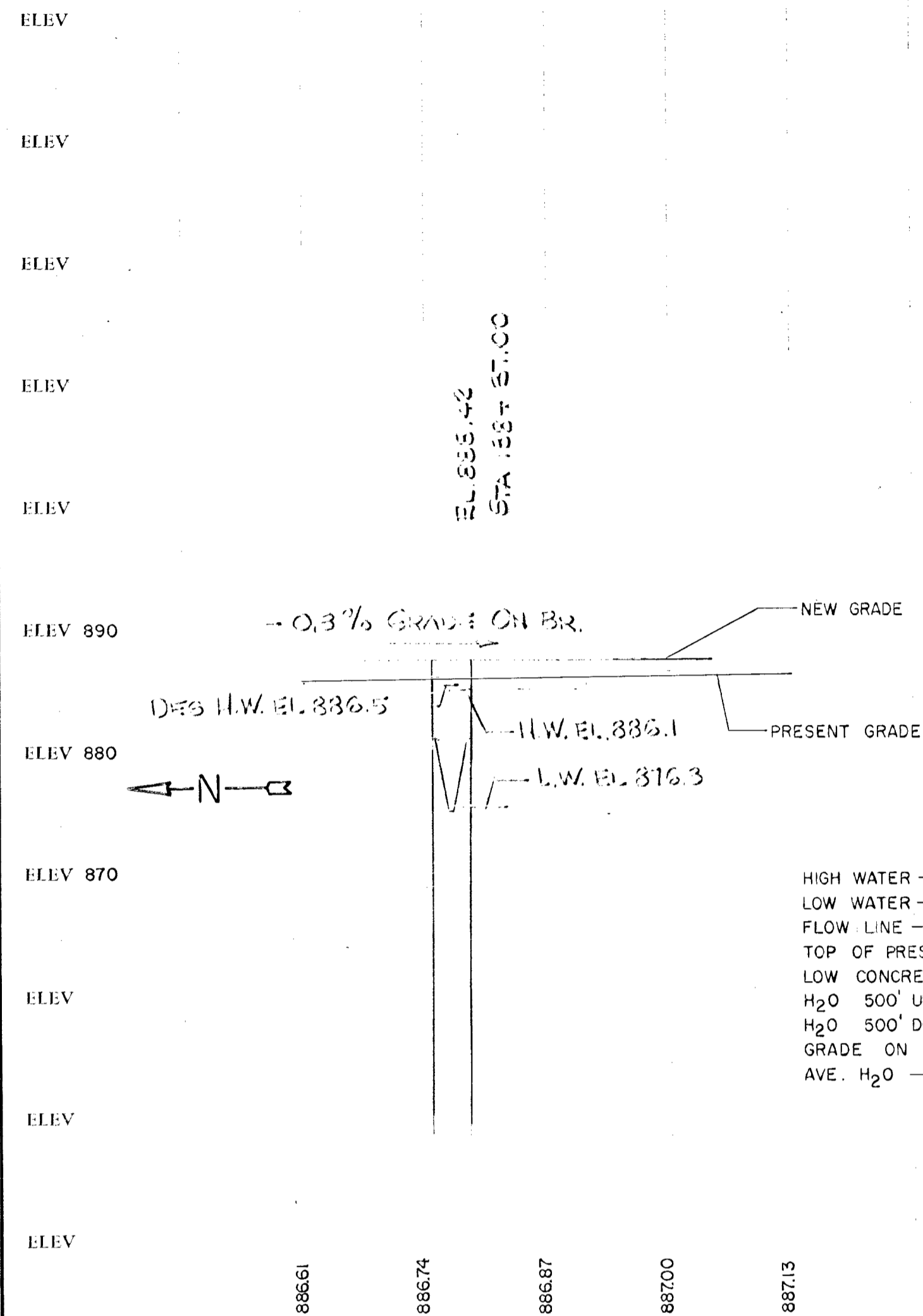


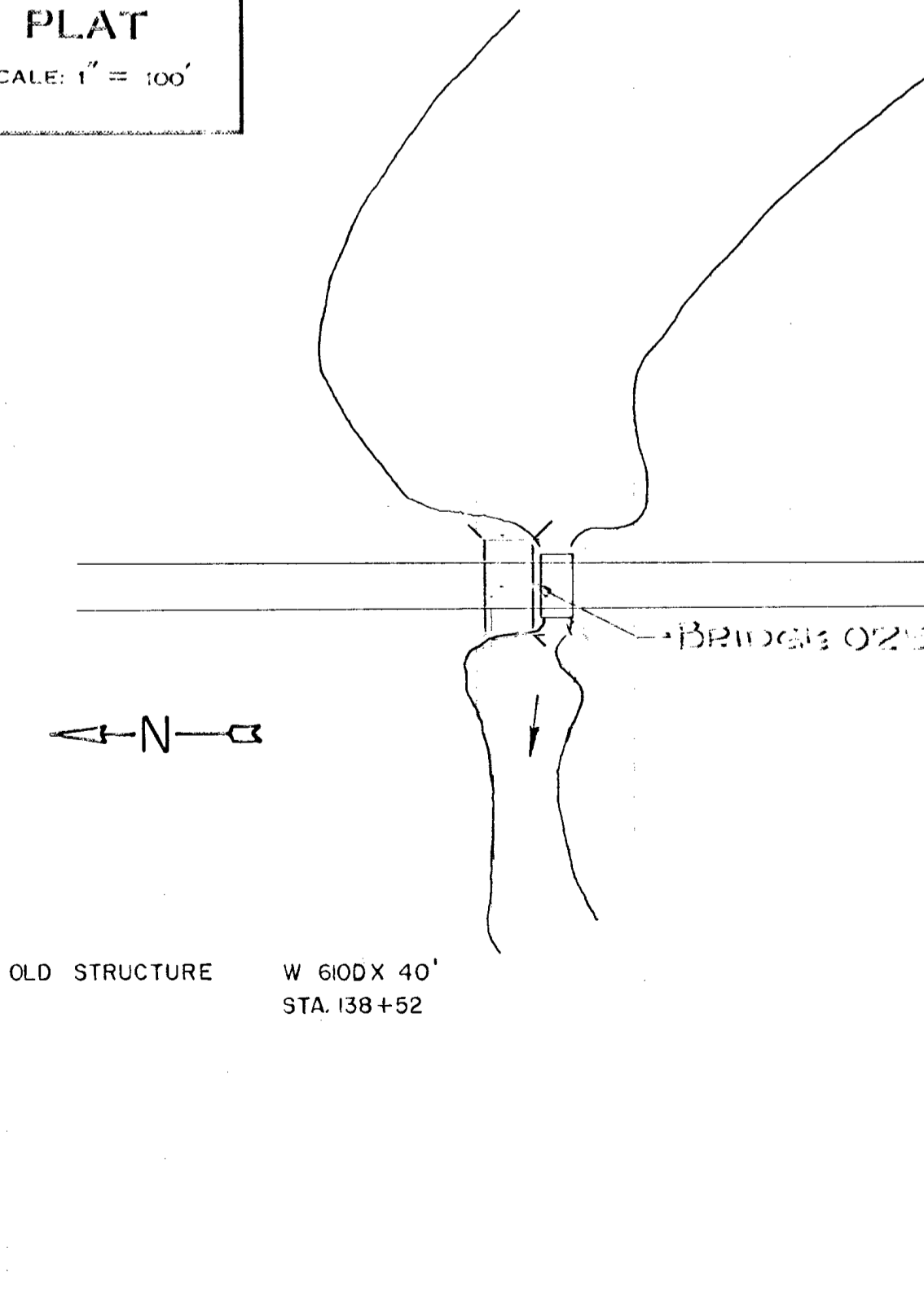
**CONTRACTED PROFILE**

SCALE: HOR. 1" = 100'. VER. 1" = 10'



