A0007160

FS = 1.5

```
LISTH JR1A

08/17/83    09.10


1110 1 34.0 -16.14 1 -16.14 0 -1
1120 PZ-22
1130 29000000 6.47 84.38


*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR1AA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT6
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR1A


*RUN COMPLETED*
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*LISTH JR1AA

08/17/83    09.13
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BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 539 T0 554 ORLEANS SIDE

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT
INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS
AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 36.92 INCHES AND OCCURS AT MEMBER COORDINATE
34.00 FT.

PZ-22 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
-16.14	POINT LD	-0.25 LBF
-16.14	COUPLE	50.49 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
25.00	CONTN LD	441.77 LBF/SQ FT
24.00	CONTN LD	379.67 LBF/SQ FT
23.00	CONTN LD	315.74 LBF/SQ FT
22.00	CONTN LD	251.81 LBF/SQ FT
21.00	CONTN LD	187.88 LBF/SQ FT
20.00	CONTN LD	123.95 LBF/SQ FT
19.00	CONTN LD	60.02 LBF/SQ FT
18.50	CONTN LD	28.05 LBF/SQ FT
18.50	CONTN LD	28.05 LBF/SQ FT

17.69	CONTN LD	0.	LBF/SQ FT
17.50	CONTN LD	-6.47	LBF/SQ FT
16.50	CONTN LD	-40.99	LBF/SQ FT
15.50	CONTN LD	-75.51	LBF/SQ FT
14.50	CONTN LD	-110.03	LBF/SQ FT
13.50	CONTN LD	-144.56	LBF/SQ FT
12.50	CONTN LD	-179.08	LBF/SQ FT
11.50	CONTN LD	-213.60	LBF/SQ FT
10.50	CONTN LD	-248.12	LBF/SQ FT
9.50	CONTN LD	-282.64	LBF/SQ FT
8.50	CONTN LD	-317.16	LBF/SQ FT
7.50	CONTN LD	-351.69	LBF/SQ FT
6.50	CONTN LD	-386.21	LBF/SQ FT
6.00	CONTN LD	-403.47	LBF/SQ FT
6.00	CONTN LD	-403.47	LBF/SQ FT
5.00	CONTN LD	-449.75	LBF/SQ FT
4.00	CONTN LD	-496.04	LBF/SQ FT
3.00	CONTN LD	-542.33	LBF/SQ FT
2.00	CONTN LD	-588.61	LBF/SQ FT
1.00	CONTN LD	-634.90	LBF/SQ FT
0.	CONTN LD	-681.18	LBF/SQ FT
-1.00	CONTN LD	-727.47	LBF/SQ FT
-2.00	CONTN LD	-773.75	LBF/SQ FT
-3.00	CONTN LD	-820.04	LBF/SQ FT
-4.00	CONTN LD	-866.33	LBF/SQ FT
-4.36	CONTN LD	-882.84	LBF/SQ FT
-8.20	CONTN LD	0.	LBF/SQ FT
-13.66	CONTN LD	1257.40	LBF/SQ FT
-14.00	CONTN LD	1266.64	LBF/SQ FT
-15.00	CONTN LD	1294.13	LBF/SQ FT
-16.00	CONTN LD	1321.61	LBF/SQ FT
-16.00	CONTN LD	1794.72	LBF/SQ FT
-16.14	CONTN LD	1826.36	LBF/SQ FT
-16.14	CONTN LD	0.	LBF/SQ FT

PZ-22 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 84.38 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 6.47 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT -16.140

THE MAXIMUM BENDING MOMENT IS 74060.55 LBF-FT AND OCCURS AT 2.58
WHICH HAS THE SHEAR FORCE OF 5.64 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	36.9152
33.999	0.0	0.0	0.0	36.9152
33.000	31.3	4.8	10.4	35.6423
32.000	125.0	19.3	83.3	34.3681
31.000	281.3	43.5	281.3	33.0940
30.000	500.0	77.3	666.7	31.8202
29.000	781.3	120.7	1302.1	30.5468

28.000	1125.0	173.9	2250.0	29.2744
27.000	1531.3	236.7	3572.9	28.0036
26.000	2000.0	309.1	5333.3	26.7354
25.000	2470.9	381.9	7573.6	25.4710
24.000	2881.6	445.4	10255.0	24.2120
23.000	3229.3	499.1	13315.8	22.9603
22.000	3513.1	543.0	16692.4	21.7180
21.000	3732.9	577.0	20320.7	20.4875
20.000	3888.9	601.1	24136.9	19.2715
19.000	3980.8	615.3	28077.1	18.0724
18.000	4012.6	620.2	32077.9	16.8933
17.687	4014.3	620.4	33332.6	16.5292
17.000	4006.1	619.2	36090.1	15.7367
16.000	3965.1	612.8	40078.6	14.6057
15.000	3889.6	601.2	44008.8	13.5029
14.000	3779.6	584.2	47846.3	12.4312
13.000	3635.0	561.8	51556.4	11.3933
12.000	3455.9	534.1	55104.8	10.3918
11.000	3242.3	501.1	58456.8	9.4292
10.000	2994.2	462.8	61577.9	8.5078
9.000	2711.6	419.1	64433.7	7.6298
8.000	2394.4	370.1	66989.6	6.7974
7.000	2042.7	315.7	69211.0	6.0122
6.000	1656.5	256.0	71063.5	5.2758
5.000	1229.9	190.1	72510.5	4.5896
4.000	757.0	117.0	73507.8	3.9545
3.000	237.8	36.8	74009.1	3.3713
2.579	5.6	0.9	74060.5	3.1416
2.000	-327.7	-50.6	73968.0	2.8403
1.000	-939.4	-145.2	73338.3	2.3614
0.	-1597.5	-246.9	72073.7	1.9343
-1.000	-2301.8	-355.8	70128.0	1.5580
-2.000	-3052.4	-471.8	67454.8	1.2311
-3.000	-3849.3	-594.9	64007.8	0.9518
-4.000	-4692.5	-725.3	59740.7	0.7175
-5.000	-5524.8	-853.9	54619.6	0.5254
-6.000	-6144.8	-949.7	48765.7	0.3717
-7.000	-6534.8	-1010.0	42406.7	0.2524
-8.000	-6694.8	-1034.7	35772.8	0.1631
-8.195	-6699.2	-1035.4	34467.7	0.1487
-8.197	-6699.2	-1035.4	34454.3	0.1487
-9.000	-6624.9	-1023.9	29093.8	0.0991
-10.000	-6325.0	-977.6	22599.7	0.0555
-11.000	-5795.1	-895.7	16520.5	0.0279
-12.000	-5035.2	-778.2	11086.2	0.0120
-13.000	-4045.4	-625.3	6526.8	0.0041
-14.000	-2837.1	-438.5	3070.8	0.0009
-15.000	-1556.7	-240.6	871.7	0.0001
-16.000	-248.8	-38.5	-33.3	-0.0000
-16.137	-1.6	-0.2	-50.5	0.
-16.139	0.0	0.0	0.0	-0.0000
-16.139	0.0	0.0	0.0	-0.0000
-16.140	0.0	0.0	0.0	-0.0000

RUN COMPLETED

FS = 1.5

```
LISTH JR1B

08/17/83    09.18


1110 1 34.0 -16.14 1 -16.14 0 -1
1120 PZ-27
1130 29000000 7.94 184.2


*FRN WESLIB/CORPS/X0015,E
                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR1BA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT6
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR1B


