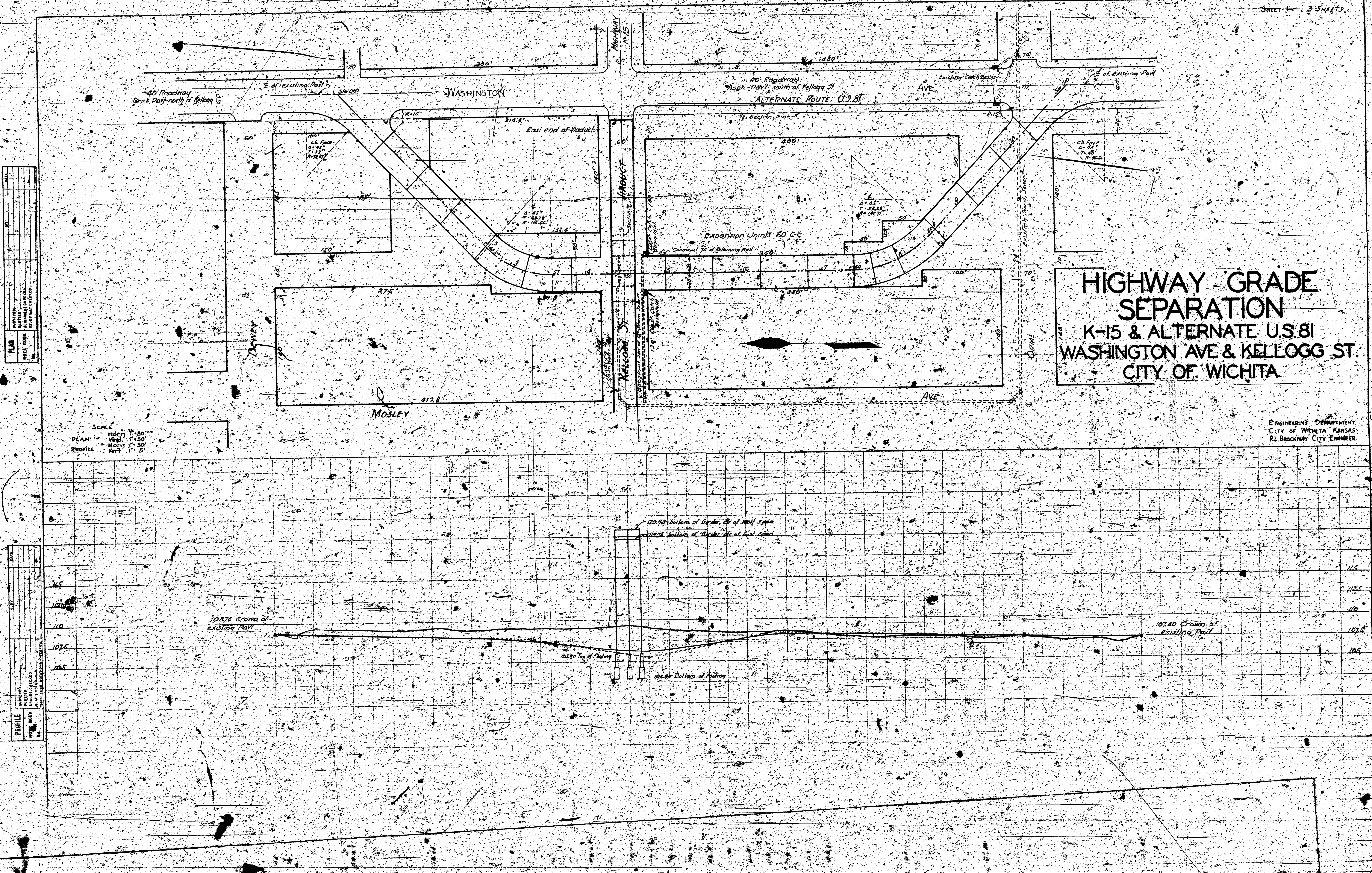
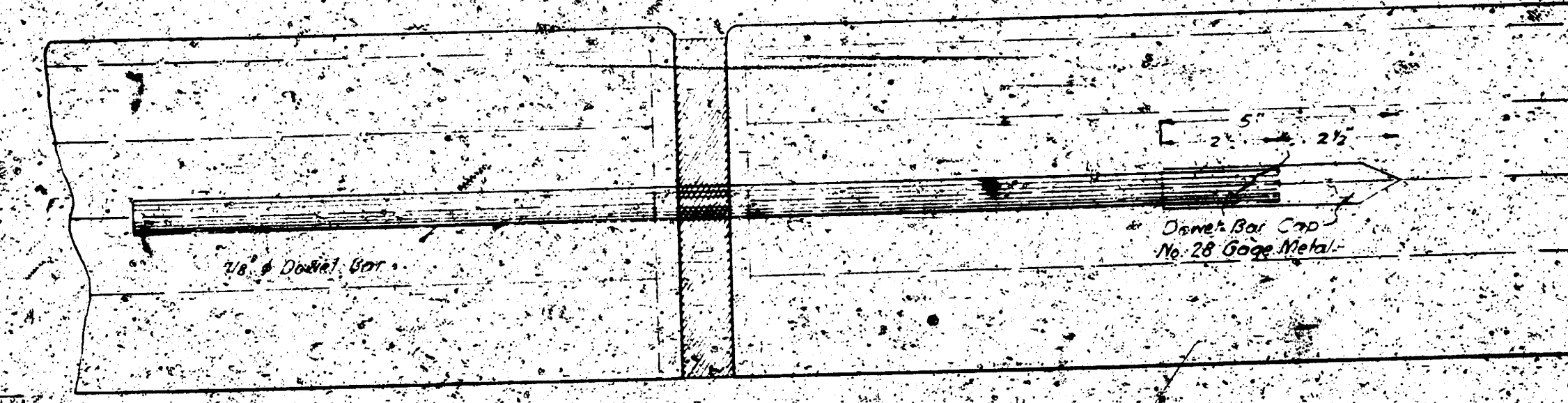
