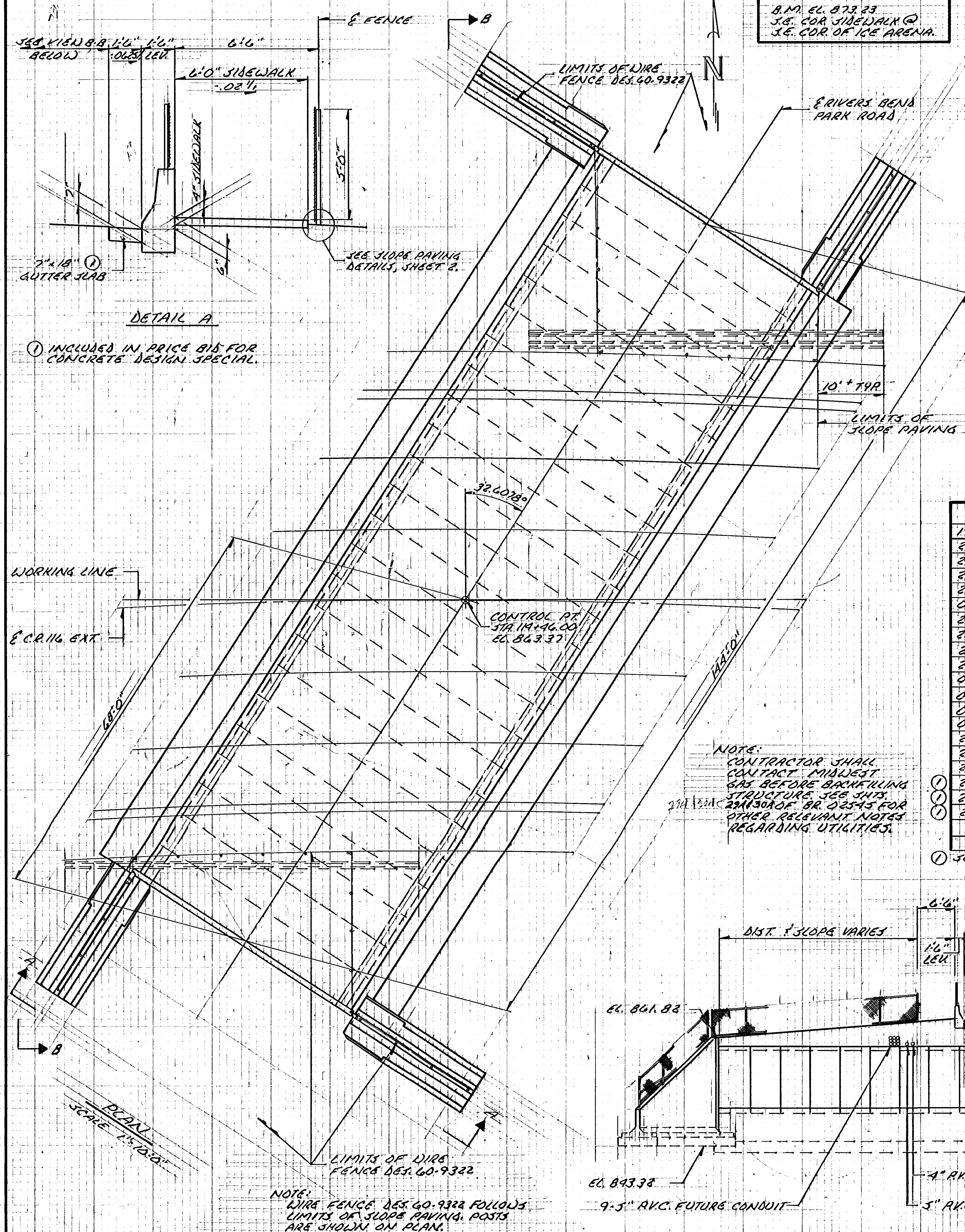