*RUN COMPLETED*
```

*LISTH JR1BA

08/17/83 09.21

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 539 T0 554 ORLEANS SIDE

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 16.91 INCHES AND OCCURS AT MEMBER COORDINATE 34.00 FT.

PZ-27 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
-16.14	POINT LD	-0.25 LBF
-16.14	COUPLE	50.49 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
25.00	CONTN LD	441.77 LBF/SQ FT
24.00	CONTN LD	379.67 LBF/SQ FT
23.00	CONTN LD	315.74 LBF/SQ FT
22.00	CONTN LD	251.81 LBF/SQ FT
21.00	CONTN LD	187.88 LBF/SQ FT
20.00	CONTN LD	123.95 LBF/SQ FT
19.00	CONTN LD	60.02 LBF/SQ FT
18.50	CONTN LD	28.05 LBF/SQ FT
18.50	CONTN LD	28.05 LBF/SQ FT

17.69	CONTN LD	0.	LBF/SQ FT
17.50	CONTN LD	-6.47	LBF/SQ FT
16.50	CONTN LD	-40.99	LBF/SQ FT
15.50	CONTN LD	-75.51	LBF/SQ FT
14.50	CONTN LD	-110.03	LBF/SQ FT
13.50	CONTN LD	-144.56	LBF/SQ FT
12.50	CONTN LD	-179.08	LBF/SQ FT
11.50	CONTN LD	-213.60	LBF/SQ FT
10.50	CONTN LD	-248.12	LBF/SQ FT
9.50	CONTN LD	-282.64	LBF/SQ FT
8.50	CONTN LD	-317.16	LBF/SQ FT
7.50	CONTN LD	-351.69	LBF/SQ FT
6.50	CONTN LD	-386.21	LBF/SQ FT
6.00	CONTN LD	-403.47	LBF/SQ FT
6.00	CONTN LD	-403.47	LBF/SQ FT
5.00	CONTN LD	-449.75	LBF/SQ FT
4.00	CONTN LD	-496.04	LBF/SQ FT
3.00	CONTN LD	-542.33	LBF/SQ FT
2.00	CONTN LD	-588.61	LBF/SQ FT
1.00	CONTN LD	-634.90	LBF/SQ FT
0.	CONTN LD	-681.18	LBF/SQ FT
-1.00	CONTN LD	-727.47	LBF/SQ FT
-2.00	CONTN LD	-773.75	LBF/SQ FT
-3.00	CONTN LD	-820.04	LBF/SQ FT
-4.00	CONTN LD	-866.33	LBF/SQ FT
-4.36	CONTN LD	-882.84	LBF/SQ FT
-8.20	CONTN LD	0.	LBF/SQ FT
-13.66	CONTN LD	1257.40	LBF/SQ FT
-14.00	CONTN LD	1266.64	LBF/SQ FT
-15.00	CONTN LD	1294.13	LBF/SQ FT
-16.00	CONTN LD	1321.61	LBF/SQ FT
-16.00	CONTN LD	1794.72	LBF/SQ FT
-16.14	CONTN LD	1826.36	LBF/SQ FT
-16.14	CONTN LD	0.	LBF/SQ FT

PZ-27 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 184.20 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 7.94 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT -16.140

THE MAXIMUM BENDING MOMENT IS 74060.55 LBF-FT AND OCCURS AT 2.58
WHICH HAS THE SHEAR FORCE OF 5.64 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	16.9105
33.999	0.0	0.0	0.0	16.9105
33.000	31.3	3.9	10.4	16.3274
32.000	125.0	15.7	83.3	15.7437
31.000	281.3	35.4	281.3	15.1600
30.000	500.0	63.0	666.7	14.5765
29.000	781.3	98.4	1302.1	13.9931

28.000	1125.0	141.7	2250.0	13.4103
27.000	1531.3	198.9	3572.9	12.8281
26.000	2000.0	251.9	5333.3	12.2472
25.000	2470.9	311.2	7573.6	11.6680
24.000	2881.6	362.9	10255.0	11.0912
23.000	3229.3	406.7	13315.8	10.5178
22.000	3513.1	442.5	16692.4	9.9488
21.000	3732.9	470.1	20320.7	9.3851
20.000	3888.9	489.8	24136.9	8.8280
19.000	3980.8	501.4	28077.1	8.2788
18.000	4012.6	505.4	32077.9	7.7386
17.687	4014.3	505.6	33332.6	7.5718
17.000	4006.1	504.5	36090.1	7.2088
16.000	3965.1	499.4	40078.6	6.6907
15.000	3889.6	489.9	44008.8	6.1855
14.000	3779.6	476.0	47846.3	5.6946
13.000	3635.0	457.8	51556.4	5.2192
12.000	3455.9	435.3	55104.8	4.7604
11.000	3242.3	408.4	58456.8	4.3194
10.000	2994.2	377.1	61577.9	3.8973
9.000	2711.6	341.5	64433.7	3.4951
8.000	2394.4	301.6	66989.6	3.1138
7.000	2042.7	257.3	69211.0	2.7541
6.000	1656.5	208.6	71063.5	2.4168
5.000	1229.9	154.9	72510.5	2.1024
4.000	757.0	95.3	73507.8	1.8115
3.000	237.8	30.0	74009.1	1.5443
2.579	5.6	0.7	74060.5	1.4391
2.000	-327.7	-41.3	73968.0	1.3011
1.000	-939.4	-118.3	73338.3	1.0817
0.	-1597.5	-201.2	72073.7	0.8861
-1.000	-2301.8	-289.9	70128.0	0.7137
-2.000	-3052.4	-384.4	67454.8	0.5640
-3.000	-3849.3	-484.8	64007.8	0.4360
-4.000	-4692.5	-591.0	59740.7	0.3287
-5.000	-5524.8	-695.8	54619.6	0.2407
-6.000	-6144.8	-773.9	48765.7	0.1703
-7.000	-6534.8	-823.0	42406.7	0.1156
-8.000	-6694.8	-843.2	35772.8	0.0747
-8.195	-6699.2	-843.7	34467.7	0.0681
-8.197	-6699.2	-843.7	34454.3	0.0681
-9.000	-6624.9	-834.4	29093.8	0.0454
-10.000	-6325.0	-796.6	22599.7	0.0254
-11.000	-5795.1	-729.9	16520.5	0.0128
-12.000	-5035.2	-634.2	11086.2	0.0055
-13.000	-4045.4	-509.5	6526.8	0.0019
-14.000	-2837.1	-357.3	3070.8	0.0004
-15.000	-1556.7	-196.1	871.7	0.0000
-16.000	-248.8	-31.3	-33.3	-0.0000
-16.137	-1.6	-0.2	-50.5	0.
-16.139	0.0	0.0	0.0	-0.0000
-16.139	0.0	0.0	0.0	-0.0000
-16.140	0.0	0.0	0.0	-0.0000

RUN COMPLETED

*LISTH JR1CA

08/17/83 09.29

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 539 T0 554 ORLEANS SIDE

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 11.12 INCHES AND OCCURS AT MEMBER COORDINATE 34.00 FT.

PZ-38 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
-16.14	POINT LD	-0.25 LBF
-16.14	COUPLE	50.49 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
25.00	CONTN LD	441.77 LBF/SQ FT
24.00	CONTN LD	379.67 LBF/SQ FT
23.00	CONTN LD	315.74 LBF/SQ FT
22.00	CONTN LD	251.81 LBF/SQ FT
21.00	CONTN LD	187.88 LBF/SQ FT
20.00	CONTN LD	123.95 LBF/SQ FT
19.00	CONTN LD	60.02 LBF/SQ FT
18.50	CONTN LD	28.05 LBF/SQ FT
18.50	CONTN LD	28.05 LBF/SQ FT

17.69	CONTN LD	0.	LBF/SQ FT
17.50	CONTN LD	-6.47	LBF/SQ FT
16.50	CONTN LD	-40.99	LBF/SQ FT
15.50	CONTN LD	-75.51	LBF/SQ FT
14.50	CONTN LD	-110.03	LBF/SQ FT
13.50	CONTN LD	-144.56	LBF/SQ FT
12.50	CONTN LD	-179.08	LBF/SQ FT
11.50	CONTN LD	-213.60	LBF/SQ FT
10.50	CONTN LD	-248.12	LBF/SQ FT
9.50	CONTN LD	-282.64	LBF/SQ FT
8.50	CONTN LD	-317.16	LBF/SQ FT
7.50	CONTN LD	-351.69	LBF/SQ FT
6.50	CONTN LD	-386.21	LBF/SQ FT
6.00	CONTN LD	-403.47	LBF/SQ FT
6.00	CONTN LD	-403.47	LBF/SQ FT
5.00	CONTN LD	-449.75	LBF/SQ FT
4.00	CONTN LD	-496.04	LBF/SQ FT
3.00	CONTN LD	-542.33	LBF/SQ FT
2.00	CONTN LD	-588.61	LBF/SQ FT
1.00	CONTN LD	-634.90	LBF/SQ FT
0.	CONTN LD	-681.18	LBF/SQ FT
-1.00	CONTN LD	-727.47	LBF/SQ FT
-2.00	CONTN LD	-773.75	LBF/SQ FT
-3.00	CONTN LD	-820.04	LBF/SQ FT
-4.00	CONTN LD	-866.33	LBF/SQ FT
-4.36	CONTN LD	-882.84	LBF/SQ FT
-8.20	CONTN LD	0.	LBF/SQ FT
-13.66	CONTN LD	1257.40	LBF/SQ FT
-14.00	CONTN LD	1266.64	LBF/SQ FT
-15.00	CONTN LD	1294.13	LBF/SQ FT
-16.00	CONTN LD	1321.61	LBF/SQ FT
-16.00	CONTN LD	1794.72	LBF/SQ FT
-16.14	CONTN LD	1826.36	LBF/SQ FT
-16.14	CONTN LD	0.	LBF/SQ FT

PZ-38 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 280.00 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 11.20 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT -16.140

THE MAXIMUM BENDING MOMENT IS 74060.55 LBF-FT AND OCCURS AT 2.58
WHICH HAS THE SHEAR FORCE OF 5.64 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	11.1247
33.999	0.0	0.0	0.0	11.1247
33.000	31.3	2.8	10.4	10.7411
32.000	125.0	11.2	83.3	10.3571
31.000	281.3	25.1	281.3	9.9731
30.000	500.0	44.6	666.7	9.5892
29.000	781.3	69.8	1302.1	9.2055

FS = 1.5

```
LISTH JR1C

08/17/83    09.25


1110 1 34.0 -16.14 1 -16.14 0 -1
1120 PZ-38
1130 29000000 11.2 280.0


*FRN WESLIB/CORPS/X0015,5
illegal permissions in field following          description
*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR1CA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT6
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR1C


*RUN COMPLETED*
```

28.000	1125.0	100.4	2250.0	8.8220
27.000	1531.3	136.7	3572.9	8.4391
26.000	2000.0	178.6	5333.3	8.0569
25.000	2470.9	220.6	7573.6	7.6759
24.000	2881.6	257.3	10255.0	7.2964
23.000	3229.3	288.3	13315.8	6.9192
22.000	3513.1	313.7	16692.4	6.5449
21.000	3732.9	333.3	20320.7	6.1741
20.000	3888.9	347.2	24136.9	5.8076
19.000	3980.8	355.4	28077.1	5.4463
18.000	4012.6	358.3	32077.9	5.0909
17.687	4014.3	358.4	33332.6	4.9812
17.000	4006.1	357.7	36090.1	4.7424
16.000	3965.1	354.0	40078.6	4.4015
15.000	3889.6	347.3	44008.8	4.0692
14.000	3779.6	337.5	47846.3	3.7462
13.000	3635.0	324.6	51556.4	3.4335
12.000	3455.9	308.6	55104.8	3.1316
11.000	3242.3	289.5	58456.8	2.8415
10.000	2994.2	267.3	61577.9	2.5639
9.000	2711.6	242.1	64433.7	2.2993
8.000	2394.4	213.8	66989.6	2.0484
7.000	2042.7	182.4	69211.0	1.8118
6.000	1656.5	147.9	71063.5	1.5899
5.000	1229.9	109.8	72510.5	1.3831
4.000	757.0	67.6	73507.8	1.1917
3.000	237.8	21.2	74009.1	1.0160
2.579	5.6	0.5	74060.5	0.9467
2.000	-327.7	-29.3	73968.0	0.8559
1.000	-939.4	-83.9	73338.3	0.7116
0.	-1597.5	-142.6	72073.7	0.5829
-1.000	-2301.8	-205.5	70128.0	0.4695
-2.000	-3052.4	-272.5	67454.8	0.3710
-3.000	-3849.3	-343.7	64007.8	0.2868
-4.000	-4692.5	-419.0	59740.7	0.2162
-5.000	-5524.8	-493.3	54619.6	0.1583
-6.000	-6144.8	-548.6	48765.7	0.1120
-7.000	-6534.8	-583.5	42406.7	0.0761
-8.000	-6694.8	-597.8	35772.8	0.0491
-8.195	-6699.2	-598.1	34467.7	0.0448
-8.197	-6699.2	-598.1	34454.3	0.0448
-9.000	-6624.9	-591.5	29093.8	0.0299
-10.000	-6325.0	-564.7	22599.7	0.0167
-11.000	-5795.1	-517.4	16520.5	0.0084
-12.000	-5035.2	-449.6	11086.2	0.0036
-13.000	-4045.4	-361.2	6526.8	0.0012
-14.000	-2837.1	-253.3	3070.8	0.0003
-15.000	-1556.7	-139.0	871.7	0.0000
-16.000	-248.8	-22.2	-33.3	-0.0000
-16.137	-1.6	-0.1	-50.5	0.
-16.139	0.0	0.0	0.0	-0.0000
-16.139	0.0	0.0	0.0	-0.0000
-16.140	0.0	0.0	0.0	-0.0000

RUN COMPLETED

FS = 1.5

```
LISTH JR3C

08/17/83    08.69


1110 1 34.0 -17.9 1 -17.9 0 -1
1120 PZ-38
1130 29000000 11.2 280.0


*RUN WES
COMMAND UNKNOWN
*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR3CA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT1
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR3C


