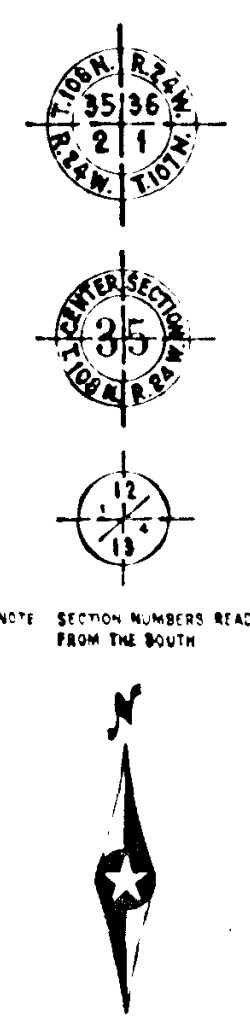


CONVENTIONAL SIGNS

STATE LINE	=====	TIMBER	(Symbol)
COUNTY LINE	=====	BRUSH	(Symbol)
TOWNSHIP OR RANGE LINE	=====	DISCHARGE	(Symbol)
SECTION LINE	=====	ROCK LEDGE	(Symbol)
QUARTER LINE	=====	SAND	(Symbol)
SIXTEENTH LINE	=====	EDGE OF CUT	(Symbol)
RIGHT OF WAY LINE	=====	TOE OF EMBANKMENT	(Symbol)
PRESENT ROAD PAVEMENT	=====	CATCH BASIN	(Symbol)
LIMITED ACCESS	=====	MANHOLE	(Symbol)
PROPERTY LINE (UNPAVED)	=====	TRUCK PILE	(Symbol)
BACKED PLANTED PROPERTY	=====	FIRE HYDRANT	(Symbol)
CORNER OF CITY BLOCK	=====	ALL LAMP	(Symbol)
TRUNK HIGHWAY CENTER LINE	=====	OTHER LAMPS (HIGH T.M.)	(Symbol)
RETAINING WALL	=====	RA. ROAD CROSSING SIGN	(Symbol)
STEAM RAILROAD	=====	RAILROAD CROSSING SIGN	(Symbol)
ELECTRIC RAILROAD	=====	ELECTRIC WARNING SIGN	(Symbol)
RAILROAD RIGHT OF WAY LINE	=====	CROSSING GATE	(Symbol)
RAILROAD	=====	RAILROAD SIGN	(Symbol)
CRACK	=====	OVERHEAD POWER LINE	(Symbol)
BANDS OF WATERFALL	=====	UNDERPASS (PIERS)	(Symbol)
DRY RUN	=====	AD. WENT. WALL & PIER	(Symbol)
STEAM RAILROAD	=====	BRIDGE	(Symbol)
ELECTRIC RAILROAD	=====	CONCRETE & STONE T. L.P. & BRICK & STUCCO	(Symbol)
RAILROAD RIGHT OF WAY LINE	=====	WEDGE	(Symbol)
RAILROAD	=====	IRON PIPE	(Symbol)
CRACK	=====	STONE MONUMENT	(Symbol)
BANDS OF WATERFALL	=====	WOOD STAKE OR PILE	(Symbol)
DRY RUN	=====	MEASURER CORNER	(Symbol)

