#### 236. PER ANA

# PROBLEM STATISTICS

NUMBER OF JOINTS/MEMBER+ELEMENTS/SUPPORTS = 155/ 268/ 31
ORIGINAL/FINAL BAND-WIDTH = 21/ 9
TOTAL PRIMARY LOAD CASES = 1, TOTAL DEGREES OF FREEDOM = 784
SIZE OF STIFFNESS MATRIX = 43904 DOUBLE PREC. WORDS
REQRD/AVAIL. DISK SPACE = 12.59/ 245.6 MB, EXMEM = 1964.5 MB

++	Processing Element Stiffness Matrix.		9:16:56
++	Processing Global Stiffness Matrix.	Maria da Bari	9:16:56
++	Processing Triangular Factorization.	4	9:16:56
++	Calculating Joint Displacements.		9:16:56
++	Calculating Member Forces.		9:16:56

#### 237. PRINT MEM FORCES

MEMBER END FORCES STRUCTURE TYPE = SPACE

ALL UNITS ARE -- KNS METE

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-2	TORSION	MOM-Y	MOM-Z
1	1	1 2	.00	653.38 -653.38	.00	.00	.00	2643.78 -2326.89
2	1	2	.00	629.12 -629.12	.00	.00	.00	2326.89 -2021.76
3	1	3 4	.00	590.45 -590.45	.00	.00	.00	2021.76 -1735.39
4	1	4 5	.00	544.01 -544.01	.00	.00	.00	1735.39 -1471.54
5	1	5 6	.00	494.18 -494.18	.00	.00	.00	1471.54 -1231.86
6	1	6 7	.00	443.51 -443.51	.00	.00	.00	1231.86 -1016.75
7	1	7 8	.00	393.64 -393.64	.00	.00	.00	1016.75 -825.84
8	1	8 9	.00	345.63 -345.63	.00	.00	.00	825.83 -658.20
9	1	9 10	.00	299.99 -299.99	.00	.00	.00	658.20 -512.71
10	1	10 11	.00	256.93 -256.93	.00	.00	.00	512.71 -388.10
11	1	11 12	.00	216.47 -216.47	.00	.00	.00	388.09 -283.11
12	1	12 13	.00	178.45 -178.45	.00	.00	.00	283.11 -196.56
13	1	13 14	.00	142.72 -142.72	.00 .00	.00	.00	196.56 -127.34
14	1	14 15	.00	109.33 -109.33	.00	.00 .00	.00	127.34 -74.31

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z
15	1	15 16	.00	78.29 -78.29	.00	.00	.00	74.32 -36.35
16	1	16 17	.00	49.79 -49.79	.00	.00	.00	36.35 -12.20
17	1	17 18	.00 .00	24.39 -24.39	.00	.00	.00	12.20 38
18	1	18 19	.00	3.60 -3.60	.00	.00	.00	.37 1.37
19	1	19 20	.00 .00	74 .74	.00	.00	.00 .00	-1.37 1.01
20	1	20 21	.00	-2.08 2.08	.00	.00 .00	.00 .00	-1.01 01
21	1	22 23	.00 .00	16.60 -16.60	.00	.00 .00	.00	12.90 -4.85
22	1	23 24	.00	4.06 -4.06	.00	.00 .00	.00	4.85 -2.88
23	1	24 25	.00	1.29 -1.29	.00	.00	.00	2.88 -2.26
24	1	25 26	.00	.83 83	.00	.00	.00 .00	2.26 -1.85
25	1	26 27	.00	.67 67	.00	.00 .00	.00 .00	1.85 -1.53
26	1	27 28	.00	.55 55	.00	.00	.00	1.53 -1.26
27	<b>1</b> 54	28 29	.00	.45 45	.00	.00 .00	.00	1.26 -1.04
28		29 30	.00	.42 42	.00	.00	.00	1.05 84
29	1	30 31	.00	.43 43		.00	.00	.84 64
30	<b>1</b>	31 32	.00	.40 40	.00	.00 .00	.00 .00	.64 44
31	1	32 33	.00	.37 37	.00	.00	.00	.44 26
32	1	33 34	.00	.33 33	.00	.00	.00	- 11
33	1	34 35	.00	.21 21	.00	.00	.00	. 11 01
34	1	35 36	.00 .00	.16 16	.00	.00	.00 .00	.01 .07
35	1	36 37	.00	.16 16	.00	.00 .00	.00	07 .15
36	1	37 38	.00	17 17	.00	.00	.00	"15 .23
37	1	38 39	.00	.04 04	.00	.00	.00	- 23 25

	·	:	· · · · · · · · · · · · · · · · · · ·			00/	SOCACIAL VI OI	1. 41040 (WING V	muu)
MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	мом-ү	MOM-Z	
38	1	39 40	.00	-1.24 1.24	.00	.00	.00	25 35	: . ::.
39	1	40 41	.00	.46 46	.00	.00	.00	.35 ~.13	
40	1	41 42	.00	.28 28	.00	.00	.00	.13	
41	1	43 44	.00	18.54 -18.54	.00	.00	.00	16.33 -7.33	
42	1	44 45	.00	9.00 -9.00	.00	.00	.00	7.33	
43	1	45	.00	3.31	.00	.00	.00	-2.97 2.97	
44	1	46	.00	-3.31 1.15	.00	.00	.00	-1.36 1.36	
45	1	47	.00	-1.15 .44	.00	.00	.00	80 .80	
		48	.00	44	.00	.00	.00	59	
46	1	48 49	.00	.17 17	.00	.00	.00	.59 51	
47	1	49 50	.00 .00	.03 03	.00	.00	.00	.51 49	
48	1	50 51	.00	.06 06	.00	.00	.00	.49 46	
49	1	51 52	.00	.27 27	.00	.00	.00 .00	.46 33	
50	1	52 53	.00	.39 39	.00	.00	.00	.33 14	
51	1	53 54	.00	.37 37	.00	.00	.00	.14	
52	1	54 55	.00	.31 31	.00	.00	.00	04 .19	
53	1	55 56	.00	.18	.00	.00	.00	19 .28	
54	1	56 57	.00	.02 02	.00	.00	.00	28 .29	
55	1	57 58	.00	.16 16	.00	.00	.00	29 .36	
56	1	58 59	.00	01 .01	.00	.00	.00	~.36 .36	
57	1	59 60	.00	29 .29	.00	.00	.00	36 .22	
58	<b>1</b>	60 61	.00	-1.60 1.60	.00	.00	.00	22 56	
59	1	61 62	.00	65 .65	.00	.00	.00	.56 87	
60	1	62 63	.00	1.80 -1.80	.00	.00	.00	.87	
		رن	.00	-1.00	.00	.00	.00	.00	

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	мом-ү	MOM-Z	
61	1	64 65	.00	20.24 -20.24	.00	.00	.00	19.38 -9.57	
62	1	65 66	.00	11.95 -11.95	.00	.00	.00	9.57 -3.77	
63	1	66 67	.00	5.79 -5.79	.00	.00	.00 .00	3.77 ~.96	
64	1	67 68	.00	2.20 -2.20	.00	.00 .00	.00 .00	.96 .10	
65	1	68 69	.00	.56 56	.00	.00	.00	10 .37	
66	1	69 70	.00	05 .05	.00	.00	.00 .00	37 .35	
67	1	70 71	.00	20 .20	.00	.00	.00 .00	35 .25	
68	1	71 72	.00	25 .25	.00	.00 .00	.00 .00	25 .13	
69	1	72 73	.00 .00	.08 08	.00	.00	.00 .00	13 .17	
70	1	73 74	.00	.54 54	.00	.00	.00 .00	17 .43	
71	1	74 75	.00	. 44 44	.00 .00	.00	.00 .00	43 .64	
72	1	75 76	.00 .00	10 .10	.00	.00 .00	.00 .00	64 .60	
73	1	76 77	.00	.35 35	.00	.00 .00	.00 .00	60 .77	
74	1	77 78	.00	35 .35	.00	.00	.00	77 .60	
75	1	78 79	.00 .00	09 .09	.00	.00 .00	.00 .00	60 .56	
76	1	79 80	.00	54 .54	.00	.00 .00	.00 .00	56 .29	
77	1	80 81	.00	79 .79	.00	.00	.00	29 09	
78	1	81 82	.00	76 .76	.00	.00	.00	.09 46	
79	1	82 83	.00	.93 93	.00	.00	.00	.45 .00	
81	1	85 86	.00 .00	20.20 -20.20		.00	.00	21.13 -11.33	
82	1	86 87	.00	13.25 -13.25		.00	.00 .00	11.33 -4.90	
83	1	87 88	.00 .00	7.60 -7.60		.00	.00 .00	4.90 -1.22	
84	1	88 89	.00 .00	3.45 -3.45	.00	.00 .00	.00 .00	1.22 .45	

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							<del></del>	<del></del>	
MEMBER	LCAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	мом-ү	MOM-Z	
85	1	. 89 90	.00	1.08	.00	.00	.00	45 .97	
86	1	90	.00	.02	.00	.00	.00	97	:
		91	.00	02	.00	.00	.00	.99	
87	1	91	.00	.04	.00	.00	.00	99	
		92	.00	04	.00	.00	.00	1.00	
88	1	92	.00	.03	.00	.00	.00	-1.01	
		93	.00	03	.00	.00	.00	1.02	1
89	1	93 94	.00	31 .31	.00	.00	.00	-1.02 .87	
00									
90	1	94 95	.00 .00	.85 85	.00	.00	.00	87 1.28	
91	1	95	.00	. 61	.1., -1.1. 1 <b>00.</b> - 1., 1	.00	.00	-1.28	
		96	.00	61	.00	.00	.00	1.58	
92	1	96	.00	91	.00	.00	.00	-1.58	
		97	.00	.91	.00	.00	00	1.14	
93	1	97	.00	.18	.00	.00	.00	-1.14	
		98	.00	18	.00	.00	.00	1.22	
94	1	98	.00 .00	.14 14	.00	.00	.00	-1.22 1.29	
95	1	99	.00						
	1	100	.00	-1.79 1.79	.00	.00	.00	-1.29 .43	
96	1	100	.00	69	.00	.00	.00	43	
	i ya Fili	101	.00	.69	.00	.00	.00	.09	
97	1	101	.00	20	.00	.00	.00	10	
		102	.00	.20	.00	.00	.00	.00	
101	1	106 107	.00	18.63 -18.63	.00	.00	.00	21.49 -12.45	
	The same of								
102	<b>. 1</b>	107 108	.00	13.03 -13.03	.00	.00	.00	12.45 -6.13	
103	1	108	.00	8.42	.00	.00	.00	6.14	
		109	.00	-8.42	.00	.00	.00	-2.05	
104	1	109	.00	4.47	.00	.00	.00	2.05	
	ĭ 4,	110	.00	-4.47	.00	.00	.00	.12	
105	1	110	.00	1.77	.00	.00	.00	12	
		111	,00	-1.77	.00	.00	.00	.97	
106	1	111 112	.00	.51 →.51	.00	.00	.00	97 1.22	
107	1								
107	1	112 113	.00	.57 57	.00	.00	.00	-1.22 1.50	
108	1	113	.00	1.58	.00	.00	.00	-1.50	
		114	.00	-1.58	.00	.00	.00	2.27	
109	1	114	.00	33	.00	.00	.00	-2.27	
		115	.00	.33	.00	.00	.00	2.11	
110	1	115 116	.00	.70 70	.00	.00	.00	-2.11	
		110	.00	/0	.00	.00	.00	2.45	

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	мом-ү	MOM-Z	
111	1	116 117	.00	62 .62	.00	.00	.00	-2.45 2.14	
112	1	117	.00	1.33	.00	.00	.00	-2.14	
		118	.00	-1.33	.00	.00	.00	2,79	
113	1	118	.00	-3.62	.00	.00	.00	-2.79 1.04	
		119		3.62					
114	1	119 120	.00	-2.15 2.15	.00	.00	.00	-1.04 .00	
121	1	127	.00	16.24	.00	.00	.00	20.74	
		128	.00	-16.24	.00	.00	.00	-12.86	
122	1 .	128 129	.00	11.55 -11.55	.00	.00	.00	12.86 -7.26	
123	1	129	.00	7.81	.00	.00	.00	7.26	
		130	.00	-7.81	.00	.00	.00	-3.48	
124	1	130	.00	5.39 -5.39	.00	.00 .00	.00	3.48 86	
105		131		e i Pijake i <sup>M</sup>	.00				
125	1	131 132	.00	2.11 -2.11	.00	.00	.00	. 86 . 16	
126	1	132	.00	2.08	.00	.00	.00	16	
		133	.00	-2.08	.00	.00	.00	1.17	
127	1	133 134	.00	1.29 -1.29	.00	.00	.00	-1.17 1.79	
128	1	134	.00	2.35	.00	.00	.00	-1.79	
		135	.00	-2.35	.00	.00	.00	2.93	
129	1	135 136	.00	5.33 ~5.33	.00 .00	.00	.00	-2.93 5.52	
130	1	136	.00	-4.19	.00	.00	.00	-5.53	
		137	.00	4.19	.00	.00	.00	3.49	
131	1	137 138	.00	-3.45 3.45	.00	.00 .00	.00	-3.49 1.82	
132	1	138	.00	-3.76	.00	.00	.00	-1.82	
		139	.00	3.76	.00	.00	.00	.00	
141	1	148	.00	12.70 -12.70	.00	.00	.00	18.96 -12.80	
		149	.00						
142	1	149 150	.00	10.01 -10.01	.00 .00	.00	.00	12.80 -7.95	
143	1	150	.00	4.77	.00	.00	.00	7.95	
		151	.00	-4.77		.00	.00	-5.63	
144	1	151 152	.00	6.11 -6.11	.00	.00	.00	5.63 -2.67	
145	1	152	.00	2.57	.00	.00	.00	2.67	
		153	.00	-2.57		.00	.00		
146	. 1	153 154	.00	4.58 -4.58		.00	.00		
147	1	154	.00	4.72		.00	.00	80	
<b></b>		155	.00	-4.72		.00	00		

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z	e e e e e e e e e e e e e e e e e e e
148	1	155 156	.00	-1.30 1.30	.00	.00	.00	-3.10 2.46	
149	1	156 157	.00	~5.06 5.06	.00	.00	.00	-2.46 .01	
161	1	169 170	.00	6.56 -6.56	.00	.00	.00	15.88 -12.69	
162	1	170 171	.00	8.73 -8.73	.00	.00	.00	12.70 -8.46	
163	1	171 172	.00	2.65 -2.65	.00 .00	.00	.00	8.46 -7.18	
164	1	172 173	.00	83 .83	.00	.00	.00	7.18 -7.58	
165	1	173 174	.00 .00	11.68 -11.68	.00 .00	.00	.00	7.59 -1.92	
166	1	174 175	.00	4.34 -4.34	.00	.00	.00	1.92 .18	
167	1	175 176	.00 .00	35 .35	.00	01 .01	.00	19 .01	
181	1	190 191	.00 .00	2.98 -2.98	.00	.00	.00	12.26 -10.81	
182	1	191 192	.00	-4.02 4.02	.00	.00	.00 .00	10.81 -12.76	
183	1	192 193	.00	14.44 -14.44	.00	.00 .00	.00	12.77 -5.77	
184	1	193 194	.00	11.88 -11.88	.00	.00	.00	5.77 .00	
191	1	211 212	.00	9.95 -9.95	.00	.00	.00	10.77 -5.94	
192	1	212 213	.00 .00	12.23 -12.23	.00	.01 01	.00	5.94 01	
201	1	2 23	.00	4.17 -4.17	.00	.00	.00	2.84 -1.05	
202	1	23 44	.00	3.22 -3.22	.00	.00	.00	1.05	
203	1	4.4 65	.00	1.27 -1.27	.00	.00	.00	~.33 .87	
204	1	65 86	.00	.09 09	.00	.00 .00	.00	87 .91	
205	1	86 107	.00	41 .41	.00 .00	.00	.00	91 .74	
206	1	107 128	.00	24 .24	.00 .00	.00	.00	74 .63	
207	1	128 149	.00 .00	.30 30	.00	.00	.00	63 .76	
208	1	149 170	.00	01 .01	.00	.00	.00	76 .76	

·	· · · · · · · · · · · · · · · · · · ·					BOX CU	ILVERT AT CH	I. 4+643 (WING W	ALL)
EMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	мом-ч	MOM-Z	
209	1	170 191	.00	-4.03 4.03	.00	.00 .00	.00	76 97	
210	1	191 212	.00	2.28 -2.28	.00	.00	.00	.97	
211	1	3 24	.00	19.17 -19.17	.00	.00	.00	11.09 -2.88	
212	1	24 45	.00	8.90 -8.90	.00	.00	.00	2.88 .93	
213	1	45 66	.00	3.57 -3.57	.00	.00	.00	93 2.46	
214	1	66 87	.00	.72 72	.00	.00 .00	.00	-2.46 2.77	
215	. 1	87 108	.00	62 .62	.00 .00	.00	.00	-2.77 2.50	
216	1	108 129	.00	98 .98	.00	.00	.00	-2.50 2.08	
217	1	129 150	.00 .00	93 .93	.00	.00	.00	-2.09 1.69	
218	1	150 171	.00	1.77 -1.77	.00	.00	.00	-1.69 2.44	
219	1	171 192	.00 .00	6.47 -6.47	.00	.00	.00	-2.44 5.21	
220	1	192 213	.00	-12.23 12.23	.00 .00	01 .01	.00 .00	-5.22 01	
221	1	4 25	.00	27.52 -27.52	.00	.00	.00	17.70 -5.92	
222	1	25 46	.00	15.40 -15.40	.00	.00 .00	.00	5.92 .67	
223	1	46 67	.00	7.00 -7.00	.00	.00 .00	.00 .00	67 3.66	
224	1	67 88	.00	2.04	.00	.00	.00 .00	-3.66 4.53	
225	1	88 109	.00	33 .33	.00	.00 .00	.00 .00	-4.53 4.39	
226	1	109 130	.00 .00	89 .89	.00	.00 .00	.00 .00	-4.39 4.01	
227	1	130 151	.00 .00	-1.70 1.70	.00	.00 .00	.00 .00	-4.01 3.29	
228	1	151 172	.00	-5.12 5.12	.00	.00	.00 .00	-3.29 1.10	
229	1	172 193	.00	-2.56 2.56	.00	.00	.00	-1.10 .00	
231	1	5 26	.00	31.49 -31.49	.00	.00	.00	22.21 -8.74	
232	1	26 47	.00	19.53 -19.53	.00	.00 .00	.00	8.74 38	

