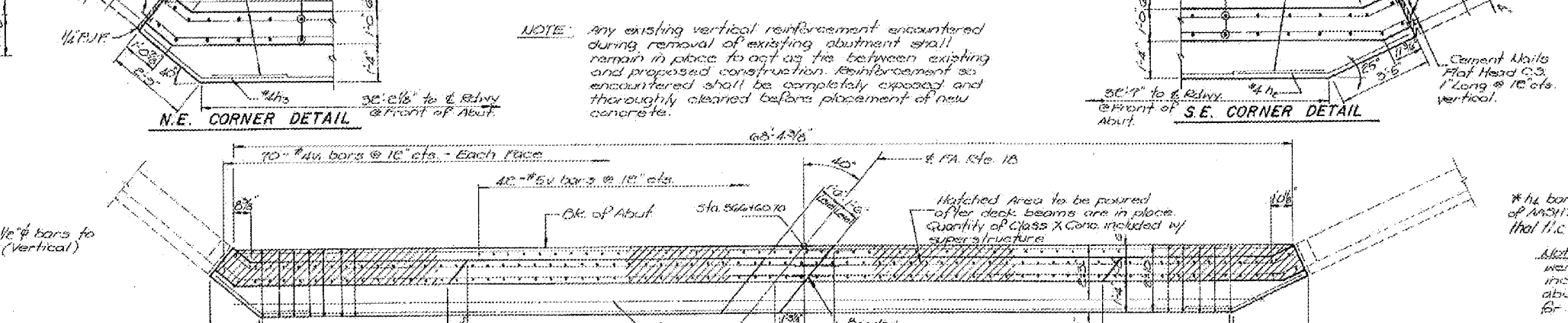
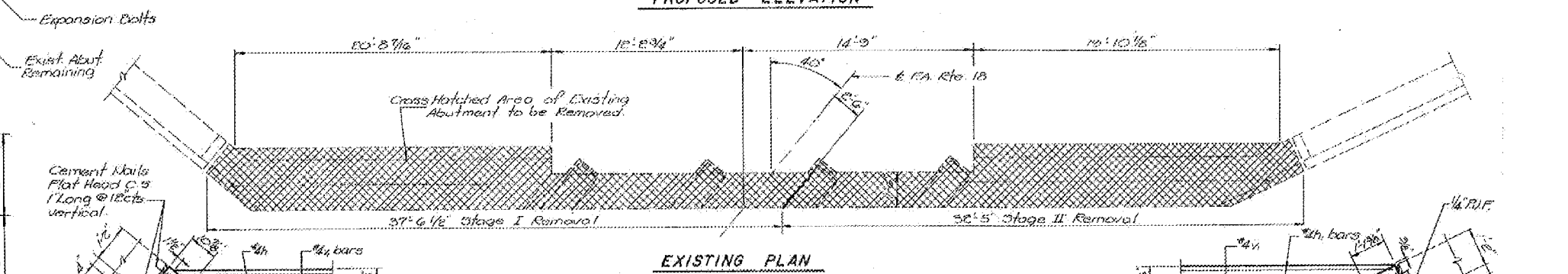
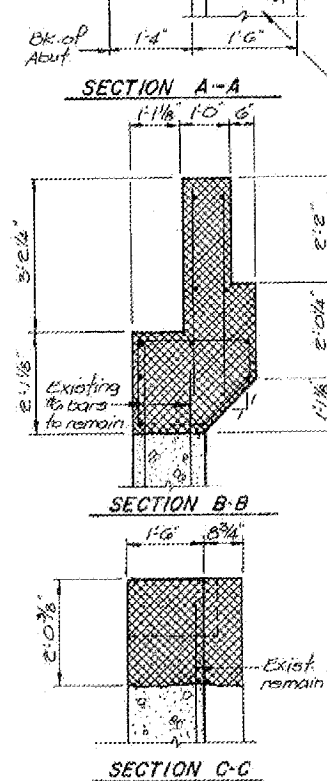
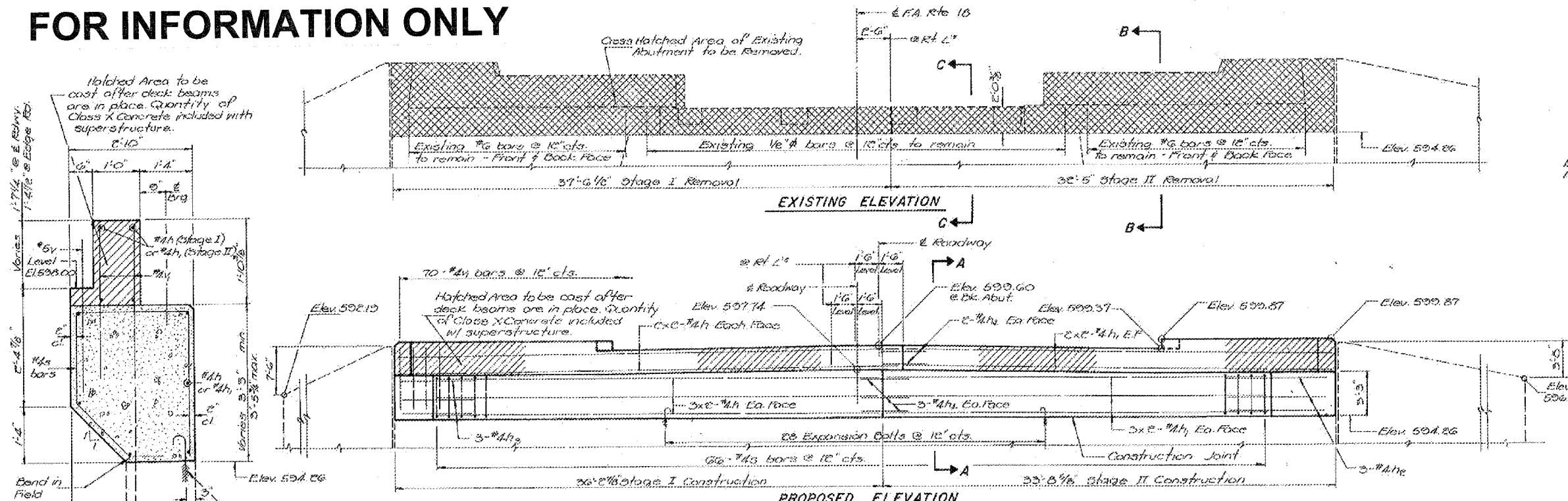


