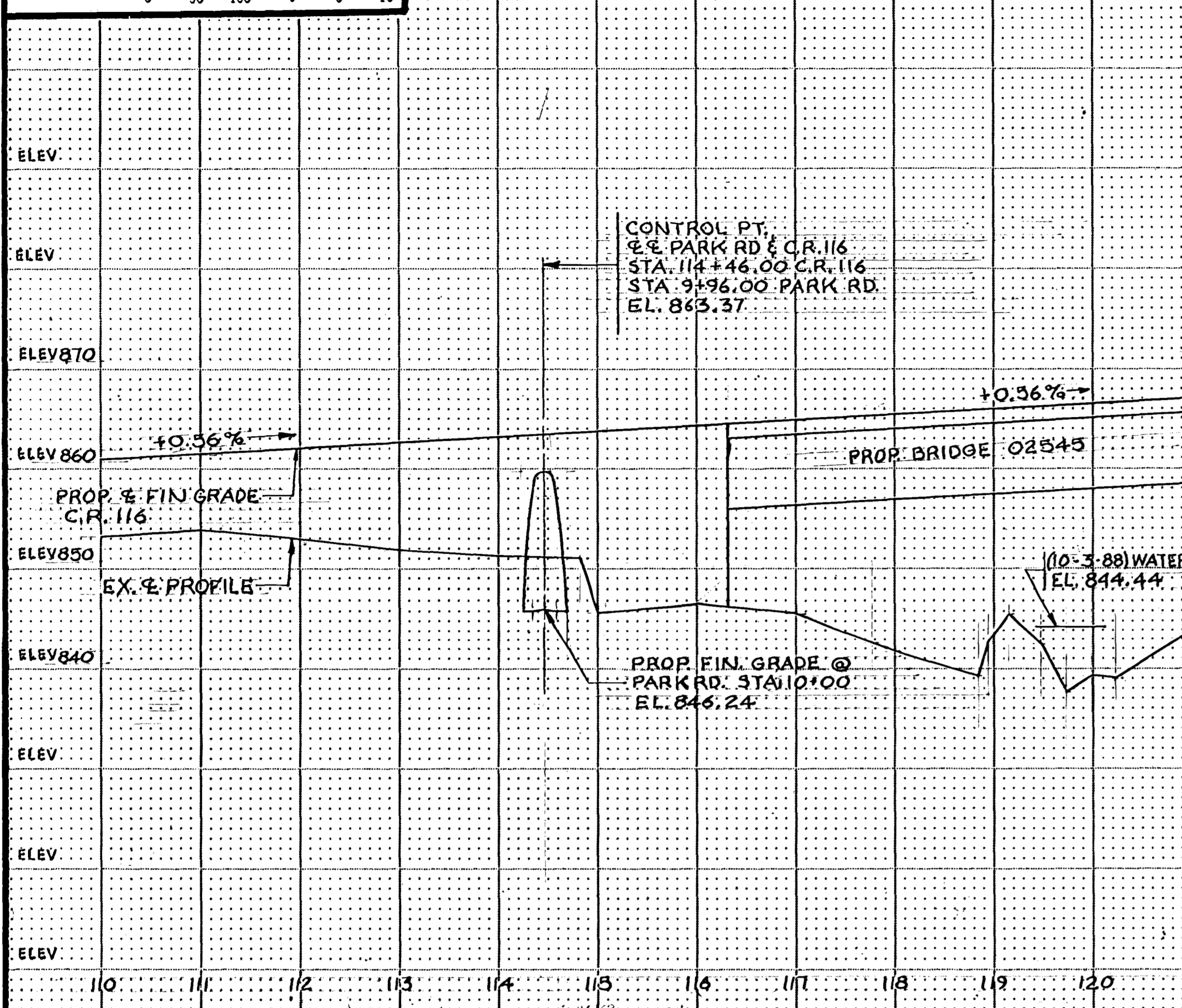


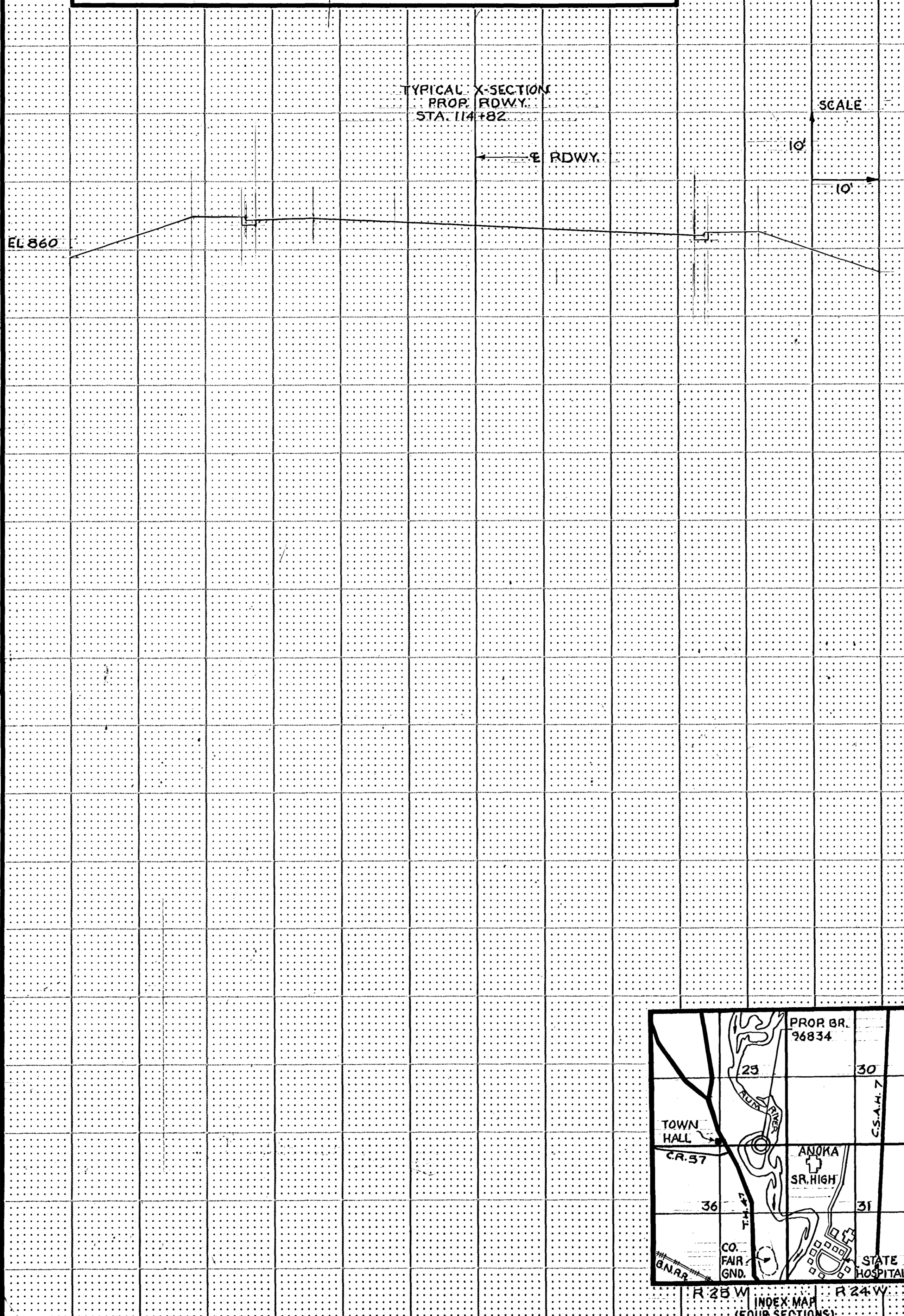
CONTRACTED PROFILE

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



TYPICAL SECTIONS & PERTINENT DATA

SCALES AS SHOWN



Fed. Proj. No.

LOCATION ENGINEER'S OBSERVATIONS AT BRIDGE SITE

1. Special Features: Waterfalls, dams, floods, ice, debris, sliding banks, recreational boating.
2. Other bridges or culverts over the same stream (particularly structures which carry high water without overflow of roadway): Given location, type, length, height above high water, cross-sectional area etc.
3. Apparent highwater elevation..... Obtained from.....
4. Other data: Approx. velocity of water at time of survey.....