мемве	R LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z	
233	1	47 68	.00	10.15 -10.15	.00	.00	.00	.38 3.95	
234	1	68 89	.00	3.70 -3.70	.00	.00	.00	-3.95 5.54	
235	1	89 110	.00	.01	.00	.00	.00	-5.54 5.54	
236	1	110 131	.00	-1.34 1.34	.00	.00	.00 .00	-5.54 4.97	
237	1	131 152	.00	83 .83	.00	.00	.00	-4.97 4.61	
238	1	152 173	.00	1.09 -1.09	.00	.00	.00	-4.61 5.08	
239	1	173 194	.00	-11.88 11.88	.00	.00	.00	-5.08 .00	
241	1	6 27	.00	32.92 -32.92	.00	.00	.00	24.95 -10.86	
242	. 1	27 48	.00	21.38 -21.38	.00	.00	.00 .00	10.86 -1.71	
243	1	48 69	.00	12.01 -12.01	.00	.00	.00	1.71 3.42	
244	1	69 90	.00	4.99 -4.99	.00	.00	.00	-3.42 5.55	
245	1	90 111	.00	.43 43	.00	.00	.00	-5.55 5.73	
246	1	111 132	.00	-1.90 1.90	.00	.00	.00	-5.73 4.92	
247	1	132 153	.00	-4.18 4.18	.00	.00	.00	-4.92 3.13	
248	1	153 174	.00	-7.34 7.34	.00	.00	.00	-3.13 .00	
251	. 1	7 28	.00	32.70 -32.70	.00	.00	.00	26.27 -12.28	
252	1	28 49	.00	21.59 -21.59	.00	.00	.00	12.28 -3.04	
253	1	49 70	.00	12.55 -12.55	.00 .00	.00	.00	3.04 2.32	
254	1	70 91	.00	5.54 -5.54	.00 .00	.00	.00	-2.32 4.69	
255	1	91 112	.00	.39 39	.00	.00	.00 .00	-4.69 4.85	
256	1	112 133	.00	-2.80 2.80	.00	.00	.00	-4.85 3.66	
257	1	133 154	.00	-3.86 3.86	.00	.00	.00	-3.66 2.00	
258	1	154 175	.00	-4.69 4.69	.00	.00 .00	.00	-2.00 .00	
ing the first particular	ed (4) 17 基金基	A 1888 A 1888	ignic partition at the sign of	man to gar in 1985 and			化二氯甲基甲基磺基甲基	and the second of the second	Acres and the second

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z	
261	1	8 29	.00	31.43 -31.43	.00	.00	.00	26.53 -13.08	
262	1	29 50	.00	20.73 -20.73	.00 .00	.00	.00	13.08 -4.21	
263	1	50 71	.00	11.98 -11.98	.00	.00	.00	4.21 .91	
264	1	71 92	.00	5.33 -5.33	.00	.00	.00	90 3.18	
265	1	92 113	.00 .00	.66 66	.00 .00	.00 .00	.00	-3.18 3.47	
266	1	113 134	.00	-3.00 3.00	.00	.00	.00	-3.47 2.19	
267	1	134 155	.00	-5.44 5.44	.00	.00	.00	-2.18 14	
268	1	155 176	.00	.35 35	.00	.01 01	.00	.14 .01	
271	1	9 30	.00	29.63 -29.63	.00	.00	.00 .00	26.09 -13.40	
272	1	30 51	.00	19.36 -19.36	.00	.00	.00	13.40 -5.12	
273	1	51 72	.00	10.88 -10.88	.00	.00 .00	.00	5.12 47	
274	1	72 93	.00	4.31 -4.31	.00	.00	.00	.47 1.37	
275	1	93 114	.00 .00	.43 43	.00	.00 .00	.00	-1.37 1.55	
276	1	114 135	.00	.14 14	.00	.00	.00 .00	-1.55 1.61	
277	1	135 156	.00	-3.76 3.76	.00	.00	.00	-1.61 .00	
281	1	10 31	.00 .00	27.62 -27.62	.00	.00 .00	.00 .00	25.19 -13.37	
282	i	31 52	.00	17.84 -17.84	.00 .00	.00	.00 .00	13.37 -5.74	
283	1	52 73	.00	9.93 -9.93	.00	.00	.00	5.74 -1.50	
284	1	73 94	.00	3.69 -3.69	.00	.00	.00 .00	1.50 .08	
285	1	94 115	.00 .00	-1.23 1.23	.00	.00 .00	.00 .00	08 45	
286	1	115 136	.00	-4.00 4.00	.00	.00	.00 .00	.45 -2.16	
287	1	136 157	.00	5.06 -5.06		.01 01	.00	2.16 .00	
291	1	11 32	.00 .00	25.61 -25.61	.00 .00	.00 .00	.00 .00	24.00 -13.03	

MEMBER	LOAD	J'T	AXIAL	SHEAR-Y	SHEAR-2	TORSION	Y-MOM	MOM-Z	
292	1	32 53	.00	16.29 -16.29	.00	.00	.00	13.03 -6.06	
293	1	53 74	.00	8.99 -8.99	.00	.00	.00	6.06 -2.22	
294	1	74 95	.00	3.76 -3.76	.00	.00	.00	2.22 62	
295	1	95 116	.00	.70 70	.00	.00	.00	. 62 32	
296	1	116 137	.00 .00	.74 74	.00	.00	.00	.32	
301	1	12 33	.00	23.77 -23.77	.00	.00	.00	22.55 -12.38	
302	1	33 54	.00	14.91 -14.91	.00	.00	.00	12.38 -6.00	
303	1	54 75	.00	8.10 -8.10	.00	.00	.00	6.00 -2.54	
304	1	75 96	.00	3.79 -3.79	.00	.00	.00	2.54 92	
305	1	96 117	.00 .00	2.46 -2.46	.00	.00 .00	.00	.92	
306	1	117 138	.00	31 .31	.00	.00	.00	13 .00	
311	1	13 34	.00	22.04 -22.04	.00	.00	.00	20.85 -11.42	
312	1	34 55	.00	13.73 -13.73	.00	.00	.00	11.42 -5.54	
313	1	55 76	.00 .00	7.45 -7.45	.00	.00	.00	5.54 -2.36	
314	1	76 97	.00	2.61 -2.61	.00	.00	.00	2.36 -1.24	
315	1	97 118	.00	84 .84	.00	.00 .00	.00	1.24 -1.60	
316	1	118 139	.00	3.76 -3.76	.00	.00 .00	.00	1.60 .00	
321	1	14 35	.00	20.29 -20.29	.00	.00	.00	18.86 -10.17	
322	1	35 56	.00	12.37 -12.37	.00	.00	.00	10.17 -4.88	
323	1	56 77	.00	6.59 -6.59	.00	.00	.00	4.88 -2.06	
324	1	77 98	.00	3.35 -3.35	.00	.00	.00	2.06 63	
325	1	98 119	.00	1.48 -1.48	.00	.00	.00	.63	
331	1	15 36	.00	18.52 -18.52	.00	.00	.00	16.58 -8.65	

C:\Box Culvert\W4\_643.doc Page 15 of 28 // - ≥ o/

MEMBER	LOAD JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z	
332	1 36 57	.00	11.03 -11.03	.00 .00	.00	.00	8.65 -3.93	
333	1 57 78	.00	5.39 -5.39	.00	.00	.00	3.93 -1.63	
334	1 78 99	.00	1.66 -1.66	.00	.00	.00	1.63 92	
335	1 99 120	.00	2.15 -2.15	.00	.00	.00	.92 .00	
341	1 16 37	.00	16.56 -16.56	.00	.00	.00	14.03 -6.94	
342	1 37 58	.00	9.51 -9.51	.00	.00	.00 .00	6.94 -2.88	
343	1 58 79	.00	4.65 -4.65	.00	.00	.00 .00	2.88 89	
344	1 79 100	.00	2.08 -2.08	.00	.00	.00	.89 .00	
351	1 17 38	.00	14.05 -14.05	.00	.00	.00 .00	11.12 -5.10	
352	1 38 59	.00	7.60 -7.60	.00	.00	.00	5.10 -1.85	
353	1 59 80	.00	3.32 -3.32	.00	.00 .00	.00	1.85 44	
354	1 80 101	.00	1.02 -1.02	.00	.00	.00	.44	
361	1 18 39	.00	10.01 -10.01	.00	.00	.00 .00	7.63 -3.35	
362	1 39 60	.00	5.17 -5.17	.00 .00	.00	.00	3.35 -1.13	
363	1 60 81	.00	2.38 -2.38	.00	.00	.00	1.13 12	
371	1 19 40	.00	4.34 -4.34	.00	.00 .00	.00 .00	3.71 -1.85	
372	1 40 61	.00	2.64 -2.64	.00	.00	.00 .00	1.85 72	
373	1 61 82	.00	1.69 -1.69	.00	.00	.00 .00	.72 .00	
381	1 20 41	.00	1.33 -1.33	.00 .00	.00	.00	.83 25	
382	1 41 62	.00	1.52 -1.52	.00	.00	.00 .00	.25 .39	
391	1 21 42	.00	-2.07 2.07	.00	.00	.00	-1.66 .77	
392	1 42 63	.00	-1.80 1.80	.00	.00	.00	77 .00	
	aj et et ajlak							No.

