



REGIONE PIEMONTE
CITTA' METROPOLITANA DI TORINO
CITTA' DI MONCALIERI

Via Martiri di Timisoara
PONTE NUOVO SUL FIUME PO
Interventi di ripristino e consolidamento



COMMESSA

20877

ELABORATO

R08

SCALA

DATA

settembre 2019

OGGETTO

RELAZIONE DI CALCOLO STRUTTURALE

PROGETTO ESECUTIVO

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PROGETTO :

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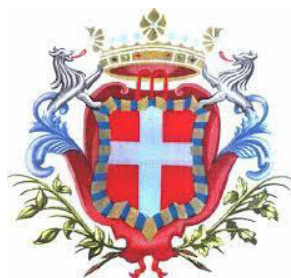


I. G. INGEGNERIA GEOTECNICA srl.
Dott. Ing. Valter PEISINO
ORDINE DEGLI INGEGNERI
DELLA PROVINCIA DI CUNEO
n° 753

Timbro e firma del responsabile dell'elaborato

VISTO: IL RESPONSABILE DEL PROCEDIMENTO

CITTA' DI MONCALIERI
Città Metropolitana di Torino



Via Martiri di Timisoara
PONTE NUOVO SUL FIUME PO
Interventi di ripristino e consolidamento

PROGETTO ESECUTIVO

RELAZIONE DI CALCOLO STRUTTURALE

Torino, settembre 2019

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1. PREMESSA

Il Ponte su cui si svolge l'intervento in oggetto ricade nel Comune di Moncalieri, denominato ponte "Caduti di Timisoara" che collega Torino a Moncalieri lungo Via Martiri della Libertà, consentendo il superamento del F. Po.

L'opera in oggetto, di lunghezza 150 m circa, è costituita da una coppia di cassoni a travata continua in c.a.p. su 4 appoggi, con luci 38.6 m, 78.0 m e 38.6 m tra l'asse degli appoggi.

La larghezza totale dell'impalcato è di 22.25m circa, costituito da 2 carreggiate di 7.6m circa, 2 marciapiedi alle estremità di 3m e una trave spartitraffico in mezzzeria di 0.90m circa.

I cassoni hanno soletta base di larghezza 5.5m circa e di spessore variabile da 0.20m (in prossimità delle spalle e in mezzzeria della campata centrale) a 0.70m (in prossimità delle pile).

Le pareti verticali dei cassoni hanno spessore variabile da 0.40m a 0.6m ed altezza variabile da 2.0m (in corrispondenza delle spalle e in mezzzeria della campata centrale) e 3.5m circa (in corrispondenza delle pile).

La soletta superiore ha uno spessore di 30cm con spessore ridotto a 20cm all'estremità delle ali. I due cassoni sono tra loro strutturalmente indipendenti separati con una trave spartitraffico semplicemente appoggiata alle estremità delle ali dei 2 cassoni.

Le 2 pile sono formate da un unico setto in c.a. di spessore 200 cm circa ed altezza 10m circa. Le fondazioni delle pile sono costituite da zatteroni rettangolari di sezione 7m x 2.6m circa poggianti su pali di diametro 1.5m disposti su 3 file.

Le spalle, anch'esse in c.a., hanno parte in elevato di spessore 0.80m e altezza 5m circa, con fondazioni di sezione 5.4m x 1.2m poggianti su pali di diametro 0.6m disposti su 3 file.

Gli appoggi delle spalle sono di tipo carrello monodirezionale, mentre le pile hanno una appoggi di tipo a carrello monodirezionale e una di tipo a cerniera.

La presente relazione di calcolo fa parte di un primo lotto di opere di consolidamento del ponte ed ha come obiettivo individuare le azioni agenti sugli appoggi così da poter sostituirli con dispositivi adeguati. Dato il budget a disposizione dalla Stazione Appaltante si prevede la sostituzione degli appoggi ammalorati delle sole spalle, rimandando a lotti successivi l'intervento sulle pile.

2. MATERIALI (R.D.C. DEL 01/06/1968 AGG. 14/03/69)

2.1. CALCESTRUZZO

La resistenza cubica è 300 kg/cm^2 ,

2.2. BARRE DI ARMATURA

L'acciaio è A.L.E. 4400 kg/cm^2 ,

Poiché la seguente relazione di calcolo riguarda la sostituzione degli appoggi non si è proceduto con indagini distruttive e non distruttive dei materiali; tuttavia esse saranno necessarie allorché si procederà alle verifiche sezionali dei cassoni.

3. NORMATIVE DI RIFERIMENTO

Nella progettazione sono state prese in considerazione le normative di seguito esposte:

- Legge 5 novembre 1971, n. 1086 - Norme per la disciplina delle opere in conglomerato cementizio armato normale e precompresso ed a struttura metallica.
- - Legge 5 febbraio 1974, n. 64 - Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche.
- Eurocodici UNI EN 1990:2006; UNI EN 1991; UNI EN 1992; UNI EN 1993; UNI EN 1994; UNI EN 1997; UNI EN 1998
- Decreto Ministero Infrastrutture 17 gennaio 2018 – Aggiornamento delle “Norme tecniche per le costruzioni”.
- Circolare Ministero Infrastrutture 21 gennaio 2019 n.7 - Istruzioni per l'applicazione dell' Aggiornamento delle “Norme tecniche per le costruzioni”.

4. ANALISI DEI CARICHI

Di seguito si riportano i carichi considerati, considerando l'effetto torcente dovuto alla loro posizione sull'impalcato.

4.1. PESI PROPRI E PERMANENTI

Peso impalcato: calcolato in automatico dal programma (25 kN/mc)

Pesi permanenti portati:

Pavimentazione stradale: carico distribuito = 23.1 kN/ml
Momento torcente distribuito = 38.2 kNm/ml

Cordoli e marciapiede: carico distribuito = 29.7 kN/ml
Momento torcente distribuito = 116.5 kNm/ml

Spartitraffico: carico distribuito = 5.5 kN/ml
Momento torcente distribuito = 30.5 kNm/ml

Parapetti: carico distribuito = 0.30 kN/ml
Momento torcente distribuito = 1.61 kNm/ml

Pali luce: carico concentrato a palo = 1.00 kN/ml
 Momento torcente distribuito = 5.30 kNm/ml

Tubazioni inferiori: carico concentrato a palo = 1.50 kN/ml
Momento torcente distribuito = 5.20 kNm/ml

4.2. SOVRACCARICHI ACCIDENTALI

Trattandosi di ponte di prima categoria, si considerano gravanti sull'impalcato due colonne di carichi mobili, di seguito specificate (DM 2018 § 5.1.3.3):

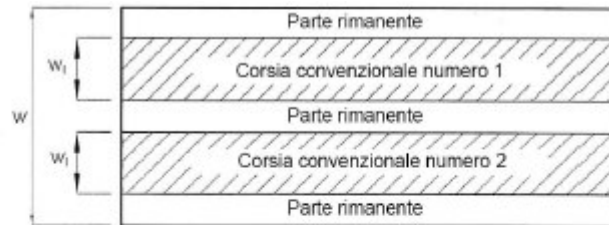
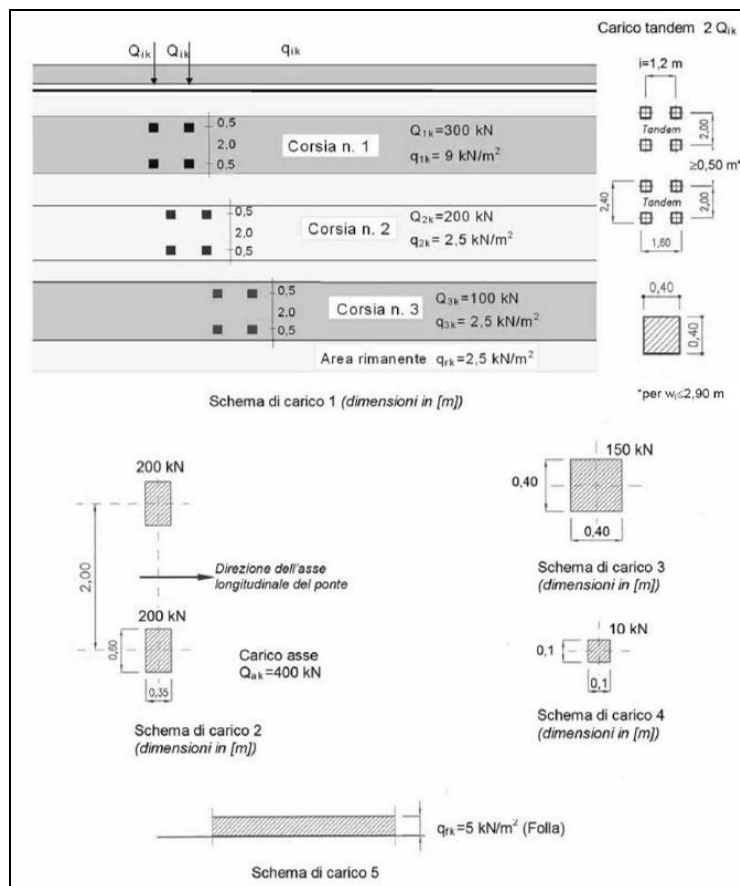


Fig. 5.1.1 - Esempio di numerazione delle corsie

Tab. 5.1.I - Numero e larghezza delle corsie

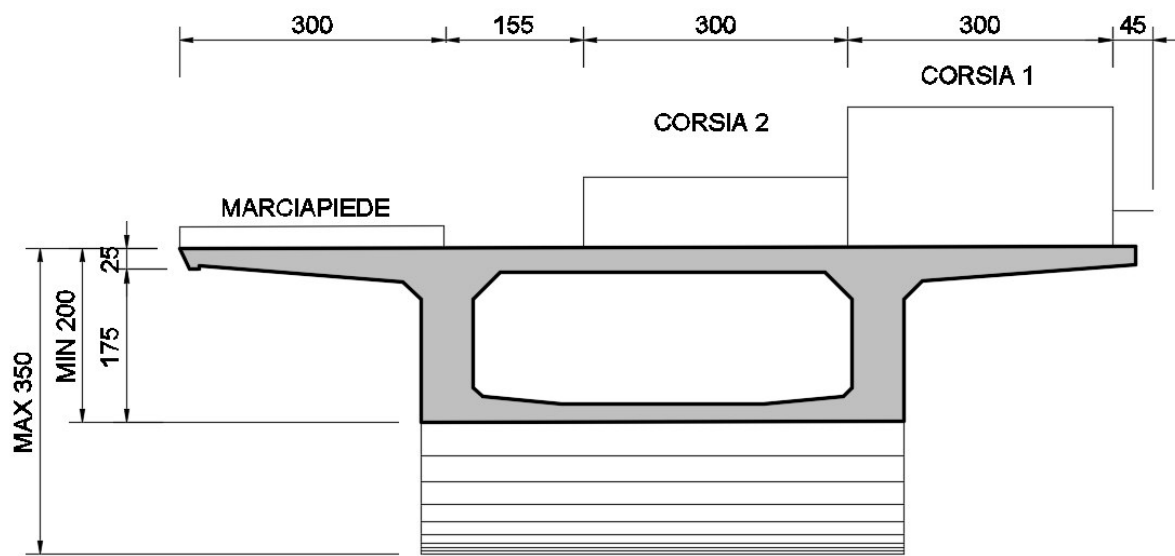
Larghezza della superficie carrabile "w"	Numero di corsie convenzionali	Larghezza di una corsia convenzionale [m]	Larghezza della zona rimanente [m]
$w < 5,40$ m	$n_l = 1$	3,00	$(w - 3,00)$
$5,4 \leq w < 6,0$ m	$n_l = 2$	$w/2$	0
$6,0 \leq w$	$n_l = \text{Int}(w/3)$	3,00	$w - (3,00 \times n_l)$



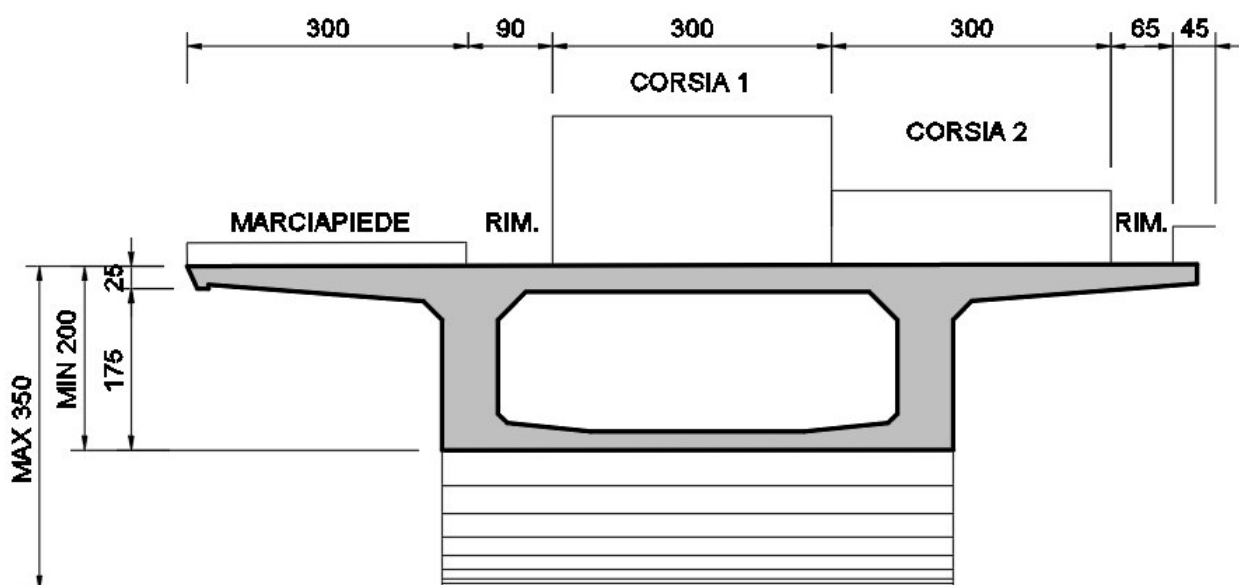
Tab. 5.1.II - Intensità dei carichi Q_{ik} e q_{ik} per le diverse corsie

Posizione	Carico asse Q_{ik} [kN]	q_{ik} [kN/m ²]
Corsia Numero 1	300	9,00
Corsia Numero 2	200	2,50
Corsia Numero 3	100	2,50
Altre corsie	0,00	2,50

Schema carichi Mobili TU 2018 (Stralcio)



Schema dei carichi accidentali sulla piattaforma (condizione "tutto destra")



Schema dei carichi accidentali sulla piattaforma (condizione "centrato")

- una prima colonna di carichi costituita da un automezzo aderente allo spartitraffico centrale di carico Q_{1k} di 600 kN dotato di 2 assi di 2 ruote ciascuno, distanziati di 1.20 m in senso longitudinale e con interasse ruote in senso trasversale di 2.00 m, più carichi q_{1k} di 9 kN/mq distribuiti linearmente in asse al convoglio oltre l'ingombro di Q_{1k} ;
- una seconda colonna di carichi costituita da un automezzo adiacente alla stessa di carico Q_{2k} di 400 kN dotato di 2 assi di 2 ruote ciascuno, distanziati di 1.20 m in senso longitudinale e con interasse ruote in senso trasversale di 2.00 m, più carichi q_{2k} di 2.5 kN/mq distribuiti linearmente in asse al convoglio oltre l'ingombro di Q_{2k} , posta ad interasse dalla precedente di 3.00 m.
- alla restante parte di impalcato stradale si applica un carico distribuito di 2.5 kN/mq;
- folla su marciapiede si considera pari a 5.0 kN/mq (valore dimezzato in concomitanza con il traffico) su una larghezza di 2.95m circa, che comporta un carico distribuito pari a 14.75 kN/ml e, vista la sua posizione, un momento torcente linearmente distribuito pari a 58.2kNm/ml.

4.3. AZIONE LONGITUDINALE DI FRENAMENTO

Per quanto riguarda gli effetti del frenamento sulla struttura, è stata applicata la seguente condizione di carico in accordo con il par. 5.1.3.5 delle NTC2018:

$$180 \text{ kN} \leq q_3 = 0,6 (2Q_{1k}) + 0,10q_{1k} \cdot w_1 \cdot L \leq 900 \text{ kN}$$

Da cui si ricava un valore di 781.2kN che distribuito sull'intero impalcato porta a modellare un carico distribuito longitudinale di 5.01kN/m

4.4. AZIONE DEL VENTO

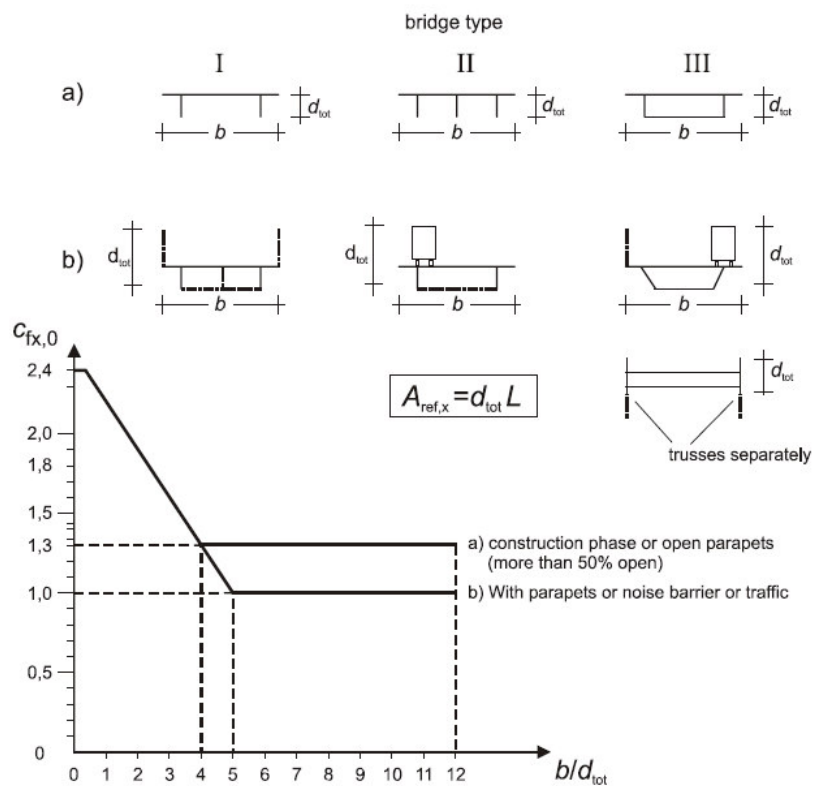
Per la definizione dell'azione del vento si rimanda alla citata norma NTC2018 da cui è possibile valutare l'azione predetta in funzione delle posizione geografica della zona di interesse.

Tipo costruzione	3	
Vita Nominale V_N	100	anni
Classe d'uso	III	
Coefficiente d'uso C_U	1.5	
Periodo di riferimento V_R	150	
Zonazione vento	1	Piemonte
Velocità base $v_{b,0}$	25	m/s2
Altitudine base a_0	1000	m
Coefficiente base k_s	0.4	
Altitudine s.l.m. a_s	215	m
Coefficiente di altitudine c_a	1	

Velocità base riferimento v_b	25	m/s2
Coefficiente di ritorno c_r	1.06	
Velocità riferimento v_r	26.5	m/s2
Pressione cinetica di riferimento q_r	439.8	N/m2
Coefficiente dinamico c_d	1.0	
Classe di rugosità del terreno	B	
Coefficiente di topografia c_t	1.0	
Categoria di esposizione	IV	
Coefficiente K_r	0.2	
Coefficiente z_0	0.3	
Coefficiente z_{min}	8.0	

Per la valutazione dell'azione del vento si considera la massima altezza del cassone (3.55m), lo spessore della massicciata (0.2m) e l'altezza veicolare (3.0m), a cui corrisponde un coefficiente di esposizione pari a $c_e=1.63$.

Per la valutazione del coefficiente di pressione si considera il valore ottenibile in accordo con il par. 8.3 dell'Eurocodice 1 parte 4, di cui si riporta la figura 8.3



A favore di sicurezza si è scelto di applicare il coefficiente di pressione ottenibile considerando come geometria il cassone singolo caricato, da cui:

Larghezza cassone singolo	11.0	m
Altezza superficie esposta al vento scarico	3.8	m
Altezza superficie esposta al vento carico	6.8	m
Rapporto di forma con folla	1.6	
Coefficiente di pressione c_p (con folla)	2.1	

Per quanto sopra detto la pressione del vento risulta essere $p=1.509\text{kN/m}^2$, da applicare su una altezza di parete 6.8m con eccentricità dal baricentro del cassone di 1.6m, da cui risulta:

Forza a ml del vento	10.2	kN/m
Momento torcente vento	16.3	kNm/m

4.5. AZIONE TRASVERSALE CENTRIFUGA

Essendo il ponte in rettilineo non viene considerata la forza centrifuga

4.6. AZIONE TERMICA

Si è considerata l'effetto di un Δ termico pari a $+15\text{ }^\circ\text{C}$.

4.7. AZIONE SISMICA

Per la valutazione degli effetti orizzontali e torcenti dell'azione sismica, è stata effettuata un'analisi statica lineare.

Analisi sismica - Statica lineare - (NTC 2018)

DATI PROGETTO

Edificio sito in località MONCALIERI (long. 7.702 lat. 45.000100)

Categoria del suolo di fondazione = C

Coeff. di amplificazione stratigrafica $S_s = 1.500$

Coeff. di amplificazione topografica $S_T = 1.000$

$S = 1.500$

Vita nominale dell'opera $V_N = 100$ anni

Coefficiente d'uso $C_U = 2.0$

Periodo di riferimento $V_R = 200.0$

PVR : probabilità di superamento in $V_R = 5\%$

Tempo di ritorno = 2475

Coeff. di smorzamento viscoso = 2.0

Valori risultanti per :

$a_g = 0.783$ [g/10]

$F_0 = 2.927$

$T_C^* = 0.292$

Fattore di comportamento $q = 1.000$

Rapporto spettro di esercizio / spettro di progetto = 0.615

Coeff. λ = 1.0000

$S_d = 0.189$ per $T_1 = 0.839$

Numero condizioni generanti carichi sismici : 2

Cond. 001 : Peso_proprio_____ con coeff. 1.000
Cond. 002 : Permanente_____ con coeff. 1.000

Condizioni di carico sismico generate:

Cond. 006 : Sisma X
Cond. 007 : Sisma Y
Cond. 008 : Torcente add. X
Cond. 009 : Torcente add. Y

Carichi sismici :

Piani	Pesi	C. distr.	Forze piano	Torc. piano X	Torc. piano Y	Bar. X	Bar. Y
mm	kN		kN	kNm	kNm	mm	mm
5000	37221.18	0.1886	7018.20	0.0	54461.2	77600	0

Per la valutazione degli effetti verticali dell'azione sismica, è stata effettuata un'analisi dinamica lineare.

ANALISI DINAMICA

lavoro : \87701D

PARAMETRI DI CALCOLO:

Modello generale
Assi di vibrazione: X Y Z
Combinazione quadratica completa (CQC)

DATI PROGETTO

Edificio sito in località MONCALIERI (long. 7.702 lat. 45.000100)

Categoria del suolo di fondazione = C

Coeff. di amplificazione stratigrafica $S_s = 1.500$

Coeff. di amplificazione topografica $ST = 1.000$

$S = 1.500$

vita nominale dell'opera VN = 100 anni

Coefficiente d'uso CU = 2.0

Periodo di riferimento VR = 200.0

PVR : probabilità di superamento in VR = 5 %

Tempo di ritorno = 2475

Coeff. di smorzamento viscoso = 2.0

Valori risultanti per :

ag 0.783 [g/10]

Fo 2.927

TC* 0.292

Fattore di comportamento q = 1.000

Rapporto spettro di esercizio / spettro di progetto = 0.615

CONDIZIONI DI RIFERIMENTO	COEFFICIENTE	PESO RISULTANTE [kN]
1.	1.000	27909.182
2.	1.000	9312.000

*** TABELLA AUTOVETTORI ***

n	PERIODO [sec]	MASSA ATTIVATA			COEFFICIENTI DI CORRELAZIONE									
		%X	%Y	%Z	n+1	n+2	n+3	n+4	n+5	n+6	n+7			
1	0.838747	0.000	0.000	14.551	0.012	0.008	0.006	0.003	0.002	0.002	0.001	0.001	0.001	0.001
0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.365172	0.000	0.000	0.000	0.212	0.084	0.028	0.010	0.008	0.007	0.005	0.004	0.003	0.003
0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.301453	0.000	21.603	0.000	0.355	0.063	0.017	0.012	0.012	0.008	0.006	0.005	0.005	0.005
0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.263496	0.000	0.000	38.285	0.141	0.027	0.018	0.017	0.011	0.008	0.007	0.006	0.005	0.005
0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.206256	0.000	0.000	0.000	0.078	0.045	0.041	0.021	0.014	0.013	0.011	0.009	0.007	0.007
0.005	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.146918	99.836	0.000	0.000	0.445	0.354	0.093	0.046	0.038	0.032	0.023	0.016	0.010	0.010
0.008	0.006	0.004	0.004	0.004	0.004	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.131422	0.000	0.000	14.715	0.949	0.202	0.080	0.064	0.052	0.034	0.023	0.013	0.010	0.010
0.008	0.006	0.005	0.005	0.005	0.004	0.004	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002
0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.128405	0.000	0.000	0.000	0.246	0.092	0.072	0.058	0.038	0.025	0.014	0.011	0.008	0.008
0.006	0.006	0.006	0.005	0.005	0.004	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002
0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.107853	0.000	45.894	0.000	0.345	0.236	0.167	0.088	0.049	0.024	0.018	0.012	0.009	0.009
0.008	0.008	0.007	0.007	0.006	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.002
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
10	0.094017	0.000	0.000	0.000	0.000	0.851	0.583	0.231	0.101	0.040	0.028	0.018	0.013	0.012	0.012
0.012	0.010	0.010	0.009	0.008	0.006	0.005	0.005	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003
0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001					
11	0.090173	0.000	0.000	0.000	0.000	0.846	0.336	0.133	0.048	0.033	0.021	0.014	0.013	0.013	0.013
0.011	0.011	0.010	0.009	0.006	0.006	0.005	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003
0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002					
12	0.086405	0.000	0.000	0.000	0.000	0.512	0.183	0.059	0.039	0.024	0.016	0.015	0.015	0.015	0.013
0.013	0.011	0.010	0.007	0.006	0.006	0.005	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003
0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002						
13	0.078384	0.000	0.000	0.000	1.701	0.438	0.101	0.061	0.035	0.022	0.020	0.020	0.017	0.017	0.017
0.014	0.013	0.009	0.008	0.007	0.006	0.005	0.005	0.005	0.005	0.004	0.004	0.003	0.003	0.003	0.003
0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002							
14	0.070007	0.000	0.000	0.000	0.000	0.231	0.117	0.057	0.032	0.029	0.029	0.025	0.024	0.020	0.020
0.018	0.012	0.010	0.009	0.007	0.007	0.006	0.006	0.006	0.005	0.005	0.004	0.004	0.004	0.003	0.003
0.003	0.003	0.003	0.003	0.003	0.002	0.002									
15	0.058367	0.000	15.771	0.000	0.000	0.549	0.172	0.074	0.064	0.063	0.051	0.050	0.038	0.034	0.034
0.019	0.017	0.015	0.011	0.011	0.010	0.010	0.009	0.008	0.007	0.006	0.006	0.005	0.005	0.004	0.004
0.004	0.004	0.004	0.004	0.003	0.003										
16	0.053312	0.000	0.000	0.000	3.184	0.380	0.128	0.107	0.106	0.080	0.079	0.058	0.050	0.026	0.026
0.023	0.020	0.014	0.014	0.013	0.012	0.011	0.010	0.009	0.008	0.007	0.006	0.006	0.005	0.005	0.005
0.005	0.005	0.005	0.004	0.004											
17	0.046938	0.013	0.000	0.000	0.000	0.364	0.283	0.279	0.188	0.185	0.119	0.097	0.043	0.036	0.036
0.030	0.021	0.020	0.018	0.018	0.016	0.014	0.013	0.011	0.009	0.008	0.007	0.007	0.007	0.007	0.007
0.006	0.006	0.005	0.005												
18	0.041143	0.000	0.000	0.000	0.000	0.933	0.924	0.639	0.626	0.344	0.255	0.084	0.066	0.053	0.053
0.034	0.032	0.028	0.027	0.025	0.021	0.019	0.016	0.013	0.012	0.010	0.010	0.009	0.009	0.009	0.009
0.008	0.007	0.00													

