

FILE NAME: \\K-FS1\LIBRARY\CAD\DETAILS\DISTRICTS\CROSS VALLEY WATER DISTRICT\TBR-1.DWG

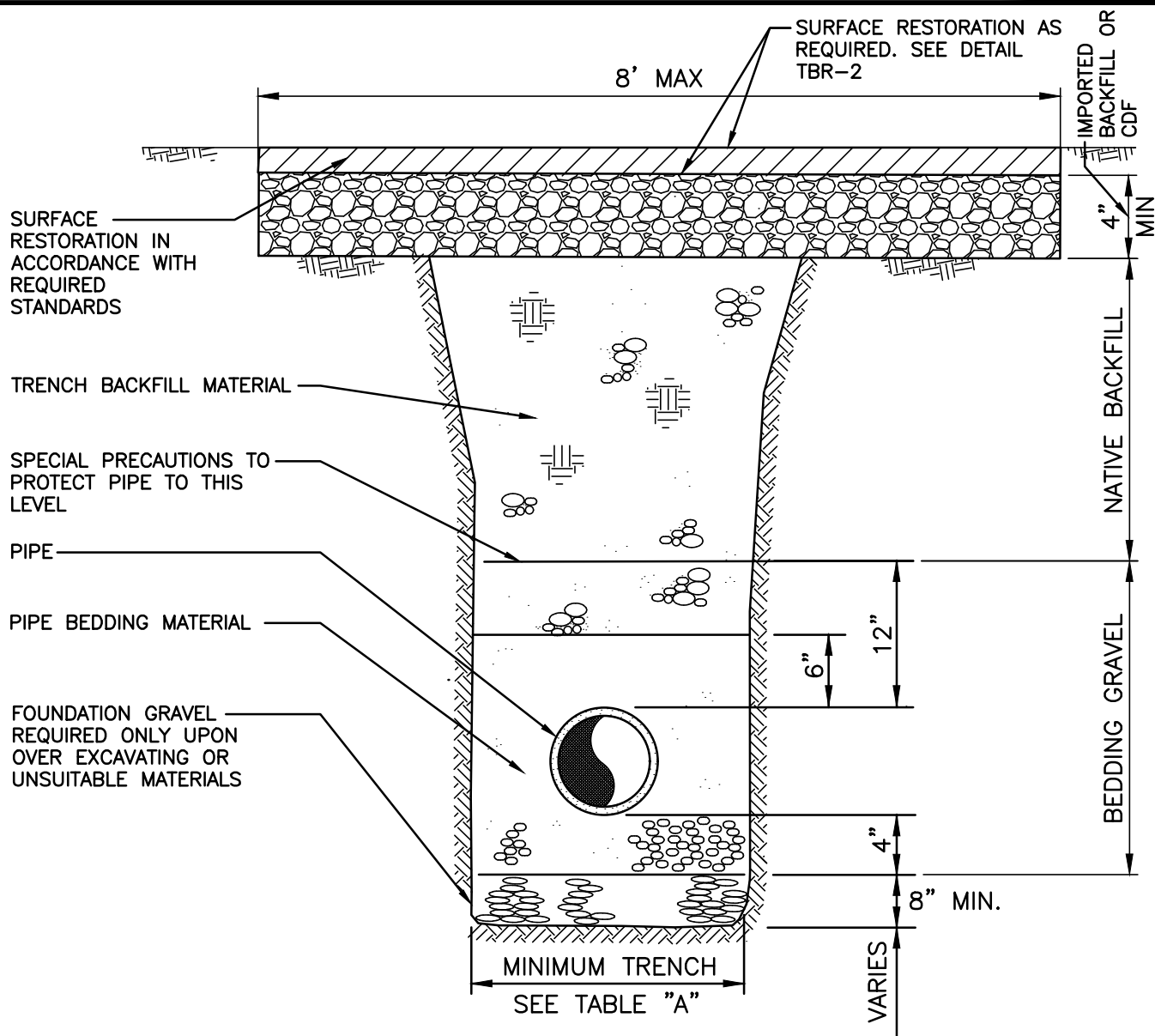
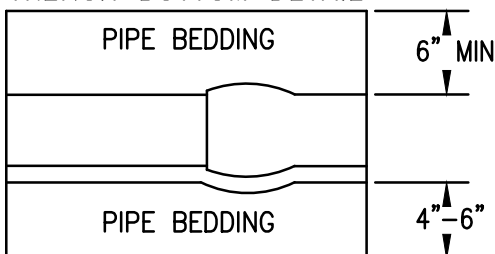


TABLE "A"

6" PIPE	-2'-6"
8" PIPE	-2'-6"
10" PIPE	-3'-0"
12" PIPE	-3'-0"
16" PIPE	-3'-6"
18" PIPE	-4'-0"
24" PIPE	-4'-0"

TRENCH BOTTOM DETAIL



KEEP TRENCH BOTTOM COMPACTED WITH UNIFORM GRADE. NO TEMPORARY SUPPORTS I.E. BLOCKS, ALLOWED TO SUPPORT PIPE. TRENCH BOTTOM SHALL BE TO GRADE PRIOR TO PIPE INSTALLATION.

