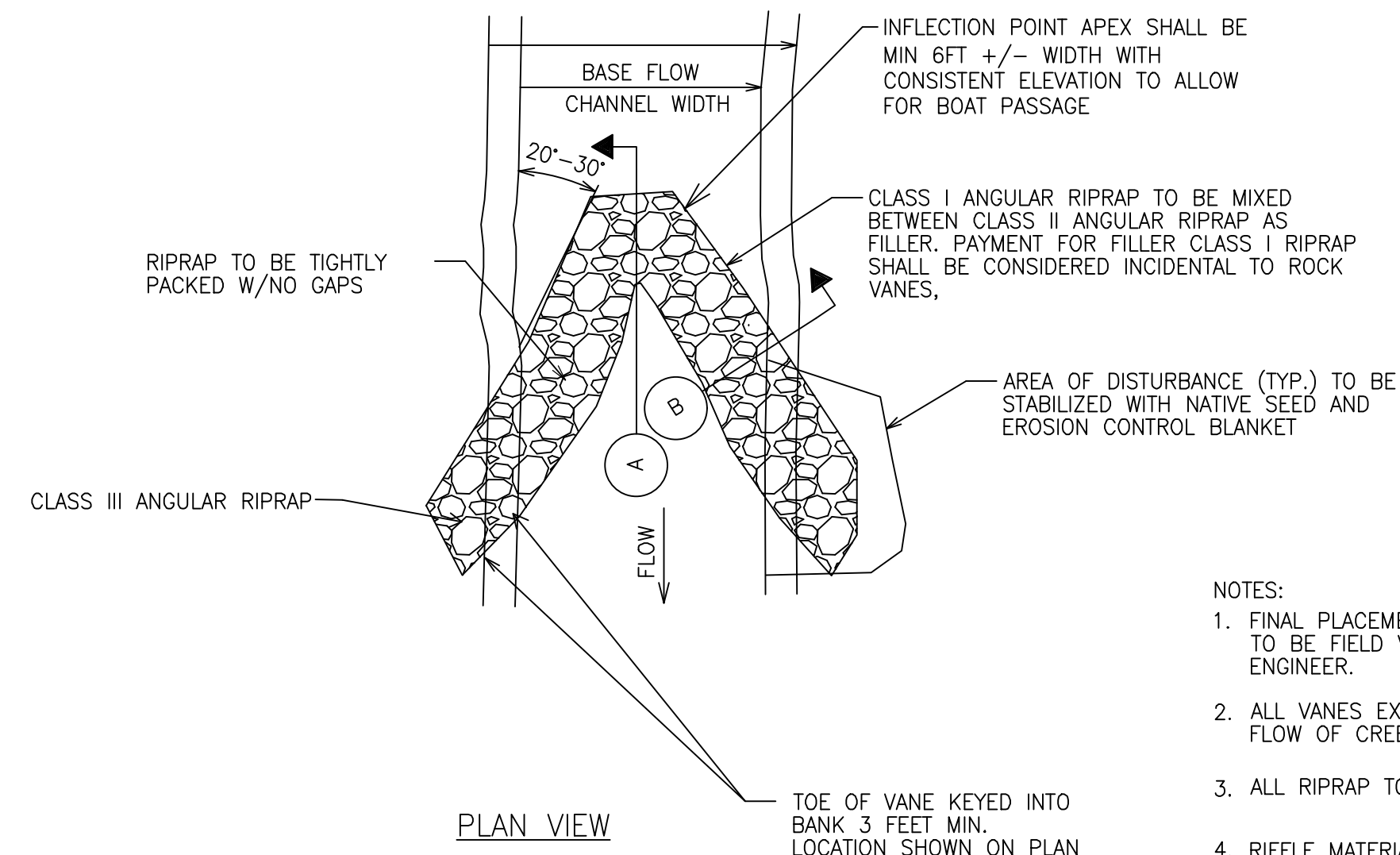
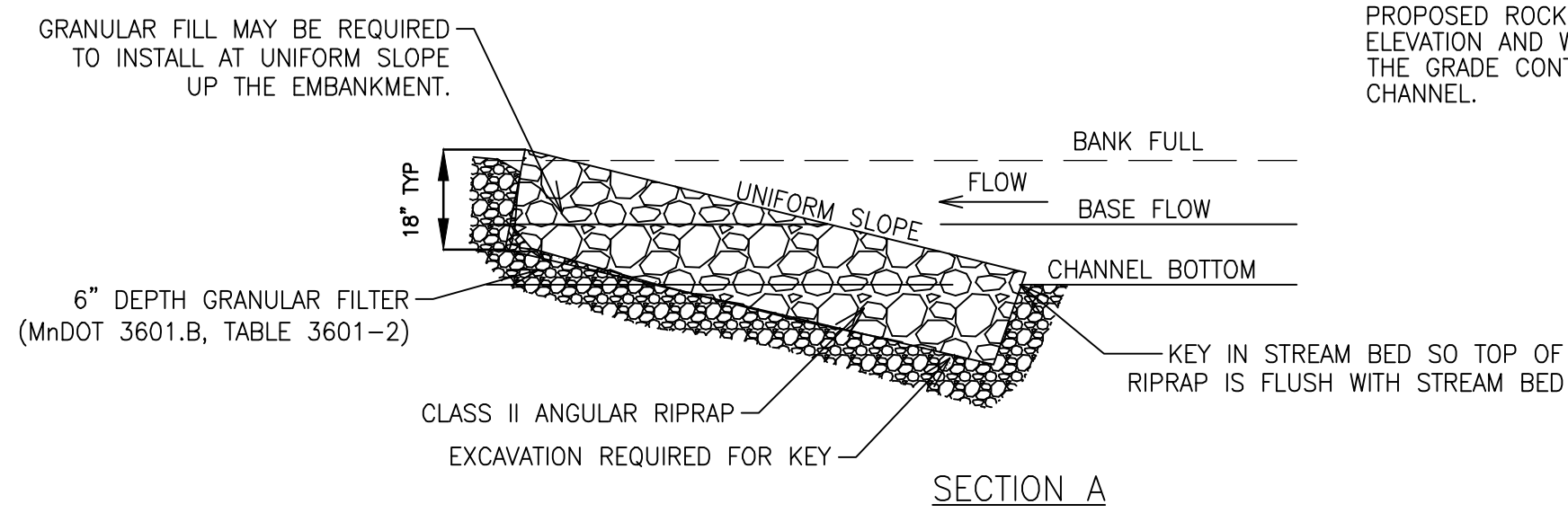