4.8. COMBINAZIONI DI CARICO

LIST OF LOAD COMBINATIONS

1	SLU 1 (SO)	Active	Add	P.P(1.350) + PERMANENTI N.STR(1.350) + TEMPERATURA_env(0.720)
+				TRAFFICO SO_env(1.350) + TRAFFICO_carico foll(0.675) + VARIABILE_Vento (y+)(0.900)
2	SLU 1 (NE)	Active	Add	P.P(1.350) + PERMANENTI N.STR(1.350) + TEMPERATURA_env(0.720)
+				TRAFFICO NE_env(1.350) + TRAFFICO_carico foll(0.675) + VARIABILE_Vento (y+)(0.900)
3	SLU 2A (SO)	Active	Add	P.P(1.350) + PERMANENTI N.STR(1.350) + TRAFFICO_frenatura(1.350)
+				TRAFFICO SO PSI_env(1.350) + VARIABILE_Vento (y+)(0.300)
4	SLU 2A (NE)	Active	Add	P.P(1.350) + PERMANENTI N.STR(1.350) + TRAFFICO_frenatura(1.350)
+				TRAFFICO NE PSI_env(1.350) + VARIABILE_Vento (y+)(0.300)
5	SLE RARA (SO)	Active	Add	P.P(1.000) + PERMANENTI N.STR(1.000) + TEMPERATURA_env(0.600)
+				TRAFFICO SO_env(1.000) + VARIABILE_Vento (y+)(0.600)
6	SLE RARA (NE)	Active	Add	P.P(1.000) + PERMANENTI N.STR(1.000) + TEMPERATURA_env(0.600)
+				TRAFFICO NE_env(1.000) + VARIABILE_Vento (y+)(0.600)
7	SLE FREQ (SO)	Active	Add	P.P(1.000) + PERMANENTI N.STR(1.000) + TRAFFICO SO PSI_env(1.000)
+				TRAFFICO_carico foll(0.750) + TEMPERATURA_env(0.600) + VARIABILE_Vento (y+)(0.200)
8	SLE FREQ (NE)	Active	Add	P.P(1.000) + PERMANENTI N.STR(1.000) + TRAFFICO NE PSI_env(1.000)
+				TRAFFICO_carico foll(0.750) + TEMPERATURA_env(0.600) + VARIABILE_Vento (y+)(0.200)
9	SLE QP	Active	Add	P.P(1.000) + PERMANENTI N.STR(1.000) + TEMPERATURA_env(0.500)
10	SLC	Active	Add	P.P(1.000) + PERMANENTI N.STR(1.000) + TEMPERATURA_env(0.500)
+				ENV_SLC(1.000)
11	SLV	Active	Add	P.P(1.000) + PERMANENTI N.STR(1.000) + TEMPERATURA_env(0.500)
+				ENV_SLV(1.000)

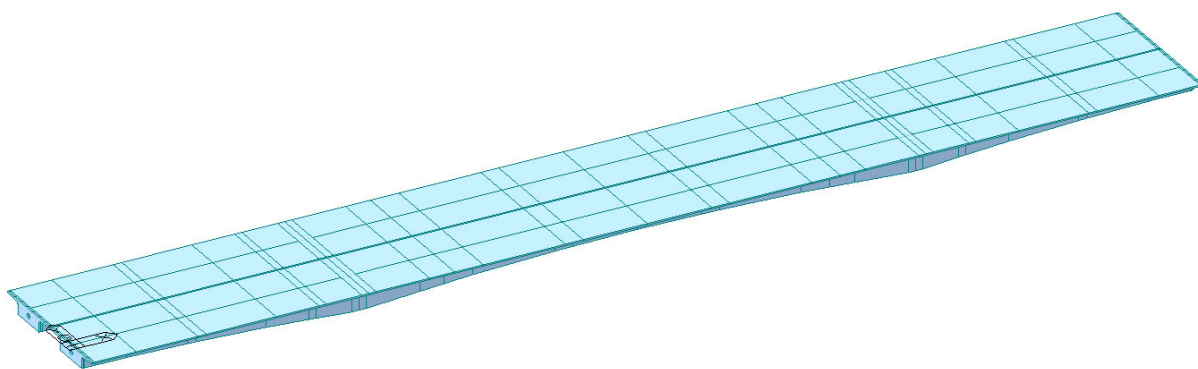
N.B.: Si considerano concomitanti le azioni di traffico e l'azione della folla essendo il marciapiede sopraelevato di circa 25 cm rispetto alla superficie stradale.

5. MODELLO NUMERICO

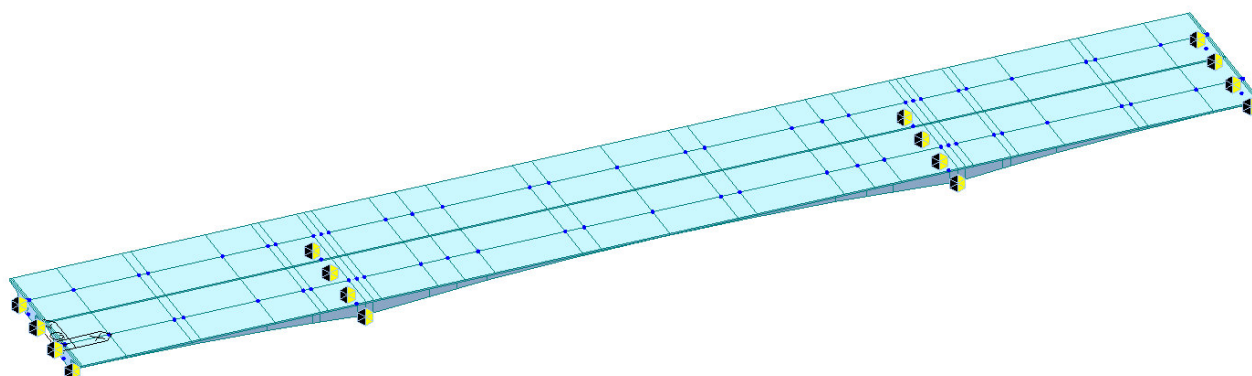
Il modello numerico del ponte è stato eseguito con il programma di calcolo agli elementi finiti "Midas Civil".

In questa sede viene rappresentato il modello numerico complessivo dell'opera finalizzato allo studio degli apparecchi d'appoggio (in appendice si riporta il tabulato generato dal programma).

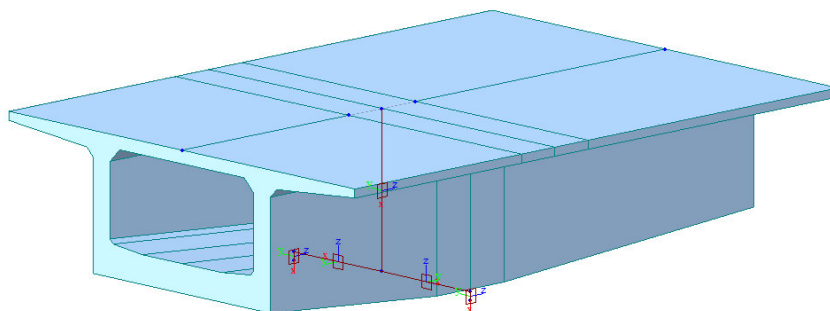
Si seguito si riportano alcune immagine significative del modello numerico.



Modello numerico (Vista 3d solido)



Modello 3D: Appoggi modellati come "point spring support"



Modellazione appoggio su pila

Section Data

DB/User

PSC

Section ID

1

PSC-nCELL2

Name

APPOGGIO_Spalla

☐ Mesh Size for Stiff. Calc.

m

☒ Symmetric

No. of Cells:

8

Slab Width:

10.75

m

Joint On/Off

☐ JO
☐ JI

Cell Type

☐ Polygon
☒ Circle

☐ Side Hole

Shear Check

Z1:

1.4

m

☒ Auto

Z2: Centroid

Z3:

1

m

☒

Web Thick.

for Shear(total)

Auto

t1:

5.50018

m

☒

t2:

4.8416

m

☒

t3:

4.79995

m

☒

for Torsion(min.)

8.6823044

m

☒

Offset: Center-Top

Change Offset ...

Table Input ...

Display Centroid

Left Side

Right Side

Outer

HO1	0.2	m	BO1	2.425	m
HO2	0.2	m	BO1-1	0	m
HO2-1	0	m	BO2	0.2	m
HO3	0.2	m	BO3	0	m
HO4	1.4	m	BO4	2.75	m
			BO5	0	m

Inner

HI1	0.65	m	BI1	0	m
HI2	0.65	m	BI2	0	m
HI2-1	0	m	BI2-1	0	m
HI3	0	m	BI3	0	m
HI4	0	m	BI4	0	m
HI5	0	m	BI5	0	m
HI6	0	m	BI6	0	m
R1	0.001	m	BI7	0	m
R2	0.001	m	BI8	0	m

☒ Consider Shear Deformation.

☐ Consider Warping Effect(7th DOF)

Warping Check

☒ Auto
☐ User

PSC Viewer

Slab Width

Viewer

Show Calculation Results...

OK

Cancel

Apply

Sezione di appoggio a spalle

Section Data

DB/User

PSC

Section ID

2

T

PSC-T

Name

APPOGGIO_Pila

☐ Mesh Size for Stiff. Calc.

m

Section Name

None

☒ Symmetry

Joint On/Off

☐ J1
 ☒ J1.1
 ☐ J1.2
 ☒ J1.3
 ☐ J1.4
 ☐ J1.1
 ☐ J1.2
 ☐ J1.3
 ☐ J1.4

Shear Check

Z1: 2.953 m

Z2: Centroid

Z3: 2.953 m

Web Thick.

for Shear (total)

t1: 5.5 m

t2: 5.5 m

t3: 5.5 m

for Torsion (min.)

5.5 m

☒ Consider Shear Deformation.
 ☐ Consider Warping Effect (7th DOF)

Warping Check ☒ Auto ☐ User

Offset: Center-Top

Change Offset ...

Table Input...

Display Centroid

Left

H1	0	m
HL1	0.2	m
HL2	0.4	m
HL3	2.953	m
BL1	2.75	m
BL2	0	m
BL3	2.625	m
BL4	5.375	m
HL2-1	0.2	m
HL2-2	0.39	m
HL3-1	0	m
HL3-2	0	m
BL2-1	0	m
BL2-2	0	m
BL3-1	2.425	m
BL3-2	2.624	m

Right

HR1	0.2	m
HR2	0.4	m
HR3	2.953	m
BR1	2.75	m
BR2	0	m
BR3	2.625	m
BR4	5.375	m
HR2-1	0.2	m
HR2-2	0.39	m
HR3-1	0	m
HR3-2	0	m
BR2-1	0	m
BR2-2	0	m
BR3-1	2.425	m
BR3-2	2.624	m

PSC Viewer

Viewer

Show Calculation Results...

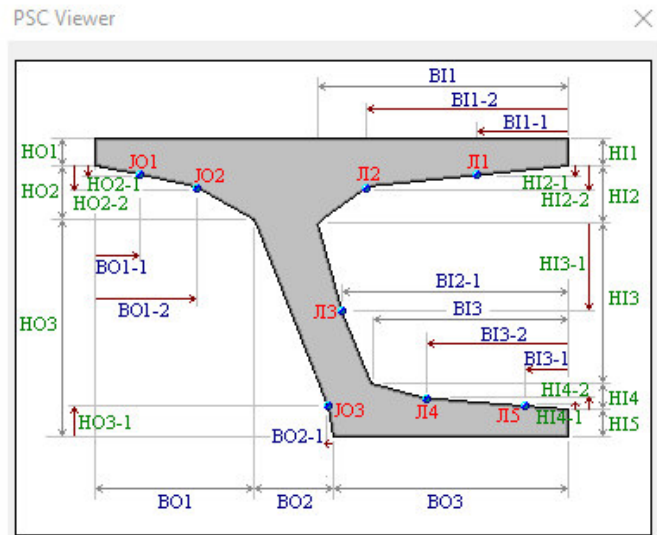
OK

Cancel

Apply

Sezione di appoggio pile

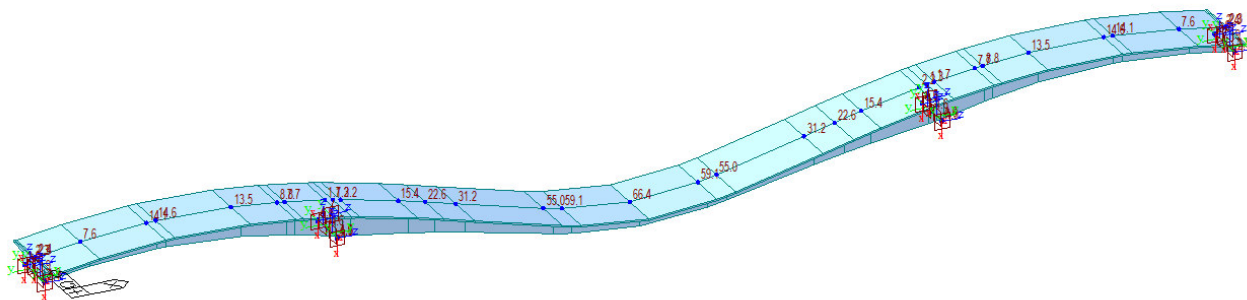
Size-I		Size-J	
HO1	0.2 m	HO1	0.2 m
HO2	0.4 m	HO2	0.4 m
HO2-1	0.2 m	HO2-1	0.2 m
HO2-2	0 m	HO2-2	0 m
HO3	2.953 m	HO3	2.451 m
HO3-1	0 m	HO3-1	0 m
BO1	2.625 m	BO1	2.625 m
BO1-1	2.425 m	BO1-1	2.425 m
BO1-2	0 m	BO1-2	0 m
BO2	0 m	BO2	0 m
BO2-1	0 m	BO2-1	0 m
BO3	2.75 m	BO3	2.75 m
HI1	0.3 m	HI1	0.3 m
HI2	0.3 m	HI2	0.3 m
HI2-1	0 m	HI2-1	0 m
HI2-2	0 m	HI2-2	0 m
HI3	2.063 m	HI3	1.595 m
HI3-1	0 m	HI3-1	0 m
HI4	0.19 m	HI4	0.19 m
HI4-1	0 m	HI4-1	0 m
HI4-2	0.09 m	HI4-2	0.09 m
HI5	0.7 m	HI5	0.666 m
BI1	2.15 m	BI1	2.25 m
BI1-1	1.85 m	BI1-1	1.95 m
BI1-2	0 m	BI1-2	0 m
BI2-1	0 m	BI2-1	0 m
BI3	2.15 m	BI3	2.25 m
BI3-1	1.15 m	BI3-1	1.25 m
BI3-2	2.05 m	BI3-2	2.15 m



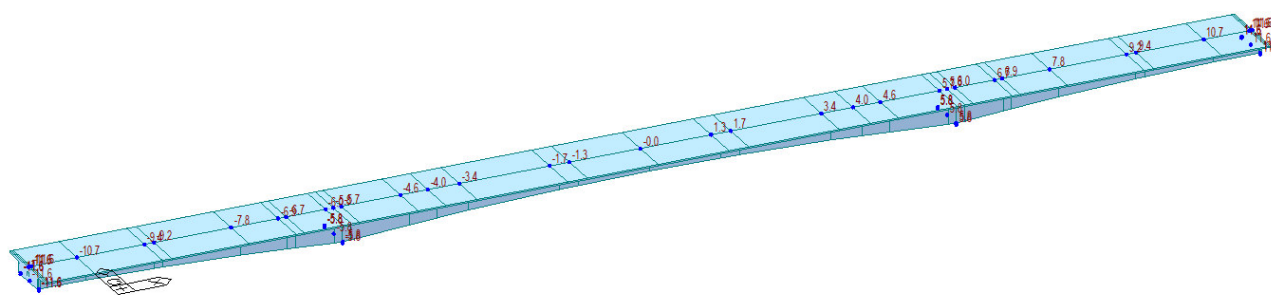
Sezione tipologica con dimensione variabile

Node	Mode	UX	UY	UZ	RX	RY	RZ
EIGENVALUE ANALYSIS							
Mode No	Frequency		Period		Tolerance		
	(rad/sec)	(cycle/sec)	(sec)				
1	3.242783	0.516105	1.937590	0.0000e+000			
2	3.307519	0.526408	1.899667	0.0000e+000			
3	3.307519	0.526408	1.899667	0.0000e+000			
4	3.852860	0.613202	1.630785	0.0000e+000			
5	7.645417	1.216806	0.821824	0.0000e+000			
MODAL PARTICIPATION MASSES PRINTOUT							
Mode No	TRAN-X		TRAN-Y		TRAN-Z		ROTN-Z
	MASS(%)	SUM(%)	MASS(%)	SUM(%)	MASS(%)	SUM(%)	
1	0.00	0.00	99.26	99.26	0.00	0.00	0.00
2	49.99	49.99	0.00	99.26	0.00	0.00	0.76
3	50.01	100.00	0.00	99.26	0.00	0.00	0.76
4	0.00	100.00	0.00	99.26	0.00	0.00	98.47
5	0.00	100.00	0.00	99.26	8.29	8.29	99.99

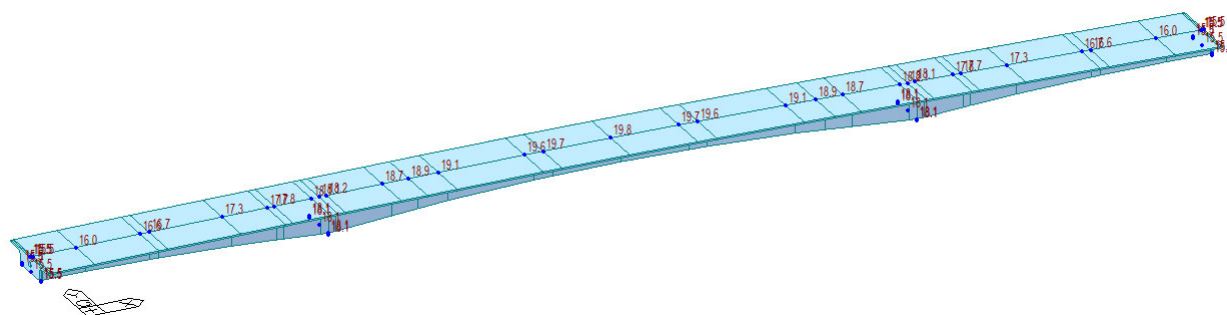
Periodo proprio di vibrazione della struttura con isolatori



Deformazioni carichi da traffico (carichi da Normativa)



Deformazioni dovuti alla deformazione termica $\Delta=+15^{\circ}\text{C}$ (con sistema isolato)



Deformazioni dovuti al carico vento (con il sistema isolato)

6. PROGETTO DEGLI APPOGGI E DEI GIUNTI

In base ai risultati di calcolo si sono scelti i seguenti appoggi:

APPOGGI → 4 Appoggi su PILE **SI-N 900/60**
 → 4 Appoggi su SPALLE **SI-N 500/56**

GIUNTI DI DILATAZIONE → **GPE 300**

Di seguito si riportano i carichi e le deformazioni agenti (i tabulati completi sono riportati nell'appendice) su essi nonché le verifiche di calcolo.

Carichi per la verifica degli appoggi (COMBINAZIONE A SLC)

Reaz.		PILE		
Node	Load	FX (kN)	FY (kN)	FZ (kN)
83	SLC(all)	586.4	-480.4	10955.9
84	SLC(all)	586.5	480.4	9569.7
87	SLC(all)	586.5	-480.4	9558.2
88	SLC(all)	586.4	480.4	10967.0
		SPALLE		
51	SLC(all)	189.1	-135.8	580.6
52	SLC(all)	189.1	135.8	904.0
53	SLC(all)	189.0	-135.8	914.3
54	SLC(all)	189.1	135.8	570.3

Carichi sugli appoggi a SLC (fattore di struttura unitario $q=1$)

Deformazioni (COMBINAZIONE A SLC)

Spost.		PILE					
Node	Load	DX (mm)	DY (mm)	DZ (mm)	RX ([rad])	RY ([rad])	RZ ([rad])
83	SLC(all)	-69.2	56.6	-1.4	0.0001	0.0029	0.0003
84	SLC(all)	-69.2	-56.6	-1.2	-0.0001	0.0029	-0.0003
87	SLC(all)	-69.2	56.6	-1.2	0.0001	0.0029	0.0003
88	SLC(all)	-69.1	-56.6	-1.4	-0.0001	0.0029	-0.0003
Spost.		SPALLE					
51	SLC(all)	-65.0	46.7	-0.2	0.0000	-0.0007	0.0003
52	SLC(all)	-65.0	-46.7	-0.3	0.0000	-0.0008	-0.0003
53	SLC(all)	-64.9	46.7	-0.3	0.0000	-0.0007	0.0003
54	SLC(all)	-65.0	-46.7	-0.2	0.0000	-0.0008	-0.0003

Deformazioni su appoggi a SLC (fattore di struttura unitario $q=1$)

Temp.		PILE					
Node	Load	DX (mm)	DY (mm)	DZ (mm)	RX ([rad])	RY ([rad])	RZ ([rad])
83	TEMP +15°C	-5.8	0.0	0.0	0	-0.00001	0
84	TEMP +15°C	-5.8	0.0	0.0	0	-0.00001	0
87	TEMP +15°C	-5.8	0.0	0.0	0	-0.00001	0
88	TEMP +15°C	-5.8	0.0	0.0	0	-0.00001	0
Temp.		PILE					
51	TEMP +15°C	-11.6	0.0	0.0	0.0	0.0	0.0
52	TEMP +15°C	-11.6	0.0	0.0	0.0	0.0	0.0
53	TEMP +15°C	-11.6	0.0	0.0	0.0	0.0	0.0
54	TEMP +15°C	-11.6	0.0	0.0	0.0	0.0	0.0

Deformazioni su appoggi per variazione termica ($\Delta=+15^\circ\text{C}$)

Verifica isolatori sismici			Pag	1
Dati di ingresso (da modello di calcolo e scheda tecnica isolatore)				
1. Caratteristiche isolatore				
Diametro isolatore elastomerico	D	900	[mm]	
Spessore totale dell'elastomero	t_e	60	[mm]	
Modulo di taglio dinamico elastomero	G_{din}	0.8	[MPa]	
Modulo di compressibilità volumetrica gomma	E_d	2000	[MPa]	
Spessore del singolo strato di gomma	t_i	6	[mm]	
Spessore della lamella in acciaio	t_s	3	[mm]	
Lato piastra in acciaio	Z	950	[mm]	
Tensione snervamento acciaio lamelle	f_{yk}	275	[mm]	
2. Spostamenti				
2.1 Spostamenti orizzontali				
Spostamento in x per SLC _x	$d_{ex,x}$	69.1	[mm]	
Spostamento in y per SLC _y	$d_{ey,x}$	56.6	[mm]	
Spostamento per termica x	$d_{T,x}$	5.8	[mm]	
Spostamento per termica y	$d_{T,y}$	0	[mm]	
Spostamento massimo	d_{sd}	74.0	[mm]	
2.2 Rotazioni				
Rotazione attorno ad x	α_x	0	[rad]	
Rotazione attorno ad y	α_y	0.0029	[rad]	
3. Forze applicate all'isolatore				
Sforzo normale agente su isolatore	V	10967	[kN]	
Calcolo				
Fattore di forma primario	S_1	37.5	[-]	
Modulo di compressibilità assiale	E_c	1500	[MPa]	
Angolo Φ	Φ	2.98	[rad]	
Area ridotta efficace dell'isolatore	A_r	569670	[mm ²]	
Deformazione di taglio dovuto a sforzo assiale	v_c	0.96	[-]	
Deformazione di taglio dovuta per spost.sismico	v_s	1.23	[-]	< 2
	α	0.0029	[rad]	
	a^2	1761.75	[mm ²]	
Deformazione di taglio dovuta a rotazione	v_α	2.45	[-]	
Carico critico	V_{cr}	256351	[kN]	
Tensione negli inserti in acciaio	σ_s	100.1	[MPa]	< 275MPa
Deformazione di taglio totale di progetto	v_t	4.64	[-]	< 5
Rapporto tra V e V_{cr}	η	23.37	[-]	> 2

Verifica isolatore SI-N 900/60

Verifica isolatori sismici		Pag	1
Dati di ingresso (da modello di calcolo e scheda tecnica isolatore)			
1. Caratteristiche isolatore			
Diametro isolatore elastomerico	D	500	[mm]
Spessore totale dell'elastomero	t_e	56	[mm]
Modulo di taglio dinamico elastomero	G_{din}	0.8	[MPa]
Modulo di compressibilità volumetrica gomma	E_d	2000	[MPa]
Spessore del singolo strato di gomma	t_i	6	[mm]
Spessore della lamella in acciaio	t_s	3	[mm]
Lato piastra in acciaio	Z	650	[mm]
Tensione snervamento acciaio lamelle	f_{yk}	275	[mm]
2. Spostamenti			
2.1 Spostamenti orizzontali			
Spostamento in x per SLC _x	$d_{ex,x}$	64.9	[mm]
Spostamento in y per SLC _y	$d_{ey,x}$	46.7	[mm]
Spostamento per termica x	$d_{T,x}$	11.6	[mm]
Spostamento per termica y	$d_{T,y}$	0	[mm]
Spostamento massimo	d_{sd}	72.1	[mm]
2.2 Rotazioni			
Rotazione attorno ad x	α_x	0	[rad]
Rotazione attorno ad y	α_y	0.0007	[rad]
3. Forze applicate all'isolatore			
Sforzo normale agente su isolatore	V	914	[kN]
Calcolo			
Fattore di forma primario	S_1	20.8	[-]
Modulo di compressibilità assiale	E_c	1500	[MPa]
Angolo Φ	Φ	2.85	[rad]
Area ridotta efficace dell'isolatore	A_r	160437	[mm ²]
Deformazione di taglio dovuto a sforzo assiale	v_c	0.51	[-]
Deformazione di taglio dovuta per spost.sismico	v_s	1.29	[-] < 2
	α	0.0007	[rad]
	α^2	131.25	[mm ²]
Deformazione di taglio dovuta a rotazione	v_α	0.20	[-]
Carico critico	V_{cr}	23875	[kN]
Tensione negli inserti in acciaio	σ_s	29.6	[MPa] < 275MPa
Deformazione di taglio totale di progetto	v_t	2.00	[-] < 5
Rapporto tra V e V_{cr}	η	26.12	[-] < 2

Verifica isolatore SI-N 500/56

7. CONCLUSIONI

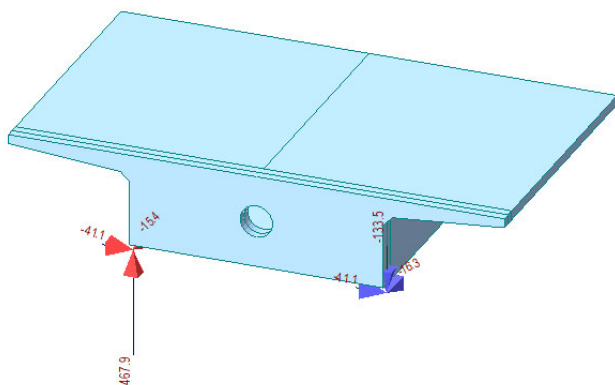
In base alle risultanze dei modelli di calcolo, al paragrafo n.6 sono riportate le caratteristiche che devono avere i nuovi appoggi che sostituiranno quelli esistenti.