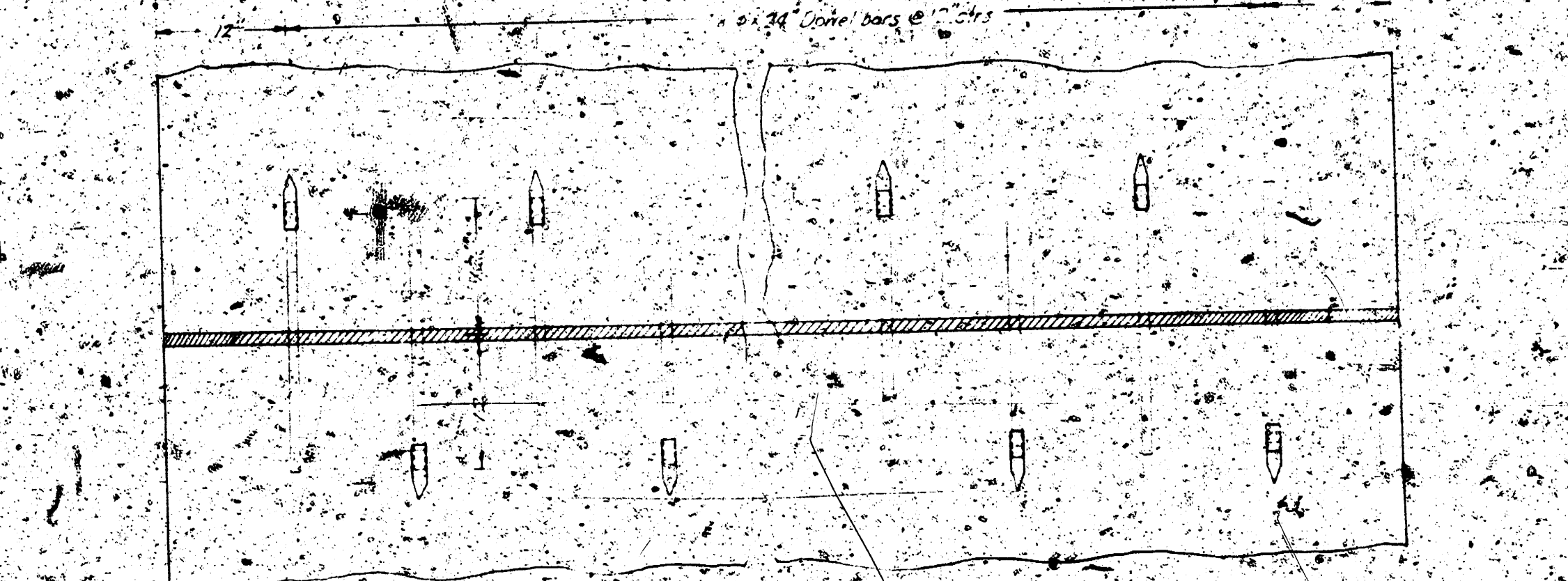
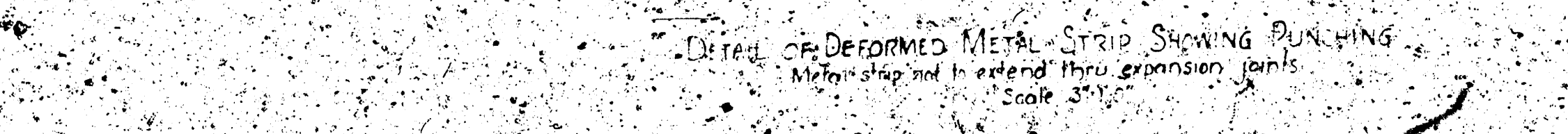