\*\*\*\*\*\*\*\*\*\* END OF LATEST ANALYSIS RESULT \*\*\*\*\*\*\*\*\*\*

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239. PLOT DISP FILE
240. START CON DESIGN
241. FC 25000
242. CLEAR 0.065
243 TRACK 1
244. MAXMAIN 25
245. DESIGN BEAM 141 TO 144 161 TO 164 251 TO 254 261 TO 264
      BEAM NO. 141 DESIGN RESULTS - FLEXURE
LEN - 485. MM FY - 414. FC - 25. MPA, SIZE - 428. X 275. MMS
      HEIGHT
LEVEL.
                   BAR INFO
                                 FROM
                                               TO .
        (MM)
                                  (MM)
                                              (MM)
                                                           STA END
          191. 3 - 12MM
                                 0.
                                               485.
 CRITICAL NEG MOMENT= 18.96 KN-MET AT 0.MM, LOAD 1
  REQD STEEL= 275.MM2, ROW= .0034, ROWMX= .0194 ROWMN= .0033 |
MAX/MIN/ACTUAL BAR SPACING= 314./ 37./ 157. MMS |
BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS |
  BEAM NO. 141 DESIGN RESULTS - SHEAR
AT START SUPPORT - Vu= 12.70 KNS Vc= 65.60 KNS Vs=
                   STIRRUPS ARE NOT REQUIRED.
         SUPPORT - Vu= 12.70 KNS Vc= 65.60 KNS Vs=
 AT END
                                                            .00 KNS
                   STIRRUPS ARE NOT REQUIRED.
  148J
                           484X 427X 274
                                                               149J
3No12 H 191. 0.TO 485
        000
                                  000
                                               | | 3#12
3#12
                     | | 3#12
      BEAM NO. 142 DESIGN RESULTS - FLEXURE
      485. MM FY - 414. FC - 25. MPA, SIZE - 428. X 275. MMS
LEVEL
        HEIGHT
                   BAR INFO
                                FROM
                                             TO
                                                          ANCHOR
          (MM)
                                  (MM)
                                              (MM)
                                                           STA END
          191. 3 - 12MM
                                             485.
                                  0.
                                                          YES YES
```

238. PLOT BEN FILE

CRITICAL NEG MOMENT= 12.80 KN-MET AT 0.MM, LOAD REQD STEEL= 273.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 314./ 37./ 157. MMS | BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS BEAM NO. 142 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 10.01 KNS Vc= 65.60 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. SUPPORT - Vu= 10.01 KNS Vc= 65.60 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 149J 484X 427X 274. 150J 3No12 H 191. 0.TO 485 000 000 000 | | 3#12 3#12 j 3#12 BEAM NO. 143 DESIGN RESULTS - FLEXURE LEN - 485. MM FY - 414. FC - 25. MPA, SIZE - 428. X 275. MMS LEVEL HEIGHT BAR INFO FROM TO (MM) (MM) STA END (MM) 191. 3 - 12MM ... 0. 485. | CRITICAL NEG MOMENT= 7.95 KN-MET AT 0.MM, ŁOAD 1 | REQD STEEL= 273.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 314./ 37./ 157. MMS | BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS BEAM NO. 143 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 4.77 KNS Vc= 65.60 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. SUPPORT - Vu= 4.77 KNS Vc= 65.60 KNS Vs= AT END STIRRUPS ARE NOT REQUIRED. 484X 427X 274 3No12 H 191. 0.TO 485

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e de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición de la composición de la composición dela composición de la composición dela c		_				
	BEAM NO.	144 DES	IGN RES	ULTS - FL	EXURE	
EN -	485. MM FY -	414. FC	- 25. MPA,	SIZE - 428.	X 275. M	MS
EVEL	HEIGHT B	AR INFO	FROM	TO	ANCHO	R
	(MM)		(MM)	(MM)	STA E	ND
			. Salata Birangan and Araba	a destruction		
1	191. 3	- 12MM	0.	485.	YES Y	ES
CRI'	TICAL NEG MOME				 AD 1	
REO	D STEEL= 273	MM2, ROW=	.0033, ROWMX=	.0194 ROWMN=	.0033	
	/MIN/ACTUAL BA IC/REQD. DEVEL					
	BEAM NO.	144 DES	IGN RES	ULTS - SHE	AR	
ልጥ ርጥአ						
	יי ייים רום מווף יים	711= 6 11	KNIS Vom CE	60 Wile Tra-	ΛΛ #	M C
trung.	ana alimati da s	TIRRUPS ARE	KNS Vc= 65 NOT REQUIRED			
franki,	SUPPORT - V	TIRRUPS ARE u= 6.11	NOT REQUIRED KNS Vc= 65	.60 KNS Vs=		
AT END	SUPPORT - V	TIRRUPS ARE Yu= 6.11 TIRRUPS ARE	NOT REQUIRED KNS Vc= 65 NOT REQUIRED	.60 KNS Vs=	.00 K	NS
trung.	SUPPORT - V	TIRRUPS ARE Yu= 6.11 TIRRUPS ARE	NOT REQUIRED KNS Vc= 65	.60 KNS Vs=	.00 K	
AT END	SUPPORT - V	TIRRUPS ARE Yu= 6.11 TIRRUPS ARE	NOT REQUIRED KNS Vc= 65 NOT REQUIRED	.60 KNS Vs=	.00 K	NS
AT END	SUPPORT - V	TIRRUPS ARE TIRRUPS ARE 48	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 K	NS
AT END	SUPPORT - V	TIRRUPS ARE TIRRUPS ARE 48	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 K	NS
AT END	SUPPORT - V	TIRRUPS ARE TIRRUPS ARE 48	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 K	NS
AT END 151J No12 H	SUPPORT - V	TIRRUPS ARE TIRRUPS ARE 48	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 K	NS
AT END 151J No12 H	SUPPORT - V S 191. 0.TO	TIRRUPS ARE TIRRUPS ARE 48	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 K	NS
AT END 151J No12 H	SUPPORT - V S 191. 0.TO	STIRRUPS ARE TIRRUPS ARE 485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 K	NS
AT END 151J No12 H	SUPPORT - V S 191. 0.TO	TIRRUPS ARE TIRRUPS ARE 48	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 к	NS
AT END 151J No12 H	SUPPORT - V S 191. 0.TO	STIRRUPS ARE TIRRUPS ARE 485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 к	NS
AT END 151J No12 H	SUPPORT - V S 191. 0.TO	STIRRUPS ARE TIRRUPS ARE 485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 к	NS
AT END 151J No12 H	SUPPORT - V S 191. 0.TO	STIRRUPS ARE TIRRUPS ARE 485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 к	NS
AT END 151J No12 H	SUPPORT - V S  191. 0.TO	TIRRUPS ARE  TU= 6.11  TIRRUPS ARE  48  485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 K	NS
AT END 151J 3No12 H	SUPPORT - V S 191. 0.TO	TIRRUPS ARE  TU= 6.11  TIRRUPS ARE  48  485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274	.60 KNS Vs=	.00 K	NS
AT END 151J 3No12 H	SUPPORT - V S  191. 0.TO	TIRRUPS ARE  TU= 6.11  TIRRUPS ARE  48  485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274  OOO	.60 KNS Vs=	.00 K	NS 52J
AT END 151J No12 H	SUPPORT - V S  191. 0.TO  BEAM NO.  485. MM FY -	TIRRUPS ARE  TU= 6.11  TIRRUPS ARE  48  485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274  OOO I G N R E S - 25. MPA,		.00 K	NS 52J MS
151J 151J 3No12 H	SUPPORT - V S  191. 0.TO  BEAM NO.  485. MM FY -	TIRRUPS ARE  TU= 6.11  TIRRUPS ARE  48  485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274  OOO  I G N R E S  - 25. MPA, FROM		.00 K 1 2 EXURE X 275. M ANCHO	NS 52J MS
AT END 151J No12 H	SUPPORT - V S  191. 0.TO  BEAM NO.  485. MM FY -  HEIGHT E	TIRRUPS ARE  TU= 6.11  TIRRUPS ARE  48  485	NOT REQUIRED KNS VC= 65 NOT REQUIRED 4X 427X 274  OOO I G N R E S - 25. MPA,		.00 K 1 coo	NS 52J MS

REQD STEEL= 273. MAX/MIN/ACTUAL BAR BASIC/REQD. DEVELO	SPACING= 314.	ROWMX= .0194 ' 37./ 157.	ROWMN= .0033   MMS	
BEAM NO. 1	61 DESIGN	RESULTS	- SHEAR	
AT END SUPPORT - Vu	IRRUPS ARE NOT RE	EQUIRED. = 65.60 KNS		
169J	484X 427	C 274		170J
No12 H 191. 0.TO 4	85			
000			000 3#12	
5#12	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		3#12	
	62 DESIGN 414. FC - 25.			MMS
	414. FC - 25.	MPA, SIZE - M TO	428. X 275.	HOR
LEN - 485. MM FY - LEVEL HEIGHT BF (MM)	414. FC - 25. R INFO FRO (MM	MPA, SIZE - M TO ) (MM	428. X 275. ANC ) STA	HOR END
LEN - 485. MM FY - LEVEL HEIGHT BA (MM)	414. FC - 25.  R INFO FRO (MM)  - 12MM 0  HT= 12.70 KN- MM2, ROW= .0033, R SPACING= 314.	MPA, SIZE - M TO ) (MM  . 48  MET AT 0  ROWMX= .0194 / 37./ 157	428. X 275.  ANC STA  5. YES  MM, LOAD 1  ROWMN= .0033	HOR END YES
LEVEL HEIGHT BA  (MM)  1 191. 3    CRITICAL NEG MOMEN   REQD STEEL= 273   MAX/MIN/ACTUAL BAB   BASIC/REQD. DEVELO	414. FC - 25.  R INFO FRO (MM)  - 12MM 0  HT= 12.70 KN- MM2, ROW= .0033, R SPACING= 314.	MPA, SIZE -  M TO ) (MM  . 48  MET AT 0  ROWMX= .0194 / 37./ 157 177./ 359.	428. X 275.  ANC  STA  5. YES  MM, LOAD 1  ROWMN= .0033  MMS  MMS	HOR END YES
LEVEL HEIGHT BA  (MM)  1 191. 3    CRITICAL NEG MOMEN   REQD STEEL= 273.   MAX/MIN/ACTUAL BAA   BASIC/REQD. DEVELO	414. FC - 25.  R INFO FRO (MM  - 12MM 0  IT = 12.70 KN- MM2, ROW= .0033, R SPACING= 314. DPMENT LENGTH =  162 DESIGN  1= 8.73 KNS V FIRRUPS ARE NOT F	MPA, SIZE -  M TO ) (MM  . 48  MET AT 0 ROWMX= 0194 / 37./ 157 177./ 359.  R E S U L T  /C= 65.60 KN	428. X 275.  ANC  STA  5. YES  MM, LOAD 1  ROWMN= .0033.  MMS  MMS  MMS  S - SHEAR  S Vs= .00	HOR END YES
LEN - 485. MM FY - LEVEL HEIGHT BA (MM)  1 191. 3   CRITICAL NEG MOMEN   REQD STEEL= 273.   MAX/MIN/ACTUAL BAB   BASIC/REQD. DEVELO	414. FC - 25.  R INFO FRO (MM  - 12MM 0  IT= 12.70 KN- MM2, ROW= .0033, R SPACING= 314. DPMENT LENGTH =  L62 D E S I G N  I= 8.73 KNS V FIRRUPS ARE NOT F	MPA, SIZE -  M TO ) (MM  . 48  MET AT 0 ROWMX= .0194 / 37./ 157 177./ 359.  R E S U L T /C= 65.60 KN REQUIRED. /C= 65.60 KN	428. X 275.  ANC  STA  5. YES  MM, LOAD 1 ROWMN= .0033  MMS  MMS  S - SHEAR  S Vs= .00  S Vs= .00	HOR END  YES
LEN - 485. MM FY -  LEVEL HEIGHT BA  (MM)  1 191. 3  1 CRITICAL NEG MOMEN   REQD STEEL= 273.   MAX/MIN/ACTUAL BAB   BASIC/REQD. DEVELO   BEAM NO.  AT START SUPPORT - VI  START SUPPORT - VI START SUPPORT - VI START SUPPORT - VI	414. FC - 25.  R INFO FRO (MM  - 12MM 0  IT = 12.70 KN- MM2, ROW= .0033, R SPACING= 314. DPMENT LENGTH =  L62 D E S I G N  I = 8.73 KNS V FIRRUPS ARE NOT R  1 = 8.73 KNS V	MPA, SIZE -  M TO ) (MM  . 48  MET AT 0 ROWMX= .0194 / 37./ 157 177./ 359.  R E S U L T /C= 65.60 KN REQUIRED. /C= 65.60 KN	428. X 275.  ANC  STA  5. YES  MM, LOAD 1 ROWMN= .0033  MMS  MMS  S - SHEAR  S Vs= .00  S Vs= .00	HOR END YES
LEN - 485. MM FY - LEVEL HEIGHT BA (MM)  1 191. 3  CRITICAL NEG MOMEN REQD STEEL= 273. MAX/MIN/ACTUAL BAB BASIC/REQD. DEVELO BEAM NO.  AT START SUPPORT - VI STAT END SUPPORT - VI STAT SUPPORT - VI STAT SUPPORT - VI	414. FC - 25.  R INFO FRO (MM  - 12MM 0  IT= 12.70 KN- MM2, ROW= .0033, R SPACING= 314. DPMENT LENGTH =  L62 DESIGN  I= 8.73 KNS VIRRUPS ARE NOT R  I= 8.73 KNS VIRRUPS ARE NOT F  A84X 427	MPA, SIZE -  M TO ) (MM  . 48  MET AT 0 ROWMX= .0194 / 37./ 157 177./ 359.  R E S U L T /C= 65.60 KN REQUIRED. /C= 65.60 KN	428. X 275.  ANC  STA  5. YES  MM, LOAD 1 ROWMN= .0033  MMS  MMS  S - SHEAR  S Vs= .00  S Vs= .00	HOR END  YES
LEN - 485. MM FY - LEVEL HEIGHT BA (MM)  1 191. 3   CRITICAL NEG MOMEN   REQD STEEL= 273.   MAX/MIN/ACTUAL BAB   BASIC/REQD. DEVELO	414. FC - 25.  R INFO FRO (MM  - 12MM 0  IT= 12.70 KN- MM2, ROW= .0033, R SPACING= 314. DPMENT LENGTH =  L62 DESIGN  I= 8.73 KNS VIRRUPS ARE NOT R  I= 8.73 KNS VIRRUPS ARE NOT F  A84X 427	MPA, SIZE -  M TO ) (MM  . 48  MET AT 0 ROWMX= .0194 / 37./ 157 177./ 359.  R E S U L T /C= 65.60 KN REQUIRED. /C= 65.60 KN	428. X 275.  ANC  STA  5. YES  MM, LOAD 1 ROWMN= .0033  MMS  MMS  S - SHEAR  S Vs= .00  S Vs= .00	HOR END  YES

	000		000		000	
#12		3#12		3#	12	
					· · · · · · · · · · · · · · · · · · ·	
						·
н 12	EAM NO.	. 163 DES	IGNRES	SULTS-	FLEXURE	
EN -	485. MM FY	- 414. FC	- 25. MPA	SIZE - 4	28. X 275.	MMS
	HEIGHT (MM)	BAR INFO	FROM (MM)	TO (MM)	ANC STA	
				(1,1,1)	<u> </u>	
1	191.	3 - 12MM	0.	485.	YES	YES
		MENT= 8.				1
REQD	STEEL= 2	73.MM2, ROW=	.0033, ROWM	K= .0194 RO	WMN= .0033	$\mathbf{i}_{i+1} = 1$
		BAR SPACING= ELOPMENT LENG				
						i
В	EAM NO.	. 163 DES	IGN RES	SULTS-	SHEAR	
AT STAR	T SUPPORT -	Vu= 2.65	KNS Vc=	65.60 KNS	Vs= .00	KNS
		Vu= 2.65 STIRRUPS ARE	NOT REQUIRE	ΣD.		
		STIRRUPS ARE Vu= 2.65	NOT REQUIRE	ED. 65.60 KNS		
AT END	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE	E NOT REQUIR KNS VC= ( E NOT REQUIR	ED. 65.60 KNS ED.	Vs= .00	KNS
AT END	SUPPORT -	STIRRUPS ARE Vu= 2.65	E NOT REQUIR KNS VC= ( E NOT REQUIR	ED. 65.60 KNS ED.	Vs= .00	KNS
AT END	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE	E NOT REQUIR KNS VC= ( E NOT REQUIR	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END  171J  No12 H	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END  171J  No12 H	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE	E NOT REQUIRE KNS VC= (ENOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END  171J  No12 H	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485	E NOT REQUIRE KNS VC= (ENOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END  171J  No12 H	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END  171J  No12 H	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END  171J  No12 H	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END  171J  No12 H	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END  171J  No12 H  #12	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485  485	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4	Vs= .00	KNS
AT END  171J  No12 H  #12	SUPPORT -	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485  485	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4 1	Vs= .00  000  12  FLEXURE	KNS
AT END  171J  No12 H  #12  B  EN -	SUPPORT -  191. 0.TO  COO  E A M N O.  485. MM FY	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485  485  - 414 FC	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27  I G N R E S  - 25. MPA,	ED. 65.60 KNS ED. 4	Vs= .00  000  12  FLEXURE  28. X 275.	MMS
AT END  171J  No12 H	SUPPORT -  191. 0.TO  COO  E A M N O.  485. MM FY	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485  485  . 164 D E S	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27	ED. 65.60 KNS ED. 4 1	Vs= .00  000  12  FLEXURE  28. X 275.  ANC	MMS
AT END  171J  No12 H  #12  B  EN -	SUPPORT -  191. 0.TO  OOO  E A M N O.  485. MM FY  HEIGHT	STIRRUPS ARE Vu= 2.65 STIRRUPS ARE 485  485  - 414 FC	E NOT REQUIRE KNS VC= ( E NOT REQUIRE 34X 427X 27  I G N R E S  - 25. MPA, FROM	ED. 65.60 KNS ED. 4	Vs= .00  000  12  FLEXURE  28. X 275.  ANC	MMS

```
CRITICAL NEG MOMENT= 7.58 KN-MET AT 485.MM, LOAD
   REQD STEEL= 273.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 |
  MAX/MIN/ACTUAL BAR SPACING= 314./ 37./ 157. MMS
 BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS
      BEAM NO. 164 DESIGN RESULTS - SHEAR
                           .83 KNS Vc= 65.60 KNS Vs=
AT START SUPPORT - Vu=
                                                               .00 KNS
                   STIRRUPS ARE NOT REQUIRED.
STIRRUPS ARE NOT REQUIRED.

AT END SUPPORT - Vu= .83 KNS Vc= 65.60 KNS Vs= .00 KNS
                   STIRRUPS ARE NOT REQUIRED.
                             484X 427X 274
                                                                  · 173J
3No12 H 191. 0.TO 485
                                                               000
                                   000
                                                   | 3#12
                        1 3#12
3#12
       BEAM NO. 251 DESIGN RESULTS - FLEXURE
       428. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275. MMS
                                                TO
                                                             ANCHOR
        HEIGHT BAR INFO
                                    FROM
LEVEL
                                    (MM)
                                                 (MM)
         (MM)
                                    0.
           189. 2 - 16MM
                                                  428.
                   MENT= 26.27 KN-MET AT 0.MM, LOAD 1
    CRITICAL NEG MOMENT=
 REQD STEEL= 384.MM2, ROW= .0041, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 367./ 41./ 367. MMS | BASIC/REQD, DEVELOPMENT LENGTH = 316./ 478. MMS
       BEAM NO. 251 DESIGN RESULTS - SHEAR
 AT START SUPPORT - Vu= 32.70 KNS Vc= 74.34 KNS Vs=
          PROVIDE 12 MM BARS AT 92. MM C/C FOR 428. MM

SUPPORT - Vu= 32.70 KNS Vc= 74.34 KNS Vs= .00 KNS

PROVIDE 12 MM BARS AT 92. MM C/C FOR 428. MM
                              427X 484X 274
2No16cHc189. 0.TO 428
                                                               6*12c/c 92
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1416	00		00		00	
2#16		2#16		2#16		
				11		
5 × 5.		i i				
	BEAM N	O. 252 DESI	GN RES	ULTS - F	LEXURE	
EN -	428. MM F	Y - 414. FC -	- 25. MPA,	SIZE - 485.	X 275. MMS	
EVEL	HEIGHT (MM)	BAR INFO	and the second of the second of	TO	ANCHOR	
	(641)		(MM)	(MM)	STA END	
						٠.
1	191.	3 - 12MM	0.	428.	YES YES	
CRI	TICAL NEG M	OMENT= 12.2	8 KN-MET A	T 0.MM, Lo	DAD 1	
REQ MAX	D STEEL= /MIN/ACTUAL	309.MM2, ROW= . BAR SPACING=	0033, ROWMX	= .0194 ROWMN:	= .0033	
BAS	IC/REQD. DE	VELOPMENT LENGT	TH = 177./	359. MMS		
						. :
	BEAM N	O. 252 DESI	GNRFC	[] [, m ← = en.	7 A P	
				ours - sm	arit.	
300 000						
AT STA	RT SUPPORT	- Vu= 21.59 8	NS Vc= 7	4.34 KNS Vs=	.00 KNS	
		- Vu= 21.59 K STIRRUPS ARE	NOT REQUIRE	D.		
			NOT REQUIRE CNS Vc= 7	D. 4.34 KNS Vs=		
	SUPPORT	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE	NOT REQUIRE CNS Vc= 7 NOT REQUIRE	D. 4.34 KNS Vs= D.	.00 KNS	
AT END	SUPPORT	STIRRUPS ARE - Vu= 21.59 K	NOT REQUIRE CNS Vc= 7 NOT REQUIRE	D. 4.34 KNS Vs= D.		
AT END	SUPPORT	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427	NOT REQUIRE CNS Vc= 7 NOT REQUIRE	D. 4.34 KNS Vs= D.	.00 KNS	
AT END	SUPPORT	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427	NOT REQUIRE CNS Vc= 7 NOT REQUIRE	D. 4.34 KNS Vs= D.	.00 KNS	
AT END	SUPPORT	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427	NOT REQUIRE CNS Vc= 7 NOT REQUIRE	D. 4.34 KNS Vs= D.	.00 KNS	
AT END	SUPPORT	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427	NOT REQUIRE CNS Vc= 7 NOT REQUIRE	D. 4.34 KNS Vs= D.	.00 KNS	
AT END	SUPPORT	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427	NOT REQUIRE CNS Vc= 7 NOT REQUIRE	D. 4.34 KNS Vs= D.	.00 KNS	
AT END	SUPPORT  191. 0.T	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274	D. 4.34 KNS Vs= D.	.00 KNS	
AT END 28J BNo12 H	SUPPORT	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427	NOT REQUIRE CNS Vc= 7 NOT REQUIRE	D. 4.34 KNS Vs= D.	.00 KNS	
AT END 28J NO12 H	SUPPORT  191. 0.T	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274	D. 4.34 KNS Vs= D.	.00 KNS	
AT END 28J BNo12 H	SUPPORT  191. 0.T	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274	D. 4.34 KNS Vs= D.	.00 KNS	
AT END 28J NO12 H	SUPPORT  191. 0.T	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274	D. 4.34 KNS Vs= D.	.00 KNS	
AT END 28J BNo12 H	SUPPORT  191. 0.T	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274	D. 4.34 KNS Vs= D.	.00 KNS	
28J 3No12 H	SUPPORT  191. 0.T	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274)	D. 4.34 KNS Vs= D.	.00 KNS	
28J 3No12 H	SUPPORT  191. 0.T	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274)	D. 4.34 KNS Vs= D.	.00 KNS	
28J 3No12 H	SUPPORT  191. 0.T	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274)	D. 4.34 KNS Vs= D.	.00 KNS 49J	
28J 3#12 EN -	OOO  BEAM N 427. MM F	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274)  GN RES 25. MPA,	D. 4.34 KNS Vs= D.	.00 KNS 49J  LEXURE X 275 MMS	
28J 3M012 H	OOO  BEAM N 427. MM F	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428                      3#12	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274)	D. 4.34 KNS Vs= D.	.00 KNS 49J	
28J 3No12 H	OOO  BEAM N  427. MM F  HEIGHT	STIRRUPS ARE - Vu= 21.59 K STIRRUPS ARE 427 0 428	NOT REQUIRE (NS Vc= 7 NOT REQUIRE (X 484X 274)  GN RES 25. MPA, FROM	D. 4.34 KNS Vs= D.	.00 KNS 49J  LEXURE X 275 MMS  ANCHOR	

MAX	) STEEL= 3 MIN/ACTUAL	MENT= 2.32 09.MM2, ROW= .0 BAR SPACING= ELOPMENT LENGTE	0033, ROWMX= 371./ 37./	.0194 ROWMN= 186. MMS		
2	191.	3 - 12MM	o.	427.	YES	YES
REQI MAX, BAS	D STEEL= 3 /MIN/ACTUAL IC/REQD. DEV	MENT= 3.04 09.MM2, ROW= .0 BAR SPACING= ELOPMENT LENGT	0033, ROWMX= 371./ 37./ H = 177./	.0194 ROWMN= 186. MMS 359. MMS	.0033	
Alega II		Vu= 12.55 K STIRRUPS ARE Vu= 12.55 K STIRRUPS ARE	NOT REQUIRED. NS Vc= 74.	34 KNS Vs=		
_ 49J		426	X 484X 274_			70J
10.0	184. 0.TO					
#12	000		000		000	
	BEAM NO	). 254 DESI	GN RES		LEXURE	
100				lasta (lattara da la	Section 1	
	427. MM F	7 - 414. FC -	- 25. MPA, S	SIZE - 485.	X 275.	MMS
EN -		( - 414. FC - BAR INFO	FROM (MM)	FIZE - 485. TO (MM)	X 275. ANCI STA	HOR
EN -	HEIGHT (MM)		FROM	TO	Anci Sta	HOR
EN - EVEL  1 CRI REC MAX	HEIGHT (MM)  84.  TICAL POS MO D STEEL= (/MIN/ACTUAL	BAR INFO	FROM (MM) 0. 69 KN-MET AT .0033, ROWMX= 371./ 37.	TO (MM)  427.  427.MM, L .0194 ROWMN / 186.MMS	ANCI STA YES OAD 1	HOR END YES
EN - EVEL  1 CRI REC MAX	HEIGHT (MM)  84.  TICAL POS MO DO STEEL= (/MIN/ACTUAL BIC/REQD. DE	BAR INFO  3 - 12MM  DMENT= 4.6 309.MM2, ROW= BAR SPACING=	FROM (MM) 0. 69 KN-MET AT .0033, ROWMX= 371./ 37. FH = 177./	TO (MM)  427.  427.MM, L .0194 ROWMN / 186. MMS 327. MMS	ANCI STA YES OAD 1 = .0033	HOR END YES
EN - LEVEL  1 CRI REC MAX BAS	HEIGHT (MM)  84.  TICAL POS MOD STEEL=  (/MIN/ACTUAL BIC/REQD. DEV  B E A M N	BAR INFO  3 - 12MM  DMENT= 4.6 309.MM2, ROW= BAR SPACING= VELOPMENT LENGT	FROM (MM)  0.  69 KN-MET AT. 0033, ROWMX= 371./ 37. FH = 177./	TO (MM)  427.  427.MM, L .0194 ROWMN / 186. MMS 327. MMS	ANCI STA YES OAD 1 = .0033	HOR END YES

