

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 5571	BD-1	WHITESIDE	63	16
FED. RD. DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 2
44 SHEETS

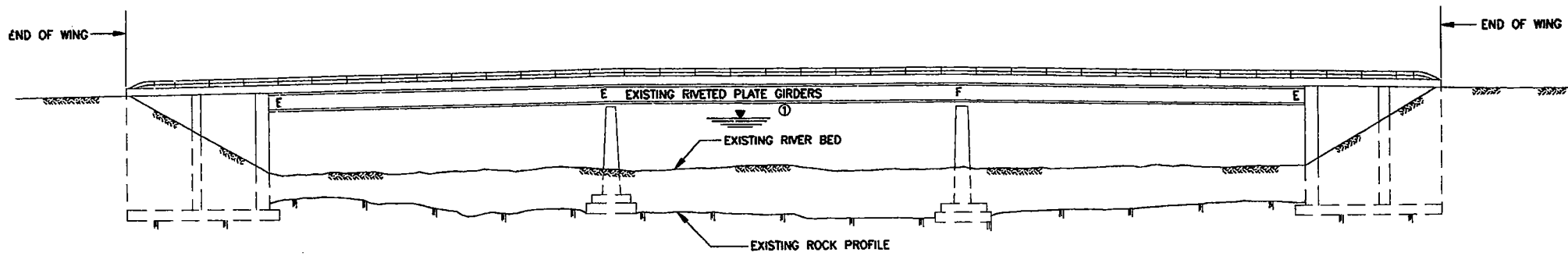
B.M. - CHISELED "□" ON LOWEST STEP OF SOUTHEAST WINGWALL
22' LEFT, STATION 20+30.2, ELEVATION 644.97

EXISTING STRUCTURE : STRUCTURE NUMBER 098-0052, CONSTRUCTED IN 1951 UNDER
SENATE BILL #417, SECTION B-F.
SUPERSTRUCTURE : REINF. CONC. DECK ON RIVETED STEEL PLATE GIRDERS
SUBSTRUCTURE : VAULTED ABUTMENTS, SOLID PIERS
DECK TO BE REMOVED AND STRUCTURE WIDENED. TRAFFIC
TO BE MAINTAINED UTILIZING STAGE CONSTRUCTION.

NO SALVAGE :

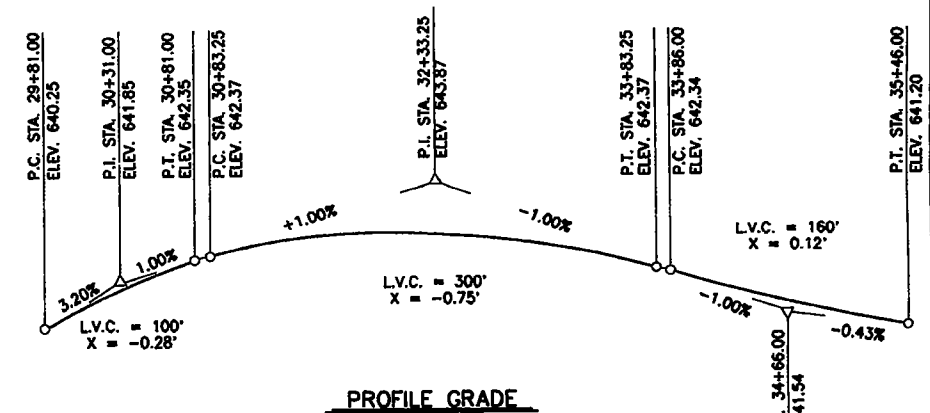
STATION 32+33
REBUILT 199__ BY
STATE OF ILLINOIS
F A RTE. 5571 SEC. BD-1
F A PROJ. BHM-5062(014)
LOADING HS 20
STR. NO. 098-0052

NOTES:
EXISTING NAME PLATE TO BE CLEANED AND RELOCATED NEXT
TO NEW NAME PLATE ON THE NEW PARAPET, COST INCIDENTAL
TO "NAME PLATE."
FOR MATERIALS AND DETAIL DIMENSIONS OF NAME PLATES,
SEE STANDARD SHEET 2113.