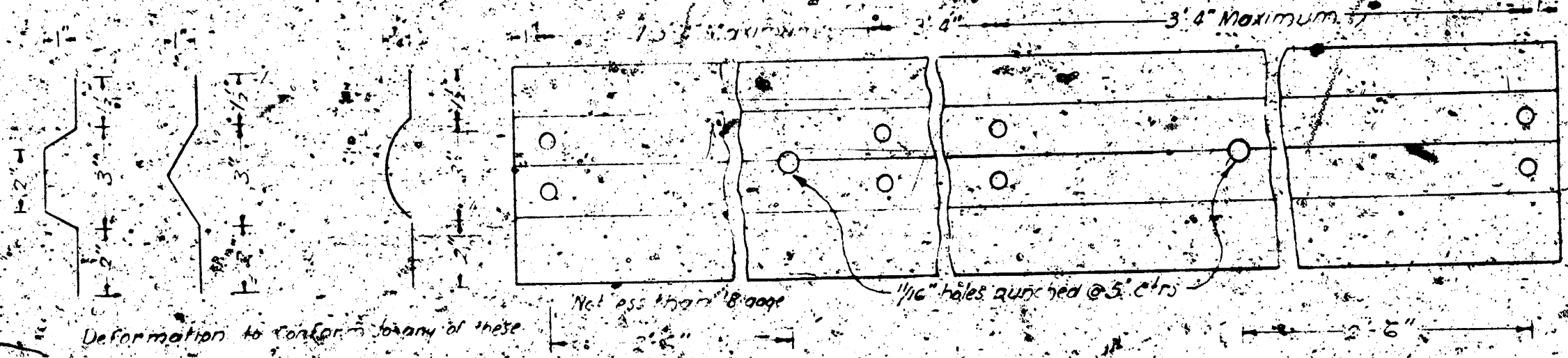
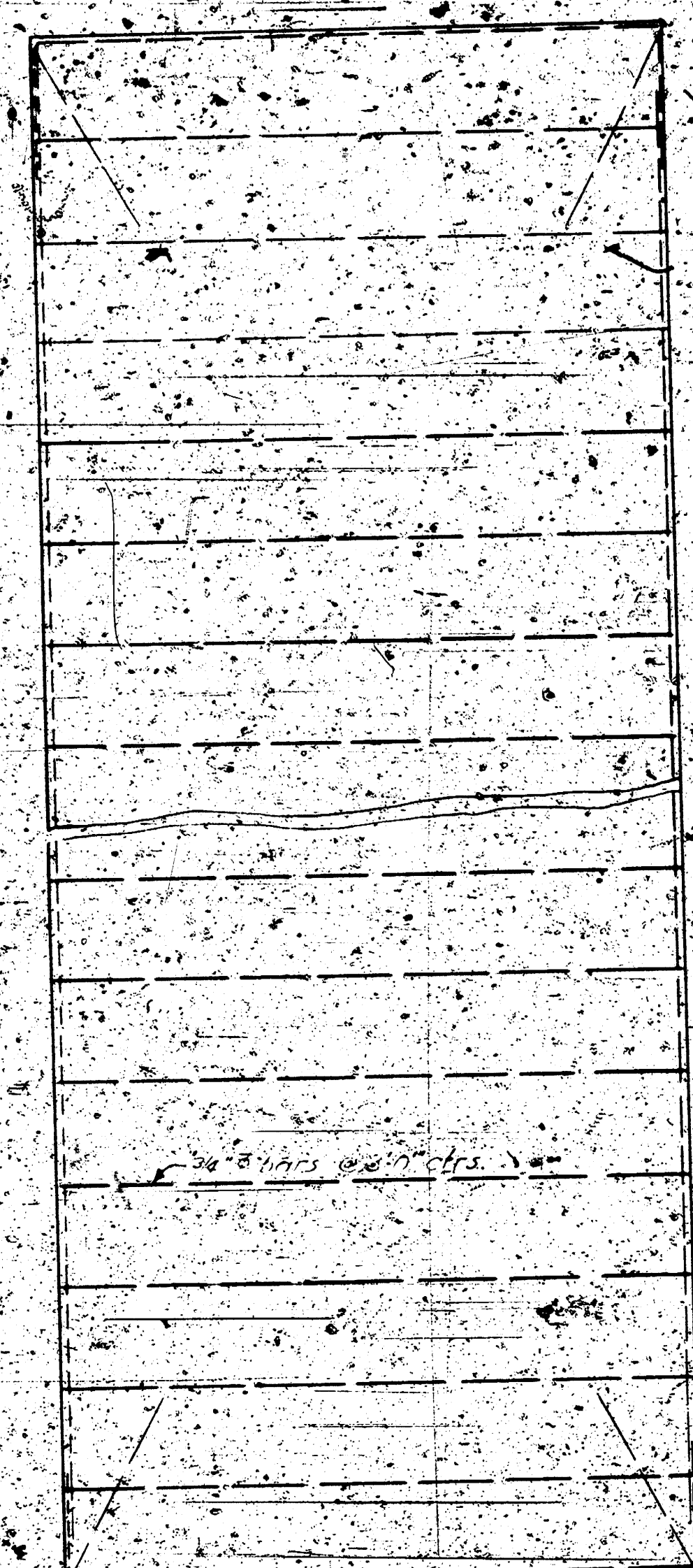