*RUN COMPLETED*
```

*LISTH JR3CA

08/17/83 08.72

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 554 TO 589

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 8.46 INCHES AND OCCURS AT MEMBER COORDINATE 34.00 FT.

PZ-38 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
-17.91	POINT LD	26.43 LBF
-17.91	COUPLE	-11.14 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
25.00	CONTN LD	386.73 LBF/SQ FT
24.00	CONTN LD	268.82 LBF/SQ FT
24.00	CONTN LD	268.82 LBF/SQ FT
23.00	CONTN LD	167.55 LBF/SQ FT
22.00	CONTN LD	66.28 LBF/SQ FT
21.35	CONTN LD	0. LBF/SQ FT
21.00	CONTN LD	-34.99 LBF/SQ FT
20.00	CONTN LD	-136.25 LBF/SQ FT
19.00	CONTN LD	-225.11 LBF/SQ FT

18.50	CONTN LD	-243.65	LBF/SQ FT
18.50	CONTN LD	-243.65	LBF/SQ FT
17.50	CONTN LD	-234.55	LBF/SQ FT
16.50	CONTN LD	-225.45	LBF/SQ FT
15.50	CONTN LD	-216.35	LBF/SQ FT
14.50	CONTN LD	-206.72	LBF/SQ FT
13.50	CONTN LD	-195.43	LBF/SQ FT
12.50	CONTN LD	-185.56	LBF/SQ FT
11.50	CONTN LD	-183.37	LBF/SQ FT
10.50	CONTN LD	-181.18	LBF/SQ FT
9.50	CONTN LD	-178.98	LBF/SQ FT
8.50	CONTN LD	-176.79	LBF/SQ FT
7.50	CONTN LD	-174.59	LBF/SQ FT
6.50	CONTN LD	-172.40	LBF/SQ FT
5.50	CONTN LD	-170.21	LBF/SQ FT
4.50	CONTN LD	-168.01	LBF/SQ FT
3.50	CONTN LD	-165.82	LBF/SQ FT
2.50	CONTN LD	-163.62	LBF/SQ FT
1.50	CONTN LD	-161.43	LBF/SQ FT
0.50	CONTN LD	-159.24	LBF/SQ FT
0.	CONTN LD	-158.14	LBF/SQ FT
0.	CONTN LD	-158.14	LBF/SQ FT
-1.00	CONTN LD	-154.77	LBF/SQ FT
-2.00	CONTN LD	-151.40	LBF/SQ FT
-3.00	CONTN LD	-148.03	LBF/SQ FT
-4.00	CONTN LD	-144.66	LBF/SQ FT
-5.00	CONTN LD	-141.29	LBF/SQ FT
-6.00	CONTN LD	-175.21	LBF/SQ FT
-7.00	CONTN LD	-226.93	LBF/SQ FT
-8.00	CONTN LD	-278.65	LBF/SQ FT
-9.00	CONTN LD	-330.37	LBF/SQ FT
-10.00	CONTN LD	-382.09	LBF/SQ FT
-11.00	CONTN LD	-433.81	LBF/SQ FT
-12.00	CONTN LD	-485.53	LBF/SQ FT
-13.00	CONTN LD	-537.27	LBF/SQ FT
-13.93	CONTN LD	-585.46	LBF/SQ FT
-14.60	CONTN LD	0.	LBF/SQ FT
-17.91	CONTN LD	2910.90	LBF/SQ FT
-17.91	CONTN LD	0.	LBF/SQ FT

PZ-38 PROPERTIES ARE AS FOLLOUS.

MOMENT OF INERTIA= 280.00 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 11.20 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT -17.900

THE MAXIMUM BENDING MOMENT IS 44879.58 LBF-FT AND OCCURS AT 4.31
WHICH HAS THE SHEAR FORCE OF -0.24 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	8.4565
33.999	0.0	0.0	0.0	8.4565

33.000	31.3	2.8	10.4	8.1695
32.000	185.0	11.2	83.3	7.8823
31.000	281.3	25.1	281.3	7.5950
30.000	500.0	44.6	666.7	7.3079
29.000	781.3	69.8	1302.1	7.0208
28.000	1125.0	100.4	2250.0	6.7341
27.000	1531.3	136.7	3572.9	6.4479
26.000	2000.0	178.6	5333.3	6.1624
25.000	2443.4	218.2	7564.5	5.8781
24.000	2771.1	247.4	10181.5	5.5954
23.000	2989.3	266.9	13070.2	5.3149
22.000	3106.2	277.3	16126.4	5.0371
21.345	3127.9	279.3	18169.0	4.8572
21.000	3121.9	278.7	19248.9	4.7628
20.000	3036.3	271.1	22336.4	4.4926
19.000	2855.6	255.0	25289.8	4.2272
18.000	2617.7	233.7	28027.6	3.9671
17.000	2383.2	212.8	30527.2	3.7130
16.000	2157.7	192.7	32796.9	3.4653
15.000	1941.4	173.3	34845.7	3.2247
14.000	1734.9	154.9	36683.0	2.9914
13.000	1539.3	137.4	38319.2	2.7660
12.000	1352.8	120.8	39764.8	2.5487
11.000	1169.4	104.4	41025.7	2.3398
10.000	988.2	88.2	42104.3	2.1397
9.000	809.2	72.3	43002.9	1.9485
8.000	632.5	56.5	43723.5	1.7665
7.000	457.9	40.9	44268.5	1.5938
6.000	285.5	25.5	44640.0	1.4304
5.000	115.3	10.3	44840.2	1.2766
4.314	-0.2	-0.0	44879.6	1.1766
4.000	-52.7	-4.7	44871.3	1.1323
3.000	-218.6	-19.5	44735.4	0.9976
2.000	-382.2	-34.1	44434.9	0.8724
1.000	-543.6	-48.5	43971.8	0.7566
0.	-702.9	-62.8	43348.4	0.6502
-1.000	-859.3	-76.7	42567.0	0.5530
-2.000	-1012.4	-90.4	41630.9	0.4648
-3.000	-1162.1	-103.8	40543.3	0.3855
-4.000	-1308.4	-116.8	39307.8	0.3149
-5.000	-1451.4	-129.6	37927.6	0.2525
-6.000	-1609.7	-143.7	36399.9	0.1983
-7.000	-1810.7	-161.7	34694.0	0.1518
-8.000	-2063.5	-184.2	32761.2	0.1126
-9.000	-2368.0	-211.4	30549.7	0.0805
-10.000	-2724.3	-243.2	28007.9	0.0548
-11.000	-3132.2	-279.7	25083.9	0.0351
-12.000	-3591.9	-320.7	21726.2	0.0206
-13.000	-4103.3	-366.4	17882.9	0.0108
-14.000	-4664.2	-416.4	13502.4	0.0048
-14.596	-4820.8	-430.4	10661.0	0.0027
-14.598	-4820.8	-430.4	10651.4	0.0027
-15.000	-4749.3	-424.0	8722.4	0.0017
-16.000	-3955.6	-353.2	4296.7	0.0004
-17.000	-2283.1	-203.8	1104.1	0.0000
-17.899	-29.3	-2.6	11.4	0.
-17.900	-26.4	-2.4	11.4	0.

```
*RUN COMPLETED*
```

FS = 1.5

LISTH LT6

08/16/83 12.19

```
10001 'I7TH ST OUTFALL CANAL
10002 'STA 539 T0 554 ORLEANS SIDE
10003                    3  0.34000000E 02  0.
10004                    3  0.33000000E 02  0.62500000E 02
10005                    3  0.32000000E 02  0.12500000E 03
10006                    3  0.31000000E 02  0.18750000E 03
10007                    3  0.30000000E 02  0.25000000E 03
10008                    3  0.29000000E 02  0.31250000E 03
10009                    3  0.28000000E 02  0.37500000E 03
10010                    3  0.27000000E 02  0.43750000E 03
10011                    3  0.26000000E 02  0.50000000E 03
10012                    3  0.26000000E 02  0.50000000E 03
10013                    3  0.25000000E 02  0.44176907E 03
10014                    3  0.24000000E 02  0.37967472E 03
10015                    3  0.23000000E 02  0.31574342E 03
10016                    3  0.22000000E 02  0.25181211E 03
10017                    3  0.21000000E 02  0.18788081E 03
10018                    3  0.20000000E 02  0.12394950E 03
10019                    3  0.19000000E 02  0.60018181E 02
10020                    3  0.18500000E 02  0.28052530E 02
10021                    3  0.18500000E 02  0.28052530E 02
10022                    3  0.17687396E 02  0.
10023                    3  0.17500000E 02 -0.64692211E 01
10024                    3  0.16500000E 02 -0.40990969E 02
10025                    3  0.15500000E 02 -0.75512724E 02
10026                    3  0.14500000E 02 -0.11003446E 03
10027                    3  0.13500000E 02 -0.14455622E 03
10028                    3  0.12500000E 02 -0.17907796E 03
10029                    3  0.11500000E 02 -0.21359972E 03
10030                    3  0.10500000E 02 -0.24812145E 03
```

```
                                3  0.95000000E 01 -0.28264321E 03
10031                           3  0.85000000E 01 -0.31716496E 03
10032                           3  0.75000000E 01 -0.35168671E 03
10033                           3  0.65000000E 01 -0.38620846E 03
10034                           3  0.60000000E 01 -0.40346934E 03
10035                           3  0.60000000E 01 -0.40346934E 03
10036                           3  0.50000000E 01 -0.44975490E 03
10037                           3  0.40000000E 01 -0.49604047E 03
10038                           3  0.30000000E 01 -0.54232607E 03
10039                           3  0.20000000E 01 -0.58861163E 03
10040                           3  0.10000000E 01 -0.63489720E 03
10041                           3  0.                -0.68118279E 03
10042                           3 -0.10000000E 01 -0.72746835E 03
10043                           3 -0.20000000E 01 -0.77375392E 03
10044                           3 -0.30000000E 01 -0.82003950E 03
10045                           3 -0.40000000E 01 -0.86632507E 03
10046                           3 -0.43569130E 01 -0.88284499E 03
10047                           3 -0.81958594E 01  0.
10048                           3 -0.13663497E 02  0.12573962E 04
10049                           3 -0.14000000E 02  0.12666438E 04
10050                           3 -0.15000000E 02  0.12941252E 04
10051                           3 -0.16000000E 02  0.13216065E 04
10052                           3 -0.16000000E 02  0.17947233E 04
10053                           3 -0.16137557E 02  0.18263573E 04
10054                           4 -0.16137557E 02  0.
10055                           0 -0.16137557E 02  0.
10056
10057  -0.16137557E 02  0.25048828E 00 -0.50498047E 02
```

```
LISTH JR4A

08/16/83    09.15


1110 1 34.0 0.35 1 0.35 0 -1
1120 PZ-22
1130 29000000 6.47 84.38


*FRN WESLIB/CORPS/X0015,E
                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
-YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
-JR4AA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
-YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
-LT2
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
-YES
ENTER THE DATA FILE NAME.
-JR4A