La scelta del vincolamento ricade su:

- Isolatori a scorrimento a superficie curva, costituiti da una o due piastre di scorrimento in acciaio a superficie concava lavorate con opportuno raggio di curvatura e rivestite da un foglio inossidabile. L'elemento che si accoppia alla piastra di scorrimento è dotato di superficie sferica, con il medesimo raggio della piastra di scorrimento, rivestita con un patino ad alta resistenza che produce l'attrito dinamico richiesto. Tali isolatori devono rispettare le azioni e le rotazioni calcolate agli SLU, permettere gli spostamenti calcolati e devono essere collegati mediante zanche alla struttura inferiore e superiormente mediante accoppiamento perno-contropiastra.

Utilizzando isolatori sismici, sarà necessario collegare i due impalcati per evitare battimenti tra gli stessi in condizioni sismica. In questa prima fase di sostituzione dei soli appoggi sulle spalle, tale operazione non risulta ancora necessaria; nei successivi lotti di intervento di sostituzione degli appoggi sulle pile si dovranno collegare gli impalcati poiché si andranno a rimuovere tutti i vincoli trasversali residui.

Si segnala inoltre che, nei risultati di calcolo nella condizione di traffico veicolare, è possibile avere una condizione di leggera trazione (133.5kN) su uno degli appoggi delle spalle (come mostrato in figura):



sarà quindi necessario prevedere il bloccaggio della trazione su tutti gli appoggi delle spalle attraverso delle zanche di collegamento dall'isolatore alla struttura in calcestruzzo.

Per quanto concerne infine i giunti di dilatazione, poiché quelli esistenti risultano ammalorati si prevede la loro sostituzione con nuovi dispositivi, scelti sulla base del sistema di vincolamento proposto, ovvero quello dell'isolamento.

Questi giunti, che necessitano di una capacità di spostamento di 30cm, dovranno essere in gomma armata realizzati mediante una piastra ponte centrale ed elementi portanti laterali liberi di muoversi e separati dalla piastra ponte da varchi sinusoidali o rettilinei. Essi saranno ancorati alla struttura mediante barre filettate o zanche multidirezionali e tirafondi.

APPENDICE 1: Tabulati di calcolo

; MIDAS/Civil Text(MCT) File.
; Date : 2019/9/13

*VERSION

8.8.1

*UNIT ; Unit System

; FORCE, LENGTH, HEAT, TEMPER
KN , M, BTU, C

*PROJINFO ; Project Information

; PROJECT, REVISION, USER, EMAIL, ADDRESS, TEL, FAX, CLIENT, TITLE, ENGINEER, EDATE
; One Line per Data
; CHECK1, CDATE1, CHECK2, CDATE2, CHECK3, CDATE3, APPROVE, ADATE, COMMENT
; One Line per Data
USER=utente
ADDRESS=HP Inc.

*STRUCTYPE ; Structure Type

; iSTYP, iMASS, iSMAS, bMASSOFFSET, bSELFWEIGHT, GRAV, TEMPER, bALIGNBEAM,
bALIGNSLAB, bROTRIGID
0, 1, 1, NO, YES, 9.806, 0, NO, NO, NO

*REBAR-MATL-CODE ; Rebar Material Code

; CONC_CODE, CONC_MDB, SRC_CODE, SRC_MDB
ASTM(RC), Grade 60, ASTM(RC), Grade 60

*NODE ; Nodes

; iNO, X, Y, Z
1, 0, 0, 0
2, 0, 11.01, 0
3, 0.2, 0, 0
4, 0.2, 11.01, 0
5, -0.2, 0, 0
6, -0.2, 11.01, 0
7, 38.6, 0, 0
8, 38.6, 11.01, 0
9, 37.6, 0, 0
10, 37.6, 11.01, 0
11, 39.6, 0, 0
12, 39.6, 11.01, 0
15, 116.6, 0, 0
16, 116.6, 11.01, 0
17, 115.6, 0, 0
18, 115.6, 11.01, 0
19, 117.6, 0, 0
20, 117.6, 11.01, 0
21, 155.2, 0, 0
22, 155.2, 11.01, 0
23, 155.4, 0, 0
24, 155.4, 11.01, 0
25, 155, 0, 0
26, 155, 11.01, 0

43, 0, 0, -2
44, 0, 11.01, -2
45, 0, 2.75, -2
46, 0, 13.76, -2
47, 0, -2.75, -2
48, 0, 8.26, -2
51, 0, 2.75, -2.2
52, 0, 13.76, -2.2
53, 0, -2.75, -2.2
54, 0, 8.26, -2.2
55, 155.2, 0, -2
56, 155.2, 11.01, -2
57, 155.2, 2.75, -2
58, 155.2, 13.76, -2
59, 155.2, -2.75, -2
60, 155.2, 8.26, -2
63, 155.2, 2.75, -2.2
64, 155.2, 13.76, -2.2
65, 155.2, -2.75, -2.2
66, 155.2, 8.26, -2.2
67, 38.6, 0, -3.6
68, 38.6, 11.01, -3.6
69, 116.6, 0, -3.6
70, 116.6, 11.01, -3.6
71, 38.6, -2.75, -3.6
72, 38.6, 8.26, -3.6
73, 116.6, -2.75, -3.6
74, 116.6, 8.26, -3.6
75, 38.6, 2.75, -3.6
76, 38.6, 13.76, -3.6
77, 116.6, 2.75, -3.6
78, 116.6, 13.76, -3.6
83, 38.6, -2.75, -3.8
84, 38.6, 8.26, -3.8
85, 116.6, -2.75, -3.8
86, 116.6, 8.26, -3.8
87, 38.6, 2.75, -3.8
88, 38.6, 13.76, -3.8
89, 116.6, 2.75, -3.8
90, 116.6, 13.76, -3.8
91, 6, 0, 0
92, 6, 11.01, 0
93, 149.2, 0, 0
94, 149.2, 11.01, 0
95, 15.8, 0, 0
96, 15.8, 11.01, 0
97, 139.4, 0, 0
98, 139.4, 11.01, 0
99, 25.6, 0, 0
100, 25.6, 11.01, 0
101, 129.6, 0, 0
102, 129.6, 11.01, 0
103, 31.6, 0, 0
104, 31.6, 11.01, 0
105, 123.6, 0, 0

106, 123.6, 11.01, 0
107, 47.1, 0, 0
108, 47.1, 11.01, 0
109, 108.1, 0, 0
110, 108.1, 11.01, 0
111, 54.6, 0, 0
112, 54.6, 11.01, 0
113, 100.6, 0, 0
114, 100.6, 11.01, 0
115, 66.1, 0, 0
116, 66.1, 11.01, 0
117, 77.6, 0, 0
118, 77.6, 11.01, 0
119, 89.1, 0, 0
120, 89.1, 11.01, 0
121, 14.6, 0, 0
122, 14.6, 11.01, 0
123, 140.6, 0, 0
124, 140.6, 11.01, 0
125, 32.6, 0, 0
126, 32.6, 11.01, 0
127, 50.6, 0, 0
128, 50.6, 11.01, 0
129, 68.6, 0, 0
130, 68.6, 11.01, 0
131, 86.6, 0, 0
132, 86.6, 11.01, 0
133, 104.6, 0, 0
134, 104.6, 11.01, 0
135, 122.6, 0, 0
136, 122.6, 11.01, 0

*ELEMENT ; Elements

; iEL, TYPE, iMAT, iPRO, iN1, iN2, ANGLE, iSUB, ; Frame Element
; iEL, TYPE, iMAT, iPRO, iN1, iN2, ANGLE, iSUB, EXVAL, EXVAL2, bLMT ; Comp/Tens Truss
; iEL, TYPE, iMAT, iPRO, iN1, iN2, iN3, iN4, iSUB, iWID, LCAXIS ; Planar Element
; iEL, TYPE, iMAT, iPRO, iN1, iN2, iN3, iN4, iN5, iN6, iN7, iN8 ; Solid Element

1, BEAM , 1, 1, 6, 2, 0, 0
2, BEAM , 1, 1, 2, 4, 0, 0
3, BEAM , 1, 1, 5, 1, 0, 0
4, BEAM , 1, 1, 1, 3, 0, 0
5, BEAM , 1, 1, 25, 21, 0, 0
6, BEAM , 1, 1, 21, 23, 0, 0
7, BEAM , 1, 1, 26, 22, 0, 0
8, BEAM , 1, 1, 22, 24, 0, 0
9, BEAM , 1, 2, 9, 7, 0, 0
10, BEAM , 1, 2, 7, 11, 0, 0
11, BEAM , 1, 2, 10, 8, 0, 0
12, BEAM , 1, 2, 8, 12, 0, 0
13, BEAM , 1, 2, 17, 15, 0, 0
14, BEAM , 1, 2, 15, 19, 0, 0
15, BEAM , 1, 2, 18, 16, 0, 0
16, BEAM , 1, 2, 16, 20, 0, 0
17, BEAM , 1, 3, 3, 91, 0, 0
18, BEAM , 1, 3, 4, 92, 0, 0

IG INGEGNERIA GEOTECNICA

19, BEAM , 1, 3, 26, 94, 0, 0
20, BEAM , 1, 3, 25, 93, 0, 0
21, BEAM , 1, 4, 91, 121, 0, 0
22, BEAM , 1, 4, 92, 122, 0, 0
23, BEAM , 1, 4, 93, 123, 0, 0
24, BEAM , 1, 4, 94, 124, 0, 0
25, BEAM , 1, 5, 95, 99, 0, 0
26, BEAM , 1, 5, 96, 100, 0, 0
27, BEAM , 1, 5, 97, 101, 0, 0
28, BEAM , 1, 5, 98, 102, 0, 0
29, BEAM , 1, 6, 99, 103, 0, 0
30, BEAM , 1, 6, 100, 104, 0, 0
31, BEAM , 1, 6, 101, 105, 0, 0
32, BEAM , 1, 6, 102, 106, 0, 0
33, BEAM , 1, 7, 103, 125, 0, 0
34, BEAM , 1, 7, 104, 126, 0, 0
35, BEAM , 1, 7, 105, 135, 0, 0
36, BEAM , 1, 7, 106, 136, 0, 0
37, BEAM , 1, 8, 11, 107, 0, 0
38, BEAM , 1, 8, 12, 108, 0, 0
39, BEAM , 1, 8, 17, 109, 0, 0
40, BEAM , 1, 8, 18, 110, 0, 0
41, BEAM , 1, 9, 107, 127, 0, 0
42, BEAM , 1, 9, 108, 128, 0, 0
43, BEAM , 1, 9, 109, 133, 0, 0
44, BEAM , 1, 9, 110, 134, 0, 0
45, BEAM , 1, 10, 111, 115, 0, 0
46, BEAM , 1, 10, 112, 116, 0, 0
47, BEAM , 1, 10, 114, 120, 0, 0
48, BEAM , 1, 10, 113, 119, 0, 0
49, BEAM , 1, 11, 115, 129, 0, 0
50, BEAM , 1, 11, 116, 130, 0, 0
51, BEAM , 1, 11, 119, 131, 0, 0
52, BEAM , 1, 11, 120, 132, 0, 0
53, BEAM , 1, 4, 121, 95, 0, 0
54, BEAM , 1, 4, 122, 96, 0, 0
55, BEAM , 1, 4, 123, 97, 0, 0
56, BEAM , 1, 4, 124, 98, 0, 0
57, BEAM , 1, 7, 125, 9, 0, 0
58, BEAM , 1, 7, 126, 10, 0, 0
59, BEAM , 1, 9, 127, 111, 0, 0
60, BEAM , 1, 9, 128, 112, 0, 0
61, BEAM , 1, 11, 129, 117, 0, 0
62, BEAM , 1, 11, 130, 118, 0, 0
63, BEAM , 1, 11, 131, 117, 0, 0
64, BEAM , 1, 11, 132, 118, 0, 0
65, BEAM , 1, 9, 133, 113, 0, 0
66, BEAM , 1, 9, 134, 114, 0, 0
67, BEAM , 1, 7, 135, 19, 0, 0
68, BEAM , 1, 7, 136, 20, 0, 0

*MATERIAL ; Material

; iMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT, bMASS, DAMPRATIO, [DATA1]

; STEEL, CONC, USER

```
; iMAT, TYPE, MNAME, SPHEAT, HEATCO, PLAST, TUNIT, bMASS, DAMPRATIO, [DATA2],  
[DATA2] ; SRC  
; [DATA1] : 1, STANDARD, CODE/PRODUCT, DB, USEELAST, ELAST  
; [DATA1] : 2, ELAST, POISN, THERMAL, DEN, MASS  
; [DATA1] : 3, Ex, Ey, Ez, Tx, Ty, Tz, Sxy, Sxz, Syz, Pxy, Pxz, Pyz, DEN, MASS ; Orthotropic  
; [DATA2] : 1, STANDARD, CODE/PRODUCT, DB, USEELAST, ELAST or 2, ELAST, POISN,  
THERMAL, DEN, MASS  
1, CONC, C25/30, 0, 0, 0, C, NO, 0.05, 1, EN04(RC), C25/30, NO, 3.1475e+007
```

*MATL-COLOR

```
; iMAT, W_R, W_G, W_B, HF_R, HF_G, HF_B, HE_R, HE_G, HE_B, bBLEND, FACT  
1, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5
```

*SECTION ; Section

```
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, [DATA1], [DATA2] ; 1st line -  
DB/USER  
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, BLT, D1, ..., D8, iCEL ; 1st line -  
VALUE  
; AREA, ASy, ASz, Ixx, Iyy, Izz ; 2nd line  
; CyP, CyM, CzP, CzM, QyB, QzB, PERI_OUT, PERI_IN, Cy, Cz ; 3rd line  
; Y1, Y2, Y3, Y4, Z1, Z2, Z3, Z4, Zyy, Zzz ; 4th line  
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, ELAST, DEN, POIS, POIC, SF, THERMAL ; 1st  
line - SRC  
; D1, D2, [SRC] ; 2nd line  
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, 1, DB, NAME1, NAME2, D1, D2 ; 1st line -  
COMBINED  
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, 2, D11, D12, D13, D14, D15, D21, D22, D23,  
D24  
; iSEC, TYPE, SNAME, [OFFSET2], bSD, bWE, SHAPE, iyVAR, izVAR, STYPE ; 1st line -  
TAPERED  
; DB, NAME1, NAME2 ; 2nd line(STYPE=DB)  
; [DIM1], [DIM2] ; 2nd line(STYPE=USER)  
; D11, D12, D13, D14, D15, D16, D17, D18 ; 2nd line(STYPE=VALUE)  
; AREA1, ASy1, ASz1, Ixx1, Iyy1, Izz1 ; 3rd line(STYPE=VALUE)  
; CyP1, CyM1, CzP1, CzM1, QyB1, QzB1, PERI_OUT1, PERI_IN1, Cy1, Cz1 ; 4th  
line(STYPE=VALUE)  
; Y11, Y12, Y13, Y14, Z11, Z12, Z13, Z14, Zyy1, Zyy2 ; 5th line(STYPE=VALUE)  
; D21, D22, D23, D24, D25, D26, D27, D28 ; 6th line(STYPE=VALUE)  
; AREA2, ASy2, ASz2, Ixx2, Iyy2, Izz2 ; 7th line(STYPE=VALUE)  
; CyP2, CyM2, CzP2, CzM2, QyB2, QzB2, PERI_OUT2, PERI_IN2, Cy2, Cz2 ; 8th  
line(STYPE=VALUE)  
; Y21, Y22, Y23, Y24, Z21, Z22, Z23, Z24, Zyy2, Zzz2 ; 9th line(STYPE=VALUE)  
; OPT1, OPT2, [JOINT] ; 2nd line(STYPE=PSC)  
; ELAST, DEN, POIS, POIC, THERMAL ; 2nd line(STYPE=PSC-CMPW)  
; bSHEARCHK, [SCHK-I], [SCHK-J], [WT-I], [WT-J], WI, WJ, bSYM, bSIDEHOLE ; 3rd  
line(STYPE=PSC)  
; bSHEARCHK, bSYM, bHUNCH, [CMPWEB-I], [CMPWEB-J] ; 3rd  
line(STYPE=PSC-CMPW)  
; bUSERDEFMESH SIZE, MESH SIZE, bUSERINPSTIFF, [STIFF-I], [STIFF-J] ; 4th  
line(STYPE=PSC)  
; [SIZE-A]-i ; 5th line(STYPE=PSC)  
; [SIZE-B]-i ; 6th line(STYPE=PSC)  
; [SIZE-C]-i ; 7th line(STYPE=PSC)  
; [SIZE-D]-i ; 8th line(STYPE=PSC)
```

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; [SIZE-A]-j ; 9th line(STYPE=PSC)
; [SIZE-B]-j ; 10th line(STYPE=PSC)
; [SIZE-C]-j ; 11th line(STYPE=PSC)
; [SIZE-D]-j ; 12th line(STYPE=PSC)
; GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc, bMULTI, EsEc-L, EsEc-S ; 2nd line(STYPE=CMP-
B/I)
; SW_i, Hw_i, tw_i, B_i, Bf1_i, tf1_i, B2_i, Bf2_i, tf2_i ; 3rd line(STYPE=CMP-B/I)
; SW_j, Hw_j, tw_j, B_j, Bf1_j, tf1_j, B2_j, Bf2_j, tf2_j ; 4th line(STYPE=CMP-B/I)
; N1, N2, Hr, Hr2, tr1, tr2 ; 5th line(STYPE=CMP-B)
; GN, CTC, Bc, Tc, Hh, EgDEsb, DgdDsb, Pgd, Psb, bSYM, SW_i, SW_j ; 2nd
line(STYPE=CMP-CI/CT)
; OPT1, OPT2, [JOINT] ; 3rd line(STYPE=CMP-CI/CT)
; [SIZE-A]-i ; 4th line(STYPE=CMP-CI/CT)
; [SIZE-B]-i ; 5th line(STYPE=CMP-CI/CT)
; [SIZE-C]-i ; 6th line(STYPE=CMP-CI/CT)
; [SIZE-D]-i ; 7th line(STYPE=CMP-CI/CT)
; [SIZE-A]-j ; 8th line(STYPE=CMP-CI/CT)
; [SIZE-B]-j ; 9th line(STYPE=CMP-CI/CT)
; [SIZE-C]-j ; 10th line(STYPE=CMP-CI/CT)
; [SIZE-D]-j ; 11th line(STYPE=CMP-CI/CT)
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, STYPE1, STYPE2 ; 1st line -
CONSTRUCT
; SHAPE, ...(same with other type data from shape) ; Before (STYPE1)
; SHAPE, ...(same with other type data from shape) ; After (STYPE2)
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - COMPOSITE-B
; Hw, tw, B1, Bf1, tf1, B2, Bf2, tf2 ; 2nd line
; [SHAPE-NUM], [STIFF-SHAPE], [STIFF-POS] (1~4) ; 3rd line
; SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc, TsTc, bMulti, Elong, Esh ; 4th line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - COMPOSITE-I
; Hw, tw, B1, tf1, B2, tf2 ; 2nd line
; [SHAPE-NUM], [STIFF-SHAPE], [STIFF-POS] (1~2) ; 3rd line
; SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc, TsTc, bMulti, Elong, Esh ; 4th line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - COMPOSITE-
TUB
; Hw, tw, B1, Bf1, tf1, B2, Bf2, tf2, Bf3, tfp ; 2nd line
; [SHAPE-NUM], [STIFF-SHAPE], [STIFF-POS] (1~3) ; 3rd line
; SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc, TsTc, bMulti, Elong, Esh ; 4th line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - COMPOSITE-
CI/CT
; OPT1, OPT2, [JOINT] ; 2nd line
; [SIZE-A] ; 3rd line
; [SIZE-B] ; 4th line
; [SIZE-C] ; 5th line
; [SIZE-D] ; 6th line
; SW, GN, CTC, Bc, Tc, Hh, EgDEsb, DgdDsb, Pgd, Psb ; 7th line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - PSC
; OPT1, OPT2, [JOINT] ; 2nd line
; bSHEARCHK, [SCHK], [WT], WIDTH, bSYM, bSIDEHOLE ; 3rd line
; bUSERDEFMESH SIZE, MESH SIZE, bUSERINPSTIFF, [STIFF] ; 4th line
; bWE, [WARPING POINT]-i, [WARPING POINT]-j ; 5th line
; [SIZE-A] ; 6th line
; [SIZE-B] ; 7th line
; [SIZE-C] ; 8th line
; [SIZE-D] ; 9th line
; [DATA1] : 1, DB, NAME or 2, D1, D2, D3, D4, D5, D6, D7, D8, D9, D10

```



```
; [DATA2] : CCSHAPE or iCEL or iN1, iN2  
; [SRC] : 1, DB, NAME1, NAME2 or 2, D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, iN1, iN2  
; [DIM1], [DIM2] : D1, D2, D3, D4, D5, D6, D7, D8  
; [OFFSET] : OFFSET, iCENT, iREF, iHORZ, HUSER, iVERT, VUSER  
; [OFFSET2]: OFFSET, iCENT, iREF, iHORZ, HUSERI, HUSERJ, iVERT, VUSERI, VUSERJ  
; [SHAPE-NUM]: SHAPE-NUM, POS, STIFF-NUM1, STIFF-NUM2, STIFF-NUM3, STIFF-NUM4  
; [STIFF-SHAPE]: SHAPE-NUM, for(SHAPE-NUM) { NAME, SIZE1~8 }  
; [STIFF-POS]: STIFF-NUM, for(STIFF-NUM) { SPACING, iSHAPE, bCALC }  
; [JOINT] : 8(1CELL, 2CELL), 13(3CELL), 9(PSCM), 8(PSCH), 9(PSCT), 2(PSCB), 0(nCELL),  
2(nCEL2)  
; [SIZE-A] : 6(1CELL, 2CELL), 10(3CELL), 10(PSCM), 6(PSCH), 8(PSCT), 10(PSCB), 5(nCELL),  
11(nCEL2)  
; [SIZE-B] : 6(1CELL, 2CELL), 12(3CELL), 6(PSCM), 6(PSCH), 8(PSCT), 6(PSCB), 8(nCELL),  
18(nCEL2)  
; [SIZE-C] : 10(1CELL, 2CELL), 13(3CELL), 9(PSCM), 10(PSCH), 7(PSCT), 8(PSCB), 0(nCELL),  
11(nCEL2)  
; [SIZE-D] : 8(1CELL, 2CELL), 13(3CELL), 6(PSCM), 7(PSCH), 8(PSCT), 5(PSCB), 0(nCELL),  
18(nCEL2)  
; [STIFF] : AREA, ASy, ASz, Ixx, Iyy, Izz  
; [SCHK] : bAUTO_Z1, Z1, bAUTO_Z3, Z3  
; [WT] : bAUTO_TOR, TOR, bAUTO_SHR1, SHR1, bAUTO_SHR2, SHR2, bAUTO_SHR3, SHR3  
; [CMPWEB] : EFD, LRF, A, B, H, T  
; [WARPING POINT] : nWarpingCheck, X1,X2,X3,X4,X5,X6, Y1,Y2,Y3,Y4,Y5,Y6  
1, PSC , APPOGGIO_Spalla , CT, 0, 0, 0, 0, 0, 0, YES, NO, NCE2  
CIRCLE, 1, NO, NO  
YES, YES, 1.4, YES, 1, YES, 0, YES, 0, YES, 0, YES, 0, 10.75, YES, NO  
NO,, NO,,,,,  
NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0  
0.2, 0.2, 0, 0.2, 1.4, 2.425, 0, 0.2, 0, 2.75, 0  
0.65, 0.65, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0.001, 0.001  
0.2, 0.2, 0, 0.2, 1.4, 2.425, 0, 0.2, 0, 2.75, 0  
0.65, 0.65, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0.001, 0.001  
  
2, PSC , APPOGGIO_Pila , CT, 0, 0, 0, 0, 0, 0, YES, NO, PSCT  
, , NO, YES, YES, NO, NO, YES, YES, NO, NO  
YES, YES, 2.953, YES, 2.953, YES, 0, YES, 0, YES, 0, YES, 0, 0, YES, NO  
NO,, NO,,,,,  
NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0  
0, 0.2, 0.4, 2.953, 2.75, 0, 2.625, 5.375  
0.2, 0.39, 0, 0, 0, 0, 2.425, 2.624  
0.2, 0.4, 2.953, 2.75, 0, 2.625, 5.375  
0.2, 0.39, 0, 0, 0, 0, 2.425, 2.624  
  
3, TAPERED , CAMPATA_min1 , CT, 0, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC  
, , YES, NO, NO, YES, NO, NO, YES, YES  
YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,  
YES, 0, 0.2, 0.2, NO, NO  
NO,, NO,,,,,,,,,  
NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0  
0.2, 0.4, 0.2, 0, 1.4, 0  
2.625, 2.425, 0, 0, 0, 2.75  
0.3, 0.3, 0, 0, 1.01, 0, 0.19, 0, 0.09, 0.2  
2.15, 1.85, 0, 0, 2.15, 1.15, 2.05, 0  
  
0.2, 0.4, 0.2, 0, 1.418, 0
```

2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 1.003, 0, 0.19, 0, 0.09, 0.225
2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

4, TAPERED , CAMPATA_min2 , CT, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , ,
 NO, 0
 0.2, 0.4, 0.2, 0, 1.418, 0
 2.625, 2.425, 0, 0, 0, 2.75
 0.3, 0.3, 0, 0, 1.003, 0, 0.19, 0, 0.09, 0.225
 2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

0.2, 0.4, 0.2, 0, 1.655, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 1.068, 0, 0.19, 0, 0.09, 0.397
2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

5, TAPERED , CAMPATA_min3 , CT, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , ,
 NO, 0
 0.2, 0.4, 0.2, 0, 1.655, 0
 2.625, 2.425, 0, 0, 0, 2.75
 0.3, 0.3, 0, 0, 1.068, 0, 0.19, 0, 0.09, 0.397
 2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

0.2, 0.4, 0.2, 0, 2.092, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 1.324, 0, 0.19, 0, 0.09, 0.578
2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

6, TAPERED , CAMPATA_min4 , CT, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , , ,
 NO, 0
 0.2, 0.4, 0.2, 0, 2.092, 0
 2.625, 2.425, 0, 0, 0, 2.75
 0.3, 0.3, 0, 0, 1.324, 0, 0.19, 0, 0.09, 0.578
 2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

0.2, 0.4, 0.2, 0, 2.484, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 1.645, 0, 0.19, 0, 0.09, 0.649
2.25, 1.95, 0, 0, 2.25, 1.25, 2.15, 0

7, TAPERED , CAMPATA_min5 , CT, 0, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES

[illegible]

NO,, NO,,,,,,

NO, 0

0.2, 0.4, 0.2, 0, 2.484, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 1.645, 0, 0.19, 0, 0.09, 0.649

2.25, 1.95, 0, 0, 2.25, 1.25, 2.15, 0

0.2, 0.4, 0.2, 0, 2.953, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 2.063, 0, 0.19, 0, 0.09, 0.7

2.15, 1.85, 0, 0, 2.15, 1.15, 2.05, 0

8, TAPERED , CAMPATA max1 , CT, 0, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC

., YES, NO, NO, YES, NO, NO, YES, YES

[illegible]

NO,, NO,,,,,,

[illegible]

0.2, 0.4, 0.2, 0, 2.953, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 2.063, 0, 0.19, 0, 0.09, 0.7

2.15, 1.85, 0, 0, 2.15, 1.15, 2.05, 0

0.2, 0.4, 0.2, 0, 2.451, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 1.595, 0, 0.19, 0, 0.09, 0.666

2.25, 1.95, 0, 0, 2.25, 1.25, 2.15, 0

9, TAPERED , CAMPATA_max2 , CT, 0, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC

., YES, NO, NO, YES, NO, NO, YES, YES

[illegible]

NO., NO.,.....

[illegible]

0.2, 0.4, 0.2, 0, 2.451, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 1.595, 0, 0.19, 0, 0.09, 0.666

2.25, 1.95, 0, 0, 2.25, 1.25, 2.15, 0

0.2, 0.4, 0.2, 0, 1.953, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 1.251, 0, 0.19, 0, 0.09, 0.512

2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

10, TAPERED , CAMPATA_max3 , CT, 0, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC

., YES, NO, NO, YES, NO, NO, YES, YES

[illegible]

NO,, NO,, , , , , , , , , , , ,

NO,0

0.2, 0.4, 0.2, 0, 1.953, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 1.251, 0, 0.19, 0, 0.09, 0.512

2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

0.2, 0.4, 0.2, 0, 1.554, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 0.979, 0, 0.19, 0, 0.09, 0.385

2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

11, TAPERED , CAMPATA_max4 , CT, 0, 0, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC

, , YES, NO, NO, YES, NO, NO, YES, YES

[illegible]

NO, , NO, , , , , , , , , , ,

NO, 0

0.2, 0.4, 0.2, 0, 1.554, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 0.979, 0, 0.19, 0, 0.09, 0.385

2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

0.2, 0.4, 0.2, 0, 1.403, 0

2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 1.013, 0, 0.19, 0, 0.09, 0.2

2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

*SECT-COLOR

; iSEC, W R, W G, W B, HF R, HF G, HF B, HE R, HE G, HE B, bBLEND, FACT

1, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

2, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

3, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

4, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

5, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

6, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

7, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

8, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

9, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

10, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

11, 255, 0, 0, 0, 255, 0, 0, 0, 255, NO, 0.5

*COMP-GEN-SECT-PSC-DESIGN ; Composite Section for PSC Design

; SECT, bCompPSC, (Z1, Z2, Z3, t1, t2, t3, TotT)-I, (Z1, Z2, Z3, t1, t2, t3, TotT)-J

3, NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

4, NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

5. NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

[illegible]

7, NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

[illegible]

9, NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

10, NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

11, NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

*DGN-SECT

