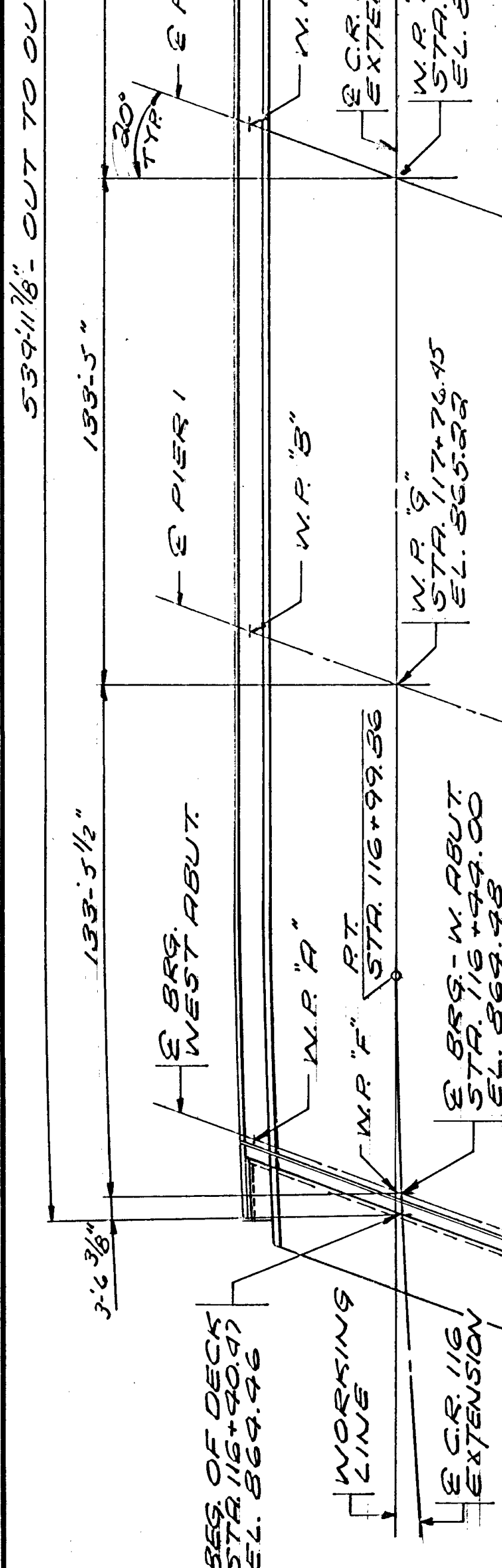
