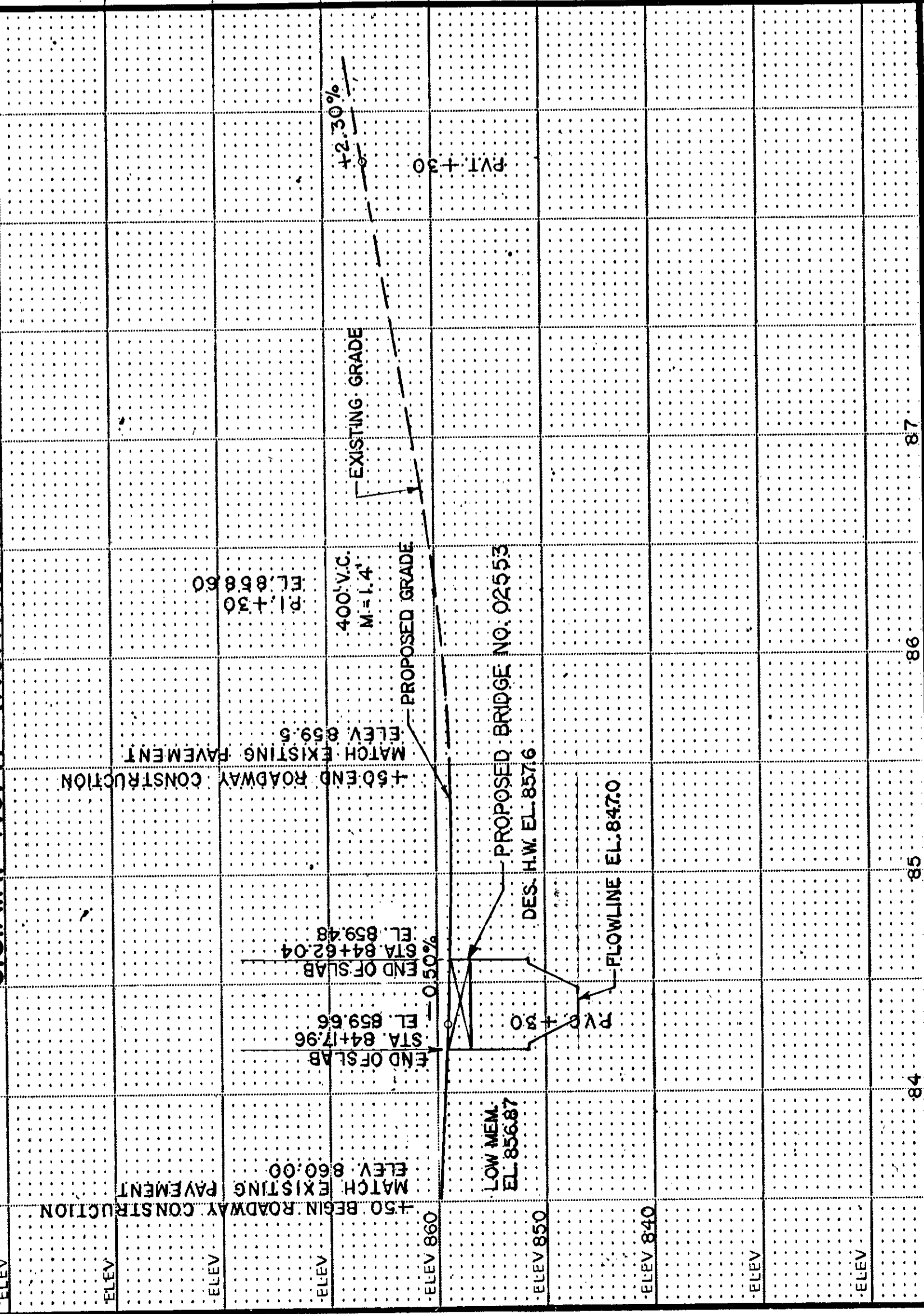


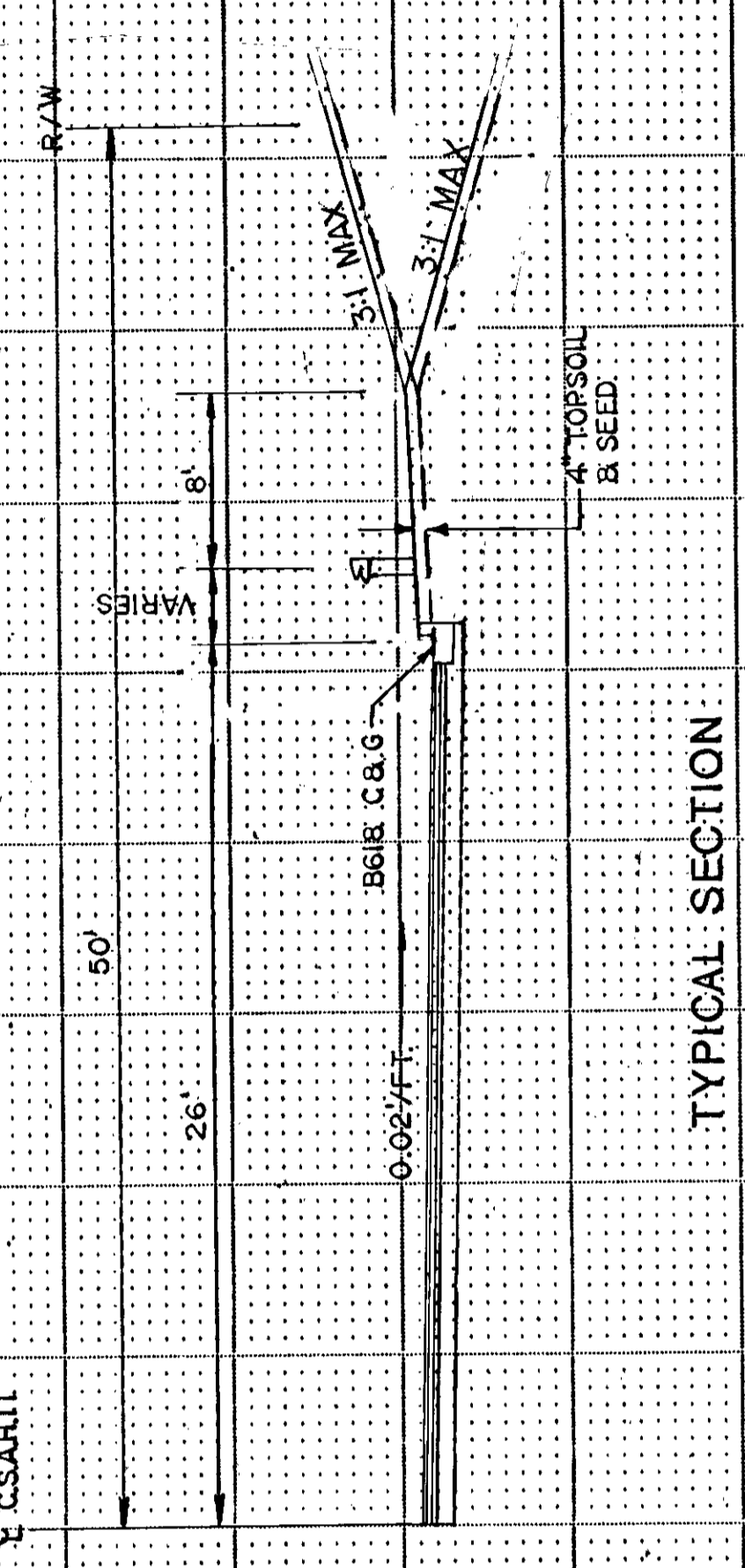