3No12 H 84. (		*######				ad ad 20 at at at a	
413		2410			2.11.0		
#12		3#12	000		3#12	000	
					V.		
		in the type of the					
BEAM	N O. 261	DESI	GN RE	SULTS	s - FLE	XURE	
EN - 428. MM	FY - 414	4. FC -	25. MPA	A, SIZE -	485. X	275.	MMS
		NFO	FROM	TO (MM)		ANCI	
EVEL HEIGHT (MM)	55 5 0 0 1		(MM)	(MM)		SIA	END
(MM)  1 189.  CRITICAL NEG REOD STEEL=	2 - 16 G MOMENT= 388 MM2	6MM 26.53	0. 3 KN-MET	428 AT 0.6X= .0194	MM, LOA	YES D 1	YES
(MM)  1 189.  CRITICAL NEC	2 - 16 G MOMENT= 388.MM2, JAL BAR SPA	6MM 26.53 , ROW= .( ACING=	0. 3 KN-MET 0042, ROWN 367./	AT 0.4X= .0194	MM, LOA ROWMN= MMS	YES D 1	YES
(MM)  1 189.  CRITICAL NEG REQD STEEL= MAX/MIN/ACTU	2 - 16 G MOMENT= 388.MM2, JAL BAR SPA	6MM 26.53 , ROW= .( ACING=	0. 3 KN-MET 0042, ROWN 367./	AT 0.4X= .0194	MM, LOA ROWMN= MMS	YES D 1	YES
(MM)  1 189.  CRITICAL NECE REQD STEEL= MAX/MIN/ACTURE BASIC/REQD.	2 - 16 G MOMENT= 388.MM2, JAL BAR SPA	6MM 26.53 , ROW= .( ACING= NT LENGTH	0. 3 KN-MET 0042, ROWN 367./ H = 316.	AT 0.4X= .0194 41./ 367. / 478.	MM, LOA ROWMN= MMS MMS	YES D 1.0033	YES
(MM)  1 189.  CRITICAL NEC REQD STEEL= MAX/MIN/ACTU BASIC/REQD.  BE A M  AT START SUPPOI	2 - 16 3 MOMENT= 388.MM2, JAL BAR SPA DEVELOPMEN N O. 261 RT - Vu=	6MM  26.53 , ROW= .( ACING= NT LENGTH  DESI  31.43 KN	0. 3 KN-MET 0042, ROWN 367./ H = 316. G N R E	428 AT 0. 6X= .0194 11./ 367. / 478. S U L T S	MM, LOA ROWMN= MMS MMS	YES D 1.0033	YES
(MM)  1 189.  CRITICAL NEC REQD STEEL= MAX/MIN/ACTU BASIC/REQD.  BE A M  AT START SUPPOI	2 - 16 3 MOMENT= 388.MM2, JAL BAR SPA DEVELOPMEN  N O. 261  RT - Vu= STIRRORT - Vu=	6MM  26.53  ROW= ( ACING= NT LENGTH  DESI  31.43 KN UPS ARE N 31.43 KN	0. 3 KN-MET 0042, ROWN 367./ H = 316. G N R E NS VC= NOT REQUIR NS VC=	428 AT 0. 6X= .0194 11./ 367. / 478. S U L T S 74.34 KNS RED. 74.34 KNS	MM, LOA ROWMN= MMS MMS MMS  S - SHEA	YES D 1.0033	YES
1 189.  CRITICAL NECE REQD STEEL=  MAX/MIN/ACTU BASIC/REQD.  BEAM  BEAM  AT START SUPPOI	2 - 16 3 MOMENT= 388.MM2, JAL BAR SPA DEVELOPMEN  N O. 261  RT - Vu= STIRRORT - Vu=	6MM  26.53 , ROW= .0 ACING= NT LENGTH  DESI  31.43 KN UPS ARE N 31.43 KN	0.  3 KN-MET  0042, ROWN 367./ 4 = 316.  G N R E  NS VC= NOT REQUIR	428 AT 0. 6X= .0194 61./ 367. / 478. S U L T S 74.34 KNS RED. 74.34 KNS	MM, LOA ROWMN= MMS MMS MMS  S - SHEA	YES D 1.0033	YES
(MM)  1 189.  CRITICAL NEC REQD STEEL= MAX/MIN/ACTU BASIC/REQD.  BE A M  AT START SUPPORT	2 - 16 3 MOMENT= 388.MM2, JAL BAR SPA DEVELOPMEN  N O. 261  RT - Vu= STIRRORT - Vu=	6MM  26.53 , ROW= .0 ACING= NT LENGTH  DESI  31.43 KN UPS ARE N 31.43 KN	0. 3 KN-MET 0042, ROWN 367./ H = 316. G N R E NS VC= NOT REQUIR NS VC=	428 AT 0. 6X= .0194 61./ 367. / 478. S U L T S 74.34 KNS RED. 74.34 KNS	MM, LOA ROWMN= MMS MMS MMS  S - SHEA	YES D 1.0033	YES
(MM)  1 189.  CRITICAL NEGREQD STEEL= MAX/MIN/ACTUBASIC/REQD.  BEAM  AT START SUPPOI	2 - 16 388.MM2, JAL BAR SPA DEVELOPMEN  N O. 261  RT - Vu= STIRRE RT - Vu= STIRRE	6MM  26.53 , ROW= .0 ACING= NT LENGTH  DESI  31.43 KN UPS ARE N 31.43 KN	0.  3 KN-MET  0042, ROWN 367./ 4 = 316.  G N R E  NS VC= NOT REQUIR	428 AT 0. 6X= .0194 61./ 367. / 478. S U L T S 74.34 KNS RED. 74.34 KNS	MM, LOA ROWMN= MMS MMS MMS  S - SHEA	YES D 1.0033	YES
(MM)  1 189.  CRITICAL NEGREQD STEEL= MAX/MIN/ACTUBASIC/REQD.  BEAM  AT START SUPPOINT SUPPOI	2 - 16 388.MM2, JAL BAR SPA DEVELOPMEN  N O. 261  RT - Vu= STIRRE RT - Vu= STIRRE	6MM  26.53 , ROW= .0 ACING= NT LENGTH  DESI  31.43 KN UPS ARE N 31.43 KN	0.  3 KN-MET  0042, ROWN 367./ 4 = 316.  G N R E  NS VC= NOT REQUIR	428 AT 0. 6X= .0194 61./ 367. / 478. S U L T S 74.34 KNS RED. 74.34 KNS	MM, LOA ROWMN= MMS MMS MMS  S - SHEA	YES D 1.0033	YES
(MM)  1 189.  CRITICAL NEGREQD STEEL= MAX/MIN/ACTUBASIC/REQD.  BEAM  AT START SUPPOINT SUPPOI	2 - 16 388.MM2, JAL BAR SPA DEVELOPMEN  N O. 261  RT - Vu= STIRRE RT - Vu= STIRRE	6MM  26.53 , ROW= .0 ACING= NT LENGTH  DESI  31.43 KN UPS ARE N 31.43 KN	0.  3 KN-MET  0042, ROWN 367./ 4 = 316.  G N R E  NS VC= NOT REQUIR	428 AT 0. 6X= .0194 61./ 367. / 478. S U L T S 74.34 KNS RED. 74.34 KNS	MM, LOA ROWMN= MMS MMS MMS  S - SHEA	YES D 1.0033	YES
(MM)  1 189.  CRITICAL NEC REQD STEEL= MAX/MIN/ACTU BASIC/REQD.  BE A M  AT START SUPPOI	2 - 16 388.MM2, JAL BAR SPA DEVELOPMEN  N O. 261  RT - Vu= STIRRE RT - Vu= STIRRE	6MM  26.53 , ROW= .0 ACING= NT LENGTH  DESI  31.43 KN UPS ARE N 31.43 KN	0.  3 KN-MET  0042, ROWN 367./ 4 = 316.  G N R E  NS VC= NOT REQUIR	428 AT 0. 6X= .0194 61./ 367. / 478. S U L T S 74.34 KNS RED. 74.34 KNS	MM, LOA ROWMN= MMS MMS MMS  S - SHEA	YES D 1.0033	YES

	4.7
BEAM NO. 262 DESIGN RESULTS - FLEXURE	
LEN - 428. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275.	MMS
LEVEL HEIGHT BAR INFO FROM TO ANCH (MM) (MM) (MM) STA	IOR END
	<del></del>
1 191. 3 - 12MM 0. 428. YES	YES
CRITICAL NEG MOMENT=	
BEAM NO. 262 DESIGN RESULTS - SHEAR	
AT START SUPPORT - Vu= 20.73 KNS Vc= 74.34 KNS Vs= .00	KNS
STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 20.73 KNS Vc= 74.34 KNS Vs= .00  STIRRUPS ARE NOT REQUIRED.	KNS
29J	50J
	======
) 3No12 H 191.77 0.70 428 11 4 124 125 125 136 136 136 136 136 136 136 136 136 136	
3#12	
3#12	
3#12     3#12 	
3#12     3#12 	
3#12	
BEAM NO. 263 DESIGN RESULTS - FLEXURE LEN - 427. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275.	
BEAM NO. 263 DESIGNRESULTS - FLEXURE  LEN - 427. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275.  LEVEL HEIGHT BAR INFO FROM TO ANC	
BEAM NO. 263 DESIGNRESULTS - FLEXURE  LEN - 427. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275.  LEVEL HEIGHT BAR INFO FROM TO ANC	HOR
BEAM NO. 263 DESIGNRESULTS - FLEXURE  LEN - 427. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275.  LEVEL HEIGHT BAR INFO FROM TO ANC	HOR END
BEAM NO. 263 DESIGNRESULTS - FLEXURE  LEN - 427. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275.  LEVEL HEIGHT BAR INFO FROM TO ANC (MM) (MM) STA	HOR END YES
BEAM NO. 263 DESIGNRESULTS - FLEXURE  LEN ~ 427. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275.  LEVEL HEIGHT BAR INFO FROM TO ANC (MM) (MM) (MM) STA  1 84. 3 - 12MM 11. 427. NO    CRITICAL POS MOMENT= .91 KN-MET AT 427. MM, LOAD 1   REQD STEEL= 309.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033   MAX/MIN/ACTUAL BAR SPACING= 371./ 37./ 186. MMS   BASIC/REQD. DEVELOPMENT LENGTH = 177./ 327. MMS	HOR END YES
BEAM NO. 263 DESIGNRESULTS - FLEXURE  LEN - 427. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275.  LEVEL HEIGHT BAR INFO FROM TO ANC (MM) (MM) (MM) STA  1 84. 3 - 12MM 11. 427. NO    CRITICAL POS MOMENT= .91 KN-MET AT 427.MM, LOAD 1   REQD STEEL= 309.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033   MAX/MIN/ACTUAL BAR SPACING= 371./ 37./ 186. MMS   BASIC/REQD. DEVELOPMENT LENGTH = 177./ 327. MMS	HOR END YES I YES I YES

# AT START SUPPORT - Vu= 11.98 KNS VC= 74.34 KNS Vs= STIRRUPS ARE NOT REQUIRED. SUPPORT - Vu= 11.98 KNS Vc= 74.34 KNS Vs= STIRRUPS ARE NOT REQUIRED. SOJ 426X 484X 274 3No12 H 184, 11.TO 427 000 000 000 3#12 3#12 | | 3#12 000 BEAM NO. 264 DESIGN RESULTS - FLEXURE 427. MM FY - 414. FC - 25. MPA, SIZE - 485. X 275. MMS LEVEL HEIGHT BAR INFO FROM TΟ ANCHOR (MM) (MM) (MM) STA END 84. 3 - 12MM 0. 427. YES YES CRITICAL POS MOMENT= 3.18 KN-MET AT 427.MM, LOAD 1 [ REQD STEEL= 309.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 371./ 37./ 186. MMS BASIC/REQD. DEVELOPMENT LENGTH = 177./ 327. MMS BEAM NO. 264 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 5.33 KNS Vc= 74.34 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. SUPPORT - Vu= 5.33 KNS Vc= 74.34 KNS Vs= AT END .00 KNS STIRRUPS ARE NOT REQUIRED. \_ 426X 484X 274 71*3* 92.7 3No12 H 84. 0.TO 427 3#12 | 3#12 | 3#12 000 000 000 \*\*\*\*\*\*\*\*END OF BEAM DESIGN\*\*\*\*\*\*\*

BEAM NO. 263 DESIGN RESULTS - SHEAR

246. END CON DESIGN 247. FINISH

\*\*\*\* DATE= JAN 30,2000 TIME= 9:16:57 \*\*\*\*

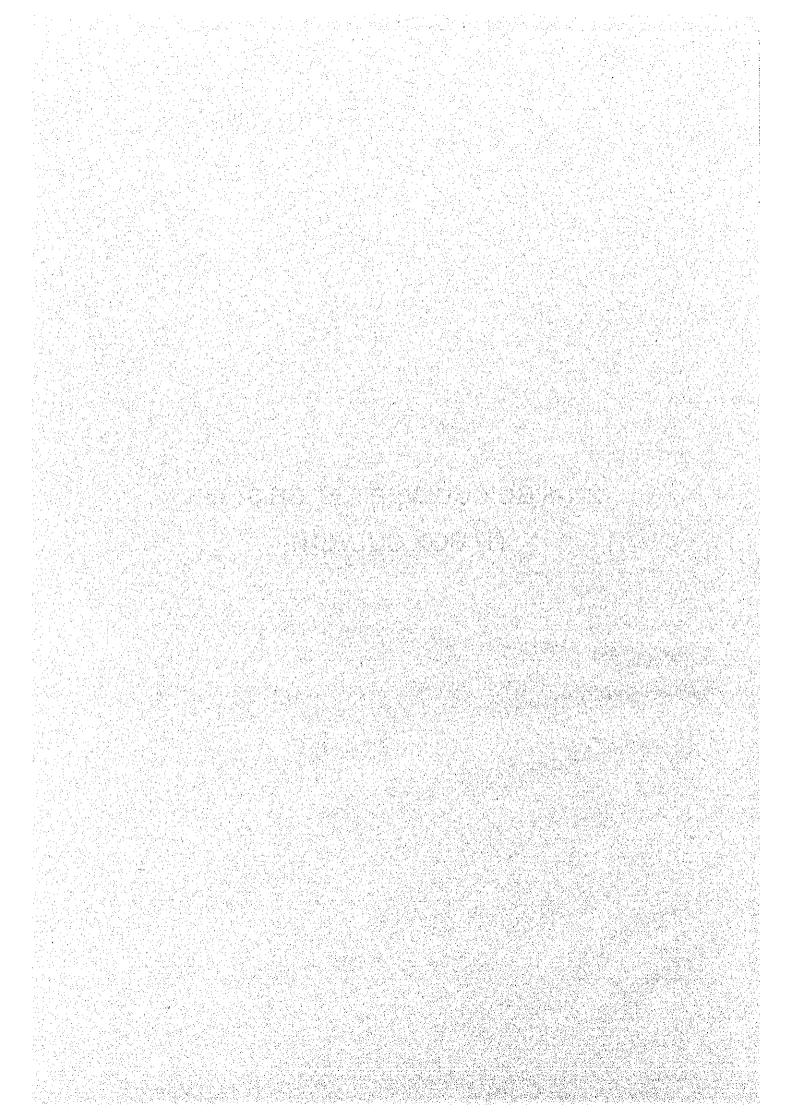
\*\*\*\* DATE= JAN 30,2000 TIME= 9:16:57 \*\*\*\*

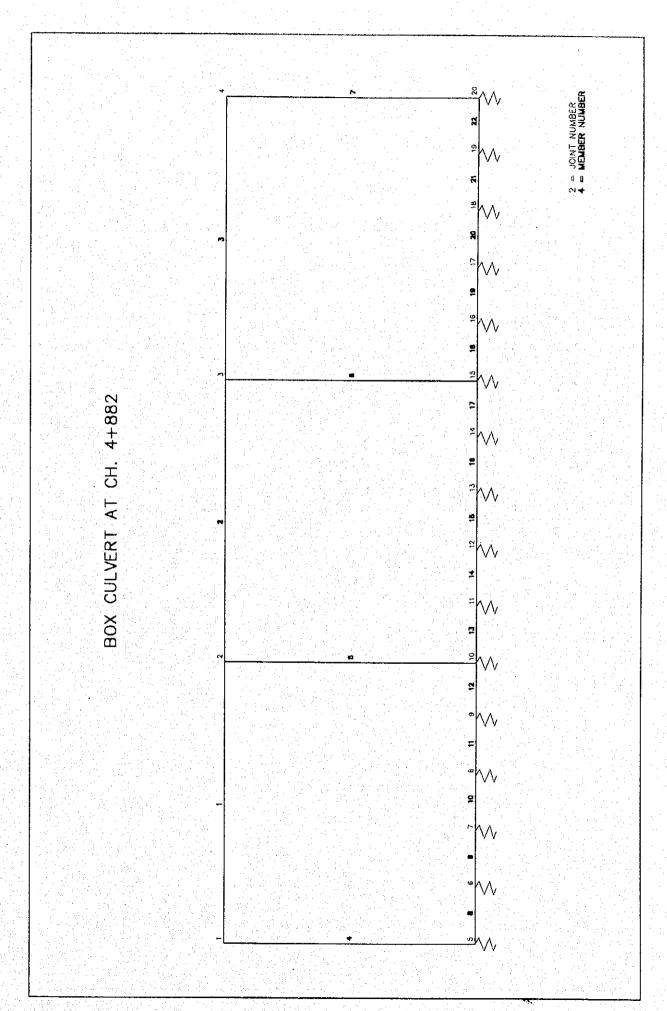
For questions on STAAD-III, contact:

Research Engineers, Inc at

West Coast: Ph- (714) 974-2500 Fax- (714) 921-2543 \*
East Coast: Ph- (508) 688-3626 Fax- (508) 685-7230 \*

# 2-1-5 BOX CULVERT AT CH.5+882 (1) BOX CULVERT





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STAAD-III
                       Revision 22.3a
                       Proprietary Program of
                       Research Engineers, Inc.
                                 JAN 30, 2000
                       Date=
                       Time=
                                 11:40:43
                 USER ID: Development Design Consultants L
1. STAAD PLANE DESIGN OF 3 X 4.5 X 4 BOX CULVERT AT CH. 4+882
 2. UNIT METER KNS
3. JOINT COORD
4. 1 0.00 4.35 0.00
5. 2 4.71 4.35 0.00
5. 2 4.71 4.35
6. 3 9.42 4.35
              4.35
                     0.00
 7. 4 14.13 4.35
                     0.00
                            10 4.71 0.00 0.00
15 9.42 0.00 0.00
20 14.13 0.00 0.00
8. 5 0.00 0.00 0.00
9. 11 5.65 0.00 0.00
10. 16 10.36 0.00 0.00
11. MEMBER INCI
                  . 2
             1
                . . . 5
             1
13
     -4
             2 10
      5
14.
             3
                 ::15
15:
      6
                 <sup>--</sup> 20
16.
            5
                          22
17.
      8
                 6
18. MEMBER PROPERTY
19. 1 TO 3 PRIS
                       YD .
                               0.350 ZD 1.0
20. 4 7 : 21. 5 6 . . .
                               0.350 ZD 1.0
              PRIS
                       ÝD
                       YD
                               0.275 ZD 1.0
              PRIS
22. 8 TO 22
              PRIS
                       ΥD
                           0.350 ZD 1.0
23. CONSTANT
24. E 23.667E6 ALL
25. DENSITY 23.56 ALL
26. SUPPORT
                   FIXED BUT MZ
                                          1883
27. *6 TO 19
                                   KFY
28. *5 20
                 FIXED BUT MZ
                                  KFY
                                          942
              FIXED BUT MZ
FIXED BUT MZ
29. 5 6 7 8
                                         2525
                                  KFY
30. 9 TO 16
                                  KFY
                                         2825
31. 17 18 19 20 FIXED BUT MZ
                                  KFY
                                         2525
32...*
33. LOAD 1 : SELFWEIGHT
34. SELFWEIGHT Y -1
35. LOAD 2 : FILL WEIGHT
36. MEMBER LOAD 🤲
37. 1 TO 3 UNI GY -21.28
38. LOAD 3 : BACK FILL (MINIMUM)
39. MEMBER LOAD
40. 4 TRAP GX 6.16 26.72
41. 7 TRAP GX -6.16 -26.72
42. LOAD 4 : BACK FILL (MAXIMUM)
43. MEMBER LOAD
                       16.15 34.82 0.00 1.98
44. 4 TRAP
              GX
45. 4 TRAP
                       34.82 64.74 1.98 4.35
               GX
46. 7 TRAP
                 GX -
                       -16.15 -34.82 0.00 1.98
47. 7 TRAP GX -34.82 -64.74
48. LOAD S : LL IN ADJACENT SPANS
                                      1.98 4.35
49. MEMBER LOAD
                               1.37 3.34
              GY
50. 1 UNI
                       -21.02
              GY ~21.02 1.37
: LL IN ALTERNATE SPAN
51. 2 UNI
                     ~21.02 1.37 3.34
52. LOAD 6
53. MEMBER LOAD
                 GY -21.02 1.37 3.34
GY -21.02 1.09 3.07
 54. 1 UNI GY
 55. 3 UNI
 56. LOAD 7
             : LL IN SPAN 1
```

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57. MEMBER LOAD

11-217