```

; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, [DATA1], [DATA2] ; 1st line -
DB/USER

```

```

; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, BLT, D1, ..., D8, iCEL          ; 1st line -
VALUE

```

```

; AREA, ASy, ASz, Ixx, Iyy, Izz ; 2nd line
; CyP, CyM, CzP, CzM, QyB, QzB, PERI_OUT, PERI_IN, Cy, Cz ; 3rd line
; Y1, Y2, Y3, Y4, Z1, Z2, Z3, Z4, Zyy, Zzz ; 4th line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, ELAST, DEN, POIS, POIC, SF, THERMAL ; 1st
line - SRC
; D1, D2, [SRC] ; 2nd line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, 1, DB, NAME1, NAME2, D1, D2 ; 1st line -
COMBINED
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE, 2, D11, D12, D13, D14, D15, D21, D22, D23,
D24
; iSEC, TYPE, SNAME, [OFFSET2], bSD, bWE, SHAPE, iyVAR, izVAR, STYPE ; 1st line -
TAPERED
; DB, NAME1, NAME2 ; 2nd line(STYPE=DB)
; [DIM1], [DIM2] ; 2nd line(STYPE=USER)
; D11, D12, D13, D14, D15, D16, D17, D18 ; 2nd line(STYPE=VALUE)
; AREA1, ASy1, ASz1, Ixx1, Iyy1, Izz1 ; 3rd line(STYPE=VALUE)
; CyP1, CyM1, CzP1, CzM1, QyB1, QzB1, PERI_OUT1, PERI_IN1, Cy1, Cz1 ; 4th
line(STYPE=VALUE)
; Y11, Y12, Y13, Y14, Z11, Z12, Z13, Z14, Zyy1, Zyy2 ; 5th line(STYPE=VALUE)
; D21, D22, D23, D24, D25, D26, D27, D28 ; 6th line(STYPE=VALUE)
; AREA2, ASy2, ASz2, Ixx2, Iyy2, Izz2 ; 7th line(STYPE=VALUE)
; CyP2, CyM2, CzP2, CzM2, QyB2, QzB2, PERI_OUT2, PERI_IN2, Cy2, Cz2 ; 8th
line(STYPE=VALUE)
; Y21, Y22, Y23, Y24, Z21, Z22, Z23, Z24, Zyy2, Zzz2 ; 9th line(STYPE=VALUE)
; OPT1, OPT2, [JOINT] ; 2nd line(STYPE=PSC)
; ELAST, DEN, POIS, POIC, THERMAL ; 2nd line(STYPE=PSC-CMPW)
; bSHEARCHK, [SCHK-I], [SCHK-J], [WT-I], [WT-J], WI, WJ, bSYM, bSIDEHOLE ; 3rd
line(STYPE=PSC)
; bSHEARCHK, bSYM, bHUNCH, [CMPWEB-I], [CMPWEB-J] ; 3rd
line(STYPE=PSC-CMPW)
; bUSERDEFMESH SIZE, MESH SIZE, bUSERINPSTIFF, [STIFF-I], [STIFF-J] ; 4th
line(STYPE=PSC)
; [SIZE-A]-i ; 5th line(STYPE=PSC)
; [SIZE-B]-i ; 6th line(STYPE=PSC)
; [SIZE-C]-i ; 7th line(STYPE=PSC)
; [SIZE-D]-i ; 8th line(STYPE=PSC)
; [SIZE-A]-j ; 9th line(STYPE=PSC)
; [SIZE-B]-j ; 10th line(STYPE=PSC)
; [SIZE-C]-j ; 11th line(STYPE=PSC)
; [SIZE-D]-j ; 12th line(STYPE=PSC)
; GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc, bMULTI, EsEc-L, EsEc-S ; 2nd line(STYPE=CMP-
B/I)
; SW_i, Hw_i, tw_i, B_i, Bf1_i, tf1_i, B2_i, Bf2_i, tf2_i ; 3rd line(STYPE=CMP-B/I)
; SW_j, Hw_j, tw_j, B_j, Bf1_j, tf1_j, B2_j, Bf2_j, tf2_j ; 4th line(STYPE=CMP-B/I)
; N1, N2, Hr, Hr2, tr1, tr2 ; 5th line(STYPE=CMP-B)
; GN, CTC, Bc, Tc, Hh, EgDsb, DgdDsb, Pgd, Psb, bSYM, SW_i, SW_j ; 2nd
line(STYPE=CMP-CI/CT)
; OPT1, OPT2, [JOINT] ; 3rd line(STYPE=CMP-CI/CT)
; [SIZE-A]-i ; 4th line(STYPE=CMP-CI/CT)
; [SIZE-B]-i ; 5th line(STYPE=CMP-CI/CT)
; [SIZE-C]-i ; 6th line(STYPE=CMP-CI/CT)
; [SIZE-D]-i ; 7th line(STYPE=CMP-CI/CT)
; [SIZE-A]-j ; 8th line(STYPE=CMP-CI/CT)
; [SIZE-B]-j ; 9th line(STYPE=CMP-CI/CT)
; [SIZE-C]-j ; 10th line(STYPE=CMP-CI/CT)

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; [SIZE-D]-j ; 11th line(STYPE=CMP-CI/CT)
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, STYPE1, STYPE2 ; 1st line -
CONSTRUCT
; SHAPE, ...(same with other type data from shape) ; Before (STYPE1)
; SHAPE, ...(same with other type data from shape) ; After (STYPE2)
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - COMPOSITE-B
; Hw, tw, B1, Bf1, tf1, B2, Bf2, tf2 ; 2nd line
; [SHAPE-NUM], [STIFF-SHAPE], [STIFF-POS] (1~4) ; 3rd line
; SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc, TsTc, bMulti, Elong, Esh ; 4th line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - COMPOSITE-I
; Hw, tw, B1, tf1, B2, tf2 ; 2nd line
; [SHAPE-NUM], [STIFF-SHAPE], [STIFF-POS] (1~2) ; 3rd line
; SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc, TsTc, bMulti, Elong, Esh ; 4th line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - COMPOSITE-
TUB
; Hw, tw, B1, Bf1, tf1, B2, Bf2, tf2, Bf3, tfp ; 2nd line
; [SHAPE-NUM], [STIFF-SHAPE], [STIFF-POS] (1~3) ; 3rd line
; SW, GN, CTC, Bc, Tc, Hh, EsEc, DsDc, Ps, Pc, TsTc, bMulti, Elong, Esh ; 4th line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - COMPOSITE-
CI/CT
; OPT1, OPT2, [JOINT] ; 2nd line
; [SIZE-A] ; 3rd line
; [SIZE-B] ; 4th line
; [SIZE-C] ; 5th line
; [SIZE-D] ; 6th line
; SW, GN, CTC, Bc, Tc, Hh, EgdEsb, DgdDsb, Pgd, Psb ; 7th line
; iSEC, TYPE, SNAME, [OFFSET], bSD, bWE, SHAPE ; 1st line - PSC
; OPT1, OPT2, [JOINT] ; 2nd line
; bSHEARCHK, [SCHK], [WT], WIDTH, bSYM, bSIDEHOLE ; 3rd line
; bUSERDEFMESH SIZE, MESH SIZE, bUSERINPSTIFF, [STIFF] ; 4th line
; bWE, [WARPING POINT]-i, [WARPING POINT]-j ; 5th line
; [SIZE-A] ; 6th line
; [SIZE-B] ; 7th line
; [SIZE-C] ; 8th line
; [SIZE-D] ; 9th line
; [DATA1] : 1, DB, NAME or 2, D1, D2, D3, D4, D5, D6, D7, D8, D9, D10
; [DATA2] : CCSHAPE or iCEL or iN1, iN2
; [SRC] : 1, DB, NAME1, NAME2 or 2, D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, iN1, iN2
; [DIM1], [DIM2] : D1, D2, D3, D4, D5, D6, D7, D8
; [OFFSET] : OFFSET, iCENT, iREF, iHORZ, HUSER, iVERT, VUSER
; [OFFSET2]: OFFSET, iCENT, iREF, iHORZ, HUSERI, HUSERJ, iVERT, VUSERI, VUSERJ
; [SHAPE-NUM]: SHAPE-NUM, POS, STIFF-NUM1, STIFF-NUM2, STIFF-NUM3, STIFF-NUM4
; [STIFF-SHAPE]: SHAPE-NUM, for(SHAPE-NUM) { NAME, SIZE1~8 }
; [STIFF-POS]: STIFF-NUM, for(STIFF-NUM) { SPACING, iSHAPE, bCALC }
; [JOINT] : 8(1CELL, 2CELL), 13(3CELL), 9(PSCM), 8(PSCH), 9(PSCT), 2(PSCB), 0(nCELL),
2(nCEL2)
; [SIZE-A] : 6(1CELL, 2CELL), 10(3CELL), 10(PSCM), 6(PSCH), 8(PSCT), 10(PSCB), 5(nCELL),
11(nCEL2)
; [SIZE-B] : 6(1CELL, 2CELL), 12(3CELL), 6(PSCM), 6(PSCH), 8(PSCT), 6(PSCB), 8(nCELL),
18(nCEL2)
; [SIZE-C] : 10(1CELL, 2CELL), 13(3CELL), 9(PSCM), 10(PSCH), 7(PSCT), 8(PSCB), 0(nCELL),
11(nCEL2)
; [SIZE-D] : 8(1CELL, 2CELL), 13(3CELL), 6(PSCM), 7(PSCH), 8(PSCT), 5(PSCB), 0(nCELL),
18(nCEL2)
; [STIFF] : AREA, ASy, ASz, Ixx, Iyy, Izz

```

[illegible]

5, TAPERED , CAMPATA_min3 , CT, 0, 0, 0, 0, 0, 0, 0, YES, NO, ICEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , ,
 NO, 0
 0.2, 0.4, 0.2, 0, 1.655, 0
 2.625, 2.425, 0, 0, 0, 2.75
 0.3, 0.3, 0, 0, 1.068, 0, 0.19, 0, 0.09, 0.397
 2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

0.2, 0.4, 0.2, 0, 2.092, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 1.324, 0, 0.19, 0, 0.09, 0.578
2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

6, TAPERED , CAMPATA_min4 , CT, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , ,
 NO, 0
 0.2, 0.4, 0.2, 0, 2.092, 0
 2.625, 2.425, 0, 0, 0, 2.75
 0.3, 0.3, 0, 0, 1.324, 0, 0.19, 0, 0.09, 0.578
 2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

0.2, 0.4, 0.2, 0, 2.484, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 1.645, 0, 0.19, 0, 0.09, 0.649
2.25, 1.95, 0, 0, 2.25, 1.25, 2.15, 0

7, TAPERED , CAMPATA_min5 , CT, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , , ,
 NO, 0
 0.2, 0.4, 0.2, 0, 2.484, 0
 2.625, 2.425, 0, 0, 0, 2.75
 0.3, 0.3, 0, 0, 1.645, 0, 0.19, 0, 0.09, 0.649
 2.25, 1.95, 0, 0, 2.25, 1.25, 2.15, 0

0.2, 0.4, 0.2, 0, 2.953, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 2.063, 0, 0.19, 0, 0.09, 0.7
2.15, 1.85, 0, 0, 2.15, 1.15, 2.05, 0

8, TAPERED , CAMPATA_max1 , CT, 0, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , ,
 NO, 0

0.2, 0.4, 0.2, 0, 2.953, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 2.063, 0, 0.19, 0, 0.09, 0.7
2.15, 1.85, 0, 0, 2.15, 1.15, 2.05, 0

0.2, 0.4, 0.2, 0, 2.451, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 1.595, 0, 0.19, 0, 0.09, 0.666
2.25, 1.95, 0, 0, 2.25, 1.25, 2.15, 0

9, TAPERED , CAMPATA_max2 , CT, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , , ,
 NO, 0
 0.2, 0.4, 0.2, 0, 2.451, 0
 2.625, 2.425, 0, 0, 0, 2.75
 0.3, 0.3, 0, 0, 1.595, 0, 0.19, 0, 0.09, 0.666
 2.25, 1.95, 0, 0, 2.25, 1.25, 2.15, 0

0.2, 0.4, 0.2, 0, 1.953, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 1.251, 0, 0.19, 0, 0.09, 0.512
2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

10, TAPERED , CAMPATA_max3 , CT, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , ,
 NO, 0
 0.2, 0.4, 0.2, 0, 1.953, 0
 2.625, 2.425, 0, 0, 0, 2.75
 0.3, 0.3, 0, 0, 1.251, 0, 0.19, 0, 0.09, 0.512
 2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

0.2, 0.4, 0.2, 0, 1.554, 0
2.625, 2.425, 0, 0, 0, 2.75
0.3, 0.3, 0, 0, 0.979, 0, 0.19, 0, 0.09, 0.385
2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

11, TAPERED , CAMPATA_max4 , CT, 0, 0, 0, 0, 0, 0, 0, YES, NO, 1CEL, 1, 1, PSC
 , , YES, NO, NO, YES, NO, NO, YES, YES
 YES, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0, YES, 0,
 YES, 0, 0.2, 0.2, NO, NO
 NO, , NO, , , , , , , ,
 NO, 0
 0.2, 0.4, 0.2, 0, 1.554, 0
 2.625, 2.425, 0, 0, 0, 2.75
 0.3, 0.3, 0, 0, 0.979, 0, 0.19, 0, 0.09, 0.385
 2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

0.2, 0.4, 0.2, 0, 1.403, 0
2.625, 2.425, 0, 0, 0, 2.75

0.3, 0.3, 0, 0, 1.013, 0, 0.19, 0, 0.09, 0.2
2.35, 2.05, 0, 0, 2.35, 1.35, 2.25, 0

*TS-GROUP ; Tapered Section Group

; NAME, ELEM_LIST, ZVAR, ZEXP, ZFROM, ZDIST, YVAR, YEXP, YFROM, YDIST, iSCM

1, 21 53, LINEAR, , , , LINEAR, , , , 0
2, 22 54, LINEAR, , , , LINEAR, , , , 0
3, 33 57, LINEAR, , , , LINEAR, , , , 0
4, 34 58, LINEAR, , , , LINEAR, , , , 0
5, 41 59, LINEAR, , , , LINEAR, , , , 0
6, 42 60, LINEAR, , , , LINEAR, , , , 0
7, 49 61, LINEAR, , , , LINEAR, , , , 0
8, 50 62, LINEAR, , , , LINEAR, , , , 0
9, 51 63, LINEAR, , , , LINEAR, , , , 0
10, 52 64, LINEAR, , , , LINEAR, , , , 0
11, 43 65, LINEAR, , , , LINEAR, , , , 0
12, 44 66, LINEAR, , , , LINEAR, , , , 0
13, 35 67, LINEAR, , , , LINEAR, , , , 0
14, 36 68, LINEAR, , , , LINEAR, , , , 0
15, 23 55, LINEAR, , , , LINEAR, , , , 0
16, 24 56, LINEAR, , , , LINEAR, , , , 0

*STLDCASE ; Static Load Cases

; LCNAME, LCTYPE, DESC

P.P , D ,

PERM. pavimentazione, DW, 23.1 kN/ml - 3.82 kNm/ml

PERM. cordoli+marciapiede, DW, 30.98 kN/ml - 122.89 kNm/ml

PERM. spartitrafficio, DW, 5.45 kN/ml - 30.45 kNm/ml

PERM. parapetti, DW, 0.30 kN/ml - 1.61 kNm/ml

PERM. pali luce, DW, 1.00 kN - 5.30 kNm

PERM. tubazioni, DW, 1.50 kN/ml - 5.18 kNm/ml

TEMP_+15°C, T ,

TEMP_-15°C, T ,

TRAFFICO_frenatura, BRK,

TRAFFICO_carico folla, L , 5.0 kN/mq

VARIABILE_Vento (y+), W , 10.2 kN/ml - 16.3 kNm/ml

*SPRING ; Point Spring Supports

; NODE_LIST, Type, SDx, SDy, SDz, SRx, SRy, SRz, DAMPING, Cx, Cy, Cz, CRx, CRy, CRz, GROUP, [DATA1] ; LINEAR

; NODE_LIST, Type, Direction, Vx, Vy, Vz, Stiffness, GROUP, [DATA1] ; COMP, TENS

; NODE_LIST, Type, Direction, Vx, Vy, Vz, FUNCTION, GROUP, [DATA1] ; MULTI

; [DATA1] EFFAREA, Kx, Ky, Kz

51to54 , LINEAR, 2910, 2910, 2.822e+006, 0, 0, 0, NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

63to66, LINEAR, 2910, 2910, 2.822e+006, 0, 0, 0, NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

83to90, LINEAR, 8480, 8480, 7.879e+006, 0, 0, 0, NO, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

*ELASTICLINK ; Elastic Link

; iNO, iNODE1, iNODE2, LINK, ANGLE, SDx, SDy, SDz, SRx, SRy, SRz, bSHEAR, DRy, DRz, GROUP ; GEN

```
; iNO, iNODE1, iNODE2, LINK, ANGLE, bSHEAR, DRy, DRz, GROUP ; RIGID
; iNO, iNODE1, iNODE2, LINK, ANGLE, SDx, bSHEAR, DRy, DRz, GROUP ;
TENS,COMP
; iNO, iNODE1, iNODE2, LINK, ANGLE, DIR, FUNCTION, bSHEAR, DRENDI, GROUP ;
MULTILINEAR
1, 2, 44, RIGID, 0, NO, 0.5, 0.5,
3, 44, 46, RIGID, 0, NO, 0.5, 0.5,
4, 46, 52, RIGID, 0, NO, 0.5, 0.5,
5, 44, 48, RIGID, 0, NO, 0.5, 0.5,
6, 48, 54, RIGID, 0, NO, 0.5, 0.5,
7, 1, 43, RIGID, 0, NO, 0.5, 0.5,
9, 43, 45, RIGID, 0, NO, 0.5, 0.5,
10, 45, 51, RIGID, 0, NO, 0.5, 0.5,
11, 43, 47, RIGID, 0, NO, 0.5, 0.5,
12, 47, 53, RIGID, 0, NO, 0.5, 0.5,
13, 21, 55, RIGID, 0, NO, 0.5, 0.5,
14, 55, 57, RIGID, 0, NO, 0.5, 0.5,
15, 57, 63, RIGID, 0, NO, 0.5, 0.5,
17, 55, 59, RIGID, 0, NO, 0.5, 0.5,
18, 59, 65, RIGID, 0, NO, 0.5, 0.5,
19, 22, 56, RIGID, 0, NO, 0.5, 0.5,
21, 56, 58, RIGID, 0, NO, 0.5, 0.5,
22, 56, 60, RIGID, 0, NO, 0.5, 0.5,
23, 60, 66, RIGID, 0, NO, 0.5, 0.5,
24, 58, 64, RIGID, 0, NO, 0.5, 0.5,
25, 8, 68, RIGID, 0, NO, 0.5, 0.5,
26, 68, 76, RIGID, 0, NO, 0.5, 0.5,
27, 68, 72, RIGID, 0, NO, 0.5, 0.5,
28, 7, 67, RIGID, 0, NO, 0.5, 0.5,
29, 67, 75, RIGID, 0, NO, 0.5, 0.5,
30, 67, 71, RIGID, 0, NO, 0.5, 0.5,
31, 16, 70, RIGID, 0, NO, 0.5, 0.5,
32, 70, 78, RIGID, 0, NO, 0.5, 0.5,
33, 70, 74, RIGID, 0, NO, 0.5, 0.5,
34, 15, 69, RIGID, 0, NO, 0.5, 0.5,
35, 69, 77, RIGID, 0, NO, 0.5, 0.5,
36, 69, 73, RIGID, 0, NO, 0.5, 0.5,
37, 76, 88, RIGID, 0, NO, 0.5, 0.5,
39, 72, 84, RIGID, 0, NO, 0.5, 0.5,
40, 75, 87, RIGID, 0, NO, 0.5, 0.5,
42, 71, 83, RIGID, 0, NO, 0.5, 0.5,
43, 74, 86, RIGID, 0, NO, 0.5, 0.5,
45, 78, 90, RIGID, 0, NO, 0.5, 0.5,
46, 77, 89, RIGID, 0, NO, 0.5, 0.5,
48, 73, 85, RIGID, 0, NO, 0.5, 0.5,
49, 5, 6, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
50, 1, 2, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
51, 3, 4, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
52, 91, 92, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
53, 121, 122, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
54, 95, 96, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
55, 99, 100, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
56, 103, 104, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
57, 125, 126, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
58, 9, 10, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
```

59, 9, 10, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
60, 7, 8, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
61, 11, 12, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
62, 107, 108, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
63, 127, 128, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
64, 111, 112, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
65, 115, 116, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
66, 129, 130, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
67, 117, 118, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
68, 131, 132, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
69, 119, 120, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
70, 113, 114, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
71, 133, 134, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
72, 109, 110, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
73, 17, 18, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
74, 19, 20, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
75, 15, 16, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
76, 135, 136, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
77, 105, 106, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
78, 101, 102, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
79, 97, 98, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
80, 123, 124, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
81, 93, 94, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
82, 23, 24, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
83, 21, 22, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,
84, 25, 26, GEN , 0, 1e+011, 0, 0, 0, 0, 0, NO, 0.5, 0.5,

*LOADTOMASS ; Load to Mass

; DIR, bNODAL, bBEAM, bFLOOR, bPRES, GRAV

; LCNAME1, FACTOR1, LCNAME2, FACTOR2, ... ; from line 1

XYZ, YES, YES, YES, YES, 9.806

P.P, 1, PERM. pavimentazione, 1, PERM. cordoli+marciapiede, 1

PERM. spartitraffico, 1, PERM. parapetti, 1, PERM. pali luce, 1

PERM. tubazioni, 1

*USE-STLD, P.P

*SELFWEIGHT ; Self Weight

; X, Y, Z, GROUP

0, 0, -1,

; End of data for load case [P.P] -----

*USE-STLD, PERM. pavimentazione

*BEAMLOAD ; Element Beam Loads

; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN], [VALUE], GROUP

; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ, bPROJ, [ECCEN], [VALUE], GROUP

; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4

; [ECCEN] : bECCEN, ECCDIR, I-END, J-END, bJ-END

; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END, ADDITIONAL_J-END, bADDITIONAL_J-END

1, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 38.2, 1, 38.2, 0, 0, 0, 0, , NO, 0, 0, NO,

1, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,

2, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 38.2, 1, 38.2, 0, 0, 0, 0, , NO, 0, 0, NO,

[illegible]

[illegible]

```

57, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -38.2, 1, -38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 38.2, 1, 38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -38.2, 1, -38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 38.2, 1, 38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -38.2, 1, -38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 38.2, 1, 38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -38.2, 1, -38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 38.2, 1, 38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -38.2, 1, -38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 38.2, 1, 38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -38.2, 1, -38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 38.2, 1, 38.2, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -23.1, 1, -23.1, 0, 0, 0, 0, , NO, 0, 0, NO,

```

; End of data for load case [PERM. pavimentazione] -----

*USE-STLD, PERM. cordoli+marciapiede

*BEAMLOAD ; Element Beam Loads

; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN], [VALUE], GROUP

; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ, bPROJ, [ECCEN], [VALUE], GROUP

; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4

; [ECCEN] : bECCEN, ECCDIR, I-END, J-END, bJ-END

; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END, ADDITIONAL_J-END, bADDITIONAL_J-END

```

1, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
1, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -116.45, 1, -116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
2, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -116.45, 1, -116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
2, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 116.45, 1, 116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 116.45, 1, 116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 116.45, 1, 116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 116.45, 1, 116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -116.45, 1, -116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -116.45, 1, -116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 116.45, 1, 116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
10, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
10, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 116.45, 1, 116.45, 0, 0, 0, 0, , NO, 0, 0, NO,

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[illegible]

[illegible]

66, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -116.45, 1, -116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 116.45, 1, 116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -116.45, 1, -116.45, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -29.7, 1, -29.7, 0, 0, 0, 0, , NO, 0, 0, NO,

; End of data for load case [PERM. cordoli+marciapiede] -----

*USE-STLD, PERM. spartitrafficio

*BEAMLOAD ; Element Beam Loads

; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN], [VALUE], GROUP

; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ, bPROJ, [ECCEN], [VALUE], GROUP

; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4

; [ECCEN] : bECCEN, ECCDIR, I-END, J-END, bJ-END

; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END, ADDITIONAL_J-END, bADDITIONAL_J-END

1, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
1, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
2, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
2, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
10, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
10, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
11, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
11, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
12, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
12, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
13, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
13, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
14, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
14, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
15, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
15, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
16, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
16, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
17, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
17, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
18, BEAM , UNILoad, GZ, NO , NO, aDir[1], , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
18, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
19, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,

[illegible]

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47, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
47, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
48, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
48, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
49, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
49, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
50, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
50, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
51, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
51, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
52, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
52, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
53, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
53, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
54, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
54, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
55, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
55, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
56, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
56, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
57, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
57, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, -30.45, 1, -30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , , 0, 30.45, 1, 30.45, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , , 0, -5.45, 1, -5.45, 0, 0, 0, 0, , NO, 0, 0, NO,

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; End of data for load case [PERM. spartitrafficio] -----

*USE-STLD, PERM. parapetti

*BEAMLOAD ; Element Beam Loads

; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN], [VALUE], GROUP

; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ, bPROJ, [ECCEN], [VALUE], GROUP

; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4

; [ECCEN] : bECCEN, ECCDIR, I-END, J-END, bJ-END

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; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END, ADDITIONAL_J-END, bADDITIONAL_J-
END

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[illegible]

[illegible]

55, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 1.61, 1, 1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
55, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
56, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -1.61, 1, -1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
56, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
57, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 1.61, 1, 1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
57, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -1.61, 1, -1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 1.61, 1, 1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -1.61, 1, -1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 1.61, 1, 1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -1.61, 1, -1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 1.61, 1, 1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -1.61, 1, -1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 1.61, 1, 1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -1.61, 1, -1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 1.61, 1, 1.61, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -0.3, 1, -0.3, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -1.61, 1, -1.61, 0, 0, 0, 0, , NO, 0, 0, NO,

