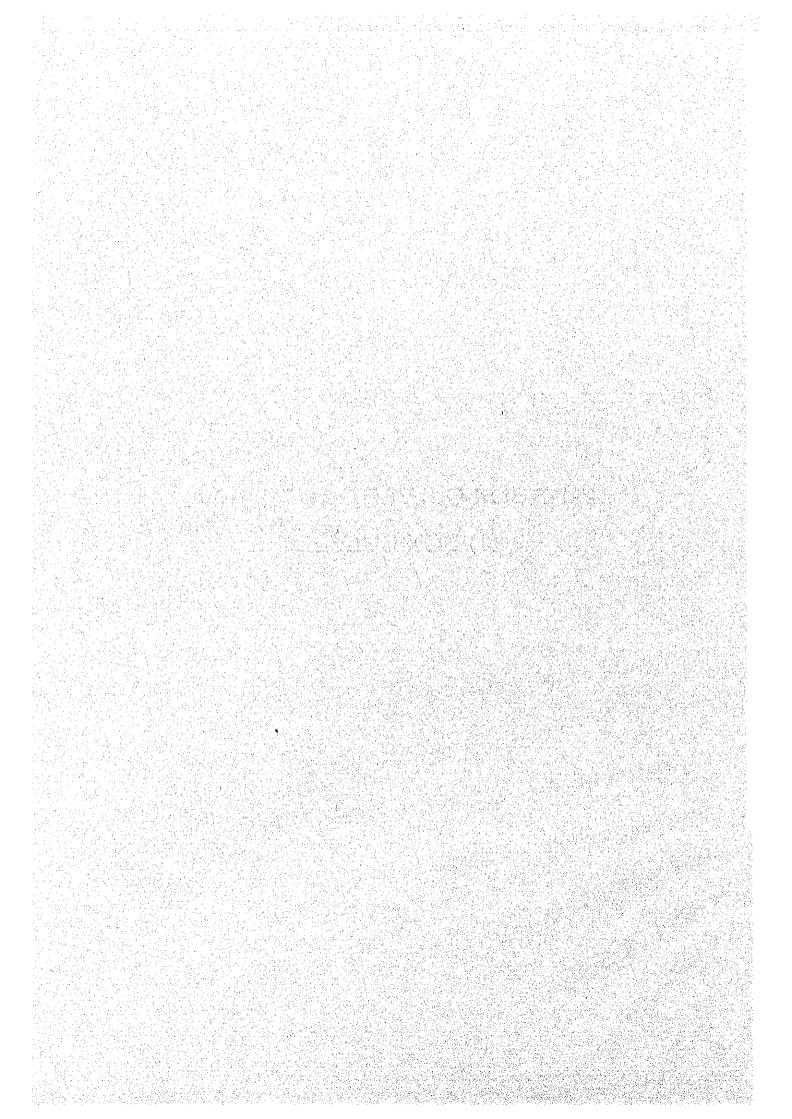
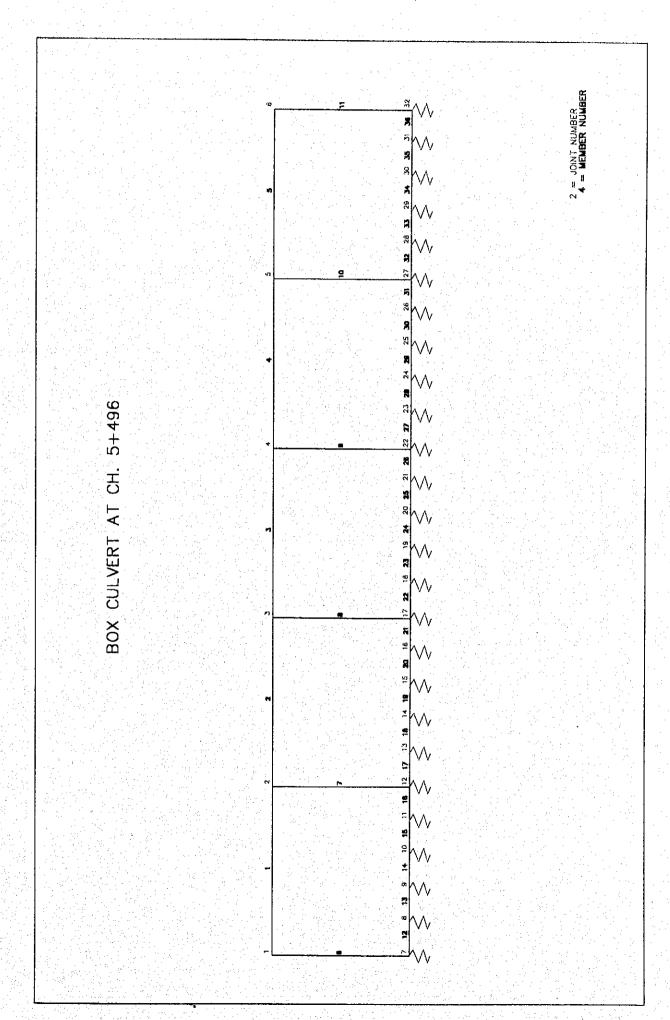
2-1-7 BOX CULVERT AT CH.6+496 (1) BOX CULVERT





```
STAAD-III
                     Revision 22.3a
                     Proprietary Program of
                     Research Engineers, Inc.
                     Date≕
                               JAN 30, 2000
                     Time=
                               11:45:32
                USER ID: Development Design Consultants L
 1. STAAD PLANE DESIGN OF BOX CULVERT (5 X 2.5 X 2.0)
 2. UNIT METER KNS
 3. JOINT COORD
4. 1 0.00 2.25 0.00
5
    2
        2.67
              2.25
                    0.00
 6.
     3.
        5.33
              2.25
                    0.00
       8.00
                    0.00
 7.
     4
              2.25
 8. 5 10.67
             2.25
                    0.00
              2.25
9. 6 13.33
                    0.00
10. 7
        0.00
              0.00
                     0.00
                           11
                               2.136 0.00 0.00
              0.00
                           16 4.806 0.00 0.00
                    0.00
11. 12
        2.67
       5.33
12. 17
              0.00
                     0.00
                           21 7.476 0.00 0.00
                    0.00
              0.00
                           26 10.146 0.00 0.00
13. 22 8.00
14. 27 10.67 0.00
15. 32 13.33 0.00
                     0.00
                           31 12.816 0.00 0.00
                     0.00
17. MEMBER INCI
                   2
                          5
18.
    1
            1
                   7
19.
      6
            1
     √ 7
20.
                 1.2
21.
                  17
           . 4
                  22
22.
      9
23.
      10
            5
24.
      11
             6
                  32
25.
            7
     . 12
26. MEMBER PROPERTY
27. 1 TO 5 PRIS
28. 6 11 PRIS
                      ΥĐ
                             0.250 ZD 1.0
                             0.250 ZD 1.0
                      YD
29. 7 TO 10 PRIS
                              0.250 ZD 1.0
                      ΥD
30. 12 TO 36 PRIS
                             0.250 ZD 1.0
                      YD
31. CONSTANT
32. E 23.667E6 ALL
33. DENSITY 23.56 ALL
34. SUPPORT
35. *8 TO 31 FIXED BUT MZ
                                   1067
                            KFY
36. *7 32 FIXED BUT MZ
                             KFY
                                   534
37. *
38. 10 TO 29
                      FIXED BUT MZ
                                    KFY
                                           1067
39. 7 8 9 30 31 32 FIXED BUT MZ
                                    KFY
                                           1600
40.
41. LOAD 1 : SELFWEIGHT
42. SELFWEIGHT Y -1
43. LOAD 2 : FILL WEIGHT
44. MEMBER LOAD
45. 1 TO 5 UNI GY -30.03
46. LOAD 3 : BACK FILL (MINIMUM)
 47. MEMBER LOAD
 48. 6 TRAP
49. 11 TRAP
              . GX
                     8.12 18.75
                GX
                     -8.12 -18.75
 50. LOAD 4 : BACK FILL (MAXIMUM)
 51. MEMBER LOAD
                      20.07 24.08 0.00 0.43
 52. 6 TRAP
                GX
 53. 6 TRAP
                GΧ
                      24.08 47.08 0.43 2.25
                      -20.07 -24.08 0.00 0.43
 54. 11 TRAP
                GX
 55. 11 TRAP
                     -24.08 -47.08 0.43 2.25
                GX
 56. LOAD 5
              : LL IN ADJACENT SPANS
```

57. MEMBER LOAD

C:\Box Culvert\B5_496.doc Page 1 of 28

11-317

```
1 UNI GY -13.32 0.00 2.67
2 UNI GY -13.32 1.54 2.67
59. 2 UNI
60. LOAD 6 : LL IN ALTERNATE SPAN
61. MEMBER LOAD
62. 1 UNI
63. 3 UNI
             GY
                  -13.32
                           0.00
                                 2.67
              GY
                  -13.32
                           0.00 2.67
64. LOAD 7 : LL IN SPAN 1
65. MEMBER LOAD
66. 1 UNI GY -13.32
                           0.00
67. LOAD 8
           : LL IN SPAN 2
68. MEMBER LOAD
69. 2 UNI
             GY -13.32 0.00 2.67
70. LOAD 9 : LL IN MIDDLE OF BOX CULVERT
71. MEMBER LOAD
72. 3 UNI GY
                   -13.32
                           0.00
73. LOAD 10 : MILITARY LOADING IN SPAN 1
74. MEMBER LOAD
75. 1 UNI
           GY
                  -11.54 0.00 1.33
76. 1 UNI
             GY -11.54
                          1.33 2.67
77. LOAD 11 : MILITARY LOADING IN SPAN 2
78. MEMBER LOAD
            GY -11.54
GY -11.54
79. 2 UNI
                           0.00 1.33
80. 2 UNI
                          1.33 2.67
81. LOAD 12 : LL IN SPAN 1 FOR MAX. SHEAR
82. MEMBER LOAD
83. 1 UNI GY -13.32
                          0.00 2.67
84. LOAD 13 : MILITARY LOADING IN SPAN 1 FOR MAX. SHEAR
85. MEMBER LOAD
            GY
86. 1 UNI
                   -11.54
                           0.00
87. 1 UNI
                           2.00 2.67
              GΥ
                   -11.54
89. *
90. LOAD COMB 14
91. 1 1.3 2 1.3 4 1.3
                              2.171
92. LOAD COMB 15
93. 1 1.3 2 1.3 4 1.3
94. *
95. LOAD COMB 16
96. 1 1.3 2 1.3 4 1.3 5 2.171
97. LOAD COMB 17
98. 1 1.3 2 1.3 4 1.3 6
                             2.171
99. LOAD COMB 18
100. 1 1.3 2 1.3 4 1.3
                          7
                             2.171
101. LOAD COMB 19
102. 1 1.3 2 1.3 4
                      1.3
                           8
                             2.171
103. LOAD COMB 20
104. 1 1.3 2 1.3
                  4 1.3
                             2,171
105. LOAD COMB 21
106. 1 1.3 2 1.3 4
                     1.3
                           10 2.171
107. LOAD COMB 22
108. 1 1.3 2 1.3
                     1.3 11
                              2.171
109. *
110. LOAD COMB 23
111. 1 1.3 2 1.3 3 1.3 5
                             2:171
112. LOAD COMB 24
113, 1 1.3 2 1.3 3 1.3
                             2.171
114. LOAD COMB 25
115. 1 1.3 2 1.3 3 1.3 7
                             2.171
116. LOAD COMB 26
117. 1 1.3 2 1.3 3 1.3 8
                             2.171
118. LOAD COMB 27
119. 1 1.3 2 1.3 3 1.3 9 2.171
120. LOAD COMB 28
121. 1 1.3 2 1.3 3 1.3 10 2.171
122. LOAD COMB 29
123. 1 1.3 2 1.3 3 1.3 11 2.171
124. LOAD COMB 30
125. 1 1.3 4 1.3
126. *
```

C:\Box Culvert\B5_4\96.doc \ Page 2 of 28

127. PERFORM ANALYSIS

PROBLEM STATISTICS

NUMBER OF JOINTS/MEMBER+ELEMENTS/SUPPORTS = ORIGINAL/FINAL BAND-WIDTH = 26/ 5 TOTAL PRIMARY LOAD CASES = 13, TOTAL DEGREES OF FREEDOM = SIZE OF STIFFNESS MATRIX = 980 DOUBLE PREC. WORDS REQRD/AVAIL. DISK SPACE = 12.09/ 219.7 MB, EXMEM = 1956.5 MB

WARNING LOAD BEYOND ITS LENGTH. FULL LENGTH ASSUMED. MEMB **WARNING** LOAD BEYOND ITS LENGTH. FULL LENGTH ASSUMED. MEMB **WARNING** LOAD BEYOND ITS LENGTH. FULL LENGTH ASSUMED. MEMB 11:45:33 ++ Processing Element Stiffness Matrix. ++ Processing Global Stiffness Matrix. 11:45:33 11:45:33 ++ Processing Triangular Factorization. ++ Calculating Joint Displacements. 11:45:33 ++ Calculating Member Forces. 11:45:33

128. LOAD LIST 14 TO 30

129. PLOT DISP FILE 130. PRINT MAXFORCE ENVELOP LIST 1 2 4 6 7 8 TO 17

MEMBER FORCE ENVELOPE _____

ALL UNITS ARE KNS METE

MAX AND MIN FORCE VALUES AMONGST ALL SECTION LOCATIONS

MEMB	1. 1	FY/	DIST	LD	M2/	DIST	LD			
100		FZ	DIST	LD	MY	DIST	LD	FX	DIST	LD
1	MAX	109.90	.00	17	50.21	.00	19			
	THE COL	.00	.00	14	.00	.00	14	64.71 C	.00	19
4. juli 19	MIN	-99.06	2.67	25	-32.50	1.34	25	04.72		
	TILL	.00	2.67	30	.00	2.67		29.38 C	2.67	25
		建二苯基丁烷	200	2000						de Alberta Notae
2	MAX	111.26	.00	- 26	51.07	.00	26			
	100	.00	.00	14	.00	.00	14	103.65 C	00	19
	MIN	-90.47	2.66	19	-30.91	1.55	19			
		.00	2.66	30	.00	2.66	30	38.45 C	2.66	25
									ew Mari	
4	MAX	59.38	.00	14	50.50		27			
	7.3	.00	.00	14	.00	.00	14	98.97 C	.00	20
100	MIN	-79.43	2.67	27	An artist of the control of the cont	. 89	20			
		.00	2.67	30	.00	2.67	30	41.06 C	2.67	25
6	MAX	53.44	2.25	30	13.37	1.31	30			
	tunt	.00	.00	14	.00	.00	14	127.13 C	2 25	17
	MIN	-64.71	.00	19	-50.21	.00	19			
	133.14	.00	2.25	30	00	2.25	30	16.75 C	2.06	30
	1,41						, ,			
7	MAX	-5.78	.00	30	45.75	2.25	27			
1	1.5	.00	.00	14	.00	.00	1.4	191.50 C	2.25	23
1 1	MIN	-38.94	2:25	19	-44.59	.00	19			el Sala
		.00	2.25	30	.00	2.25	30	15.29 C	2.06	30
8	MAX	2.53	.00	26	23.40	2.25	20			
	UMA	00	.00	14	.00	.00	14	168.52 C	2 25	17
. 1 43	MIN	and the second second	2.25	20	-29.80	.00	27	100.32 C	2.23	
	1.1.1.14	-23.30	2.25	30	.00	2.25	30	19.02 C	2.06	30
4 4 T			1000	Arrent						

100		and a second	100				1 1				
MEMB	3	FY/	DIST	LD	MZ/	DIST	LD		· · · · · · · · · · · · · · · · · · ·		
: '		FZ	DIST	LD	МҮ	DIST	ľD	FX	DIST	LD	
9	MAX	23.21	.00	20	29.39	.00	27			,	
	IIII	00	.00	14	.00	.00	14	167.52	C 2.25	17	4
	MIN	1.14	2.25	25	-23.03	2.25	20	107.32	C 2.23	11	
. , .	11714	.00	2.25	30	.00	2.25	30	19.05	C 2.06	30	
	12 11	•00	2.23	30	.00	2.23	30	19.03	C 2.06	30	
10	MAX	38.24	.00	20	41.14	.00	20	Anna Service Transport			
	100	.00	.00	. 14	.00	.00	14	147.78	C 2.25	27	
	MIN	5.79	2.25	- 30	-45.65	2.25	27			·	
3.00		.00	2.25	30	.00	2.25	30	15.15	C 2.06	30	1.0
	ana Pilipi			12.3		tya 19	Maria di	and the second	e e e	the sound	
11	MAX	60.73	.00	20	45.74	.00	20	17 7.1		4.5	***
		.00	.00	14	.00	.00	14	93.50	C 2.25	20	
	4.5										the state of the state of
	MIN	-53.34	2.25	30	-13.42	1.31	30			100	
		.00	2.25	30	.00	2.25	. 30	16.81	C : 2.06	30	
10				2.0						1.4.	
12	MAX	-18.60	.00	30	34.11	.53	26				1.7 1/2
	ACTAL	.00	.00	14	.00	.00	14	.00	.00	14	
	MIN	-74.91	.53	17	-16.27	.00	18				4.175.0
		.00	.53	30	.00	.53	30	.00	.53	30	
13	MAX	-2.44	.00	26	42.17	.53	24				
		00		14	.00	.00	14	.00	.00	14	
	MIN	-25.05	.53	18	-1.07	.00	30		.00		
	124.93	.00	.53	30	.00	.53	30	.00	.53	30	
				in year				.i.ai.i.a.			
14	XAM	41.13	.00	26	42.17	.00	24		and the second		
		.00	.00	14	.00	.00	14	.00	.00	14	
	MIN	19	. 53	30	2.67	.53	30				
		.00	.53	30	.00	.53	30	.00	.53	30	
15	MAX	69.36	.00	26	24.69	.00	24				
	W 731	.00	.00	14	.00	.00	14	.00	.00	14	
	MIN	6.57 .00	.53	30	-20.32	.53	26	00	5.3	20	
		.00	.53	30	.00	. 53	30	.00	.53	30	
16	MAX	100.43	.00	24	-1.93	.00	30				
		.00	.00	14	.00	.00	14	.00	.00	14	
	MIN	13.05	.53	30	-71.68	.53	26				
		.00	. 53	30	.00	.53	30	.00	.53	30	
		, Elektrika i e	destruction								
17	MAX	-8.81	.00	30	10.07	. 53	20			4.14	
	MALET.	.00	.00	14	.00	.00	14	.00	.00	14	
11.11.11	MIN	-65.50	53	25	-40.54	.00	25			312.5	
		.00	.53	30	.00	.53	30	.00	.53	30	:
1.0		化多元基金 医毛髓炎	(1) 医乳腺管理				ethia i dhe		and the second		

^{131.} START CONC DESIGN 132. FC 25000.0

	TEM - S	2070.	ruri	f. T	~ 4	T4.	rc -	23.	MEA,	2175 -	TOOO.	٠.٨	250.	[A][A]
٠.			O Car				40.45							
	LEVEL	HEI	SHT		BAR	INFO		FROM		TO	100		ANCH	IOR .
Ċ.		(M)	1)	S	i di		1	(MM)		(MM))		STA	END
	Tell Attendation		200	1. 7			100	100			12.64	Supplied		Not 1
														. V

71. 3 - 16MM

^{133.} TRACK 2

^{134.} MAXMAIN 20.