```
58. 1 UNI
             GY
                   -21,02
                            1.37 3.34
59. LOAD 8 ; LL IN SPAN 2
 60. MEMBER LOAD
61. 2 UNI GY -21.02
                            1.37 3.34
62. LOAD 9
             : MILITARY LOADING IN SPAN 1
63, MEMBER LOAD
            GY
64. 1 UNI
                    -17.56
                            0.76 2.35
 65. 1 UNI
                  -17.56
                            2.35 3.95
               GY
66. LOAD 10 : MILITARY LOADING IN SPAN 2
 67. MEMBER LOAD
68. 2 UNI GY
69. 2 UNI GY
                   -17.56 0.76 2.35
             GY -17.56 2.35 3.95
70. LOAD 11 : LL IN SPAN 1 FOR MAX. SHEAR
71. MEMBER LOAD
72. 1 UNI GY -21.02
                            0.00 1.98
73. LOAD 12 : MILITARY LOADING IN SPAN 1 FOR MAX. SHEAR
74. MEMBER LOAD
75. 1 UNI
             GY
                    -17.56
                            0.00 1.60
76. 1 UNI
77. *
               GY
                    -17.56
                            1.60 3.20
 78. LOAD COMB 13
79. 1 1.3 2 1.3
                     1.3 11
80. LOAD COMB 14
81. 1 1.3 2 1.3 4
                      1.3
                           12
                               2.171
82. *
83. LOAD COMB 15
84. 1 1.3 2 1.3
                      1.3 5 2.171
85. LOAD COMB 16
86. 1 1.3 2 1.3
                       1.3
                           6 2.171
 87. LOAD COMB 17
88. 1 1.3 2 1.3 4
                      1.3
                           7 5 2 171
 89. LOAD COMB 18
 90. 1 1.3 2 1.3 4
                       1.3
                           8
 91. LOAD COMB 19
 92. 1 1.3 2 1.3 4
                      1.3
 93. LOAD COMB 20
 94. 1 1.3 2 1.3 4
                       1.3
 95. *
 96. LOAD COMB 21
 97. 1 1.3 2 1.3 3
                      1.3
                              2.171
 98. LOAD COMB 22
 99. 1 1.3 2 1.3 3
                      1.3
                              2.171
100. LOAD COMB 23
101. 1 1.3 2 1.3 3
102. LOAD COMB 24
                      1.3.7
                              2.171
103. 1 1.3 2 1.3 3
                      1.3
                           8 . 2.171
104. LOAD COMB 25
105. 1 1.3 2 1.3 3
                      1.3 9
                              2.171
106. LOAD COMB 26
107. 1 1.3 2 1.3 3
                      1.3
                           10 2.171
108. LOAD COMB 27
109. 1 1.3 4 1.3
110. *
```

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### 111. PERFORM ANALYSIS

# PROBLEM STATISTICS

NUMBER OF JOINTS/MEMBER+ELEMENTS/SUPPORTS = 20/ 22/ 16
ORIGINAL/FINAL BAND-WIDTH = 16/ 4
TOTAL PRIMARY LOAD CASES = 12, TOTAL DEGREES OF FREEDOM = 44
SIZE OF STIFFNESS MATRIX = 440 DOUBLE PREC. WORDS
REQRD/AVAIL DISK SPACE = 12.05/ 219.2 MB, EXMEM = 1956.5 MB

++ Processing Element Stiffness Matrix. 11:40:43
++ Processing Global Stiffness Matrix. 11:40:43
++ Processing Triangular Factorization. 11:40:43
++ Calculating Joint Displacements. 11:40:43
++ Calculating Member Forces. 11:40:43

112. LOAD LIST 13 TO 27
113. PRINT MAXFORCE ENVELOP LIST 1 2 4 5 8 TO 17

## MEMBER FORCE ENVELOPE

ALL UNITS ARE KNS METE

MAX AND MIN FORCE VALUES AMONGST ALL SECTION LOCATIONS

MEMB		FY/	DIST	LD	MZ/	DIST				
		FZ	DIST	PD .	MY	DIST	LD	FX	DIST	LD
	147.14	163.60	00	1.4	137 62	4 71	26			
Т	XAM	157.69	.00	14	137.62 .00	4.71	25 13	88.60 C	.00	15
	N477 N 1	.00 -167.25	4.71	13 25		1.96	25	80.00 C	.00	
	MIN	-167.23	4.71	27	.00	4.71	27	31.03 C	4 71	22
		.00	4./1			4./T		31.03 C		
2	MAX	151.20	.00	26	129.33	.00	21			
		00	.00	13	.00	.00	13	97.06 C	.00	20
	MIN	-151.20	4.71	20	-93.10	2.36	20			
		.00	4.71	27	.00	4.71	27	20.64 C	4.71	22
		146.00	4 25	7 . 4	50.50	2 17	27			
4	MAX	146.93	4.35	13 13	58.58 .00	2.17	. 27 . 13	204.33 C	4.35	14
	MIN	-88.60	.00	15	-123.88	4.35	13	204.33 C	4.55	1.4
	MIN	-88.80	4.35	27	.00	4.35	27	28.85 C	3 99	27
		.00	4.33	- 21	.00	4.55	21	20.03 C		
5	MAX	11.17	.00	25	32.49	.00	25			
in the Till		.00	.00	13	.00	.00	13	325.38 C	4.35	21
7 1, 11	MIN	-8.59	4.35	20	-24.66	.00	20			
	. 1 1	.00	4.35	27	.00	4.35	27	46.89 C	3.99	27
		ja kata sa		高级数						
8	XAM	-46.13	.00	27	36.16	. 94	21			
100	griff to a	.00	.00	13	.00	.00	13	.00	.00	13
	MIN	-135.19	.94	14	-123.88	.00	13			Server and
		.00	.94	27	.00	.94	27	.00	.94	27
	MAV	-25.95	.00	26	75.77	. 94	21			
	XAM	.00	.00	- 13	.00	.00	13	.00	.00	13
10 10 1	MIN	-70.82	.94	14	-30.08	.00	27			
	ULLIN	.00	.94	27	.00	.94	27	.00	.94	27
	verin			- 1			~			
10	MAX	19.67	.00	26	75.77	.00	21	imani, indinaka 1969 Perintahan		
		.00	.00	13	.00	.00	13	.00	.00	13
	MIN	-18.06	.94	. 27	17	.00	27			
100	4.5	.00	.94	27	.00	.94	27	.00	.94	27
	A		00		60	0.0	26			en dele Starto
11	MAX	75.09	.00	21	68.42		25	00	.00	13
	WTN	.00	.00	13	.00	.00	13	.00	.00	1.3
	MIN	12	.94	27 27	-13.03 .00	.94 .94	20 27	.00	. 94	27
A		.00	.94	21	.00	. 94	41		. 34	- 41

MEMB		FY/ FZ	DIST DIST	LD LD	MZ/ MY	DIST DIST	LD LD	FX	DIST	LĐ
12	MAX	139.28	.00	21	23.75	00	13			
		.00	.00	13	.00	.00	13	.00	.00	13
	MIN	20.53	.94	27	-130.21	. 94	21			
	4 4	.00	. 94	27	.00	. 94	27	.00	. 94	27
13	MAX	-32.75	.00	27	11.08	94	13		ve Silver ger	
		.00	.00	13	00	.00	13	.00	.00	13
	MIN	-131.66	.94	21	-129 58	00	21			
		.00	. 94	27	.00	94	27	.00	. 94	27
14	MAX	-13.49	.00	27	58.22	. 94	16			
	u Meri,	.00	.00	13	.00	.00	13	.00	.00	13
	MIN	-69.65	. 94	21	-10.55	.00	21			
		.00	. 94	27	.00	. 94	27	.00	. 94	27
15	MAX	6.12	.00	16	58.84	.94	15			
		.00	.00	13	00.00	. 00	13	.00	.00	13
	MIN	-12.22	.94	25	26.15	4.7	27			
		.00	.94	27	.00	94	27	.00	.94	27
16	MAX	62.13	.00	22	58.84	.00	15			
		.00	.00	13	.00	.00	13	.00	.00	13
	MIN	13.46	.94	_	-3.28		26	.00	.00	
		.00	. 94	27	.00	. 94	27	.00	. 94	27
17	MAX	119.52	.00	22	17.53	.00	19			
	· m-m·	.00			.00		13	.00	.00	13
	MIN	32.69			-108.69		26	.00	.00	<b></b>
		.00	.94	27	and the second s		27	.00	94	27
5 5 175 4		in a street en algebracht is		7						

<sup>114.</sup> START CONC DESIGN 115. FC 25000.0 116. TRACK 2

350. MMS
ANCHOR STA END
ио ио
D 25   .0033
YES YES
D 25   .0033

<sup>117.</sup> MAXMAIN 20.

<sup>118.</sup> CLEAR 0.05 119. DESIGN BEAM 1 2

SECTION !	REINF STEE!	C(+VE/-VE)	MOMENTS (+V	LOAD (+VE/-VE		
( MM )	(SQ. MI	1)	(KNS-N	1ET )		
0.	0./	987	0./	97.	0/	15
392.	0./	491.	0./	49	0/	15
785.	321./	211.	32./	21.	25/	20
1177.	677./	126.	67./	13	25/	27
1570.	919./	71	90./	7.	25/	27
1962.	1039./	32.	102./	3	25/	27
2355.	1035./	10.	101./	1.	25/	27
2747.	906./	4.	89./	0.	25/	27
3140.	656./	15.	65./	2.	25/	27
3532.	292./	51.	29./	5.	25/	13
3925.	0./	383.	0./	38.	0/	. 13
4317	0./	837.	0./	83.	0/	. 14
4710.	0./	1426.	0./	138.	0/	- 25

# BEAM NO. 1 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu= 136.68 KNS Vc= 228.01 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 137. MM C/C FOR 981. MM

AT END SUPPORT - Vu= 156.71 KNS Vc= 228.01 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 137. MM C/C FOR 1374. MM

	1J	4709X 999X 349 2J
l		
1	7No16 H 279.   0.TO 4710   9*12c/c137             9No12 H  69. 234.TO 388	
1		
1	0000000     7#16	0000000   0000000 7#16   7#16   9#12   1   00000000   1   000000000   1   00000000

# BEAM NO. 2 DESIGN RESULTS - FLEXURE

LEN - 4710. MM FY - 414. FC - 25. MPA, SIZE - 1000. X 350. MMS
LEVEL HEIGHT BAR INFO FROM TO ANCHOR

	(MM) ( ) ( ) ( ( ) ( ) ( ) ( ) ( ) ( ( )	(MM)	(MM)	STA	END
	1 73. 3 - 20MM	391.	4123.	NO	NO
1	CRITICAL POS MOMENT= 93.10 REQD STEEL= 931.MM2, ROW= .0 MAX/MIN/ACTUAL BAR SPACING= BASIC/REQD. DEVELOPMENT LENGTH	033, ROWMX= 878./ 45./	.0194 ROWMN= 439. MMS		
1	2 281. 12 - 12MM	0.	1929.	YES	NO
1	CRITICAL NEG MOMENT= 129.33 REQD STEEL= 1293.MM2, ROW= .0 MAX/MIN/ACTUAL BAR SPACING= BASIC/REQD. DEVELOPMENT LENGTH	046, ROWMX= 886./ 37./	.0194 ROWMN= 81. MMS	10 march 10	

3 281. 10 - 12MM 2585. 4710. NO YES

| CRITICAL NEG MOMENT= 112.91 KN-MET AT 4710.MM, LOAD 26 |
| REQD STEEL= 1130.MM2, ROW= .0040, ROWMX= .0194 ROWMN= .0033 |
| MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 98. MMS |
| BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS |

REQUIRED REINF. STEEL SUMMARY :

SECTION ( MM )	REINF STEEL(+VE/-VE) (SQ. MM)	MOMENTS (+VE/-VE) (KNS-MET )	LOAD(+VE/-VE)
0.	0./ 1336.	0./ 129.	0/ 21
392.	0./ 783.	0./ 77.	0/ 21
785.	0./ 433.	0./ 43.	0/ 14
1177.	400./ 214.	40./ 22.	20/ 22
1570.	702./ 63.	70./ 6.	20/ 22
1962.	886./ 0.	87./ 0.	20/ 0
2355.	948./ 0.	93./	20/ 0
2747.	886./	87./ 0.	20/ 0
3140.	702./ 48.	70./ 5.	20/ 22
3532.	400./ 190.	40./ 19.	20/ 22
3925.	0./ 394.	0./ 40.	0/ 22
4317.	0./ 663.	0./ 66.	0/ 22
4710.	0./ 1159.	0./ 113.	0/ 26

#### BEAM NO. 2 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu= 140.66 KNS Vc= 228.01 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 137. MM C/C FOR 981. MM AT END SUPPORT - Vu= 140.65 KNS Vc= 228.01 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 137. MM C/C FOR 981. MM

С <u> </u>	4709X 999X 349	
12No12 H 281.   0.TO 1929   9*12c/c137           3No20 H  73. 391.TO		81.2585.TO 4710           9*12c/c137
1 44 0000000000		000000000
12#12 		10#12

120. CLEAR 0.065 121. DESIGN BEAM 4 5 8 TO 17

BEAM NO. 4 DESIGN RESULTS - FLEXURE

LEN - 4350. MM FY - 414. FC - 25. MPA, SIZE - 1000. X 350. MMS

LEVEL HEIGHT BAR INFO FROM TO ANCHOR (MM) (MM) (MM) STA END

REQD STEEL= 888.MM2, ROW=.0033, ROWMK=.0194 ROWMN=.0033   MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 127. MMS   BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS    EQUIRED REINF. STEEL SUMMARY :  ECTION REINF STEEL(+VE/-VE) MOMENTS(+VE/-VE) LOAD(+VE/-VE) MM ) (SQ. MM ) (KNS-MET )  0. 1049./ 0. 97./ 0. 15/ 0 362. 707./ 0. 66./ 0. 15/ 0 725. 465./ 111. 44./ 11. 21/ 27 1087. 351./ 316. 33./ 30. 21/ 27 1450. 267./ 475. 25./ 45. 25/ 27 1812. 222./ 581. 21./ 55. 25/ 27 1812. 222./ 581. 21./ 55. 25/ 27 2175. 205./ 624. 20./ 59. 25/ 27 22537. 213./ 599. 20./ 56. 25/ 27 2900. 257./ 496. 24./ 47. 25/ 27 3622. 340./ 310. 32./ 29. 25/ 27 3625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J_  8No12 H 266. 185.TO 3984                                 8No12 H 266. 185.TO 3984	REOD S	84. 12 - AL POS MOMENT TEEL= 1323.M N/ACTUAL BAR REQD. DEVELOP	= 123.88 M2, ROW= .00	KN-MET AT 050, ROWMX= . 886./ 37./ = 177./	4350.MM, L 0194 ROWMN 81. MMS 350. MMS	OAD 13 ≔ .0033	1 - 4 5 1 - 4 7
CRITICAL NEG MOMENT= 58.58 KN-MET AT 2175.MM, LOAD 27 REQD STEEL= 888.MM2, ROW=.0033, ROWMX=.0194 ROWNN=.0033   MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 127. MMS   BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS    EQUIRED REINF. STEEL SUMMARY:  ECTION REINF STEEL (+VE/-VE) MOMENTS(+VE/-VE) LOAD(+VE/-VE)   MM   (KNS-MET )  0. 1049./ 0. 97./ 0. 15./ 0   362. 707./ 0. 66./ 0. 15./ 0   725. 465./ 111. 44./ 11. 21./ 27   1087. 351./ 316. 33./ 30. 21./ 27   1450. 267./ 475. 25./ 45. 25./ 27   2175. 205./ 624. 20./ 59. 25./ 27   2175. 205./ 624. 20./ 59. 25./ 27   225.7   213./ 599. 20./ 56. 25./ 27   225.7   2362. 340./ 310. 32./ 29. 25./ 27   3262. 340./ 310. 32./ 29. 25./ 27   3262. 340./ 310. 32./ 29. 25./ 27   3387. 816./ 0. 76./ 0. 13./ 0   32./ 29. 25./ 27   3987. 816./ 0. 76./ 0. 13./ 0   4350. 1359./ 0. 124./ 0. 13./ 0   13./ 0   13.59./ 0. 124./ 0. 13./ 0   13./ 0   13. 0   1.	2	266. 8 -	12MM			МО	NO
ECTION REINF STEEL (+VE/-VE) MOMENTS (+VE/-VE) LOAD (+VE/-VE)  MM ) (SQ. MM )  0. 1049./ 0. 97./ 0. 15/ 0 362. 707./ 0. 66./ 0. 15/ 0 725. 465./ 111. 44./ 11. 21/ 27 1087. 351./ 316. 33./ 30. 21/ 27 1450. 267./ 475. 25./ 45. 25/ 27 1812. 222./ 581. 21./ 55. 25/ 27 2175. 205./ 624. 20./ 59. 25/ 27 2277. 213./ 599. 20./ 56. 25/ 27 2900. 257./ 496. 24./ 47. 25/ 27 3262. 340./ 310. 32./ 29. 25/ 27 33625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984                 8*12c/c130 2No12 H 84. 0.TO 4350	CRITIC REQD S MAX/MI	CAL NEG MOMENT STEEL= 888.M N/ACTUAL BAR	= 58.58 M2, ROW= .0 SPACING=	KN-MET AT 033, ROWMX= . 886./ 37./	2175.MM, L 0194 ROWMN 127. MMS	OAD 27 I= .0033	
ECTION REINF STEEL (+VE/-VE) MOMENTS (+VE/-VE) LOAD (+VE/-VE)  MM ) (SQ. MM )  0. 1049./ 0. 97./ 0. 15/ 0 362. 707./ 0. 66./ 0. 15/ 0 725. 465./ 111. 44./ 11. 21/ 27 1087. 351./ 316. 33./ 30. 21/ 27 1450. 267./ 475. 25./ 45. 25/ 27 1812. 222./ 581. 21./ 55. 25/ 27 2175. 205./ 624. 20./ 59. 25/ 27 2277. 213./ 599. 20./ 56. 25/ 27 2900. 257./ 496. 24./ 47. 25/ 27 3262. 340./ 310. 32./ 29. 25/ 27 33625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984                 8*12c/c130 2No12 H 84. 0.TO 4350	EQUIRED F	REINF. STEEL S	SUMMARY :				
0. 1049./ 0. 97./ 0. 15/ 0 362. 707./ 0. 66./ 0. 15/ 0 725. 465./ 111. 44./ 11. 21/ 27 1087. 351./ 316. 33./ 30. 21/ 27 1450. 267./ 475. 25./ 45. 25/ 27 1812. 222./ 581. 21./ 55. 25/ 27 2175. 205./ 624. 20./ 59. 25/ 27 2537. 213./ 599. 20./ 56. 25/ 27 2900. 257./ 496. 24./ 47. 25/ 27 3262. 340./ 310. 32./ 29. 25/ 27 3625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1 J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984           8*12c/c130		DUTNE COURT	/	MOMENTS / +1	TE/-VE)	LOAD(+VE	:/-VE)
725. 465./ 111. 44./ 11. 21/ 27 1087. 351./ 316. 33./ 30. 21/ 27 1450. 267./ 475. 25./ 45. 25/ 27 1812. 222./ 581. 21./ 55. 25/ 27 2175. 205./ 624. 20./ 59. 25/ 27 2537. 213./ 599. 20./ 56. 25/ 27 2900. 257./ 496. 24./ 47. 25/ 27 3262. 340./ 310. 32./ 29. 25/ 27 3625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984						15/	0
725.	262	1049.7	0.	66 /	0.	15/	. 0
1087. 351./ 316. 33./ 30. 21/ 27 1450. 267./ 475. 25./ 45. 25/ 27 1812. 222./ 581. 21./ 55. 25/ 27 2175. 205./ 624. 20./ 59. 25/ 27 2537. 213./ 599. 20./ 56. 25/ 27 2900. 257./ 496. 24./ 47. 25/ 27 3262. 340./ 310. 32./ 29. 25/ 27 3625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1		465./		44./	11.	21/	27
1450. 267./ 475. 25./ 45. 25/ 27 1812. 222./ 581. 21./ 55. 25/ 27 2175. 205./ 624. 20./ 59. 25/ 27 2537. 213./ 599. 20./ 56. 25/ 27 2900. 257./ 496. 24./ 47. 25/ 27 3262. 340./ 310. 32./ 29. 25/ 27 3625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984	1087	351./	316.	33./	30.		
1812. 222./ 581. 21./ 55. 25/ 27 2175. 205./ 624. 20./ 59. 25/ 27 2537. 213./ 599. 20./ 56. 25/ 27 2900. 257./ 496. 24./ 47. 25/ 27 3262. 340./ 310. 32./ 29. 25/ 27 3625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1	1450	267./	475.	25./	45.	25/	27
2175.	1812	222 /	581.	21./	55.	25/	27
2537. 213./ 599. 20./ 56. 25/ 27 2900. 257./ 496. 24./ 47. 25/ 27 3262. 340./ 310. 32./ 29. 25/ 27 3625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS	2175	205 /	624	20./	59.		
3262. 340./ 310. 32./ 29. 25/ 27 3625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984	2537	213./	599.	20./		25/	27
3262. 340./ 310. 32./ 29. 25/ 27 3625. 456./ 36. 43./ 3. 25/ 27 3987. 816./ 0. 76./ 0. 13/ 0 4350. 1359./ 0. 124./ 0. 13/ 0  B E A M N O. 4 D E S I G N R E S U L T S - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984	2000	257./	496.	24./	47.	25/	27
3625. 456./ 36. 43./ 3. 25./ 27 3987. 816./ 0. 76./ 0. 137 0 4350. 1359./ 0. 124./ 0. 137 0  BEAMNO. 4 DESIGNRESULTS - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS	3262	340./	310.	32./	29.	25/	27
AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984	3625	456./	36.	43./	3,	25/	27
BEAM NO. 4 DESIGN RESULTS - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984	1987	816./	0.	76./	0.	13/	0
