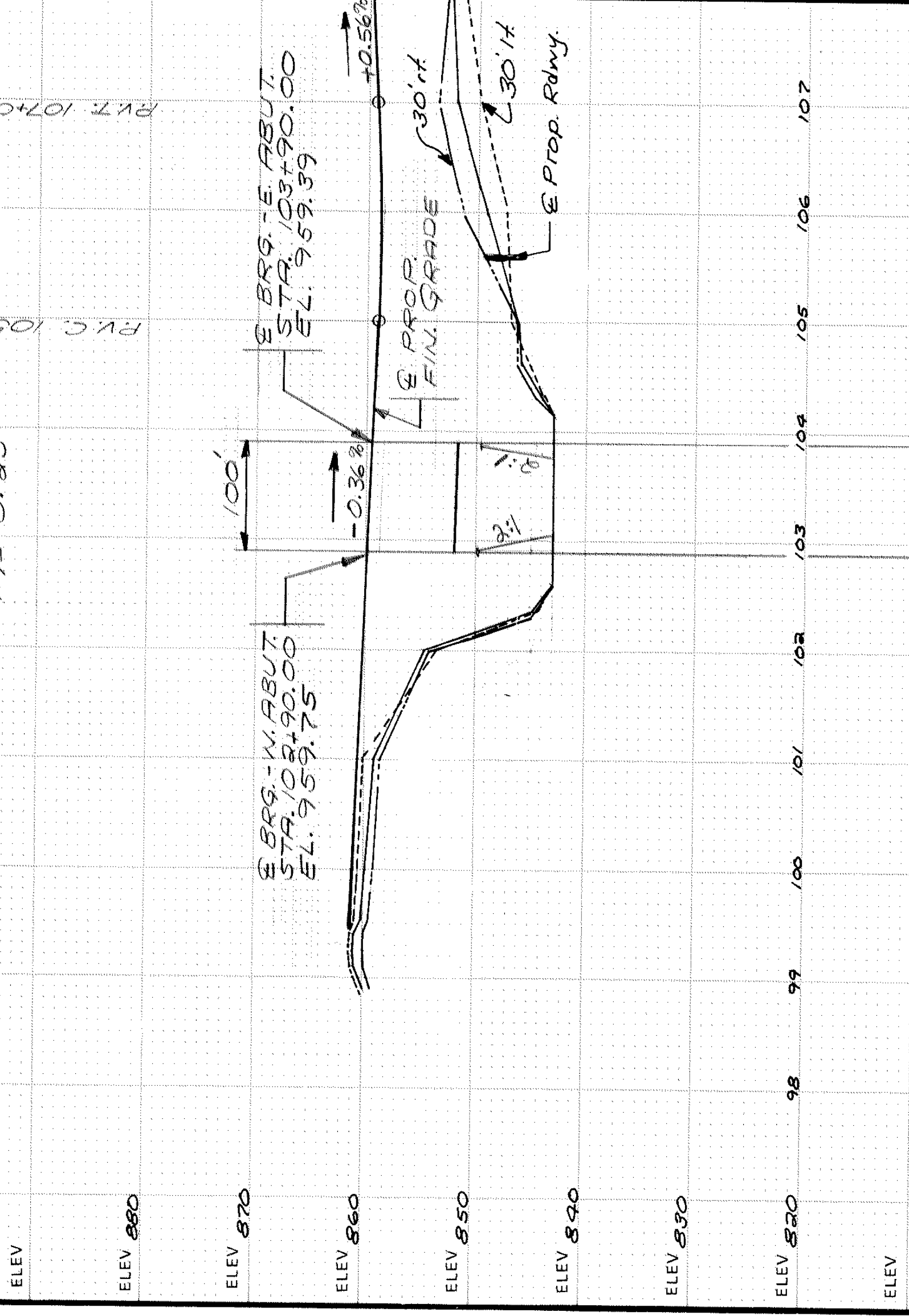