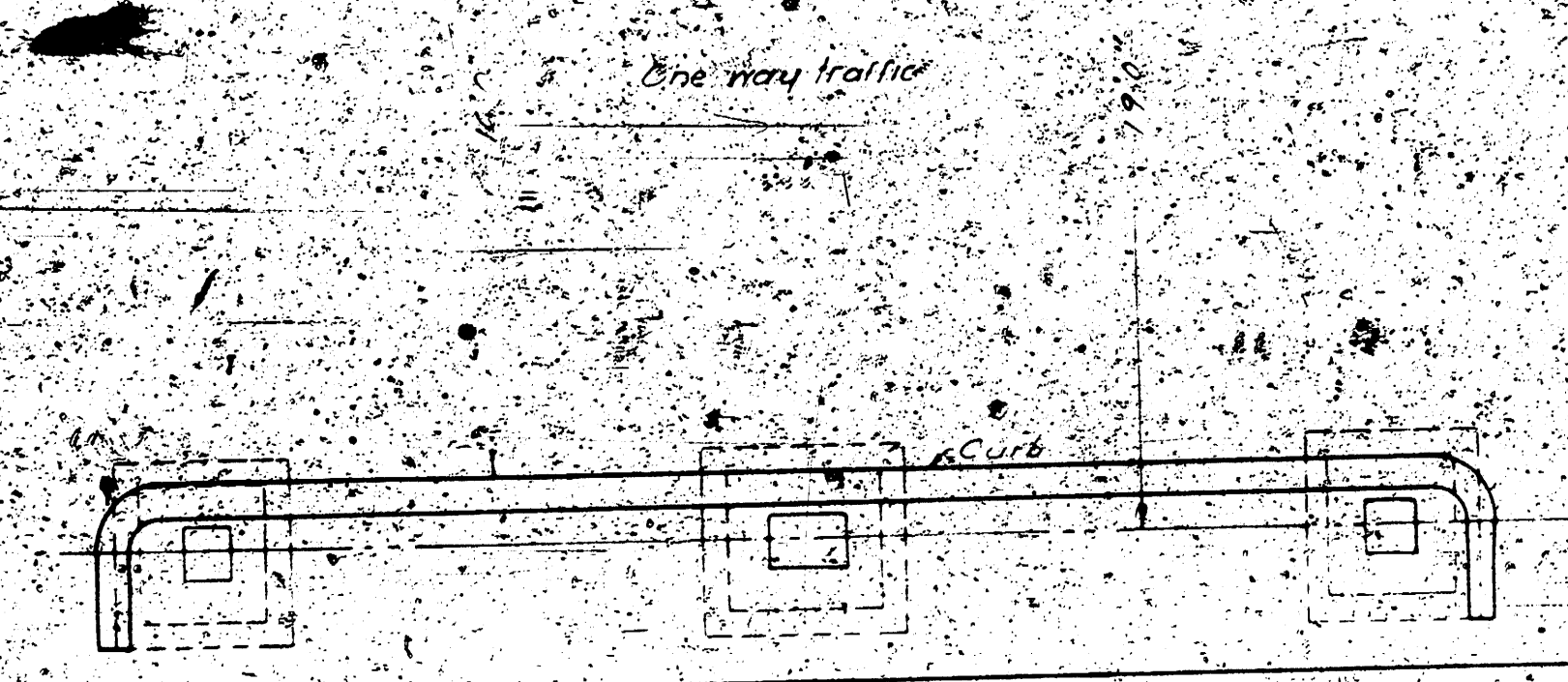
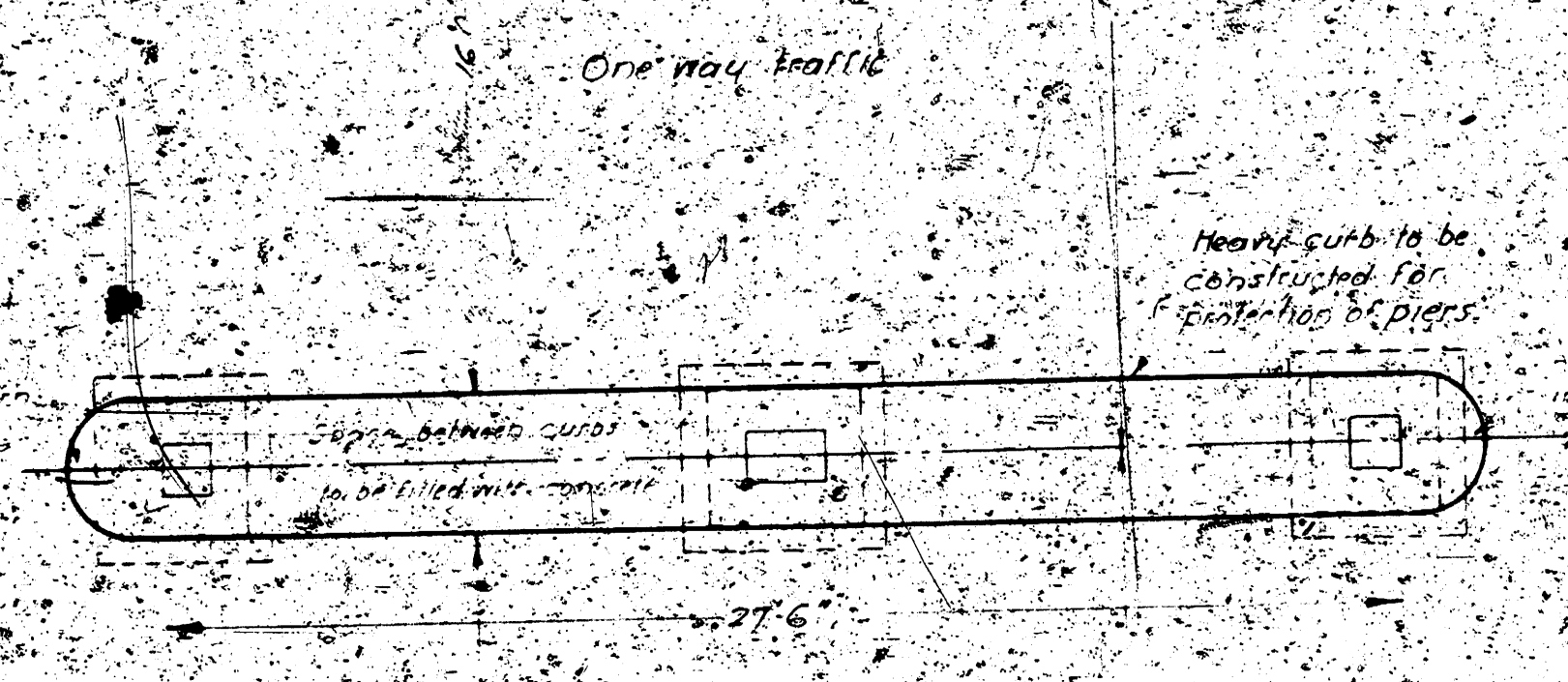