; End of data for load case [PERM. parapetti] -----

*USE-STLD, PERM. pali luce

*CONLOAD ; Nodal Loads

; NODE_LIST, FX, FY, FZ, MX, MY, MZ, GROUP

121, 0, 0, -1, 5.3, 0, 0,
122, 0, 0, -1, -5.3, 0, 0,
123, 0, 0, -1, 5.3, 0, 0,
124, 0, 0, -1, -5.3, 0, 0,
125, 0, 0, -1, 5.3, 0, 0,
126, 0, 0, -1, -5.3, 0, 0,
127, 0, 0, -1, 5.3, 0, 0,
128, 0, 0, -1, -5.3, 0, 0,
129, 0, 0, -1, 5.3, 0, 0,
130, 0, 0, -1, -5.3, 0, 0,
131, 0, 0, -1, 5.3, 0, 0,
132, 0, 0, -1, -5.3, 0, 0,
133, 0, 0, -1, 5.3, 0, 0,
134, 0, 0, -1, -5.3, 0, 0,
135, 0, 0, -1, 5.3, 0, 0,
136, 0, 0, -1, -5.3, 0, 0,

; End of data for load case [PERM. pali luce] -----

*USE-STLD, PERM. tubazioni

*BEAMLOAD ; Element Beam Loads

; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN], [VALUE], GROUP

; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ, bPROJ, [ECCEN], [VALUE], GROUP

; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4

; [ECCEN] : bECCEN, ECCDIR, I-END, J-END, bJ-END

; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END, ADDITIONAL_J-END, bADDITIONAL_J-END

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1, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
1, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
2, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
2, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
10, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
10, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
11, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
11, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
12, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
12, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
13, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
13, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
14, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
14, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
15, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
15, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
16, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
16, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
17, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
17, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
18, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
18, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
19, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
19, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
19, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
20, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
20, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
21, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
21, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
22, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
22, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,

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[illegible]

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49, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
50, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
50, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
51, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
51, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
52, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
52, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
53, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
53, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
54, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
54, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
55, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
55, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
56, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
56, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
56, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
57, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
57, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 5.18, 1, 5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -5.18, 1, -5.18, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -1.5, 1, -1.5, 0, 0, 0, 0, , NO, 0, 0, NO,

```

; End of data for load case [PERM. tubazioni] -----

*USE-STLD, TEMP_+15°C

*ELTEMPER ; Element Temperatures

; ELEM_LIST, TEMPER, GROUP

```

1, 15,
2, 15,
3, 15,
4, 15,
5, 15,
6, 15,
7, 15,
8, 15,

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9, 15,
10, 15,
11, 15,
12, 15,
13, 15,
14, 15,
15, 15,
16, 15,
17, 15,
18, 15,
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34, 15,
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39, 15,
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58, 15,
59, 15,
60, 15,
61, 15,
62, 15,
63, 15,

64, 15,
65, 15,
66, 15,
67, 15,
68, 15,

; End of data for load case [TEMP_+15°C] -----

*USE-STLD, TEMP_-15°C

*ELTEMPER ; Element Temperatures

; ELEM_LIST, TEMPER, GROUP

1, -15,
2, -15,
3, -15,
4, -15,
5, -15,
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7, -15,
8, -15,
9, -15,
10, -15,
11, -15,
12, -15,
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15, -15,
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24, -15,
25, -15,
26, -15,
27, -15,
28, -15,
29, -15,
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31, -15,
32, -15,
33, -15,
34, -15,
35, -15,
36, -15,
37, -15,
38, -15,
39, -15,
40, -15,
41, -15,
42, -15,
43, -15,

44, -15,
45, -15,
46, -15,
47, -15,
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52, -15,
53, -15,
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56, -15,
57, -15,
58, -15,
59, -15,
60, -15,
61, -15,
62, -15,
63, -15,
64, -15,
65, -15,
66, -15,
67, -15,
68, -15,

; End of data for load case [TEMP_-15°C] -----

*USE-STLD, TRAFFICO_frenatura

*BEAMLOAD ; Element Beam Loads

; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN], [VALUE], GROUP

; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ, bPROJ, [ECCEN], [VALUE], GROUP

; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4

; [ECCEN] : bECCEN, ECCDIR, I-END, J-END, bJ-END

; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END, ADDITIONAL_J-END, bADDITIONAL_J-END

1, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
2, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
10, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
11, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
12, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
13, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
14, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
15, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
16, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
17, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,
18, BEAM , UNILoad, GX, NO , NO, aDir[1], , , , 0, -5.01, 1, -5.01, 0, 0, 0, 0, , NO, 0, 0, NO,

[illegible]

; End of data for load case [TRAFFICO frenatura] -----

*USE-STLD, TRAFFICO carico folla

*BEAMLOAD ; Element Beam Loads

; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN], [VALUE], GROUP

; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ, bPROJ, [ECCEN], [VALUE], GROUP

; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4

; [ECCEN] : bECCEN, ECCDIR, I-END, J-END, bJ-END

; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END, ADDITIONAL_J-END, bADDITIONAL_J-END

1, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
1, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
2, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
2, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
7, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
8, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
10, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
10, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
11, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
11, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
12, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
12, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
13, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
13, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
14, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
14, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
15, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
15, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
16, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
16, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
17, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
17, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
18, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
18, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
19, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
19, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
20, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
20, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
21, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
21, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
22, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
22, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
23, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
23, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
24, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
24, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,

[illegible]

52, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
53, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
53, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
54, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
54, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
55, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
55, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
56, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
56, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
57, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
57, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
58, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
59, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
60, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
61, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
62, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
63, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
64, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
65, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
66, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,
67, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, 58.115, 1, 58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -58.115, 1, -58.115, 0, 0, 0, 0, , NO, 0, 0, NO,
68, BEAM , UNILOAD, GZ, NO , NO, aDir[1], , , 0, -14.75, 1, -14.75, 0, 0, 0, 0, , NO, 0, 0, NO,

; End of data for load case [TRAFFICO_carico folla] -----

*USE-STLD, VARIABILE_Vento (y+)

*BEAMLOAD ; Element Beam Loads

; ELEM_LIST, CMD, TYPE, DIR, bPROJ, [ECCEN], [VALUE], GROUP

; ELEM_LIST, CMD, TYPE, TYPE, DIR, VX, VY, VZ, bPROJ, [ECCEN], [VALUE], GROUP

; [VALUE] : D1, P1, D2, P2, D3, P3, D4, P4

; [ECCEN] : bECCEN, ECCDIR, I-END, J-END, bJ-END

; [ADDITIONAL] : bADDITIONAL, ADDITIONAL_I-END, ADDITIONAL_J-END, bADDITIONAL_J-END

3, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -16.3, 1, -16.3, 0, 0, 0, 0, , NO, 0, 0, NO,
3, BEAM , UNILOAD, GY, NO , NO, aDir[1], , , 0, 10.2, 1, 10.2, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -16.3, 1, -16.3, 0, 0, 0, 0, , NO, 0, 0, NO,
4, BEAM , UNILOAD, GY, NO , NO, aDir[1], , , 0, 10.2, 1, 10.2, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNILOAD, GY, NO , NO, aDir[1], , , 0, 10.2, 1, 10.2, 0, 0, 0, 0, , NO, 0, 0, NO,
5, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -16.3, 1, -16.3, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -16.3, 1, -16.3, 0, 0, 0, 0, , NO, 0, 0, NO,
6, BEAM , UNILOAD, GY, NO , NO, aDir[1], , , 0, 10.2, 1, 10.2, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNILOAD, GY, NO , NO, aDir[1], , , 0, 10.2, 1, 10.2, 0, 0, 0, 0, , NO, 0, 0, NO,
9, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -16.3, 1, -16.3, 0, 0, 0, 0, , NO, 0, 0, NO,

[illegible]

65, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -16.3, 1, -16.3, 0, 0, 0, 0, , NO, 0, 0, NO,
 67, BEAM , UNIMOMENT, GX, NO , NO, aDir[1], , , 0, -16.3, 1, -16.3, 0, 0, 0, 0, , NO, 0, 0, NO,
 67, BEAM , UNILoad, GY, NO , NO, aDir[1], , , 0, 10.2, 1, 10.2, 0, 0, 0, 0, , NO, 0, 0, NO,

; End of data for load case [VARIABILE_Vento (y+)] -----

*SFUNCTION ; Spectrum Function

; FUNC=NAME, iTYPE, iMETHOD, SCALE/MAX, GRAV, DRATIO, DESC, RMF ; line 1

; SPEC_CODE, [CODE_DATA] ; line 2

; PERIOD1, VALUE1, PERIOD2, VALUE2, ... ; from line 3

;[CODE_DATA] : NSC, SFI, SC, EQ, TG, DP, MaxEQ

; CH2001

;[CODE_DATA] : NSC, SFI, SC, EQ, TG, DP, MaxEQ, nLForce ; CH2010

;[CODE_DATA] : SFI, SC, EQ, TG, DP, MaxEQ ; CHSH2003

;[CODE_DATA] : DIV, SC, SFI, EQ, TG, G ; GB50111_2006

;[CODE_DATA] : BT, ZM, ST, SI, SC, TG, CI, CS, CD, EPA, SMAX, PERIOD ; JTG/T B02-01-2008

;[CODE_DATA] : iSPE, SParam, TB, TC, TD, AG, Q, IF, FPX, FPY ; P100-1(2013)

FUNC=SLC, 1, 0, 1, 9.806, 0, , 1.000000

USER

0.000000,	0.125,	0.153000,	0.363
0.460000,	0.363,	0.530000,	0.315
0.601000,	0.278,	0.671000,	0.249
0.741000,	0.226,	0.811000,	0.206
0.881000,	0.19,	0.951000,	0.176
1.021000,	0.164,	1.091000,	0.153
1.161000,	0.144,	1.232000,	0.136
1.302000,	0.091,	1.372000,	0.086
1.442000,	0.082,	1.512000,	0.078
1.582000,	0.075,	1.652000,	0.071
1.722000,	0.069,	1.793000,	0.066
1.863000,	0.064,	1.933000,	0.061
2.031000,	0.055,	2.130000,	0.05
2.228000,	0.046,	2.327000,	0.042
2.425000,	0.039,	2.523000,	0.036
2.622000,	0.033,	2.720000,	0.031
2.819000,	0.029,	2.917000,	0.027
3.016000,	0.025,	3.114000,	0.023
3.213000,	0.022,	3.311000,	0.021
3.409000,	0.02,	3.508000,	0.018
3.606000,	0.018,	3.705000,	0.017
3.803000,	0.016,	3.902000,	0.015
4.000000,	0.014		

FUNC=SLV, 1, 0, 1, 9.806, 0, , 1.000000

USER

0.000000,	0.111,	0.152000,	0.315
0.457000,	0.315,	0.526000,	0.274
0.594000,	0.243,	0.663000,	0.218
0.731000,	0.197,	0.800000,	0.18
0.868000,	0.166,	0.937000,	0.154
1.005000,	0.144,	1.073000,	0.134
1.142000,	0.126,	1.210000,	0.119
1.279000,	0.08,	1.347000,	0.076
1.416000,	0.072,	1.484000,	0.069
1.553000,	0.066,	1.621000,	0.063
1.690000,	0.06,	1.758000,	0.058

1.827000,	0.056,	1.895000,	0.054
1.995000,	0.049,	2.096000,	0.044
2.196000,	0.04,	2.296000,	0.037
2.396000,	0.034,	2.496000,	0.031
2.597000,	0.029,	2.697000,	0.027
2.797000,	0.025,	2.897000,	0.023
2.998000,	0.021,	3.098000,	0.02
3.198000,	0.019,	3.298000,	0.018
3.399000,	0.017,	3.499000,	0.016
3.599000,	0.015,	3.699000,	0.014
3.800000,	0.013,	3.900000,	0.013
4.000000,	0.012		

FUNC=SLC_z, 1, 0, 1, 9.806, 0, , 1.000000

USER

0.000000,	0.032,	0.050000,	0.063
0.150000,	0.063,	0.235000,	0.04
0.320000,	0.029,	0.405000,	0.023
0.490000,	0.019,	0.575000,	0.016
0.660000,	0.014,	0.745000,	0.013
0.830000,	0.011,	0.915000,	0.01
1.000000,	0.009,	1.094000,	0.008
1.188000,	0.007,	1.281000,	0.006
1.375000,	0.005,	1.469000,	0.004
1.563000,	0.004,	1.656000,	0.003
1.750000,	0.003,	1.844000,	0.003
1.938000,	0.003,	2.031000,	0.002
2.125000,	0.002,	2.219000,	0.002
2.313000,	0.002,	2.406000,	0.002
2.500000,	0.002,	2.594000,	0.001
2.688000,	0.001,	2.781000,	0.001
2.875000,	0.001,	2.969000,	0.001
3.063000,	0.001,	3.156000,	0.001
3.250000,	0.001,	3.344000,	0.001
3.438000,	0.001,	3.531000,	0.001
3.625000,	0.001,	3.719000,	0.001
3.813000,	0.001,	3.906000,	0.001
4.000000,	0.001		

FUNC=SLV_z, 1, 0, 1, 9.806, 0, , 1.000000

USER

0.000000,	0.027,	0.050000,	0.051
0.150000,	0.051,	0.235000,	0.033
0.320000,	0.024,	0.405000,	0.019
0.490000,	0.016,	0.575000,	0.013
0.660000,	0.012,	0.745000,	0.01
0.830000,	0.009,	0.915000,	0.008
1.000000,	0.008,	1.094000,	0.006
1.188000,	0.005,	1.281000,	0.005
1.375000,	0.004,	1.469000,	0.004
1.563000,	0.003,	1.656000,	0.003
1.750000,	0.003,	1.844000,	0.002
1.938000,	0.002,	2.031000,	0.002
2.125000,	0.002,	2.219000,	0.002
2.313000,	0.001,	2.406000,	0.001
2.500000,	0.001,	2.594000,	0.001
2.688000,	0.001,	2.781000,	0.001

2.875000,	0.001,	2.969000,	0.001
3.063000,	0.001,	3.156000,	0.001
3.250000,	0.001,	3.344000,	0.001
3.438000,	0.001,	3.531000,	0.001
3.625000,	0.001,	3.719000,	0.001
3.813000,	0.001,	3.906000,	0.001
4.000000,	0		

*SPLDCASE ; Spectrum Load Cases

```
; NAME=NAME, DIR, ANGLE, SCALE, PMFT, bDAMP, bECC, INTERP, DESC, ; line 1
; COMTYPE, bADDSIGN, iSIGNTYPE, bMODE ; line 2
; FUNC1, FUNC2, FUNC3, ... ; line 3
; bUSE1, dFACTOR1, bUSE2, dFACTOR2, ..., bUSEn, dFACTORn ; line 4 (bMODE=YES)
; bCDR, [DR-DC] ; line 5 (bDAMP=YES)
; [DR-DC] : iMDTYPE, DALL, iMODE1, DAMPING1, iMODE2, DAMPING2, ... ; iMDTYPE=1
; : iMDTYPE, iCOEF, bMASSP, MASSC, bSTIFFP, STIFFC ; iMDTYPE=2, iCOEF=1
; : iMDTYPE, iCOEF, iCALC, bMASSP, FP1, DR1, bSTIFFP, FP2, DR2 ; iMDTYPE=2, iCOEF=2
; : iMDTYPE ; iMDTYPE=3
```

```
NAME=SLC_x, XY, 0, 1, 1, NO, NO, LOG,
CQC, NO, 0, YES
SLC
YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES,
1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1
NAME=SLC_y, XY, 90, 1, 1, NO, NO, LOG,
CQC, NO, 0, YES
SLC
YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES,
1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1
NAME=SLV_x, XY, 0, 1, 1, NO, NO, LOG,
CQC, NO, 0, YES
SLV
YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES,
1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1
NAME=SLV_y, XY, 90, 1, 1, NO, NO, LOG,
CQC, NO, 0, YES
SLV
YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES,
1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1
NAME=SLC_z, Z, 0, 1, 1, NO, NO, LOG,
CQC, NO, 0, YES
SLC_z
YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES,
1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1
NAME=SLV_z, Z, 0, 1, 1, NO, NO, LOG,
CQC, NO, 0, YES
SLV_z
YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES,
1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1, YES, 1
```

*MVLDCODE ; Moving Load Code

```
; CODE=CODE
CODE=EUROCODE
```

*LINELANE ; Traffic Line Lanes

```
; NAME=NAME, LDIST, GROUP, SKEWS, SKEWE, MOVING, LW, WS, bLANEOPT, ALLOWWIDTH
; line 1
; iELEM1, ECC1, FACT1, bSPAN1, ECCVL... ; from line 2
NAME=NE_Centrato_lane 1, LANE, , 0, 0, BOTH, 3, 2, NO, 3
  3, 0, 0, NO, 0, 4, 0, 0, NO, 0, 17, 0, 0, NO, 0
  21, 0, 0, NO, 0, 53, 0, 0, NO, 0, 25, 0, 0, NO, 0
  29, 0, 0, NO, 0, 33, 0, 0, NO, 0, 57, 0, 0, NO, 0
  9, 0, 0, NO, 0, 10, 0, 0, NO, 0, 37, 0, 0, NO, 0
  41, 0, 0, NO, 0, 59, 0, 0, NO, 0, 45, 0, 0, NO, 0
  49, 0, 0, NO, 0, 61, 0, 0, NO, 0, 63, 0, 0, NO, 0
  51, 0, 0, NO, 0, 48, 0, 0, NO, 0, 65, 0, 0, NO, 0
  43, 0, 0, NO, 0, 39, 0, 0, NO, 0, 13, 0, 0, NO, 0
  14, 0, 0, NO, 0, 67, 0, 0, NO, 0, 35, 0, 0, NO, 0
  31, 0, 0, NO, 0, 27, 0, 0, NO, 0, 55, 0, 0, NO, 0
  23, 0, 0, NO, 0, 20, 0, 0, NO, 0, 5, 0, 0, NO, 0
  6, 0, 0, NO, 0
NAME=NE_Centrato_lane 2, LANE, , 0, 0, BOTH, 3, 2, NO, 3
  3, -3, 0, NO, 0, 4, -3, 0, NO, 0, 17, -3, 0, NO, 0
  21, -3, 0, NO, 0, 53, -3, 0, NO, 0, 25, -3, 0, NO, 0
  29, -3, 0, NO, 0, 33, -3, 0, NO, 0, 57, -3, 0, NO, 0
  9, -3, 0, NO, 0, 10, -3, 0, NO, 0, 37, -3, 0, NO, 0
  41, -3, 0, NO, 0, 59, -3, 0, NO, 0, 45, -3, 0, NO, 0
  49, -3, 0, NO, 0, 61, -3, 0, NO, 0, 63, -3, 0, NO, 0
  51, -3, 0, NO, 0, 48, -3, 0, NO, 0, 65, -3, 0, NO, 0
  43, -3, 0, NO, 0, 39, -3, 0, NO, 0, 13, -3, 0, NO, 0
  14, -3, 0, NO, 0, 67, -3, 0, NO, 0, 35, -3, 0, NO, 0
  31, -3, 0, NO, 0, 27, -3, 0, NO, 0, 55, -3, 0, NO, 0
  23, -3, 0, NO, 0, 20, -3, 0, NO, 0, 5, -3, 0, NO, 0
  6, -3, 0, NO, 0
NAME=NE_Centrato_rim1, LANE, , 0, 0, BOTH, 3, 2, NO, 3
  3, -4.84, 0, NO, 0, 4, -4.84, 0, NO, 0, 17, -4.84, 0, NO, 0
  21, -4.84, 0, NO, 0, 53, -4.84, 0, NO, 0, 25, -4.84, 0, NO, 0
  29, -4.84, 0, NO, 0, 33, -4.84, 0, NO, 0, 57, -4.84, 0, NO, 0
  9, -4.84, 0, NO, 0, 10, -4.84, 0, NO, 0, 37, -4.84, 0, NO, 0
  41, -4.84, 0, NO, 0, 59, -4.84, 0, NO, 0, 45, -4.84, 0, NO, 0
  49, -4.84, 0, NO, 0, 61, -4.84, 0, NO, 0, 63, -4.84, 0, NO, 0
  51, -4.84, 0, NO, 0, 48, -4.84, 0, NO, 0, 65, -4.84, 0, NO, 0
  43, -4.84, 0, NO, 0, 39, -4.84, 0, NO, 0, 13, -4.84, 0, NO, 0
  14, -4.84, 0, NO, 0, 67, -4.84, 0, NO, 0, 35, -4.84, 0, NO, 0
  31, -4.84, 0, NO, 0, 27, -4.84, 0, NO, 0, 55, -4.84, 0, NO, 0
  23, -4.84, 0, NO, 0, 20, -4.84, 0, NO, 0, 5, -4.84, 0, NO, 0
  6, -4.84, 0, NO, 0
NAME=NE_Centrato_rim2, LANE, , 0, 0, BOTH, 3, 2, NO, 3
  3, 1.96, 0, NO, 0, 4, 1.96, 0, NO, 0, 17, 1.96, 0, NO, 0
  21, 1.96, 0, NO, 0, 53, 1.96, 0, NO, 0, 25, 1.96, 0, NO, 0
  29, 1.96, 0, NO, 0, 33, 1.96, 0, NO, 0, 57, 1.96, 0, NO, 0
  9, 1.96, 0, NO, 0, 10, 1.96, 0, NO, 0, 37, 1.96, 0, NO, 0
  41, 1.96, 0, NO, 0, 59, 1.96, 0, NO, 0, 45, 1.96, 0, NO, 0
  49, 1.96, 0, NO, 0, 61, 1.96, 0, NO, 0, 63, 1.96, 0, NO, 0
  51, 1.96, 0, NO, 0, 48, 1.96, 0, NO, 0, 65, 1.96, 0, NO, 0
  43, 1.96, 0, NO, 0, 39, 1.96, 0, NO, 0, 13, 1.96, 0, NO, 0
  14, 1.96, 0, NO, 0, 67, 1.96, 0, NO, 0, 35, 1.96, 0, NO, 0
  31, 1.96, 0, NO, 0, 27, 1.96, 0, NO, 0, 55, 1.96, 0, NO, 0
  23, 1.96, 0, NO, 0, 20, 1.96, 0, NO, 0, 5, 1.96, 0, NO, 0
  6, 1.96, 0, NO, 0
```

NAME=NE_Tutto SX_lane 1, LANE, , 0, 0, BOTH, 3, 2, NO, 3
3, -3.68, 0, NO, 0, 4, -3.68, 0, NO, 0, 17, -3.68, 0, NO, 0
21, -3.68, 0, NO, 0, 53, -3.68, 0, NO, 0, 25, -3.68, 0, NO, 0
29, -3.68, 0, NO, 0, 33, -3.68, 0, NO, 0, 57, -3.68, 0, NO, 0
9, -3.68, 0, NO, 0, 10, -3.68, 0, NO, 0, 37, -3.68, 0, NO, 0
41, -3.68, 0, NO, 0, 59, -3.68, 0, NO, 0, 45, -3.68, 0, NO, 0
49, -3.68, 0, NO, 0, 61, -3.68, 0, NO, 0, 63, -3.68, 0, NO, 0
51, -3.68, 0, NO, 0, 48, -3.68, 0, NO, 0, 65, -3.68, 0, NO, 0
43, -3.68, 0, NO, 0, 39, -3.68, 0, NO, 0, 13, -3.68, 0, NO, 0
14, -3.68, 0, NO, 0, 67, -3.68, 0, NO, 0, 35, -3.68, 0, NO, 0
31, -3.68, 0, NO, 0, 27, -3.68, 0, NO, 0, 55, -3.68, 0, NO, 0
23, -3.68, 0, NO, 0, 20, -3.68, 0, NO, 0, 5, -3.68, 0, NO, 0
6, -3.68, 0, NO, 0

NAME=NE_Tutto SX_lane 2, LANE, , 0, 0, BOTH, 3, 2, NO, 3
3, -0.68, 0, NO, 0, 4, -0.68, 0, NO, 0, 17, -0.68, 0, NO, 0
21, -0.68, 0, NO, 0, 53, -0.68, 0, NO, 0, 25, -0.68, 0, NO, 0
29, -0.68, 0, NO, 0, 33, -0.68, 0, NO, 0, 57, -0.68, 0, NO, 0
9, -0.68, 0, NO, 0, 10, -0.68, 0, NO, 0, 37, -0.68, 0, NO, 0
41, -0.68, 0, NO, 0, 59, -0.68, 0, NO, 0, 45, -0.68, 0, NO, 0
49, -0.68, 0, NO, 0, 61, -0.68, 0, NO, 0, 63, -0.68, 0, NO, 0
51, -0.68, 0, NO, 0, 48, -0.68, 0, NO, 0, 65, -0.68, 0, NO, 0
43, -0.68, 0, NO, 0, 39, -0.68, 0, NO, 0, 13, -0.68, 0, NO, 0
14, -0.68, 0, NO, 0, 67, -0.68, 0, NO, 0, 35, -0.68, 0, NO, 0
31, -0.68, 0, NO, 0, 27, -0.68, 0, NO, 0, 55, -0.68, 0, NO, 0
23, -0.68, 0, NO, 0, 20, -0.68, 0, NO, 0, 5, -0.68, 0, NO, 0
6, -0.68, 0, NO, 0

NAME=NE_Tutto SX_rim, LANE, , 0, 0, BOTH, 3, 2, NO, 3
3, 1.63, 0, NO, 0, 4, 1.63, 0, NO, 0, 17, 1.63, 0, NO, 0
21, 1.63, 0, NO, 0, 53, 1.63, 0, NO, 0, 25, 1.63, 0, NO, 0
29, 1.63, 0, NO, 0, 33, 1.63, 0, NO, 0, 57, 1.63, 0, NO, 0
9, 1.63, 0, NO, 0, 10, 1.63, 0, NO, 0, 37, 1.63, 0, NO, 0
41, 1.63, 0, NO, 0, 59, 1.63, 0, NO, 0, 45, 1.63, 0, NO, 0
49, 1.63, 0, NO, 0, 61, 1.63, 0, NO, 0, 63, 1.63, 0, NO, 0
51, 1.63, 0, NO, 0, 48, 1.63, 0, NO, 0, 65, 1.63, 0, NO, 0
43, 1.63, 0, NO, 0, 39, 1.63, 0, NO, 0, 13, 1.63, 0, NO, 0
14, 1.63, 0, NO, 0, 67, 1.63, 0, NO, 0, 35, 1.63, 0, NO, 0
31, 1.63, 0, NO, 0, 27, 1.63, 0, NO, 0, 55, 1.63, 0, NO, 0
23, 1.63, 0, NO, 0, 20, 1.63, 0, NO, 0, 5, 1.63, 0, NO, 0
6, 1.63, 0, NO, 0

NAME=SO_Centrato_lane 2, LANE, , 0, 0, BOTH, 3, 2, NO, 3
1, 3, 0, NO, 0, 2, 3, 0, NO, 0, 18, 3, 0, NO, 0
22, 3, 0, NO, 0, 54, 3, 0, NO, 0, 26, 3, 0, NO, 0
30, 3, 0, NO, 0, 34, 3, 0, NO, 0, 58, 3, 0, NO, 0
11, 3, 0, NO, 0, 12, 3, 0, NO, 0, 38, 3, 0, NO, 0
42, 3, 0, NO, 0, 60, 3, 0, NO, 0, 46, 3, 0, NO, 0
50, 3, 0, NO, 0, 62, 3, 0, NO, 0, 64, 3, 0, NO, 0
52, 3, 0, NO, 0, 47, 3, 0, NO, 0, 66, 3, 0, NO, 0
44, 3, 0, NO, 0, 40, 3, 0, NO, 0, 15, 3, 0, NO, 0
16, 3, 0, NO, 0, 68, 3, 0, NO, 0, 36, 3, 0, NO, 0
32, 3, 0, NO, 0, 28, 3, 0, NO, 0, 56, 3, 0, NO, 0
24, 3, 0, NO, 0, 19, 3, 0, NO, 0, 7, 3, 0, NO, 0
8, 3, 0, NO, 0

NAME=SO_Centrato_lane1, LANE, , 0, 0, BOTH, 3, 2, NO, 3
1, 0, 0, NO, 0, 2, 0, 0, NO, 0, 18, 0, 0, NO, 0
22, 0, 0, NO, 0, 54, 0, 0, NO, 0, 26, 0, 0, NO, 0