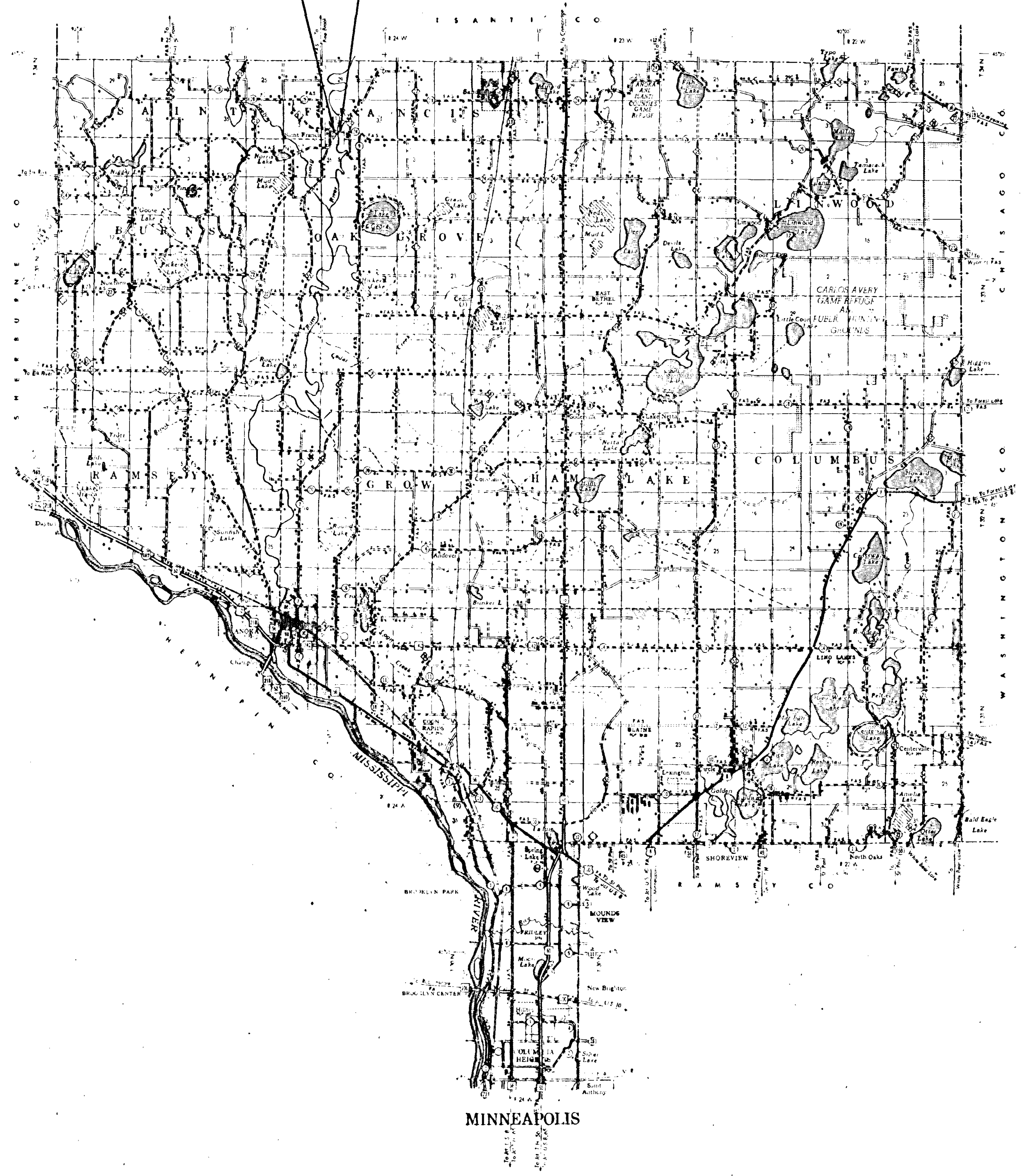
NOTE: SECTION NUMBERS READ FROM THE SOUTH



BEG. OF BRIDGE STA. 11+39.67

BRIDGE No. 02501 (RAIL BRG.)

END OF BRIDGE STA. 15+30.33



STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
CONSTRUCTION PLAN FOR BRIDGE NO. 02501
County State Aid Highway No. _____

IN SAINT FRANCIS.
From A POINT 2005 FT. EAST & 900 FT. NORTH OF S.W. CORNER, SEC. 32, TWP. 34 N., R. 24 W. To A POINT 2395.7 FT. EAST & 900 FT. NORTH OF S.W. CORNER, SEC. 32, TWP. 34 N., R. 24 W.

GROSS LENGTH	FEET	MILES
BRIDGES LENGTH	FEET	MILES
EXCEPTIONS LENGTH	FEET	MILES
NET LENGTH	FEET	MILES

SCALES
Plan 1 Inch = 200 Feet
PROFILE Horiz. 1 Inch = 200 Feet Vert. 1 Inch = 20 Feet
WORKING PLANS Horiz. 1 Inch = 100 Feet Vert. 1 Inch = 10 Feet Cross Section 1 Inch = FEET
LAYOUT Scale 1 Inch = Feet

MINN. PROJ. 563

INDEX OF SHEETS
Title Sheet & Layout Map

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE CONSIDERED IN THE CONSTRUCTION OF THIS PROJECT.

PLANS & R/W APPROVED: E. J. Lundheim DATE: _____
CELESTY ENGINEER

RECOMMENDED FOR APPROVAL ANOKA COUNTY REG. N. _____
DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL Edgar C. P. DISTRICT ENGINEER
ASST. BRIDGE ENGINEER

APPROVED _____ 1962 _____ STATE AID ENG.