^{135.} CLEAR 0.05 136. DESIGN BEAM 1 TO 5

MAX/MI	AL POS MOMENT TEEL= 598.MI N/ACTUAL BAR REQD. DEVELOPI	M2, ROW= .0 SPACING=	882./ 2 41./	.0194 ROWMN 441. MMS		
2	181. 7 -	12MM	0.	1694.	YES	ИО
REQD S'	AL NEG MOMENT TEEL= 776.M N/ACTUAL BAR REQD. DEVELOP	M2, ROW= .0 SPACING=	0043, ROWMX= 886./ 37./	.0194 ROWMN 148. MMS	= .0033	
3	179. 3 -	1.6MM	1858.	2670.	ИО	YES
REQD S	AL NEG MOMENT TEEL= 598.M N/ACTUAL BAR REQD. DEVELOP	M2, ROW= .(SPACING=	0033, ROWMX= 882./ 41./	.0194 ROWMN 441. MMS		
EQUIRED R	EINF. STEEL S	UMMARY :				
ECTION MM)	REINF STEEL	(+VE/-VE)	MOMENTS(+		LOAD(+VE	/-VE)
0	0./	817.	0./	50.	0/	19
222.	0./	540.	0./	34.	0/	
445.		310.	1./	20.	25/	the state of the state of
667	226./	121.	14./	8.	25/	
890.	384./	59.	24./	4.	25/	
112.	482./	27.	30./	2.	25/	
1335.	520./	2.	33./	0.	25/	
l557. L780.	496./ 420./	0. 0.	31./ 26./	0. 0.	25/ 24/	
2002.	292./	0.	18./	0.	17/	
2225.	163./	0.	10./	ő.	19/	
	59./	191	4 /	12.	19/	and the second second
		the second second second second	1.00	20		^-
2447. 2670.	28./	517.	2./	32.	30/	25
2447. 2670. B E AT START	28./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu=	1 DEST 96.70 K OVIDE 12 MM 85.86 K	GN RESU NS VC= 144. BARS AT 87.	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs=	HEAR = .00 DR 556. = .00) KNS MM) KNS
2447. 2670. B E AT START	28./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu=	1 DEST = 96.70 K DVIDE 12 MM = 85.86 K DVIDE 12 MM	GN RESU NS VC= 144. BARS AT 87. NS VC= 144.	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs=	HEAR = .00 DR 556. = .00) KNS MM) KNS
2447. 2670. B E AT START AT END	28./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu=	1 DEST = 96.70 K DVIDE 12 MM = 85.86 K DVIDE 12 MM	G N R E S U NS Vc= 144. BARS AT 87. NS Vc= 144. BARS AT 87.	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs=	HEAR = .00 DR 556. = .00) KNS MM) KNS MM
2447. 2670. B E AT START AT END	28./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu= PRO	1 DEST 96.70 K OVIDE 12 MM 85.86 K OVIDE 12 MM 2669	G N R E S U NS Vc= 144. BARS AT 87. NS Vc= 144. BARS AT 87.	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs= MM C/C FC	EAR00 DR 55600 DR 556.) KNS MM) KNS MM 2J
2447. 2670. B E AT START AT END	28./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu= PRO	1 DEST 96.70 K OVIDE 12 MM 85.86 K OVIDE 12 MM 2669	G N R E S U NS Vc= 144. BARS AT 87. NS Vc= 144. BARS AT 87.	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs= MM C/C FC	EAR00 DR 55600 DR 556.) KNS MM) KNS MM 2J 3.TO8267
2447. 2670. B E AT START AT END	28./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu= PRO	1 DEST 96.70 K OVIDE 12 MM 85.86 K OVIDE 12 MM 2669	G N R E S U NS Vc= 144. BARS AT 87. NS Vc= 144. BARS AT 87.	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs= MM C/C FC	EAR00 DR 55600 DR 556.) KNS MM) KNS MM 2J 3.TO8267
2447. 2670. B E AT START AT END	28./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu= PRO	1 DEST 96.70 K OVIDE 12 MM 85.86 K OVIDE 12 MM 2669	G N R E S U NS Vc= 144. BARS AT 87. NS Vc= 144. BARS AT 87.	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs= MM C/C FC	EAR00 DR 55600 DR 556.) KNS MM) KNS MM 2J 3.TO8267
2447. 2670. B E AT START AT END 1J No16cHc1	28./ E A M N O. SUPPORT - Vu= PRC SUPPORT - Vu= PRC	1 DEST 96.70 K OVIDE 12 MM 85.86 K OVIDE 12 MM 2669	GN RESUNS VC= 144. BARS AT 87. NS VC= 144. BARS AT 87. X 999X 249	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs= MM C/C FC	EAR00 DR 55600 DR 556.) KNS MM) KNS MM 2J 3.TO8267
2447. 2670. B F AT START AT END 1J No16cHc1	28./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu= PRO	1 DEST 96.70 K OVIDE 12 MM 85.86 K OVIDE 12 MM 2669	G N R E S U NS Vc= 144. BARS AT 87. NS Vc= 144. BARS AT 87.	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs= MM C/C FC	EAR00 DR 55600 DR 556.) KNS MM) KNS MM 2J
2447. 2670. B E AT START AT END 1J No16cHc1	28./ E A M N O. SUPPORT - Vu= PRC SUPPORT - Vu= PRC	1 DEST = 96.70 K OVIDE 12 MM = 85.86 K OVIDE 12 MM 2669	GN RESUNS VC= 144. BARS AT 87. NS VC= 144. BARS AT 87. X 999X 249	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs= MM C/C FC	EAR00 DR 55600 DR 556.) KNS MM) KNS MM 2J 3.TO8267
2447. 2670. B E AT START AT END 1J No16cHc1	28./ E A M N O. SUPPORT - Vu= PRO PRO PRO 71. 0.TO 26	1 DEST = 96.70 K OVIDE 12 MM = 85.86 K OVIDE 12 MM 2669	GN RESUNS VC= 144. BARS AT 87. NS VC= 144. BARS AT 87. X 999X 249	LTS - SF 98 KNS Vs= MM C/C FC 98 KNS Vs= MM C/C FC	EAR00 DR 55600 DR 556.) KNS MM) KNS MM 2J

DN - 20	60. MM FY -	414. FC -	25. MPA, S	SIZE - 1000.	X 250	. MMS
EVEL	HEIGHT BAR	INFO	FROM	TO		CHOR
. t. • t.	(MM)		(MM)	(MM)	STA	END
1	71. 3 -	16MM	80.	2660.	МО	YES
CRITI	CAL POS MOMENT	= 30.9	1 KN-MET AT	1552.MM, L	OAD 19	-
REQD	STEEL= 598.M	M2, $ROW=$.	0033, ROWMX=	.0194 ROWMN	= .0033	;
MAX/M	IIN/ACTUAL BAR	SPACING= ::	882./ 41./	/ 441. MMS		1
BASIC	/REQD. DEVELOP	MENT LENGT	'H = 316./	474. MMS		1
en e						-1
2	181. 7 -	12MM	0.	1245.	YES	ИО
CRITI	CAL NEG MOMENT	 = 51.0	17 KN-MET AT	0 MM T	 OAD 26	-
REQD	STEEL= 790.M	M2, ROW= .	0044, ROWMX=	.0194 ROWMN	= .0033	
MAX/M	IIN/ACTUAL BAR	SPACING= :	886./ 37.,	/ 148. MMS		1
	REQD. DEVELOP					1
						- ∤, + :
3	179. 3 -	16MM	1627	2660.	МО	YES
						-
CRITI	CAL NEG MOMENT	= 22.9	8 KN-MET AT	2660.MM, L	OAD 18	į
	STEEL= 598.M				= .0033	1 55
	IIN/ACTUAL BAR					$A \in \mathbb{N}$
DASIC	7 KEQD. DEVELOR	MENI LENGI	'H = 316./	478. MMS		1
DASIC	7 REQU. DEVELOR		'H = 316./	478. MMS		- -
DASIC	7 REQU. DEVELOP	MENT LENGT	'H = 316./	478. MMS		-1 -1
	REINF. STEEL S		H = 316./	478. MMS		 - - -
EQUIRED	REINF, STEEL S	UMMARY :				-
EQUIRED ECTION		UMMARY :	MOMENTS (+	478. MMS +VE/-VE) -MET)	LOAD (+V)	 - E/-VE)
EQUIRED ECTION MM)	REINF. STEEL S REINF STEEL (SQ. MM	UMMARY : (+VE/-VE)	MOMENTS (+ (KNS-	+VE/-VE) -MET)		
EQUIRED ECTION MM) 0.	REINF. STEEL S REINF STEEL (SQ. MM	UMMARY : 	MOMENTS (+ (KNS- 0./	+VE/-VE) -MET)	0/	26
EQUIRED ECTION MM) 0. 222.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./	UMMARY : (+VE/-VE)) 832. 547.	MOMENTS (+ (KNS- 0./ 0./	+VE/-VE) -MET) 51. 34.	0/ 0/	26 27
EQUIRED ECTION MM) 0.	REINF. STEEL S REINF STEEL (SQ. MM	UMMARY : 	MOMENTS (+ (KNS- 0./	+VE/-VE) -MET) 51. 34. 20.	0/ 0/ 0/	26 27 24
EQUIRED ECTION MM) 0. 222. 443.	REINF STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./	UMMARY: (+VE/-VE)) 832. 547. 319. 143.	MOMENTS (+ (KNS- 0./ 0./ 0./	+VE/-VE) -MET) 51. 34. 20. 9.	0/ 0/	26 27 24
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5.	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20.	0/ 0/ 0/ 19/	26 27 24 24
EQUIRED CTION MM) 0. 222. 443. 665. 887. 1108.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0.	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0.	0/ 0/ 0/ 19/ 19/	26 27 24 24 24
EQUIRED CTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./ 494./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0.	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0.	0/ 0/ 0/ 19/ 19/ 19/ 19/	26 27 24 24 24 0 0
EQUIRED CTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0.	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 0.	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/	26 27 24 24 24 0 0
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0. 0.	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 0. 0.	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 19/	26 27 24 24 24 0 0 0 0
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773. 1995. 2217.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./ 167./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0. 0. 32.	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 0. 0. 2.	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 19/ 27/	26 27 24 24 24 0 0 0 0
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773. 1995. 2217. 2438.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0. 0. 32.	MOMENTS (4 (KNS- 0./ 0./ 7./ 19./ 26./ 31./ 31./ 28./ 21./ 11./ 4./	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 2. 11.	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 19/ 27/ 27/	26 27 24 24 24 0 0 0 0 0 18
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773. 1995. 2217. 2438.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./ 167./ 64./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0. 0. 0. 32. 178.	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 0. 0. 2.	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 19/ 27/	26 27 24 24 24 0 0 0 0
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773. 1995. 2217. 2438. 2660.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./ 167./ 64./ 0./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0. 0. 32. 178. 364.	MOMENTS (+ (KNS- 0./ 0./ 0./ 7./ 19./ 26./ 31./ 31./ 28./ 21./ 11./ 4./ 0./	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 2. 11. 23.	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 27/ 27/ 0/	26 27 24 24 24 0 0 0 0 0 0
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773. 1995. 2217. 2438. 2660.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./ 167./ 64./	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0. 0. 32. 178. 364.	MOMENTS (+ (KNS- 0./ 0./ 0./ 7./ 19./ 26./ 31./ 31./ 28./ 21./ 11./ 4./ 0./	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 2. 11. 23.	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 27/ 27/ 0/	26 27 24 24 24 0 0 0 0 0 18
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773. 17995. 2217. 2438. 2660.	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./ 167./ 64./ 0./ E A M N O.	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0. 0. 32. 178. 364.	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 2. 11. 23.	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 27/ 27/ 0/	26 27 24 24 24 0 0 0 0 0 0 18 18 18
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773. 17995. 2217. 2438. 2660. B AT START	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./ 167./ 64./ 0./ E A M N O.	UMMARY:	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 2. 11. 23. JLTS - SH .98 KNS VS=	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 27/ 27/ 0/ EAR	26 27 24 24 24 0 0 0 0 0 18 18 18
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773. 1995. 2217. 2438. 2660. B AT START	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./ 167./ 64./ 0./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu=	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0. 0. 32. 178. 364. 2 D E S I 98.06 K VIDE 12 MM 77.26 K	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 2. 11. 23. J L T S - SH .98 KNS Vs= .MM C/C FO .98 KNS Vs=	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 27/ 27/ 0/ EAR .00 R 554.	26 27 24 24 24 0 0 0 0 0 18 18 18
EQUIRED ECTION MM) 0. 222. 443. 665. 887. 1108. 1330. 1552. 1773. 1995. 2217. 2438. 2660. B AT START	REINF. STEEL S REINF STEEL (SQ. MM 0./ 0./ 0./ 111./ 294./ 420./ 487./ 494./ 439./ 325./ 167./ 64./ 0./ E A M N O. SUPPORT - Vu= PRO SUPPORT - Vu=	UMMARY: (+VE/-VE)) 832. 547. 319. 143. 5. 0. 0. 0. 32. 178. 364. 2 D E S I 98.06 K VIDE 12 MM 77.26 K	MOMENTS (+	+VE/-VE) -MET) 51. 34. 20. 9. 0. 0. 0. 2. 11. 23. J L T S - SH .98 KNS Vs= .MM C/C FO .98 KNS Vs=	0/ 0/ 0/ 19/ 19/ 19/ 19/ 19/ 27/ 27/ 0/ EAR .00 R 554.	26 27 24 24 24 0 0 0 0 0 18 18 18

1	1	1
1	工作的 化二氯乙烷烷 医氯化	I and the second second
1 0000000	Teed in Jack Spain AR	000
j 7#12	3#16	3#16
1	1	l 000
1		
	11	

REAM NO. 3 DESIGN RESULTS - FLEXURE

DEN - 20	370. 1111			,		
LEVEL	HEIGHT		BAR INFO	FROM	то	ANCHOR
	(MM)			(MM)	(MM)	STA END
		77				
		1.3.1	2 1 (2004	A	0.020	VEC VEC

	1	71. 3 - 16MM 0. 2670. YES	YE:
1		CRITICAL POS MOMENT= 33.03 KN-MET AT 1335.MM, LOAD 27	
1		REQD STEEL= 598 MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 MAX/MIN/ACTUAL BAR SPACING= 882./ 41./ 441. MMS	!
1		BASIC/REQD. DEVELOPMENT LENGTH = 316./ 474. MMS	

CRITICAL	NEG MOME	NT= 37.9	4 KN-MET	AT 0.M	M, LOAD 17
		.MM2, ROW≃ . R SPACING=			EE00. = MMWC
		OPMENT LENGT			

	3 179. 3 - 16MM 1635. 2670. NO YE
1	CRITICAL NEG MOMENT= 34.35 KN-MET AT 2670.MM, LOAD 20
i	REQD STEEL= 598.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033
i	MAX/MIN/ACTUAL BAR SPACING= 882./ 41./ 441. MMS
ļ	BASIC/REQD. DEVELOPMENT LENGTH = 316./ 478. MMS
ŧ	<u> </u>

REQUIRED REINF. STEEL SUMMARY :

SECTION REINF STEEL (+VE/-VE)	MOMENTS (+VE/-VE)	LOAD(+VE/-VE)
SECTION REINF STEEL (+VE/-VE) (MM) (SQ. MM)	(KNS-MET)	EOAD (TVE) - VE)
0. 0./ 610.	0./ 38.	0/ 17
222. 0./ 268.	0./	0/ 17
445. 47./ 67. 67.	3./	27/ 18
667. 254./ 0.	16./ 0.	27/ 0
890. 405./ 0.	26./	27/ 0
1112. 497./	31./	27/ 0
1335. 528./	33./	27/ 0
1557. 498./ 0.	31./ 0.	27/ 0
1780. 406./ 0.	26./ 0.	27/ 0
2002. 256./ 0.	16./ 0.	27/ 0
2225. 49./ 125.	3./ 8.	27/ 19
2447. 0./ 311.	.0./ 20.	0/ 19
2670. 0./ 550.	0./ 34.	0/ 20

BEAM NO. 3 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu= 89,19 KNS 144.98 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 87. MM C/C FOR 556. MM SUPPORT - Vu= 87.67 KNS Vc= 144.98 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 87. MM C/C FOR 556. MM

3J	2669X 999X 249	4J
3No16cHc171. 0.TO 2670	3Nc	16 H 179.1635.TOc26707
<u> </u>	and the world the second of the second of	
000 3#16 3#	16 000	

7 533		C30							0.0		~		4 4 4 4		^ ~ ~	
LLN	2	6/U.	MM	LΥ	-	414.	FC	-	25.	MPA.	SIZE	_	1000.	Х	250.	MMS

	GHT BAR INFO M)	FROM (MM)	TO (MM)		NCHOR A END
1	71. 3 - 16MM	0.	2476	5. YES	s no
REQD STE MAX/MIN/	POS MOMENT= EL= 598.MM2, R ACTUAL BAR SPACI QD. DEVELOPMENT	OW= .0033, R NG= 882./	OWMX= .0194 41./ 441	ROWMN= .003: MMS	

2 179. 3 - 16MM 0. 923. YES	NO I
CRITICAL NEG MOMENT= 22.34 KN-MET AT 0.MM, LOAD 18 REQD STEEL= 598.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 MAX/MIN/ACTUAL BAR SPACING= 882./ 41./ 441. MMS BASIC/REQD. DEVELOPMENT LENGTH = 316./ 478. MMS	

, i	3 181. 7 - 12MM 1533. 2670. NO	YES
	CRITICAL NEG MOMENT= 50.50 KN-MET AT 2670.MM, LOAD 27	
	REQD STEEL= 781.MM2, ROW= .0043, ROWMX= .0194 ROWMN= .0033	1
	MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 148. MMS	. I - 1
	BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS	1

REQUIRED REINF. STEEL SUMMARY:

SECTION REINF STEEL (+VE/-VE)	MOMENTS(+VE/-VE) LOAD(+VE/-VE)
(MM) (SQ. MM)	(KNS-MET)
0. 0./ 354.	
222. 63./ 161.	0./ 22. 0/ 18 4./ 10. 27/ 18
445. 167./ 8.	11./ 1. 27/ 18
667. 237./	15./ 0. 20/ 0
270./	17./ 0. 20/ 0

garage and				1.0	
SECTION	REINF STE	EL(+VE/-VE)	MOMENTS (+VE	/-VE)	LOAD(+VE/-VE)
(MM)	(SQ.	MM)	(KNS-M	ET)	
1110	0.67	^	17.		20/ 0
1112.	267./		17./	0.	20/ 0
1335	242./		15./	0.	15/ 0
1557.	212./		14./	0.	14/ 0
1780.	147./		9./	0.	14/ 0
2002	46./ 0./	· ·	3./	8.	14/ 27 0/ 27
2225.			0./	20. 34.	0/ 27 0/ 27
2447. 2670.	0./	and the second s	0./	34. 50.	0/ 27
В	EAM NO.	4 DESI	GN RESU	LTS - S	HEAR
AT START		CONTRACTOR AND	NS Vc= 144.9	8 KNS V	s= .00 KNS
N. (1) (1)			NOT REQUIRED. NS Vc= 144.9	O PAIC II	- 00 1010
AT END	SUPPORT -		.NS VC= 144.9 IBARS AT 87.		
		EKOATOR IS LIL	IDAKS AL OI.	MM C/C I	OK 334. FILE
4Ј		2669	X 999X 249		و
,	171. 0.TO		and the second s		33.TO*2670c 8
			711012		
	er jer jakir				
<u> </u>				3.41 85.5	
<u> </u>					
	000				000000
3#16		3#16		7#1	the transfer of the second second
	000		000		
		i i i		ii	
		Dii bash		ii i	
В	FAM NO	5 DES1	IGN RESU	т. т с –	FLEXIIRE
					LEBROKE
LEN - 2	660. MM FY	- 414. FC	- 25. MPA, S.	IZE - 100	0. X 250. MM
			H: <u>보</u> 함 기자교로		
LEVEL	HEIGHT	BAR INFO	FROM	TO	ANCHOR
	(MM)		(MM)	(MM)	STA EN
			<u>an an a</u>		
1	71.	3 - 16MM	0.	2469.	YES NO
1					
CRIT	ICAL POS MO	MENT= 18.	10 KN-MET AT	2660.MM,	LOAD 25
REQD	STEEL= 5	98.MM2, ROW≔	.0033, ROWMX=	.0194 ROW	MN= .0033
			882./ 41./	441. MM	s
			TH = 316./	474. MMS	
1					
	120	2 _ 1 <i>6</i> MM		700	VECTOR
2	179.	3 - 16MM	0.	700.	YES NO
I CDTM	TCAL NEC MO	MENT= 10	15 KN-MET AT	О ММ	10AD 25 1
I WEAD	MIN/ACTITAT	BAR SPACING	.0033, ROWMX= 882./ 41./	441 MW	g 1
		ELOPMENT LENG		478. MMS	
					<u> </u>
3	181.	7 - 12MM	860.	2660.	NO YE
				vi s gli i i i i	어머니 있는 사람

CRITICAL NEG MOMENT= 45.74 KN-MET AT 2660.MM, LOAD 20 | REQD STEEL= 704.MM2, ROW= .0039, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 148. MMS | BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS

REQUIRED REINF. STEEL SUMMARY :

SECTION (MM)	REINF STEEL (SQ. MM		MOMENTS (-VE/-VE) -MET)	LOAD (+)	/E/-VE)
	(02		(IIII)	CHIE /		
0.	29./	286.	2./	18.	30/	25
222.	39./	99.	2./	6.	30/	25
443	134./	0. 1	9./	· 0.	20/	0
665.	212./	0.	13./	0.	20/	0
887.	263./	0.	17./	0.	27/	0
1108.	281./	0.	18./	0.	28/	0
1330.	286./	2.	18./	0.	25/	30 -
1552.	254./	28.	16./	2.	25/	30
1773.	186./	60.	12./	4.	25/	30
1995	82./	98.	5./	6.	25/	30
2217.	0./	260.	0./	17.	0/	20
2438.	0./	478.	0 /	30.	0/	20
2660.	0./	741.	0./	46.	. 0/	20

BEAM NO. 5 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu= 50.15 KNS Vc= 144.98 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.

AT END SUPPORT - Vu= 68.12 KNS Vc= 144.98 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 87 MM C/C FOR 332 MM

3No16 H 171. 0.TO 2469No12 H 181. 860.TO 2660 5*12c/c 8												
	==== 7 .	2c/c 87	5*12c	*****	2660	860.TO	I 181.	69No12	.TO 24	. 0	н 171	3No16
		-1 -1 -1					11, 1					

ij		真是多类型的 透光的	
١	000	0000000	0000000
.	3#16	7#12	7 #12
-	000	000	
1		化基氯酚 建氯化物 经基本价格 化	
-[그 전환 전상 경우를 잃었다.		1 克斯特斯斯 医多元 网络斯
-			

137 CLEAR 0.065

138. DESIGN BEAM 6 7 11 12 TO 25

BEAM NO. 6 DESIGN RESULTS - FLEXURE

LEN - 2250. MM FY - 414. FC - 25. MPA, SIZ	E - 100	0. X 250.	. MMS
[일 사회 보다 생활 등에 살아 들었다는 보다는 집에도 그들어 보다는			
LEVEL HEIGHT BAR INFO FROM	TO	ANG	CHOR
(MM)	(MM)	STA	END
	<u> 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 </u>		
가 생생들이 가는 사람들이 가장하면 되었다. 기계를 받았다고 가능하고 있다면 가장 가장 하는데 가장하는		ALCOHOLOGICAL PROPERTY.	4 1 No.

| CRITICAL POS MOMENT= 50.21 KN-MET AT 0.MM, LOAD 19 | REQD STEEL= 854.MM2, ROW= .0051, ROWMX= .0194 ROWMN= .0033 |
MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 127. MMS |
BASIC/REQD. DEVELOPMENT LENGTH = 177./ 338. MMS | 5 - 12MM 110. 2250. NO YES 166. CRITICAL NEG MOMENT= 13.37 KN-MET AT 1312.MM, LOAD 30 | REQD STEEL= 554.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 222. MMS | BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS REQUIRED REINF. STEEL SUMMARY : _____ SECTION REINF STEEL(+VE/-VE) MOMENTS(+VE/-VE) LOAD(+VE/-VE) (SQ. MM) (KNS-MET) 0. 0 19/ 0 50./ 904./ 0. 39./ 0. 0. 0. 701./ 187. 17/ 24/ 0. 557./ 32./ 375. 70. 459./ 26 / 24/ 30 4 562. 371./ 70. 145. 24/ 30 21./ 750. 294./ 198. 227./ 227. 12. 24/ 17./ 937. 13./ 1125. 227./ 227. 175./ 230. 10./ 13. 1312. 25/ 148./ 206. 1500. 12. 186. 8./ 25/ 19 1687. 133./ 11. 8./ 9./ 10. 25/ 1875. 130./ 169. 19 14/ 26 137. 8. 2062. 159./ 147. 2250. 281./ 16./ BEAM NO. 6 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 60.41 KNS Vc= 132.52 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 80. MM C/C FOR 281. MM AT END SUPPORT - Vu= 43.02 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2249X 999X 249 00000 1 (00000 1 1 | 5#12 8#12 | 5#12 00000000 00000000 0000000 BEAM NO. 7 DESIGN RESULTS - FLEXURE LEN - 2250. MM FY - 414. FC - 25. MPA, SIZE - 1000. X 250. MMS

HEIGHT

BAR INFO

FROM

(MM)

TO:

(MM)