*RUN COMPLETED*
```

*LISTH JR4AA

08/16/83 09.18

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 589 TO 614

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 5.47 INCHES AND OCCURS AT MEMBER COORDINATE 34.00 FT.

PZ-22 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
0.35	POINT LD	-0.00 LBF
0.35	COUPLE	-7.61 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
26.00	CONTN LD	324.23 LBF/SQ FT
25.00	CONTN LD	206.32 LBF/SQ FT
24.00	CONTN LD	86.19 LBF/SQ FT
24.00	CONTN LD	86.19 LBF/SQ FT
23.15	CONTN LD	0. LBF/SQ FT
23.00	CONTN LD	-15.07 LBF/SQ FT
22.00	CONTN LD	-116.34 LBF/SQ FT
21.00	CONTN LD	-217.61 LBF/SQ FT
20.00	CONTN LD	-306.46 LBF/SQ FT
19.00	CONTN LD	-343.55 LBF/SQ FT
18.50	CONTN LD	-362.09 LBF/SQ FT
18.50	CONTN LD	-362.09 LBF/SQ FT
17.50	CONTN LD	-352.99 LBF/SQ FT
16.50	CONTN LD	-343.89 LBF/SQ FT
15.50	CONTN LD	-334.79 LBF/SQ FT
14.50	CONTN LD	-325.69 LBF/SQ FT

13.50	CONTN LD	-316.60	LBF/SQ FT
12.50	CONTN LD	-307.50	LBF/SQ FT
11.50	CONTN LD	-298.40	LBF/SQ FT
10.50	CONTN LD	-288.69	LBF/SQ FT
9.50	CONTN LD	-285.47	LBF/SQ FT
8.50	CONTN LD	-283.28	LBF/SQ FT
7.50	CONTN LD	-281.08	LBF/SQ FT
6.50	CONTN LD	-278.89	LBF/SQ FT
5.50	CONTN LD	-276.69	LBF/SQ FT
4.79	CONTN LD	-275.14	LBF/SQ FT
4.13	CONTN LD	0.	LBF/SQ FT
0.35	CONTN LD	1558.76	LBF/SQ FT
0.35	CONTN LD	0.	LBF/SQ FT

PZ-22 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 84.38 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 6.47 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT 0.350

THE MAXIMUM BENDING MOMENT IS 23609.15 LBF-FT AND OCCURS AT 14.53
WHICH HAS THE SHEAR FORCE OF -1.13 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	5.4652
33.999	0.0	0.0	0.0	5.4652
33.000	31.3	4.8	10.4	5.1823
32.000	125.0	19.3	83.3	4.8991
31.000	281.3	43.5	281.3	4.6159
30.000	500.0	77.3	666.7	4.3330
29.000	781.3	120.7	1302.1	4.0505
28.000	1125.0	173.9	2250.0	3.7691
27.000	1531.3	236.7	3572.9	3.4892
26.000	1912.1	295.5	5304.6	3.2120
25.000	2177.4	336.5	7358.6	2.9385
24.000	2323.6	359.1	9619.1	2.6702
23.149	2360.3	364.8	11617.7	2.4472
23.000	2359.2	364.6	11969.0	2.4087
22.000	2293.5	354.5	14303.8	2.1557
21.000	2126.5	328.7	16522.2	1.9128
20.000	1864.5	288.2	18525.2	1.6815
19.000	1539.5	237.9	20230.2	1.4633
18.000	1183.2	182.9	21592.7	1.2593
17.000	830.2	128.3	22598.6	1.0705
16.000	486.3	75.2	23256.1	0.8976
15.000	151.5	23.4	23574.3	0.7411
14.535	-1.1	-0.2	23609.2	0.6740
14.000	-174.2	-26.9	23562.2	0.6013
13.000	-490.8	-75.9	23228.9	0.4780
12.000	-798.3	-123.4	22583.6	0.3711
11.000	-1096.6	-169.5	21635.4	0.2801
10.000	-1386.1	-214.2	20393.5	0.2044
9.000	-1671.7	-258.4	18864.3	0.1430
8.000	-1955.0	-302.2	17050.8	0.0949
7.000	-2236.1	-345.6	14955.1	0.0588
6.000	-2515.0	-388.7	12579.4	0.0333
5.000	-2791.7	-431.5	9925.9	0.0166
4.128	-2940.4	-454.5	7406.1	0.0078

4.126	-2940.4	-454.5	7400.2	0.0078
4.000	-2937.1	-454.0	7030.9	0.0069
3.000	-2678.2	-413.9	4188.8	0.0021
2.000	-2006.1	-310.1	1812.3	0.0004
1.000	-920.8	-142.3	314.4	0.0000
0.355	-1.6	-0.2	7.6	0.
0.353	-0.0	-0.0	0.0	0.
0.351	-0.0	-0.0	0.0	0.
0.350	-0.0	-0.0	0.0	0.

RUN COMPLETED

*LISTH JR4BA

08/16/83 09.27

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 589 TO 614

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 2.50 INCHES AND OCCURS AT MEMBER COORDINATE 34.00 FT.

PZ-27 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
0.35	POINT LD	-0.00 LBF
0.35	COUPLE	-7.61 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
26.00	CONTN LD	324.23 LBF/SQ FT
25.00	CONTN LD	206.32 LBF/SQ FT
24.00	CONTN LD	86.19 LBF/SQ FT
24.00	CONTN LD	86.19 LBF/SQ FT
23.15	CONTN LD	0. LBF/SQ FT
23.00	CONTN LD	-15.07 LBF/SQ FT
22.00	CONTN LD	-116.34 LBF/SQ FT
21.00	CONTN LD	-217.61 LBF/SQ FT
20.00	CONTN LD	-306.46 LBF/SQ FT
19.00	CONTN LD	-343.55 LBF/SQ FT
18.50	CONTN LD	-362.09 LBF/SQ FT
18.50	CONTN LD	-362.09 LBF/SQ FT
17.50	CONTN LD	-352.99 LBF/SQ FT
16.50	CONTN LD	-343.89 LBF/SQ FT
15.50	CONTN LD	-334.79 LBF/SQ FT
14.50	CONTN LD	-325.69 LBF/SQ FT

13.50	CONTN LD	-316.60	LBF/SQ FT
12.50	CONTN LD	-307.50	LBF/SQ FT
11.50	CONTN LD	-298.40	LBF/SQ FT
10.50	CONTN LD	-288.69	LBF/SQ FT
9.50	CONTN LD	-285.47	LBF/SQ FT
8.50	CONTN LD	-283.28	LBF/SQ FT
7.50	CONTN LD	-281.08	LBF/SQ FT
6.50	CONTN LD	-278.89	LBF/SQ FT
5.50	CONTN LD	-276.69	LBF/SQ FT
4.79	CONTN LD	-275.14	LBF/SQ FT
4.13	CONTN LD	0.	LBF/SQ FT
0.35	CONTN LD	1558.76	LBF/SQ FT
0.35	CONTN LD	0.	LBF/SQ FT

PZ-27 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 184.20 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 7.94 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT 0.350

THE MAXIMUM BENDING MOMENT IS 23609.15 LBF-FT AND OCCURS AT 14.53
WHICH HAS THE SHEAR FORCE OF -1.13 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	2.5036
33.999	0.0	0.0	0.0	2.5036
33.000	31.3	3.9	10.4	2.3739
32.000	125.0	15.7	83.3	2.2442
31.000	281.3	35.4	281.3	2.1145
30.000	500.0	63.0	666.7	1.9849
29.000	781.3	98.4	1302.1	1.8555
28.000	1125.0	141.7	2250.0	1.7266
27.000	1531.3	192.9	3572.9	1.5984
26.000	1912.1	240.8	5364.6	1.4714
25.000	2177.4	274.2	7358.6	1.3461
24.000	2323.6	292.7	9619.1	1.2232
23.149	2360.3	297.3	11617.7	1.1210
23.000	2359.2	297.1	11969.0	1.1034
22.000	2293.5	288.9	14303.8	0.9875
21.000	2126.5	267.8	16522.2	0.8762
20.000	1864.5	234.8	18525.2	0.7703
19.000	1539.5	193.9	20230.2	0.6703
18.000	1183.2	149.0	21592.7	0.5769
17.000	830.2	104.6	22598.6	0.4904
16.000	486.3	61.2	23256.1	0.4112
15.000	151.5	19.1	23574.3	0.3395
14.535	-1.1	-0.1	23609.2	0.3087
14.000	-174.2	-21.9	23562.2	0.2754
13.000	-490.8	-61.8	23228.9	0.2190
12.000	-798.3	-100.5	22583.6	0.1700
11.000	-1096.6	-138.1	21635.4	0.1283
10.000	-1386.1	-174.6	20393.5	0.0936
9.000	-1671.7	-210.5	18864.3	0.0655
8.000	-1955.0	-246.2	17050.8	0.0435
7.000	-2236.1	-281.6	14955.1	0.0270
6.000	-2515.0	-316.7	12579.4	0.0152
5.000	-2791.7	-351.6	9925.9	0.0076
4.128	-2940.4	-370.3	7406.1	0.0036

```
LISTH JR4B

08/16/83    09.23


1110 1 34.0 0.35 1 0.35 0 -1
1120 PZ-27
1130 29000000 7.94 184.2


*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR4BA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT2
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR4B


*RUN COMPLETED*
```

4.126	-2940.4	-370.3	7400.2	0.0036
4.000	-2937.1	-369.9	7030.9	0.0032
3.000	-2678.2	-337.3	4188.8	0.0010
2.000	-2006.1	-252.7	1818.3	0.0002
1.000	-920.8	-116.0	314.4	0.0000
0.355	-1.6	-0.2	7.6	0.
0.353	-0.0	-0.0	0.0	0.
0.351	-0.0	-0.0	0.0	0.
0.350	-0.0	-0.0	0.0	0.

RUN COMPLETED

Bandit

*LISTH LT2

08/11/83 15.48

(1)

```
10001 "17TH ST OUTFALL CANAL
10002 "STA 589 TO 614
10003                    3  0.34000000E 02  0.
10004                    3  0.33000000E 02  0.62500000E 02
10005                    3  0.32000000E 02  0.12500000E 03
10006                    3  0.31000000E 02  0.18750000E 03
10007                    3  0.30000000E 02  0.25000000E 03
10008                    3  0.29000000E 02  0.31250000E 03
10009                    3  0.28000000E 02  0.37500000E 03
10010                    3  0.27000000E 02  0.43750000E 03
10011                    3  0.27000000E 02  0.43750000E 03
10012                    3  0.26000000E 02  0.32423007E 03
10013                    3  0.25000000E 02  0.20631622E 03
10014                    3  0.24000000E 02  0.86194313E 02
10015                    3  0.24000000E 02  0.86194313E 02
10016                    3  0.23148844E 02  0.
10017                    3  0.23000000E 02 -0.15073031E 02
10018                    3  0.22000000E 02 -0.11634038E 03
10019                    3  0.21000000E 02 -0.21760772E 03
10020                    3  0.20000000E 02 -0.30646033E 03
10021                    3  0.19000000E 02 -0.34354555E 03
10022                    3  0.18500000E 02 -0.36208815E 03
10023                    3  0.18500000E 02 -0.36208815E 03
10024                    3  0.17500000E 02 -0.35298969E 03
10025                    3  0.16500000E 02 -0.34389128E 03
10026                    3  0.15500000E 02 -0.33479288E 03
10027                    3  0.14500000E 02 -0.32569441E 03
10028                    3  0.13500000E 02 -0.31659589E 03
10029                    3  0.12500000E 02 -0.30749759E 03
10030                    3  0.11500000E 02 -0.29839909E 03
10031                    3  0.10500000E 02 -0.28869357E 03
```

