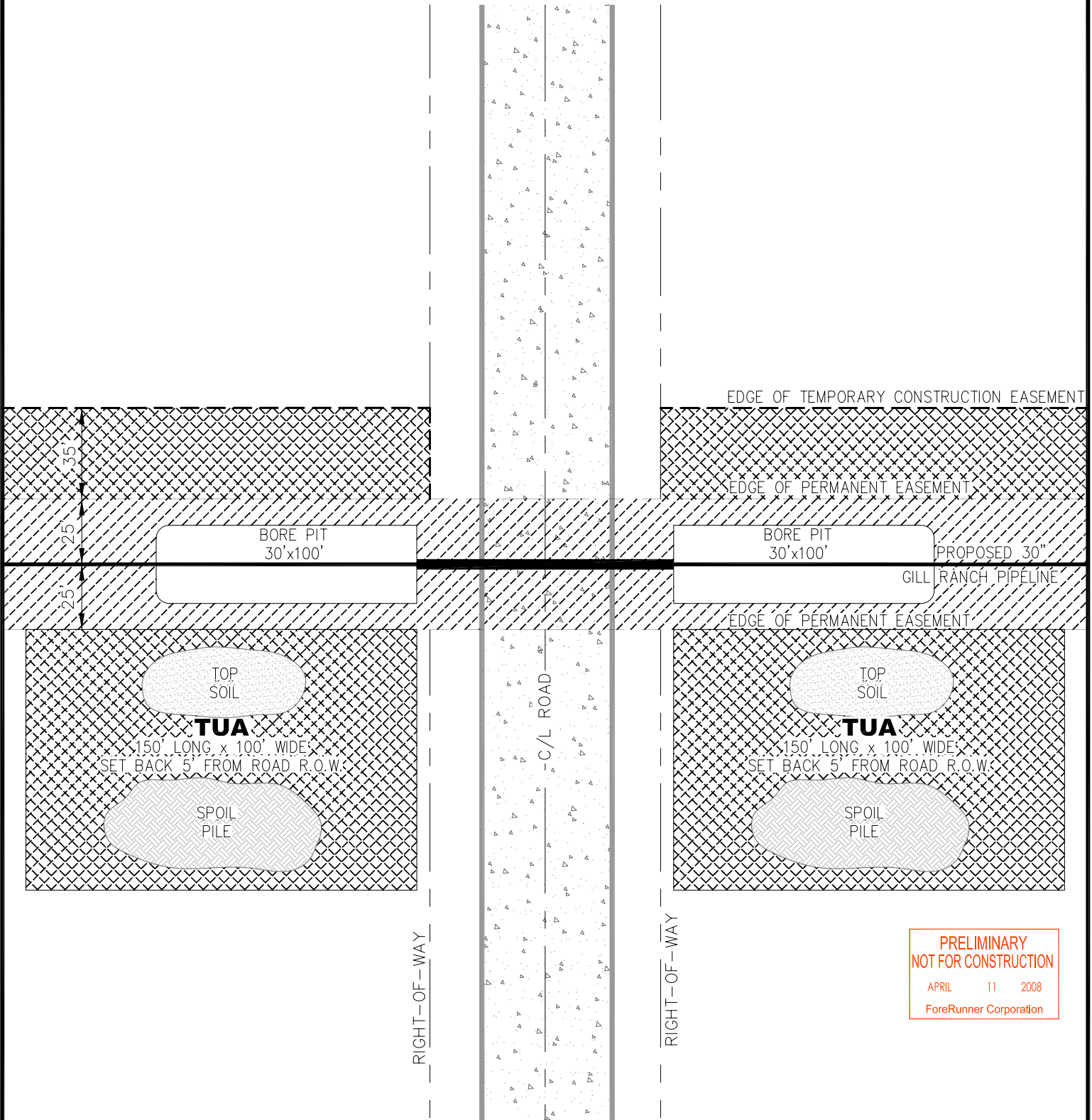


APPENDIX A.4

GAS PIPELINE TYPICAL SPECIFICATIONS

Typical Uncased Road Crossing Plan

Document No.
12361-180C-603



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ForeRunner Corporation

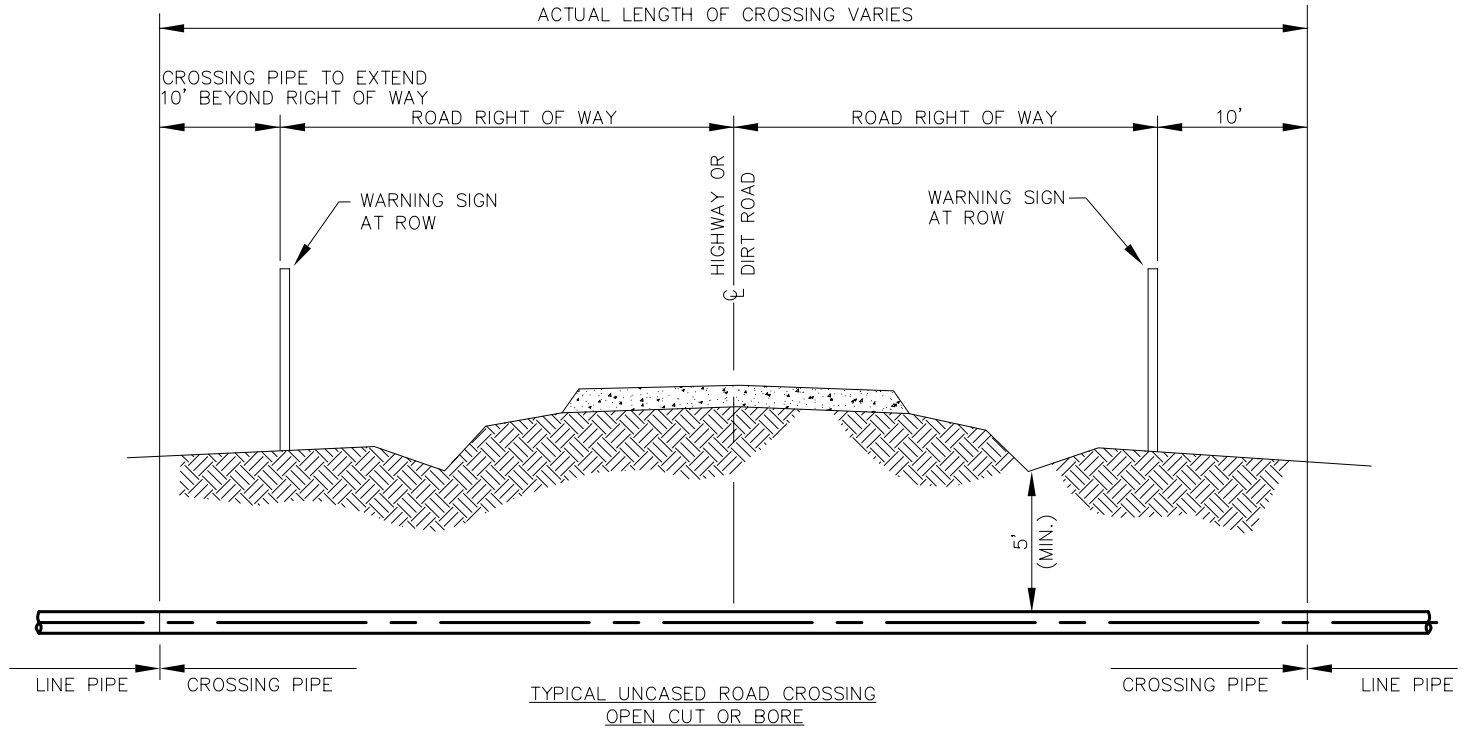
GRa GILL RANCH STORAGE

FORERUNNER
CORPORATION
3800 S. WADSWORTH BLVD. #600
LAKWOOD, CO 80226
303-969-0225

NO.	DESCRIPTION			
P3	PRELIMINARY			4/11/08
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R. STONE	01/15/08			

Typical Uncased Road Crossing Section

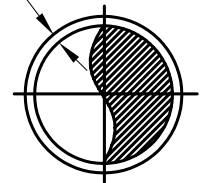
Document No.
12361-180C-604



NOTES:

1. CROSSING SHALL BE IN ACCORDANCE WITH APPLICABLE PERMIT.
2. ROAD CROSSING PIPE SHALL EXTEND TO A MINIMUM OF RIGHT OF WAY LINE PLUS 10' EACH SIDE.
3. THE TYPE AND MINIMUM REQUIRED LENGTH OF PIPE FOR CROSSING OF PUBLIC ROADS SHALL BE AS SPECIFIED ON MAPS ON ALIGNMENT SHEETS.
4. ALL BORED CROSSING PIPE SHALL HAVE 40 MILS OF POWERCRETE J PROTECTION DURING INSERTION. PIPE FOR OPEN CUT CROSSING DOES NOT REQUIRE EXTRA COATING.
5. CROSSING SHALL BE A MINIMUM OF 5' BELOW PAVED SURFACE FOR ALL STATE AND US HIGHWAYS.
6. OPPOSITE HAND ORIENTATION MAY BE VALID FOR A GIVEN CROSSING.

BORE ANNULUS TO BE NO LARGER THAN 1" GREATER THAN COATED LINE PIPE



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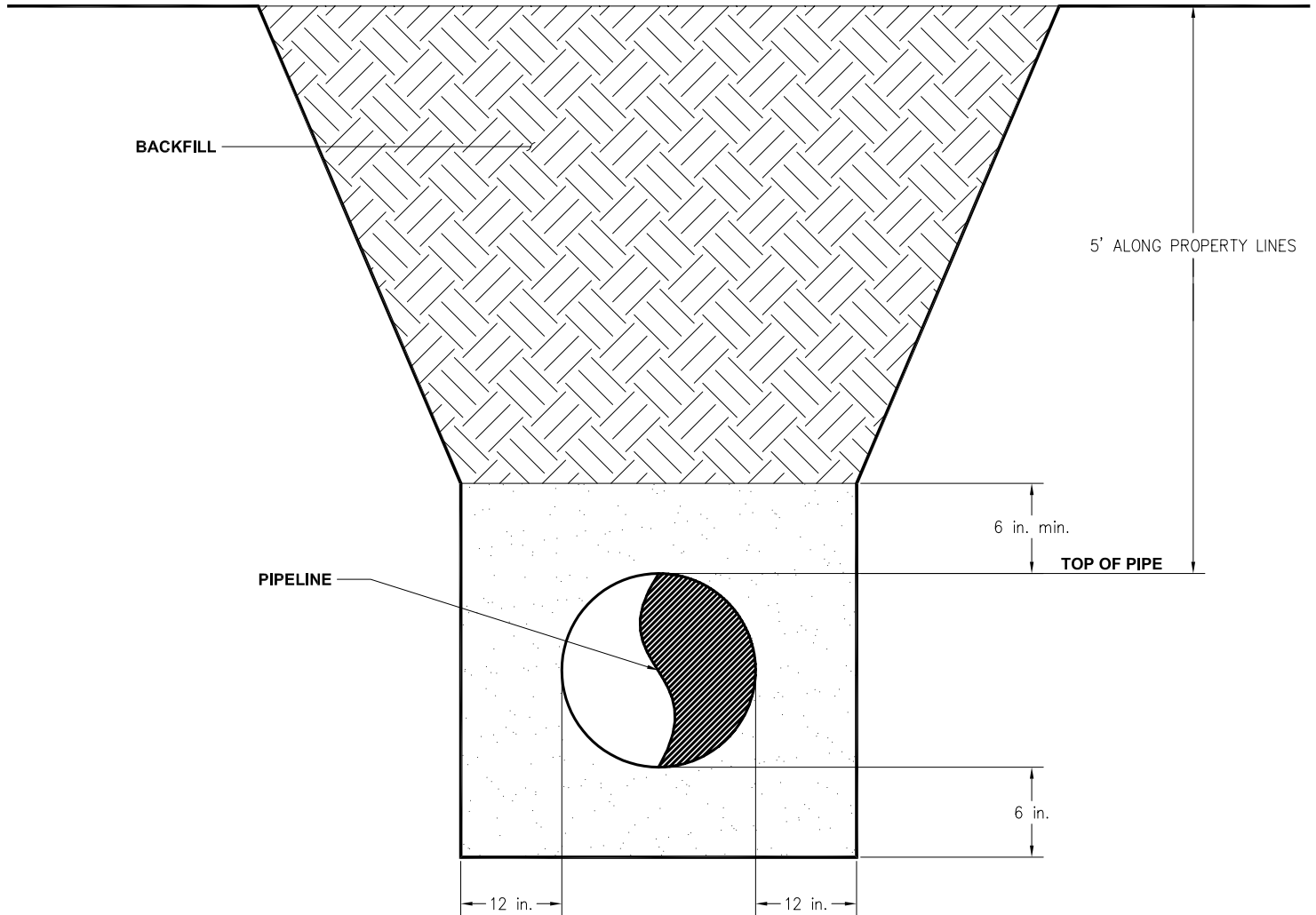
gRa GILL RANCH STORAGE