ANCHOR STA END

CRITICAL POS MOMENT=	1	84. 7 -	12MM	0.	1471.	YES NO
CRITICAL NEG MOMENT= 45.75 KN-MET AT 2250.MM, LOAD 27 REQD STEEL= 774.MM2, ROW=.0047, ROWMX=.0194 ROWMN=.0033 MAX/MIN/ACTUAL BAR SFRCING= 886./ 37./ 148. MMS BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS	REQD :	CAL POS MOMENT STEEL= 763.M IN/ACTUAL BAR	= 44.59 M2, ROW= (SPACING=	046, ROWMX= .886./ 37./	2250 MM, 0194 ROWM 148 MMS	LOAD 19 N= .0033
MRAY/MIN/ACTUAL BAR SPACING= 886./ 37. 148. MMS BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS BASIC/REQD. DEVELOPMENT LENGTH = 177./ 352. MMS BASIC/REQD. DEVELOPMENT LENGTH = 177./ 312. DEVELOPMENT LE	2	166. 7 -	12MM	110.	2250.	NO YES
SECTION REINF STEEL(+VE/-VE) MOMENTS(+VE/-VE) LOAD(+VE/-VE) (MM) (SQ. MM) (KNS-MET) 0. 797./ 0. 45./ 0. 19/ 0 187. 661./ 0. 37./ 0. 19/ 0 375. 527./ 0. 30./ 0. 19/ 0 562. 335./ 16. 23./ 1. 19/ 25 750. 266./ 45. 15./ 3. 19/ 25 937. 139./ 75. 8./ 4. 19/ 25 1125. 13./ 113. 1./ 7. 19/ 24 1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAM NO. 7 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUES ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUES ARE NOT REQUIRED. 7812	REQD	STEEL= 774.M IN/ACTUAL BAR	M2, ROW≃ (SPACING=	0047, ROWMX= . 886./ 37./	0194 ROWM 148 MMS	N≃ .0033 [
(MM) (SQ. MM) (KNS-MET) 0. 797./ 0. 45./ 0. 19/ 0 187. 661./ 0. 37./ 0. 19/ 0 375. 527./ 0. 30./ 0. 19/ 0 562. 395./ 16. 23./ 1. 19/ 25 750. 266./ 45. 15./ 3. 19/ 25 937. 139./ 75. 8./ 4. 19/ 25 1125. 13./ 113. 1./ 7. 19/ 24 1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 B E A M N O. 7 D E S I G N R E S U L T S - SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2 2 2249X 999X 249 12J 7Nol21H H84.6. 0. TOT147150 2 2249X 999X 249 12J	REQUIRED	REINF. STEEL S	UMMARY :			
0. 797./ 0. 45./ 0. 19/ 0 187. 661./ 0. 37./ 0. 19/ 0 375. 527./ 0. 30./ 0. 19/ 0 562. 395./ 16. 23./ 1. 19/ 25 750. 266./ 45. 15./ 3. 19/ 25 937. 139./ 75. 8./ 4. 19/ 25 1125. 13./ 113. 1./ 7. 19/ 24 1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 B E A M N O. 7 D E S I G N R E S U L T S - SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STITROPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STITROPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150		(SQ. MM)	MOMENTS (+V	YE/-VE) MET)	LOAD(+VE/-VE)
187. 661./ 0. 37./ 0. 19/ 0 375. 527./ 0. 30./ 0. 19/ 0 562, 395./ 16. 23./ 1. 19/ 25 750. 266./ 45. 15./ 3. 19/ 25 937. 139./ 75. 8./ 4. 19/ 25 1125. 13./ 113. 1./ 7. 19/ 24 1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 425. 0./ 24. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 B E A M N O. 7 D E S I G N R E S U L T S - SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150	0			45 /	0	10/ 0
375. 527./ 0. 30./ 0. 19/ 0 562. 395./ 16. 23./ 1. 19/ 25 750. 266./ 45. 15./ 3. 19/ 25 937. 139./ 75. 8./ 4. 19/ 25 1125. 13./ 113. 1./ 7. 19/ 24 1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 B E A M N O. 7 D E S I G N R E S U L T S - SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150		ing the fire of th				
562. 395./ 16. 23./ 1. 19/ 25 750. 266./ 45. 15./ 3. 19/ 25 937. 139./ 75. 8./ 4. 19/ 25 1125. 13./ 113. 1./ 7. 19/ 24 1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAMNO. 7 DESIGNRESULTS - SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J	and the second second		0.		0.	19/ 0
750. 266./ 45. 15./ 3. 19/ 25 937. 139./ 75. 8./ 4. 19/ 25 1125. 13./ 113. 1./ 7. 19/ 24 1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAM NO. 7 DESIGNRESULTS - SHEAR AT START SUPPORT - Vu= 38.94 kNs Vc= 132.52 kNs Vs= .00 kNs STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 kNs Vc= 132.52 kNs Vs= .00 kNs STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150						
937. 139./ 75. 8./ 4. 19/ 25 1125. 13./ 113. 1./ 7. 19/ 24 1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAM NO. 7 DESIGNRESULTS-SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150	A	266 /	45			
1125. 13./ 113. 1./ 7. 19/ 24 1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAMNO. 7 DESIGNRESULTS - SHEAR AT START SUPPORT - Vu= 38.94 kNS Vc= 132.52 kNS Vs= .00 kNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 kNS Vc= 132.52 kNS Vs= .00 kNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H 184.6. 0.TOT147150	Contract to the contract of th					
1312. 0./ 193. 0./ 11. 0/ 24 1500. 0./ 297. 0./ 17. 0/ 27 1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAMNO. 7 DESIGNRESULTS-SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150	and the second second		4.7			
1500. 0./ 297. 0./ 17. 0/27 1687. 0./ 425. 0./ 24. 0/27 1875. 0./ 554. 0./ 31. 0/27 2062. 0./ 685. 0./ 39. 0/27 2250. 0./ 819. 0./ 46. 0/27 BEAMNO. 7 DESIGNRESULTS-SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0. TOT147150	The second secon		and the second s	the state of the s		
1687. 0./ 425. 0./ 24. 0/ 27 1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAM NO. 7 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150	•	0./				
1875. 0./ 554. 0./ 31. 0/ 27 2062. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAM NO. 7 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS						
2052. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAM NO. 7 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 38.94 kNS Vc= 132.52 kNS Vs= .00 kNS		0./	425.	the state of the s		0/ 27
2052. 0./ 685. 0./ 39. 0/ 27 2250. 0./ 819. 0./ 46. 0/ 27 BEAM NO. 7 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 38.94 kNS Vc= 132.52 kNS Vs= .00 kNS	the second of the second of the second	0./	554.			0/ 27
BEAM NO. 7 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 38.94 kNS Vc= 132.52 kNS Vs= .00 kNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 kNS Vc= 132.52 kNS Vs= .00 kNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150		0./	685.			0/ 27
AT START SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150	2250.	0./	819.	0.7	46.	0/ 27
STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150	В	EAM NO.	7 DESI	GN RESU	LTS-S	HEAR
AT END SUPPORT - Vu= 38.94 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 2J 2249X 999X 249 12J 7No121H H84.6. 0.TOT147150	AT START	9.7			2 KNS Vs	= .00 KNS
TNo121H H84.6. 0.TOT147150	7.00 DVD	STI	KKUPS ARE N	OT REQUIRED.	A	
7No121H H84.6. 0.TOT147150	AT END				OZKNS VS	≠ .00 KNS
	2J		2249	x 999x 249		12J
	****	**************************************				
7#12	7No121H H	84.6. 0.TOT147	150			
7#12						
	and the second second	00000	7#12		1 1 3 3 3 3 3 3 3 3	000000

EN - 2250.	MM FY -	414. FC -	25. MPA, SI	ZE - 1000.	X 250.	MMS
EVEL HEIG	M)		· ·	TO (MM)	ANC STA	
1	34. 5 -	12MM	117.	2250.	NO	YES
REQD STEE	EL= 554.M ACTUAL BAR	M2, ROW= .0 SPACING=	KN-MET AT 033, ROWMX= . 886./ 37./ = 177./	0194 ROWMN= 222. MMS		
2 1	66. 7 -	12MM	0.	2250.	YES	YES
REQD STE	EL= 774.M ACTUAL BAR	M2, ROW= .0 SPACING=	KN-MET AT 0047, ROWMX= . 886./ 37./ H = 177./	0194 ROWMN 148. MMS		
	NF. STEEL S REINF STEEL		MOMENTS (+V	10 /_VD\	LOAD(+VE	/-VF)
ECTION MM)	(SQ. MM		MOMENTS (+V		LOAD (+VE	,/ -VS)
0.	0./	819.	0./	46.	0/	
187.	0./	615.	0./	35.	0/	
375.	0./	466.	0./	27.	0/	
562.	69./	363.	4./	21. 16.	30/ 30/	
750. 937.	145./ 198./	269. 186.	8./ 12./	11.	30/	
1125	228./	114.	13./	7	30/	4.5
1312.	231./	62.	13./	4	30/	
1500.	207./	41.	12./	2.	30/	25
1687.	154./	33.	9./	2.	30/	and the second second
1875.	117./	35.	7./	2.	20/	
	73./	71.	4./	4	27/ 27/	18 30
2062. 2250.	70./	206.	4./	12.	- ′ ′	
2062. 2250.			4./ GN RESU			
2062. 2250. B E F	A M NO. JPPORT - Vu=	11 DESI = 56.43 K	GN RESUNS Vc= 132.	L T S - SH 52 KNS Vs=	IEAR 0(
2062. 2250. B E A AT START SU	A M N O. JPPORT - Vu- PRO JPPORT - Vu-	11 DESI = 56.43 K OVIDE 12 MM = 42.91 K	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132.	LTS-SH 52 KNS Vs= MM C/C FO	IEAR 0(DR 94.	MM
2062. 2250. B E A AT START SU	A M N O. JPPORT - Vu- PRO JPPORT - Vu-	11 DESI = 56.43 K OVIDE 12 MM = 42.91 K	GN RESU NS Vc= 132. BARS AT 80.	LTS-SH 52 KNS Vs= MM C/C FO	IEAR 0(DR 94.	MM
2062. 2250. B E A AT START SU	A M N O. JPPORT - Vu- PRO JPPORT - Vu-	11 DESI = 56.43 K OVIDE 12 MM = 42.91 K IRRUPS ARE	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132.	LTS - SH 52 KNS Vs= MM C/C FO 52 KNS Vs=	IEAR 0(DR 94.	MM
2062. 2250. BEA AT START SU AT END SU	A M N O. JPPORT - Vu- PRO JPPORT - Vu-	11 DESI = 56.43 K OVIDE 12 MM = 42.91 K IRRUPS ARE	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132. NOT REQUIRED.	LTS - SH 52 KNS Vs= MM C/C FO 52 KNS Vs=	IEAR 0(DR 94.	MM O KNS
2062. 2250. B E A AT START SU AT END SU 6J	A M N O. JPPORT - Vu= PRO JPPORT - Vu= ST	11 DESI = 56.43 K OVIDE 12 MM = 42.91 K IRRUPS ARE	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132. NOT REQUIRED. X 999X 249	L T S - SH 52 KNS Vs= MM C/C FC 52 KNS Vs=	EAR 0(DR 94. 0(MM D KNS 32J
2062. 2250. B E A AT START SU AT END SU 6J	A M N O. JPPORT - Vu= PRO JPPORT - Vu= ST	11 DESI = 56.43 K OVIDE 12 MM = 42.91 K IRRUPS ARE	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132. NOT REQUIRED.	L T S - SH 52 KNS Vs= MM C/C FC 52 KNS Vs=	EAR 0(DR 94. 0(MM D KNS 32J
2062. 2250. B E A AT START SU AT END SU 6J	A M N O. JPPORT - Vu= PRO JPPORT - Vu= ST	11 DESI = 56.43 K OVIDE 12 MM = 42.91 K IRRUPS ARE	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132. NOT REQUIRED. X 999X 249	L T S - SH 52 KNS Vs= MM C/C FC 52 KNS Vs=	EAR 0(DR 94. 0(MM D KNS 32J

00000

00000

7#12

EN - 5	34. MM FY -	414. FC -	25. MPA, S	IZE - 1000.	X 250. MMS
EVEL	HEIGHT BA (MM)		FROM (MM)	TO (MM)	ANCHOR STA END
1	84. 5	- 12MM		534.	YES YES
MAX/M	STEEL= 554. IN/ACTUAL BAR	MM2, ROW= . SPACING≃	7 KN-MET AT 0033, ROWMX= 886./ 37./ H = 177./	.0194 ROWMN 222. MMS	= .0033
2	164. 3	- 16MM	0.	534.	YES YES
REQD:	STEEL= 577. IN/ACTUAL BAR	MM2, ROW= . SPACING=	1 KN-MET AT 0035, ROWMX= 882./ 41./ H = 316./	.0194 ROWMN 441. MMS	= .0033
REQUIRED I	REINF. STEEL	SUMMARY :			
SECTION (MM)	REINF STEE (SQ. M		MOMENTS (+ (KNS-		LOAD (+VE/-VE
0.	281./	147.	16./	9.	14/ 26
	227./	183.	13./	11.	14/ 26
44.		210		1.3	20/ 20
89.	179./	219. 255.	10./	13. 15	30/ 26 30/ 26
of a contract to	179./ 164./	255.		13. 15. 17.	30/ 26 30/ 26 30/ 26
89. 133. 178. 222.	179./ 164./ 149./ 133./	255. 292. 329.	10./ 10./ 9./ 8./	15. 17. 19.	30/ 26
89. 133. 178. 222. 267.	179./ 164./ 149./ 133./ 117./	255. 292. 329. 367.	10./ 10./ 9./ 8./ 7./	15. 17. 19.	30/ 26 30/ 26 30/ 26 30/ 26
89. 133. 178. 222. 267. 311.	179./ 164./ 149./ 133./ 117./ 102./	255. 292. 329. 367. 405.	10./ 10./ 9./ 8./ 7./ 6./	15. 17. 19. 21. 23.	30/ 26 30/ 26 30/ 26 30/ 26 30/ 26
89. 133. 178. 222. 267. 311. 356.	179./ 164./ 149./ 133./ 117./ 102./ 85./	255. 292. 329. 367. 405. 443.	10./ 10./ 9./ 8./ 7./ 6./ 5./	15. 17. 19. 21. 23. 25.	30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26
89. 133. 178. 222. 267. 311.	179./ 164./ 149./ 133./ 117./ 102./ 85./	255. 292. 329. 367. 405.	10./ 10./ 9./ 8./ 7./ 6./	15. 17. 19. 21. 23. 25. 28.	30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26
89. 133. 178. 222. 267. 311. 356. 400.	179./ 164./ 149./ 133./ 117./ 102./ 85./ 69./	255. 292. 329. 367. 405. 443. 482.	10./ 10./ 9./ 8./ 7./ 6./ 5./ 4./	15. 17. 19. 21. 23. 25.	30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26
89. 133. 178. 222. 267. 311. 356. 400. 445.	179./ 164./ 149./ 133./ 117./ 102./ 85./ 69./ 52./	255. 292. 329. 367. 405. 443. 482. 522.	10./ 10./ 9./ 8./ 7./ 6./ 5./ 4./ 3./	15. 17. 19. 21. 23. 25. 28. 30.	30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26
89. 133. 178. 222. 267. 311. 356. 400. 445. 489. 534.	179./ 164./ 149./ 133./ 117./ 102./ 85./ 69./ 52./ 35./ 18./	255. 292. 329. 367. 405. 443. 482. 522. 562. 602.	10./ 10./ 9./ 8./ 7./ 6./ 5./ 4./ 3./ 2./	15. 17. 19. 21. 23. 25. 28. 30. 32. 34.	30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26
89. 133. 178. 222. 267. 311. 356. 400. 445. 489. 534.	179./ 164./ 149./ 133./ 117./ 102./ 85./ 69./ 52./ 35./ 18./ E A M N O. SUPPORT - Vu	255. 292. 329. 367. 405. 443. 482. 522. 562. 602. 12 DESI	10./ 10./ 9./ 8./ 7./ 6./ 5./ 4./ 3./ 2./ 1./	15. 17. 19. 21. 23. 25. 28. 30. 32. 34. L T S - SH	30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26 30/ 26
89. 133. 178. 222. 267. 311. 356. 400. 445. 489. 534. B	179./ 164./ 149./ 133./ 117./ 102./ 85./ 69./ 52./ 35./ 18./ E A M N O. SUPPORT - Vu	255. 292. 329. 367. 405. 443. 482. 522. 562. 602. 12 DESI = 72.04 K OVIDE 12 MM = 73.68 K	10./ 10./ 9./ 8./ 7./ 6./ 5./ 4./ 3./ 2./ 1./ GNRESU	15. 17. 19. 21. 23. 25. 28. 30. 32. 34. L T S - SH 52 KNS Vs= MM C/C FC 52 KNS Vs=	30/ 26 30/ 26
89. 133. 178. 222. 267. 311. 356. 400. 445. 489. 534. B	179./ 164./ 149./ 133./ 117./ 102./ 85./ 69./ 52./ 35./ 18./ E A M N O. SUPPORT - Vu PRO SUPPORT - Vu PRO SUPPORT - Vu PRO PRO SUPPORT - Vu PRO PRO PRO SUPPORT - Vu PRO PRO PRO PRO PRO PRO PRO PRO	255. 292. 329. 367. 405. 443. 482. 522. 562. 602. 12 DESI = 72.04 K OVIDE 12 MM = 73.68 K OVIDE 12 MM	10./ 10./ 9./ 8./ 7./ 6./ 5./ 4./ 3./ 2./ 1./ GNRESU NS VC= 132. BARS AT 80. NS VC= 132.	15. 17. 19. 21. 23. 25. 28. 30. 32. 34. L T S - SH 52 KNS Vs= MM C/C FC 52 KNS Vs=	30/ 26 30/ 26

BEA	M N O. 13	DESI	GN RESU	LTS - F	LEXURE	
LEN - 534.	MM FY - 4	14. FC -	25. MPA, SI	ZE - 1000.	X 250.	MMS
LEVEL HEIG		INFO		TO (MM)	ANC STA	
1 8	4, 5 -	12MM	0.	485.	YES	NO
REQD STEE MAX/MIN/A	L= 554.MM CTUAL BAR S	2, ROW= . PACING=	7 KN-MET AT 0033, ROWMX= . 886./ 37./ H = 177./	0194 ROWMN 222. MMS		
2 16	6. 7 -	12MM	0.	534.	YES	YES
REQD STEE	L= 711.MN CTUAL BAR S	12, ROW= . SPACING=	7 KN-MET AT 0043, ROWMX= . 886./ 37./	0194 ROWMN 148. MMS	i= .0033	
REQUIRED REIN	IF. STEEL SO	JMMARY :				
SECTION F	EINF STEEL (SQ. MM		MOMENTS (+V (KNS-M		LOAD (+VE	/-VE)
0.	18./	602.	1./	34	30/	26
44.	13./	604.	1./	34.	30/	
89.	7./ 1./	607. 613.	0./	34. 35.	30/ 30/	26 24
133. 178	0.7	627.	0./	35.	0/	
222	0./	641.	0.7	36.	0/	
267.	0.7	656	0./	37.	0/	
311	0./	671	0./	38.	0/	
356.	0./	687. 702.	0./	39. 40.	0/ 0/	
400. 445.	0.7	702.	0./ 0./	40.	0/	5
489	0./	735.	0./	41.	0/-	
534.	0./	752.	0./	42.	0/	24
ВЕА	M NO. 1	3 DES	IGN RESU	LTS-S	HEAR	
AT START SU			KNS Vc= 132.5 NOT REQUIRED.	2 KNS Vs	= .00	KNS
AT END SU			KNS Vc= 132.5 NOT REQUIRED.	2 KNS Vs	= .00) KNS
8J		53	3X 999X 249			9J
5No12 H 184.	The second secon					*****
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
00000	00		000000		00000	00
7#12		7#12	00000	1 7#12		

EN - 534	. MM FY - 414.	FC - 25. MP	A, SIZE - 100	00. X 250.	MMS
	IGHT BAR INF	O FROM (MM)	TO (MM)	ANCH STA	
1	166. 7 - 12M	м О.	534.	YES	YES
REQD ST MAX/MIN	L NEG MOMENT= PEEL= 711.MM2, VACTUAL BAR SPAC REQD. DEVELOPMENT	42.17 KN-MET ROW= .0043, ROW ING= 886./	MX= .0194 ROW 37./ 148. MM	LOAD 24 MN= .0033 IS	
EQUIRED RE	INF. STEEL SUMMA	RY:			
SECTION MM)	REINF STEEL(+VE (SQ. MM)	/-VE) MOMEN	TS(+VE/-VE) KNS-MET)	LOAD(+VE/	-VE)
0.	0./ 75	2. 0.	/ 42.	0/ 2	4
44.			/ 41.	0/ 2	
89.	0./ 69		/ 39.	0/ 2	
133.	0./ 66			0/ 2	
178.		9. 0.	, , 36.	7 11 11	-
222		2. 0.		the state of the s	
267.	0./ 58	2. 5	/ 33. / 33.		
311.	0./ 55			0/ 2	
356.	0./ 53			0/ 2	
400.	0./ 50				
445.	0./ 48		/ 29. / 27.		4
489.	0./ 45		/ 26.	0/ 2	4
534.		1. 0.	/ 25. / 25.	0/ 2	
AT START S	SUPPORT - Vu= 3	9.91 KNS Vc= S ARE NOT REQUI	132.52 KNS V RED. 132.52 KNS V	/s= .00	4.5 S
9J		533X 999X 2	49		10J
No12 H 166	. 0.TO 534				
101 y 100 y					

8 F	AM NO. 15	DEST	IN RESU	រ. ក s ខាគ	XURE	
						and the second
LEN - 534	. MM FY - 41	4. FC -	25. MPA, SI	ZE - 1000. X	. 250.	MMS
LEVEL HE	IGHT BAR I	NEO	FROM	то	ANCE	IOR
	MM)		(MM)	(MM)	STA	END
					11 1 V	
	5.1	22.04	•		VIDO	VIDO
1	84. 5 - 1	ZMM		534.	YES	152
CRITICA	L POS MOMENT=	20.32	KN-MET AT	534.MM, LOA	AD 26	
REQD ST	'EEL= 554.MM2	, ROW= .0	033, ROWMX= .	0194 ROWMN=	.0033	
	I/ACTUAL BAR SE					
BASIC/F	REQD. DEVELOPME	NT LENGTH	= 177./	352. MMS		
						l
2	166. 5 - 1	2MM	0.	534.	YES	YES
•	AL NEG MOMENT=			and the second second		
	TEEL= 554.MM2 I/ACTUAL BAR SI				.0033	
	REQD. DEVELOPME					
í 						
						e de la companya de La companya de la co
SOCUEDED DE	THE CORPT OU	MADN .				
REQUIRED RE	EINF. STEEL SU	THARI:				
SECTION	REINE STEEL(+VE/-VE)	MOMENTS (+	/E/-VE) Lo	3V+) DAC	/-VE)
(MM)	(SQ. MM	and the second s	(KNS-t	MET)		
0.	0./ 0./	431.	0./ 0./	25. 22.	0/ 0/	24 24
44 89	0./	378. 325.	0./	19.		24
133	0./	272.	ŏ./	16.	0/	
178.	0./	221.	0./	13.		24
222		170.		10.	and the first of the second	24
267. 311.	55./ 104./	119. 69.	3./ 6./	7. 4.	19/ 19/	24 24
356.	153./	20.	9./	i.	19/	
400.	202./	0.	12./	0.		
445.	and the second of the second o	0.	15./	0.	19/	and the second second
489.	301./	0.	17./	0. 0.	26/	0
534.	353./	0.	20./		20/	Ů
8 E	AM NO. 15	DESI	GN RESU	L T S - SHE	AR	
AM CMARM	SUPPORT - Vu=	60 12 6	JC Vom 122	52 VAIC U	O.C	KVIC.
AI SIAKI			BARS AT 80.			
AT END	SUPPORT - Vu=					
	PROV	IDE 12 MM	BARS AT 80.	MM C/C FOR	534	MM
10Ј		533	x 999X 249			115
				and the second		
	turi e ili dell'especia Nil. Nell'Especia Servicia di Care					
						