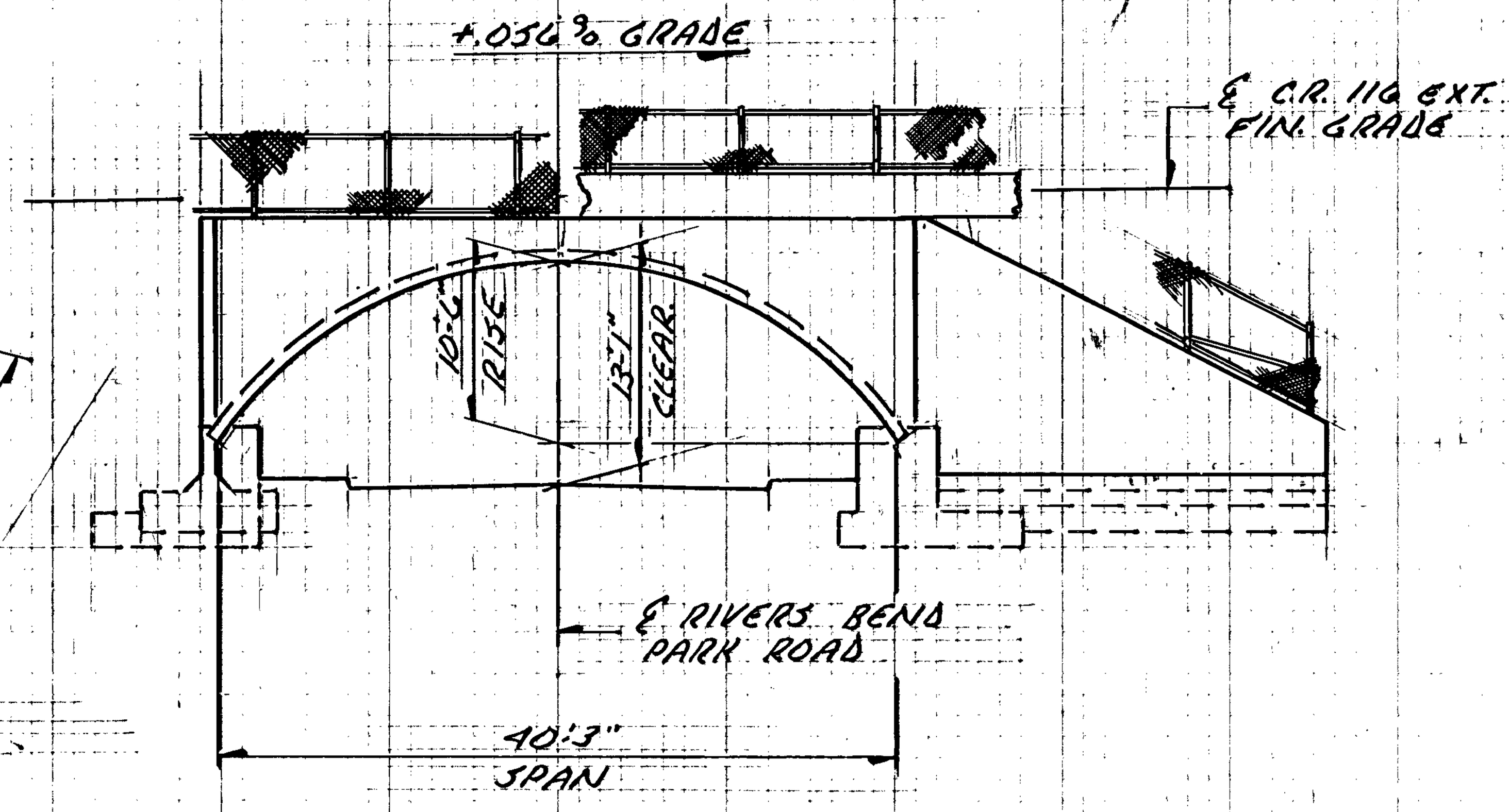