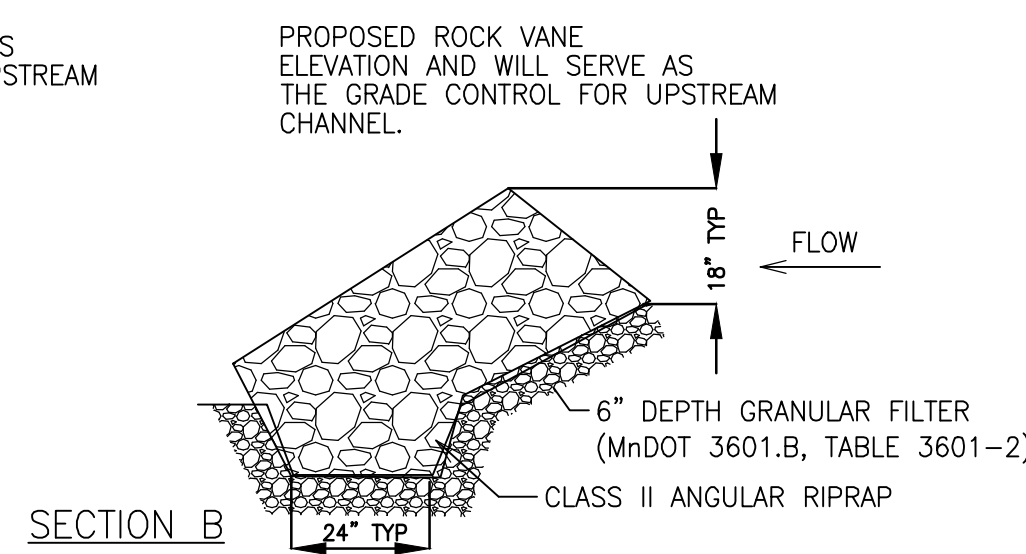
**NOT FOR
CONSTRUCTION**



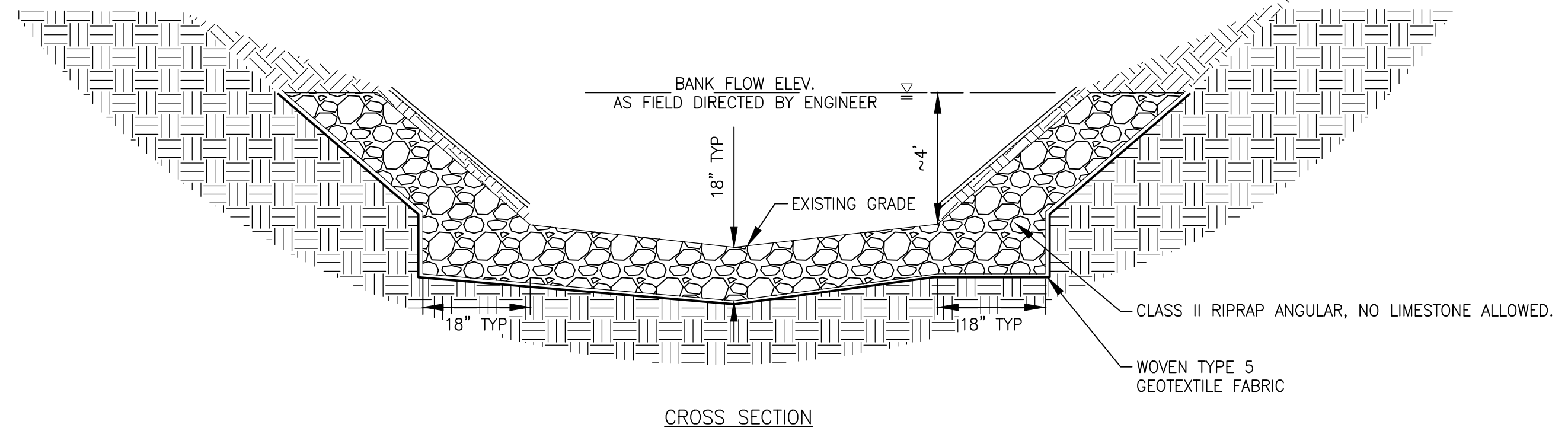
- NOTES:
1. FINAL PLACEMENT OF ROCK VANE TO BE FIELD VERIFIED BY ENGINEER.
 2. ALL VANES EXTEND UPSTREAM INTO FLOW OF CREEK.
 3. ALL RIPRAP TO BE GRANITE.
 4. RIFFLE MATERIAL TO BE PLACED DOWNSTREAM AS DIRECTED IN THE FIELD BY ENGINEER.



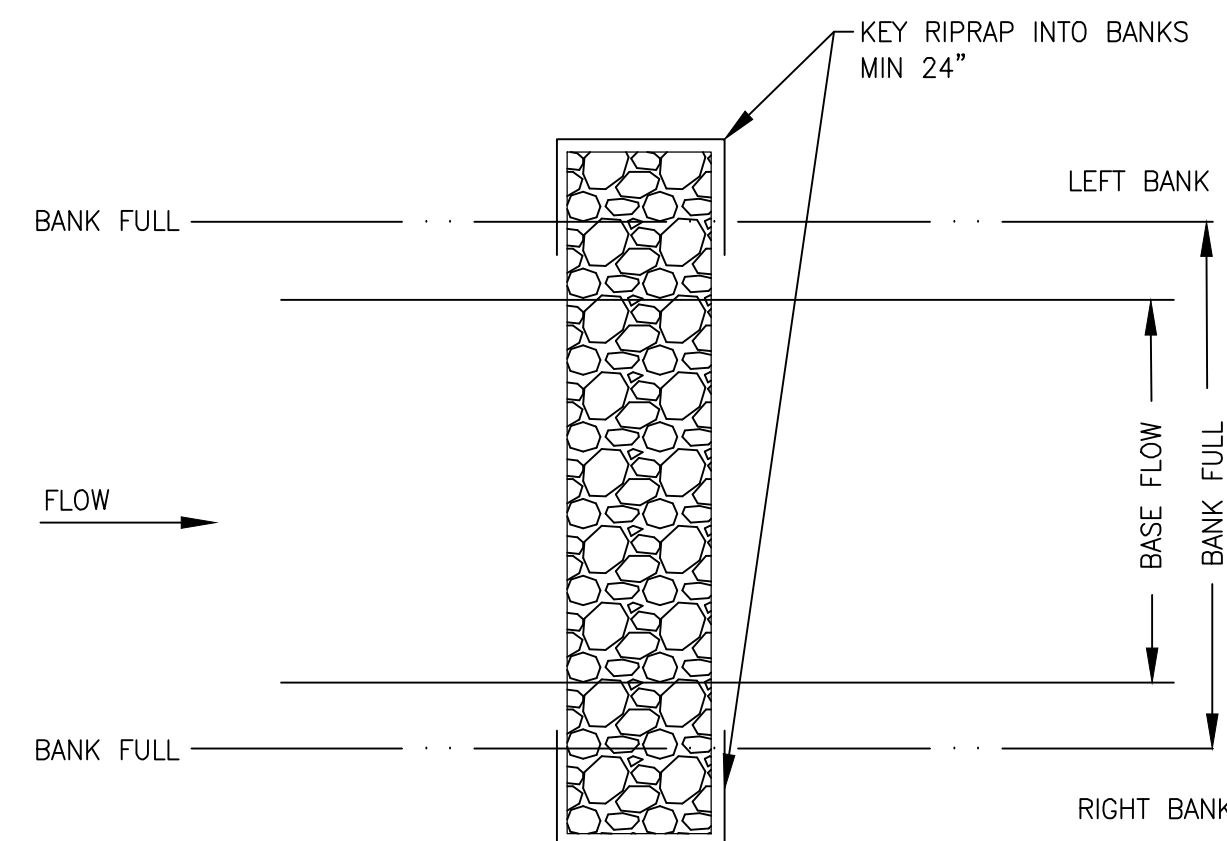
GRADE CONTROL STRUCTURE (1)
NOT TO SCALE