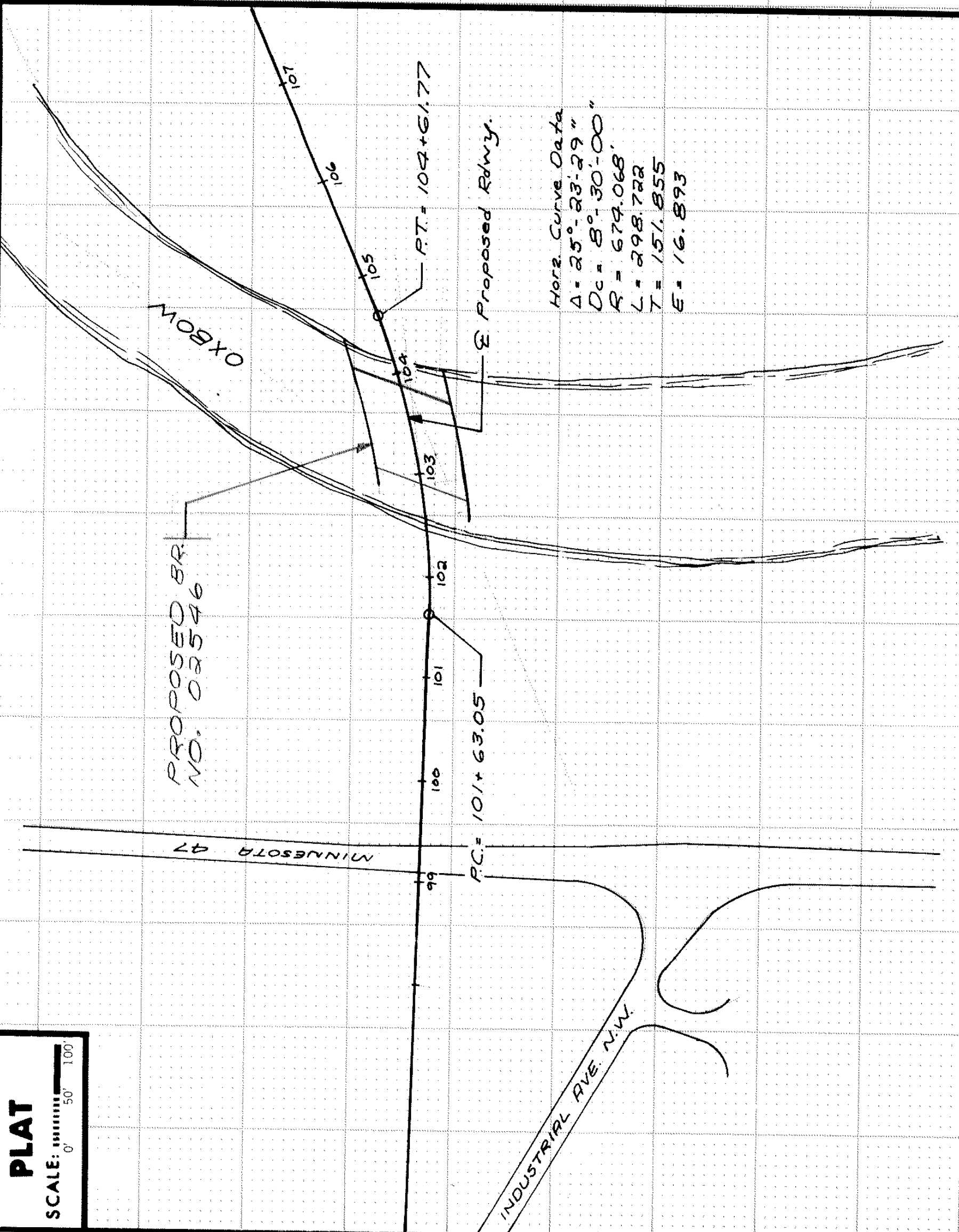