```
10032                    3  0.95000000E 01 -0.28547102E 03
10033                    3  0.85000000E 01 -0.28327692E 03
10034                    3  0.75000000E 01 -0.28108286E 03
10035                    3  0.65000000E 01 -0.27888898E 03
10036                    3  0.55000000E 01 -0.27669495E 03
10037                    3  0.47925989E 01 -0.27514296E 03
10038                    3  0.41266568E 01  0.
10039                    3  0.35392135E 00  0.15587565E 04
10040                    4  0.35392135E 00  0.
10041                    0  0.35392135E 00  0.
10042   0.35392135E 00  0.61035156E-04  0.76054688E 01
```

```
LISTH JR5A

08/16/83    09.41


1110 1 34.0 9.1 1 9.1 0 -1
1120 PZ-22
1130 29000000 6.47 84.38


*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR5AA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT4
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR5A


*RUN COMPLETED*
```

*LISTH JR5AA

08/16/83 09.44

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 614 TO 625

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT
INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS
AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 1.65 INCHES AND OCCURS AT MEMBER COORDINATE
34.00 FT.

PZ-22 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
9.07	POINT LD	34.87 LBF
9.07	COUPLE	-37.37 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	261.73 LBF/SQ FT
26.00	CONTN LD	143.82 LBF/SQ FT
25.00	CONTN LD	23.69 LBF/SQ FT
24.80	CONTN LD	0. LBF/SQ FT
24.00	CONTN LD	-96.43 LBF/SQ FT
24.00	CONTN LD	-96.43 LBF/SQ FT
23.00	CONTN LD	-197.69 LBF/SQ FT
22.00	CONTN LD	-298.96 LBF/SQ FT
21.00	CONTN LD	-387.81 LBF/SQ FT
20.00	CONTN LD	-424.90 LBF/SQ FT
19.00	CONTN LD	-461.99 LBF/SQ FT
18.50	CONTN LD	-480.53 LBF/SQ FT
18.50	CONTN LD	-480.53 LBF/SQ FT
17.50	CONTN LD	-471.43 LBF/SQ FT
16.50	CONTN LD	-462.33 LBF/SQ FT
15.50	CONTN LD	-453.23 LBF/SQ FT
14.50	CONTN LD	-444.13 LBF/SQ FT

14.41	CONTN LD	-443.28	LBF/SQ FT
12.97	CONTN LD	0.	LBF/SQ FT
9.07	CONTN LD	1201.13	LBF/SQ FT
9.07	CONTN LD	0.	LBF/SQ FT

PZ-22 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 84.38 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 6.47 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT 9.100

THE MAXIMUM BENDING MOMENT IS 13807.23 LBF-FT AND OCCURS AT 18.78
WHICH HAS THE SHEAR FORCE OF 1.92 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	1.6546
33.999	0.0	0.0	0.0	1.6546
33.000	31.3	4.8	10.4	1.5414
32.000	125.0	19.3	83.3	1.4282
31.000	281.3	43.5	281.3	1.3150
30.000	500.0	77.3	666.7	1.2020
29.000	781.3	120.7	1302.1	1.0896
28.000	1125.0	173.9	2250.0	0.9781
27.000	1443.4	223.1	3543.6	0.8682
26.000	1646.1	254.4	5098.2	0.7609
25.000	1729.9	267.4	6796.2	0.6572
24.803	1732.2	267.7	7137.8	0.6372
24.000	1693.5	261.8	8517.9	0.5582
23.000	1546.5	239.0	10146.4	0.4653
22.000	1298.1	200.6	11577.1	0.3796
21.000	954.7	147.6	12711.0	0.3019
20.000	548.4	84.8	13465.6	0.2332
19.000	104.9	16.2	13795.4	0.1740
18.779	1.9	0.3	13807.2	0.1622
18.000	-369.8	-57.2	13664.1	0.1244
17.000	-841.2	-130.0	13057.8	0.0845
16.000	-1303.6	-201.5	11984.7	0.0537
15.000	-1756.8	-271.5	10453.7	0.0314
14.000	-2176.3	-336.4	8477.5	0.0163
13.000	-2340.3	-361.7	6193.5	0.0072
12.969	-2340.4	-361.7	6120.7	0.0070
12.967	-2340.4	-361.7	6116.0	0.0070
12.000	-2196.1	-339.4	3899.7	0.0025
11.000	-1743.6	-269.5	1904.1	0.0006
10.000	-983.0	-151.9	515.1	0.0001
9.101	-36.1	-5.6	38.4	0.
9.100	-34.9	-5.4	38.4	0.

RUN COMPLETED

```
LISTH JR5B

08/16/83    09.48


1110 1 34.0 9.1 1 9.1 0 -1
1120 PZ-27
1130 29000000 7.94 184.2


*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR5BA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
"CANTILEVER RETAINING WALL STABILITY" PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT4
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR5B


*RUN COMPLETED*
```

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xLISTH JR5BA

08/16/83    09.53
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BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 614 TO 625

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 0.76 INCHES AND OCCURS AT MEMBER COORDINATE 34.00 FT.

PZ-27 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
9.07	POINT LD	34.87 LBF
9.07	COUPLE	-37.37 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	261.73 LBF/SQ FT
26.00	CONTN LD	143.82 LBF/SQ FT
25.00	CONTN LD	23.69 LBF/SQ FT
24.80	CONTN LD	0. LBF/SQ FT
24.00	CONTN LD	-96.43 LBF/SQ FT
24.00	CONTN LD	-96.43 LBF/SQ FT
23.00	CONTN LD	-197.69 LBF/SQ FT
22.00	CONTN LD	-298.96 LBF/SQ FT
21.00	CONTN LD	-387.81 LBF/SQ FT
20.00	CONTN LD	-424.90 LBF/SQ FT
19.00	CONTN LD	-461.99 LBF/SQ FT
18.50	CONTN LD	-480.53 LBF/SQ FT
18.50	CONTN LD	-480.53 LBF/SQ FT
17.50	CONTN LD	-471.43 LBF/SQ FT
16.50	CONTN LD	-462.33 LBF/SQ FT
15.50	CONTN LD	-453.23 LBF/SQ FT
14.50	CONTN LD	-444.13 LBF/SQ FT

14.41	CONTN LD	-443.28	LBF/SQ FT
12.97	CONTN LD	0.	LBF/SQ FT
9.07	CONTN LD	1201.13	LBF/SQ FT
9.07	CONTN LD	0.	LBF/SQ FT

PZ-27 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 184.20 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 7.94 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT 9.100

THE MAXIMUM BENDING MOMENT IS 13807.23 LBF-FT AND OCCURS AT 18.78
WHICH HAS THE SHEAR FORCE OF 1.92 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	0.7579
33.999	0.0	0.0	0.0	0.7579
33.000	31.3	3.9	10.4	0.7061
32.000	125.0	15.7	83.3	0.6542
31.000	281.3	35.4	281.3	0.6024
30.000	500.0	63.0	666.7	0.5506
29.000	781.3	98.4	1302.1	0.4991
28.000	1125.0	141.7	2250.0	0.4480
27.000	1443.4	181.8	3543.6	0.3977
26.000	1646.1	207.3	5098.2	0.3486
25.000	1729.9	217.9	6796.2	0.3010
24.803	1732.2	218.2	7137.8	0.2919
24.000	1693.5	213.3	8517.9	0.2557
23.000	1546.5	194.8	10146.4	0.2132
22.000	1298.1	163.5	11577.1	0.1739
21.000	954.7	120.2	12711.0	0.1383
20.000	548.4	69.1	13465.6	0.1068
19.000	104.9	13.2	13795.4	0.0797
18.779	1.9	0.2	13807.2	0.0743
18.000	-369.8	-46.6	13664.1	0.0570
17.000	-841.2	-105.9	13057.8	0.0387
16.000	-1303.6	-164.2	11984.7	0.0246
15.000	-1756.8	-221.3	10453.7	0.0144
14.000	-2176.3	-274.1	8477.5	0.0075
13.000	-2340.3	-294.7	6193.5	0.0033
12.969	-2340.4	-294.8	6120.7	0.0032
12.967	-2340.4	-294.8	6116.0	0.0032
12.000	-2196.1	-276.6	3899.7	0.0012
11.000	-1743.6	-219.6	1904.1	0.0003
10.000	-983.0	-123.8	515.1	0.0000
9.101	-36.1	-4.5	38.4	0.
9.100	-34.9	-4.4	38.4	0.

RUN COMPLETED

*LISTH LT4

08/11/83 15.50

```
10001 *17TH ST OUTFALL CANAL
10002 *STA 614 TO 625
10003                    3  0.34000000E 02  0.
10004                    3  0.33000000E 02  0.62500000E 02
10005                    3  0.32000000E 02  0.12500000E 03
10006                    3  0.31000000E 02  0.18750000E 03
10007                    3  0.30000000E 02  0.25000000E 03
10008                    3  0.29000000E 02  0.31250000E 03
10009                    3  0.28000000E 02  0.37500000E 03
10010                    3  0.28000000E 02  0.37500000E 03
10011                    3  0.27000000E 02  0.26173007E 03
10012                    3  0.26000000E 02  0.14381623E 03
10013                    3  0.25000000E 02  0.23694330E 02
10014                    3  0.24802748E 02  0.
10015                    3  0.24000000E 02 -0.96427590E 02
10016                    3  0.24000000E 02 -0.96427590E 02
10017                    3  0.23000000E 02 -0.19769493E 03
10018                    3  0.22000000E 02 -0.29896228E 03
10019                    3  0.21000000E 02 -0.38781482E 03
10020                    3  0.20000000E 02 -0.42490016E 03
10021                    3  0.19000000E 02 -0.46198536E 03
10022                    3  0.18500000E 02 -0.48052799E 03
10023                    3  0.18500000E 02 -0.48052799E 03
10024                    3  0.17500000E 02 -0.47142953E 03
10025                    3  0.16500000E 02 -0.46233113E 03
10026                    3  0.15500000E 02 -0.45323278E 03
10027                    3  0.14500000E 02 -0.44413430E 03
10028                    3  0.14406118E 02 -0.44328012E 03
10029                    3  0.12967902E 02  0.
10030                    3  0.90708572E 01  0.12011291E 04
10031                    4  0.90708572E 01  0.
```

```
10032                    0  0.90708572E 01  0.
10033   0.90708572E 01  0.30517578E-04  0.37879883E 02
```

```
LISTH JR6A

08/16/83    09.66


1110 1 35.0 10.59 1 10.59 0 -1
1120 PZ-22
1130 29000000 6.47 84.38


*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR6AA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT3
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR6A