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
DISTRICT ENGINEER

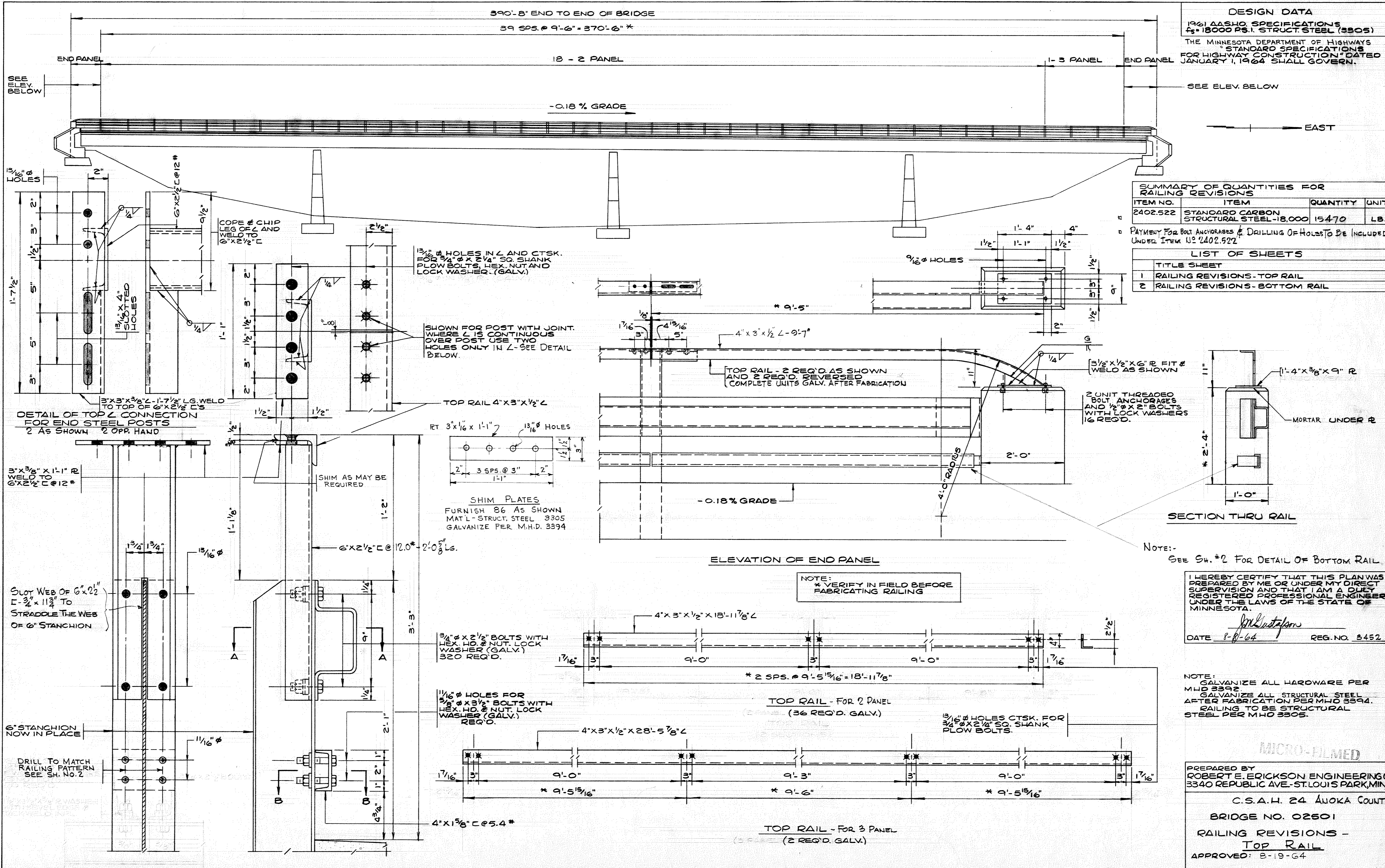
SPECIFICATIONS
THE "SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JANUARY 1, 1958, SHALL GOVERN.

Minn. Project No. 56374(11) State Project No. 02-62

ANOKA County, Minnesota.

390'-8" END TO END OF BRIDGE
 39 SPS. @ 9'-6" = 370'-6" *

DESIGN DATA
 1961 AASHTO SPECIFICATIONS
 $F_y = 18000$ P.S.I. STRUCT. STEEL (3305)
 THE MINNESOTA DEPARTMENT OF HIGHWAYS
 STANDARD SPECIFICATIONS
 FOR HIGHWAY CONSTRUCTION DATED
 JANUARY 1, 1964 SHALL GOVERN.