NOTES:

1. REFERENCE SNOHOMISH COUNTY ENGINEERING DESIGN AND DEVELOPMENT STANDARDS, SECTION 8.
2. SURFACE RESTORATION IN ACCORDANCE WITH SNOHOMISH COUNTY REQUIREMENTS.
3. MAXIMUM TRENCH WIDTH:  
15" DIAMETER PIPE AND SMALLER = 40"  
16" DIAMETER PIPE AND SMALLER =  $1-1/2 \times \text{I.D.} + 18"$

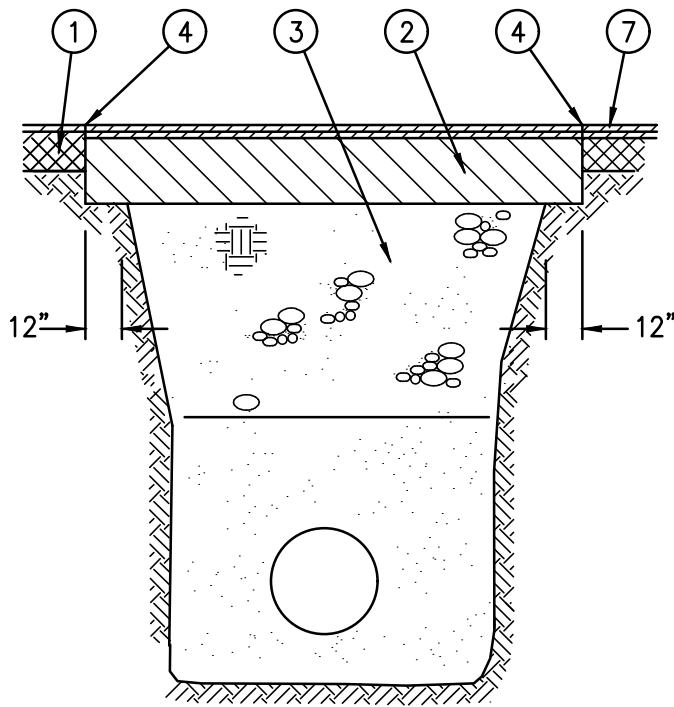
CROSS VALLEY WATER DISTRICT  
TRENCH BACKFILL AND RESTORATION

TRENCH SECTION - PIPE  
BEDDING AND TRENCH BACKFILL

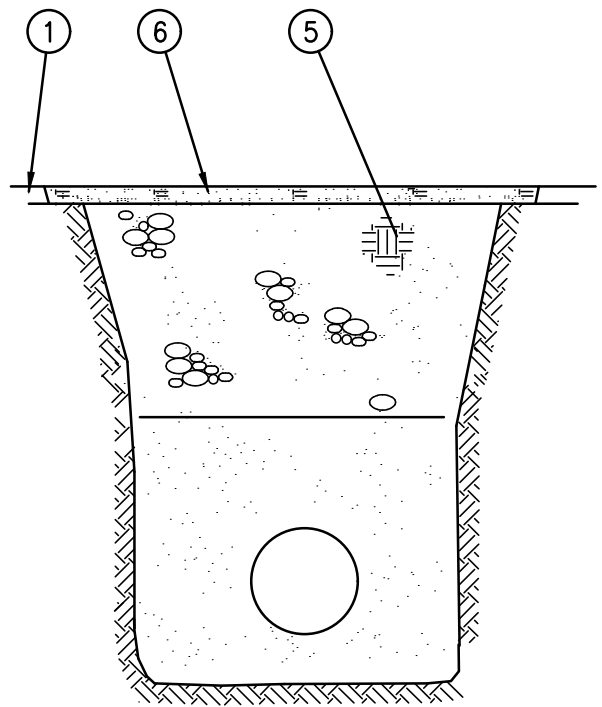
TBR-1

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ACP RESTORATION



UNPAVED SHOULDER  
AND PRIVATE EASEMENT

- ① EXISTING SURFACE
- ② LONGITUDINAL TRENCH – 6" HMA CLASS 1/2" OR 2" HMA CLASS 1/2" + 4" HMA CLASS 1"  
TRANSVERSE TRENCH – 8" HMA CLASS 1/2" OR 2" HMA CLASS 1/2" + 6" HMA CLASS 1"
- ③ TRENCH BACKFILL OR CONTROL DENSITY FILL  
PER LOCAL JURISDICTIONAL REQUIREMENTS.
- ④ NEAT LINE ACP CUT. TACK EDGES WITH AR  
4000 ASPHALT CEMENT. SEAL EDGES WITH  
AR 4000 ASPHALT CEMENT.
- ⑤ TRENCH BACKFILL.
- ⑥ RESTORE EXISTING SURFACE. TOP SOIL, CSTC  
(2" MINIMUM) OR AS NOTED ON PLANS.
- ⑦ 2" HMA CLASS 1/2" OVERLAY WHEN SPECIFIED ON  
PLANS OR REQUIRED BY THE JURISDICTIONAL  
AUTHORITY.