*RUN COMPLETED*
```

xLISTH JR6AA

08/16/83 09.69

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 625 TO 635

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 1.55 INCHES AND OCCURS AT MEMBER COORDINATE 35.00 FT.

PZ-22 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
10.59	POINT LD	1.57 LBF
10.59	COUPLE	-31.43 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
35.00	CONTN LD	0. LBF/SQ FT
34.00	CONTN LD	62.50 LBF/SQ FT
33.00	CONTN LD	125.00 LBF/SQ FT
32.00	CONTN LD	187.50 LBF/SQ FT
31.00	CONTN LD	250.00 LBF/SQ FT
30.00	CONTN LD	312.50 LBF/SQ FT
29.00	CONTN LD	375.00 LBF/SQ FT
29.00	CONTN LD	375.00 LBF/SQ FT
28.00	CONTN LD	261.73 LBF/SQ FT
27.00	CONTN LD	143.82 LBF/SQ FT
26.00	CONTN LD	23.69 LBF/SQ FT
25.80	CONTN LD	0. LBF/SQ FT
25.00	CONTN LD	-96.43 LBF/SQ FT
24.00	CONTN LD	-216.55 LBF/SQ FT
24.00	CONTN LD	-216.55 LBF/SQ FT
23.00	CONTN LD	-317.82 LBF/SQ FT
22.00	CONTN LD	-406.67 LBF/SQ FT
21.00	CONTN LD	-443.75 LBF/SQ FT
20.00	CONTN LD	-480.84 LBF/SQ FT
19.00	CONTN LD	-517.93 LBF/SQ FT
18.50	CONTN LD	-536.47 LBF/SQ FT
18.50	CONTN LD	-536.47 LBF/SQ FT
17.50	CONTN LD	-527.37 LBF/SQ FT
16.50	CONTN LD	-518.27 LBF/SQ FT
16.25	CONTN LD	-516.00 LBF/SQ FT

14.54	CONTN LD	0.	LBF/SQ FT
10.59	CONTN LD	1196.65	LBF/SQ FT
10.59	CONTN LD	0.	LBF/SQ FT

PZ-22 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 84.38 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 6.47 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT 10.590

THE MAXIMUM BENDING MOMENT IS 13604.12 LBF-FT AND OCCURS AT 19.96
WHICH HAS THE SHEAR FORCE OF 0.72 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
35.000	0.	0.	0.	1.5511
34.999	0.0	0.0	0.0	1.5511
34.000	31.3	4.8	10.4	1.4431
33.000	125.0	19.3	83.3	1.3350
32.000	281.3	43.5	281.3	1.2270
31.000	500.0	77.3	666.7	1.1192
30.000	781.3	120.7	1302.1	1.0119
29.000	1125.0	173.9	2250.0	0.9055
28.000	1443.4	223.1	3543.6	0.8008
27.000	1646.1	254.4	5098.2	0.6986
26.000	1729.9	267.4	6796.2	0.6001
25.803	1732.2	267.7	7137.8	0.5812
25.000	1693.5	261.8	8517.9	0.5063
24.000	1537.0	237.6	10143.2	0.4186
23.000	1269.9	196.3	11555.1	0.3379
22.000	907.6	140.3	12651.3	0.2654
21.000	482.4	74.6	13349.4	0.2018
20.000	20.1	3.1	13603.7	0.1476
19.960	0.7	0.1	13604.1	0.1456
19.000	-479.3	-74.1	13377.2	0.1029
18.000	-1010.0	-156.1	12633.7	0.0676
17.000	-1537.3	-237.6	11359.3	0.0411
16.000	-2046.4	-316.3	9562.9	0.0227
15.000	-2335.5	-361.0	7346.7	0.0109
14.545	-2366.9	-365.8	6275.7	0.0073
14.543	-2366.9	-365.8	6271.0	0.0073
14.000	-2322.0	-358.9	4992.7	0.0043
13.000	-2006.1	-310.1	2803.5	0.0012
12.000	-1387.6	-214.5	1081.5	0.0002
11.000	-466.6	-72.1	129.2	0.0000
10.591	-2.8	-0.4	31.4	0.
10.590	-1.6	-0.2	31.4	0.

RUN COMPLETED

*LISTH JR6BA

08/16/83 09.76

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 625 TO 635

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 0.71 INCHES AND OCCURS AT MEMBER COORDINATE 35.00 FT.

PZ-27 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
10.59	POINT LD	1.57 LBF
10.59	COUPLE	-31.43 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
35.00	CONTN LD	0. LBF/SQ FT
34.00	CONTN LD	62.50 LBF/SQ FT
33.00	CONTN LD	125.00 LBF/SQ FT
32.00	CONTN LD	187.50 LBF/SQ FT
31.00	CONTN LD	250.00 LBF/SQ FT
30.00	CONTN LD	312.50 LBF/SQ FT
29.00	CONTN LD	375.00 LBF/SQ FT
29.00	CONTN LD	375.00 LBF/SQ FT
28.00	CONTN LD	261.73 LBF/SQ FT
27.00	CONTN LD	143.82 LBF/SQ FT
26.00	CONTN LD	23.69 LBF/SQ FT
25.80	CONTN LD	0. LBF/SQ FT
25.00	CONTN LD	-96.43 LBF/SQ FT
24.00	CONTN LD	-216.55 LBF/SQ FT
24.00	CONTN LD	-216.55 LBF/SQ FT
23.00	CONTN LD	-317.82 LBF/SQ FT
22.00	CONTN LD	-406.67 LBF/SQ FT
21.00	CONTN LD	-443.75 LBF/SQ FT
20.00	CONTN LD	-480.84 LBF/SQ FT
19.00	CONTN LD	-517.93 LBF/SQ FT
18.50	CONTN LD	-536.47 LBF/SQ FT
18.50	CONTN LD	-536.47 LBF/SQ FT
17.50	CONTN LD	-527.37 LBF/SQ FT
16.50	CONTN LD	-518.27 LBF/SQ FT
16.25	CONTN LD	-516.00 LBF/SQ FT

14.54	CONTN LD	0.	LBF/SQ FT
10.59	CONTN LD	1196.65	LBF/SQ FT
10.59	CONTN LD	0.	LBF/SQ FT

PZ-27 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 184.20 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 7.94 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT 10.590

THE MAXIMUM BENDING MOMENT IS 13604.12 LBF-FT AND OCCURS AT 19.96
WHICH HAS THE SHEAR FORCE OF 0.72 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
35.000	0.	0.	0.	0.7106
34.999	0.0	0.0	0.0	0.7106
34.000	31.3	3.9	10.4	0.6611
33.000	125.0	15.7	83.3	0.6116
32.000	281.3	35.4	281.3	0.5621
31.000	500.0	63.0	666.7	0.5127
30.000	781.3	98.4	1302.1	0.4635
29.000	1125.0	141.7	2250.0	0.4148
28.000	1443.4	181.8	3543.6	0.3669
27.000	1646.1	207.3	5098.2	0.3200
26.000	1729.9	217.9	6796.2	0.2749
25.803	1732.2	218.2	7137.8	0.2662
25.000	1693.5	213.3	8517.9	0.2319
24.000	1537.0	193.6	10143.2	0.1917
23.000	1269.9	159.9	11555.1	0.1548
22.000	907.6	114.3	12651.3	0.1216
21.000	482.4	60.8	13349.4	0.0924
20.000	20.1	2.5	13603.7	0.0676
19.960	0.7	0.1	13604.1	0.0667
19.000	-479.3	-60.4	13377.2	0.0471
18.000	-1010.0	-127.2	12633.7	0.0310
17.000	-1537.3	-193.6	11359.3	0.0188
16.000	-2046.4	-257.7	9562.9	0.0104
15.000	-2335.5	-294.1	7346.7	0.0050
14.545	-2366.9	-298.1	6275.7	0.0034
14.543	-2366.9	-298.1	6271.0	0.0034
14.000	-2322.0	-292.4	4992.7	0.0020
13.000	-2006.1	-252.7	2803.5	0.0006
12.000	-1387.6	-174.8	1081.5	0.0001
11.000	-466.6	-58.8	129.2	0.0000
10.591	-2.8	-0.3	31.4	0.
10.590	-1.6	-0.2	31.4	0.

RUN COMPLETED

```
LISTH JR6B

08/16/83    09.72


1110 1 35.0 10.59 1 10.59 0 -1
1120 PZ-27
1130 29000000 7.94 184.2


*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR6BA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT3
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR6B


*RUN COMPLETED*
```

FS = 1.5

```
LISTH JR3A

08/16/83    08.93


1110 1 34.0 -17.9 1 -17.9 0 -1
1120 PZ-22
1130 29000000 6.47 84.38


*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR3AA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
"CANTILEVER RETAINING WALL STABILITY" PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT1
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR3A