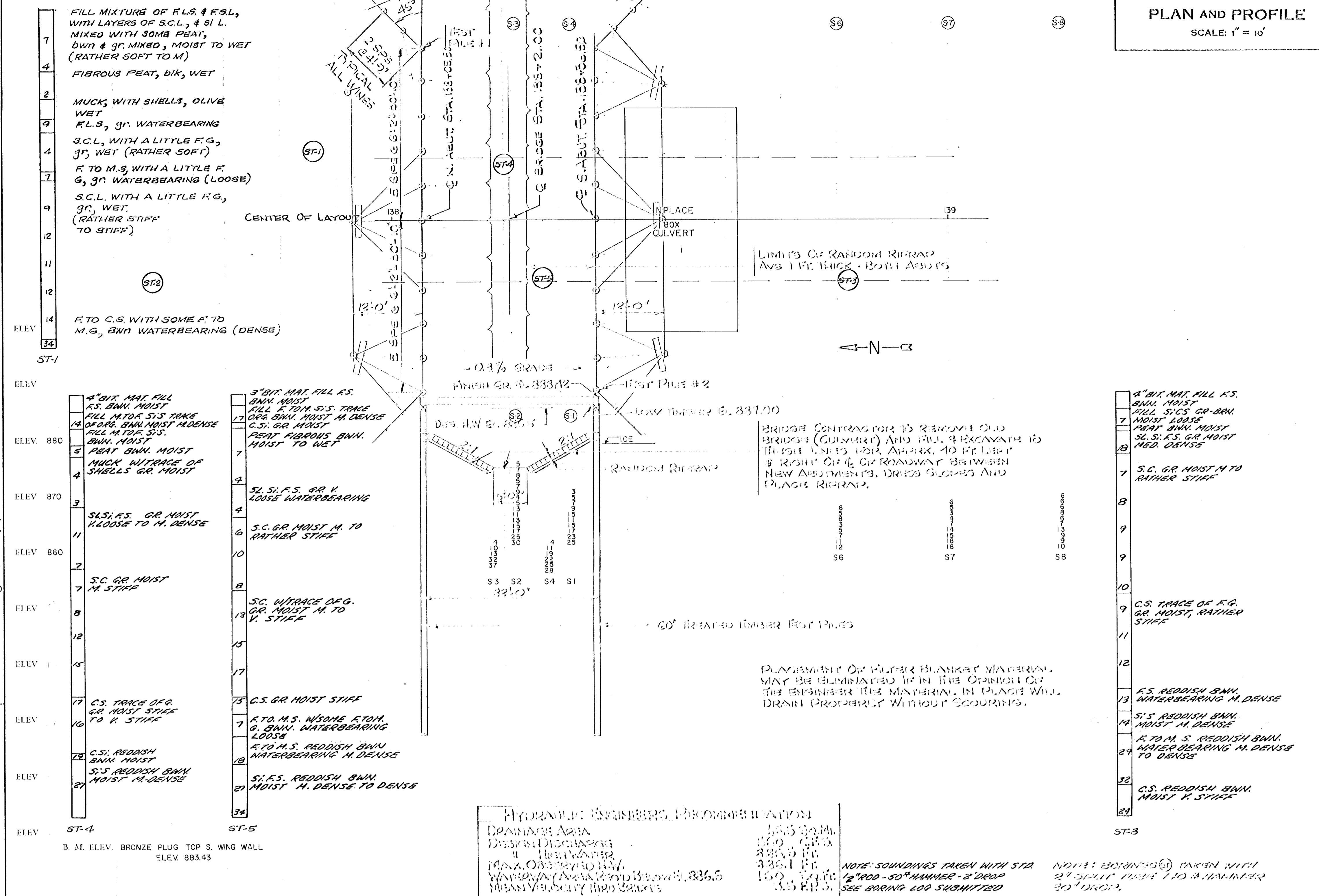
**PLAT**

SCALE: 1" = 100'



**PLAN AND PROFILE**

SCALE: 1" = 10'



**HYDRAULIC ENGINEERS RECOMMENDATION**

DRAINAGE AREA	555 SQ. MI.
DESIGN DISCHARGE	500 CFS.
" " " " " "	300 CFS.
PAV. OR SURF. HW.	336.1 FT.
WATERWAY (AFTER 100' BELOW)	150' C.F.S.
MEAN VELOCITY (HIG BRIDGE)	3.5 F.P.S.

FOLLOW SEPARATE "INSTRUCTIONS FOR PREPARATION OF BRIDGE SURVEYS" WHEN MAKING BRIDGE SURVEYS.

**DATA**

- Preliminary recommendations of Engineer in charge of Bridge Survey:
  - Net span length and type of bridge: 32' REPAIRED TIMBER BRIDGE
  - Width of roadway on bridge: 48'
  - Number and width of sidewalks, if any: 2 - 5'
  - Locate center of bridge at station: 138+21.00
  - If a skew bridge is recommended, the angle of skew should be: \_\_\_\_\_
  - Is piling required? YES
- Special features: Waterfalls, dams, exceptional floods, ice, driftwood, sliding banks, logging, etc.
  - SLOW MOVING WATER
  - NO MOVING ICE
  - ST. PAUL WATER WORKS DAM - UPSTREAM 800'
- Changes: In height or length from that of old bridge, and reasons why: \_\_\_\_\_

**DATA (Contd.)**

- Other bridges in vicinity:
  - Over same stream (particularly structures which carry high water without overflow of roadway); give location, length, height above water, net cross-sectional area at high water stage and estimated age: NONE
  - Over or under same highway or railroad; give location, length, horizontal and vertical clearances and estimated age: NONE
  - Reasons why these bridges are, or are not, fair indications of what length the proposed bridge should be: \_\_\_\_\_
- If structure is over a drainage ditch, is ditch gradient liable to be altered? NO
- Navigation clearances required, if any: NONE
- Information and evidence in regard to high water stages was obtained as follows: ST. PAUL WATER WORKS
- Must contractor provide for traffic during construction of proposed bridge? If so, by what means? ROAD CLOSURE AT MINIMUM

**HIGH AND LOW WATER ELEVATIONS**

Data obtained from ST. PAUL WATER WORKS reflects highest water elevation in the area of this construction to be 886.10 and the lowest water elevation to be 876.30. The above figures are for informational purposes only. The state neither warrants nor represents that these figures for high water or low water are in any way indicative of the high water or low water to be expected or encountered during this construction.

**SHIPPING POINT**

Proposed Bridge is 5 miles WEST of HUGO which is the nearest Railroad shipping point.

\*(Give name of town, station or siding)

Date \_\_\_\_\_ Project or County Engineer

Date \_\_\_\_\_ District Engineer

STATE OF MINNESOTA  
DEPARTMENT OF HIGHWAYS  
**BRIDGE SURVEY**

FOR  
PROPOSED BRIDGE LOCATED 2 MILES N.W. OF  
CENTERVILLE ON CSAH. # 14  
(TOWN OR CITY) (F.H. S.A.R. OR C.A.R. NUMBER)

SEC. 15 TWP. 31 N. R. 22 W.  
TOWNSHIP LIND LAKE COUNTY ANOKA

SURVEY MADE DURING MONTH OF JAN. 1974.

SURVEY MADE BY DICK KINNAN

BRIDGE No. 02527