5No12cHc18	14. 0.TO 534			the confirmation of the contract of the contra	100	:/c 80
					<u> </u>	
		1		or led on say		
00) 0000		00000		00000	,
5#12	1	5#12		5#12		
00	0000	and the second of the second	00000		00000)
	- 1.	1 7 7	and the state of the state of the		A REPORT OF THE	make the contract of the con-

LEN -	B E A M 534. MM		the second					: · · · · ·		
LEVEL		BAR		·	FROM		*		Δ	1
1	88.	4 -			0.		53	4.	YE	S YE
RE MA	ITICAL PO QD STEEL= X/MIN/ACT SIC/REQD.	1249.M UAL BAR	M2, ROW= SPACING=	. 68 . 00	KN-MI 75, I	ROWMX=	= .0194 ./ 293	ROWMN		

REQUIRED REINF. STEEL SUMMARY :

SECTION REINF STEEL (+VE/-VE)	MOMENTS (+VE/-VE)	LOAD(+VE/-VE)
(MM) (SQ. MM)	(KNS-MET)	
		pinta da la compresión
353./	20./	26/ 0
431./	25./ 0.	26/ 0
89. 509./ 0.	29./	26/ 0
588./ 0.	33./ 0.	26/ 0
178. 668./ 0.	38./	26/ 0
222. 748./ 0.	42./ 0.	26/ 0
829./ 0.	46./	26/ 0
311. 910./	51./ 0.	26/ 0
356. 992./ 0.	55./ 0.	26/ 0
400.	59./	26/ 0
445.	63./	26/ 0
489. 1242./ 0.	67./ 0.	26/ 0
534. 1327./ 0.	72./ 0.	26/ 0

BEAM NO. 16 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu= 99.21 KNS Vc= 132.52 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 80 MM C/C FOR 534 MM AT END SUPPORT - Vu= 97.56 KNS Vc= 132.52 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 80 MM C/C FOR 534 MM

11J	533x 99	9X 249		12J
4No20cHc 88. 0.TO	534		8*12c	
				=======
		0		

H.N - 1.19	MM EV - A	14 FC ~	25. MPA, SI		XURE 250	MMS
LEVEL HEIO		INFO	FROM (MM)	TO (MM)	ANC! STA	
1 8	84. 7 -	12MM	0.	534.	YES	YES
CRITICAL REQD STEI MAX/MIN/A	POS MOMENT= EL= 682.MM ACTUAL BAR S	40.54 2, ROW= .0 PACING=	KN-MET AT 0041, ROWMX= . 886./ 37./ I = 177./	0.MM, LOA 0194 ROWMN= 148. MMS		
2 1	66. 5 -	12MM	0.	534.	YES	YES
REQD STE	EL= 554.MM ACTUAL BAR S QD. DEVELOPM	2, ROW= .0 PACING= PENT LENGTH	KN-MET AT 0033, ROWMX= . 886./ 37./ H = 177./	0194 ROWMN= 222. MMS		
	REINF STEEL((+VE/-VE)	MOMENTS (+1	VE/-VE) LO MET)	AD (+VE	/-VE)
0.	721./	0.	41./	0.	25/	0
44.	670./	0.	38./	0.	25/	0
89.	619./	0.	35./	0.	25/	0
133.	568./	0.	32./	0.	25/ 25/	0
178. 222.	518./ 467./	0.	29./ 27./	0.	25/	
267.	416./	0.	24./	o.	25/	
311.	366./	26.	21./	 4.3 	25/	The state of the s
356.	315./	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18./	3.		20
400. 445.	265./ 214./	84. 113.	15./ 12./	5. 7.	25/ 25/	4.7 (4.6)
489.	164./	143.	10./	8.	25/	
407.		173.				
534.	114./			10.	25/	
534. B E A	A M N O. 1	7 DESI	GN RESU	L T S - SHEA	IR	
534. B E A AT START SU	A M N O. 1 JPPORT - Vu= PROV	7 DESI 62.64 K VIDE 12 MM	GNRESU NS Vc= 132. BARS AT 80.	L T S - SHEA 52 KNS VS= MM C/C FOR	\R .00 534.) KNS MM
534. B E A AT START SU	AMNO. 1 JPPORT - Vu= PROV JPPORT - Vu=	7 DESI 62.64 K VIDE 12 MM 64.28 K	G N R E S U NS Vc= 132.	L T S - SHEA 52 KNS Vs= MM C/C FOR 52 KNS Vs=	AR .00 534.) KNS MM) KNS
534. B E A AT START SU	AMNO. 1 JPPORT - Vu= PROV JPPORT - Vu= PROV	7 DESI 62.64 K VIDE 12 MM 64.28 K VIDE 12 MM	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132.	L T S - SHEA 52 KNS VS= MM C/C FOR 52 KNS VS= MM C/C FOR	.00 534. .00 534.) KNS MM) KNS
B E A AT START SU AT END SU	A M N O. 1 JPPORT - Vu= PROV JPPORT - Vu=	7 DESI 62.64 K VIDE 12 MM 64.28 K VIDE 12 MM	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132. BARS AT 80. X 999X 249	L T S - SHEA 52 KNS VS= MM C/C FOR 52 KNS VS= MM C/C FOR	.00 534. .00 534.) KNS MM) KNS MM
B E A AT START SU AT END SU	AMNO. 1 JPPORT - Vu= PROV JPPORT - Vu= PROV	7 DESI 62.64 K VIDE 12 MM 64.28 K VIDE 12 MM	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132. BARS AT 80.	L T S - SHEA 52 KNS VS= MM C/C FOR 52 KNS VS= MM C/C FOR	.00 534. .00 534.) KNS MM) KNS MM 13J c/c 80
B E A AT START SU AT END SU 12J 7No12cHc184	AMNO. 1 JPPORT - Vu= PROV JPPORT - Vu= PROV	7 DESI 62.64 K VIDE 12 MM 64.28 K VIDE 12 MM	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132. BARS AT 80. X 999X 249	L T S - SHEF 52 KNS VS= MM C/C FOR 52 KNS VS= MM C/C FOR	.00 534. .00 534.) KNS MM) KNS MM 13J c/c 80
B E A AT START SU AT END SU 12J 7No12cHc184	AMNO. 1 JPPORT - Vu= PROV JPPORT - Vu= PROV	7 DESI 62.64 K VIDE 12 MM 64.28 K VIDE 12 MM 533	G N R E S U NS Vc= 132. BARS AT 80. NS Vc= 132. BARS AT 80. X 999X 249	L T S - SHEF 52 KNS VS= MM C/C FOR 52 KNS VS= MM C/C FOR	.00 534. .00 534.) KNS MM) KNS MM 13J

EN - 534.	MM FY -	414. FC	- 25. MPA, S	SIZE - 1000.	X 250	MMS
and the second second	GHT B M)	AR INFO	FROM (MM)	TO (MM)	ANC STA	CHOR END
1	84. 5	- 12MM	0.	530.	YES	
REQD STE MAX/MIN/	EL= 554 ACTUAL BA	.MM2, ROW= R SPACING=	65 KN-MET AT .0033, ROWMX= 886./ 37./ FH = 177./	.0194 ROWMN 222 MMS	OAD 25	
2 1	66. 5	- 12MM	0.	534.		YES
REQD STE MAX/MIN/	EL= 554 ACTUAL BA	.MM2, ROW= R SPACING=	17 KN-MET AT .0033, ROWMX= 886./ 37./ TH = 177./	.0194 ROWMN 222. MMS		i 🔻
EQUIRED REI	NF. STEEL	SUMMARY :				
		EL(+VE/-VE) MM)	MOMENTS (+ (KNS-		LOAD (+VE	:/-VE)
0.	114./	173.	7./	10.	25/	20
44.	90./		y	10.	25/	20
89. 133.	66./ 41./	185. 192.	4./	11. 11.	25/ 25/	20 20
178	17./		1,/	12.	25/	20
222.	0./	205.	0./	12.	0/	20
267. 311.	0./	and the second s	0./	12.	0/	20
356.	0./ 0./		0./ 0./	13. 13.	0/	20
400.	0./	236.	0./	14.	ő/	20
445.	0./	The state of the s	0./	14.	0/	20
489. 534.	0./	253. 262.	0./ 0./	15. 15.	0/ 0/	20 20
ВЕА	м по.	18 DES	IGN RESU	LTS-SH	EAR	
	\$	TIRRUPS ARE	KNS Vc= 132. NOT REQUIRED. KNS Vc= 132.			
13.7	S		NOT REQUIRED.			
13J		33	3X 999X 249_			_ 14J
 No12 H 184.	. 50	530				

14 - 334.	MM FI -	414. EC -	25. MPA, S	IZE - 1000	J. X 250.	MMS
4)	GHT BAR IM)			(MM)	ANC STA	CHOR END
	.66. 5 -		0.	534.	YES	YES
REQD STI	EL= 554.N ACTUAL BAR	M2, ROW= SPACING=	7 KN-MET AT 0033, ROWMX= 886./ 37., H = 177./	.0194 ROW	MN= .0033 S	
'ONTDED DE	INF. STEEL S	STIMMARY .				
			HOLDING (A PARKIN	3. / TVT3.
	(SQ. M		MOMENTS (- (KNS-	·MET)	LOAD (+VE	./-VE)
0.	0./	262.	0./	15.	0/	20
44	0./	250.	0./	14.	0/	
89.	0./	241.	0 /	14.	0/	17
133.	0./	233.	0./	14.	0/	17
178.	0./	225.	0./	13.	0/	17 0
222	0./	217.	0./	13.	0/	17
267.	0./	210.	0./	12.	.0/	17
311	0./	209.	0./	12.	0/	18
356.	0./	212.	0./	12.	0/	18
400.	0./	215.	0./	12.	0/	
445.	0./	218.	0./	13.	0/ 0/	18
489.	0./		0./	13.		
534.	0./	225.	0./	13.	0/	18
BE	AM NO.	19 DESI	GN RES	ULTS-	SHEAR	
AT START S	UPPORT - Vu ST	= 19.21 F IRRUPS ARE	NS Vc= 132 NOT REQUIRED	.52 KNS V	/s= .0	0 KNS
at end s	UPPORT - Vu	≃ 17.57 £	NS Vc≔ 132 NOT REQUIRED	.52 KNS V	/s= .0	0 KNS
_ 14J		533	3X 999X 249_			15J

1	
er <u>i de la companya di manana di</u>	
1 00000	1 1 1 00000
j 5#12	 5#12
1	
1 3 4 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	
	4、大利、大学院、77年民代的原理的,企业等、各种、营工工程、企工工程、企業研究。

- 534. MM FY - 414. FC -	25. MPA, SI	ZE - 1000). X 250.	MMS
EL HEIGHT BAR INFO (MM)		TO (MM)	ANC STA	CHOR END
84. 5 - 12MM	0.	534.	YES	YES
CRITICAL POS MOMENT= 19.68 REQD STEEL= 554.MM2, ROW= .00 MAX/MIN/ACTUAL BAR SPACING= 8 BASIC/REQD, DEVELOPMENT LENGTH	33, ROWMX= .0	0194 ROWM 222. MMS	0033	
166. 5 - 1.2MM	0.	534.	YES	YES
CRITICAL NEG MOMENT= 13.03 REQD STEEL= 554 MM2, ROW= .00 MAX/MIN/ACTUAL BAR SPACING= 8 BASIC/REQD. DEVELOPMENT LENGTH	33, ROWMX= .0	0194 ROWM 222. MMS	N= .0033	
				100
UIRED REINF. STEEL SUMMARY :				
TION REINF STEEL(+VE/-VE) M) (SQ. MM)	MOMENTS (+VI (KNS-MI		LOAD(+VE	:/-VE)
TION REINF STEEL(+VE/-VE) M) (SQ. MM)	(KNS-MI		LOAD(+VE	
TION REINF STEEL(+VE/-VE) M) (SQ. MM)		ET)		
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181.	0./ 0./ 0./ 0./	13. 12. 11.	0/ 0/ 0/	18 18 18
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159.	0./ 0./ 0./ 0./ 1./	13. 12. 11. 9.	0/ 0/ 0/ 27/	18 18 18 18
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138.	0./ 0./ 0./ 0./ 1./ 3./	13. 12. 11. 9.	0/ 0/ 0/ 27/ 27/	18 18 18 18
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138. 22. 93./ 117.	0./ 0./ 0./ 0./ 1./ 3./ 5./	13. 12. 11. 9. 8. 7.	0/ 0/ 0/ 27/ 27/ 27/	18 18 18 18 18 18
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138. 22. 93./ 117. 67. 128./ 96.	0./ 0./ 0./ 1./ 3./ 5./ 7./	13. 12. 11. 9. 8. 7. 6.	0/ 0/ 0/ 27/ 27/ 27/ 27/	18 18 18 18 18 18 18
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138. 22. 93./ 117. 67. 128./ 96. 11. 164./ 76.	0./ 0./ 0./ 0./ 1./ 3./ 5./	13. 12. 11. 9. 8. 7. 6.	0/ 0/ 0/ 27/ 27/ 27/ 27/ 27/	18 18 18 18 18 18
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138. 22. 93./ 117. 67. 128./ 96. 11. 164./ 76.	0./ 0./ 0./ 1./ 3./ 5./ 7./ 10./	13. 12. 11. 9. 8. 7. 6.	0/ 0/ 0/ 27/ 27/ 27/ 27/	18 18 18 18 18 18 18 18 18 25
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138. 22. 93./ 117. 67. 128./ 96. 11. 164./ 76. 56. 199./ 56.	0./ 0./ 0./ 1./ 3./ 5./ 7./ 10./ 12./ 14./ 16./	13. 12. 11. 9. 8. 7. 6. 4. 3.	0/ 0/ 0/ 27/ 27/ 27/ 27/ 27/ 20/	18 18 18 18 18 18 18 18 18 25 25
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138. 22. 93./ 117. 67. 128./ 96. 11. 164./ 76. 56. 199./ 56. 00. 235./ 37. 45. 271./ 18. 89. 306./ 0.	0./ 0./ 0./ 1./ 3./ 5./ 7./ 10./ 12./ 14./ 16./ 18./	13. 12. 11. 9. 8. 7. 6. 4. 3. 2. 1.	0/ 0/ 0/ 27/ 27/ 27/ 27/ 20/ 20/ 20/ 20/	18 18 18 18 18 18 18 18 25 25 25
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138. 22. 93./ 117. 67. 128./ 96. 11. 164./ 76. 56. 199./ 56. 00. 235./ 37. 45. 271./ 18.	0./ 0./ 0./ 1./ 3./ 5./ 7./ 10./ 12./ 14./ 16./	13. 12. 11. 9. 8. 7. 6. 4. 3. 2.	0/ 0/ 0/ 27/ 27/ 27/ 27/ 20/ 20/ 20/ 20/	18 18 18 18 18 18 18 18 25 25 25
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138. 22. 93./ 117. 67. 128./ 96. 11. 164./ 76. 56. 199./ 56. 00. 235./ 37. 45. 271./ 18. 89. 306./ 0. 34. 342./ 0.	(KNS-MI 0./ 0./ 0./ 1./ 3./ 5./ 7./ 10./ 12./ 14./ 16./ 18./ 20./	13. 12. 11. 9. 8. 7. 6. 4. 3. 2. 1. 0.	0/ 0/ 0/ 27/ 27/ 27/ 27/ 20/ 20/ 20/ 20/ 20/	18 18 18 18 18 18 18 19 25 25 0 0
TION REINF STEEL(+VE/-VE) M) (SQ. MM) 0. 0./ 225. 44. 0./ 202. 89. 0./ 181. 33. 21./ 159. 78. 57./ 138. 22. 93./ 117. 67. 128./ 96. 11. 164./ 76. 56. 199./ 56. 00. 235./ 37. 45. 271./ 18. 89. 306./ 0. 34. 342./ 0.	(KNS-MI 0./ 0./ 0./ 1./ 3./ 5./ 7./ 10./ 12./ 14./ 16./ 18./ 20./ S N R E S U S VC= 132.5 OT REQUIRED. S VC= 132.5	13. 12. 11. 9. 8. 7. 6. 4. 3. 2. 1. 0. 0. LTS = S	0/ 0/ 0/ 27/ 27/ 27/ 27/ 20/ 20/ 20/ 20/ 30/	18 18 18 18 18 18 18 18 25 25 0 0

00000 5#12	00000 5#12	
00000	00000	00000
<u> </u>		

REAM NO. 21 DESIGN RESULTS - FLEXURE

LEN -	524. MM	FY - 414.	FC - 25.	MPA, SIZE -	1000. X 250. MMS
LEVEL	HEIGHT (MM)	BAR INF	O FROM	5.5 %	ANCHOR STA END
1	84.	10 - 12M	м О.	524	. YES YES
				IET AT 524.	

CRITICAL POS MOMENT = 59.50 KN-MET AT 524.MM, LOAD 20
REQD STEEL= 1022.MM2, ROW= .0061, ROWMX= .0194 ROWMN= .0033
MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 98. MMS
BASIC/REQD. DEVELOPMENT LENGTH = 177./ 324. MMS

REQUIRED REINF. STEEL SUMMARY :

SECTION (MM)	REINF STEEL (SQ. MM	The second secon	MOMENTS (+V) (KNS-M)		LOAD(+VE/-VE)
	242 /		20 /	•	20/ 0
0.	342./	0.	20./	0.	
44.	402./	0	23./	0.	20/ 0
87.	463./	0.	26./	0.	20/ 0
131.	524 /	0.	30./	0.	20/ 0
175.	585./	0	33./	0.	20/ 0
218.	647 /	0	37./	0.	20/ 0
262.	708./	0.	40./	0.	20/ 0
306.	770./	0.	43./	0.	20/ 0
349	832./	0.	46./	0.	20/ 0
393.	895./	0.	50./	0.	20/ 0
437.	957./	0.	53./	0.	20/ 0
480.	1020./	0.	56./	0.	20/ 0
524.	1084./	0.	59./	0.	20/ 0

BEAM NO. 21 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu= 76.76 KNS Vc= 132.52 KNS Vs= .00 KNS
PROVIDE 12 MM BARS AT 80. MM C/C FOR 524. MM
AT END SUPPORT - Vu= 75.19 KNS Vc= 132.52 KNS Vs= .00 KNS
PROVIDE 12 MM BARS AT 80. MM C/C FOR 524. MM

16J	523X	999X 249	y tententátota	17J
			Village Control	
	Transfer of Atlanta			
10No12cHc 84, 0.TO	524		8	*12c/c 80
]======================================				

C:\Box Culver\\B5_496.doc \(\frac{1}{2} \) \(\frac{1} \) \(\frac{1}{2} \) \(\frac{1}{2} \) \(\fra

		1
	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 0000000000 1	000000000	000000000

BEAM NO. 22 DESIGN RESULTS - FLEXURE 536. MM FY - 414. FC - 25. MPA, SIZE - 1000. X 250. MMS LEVEL HEIGHT BAR INFO ANCHOR FROM TO (MM) (MM) STA END 8 - 12MM CRITICAL POS MOMENT= 47.53 KN-MET AT 0.MM, LOAD 19 1 REQD STEEL= 806.MM2, ROW= .0048, ROWMX= .0194 ROWMN= .0033 MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 127. MMS
BASIC/REQD. DEVELOPMENT LENGTH = 177./ 319. MMS 2 166. 5 - 12MM 155. 5 NO YES CRITICAL NEG MOMENT= 1.85 KN-MET AT 536.MM, LOAD 25 | REQD STEEL= 554.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 222. MMS | BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS |

REQUIRED REINF. STEEL SUMMARY :

SECTION	REINF STEEL	+VE/-VE)	MOMENTS (+)	E/-VE)	LOAD(+VE/-VE)
(MM)	(SQ. MM	1	(KNS-N	ET)	
0.	853./	0.	48./	0.	19/ 0
45.	. 797./	0.	45./	0.	19/ 0
89.	742./	0.	42./	0.	19/ 0
134.	686./	0.	39./	0.	19/ 0
179.	631./	0.	36./	0.	19/ 0
224.	576./	0.	33./	0.	19/ 0
268.	521 /	0.	30./	0.	19/ 0
313.	467./	0.	27./	0.	19/ 0 1
358.	412./	0.	24./	0.	19/ 0
402.	357./	0.	21./	0.	19/ 0
447.	303./	0.	17./	0.	19/ 0
492.	249./	1. O. A. A.	14./	0.	19/ 0
536.	194./	31.	11./	2.	19/ 25

BEAM NO. 22 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu = 66.71 KNS Vc= 132.52 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 80. MM C/C FOR 536. MM AT END SUPPORT - Vu = 68.38 KNS Vc= 132.52 KNS Vs= .00 KNS PROVIDE 12 MM BARS AT 80. MM C/C FOR 536. MM

17J		536X	999X 249			18J
8No12cHc 8	4. 0.TO 53	3612 н 166.	155.TO 536		8*12c	/c 80
	26664 48				*****	
		l I.a. i n Liberia				
0.110			00000		00000	
8#12 	0000		000000		000000	0
В Е	AM NO.	23 DESI	GN RESU	LTS-	FLEXURE	
LEN - 53	36. MM FY -	414. FC -	25. MPA, S	IZE - 1000	. X 250.	MMS
LEVEL F	REIGHT BA	R INFO	FROM	ТО	ANC	
	(MM)		(MM)	(MM)	STA	END
1	84. 5	- 12MM	0.	536.	YES	VES
1						1
	CAL POS MOMEN STEEL= 554.					
MAX/MI	IN/ACTUAL BAR	SPACING=	886./ 37./	222. MMS		i
BASIC	/REQD. DEVELO	PMENT LENGTH	(= 177./	352. MMS		 -
	106	10204		626	YES	VEC
2 	166. 5	- 12MM	· · · · · · · · · · · · · · · · · · ·	536.	165	- -
	CAL NEG MOMEN STEEL= 554.					
MAX/M	IN/ACTUAL BAR	SPACING=	886./ 37./	222. MMS	.0033	i
BASIC,	/REQD. DEVELO	PMENT LENGTH	I = 177./	359. MMS		-
REOUIRED !	REINF. STEEL	SUMMARY :				
			MOMENIBO ()	UP / UP)	LOAD(+V	r/_1761
SECTION (MM)	(SQ. M	CL(+VE/-VE) 1M)	MOMENTS (4		דייאס (דע:	5/-V5)
0.	194./	31.	11./	2.	19/	25
45.	166./	49.	10./	3.	19/	25
89. 134.	138./ 109./	68. 86.	8./ 6./	4. 5.	19/ 19/	
179.	80./	105.	5./	6.	19/	25
224. 268.	51./ 22./	124. 143.	3./ 1./	7 8	19/ 19/	25 25
313.	0.7	163.	0.7	10.	0/	25
358.	0./	183.	0./	11. 12.	0/ 0/	25 25
402. 447.	0./ 0./	204. 224.	0./ 0./	12. 13.	0/	25 25
492.	0./	245.	0./	3.4	0.7	
536.	0./	267	0./	14. 15.	0/ 0/	25 25

Page 25 of 28

BEAM NO. 23 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu= 37.39 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.