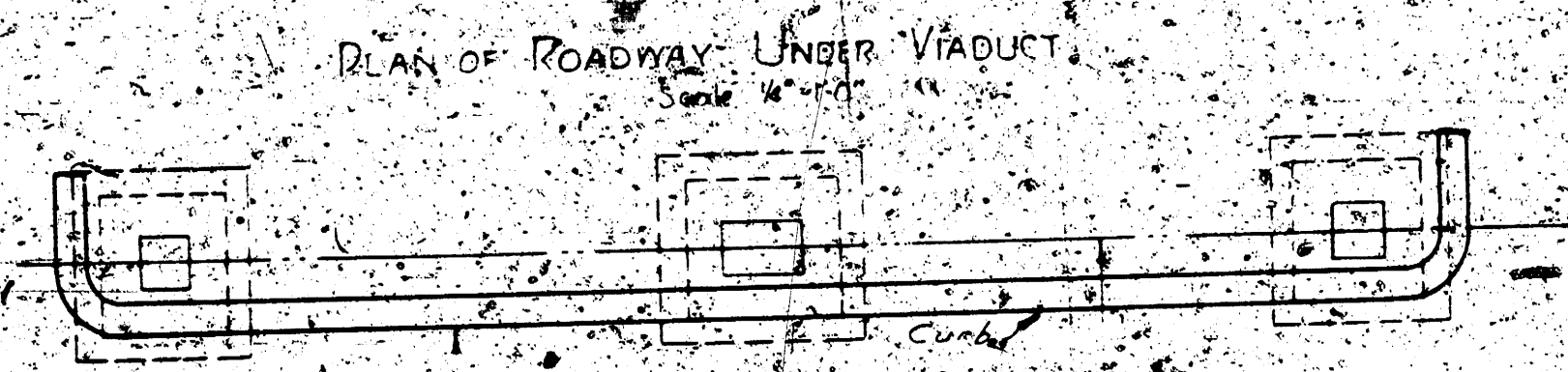
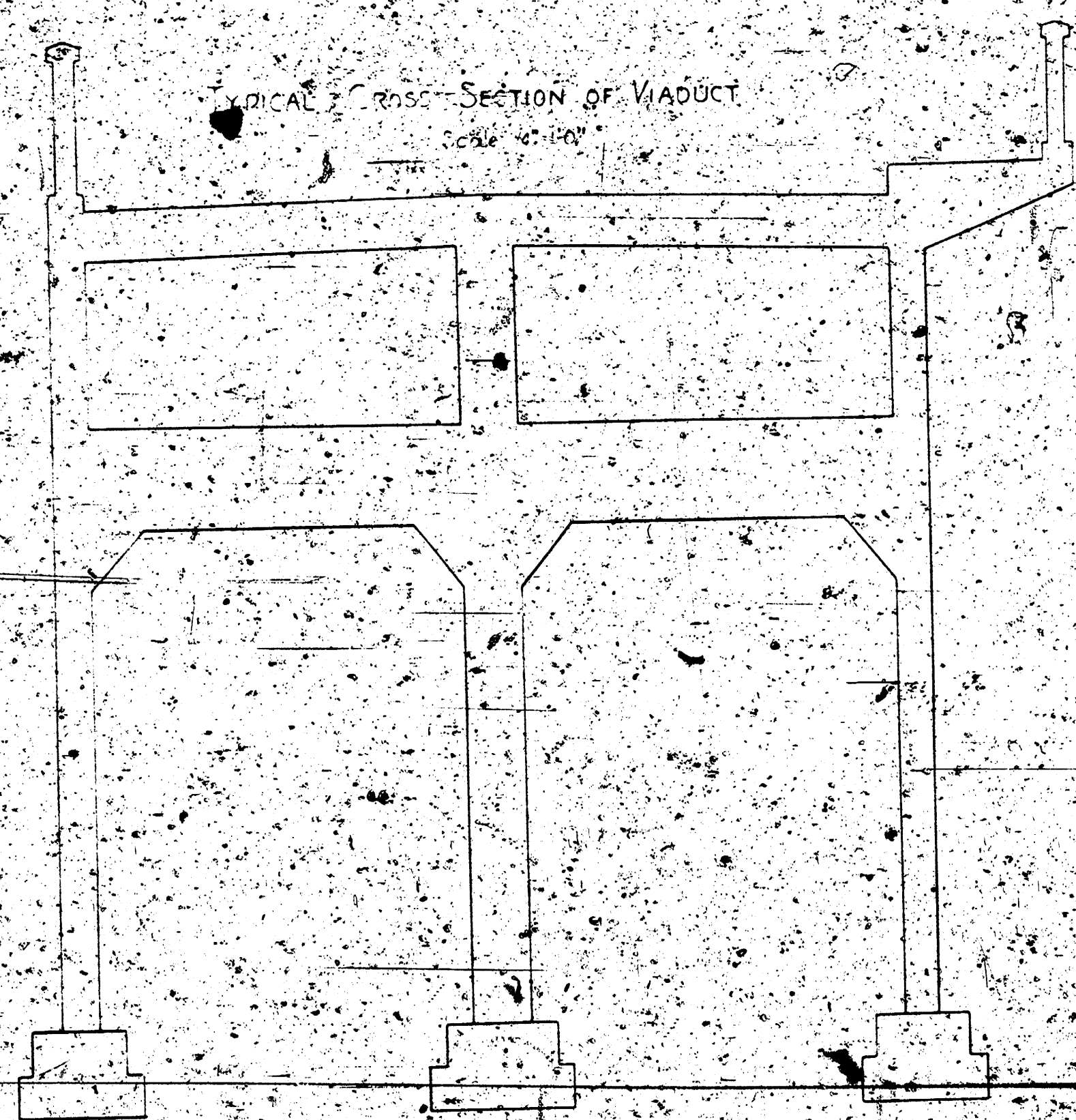