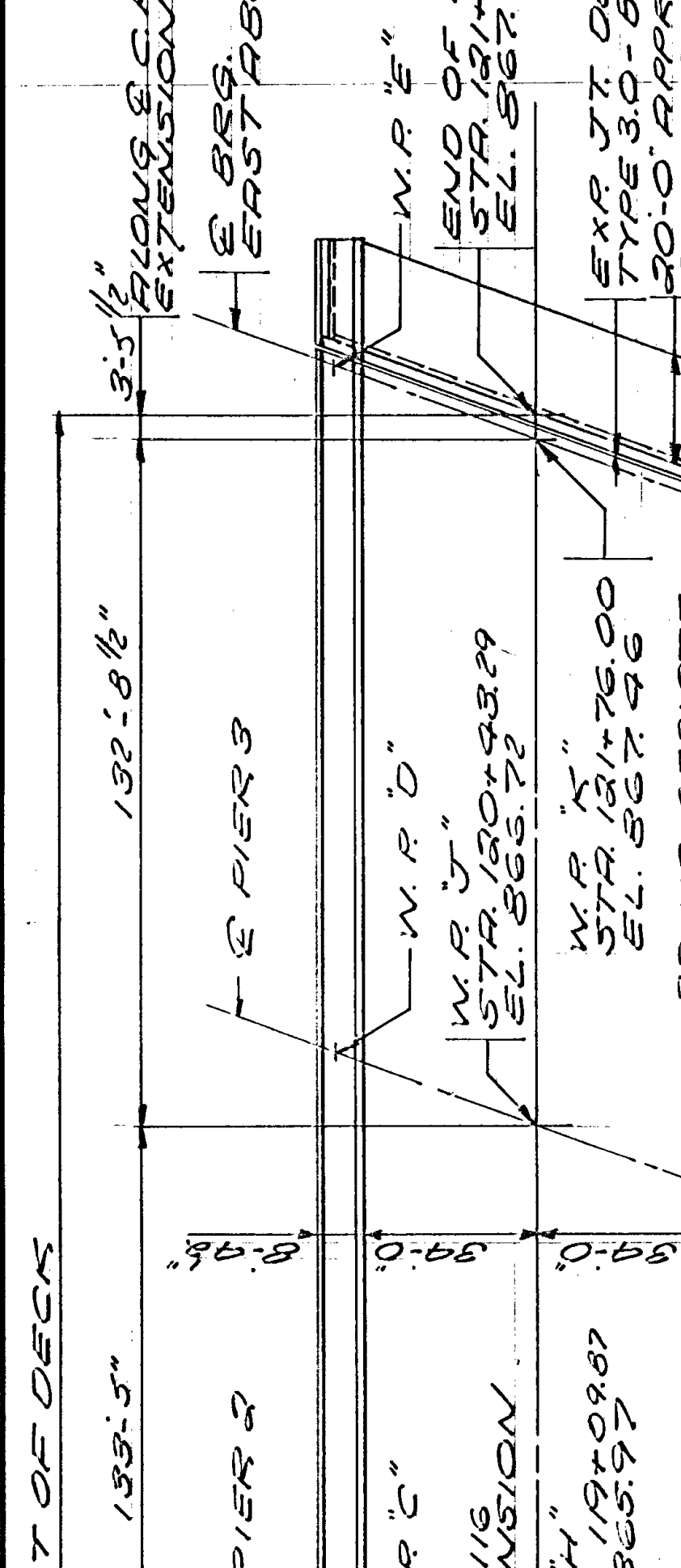