HMA= HOT MIX ASPHALT  
AR= ASPHALT RUBBER  
CSTC= CRUSHED SURFACE TOP COURSE  
ACP= ASPHALT CONCRETE PAVEMENT

NOTES:

1. RESTORATION TO BE EXISTING CONDITION OR BETTER.
2. ALL WORK TO COMPLY WITH SNOHOMISH COUNTY REQUIREMENTS.
3. IF PERMEABLE SURFACE IS REQUIRED, INSTALL OR REPLACE IN KIND  
ACCORDING TO JURISDICTIONAL REQUIREMENTS.

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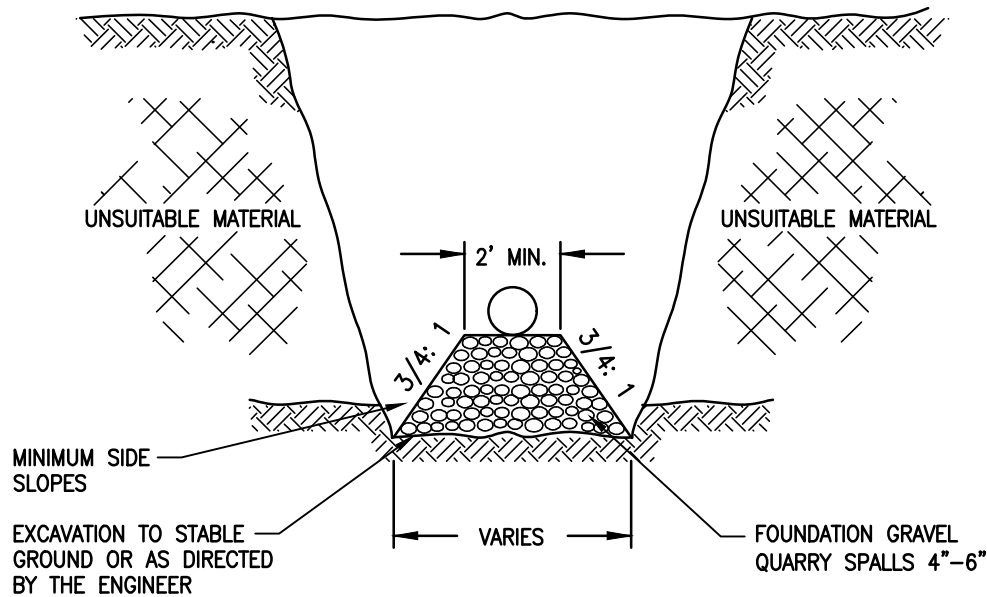
**CROSS VALLEY WATER DISTRICT  
TRENCH BACKFILL AND RESTORATION**

TRENCH SURFACE RESTORATION

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**NOTES:**

1. OVER EXCAVATION REQUIRED WHEN UNSUITABLE FOUNDATION MATERIALS ENCOUNTERED.
2. STRICTLY COMPLY WITH ALL TRENCH SAFETY SYSTEM REQUIREMENTS.
3. RESTRAINED JOINT PIPE MAY BE REQUIRED AS DIRECTED BY THE DISTRICT.
4. BACKFILL TRENCH IN ACCORDANCE WITH SNOHOMISH COUNTY ENGINEERING DESIGN AND DEVELOPMENT STANDARDS AND CVWD STANDARD DETAIL TBR-1.