HIGHWAY GRADE SEPARATION
K-15 & ALTERNATE U.S. 81
WASHINGTON AVE & KELLOGG ST.
CITY OF WICHITA

ENGINEERING DEPARTMENT
CITY OF WICHITA, KANSAS
PL. BROCKWAY, CITY ENGINEER

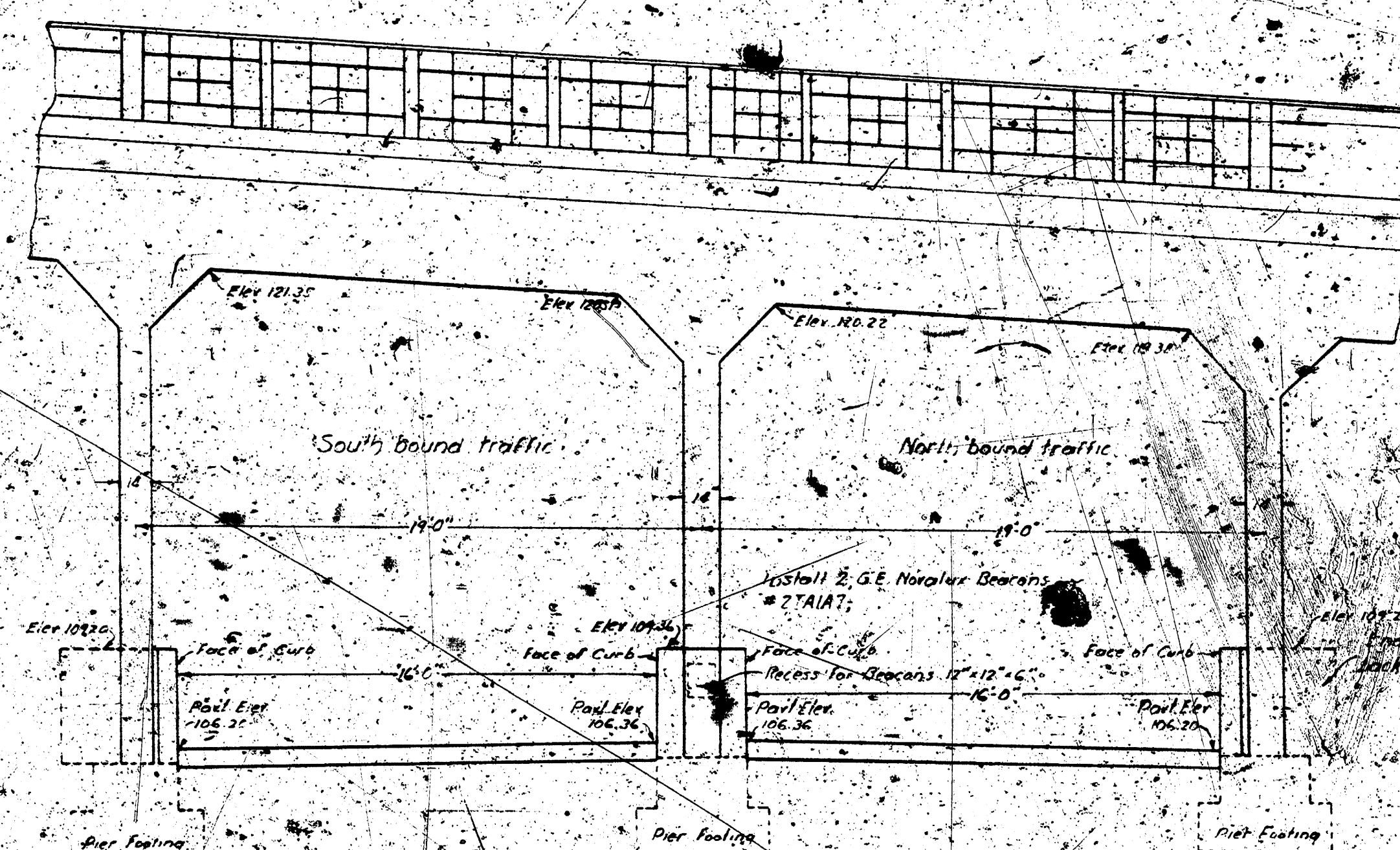
CONSTRUCTION DETAILS



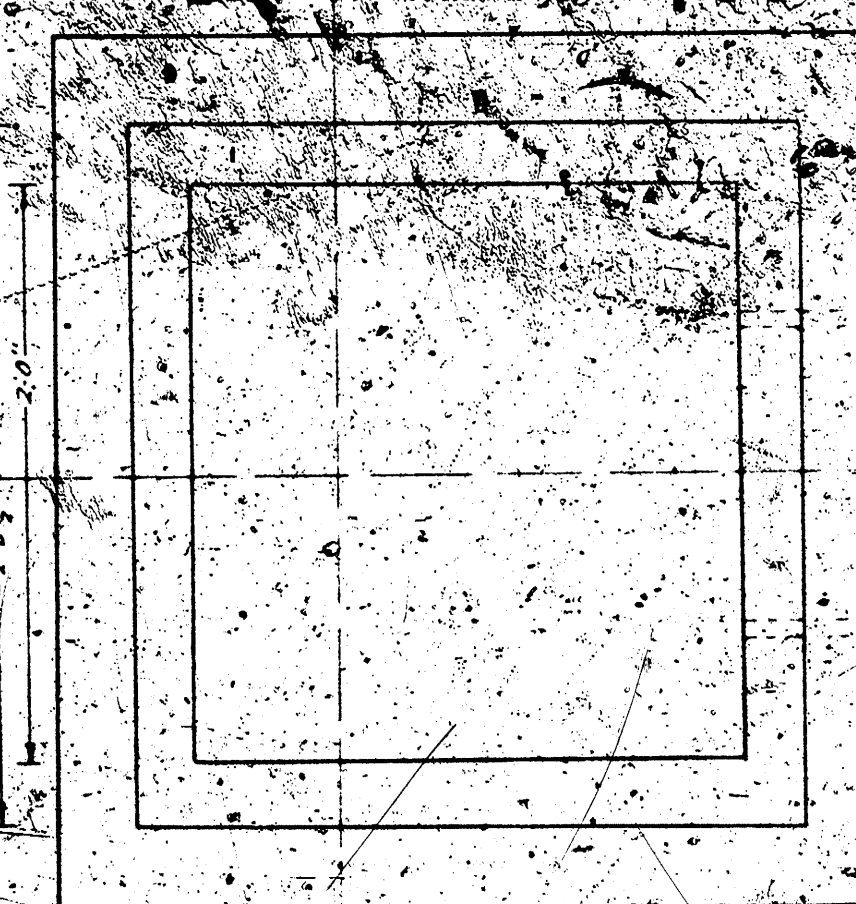
Notes: All expansion joints shall be constructed with full end clearance of not less than one inch and with a lower stop of three inches. Other types may be used with the approval of the Engineer.