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CORPORATION
 3800 S. WADSWORTH BLVD. #600
 LEXINGTON, CO 80238
 303-969-0223

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R. STONE	01-15-08			

Typical Pipe Trench Cross Section

Document No.
12361-180C-605



TYPICAL CROSS SECTION

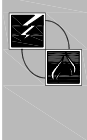
NOTE:

ALL FILL TO BE NATIVE SOIL UNLESS NATIVE SOIL IS NOT ACCEPTABLE FOR THE PORTION AROUND THE PIPE. IF NATIVE SOIL IS FOUND NOT SUITABLE, SAND PADDING OR SELECTED FILL TO BE USED AS REQUIRED BY CODE.

NOT TO SCALE

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GR GILL RANCH STORAGE



**FORERUNNER
CORPORATION**
 3800 S. WADSWORTH BLVD. #600
 LAKENWOOD, CO 80228
 303-969-0223

NO.	DESCRIPTION			
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R. STONE	02/08/08			

Typ. WWD Conc. Water Line Crossing (Bored)

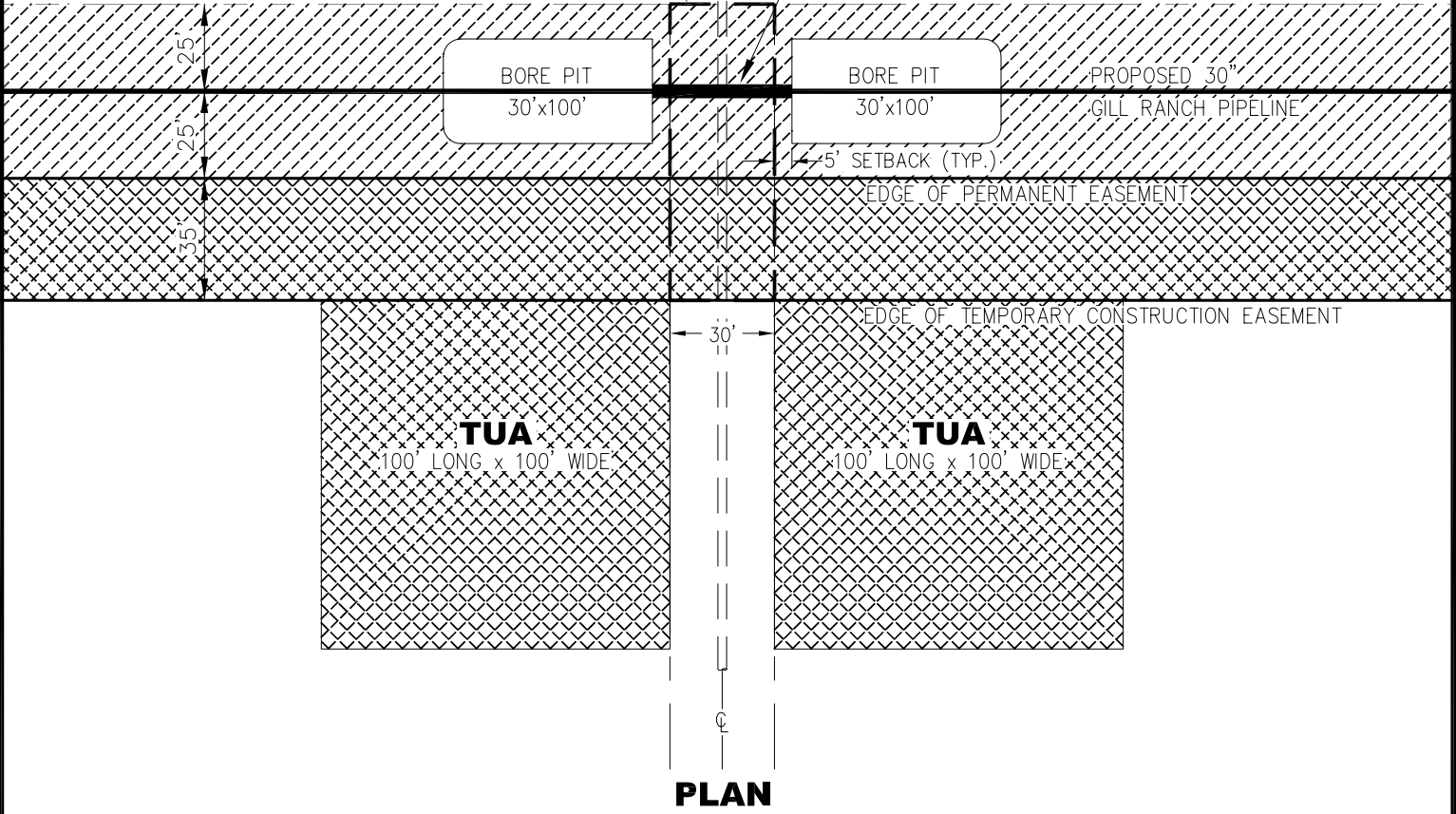
Document No.
12361-180C-606

CONTRACTOR TO PROVIDE
EXTRA COVER OR MATS
OVER WATER LINE X-ING
AS NECESSARY

WWD CONCRETE WATER LINES

30" BORE PIPE, .625" W.T., W/ 40 MILS A.R. TOPCOAT

EDGE OF PERMANENT EASEMENT



PLAN

30'x100' BORE PITS

WWD CONCRETE WATER LINES

ELEV. VARIES
5' MIN. TO T.O.P.

30" GILL RANCH
PIPELINE

2'
CLR

30" BORE PIPE
.625" W.T., W/ 40 MILS A.R. TOPCOAT

PROVIDE BENDS AS NECESSARY
FOR 2' CLEARANCE UNDER ALL
WATER LINES

ELEVATION

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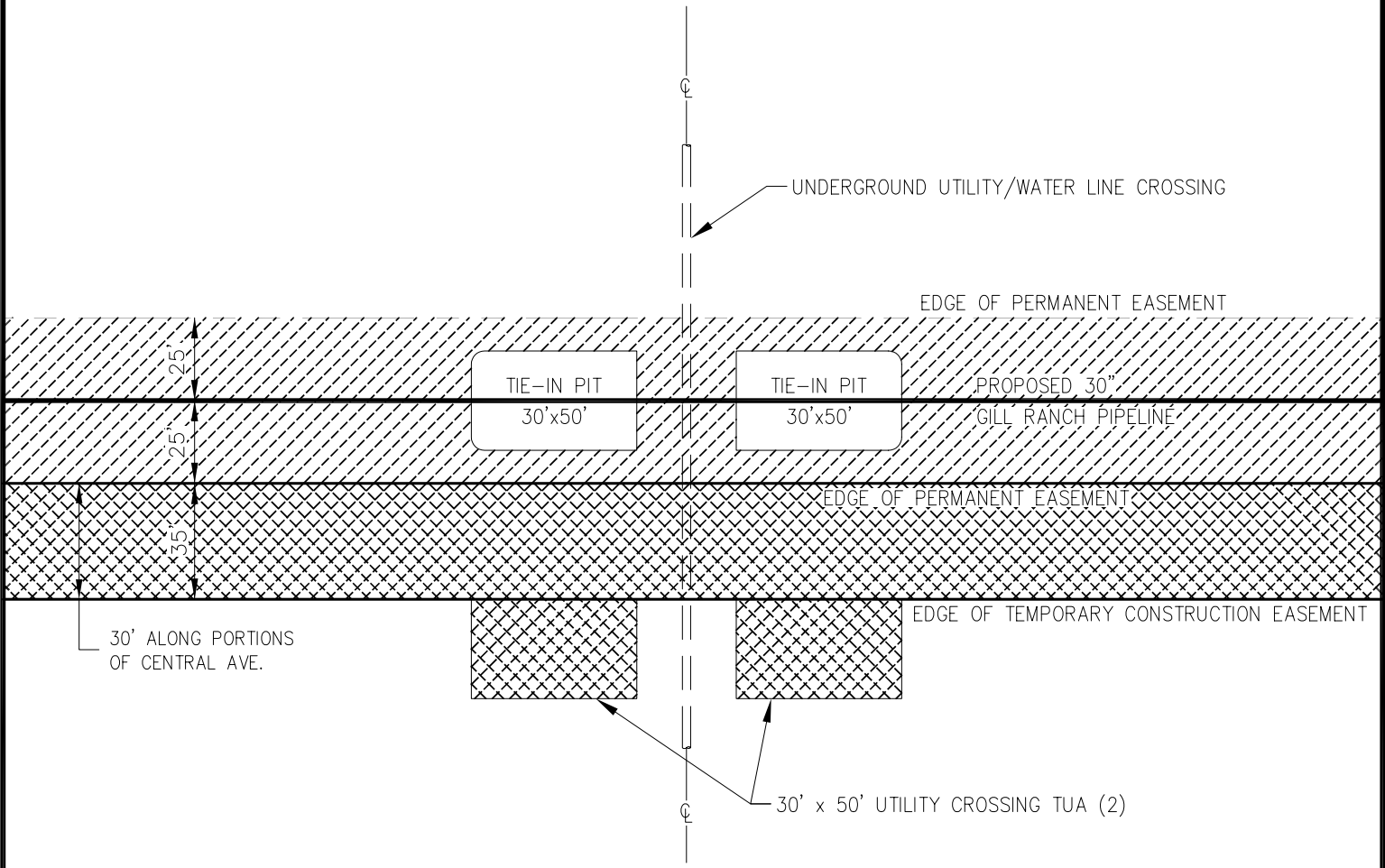
GILL RANCH STORAGE