AT END SUPPORT - Vu= 39.06 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.

18J	536X	999X 249_	8 J. M. J.		19J
5No12 H 184. 0.TO 536	6				
				* # # # # # # # # # # # # # # # # # # #	- -
		and the second			
	 5#12	0000		00000)
00000		00000	[]	00000	3

BEAM NO. 24 DESIGN RESULTS - FLEXURE

LEN - 536. MM FY - 414. FC - 25. MPA, SIZE - 1000. X 250. MMS

LEVEL HEIGHT BAR INFO FROM TO ANCHOR

(MM) (MM) (MM) STA END

1 166. 5 - 12MM 0. 536. YES	YES
CRITICAL NEG MOMENT= 15.44 KN-MET AT 0.MM, LOAD 25	
REQD STEEL= 554.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 222.MMS	1
BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS	1

REQUIRED REINF. STEEL SUMMARY :

				The second of		
SECTION	REINF STEEL	(+VE/-VE)	MOMENTS (+VE,	/-VE)	LOAD(+VE/-VE	Z)
(MM)	(SQ. MM)	(KNS-ME	Γ)		
	to the first of the					
0.	0.7	267.	0./	15.	0/ 25	
45.	0./	263.	0./	15.	0/ 25	
89.	0./	260.	0./	15.	0/ 25	
134.	0./	257.	0./	15.	0/ 25	
179.	0./	255.	0 /	15.	0/ 25	
224.	0./	252.	0./	15.	0/ 25	
268.	0./	250.	0./	14.	0/ 25	
313.	0./	248.	0./	14.	0/ 25	
358.	0./	248.	0./	14.	0/ 23	1
402.	0./	251.	0./	15.	0/ 23	
447.	0./	254.	0./	15.	0/ 23	7
492.	0./	257.	0./	15.	0/ 23	
536.	0./	261.	0./	15.	0/ 23	

BEAM NO. 24 DESIGN RESULTS - SHEAF

AT	START SUPPORT	_	Vu= 8.55 KNS	Vc= 132.52 KNS	Vs=	.00 KNS
		1.	STIRRUPS ARE NOT	REQUIRED.		
AT	END SUPPORT		Vu= 10.21 KNS	Vc= 132.52 KNS	Vs≕	.00 KNS
			STIRRUPS ARE NOT	REQUIRED.		

19J	536X 999X	249	20J
5No12 H 166. 0.TO 5	36		
		1	00000 12

BEAM NO. 25 DESIGN RESULTS - FLEXURE

LEN -	536. MM	FY -	414. F	FC - 2	5. MPA,	SIZE - 1000.	Х	250. MMS

LEVE	L		HEIC	НТ		BA	ıR	INFO		E	ROM		Ą,	TO	31.		ANC	HOR	Ì
	٠		(M)	4)			1. j.			((MM)			(MM))		STA	END	
		31.		-	- 2 - 5 * -	20 F 19 74	- 26 		 <u>. 1</u>	1 2		<u> </u>		 <u> </u>		- 244 	. 14, 1	<u> </u>	

	1 1 3 4 1 5 ÷ 12MM 3 5 ÷ 0.	Ε
1	CRITICAL POS MOMENT= 5.55 KN-MET AT 536.MM, LOAD 20	
ĺ	REQD STEEL= 554.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033	١,
-	MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 222. MMS	ì
	BASIC/REQD. DEVELOPMENT LENGTH = 177./ 352. MMS	ď
- !		11

٠.	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	١.
l	enginangan beragangan adalah seperian peramanan digilagan angan seperian digilagan seperian seperian digilagan	
Į	CRITICAL NEG MOMENT= 15.12 KN-MET AT 0.MM, LOAD 23	
١	REOD STEEL= 554.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033	
i	MAX/MIN/ACTUAL BAR SPACING= 886./ 37./ 222. MMS	
i	BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS	•
i	<u></u>	, .

REQUIRED REINF. STEEL SUMMARY :

SECTION REINF STEEL(+VE/-VE) MO	OMENTS (+VE/-VE)	LOAD(+VE/-VE)
(MM) (SQ. MM)	(KNS-MET)	
0. 0./ 261.	0./ 15.	0/ 23
45. 0./ 240.	0./ 14.	0/ 23
89. 0./ 218.	0./	0/ 23
134. 0./ 201.	0./ 12.	0/ 26
179.	0./ 11.	0/ 26
224. 0./ 171.	0./ 10.	0/ 26
268. 0./ 156.	0./	0/ 26
313. 0./ 141.	0./	0/ 26
358. 8./ 127.	0./	20/ 26
402. 30./ 113.	2./ 7.	20/ 26
447. 52./ 99.	3./ 6.	20/ 26
492. 73./ 86.	4./ 5.	20/ 26
536. 95./ 72.	6./ 4.	20/ 26

BEAM NO. 25 DESIGN RESULTS - SHEAR

AT START SUPPORT - Vu= 34.52 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 32.86 KNS Vc= 132.52 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED.

20J	536X	999X 249		<u> </u>	21J
<u>, waxanin da</u>					
5No12 H 184, 0.TO 536			.0464444		-=====
00000	! 5#12	0000	5#12	00000	

139. END CONC DESIGN 140. FINISH

******* END OF STAAD-III ******** **** DATE= JAN 30,2000 TIME= 11:45:34 **** 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

2-1-7 BOX CULVERT AT CH.6+496 (2) WING WALL

WING WALL WITH JOINT NUMBER Q , 4<u>1</u> WING WALL AT CH. 5+496 g <u>1</u> **‡**

```
STAAD-III
                      Revision 22.3a
                      Proprietary Program of
                      Research Engineers, Inc.
                      Date=
                                JAN 30, 2000
                      Time=
                                 9:19:22
                 USER ID: Development Design Consultants L
 1. STAAD SPACE
 2. UNIT KNS METER
3. PAGE EJE
 4. JOI COO
 5.
         1 0.000 0.000 0.000
                                 21 8.30 0.000 0.000
 6. R
                2 0.000 0.000 0.363
                                83 7.885 0.000 1.088
 7. 64
           0.000 0.000 1.088
8.85
           0.000 0.000 1.450
                                 102 7.055 0.000 1.450
           0.000 0.000 1.813
9. 106
                                 120 5.810 0.000 1.813
10. 127
           0.000 0.000 2.175
                                 139
                                      4.980 0.000 2.175
11. 148
           0.000 0.000 2.538
                                 157
                                      3.735 0.000 2.538
12.169
           0.000 0.000 2.900
                                 176
                                     2.905 0.000 2.900
         0.000 0.000 3.263
13.:190
                                 194
                                      1.660 0.000 3.263
14. 211
           0.000 0.000 3.625
                                 213
                                      0.830 0.000 3.625
16. MEM INC
17. *HORIZONTAL MEMBER
18. 1
                2
                       20
                                  1
          1
                              1
19. R
          2
                20
                       21
20.61
          64
                 65
                       79
                              1
21. 81
          85
                86
                       97
                              1
                                    1
22. 101
          106
                107
                       114
23: 121
          127
                128
                       132
                              .1
                                    1
24. 141
          148
                 149
                       149
                              1
                                    1
25. 161
          169
                170
                       167
                              1
                                    1
26. 181
          190
                191
                       184
                              1
                                    1
27. 191
          211
                212
                       192
                              1
                                    1
28. *VERTICAL MEMBER
                      (START WITH
                                   301)
29. 201
          2
                23
                       210
                              1
                                    21
30. R
                 10
          1
                       1
31. 221
          4
                 25
                       229
                              1
                                    21
32. R
          1
                 10
                       1
33. 241
                 27
                       248
          6
                              1
                                    21
34. R
          2
                 10
                       1
35. 271
          9
                 30
                       277
                                    21
                              1
36. R
          1
                10
                       1
37, 291
                       296
                                    21
          1.1
                32
                              1
38. R
          2
                10
39. 321
                35
                                    21
          14
                       325
                              1
40. R
          1
                 10
                       1
41. 341
          16
                 37
                       344
                              1
                                    21
42. R
                 10
43. 371
          19
                 40
                       373
                              1
                                    21
44. R
          1
                 10
                       1
45. 391
          21
                 42
                       392
                              1
                                    21
47 MEM PRO
48.1
          TO
                 20
                       PRI
                              ΥD
                                    2.000
                                                  0.3
                                                       IX
                                                             1E-06
49. 21
          TO
                 40
                       PRI
                              YD
                                    0.250
                                            2D
                                                  0.363 IX
                                                               1E-06
50.41
          TO
                 60
                       PRI
                              YD
                                    0.250
                                            ZD
                                                  0.363 IX
                                                               1E-06
51. 61
          ŤΟ
                 7.9
                       PRI
                              ΥĎ
                                    0.250
                                           ZD
                                                  0.363 IX
52.81
          TO
                 97
                       PRI
                              YD
                                    0.250
                                            ZD
                                                  0.363 IX
                                                               1E-06
53. 101
          TO
                 114
                                                  0.363 IX
                       PRI
                              YD
                                    0.250
                                            ZD
54. 121
          OT
                 132
                       PRI
                              YD.
                                    0.250
                                                  0.363 IX
                                                               1E-06
                                            ZĐ
55. 141
          ŤΟ
                149
                       PRI
                              ΥD
                                    0.250
                                            20
                                                  0.363 IX
                                                               1E-06
56 161
          TO
                167
                       PRI
                                    0.250
                              YD
                                            ZD
                                                  0.363 IX
                                                               1E-06
57. 181
          TO
                 184
                       PRI
                              YD
                                    0.250
                                            ZD
                                                  0.363 IX
                                                               1E-06
58. 191.
          TO
                       PRI
                 192
                              YD
                                    0.250
                                            20
                                                  0.363 IX
                                                               1E-06
   *VERTICAL
```

1 1										<u> </u>	
60. 201 61. 211 62. 221 63. 231 64. 241 65. 251	TO TO TO TO TO	210 220 229 239 248 258	PRI PRI PRI PRI PRI PRI	YD YD YD YD YD YD	0.250 0.250 0.250 0.250 0.250 0.250	ZD ZD ZD ZD ZD ZD	0.415 0.415 0.415 0.415 0.415	IX IX IX	1E-06 1E-06 1E-06 1E-06 1E-06		
66. 261 67. 271	TO TO	268 277	PRI	YD YD		ZD ZD	0.415	IX	1E-06 1E-06		
68. 281 69. 291	TO TO	287 296	PRI PRI	YD YD	0.250 0.250		0.415 0.415	IX	1E-06 1E-06		
70. 301 71. 311	TO TO	306 316	PRI PRI	YD YD	0.250 0.250	ZD ZD	0.415		1E-06		
72. 321 73. 331	ТО ТО	325 335	PRI PRI	YD YD	0.250 0.250	ZD ZD	0.415		1E-06 1E-06		
74. 341 75. 351	TO TO	344 354	PRI PRI	YD .	0.250 0.250	ZD ZD	0.415		1E-06 1E-06		
76. 361 77. 371	TO TO	364 373	PRI	YD YD	0.250 0.250	ZD ZD	0.415 0.415		1E-06 1E-06		
78. 381 79. 391	TO TO	383 392	PRI PRI	YD YD	0.250	ZD ZD	0.415 0.415		1E-06 1E-06		
81. CONS' 82. E	TANTS CONC										
83. DEN 85. SUPP											
86. 1 87. 2	TO		11 47 4	85	106	127	148 FIXED	169	190 BUT	211 MZ	FIXED
89. LOAD 90. JOIN	T LOAD										
91. 2 92. 3	FY	-12.7 -12.4	10								
93. 4 94. 5 95. 6	FY FY FY	-12.0 -11.6 -11.2	55								
96. 7 97. 8	FY FY	-10.9 -10.9	90								
98. 9 99. 10	FY FY	-10.1 -9.	L4								
100. 11 101. 12	FY FY	-9. -9.									
102. 13 103. 14	FY FY	-8. -8.									
104. 15 105. 16	FY FY	-7. -7.	_								
106. 17 107. 18	FY FY	-7. 0.	00								
108. 19	FY	0.	00								
110. 21 111. 23	FY FY	0. -8. -7.	07								
112. 24 113. 25 114. 26	FY FY FY	-7. -7.	50								
115. 27 116. 28	FY FY	-6. -6.	93								
117. 29 118. 30	EY FY	-6. -6.	36								
119. 31 120. 32	FY FY	-5. -5.	79								
121. 33 122. 34	FY FY	-5. -4.									
123. 35 124. 36	FY FY	-4. -4.	37								
125. 37 126. 38	FY FY	-4. -3.	81								
127. 39 128. 40	FY FY	0.	00								
129. 41 130. 42	FY FY	0.	00								
131. 44 132. 45	FY FY	-6. -6.									

Page 2 of 28

					
	100				
				1	
	133.	46	ΓY	-6.2	6
	134.	47	ΓY	-5.9	
٠.					
	135,	48	FΥ	-5.6	9
	136.	49			
	130.	47	FΥ	-5.4	U
	137.	50	FΥ	-5.1	2
	138.	51	FΥ	-4.8	4
	139.	52			
			FY	-4.5	
	140.	53	ΕY	-4.2	7
	141.	54	FΥ	-3 9	8
:	142.	55	FY	-3.7	Λ
	143.	56	FΥ	-3.4	2 .
				and the second second	
	144.	57	ĮΥ	-3.1	3
	145.	58	CV	-2.8	<u>.</u>
		50 .	ξY		
	146.	59	FΥ	-2.5	7
-					
	147.	60	FΥ	0.0	U
	148.	61	FY	0.0	Λ
	149.	62	FΥ	0.0	0
1	150,	63	FY	0.0	
			C I		
	151.	65	FΥ	-5.5	-8
	152.	66	ΓY		
	153.	67	FY	-5.0	
	154.	68	FΥ	-4.7	3
	155.	69		-4 4	
1			FΥ		
	156.	70	FΥ	-4 1	6
				2.0	Α.
	157.	71	FΥ	-3.8	8
	158.	72	FΥ	-3.6	0
	159.	73	FΥ	-3.3	1
	160.	74	FΥ	-3.0	2
	161.	75	ΓY	-2.7	4
Ċ	162.	76	ΓY	-2.4	
	163.	77	ΓY	-2.1	8
	164.	78	FY	-1.8	a
	165.	79	ΕY	-1.6	i.
	166.	80	FΥ	-1.3	2
	167.	81	ΓY	0.0	
	168.	82	ΓY	0.0	n .
	169.				
		83	FΥ	0.0	
	170.	86	ΓY	-4.3	4
	171.	87	ΓY	-4.0	
	172.	88	FΥ	-3.7	7
	173.	89		-3.4	
			FΥ		
	174.	90	ΓY	-3.2	1
	175.	91	FY	-2.9	2
	176.	92	FY	-2.6	4
	177.	93		-2.3	α
	411.		FY		
	178.	94	FΥ	-2.0	7
	179.	95		-1.7	
			FY		
	180.	96	FΥ	-1.5	0
	181.	97	FY	-1.2	
	182.	.98 : 🚆	FΥ	-0.9	3
	183.	99 :	FY	-0.6	
				2.0	≃ ⊹
	184.	100	ΓY	-0.3	7
	185.	101	FY	-0.0	
	186.	102	ŁΥ	0.0	
	187.	107	FΥ	-3.2	7
				٦. ٧	,
	188.	108	ΕY	-2.9	8
•	189.	109	FY	-2.7	n
	190.	110	FY	-2.4	1
	191.	111	FY	-2.1	
	192.	112	ΕY	-1.8	5
	193.	113	ΓY	-1.5	6
				1.0	ي د
-	194.	114	·ΓΥ	-1.2	8
	195.	115	ΕY	-0.9	
ċ					
	196.	116	ΙY	-0.7	1
	197.	117	FΥ	-0.4	3
	198.	118	FY	-0.1	4
	199.	119	FΥ	0.0	
1	200.	120	FΥ	0.0	
ċ	201.	128	FY	-2.5	6
	202.	129	FY	-2.2	1
	and the second of	A STATE OF THE STA			

	100			-		1. The second second	
	203.	130		FY		-1.99	
	204.	131	٠.	FY		-1.70	
	205.	132		ĘΥ		-1.42	
	206.	133		FΥ		-1.14	
	207.	134	:	ξY		-0.85	
	208.	135	1	FY		~0.57	
	209.	136		FY		-0.28	
	210.	137	•	ΕY		0.00	
	211.	138	14	EY		0.00	
	212.	139		ΓY		0.00	
	213.	149		FΥ		-1.85	
	214.	150	4	FΥ		-1.56	
	215.	151		£Υ		-1.28	
	216.	152		FΥ	100	-0.99	
	217.	153	:	FY		-0.71	
	218.	154		FY		-0.43	
	219.	155		FY	11	-0.14	
	220.	156		ΕY		0.00	
	221.	157		FΥ		0.00	
	222.	170	Ċ	$\mathbf{F}\mathbf{Y}$		-1.14	
	223.	171		FΥ	- 1	-0.85	
	224.	172		FΥ		-0.57	
	225.	173		FΥ	116	-0.28	
	226.	174	* *	ΞY		0.00	
	227.	175	٠.	ΓY	1.	0.00	
٠	228.	176		FΥ	1.	0.00	
	229.	191	4	ΓY		-0.43	
	230.	192		ΓY		-0 14	
	231.	193		ΓY		0.00	
	232.	194	÷	FΥ	12-	0.00	٠
	233.	212		FY		0.00	
	234	213		FY		0.00	

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/ 247.1 MB, EXMEM = 1964.5 MB

++	Processing Element Stiffness Matrix.	9:19:22
++	Processing Global Stiffness Matrix.	9:19:22
++	Processing Triangular Factorization.	9:19:22
++	Calculating Joint Displacements.	9:19:22
++	Calculating Member Forces.	9:19:22

237. PRINT MEM FORCES

MEMBER END FORCES STRUCTURE TYPE = SPACE

ALL UNITS ARE -- KNS METE

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	Y-MOM	MOM-Z
1	. 1	1	.00	376.86	.00	.00	.00	1246.28
		2	.00	-376.86	.00	.00	.00	-1089.89
2	1	2	.00	362.02	.00	.00	.00	1089.88
		3	.00	-362.02	.00	.00	.00	-939.64
3	1	3	.00	338.47	.00	.00	.00	939.64
		4	.00	-338.47	.00	.00	.00	-799.18
4	1	4	.00	310.26	.00	.00	.00	799.17
		5	.00	-310.26	.00	.00	.00	-670.42
5	1	5	.00	280.09	.00	.00	.00	670.42
		. 6	.00	-280.09	.00	.00	.00	-554.18
6	1	6	.00	249.51	.00	.00	.00	554.18
		7	.00	-249.51	.00	.00	.00	-450.63
7	1	7	.00	219.50	.00	.00	.00	450.63
		8	.00	-219.50	.00	.00	.00	-359.53
			20	100 70	^^			250.52
8	1	. 8 9	.00	190.70 -190.70	.00	.00	.00	359.53 -280.39
					Paragraphic			
9.	1	9 10	.00	163.40 -163.40	.00	.00 .00	.00	280.39 -212.58
				ewally set i				
10	1	. 10 11	.00	137.74 -137.74	.00	.00	.00	212.58 -155.42
				7137.74	.00	.00	.00	-133.42
11	1	11	.00	113.67	.00	.00	.00	155.42
		12	.00	-113.67	.00	.00	.00	-108.24
12	1	12	.00	91.14	.00	.00	.00	108.24
		13	.00	-91.14	.00	.00	.00	-70.42
13	1	13	.00	70.05	.00	.00	.00	70.42
		14	.00	-70.05	.00	.00	.00	-41.35
14	1	14	.00	50.46	.00	.00	.00	41.35
		15	.00	-50.46	.00	.00	.00	-20.41

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z	
15	1	15 16	.00	32.44 -32.44	.00	.00	.00	20.41 -6.95	
16	1	16 17	.00	16.28 -16.28	.00	.00	.00	6.95 19	
17	1	17 18	.00	2.80 -2.80	.00	.00	.00	.19 .97	
18	1	18 19	.00	06 .06	.00	.00	.00	97 .95	
19	1	19 20	.00	99 .99	.00	.00	.00	95 .53	
20	1	20 21	.00	-1.29 1.29	.00	.00	.00	53 .00	
21	1	22 23	.00	10.60 -10.60	.00	.00	.00	7.39 -2.99	
22	1	23 24	.00	2.73 -2.73	.00	.00	.00	2.99 -1.86	
23	1	24 25	.00	.95 95	.00	.00	.00 .00	1.86 -1.47	
24	1	25 26	.00	.65 65	.00	.00	.00	1.47 -1.20	
25	1	26 27	.00	.54 54	.00	.00	.00	1.20 97	
26	1	27 28	.00	.45 45	.00	.00	.00	.97 79	
27	1	28 29	.00	.37 37	.00	.00	.00 .00	.79 63	
28	1	29 30	.00	.34 34	.00	.00	.00	. 63 49	
29	1	30 31	.00	.33 33	.00	.00	.00	.49 36	
30	1	31 32	.00	.30 30	.00	.00 .00	.00	.36 24	
31	1	32 33	.00 .00	.26 26	.00	.00	.00	.24 13	
32	1	33 34	.00 .00	.23 23	.00	.00	.00	.13 03	
33	1	34 35	.00	.15 15	.00	.00	.00 .00	.03	
34	1	35 36	.00	.12		.00	.00	03 .08	
35	1	36 37	.00	.12 12		.00 .00	.00	08 .12	
36	1	37 38	.00	.04 04	.00	.00	.00 .00	12 .14	
37	1	38 39	.00	71 .71	.00	.00	.00	14 15	