SECTION B



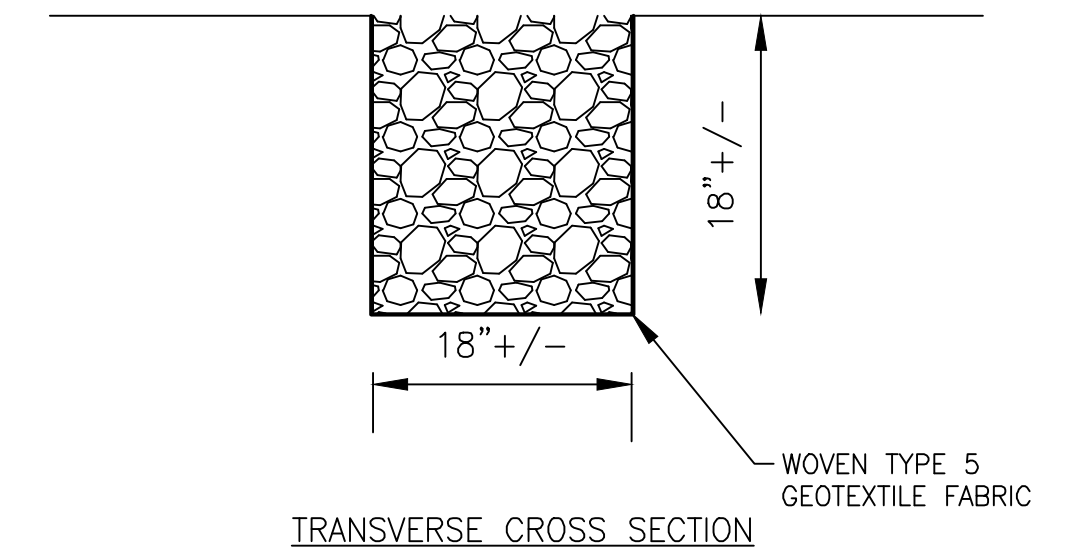
CROSS SECTION



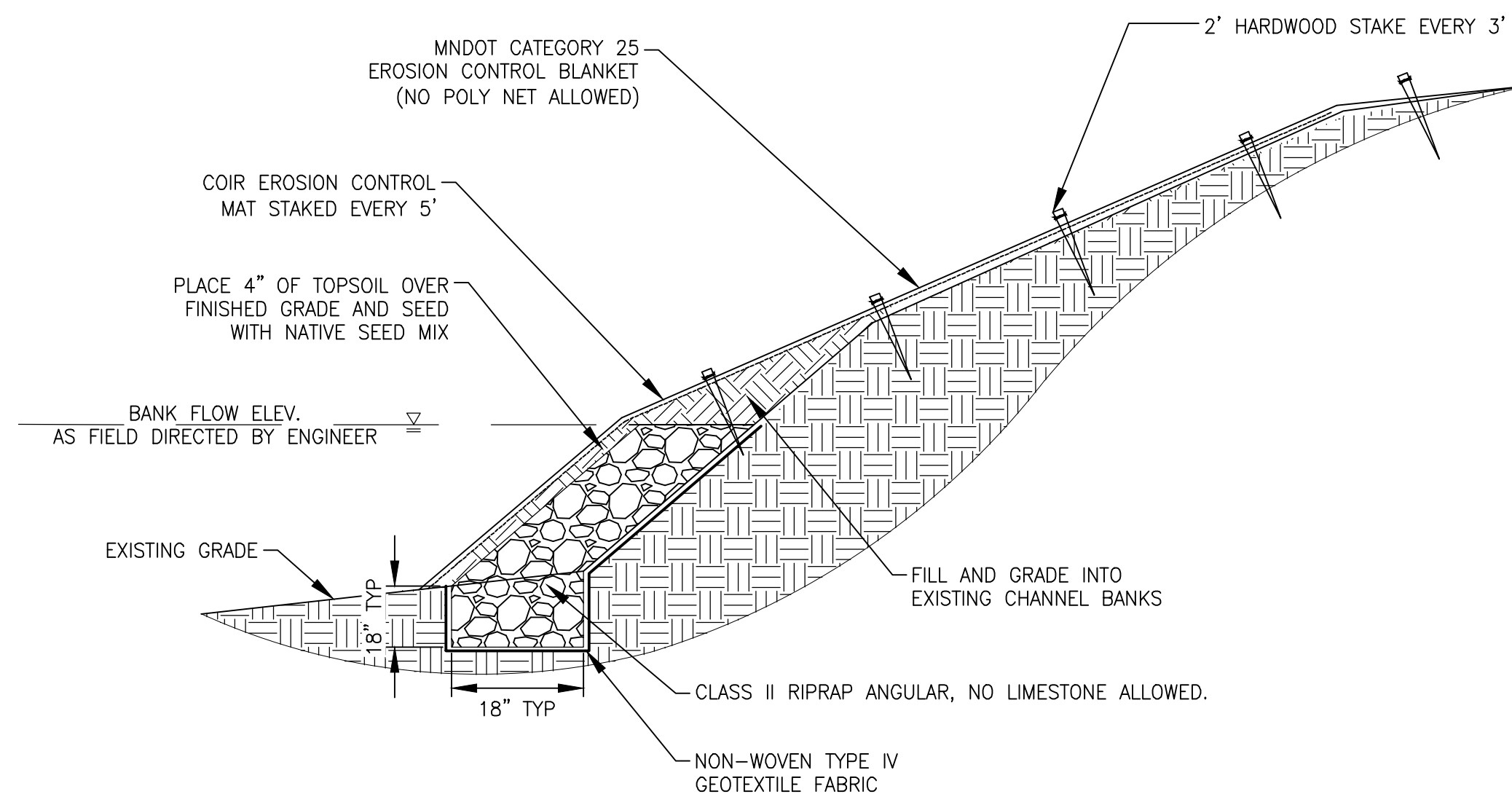
PLAN VIEW

GRADE CONTROL STRUCTURE (2)
NOT TO SCALE

- NOTES:
1. EXCAVATE TRENCH AND PLACE CLASS II RIPRAP PER MNDOT SPEC 3601.2A INTO TRENCH APPROX. 18" DEEP