BEAM NO. 4 DESIGN RESULTS - SHEAR  AT START SUPPORT - Vu= 82.88 KNS Vc= 215.56 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.  AT END SUPPORT - Vu= 127.44 KNS Vc= 215.56 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J 4349X 999X 349 5J  8No12 H 266. 185.TO 3984	4350.	1359./	0.	124./	0.	13/	0
PROVIDE 12 MM BARS AT 130. MM C/C FOR 906. MM  1J		SUPPORT - Vu	= 82.88 KN	IS Vc= 215.			) KNS
8No12 H 266, 185.TO 3984	AT END						
8*12c/c130 2No12 H 84. 0.TO 4350	and the second second		4349	〈 999X 349	ng mesing di <del>Tabupa</del>		5J
8*12c/c130 2No12 H 84. 0.TO 4350	1J		======================================			=======	====
			3984			8*12	c/c130
	8No12 H		F.O.				
	8No12 H 2No12 H	84. 0.TO 43	50			.         	

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CRITICAL POS MOMENT= 24.66 KN-M REQD STEEL= 624.MM2, ROW= .0033, MAX/MIN/ACTUAL BAR SPACING= 878./ BASIC/REQD. DEVELOPMENT LENGTH =  2 187. 2 - 20MM 0.  CRITICAL NEG MOMENT= 32.49 KN-M REQD STEEL= 624.MM2, ROW= .0033, MAX/MIN/ACTUAL BAR SPACING= 878./ BASIC/REQD. DEVELOPMENT LENGTH =  EQUIRED REINF. STEEL SUMMARY:  ECTION REINF STEEL(+VE/-VE) MO MM ) (SQ. MM )  0. 369./ 490. 362. 322./ 427. 725. 275./ 365. 1087. 228./ 303. 1450. 181./ 242. 1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 3625. 143./ 120. 3987. 201./ 164.	T AT 0.0WMX= .0194 45./ 878. 93./ 594.  4350  T AT 0.0WMX= .0194 45./ 878. 93./ 598.  ENTS(+VE/-VI(KNS-MET)  5./ 33 2./ 28 8./ 26 5./ 26 6./ 8 4./ 66./ 8	.MM, LOAD 20 ROWMN= .0033 .MMS MMS  0. YES .MM, LOAD 29 ROWMN= .003 .MMS MMS  E) LOAD(+V  2. 20/ 4. 20/ 6. 20/ 6. 20/ 2. 20/ 8. 20/ 8. 20/ 8. 20/ 8. 20/ 8. 20/ 9. 20/ 1. 19/	)   3   3   4    5   3   4    5   3   4    5   2   2   2   2   2   2   2   2   2   2
REQD STEEL= 624.MM2, ROW= .0033, MAX/MIN/ACTUAL BAR SPACING= 878./BASIC/REQD. DEVELOPMENT LENGTH =  2 187. 2 - 20MM 0.  CRITICAL NEG MOMENT= 32.49 KN-M REQD STEEL= 624.MM2, ROW= .0033, MAX/MIN/ACTUAL BAR SPACING= 878./BASIC/REQD. DEVELOPMENT LENGTH =  EQUIRED REINF. STEEL SUMMARY:  ECTION REINF STEEL(+VE/-VE) MOMM) (SQ. MM)  0. 369./ 490. 362. 322./ 427. 725. 275./ 365. 1087. 228./ 303. 1450. 181./ 242. 1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 3625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  B E A M N O. 5 D E S I G N  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE  AT END SUPPORT - Vu= 11.17 KNS VC	T AT 0.0WMX= .0194 45./ 878. 93./ 594.  4350 T AT 0.0WMX= .0194 45./ 878. 93./ 598.  ENTS(+VE/-VI. (KNS-MET) 5./ 32 2./ 26 8./ 26 5./ 26 4./ 66./ 68 4./ 11	.MM, LOAD 20 ROWMN= .0033 .MMS MMS  0. YES .MM, LOAD 29 ROWMN= .003 .MMS MMS  E) LOAD(+V  2. 20/ 4. 20/ 6. 20/ 6. 20/ 2. 20/ 8. 20/ 8. 20/ 8. 20/ 8. 20/ 8. 20/ 9. 20/ 1. 19/	3
CRITICAL NEG MOMENT = 32.49 KN-M REQD STEEL = 624.MM2, ROW = .0033, MAX/MIN/ACTUAL BAR SPACING = 878./ BASIC/REQD. DEVELOPMENT LENGTH =  EQUIRED REINF. STEEL SUMMARY:  ECTION REINF STEEL(+VE/-VE) MO MM ) (SQ. MM )  0. 369./ 490. 362. 322./ 427. 725. 275./ 365. 1087. 228./ 303. 1450. 181./ 242. 1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 3625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  B E A M N O. 5 D E S I G N  AT START SUPPORT - Vu = 11.17 KNS VC STIRRUPS ARE NOT RE AT END SUPPORT - Vu = 11.17 KNS VC	T AT 0 OWMX= .0194 45./ 878 93./ 598.  ENTS(+VE/-VI (KNS-MET) 5./ 32 2./ 28 8./ 26 5./ 26 4./ 16 6./ 8 4./ 5 6./ 8 4./ 11	.MM, LOAD 25 ROWMN= .003 . MMS MMS  E) LOAD(+1)  2. 20/ 8. 20/ 4. 20/ 0. 20/ 2. 20/ 8. 20/ 4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	5   3    1    VE/-VE)  25   25   25   25   25   25   26   26   26
CRITICAL NEG MOMENT = 32.49 KN-M REQD STEEL = 624.MM2, ROW = .0033, MAX/MIN/ACTUAL BAR SPACING = 878./ BASIC/REQD. DEVELOPMENT LENGTH =  EQUIRED REINF. STEEL SUMMARY:  ECTION REINF STEEL(+VE/-VE) MO MM ) (SQ. MM )  0. 369./ 490. 362. 322./ 427. 725. 275./ 365. 1087. 228./ 303. 1450. 181./ 242. 1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 3625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  B E A M N O. 5 D E S I G N  AT START SUPPORT - Vu = 11.17 KNS VC  STIRRUPS ARE NOT REA	T AT 0 OWMX= .0194 45./ 878 93./ 598.  ENTS(+VE/-VI (KNS-MET) 5./ 32 2./ 28 8./ 26 5./ 26 4./ 16 6./ 8 4./ 5 6./ 8 4./ 11	.MM, LOAD 25 ROWMN= .003 .MMS .MMS .MMS .MMS .MMS .MMS .MMS .MM	5   3   3   4   4   4   4   4   4   4   4
ECTION REINF STEEL(+VE/-VE) MO  MM ) (SQ. MM )  0. 369./ 490. 362. 322./ 427. 725. 275./ 365. 1087. 228./ 303. 1450. 181./ 242. 1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 33625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  B E A M N O. 5 D E S I G N  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE  AT END SUPPORT - Vu= 11.17 KNS VC	(KNS-MET) 5./ 32 2./ 28 8./ 20 5./ 20 2./ 10 9./ 12 6./ 8 4./ 6 5./ 20 6./ 8 4./ 5 0./ 8 4./ 11	2. 20/ 8. 20/ 4. 20/ 0. 20/ 6. 20/ 2. 20/ 8. 20/ 4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	25 25 25 25 25 25 25 25 25 25 26 26
MM ) (SQ. MM )  0. 369./ 490. 362. 322./ 427. 725. 275./ 365. 1087. 228./ 303. 1450. 181./ 242. 1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 33625. 143./ 120. 33987. 201./ 164. 4350. 260./ 208.  B E A M N O. 5 D E S I G N  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE  AT END SUPPORT - Vu= 11.17 KNS VC	(KNS-MET) 5./ 32 2./ 28 8./ 20 5./ 20 2./ 10 9./ 12 6./ 8 4./ 6 5./ 20 6./ 8 4./ 5 0./ 8 4./ 11	2. 20/ 8. 20/ 4. 20/ 0. 20/ 6. 20/ 2. 20/ 8. 20/ 4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	25 25 25 25 25 25 25 25 25 25 26 26
362. 322./ 427. 725. 275./ 365. 1087. 228./ 303. 1450. 181./ 242. 1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 33625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  B E A M N O. 5 D E S I G N  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE AT END SUPPORT - Vu= 11.17 KNS VC	2./ 28 8./ 24 5./ 20 2./ 16 9./ 12 6./ 8 4./ 4 5./ 5 6./ 5 0./ 8	8. 20/ 4. 20/ 0. 20/ 6. 20/ 2. 20/ 8. 20/ 4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	25 25 25 25 25 25 25 25 26 26
362. 322./ 427. 725. 275./ 365. 1087. 228./ 303. 1450. 181./ 242. 1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 33625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  B E A M N O. 5 D E S I G N  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE AT END SUPPORT - Vu= 11.17 KNS VC	2./ 28 8./ 24 5./ 20 2./ 16 9./ 12 6./ 8 4./ 4 5./ 5 6./ 5 0./ 8	8. 20/ 4. 20/ 0. 20/ 6. 20/ 2. 20/ 8. 20/ 4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	25 25 25 25 25 25 25 25 26 26
1087. 228./ 303. 1450. 181./ 242. 1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 3625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  BEAMNO. 5 DESIGN  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE  AT END SUPPORT - Vu= 11.17 KNS VC	5./ 20 2./ 16 9./ 12 6./ 8 4./ 6 5./ 2 6./ 5 0./ 8	0. 20/ 6. 20/ 2. 20/ 8. 20/ 4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	25 25 25 25 25 26 26
1450. 181./ 242.  1812. 134./ 181.  2175. 88./ 121.  2537. 55./ 61.  2900. 71./ 32.  3262. 86./ 76.  3625. 143./ 120.  3987. 201./ 164.  4350. 260./ 208.  BEAM NO. 5 DESIGN  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE  AT END SUPPORT - Vu= 11.17 KNS VC	2./ 16 9./ 12 6./ 8 4./ 6 5./ 2 6./ 5 0./ 8	6. 20/ 2. 20/ 8. 20/ 4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	25 25 25 25 26 26
1812. 134./ 181. 2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 3625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  BEAM NO. 5 DESIGN  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE  AT END SUPPORT - Vu= 11.17 KNS VC	9./ 12 6./ 8 4./ 6 5./ 2 6./ 5 0./ 8	2. 20/ 8. 20/ 4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	25 25 25 26 26
2175. 88./ 121. 2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 3625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  BEAM NO. 5 DESIGN  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE AT END SUPPORT - Vu= 11.17 KNS VC	6./ 8 4./ 6 5./ 2 6./ 5 0./ 8	8. 20/ 4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	25 25 26 26
2537. 55./ 61. 2900. 71./ 32. 3262. 86./ 76. 3625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  BEAM NO. 5 DESIGN  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE AT END SUPPORT - Vu= 11.17 KNS VC	4./ 5./ 5./ 5./ 5./ 5./ 5./ 5./ 5./ 5./ 5	4. 27/ 2. 27/ 5. 27/ 8. 19/ 1. 19/	25 26 26
2900. 71./ 32. 3262. 86./ 76. 3625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  BEAM NO. 5 DESIGN  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE AT END SUPPORT - Vu= 11.17 KNS VC	5./ 6./ 0./ 4./	2. 27/ 5. 27/ 8. 19/ 1. 19/	26 26
3625. 143./ 120. 3987. 201./ 164. 4350. 260./ 208.  BEAM NO. 5 DESIGN  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE AT END SUPPORT - Vu= 11.17 KNS VC	0./ 8 4./ 1	8. 19/ 1. 19/	
3987. 201./ 164. 4350. 260./ 208.  BEAM NO. 5 DESIGN  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE  AT END SUPPORT - Vu= 11.17 KNS VC	4./ 1	1. 19/	26
BEAM NO. 5 DESIGN  AT START SUPPORT - Vu= 11.17 KNS VC  STIRRUPS ARE NOT RE  AT END SUPPORT - Vu= 11.17 KNS VC			~ ~ .
AT START SUPPORT - Vu= 11.17 KNS VC STIRRUPS ARE NOT RE AT END SUPPORT - Vu= 11.17 KNS VC		4 19/	
AT START SUPPORT - Vu= 11.17 KNS VC STIRRUPS ARE NOT RE AT END SUPPORT - Vu= 11.17 KNS VC	ESULTS	S - SHEAR	
AT END SUPPORT - Vu= 11.17 KNS Vc	153.28 KNS	et ja stolet ejen	00 KNS
	153.28 KNS	S Vs≕ .(	00 KNS
_ 2J4349X_999X	274		10J
No20 H 188. 0.TO 4350	========	<b>3 3 3 3 3 3 3 3 3 3</b>	=========
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		00	
#20   2#20		2#20	

	MM FY -	414. FC ~	25. MPA, SI	ZE - 1000.	x 350.	MMS
and the second second	EIGHT BAR (MM)	INFO	FROM (MM)	TO (MM)	ANC STA	
1	84. 12	- 12MM	in the state of th	942.	YES	
REQD S'	reel= 1323.M N/ACTUAL BAR	M2, ROW= .0 SPACING=	KN-MET AT 050, ROWMX= . 886./ 37./	0194 ROWM 81. MMS	LOAD 13 N= .0033	i
2	266. 8 ~	· 12MM	230.	942.	ИО	YES
MAX/MT	N/ACTUAL BAR	SPACING=	886./ 37./	127. MMS		1
BASIC/	REQD. DEVELOF EINF. STEEL S	PMENT LENGTH	886./ 37./ R = 177./	127. MMS 359. MMS		  -  -
BASIC/	REOD. DEVELOR EINF. STEEL S REINF STEEL	MENT LENGTH	MOMENTS(+V	359. MMS		   -  E/-VI
BASIC/ EQUIRED R ECTION	REQD. DEVELOR	MENT LENGTH	R = 177./	359. MMS		    -  
BASIC/ EQUIRED R ECTION	REOD. DEVELOR EINF. STEEL S REINF STEEL	MENT LENGTH	MOMENTS(+V	359. MMS /E/-VE) /ET )		
BASIC/ EQUIRED R ECTION MM )	REQD. DEVELOR EINF. STEEL S REINF STEEI (SQ. MM	PMENT LENGTH SUMMARY : .(+VE/-VE) 1 )	MOMENTS (+\ (KNS-)	359. MMS /E/-VE) /ET )	LOAD (+VI	0
BASIC/ EQUIRED R ECTION MM )	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM	SUMMARY: .(+VE/-VE) 1)	MOMENTS(+\ (KNS-N	359. MMS /E/-VE) /ET ) 0.	LOAD (+Vi 13/ 13/ 13/	0
BASIC/ EQUIRED R ECTION MM ) 0. 78.	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM 1359./ 1250./	SUMMARY: .(+VE/-VE) 1)	MOMENTS(+\ (KNS-\) 124./ 114./	359. MMS  /E/~VE)  4ET )  0. 0.	LOAD (+Vi 13/ 13/ 13/	0 0
BASIC/EQUIRED RECTION MM )  0. 78.	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM 1359./ 1250./ 1140./	CHENT LENGTH  SUMMARY:  .(+VE/-VE)  1)  0.  0.  0.	MOMENTS(+\ (KNS-\) 124./ 114./ 105./	359. MMS  /E/~VE)  4ET )  0. 0. 0.	LOAD(+VI 13/ 13/ 13/ 13/ 13/	0 0 0 0
BASIC/ EQUIRED R ECTION MM ) 0. 78. 157. 235.	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM 1359./ 1250./ 1140./ 1031./ 922./ 814./	O.  0.  0.  0.  0.  0.  0.	MOMENTS(+\ (KNS-\) 124./ 114./ 105./ 95./	359. MMS  /E/~VE)  4ET )  0.  0.  0.  0.	LOAD(+VI 13/ 13/ 13/ 13/ 13/	0 0 0 0
BASIC/EQUIRED RECTION MM )  0. 78. 157. 235.	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM  1359./ 1250./ 1140./ 1031./ 922./ 814./ 705./	O. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	MOMENTS (+V (KNS-N 124./ 114./ 105./ 95./ 86./	359. MMS  /E/~VE)  4ET )  0.  0.  0.  0.  0.	13/ 13/ 13/ 13/ 13/	0 0 0 0 0
BASIC/ EQUIRED R ECTION MM ) 0. 78. 157. 235. 314.	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM 1359./ 1250./ 1140./ 1031./ 922./ 814./	O. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	MOMENTS(+\ (KNS-\) 124./ 114./ 105./ 95./ 86./ 76./	359. MMS  /E/~VE)  4ET )  0.  0.  0.  0.  0.  0.	13/ 13/ 13/ 13/ 13/ 13/ 13/	0 0 0 0 0
BASIC/ EQUIRED R ECTION MM ) 0. 78. 157. 235. 314. 392. 471.	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM  1359./ 1250./ 1140./ 1031./ 922./ 814./ 705./	O. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	MOMENTS(+\ (KNS-\) 124./ 114./ 105./ 95./ 86./ 76./ 66./	359. MMS  /E/~VE)  0. 0. 0. 0. 0. 0. 0.	13/ 13/ 13/ 13/ 13/ 13/ 13/ 13/	0 0 0 0 0
BASIC/ EQUIRED R ECTION MM ) 0. 78. 157. 235. 314. 392. 471. 549.	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM  1359./ 1250./ 1140./ 1031./ 922./ 814./ 705./ 597./	O. O. O. O. O. O. 48. 120.	MOMENTS (+V (KNS-N 124./ 114./ 105./ 95./ 86./ 76./ 66./ 56./ 47./ 43./	359. MMS  /E/~VE)  4ET )  0.  0.  0.  0.  0.  5.  11.	13/ 13/ 13/ 13/ 13/ 13/ 13/ 13/ 27/ 27/	0 0 0 0 0 0 0 0 26 21
BASIC/ EQUIRED R ECTION MM ) 0. 78. 157. 235. 314. 392. 471. 549. 628.	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM  1359./ 1250./ 1140./ 1031./ 922./ 814./ 705./ 597./ 501./	O. O. O. O. O. O. 48.	MOMENTS(+V (KNS-N 124./ 114./ 105./ 95./ 86./ 76./ 66./ 56./ 47./	359. MMS  /E/~VE)  4ET )  0.  0.  0.  0.  0.  0.  5.	13/ 13/ 13/ 13/ 13/ 13/ 13/ 13/ 27/ 27/ 27/	0 0 0 0 0 0 0 0 0 26 21 21
BASIC/ EQUIRED R ECTION MM ) 0. 78. 157. 235. 314. 392. 471. 549. 628. 706.	REQD. DEVELOR EINF. STEEL S REINF STEEL (SQ. MM  1359./ 1250./ 1140./ 1031./ 922./ 814./ 705./ 597./ 501./ 456./	O. O. O. O. O. O. 48. 120.	MOMENTS (+V (KNS-N 124./ 114./ 105./ 95./ 86./ 76./ 66./ 56./ 47./ 43./	359. MMS  /E/~VE)  4ET )  0.  0.  0.  0.  0.  5.  11.  20.	13/ 13/ 13/ 13/ 13/ 13/ 13/ 13/ 27/ 27/	0 0 0 0 0 0 0 0 0 26 21 21 21

AT START SUPPORT - Vu= 127.88 KNS Vc= 215.56 KNS Vs= .00 KNS
PROVIDE 12 MM BARS AT 130. MM C/C FOR 942. MM
AT END SUPPORT - Vu= 132.41 KNS Vc= 215.56 KNS Vs= .00 KNS
PROVIDE 12 MM BARS AT 130. MM C/C FOR 942. MM

5J 941X 999X 349 6J

	9417 7997 349	
8No12    9*12c/c130    12No12 H 84. 0.TO 94	H 266. 230.TO 942	9*12c/c130
	0000000	0000000
	8#12	8#12
  12#12	112#12	12#12
00000000000	0000000000	0000000000

EN - 942	. MM FY -	414. FC -	25. MPA, SI	ZE - 1000	. x 350. M	1S
	IGHT BAI MM)	R INFO	FROM (MM)	TO (MM)	ANCHOI STA EX	
1	84. 8	- 12MM	0.	942.	YES Y	ES
REQD ST MAX/MIN	EEL= 888.0 /ACTUAL BAR	MM2, ROW= .0 SPACING=	3 KN-MET AT 0033, ROWMX= . 886./ 37./ H = 177./	0194 ROWMN 127. MMS	8800. = <b> </b>	
2	266. 8	- 12MM	0.	942.	YES YI	ES
REQD ST MAX/MIN	EEL= 888.0 /ACTUAL BAR	MM2, ROW= .0 SPACING=	7 KN-MET AT 0033, ROWMX= . 886./ 37./ 1 = 177./	0194 ROWMS	N= .0033	
EQUIRED RE	INF. STEEL S	SUMMARY :				
ECTION MM )	REINF STEEM	L(+VE/-VE) M )	MOMENTS (+\	And the second second second	LOAD(+VE/-V	/E)
0.	317./	382.	30./	36.	27/ 21	-
78. 157.	294./ 271./	413.	28./ 26./	39. 42.	27/ 21 27/ 21	٠.
235.	247./		23./		27/ 21	
314	222./		21./	48.	27/ 21	
214		C 4 O				
392.	1. C 1.3	548.	19./	52.	27/ 21	
392. 471.	171./	583.	16./	55.	27/ 21	
392. 471. 549.	171./ 144./	583. 619.	16./ 14./	55. 58.	27/ 21 27/ 21	
392. 471.	171./	583.	16./	55. 58. 62. 65.	27/ 21	
392. 471. 549. 628. 706. 785.	171./ 144./ 117./ 89./ 61./	583. 619. 657. 695. 733.	16./ 14./ 11./ 9./ 6./	55. 58. 62. 65.	27/ 21 27/ 21 27/ 21 27/ 21 27/ 21	
392. 471. 549. 628. 706.	171./ 144./ 117./ 89./ 61./	583. 619. 657. 695.	16./ 14./ 11./ 9./	55. 58. 62. 65.	27/ 21 27/ 21 27/ 21 27/ 21	