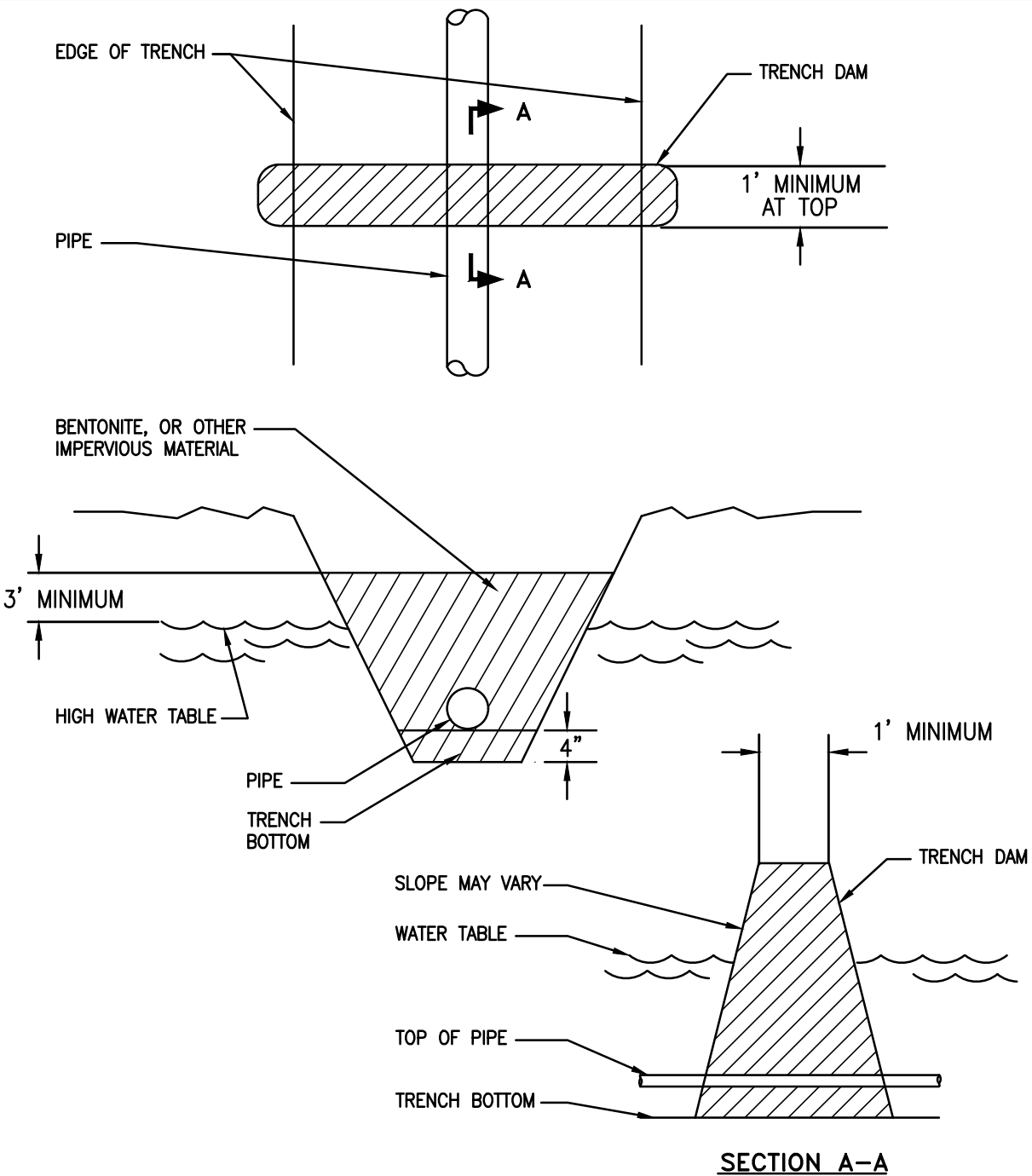
**CROSS VALLEY WATER DISTRICT  
TRENCH BACKFILL AND RESTORATION**

**UNSUITABLE FOUNDATION  
EXCAVATION**

TBR-3

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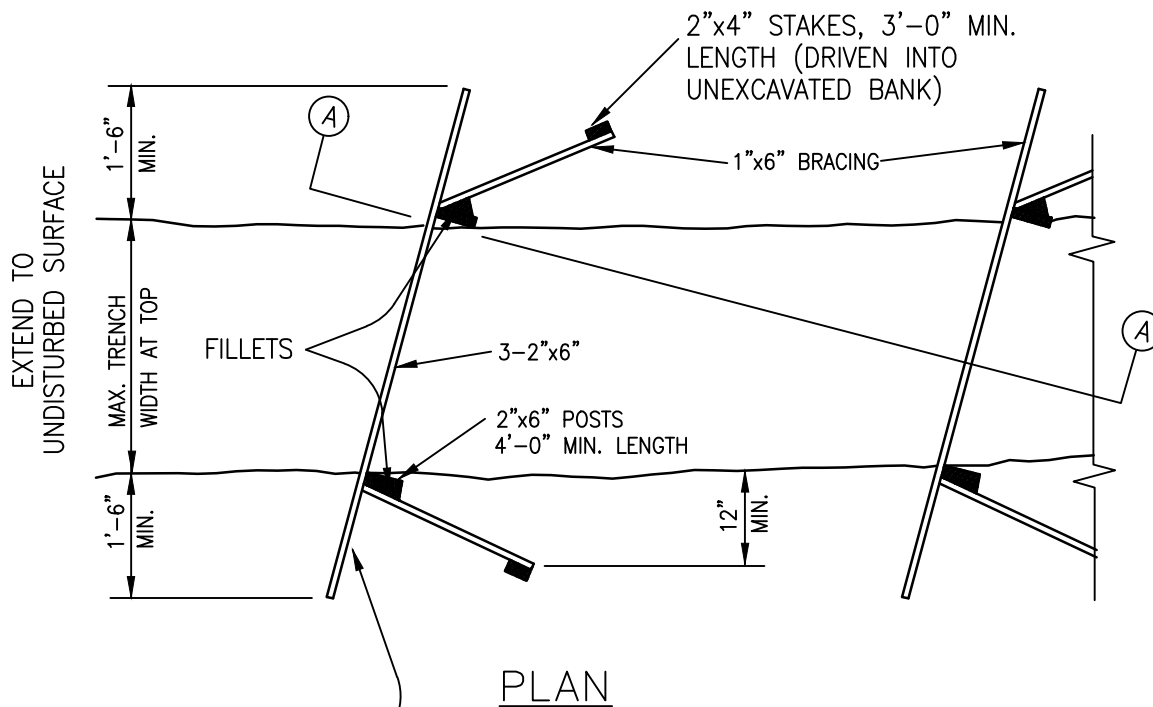
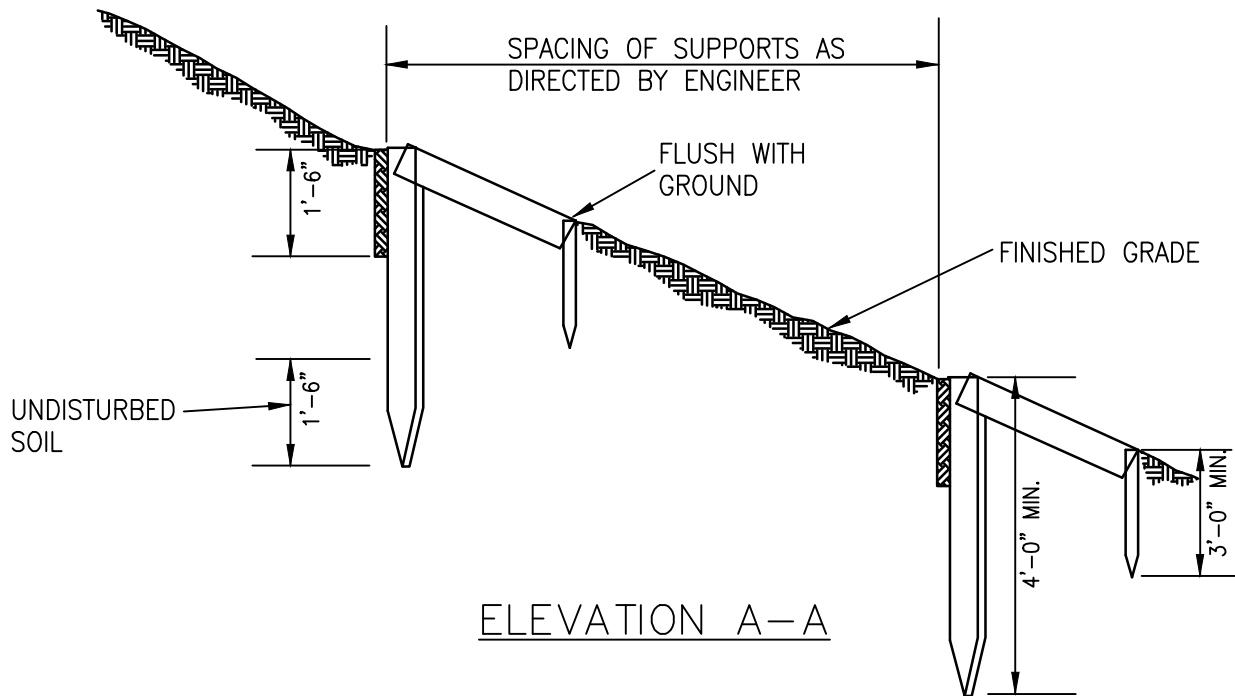
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**NOTES:**

1. INSTALL IN HIGH GROUND WATER AREAS, ADJACENT TO WETLANDS AND STREAM CROSSINGS OR AS SHOWN ON PLANS OR AS DIRECTED BY THE DISTRICT.
2. ELEVATION AT TOP OF TRENCH DAM TO VARY BASED ON WATER TABLE AS DIRECTED BY THE DISTRICT.

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ONLY TOP 2"x6" BOARD EXTENDS FULL DISTANCE AS SHOWN. ALL OTHER BOARDS EXTEND TO FULL WIDTH OF TRENCH.