 2. EXTEND CLASS II ROCK TRENCH BOTH WAYS FROM CENTER LINE TO CREATE A 18" DEPRESSION
 3. CLASS II RIPRAP SHALL NOT INCREASE THE FLOOD ELEVATION OF THE CREEK

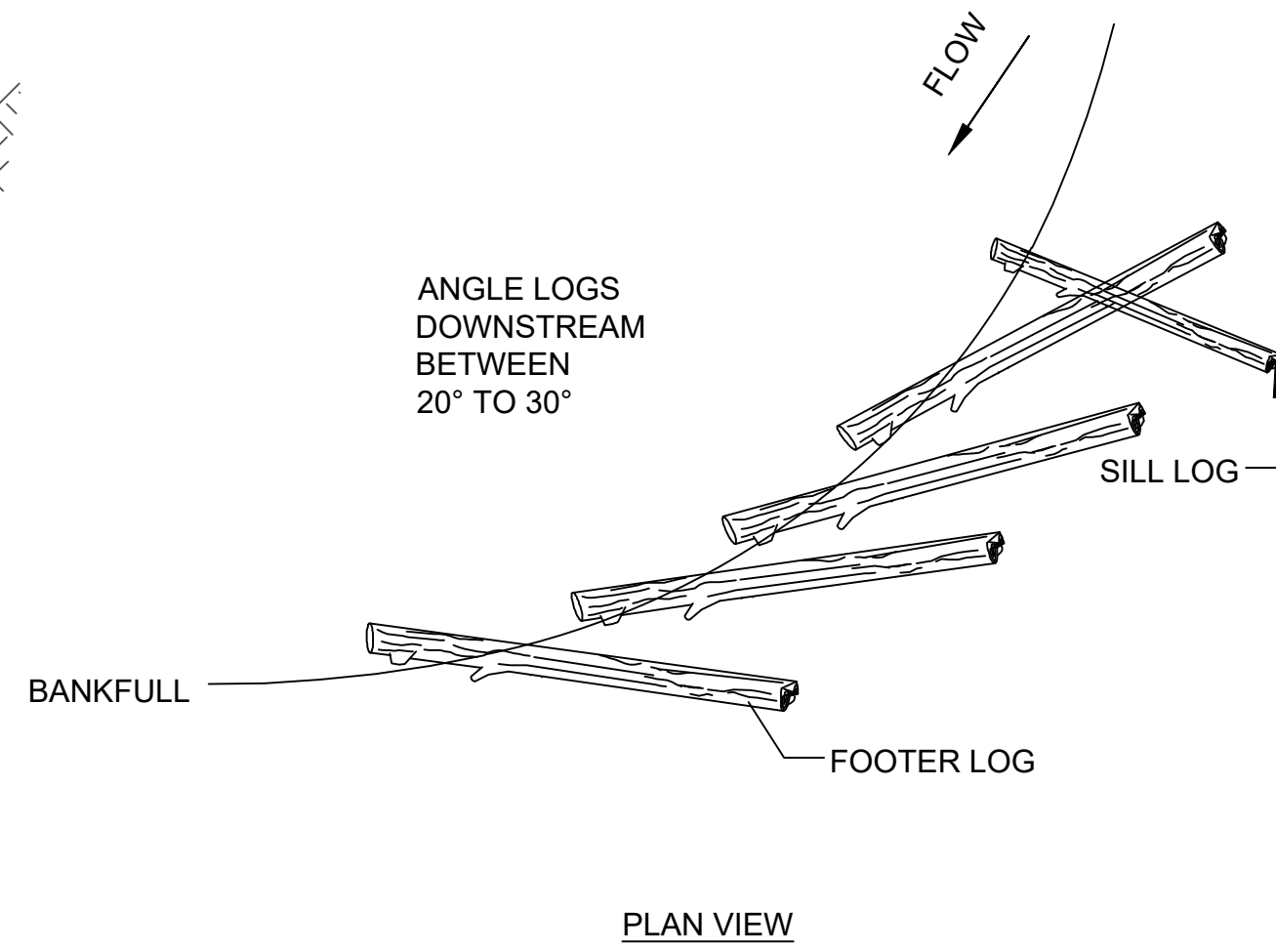
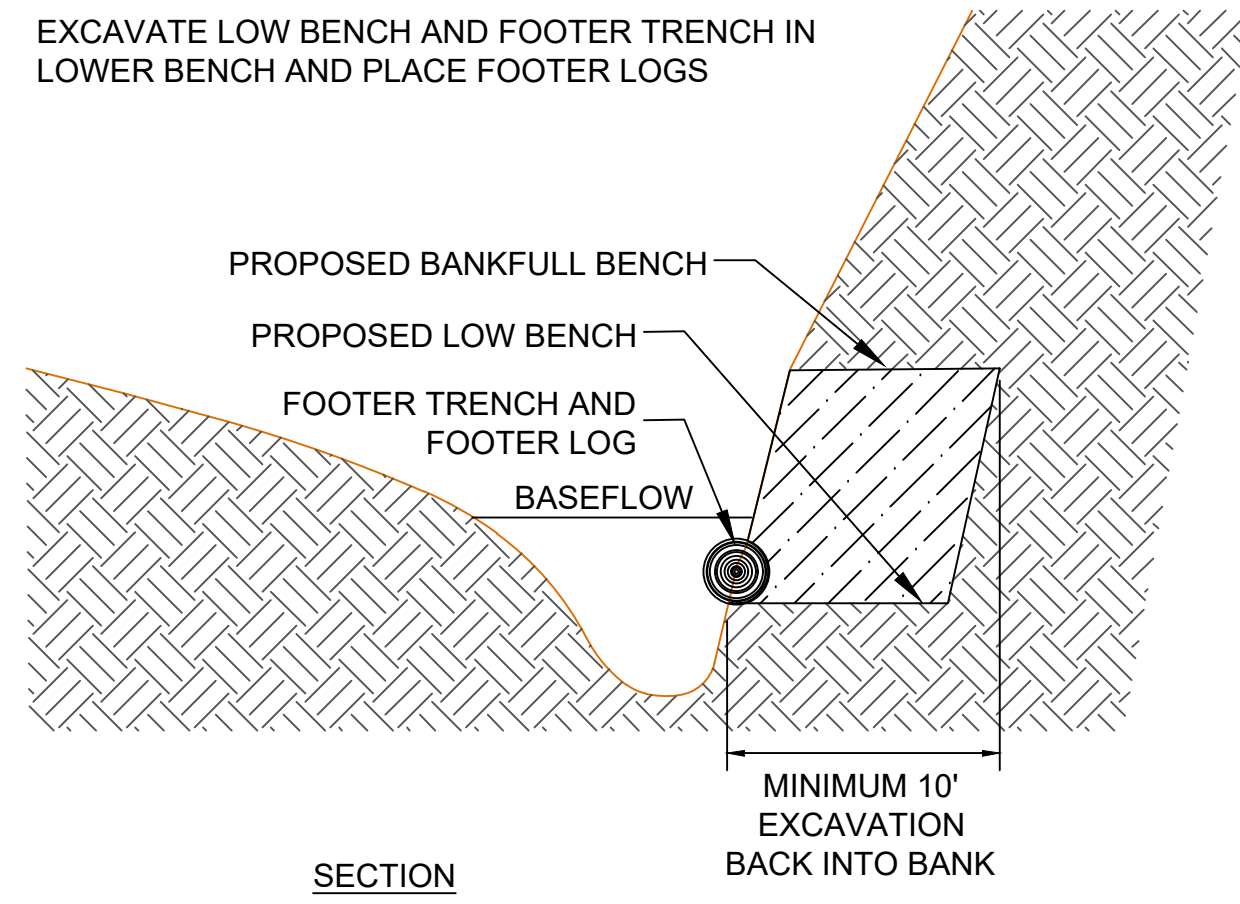