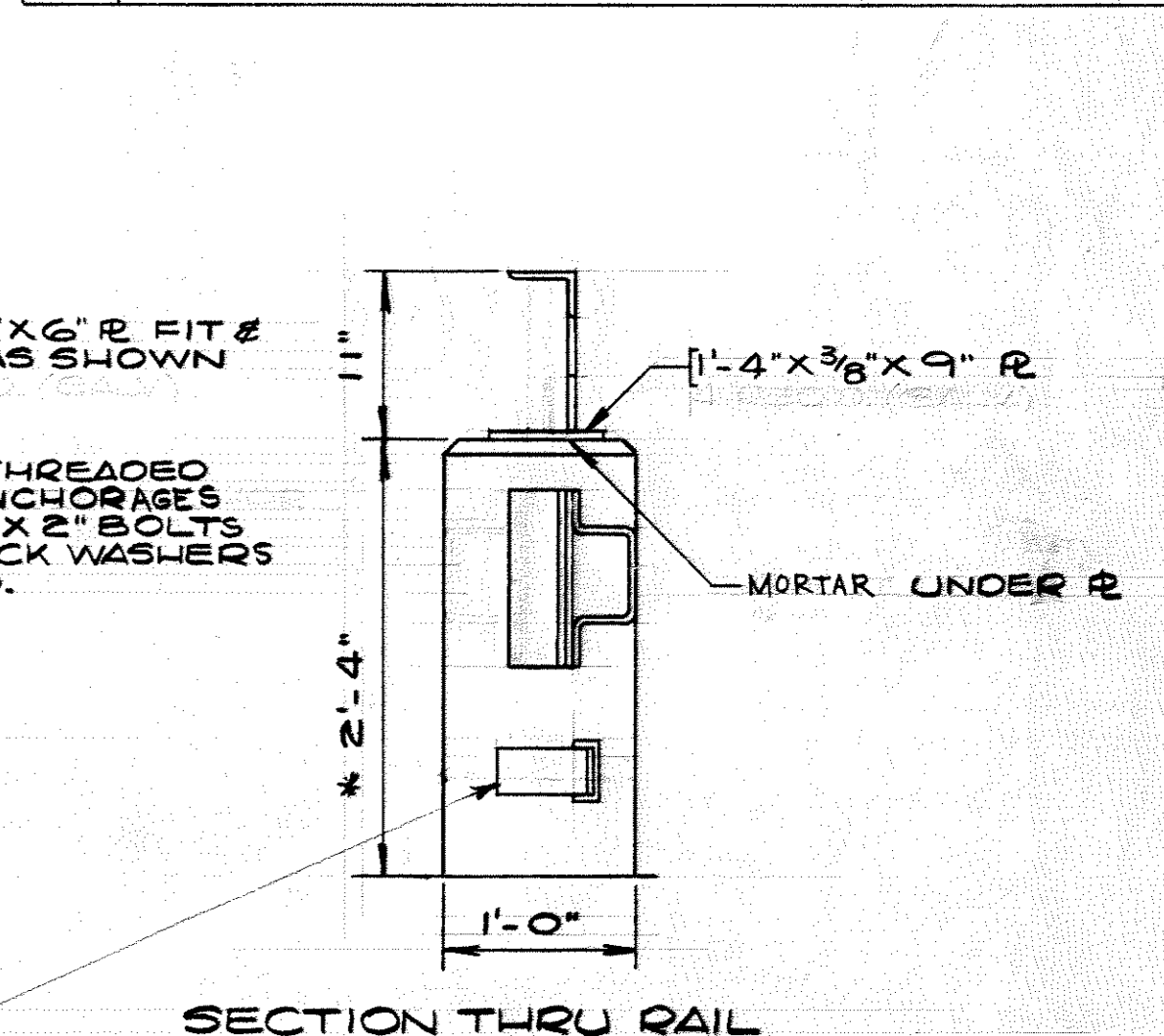
SUMMARY OF QUANTITIES FOR RAILING REVISIONS

ITEM NO.	ITEM	QUANTITY	UNIT
2402.522	STANDARD CARBON STRUCTURAL STEEL-18,000	15470	LB.