11-35/

	MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z
	38	1	39 40	.00	03	.00	.00	.00	.15
	39	1	40 41	.00	.29 29	.00	.00	.00	.17
	40	1	41 42	.00	.12 -,12	.00	.00	.00	.05
	41	1	43	.00	11.34 -11.34	.00	.00	.00	8.94 -4.24
	42	1	44 45	.00	5.61 -5.61	.00	.00	.00	4.24 -1.91
	43	1	45 46	.00	2.16 -2.16	.00	.00	.00	1.91 -1.01
	44	1	46 47	.00	.83 83	.00	.00	.00	1.01 67
	45	1	47 48	.00	.39 39	.00	.00	.00	.67 51
	46	1	48 49	.00	.22 22	.00	.00	.00	.50 42
	47	1	49 50	.00	.13	.00	.00	.00	.42 36
	48	1	50 51	.00	.13 13	.00	.00	.00	.36 31
	49	1	51 52	.00	.23 23	.00	.00	.00	.31 21
	50	1	52 53	.00	.29 29	.00	.00	.00	.21 09
	51	1	53 54	.00	.27 27	.00	.00	.00	.09
	52	1	54 55	.00	.22 22	.00	.00	.00	02 .11
	53	1	55 56	.00	.15	.00	.00	.00	11 .17
	54	1	56 57	.00	.05	.00	.00	.00	17 .19
	55	1	57 58	.00	.08	.00	.00	.00	19 .23
	56	1	58 59	.00	30 .30	.00	.00	.00	23 .10
	57	1	59 60	.00	95 .95	.00	.00	.00	10 29
	58	1	60 61	.00	19 .19	.00	.00	.00	.29 37
	59	1	61 62	.00	27 .27	.00	.00	.00	.37 48
	60	1	62 63	.00	1.16 -1.16	.00	.00	.00	.48 .00
- -	:\Box Culve	rt\W5_49	6.doc						Paç

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	мом-ч	мом-г	
61	1	64 65	.00	12.14 -12.14	.00	.00	.00	10.36 -5.32	
62	1	65 66	.00	7.27 -7.27	.00	.00	.00	5.32 -2.30	
63	1	66 67	.00	3.60 -3.60	.00	.00	.00	2.30 81	
64	1	67 68	.00	1.44	.00	.00	.00	.81 21	
65	1	68 69	.00	.45 45	.00	.00	.00	.21 03	
66	1	69 70	.00	.07 07	.00	.00	.00	.03	
67	1	70 71	.00	02 .02	.00	.00	.00	01 .00	
68	1	71 72	.00	05 .05	.00	.00	.00	.00 02	
69	1	72 73	.00	.11 11	.00	.00	.00	.02 .03	
70	1	73 74	.00	.37 37	.00	.00	.00	03 .18	
71	1	74 - 75	.00	.31 31	.00	.00	.00	18 .31	
72	. 1	75 76	.00	01 .01	.00	.00	.00 .00	31 .31	
73	1	76 77	.00	.24 24	.00	.00 .00	.00	31 .41	
74	1	77 78	.00	18 .18	.00	.00 .00	.00	40 .33	
75	1	78 79	.00	13 .13	.00	.00 .00	.00	33 .27	
76	1	79 80	.00	65 .65	.00	.00	.00	27 .00	
77	1	80 81	.00	-1.27 1.27	.00	.00	.00 .00	.00 52	
78	1	81 82	.00	.28 28	.00	.00	.00 .00	.52 41	
79	1	82 83	.00 .00	.98 98	.00	.00	.00 .00	.41	
81	1	85 86	.00	12.06 -12.06		.00	.00	11.16 -6.15	
82	1	86 87	.00	7.98 -7.98		.00	.00	6.15 -2.84	
83	1	87 88	.00	4.63 -4.63		.00	.00	2.84 92	
84	1	88 89	.00	2.15 -2.15		.00	.00	.92 03	

MEMBER .	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z	
85	1	89 90	.00	.73 73	.00	.00	.00	.03	
86	1	90	.00			Alternative State	4.1.1.4		
00	1	91	.00	.10 10	.00	.00	.00	28 .32	
87	1	91	.00	.10	.00	.00	.00	32	
		92	.00	- 10	.00	.00	.00	.36	
88	1	92	.00	.11	.00	.00	.00	36	
		93	.00	11	.00	.00	.00	.41	
89	1	93	.00	10	.00	.00	.00	41	
		94	.00	.10	.00	.00	.00	.37	
90	1	94	.00	.54	.00	.00	.00	37	1,
		95	.00	54	.00	.00	.00	.59	
91	1	95 96	.00	.38	.00	.00	.00	59	
				38	.00	.00	.00	.75	
92	1	96 97	.00	44	.00	.00	.00	75 .57	1
0.2									į
93	1	97 98	.00	10	.00	.00	.00	57 .61	
94	1	98	.00	.02					
	*	99	.00	02	.00	.00	.00	61 .62	
95	1	99	.00	-1.16	.00	.00	.00	62	
		100	.00	1.16	.00	.00	.00	.02	, i
96	1	100	.00	- 48	.00	.00	.00	14	٠. ن
		101	.00	.48	.00	.00	.00	06	
97	1	101	.00	.14	.00	.00	.00	.06	
		102	.00	14	.00	.00	.00	.00	
101	1	106 107	.00	11.17 -11.17	.00	.00	.00	11.30 -6.67	
100	V.	day term							i
102	1	107 108	.00	7.81 -7.81	.00	.00	.00	6.67 -3.42	
103	1	108	.00	5.08	.00	.00	.00	3.43	
100		109	.00	-5.08	.00	00	.00	-1.32	
104	1	109	.00	2.74	.00	.00	.00	1.32	
		110	.00	-2.74	.00	.00	.00	18	
105	1	110	.00	1.11	.00	.00	.00	.18	
		111	.00	-1.11	.00	.00	.00	.28	:
106	1	111	.00	.39	.00	.00	.00	28	
		112	.00	39	.00	.00	.00	.44	
107	1	112 113	.00 .00	42	.00	.00	.00	44	
				42	.00	.00	.00	.61	
108	1	113 114	.00	.95 95	.00	.00	.00	61 1.01	
100	1	g Albert		7 3 4 37.					
109	1	114 115	.00	08 .08	.00	.00	.00	-1.01 .98	
110	1	115	.00	.41	.00	00	.00		
×		116	.00	- 41	.00	.00	.00	98 1.15	

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z	
111	1	116 117	.00	31 .31	.00	.00	.00	-1.15 1.02	
112	1	117 118	.00	.74 74	.00	.00	.00	-1.02 1.33	
113	: 1	118 119	.00	-2.00 2.00	.00	.00	.00	-1.33 .50	
114	1	119 120	.00	-1.22 1.22	.00	.00	.00	50 .00	
121	1	127 128	.00	9.78 -9.78	.00	.00	.00 .00	10.89 -6.83	
122	1	128 129	.00	6.95 -6.95	.00	.00	.00	6.83 -3.95	
123	1	129 130	.00	4.67 -4.67	.00	.00	.00	3.95 -2.01	
124	1	130 131	.00	3.28 -3.28	.00	.00	.00	2.02 66	
125	1	131 132	.00	1.29 -1.29	.00	.00	.00	.66 12	
126	1	132 133	.00	1.29 -1.29	.00	.00 .00	.00	.12 .41	
127	1	133 134	.00	.87 87	.00	.00	.00	41 .78	
128	1	134 135	.00	1.38 -1.38	.00	.00	.00	78 1.35	
129	1	135 136	.00	3.00 -3.00	.00	.00	.00	-1.35 2.60	
130	1	136 137	.00	-2.27 2.27	.00	.00 .00	.00 .00	-2.60 1.66	
131	1	137 138	.00	-1.91 1.91	.00	.00	.00	-1.66 .87	
132	1	138 139	.00	-2.09 2.09	.00	.00	.00	87 .00	
141	1	148 149	.00	7.65 -7.65	.00	.00	.00	9.95 -6.77	yni X
142	1	149 150	.00	6.05 -6.05	.00	.00 .00	.00	6.77 -4.26	
143	1	150 151	.00	2.85 -2.85	.00	.00	.00 .00	4.26 -3.08	
144	1	151 152	.00	3.66 -3.66	.00	.00	.00	3.08 -1.56	
145	1	152 153	.00	1.63 -1.63	.00	.00 .00	.00 .00	1.56 88	
146	1	153 154	.00	2.76 -2.76		.00	.00	.88 .27	
147	1	154 155	.00	2.70 -2.70	.00	.00 .00	.00	27 1.39	

MEMBER	LOAD JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z
148	1 155	.00	56	.00	.00	.00	-1.39
	156	.00	.56	.00	.00	.00	1.16
149	1 156	.00	-2.77	.00	.00	.00	-1.15
	157	.00	2.77	00	.00	.00	.00
161	1 169	.00	4.02	.00	.00	.00	8.34
1.5	170	.00	-4.02	.00	.00	.00	-6.67
162	1 170	.00	5.22	.00	.00	.00	6.67
	171	.00	-5.22	.00	.00	.00	-4.51
163	1 171	.00	1.65	.00	.00	.00	4.51
	172	.00	-1.65	.00	.00	.00	-3.82
164	1 172	.00	52	.00	.00	.00	3.82
	173	.00	.52	.00	.00	.00	-4.04
165	1 173	.00	7.09	.00	.00	.00	4.04
	174	.00	-7.09	.00	.00	.00	-1.10
166	1 174	.00	2.71	.00	.00	.00	1.10
	175	.00	-2.71	.00	.00	.00	.02
167	1 175	.00	03	.00	.00	.00	02
	176	.00	.03	.00	.00	.00	.00
181	1 190 191	.00	1.86 -1.86	.00	.00	.00	6.46
			first. Alex	.00	.00	.00	- 5.69
182	1 191 192	.00	-2.38 2.38	.00	.00		5.69 -6.67
					크는 현취된 방		
183	1 192 193	.00	8.82 -8.82	.00	.00	.00	6.68 -3.02
184	1 101	Professional					
104	1 193 194	.00	7.27 -7.27	.00 .00	.00	.00	3.02
191	1 211	.00	6.10	.00	00	00	C 6C
	212	.00	-6.10	.00	.00	.00	5.65 -3.12
192	1 212	.00	7.49	.00	.00	.00	3.12
	213	.00	-7.49	.00	.00	.00	01
201	1 2	.00	2.06	.00	.00	.00	1.28
	23	.00	-2.06	.00	.00	.00	 53
202	1 23	.00	1.86	.00	.00	.00	.53
	44	.00	-1.86	.00	.00	.00	.14
203	1 44	.00	.77	.00	.00	.00	14
	65	.00	77	.00	.00	.00	.42
204	1 65	.00	.06	.00	.00	.00	42
	86	.00	06	.00	.00	.00	.45
205	1 86	.00	19	.00	.00	.00	45
	107	.00	.19	.00	.00	.00	.38
206	1 107 128	.00	10	.00	.00	.00	38
	开西港市 第二	.00	.10	.00	.00	.00	.34
207	1 128 149	.00	.17 17	.00	.00	.00	34 41
						.00	
208	1 149 170	.00	08 .08	.00	.00	.00 .00	41 .38
			.00	.00	.00	.00	. 38

									,
	MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z
	209	1	170 191	.00	-2.42 2.42	.00	.00	.00	38 50
	210	1	191 212	.00	1.40 -1.40	.00	.00	.00	.50 .00
	211	1	3 24	.00	11.15 -11.15	.00	.00	.00	5.44 -1.39
:	212	1	24 45	.00	5.15 -5.15	.00	.00	.00	1.39 .47
	213	1	45 66	.00	2.06 -2.06	.00	.00	.00	48 1.22
	214	1	66 87	.00	.43 43	.00	.00	.00	-1.22 1.38
	215	1	87 108	.00	28 .28	.00 .00	.00	.00	-1.38 1.28
17	216	1	108 129	.00	53 .53	.00	.00	.00	-1.28 1.09
	217	1	129 150	.00	52 .52	.00	.00	.00	-1.09 .90
	218	1	150 171	.00	1.12 -1.12	.00 .00	.00	.00	90 1.31
	219	1	171 192	.00	3.84 -3.84	.00	.00	.00	-1.31 2.70
	220	1	192 213	.00	-7.49 7.49	.00	01 .01	.00 .00	-2.71 .00
. :	221	1	4 25	.00	16.18 -16.18	.00 .00	.00 .00	.00 .00	8.76 -2.88
	222	1	25 46	.00	8.98 -8.98	.00	.00 .00	.00 .00	2.88 .38
	223	1	46 67	.00	4.05 -4.05	.00	.00	.00	38 1.85
	224	1	67 88	.00	1.19 -1.19	.00	.00	.00	-1.85 2.28
	225	1	88 109	.00	10 .10	.00	.00	.00 .00	-2.28 2.24
	226	1	109 130	.00	45 .45	.00	.00	.00	-2,24 2.08
	227	1	130 151	.00	-1.05 1.05	.00	.00	.00	-2.08 1.70
	228	1	151 172	.00	-3.14 3.14	.00	.00	.00	-1.70 .56
	229	1	172 193	.00	-1.54 1.54	.00	.00	.00	56 .00
	231	1	5 26	.00	18.51 -18.51	.00	.00 .00	.00	10.98 -4.26
	232	1	26 47	.00	11.41 -11.41	.00	.00	.00	4.26 11
		- F - F - F - F - F - F - F - F - F - F					an walata in A	10.8088,78	

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z	· · · · · · · · · · · · · · · · · · ·
233	1	47 68	.00	5.88 -5.88	.00	.00	.00	.12 2.01	
234	1	68 89	.00	2.14 -2.14	.00	.00	.00	-2.01 2.79	
235	1	89 110	.00	.07 07	.00	.00	.00	-2.79 2.82	
236	1	110 131	.00	71 .71	.00	.00	.00	-2.82 2.56	
237	1	131 152	.00	42 .42	.00	.00	.00	-2.56 2.41	
238	1	152 173	.00	.61 61	.00	.00	.00	-2.41 2.63	
239	. 1	173 194	.00 .00	-7.27 7.27	.00	.00	.00	-2.64 .00	
241	1	6 27	.00	19.31 -19.31	.00	.00	.00	12.29 -5.28	
242	1	27 48	.00	12.47 -12.47	.00	.00	.00	5.28 75	
243	1	48 69	.00 .00	6.95 -6.95	.00 .00	.00 .00	.00	.75 1.76	
244	1	69 90	.00	2.88 -2.88	.00	.00	.00	-1.76 2.80	
245	1	90 111	.00	.29 29	.00	.00	.00	-2.80 2.91	
246	1	111 132	.00	-1.12 1.12	.00	.00 .00	.00	-2.91 2.51	
247	1	132 153	.00	-2.54 2.54	.00	.00	.00 .00	-2.51 1.58	
248	1	153 174	.00	-4.38 4.38	.00	.00	.00	-1.59 .00	
251	1	7 28	.00	19.11 -19.11	.00	.00	.00	12.87 -5.93	
252	1	28 49	.00	12.53 -12.53	.00	.00	.00	5.93 -1.38	
253	1	49 70	.00 .00	7.22 -7.22	.00	.00 .00	.00 .00	1.38 1.23	
254	1	70 91	.00 .00	3.15 -3.15	.00	.00 .00	.00	-1.23 2.37	
255	1	91 112	.00	.23 23	.00	.00	.00	-2.37 2.45	
256	1	112 133	.00	-1.65 1.65	.00	.00 .00	.00	-2.45 1.86	
257	1	133 154	.00 .00	-2.38 2.38	.00	.00	.00	-1.86 .99	
258	1	154 175	.00	-2.75 2.75	.00	.00	.00	99 .00	

MEMBER	LOAD J	ſŢ	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-Z
261		8 29	.00	18.29 -18.29	.00	.00	.00	12.92 -6.28
262		29 50	.00	11.96 -11.96	.00	.00	.00	6.28 -1.94
263		50 71	.00	6.84 -6.84	.00	.00	.00	1.94 .54
264		/1)2	.00	2.99 -2.99	.00	.00	.00	54 1.62
265	1 9 11)2 L3	.00	.35 35	.00	.00	.00	-1.62 1.74
266	1 11 13		.00	-1.74 1.74	.00	.00	.00	-1.74 1.11
267	1 13 15		.00	-3.09 3.09	.00	.00	.00	-1.11 01
268	and the second s	55 76	.00	.03 03	.00	.00	.00	.01
271	1	9 30	.00	17.16 -17.16	.00	.00	.00	12.62 -6.39
272		30 51	.00	11.09 -11.09	.00	.00	.00	6.39 -2.37
273		51 72	.00	6.14 -6.14	.00	.00	.00	2.37 14
274		72 93	.00	2.38 -2.38	.00	.00	.00 .00	.14 .72
275		93 14	.00	.24 24	.00 .00	.00 .00	.00	72 .81
276		14 35	.00	01 .01	.00	.00	.00	80 .80
277		35 56	.00	-2.21 2.21	.00	.00	.00	80 .00
281		10 31	.00	15.91 -15.91	.00	.00	.00 .00	12.10 -6.32
282		31 52	.00 .00	10.15 -10.15	.00	.00	.00	6.32 -2.64
283		52 73	.00	5.54 -5.54	.00	.00	.00	2.64 64
284	1	73 94	.00	1.97 -1.97	.00	.00	.00	. 64 . 07
285	1 1	94 .15	.00 .00	74 .74	.00	.00	.00 .00	07 19
286		.15 L36	.00	-2.22 2.22	.00	.00	.00 .00	.20 -1.00
287		L36 L57	.00 .00	2.77 -2.77	.00	.00	.00	1.00
291	1	11 32	.00	14.67 -14.67		.00	.00	11.43 -6.11

						. UOX	COUVERT AT C	11.51430 (VVIII4O	9.9/51
MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	MOM-Y	MOM-2	
292		32 53	.00	9.19 -9.19	.00	.00	.00	6.11 -2.77	
293		53 74	.00	4.95 -4.95	.00	.00	.00	2.77 98	
294		74 95	.00	1.99 -1.99	.00	.00	.00	.98 26	
295		95 16	.00	.36	.00	.00	.00	.26 13	
296		16 37	.00	.36 36	.00	.00	.00	.13	
301		12 33	.00	13.53 -13.53	.00	.00	.00	10.64 -5.73	
302		33 54	.00	8.33 -8.33	.00	.00	.00	5.73 -2.71	
303		54 75	.00	4.40 -4.40	.00	.00	.00	2.71 -1.12	
304		75 96	.00 .00	1.98 -1.98	.00	.00	.00	1.12	
305		96 17	.00	1.29 -1.29	.00	.00	.00	.40 .07	
306		17 38	.00	18 .18	.00	.00	.00	07 .00	
311		13 34	.00	12.45 -12.45	.00	.00	.00	9.73 -5.21	
312		34 55	.00	7.59 -7.59	.00	.00	.00	5.21 -2.45	
313		55 76	.00	3.95 -3.95	.00	.00	.00	2.45 -1.02	
314		76 97	.00	1.25 -1.25	.00	.00	.00	1.02 57	
315		97 18	.00 .00	51 .51	.00	.00	.00	.57 76	
316		18 39	.00	2.09 -2.09	.00	.00	.00	.76 .00	
321		14 35	.00 .00	11.34 -11.34	.00	.00	.00	8.65 -4.54	
322		35 56	.00	6.71 -6.71	.00	.00	.00	4.54 -2.10	
323		56 77	.00	3.39 -3.39	.00	00 .00	.00	2.10	
324		77 98	.00	1.63 -1.63	.00	.00	.00	.87 28	
325		98 19	.00 .00	.78 78	.00	.00 .00	.00	.28	
331		15 36	.00 .00	10.14 -10.14	.00	.00	.00	7.42 -3.73	
and the last of the second of		10 Page 1979	tur i State, an Au	The state of the s	er see in grant or a contract to	and the second of the	the state of the state of	and the second process of	100

C:\Box Culvert\W5_496.doc Page 15 of 28 //- 360

MEMBER	LOAD	JT	AXIAL	SHEAR-Y	SHEAR-Z	TORSION	мом-ч	MOM-Z
332	1	36 57	.00	5.78 -5.78	.00	.00 .00	.00	3.73 -1.64
333	1	57 78	.00	2.62 -2.62	.00	.00	.00	1.64 69
334	1	78 99	.00	. 68 68	.00	.00	.00	.69 44
335	1	99 120	.00	1.22 -1.22	.00	.00	.00	.44
341	1	16 37	.00	8.65 -8.65	.00	.00	.00	5.98 -2.84
342	1	37 58	.00	4.63 -4.63	.00	.00	.00	2.84 -1.16
343	1	58 79	.00	2.15 -2.15	.00	.00	.00	1.16 38
344	1	79 100	.00	1.06 -1.06	.00	.00	.00	.38
351	1	17 38	.00	6.36 -6.36	.00	.00	.00	4.26 -1.95
352	1	38 59	.00	3.30 -3.30	.00	.00	.00	1.95 76
353	1	59 80	.00	1.39 -1.39	.00	.00	.00	.76 25
354	1	80 101	.00	.70 70	.00	.00	.00	.25 .00
361	1	18 39	.00	2.86 -2.86	.00	.00	.00	2.29 -1.25
362	1	39 60	.00	2.17 -2.17	.00	.00	.00 .00	1.25 46
363	1	60 81	.00	1.41 -1.41	.00	.00	.00 .00	.46 .05
364	. 1	81 102	.00	14 .14	.00	.00	.00 .00	05 .00
371	1	19 40	.00	.94 94	.00	.00	.00 .00	.82 48
372	1	40 61	.00	. 63 63	.00	.00	.00 .00	.48 25
381	1 1	20 41	.00	.28 28	.00	.00	.00 .00	09 .19
382	1	41 62	.00	. 45 45		.00	.00 .00	19 .35
391	1	21 42	.00	-1.28 1.28		.00	.00	88 .42
392	1	42 63	.00 .00	-1.16 1.16		.00	.00	42 .00
****	*****	**** [END OF LATE	ST ANALYS	IS RESULT	*****	***	