TRANSVERSE CROSS SECTION



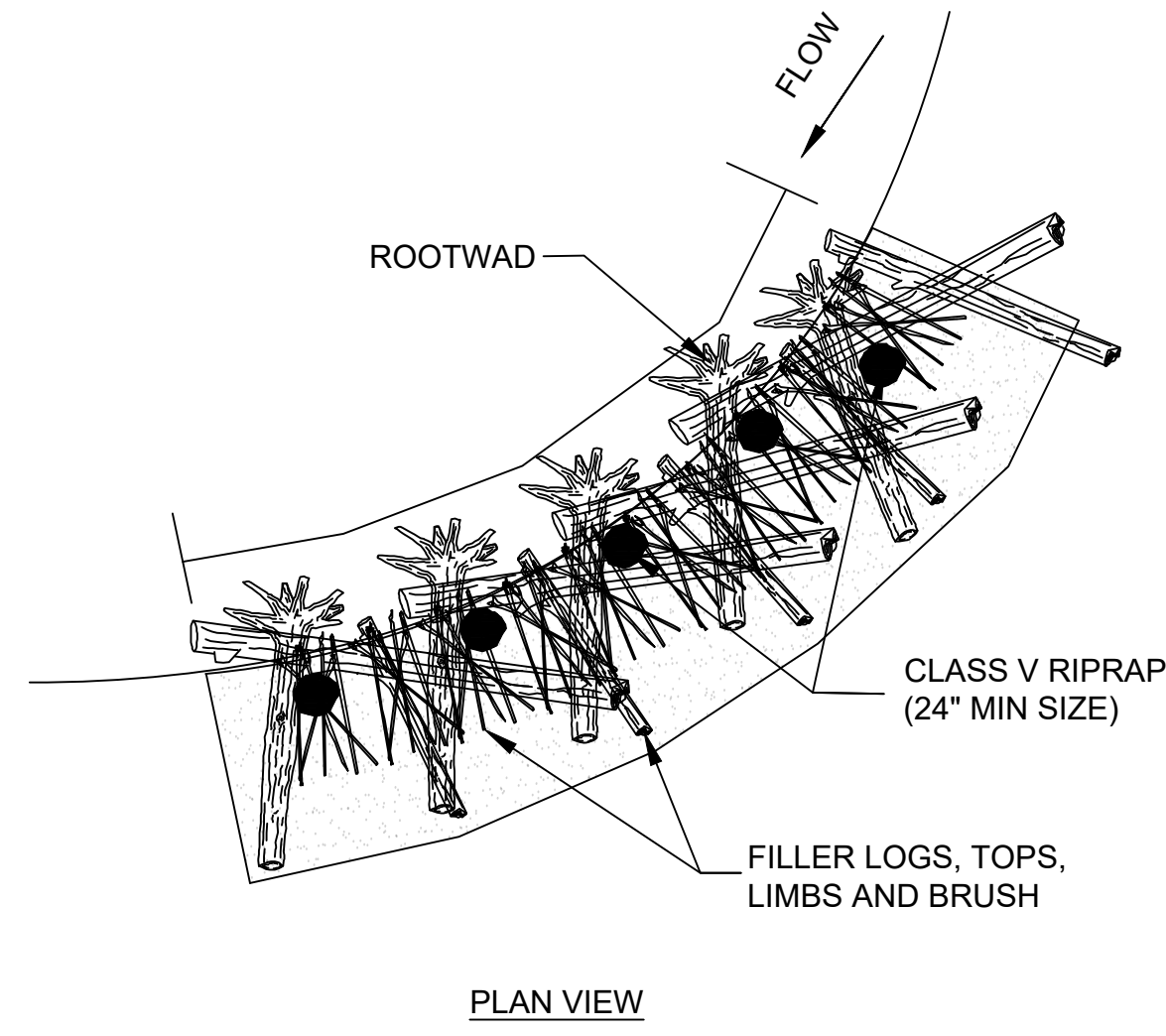
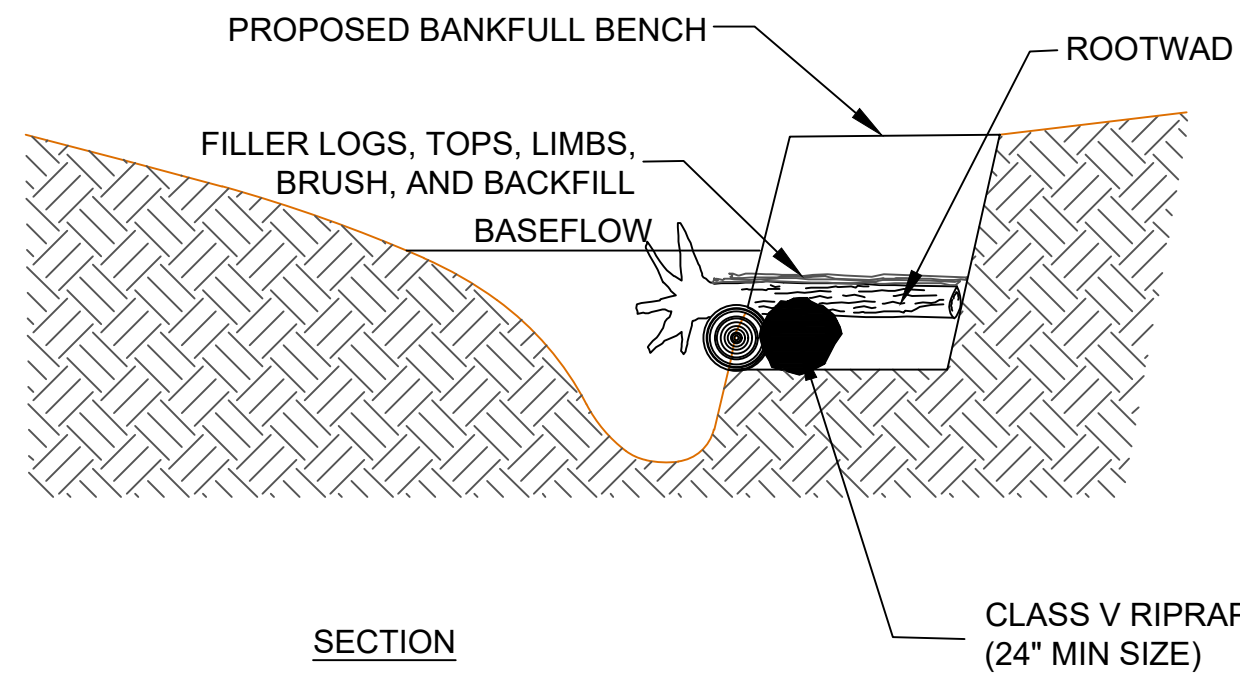
BANK STABILIZATION
NOT TO SCALE