30, 0, 0, NO, 0, 34, 0, 0, NO, 0, 58, 0, 0, NO, 0
11, 0, 0, NO, 0, 12, 0, 0, NO, 0, 38, 0, 0, NO, 0
42, 0, 0, NO, 0, 60, 0, 0, NO, 0, 46, 0, 0, NO, 0
50, 0, 0, NO, 0, 62, 0, 0, NO, 0, 64, 0, 0, NO, 0
52, 0, 0, NO, 0, 47, 0, 0, NO, 0, 66, 0, 0, NO, 0
44, 0, 0, NO, 0, 40, 0, 0, NO, 0, 15, 0, 0, NO, 0
16, 0, 0, NO, 0, 68, 0, 0, NO, 0, 36, 0, 0, NO, 0
32, 0, 0, NO, 0, 28, 0, 0, NO, 0, 56, 0, 0, NO, 0
24, 0, 0, NO, 0, 19, 0, 0, NO, 0, 7, 0, 0, NO, 0
8, 0, 0, NO, 0

NAME=SO_Centrato_rim 1, LANE, , 0, 0, BOTH, 3, 2, NO, 3

1, 4.833, 0, NO, 0, 2, 4.833, 0, NO, 0, 18, 4.833, 0, NO, 0
22, 4.833, 0, NO, 0, 54, 4.833, 0, NO, 0, 26, 4.833, 0, NO, 0
30, 4.833, 0, NO, 0, 34, 4.833, 0, NO, 0, 58, 4.833, 0, NO, 0
11, 4.833, 0, NO, 0, 12, 4.833, 0, NO, 0, 38, 4.833, 0, NO, 0
42, 4.833, 0, NO, 0, 60, 4.833, 0, NO, 0, 46, 4.833, 0, NO, 0
50, 4.833, 0, NO, 0, 62, 4.833, 0, NO, 0, 64, 4.833, 0, NO, 0
52, 4.833, 0, NO, 0, 47, 4.833, 0, NO, 0, 66, 4.833, 0, NO, 0
44, 4.833, 0, NO, 0, 40, 4.833, 0, NO, 0, 15, 4.833, 0, NO, 0
16, 4.833, 0, NO, 0, 68, 4.833, 0, NO, 0, 36, 4.833, 0, NO, 0
32, 4.833, 0, NO, 0, 28, 4.833, 0, NO, 0, 56, 4.833, 0, NO, 0
24, 4.833, 0, NO, 0, 19, 4.833, 0, NO, 0, 7, 4.833, 0, NO, 0
8, 4.833, 0, NO, 0

NAME=SO_Centrato_rim2, LANE, , 0, 0, BOTH, 3, 2, NO, 3

1, -1.983, 0, NO, 0, 2, -1.983, 0, NO, 0
18, -1.983, 0, NO, 0, 22, -1.983, 0, NO, 0
54, -1.983, 0, NO, 0, 26, -1.983, 0, NO, 0
30, -1.983, 0, NO, 0, 34, -1.983, 0, NO, 0
58, -1.983, 0, NO, 0, 11, -1.983, 0, NO, 0
12, -1.983, 0, NO, 0, 38, -1.983, 0, NO, 0
42, -1.983, 0, NO, 0, 60, -1.983, 0, NO, 0
46, -1.983, 0, NO, 0, 50, -1.983, 0, NO, 0
62, -1.983, 0, NO, 0, 64, -1.983, 0, NO, 0
52, -1.983, 0, NO, 0, 47, -1.983, 0, NO, 0
66, -1.983, 0, NO, 0, 44, -1.983, 0, NO, 0
40, -1.983, 0, NO, 0, 15, -1.983, 0, NO, 0
16, -1.983, 0, NO, 0, 68, -1.983, 0, NO, 0
36, -1.983, 0, NO, 0, 32, -1.983, 0, NO, 0
28, -1.983, 0, NO, 0, 56, -1.983, 0, NO, 0
24, -1.983, 0, NO, 0, 19, -1.983, 0, NO, 0
7, -1.983, 0, NO, 0, 8, -1.983, 0, NO, 0

NAME=SO_Tutto DX_lane1, LANE, , 0, 0, BOTH, 3, 2, NO, 3

1, 3.655, 0, NO, 0, 2, 3.655, 0, NO, 0, 18, 3.655, 0, NO, 0
22, 3.655, 0, NO, 0, 54, 3.655, 0, NO, 0, 26, 3.655, 0, NO, 0
30, 3.655, 0, NO, 0, 34, 3.655, 0, NO, 0, 58, 3.655, 0, NO, 0
11, 3.655, 0, NO, 0, 12, 3.655, 0, NO, 0, 38, 3.655, 0, NO, 0
42, 3.655, 0, NO, 0, 60, 3.655, 0, NO, 0, 46, 3.655, 0, NO, 0
50, 3.655, 0, NO, 0, 62, 3.655, 0, NO, 0, 64, 3.655, 0, NO, 0
52, 3.655, 0, NO, 0, 47, 3.655, 0, NO, 0, 66, 3.655, 0, NO, 0
44, 3.655, 0, NO, 0, 40, 3.655, 0, NO, 0, 15, 3.655, 0, NO, 0
16, 3.655, 0, NO, 0, 68, 3.655, 0, NO, 0, 36, 3.655, 0, NO, 0
32, 3.655, 0, NO, 0, 28, 3.655, 0, NO, 0, 56, 3.655, 0, NO, 0
24, 3.655, 0, NO, 0, 19, 3.655, 0, NO, 0, 7, 3.655, 0, NO, 0
8, 3.655, 0, NO, 0

NAME=SO_Tutto Dx_lane2, LANE, , 0, 0, BOTH, 3, 2, NO, 3

1, 0.662, 0, NO, 0, 2, 0.662, 0, NO, 0, 18, 0.662, 0, NO, 0
 22, 0.662, 0, NO, 0, 54, 0.662, 0, NO, 0, 26, 0.662, 0, NO, 0
 30, 0.662, 0, NO, 0, 34, 0.662, 0, NO, 0, 58, 0.662, 0, NO, 0
 11, 0.662, 0, NO, 0, 12, 0.662, 0, NO, 0, 38, 0.662, 0, NO, 0
 42, 0.662, 0, NO, 0, 60, 0.662, 0, NO, 0, 46, 0.662, 0, NO, 0
 50, 0.662, 0, NO, 0, 62, 0.662, 0, NO, 0, 64, 0.662, 0, NO, 0
 52, 0.662, 0, NO, 0, 47, 0.662, 0, NO, 0, 66, 0.662, 0, NO, 0
 44, 0.662, 0, NO, 0, 40, 0.662, 0, NO, 0, 15, 0.662, 0, NO, 0
 16, 0.662, 0, NO, 0, 68, 0.662, 0, NO, 0, 36, 0.662, 0, NO, 0
 32, 0.662, 0, NO, 0, 28, 0.662, 0, NO, 0, 56, 0.662, 0, NO, 0
 24, 0.662, 0, NO, 0, 19, 0.662, 0, NO, 0, 7, 0.662, 0, NO, 0
 8, 0.662, 0, NO, 0

NAME=SO_Tutto Dx_rim, LANE, , 0, 0, BOTH, 3, 2, NO, 3

1, -1.655, 0, NO, 0, 2, -1.655, 0, NO, 0
 18, -1.655, 0, NO, 0, 22, -1.655, 0, NO, 0
 54, -1.655, 0, NO, 0, 26, -1.655, 0, NO, 0
 30, -1.655, 0, NO, 0, 34, -1.655, 0, NO, 0
 58, -1.655, 0, NO, 0, 11, -1.655, 0, NO, 0
 12, -1.655, 0, NO, 0, 38, -1.655, 0, NO, 0
 42, -1.655, 0, NO, 0, 60, -1.655, 0, NO, 0
 46, -1.655, 0, NO, 0, 50, -1.655, 0, NO, 0
 62, -1.655, 0, NO, 0, 64, -1.655, 0, NO, 0
 52, -1.655, 0, NO, 0, 47, -1.655, 0, NO, 0
 66, -1.655, 0, NO, 0, 44, -1.655, 0, NO, 0
 40, -1.655, 0, NO, 0, 15, -1.655, 0, NO, 0
 16, -1.655, 0, NO, 0, 68, -1.655, 0, NO, 0
 36, -1.655, 0, NO, 0, 32, -1.655, 0, NO, 0
 28, -1.655, 0, NO, 0, 56, -1.655, 0, NO, 0
 24, -1.655, 0, NO, 0, 19, -1.655, 0, NO, 0
 7, -1.655, 0, NO, 0, 8, -1.655, 0, NO, 0

*VEHICLE ; Vehicles

; if Moving Load Code is China

; NAME=NAME, 1, TYPE-NAME, CODE ; standard

; NAME=NAME, 2, LTYPE, [TRUCK/LANE] or [TRAIN/SUBWAY] or [CROWD] ; user:
 line 1

; LOAD1, DIST1, LOAD2, DIST2, ... ; user: from line 2

; [TRUCK/LANE] : 1, P, Qm, Qq ; truck(JTG)

; [TRUCK/LANE] : 2, P, Qm, Qq ; lane load1

; [TRUCK/LANE] : 3, Qk, Pk1, L1, Pk2, L2 ; lane load2

; [TRUCK/LANE] : 4, dW, dD ; crawler type

; [TRUCK/LANE] : 5 ; GC type load

; [TRAIN/SUBWAY] : iTYPE, W1, D1, W2, D2 ; train-type1,3

; [TRAIN/SUBWAY] : iTYPE, DD, FD, BD, MAINCOUNT ; train-type2

; [TRAIN/SUBWAY] : 4, P1, D1, P2, D2, P3, D3, P4, dD, Po, n, IFR ; subway

; [CROWD] : 1, dW1 ; crowd-type1

; [CROWD] : 2, dW1, dL1, dW2, dL2, WIDTH ; crowd-type2

; if Moving Load Type is India

; NAME=NAME, 1, TYPE-NAME, CODE ; standard

; NAME=NAME, 2, bWTB, P, D, Pb, Db, dD1, dD2, NDIST ; user: line 1

; NAME=NAME, 2, bWTB, dD1, dD2, NDIST ; user: line 1

; LOAD1, DIST1, LOAD2, DIST2, ... ; user: from line 2

; if Moving Load Code is CANADA

; NAME=NAME, 1, TYPE-NAME, DLA, CODE, [DYNA] ; standard

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; NAME=NAME, 2, bTRAIN, W(W1), PL(D1), PLM(W2), PLV(D2), NDIST, [DYNA] ; user: line
1
; LOAD1, DIST1, LOAD2, DIST2, ... ; user: from line 2
; [DYNA] : nDYNA, FACT1AXLE, FACT2AXLE, FACT3AXLE ; Dynamic Load
Allowance
; if Moving Load Code is BS
; NAME=NAME, 1, TYPE-NAME, CODE, UNITNUM ; standard
; NAME=nLane, FACTOR1, FACTOR2, FACTOR3, FACTOR4, ADDDATA, AL, CA, LL ; HA,
HA & HB, HA & HB(Auto)
; NAME=NAME, 2, iSTYPE, W1, W2, W3, L, Pa, Pb, D1, D2, d, UNITNUM ; user(BS 5400)
; NAME=NAME, 2, iSTYPE, [BD37/01-HA], [BS-DATA-LF] ; user(HA)
; NAME=NAME, 2, iSTYPE, [BS-DATA-HB] ; user(HB)
; NAME=NAME, 2, iSTYPE, [BD37/01-HA2], [BS-DATA-HB2], [BS-DATA-LF] ;
user(HA&HB)
; NAME=NAME, 2, iSTYPE, [BD37/01-HA], [BD37/01-HB], [BS-DATA-LF] ;
user(HA&HB(AUTO))
; NAME=NAME, 2, iSTYPE, W, L ; user(Pedestrian)
; NAME=NAME, 2, iSTYPE, V, AN, MINS, MAXS, P1, D1, P2, D2, ... ; user(Special
Vehicle)
; [BS-DATA-HA] : W1, W2, W3, EXP, EXP2, L1, L2, Pa
; [BS-DATA-HA2] : W1, W2, W3, EXP, EXP2, L1, L2
; [BS-DATA-HB] : Pb, D1, D2, d, UNITNUM
; [BS-DATA-HB2] : Pb, D1, D2, d, dd, UNITNUM
; [BS-DATA-LF] : nLT, LF1, LF2, LF3, LF4
; if Moving Load Code is EUROCODE
; NAME=NAME, 1, iTYPE, TYPE-NAME, PSY1, PSY2, PHI, [AF7] ; standard (LM1,
FLM1)
; NAME=NAME, 1, iTYPE, TYPE-NAME, bDF, bU, PHI, PSY, ADJ, IN ; standard (others)
; NAME=NAME, 2, 1, [AF7] ; user(Type 1)
; [LOAD7], D, PHI, TPSY, UPSY ; user(Type 1): line 2
; NAME=NAME, 2, 2, ALP, TPSY, W, BET, LPSY, P1, D1, P2, D2, ... ; user(Type 2)
; NAME=NAME, 2, 3 ; user(Type 3)
; [LOADCASE1] ; user(Type 3): line 2
; [LOADCASE2] ; user(Type 3): line 3
; [LOADCASE3] ; user(Type 3): line 4
; NAME=NAME, 2, 4, WS, V, AN, MINS, MAXS, DYF, UI, F, P1, D1, P2, D2, ... ; user(Type 4)
; NAME=NAME, 2, 5, INT, bPHI1, PHI1, bPHI2, PHI2 ; user(Type 5)
; [VEHICLE1] ; user(Type 5): line 2
; [VEHICLE2] ; user(Type 5): line 3
; [VEHICLE3] ; user(Type 5): line 4
; [AF7] : TF1, TF2, TF3, UF1, UF2, UF3, UF4 ; adjustment factor
; [LOAD7] : TL1, TL2, TL3, UL1, UL2, UL3, UL4 ; tandem/udl loads
; [LOADCASE] : bUSE, N, bDF, bUI, PHI, P1, L1, P2, L2, ... ; load case
; [VEHICLE] : bUSE, N, P1, L1, P2, L2, ... ; vehicle
; if Moving Load Code is RUSSIA
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC, bFATI, nLOADFAC, dLOADFAC ;
standard (SK)
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC, bFATI, nLOADFAC, dLOADFAC ;
standard (SK FATIGUE)
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC, dDYNAFAC_UDL
; bFATI, nLOADFAC, dLOADFAC, dLOADFAC_UDL, s1[3], s1_UDL[3] ; standard (AK)
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC, nLOADFAC, dLOADFAC,
; bTWOVEHI, TWOVEHI_FACT, b2NDREDUC, 2NDREDUC_FACT ; standard
(N14)
; NAME=NAME, 1, iTYPE, K, nDYNAFAC, dDYNAFAC, nLOADFAC, dLOADFAC,
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;          bTWOVEHI, TWOVEHI_FACT, b2NDREDUC, 2NDREDUC_FACT          ; standard
(N11)
; NAME=NAME, 1, iTYPE, nDYNAFAC, dDYNAFAC, dEMPTYCAR
;          bFATI, nLOADFAC, dLOADFAC,                                ; standard (SUBWAY TRAINS)
; NAME=NAME, 1, iTYPE, VARIABLE, nDYNAFAC, dDYNAFAC, dEMPTYCAR
;          bFATI, nLOADFAC, dLOADFAC,                                ; standard (TRAMCARS)
; NAME=NAME, 1, iTYPE, nDYNAFAC, dDYNAFAC, bFATI, nLOADFAC, dLOADFAC          ;
standard (NK-80)
; NAME=NAME, 1, iTYPE, W, D, nDYNAFAC, dDYNAFAC, bFATI, nLOADFAC, dLOADFAC          ;
standard (NG-60)
; NAME=NAME, 1, iTYPE, BRIDGETYPE, W, bFATI, nLOADFAC, dLOADFAC          ; standard
(UNIFORM LOAD)
; NAME=NAME, 1, iTYPE, BRIDGETYPE, W, bFATI, nLOADFAC, dLOADFAC          ; standard
(UNIFORM LOAD(W/O OTHER LOADS))
; NAME=NAME, 1, iTYPE, BRIDGETYPE, P          ; standard
(CONCENTRATED LOAD (W/O OTHER LOADS))
; NAME=NAME, 2, iTYPE, W, nDYNAFAC, dDYNAFAC, dDYNAFAC_UDL
;          bFATI, nLOADFAC, dLOADFAC, dLOADFAC_UDL, s1[3], s1_UDL[3]          ; user (Type 1)
; NAME=NAME, 2, iTYPE, nDYNAFAC, dDYNAFAC, dEMPTYCAR
;          bFATI, nLOADFAC, dLOADFAC,                                ; user (Type 2)
; NAME=NAME, 2, iTYPE, Variable, nDYNAFAC, dDYNAFAC, dEMPTYCAR
;          bFATI, nLOADFAC, dLOADFAC,                                ; user (Type 3)
; NAME=NAME, 2, iTYPE, nDYNAFAC, dDYNAFAC, nLOADFAC, dLOADFAC

;          bTWOVEHI, TWOVEHI_FACT, b2NDREDUC, 2NDREDUC_FACT          ; user (Type
4)
; NAME=NAME, 2, iTYPE, nDYNAFAC, dDYNAFAC, nLOADFAC, dLOADFAC

;          bTWOVEHI, TWOVEHI_FACT, b2NDREDUC, 2NDREDUC_FACT          ; user (Type
5)
; NAME=NAME, 2, iTYPE, W, D, nDYNAFAC, dDYNAFAC, bFATI, nLOADFAC, dLOADFAC          ;
user (Type 6)
; NAME=NAME, 2, iTYPE, P, W, bFATI, nLOADFAC, dLOADFAC          ; user (Type 7)
; if Moving Load Code is KSCE-LSD15
; NAME=NAME, 1, TYPE-NAME, nLANETYPE, dDYNAFAC, CODE, nLANELOAD, L,
CONVERTDIST          ; standard
; NAME=NAME, 2, 8, L1, W1, W2, EXP, dDYNAFAC, nLANELOAD, L, CONVERTDIST          ;
user: line 1 (Type 1)
; NAME=NAME, 2, 1, W1, W2, D1, D2, 0, 0, 0, NO          ; user: line 1 (Type 2)
; NAME=NAME, 2, 6, LOADNUM, DIST, W, L, 0, 0, 0, NO          ; user: line 1 (Type 3)
; LOAD1, DIST1, (DIST2_1), LOAD2, DIST2, (DIST2_2), ...          ; user: from line 2
; if Moving Load Code is South Africa
; NAME=NAME, 1, TYPE-NAME, CODE, bINCREL, dINCREL          ; standard NA
; NAME=NAME, 1, TYPE-NAME, CODE, UNITNUM          ; standard NB
; NAME=NAME, 1, TYPE-NAME, CODE, OPPOSITE          ; standard NC
; NAME=NAME, 2, TYPE, W1, L, W2, W3, PA, bINCREL, dINCREL          ; user NA
; NAME=NAME, 2, TYPE, PB, UNITNUM, DELTA, D1, D2          ; user NB
; NAME=NAME, 2, TYPE, P, OPPOSITE, NUM1, NUM2, NUM3 [DIST1], [DIST2], [DIST3]          ; user
NC
; if Load Type is Permit Truck
; NAME=NAME, 3, AXLE-TYPE-NUM, IMP-FACTOR          ; user(Permit Truck)
; AXLE-TYPE-NAME1, bEDWL1, bSV1, P1, D1, P2, D2, ..., Pn, Dn          ; user(from line 2)
; ...
; AXLE-TYPE-NAME n, bEDWL n, bSV n, P1, D1, P2, D2, ..., Pn, Dn

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; AXLE-TYPE1, SPACING1, bVS1, AXLE-TYPE2, SPACING2, bVS2 ... ; line 2+AXLE-
TYPE-NUM
; if Moving Load Code is not one of those specified above.
; NAME=NAME, 1, TYPE-NAME, DLA, CODE ; standard
; NAME=NAME, 2, bTRAIN, W(W1), PL(D1), PLM(W2), PLV(D2), NDIST ; user: line 1
; LOAD1, DIST1, LOAD2, DIST2, ... ; user: from line 2
NAME=Load Model 1, 1, 1, Load Model 1, 0.75, 0.4, , 1, 1, 1, 1, 1, 1

*MVLDCASE(EURO) ; Moving Load Cases
; NAME=NAME, bOPTIM, iTYPE, DESC, VHL1, VHL2, bLEAD, SERIAL
; type 1, 3
; nType, SLN1, SLN2, SLN3, ... ; line 2 (nType=1)
; nType, SRA1, SRA2, SRA3, ... ; line 2/3 (nType=2)
; nType, FLN1, FLN2, FLN3, ... ; line 4 (nType=3)
; NAME=NAME, bOPTIM, iTYPE, DESC, iOPT, bLEAD, SERIAL
; type 2
; [SUB1] ; line 2
; ... ; ...
; [SUBn] ; line n+1
; [SUB] : VCLA, SCA, MIN, MAX, SLN1, SLN2, ... ; sub-
loadcase
; NAME=NAME, bOPTIM, iTYPE, DESC, iOPT, bLEAD, SERIAL
; type 4
; 0, SLN1, SLN2, SLN3, ... ; line 2
; 1, SRA1, SRA2, SRA3, ... ; line 3
; 2, STradd1, STradd2, STradd3, ... ; line 4
; NAME=NAME, bOPTIM, iTYPE, DESC, iOPT, SF1, SF2, SF3, bPSI1, MULF1, MULF2, MULF3,
SERIAL ; type 5
; [SUB1] ; line 2
; ... ; ...
; [SUBn] ; line n+1
; ////////////////////////////////////////;
; Moving Load Optimization ;
; NAME=NAME, bOPTIM, iTYPE, DESC, VHL1, VHL2, bLEAD, MINVEHL, LANEOP,
LOADEDLANE, SERIAL ; type 1, 3
; nType, SRA1, SRA2, SRA3, ... ; line 2 (nType=2)
; nType, FLN1, FLN2, FLN3, ... ; line 3 (nType=3)
; NAME=NAME, bOPTIM, iTYPE, DESC, iOPT, bLEAD, MINVEHL, LANEOP, MIN, MAX, SERIAL
; type 2
; [ASSGNVEHL1] ; line 2
; ... ; ...
; [ASSGNVEHLn] ; line n+1
; [ASSGNVEHL] : VC, VCLA, SCA ... ; Assignment-
Vehicle
; NAME=NAME, bOPTIM, iTYPE, DESC, iOPT, bLEAD, MINVEHL, LANEOP, LOADEDLANE,
SERIAL ; type 4
; 1, SRA1, SRA2, SRA3, ... ; line 3
; NAME=NAME, bOPTIM, iTYPE, DESC, iOPT, SF1, SF2, SF3, bPSI1, MULF1, MULF2, MULF3,
MINVEHL, LANEOP, MIN, MAX, SERIAL ; type 5
; [ASSGNVEHL1] ; line 2
; ... ; ...
; [ASSGNVEHLn] ; line n+1
NAME=SO_Tutto DX, NO, 1, , Load Model 1, , YES, 1
1, SO_Tutto DX_lane1, SO_Tutto Dx_lane2
2, SO_Tutto Dx_rim

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NAME=SO_Centrato, NO, 1, , Load Model 1, , YES, 2
1, SO_Centrato_lane 2, SO_Centrato_lane1
2, SO_Centrato_rim 1, SO_Centrato_rim2
NAME=NE_Tutto SX, NO, 1, , Load Model 1, , YES, 3
1, NE_Tutto SX_lane 1, NE_Tutto SX_lane 2
2, NE_Tutto SX_rim
NAME=NE_Centrato, NO, 1, , Load Model 1, , YES, 4
1, NE_Centrato_lane 1, NE_Centrato_lane 2
2, NE_Centrato_rim1, NE_Centrato_rim2
NAME=SO_Tutto DX_psif, NO, 1, , Load Model 1, , NO, 5
1, SO_Tutto DX_lane1, SO_Tutto Dx_lane2
2, SO_Tutto Dx_rim
NAME=SO_Centrato_psif, NO, 1, , Load Model 1, , NO, 6
1, SO_Centrato_lane 2, SO_Centrato_lane1
2, SO_Centrato_rim 1, SO_Centrato_rim2
NAME=NE_Tutto SX_psif, NO, 1, , Load Model 1, , NO, 7
1, NE_Tutto SX_lane 1, NE_Tutto SX_lane 2
2, NE_Tutto SX_rim
NAME=NE_Centrato_psif, NO, 1, , Load Model 1, , NO, 8
1, NE_Centrato_lane 1, NE_Centrato_lane 2
2, NE_Centrato_rim1, NE_Centrato_rim2

*LOADCOMB ; Combinations

; NAME=NAME, KIND, ACTIVE, bES, iTYPE, DESC, iSERV-TYPE, nLCOMTYPE ; line 1

; ANAL1, LCNAME1, FACT1, ... ; from line 2

NAME=TRAFFICO SO_env, GEN, INACTIVE, 0, 1, , 0, 0
MV, SO_Tutto DX, 1, MV, SO_Centrato, 1
NAME=TRAFFICO NE_env, GEN, INACTIVE, 0, 1, , 0, 0
MV, NE_Tutto SX, 1, MV, NE_Centrato, 1
NAME=TEMPERATURA_env, GEN, INACTIVE, 0, 1, , 0, 0
ST, TEMP_+15°C, 1, ST, TEMP_-15°C, 1
NAME=PERMANENTI N.STR, GEN, ACTIVE, 0, 0, , 0, 0
ST, PERM. pavimentazione, 1, ST, PERM. cordoli+marciapiede, 1
ST, PERM. spartitraffico, 1, ST, PERM. parapetti, 1
ST, PERM. pali luce, 1, ST, PERM. tubazioni, 1
NAME=TRAFFICO SO PSI_env, GEN, INACTIVE, 0, 1, , 0, 0
MV, SO_Tutto DX_psif, 1, MV, SO_Centrato_psif, 1
NAME=TRAFFICO NE PSI_env, GEN, INACTIVE, 0, 1, , 0, 0
MV, NE_Tutto SX_psif, 1, MV, NE_Centrato_psif, 1
NAME=SLC 1, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 1, RS, SLC_y, 0.3, RS, SLC_z, 0.3
NAME=SLC 2, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 0.3, RS, SLC_y, 1, RS, SLC_z, 0.3
NAME=SLC 3, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 0.3, RS, SLC_y, 0.3, RS, SLC_z, 1
NAME=SLC 4, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -1, RS, SLC_y, 0.3, RS, SLC_z, 0.3
NAME=SLC 5, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -0.3, RS, SLC_y, 1, RS, SLC_z, 0.3
NAME=SLC 6, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -0.3, RS, SLC_y, 0.3, RS, SLC_z, 1
NAME=SLC 7, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 1, RS, SLC_y, -0.3, RS, SLC_z, 0.3
NAME=SLC 8, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 0.3, RS, SLC_y, -1, RS, SLC_z, 0.3