NOTE:

1" CROSS BOARDS AND BRACING TO BE SECURELY NAILED TO STAKES.

**CROSS VALLEY WATER DISTRICT  
TRENCH BACKFILL AND RESTORATION**

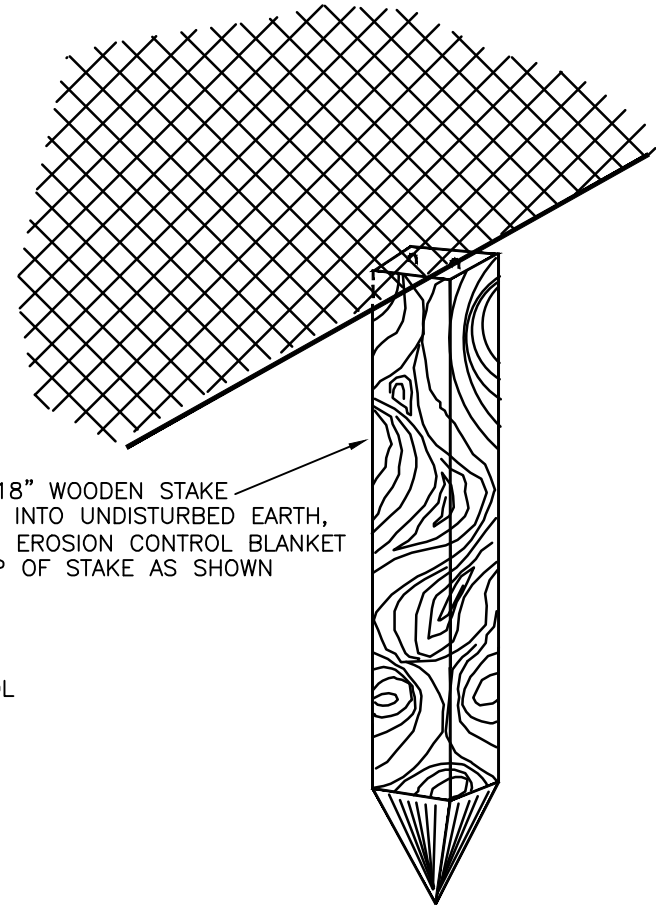
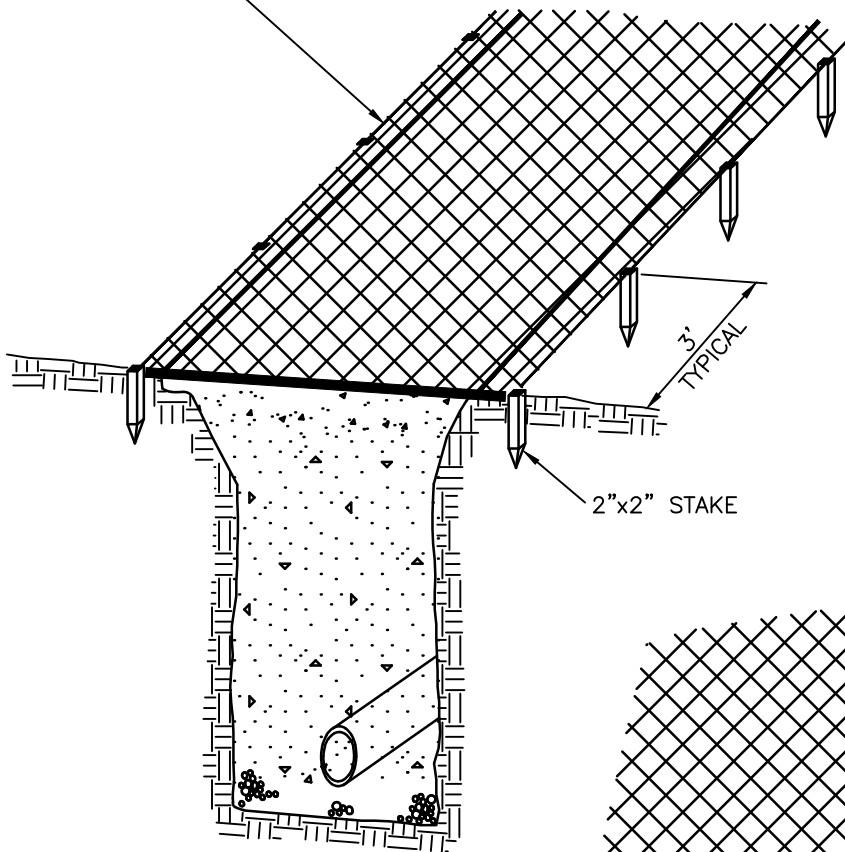
**TIMBER BACKFILL SUPPORTS**

TBR-5

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EROSION CONTROL BLANKET  
4" MINIMUM OVERLAP AT  
STAPLED JOINTS.