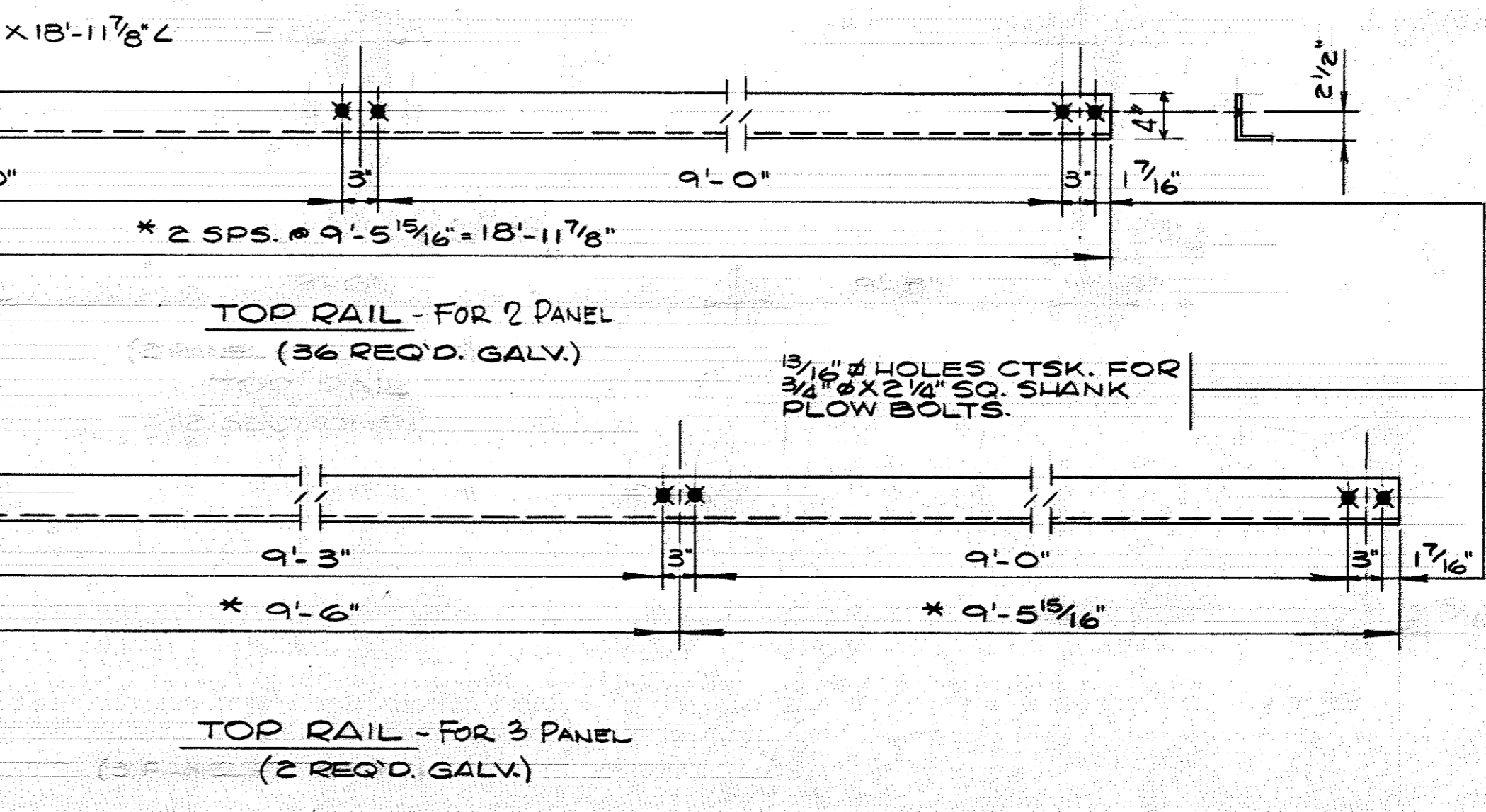
PAYMENT FOR BOLT ANCHORAGES & DRILLING OF HOLES TO BE INCLUDED UNDER ITEM U2 2402.522

LIST OF SHEETS

TITLE SHEET
1 RAILING REVISIONS-TOP RAIL
2 RAILING REVISIONS-BOTTOM RAIL



ELEVATION OF END PANEL



NOTE: SEE SH. #2 FOR DETAIL OF BOTTOM RAIL

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

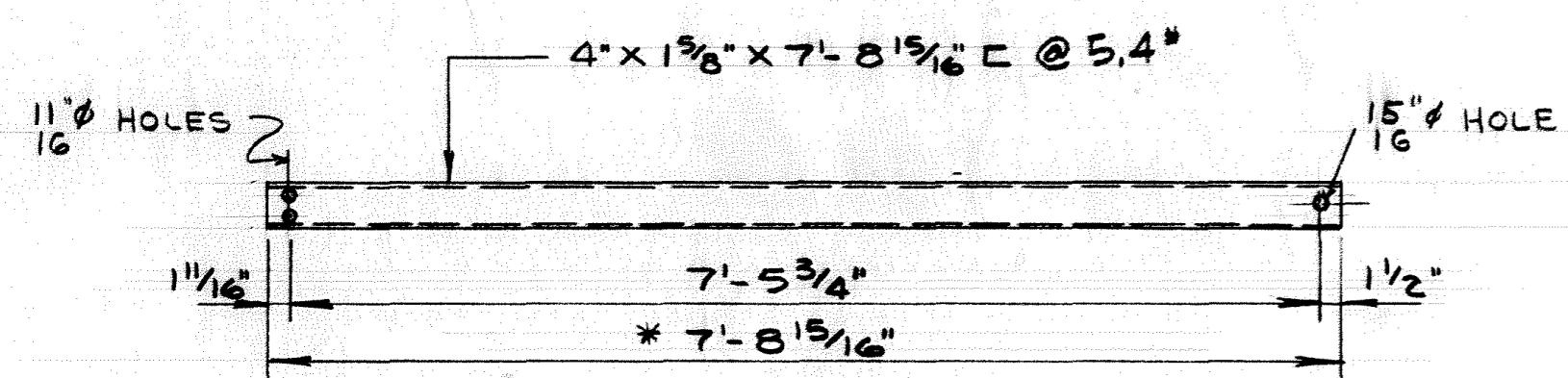
Robert E. Erickson
 DATE 8-8-64 REG. NO. 3452

NOTE: GALVANIZE ALL HARDWARE PER MHD 3392. GALVANIZE ALL STRUCTURAL STEEL AFTER FABRICATION PER MHD 3394. RAILING TO BE STRUCTURAL STEEL PER MHD 3305.