**FORERUNNER
CORPORATION**
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LAKWOOD, CO 80226
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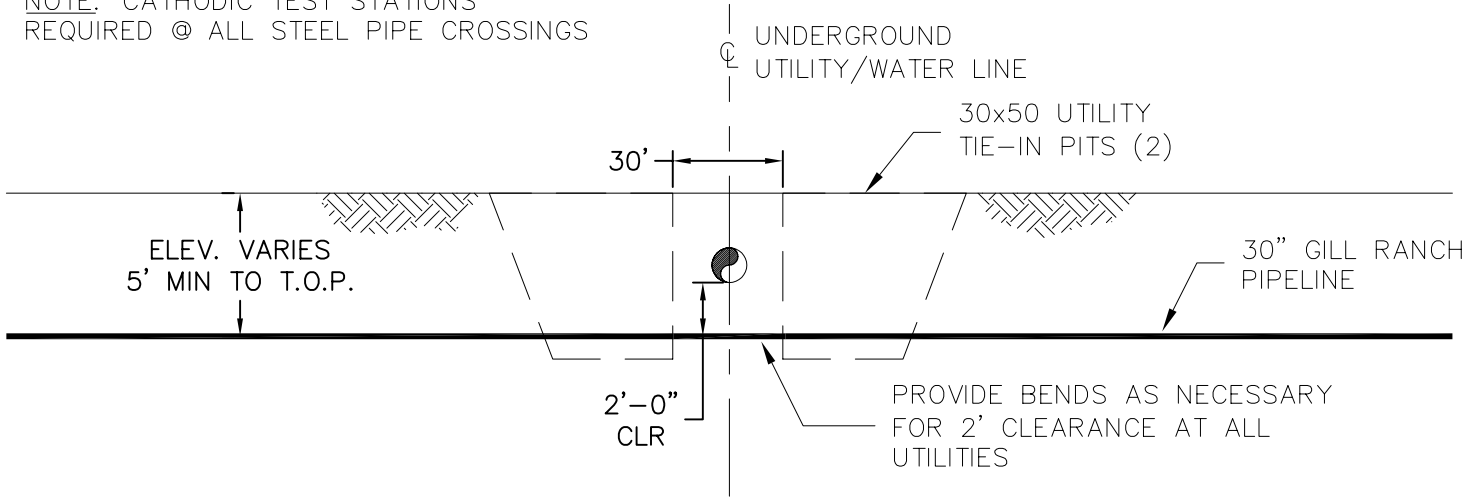
Typical Steel Water line/Utility Crossing

Document No.
12361-180C-607



PLAN

NOTE: CATHODIC TEST STATIONS
REQUIRED @ ALL STEEL PIPE CROSSINGS



SECTION

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P3	PRELIMINARY			4/11/08
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R. STONE	01/15/08			