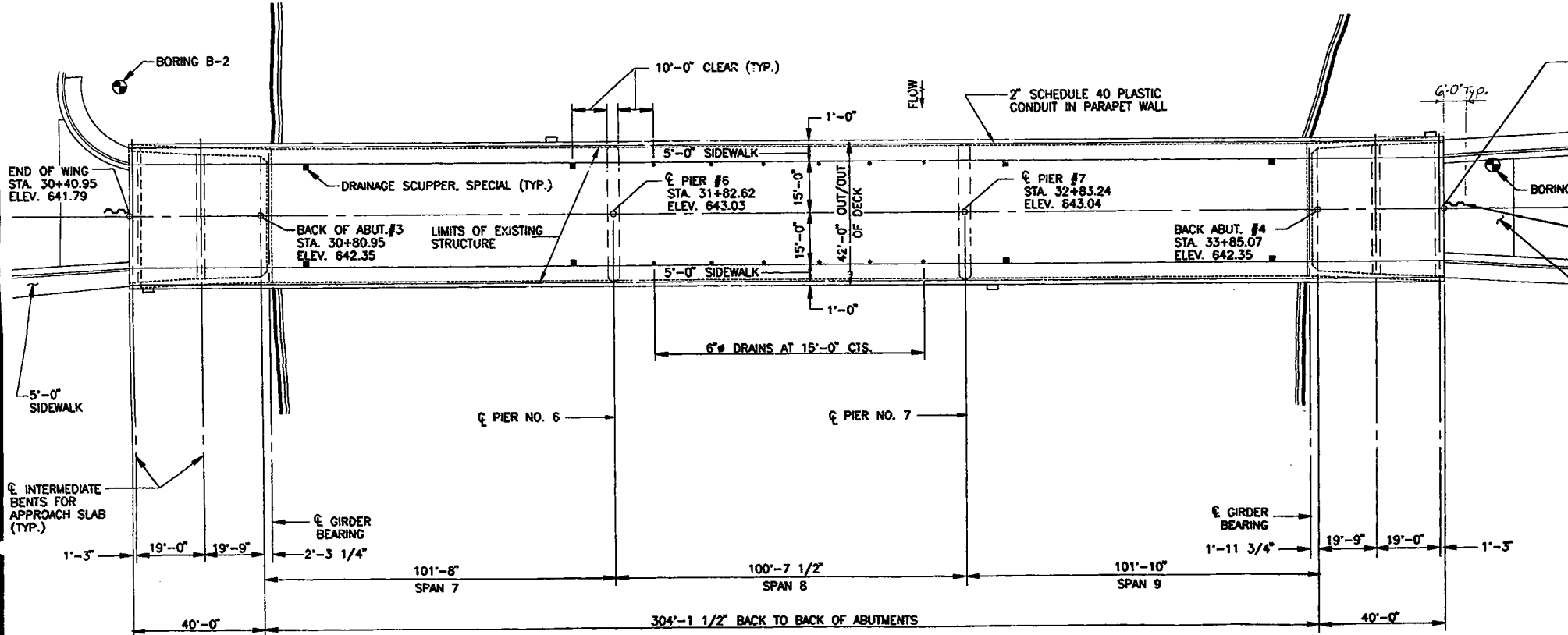


① HIGH WATER ELEV. 632.76 (1938)
FROM ORIGINAL BRIDGE PLANS

ELEVATION

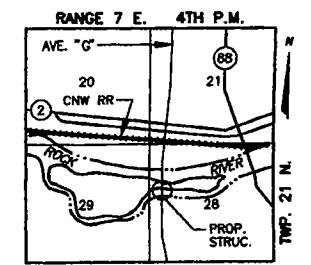


PROFILE GRADE



PLAN

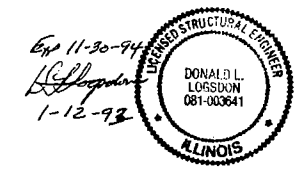
DESIGN SPECIFICATIONS
1989 AASHTO SPECIFICATIONS & 1990-1991 INTERIM
DESIGN LOADING HS20-44
ALLOW 25#/SQ.FT. FOR FUTURE WEARING SURFACE
DESIGN STRESSES
f_c = 3500 psi
f_y = 60,000 psi (REINF.)
f_s = 18,000 psi (EXISTING PLATE GIRDERS)



LOCATION SKETCH

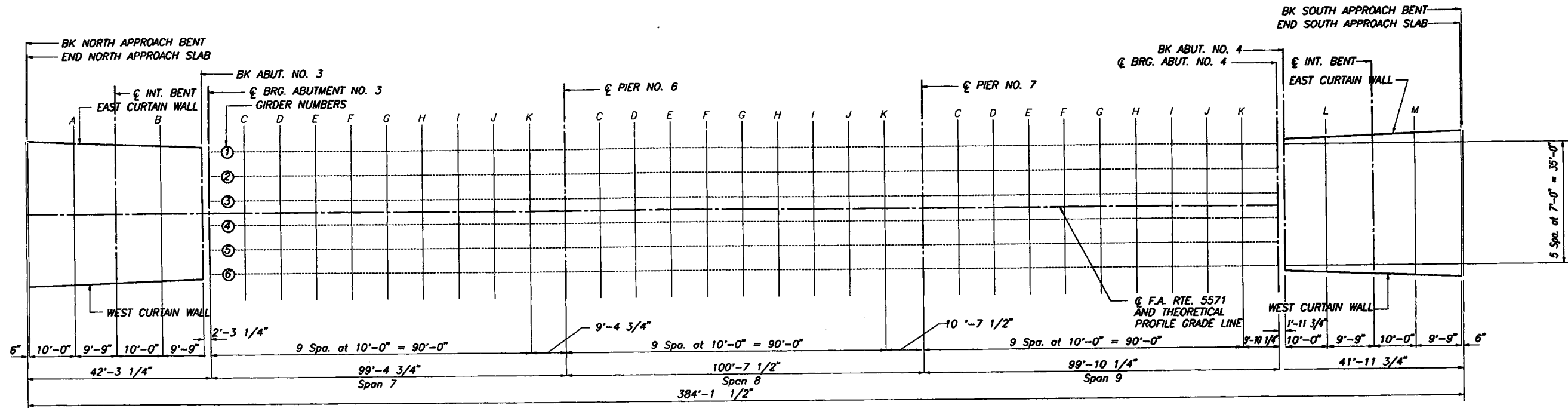
GENERAL PLAN
AVENUE "G" OVER SOUTH
CHANNEL OF THE ROCK RIVER
F.A.U. RTE. 5571 SECTION BD-1
WHITESIDE COUNTY
STRUCTURE NO. 098-0052
STATION 32+33.01

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
Engineer of Bridges and Structures