2"x2"x18" WOODEN STAKE  
DRIVEN INTO UNDISTURBED EARTH,  
STAPLE EROSION CONTROL BLANKET  
TO TOP OF STAKE AS SHOWN

**NOTE:**

AFTER TRENCH HAS BEEN COMPLETELY  
BACKFILLED AND COMPACTED, EROSION CONTROL  
BLANKET SHALL BE INSTALLED LONGITUDINALLY  
OVER ENTIRE WIDTH OF BACKFILLED TRENCH.

EROSION CONTROL BLANKET FOR SLOPE  
PROTECTION SHALL BE USED AS DIRECTED  
BY THE DISTRICT AND/OR ENGINEER.

THIS SLOPE PROTECTION DETAIL REPRESENTS  
MINIMUM REQUIREMENTS FOR MATERIALS AND  
INSTALLATIONS.

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# CROSS VALLEY WATER DISTRICT TRENCH BACKFILL AND RESTORATION

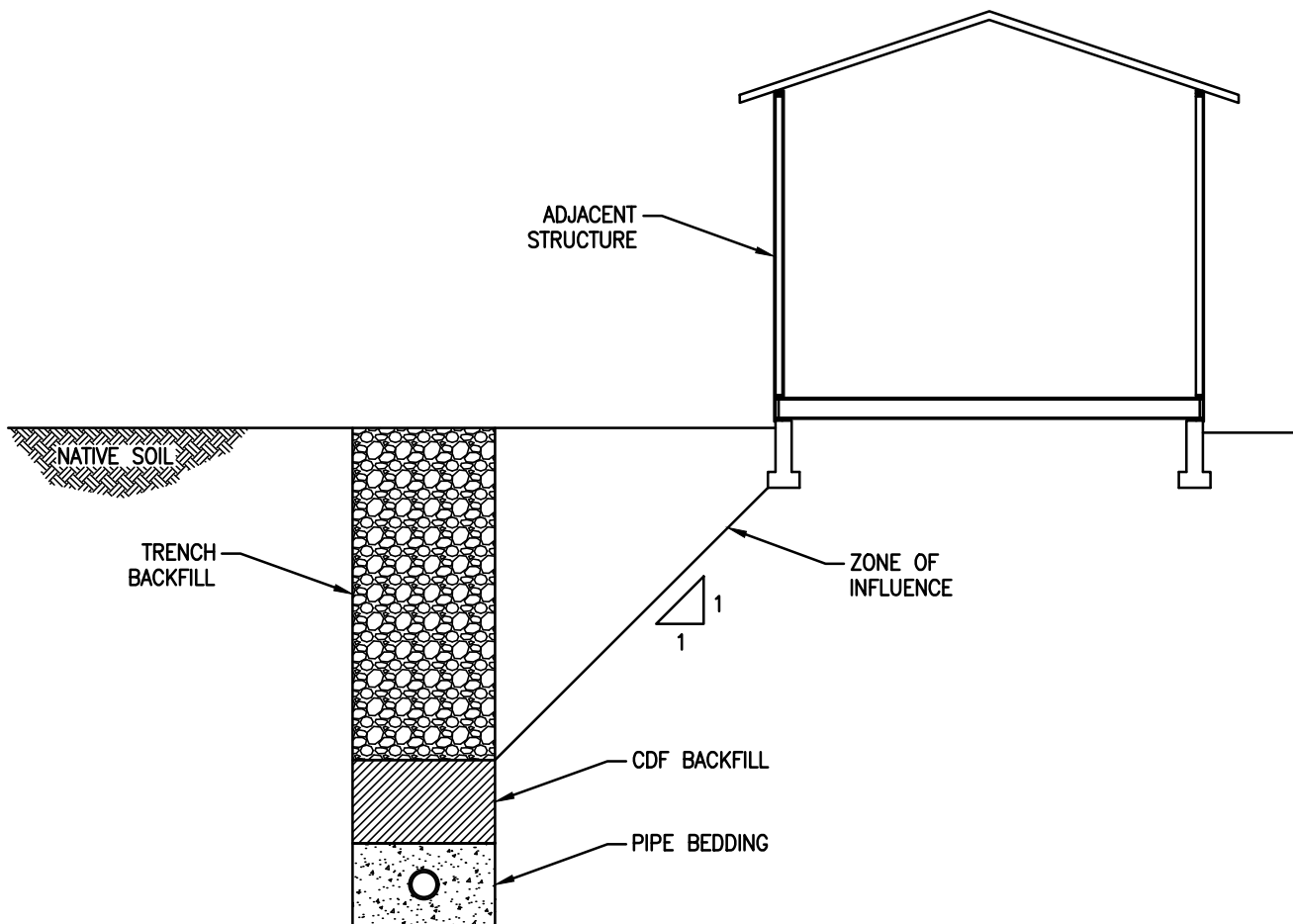
## EROSION CONTROL BLANKET

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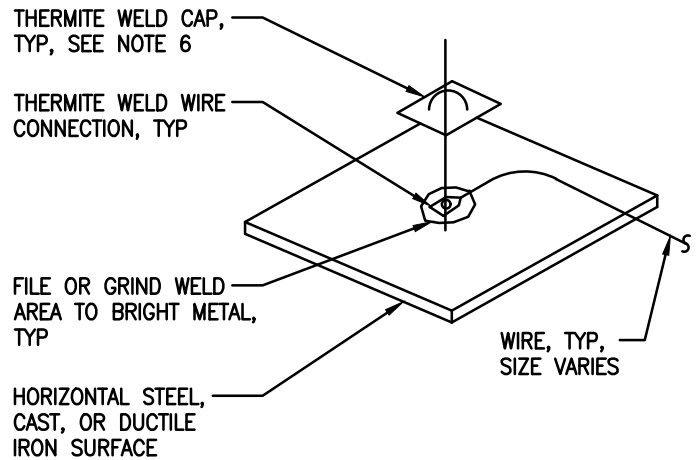
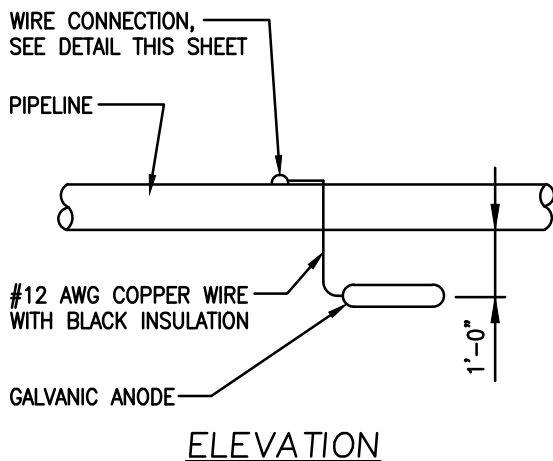
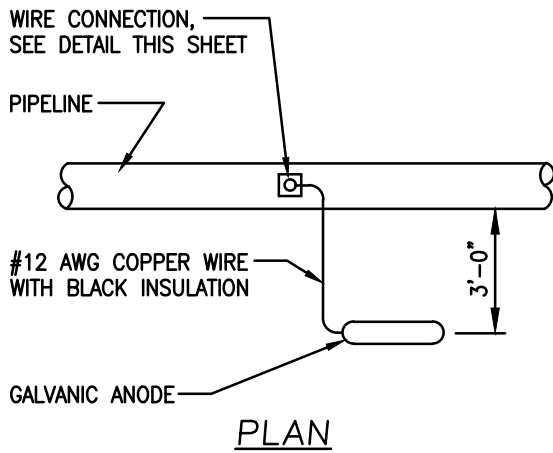
# CROSS VALLEY WATER DISTRICT TRENCH BACKFILL AND RESTORATION

ZONE OF INFLUENCE