Page 16 of 28 C:\Box Culvert\W5_496.doc

238.										
239.	PLOT DI									
41.	START CO	5000	GN							
43.	CLEAR (TRACK 1							la de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición dela com		
	MAXMAIN DESIGN		1 TO 144	161 TO	0 164 2	:51 TO :	254 26	1 TO 26	4	
	BEA	м ио	. 141 D	E S I	GN F	ESU	LTS	- FLE	XURE	
EN -	415.	MM FY	- 414.	FC -	25.	MPA, S	IZE -	363. X	250.	MMS
EVEL	HEIO (MI	GHT M)	BAR INFO)	FROM (MM)		TO		ANCI STA	
					(1117)		(tar)			
1	1.0		2 1210							
			2 - 12M							
- R	EOD STEI	EL= 20	MENT= 01.MM2, 1	ROW = 0	0033. R	=XMWO	.0194	ROWMN=	D 1 .0033	l
			BAR SPAC ELOPMENT							
									<u>-</u>	
	April 18 Sept.			the second second	and the second	and the second second				
	BEA	м ио	. 141 D	FSI	GN R	E S II	7. T C	- SHEAT	•	2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	BEA	M NO	. 141 D	ESI	GN P	ESU	LTS	- SHEA	₹	
AT S		PPORT -	Vu=	7.65 KN	ls Vc=	48.	11 KNS	Vs=		KNS
T 4 27	TART SUI	PPORT -	Vu= STIRRUP: Vu=	7.65 KN S ARE N 7.65 KN	NS Vc= NOT REC NS Vc=	48. UIRED. 48.	11 KNS	Vs=	.00	100
AT E	TART SUI	PPORT -	Vu= STIRRUP: Vu= STIRRUP:	7.65 KN S ARE N 7.65 KN S ARE N	NS Vc= NOT REC NS Vc= NOT REC	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E	TART SUI	PPORT -	Vu= STIRRUP: Vu=	7.65 KN S ARE N 7.65 KN S ARE N	NS Vc= NOT REC NS Vc= NOT REC	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E	TART SUI	PPORT -	Vu= STIRRUP: Vu= STIRRUP:	7.65 KN S ARE N 7.65 KN S ARE N 414X	NS Vc= NOT REC NS Vc= NOT REC	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E	TART SUI	PPORT -	Vu= STIRRUP: Vu= STIRRUP:	7.65 KN S ARE N 7.65 KN S ARE N 414X	NS Vc= NOT REC NS Vc= NOT REC	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E	TART SUI	PPORT -	Vu= STIRRUP: Vu= STIRRUP:	7.65 KN S ARE N 7.65 KN S ARE N 414X	NS Vc= NOT REC NS Vc= NOT REC	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E	TART SUI	PPORT -	Vu= STIRRUP: Vu= STIRRUP:	7.65 KN S ARE N 7.65 KN S ARE N 414X	NS Vc= NOT REC NS Vc= NOT REC	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E	TART SUI	PPORT -	Vu= STIRRUP: Vu= STIRRUP:	7.65 KN S ARE N 7.65 KN S ARE N 414X	NS Vc= NOT REC NS Vc= NOT REC	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E	TART SUI	PPORT -	Vu= STIRRUP: Vu= STIRRUP:	7.65 KN S ARE N 7.65 KN S ARE N 414X	NS Vc= NOT REC NS Vc= NOT REC	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E14No12	TART SUI ND SUI 8J H 166.	PPORT -	Vu= STIRRUP: Vu= STIRRUP: 415	7.65 KN S ARE N 7.65 KN S ARE N 414X	IS VC= NOT REC IS VC= NOT REC C 362X	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E14No12	TART SUI ND SUI 8J H 166.	PPORT -	Vu= STIRRUP: Vu= STIRRUP: 415	7.65 KN S ARE N 7.65 KN S ARE N 414X	IS VC= NOT REC IS VC= NOT REC C 362X	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E14	TART SUI ND SUI 8J H 166.	PPORT -	Vu= STIRRUP: Vu= STIRRUP: 415	7.65 KN S ARE N 7.65 KN S ARE N 414X	IS VC= NOT REC IS VC= NOT REC C 362X	48. UIRED. 48. UIRED.	11 KNS 11 KNS	Vs= Vs=	.00	KNS
AT E14	TART SUI ND SUI BJ H 166.	PPORT -	Vu= STIRRUPS Vu= STIRRUPS 415	7.65 KN S ARE N 7.65 KN S ARE N 414X	IS VC= NOT REC IS VC= NOT REC C 362X	48. QUIRED. 48. QUIRED. 249	11 KNS	Vs= Vs=	.00	KNS
AT E 14 No12 #12	TART SUI ND SUI 8J H 166.	PPORT - 0.TO	Vu= STIRRUPS Vu= STIRRUPS 415	7.65 KN S ARE N 7.65 KN S ARE N 414X 2#12	IS VC= NOT REC IS VC= NOT REC C 362X	48. QUIRED. 48. QUIRED. 249	11 KNS 11 KNS	Vs= Vs=	.00 .00	KNS 149J
AT E 14 No12	TART SUI ND SUI 8J H 166.	PPORT - 0.TO	Vu= STIRRUPS Vu= STIRRUPS 415	7.65 KN S ARE N 7.65 KN S ARE N 414X 2#12	IS VC= NOT REC IS VC= NOT REC C 362X	48. QUIRED. 48. QUIRED. 249	11 KNS 11 KNS	Vs= Vs=	.00 .00	KNS 149J
AT E 14 No12	TART SUI ND SUI 8J H 166. OO BE A 415. HEIC	PPORT - 0.TO M N O MM FY	Vu= STIRRUPS Vu= STIRRUPS 415	7.65 KN S ARE N 7.65 KN S ARE N 414X 2#12 E S I FC -	IS VC= NOT REC IS VC= NOT REC C 362X G N R 25. FROM	48. QUIRED. 48. QUIRED. 249	11 KNS 11 KNS LTS	Vs= Vs= 2#12 2#12 363. X	.00 .00	KNS 149J MMS
AT E 14 No12 #12	TART SUI ND SUI BJ OO A BEA 415.	PPORT - 0.TO M N O MM FY	Vu= STIRRUPS Vu= STIRRUPS 415	7.65 KN S ARE N 7.65 KN S ARE N 414X 2#12 E S I FC -	IS VC= NOT REC IS VC= NOT REC C 362X G N R 25.	48. QUIRED. 48. QUIRED. 249	11 KNS 11 KNS LTS	Vs= Vs= 2#12 2#12 363. X	.00 .00	KNS 149J MMS
AT E 14 No12 #12 EN -	TART SUI ND SUI 8J H 166. OO BE A 415. HEIC	PPORT - 0.TO M N O MM FY	Vu= STIRRUPS Vu= STIRRUPS 415	7.65 KN S ARE N 7.65 KN S ARE N 414X 2#12 E S I FC -	IS VC= NOT REC IS VC= NOT REC C 362X G N R 25. FROM	48. QUIRED. 48. QUIRED. 249	11 KNS 11 KNS LTS	Vs= Vs= 2#12 2#12 363. X	.00 .00	KNS 149J MMS

CRITICAL NEG MOMENT= 6.77 KN-MET AT 0.MM, LOAD 1 | REQD STEEL= 201.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 249./ 37./ 249. MMS BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS BEAM NO. 142 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 6.05 KNS Vc= 48.11 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 6.05 KNS Vc= 48.11 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 414X 362X 249_____ 2No12 H 166. 0.TO 415 00 1 2#12 | 2#12 2#12 BEAM NO. 143 DESIGN RESULTS - FLEXURE 415. MM FY - 414. FC - 25. MPA, SIZE - 363. X 250. MMS HEIGHT BAR INFO TO FROM ANCHOR LEVEL (MM) (MM) (MM) 0. 415. 166. 2 - 12MM CRITICAL NEG MOMENT= 4.26 KN-MET AT 0.MM, LOAD 1 | | REQD STEEL= 201.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 249./ 37./ 249. MMS | BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS | BEAM NO. 143 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 2.85 KNS Vc= 48.11 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. SUPPORT - Vu= 2.85 KNS Vc= 48.11 KNS Vs= .00 KNS AT END STIRRUPS ARE NOT REQUIRED. ____ 414X 362X 249__ 2No12 H 166. 0.TO 415

Page 18 of 28

00			1 1		
2#12	2#12	00	2#1	00 v 2	
	' ' 		 ' - '	<u> </u>	
BEAM NO	. 144 DES	IGN RES	SULTS - F	LEXURE	
LEN - 415. MM FY	- 414. FC	- 25. MPA,	SIZE - 363.	X 250. MMS	
LEVEL HEIGHT (MM)	BAR INFO	FROM (MM)	TO (MM)	ANCHOR STA END	
1 166.	2 - 12MM	0.	415.	YES YES	
CRITICAL NEG MO REQD STEEL= 2 MAX/MIN/ACTUAL BASIC/REQD. DEV	01.MM2, ROW= BAR SPACING=	.0033, ROWMX 249./ 37	(= .0194 ROWMN 7./ 249. MMS	DAD 1 = .0033	
	144 8 7 6				
BEAM NO	. 144 DES.	LGN RES	SULTS - SH	EAR	
AT START SUPPORT -	Vu= 3.66 1 STIRRUPS ARE	KNS Vc= 4	18.11 KNS Vs=	.00 KNS	
AT END SUPPORT -	Vu= 3.66 I STIRRUPS ARE	KNS Vc= 4	18.11 KNS Vs=	.00 KNS	
	OTENNOTO THE	HOT KEDOLIKE	,D.		
151J	41	4X 362X 249		152.1	
151J	41	4X 362X 249		152J	
		4X 362X 249		152J	****
		4X 362X 249		152J	W 25 00
151J 2No12 H 166. 0.TO		4X 362X 249		152J	
		4X 362X 249		152J	
2No12 H 166. 0.TO		4x 362x 249		152J	
2No12 H 166. 0.TO			2#1	00	
2No12 H 166. 0.TO	415			00	
2No12 H 166. 0.TO	415			00	
2No12 H 166. 0.TO	415	00	1 2#1	00	
2No12 H 166. 0.TO	415	oo I G N R E S		oo 2 Lexure	
2No12 H 166. 0.TO 00 2#12 BEAM NO LEN + 415. MM FY	415 415	OO I G N R E S - 25. MPA,	ULTS-F	oo 2 Lexure	
2No12 H 166. 0.TO	415 415	oo I G N R E S	ULTS-FSIZE-363.	oo 2 Lexure	

CRITICAL NEG MOMENT= 8.34 KN-MET AT 0.MM, LOAD 1 | REQD STEEL= 201.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 249./ 37./ 249. MMS | BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS | BEAM NO. 161 DESIGN RESULTS - SHEAR .00 KNS 4.02 KNS Vc= AT START SUPPORT - Vu= 48.11 KNS Vs= STIRRUPS ARE NOT REQUIRED. SUPPORT - Vu= 4.02 KNS Vc= 48.11 KNS Vs= STIRRUPS ARE NOT REQUIRED. 414X 362X 249______170J _______ 2No12 H 166. 0.TO 415 00 00 00 2#12 2#12 | 2#12 BEAM NO. 162 DESIGN RESULTS - FLEXURE LEN - 415. MM FY - 414. FC - 25. MPA, SIZE - 363. X 250. MMS TO FROM HEIGHT BAR INFO LEVEL ANCHOR (MM) (MM) (MM) 0. 1 166. 2 - 12MM 415. AL NEG MOMENT= 6.67 KN-MET AT 0.MM, LOAD 1 | CRITICAL NEG MOMENT= REQD STEEL= 201.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 249./ 37./ 249. MMS | BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS | BEAM NO. 162 DESIGN RESULTS - SHEAR AT START SUPPORT - Vu= 5.22 KNS Vc= 48.11 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. AT END SUPPORT - Vu= 5.22 KNS Vc= 48.11 KNS Vs= .00 KNS STIRRUPS ARE NOT REQUIRED. 414X 362X 249 2No12 H 166. 0.TO 415

0.84.6	00		00			0	0
2#12		2	12		2 	#12	
					i	1	
	овам м	O 163 D E	PRICM	D F C H I		ar nyman	
	BEAM N			graduation to	A		
er a ser er er	415. MM F	era de la composição de l					
LEVEL	HEIGHT (MM)	BAR INFO	FROM (MM)		TO (MM)	Al ST	NCHOR A END
1 	166.						
REQ MAX	TICAL NEG M D STEEL= /MIN/ACTUAL IC/REQD. DE	201.MM2, RC BAR SPACIN	OW= .0033, NG= 249./	ROWMX= .01	194 ROWI 249. MM	MN= .003: S	1 3
	BEAM N	O. 163 DE	ESIGN	RESUL	T S -	SHEAR	
	And the second of the second		the second of the second of the second				
ልጥ ደጥል	የተ	- Vu= 1	65 KNS Vo	·= 40 11	KWG A	S-1	00 %NG
新老 声音光	RT SUPPORT	STIRRUPS	ARE NOT RE	CITERD	ay a fati	500000	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
新老 声音光	SUPPORT	STIRRUPS	ARE NOT RE	QUIRED. = 48.11	ay a fati	500000	
AT END	SUPPORT	STIRRUPS - Vu= 1. STIRRUPS	ARE NOT RE 65 KNS VO ARE NOT RE	QUIRED. = 48.11 QUIRED.	KNS V	s= .	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
AT END	SUPPORT	STIRRUPS - Vu= 1. STIRRUPS	ARE NOT RE 65 KNS VO ARE NOT RE	QUIRED. = 48.11 QUIRED.	KNS V	s= .	00 KNS
AT END	SUPPORT	STIRRUPS - Vu= 1. STIRRUPS	ARE NOT RE 65 KNS VO ARE NOT RE	QUIRED. = 48.11 QUIRED.	KNS V	s= .	00 KNS
AT END	SUPPORT	STIRRUPS - Vu= 1. STIRRUPS	ARE NOT RE 65 KNS VO ARE NOT RE	QUIRED. = 48.11 QUIRED.	KNS V	s= .	00 KNS
AT END	SUPPORT	STIRRUPS - Vu= 1. STIRRUPS	ARE NOT RE 65 KNS VO ARE NOT RE	QUIRED. = 48.11 QUIRED.	KNS V	s= .	00 KNS
AT END	SUPPORT	STIRRUPS - Vu= 1. STIRRUPS	ARE NOT RE 65 KNS VO ARE NOT RE	QUIRED. = 48.11 QUIRED.	KNS V	s= .	00 KNS
AT END	SUPPORT 166. 0.T	STIRRUPS - Vu= 1. STIRRUPS	ARE NOT RE 65 KNS VO ARE NOT RE 414X 362X	QUIRED. = 48.11 QUIRED.	KNS V	S=	00 KNS
AT END	SUPPORT	STIRRUPS Vu= 1. STIRRUPS O 415	ARE NOT RE 65 KNS VO ARE NOT RE	QUIRED. = 48.11 QUIRED.	KNS V	s= .	00 KNS
171J 2No12 H	SUPPORT 166. 0.T	STIRRUPS Vu= 1. STIRRUPS O 415	ARE NOT RE 65 KNS VC ARE NOT RE 414X 362X	QUIRED. = 48.11 QUIRED.	KNS V	S=	00 KNS
171J 2No12 H	SUPPORT 166. 0.T	STIRRUPS Vu= 1. STIRRUPS O 415	ARE NOT RE 65 KNS VC ARE NOT RE 414X 362X	QUIRED. = 48.11 QUIRED.	KNS V	S=	00 KNS
171J 2No12 H	SUPPORT 166. 0.T	STIRRUPS Vu= 1. STIRRUPS O 415	ARE NOT RE 65 KNS VC ARE NOT RE 414X 362X	QUIRED. = 48.11 QUIRED.	KNS V	S=	00 KNS
171J 2No12 H	SUPPORT	STIRRUPS - Vu= 1. STIRRUPS 0 415	ARE NOT RE 65 KNS VC ARE NOT RE 414X 362X	QUIRED. = 48.11 QUIRED. (249	KNS V	s= 00	00 KNS
171J 2No12 H	SUPPORT 166. O.T	STIRRUPS - Vu= 1. STIRRUPS 0 415	ARE NOT RE 65 KNS VC ARE NOT RE 414X 362X	QUIRED. 48.11 QUIRED. 249 RESUL	KNS V	s= #12 FLEXURE	00 KNS
171J 2No12 H	SUPPORT	STIRRUPS - Vu= 1. STIRRUPS 0 415	ARE NOT RE 65 KNS VC ARE NOT RE 414X 362X 12 CSIGN FC - 25.	QUIRED. = 48.11 QUIRED. (249 RESUL MPA, SIZE	KNS V	S= 12 FLEXURE 3. X 25)	00 KNS

and the second second								
BEA	M NO.	164 DE	SIGN	RESUL	TS-	SHEAR		
AT START SUI			52 KNS VC ARE NOT RE			Vs=	.00	KNS
AT END SU	PPORT -	Vu≖ .	52 KNS VC ARE NOT RE	= 48.11	KNS	Vs=	.00	KNS
172J			414X 362X	249			<u> </u>	173J_
 No12 H 166.							arek:	=======
		1 / 1 // 1 /// 1 //		<u> </u>				
00 #12		the second secon	00			2#12	00	
			1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1		1.0		1.56	
					- 1		1. 4 ¹ 4 .	
The second control of	gradient für	100	S I G N					MMS
EN - 363. EVEL HEI	MM FY	- 414.	FC - 25.	MPA, SIZ	E -	115. X	250. ANC	HOR
EN - 363. EVEL HEI	MM FY	- 414.	FC - 25.	MPA, SIZ	E -	415. X	250. ANC	HOR
EN - 363. EVEL HEI (M	MM FY GHT M)	- 414. BAR INFO	FC - 25. FROM (MM)	MPA, SIZ	E -	115. X	250. ANC STA	HOR
EN - 363. EVEL HEI (M	MM FY GHT IM)	- 414. BAR INFO	FC - 25. FROM (MM)	MPA, SIZ	E - TO (MM)	415. X	250. ANC STA YES	HOR END YES
EN - 363. EVEL HEI (M 1 1 CRITICAL REQD STE	MM FY GHT M) 66. NEG MOI	- 414. BAR INFO 3 - 12MM MENT= 30.MM2, RO	FC - 25. FROM (MM) 0 12.87 KN-N DW= .0033,	MPA, SIZ M MET AT ROWMX= .0	E - TO (MM) 363.	415. X M, LOAD OWMN= (250. ANC STA YES	HOR END YES
EN - 363. EVEL HEI (M 1 1 CRITICAL REQD STE MAX/MIN/	MM FY GHT M) .66NEG MOI EEL= 2 /ACTUAL	- 414. BAR INFO 3 - 12MM MENT= 30.MM2, ROBAR SPACIN	FC - 25. FROM (MM) 0 12.87 KN-1	MPA, SIZ M MET AT ROWMX= .0 / 37./	TO (MM) 363. 0.M 0194 R 151.	M, LOAD OWMN= (250. ANC STA YES	HOR END YES
EN - 363. EVEL HEI (M 1 1 CRITICAL REQD STE MAX/MIN/	MM FY GHT M) .66NEG MOI EEL= 2 /ACTUAL	- 414. BAR INFO 3 - 12MM MENT= 30.MM2, ROBAR SPACIN	FC - 25. FROM (MM) 0 12.87 KN-1 DW = .0033, JG = 301.	MPA, SIZ M MET AT ROWMX= .0 / 37./	TO (MM) 363. 0.M 0194 R 151.	M, LOAD OWMN= (250. ANC STA YES	HOR END YES
EN - 363. EVEL HEI (M 1 1 CRITICAL REQD STE MAX/MIN/ BASIC/RE	MM FY GHT M) .66NEG MOI EEL= 2 /ACTUAL I	- 414. BAR INFO 3 - 12MM MENT= 30.MM2, ROBAR SPACINELOPMENT I	FC - 25. FROM (MM) 0 12.87 KN-1 DW = .0033, JG = 301.	MPA, SIZ M MET AT ROWMX= .0 / 37./ 177./ 3	TO (MM) 363. 0.M 0194 R 151.	M, LOAD OWMN= (MMS MS	250. ANC STA YES 10033	HOR END YES
EN - 363. EVEL HEI (M 1 1 CRITICAL REQD STE MAX/MIN/ BASIC/RE	MM FY GHT M) .66NEG MOI EEL= 2 /ACTUAL I	- 414. BAR INFO 3 - 12MM MENT= 30.MM2, ROBAR SPACINELOPMENT I	FC - 25. FROM (MM) 0 12.87 KN-N DW= .0033, G= 301. LENGTH =	MPA, SIZ M MET AT ROWMX= .0 / 37./ 177./ 3	TO (MM) 363. 0.M 0194 R 151.	M, LOAD OWMN= (MMS MS	250. ANC STA YES 10033	HOR END YES
EN - 363. EVEL HEI (M 1 1 CRITICAL REQD STE MAX/MIN/ BASIC/RE B E F	MM FY GHT IM) .66 NEG MOI EEL= 2 ACTUAL I EQD. DEVI	- 414. BAR INFO 3 - 12MM MENT= 30.MM2, ROBAR SPACINELOPMENT	FC - 25. FROM (MM) 0 12.87 KN-1 0W= .0033, NG= 301. LENGTH = E S I G N	MPA, SIZ M MET AT ROWMX= .0 / 37./ 177./ 3 R E S U I c= 55.00	TO (MM) 363. 0.M 151. 159. M	M, LOAD OWMN= (MMS MS	250. ANC STA YES 10033	HOR END YES
EN - 363. EVEL HEI (M 1 1 CRITICAL REQD STE MAX/MIN/ BASIC/RE B E A	MM FY GHT IM) .66 NEG MOI EEL= 2: /ACTUAL I EQD. DEVI	- 414. BAR INFO 3 - 12MM MENT= 30.MM2, RO BAR SPACIN ELOPMENT . 251 D I Vu= 19 STIRRUPS Vu= 19	FC - 25. FROM (MM) 0 12.87 KN-1 0 12.87 KN-3 0 12.87 KN-1 E S I G N 11 KNS V ARE NOT R	MPA, SIZ M MET AT ROWMX= .0 / 37./ 177./ 3 R E S U I C= 55.00 EQUIRED. C= 55.00	E - TO (MM) 363. 0.M)194 R 151. 359. M	M, LOAD MMS SHEAR Vs=	250. ANC STA YES. 10033	HOR END YES
EN - 363. EVEL HEI (M 1 1 CRITICAL REQD STE MAX/MIN/ BASIC/RE	MM FY GHT IM) .66 NEG MOI EEL= 2: /ACTUAL I EQD. DEVI	- 414. BAR INFO 3 - 12MM MENT= 30.MM2, ROBAR SPACING ELOPMENT IN Vu= 19 STIRRUPS Vu= 19 STIRRUPS	FC - 25. FROM (MM) 0 12.87 KN-H DW0033, NG - 301. LENGTH = E S I G N .11 KNS V ARE NOT R .11 KNS V	MPA, SIZ M) MET AT ROWMX= .0 / 37./ 177./ 3 R E S U I C= 55.00 EQUIRED. C= 55.00 EQUIRED.	E - TO (MM) 363. 0.MM) 194 R(151. 359. M	M, LOAD OWMN= (MMS - SHEAR Vs= Vs=	250. ANC STA YES. 10033	HOR END YES