**DESIGN DATA**  
 1988 R.A.S. H.T.O. DESIGN SPECIALTATIONS LOAD FACTOR DESIGN METHOD. ALL LOADINGS INCLUDES 17 P.S.F. ALLOWANCE FOR FUTURE WEARING COURSE MODIFICATIONS REINFORCED CONCRETE:  
 P.C. = 4000 P.S.I. P.S. = 6000 P.S.I. REINFORCEMENT STRUCTURAL STEEL:  
 P.Y. = 50000 P.S.I. SPEC. 9509 PRESTRESSED CONCRETE:  
 P.S. = 20000 P.S.I. P.S. = 27000 P.S.I. 270 X 6 STRANDS. DECK AREA = 45638 SQ. FT. PROTECTED A.D.T. FOR 2009 = 19,150

8 M. EL. 823.23  
 J.E. CORNER SIDEWALK AT J.E. CORNER OF ICE ARENA.



**LIST OF SHEETS**

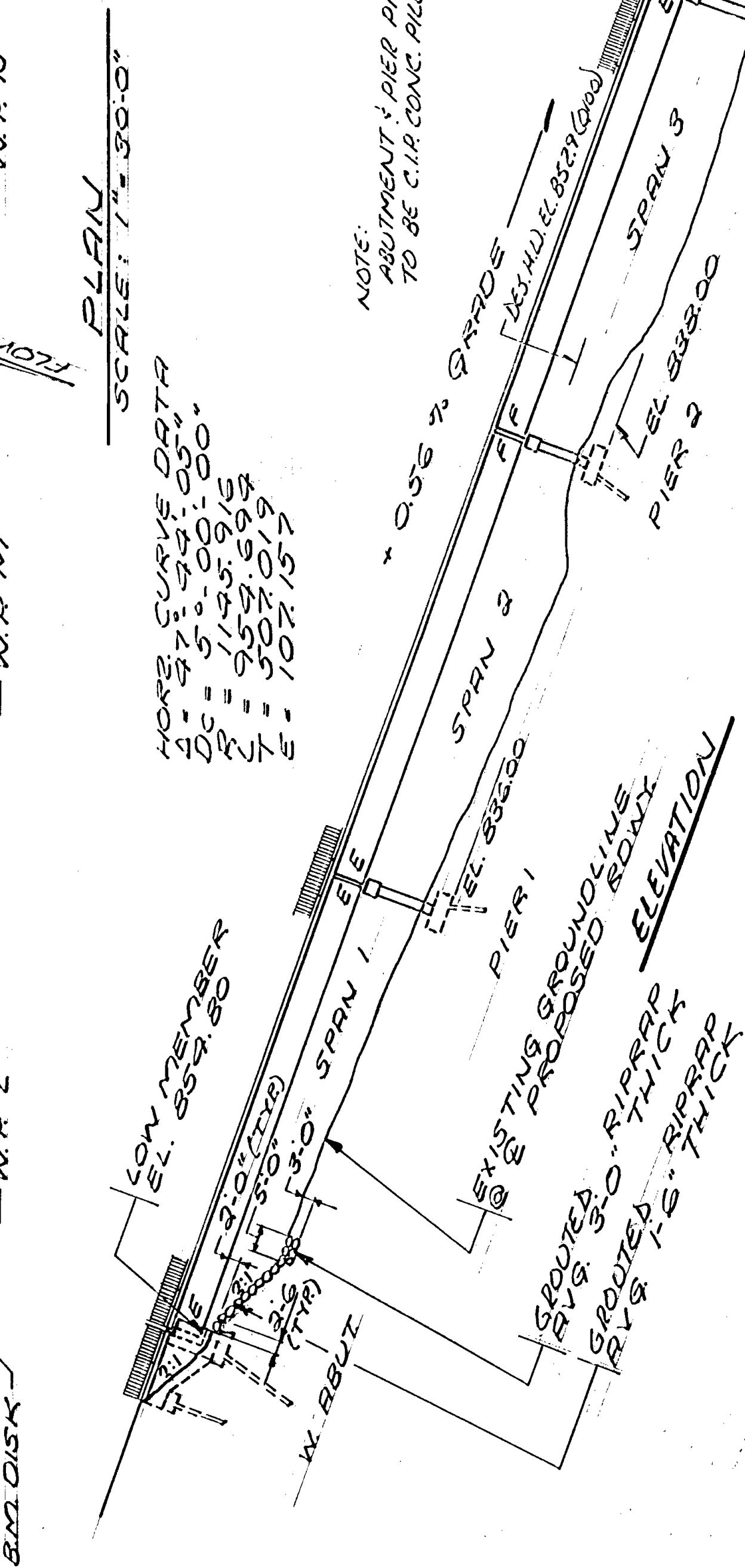
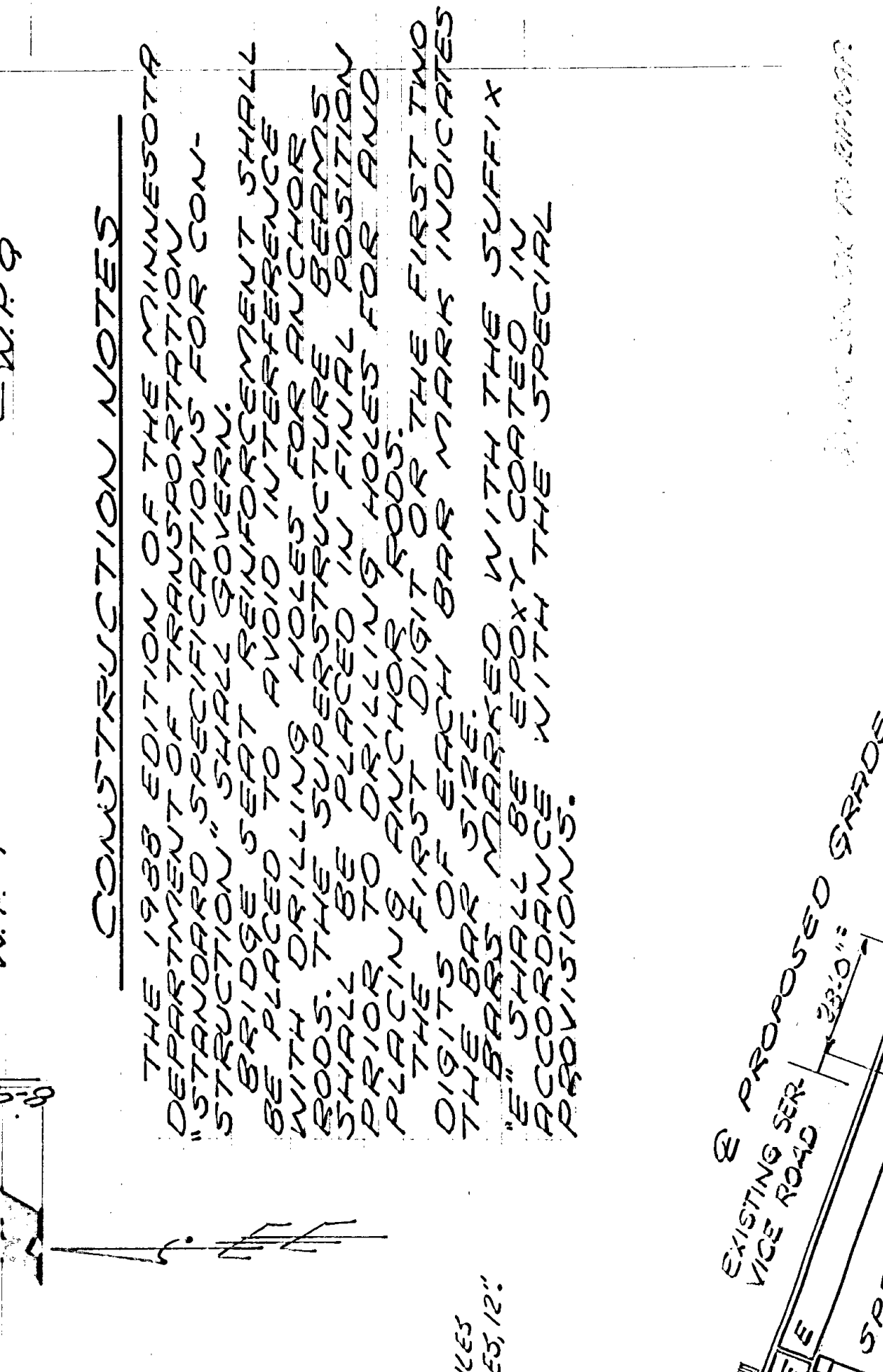
NO.	DESCRIPTION
1	GENERAL PLAN & ELEVATION
2	BRIDGE LAYOUT
3-6	WEST ABUTMENT DETAILS
7-9	WEST ABUTMENT REINFORCEMENT
10-11	WINGWALL REINFORCEMENT
12-15	EAST ABUTMENT DETAILS
16-18	EAST ABUTMENT REINFORCEMENT
19	ABUTMENT QUANTITIES
20-22	PIER DETAILS
23-26	SUPERSTRUCTURE DETAILS
27	FRAMING PLAN
28	8" PRESTR. CONCRETE BEAM DETAILS
29-30	UTILITY DETAILS
31	CONDUIT SYSTEM FOR LIGHTING
32	BIKEWAY RAILING CONCRETE (TYPE 4) FENCE
33	ORNAMENTAL METAL RAILING (TYPE 3)
34	BRIDGE APPROACH PANEL
35	EXPANSION DEVICE TYPE 30
36-41	DETAILS
42	BRIDGE SURVEY
43	BRIDGE SURVEY - PLAN & PROFILE