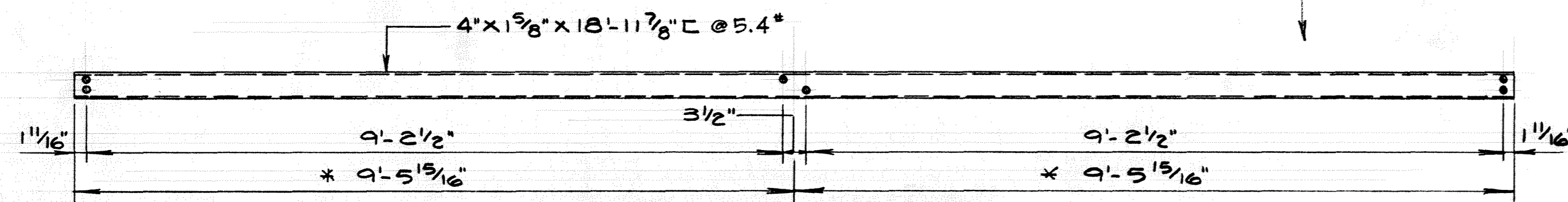
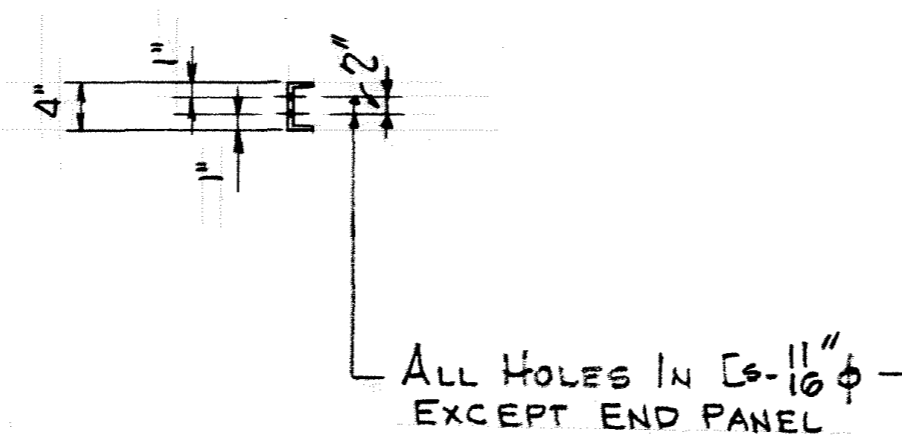
MICRO-FILMED

PREPARED BY
 ROBERT E. ERICKSON ENGINEERING CO
 3340 REPUBLIC AVE.-ST. LOUIS PARK, MINN.

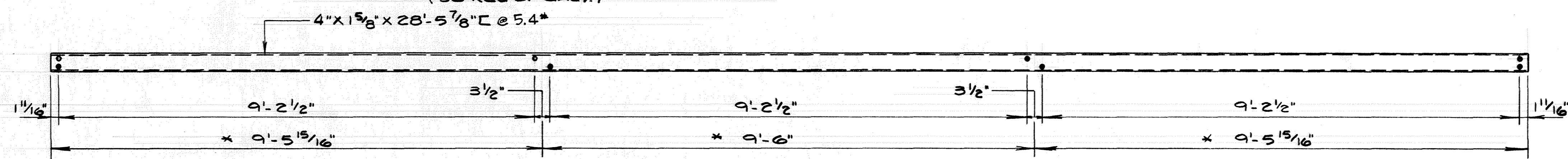
C.S.A.H. 24 ANOKA COUNTY
 BRIDGE NO. 02501
 RAILING REVISIONS -
 TOP RAIL
 APPROVED: 8-19-64



BOTTOM RAIL - FOR END PANEL
(4 REQ'D - GALV.)