STEP 1:
EXCAVATE LOW BENCH AND FOOTER TRENCH IN LOWER BENCH AND PLACE FOOTER LOGS



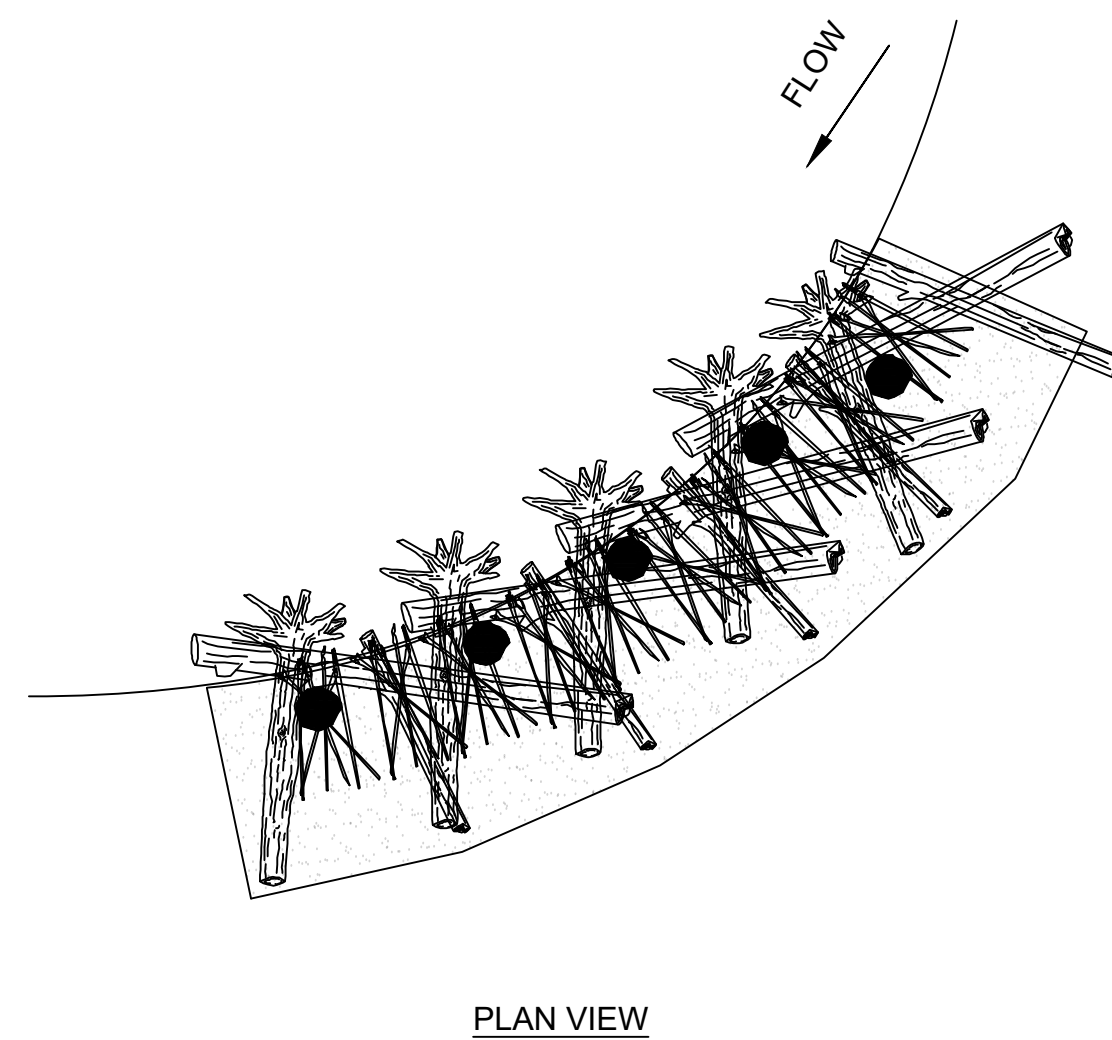
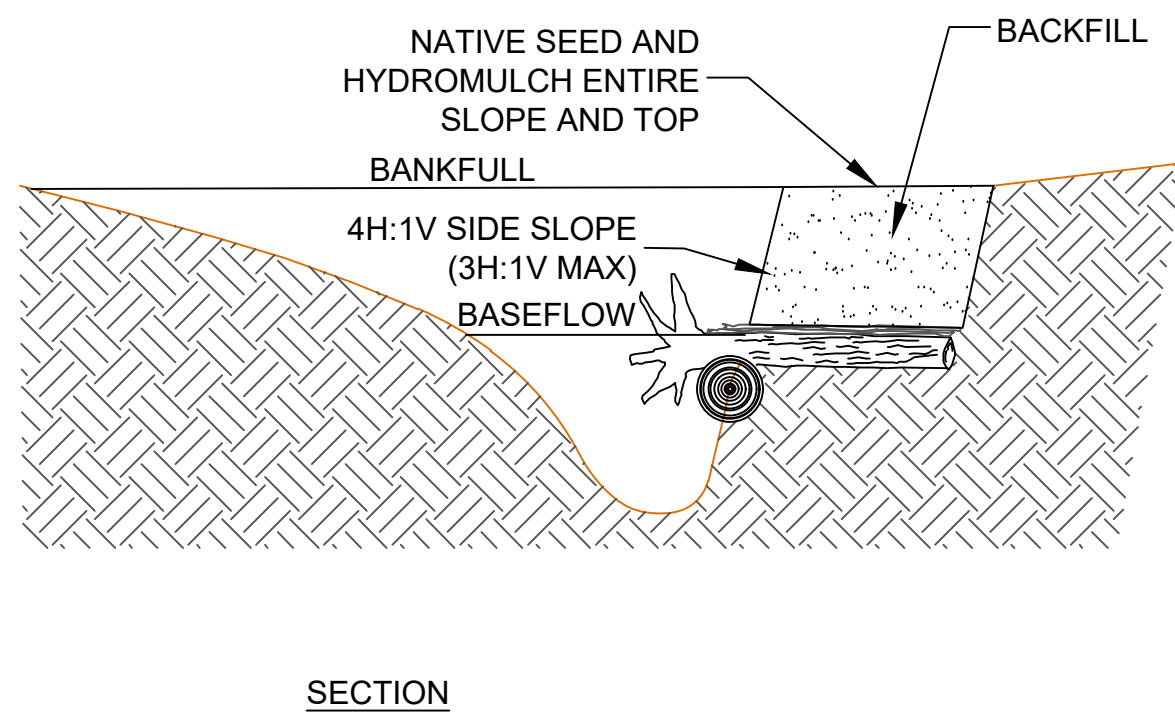
STEP 2:
PLACE ROOTWADS CANTILEVERED OVER FOOTING LOGS.

PLACE CLASS V RIPRAP ON THE DOWNSTREAM SIDE OF