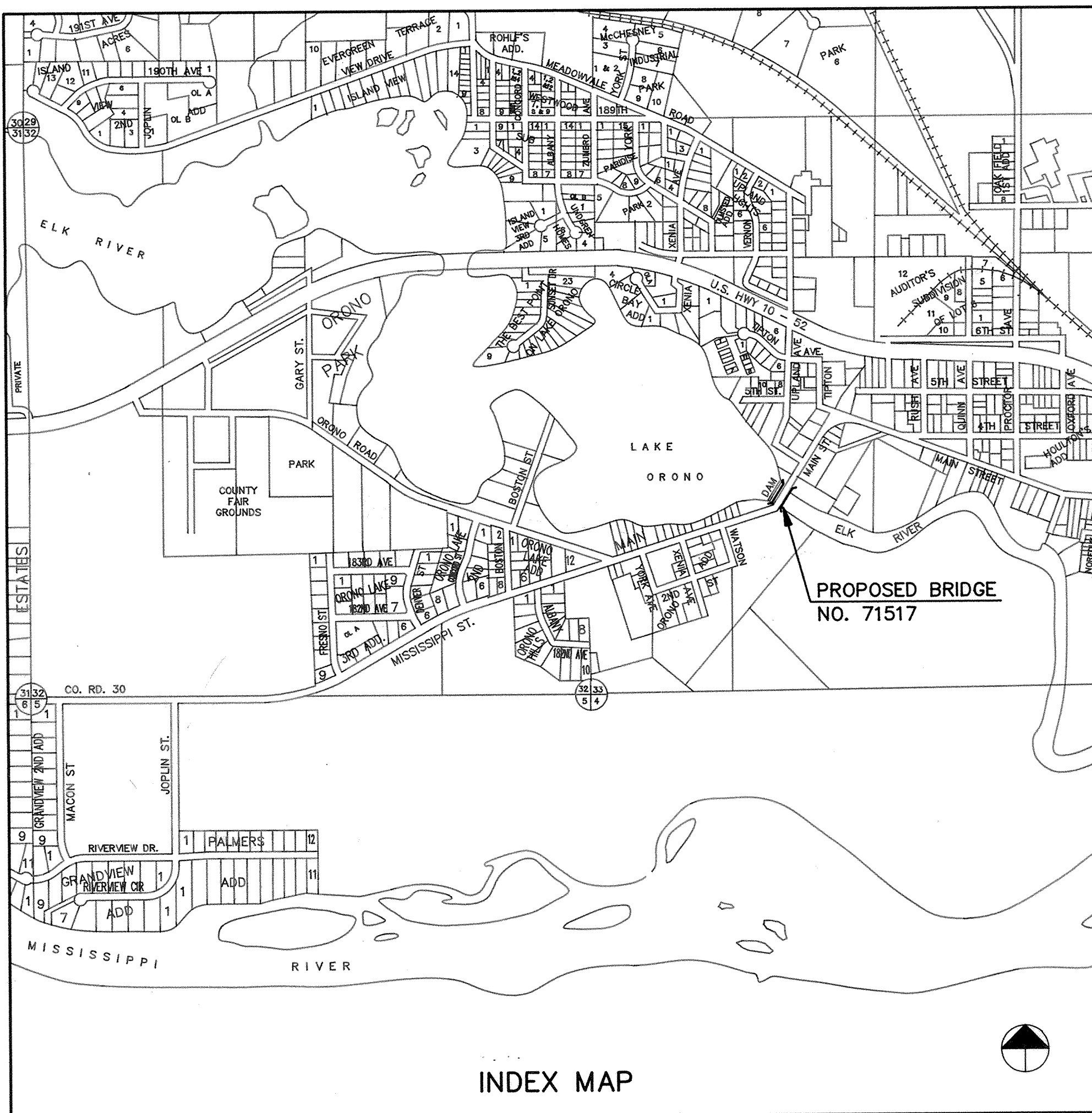


MINNESOTA DEPARTMENT OF TRANSPORTATION
CITY OF ELK RIVER
SECTION 33, T33N, R26W

CONSTRUCTION PLAN FOR BRIDGE NO. 71517 (REPLACEMENT OF BRIDGE NO. 3093)

LOCATED ON MAIN STREET OVER THE ELK RIVER, 0.14 MILE EAST OF
THE JUNCTION OF COUNTY ROAD 30 IN THE CITY OF ELK RIVER



PLAN SYMBOLS

SECTION LINE	---	DECIDUOUS TREE	
QUARTER LINE	- - - -	BRUSH OR SHRUBS	
SIXTEENTH LINE	- - - - -	HEDGE	
RIGHT OF WAY	=====	CONIFEROUS TREE	
CENTER LINE	-----	SWAMP	
FENCE LINE	-x-x-	MAILBOX	DMB
RIVER OR CREEK		SIGN	*SIGN
LAKE OR POND			
CULVERT			
BRIDGE			
RETAINING WALL			