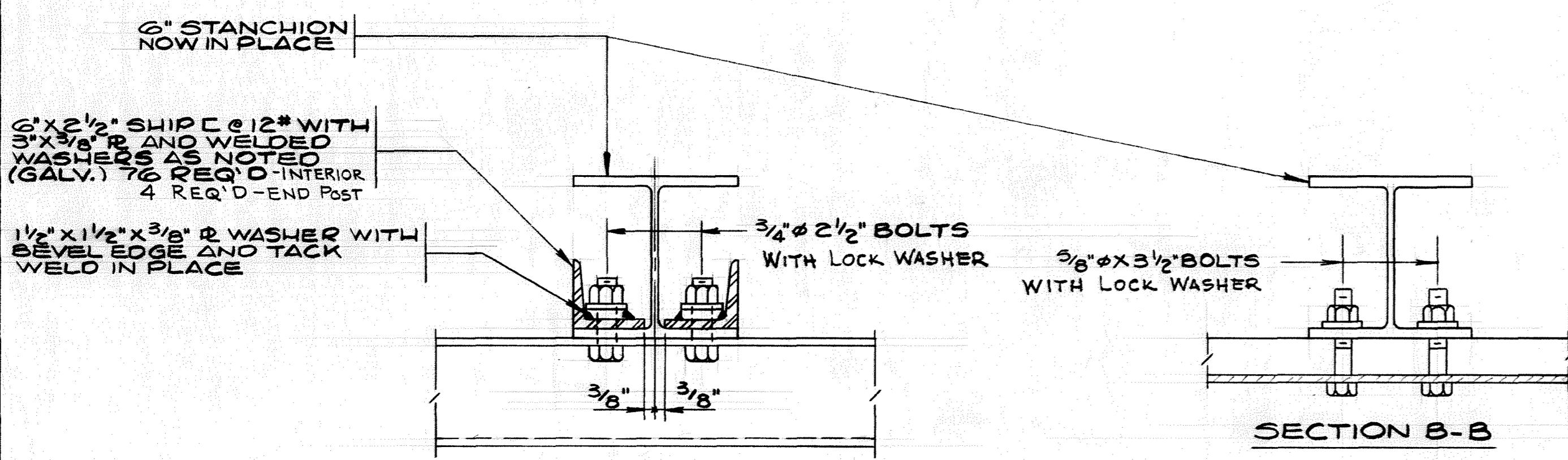
BOTTOM RAIL - FOR 2 PANEL
(36 REQ'D - GALV.)



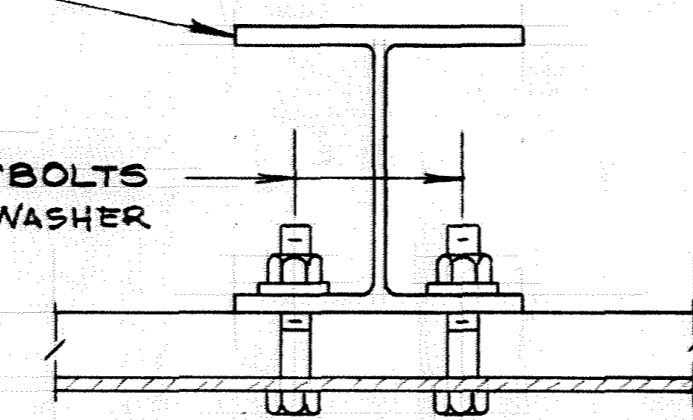
BOTTOM RAIL - FOR 3 PANEL
(2 REQ'D - GALV.)

* VERIFY IN FIELD BEFORE FABRICATING RAILING

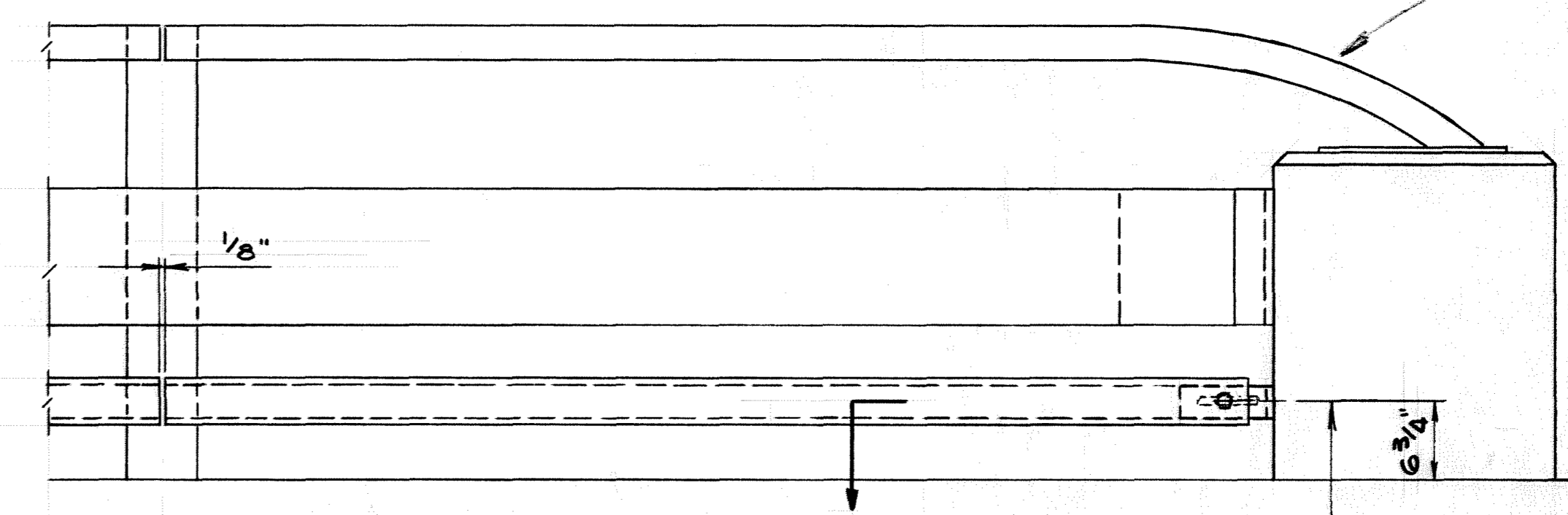
NOTE -
SEE SH. #1 FOR DETAIL OF TOP RAIL