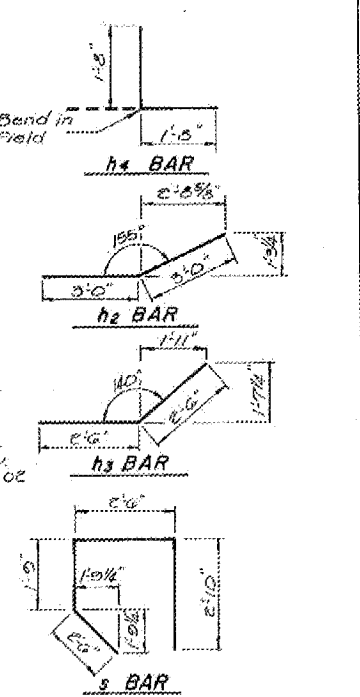
FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 18	104-BY-1BR	CARROLL	40	37

SHEET 6 OF 9



NOTE: Any existing vertical reinforcement encountered during removal of existing abutment shall remain in place to act as tie between existing and proposed construction. Reinforcement so encountered shall be completely exposed and thoroughly cleaned before placement of new concrete.



BILL OF MATERIAL

Bar	Qty	Size	Length	Shape
h1	12	#4	10'-8"	---
h2	12	#4	17'-0"	---
h3	3	#4	6'-0"	---
h3	3	#4	5'-0"	---
h3	6	#4	3'-4"	---
s	66	#4	6'-7"	□
v	42	#5	3'-2"	---
v	140	#4	4'-7"	---

Class X Concrete C.Y. 22.0
 Reinforcement Bars Lbs 1550
 Conc Removal C.Y. 15.6
 Exp. Bolts 3/4" Dia. CB

*h1 bars shall conform to the requirements of AASHTO M-31 or M-53 Grade "A" except that the elongation shall not be less than 20%.

Note: Volume of Class X Concrete & weight of Reinforcement Bars included in hatched area of proposed abutment are listed with quantities for the superstructure on sheet 2.

DESIGNED	DHC
CHECKED	KLF
DRAWN	JMB
CHECKED	KLF

EAST ABUTMENT
 F.A. RTE. 18 OVER TRIB. OF MISSISSIPPI RIVER
 F.A. RTE. 18, SECTION 104 BY-1BR
 CARROLL COUNTY
 STA. 566+37.11

M.M.F.S. 45, 1992