UTILITIES SYMBOLS

SANITARY SEWER		HYDRANT	
STORM SEWER		POWER OR TELEPHONE POLE	PP
WATERMAIN		LIGHT POLE	
GAS LINE		ANCHOR	
POWER LINE	OHW	SOIL BORING	
SANITARY MANHOLE			
STORM MANHOLE (STANDARD CASTING)	● MH		
STORM MANHOLE (INLET CASTING)	⊗ MH		
CATCH BASIN	⊗ CB		
VALVE	○		

PRESENT ADT (1991) 3146 PROJ. ADT (2011) 6292

9 TON DESIGN

SOIL FACTOR 75 PROJ. HCDT (2011) 156
OR

R-VALUE N/A N18 FACTOR N/A

DESIGN SPEED 30 MPH

DESIGN SPEED NOT ACHIEVED AT:

STA. N/A TO STA. N/A MPH

STOPPING SITE DISTANCE BASED ON:

3.5' HEIGHT OF EYE

0.5' HEIGHT OF OBJECT

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION
"STANDARD SPECIFICATION FOR CONSTRUCTION" TOGETHER WITH
"SUPPLEMENTAL SPECIFICATIONS" DATED JANUARY 2, 1991, SHALL GOVERN.

GROSS LENGTH	<u>280.67</u>	FEET	<u>0.053</u>	MILES
BRIDGE LENGTH	<u>240.67</u>	FEET	<u>0.046</u>	MILES
EXCEPTION LENGTH	<u>0</u>	FEET	<u>0</u>	MILES
NET LENGTH	<u>280.67</u>	FEET	<u>0.053</u>	MILES

SCALES:	INDEX MAP	<u>0</u> <u>1000</u>
	BRIDGE LAYOUT	<u>0</u> <u>10</u>
	SURVEY PLAN	<u>0</u> <u>10</u>
	SURVEY PROFILE	<u>0</u> <u>10</u>

INDEX OF SHEETS

1A	TITLE SHEET INDEX MAP
1	GENERAL PLAN & ELEVATION
2	BRIDGE LAYOUT
3	NORTH ABUTMENT
4	SOUTH ABUTMENT
5	ABUTMENT DETAILS
6	ABUTMENT BARLIST & QUANTITIES
7	PIER
8	PIER DETAILS
9	PRESTRESSED CONCRETE BEAM, TYPE 72-119
10	FRAMING PLAN & QUANTITIES
11	DECK PLAN & DETAILS
12	RAILING ELEVATIONS
13	CONCRETE RAIL TYPE 3
14	CONCRETE PARAPET & METAL RAIL
15	EXPANSION JOINT DEVICE
16	EXPANSION JOINT DEVICE
17-22	DETAILS
23	BRIDGE SURVEY
24	BRIDGE SURVEY PLAN & PROFILE
24A	TRAFFIC DETOUR & SIGNING PLAN

RECORD PLAN
OCT. 1993

CONTRACTOR:
C.S. MCCROSSAN

FINAL CONSTRUCTION
COST: \$736,000

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

Ronald L. Deha 13931 4/3/91
REG.NO. DATE

LARSON ENGINEERING OF MINNESOTA
3524 LABORE ROAD
WHITE BEAR LAKE, MN 55110
(612) 481-9120

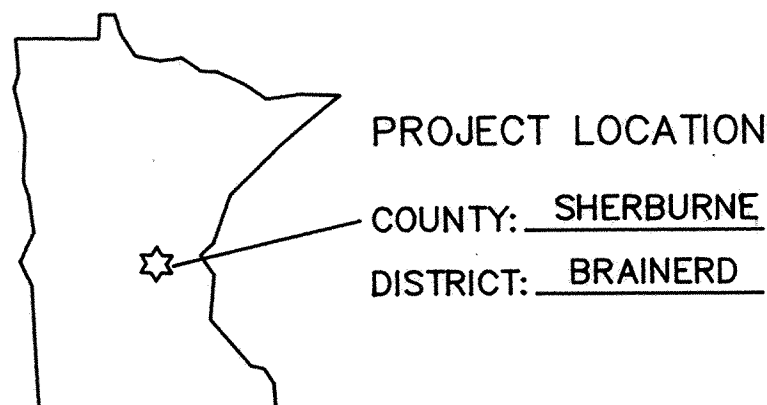
APPROVED Terry Mauer 4/3/91
ELK RIVER CITY ENGINEER DATE

RECOMMENDED FOR APPROVAL Sony R. Shinn 4/24/92
DISTRICT STATE AID ENGINEER DATE

RECOMMENDED FOR APPROVAL Mark E. Giesler 7/17/92
STATE PLANS & SPEC. ENGINEER DATE

APPROVED Quinn C. Carlson 7/17/92
STATE AID ENGINEER DATE

RECOMMENDED FOR APPROVAL Donald J. Manning 7-2-92
STATE BRIDGE ENGINEER DATE



SHEET 1A OF 24

S. P. 204-113-03

Proj No. 230-030-30 560

DRAWING NUMBER
MAINS 91
TITLE (14 of 24)