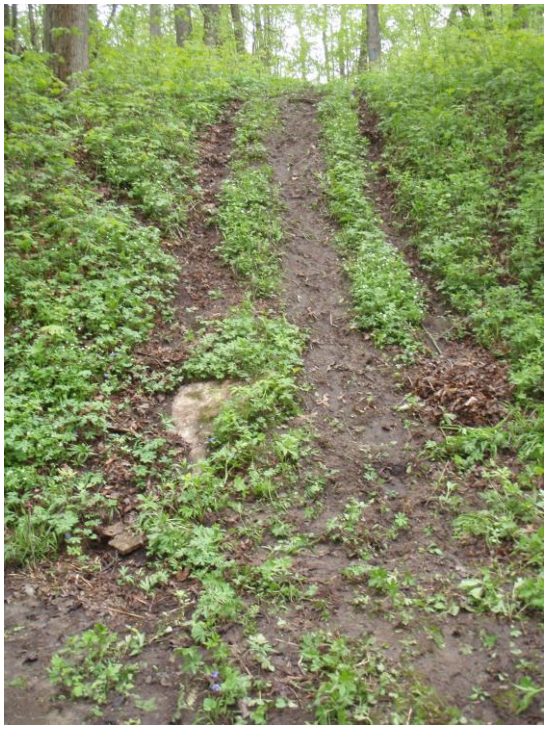
Erosion Control Steps

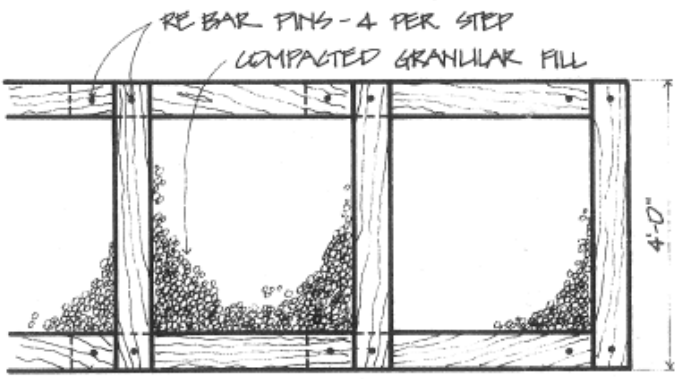
The erosion control steps were designed to control erosion down a steep muddy bank along the Lost Creek Hiking Trail. The steps still allow water to freely flow down them, but they stop the water from wearing down the steep slope more than it already has. Without these steps in place, this portion of the trail would continue to erode, and the slippery slope could pose a safety hazard for hikers.

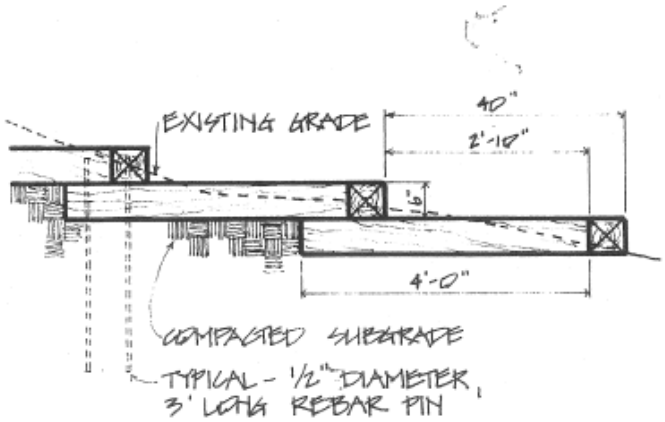
Before



After

TIMBER STEPS II





NOTES:
THIS DRAWING SHOWS STEPS WITH A 40 INCH TREAD BUT THE DESIGN ADAPTS TO OTHER RECOMMENDED TREAD LENGTHS OF 16 OR 64 INCHES. IN ALL CASES TIMBERS SHALL BE CUT INTO LENGTHS OF 2, 4, OR 6 FEET AND FIT TOGETHER AS SHOWN.

