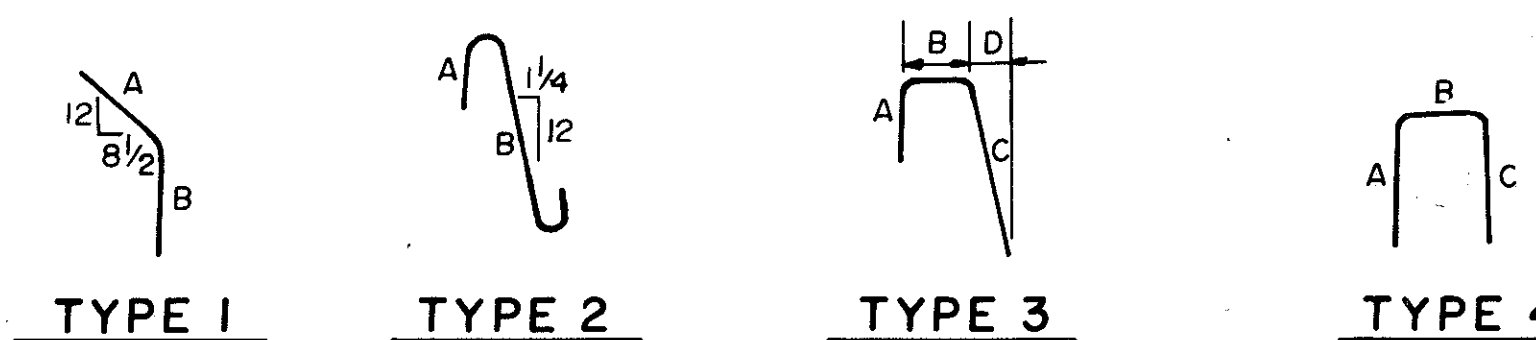
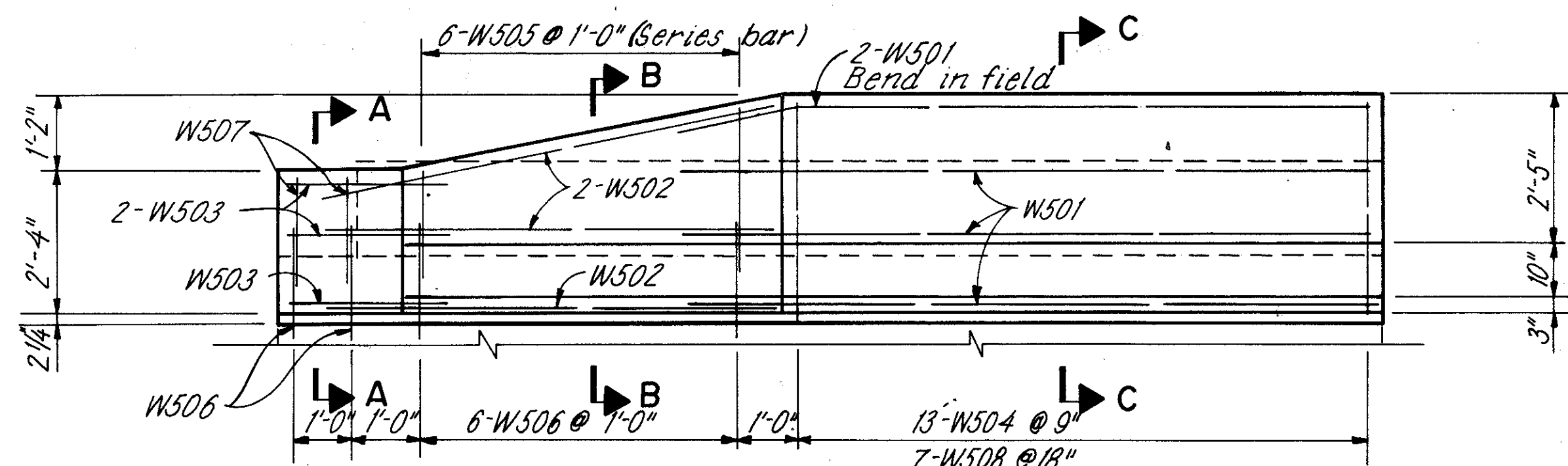


PLAN

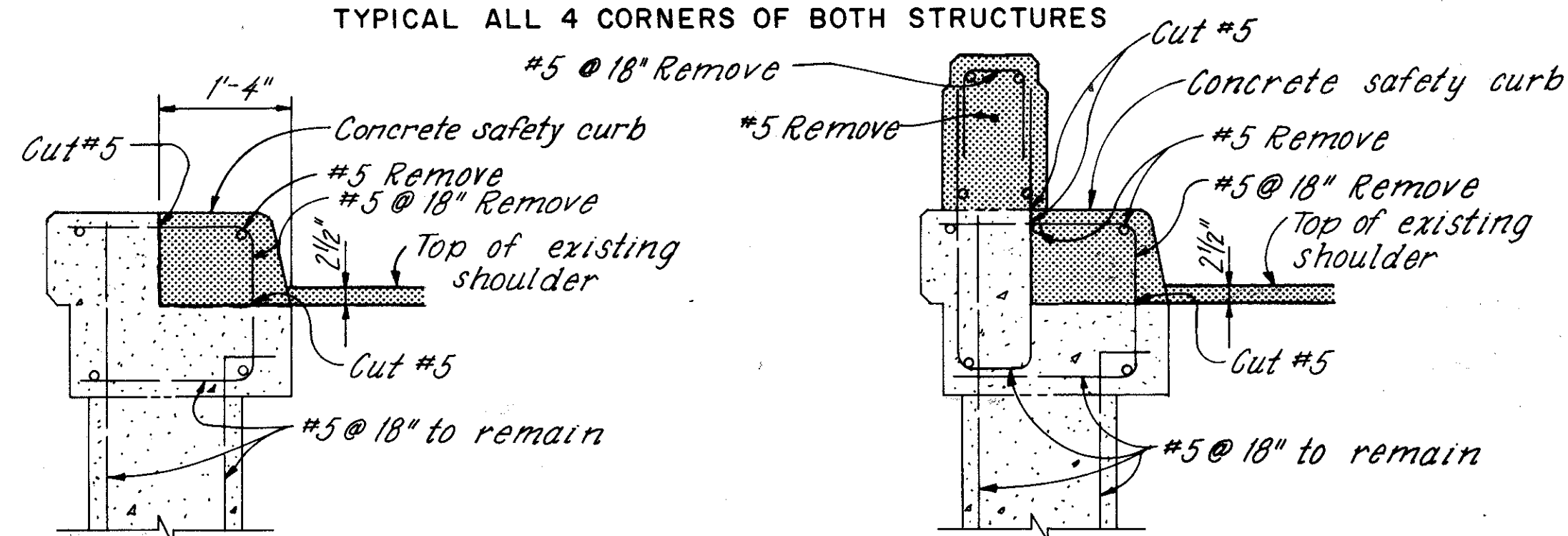


BENDING DIAGRAM



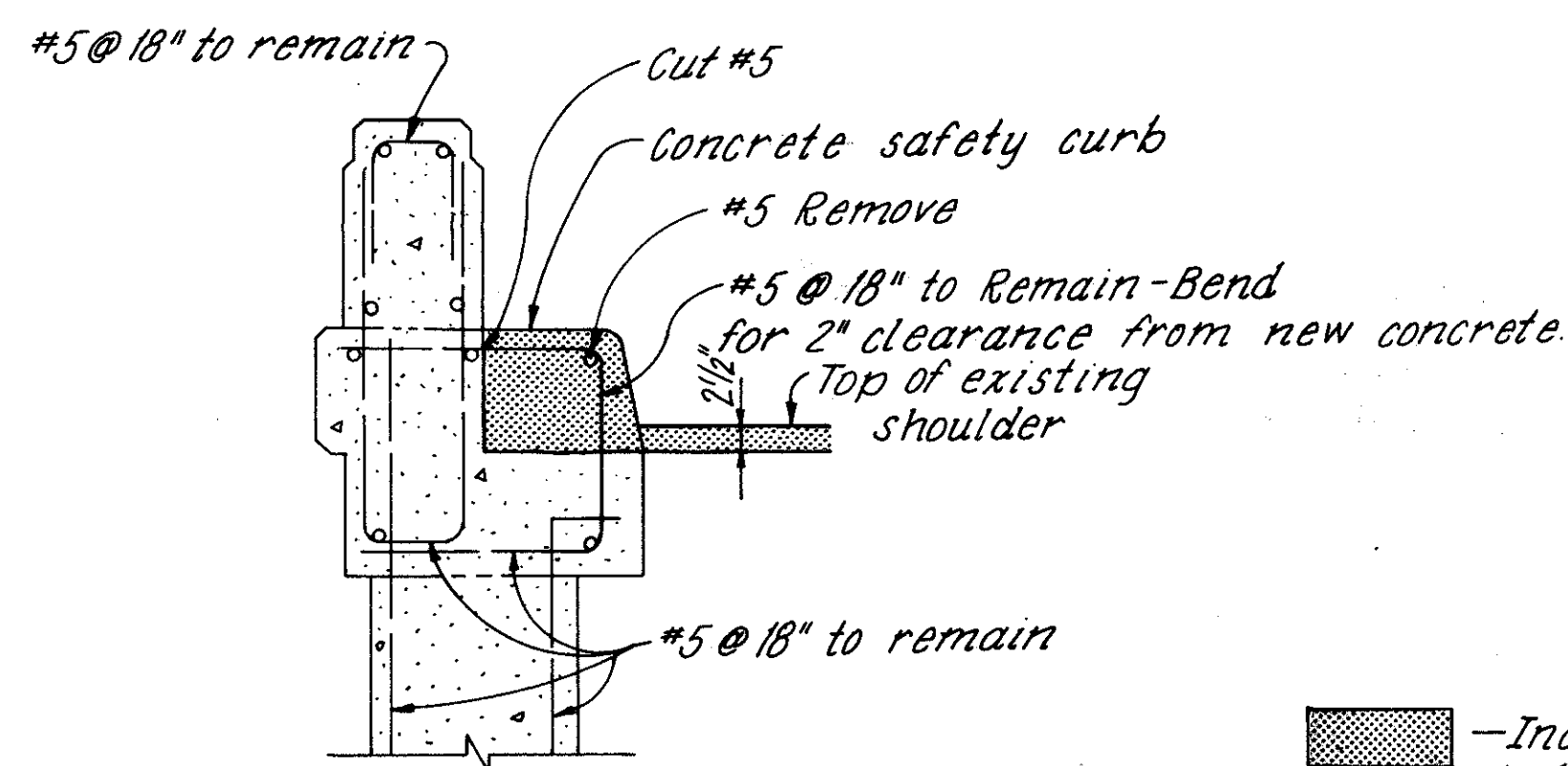
ELEVATION
WINGWALL DETAILS

TYPICAL ALL 4 CORNERS OF BOTH STRUCTURES



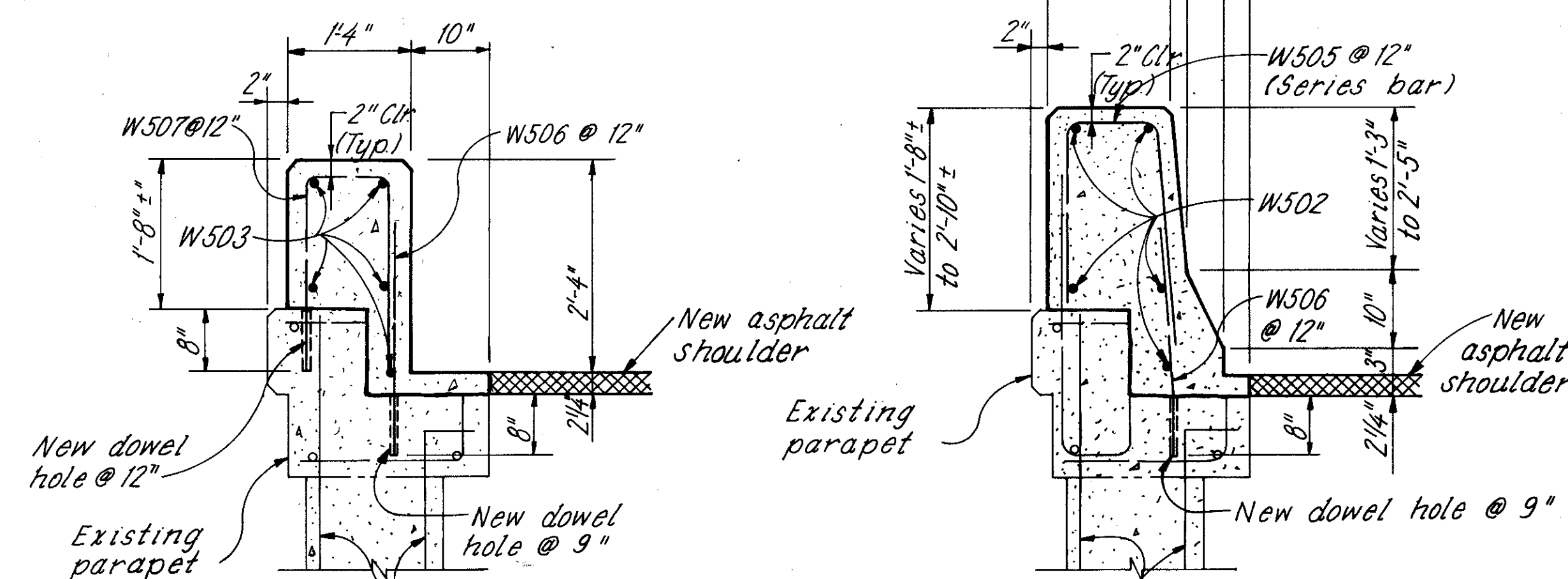
SECTION A-A
REMOVAL

SECTION B-B
REMOVAL



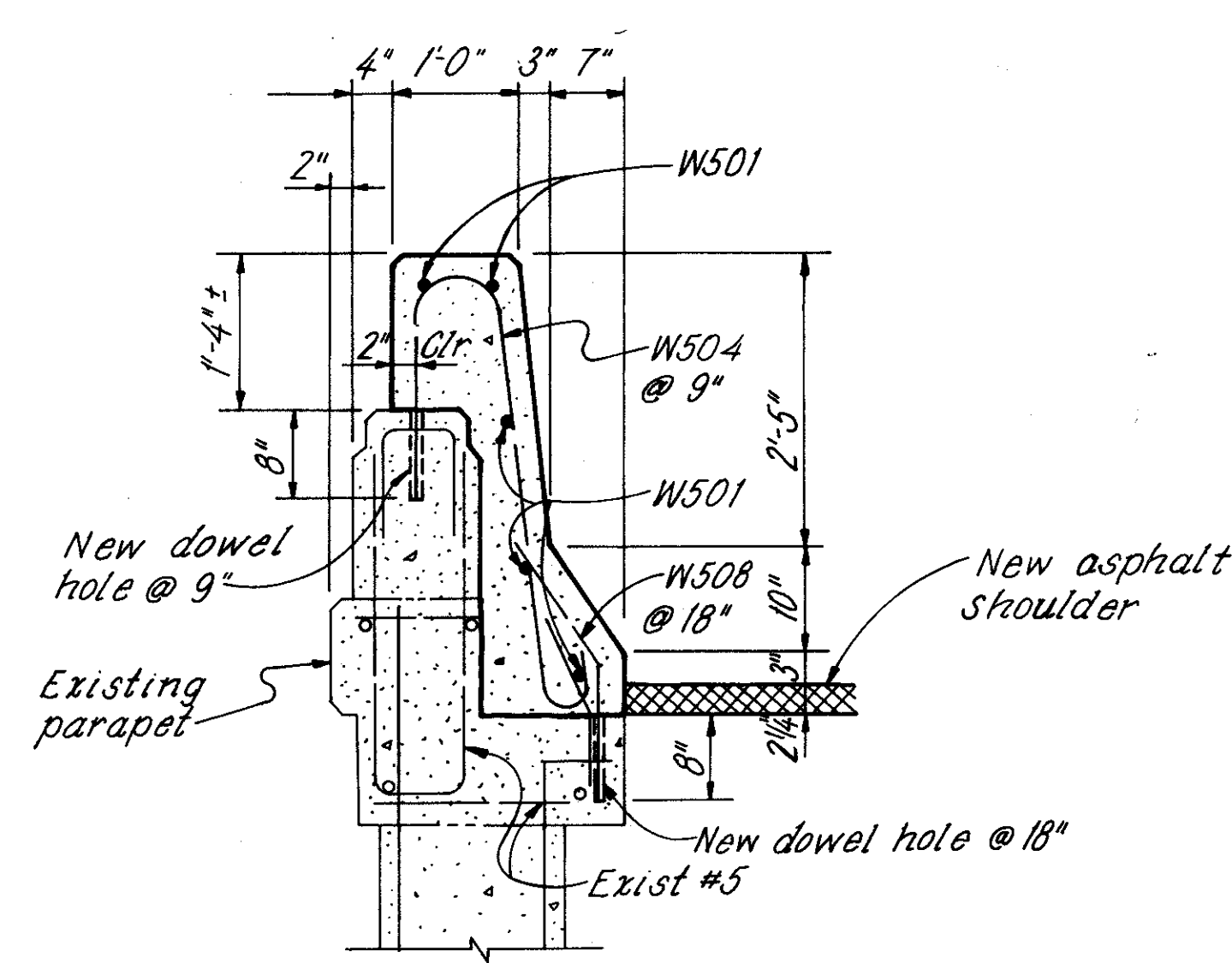
SECTION C-C
REMOVAL

—Indicates material to be removed per Item 202 - Portions of Structure removed.



SECTION A-A
PROPOSED

SECTION B-B
PROPOSED



SECTION C-C
PROPOSED

EPOXY COATED REINFORCING STEEL - SUPERSTRUCTURE										
MARK	WBB	EBB	NO.	LENGTH	TYPE	A	B	C	D	WEIGHT
S501	108	108	216	30'-0"	Str					6759
S502	16	16	32	19'-2"	Str					640
S503	8	8	16	12'-3"	Str					204
S504	1160	1160	2320	2'-0"	1	1'-0"	1'-0"			4840
S505	2336	2336	4672	6'-0"	2	1'-10"	3'-5"			29237
S506	16	16	32	14'-1"	Str					470
S507	48	48	96	17'-7"	Str					1761
S508	16	16	32	7'-6"	Str					250
S509	16	16	32	18'-10"	Str					629
S510	144	144	288	17'-8"	Str					5307
S511	16	16	32	15'-5"	Str					515
S512	16	16	32	20'-0"	Str					668
S513	16	16	32	14'-7"	Str					487
S514	16	16	32	20'-3"	Str					676
S515	16	16	32	14'-5"	Str					481
S516	16	16	32	13'-4"	Str					445
S517	64	64	128	16'-5"	Str					2192
S518	8	8	16	16'-4"	Str					273
S519	8	8	16	15'-1"	Str					252
S520	64	64	128	5'-0"	Str					668
									Sub-Total	56,754
W501	20	20	40	11'-0"	Str					459
W502	20	20	40	7'-0"	Str					292
W503	20	20	40	2'-6"	Str					104
W504	52	52	104	6'-0"	2	1'-10"	3'-5"			651
	4	4	8	4'-1"		1'-3"		2'-1"	0"	
W505	Ser of Ser of Ser of	to	3	to	1'-0"	to	to	to	to	267
	6	6	6	6'-7"	①	2'-0"		3'-4"	2'-2"	
W506	32	32	64	2'-8"	Str					178
W507	8	8	16	5'-1"	4	2'-2"	1'-0"	2'-2"		85
W508	28	28	56	2'-4"	1	1'-2"	1'-2"			136
									Sub-Total	2172
									Total	58,926

- ① Varies by 6" increments
- ② Varies by 3" increments
- ③ Varies by 1/2" increments

RE RICHLAND ENGINEERING LIMITED
MANSFIELD, OHIO

WINGWALL DETAILS & REINFORCING STEEL LIST
SUPERSTRUCTURE
BRIDGE NO. LAK-90-2342 (L&R)
OVER THE GRAND RIVER

LAKE COUNTY I.R.90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DHT	JPS	RLR	DT	DAP	9/13/89	