B.M. EL. 873.23
S.E. COR. SIDEWALK @
S.E. COR. OF ICE ARENA.

THE FOLLOWING STANDARD PLATES APPROVED BY THE F.H.W.A., SHALL APPLY ON THIS PROJECT:

STANDARD PLATES	
PLATE NO.	DESCRIPTION
0005A	SPEC. REFERENCE TO STANDARD PLATES
7035J	CONCRETE WALK
9322 I.	CHAIN LINK FENCE

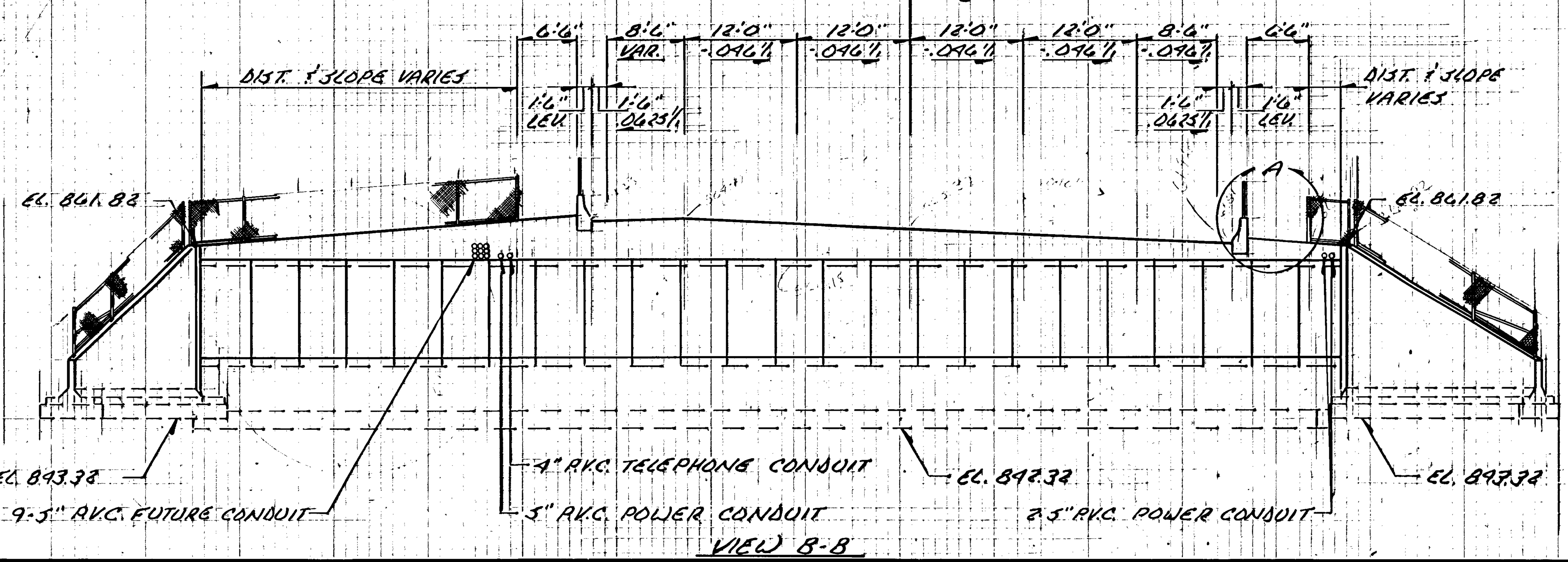


VIEW A-A

SCHEDULE OF ESTIMATED QUANTITIES				
	ITEM NO.	ITEM	QUANT.	UNIT.
	2401.501	STRUCTURE CONCRETE (3Y43)	306(P)	CU. YD.
	2401.501	STRUCTURE CONCRETE (1A43)	199(P)	CU. YD.
	2401.541	REINFORCEMENT BARS	39,950(P)	POUND
	2401.515	SIDEWALK CONCRETE (3X46)	680	SQ. FT.
	0401.601	STRUCTURE EXCAVATION	1	L. SUM
	2451.507	GRANULAR BEDDING (C.V.)	320(P)	CU. YD.
	2514.501	CONCRETE SLOPE PAVING	150	SQ. YD.
	2554.501	TRAFFIC BARRIER DESIGN SPECIAL	471	LIN. FT.
	2557.501	WIRE FENCE DESIGN 60-9322	150	LIN. FT.
	0501.603	PRECAST REINF. CONC. ARCH	144(P)	LIN. FT.
	0501.606	PRECAST HEADWALLS	2(P)	EACH
	0501.606	PRECAST WINGWALLS END SECTIONS	4(P)	EACH
	0531.603	CONCRETE DESIGN SPECIAL	471	LIN. FT.
	2557.501	WIRE FENCE, DESIGN 5-1	471	LIN. FT.
	2402.590	ELASTOMERIC BEARING PAD TYPE I	50	EACH
	2451.503	GRANULAR BACKFILL (C.V.)	6375(P)	CU. YD.
①	2545.509	CONDUIT SYSTEM (TELEPHONE)	1	L. SUM
①	2545.509	CONDUIT SYSTEM (POWER)	1	L. SUM
①	2545.509	CONDUIT SYSTEM (FUTURE UTILITIES)	1	L. SUM