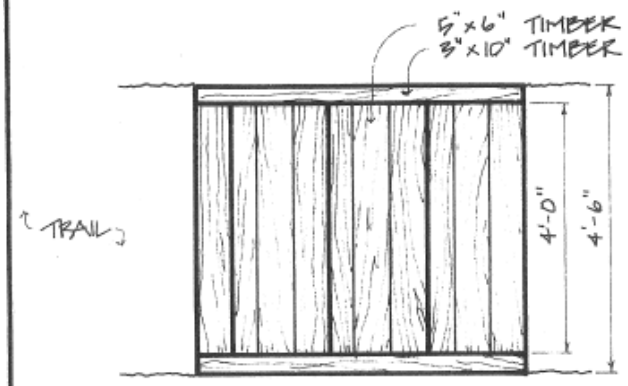
TREADS SHALL BE PITCHED TO DRAIN.

TIMBERS SHALL BE TOE NAILED WITH 60d POLE BARN NAILS.

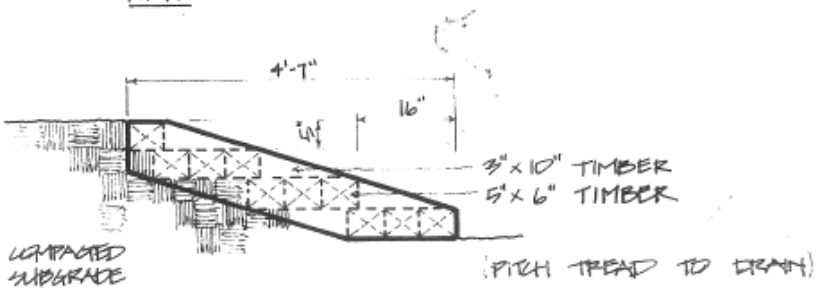
REBAR PINS SHALL BE COUNTERSUNK 1" AND PLUGGED WITH DOWEL THAT HAS BEEN PAINTED WITH CCA PRESERVATIVE SOLUTION.

TIMBERS SHALL BE SOUTHERN YELLOW, PONDEROSA, OR NORTHERN PINE THAT IS CCA PRESSURE TREATED TO A 0.6 LB./CU. FT. RETENTION IN ACCORDANCE WITH AWPB STANDARD FDN. TIMBERS SHALL BE CUT TO SIZE PRIOR TO PRESSURE TREATMENT. ANY DRILLED HOLES OR SAW CUTS AFTER TREATMENT SHALL BE PAINTED WITH CCA PRESERVATIVE SOLUTION. PLAN DIMENSIONS ARE ACTUAL SIZE.