*RUN COMPLETED*
```

*LISTH JR3AA

08/16/83 08.98

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 554 TO 589

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT
INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS
AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 28.06 INCHES AND OCCURS AT MEMBER COORDINATE
34.00 FT.

PZ-22 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
-17.91	POINT LD	26.43 LBF
-17.91	COUPLE	-11.14 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
25.00	CONTN LD	386.73 LBF/SQ FT
24.00	CONTN LD	268.82 LBF/SQ FT
24.00	CONTN LD	268.82 LBF/SQ FT
23.00	CONTN LD	167.55 LBF/SQ FT
22.00	CONTN LD	66.28 LBF/SQ FT
21.35	CONTN LD	0. LBF/SQ FT
21.00	CONTN LD	-34.99 LBF/SQ FT
20.00	CONTN LD	-136.25 LBF/SQ FT
19.00	CONTN LD	-225.11 LBF/SQ FT

18.50	CONTN LD	-243.65	LBF/SQ FT
18.50	CONTN LD	-243.65	LBF/SQ FT
17.50	CONTN LD	-234.55	LBF/SQ FT
16.50	CONTN LD	-225.45	LBF/SQ FT
15.50	CONTN LD	-216.35	LBF/SQ FT
14.50	CONTN LD	-206.72	LBF/SQ FT
13.50	CONTN LD	-195.43	LBF/SQ FT
12.50	CONTN LD	-185.56	LBF/SQ FT
11.50	CONTN LD	-183.37	LBF/SQ FT
10.50	CONTN LD	-181.18	LBF/SQ FT
9.50	CONTN LD	-178.98	LBF/SQ FT
8.50	CONTN LD	-176.79	LBF/SQ FT
7.50	CONTN LD	-174.59	LBF/SQ FT
6.50	CONTN LD	-172.40	LBF/SQ FT
5.50	CONTN LD	-170.21	LBF/SQ FT
4.50	CONTN LD	-168.01	LBF/SQ FT
3.50	CONTN LD	-165.82	LBF/SQ FT
2.50	CONTN LD	-163.62	LBF/SQ FT
1.50	CONTN LD	-161.43	LBF/SQ FT
0.50	CONTN LD	-159.24	LBF/SQ FT
0.	CONTN LD	-158.14	LBF/SQ FT
0.	CONTN LD	-158.14	LBF/SQ FT
-1.00	CONTN LD	-154.77	LBF/SQ FT
-2.00	CONTN LD	-151.40	LBF/SQ FT
-3.00	CONTN LD	-148.03	LBF/SQ FT
-4.00	CONTN LD	-144.66	LBF/SQ FT
-5.00	CONTN LD	-141.29	LBF/SQ FT
-6.00	CONTN LD	-175.21	LBF/SQ FT
-7.00	CONTN LD	-226.93	LBF/SQ FT
-8.00	CONTN LD	-278.65	LBF/SQ FT
-9.00	CONTN LD	-330.37	LBF/SQ FT
-10.00	CONTN LD	-382.09	LBF/SQ FT
-11.00	CONTN LD	-433.81	LBF/SQ FT
-12.00	CONTN LD	-485.53	LBF/SQ FT
-13.00	CONTN LD	-537.27	LBF/SQ FT
-13.93	CONTN LD	-585.46	LBF/SQ FT
-14.60	CONTN LD	0.	LBF/SQ FT
-17.91	CONTN LD	2910.90	LBF/SQ FT
-17.91	CONTN LD	0.	LBF/SQ FT

PZ-22 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 84.38 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 6.47 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT -17.900

THE MAXIMUM BENDING MOMENT IS 44879.58 LBF-FT AND OCCURS AT 4.31
WHICH HAS THE SHEAR FORCE OF -0.24 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	28.0614
33.999	0.0	0.0	0.0	28.0614

33.000	31.3	4.8	10.4	27.1092
32.000	125.0	19.3	83.3	26.1559
31.000	281.3	43.5	281.3	25.2028
30.000	500.0	77.3	666.7	24.2498
29.000	781.3	120.7	1302.1	23.2974
28.000	1125.0	173.9	2250.0	22.3459
27.000	1531.3	236.7	3572.9	21.3960
26.000	2000.0	309.1	5333.3	20.4488
25.000	2443.4	377.6	7564.5	19.5053
24.000	2771.1	428.3	10181.5	18.5672
23.000	2989.3	462.0	13070.2	17.6364
22.000	3106.2	480.1	16126.4	16.7148
21.345	3127.9	483.5	18169.0	16.1176
21.000	3121.9	482.5	19248.9	15.8046
20.000	3036.3	469.3	22336.4	14.9080
19.000	2855.6	441.4	25289.8	14.0271
18.000	2617.7	404.6	28027.6	13.1641
17.000	2383.2	368.3	30527.2	12.3209
16.000	2157.7	333.5	32796.9	11.4991
15.000	1941.4	300.1	34845.7	10.7005
14.000	1734.9	268.1	36683.0	9.9265
13.000	1539.3	237.9	38319.2	9.1784
12.000	1352.8	209.1	39764.8	8.4573
11.000	1169.4	180.7	41025.7	7.7643
10.000	988.2	152.7	42104.3	7.1002
9.000	809.2	125.1	43002.9	6.4658
8.000	632.5	97.8	43723.5	5.8618
7.000	457.9	70.8	44268.5	5.2886
6.000	285.5	44.1	44640.0	4.7467
5.000	115.3	17.8	44840.2	4.2363
4.314	-0.2	-0.0	44879.6	3.9044
4.000	-52.7	-8.2	44871.3	3.7575
3.000	-218.6	-33.8	44735.4	3.3104
2.000	-382.2	-59.1	44434.9	2.8948
1.000	-543.6	-84.0	43971.8	2.5107
0.	-702.9	-108.6	43348.4	2.1575
-1.000	-859.3	-132.8	42567.0	1.8350
-2.000	-1012.4	-156.5	41630.9	1.5424
-3.000	-1162.1	-179.6	40543.3	1.2793
-4.000	-1308.4	-202.2	39307.8	1.0448
-5.000	-1451.4	-224.3	37927.6	0.8380
-6.000	-1609.7	-248.8	36399.9	0.6580
-7.000	-1810.7	-279.9	34694.0	0.5037
-8.000	-2063.5	-318.9	32761.2	0.3738
-9.000	-2368.0	-366.0	30549.7	0.2670
-10.000	-2724.3	-421.1	28007.9	0.1818
-11.000	-3132.2	-484.1	25083.9	0.1163
-12.000	-3591.9	-555.2	21726.2	0.0685
-13.000	-4103.3	-634.2	17882.9	0.0360
-14.000	-4664.2	-720.9	13502.4	0.0160
-14.596	-4820.8	-745.1	10661.0	0.0088
-14.598	-4820.8	-745.1	10651.4	0.0088
-15.000	-4749.3	-734.1	8722.4	0.0055
-16.000	-3955.6	-611.4	4296.7	0.0012
-17.000	-2283.1	-352.9	1104.1	0.0001
-17.899	-29.3	-4.5	11.4	0.
-17.900	-26.4	-4.1	11.4	0.

RUN COMPLETED

FS=1.5

```
LISTH JR3B

08/16/83    09.00


1110 1 34.0 -17.9 1 -17.9 0 -1
1120 PZ-27
1130 29000000 7.94 184.2


*FRN EQWESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
=YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
=JR3BA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
"CANTILEVER RETAINING WALL STABILITY" PROGRAM (YES/NO)?
=YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
=LT1
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
=YES
ENTER THE DATA FILE NAME.
=JR3B


*RUN COMPLETED*
```

*LISTH JR3BA

08/16/83 09.04

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 554 TO 589

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 12.85 INCHES AND OCCURS AT MEMBER COORDINATE 34.00 FT.

PZ-27 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
-17.91	POINT LD	26.43 LBF
-17.91	COUPLE	-11.14 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
34.00	CONTN LD	0. LBF/SQ FT
33.00	CONTN LD	62.50 LBF/SQ FT
32.00	CONTN LD	125.00 LBF/SQ FT
31.00	CONTN LD	187.50 LBF/SQ FT
30.00	CONTN LD	250.00 LBF/SQ FT
29.00	CONTN LD	312.50 LBF/SQ FT
28.00	CONTN LD	375.00 LBF/SQ FT
27.00	CONTN LD	437.50 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
26.00	CONTN LD	500.00 LBF/SQ FT
25.00	CONTN LD	386.73 LBF/SQ FT
24.00	CONTN LD	268.82 LBF/SQ FT
24.00	CONTN LD	268.82 LBF/SQ FT
23.00	CONTN LD	167.55 LBF/SQ FT
22.00	CONTN LD	66.28 LBF/SQ FT
21.35	CONTN LD	0. LBF/SQ FT
21.00	CONTN LD	-34.99 LBF/SQ FT
20.00	CONTN LD	-136.25 LBF/SQ FT
19.00	CONTN LD	-225.11 LBF/SQ FT
18.50	CONTN LD	-243.65 LBF/SQ FT
18.50	CONTN LD	-243.65 LBF/SQ FT
17.50	CONTN LD	-234.55 LBF/SQ FT
16.50	CONTN LD	-225.45 LBF/SQ FT
15.50	CONTN LD	-216.35 LBF/SQ FT
14.50	CONTN LD	-206.78 LBF/SQ FT

13.50	CONTN LD	-195.43	LBF/SQ FT
12.50	CONTN LD	-185.58	LBF/SQ FT
11.50	CONTN LD	-183.37	LBF/SQ FT
10.50	CONTN LD	-181.18	LBF/SQ FT
9.50	CONTN LD	-178.98	LBF/SQ FT
8.50	CONTN LD	-176.79	LBF/SQ FT
7.50	CONTN LD	-174.59	LBF/SQ FT
6.50	CONTN LD	-172.40	LBF/SQ FT
5.50	CONTN LD	-170.21	LBF/SQ FT
4.50	CONTN LD	-168.01	LBF/SQ FT
3.50	CONTN LD	-165.82	LBF/SQ FT
2.50	CONTN LD	-163.62	LBF/SQ FT
1.50	CONTN LD	-161.43	LBF/SQ FT
0.50	CONTN LD	-159.24	LBF/SQ FT
0.	CONTN LD	-158.14	LBF/SQ FT
0.	CONTN LD	-158.14	LBF/SQ FT
-1.00	CONTN LD	-154.77	LBF/SQ FT
-2.00	CONTN LD	-151.40	LBF/SQ FT
-3.00	CONTN LD	-148.03	LBF/SQ FT
-4.00	CONTN LD	-144.66	LBF/SQ FT
-5.00	CONTN LD	-141.29	LBF/SQ FT
-6.00	CONTN LD	-175.21	LBF/SQ FT
-7.00	CONTN LD	-226.93	LBF/SQ FT
-8.00	CONTN LD	-278.65	LBF/SQ FT
-9.00	CONTN LD	-330.37	LBF/SQ FT
-10.00	CONTN LD	-382.09	LBF/SQ FT
-11.00	CONTN LD	-433.81	LBF/SQ FT
-12.00	CONTN LD	-485.53	LBF/SQ FT
-13.00	CONTN LD	-537.27	LBF/SQ FT
-13.93	CONTN LD	-585.46	LBF/SQ FT
-14.60	CONTN LD	0.	LBF/SQ FT
-17.91	CONTN LD	2910.90	LBF/SQ FT
-17.91	CONTN LD	0.	LBF/SQ FT

PZ-27 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 184.20 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 7.94 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT -17.900

THE MAXIMUM BENDING MOMENT IS 44879.58 LBF-FT AND OCCURS AT 4.31
WHICH HAS THE SHEAR FORCE OF -0.24 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
34.000	0.	0.	0.	12.8546
33.999	0.0	0.0	0.0	12.8546
33.000	31.3	3.9	10.4	12.4184
32.000	125.0	15.7	83.3	11.9817
31.000	281.3	35.4	281.3	11.5451
30.000	500.0	63.0	666.7	11.1086
29.000	781.3	98.4	1302.1	10.6723
28.000	1125.0	141.7	2250.0	10.2364
27.000	1531.3	192.9	3572.9	9.8013
26.000	2000.0	251.9	5333.3	9.3674
25.000	2443.4	307.7	7564.5	8.9352
24.000	2771.1	349.0	10181.5	8.5055
23.000	2989.3	376.5	13070.2	8.0790
22.000	3106.2	391.2	16126.4	7.6569

21.345	3187.9	393.9	18169.0	7.3833
21.000	3131.9	393.8	19248.9	7.8399
20.000	3036.3	382.4	22336.4	6.8292
19.000	2855.6	359.6	25289.8	6.4857
18.000	2617.7	329.7	28027.6	6.0303
17.000	2383.2	300.1	30527.2	5.6441
16.000	2157.7	271.8	32796.9	5.2676
15.000	1941.4	244.5	34845.7	4.9018
14.000	1734.9	218.5	36683.0	4.5472
13.000	1539.3	193.9	38319.2	4.2045
12.000	1358.8	170.4	39764.8	3.8742
11.000	1169.4	147.3	41085.7	3.5567
10.000	988.2	124.5	42104.3	3.2525
9.000	809.2	101.9	43002.9	2.9619
8.000	632.5	79.7	43723.5	2.6852
7.000	457.9	57.7	44268.5	2.4227
6.000	285.5	36.0	44640.0	2.1744
5.000	115.3	14.5	44840.2	1.9406
4.314	-0.2	-0.0	44879.6	1.7886
4.000	-52.7	-6.6	44871.3	1.7213
3.000	-218.6	-27.5	44735.4	1.5164
2.000	-382.2	-48.1	44434.9	1.3261
1.000	-543.6	-68.5	43971.8	1.1501
0.	-702.9	-88.5	43348.4	0.9883
-1.000	-859.3	-108.2	42567.0	0.8406
-2.000	-1012.4	-127.5	41630.9	0.7066
-3.000	-1162.1	-146.4	40543.3	0.5860
-4.000	-1308.4	-164.8	39307.8	0.4786
-5.000	-1451.4	-182.8	37927.6	0.3839
-6.000	-1609.7	-202.7	36399.9	0.3014
-7.000	-1810.7	-228.1	34694.0	0.2307
-8.000	-2063.5	-259.9	32761.2	0.1712
-9.000	-2368.0	-298.2	30549.7	0.1223
-10.000	-2724.3	-343.1	28007.9	0.0833
-11.000	-3132.2	-394.5	25083.9	0.0533
-12.000	-3591.9	-452.4	21726.2	0.0314
-13.000	-4103.3	-516.8	17882.9	0.0165
-14.000	-4664.2	-587.4	13502.4	0.0073
-14.596	-4820.8	-607.1	10661.0	0.0040
-14.598	-4820.8	-607.1	10651.4	0.0040
-15.000	-4749.3	-598.2	8722.4	0.0025
-16.000	-3955.6	-498.2	4296.7	0.0006
-17.000	-2283.1	-287.5	1104.1	0.0000
-17.899	-29.3	-3.7	11.4	0.
-17.900	-26.4	-3.3	11.4	0.

RUN COMPLETED