EACH ROOTWAD, ESPECIALLY IN THE CORNER BETWEEN THE FOOTER LOGS AND ROOTWAD. PLACE FILLER MATERIAL (SMALL LOGS, LIMBS, TREE TOPS AND BRUSH) BETWEEN AND ON TOP OF THE ROOTWAD.



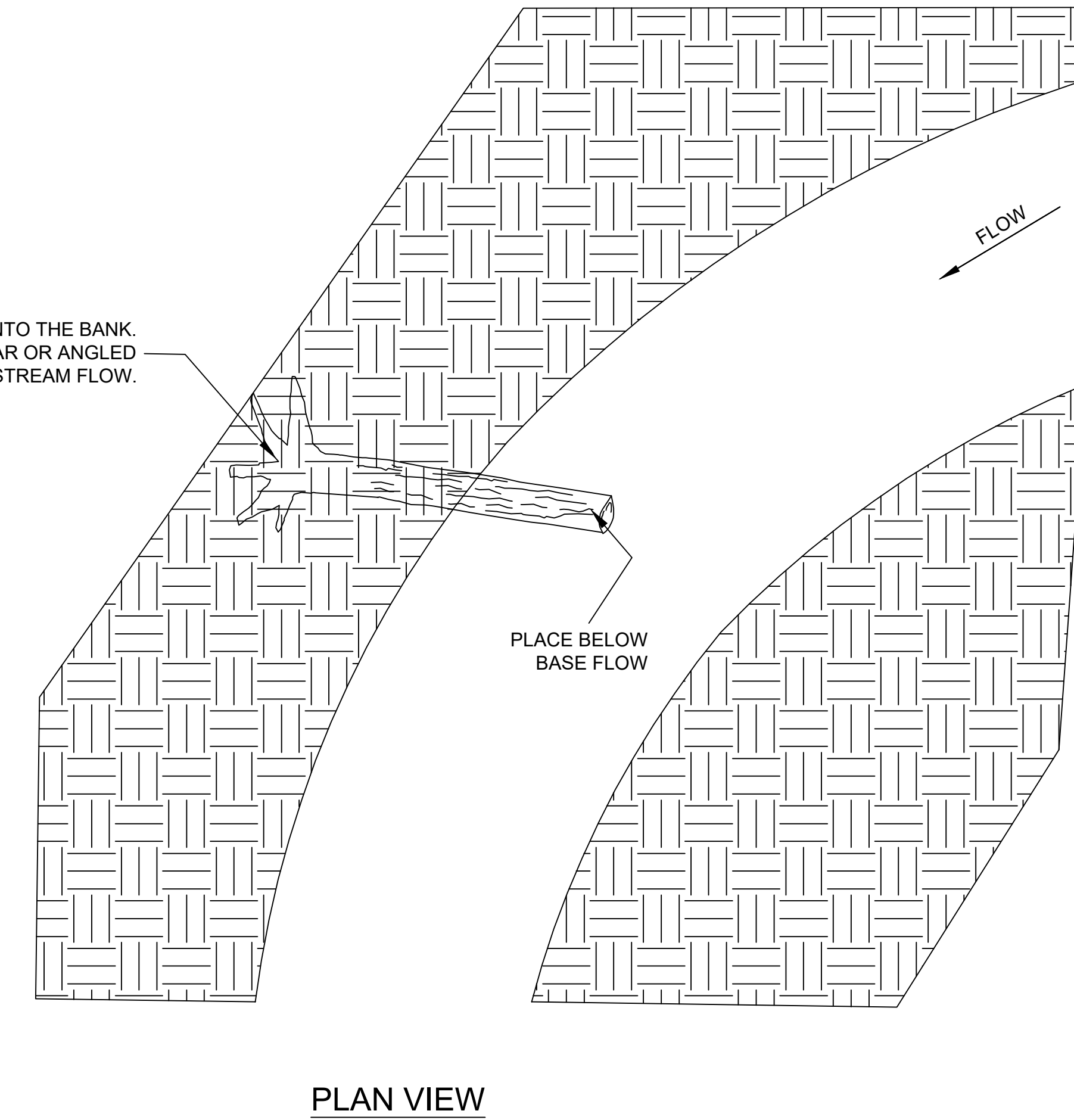
STEP 3:
BACKFILL TO THE PROPOSED BANKFULL BENCH.