HYDRAULIC ENGINEERS RECOMMENDATION

DATE

Stream or ditch designation

Drainage area

Max. flood on record..... Design flood (..... yr. freq.)..... C.F.S.

Max. observed highwater elevation..... Design highwater elevation.....

Design mean velocity through structure..... F.P.S.

Low superstructure at or above elevation.....

Flowline elevation..... Skew angle.....

Waterway area req'd. below elevation..... Sq. Ft. at Rt. angles to channel.....

In the interest of flood plain zoning the regional flood (100 yr. freq.) is..... C.F.S. at stage..... and mean velocity of..... F.P.S. with..... Ft. swellhead.

The above recommendation will provide a structure of adequate waterway to pass the regional flood within criteria established by the Dept. of Natural Resources.

FOUNDATION ENGINEERS RECOMMENDATION

DATE

Bridge survey sheets made from: ANOKA CO. GRADING PLAN FOR C.R. 85-09-116.

Bench mark elevation 873.23 (M.S.L. 1929 Adj.)
Location: SE COR. SIDEWALK @ SE COR. ICE ARENA

MINNESOTA DEPARTMENT OF TRANSPORTATION

BRIDGE SURVEY

AT MILE POINT..... ON C.R. 116 (T.H. CSAH, C.R. etc.)

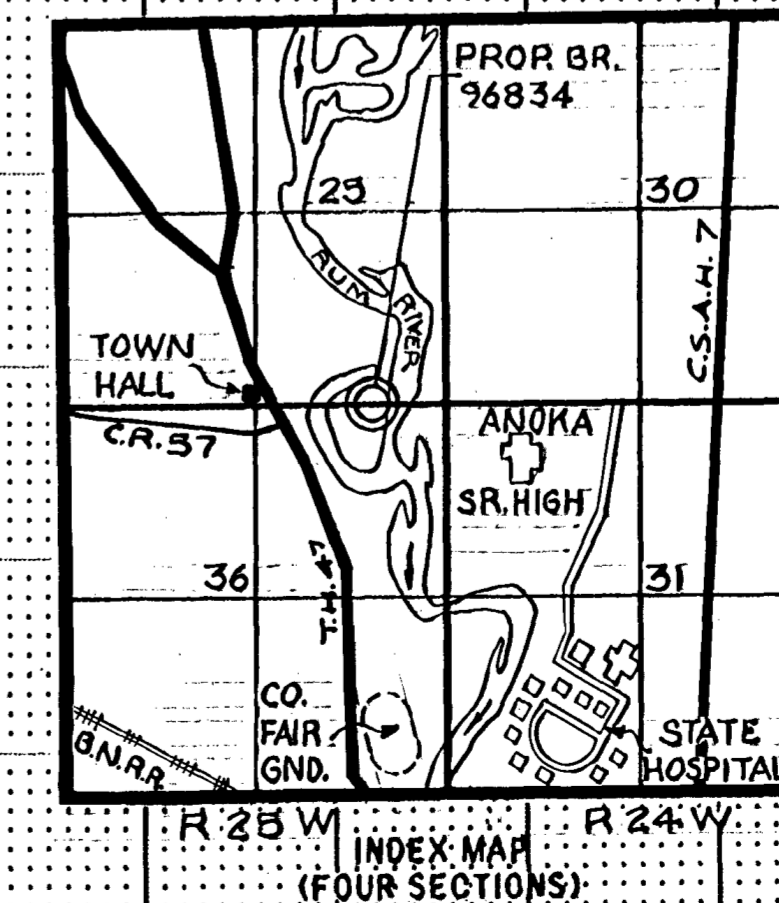
PROPOSED BRIDGE LOCATED ON C.R. EXTENSION