Engineer's Department
City of Portland, Oregon
City Engineer

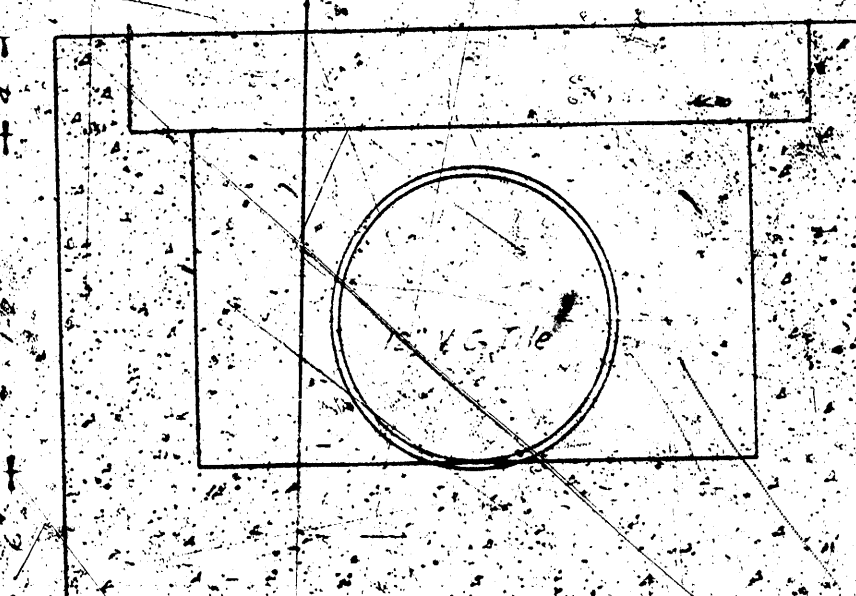
CONSTRUCTION DETAILS



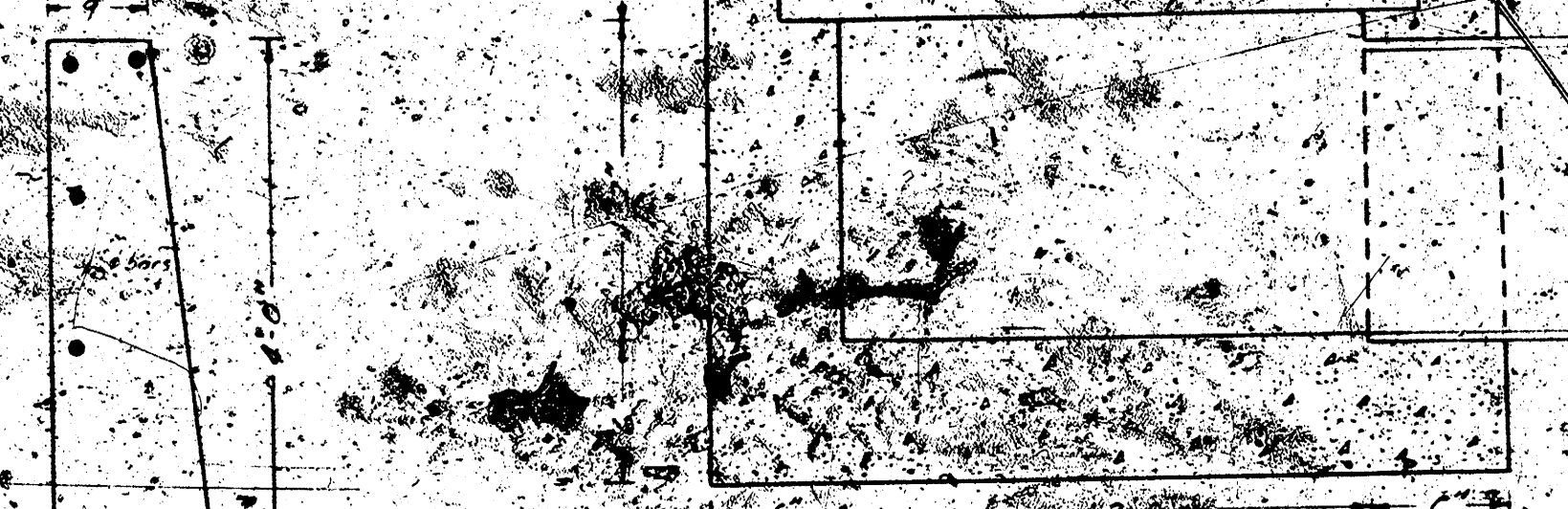
CROSS SECTION OF ROADWAY ALONG E. OF VIADUCT
Scale 1/4" = 1'-0"



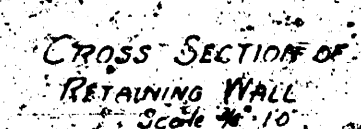
PLAN OF CATCH BASIN
Scale 1/4" = 1'-0"