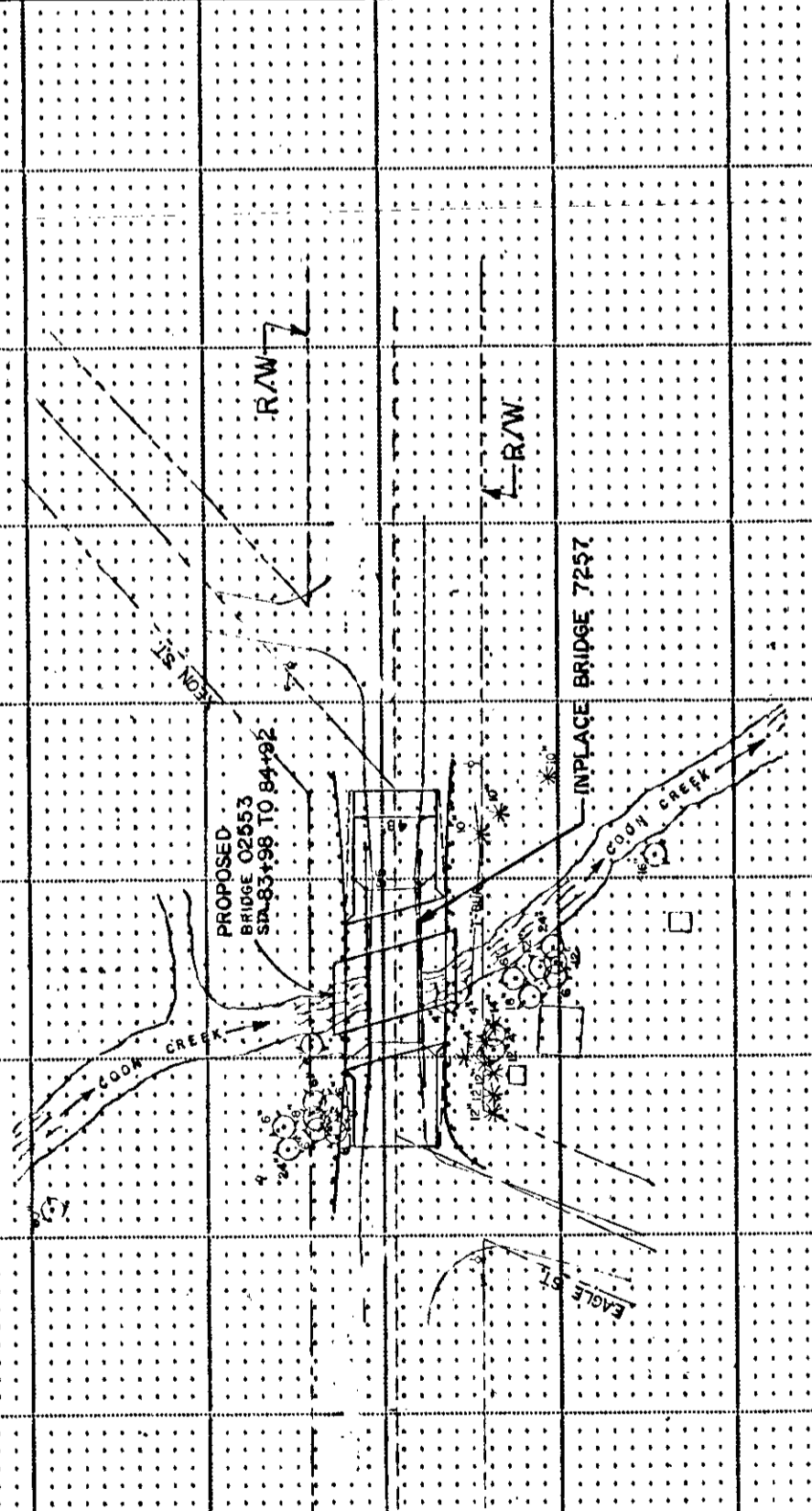
**TYPICAL SECTIONS & PERTINENT DATA**  
SCALES AS SHOWN