FROM C.R. 47 IN RAMSEY TO CSAH 7 IN ANOKA

SEC. 24 TWP. 32 N. R. 25 W

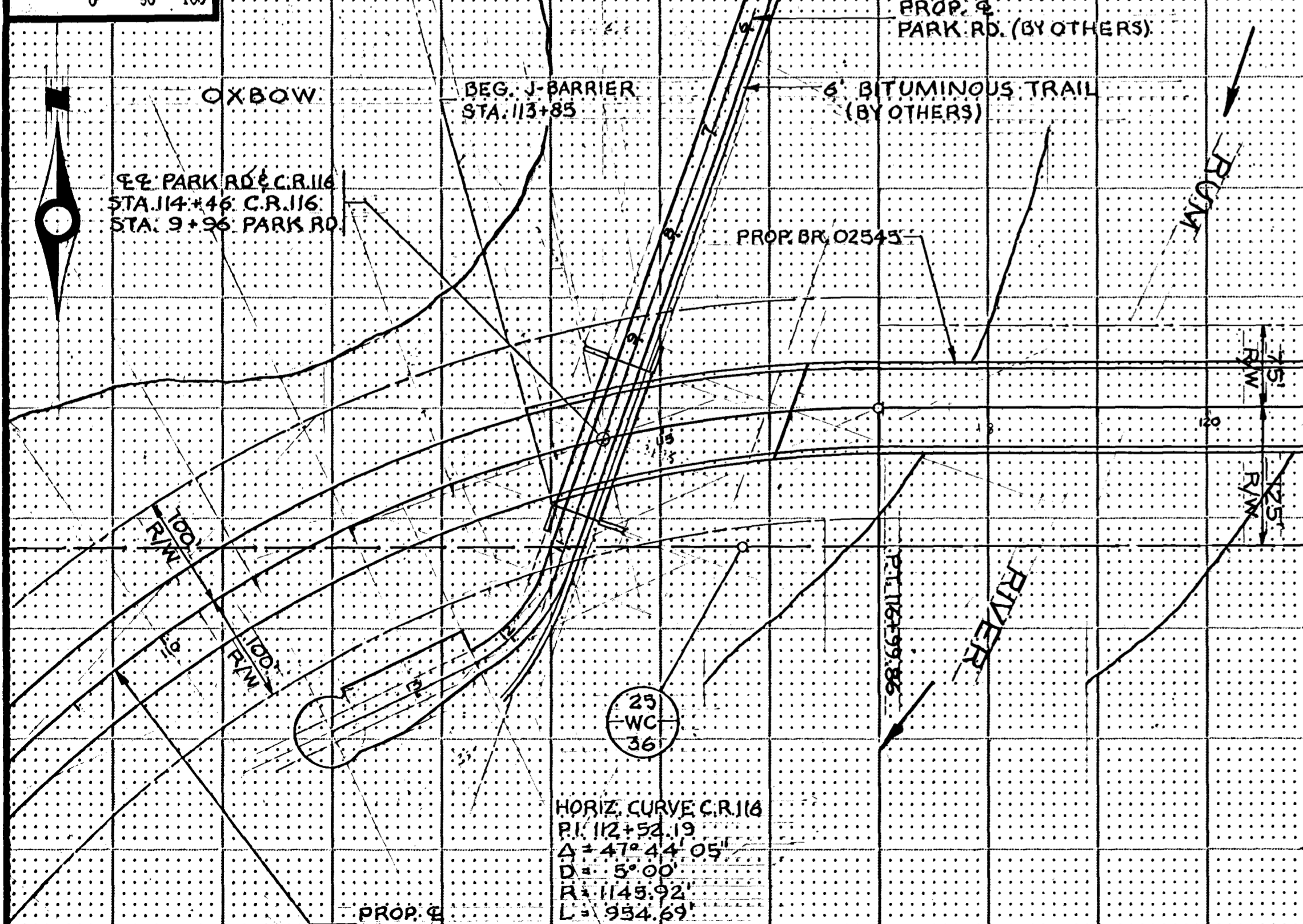
TOWNSHIP RAMSEY COUNTY ANOKA

BRIDGE NO. 96834



PLAT

SCALE: 1" = 100'



HORIZ. CURVE C.R. 116
P.I. 112+52.19
Δ = 47° 44' 05"
D = 5° 00'
R = 1143.92'
L = 954.69'
T = 307.02'
P.C. 107+43.17
P.T. 116+99.86

Area No.

Job No.

State Proj. No. 88-09-116

Sheet No. 9C of 10C Sheets