```
LISTH JR7A

08/16/83    09.81


1110 1 35.0 27.3 1 27.3 0 -1
1120 PZ-22
1130 29000000 6.47 84.38


*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
*YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
*JR7AA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
*YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
*LTS
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
*YES
ENTER THE DATA FILE NAME.
*JR7A


*RUN COMPLETED*
```

*LISTH JR7AA

08/16/83 09.83

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 635 TO 670

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT
INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS
AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 0.01 INCHES AND OCCURS AT MEMBER COORDINATE
35.00 FT.

PZ-22 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
27.28	POINT LD	9.23 LBF
27.28	COUPLE	-15.42 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
35.00	CONTN LD	0. LBF/SQ FT
34.00	CONTN LD	62.50 LBF/SQ FT
33.00	CONTN LD	125.00 LBF/SQ FT
33.00	CONTN LD	125.00 LBF/SQ FT
32.00	CONTN LD	16.47 LBF/SQ FT
31.85	CONTN LD	0. LBF/SQ FT
31.00	CONTN LD	-96.16 LBF/SQ FT
30.00	CONTN LD	-210.74 LBF/SQ FT
30.00	CONTN LD	-210.74 LBF/SQ FT
29.23	CONTN LD	-300.29 LBF/SQ FT
28.50	CONTN LD	0. LBF/SQ FT
27.28	CONTN LD	498.23 LBF/SQ FT
27.28	CONTN LD	0. LBF/SQ FT

PZ-22 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 84.38 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 6.47 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT 27.300

THE MAXIMUM BENDING MOMENT IS 526.67 LBF-FT AND OCCURS AT 29.99
WHICH HAS THE SHEAR FORCE OF 0.42 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
35.000	0.	0.	0.	0.0060
34.999	0.0	0.0	0.0	0.0060
34.000	31.3	4.8	10.4	0.0047
33.000	125.0	19.3	83.3	0.0034
32.000	195.7	30.3	252.7	0.0022
31.854	196.9	30.4	281.5	0.0021
31.000	155.9	24.1	437.9	0.0012
30.000	2.4	0.4	526.7	0.0005
29.990	0.4	0.1	526.7	0.0005
29.000	-252.4	-39.0	405.4	0.0001
28.501	-303.5	-46.9	262.4	0.0000
28.499	-303.5	-46.9	261.7	0.0000
28.000	-252.5	-39.0	118.9	0.0000
27.301	-9.7	-1.5	15.6	0.
27.300	-9.2	-1.4	15.6	0.

RUN COMPLETED

```
LISTH JR7B

08/16/83    09.86


1110 1 35.0 27.3 1 27.3 0 -1
1120 PZ-27
1130 29000000 7.94 184.2


*FRN WESLIB/CORPS/X0015,E

                    BEAMS (SHEAR, MOMENT, DEFLECTION)

DO YOU WANT OUTPUT SAVED IN A FILE (YES/NO)?
*YES
ENTER EITHER A NEW OR EXISTING OUTPUT FILE NAME UP
TO 47 CHARACTERS. TYPE A ? FOR INFO.
*JR7BA
IS THE LOADING ON THE MEMBER TO BE READ FROM A FILE CREATED BY THE
'CANTILEVER RETAINING WALL STABILITY' PROGRAM (YES/NO)?
*YES
ENTER THE NAME OF THE FILE IN WHICH THE MEMBER LOADING IS STORED.
*LT5
DO YOU WANT TO RUN AN EXISTING DATA FILE (YES/NO)?
*YES
ENTER THE DATA FILE NAME.
*JR7B


*RUN COMPLETED*
```

*LISTH JR7BA

08/16/83 09.89

BEAMS (SHEAR, MOMENT, DEFLECTION)

17TH ST OUTFALL CANAL
STA 635 TO 670

THE REFERENCE SYSTEM SELECTED DEFINES POSITIVE FORCES AS TO THE LEFT
INCREASING MEMBER COORDINATES AS UPWARD, AND POSITIVE MOMENTS
AS COUNTERCLOCKWISE.

THE MAXIMUM DEFLECTION IS 0.00 INCHES AND OCCURS AT MEMBER COORDINATE
35.00 FT.

PZ-27 HAS BEEN GIVEN TO SUPPORT THE LOAD SYSTEM.

THE WEIGHT OF THIS VERTICAL MEMBER HAS BEEN NEGLECTED.

CALCULATED EXTERNAL LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
27.28	POINT LD	9.23 LBF
27.28	COUPLE	-15.42 LBF-FT

INPUTTED LOADS

DISTANCE FROM REFERENCE(FT)	TYPE OF LOAD	MAGNITUDE OF LOAD
35.00	CONTN LD	0. LBF/SQ FT
34.00	CONTN LD	62.50 LBF/SQ FT
33.00	CONTN LD	125.00 LBF/SQ FT
33.00	CONTN LD	125.00 LBF/SQ FT
32.00	CONTN LD	16.47 LBF/SQ FT
31.85	CONTN LD	0. LBF/SQ FT
31.00	CONTN LD	-96.16 LBF/SQ FT
30.00	CONTN LD	-210.74 LBF/SQ FT
30.00	CONTN LD	-210.74 LBF/SQ FT
29.23	CONTN LD	-300.29 LBF/SQ FT
28.50	CONTN LD	0. LBF/SQ FT
27.28	CONTN LD	498.23 LBF/SQ FT
27.28	CONTN LD	0. LBF/SQ FT

PZ-27 PROPERTIES ARE AS FOLLOWS.

MOMENT OF INERTIA= 184.20 IN. TO THE 4TH PER FOOT OF WALL
CROSS SECTIONAL AREA= 7.94 SQ IN.
ELASTIC MODULUS= 29000000. LBF/SQ IN.
DEFLECTION REFERENCE IS AT 27.300

THE MAXIMUM BENDING MOMENT IS 526.67 LBF-FT AND OCCURS AT 29.99
WHICH HAS THE SHEAR FORCE OF 0.42 LBF.

DISTANCE (FEET)	SHEAR FOR (LBF)	SHEAR STR (LBF/SQIN)	BENDING MOM (LBF-FT)	DEFLECTION FROM TANG. THRU DEFLE REFERENCE (INCHES)
35.000	0.	0.	0.	0.0027
34.999	0.0	0.0	0.0	0.0027
34.000	31.3	3.9	10.4	0.0021
33.000	125.0	15.7	83.3	0.0016
32.000	195.7	24.7	252.7	0.0010
31.854	196.9	24.8	281.5	0.0009
31.000	155.9	19.6	437.9	0.0006
30.000	2.4	0.3	526.7	0.0002
29.990	0.4	0.1	526.7	0.0002
29.000	-252.4	-31.8	405.4	0.0001
28.501	-303.5	-38.2	262.4	0.0000
28.499	-303.5	-38.2	261.7	0.0000
28.000	-252.5	-31.8	118.9	0.0000
27.301	-9.7	-1.2	15.6	0.
27.300	-9.2	-1.2	15.6	0.

RUN COMPLETED

Eight

(7)

```
*LISTH LT5

08/11/83    15.51


10001 'I7TH ST OUTFALL CANAL                                                    .
10002 'STA 635 TO 670                                                           .
10003                    3  0.35000000E 02  0.
10004                    3  0.34000000E 02  0.62500000E 02
10005                    3  0.33000000E 02  0.12500000E 03
10006                    3  0.33000000E 02  0.12500000E 03
10007                    3  0.32000000E 02  0.16468044E 02
10008                    3  0.31853786E 02  0.
10009                    3  0.31000000E 02 -0.96161484E 02
10010                    3  0.30000000E 02 -0.21073930E 03
10011                    3  0.30000000E 02 -0.21073930E 03
10012                    3  0.29234116E 02 -0.30029457E 03
10013                    3  0.28499743E 02  0.
10014                    3  0.27281325E 02  0.49822606E 03
10015                    4  0.27281325E 02  0.
10016                    0  0.27281325E 02  0.
10017   0.27281325E 02  0.99182129E-04  0.15501282E 02
```

Canal

*LISTH LT3

08/11/83 15.49

(6)

```
10001 *17TH ST OUTFALL CANAL
10002 *STA 625 TO 635
10003                    3  0.35000000E 02  0.
10004                    3  0.34000000E 02  0.62500000E 02
10005                    3  0.33000000E 02  0.12500000E 03
10006                    3  0.32000000E 02  0.18750000E 03
10007                    3  0.31000000E 02  0.25000000E 03
10008                    3  0.30000000E 02  0.31250000E 03
10009                    3  0.29000000E 02  0.37500000E 03
10010                    3  0.29000000E 02  0.37500000E 03
10011                    3  0.28000000E 02  0.26173007E 03
10012                    3  0.27000000E 02  0.14381623E 03
10013                    3  0.26000000E 02  0.23694323E 02
10014                    3  0.25802748E 02  0.
10015                    3  0.25000000E 02 -0.96427582E 02
10016                    3  0.24000000E 02 -0.21654948E 03
10017                    3  0.24000000E 02 -0.21654948E 03
10018                    3  0.23000000E 02 -0.31781684E 03
10019                    3  0.22000000E 02 -0.40666945E 03
10020                    3  0.21000000E 02 -0.44375473E 03
10021                    3  0.20000000E 02 -0.48083995E 03
10022                    3  0.19000000E 02 -0.51792525E 03
10023                    3  0.18500000E 02 -0.53646789E 03
10024                    3  0.18500000E 02 -0.53646789E 03
10025                    3  0.17500000E 02 -0.52736938E 03
10026                    3  0.16500000E 02 -0.51827098E 03
10027                    3  0.16250232E 02 -0.51599847E 03
10028                    3  0.14544488E 02  0.
10029                    3  0.10588690E 02  0.11966545E 04
10030                    4  0.10588690E 02  0.
10031                    0  0.10588690E 02  0.
```

10032 0.10588690E 02 -0.61035156E-04 0.31430664E 02