**CONTRACTED PROFILE**  
SCALE: HOR. 1" = 50' VER. 1" = 10'

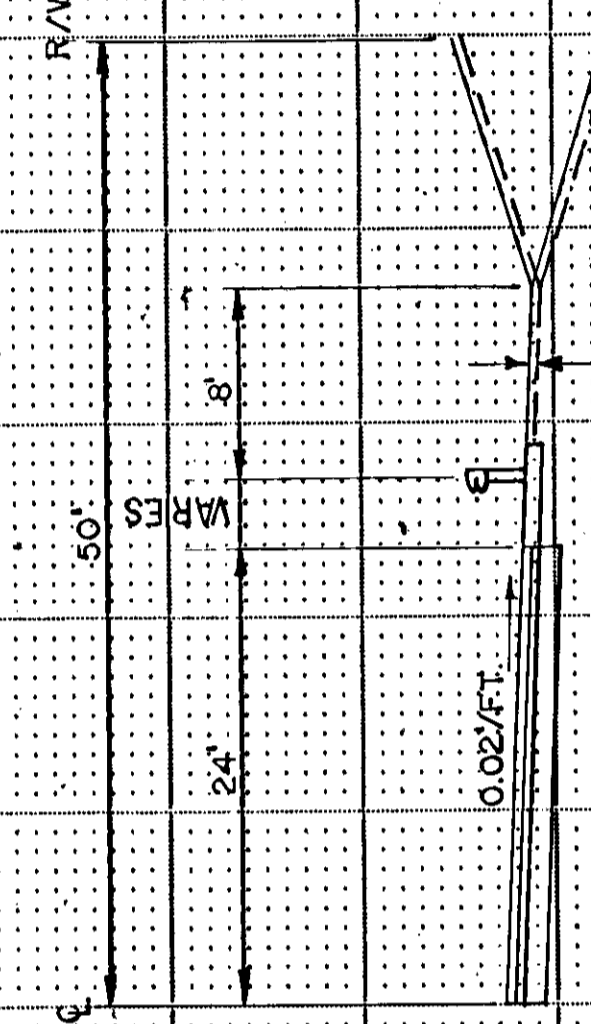
C.S.A.H. NO. 1 (NORTHDALE BLVD.)