TIMBER STEPS III



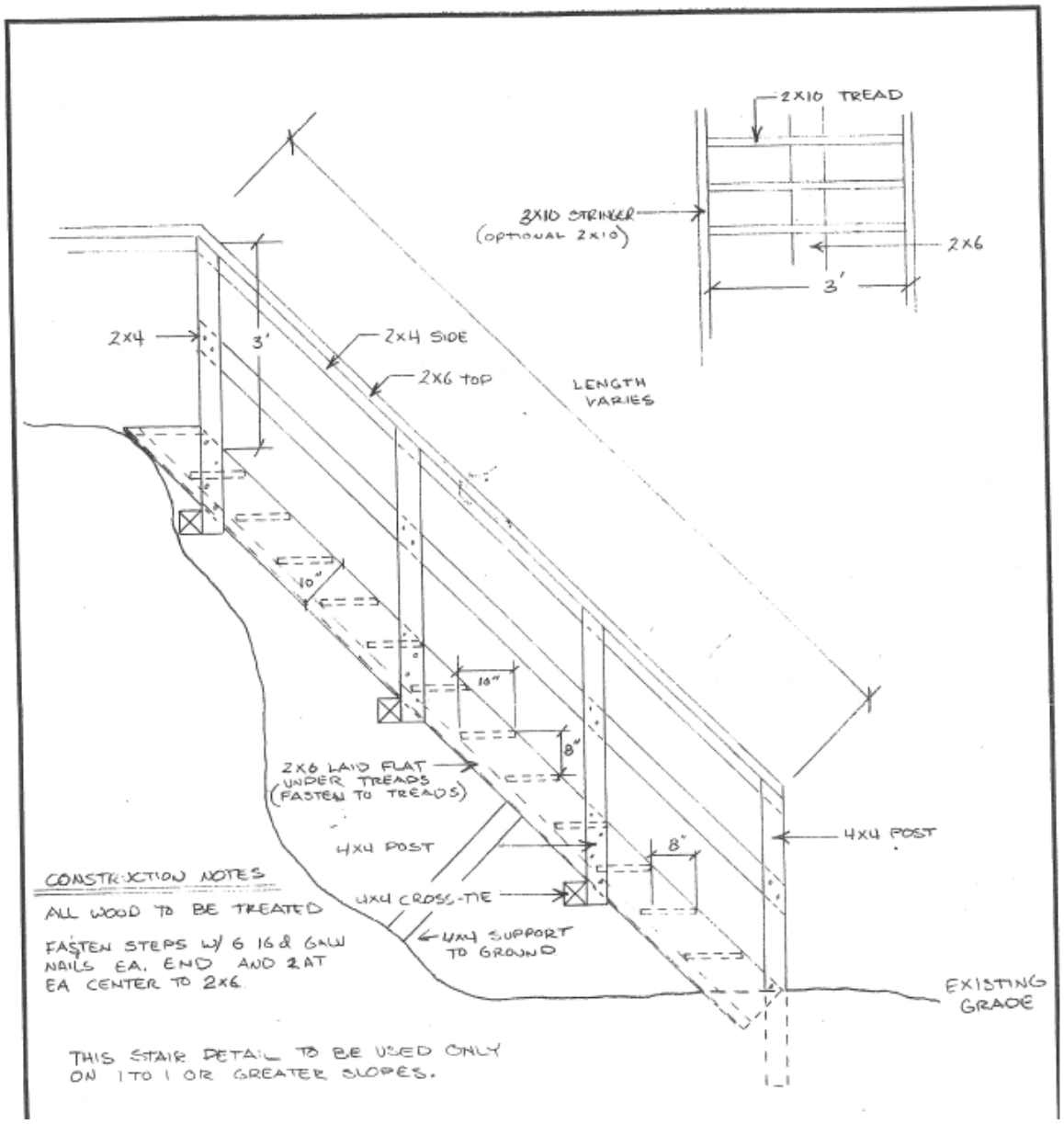
FLAT



SECTION
1/2" = 1'-0"

NOTES:

- FOR STEEPER SLOPES THE 6" SIDE OF THE 5"x6" MAY BE USED AS TREAD. TREAD LENGTH SHOULD THEN BE 14".
- USE 6" GAL. NAILS WITH A MINIMUM OF 3 NAILS IN EACH END OF EACH TIMBER.
- TIMBERS TO BE SOUTHERN YELLOW, PONDEROSA, OR NORTHERN PINE THAT IS CCA PRESSURE TREATED TO A 0.6 LB/CU. FT. RETENTION IN ACCORDANCE WITH STANDARD AWPB P1/1. TIMBERS SHALL BE CUT TO SIZE PRIOR TO THE PRESSURE TREATMENT PROCESS.



MORE INFORMATION ON EROSION CONTROL STRUCTURES CAN BE FOUND BELOW

http://www.mda.state.mn.us/protecting/conservation/practices/wscob.aspx

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_026238.pdf

http://www.mn.nrcs.usda.gov/technical/eng/Consevation_Fact_Sheets/FS410_grade_stabilization_structure.pdf