① SEE SHT. 3 FOR UTILITY QUANTITIES.

NOTE:
CONTRACTOR SHALL CONTACT MIDWEST GAS BEFORE BACKFILLING STRUCTURE. SEE SHTS. 23 THROUGH 30 OF S.P. 0255 FOR OTHER RELEVANT NOTES REGARDING UTILITIES.



VIEW B-B

NOTE:
WIRE FENCE DES. 60-9322 FOLLOWS LIMITS OF SLOPE PAVING. POSTS ARE SHOWN ON PLAN.

DESIGN DATA

1983 A.A.S.H.T.O. AND INTERIM SPECIFICATIONS.

INSIDE HEIGHT (RISE)	13.1 FT.
INSIDE WIDTH (SPAN)	36.75 FT.
ARCH LENGTH	144.0 FT.
SKEW ANGLE	32.6078 DEG.
MAX. DEPTH OF FILL	
UNIT WEIGHT FILL	120 pcf
ANGLE INTERNAL FRICTION	30 DEG.

Fy = 60,000 P.S.I. REINFORCEMENT
Fc = 5000 P.S.I. PRECAST CONC. ELEMENT
Fc = 4000 P.S.I. C.I.P. CONC.

LIST OF SHEETS	
NO.	DESCRIPTION
1	GENERAL PLAN & ELEVATION
2	BRIDGE LAYOUT & SLOPE PAVING DET.
3-4	ABUTMENT & FOOTING DET.
5	PRECAST CONC. ARCH DET.
6	PRECAST CONC. HEADWALL DET.
7	PRECAST CONC. WINGWALL DET.
8	EXCAVATIONS, BACKFILL & BARRIER DET.
9	SURVEY SHEET
10	SURVEY SHEET ~ PLAN & PROFILE

CONSTRUCTION NOTES

THE 1988 EDITION OF THE MINNESOTA DEP'T. OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

REINFORCEMENT BARS SHALL BE DEFORMED BILLET STEEL BARS CONFORMING TO ASTM A615, GRADE 60, OR STEEL FABRIC ASTM 185 GRADE 65 MAY BE USED.

ALL REINFORCEMENT TO HAVE A MINIMUM COVER OF 1 1/2" UNLESS OTHERWISE NOTED.

ALL EXPOSED CONCRETE EDGES SHALL BE FORMED W/ 1/2" OR 3/4" VEE UNLESS NOTED.

CONSTRUCTION TO BE IN ACCORDANCE WITH SPEC. 2411, EXCEPT AS NOTED.

THE FIRST DIGIT OR THE FIRST TWO DIGITS OF EACH BAR MARK INDICATE BAR SIZE.

"APPROVED" Paul K. Ruud
ANOKA COUNTY ENGINEER
DATE:

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.

Brian D. Walters
REG. NO. 13876
DATE: 9/25/89

PLANS PREPARED BY:
ERICKSON ENGINEERING
3340 REPUBLIC AVE.
ST. LOUIS PARK, MN. 55426

C.R. 116 EXTENSION
MINNESOTA DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 96834

C.R. 116 EXTENSION FROM C.R. 47 IN RAMSEY TO C.S.A.H. 7 IN ANOKA OVER RIVERS BEND PARK ROAD.

GENERAL PLAN & ELEVATION
SEC. 25 TWP. 32 N. R. 25 W.
RAMSEY TWP. ANOKA COUNTY

SHEET 1C OF 10C SHEETS	96834	DM
C.A. 88-09-116		BDW