392. 471. 549. 628. 706. 785.	171./ 144./ 117./ 89./ 61./ 32./	583. 619. 657. 695. 733. 773.	16./ 14./ 11./ 9./ 6./ 3./	55. 58. 62. 65. 69.	27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21	
392. 471. 549. 628. 706. 785. 863. 942.	171./ 144./ 117./ 89./ 61./ 32./ 2./	583. 619. 657. 695. 733. 773. 814.	16./ 14./ 11./ 9./ 6./ 3./	55. 58. 62. 65. 69. 72.	27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21	
392. 471. 549. 628. 706. 785. 863. 942. B E	171./ 144./ 117./ 89./ 61./ 32./ 2./ A M N O.  UPPORT - Vu	583. 619. 657. 695. 733. 773. 814. 9 D E S I = 63.50 KN	16./ 14./ 11./ 9./ 6./ 3./ 0./ GNRESU  WS VC= 215.5	55. 58. 62. 65. 69. 72. 76. LTS-S	27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 4EAR 00 KM	
392. 471. 549. 628. 706. 785. 863. 942. B E	171./ 144./ 117./ 89./ 61./ 32./ 2./ A M N O.  UPPORT - Vu	583. 619. 657. 695. 733. 773. 814. 9 D E S I = 63.50 KN IRRUPS ARE N	16./ 14./ 11./ 9./ 6./ 3./ 0./ GNRESU	55. 58. 62. 65. 69. 72. 76. LTS-S	27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 4EAR 00 KM	
392. 471. 549. 628. 706. 785. 863. 942. B E	171./ 144./ 117./ 89./ 61./ 32./ 2./ A M N O.  UPPORT - Vu	583. 619. 657. 695. 733. 773. 814. 9 D E S I = 63.50 KN IRRUPS ARE N	16./ 14./ 11./ 9./ 6./ 3./ 0./  GNRESU  WS VC= 215.5  NOT REQUIRED.  NS VC= 215.5	55. 58. 62. 65. 69. 72. 76. LTS-SI	27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 4EAR 00 KM	
392. 471. 549. 628. 706. 785. 863. 942.  B E  AT START S  AT END S	171./ 144./ 117./ 89./ 61./ 32./ 2./ A M N O. UPPORT - Vu	583. 619. 657. 695. 733. 773. 814.  9 DESI 63.50 KN IRRUPS ARE N 68.03 KN IRRUPS ARE N 9412	16./ 14./ 11./ 9./ 6./ 3./ 0./  GNRESU  WS VC= 215.5  NOT REQUIRED.  NS VC= 215.5  NOT REQUIRED.	55. 58. 62. 65. 69. 72. 76. LTS-SI	27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 4EAR 00 KM	
392. 471. 549. 628. 706. 785. 863. 942. B E AT START S	171./ 144./ 117./ 89./ 61./ 32./ 2./ A M N O.  UPPORT - Vui	583. 619. 657. 695. 733. 773. 814. 9 D E S I 63.50 KN IRRUPS ARE N 68.03 KN IRRUPS ARE N	16./ 14./ 11./ 9./ 6./ 3./ 0./  GNRESU  WS VC= 215.5  NOT REQUIRED.  NS VC= 215.5  NOT REQUIRED.	55. 58. 62. 65. 69. 72. 76. LTS-SI	27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 4EAR 00 KM	
392. 471. 549. 628. 706. 785. 863. 942. B E AT START S AT END S	171./ 144./ 117./ 89./ 61./ 32./ 2./ A M N O.  UPPORT - Vu- ST  UPPORT - Vu- ST	583. 619. 657. 695. 733. 773. 814.  9 DESI  63.50 KN IRRUPS ARE N  68.03 KN IRRUPS ARE N  9412	16./ 14./ 11./ 9./ 6./ 3./ 0./  GNRESU  WS VC= 215.5  NOT REQUIRED.  NS VC= 215.5  NOT REQUIRED.	55. 58. 62. 65. 69. 72. 76. LTS-SI	27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 27/ 21 4EAR 00 KM	

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Parameter States		The state of	GN RESUI		and the second	MMS
EVEL HEIG	HT BAR	INFO	FROM (MM)	TO (MM)	ANCI STA	IOR
		<u>s tart.</u> Tipuk a a				n na <del>na</del> <del>nanan</del> nagina gara
1 8	4. 8 -	12MM	0.	352.	YES	МО
CRITICAL REQD STEE MAX/MIN/A	POS MOMENT= L= 888.MN CTUAL BAR S	.1 12, ROW= . BPACING=	7 KN-MET AT 0033, ROWMX= .0 886./ 37./ CH = 177./	0.MM, L 0194 ROWMN 127.MMS	OAD 27	
2 26	6. 8 -	12MM	0.	942.	YES	YES
REQD STEE MAX/MIN/A	L= 888.M CTUAL BAR	M2, ROW= SPACING=	77 KN-MET AT .0033, ROWMX= . 886./ 37./ TH = 177./	0194 ROWMN 127. MMS	= .0033	
REQUIRED REIN	F. STEEL S	UMMARY :				
SECTION F	REINF STEEL (SQ. MM	(+VE/-VE)	MOMENTS (+V (KNS-M		LOAD(+VE	/-VE)
0.	2./	814.	0./	76.	27/	
78. 157.	0./ 0./	797. 781.	0./ 0./	74. 73.	0/ 0/	
235.	0./	771.	0.7	72.	0/	25
314.	0./		0./	71.	0/	
392. 471.	0./	757. 752.	0./ 0./	71. 70.	0/ 0/	and the second of the second
549.	0 /	747.	0.7	70.	0/	25
628.	0./	742. 739.	0./	69. 69.	0/ 0/	
706. 785.	0./	736	0./	69.	0/	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
863. 942.	0./	734. 733.	0./ 0./	69. 68.	0/ 0/	
BEA	м но. 1	O DES	IGN RESU	LTS-S	IEAR	
	STI - PPORT	RRUPS ARE 15.28	KNS VC= 215.5 NOT REQUIRED. KNS VC= 215.5 NOT REQUIRED.		e Projection	ora di esta
7J		94	1X 999X 349			8J
				61, 61, 71 B		
8No12 H 266.	0.TO 94	2				
8No12 H 84.		02 =====				
000000 8#12 8#12		8#12	0000000		000000	00

Page 11 of 19

1 2	42. MM FY -	414. FC -	25. MPA, SI	ZE - 1000.	X 350, M	15
EVEL	HEIGHT BAR (MM)	INFO	FROM (MM)	TO (MM)	ANCHOI STA EI	
1	84. 8 -	12MM	315.		NO YI	
REQD MAX/M	CAL POS MOMENT STEEL= 888.M IN/ACTUAL BAR /REQD. DEVELOP	M2, ROW= SPACING=	0033, ROWMX= . 886./ 37./	942.MM, L 0194 ROWMN 127. MMS	<b>-</b> .0033   ∶	
		MENT DEMOT		332. UM3		
2	266. 8 <del>-</del>	12MM	0.	942.	YES YI	es.
REQD MAX/M BASIC	CAL NEG MOMENT STEEL= 888.M IN/ACTUAL BAR /REQD. DEVELOP	M2, ROW= SPACING= MENT LENGT	0033, ROWMX= . 886./ 37./	0194 ROWMN 127 MMS	⊫ .0033   ·	
	REINF STEEL		MOMENTS (+V	/F/~VF)	1.0AD7+VE7=	7E1
( MM )	(SQ. MM		(KNS-M		LOAD ( FVE) -	V 13 /
0.	0./	733.	0./		0/ 25	
78.	0./	683	0./		0/ 14	
157.	0./	637	0./		0/ 14	4.1
235. 314.	0./	592.	0./		0/ 14	
392.	0./	548. 505.	0./	52. 48.	0/ 14 0/ 14	٠.,
471.	and the second s	463	0./	44.	0/ 14	
549.	0.7	421	0./	the first of the control of the	0/ 14	1.5
628.	0./	383.	0./	36.	0/ 13	
706.	11./	348.	1./		20/ 13	
785.	53./	315.	5./	30.	20/ 13	1
863.		282.	9./	27.	20/ 13	
942.	136./	250.	13./	24.	20/ 13	
В	EAM NO. 1	1 DESI	GN RESU	LTS-SH	IEAR	
	SUPPORT - Vu=	72.31 K	NS Vc= 215.5	6 KNS Vs=	.00 Ki	NS
AT START	STI	RRUPS ARE	NOT REQUIRED.	Aug Jackson W.		1
		67.78 K	NS Vc= 215.5	6 KNS Vs=	.00 Ki	NS
	SUPPORT - Vu=		NOT REQUIRED.			100
AT END		RRUPS ARE				9Ј
AT END	STI	RRUPS ARE	NOT REQUIRED.			9J
AT END	STI	RRUPS ARE 94	NOT REQUIRED.  1X 999X 349			9J
AT END	STI	RRUPS ARE 94	NOT REQUIRED.  1X 999X 349			9J
AT END	STI	RRUPS ARE 94	NOT REQUIRED.  1X 999X 349			9J
AT END	STI	RRUPS ARE 94	NOT REQUIRED. 1X 999X 349			9.
AT END	STI	RRUPS ARE 94	NOT REQUIRED. 1X 999X 349			9J
AT END	STI	RRUPS ARE 94	NOT REQUIRED. 1X 999X 349			9J
AT END	STI	RRUPS ARE 94	NOT REQUIRED. 1X 999X 349			9J
8J_ 8No12 H 2	STI	94 94 2 8No12 H	NOT REQUIRED. 1X 999X 349	2	0000000	9J
8J_No12 H 2	STI 66. 0.TO 94	94 94 2 8No12 H	NOT REQUIRED.  1X 999X 349  84. 315.TO 94	2	0000000	9 <b>J</b>

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LEN -	942. MM FY	- 414. FC -	25. MPA,	SIZE - 1000.	X 350. MMS
LEVEL	HEIGHT (MM)	BAR INFO	FROM (MM)	TO (MM)	ANCHOR STA END
1	06	7 16MM	0	942.	YES YES
REQU MAX/	STEEL= 138 MIN/ACTUAL B	33.MM2, ROW=.	0052, ROWMX 882./ 41	T 942.MM, LC = .0194 ROWMN= ./ 147. MMS 470. MMS	
2	266.	8 - 12MM	0.	594.	YES NO
REQU	STEEL= 8	88.MM2, ROW= .	0033, ROWMX 886./ 37	T 0.MM, LC = .0194 ROWMN= ./ 127.MMS 359.MMS	≖ .0033
' REQUIREI	O REINF. STE	EL SUMMARY :			
SECTION ( MM )		TEEL(+VE/-VE)	A CONTRACTOR OF THE CONTRACTOR	(+VE/-VE) I S-MET )	LOAD(+VE/-VE)
0.		/ 250.	13./	24.	20/ 13
78.			22./	The second of th	20/ 13
157	1.15		32./	7. 1.	26/ 13 26/ 27
235. 314.	433. 534.		41./ 50./	<b>.</b>	26/ 0
392.	635.	The state of the s	60./		26/ 0
471.	The state of the s	/	69./	0.	26/ 0
549.	846.		79./	0.	21/ 0
628. 706.	963. 1080.		89./ 99./	0.	21/ 0 21/ 0
785.	1197.		110./	0.	21/ 0
863.	1315.		120./		21/ 0
942.	1433.	/ 0.	130./	0.	21/ 0
	BEAM NC	. 12 DES	IGN RES	SULTS-SH	EAR
AT STA	RT SUPPORT -	Vu= 136.50 1	KNS Vc= 21	15.56 KNS Vs=	.00 KNS
		PROVIDE 12 M	M BARS AT 13	30. MM C/C FO	R 942.MM
AT END				15.56 KNS Vs= 30. MM C/C FO	
9J		94	1X 999X 34		10J
	========				
9*12c/	266. 0.TC c130				9*12c/c130
7No16 H	86. 0.TC	) 942			

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| 7#16

В	EAM NO. 13	BDESI	GN RESU	LTS - E	LEXURE	
LEN - 94	40. MM FY - 4	114. FC -	25. MPA, SI	ZE - 1000.	Х 350.	MMS
and the second second second	HEIGHT BAR (MM)	INFO	and the second s	TO (MM)	ANC STA	HOR END
1	86. 7 -	16MM	0.	940.	YES	YES
REQD S	CAL POS MOMENT= STEEL= 1376.MN IN/ACTUAL BAR S /REQD. DEVELOPN	12, ROW= . SPACING=	0052, ROWMX= . 882./ 41./	0194 ROWMN 147. MMS	= .0033	
2	266. 8 -	12MM	307.	940.	NO	YES
REQD :   MAX/M   BASIC,	CAL NEG MOMENTS STEEL= 888.MN IN/ACTUAL BAR S /REQD. DEVELOPN	= 11.0 42, ROW= SPACING= MENT LENGT	08 KN-MET AT 0033, ROWMX= . 886./ 37./	0194 ROWMN 127. MMS	i= .0033	
	REINF. STEEL SU					
SECTION ( MM )	REINF STEEL (SQ. MM		MOMENTS (+) (KNS-)		LOAD (+VE	/-VE)
0.	1426./	0.	130./	0.	21/	0
78. 157.	1315./ 1204./	0. 0.	120./ 110./	0. 0.	21/ 21/	0
235.	1094./	0.	101./	0.	21/	0
313.	983./	0.	91./	0.	21/	0
392.	873./	0.	81./	0.	21/	0
470. 548.	764./ 654./	0.	71./ 61./	0	21/ 21/	0
627.	545./	0	51./	0		0
705	436./	1.	41./	0	*	27
783.	327./	34.	31./	3.		27
862. 940.	219./ 110./	68. 116.	21./ 11./	7. 11.	1. 1.	27 13
AT START	SUPPORT - Vu=	124.37 F VIDE 12 MN 128.88 F	KNS Vc= 215.5 1 BARS AT 130.	56 KNS Vs= MM C/C FO 56 KNS Vs=	.00 PR 940.	MM KNS
10J_			39X 999X 349_			11J
9*12c/c1			56. 307.TO 940		0+12~	======    /c130
7No16 H	86. 0.TO 940				J 120	1
						=====  
7#16	00000	8#12     7#16	0000000		000000	
	<u> </u>			i		

EN - 942.			GN RESO - 25. MPA, S		ing the second of the	3
EVEL HEIG (MI	GHT BAR	INFO	FROM (MM)	TO (MM)	ANCHOR STA EN	
1	84. 8 -	12MM	0.	509.	YES NO	
REQD STEE	EL= 888.MA ACTUAL BAR S	12, ROW= SPACING=	55 KN-MET AT .0033, ROWMX= .886./ 37. rH = 177./	0194 ROWMN / 127 MMS	i= .0033	
2	66. 8 -	12MM	0.	942.	YES YE	s
REQD STE MAX/MIN/ BASIC/RE	EL= 888.MM ACTUAL BAR S	42, ROW= BPACING= MENT LENG	22 KN-MET AT .0033, ROWMX= .886./ 37. TH = 177./	.0194 ROWMN / 127. MMS	i= .0033 !	
ECTION MM )	REINF STEEL (SQ. MM			+VE/-VE) -MET )	LOAD(+VE/-V	E)
0.	110./	116.	11./	11.	21/ 13	
79.	61./	152.	6./	15.	21/ 13	
157.	11./	189.	1./	18	21/ 13	
236. 314.	0./ 0./	227. 266.	0./ 0./	22. 25.	0/ 13 0/ 13	
393.	0.7	305.	0./	29.	0/ 13	
471.	0./	345.	0./	33.	0/ 13	
550.	0./	386.	0./	37.	0/ 13	
628. 707.	0./	428. 471.	0./ 0./	40. 44.	0/ 13 0/ 16	
785.	0.7	520.	0./	49.	0/ 16	
864.	0./	570.	0./	54.	0/ 16	
942.	0./	621.	0./	58.	0/ 16	
B E A	AM NO. 1	4 DES	IGN RES	ULTS-S	HEAR	
AT START SU			KNS Vc= 215		= .00 KN	ıs
AT END SU	JPPORT - Vu=	66.87	E NOT REQUIRED KNS VC= 215 NOT REQUIRED	5.56 KNS Vs	= .00 KN	is
11J		9,	12X 999X 349_		1	.2J
						-====
51 4 15 50	. 0.то 94	Stargers.				
and the second s	. 0.то 50					
ing the second section	and the second second second			<del></del>		
000000	 	8#12	0000000		0000000	
000000 3#12 3#12		8#12     8#12			and the second s	

ВЕ	AM NO.	5 DESI	GN RESU	LTS-	FLEXURE	•
LEN - 94	12. MM FY -	414. FC -	25. MPA, SI	ZE - 1000	. X 350.	MMS
	HEIGHT BAI (MM)	RINFO	FROM (MM)	TO (MM)	ANCH STA	OR END
1	266. 8	- 12MM	0.	942.	YES	YES
REQD S	CAL NEG MOMEN' STEEL= 888.E IN/ACTUAL BAR 'REQD. DEVELO	M2, ROW= .0 SPACING=	033, ROWMX= . 886./ 37./	0194 ROWM 127. MMS	8800. =И 	
REQUIRED F	REINF. STEEL	SUMMARY :				
SECTION ( MM )	REINF STEE	.(+VE/-VE) ſ )	MOMENTS(+V (KNS-M	E/-VE) (ET )	LOAD(+VE/	-VE)
0.	0./	621.		58.	0/ 1	6
79.	0./	616.	0./	58		6
157.	0./	612.	0./	57.	0/. 1	6
236.	0./	608.	0./	57.	9 8 0/ 1	6
314.	0./	605. 603.	0./	57.	•	
393.		603.	0./	57.	0/ 1	6
471.		602.		57.	0/ 1	6
550.	0./	602.	0./	56.	0/ 1	6 - 1 - 5
628.			0./	57.	0/ 1	4
707.		608.	0./	57.	0/ 1	4
785.	0./	613.	0./	58	0/ 1	4
864	0.7	619.	0./	58	. 0/ 1	4
942.	0./ E A M N O.		0./		0/ 1	5
	SUPPORT - Vu					KNS
	SUPPORT - Vu	IRRUPS ARE N 9.43 KN	OT REQUIRED. S Vc= 215.5	2012		
	ST	IRRUPS ARE N	OT REQUIRED.			
12J		942X	999X 349			13J
=====================================	6. 0.TO 9		+ <b>&gt;</b> >===================================			=======================================
ONOTE II 20	J. J. J.					
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8#12		8#12		8#12	and the second	
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EN - 942	2. MM FY - 4	14. FC -	25. MPA, S	SIZE - 1000.	X 350. M	IMS
	EIGHT BAR (MM)	INFO	From (MM)	TO (MM)	ANCHO STA E	or Ind
1	84. 8 -	12MM	551.	942.	NO	YES
REQD S'	AL POS MOMENT= FEEL= 888.M N/ACTUAL BAR S REQD. DEVELOP	12, ROW= .0 SPACING=	0033, ROWMX= 886./ 37., H = 177./	.0194 ROWMN / 127. MMS 352. MMS	0033   	
2	266. 8 -	12MM	0.		YES Y	(ES
REQD S'	AL NEG MOMENT- FEEL= 888.MI N/ACTUAL BAR REQD. DEVELOP	12, ROW= .( SPACING=	0033, ROWMX= 886./ 37.	.0194 ROWMN / 127. MMS	= .0033	
EQUIRED R	einf. Steel S	JMMARY :				
MM )	REINF STEEL (SQ. MM		MOMENTS ( (KNS		LOAD(+VE/	-VE)
0.	0./	627.	0./	59.	0/ 1	5
79.		582.	0./	55.	0/ 1	
157.	0./	542.	0./	51.	0/ 1	9
236	0./	502	0./		0/ 1	1
314.		464	0./	44.	0/ 1	100
393. 471		426. 389.	0./ 0./	40. 37.	0/ 1 0/ 1	
550	Carlot Acceptance	353.	0./	33.	0/ 1	
628		317.	0.7	30	0/ 1	and the second second
707	0./	283.	0./	27.	0/ 1	9
785	0./	249.	0./	24.	0/ 1	
864	0./	216.	0./	21.	0/ 1	
942.	34./	184.	3,/ -	18.	26/ 1	9
В Е	AM NO. 1	6 DESI	GN RES	U L T S - SF	iEAR	
	SUPPORT - Vu= STI SUPPORT - Vu=	RRUPS ARE	NOT REQUIRED			
	and the second s		NOT REQUIRED			
13J		942	x 999x 349_			14J
				<b>=====</b> ===============================		
SNOTZ H 26	56. 0.TO 94	<b>4</b>		o12 H 84.		

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EN - 94	2. MM FY -	414. FC -	25. MPA, S	IZE - 1000. X	350	MMS
EVEL H	EIGHT BA (MM)	R INFO	(MM)	TO (MM)	<u> </u>	END
1	86. 6	- 16MM		942.	YES	YES
REQDS   MAX/MI	TEEL= 1154. N/ACTUAL BAR	MM2, ROW= .0 SPACING=	9 KN-MET AT 0044, ROWMX= 882./ 41./ H = 316./	.0194 ROWMN= 176. MMS	D 26 .0033	i 
2	266. 8	- 12MM	0.	594.	YES	МО
REQD S   MAX/MI   BASIC/	TEEL= 888. N/ACTUAL BAR REQD. DEVELO	MM2, ROW= .( SPACING= PMENT LENGTI	3 KN-MET AT 0033, ROWMX= 886./ 37./ H = 177./	.0194 ROWMN= 127. MMS	D 19 .0033	
	EINF. STEEL REINF STEE		MOMENITO	JE (-VE)	AB ( 1998	/ 001
( MM )	(SQ. M	M )	MOMENTS (+NS-N	VE/-VE) LC MET )	AD (+VE	/-VE)
ο.	34./	184.	3./	18.	26/	19
79.	130./		12./	10	26/	19
157.	226./	the state of the s	22./	3.	26/	
236. 314.	322./ 418./	1. 0.	31./ 39./	0.		27
393.		0	39./ 48./	0.	26/ 26/	
471.	609./	0.	57./	o.	26/	
550.	705./	0.	66./	ŏ.	26/	
628.	801./		75./	0.	26/	0
707.	897./	0.	83./	0.	26/	0
785.	993./	0.	92./	0.	26/	0
864. 942.	1088./ 1184./	0. 0.	100./		26/	0 .
			109./	0.	26/	0
the state of the state of	AM NO.		GN RESU			
	and the second of the second o	= 116.74 KT	45 Vc= 215 9	56 KNS Vs≕	.00	KNS
AT START	SUPPORT - Vu	the second of th	vo- 210.			MM
AT START	PR SUPPORT - Vu	OVIDE 12 MM = 112.20 K	BARS AT 130. NS Vc= 215.5	MM C/C FOR 56 KNS Vs=	.00	MM
AT START	PR	OVIDE 12 MM	BARS AT 130.	MM C/C FOR	942.	I KNS
AT START AT END	PR SUPPORT - Vu PR	OVIDE 12 MM = 112.20 K	BARS AT 130. NS Vc= 215.5 BARS AT 130.	MM C/C FOR 56 KNS Vs=	.00	мм 15J_
AT START  AT END  14J  8No12 H 26 9*12c/c13 6No16 H 8	PR SUPPORT - Vu PR 6. 0.TO 5 0  6. 0.TO 9	OVIDE 12 MM = 112.20 KM OVIDE 12 MM 942:	BARS AT 130. NS Vc= 215.5 BARS AT 130.	MM C/C FOR 56 KNS Vs= MM C/C FOR	.00	MM 15J_
AT START  AT END  14J  8No12 H 26 9*12c/c13	PR SUPPORT - Vu PR 6. 0.TO 5 0  6. 0.TO 9	OVIDE 12 MM = 112.20 KM OVIDE 12 MM 942:	BARS AT 130. NS Vc= 215.5 BARS AT 130.	MM C/C FOR 56 KNS Vs= MM C/C FOR	.00 942.	MM 15J_
AT START  AT END  14J  8No12 H 26 9*12c/c13 6No16 H 8	PR SUPPORT - Vu PR 6. 0.TO 5 0  6. 0.TO 9	OVIDE 12 MM = 112.20 KM OVIDE 12 MM 942:	BARS AT 130. NS Vc= 215.5 BARS AT 130.	MM C/C FOR 56 KNS Vs= MM C/C FOR	.00 942.	MM 15J_
AT START  AT END  14J  8No12 H 26 9*12c/c13 6No16 H 8	PR SUPPORT - Vu PR 6. 0.TO 5 0  6. 0.TO 9	OVIDE 12 MM = 112.20 KM OVIDE 12 MM 942:	BARS AT 130. NS Vc= 215.5 BARS AT 130.	MM C/C FOR 56 KNS Vs= MM C/C FOR	.00 942.	MM 15J_

122. END CONC DESIGN

123. FINISH

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