NAME=SLC 9, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 0.3, RS, SLC_y, -0.3, RS, SLC_z, 1
NAME=SLC 10, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 1, RS, SLC_y, 0.3, RS, SLC_z, -0.3
NAME=SLC 11, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 0.3, RS, SLC_y, 1, RS, SLC_z, -0.3
NAME=SLC 12, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 0.3, RS, SLC_y, 0.3, RS, SLC_z, -1
NAME=SLC 13, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -1, RS, SLC_y, -0.3, RS, SLC_z, 0.3
NAME=SLC 14, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -0.3, RS, SLC_y, -1, RS, SLC_z, 0.3
NAME=SLC 15, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -0.3, RS, SLC_y, -0.3, RS, SLC_z, 1
NAME=SLC 16, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -1, RS, SLC_y, 0.3, RS, SLC_z, -0.3
NAME=SLC 17, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -0.3, RS, SLC_y, 1, RS, SLC_z, -0.3
NAME=SLC 18, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -0.3, RS, SLC_y, 0.3, RS, SLC_z, -1
NAME=SLC 19, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 1, RS, SLC_y, -0.3, RS, SLC_z, -0.3
NAME=SLC 20, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 0.3, RS, SLC_y, -1, RS, SLC_z, -0.3
NAME=SLC 21, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, 0.3, RS, SLC_y, -0.3, RS, SLC_z, -1
NAME=SLC 22, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -1, RS, SLC_y, -0.3, RS, SLC_z, -0.3
NAME=SLC 23, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -0.3, RS, SLC_y, -1, RS, SLC_z, -0.3
NAME=SLC 24, GEN, ACTIVE, 0, 0, , 0, 0
RS, SLC_x, -0.3, RS, SLC_y, -0.3, RS, SLC_z, -1
NAME=SLV 1, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 1, RS, SLV_y, 0.3, RS, SLV_z, 0.3
NAME=SLV 2, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 0.3, RS, SLV_y, 1, RS, SLV_z, 0.3
NAME=SLV 3, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 0.3, RS, SLV_y, 0.3, RS, SLV_z, 1
NAME=SLV 4, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -1, RS, SLV_y, 0.3, RS, SLV_z, 0.3
NAME=SLV 5, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -0.3, RS, SLV_y, 1, RS, SLV_z, 0.3
NAME=SLV 6, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -0.3, RS, SLV_y, 0.3, RS, SLV_z, 1
NAME=SLV 7, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 1, RS, SLV_y, -0.3, RS, SLV_z, 0.3
NAME=SLV 8, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 0.3, RS, SLV_y, -1, RS, SLV_z, 0.3
NAME=SLV 9, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 0.3, RS, SLV_y, -0.3, RS, SLV_z, 1
NAME=SLV 10, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 1, RS, SLV_y, 0.3, RS, SLV_z, -0.3
NAME=SLV 11, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 0.3, RS, SLV_y, 1, RS, SLV_z, -0.3
NAME=SLV 12, GEN, INACTIVE, 0, 0, , 0, 0

RS, SLV_x, 0.3, RS, SLV_y, 0.3, RS, SLV_z, -1
NAME=SLV 13, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -1, RS, SLV_y, -0.3, RS, SLV_z, 0.3
NAME=SLV 14, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -0.3, RS, SLV_y, -1, RS, SLV_z, 0.3
NAME=SLV 15, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -0.3, RS, SLV_y, -0.3, RS, SLV_z, 1
NAME=SLV 16, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -1, RS, SLV_y, 0.3, RS, SLV_z, -0.3
NAME=SLV 17, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -0.3, RS, SLV_y, 1, RS, SLV_z, -0.3
NAME=SLV 18, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -0.3, RS, SLV_y, 0.3, RS, SLV_z, -1
NAME=SLV 19, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 1, RS, SLV_y, -0.3, RS, SLV_z, -0.3
NAME=SLV 20, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 0.3, RS, SLV_y, -1, RS, SLV_z, -0.3
NAME=SLV 21, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, 0.3, RS, SLV_y, -0.3, RS, SLV_z, -1
NAME=SLV 22, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -1, RS, SLV_y, -0.3, RS, SLV_z, -0.3
NAME=SLV 23, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -0.3, RS, SLV_y, -1, RS, SLV_z, -0.3
NAME=SLV 24, GEN, INACTIVE, 0, 0, , 0, 0
RS, SLV_x, -0.3, RS, SLV_y, -0.3, RS, SLV_z, -1
NAME=ENV_SLC, GEN, ACTIVE, 0, 1, , 0, 0
CB, SLC 1, 1, CB, SLC 2, 1, CB, SLC 3, 1, CB, SLC 4, 1, CB, SLC 5, 1
CB, SLC 6, 1, CB, SLC 7, 1, CB, SLC 8, 1, CB, SLC 9, 1, CB, SLC 10, 1
CB, SLC 11, 1, CB, SLC 12, 1, CB, SLC 13, 1, CB, SLC 14, 1
CB, SLC 15, 1, CB, SLC 16, 1, CB, SLC 17, 1, CB, SLC 18, 1
CB, SLC 19, 1, CB, SLC 20, 1, CB, SLC 21, 1, CB, SLC 22, 1
CB, SLC 23, 1, CB, SLC 24, 1
NAME=ENV_SLV, GEN, ACTIVE, 0, 1, , 0, 0
CB, SLV 1, 1, CB, SLV 2, 1, CB, SLV 3, 1, CB, SLV 4, 1, CB, SLV 5, 1
CB, SLV 6, 1, CB, SLV 7, 1, CB, SLV 8, 1, CB, SLV 9, 1, CB, SLV 10, 1
CB, SLV 11, 1, CB, SLV 12, 1, CB, SLV 13, 1, CB, SLV 14, 1
CB, SLV 15, 1, CB, SLV 16, 1, CB, SLV 17, 1, CB, SLV 18, 1
CB, SLV 19, 1, CB, SLV 20, 1, CB, SLV 21, 1, CB, SLV 22, 1
CB, SLV 23, 1, CB, SLV 24, 1
NAME=SLU 1 (SO), GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1.35, CB, PERMANENTI N.STR, 1.35, CB, TEMPERATURA_env, 0.72
CB, TRAFFICO SO_env, 1.35, ST, TRAFFICO_carico folla, 0.675
ST, VARIABILE_Vento (y+), 0.9
NAME=SLU 1 (NE), GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1.35, CB, PERMANENTI N.STR, 1.35, CB, TEMPERATURA_env, 0.72
CB, TRAFFICO NE_env, 1.35, ST, TRAFFICO_carico folla, 0.675
ST, VARIABILE_Vento (y+), 0.9
NAME=SLU 2A (SO), GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1.35, CB, PERMANENTI N.STR, 1.35, ST, TRAFFICO_frenatura, 1.35
CB, TRAFFICO SO PSI_env, 1.35, ST, VARIABILE_Vento (y+), 0.3
NAME=SLU 2A (NE), GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1.35, CB, PERMANENTI N.STR, 1.35, ST, TRAFFICO_frenatura, 1.35
CB, TRAFFICO NE PSI_env, 1.35, ST, VARIABILE_Vento (y+), 0.3
NAME=SLE RARA (SO), GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1, CB, PERMANENTI N.STR, 1, CB, TEMPERATURA_env, 0.6

CB, TRAFFICO SO_env, 1, ST, VARIABILE_Vento (y+), 0.6
NAME=SLE RARA (NE), GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1, CB, PERMANENTI N.STR, 1, CB, TEMPERATURA_env, 0.6
CB, TRAFFICO NE_env, 1, ST, VARIABILE_Vento (y+), 0.6
NAME=SLE FREQ (SO), GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1, CB, PERMANENTI N.STR, 1, CB, TRAFFICO SO PSI_env, 1
ST, TRAFFICO_carico folla, 0.75, CB, TEMPERATURA_env, 0.6
ST, VARIABILE_Vento (y+), 0.2
NAME=SLE FREQ (NE), GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1, CB, PERMANENTI N.STR, 1, CB, TRAFFICO NE PSI_env, 1
ST, TRAFFICO_carico folla, 0.75, CB, TEMPERATURA_env, 0.6
ST, VARIABILE_Vento (y+), 0.2
NAME=SLE QP, GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1, CB, PERMANENTI N.STR, 1, CB, TEMPERATURA_env, 0.5
NAME=SLC, GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1, CB, PERMANENTI N.STR, 1, CB, TEMPERATURA_env, 0.5
CB, ENV_SLC, 1
NAME=SLV, GEN, ACTIVE, 0, 0, , 0, 0
ST, P.P, 1, CB, PERMANENTI N.STR, 1, CB, TEMPERATURA_env, 0.5
CB, ENV_SLV, 1

*LC-COLOR ; Diagram Color for Load Case

; ANAL, LCNAME, iR1(ALL), iG1(ALL), iB1(ALL), iR2(MIN), iG2(MIN), iB2(MIN), iR3(MAX), iG2(MAX), iB2(MAX)

ST, P.P, 255, 192, 87, 0, 192, 128, 192, 192, 192
ST, PERM. pavimentazione, 163, 160, 255, 163, 255, 160, 128, 192, 0
ST, PERM. cordoli+marciapiede, 255, 192, 160, 192, 192, 0, 160, 192, 255
ST, PERM. spartitraffico, 93, 255, 87, 0, 128, 57, 255, 192, 87
ST, PERM. parapetti, 163, 255, 160, 192, 192, 0, 192, 72, 0
ST, PERM. pali luce, 85, 0, 192, 85, 192, 0, 255, 128, 0
ST, PERM. tubazioni, 192, 0, 192, 192, 72, 0, 0, 128, 255
ST, TEMP_+15°C, 255, 255, 87, 255, 0, 192, 255, 87, 87
ST, TEMP_-15°C, 210, 210, 210, 212, 160, 255, 85, 0, 192
RS, SLC_x, 0, 157, 192, 93, 255, 87, 212, 160, 255
RS, SLC_y, 0, 128, 255, 163, 160, 255, 0, 157, 192
RS, SLV_x, 255, 192, 160, 148, 87, 255, 192, 0, 192
RS, SLV_y, 160, 255, 255, 192, 0, 192, 128, 192, 0
RS, SLC_z, 255, 192, 160, 160, 192, 255, 255, 255, 255
RS, SLV_z, 0, 128, 57, 148, 87, 255, 0, 128, 57
ST, TRAFFICO_frenatura, 255, 255, 87, 148, 87, 255, 0, 192, 192
ST, TRAFFICO_carico folla, 0, 128, 128, 163, 160, 255, 255, 255, 255
MV, SO_Tutto DX, 0, 128, 57, 78, 0, 255, 0, 128, 128
MV, SO_Centrato, 163, 160, 255, 255, 128, 0, 212, 160, 255
MV, NE_Tutto SX, 0, 128, 192, 0, 192, 128, 255, 192, 87
MV, NE_Centrato, 78, 0, 255, 255, 87, 128, 255, 192, 160
CB, TRAFFICO SO_env, 192, 128, 0, 93, 255, 87, 163, 255, 160
CB, TRAFFICO NE_env, 255, 255, 255, 255, 255, 87, 0, 128, 128
CB, TEMPERATURA_env, 255, 87, 128, 255, 255, 87, 0, 128, 128
CB, PERMANENTI N.STR, 192, 72, 0, 160, 255, 255, 148, 87, 255
CB, SLC 1, 192, 128, 0, 192, 128, 0, 160, 192, 255
CB, SLC 2, 192, 192, 0, 0, 157, 192, 255, 128, 0
CB, SLC 3, 0, 192, 192, 255, 0, 128, 93, 255, 87
CB, SLC 4, 0, 192, 128, 255, 255, 87, 160, 192, 255
CB, SLC 5, 160, 192, 255, 255, 128, 0, 0, 157, 192
CB, SLC 6, 0, 128, 128, 192, 0, 192, 255, 87, 87

MV, SO_Tutto DX_psif, 255, 255, 255, 255, 255, 87, 210, 210, 210
MV, SO_Centrato_psif, 255, 0, 128, 255, 192, 160, 255, 87, 128
MV, NE_Tutto SX_psif, 255, 87, 87, 192, 72, 0, 192, 0, 128
MV, NE_Centrato_psif, 0, 192, 128, 85, 0, 192, 192, 72, 0
CB, TRAFFICO SO PSI_env, 78, 0, 255, 210, 210, 210, 255, 192, 87
CB, TRAFFICO NE PSI_env, 192, 192, 192, 212, 160, 255, 128, 192, 0
CB, SLC 7, 0, 128, 57, 0, 128, 255, 148, 87, 255
CB, SLC 8, 255, 255, 255, 192, 72, 0, 192, 192, 0
CB, SLC 9, 85, 0, 192, 0, 128, 192, 255, 128, 0
CB, SLC 10, 0, 128, 128, 78, 0, 255, 192, 192, 0
CB, SLC 11, 255, 255, 255, 192, 192, 0, 0, 128, 192
CB, SLC 12, 0, 128, 57, 255, 255, 87, 85, 192, 0
CB, SLC 13, 0, 192, 128, 148, 87, 255, 146, 0, 255
CB, SLC 14, 255, 255, 87, 255, 0, 192, 0, 192, 128
CB, SLC 15, 255, 87, 128, 255, 192, 160, 192, 128, 0
CB, SLC 16, 255, 255, 87, 0, 157, 192, 148, 87, 255
CB, SLC 17, 255, 160, 255, 93, 255, 87, 163, 160, 255
CB, SLC 18, 255, 87, 128, 255, 128, 0, 192, 0, 192
CB, SLC 19, 255, 160, 255, 255, 160, 255, 160, 192, 255
CB, SLC 20, 192, 128, 0, 85, 192, 0, 255, 255, 255
CB, SLC 21, 192, 192, 192, 148, 87, 255, 160, 192, 255
CB, SLC 22, 255, 160, 255, 0, 128, 192, 192, 192, 192
CB, SLC 23, 148, 87, 255, 78, 0, 255, 255, 160, 255
CB, SLC 24, 192, 0, 192, 0, 128, 57, 0, 192, 192
CB, SLV 1, 255, 0, 128, 255, 87, 128, 210, 210, 210
CB, SLV 2, 255, 87, 128, 255, 255, 255, 0, 128, 128
CB, SLV 3, 192, 192, 0, 255, 0, 192, 192, 192, 0
CB, SLV 4, 192, 128, 0, 255, 87, 87, 255, 0, 192
CB, SLV 5, 160, 255, 255, 255, 87, 128, 163, 255, 160
CB, SLV 6, 255, 87, 128, 192, 192, 0, 255, 0, 192
CB, SLV 7, 146, 0, 255, 146, 0, 255, 255, 0, 192
CB, SLV 8, 85, 0, 192, 160, 192, 255, 0, 157, 192
CB, SLV 9, 148, 87, 255, 255, 255, 255, 85, 192, 0
CB, SLV 10, 255, 128, 0, 85, 192, 0, 163, 160, 255
CB, SLV 11, 255, 128, 0, 85, 192, 0, 255, 0, 192
CB, SLV 12, 0, 192, 192, 128, 192, 0, 0, 128, 192
CB, SLV 13, 0, 128, 57, 192, 128, 0, 0, 128, 192
CB, SLV 14, 148, 87, 255, 85, 192, 0, 255, 192, 160
CB, SLV 15, 0, 128, 192, 210, 210, 210, 93, 255, 87
CB, SLV 16, 93, 255, 87, 255, 192, 87, 255, 128, 0
CB, SLV 17, 163, 255, 160, 255, 255, 255, 192, 0, 128
CB, SLV 18, 255, 255, 255, 255, 255, 255, 163, 160, 255
CB, SLV 19, 163, 255, 160, 0, 192, 128, 192, 192, 192
CB, SLV 20, 0, 157, 192, 146, 0, 255, 0, 192, 128
CB, SLV 21, 255, 128, 0, 160, 255, 255, 192, 128, 0
CB, SLV 22, 212, 160, 255, 85, 0, 192, 192, 0, 128
CB, SLV 23, 255, 192, 160, 255, 87, 128, 255, 255, 255
CB, SLV 24, 78, 0, 255, 192, 0, 128, 192, 192, 192
CB, ENV_SLC, 85, 0, 192, 0, 192, 128, 255, 192, 87
CB, ENV_SLV, 255, 128, 0, 255, 87, 128, 255, 255, 87
CB, SLU 1 (SO), 255, 160, 255, 85, 0, 192, 0, 157, 192
CB, SLU 1 (NE), 163, 255, 160, 160, 255, 255, 210, 210, 210
CB, SLU 2A (SO), 210, 210, 210, 192, 0, 192, 255, 192, 87
CB, SLU 2A (NE), 255, 192, 160, 192, 0, 192, 192, 0, 128
CB, SLE RARA (SO), 163, 255, 160, 192, 0, 128, 255, 87, 128

CB, SLE RARA (NE), 160, 192, 255, 0, 157, 192, 0, 128, 255
CB, SLE FREQ (SO), 212, 160, 255, 85, 192, 0, 160, 192, 255
CB, SLE FREQ (NE), 192, 0, 192, 255, 128, 0, 0, 128, 192
CB, SLE QP, 192, 128, 0, 146, 0, 255, 0, 128, 192
CB, SLC, 146, 0, 255, 255, 0, 128, 255, 0, 192
CB, SLV, 0, 192, 192, 148, 87, 255, 192, 0, 192
ST, VARIABILE_Vento (y+), 255, 192, 87, 160, 255, 255, 78, 0, 255

*EIGEN-CTRL ; Eigenvalue Analysis Control

; TYPE, iFREQ, iITER, iDIM, TOL, bMINMAX, FRMIN, FRMAX, bSTRUM ; TYPE=EIGEN
; TYPE, bINCNL, iGNUM ; TYPE=RITZ(line 1)
; KIND1, CASE1/GROUND1, iNOG1, ... ; TYPE=RITZ(from line2)
RITZ, NO, 0
GROUND, ACCX, 10, GROUND, ACCY, 10

*DGN-MATL ; Modify Steel(Concrete) Material

; iMAT, TYPE, MNAME, [DATA1] ; STEEL
; iMAT, TYPE, MNAME, [DATA2], [R-DATA], FCI, bSERV, SHORT, LONG ; CONC
; iMAT, TYPE, MNAME, [DATA3], [DATA2], [R-DATA] ; SRC
; iMAT, TYPE, MNAME, [DATA5] ; STEEL(None) & KSCE-ASD05
; [DATA1] : 1, DB, CODE, NAME or 2, ELAST, POISN, FU, FY1, FY2, FY3, FY4
; FY5, FY6, AFT, AFT2, AFT3, FY, AFV, AFV2, AFV3
; [DATA2] : 1, DB, CODE, NAME or 2, FC, CHK, LAMBDA
; [DATA3] : 1, DB, CODE, NAME or 2, ELAST, FU, FY1, FY2, FY3, FY4
; FY5, FY6, AFT, AFT2, AFT3, FY, AFV, AFV2, AFV3
; [DATA4] : 1, DB, CODE, NAME or 2, FC
; [DATA5] : 3, ELAST, POISN, AL1, AL2, AL3, AL4, AL5, AL6, AL7, AL8, AL9, AL10
; MIN1, MIN2, MIN3
; [R-DATA]: RBCODE, RBMAIN, RBSUB, FY(R), FYS
1, CONC, C25/30, 1, EN04(RC), C25/30, NO, 1, , , , 0, 0, 17500, NO, 0, 0,
, 0, NO, 1, , , , 0, 0, 0

*LINK-KEY ; Link Key

; iKEY, TYPE, LINK KEY
1, ELNK, 1
3, ELNK, 3
4, ELNK, 4
5, ELNK, 5
6, ELNK, 6
7, ELNK, 7
9, ELNK, 9
10, ELNK, 10
11, ELNK, 11
12, ELNK, 12
13, ELNK, 13
14, ELNK, 14
15, ELNK, 15
17, ELNK, 17
18, ELNK, 18
19, ELNK, 19
21, ELNK, 21
22, ELNK, 22
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24, ELNK, 24
25, ELNK, 25

26, ELNK, 26
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42, ELNK, 42
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62, ELNK, 49
63, ELNK, 61
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83, ELNK, 68
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91, ELNK, 76
92, ELNK, 77
93, ELNK, 78
94, ELNK, 79
95, ELNK, 80
96, ELNK, 81
97, ELNK, 82
98, ELNK, 83
99, ELNK, 84

*ENDDATA

Reaction(Global)

	Node	Load	FX (kN)	FY (kN)	FZ (kN)	MX (kN*m)	MY (kN*m)	MZ (kN*m)
	51	SLU 1 (SO)(all)	36.934896	-41.42316	579.045595	0	0	0
	52	SLU 1 (SO)(all)	44.584239	-41.148562	2098.010454	0	0	0
	53	SLU 1 (SO)(all)	35.867797	-41.423139	1095.579633	0	0	0
	54	SLU 1 (SO)(all)	43.596484	-41.148521	2533.290344	0	0	0
	63	SLU 1 (SO)(all)	-36.933064	-41.416488	578.951307	0	0	0
	64	SLU 1 (SO)(all)	-44.585125	-41.155392	2081.555644	0	0	0
	65	SLU 1 (SO)(all)	-35.86963	-41.416467	1095.673941	0	0	0
	66	SLU 1 (SO)(all)	-43.595596	-41.155351	2549.745661	0	0	0
	83	SLU 1 (SO)(all)	154.245686	-140.06925	14314.82194	0	0	0
	84	SLU 1 (SO)(all)	209.532691	-137.66545	16969.58718	0	0	0
	85	SLU 1 (SO)(all)	-154.243031	-140.057378	14314.6655	0	0	0
	86	SLU 1 (SO)(all)	-209.533994	-137.677413	16985.43276	0	0	0
	87	SLU 1 (SO)(all)	156.787148	-140.070221	12198.01464	0	0	0
	88	SLU 1 (SO)(all)	211.915805	-137.666579	17258.70294	0	0	0
	89	SLU 1 (SO)(all)	-156.789808	-140.058349	12198.17108	0	0	0
	90	SLU 1 (SO)(all)	-211.914506	-137.678542	17242.85702	0	0	0
	51	SLU 1 (NE)(all)	44.669883	-41.023687	2632.974689	0	0	0
	52	SLU 1 (NE)(all)	36.942329	-40.728734	1186.882921	0	0	0
	53	SLU 1 (NE)(all)	43.510838	-41.023665	2006.105484	0	0	0
	54	SLU 1 (NE)(all)	35.861346	-40.728713	487.734782	0	0	0
	63	SLU 1 (NE)(all)	-44.668051	-41.017015	2632.880736	0	0	0
	64	SLU 1 (NE)(all)	-36.943215	-40.735563	1170.427959	0	0	0
	65	SLU 1 (NE)(all)	-43.51267	-41.016993	2006.199943	0	0	0
	66	SLU 1 (NE)(all)	-35.860458	-40.735542	504.189763	0	0	0
	83	SLU 1 (NE)(all)	209.307896	-140.187853	16840.29339	0	0	0
	84	SLU 1 (NE)(all)	154.179925	-138.079261	11782.27428	0	0	0
	85	SLU 1 (NE)(all)	-209.305237	-140.175981	16840.13688	0	0	0
	86	SLU 1 (NE)(all)	-154.181229	-138.091224	11798.12013	0	0	0
	87	SLU 1 (NE)(all)	212.140602	-140.188896	17388.71916	0	0	0
	88	SLU 1 (NE)(all)	156.855082	-138.080232	14730.55174	0	0	0
	89	SLU 1 (NE)(all)	-212.143256	-140.177024	17388.87566	0	0	0
	90	SLU 1 (NE)(all)	-156.853776	-138.092195	14714.70589	0	0	0
	51	SLU 2A (SO)(all)	79.153045	-14.009052	629.355539	0	0	0
	52	SLU 2A (SO)(all)	83.281964	-13.793549	1541.691223	0	0	0
	53	SLU 2A (SO)(all)	78.783814	-14.009031	1000.230719	0	0	0

54	SLU 2A (SO)(all)	82.978839	-13.793515	1839.343667	0	0	0
63	SLU 2A (SO)(all)	55.48798	-14.002382	610.761787	0	0	0
64	SLU 2A (SO)(all)	57.38103	-13.800381	1506.736879	0	0	0
65	SLU 2A (SO)(all)	55.853547	-14.002362	981.825567	0	0	0
66	SLU 2A (SO)(all)	57.648707	-13.800347	1837.299269	0	0	0
83	SLU 2A (SO)(all)	311.678847	-47.321538	13651.86714	0	0	0
84	SLU 2A (SO)(all)	339.687615	-45.572809	14448.45901	0	0	0
85	SLU 2A (SO)(all)	80.236641	-47.30967	13658.04213	0	0	0
86	SLU 2A (SO)(all)	90.809774	-45.584776	14470.6363	0	0	0
87	SLU 2A (SO)(all)	312.538516	-47.322482	12119.53626	0	0	0
88	SLU 2A (SO)(all)	340.411003	-45.573833	14976.13937	0	0	0
89	SLU 2A (SO)(all)	79.371658	-47.310614	12126.0241	0	0	0
90	SLU 2A (SO)(all)	90.111702	-45.5858	14966.62491	0	0	0
51	SLU 2A (NE)(all)	83.336513	-13.796105	1874.835706	0	0	0
52	SLU 2A (NE)(all)	79.142097	-13.573325	1030.695171	0	0	0
53	SLU 2A (NE)(all)	82.924287	-13.796084	1511.021089	0	0	0
54	SLU 2A (NE)(all)	78.795343	-13.573305	598.923025	0	0	0
63	SLU 2A (NE)(all)	57.291959	-13.789435	1856.242122	0	0	0
64	SLU 2A (NE)(all)	55.496791	-13.580157	995.740747	0	0	0
65	SLU 2A (NE)(all)	57.737775	-13.789415	1492.616015	0	0	0
66	SLU 2A (NE)(all)	55.845317	-13.580137	596.878543	0	0	0
83	SLU 2A (NE)(all)	339.542092	-47.382925	14836.67548	0	0	0
84	SLU 2A (NE)(all)	311.670067	-45.680191	11981.18068	0	0	0
85	SLU 2A (NE)(all)	90.981995	-47.371057	14842.85043	0	0	0
86	SLU 2A (NE)(all)	80.243412	-45.692157	12003.35793	0	0	0
87	SLU 2A (NE)(all)	340.556525	-47.383903	14588.21206	0	0	0
88	SLU 2A (NE)(all)	312.549248	-45.681135	13790.27306	0	0	0
89	SLU 2A (NE)(all)	89.939474	-47.372035	14594.69977	0	0	0
90	SLU 2A (NE)(all)	79.36684	-45.693102	13780.75864	0	0	0
51	SLC(all)	188.71017	-135.773774	594.70374	0	0	0
52	SLC(all)	188.752181	135.772354	882.978854	0	0	0
53	SLC(all)	188.654441	-135.773759	893.283944	0	0	0
54	SLC(all)	188.808174	135.772369	584.410073	0	0	0
63	SLC(all)	-188.712577	-135.768783	594.102573	0	0	0
64	SLC(all)	-188.720696	135.767239	891.074646	0	0	0
65	SLC(all)	-188.659575	-135.768768	892.822457	0	0	0
66	SLC(all)	-188.775373	135.767255	616.883585	0	0	0
83	SLC(all)	585.112064	-480.363483	10836.17398	0	0	0
84	SLC(all)	585.21412	480.365688	9596.731161	0	0	0
85	SLC(all)	-585.109946	-480.35462	10835.89575	0	0	0
86	SLC(all)	-585.216153	480.356748	9611.240308	0	0	0
87	SLC(all)	585.183231	-480.364183	9585.255055	0	0	0
88	SLC(all)	585.142074	480.364988	10847.2414	0	0	0
89	SLC(all)	-585.18505	-480.35532	9585.208616	0	0	0
90	SLC(all)	-585.142181	480.356049	10838.27512	0	0	0

51	SLV(all)	166.292047	-115.809973	572.596213	0	0	0
52	SLV(all)	166.316765	115.808553	862.704359	0	0	0
53	SLV(all)	166.236319	-115.809958	871.176418	0	0	0
54	SLV(all)	166.372759	115.808568	564.135578	0	0	0
63	SLV(all)	-166.293791	-115.80499	572.090027	0	0	0
64	SLV(all)	-166.291038	115.803447	867.179902	0	0	0
65	SLV(all)	-166.240787	-115.804975	870.809916	0	0	0
66	SLV(all)	-166.345717	115.803462	592.988845	0	0	0
83	SLV(all)	519.906501	-409.737879	10737.9686	0	0	0
84	SLV(all)	520.003711	409.740083	9496.546185	0	0	0
85	SLV(all)	-519.904409	-409.729027	10737.71812	0	0	0
86	SLV(all)	-520.005561	409.731154	9510.562957	0	0	0
87	SLV(all)	519.977668	-409.738578	9487.049671	0	0	0
88	SLV(all)	519.931666	409.739384	10747.05643	0	0	0
89	SLV(all)	-519.979513	-409.729726	9487.030988	0	0	0
90	SLV(all)	-519.931588	409.730455	10737.59778	0	0	0
SUMMATION OF REACTION FORCES PRINTOUT							
	Load	FX (kN)	FY (kN)	FZ (kN)			
	SLU 1 (SO)(all)	N/A	N/A	N/A			
	SLU 1 (NE)(all)	N/A	N/A	N/A			
	SLU 2A (SO)(all)	N/A	N/A	N/A			
	SLU 2A (NE)(all)	N/A	N/A	N/A			
	SLC(all)	-3590.193906	4913.39035	81532.13051			
	SLV(all)	-3097.097949	4189.623457	81457.37836			