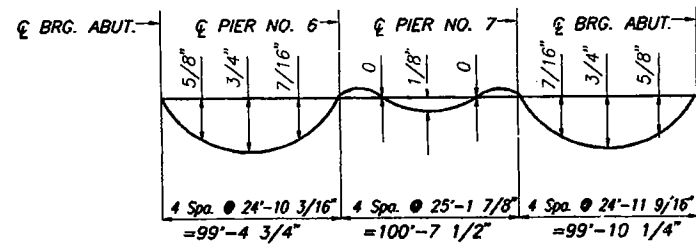


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 5571	BD-1	WHITESIDE	63	23
FED. RD. DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 9
44 SHEETS



ELEVATION LOCATION PLAN

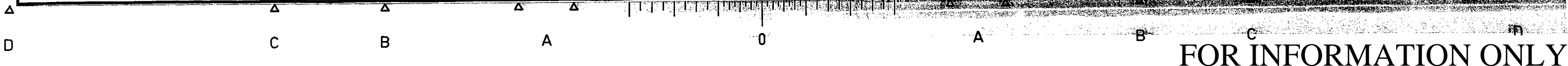


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

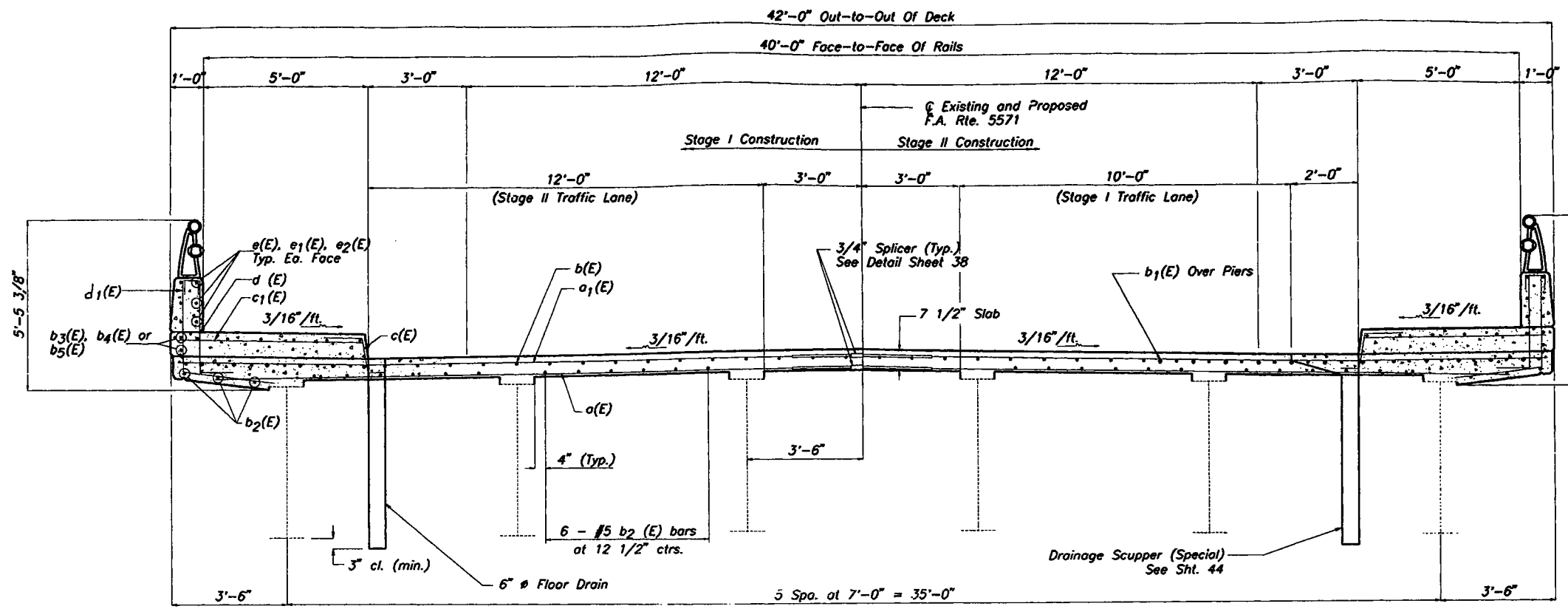
NOTE: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflection as shown on sheet 12 & 13

SUPERSTRUCTURE
TOP OF SLAB ELEVATION-LOCATIONS
AVENUE "G" OVER SOUTH
CHANNEL OF THE ROCK RIVER
F.A.U. RTE. 5571 SECTION BD-1
WHITESIDE COUNTY
STRUCTURE NO. 098-0052

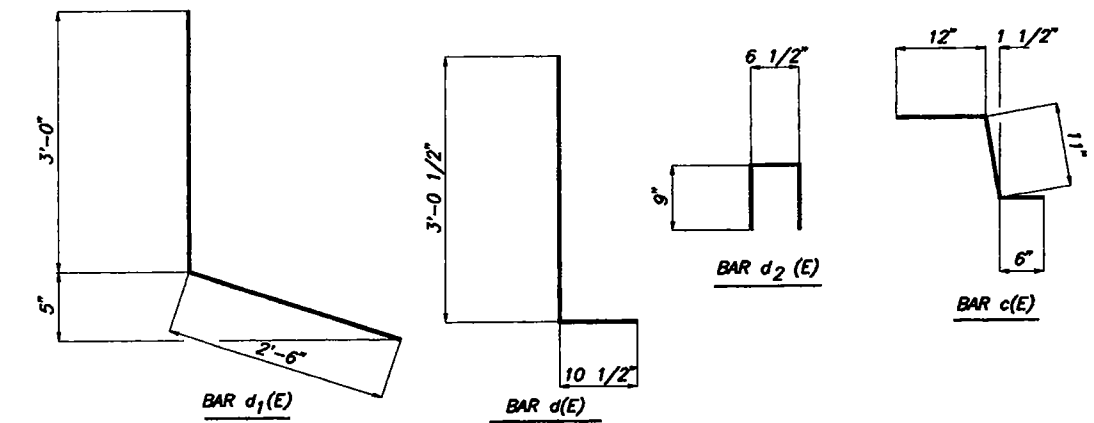
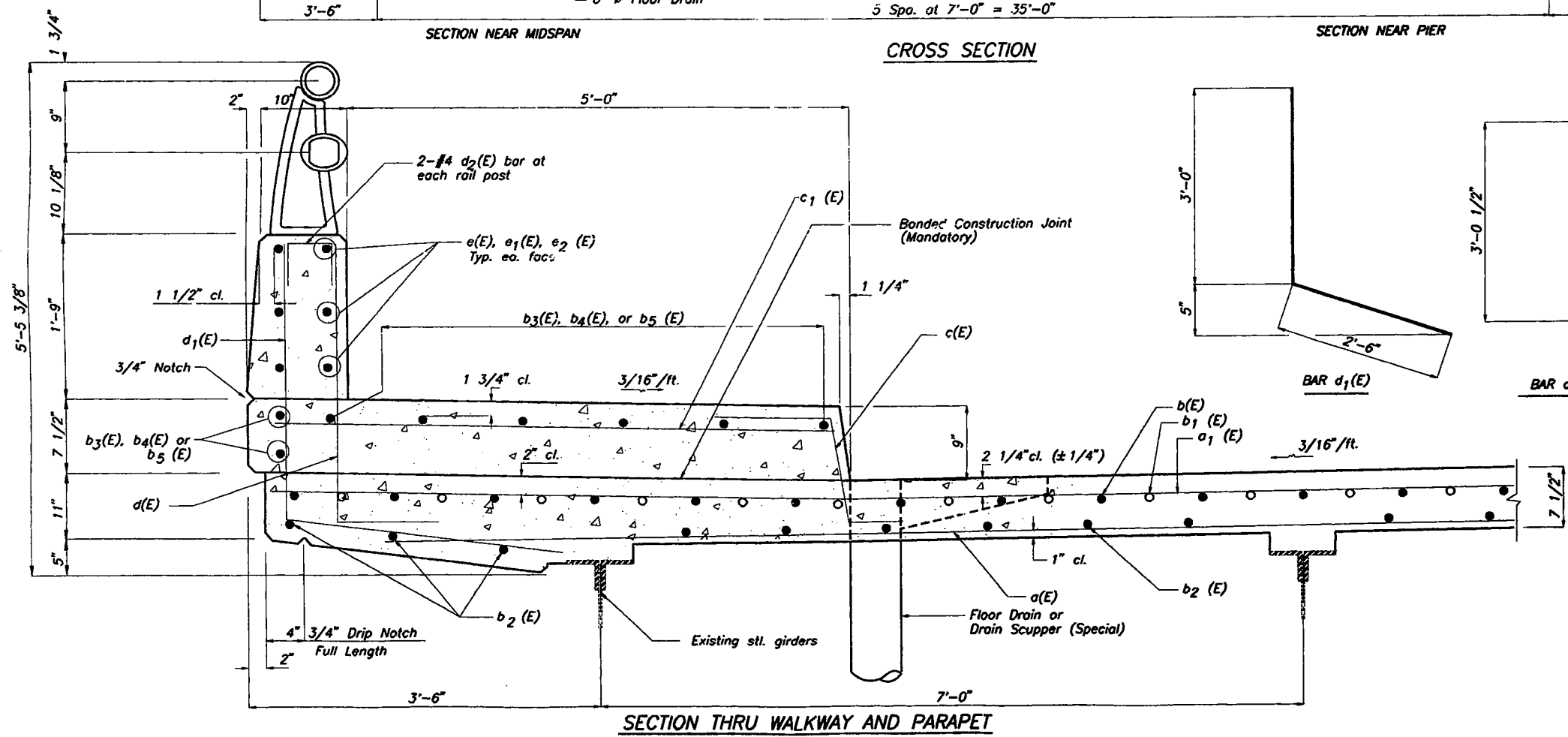


FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 17
F.A.U. 5571	BD & BD-1	WHITESIDE	63	31	44 SHEETS
FED. RD. DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



NOTE:
Reinforcement bars designated (E) shall be epoxy coated.



**SUPERSTRUCTURE
CROSS SECTIONS**
AVENUE "G" OVER NORTH AND SOUTH
CHANNELS OF THE ROCK RIVER
F.A.U. RTE. 5571 SECTION BD AND BD-1
WHITESIDE COUNTY
STRUCTURE NO. 098-0051 AND 098-0052

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 5571	BD BD-1	WHITESIDE	63	58
FED. RD. DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 24
44 SHEETS

Joint Size	"C" at 50°F	"D" at 50°F
2"	2"	1 1/2" Min.
2 1/2"	2 1/2"	1 3/4" Min.
4"	3"	2 1/2" Min.

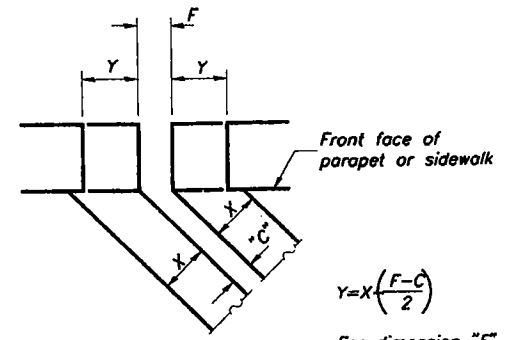
INSTALLATION NOTES

- Install sponge mandrels into positions shown to form flap convolution.
- Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
- Install continuous seal in roadway.
- Install anchor blocks as indicated.

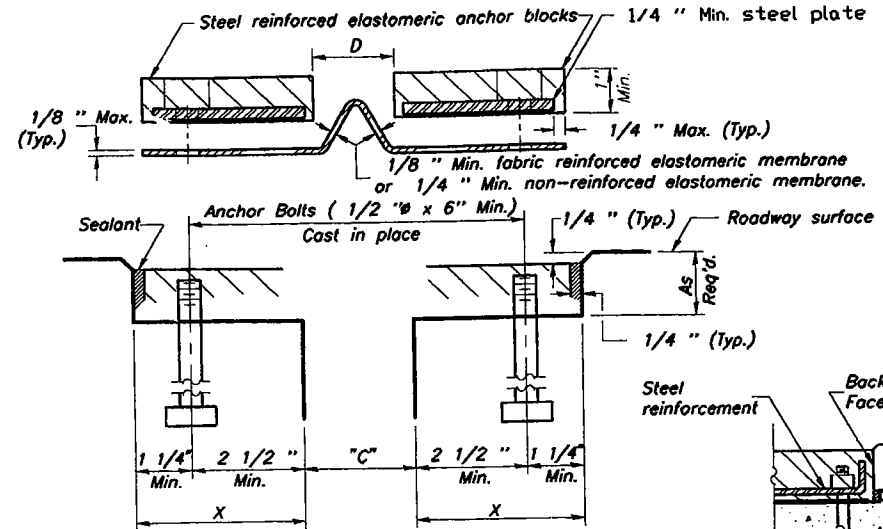
NOTE A: Maximum spacing of anchor bolts shall be 12" centers.

SKREW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



FORMING BLOCKOUT SKETCH

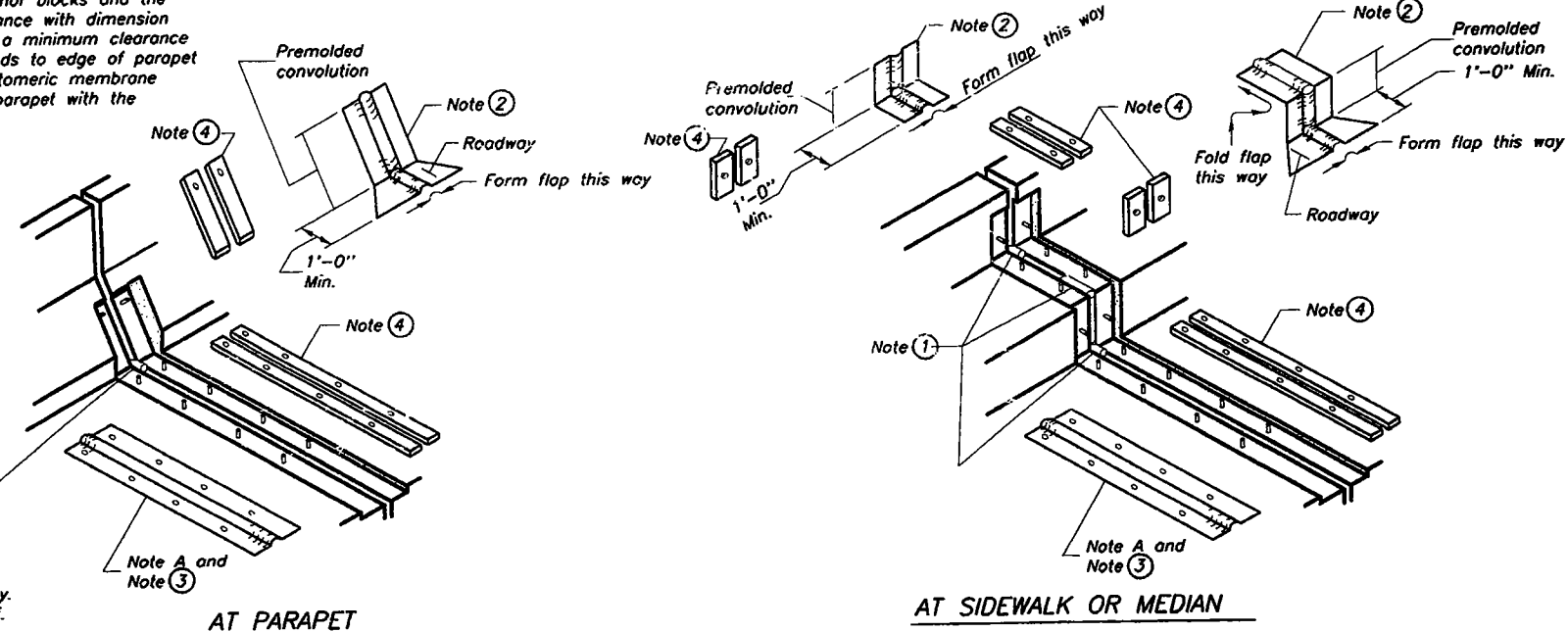


CROSS SECTION

ANCHOR BLOCK REINFORCEMENT WITH ASPHALT SURFACE

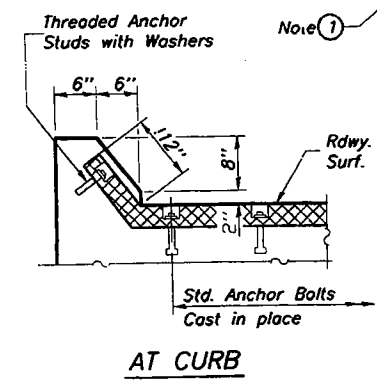
GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions.
The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.
The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.
The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.
Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.
The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.

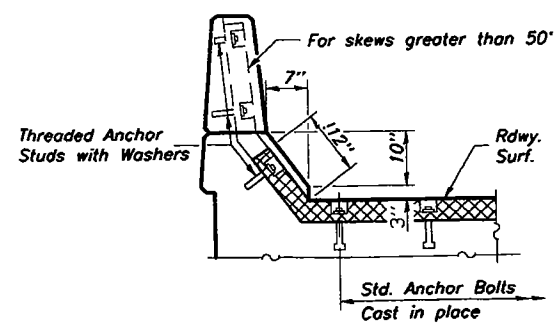


AT PARAPET

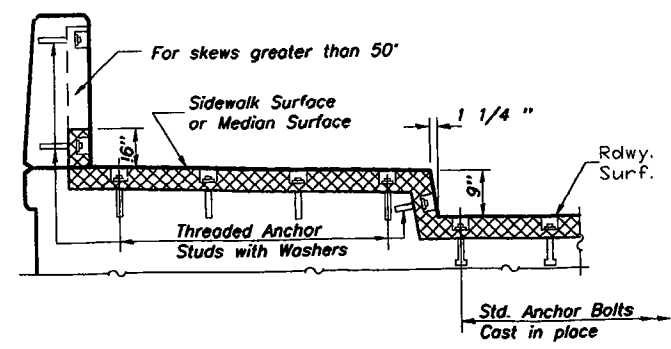
AT SIDEWALK OR MEDIAN



AT CURB



AT PARAPET



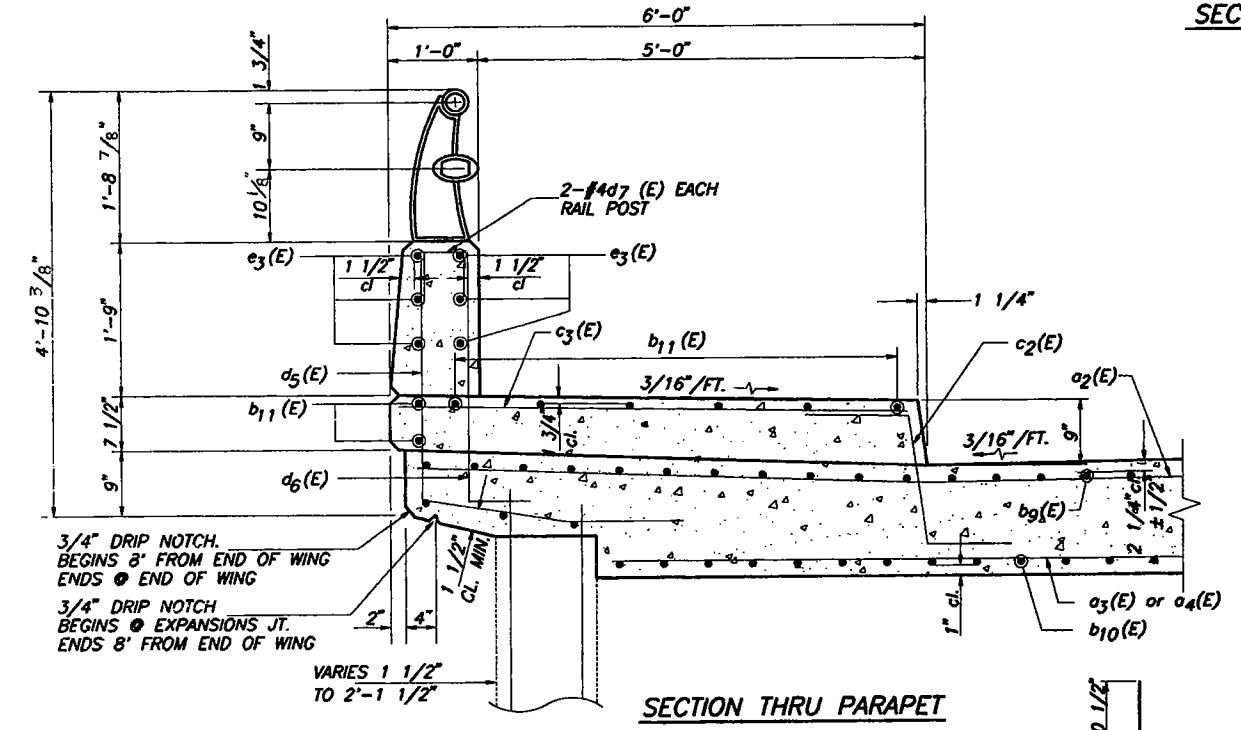
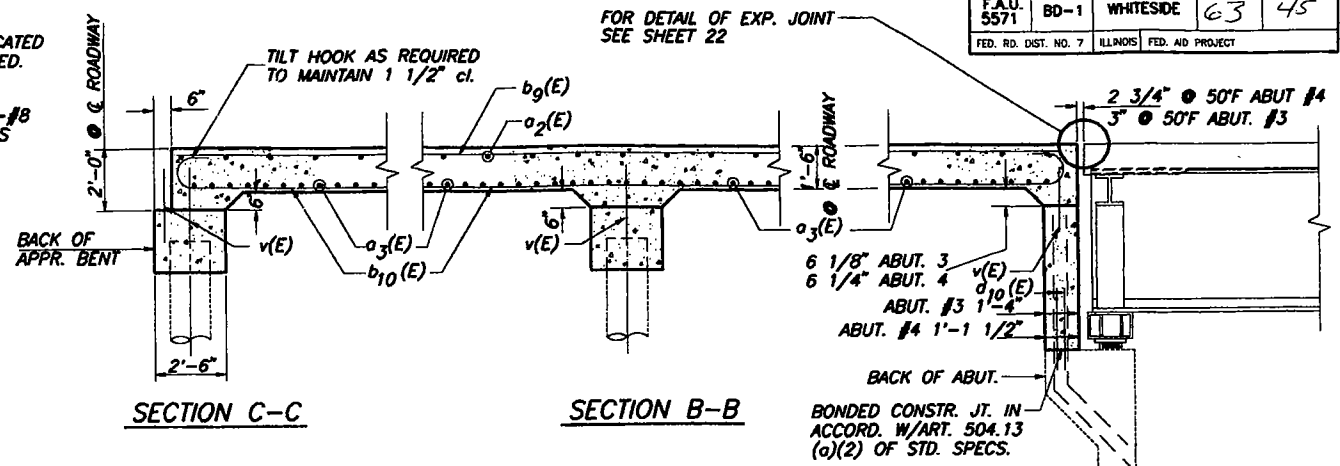
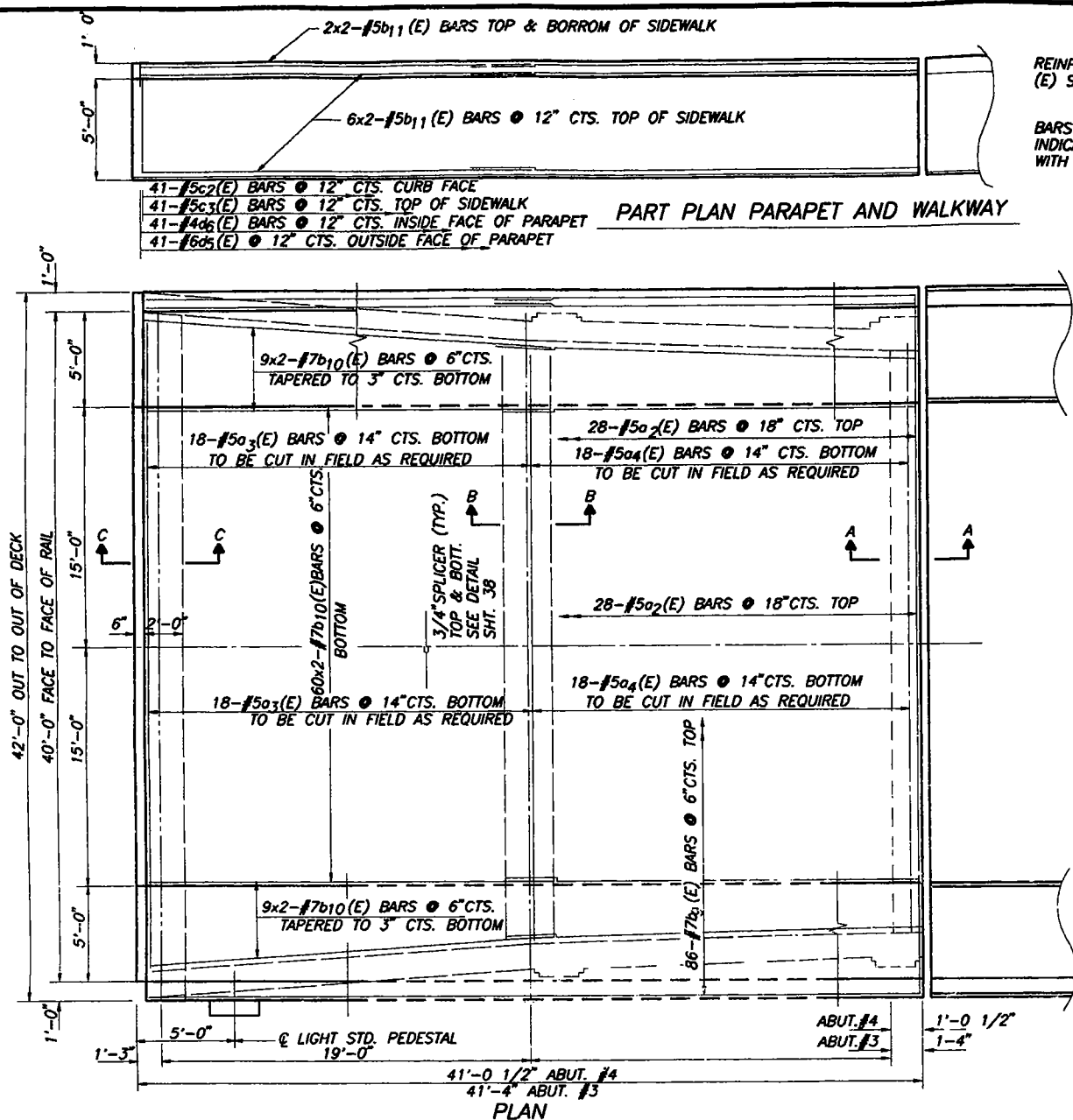
AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS

CONTINUOUS SEAL TYPE NEOPRENE EXPANSION JOINTS
For 2", 2 1/2" and 4" Movement
AVENUE "G" OVER NORTH AND SOUTH CHANNELS OF THE ROCK RIVER
F.A.U. RTE. 5571 SECTION BD AND BD-1 WHITESIDE COUNTY
STRUCTURE NO. 098-0051 AND 098-0052

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 31 44 SHEETS
F.A.U. 5571	BD-1	WHITESIDE	63	45	
FED. RD. DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

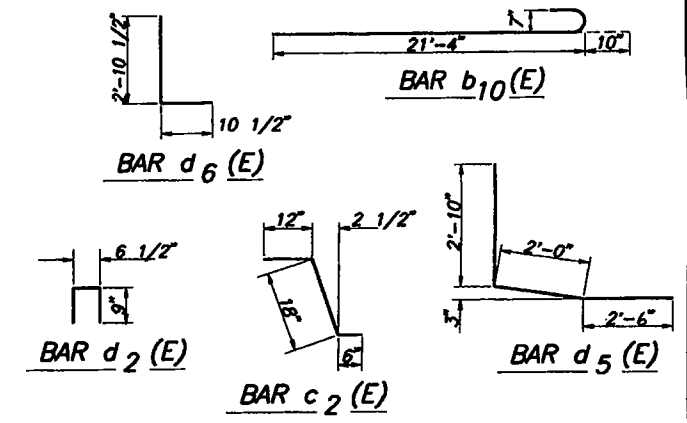
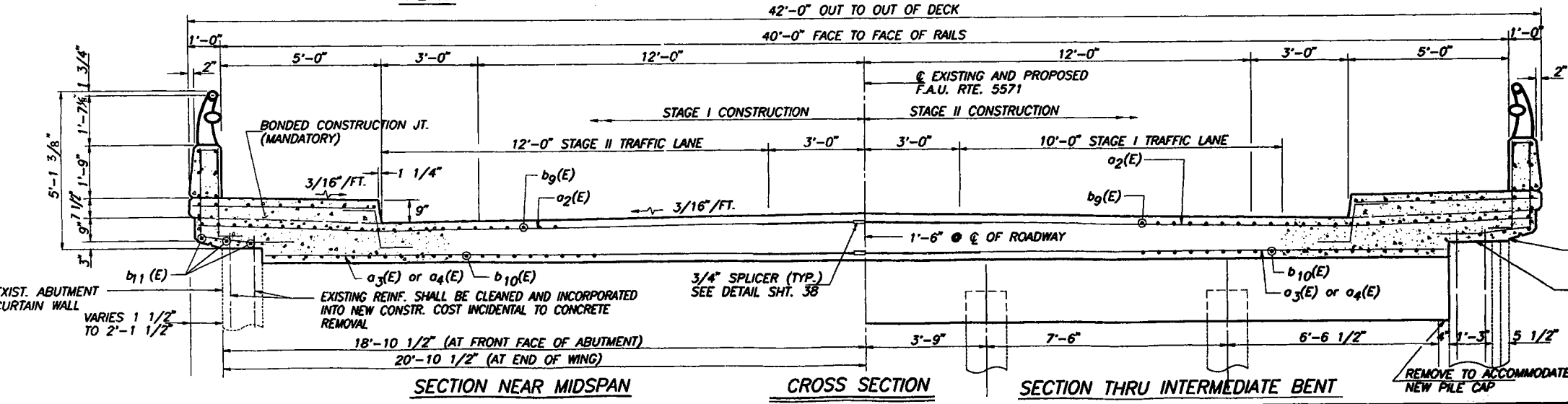
REINFORCEMENT BARS INDICATED (E) SHALL BE EPOXY COATED.

BARS INDICATED THUS 9x2-#8 INDICATES 9 LINES OF BARS WITH 2 BARS PER LINE



TWO APPROACH SLABS BILL OF MATERIALS

BAR NO.	SIZE	LENGTH	SHAPE
o ₂ (E)	#5	20'-5"	—
o ₃ (E)	#5	19'-1"	—
o ₄ (E)	#5	18'-1"	—
b ₉ (E)	#7	40'-1"	—
b ₁₀ (E)	#7	22'-2"	—
b ₁₁ (E)	#5	21'-4"	—
c ₂ (E)	#5	3'-0"	—
c ₃ (E)	#5	5'-7"	—
d ₅ (E)	#6	7'-4"	—
d ₆ (E)	#4	3'-9"	—
d ₇ (E)	#4	2'-6"	—
d ₈ (E)	#6	4'-1 1/2"	—
d ₉ (E)	#6	8'-11"	—
e ₃ (E)	#4	19'-11"	—
REINFORCEMENT BARS (EPOXY COATED)			LBS. 39,560
CLASS X CONCRETE			CU.YDS. 210



SUPERSTRUCTURE APPROACH SLABS VAULTED ABUTMENT NO. 3 & 4

AVENUE "G" OVER SOUTH CHANNEL OF THE ROCK RIVER

F.A.U. RTE. 5571 SECTION BD-1

WHITESIDE COUNTY

STRUCTURE NO. 098-0052