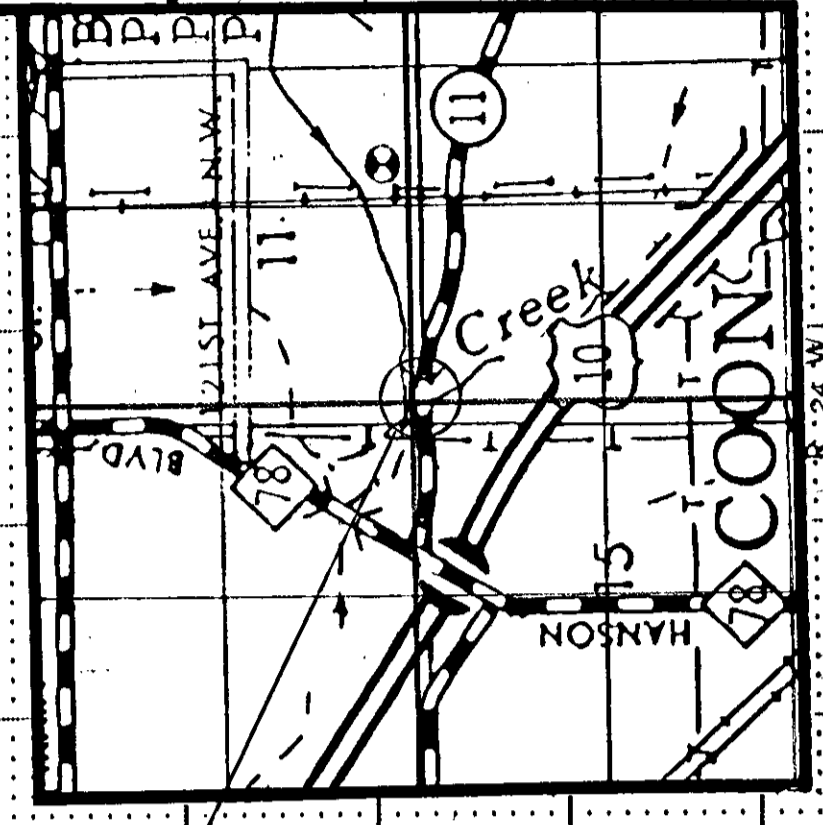
**PLAT**  
SCALE: 1" = 50'



TYPICAL SECTION  
STA. 83+50 TO 83+97.88, STA. 84+82.12 TO 84+93



TYPICAL SECTION  
STA. 84+93 TO STA. 85+50



INDEX MAP  
(FOUR SECTIONS)

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: COON CREEK  
 Drainage area: 52,000 ACRES  
 Max. flood on record: Design flood (100 yr. freq.) is 1586 C.F.S.  
 Max. observed highwater elevation: Design highwater elevation: 857.6  
 Design mean velocity through structure: 4.4 F.P.S.  
 Low superstructure at or above elevation: 856.87  
 Flowline elevation: 848.0  
 Skew angle: 15°  
 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 1586 C.F.S. at stage and mean velocity of F.P.S. with Ft. wellhead.  
 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: 10/23/89  
 Stream or ditch designation: COON CREEK  
 Drainage area: 52,000 ACRES  
 Max. flood on record: Design flood (100 yr. freq.) is 1586 C.F.S.  
 Max. observed highwater elevation: Design highwater elevation: 857.6  
 Design mean velocity through structure: 4.4 F.P.S.  
 Low superstructure at or above elevation: 856.87  
 Flowline elevation: 848.0  
 Skew angle: 15°  
 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 1586 C.F.S. at stage and mean velocity of F.P.S. with Ft. wellhead.  
 The above recommendation will provide a structure of adequate waterway to pass the regional flood within criteria established by the Dept. of Natural Resources.

Bridge survey sheets made from:

Bench mark elevation: 861.12 (M.S.L. 1929 Adj.)  
 Location: 102.110 D. LINE CORNER NECON BLVD. & C.S.A.H. 11  
 SOURCE: DISK SE ABUT. BRIDGE NO. 9723 HANSON BLVD. OVER STH 10

MINNESOTA  
 DEPARTMENT OF TRANSPORTATION

**BRIDGE SURVEY**

AT MILE POINT: ON C.S.A.H. 11  
 (T.H., C.S.A.H., C.R. sec.)  
 PROPOSED BRIDGE LOCATED 1/2 MILES EAST OF  
 HANSON BLVD.  
 SEC. 14 TWP. 31N R. 24W  
 TOWNSHIP COON RAPIDS COUNTY ANOKA

BRIDGE NO. 02553