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PROGRAM CFRAME

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RUN DATE = 04-MAY-2024

RUN TIME = 17.17.08

BRACED EXCAVATION EXAMPLE (CONTINUOUS)

*** JOINT DATA ***

JOINT	X --- FT ---	Y --- FT ---	-----FIXITY-----			KX ---LB / IN---	KY ---LB / IN---	KR IN-LB /RAD
			X	Y	R			
1	.00	.00						
2	.00	-5.00	*					
3	.00	-17.00	*					
4	.00	-28.00	*					
5	.00	-40.00	*	*				
6	.00	-45.00						

*** MEMBER DATA ***

MEMBER	END END		LENGTH FT	I IN**4	A IN**2	AS IN**2	E PSI	G PSI
	A	B						
1	1	2	5.00	.1842E+03	.7940E+01	.0000E+00	.2900E+08	.1115E+08
2	2	3	12.00	.1842E+03	.7940E+01	.0000E+00	.2900E+08	.1115E+08
3	3	4	11.00	.1842E+03	.7940E+01	.0000E+00	.2900E+08	.1115E+08
4	4	5	12.00	.1842E+03	.7940E+01	.0000E+00	.2900E+08	.1115E+08
5	5	6	5.00	.1842E+03	.7940E+01	.0000E+00	.2900E+08	.1115E+08

*** LOAD CASE 1

MEMBER	LA FT	PA		LB FT	PB		ANGLE DEG
		LB	/ FT		LB	/ FT	
1	.00	.0000E+00		5.00	.6600E+03	.00	
2	.00	.6600E+03		6.25	.1485E+04	.00	
2	6.25	.1485E+04		12.00	.1485E+04	.00	
3	.00	.1485E+04		11.00	.1485E+04	.00	
4	.00	.1485E+04		5.75	.1485E+04	.00	
4	5.75	.1485E+04		12.00	.6600E+03	.00	
5	.00	.6600E+03		5.00	.0000E+00	.00	

1 LOAD CASE 1

JOINT	JOINT DISPLACEMENTS		
	DX	DY	DR
	IN	IN	RAD
1	.6889E-01	.0000E+00	-.1130E-02
2	.0000E+00	.0000E+00	-.1222E-02
3	.0000E+00	.0000E+00	.4941E-03
4	.0000E+00	.0000E+00	-.4941E-03
5	.0000E+00	.0000E+00	.1222E-02
6	.6889E-01	.0000E+00	.1130E-02

MEMBER END FORCES						
MEMBER	JOINT	AXIAL LB	SHEAR LB	MOMENT IN-LB	MOMENT EXTREMA IN-LB	LOCATION IN
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.00
	2	.0000E+00	.1650E+04	-.3300E+05	-.3300E+05	60.00
2	2	.0000E+00	.5483E+04	-.3300E+05	.1652E+06	63.36
	3	.0000E+00	.9759E+04	-.2197E+06	-.2197E+06	144.00
3	3	.0000E+00	.8167E+04	-.2197E+06	.4985E+05	66.00
	4	.0000E+00	.8168E+04	-.2197E+06	-.2197E+06	132.00
4	4	.0000E+00	.9759E+04	-.2197E+06	.1652E+06	80.64
	5	.0000E+00	.5483E+04	-.3300E+05	-.2197E+06	.00
5	5	.0000E+00	.1650E+04	-.3300E+05	.0000E+00	60.00
	6	.0000E+00	.0000E+00	.0000E+00	-.3300E+05	.00

STRUCTURE REACTIONS			
JOINT	FORCE X LB	FORCE Y LB	MOMENT IN-LB
2	.7133E+04	.0000E+00	.0000E+00
3	.1793E+05	.0000E+00	.0000E+00
4	.1793E+05	.0000E+00	.0000E+00
5	.7133E+04	.0000E+00	.0000E+00

TOTAL .5012E+05 .0000E+00

MEMBER END FORCES							
MEMBER	LOAD CASE	JOINT	AXIAL LB	SHEAR LB	MOMENT IN-LB	MOMENT EXTREMA IN-LB	LOCATION IN
1	1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.00

		2	.0000E+00	.1650E+04	-.3300E+05	-.3300E+05	60.00
2	1	2	.0000E+00	.5483E+04	-.3300E+05	.1652E+06	63.36
		3	.0000E+00	.9759E+04	-.2197E+06	-.2197E+06	144.00
3	1	3	.0000E+00	.8167E+04	-.2197E+06	.4985E+05	66.00
		4	.0000E+00	.8168E+04	-.2197E+06	-.2197E+06	132.00
4	1	4	.0000E+00	.9759E+04	-.2197E+06	.1652E+06	80.64
		5	.0000E+00	.5483E+04	-.3300E+05	-.2197E+06	.00
5	1	5	.0000E+00	.1650E+04	-.3300E+05	.0000E+00	60.00
		6	.0000E+00	.0000E+00	.0000E+00	-.3300E+05	.00