TBR-7

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WIRE CONNECTION FOR HORIZONTAL SURFACES  
NTS

GALVANIC ANODE INSTALLATION FOR METALLIC PIPE  
NTS

**NOTES:**

1. COPPER SLEEVE REQUIRED FOR THERMITE WELDING OF #10 AWG AND SMALLER WIRE.
2. USE COPPER SLEEVE FOR THERMITE WELDING OF #4 AND #2 AWG JOINT BONDING WIRES.
3. WELDER AND CARTRIDGE SIZE VARIES ACCORDING TO SURFACE SHAPE, MATERIAL, AND HORIZONTAL OR VERTICAL SURFACE. CONSULT WELDER MANUFACTURER FOR RECOMMENDED WELDER AND CARTRIDGE.
4. FOR MULTIPLE WIRE CONNECTIONS TO PIPE SEPARATE THERMITE WELD WIRE CONNECTIONS BY ONE PIPE DIAMETER MINIMUM, 2'-0" MAXIMUM.
5. USE 15 GRAM MAXIMUM SIZE WELD CARTRIDGES FOR CONNECTIONS TO PETROLEUM AND NATURAL GAS PIPELINES OR STRUCTURES. WIRE CONNECTIONS SHALL BE AS SPECIFIED AND APPROVED BY THE OWNER.
6. COAT COMPLETED THERMITE WELD CONNECTIONS WITH ROYSTON HANDY CAP AND 747 PRIMER OR HEAT SHRINK AS SPECIFIED.