CONTRACTED PROFILE
 SCALE: HOR. 1" = 100' VER. 1" = 10'

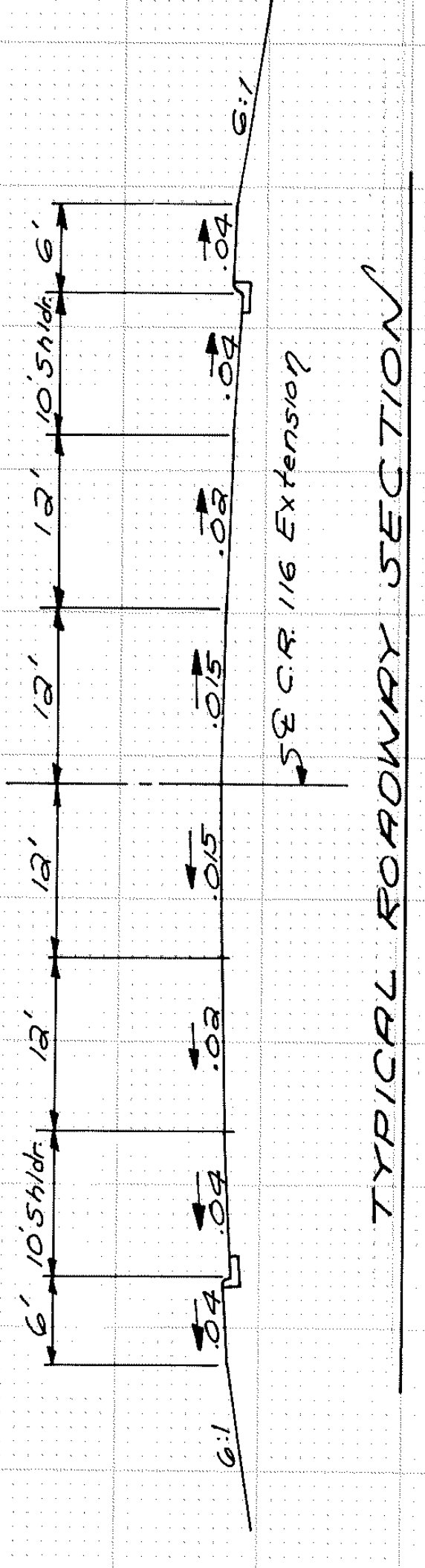
300' V.C.
 P1 = 106+00
 EL. 858.68
 G1 = -0.36 %
 G2 = +0.56 %
 P2 = 0.23'



PLAT
 SCALE: 1" = 100'



TYPICAL SECTIONS & PERTINENT DATA
 SCALES AS SHOWN



LOCATION ENGINEER'S OBSERVATIONS AT BRIDGE SITE

- Special Features: Waterfalls, dams, floods, ice, debris, sliding banks, recreational boating.
- 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.)
- Apparent highwater elevation: Obtained from:
- Other data: Approx. velocity of water at time of survey:

HYDRAULIC ENGINEERS RECOMMENDATION

Stream or ditch designation: **RUM RIVER**

Drainage area:

Max. flood on record (..... 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 ft. 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

100' PRESTRESSED BEAM SPAN
 5'-8" ROADWAY 2'-0" SHOULDERS
 2'-6" 0" SIDEWALKS
 30° SKEW
 8'-30'-00" CURVE

BRIDGE SURVEY

Bridge survey sheets made from: **SURVEY NOTES FROM SURVEY DONE BY ERICKSON ENGINEERING**

Bench mark elevation: **873.85**

Location: **SE COR. SIDEWALK @ S.E. COR. ICE ARENA**

MINNESOTA
 DEPARTMENT OF TRANSPORTATION

BRIDGE SURVEY
 ON C.R. 116 (E.X.)
 (T.H., C.S.A.H., C.R., etc.)
 PROPOSED BRIDGE LOCATED ON C.R. EXTENSION
 From C.R. 47 in Ramsey to C.S.A.H. 17 in Anoka
 SEC. 25 TWP. 33 N. R. 25 W.
 TOWNSHIP: **RAMSEY** COUNTY: **ANOKA**

BRIDGE NO. **02546**