Page 22 of 28

000			000		000	
3#12	1	3#12	. 000	3#	12	
BEAN	I N O. 252	DESI	GN RES	ULTS-	FLEXURE	
LEN - 363. N	M FY - 41	14. FC -	25. MPA,	SIZE - 4	15. X 250.	MMS
LEVEL HEIGH (MM)		INFO	FROM (MM)	TO (MM)	ANC STA	
1 166	3 -	L2MM	0.	363.	YES	YES
CRITICAL N REQD STEEI MAX/MIN/AC BASIC/REQU	.= 230.MM2 TUAL BAR SI	2, ROW= .(PACING=	0033, ROWMX 301./ 37	= .0194 RO ./ 151. M		
BEAN	1 NO. 252	DESI	GN RES	ULTS-	SHEAR	
	- 2557 Pt - Ft					
AT START SUPE	STIRI PORT - Vu=	RUPS ARE 1 12.53 KI	NOT REQUIRE NS Vc= 5	D. 5.00 KNS		KNS KNS
	STIRI PORT - Vu= STIRI	RUPS ARE N 12.53 KN RUPS ARE N	NOT REQUIRE	D. 5.00 KNS D.		
AT END SUPE	STIRI PORT - Vu= STIRI	RUPS ARE N 12.53 KN RUPS ARE N	NOT REQUIRE NS Vc= 5 NOT REQUIRE	D. 5.00 KNS D.		KNS
AT END SUPE	STIRI	RUPS ARE N 12.53 KN RUPS ARE N	NOT REQUIRE NS Vc= 5 NOT REQUIRE	D. 5.00 KNS D.		KNS
AT END SUPE	STIRI	RUPS ARE N 12.53 KN RUPS ARE N	NOT REQUIRE NS Vc= 5 NOT REQUIRE	D. 5.00 KNS D.		KNS
AT END SUPE	STIRI	RUPS ARE N 12.53 KN RUPS ARE N	NOT REQUIRE NS Vc= 5 NOT REQUIRE	D. 5.00 KNS D.	Vs= .00	KNS
AT END SUPE 28J 3No12 H 166.	STIRI	RUPS ARE N 12.53 KN RUPS ARE N 362Y	NOT REQUIRE NS VC= 5 NOT REQUIRE X 414X 249	D. 5.00 KNS D.	Vs= .00	KNS
28J 3No12 H 166. 3#12	STIRI PORT - Vu= STIRI 0.TO 363	RUPS ARE N 12.53 KN RUPS ARE N 362)	NOT REQUIRE NS VC= 5 NOT REQUIRE X 414X 249 COO	D. 5.00 KNS D	Vs= .00 Ooc 12 FLEXURE	KNS 49J
28J 3No12 H 166. 3#12	STIRI PORT - Vu= STIRI 0.TO 363 1 NO. 253 M FY - 4: T BAR	DESI 14. FC -	NOT REQUIRE NS VC= 5 NOT REQUIRE X 414X 249	D. 5.00 KNS D	Vs= .00 Ooc 12 FLEXURE	KNS 49J

```
1.23 KN-MET AT 362.MM, LOAD
   CRITICAL POS MOMENT=
   REQD STEEL= 230.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 | MAX/MIN/ACTUAL BAR SPACING= 301./ 37./ 151. MMS |
 BASIC/REQD. DEVELOPMENT LENGTH = 177./ 243. MMS
       166. 3 - 12MM
  CRITICAL NEG MOMENT= 1.38 KN-MET AT 0.MM, LOAD 1 |
   REQD STEEL= 230.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 |
 MAX/MIN/ACTUAL BAR SPACING= 301./ 37./ 151. MMS
BASIC/REQD. DEVELOPMENT LENGTH = 177./ 359. MMS
      BEAM NO. 253 DESIGN RESULTS - SHEAR
AT START SUPPORT - Vu=
                          7.22 KNS Vc=
                                            55.00 KNS Vs=
                                                                 .00 KNS
                    STIRRUPS ARE NOT REQUIRED.
                                            55.00 KNS Vs= .00 KNS
          SUPPORT - Vu= 7.22 KNS Vc=
                  STIRRUPS ARE NOT REQUIRED.
                             361X 414X 249
    49J
3No12 H 184. 0.TO 362
                                     000
                         | 3#12
                                                     | 3#12
3#12
       BEAM NO. 254 DESIGN RESULTS - FLEXURE
LEN - 362. MM FY - 414. FC - 25. MPA, SIZE - 415. X 250. MMS
        HEIGHT
                     BAR INFO
                                     FROM
                                                  TO
                                                                 ANCHOR
LEVEL
                                     (MM)
         (MM)
                                                   (MM)
            84. 3 - 12MM
                                      0.
                                                   362.
    CRITICAL POS MOMENT= 2.37 KN-MET AT 362.MM, LOAD 1 (
REQD STEEL= 230.MM2, ROW= .0033, ROWMX= .0194 ROWMN= .0033 |
MAX/MIN/ACTUAL BAR SPACING= 301./ 37./ 151. MMS |
BASIC/REQD. DEVELOPMENT LENGTH = 177./ 243. MMS |
        BEAM NO. 254 DESIGN RESULTS - SHEAR
 AT START SUPPORT - Vu= 3.15 KNS Vc= 55.00 KNS Vs= .00 KNS
                STIRRUPS ARE NOT REQUIRED.
           SUPPORT - Vu= 3.15 KNS Vc= 55.00 KNS Vs=
                                                                  .00 KNS
                     STIRRUPS ARE NOT REQUIRED.
```

Page 24 of 28

							91J
3No12 H							
3#12			3#12		3#1	2	
	000			000		000	
	ing Transition (Transition) Transition (Transition)		i ya fa				
The second							
В	EAM	N O. 261	DESI	GN RES	ULTS-	FLEXURE	
LEN →	363. MM	FY - 4	14. FC -	25. MPA,	STZE - 41	5 X 250	MMS
LEVEL	(MM)	BAK	INFO	FROM (MM)	TO (MM)	ANC STA	
	<u> </u>						
1	166.		12MM	Λ	263	YES	YES:
l				0.			1
	ICAL NEG	MOMENT=	12.9	2 KN-MET AT	0.MM,	LOAD 1	
I REQD	ICAL NEG STEEL=	MOMENT= 230.MM	12.9 2, ROW= .	2 KN-MET AT 0033, ROWMX=	0.MM, 0.194 ROW	LOAD 1 MN= .0033	
REQD MAX/I	ICAL NEG STEEL= MIN/ACTU	MOMENT= 230.MM JAL BAR S	12.9 2, ROW= . PACING=	2 KN-MET AT	0.MM, 0194 ROW / 151.MM	LOAD 1 MN= .0033	
REQD MAX/I	ICAL NEG STEEL= MIN/ACTU	MOMENT= 230.MM JAL BAR S	12.9 2, ROW= . PACING=	2 KN-MET AT 0033, ROWMX= 301./ 37.	0.MM, 0194 ROW / 151.MM	LOAD 1 MN= .0033	
REQD MAX/I BASI	ICAL NEG STEEL= MIN/ACTU C/REQD.	MOMENT= 230.MM JAL BAR S DEVELOPM	12.9 2, ROW= PACING= ENT LENGT	02 KN-MET AT 0033, ROWMX= 301./ 37. 'H = 177./	0.MM, - 0194 ROW / 151 MM 359.MMS	LOAD 1 MN= .0033 IS	
REQD MAX/I BASI	ICAL NEG STEEL= MIN/ACTU C/REQD.	MOMENT= 230.MM JAL BAR S DEVELOPM	12.9 2, ROW= PACING= ENT LENGT	2 KN-MET AT 0033, ROWMX= 301./ 37.	0.MM, - 0194 ROW / 151 MM 359.MMS	LOAD 1 MN= .0033 IS	
REQD MAX/I BASIC 	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M	MOMENT= 230.MM JAL BAR S DEVELOPM N O. 261	12.9 2, ROW= PACING= ENT LENGT	02 KN-MET AT 0033, ROWMX= 301./ 37. 'H = 177./	0.MM, - 0194 ROW / 151 MM 359 MMS	LOAD 1 MN= .0033 IS	
REQD MAX/I BASIO B	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M	MOMENT= 230.MM JAL BAR S DEVELOPM N O. 261 RT - Vu= STIR	12.9 2, ROW= PACING= ENT LENG1 D E S 1 18.29 E RUPS ARE	02 KN-MET AT 0033, ROWMX= 301./ 37. H = 177./ G N R E S CNS Vc= 55 NOT REQUIRE	0.MM, 0194 ROW / 151. MM 359. MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASIO B	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M	MOMENT = 230.MM IAL BAR S DEVELOPM N O. 261 RT - Vu= STIR RT - Vu=	12.9 2, ROW= PACING= ENT LENGT DEST	02 KN-MET AT 0033, ROWMX= 301./ 37. "H = 177./ "G N R E S	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASIO B	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M	MOMENT = 230.MM IAL BAR S DEVELOPM N O. 261 RT - Vu= STIR RT - Vu=	12.9 2, ROW= PACING= ENT LENGT D E S 1 18.29 E RUPS ARE 18.29 E RUPS ARE	02 KN-MET AT 0033, ROWMX= 301./ 37. "H = 177./ "G N R E S CNS VC= 55 NOT REQUIRER CNS VC= 55	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASIO B B AT STAR	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M	MOMENT = 230.MM IAL BAR S DEVELOPM N O. 261 RT - Vu= STIR RT - Vu=	12.9 2, ROW= PACING= ENT LENGT D E S 1 18.29 E RUPS ARE 18.29 E RUPS ARE	O2 KN-MET AT 0033, ROWMX= 301./ 37. TH = 177./ TG N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASIO 	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M T SUPPOR	MOMENT= 230.MM 230.MM AL BAR S DEVELOPM N O. 261 STIR T - Vu= STIR STIR	12.9 2, ROW= PACING= ENT LENGT D E S 1 18.29 E RUPS ARE 18.29 E RUPS ARE	O2 KN-MET AT 0033, ROWMX= 301./ 37. TH = 177./ TG N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASIO 	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M T SUPPOR	MOMENT= 230.MM 230.MM AL BAR S DEVELOPM N O. 261 STIR T - Vu= STIR STIR	12.9 2, ROW= PACING= ENT LENGT D E S 1 18.29 E RUPS ARE 18.29 E RUPS ARE	O2 KN-MET AT 0033, ROWMX= 301./ 37. TH = 177./ TG N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASIO 	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M T SUPPOR	MOMENT= 230.MM 230.MM AL BAR S DEVELOPM N O. 261 STIR T - Vu= STIR STIR	12.9 2, ROW= PACING= ENT LENGT D E S 1 18.29 E RUPS ARE 18.29 E RUPS ARE	O2 KN-MET AT 0033, ROWMX= 301./ 37. TH = 177./ TG N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASIO 	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M T SUPPOR	MOMENT= 230.MM 230.MM AL BAR S DEVELOPM N O. 261 STIR T - Vu= STIR STIR	12.9 2, ROW= PACING= ENT LENGT D E S 1 18.29 E RUPS ARE 18.29 E RUPS ARE	O2 KN-MET AT 0033, ROWMX= 301./ 37. TH = 177./ TG N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASIO 	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M T SUPPOR	MOMENT= 230.MM 230.MM AL BAR S DEVELOPM N O. 261 STIR T - Vu= STIR STIR	12.9 2, ROW= PACING= ENT LENGT D E S 1 18.29 E RUPS ARE 18.29 E RUPS ARE	O2 KN-MET AT 0033, ROWMX= 301./ 37. TH = 177./ TG N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASIO B AT STAR AT END	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M T SUPPOR	MOMENT= 230.MM 230.MM AL BAR S DEVELOPM N O. 261 STIR T - Vu= STIR STIR	12.9 2, ROW= PACING= ENT LENGT D E S 1 18.29 E RUPS ARE 18.29 E RUPS ARE	O2 KN-MET AT 0033, ROWMX= 301./ 37. TH = 177./ TG N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 S SHEAR	KNS
REQD MAX/I BASI 	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M T SUPPOR	MOMENT= 230.MM 230.MM AL BAR S DEVELOPM N O. 261 STIR T - Vu= STIR STIR	12.9 2, ROW= PACING= ENT LENGT DEST 18.29 FRUPS ARE 18.29 FRUPS ARE 362	O2 KN-MET AT 0033, ROWMX= 301./ 37. TH = 177./ TG N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED	0 MM, 0194 ROW / 151. MM 359. MMS U L T S - 5.00 KNS V	LOAD 1 MN= .0033 IS SHEAR S= .000	KNS
REQD MAX/I BASIO 	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M T SUPPOR SUPPOR	MOMENT= 230.MM 230.MM AL BAR S DEVELOPM N O. 261 STIR T - Vu= STIR STIR	12.9 2, ROW= PACING= ENT LENGT D E S 1 18.29 E RUPS ARE 18.29 E RUPS ARE	2 KN-MET AT 0033, ROWMX= 301./ 37. "H = 177./ I G N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED EX 414X 249	0 MM, 0194 ROW / 151 MM 359 MMS U L T S -	LOAD 1 MN= .0033 IS SHEAR S= .000	KNS
REQD MAX/I BASI 	ICAL NEG STEEL= MIN/ACTU C/REQD. E A M T SUPPOR SUPPOR	MOMENT= 230.MM 230.MM AL BAR S DEVELOPM N O. 261 STIR T - Vu= STIR STIR	12.9 2, ROW= PACING= ENT LENGT DEST 18.29 FRUPS ARE 18.29 FRUPS ARE 362	2 KN-MET AT 0033, ROWMX= 301./ 37. "H = 177./ I G N R E S CNS VC= 55 NOT REQUIRED CNS VC= 55 NOT REQUIRED EX 414X 249	0 MM, 0194 ROW / 151. MM 359. MMS U L T S - 5.00 KNS V	LOAD 1 MN= .0033 IS SHEAR S= .000	KNS

EVEL HEIGHT B (MM)	AR INFO	FROM (MM)	TO (MM)	ANCF STA	
1 166. 3	- 12MM	0.	363.	YES	YES
CRITICAL NEG MOME REQD STEEL= 230 MAX/MIN/ACTUAL BA BASIC/REQD. DEVEL	NT= 6.28 .MM2, ROW= .(R SPACING=	8 KN-MET A 0033, ROWM 301./ 3	K= .0194 ROWM 7./ 151. MMS	N≂ .0033	
BEAM NO.	262 DESI	GN RES	SULTS-S	HEAR	
AT END SUPPORT - V	TIRRUPS ARE Vu= 11.96 K	NOT REQUIR NS Vc=	ED. 55.00 KNS Vs		
	STIRRUPS ARE 362				50J
					ia da Yezo
000 3#12		000		000	
				2	
3#12 BEAM NO.		GN RE	SÜLŤS-	FLEXURE	MMS
B E A M N O. LEN - 362. MM FY	263 DESI	GN RE	SÜLŤS-	FLEXURE	HOR
BEAM NO. LEN - 362. MM FY LEVEL HEIGHT (MM)	263 DESI - 414. FC	IGNRE - 25. MPA FROM (MM)	S U L T S - , SIZE - 41 TO (MM)	FLEXURE 5. X 250.	HOR
BEAM NO. LEN - 362. MM FY LEVEL HEIGHT (MM)	263 DESI - 414. FC- BAR INFO 3 - 12MM ENT= 0.MM2, ROW= AR SPACING=	GNRE - 25. MPA FROM (MM) 43. 54 KN-MET .0033, ROWN	SULTS- , SIZE - 41 TO (MM) 362. AT 362.MM, IX= 0194 ROW	FLEXURE 5. X 250. ANC STA NO LOAD 1 MN= .0033	HOR END YES
BEAM NO. LEN - 362. MM FY LEVEL HEIGHT (MM) 1 84. 1 CRITICAL POS MOM REQD STEEL= 23 MAX/MIN/ACTUAL B	263 DESI - 414. FC- BAR INFO 3 - 12MM ENT= 0.MM2, ROW= AR SPACING= LOPMENT LENG	GNRE - 25. MPA FROM (MM) 43. 54 KN-MET .0033, ROWN	SULTS- , SIZE - 41 TO (MM) 362. AT 362.MM, IX= 0194 ROW	FLEXURE 5. X 250. ANC STA NO LOAD 1 MN= .0033	HOR END YES

AT END	SUPPORT -	STIRRUPS AR Vu= 6.84 STIRRUPS AR	KNS VC= 55 LE NOT REQUIRED KNS VC= 55 LE NOT REQUIRED	.00 KNS Vs=		
50J_		3	61X 414X 249_		71	J

No12 H	3No12 H0.84	. 343.TO 36	2			= == == == = =========================
			*===========	==============		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					25 22 2 3 1	
3#12	000	3#12	000		000	
B	FAM NO	264 DEC	T C N D T C			
			IGN RES			
			- 25. MPA,		X 250. MMS	
EVEL	HEIGHT (MM)	BAR INFO	FROM (MM)	TO (MM)	ANCHOR STA END	100
<u>in Switch in a</u>			Alexander (alexandra)			
	The property of the second	A the set of the set	Contract to the second			•
1	84.	3 - 12MM	0.	362.	YES YES	
CRIT REQD MAX/	ICAL POS MON STEEL= 2: MIN/ACTUAL N	MENT= 1 30.MM2, ROW= BAR SPACING=	0. .62 KN-MET AT .0033, ROWMX= 301./ 37., GTH = 177./	362 MM, LOA .0194 ROWMN= / 151, MMS	YES YES 	
CRIT REQD MAX/I BASI	ICAL POS MON STEEL= 2: MIN/ACTUAL E C/REQD. DEVE	MENT= 1 30.MM2, ROW= BAR SPACING= ELOPMENT LENG	.62 KN-MET AT .0033, ROWMX=	362.MM, LO .0194 ROWMN= / 151. MMS 243. MMS	AD 1 .0033	
CRIT REQD MAX/I BASI B B	ICAL POS MON STEEL= 2: MIN/ACTUAL PO C/REQD. DEVE E A M N O. T SUPPORT -	MENT= 1 30.MM2, ROW= 3AR SPACING= ELOPMENT LENG 264 DES Vu= 2.99 STIRRUPS ARI Vu= 2.99	.62 KN-MET AT .0033, ROWMX= 301./ 37., GTH = 177./ I G N R E S t KNS Vc= 55. E NOT REQUIRED KNS Vc= 55.	362.MM, LO0194 ROWMN= / 151. MMS 243. MMS U L T S - SHE .00 KNS Vs= .00 KNS Vs=	AD 1 .0033	
CRIT REQD MAX/I BASI B AT STAR	ICAL POS MON STEEL= 2: MIN/ACTUAL R C/REQD. DEVE E A M N O. T SUPPORT - SUPPORT -	MENT= 1 30 MM2, ROW= 3AR SPACING= LOPMENT LENG 264 DES Vu= 2.99 STIRRUPS ARI	.62 KN-MET AT .0033, ROWMX= 301./ 37., GTH = 177./ I G N R E S t KNS Vc= \$5. E NOT REQUIRED KNS Vc= \$5. E NOT REQUIRED	362.MM, LOZ .0194 ROWMN= / 151. MMS 243. MMS U L T S - SHEZ .00 KNS VS=	AD 1 .0033	
CRIT REQD MAX/I BASI B AT STAR	ICAL POS MON STEEL= 2: MIN/ACTUAL PO C/REQD. DEVE E A M N O. T SUPPORT -	MENT= 1 30 MM2, ROW= 3AR SPACING= LOPMENT LENG 264 DES Vu= 2.99 STIRRUPS ARI	.62 KN-MET AT .0033, ROWMX= 301./ 37., GTH = 177./ I G N R E S t KNS Vc= 55. E NOT REQUIRED KNS Vc= 55.	362.MM, LOZ .0194 ROWMN= / 151. MMS 243. MMS U L T S - SHEZ .00 KNS VS=	AD 1 .0033	
CRIT REQD MAX/I BASI B AT STAR AT END 71J	ICAL POS MON STEEL= 2: MIN/ACTUAL N C/REQD. DEVN E A M N O. T SUPPORT - SUPPORT -	MENT= 1 30 MM2, ROW= BAR SPACING= ELOPMENT LENG 264 D E S Vu= 2.99 STIRRUPS ARI Vu= 2.99 STIRRUPS ARI 31	.62 KN-MET AT .0033, ROWMX= 301./ 37., GTH = 177./ I G N R E S t KNS Vc= \$5. E NOT REQUIRED KNS Vc= \$5. E NOT REQUIRED	362.MM, LOZ .0194 ROWMN= / 151. MMS 243. MMS U L T S - SHEZ .00 KNS VS=	AD 1 .0033	
CRIT REQD MAX/I BASI B AT STAR AT END 71J N012 H	ICAL POS MON STEEL= 2: MIN/ACTUAL R C/REQD. DEVE E A M N O. T SUPPORT - SUPPORT -	MENT= 1 30.MM2, ROW= 30.MM2, ROW= BAR SPACING= ELOPMENT LENG 264 DES Vu= 2.99 STIRRUPS ARI Vu= 2.99 STIRRUPS ARI 31	.62 KN-MET AT .0033, ROWMX= 301./ 37., GTH = 177./ I G N R E S t KNS Vc= 55. E NOT REQUIRED. KNS Vc= 55. E NOT REQUIRED. 61X 414X 249	362.MM, LOZ .0194 ROWMN= / 151. MMS 243. MMS U L T S - SHEZ .00 KNS VS=	AD 1 .0033	
CRIT REQD MAX/I BASI B AT STAR AT END 71J N012 H	ICAL POS MON STEEL= 2: MIN/ACTUAL R C/REQD. DEVE E A M N O. T SUPPORT - SUPPORT -	MENT= 1 30 MM2, ROW= BAR SPACING= ELOPMENT LENG 264 D E S Vu= 2.99 STIRRUPS ARI Vu= 2.99 STIRRUPS ARI 31	.62 KN-MET AT .0033, ROWMX= 301./ 37., GTH = 177./ I G N R E S t KNS Vc= 55. E NOT REQUIRED. KNS Vc= 55. E NOT REQUIRED. 61X 414X 249	362.MM, LOZ .0194 ROWMN= / 151. MMS 243. MMS U L T S - SHEZ .00 KNS VS=	AD 1 .0033	
CRIT REQD MAX/I BASI B AT STAR AT END 71J N012 H	ICAL POS MON STEEL= 2: MIN/ACTUAL R C/REQD. DEVE E A M N O. T SUPPORT - SUPPORT -	MENT= 1 30.MM2, ROW= 30.MM2, ROW= BAR SPACING= ELOPMENT LENG 264 DES Vu= 2.99 STIRRUPS ARI Vu= 2.99 STIRRUPS ARI 31	.62 KN-MET AT .0033, ROWMX= 301./ 37., GTH = 177./ I G N R E S t KNS Vc= 55. E NOT REQUIRED. KNS Vc= 55. E NOT REQUIRED. 61X 414X 249	362.MM, LOZ .0194 ROWMN= / 151. MMS 243. MMS U L T S - SHEZ .00 KNS VS=	AD 1 .0033	