Section 9-B

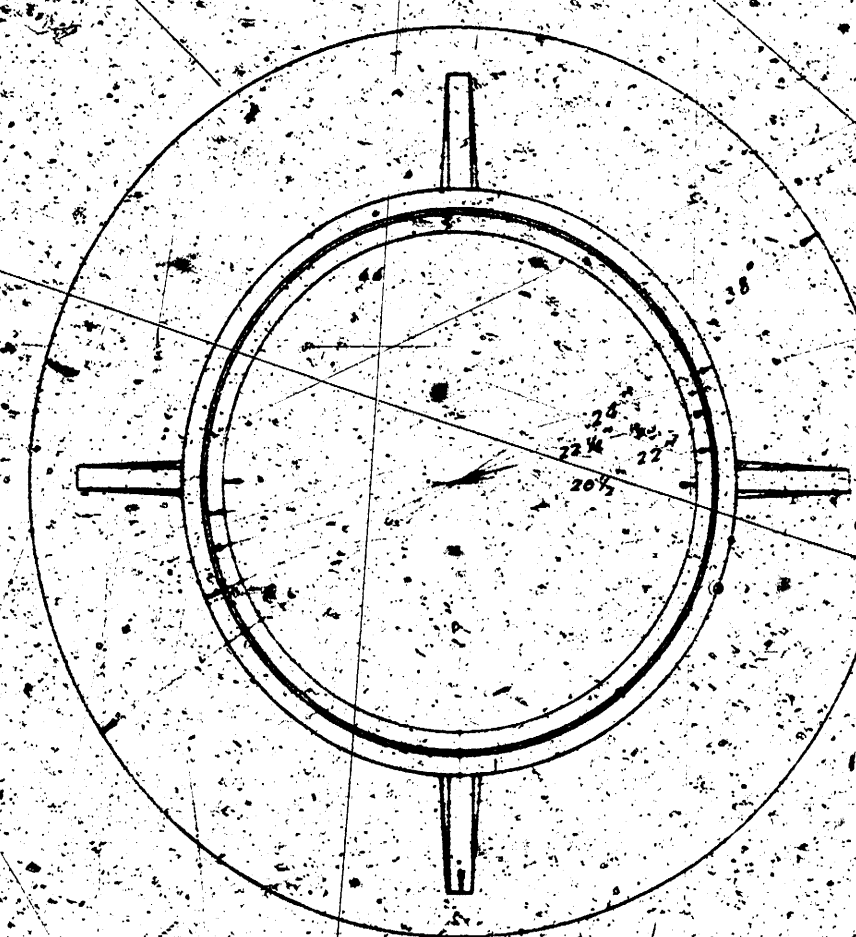


Section 8-A

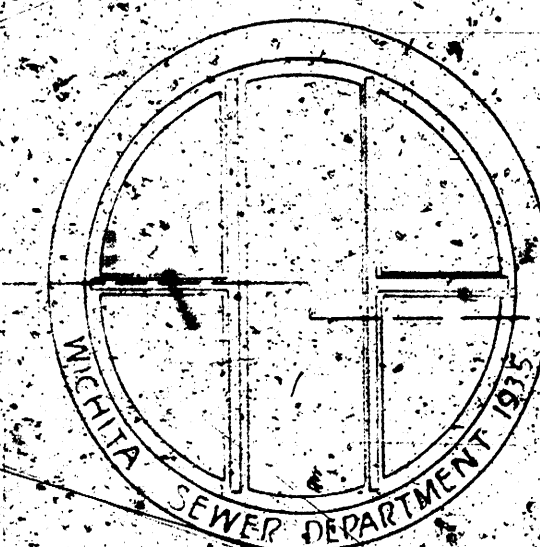


Cross-section of
Retaining Wall
Scale 1/4" = 1'-0"

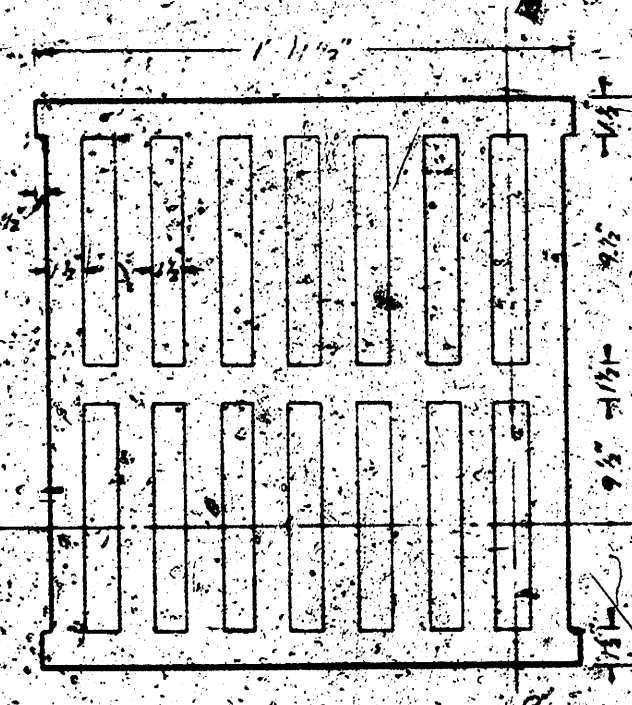
DETAILS OF CATCH BASIN GRATE AND FRAME
Scale 1/4" = 1'-0"



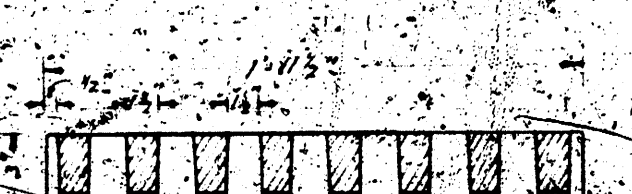
PLAN OF MANHOLE RING



PLAN OF MANHOLE COVER



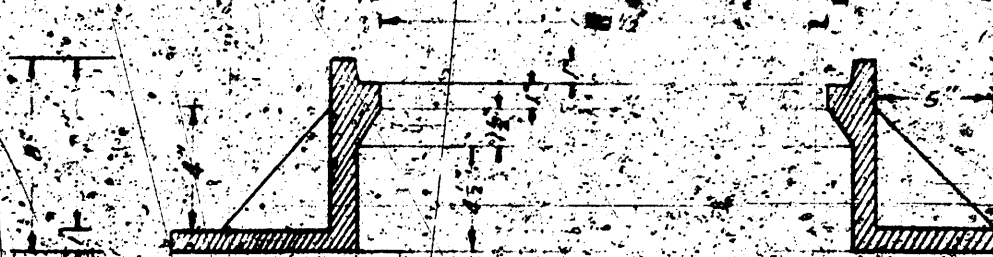
PLAN OF GRATE
HEIGHT 100"



Section A-A



VERTICAL CROSS SECTION OF BRICK MANHOLE
Scale 1/4" = 1'-0"



VERTICAL CROSS SECTION OF MANHOLE RING
Scale 1/4" = 1'-0"



Section A-A