SEED WITH NATIVE SEED MIX AND HYDROMULCH TO STABILIZE BACKFILL.

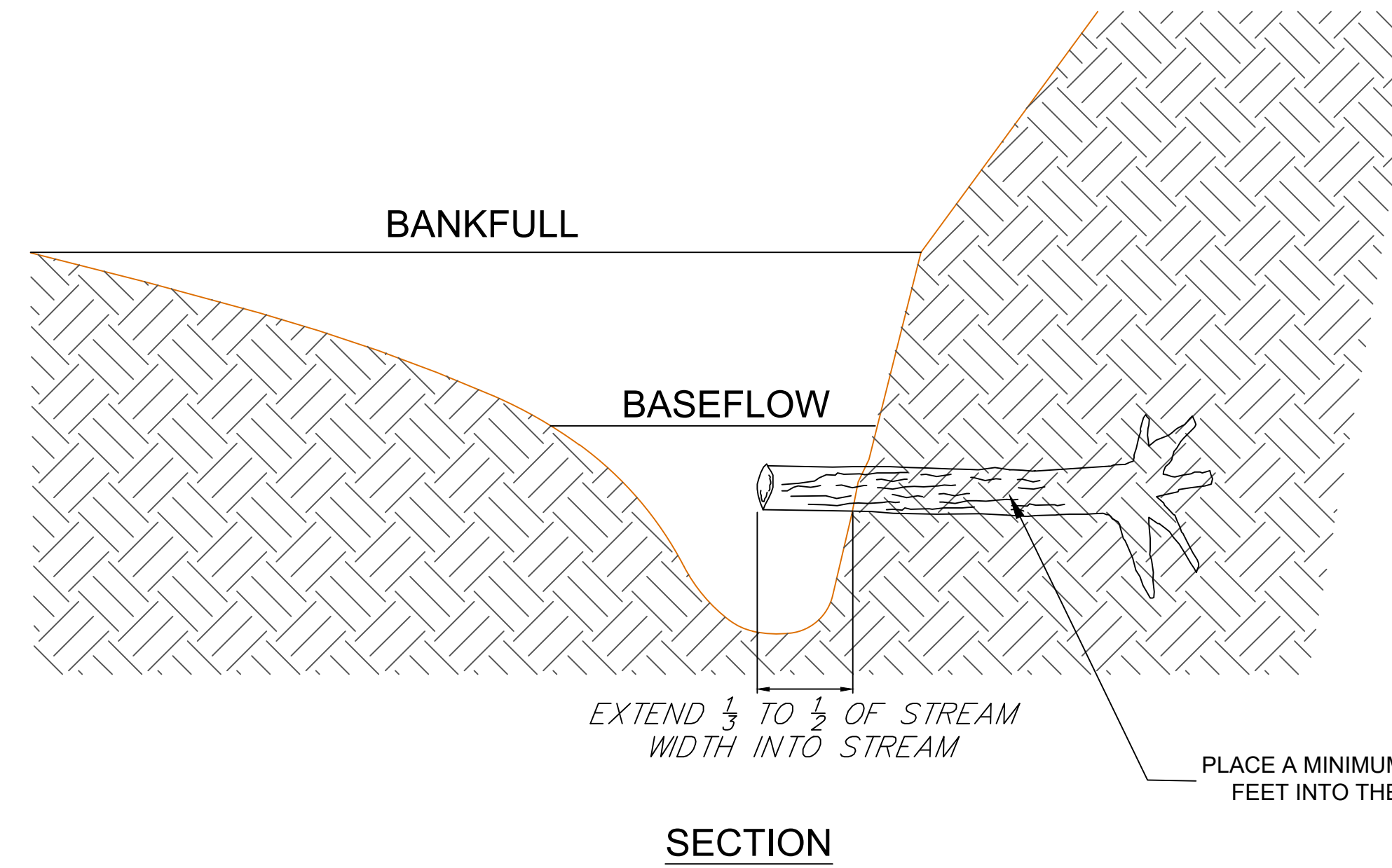


HABITAT FEATURE (1)
NOT TO SCALE

PLACE A MINIMUM OF 10 FEET INTO THE BANK. SHALL BE PLACED PERPENDICULAR OR ANGLED SLIGHTLY UPSTREAM TO STREAM FLOW.



PLAN VIEW



SECTION

HABITAT FEATURE (2)
NOT TO SCALE

CLIENT:

COON CREEK WATERSHED DISTRICT
13632 VANBUREN STREET NE
HAM LAKE, MN 55304

CCWD LOWER COON CREEK
STREAM RESTORATION PROJECT

COON RAPIDS,
ANOKA COUNTY, MINNESOTA

PROJECT TITLE:

ISSUE NO.:

1

DESCRIPTION:

CONCEPTUAL PLANS

DATE:

05/02/2024

CERTIFICATION:

**NOT FOR
CONSTRUCTION**

PROJECT NO.:

227706629

DWN BY: JRP

CHK'D BY: EM

APP'D BY: EW

ISSUE DATE: 05/02/2024

ISSUE NO.: 1

SHEET TITLE:

SHEET NO.: