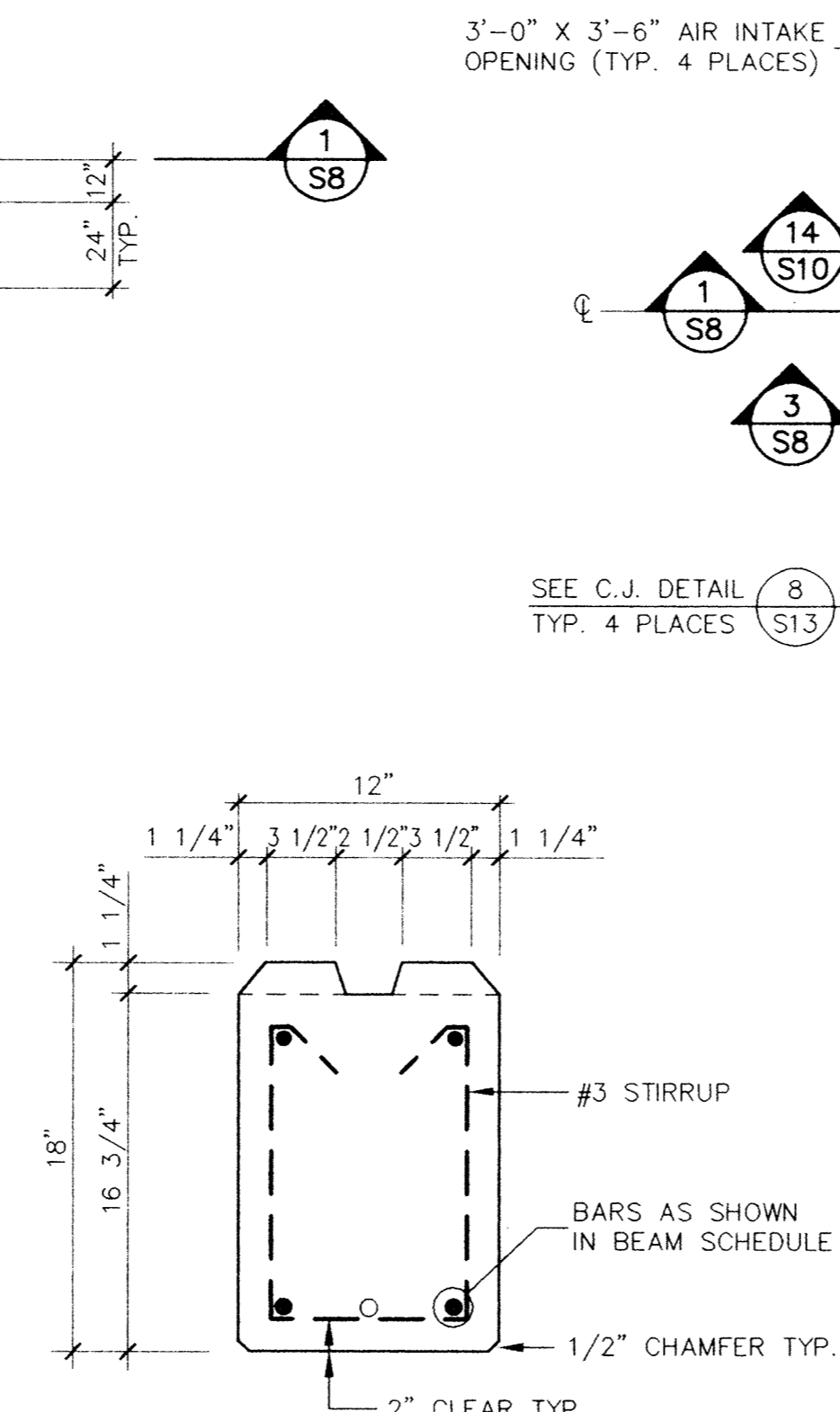
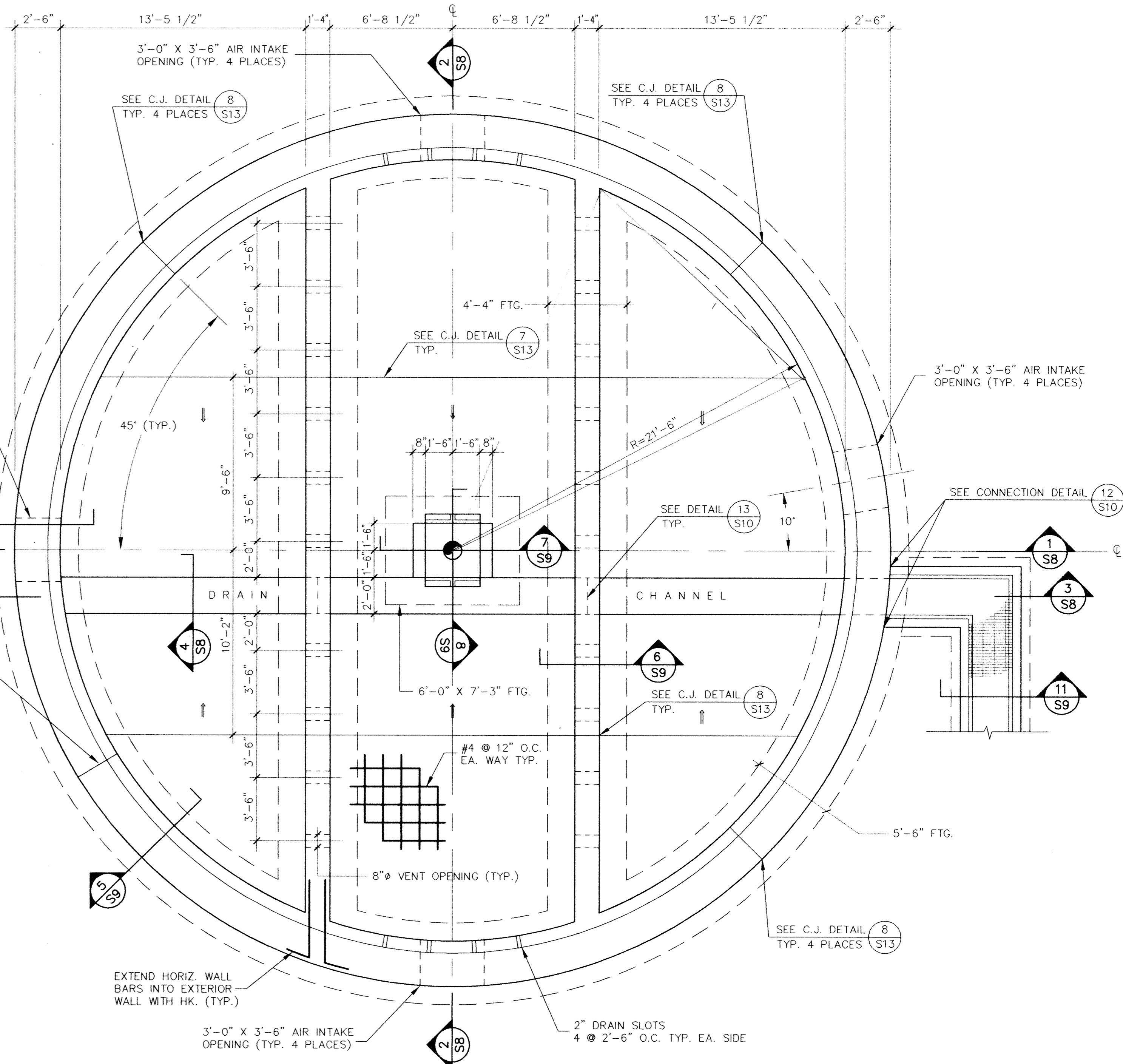


TRICKLING FILTER MEDIA SUPPORT BEAM PLAN
Scale: 1/4" = 1'-0"

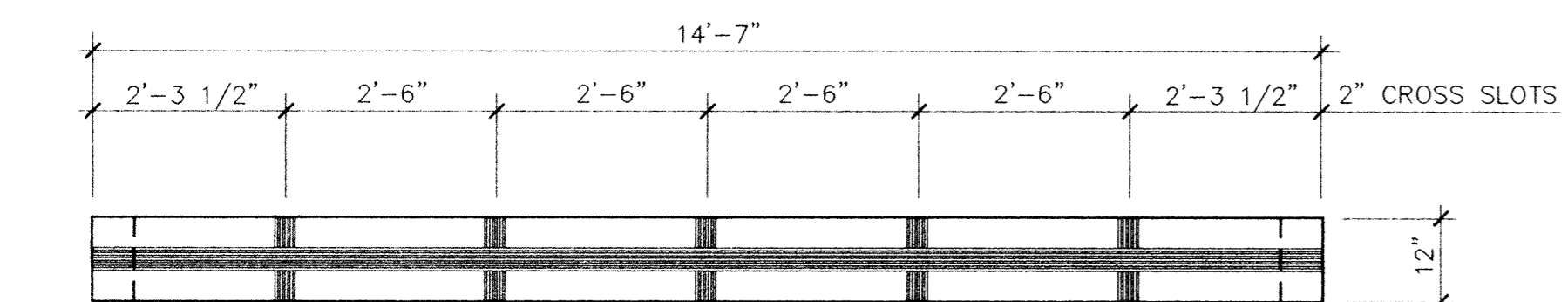
- NOTES:**
- SEE BEAM SCHEDULE BELOW FOR C.I.P. DIMENSIONS & REINFORCING.
 - THE CONTRACTOR MAY SUBMIT ALTERNATE DESIGNS FOR C.I.P. MEDIA SUPPORT BEAMS SHOWN. ACCEPTABLE ALTERNATE DESIGNS SHALL BE PRECAST SIMPLE BEAMS WITH LENGTHS AS SHOWN OR PRECAST CONTINUOUS BEAMS WITH ADDITIONAL CROSS SLOTS OVER INTERIOR FOUNDATION WALLS.
 - BEAM DESIGN CRITERIA**
 - DESIGN SERVICE LIVE LOADS: MEDIA BIOTA GROWTH + TRANSIENT WATER = 15.6 PCF X 26 FT. = 406 PSF
 - LIMIT LONG TERM MID SPAN DEFLECTION TO 1/8" MAXIMUM.
 - SEE SPECIFICATIONS FOR ADDITIONAL DESIGN INFORMATION.
 - SEE SHOP DRAWINGS BY PRECAST SUPPLIER FOR 316SS EMBEDDED WELD PLATE PLACEMENT.



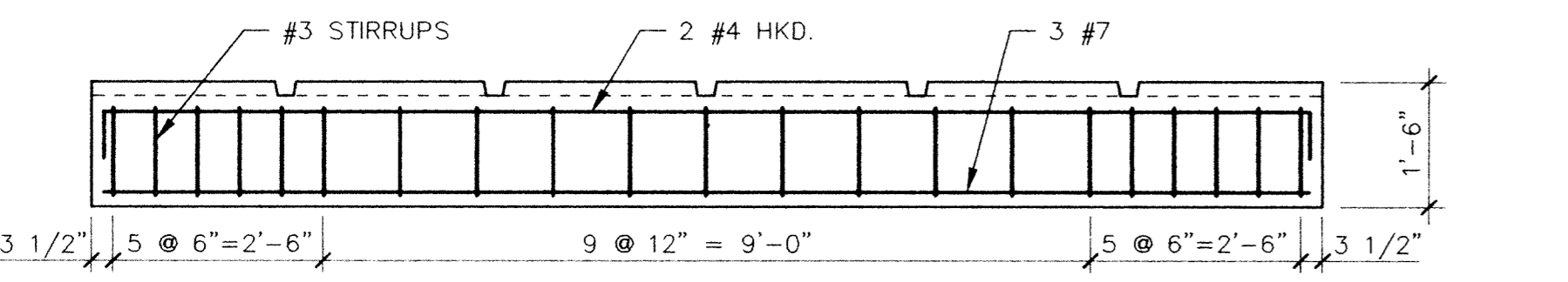
TYPICAL BEAM SECTION
Scale: 1 1/2" = 1'-0"



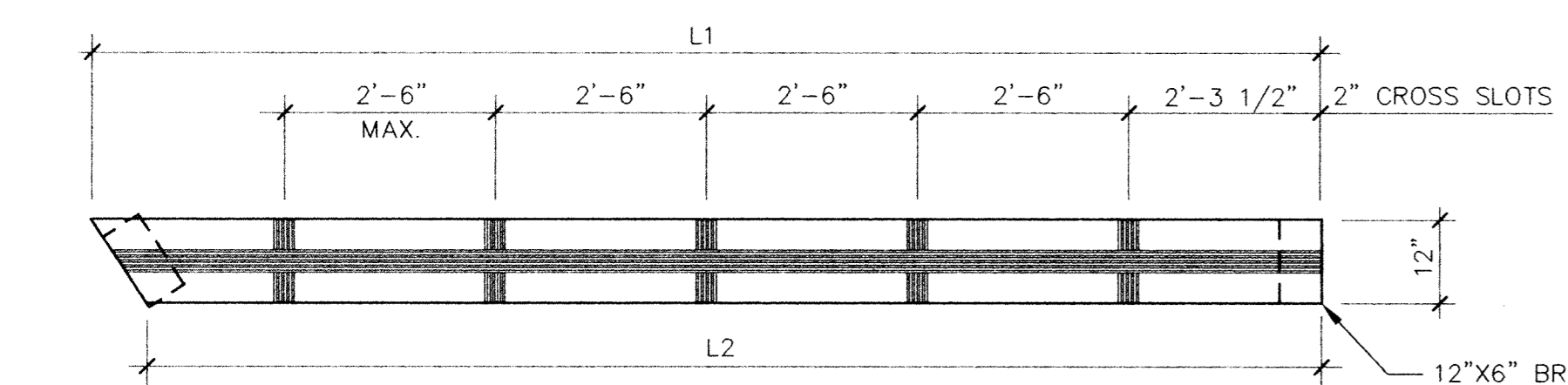
TRICKLING FILTER FOUNDATION PLAN
Scale: 1/4" = 1'-0"



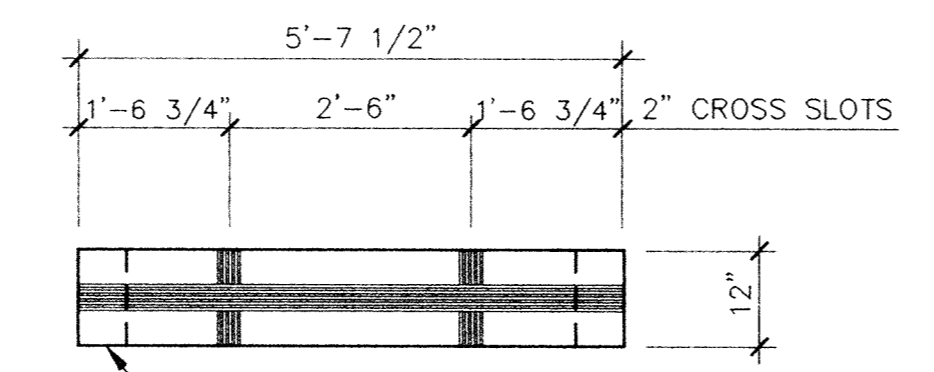
BM B1 PLAN
Scale: 1/2" = 1'-0"



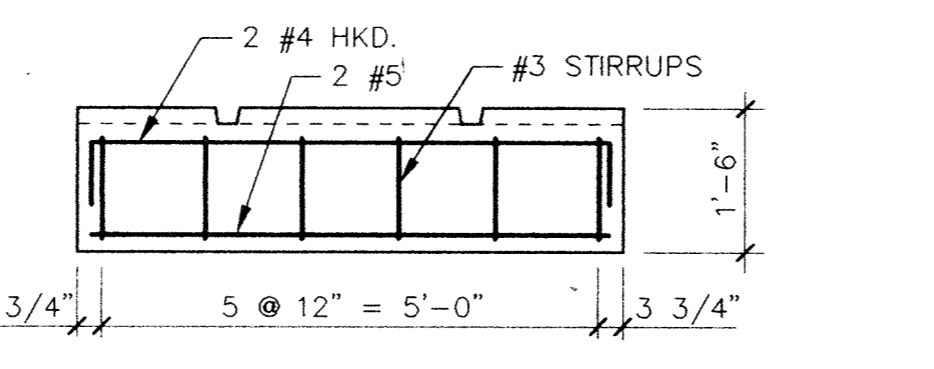
BM B1 ELEVATION
Scale: 1/2" = 1'-0"



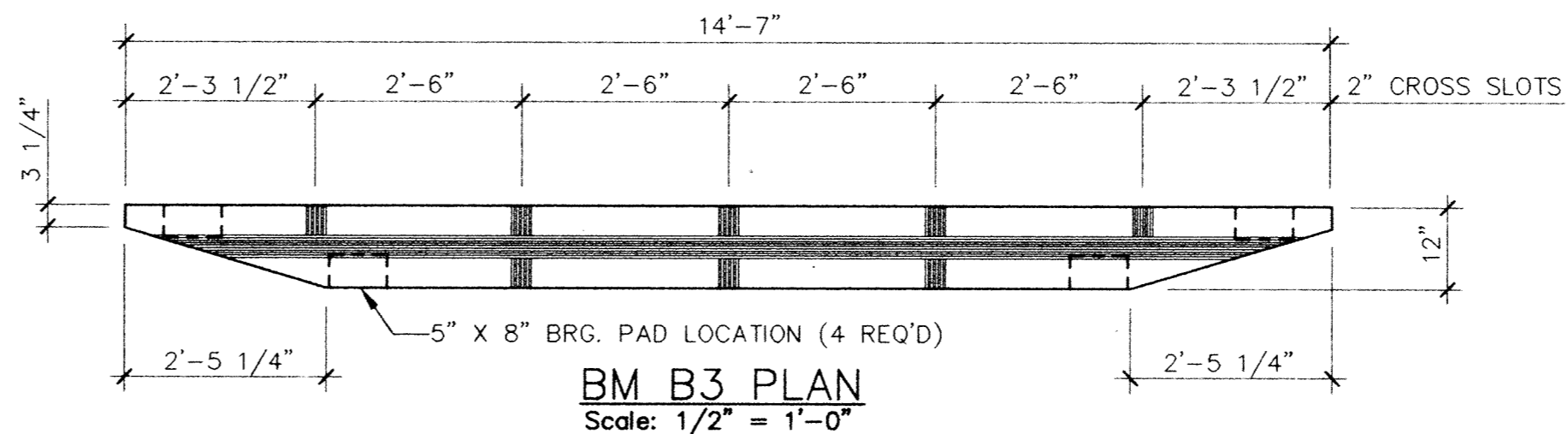
BM B4 THRU B23 PLAN
Scale: 1/2" = 1'-0"



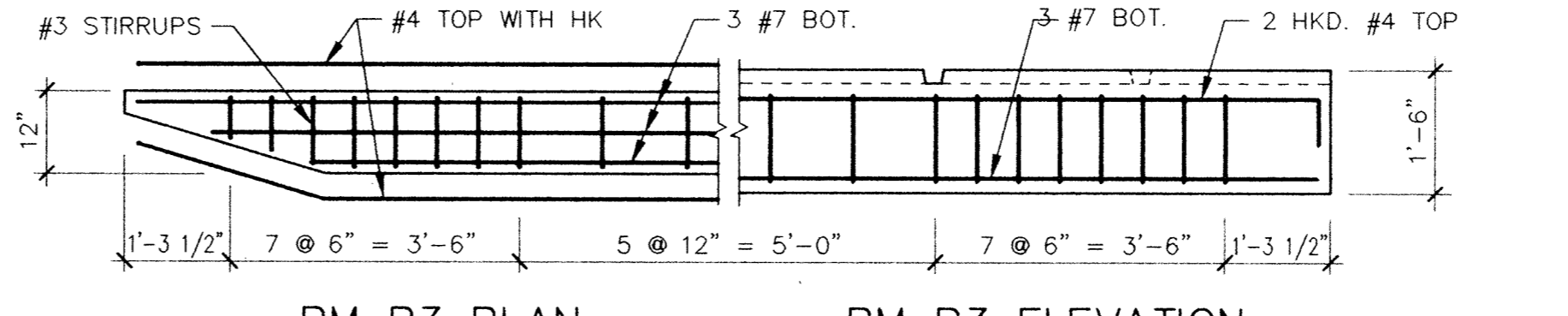
BM B2 PLAN
Scale: 1/2" = 1'-0"



BM B2 ELEVATION
Scale: 1/2" = 1'-0"



BM B3 PLAN
Scale: 1/2" = 1'-0"



BM B3 ELEVATION
Scale: 1/2" = 1'-0"

C.I.P. MEDIA SUPPORT BEAM SCHEDULE							
BM NO.	QUANT	L1	L2	TOP BARS	BOT. BARS	#3 STIRRUPS	NO. EQ.
B-1	18	14'-7"	14'-7"	2 #4 HK	3 #7	SEE BEAM DETAILS	20
B-2	4	5'-8"	5'-8"	2 #4 HK	2 #5	SEE BEAM DETAILS	6
B-3	2	14'-6 1/2"	14'-7"	2 #4 HK	3 #7	SEE BEAM DETAILS	20
B-4	2	14'-3 1/2"	14'-7"	2 #4 HK	3 #7	1 @ 3", 5 @ 6" E.E. + 9 @ EQ. SP.	20
B-5	2	14'-3 1/2"	14'-5 1/4"	2 #4 HK	3 #7	1 @ 3", 5 @ 6" E.E. + 9 @ EQ. SP.	20
B-6	2	13'-10 1/2"	14'-1 1/4"	2 #4 HK	3 #7	1 @ 3", 4 @ 6" E.E. + 10 @ EQ. SP.	19
B-7	2	13'-3 1/4"	13'-7 1/4"	2 #4 HK	3 #7	1 @ 3", 4 @ 6" E.E. + 9 @ EQ. SP.	18
B-8	2	12'-5 1/4"	12'-10 1/2"	2 #4 HK	3 #7	1 @ 3", 3 @ 6" E.E. + 9 @ EQ. SP.	16
B-9	2	11'-4"	11'-11"	2 #4 HK	3 #5	1 @ 3", 2 @ 6" E.E. + 9 @ EQ. SP.	14
B-10	2	9'-11 1/2"	10'-8 1/4"	2 #4 HK	3 #5	1 @ 3", 1 @ 6" E.E. + 9 @ EQ. SP.	12
B-11	2	8'-2 1/2"	9'-1 1/2"	2 #4 HK	3 #5	1 @ 3" E.E. + 9 @ EQ. SP.	10
B-12	2	5'-11 1/4"	7'-1 3/4"	2 #4 HK	2 #5	1 @ 3" E.E. + 7 @ EQ. SP.	8
B-13	2	2'-9 3/4"	4'-6 1/4"	2 #4 HK	2 #5	1 @ 3" E.E. + 4 @ EQ. SP.	5
B-14	2	14'-5 1/4"	14'-6 1/4"	2 #4 HK	3 #7	1 @ 3", 5 @ 6" E.E. + 9 @ EQ. SP.	20
B-15	2	14'-5 1/4"	14'-3 1/2"	2 #4 HK	3 #7	1 @ 3", 5 @ 6" E.E. + 9 @ EQ. SP.	20
B-16	2	14'-1 1/4"	13'-10 1/2"	2 #4 HK	3 #7	1 @ 3", 4 @ 6" E.E. + 10 @ EQ. SP.	19
B-17	2	13'-7 1/4"	13'-3 1/4"	2 #4 HK	3 #7	1 @ 3", 4 @ 6" E.E. + 9 @ EQ. SP.	18
B-18	2	12'-10 1/2"	12'-5 1/4"	2 #4 HK	3 #7	1 @ 3", 3 @ 6" E.E. + 9 @ EQ. SP.	16
B-19	2	11'-11"	11'-4"	2 #4 HK	3 #5	1 @ 3", 2 @ 6" E.E. + 9 @ EQ. SP.	14
B-20	2	10'-8 1/4"	9'-11 1/2"	2 #4 HK	3 #5	1 @ 3", 1 @ 6" E.E. + 9 @ EQ. SP.	12
B-21	2	9'-1 1/2"	8'-2 1/2"	2 #4 HK	3 #5	1 @ 3" E.E. + 9 @ EQ. SP.	10
B-22	2	7'-1 3/4"	5'-11 1/4"	2 #4 HK	2 #5	1 @ 3" E.E. + 7 @ EQ. SP.	8
B-23	2	4'-6 1/4"	2'-9 3/4"	2 #4 HK	2 #5	1 @ 3" E.E. + 4 @ EQ. SP.	5

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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.

David L. Condit
DATE: 12/17/94 REG. NO. 22222

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(612) 546-0432

REVISIONS	DATE	DESCRIPTION

DESIGNED: DLG, GG
CHECKED: LJJ
DRAWN: GG

GRAPHIC SCALE
HORIZ. 4
VERT. 4

CITY OF ELK RIVER
WASTEWATER TREATMENT FACILITIES
TRICKLING FILTER
STRUCTURAL PLANS

S6

DATE: DEC. 1993 SHEET 13 OF 41 SHEETS PROJECT NO. 230-151