**CONSTRUCTION NOTES**  
 THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.  
 BRIDGE SEAT REINFORCEMENT SHALL BE PLACED TO AVOID INTERFERENCE WITH DRILLING HOLES FOR ANCHORS. THE SUPERSTRUCTURE BEAMS SHALL BE PLACED IN FINAL POSITION PRIOR TO DRILLING HOLES FOR AND PLACING ANCHOR BOLTS FOR THE FIRST TWO DIGITS OF EACH BAR MARK INDICATES THE BAR SIZE.  
 BEAMS MARKED WITH THE SUFFIX "S" SHALL BE EPOXY COATED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

**PLAN SCALE: 1" = 30'-0"**  
 MORE CURVE DATA  
 A = 47'-94'-00"  
 DC = 5'-00'-00"  
 R = 149'-915"  
 L = 954'-694"  
 E = 102'-157"  
 NOTE: ABUTMENT PIER PILES TO BE C.I.P. CONCRETE PILES 12".

**SCHEDULE OF QUANTITIES FOR ENTIRE BRIDGE**

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
2345.508	CONDUIT SYSTEM (LIGHTING)	LUMP SUM	1
2345.509	CONDUIT SYSTEM (TELEPHONE)	LUMP SUM	1
2345.509	CONDUIT SYSTEM (POWER)	LUMP SUM	1
2345.509	CONDUIT SYSTEM (WATER MAIN)	LUMP SUM	1
2345.509	CONDUIT SYSTEM (GAS MAIN)	LUMP SUM	1
2401.501	STRUCTURE CONCRETE (TYPE 3)	CU. YD.	674 (P)
2401.501	STRUCTURE CONCRETE (TYPE 3)	CU. YD.	753 (P)
2401.512	BRIDGE SLAB CONCRETE (TYPE 3)	SQ. FT.	45,678 (P)
2401.513	TYPE 1 RAILING CONCRETE (TYPE 4)	LIN. FT.	1160 (P)
2401.513	TYPE 1 RAILING CONCRETE (TYPE 4)	SQ. FT.	372 (P)
2401.501	PRESTRESSED CONCRETE BEAMS 81	SQ. FT.	36,650 (P)
2401.541	REINFORCEMENT BARS EPOXY COATED	BOUNDARY	396,730 (P)
2401.541	REINFORCEMENT BARS	POUNDS	27,800 (P)
2402.595	BEARING ASSEMBLY	EACH	80
2405.502	PRESTRESSED CONCRETE BEAMS 81	LIN. FT.	5326 (P)
2401.601	GRADE PREPARATION	LUMP SUM	1
2401.601	STRUCTURE EXCAVATION	LUMP SUM	1
2402.583	ORNAMENTAL METAL RAILING	LIN. FT.	1150
2452.501	WIRE FENCE, DESIGN 5-1	LIN. FT.	2532.501
2452.502	C.I.P. CONCRETE PILING, DELIVERED 12"	LIN. FT.	16,970
2452.504	C.I.P. CONCRETE PILING, DRIVEN 12"	LIN. FT.	16,970
2452.519	C.I.P. CONCRETE TEST PILES 63 FT. LG. 12"	EACH	4
2452.519	C.I.P. CONCRETE TEST PILES 63 FT. LG. 12"	EACH	2
2401.507	GRouted RIBRAP	CU. YD.	370
2402.591	EXPANSION JOINT DEVICES, TYPE 3	LIN. FT.	182 (P)
2401.601	BRIDGE APPROACH RAILES	LUMP SUM	1
2405.511	DIAPHRAGMS FOR TYPE 81 PRESTRESSED BEAMS	LIN. FT.	1467 (P)
2405.509	CONDUIT SYSTEM (FUTURE UTILITIES)	LUMP SUM	1
2401.601	FOUNDATION PREPARATION (PIER 1)	LUMP SUM	1
2401.601	FOUNDATION PREPARATION (PIER 2)	LUMP SUM	1
2401.601	FOUNDATION PREPARATION (PIER 3)	LUMP SUM	1



**APPROVED:**  
 Paul K. Erickson  
 COUNTY ENGINEER  
 ANOKA COUNTY  
 DATE: 9/29/89

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION & THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
 Robert K. Erickson  
 REG. NO. 69894

**DATE:**  
 C.R. 116 EXTENSION  
 MINNESOTA DEPARTMENT OF TRANSPORTATION  
 BRIDGE NO. 08549  
 C.R. 116 EXTENSION FROM C.S. 49 IN RANGE TO THE RUM RIVER.  
 9'-133' PRESTRESSED BEAM SPANS 81.0" ROW 3-10.0" STALKS, 3-6" G.S. SIDEWALKS 30" STEW SPAN IDENT NO. 501  
 GENERAL PLAN AND ELEVATION  
 56-25 TWP 32N R35W ANOKA COUNTY

**PLAN SCALE: 1" = 30'-0"**  
 MORE CURVE DATA  
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