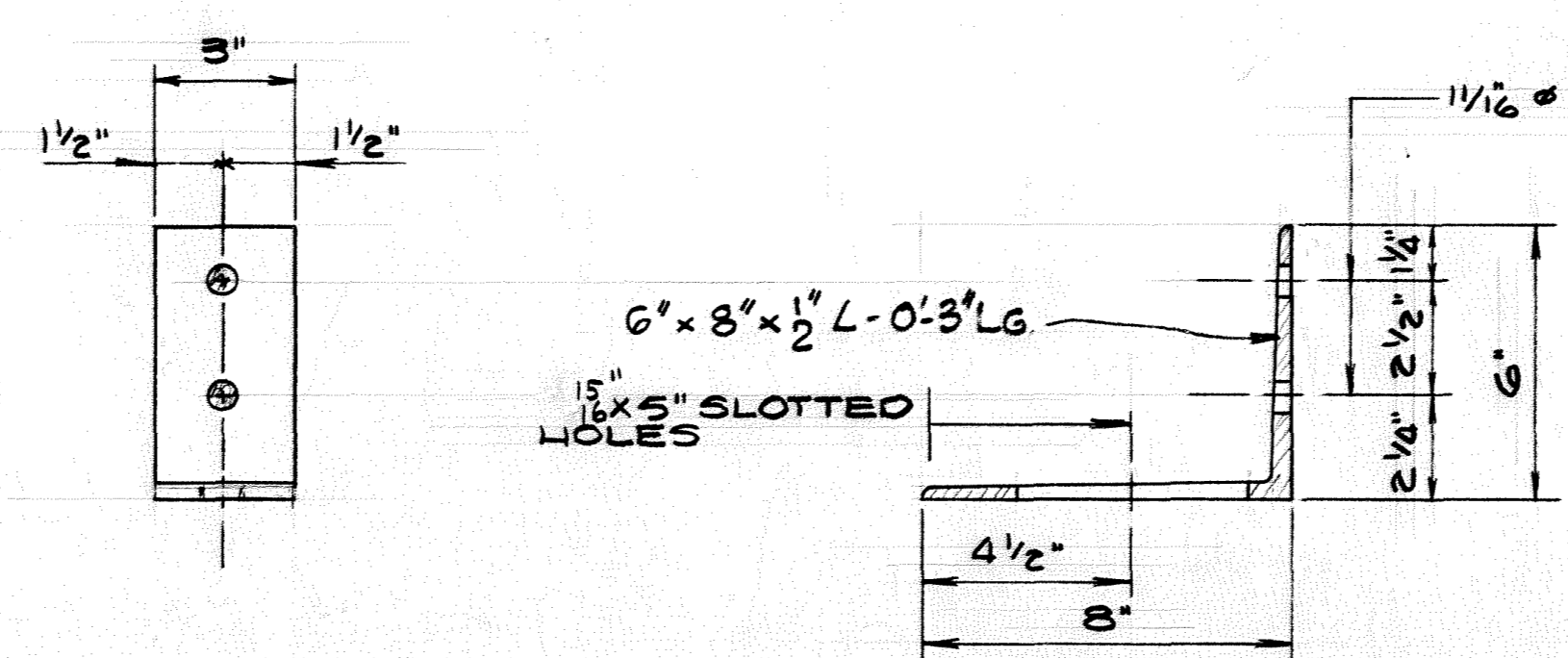
SECTION A-A



SECTION B-B



SECTION C-C



BOTTOM RAIL CONNECTOR ANGLE (4 REQ'D) GALV.

2 UNIT THREADED BOLT ANCHORAGE # 5/8" x 2 1/2" BOLT WITH LOCK WASHER - 6 REQ'D.

BOLT 7/8" x 3 1/2" WELD TO RAIL 2 - HEX NUTS, LOCK 2 NUTS TOGETHER & ALLOW 1/8" CLEAR FOR RAIL EXPANSION.

MICRO-FILMED

PREPARED BY
ROBERT E. ERICKSON ENGINEERING CO.
3340 REPUBLIC AVE. ST. LOUIS PARK, MINN.

C.S.A.H. 24 ANOKA COUNTY
BRIDGE NO. 02501
RAILING REVISIONS -
BOTTOM RAIL

APPROVED 8-19-64