Displacements(Global)

Node	Load	DX (mm)	DY (mm)	DZ (mm)	RX ([rad])	RY ([rad])	RZ ([rad])	
1	SLU 1 (SO)(all)	14.565601	14.161557	-0.294958	0.000034	-0.000947	0.000076	
2	SLU 1 (SO)(all)	-14.161549	-0.748072	0.000075	-0.002533	0.000066		

			17.684172					
	3	SLU 1 (SO)(all)	-					
			14.544096	14.173714	-0.110377	0.000036	-0.000947	0.000076
	4	SLU 1 (SO)(all)	-					
			17.662523	14.173714	-0.807033	0.000078	-0.002533	0.000066
	5	SLU 1 (SO)(all)	-					
			14.587205	14.149731	-0.484476	0.000034	-0.000947	0.000076
	6	SLU 1 (SO)(all)	-					
			17.705777	14.149737	-0.844665	0.000077	-0.002533	0.000066
	7	SLU 1 (SO)(all)	5.03614	16.331082	-1.682193	0.000049	0.003947	0.000066
	8	SLU 1 (SO)(all)	6.724305	16.331061	-2.093464	-0.000079	0.00597	0.000057
	9	SLU 1 (SO)(all)	4.766364	16.276009	2.082125	0.000053	0.003718	0.000065
	10	SLU 1 (SO)(all)	6.378236	16.276012	3.770175	-0.000081	0.005679	0.000057
	11	SLU 1 (SO)(all)	5.304478	16.390375	-5.822043	0.000055	0.004175	0.000067
	12	SLU 1 (SO)(all)	7.067845	16.390379	-8.202851	-0.000085	0.006259	0.000056
	15	SLU 1 (SO)(all)	-5.03614	16.329709	-1.682193	0.000049	-0.003947	-0.000066
	16	SLU 1 (SO)(all)	-6.724305	16.329689	-2.093464	-0.000078	-0.00597	-0.000057
	17	SLU 1 (SO)(all)	-5.304478	16.389035	-5.822043	0.000055	-0.004175	-0.000067
	18	SLU 1 (SO)(all)	-7.067844	16.38904	-8.202851	-0.000084	-0.006259	-0.000056
	19	SLU 1 (SO)(all)	-4.766364	16.274492	2.082125	0.000053	-0.003718	-0.000065
	20	SLU 1 (SO)(all)	-6.378234	16.274499	3.770175	-0.00008	-0.005679	-0.000057
	21	SLU 1 (SO)(all)	14.565601	14.159238	-0.294958	0.000034	0.000947	-0.000076
	22	SLU 1 (SO)(all)	17.684172	14.15923	-0.748072	0.000077	0.002533	-0.000066
	23	SLU 1 (SO)(all)	14.587205	14.147423	-0.484476	0.000034	0.000947	-0.000076
	24	SLU 1 (SO)(all)	17.705777	14.147428	-0.844665	0.00008	0.002533	-0.000066
	25	SLU 1 (SO)(all)	14.544096	14.171329	-0.110377	0.000036	0.000947	-0.000076
	26	SLU 1 (SO)(all)	17.662525	14.17133	-0.807033	0.00008	0.002533	-0.000066
	43	SLU 1 (SO)(all)	-					
			12.672018	14.228107	-0.294956	0.000034	-0.000947	0.000076
	44	SLU 1 (SO)(all)	-					
			15.132048	14.12653	-0.748068	0.000075	-0.002533	0.000066
	45	SLU 1 (SO)(all)	-					
			12.881763	14.228107	-0.20519	0.000034	-0.000947	0.000076
	46	SLU 1 (SO)(all)	-15.30179	14.126529	-0.743448	0.000075	-0.002533	0.000066
	47	SLU 1 (SO)(all)	-					
			12.515062	14.228107	-0.388228	0.000034	-0.000947	0.000076
	48	SLU 1 (SO)(all)	-					
			14.963873	14.126529	-0.897693	0.000075	-0.002533	0.000066
	51	SLU 1 (SO)(all)	-					
			12.692404	14.234763	-0.20519	0.000034	-0.000947	0.000076
	52	SLU 1 (SO)(all)	-					
			15.321044	14.140399	-0.743448	0.000075	-0.002533	0.000066
	53	SLU 1 (SO)(all)	-					
			12.325704	14.234756	-0.388228	0.000034	-0.000947	0.000076
	54	SLU 1 (SO)(all)	-14.98161	14.140385	-0.897693	0.000075	-0.002533	0.000066
	55	SLU 1 (SO)(all)	12.672018	14.225812	-0.294956	0.000034	0.000947	-0.000076
	56	SLU 1 (SO)(all)	15.132047	14.128452	-0.748068	0.000077	0.002533	-0.000066

	57	SLU 1 (SO)(all)	12.881133	14.225812	-0.205156	0.000034	0.000947	-0.000076
	58	SLU 1 (SO)(all)	15.302095	14.128452	-0.737617	0.000077	0.002533	-0.000066
	59	SLU 1 (SO)(all)	12.515692	14.225812	-0.388262	0.000034	0.000947	-0.000076
	60	SLU 1 (SO)(all)	14.963568	14.128452	-0.903525	0.000077	0.002533	-0.000066
	63	SLU 1 (SO)(all)	12.691774	14.23247	-0.205156	0.000034	0.000947	-0.000076
	64	SLU 1 (SO)(all)	15.321349	14.142746	-0.737617	0.000077	0.002533	-0.000066
	65	SLU 1 (SO)(all)	12.326333	14.232463	-0.388261	0.000034	0.000947	-0.000076
	66	SLU 1 (SO)(all)	14.981305	14.142732	-0.903524	0.000077	0.002533	-0.000066
			-					
	67	SLU 1 (SO)(all)	17.522072	16.507854	-1.682148	0.000049	0.003947	0.000066
			-					
	68	SLU 1 (SO)(all)	23.666211	16.230287	-2.093407	-0.000079	0.00597	0.000057
	69	SLU 1 (SO)(all)	17.522072	16.506456	-1.682148	0.000049	-0.003947	-0.000066
	70	SLU 1 (SO)(all)	23.666211	16.231552	-2.093407	-0.000078	-0.00597	-0.000057
			-					
	71	SLU 1 (SO)(all)	17.403156	16.507854	-1.816834	0.000049	0.003947	0.000066
			-					
	72	SLU 1 (SO)(all)	23.526977	16.230287	-2.153776	-0.000079	0.00597	0.000057
	73	SLU 1 (SO)(all)	17.402843	16.506456	-1.816814	0.000049	-0.003947	-0.000066
	74	SLU 1 (SO)(all)	23.52713	16.231552	-2.155787	-0.000078	-0.00597	-0.000057
			-					
	75	SLU 1 (SO)(all)	17.702857	16.507854	-1.548169	0.000049	0.003947	0.000066
			-					
	76	SLU 1 (SO)(all)	23.808004	16.230287	-2.19047	-0.000078	0.00597	0.000057
	77	SLU 1 (SO)(all)	17.70317	16.506456	-1.548189	0.000049	-0.003947	-0.000066
	78	SLU 1 (SO)(all)	23.807851	16.231552	-2.188459	-0.000078	-0.00597	-0.000057
	83	SLU 1 (SO)(all)	-18.18935	16.5176	-1.816832	0.000049	0.003947	0.000066
			-					
	84	SLU 1 (SO)(all)	24.709044	16.234133	-2.153774	-0.000079	0.00597	0.000057
	85	SLU 1 (SO)(all)	18.189037	16.5162	-1.816812	0.000049	-0.003947	-0.000066
	86	SLU 1 (SO)(all)	24.709197	16.235544	-2.155785	-0.000078	-0.00597	-0.000057
			-					
	87	SLU 1 (SO)(all)	18.489051	16.517715	-1.548168	0.000049	0.003947	0.000066
			-					
	88	SLU 1 (SO)(all)	24.990073	16.234266	-2.190469	-0.000078	0.00597	0.000057
	89	SLU 1 (SO)(all)	18.489364	16.516315	-1.548188	0.000049	-0.003947	-0.000066
	90	SLU 1 (SO)(all)	24.989918	16.235677	-2.188458	-0.000078	-0.00597	-0.000057
			-					
	91	SLU 1 (SO)(all)	14.027781	14.52764	5.532699	0.000116	-0.0011	0.000074
	92	SLU 1 (SO)(all)	-16.98643	14.52764	15.301626	0.000203	-0.002466	0.000065
	93	SLU 1 (SO)(all)	14.027781	14.523434	5.532699	0.000116	0.0011	-0.000074
	94	SLU 1 (SO)(all)	16.986431	14.523435	15.301626	0.000209	0.002466	-0.000066
			-					
	95	SLU 1 (SO)(all)	12.806304	15.088235	17.693269	0.000154	-0.000957	0.000064
			-					
	96	SLU 1 (SO)(all)	15.124455	15.088235	37.207927	0.000235	-0.001365	0.000065
	97	SLU 1 (SO)(all)	12.806304	15.082854	17.693269	0.000154	0.000957	-0.000064

98	SLU 1 (SO)(all)	15.124455	15.082854	37.207924	0.000243	0.001365	-0.000065
99	SLU 1 (SO)(all)	-9.988471	15.620509	23.387114	0.000123	0.000552	0.00006
		-					
100	SLU 1 (SO)(all)	11.827164	15.62051	41.485736	-0.000157	0.001341	0.000065
101	SLU 1 (SO)(all)	9.988472	15.616258	23.387114	0.000123	-0.000552	-0.00006
102	SLU 1 (SO)(all)	11.827164	15.616259	41.485736	0.000159	-0.001341	-0.000064
103	SLU 1 (SO)(all)	-7.256023	15.953111	17.593165	0.000089	0.002037	0.00006
104	SLU 1 (SO)(all)	-8.982278	15.953112	29.287127	-0.000117	0.003465	0.000062
105	SLU 1 (SO)(all)	7.256023	15.95024	17.593165	0.000089	-0.002037	-0.00006
106	SLU 1 (SO)(all)	8.982277	15.950241	29.287129	-0.000115	-0.003465	-0.000062
				-			
107	SLU 1 (SO)(all)	7.551129	16.849567	46.924466	0.000133	0.006035	0.000071
				-			
108	SLU 1 (SO)(all)	9.927755	16.84957	67.567763	-0.000177	0.008621	0.000051
				-			
109	SLU 1 (SO)(all)	-7.551129	16.848497	46.924466	0.000133	-0.006035	-0.000071
				-			
110	SLU 1 (SO)(all)	-9.927754	16.8485	67.567761	-0.000177	-0.008621	-0.000051
				-			
111	SLU 1 (SO)(all)	8.274054	17.267381	99.550944	0.000219	0.007111	0.000063
				-			
112	SLU 1 (SO)(all)	10.890567	17.267382	141.59028	-0.000292	0.009972	0.000046
				-			
113	SLU 1 (SO)(all)	-8.274054	17.266581	99.550944	0.000219	-0.007111	-0.000063
		-		-			
114	SLU 1 (SO)(all)	10.890567	17.266581	141.59028	-0.000292	-0.009972	-0.000046
				-			
115	SLU 1 (SO)(all)	5.824298	17.735102	181.46277	0.000342	0.005783	0.000039
				-			
116	SLU 1 (SO)(all)	7.742959	17.735102	255.69701	-0.000464	0.008113	0.000028
				-			
117	SLU 1 (SO)(all)	0	17.90749	220.02083	0.000396	0	-0.000008
				-			
118	SLU 1 (SO)(all)	0.199676	17.90749	309.59946	-0.000545	0.000765	-0.000006
				-			
119	SLU 1 (SO)(all)	-5.824298	17.734708	181.46277	0.000342	-0.005783	-0.000039
				-			
120	SLU 1 (SO)(all)	-7.742958	17.734708	255.69701	-0.000464	-0.008113	-0.000028
		-					
121	SLU 1 (SO)(all)	13.022701	15.022104	16.25707	0.000154	-0.001045	0.000065
		-					
122	SLU 1 (SO)(all)	15.399788	15.022104	35.142203	0.000239	-0.001575	0.000065
123	SLU 1 (SO)(all)	13.022701	15.016742	16.25707	0.000154	0.001045	-0.000065
124	SLU 1 (SO)(all)	15.399788	15.016742	35.142204	0.000247	0.001575	-0.000064
125	SLU 1 (SO)(all)	-6.729214	16.007343	15.715485	0.000083	0.00231	0.000061
126	SLU 1 (SO)(all)	-8.422662	16.007345	25.973229	-0.000111	0.003835	0.000062
				-			
127	SLU 1 (SO)(all)	8.09688	17.052289	70.420986	0.000172	0.006665	0.000068
128	SLU 1 (SO)(all)	10.634106	17.052289	-	-0.000228	0.009417	0.000049

					100.76953			
	129	SLU 1 (SO)(all)	4.764056	17.800084	-	0.000362	0.004879	0.000033
	130	SLU 1 (SO)(all)	6.355038	17.800084	-	-0.000493	0.00688	0.000023
	131	SLU 1 (SO)(all)	-4.764056	17.799778	-	0.000362	-0.004879	-0.000033
	132	SLU 1 (SO)(all)	-6.355038	17.799777	-	-0.000492	-0.00688	-0.000023
	133	SLU 1 (SO)(all)	-8.09688	17.051344	-	0.000172	-0.006665	-0.000068
	134	SLU 1 (SO)(all)	-	-	-	-0.000228	-0.009417	-0.000049
	135	SLU 1 (SO)(all)	10.634104	17.051345	100.76953	0.000083	-0.00231	-0.000061
	136	SLU 1 (SO)(all)	6.729214	16.0047	15.715485	-0.000109	-0.003835	-0.000062
	1	SLU 1 (NE)(all)	8.422662	16.004702	25.973229	-0.000088	-0.002533	0.000082
	2	SLU 1 (NE)(all)	-	-	-	-0.000046	-0.000947	0.000077
	3	SLU 1 (NE)(all)	17.684172	14.095068	-0.748072	-0.000091	-0.002533	0.000082
	4	SLU 1 (NE)(all)	14.565601	14.095072	-0.294958	-0.000049	-0.000947	0.000077
	5	SLU 1 (NE)(all)	-	-	-	-0.00009	-0.002533	0.000082
	6	SLU 1 (NE)(all)	17.662523	14.111082	-0.807033	-0.000046	-0.000947	0.000077
	7	SLU 1 (NE)(all)	14.544096	14.111077	-0.110377	0.00006	0.00597	0.000066
	8	SLU 1 (NE)(all)	-	-	-	-0.000069	0.003947	0.000069
	9	SLU 1 (NE)(all)	17.705777	14.082393	-0.844665	0.000061	0.005679	0.000065
	10	SLU 1 (NE)(all)	14.587205	14.082392	-0.484476	-0.000072	0.003718	0.000069
	11	SLU 1 (NE)(all)	6.724305	16.541373	-2.093464	0.000064	0.006259	0.000067
	12	SLU 1 (NE)(all)	5.03614	16.541369	-1.682193	-0.000076	0.004175	0.000068
	15	SLU 1 (NE)(all)	6.378235	16.482371	3.770175	0.00006	-0.00597	-0.000066
	16	SLU 1 (NE)(all)	4.766364	16.482372	2.082125	-0.000068	-0.003947	-0.000069
	17	SLU 1 (NE)(all)	7.067845	16.616952	-8.202851	0.000065	-0.006259	-0.000067
	18	SLU 1 (NE)(all)	5.304478	16.616953	-5.822043	-0.000075	-0.004175	-0.000068
	19	SLU 1 (NE)(all)	-6.724305	16.54	-2.093464	0.000061	-0.005679	-0.000065
	20	SLU 1 (NE)(all)	-5.036139	16.539996	-1.682193	-0.000072	-0.003718	-0.000069
	21	SLU 1 (NE)(all)	-7.067845	16.615612	-8.202851	-0.000044	0.000947	-0.000077
	22	SLU 1 (NE)(all)	-5.304478	16.615613	-5.822043	-0.00009	0.002533	-0.000082
	23	SLU 1 (NE)(all)	-6.378235	16.480856	3.770175	-0.000044	0.000947	-0.000077
	24	SLU 1 (NE)(all)	-4.766364	16.480857	2.082125	0.000065	-0.006259	-0.000067
	25	SLU 1 (NE)(all)	17.684172	14.092748	-0.748072	-0.000075	-0.004175	-0.000068
	26	SLU 1 (NE)(all)	14.565601	14.092753	-0.294958	0.000061	-0.005679	-0.000065
	43	SLU 1 (NE)(all)	15.132047	14.091461	-0.748068	-0.000088	-0.002533	0.000082
	44	SLU 1 (NE)(all)	-	14.005117	-0.294956	-0.000046	0.000947	-0.000077

			12.672018					
	45	SLU 1 (NE)(all)	-					
			15.332741	14.091461	-0.933017	-0.000088	-0.002533	0.000082
	46	SLU 1 (NE)(all)	-					
			12.884317	14.005117	-0.420582	-0.000046	-0.000947	0.000077
	47	SLU 1 (NE)(all)	-					
			14.932921	14.091461	-0.710881	-0.000088	-0.002533	0.000082
	48	SLU 1 (NE)(all)	-					
			12.512845	14.005117	-0.172833	-0.000046	-0.000947	0.000077
	51	SLU 1 (NE)(all)	-					
			15.350475	14.097487	-0.933017	-0.000088	-0.002533	0.000082
	52	SLU 1 (NE)(all)	-					
			12.694959	13.996128	-0.420582	-0.000046	-0.000947	0.000077
	53	SLU 1 (NE)(all)	-					
			14.952178	14.09748	-0.710881	-0.000088	-0.002533	0.000082
	54	SLU 1 (NE)(all)	-					
			12.323487	13.996121	-0.172833	-0.000046	-0.000947	0.000077
	55	SLU 1 (NE)(all)	-					
			15.132047	14.089166	-0.748068	-0.000088	0.002533	-0.000082
	56	SLU 1 (NE)(all)	-					
			12.672018	14.007039	-0.294956	-0.000044	0.000947	-0.000077
	57	SLU 1 (NE)(all)	-					
			15.332111	14.089166	-0.932984	-0.000088	0.002533	-0.000082
	58	SLU 1 (NE)(all)	-					
			12.884621	14.007039	-0.414751	-0.000044	0.000947	-0.000077
	59	SLU 1 (NE)(all)	-					
			14.933551	14.089166	-0.710914	-0.000088	0.002533	-0.000082
	60	SLU 1 (NE)(all)	-					
			12.51254	14.007039	-0.178664	-0.000044	0.000947	-0.000077
	63	SLU 1 (NE)(all)	-					
			15.349846	14.095194	-0.932984	-0.000088	0.002533	-0.000082
	64	SLU 1 (NE)(all)	-					
			12.695263	13.998475	-0.414751	-0.000044	0.000947	-0.000077
	65	SLU 1 (NE)(all)	-					
			14.952808	14.095187	-0.710914	-0.000088	0.002533	-0.000082
	66	SLU 1 (NE)(all)	-					
			12.323182	13.998468	-0.178664	-0.000044	0.000947	-0.000077
	67	SLU 1 (NE)(all)	-					
			23.666211	16.52304	-2.093407	0.000059	0.00597	0.000066
	68	SLU 1 (NE)(all)	-					
			17.522072	16.296567	-1.682148	-0.000068	0.003947	0.000069
	69	SLU 1 (NE)(all)	-					
			23.666211	16.521641	-2.093407	0.000059	-0.00597	-0.000066
	70	SLU 1 (NE)(all)	-					
			17.522072	16.297832	-1.682148	-0.000068	-0.003947	-0.000069
	71	SLU 1 (NE)(all)	-					
			23.500468	16.52304	-2.137366	0.000059	0.00597	0.000066
	72	SLU 1 (NE)(all)	-					
			17.395401	16.296567	-1.495403	-0.000069	0.003947	0.000069
	73	SLU 1 (NE)(all)	-					
			23.500154	16.521641	-2.137346	0.000059	-0.00597	-0.000066
	74	SLU 1 (NE)(all)	-					
			17.395555	16.297831	-1.497415	-0.000068	-0.003947	-0.000069
	75	SLU 1 (NE)(all)	-					
			23.834514	16.52304	-2.206972	0.00006	0.00597	0.000066
	76	SLU 1 (NE)(all)	-					
			17.710868	16.296567	-1.869598	-0.000068	0.003947	0.000069
	77	SLU 1 (NE)(all)	-					
			23.834827	16.521641	-2.206992	0.00006	-0.00597	-0.000066
	78	SLU 1 (NE)(all)	-					
			17.710714	16.297831	-1.867587	-0.000067	-0.003947	-0.000069
	83	SLU 1 (NE)(all)	-					
			24.682535	16.531586	-2.137364	0.000059	0.00597	0.000066
	84	SLU 1 (NE)(all)	-					
				16.282932	-1.495402	-0.000069	0.003947	0.000069

			18.181595					
	85	SLU 1 (NE)(all)	24.682221	16.530186	-2.137344	0.000059	-0.00597	-0.000066
	86	SLU 1 (NE)(all)	18.181749	16.284342	-1.497413	-0.000068	-0.003947	-0.000069
	87	SLU 1 (NE)(all)	-25.01658	16.531709	-2.20697	0.00006	0.00597	0.000066
	88	SLU 1 (NE)(all)	-					
	88	SLU 1 (NE)(all)	18.497062	16.283046	-1.869597	-0.000068	0.003947	0.000069
	89	SLU 1 (NE)(all)	25.016893	16.530309	-2.20699	0.00006	-0.00597	-0.000066
	90	SLU 1 (NE)(all)	18.496908	16.284457	-1.867585	-0.000067	-0.003947	-0.000069
	91	SLU 1 (NE)(all)	-16.98643	14.600121	15.301626	-0.000231	-0.002466	0.00008
	92	SLU 1 (NE)(all)	-					
	92	SLU 1 (NE)(all)	14.027781	14.600118	5.532699	-0.000141	-0.0011	0.000076
	93	SLU 1 (NE)(all)	16.986431	14.595915	15.301626	-0.000231	0.002466	-0.00008
	94	SLU 1 (NE)(all)	14.027781	14.595912	5.532699	-0.000135	0.0011	-0.000076
	95	SLU 1 (NE)(all)	-					
	95	SLU 1 (NE)(all)	15.124455	15.304826	37.207927	-0.000271	-0.001365	0.000074
	96	SLU 1 (NE)(all)	-					
	96	SLU 1 (NE)(all)	12.806305	15.304825	17.693269	-0.000187	-0.000957	0.000073
	97	SLU 1 (NE)(all)	15.124455	15.299444	37.207924	-0.000271	0.001365	-0.000074
	98	SLU 1 (NE)(all)	12.806304	15.299443	17.693269	-0.00018	0.000957	-0.000073
	99	SLU 1 (NE)(all)	-					
	99	SLU 1 (NE)(all)	11.827163	15.87584	41.485736	-0.000186	0.001341	0.000069
	100	SLU 1 (NE)(all)	-9.988472	15.875837	23.387114	-0.000153	0.000552	0.000073
	101	SLU 1 (NE)(all)	11.827164	15.871589	41.485736	-0.000186	-0.001341	-0.000069
	102	SLU 1 (NE)(all)	9.988471	15.871587	23.387114	-0.000148	-0.000552	-0.000073
	103	SLU 1 (NE)(all)	-8.982278	16.183366	29.287127	-0.000119	0.003465	0.000066
	104	SLU 1 (NE)(all)	-7.256023	16.183364	17.593165	-0.000114	0.002037	0.000072
	105	SLU 1 (NE)(all)	8.982277	16.180495	29.287129	-0.000119	-0.003465	-0.000066
	106	SLU 1 (NE)(all)	7.256023	16.180493	17.593165	-0.000112	-0.002037	-0.000072
	107	SLU 1 (NE)(all)			-			
	107	SLU 1 (NE)(all)	9.927754	17.234466	67.567763	-0.000156	0.008621	0.000069
	108	SLU 1 (NE)(all)			-			
	108	SLU 1 (NE)(all)	7.551129	17.234466	46.924466	-0.000168	0.006035	0.000061
	109	SLU 1 (NE)(all)			-			
	109	SLU 1 (NE)(all)	-9.927754	17.233395	67.567761	-0.000155	-0.008621	-0.000069
	110	SLU 1 (NE)(all)			-			
	110	SLU 1 (NE)(all)	-7.551129	17.233396	46.924466	-0.000168	-0.006035	-0.000061
	111	SLU 1 (NE)(all)			-			
	111	SLU 1 (NE)(all)	10.890567	17.79347	141.59028	-0.000276	0.009972	0.000062
	112	SLU 1 (NE)(all)			-			
	112	SLU 1 (NE)(all)	8.274054	17.79347	99.550944	-0.000273	0.007111	0.000051
	113	SLU 1 (NE)(all)			-			
	113	SLU 1 (NE)(all)	10.890567	17.792669	141.59028	-0.000276	-0.009972	-0.000062
	114	SLU 1 (NE)(all)			-			
	114	SLU 1 (NE)(all)	-8.274053	17.792669	99.550944	-0.000273	-0.007111	-0.000051
	115	SLU 1 (NE)(all)			-			
	115	SLU 1 (NE)(all)	7.742959	18.431851	255.69701	-0.000469	0.008113	0.000036
	116	SLU 1 (NE)(all)			-			
	116	SLU 1 (NE)(all)	5.824298	18.431849	181.46277	-0.000424	0.005783	0.000032

117	SLU 1 (NE)(all)	0.199676	18.699717	309.59946	-	-0.000565	-0.000765	-0.000006
118	SLU 1 (NE)(all)	0	18.699714	220.02083	-	-0.000496	0	-0.000008
119	SLU 1 (NE)(all)	-7.742959	18.431457	255.69701	-	-0.000469	-0.008113	-0.000036
120	SLU 1 (NE)(all)	-5.824298	18.431455	181.46277	-	-0.000424	-0.005783	-0.000032
121	SLU 1 (NE)(all)	15.399788	15.226051	35.142203	-	-0.000275	-0.001575	0.000074
122	SLU 1 (NE)(all)	13.022701	15.226048	16.25707	-	-0.000187	-0.001045	0.000074
123	SLU 1 (NE)(all)	15.399788	15.22069	35.142204	-	-0.000275	0.001575	-0.000074
124	SLU 1 (NE)(all)	13.0227	15.220686	16.25707	-	-0.000179	0.001045	-0.000073
125	SLU 1 (NE)(all)	-8.422662	16.233215	25.973229	-	-0.000108	0.003835	0.000065
126	SLU 1 (NE)(all)	-6.729214	16.233214	15.715485	-	-0.000107	0.00231	0.000072
127	SLU 1 (NE)(all)	10.634105	17.506037	100.76953	-	-0.000208	0.009417	0.000067
128	SLU 1 (NE)(all)	8.09688	17.506037	70.420986	-	-0.000216	0.006665	0.000057
129	SLU 1 (NE)(all)	6.355038	18.524132	275.06297	-	-0.000503	0.00688	0.000029
130	SLU 1 (NE)(all)	4.764056	18.524128	195.35279	-	-0.000449	0.004879	0.000027
131	SLU 1 (NE)(all)	-6.355038	18.523825	275.06297	-	-0.000502	-0.00688	-0.000029
132	SLU 1 (NE)(all)	-4.764056	18.523822	195.35279	-	-0.000448	-0.004879	-0.000027
133	SLU 1 (NE)(all)	10.634105	17.505093	100.76953	-	-0.000208	-0.009417	-0.000067
134	SLU 1 (NE)(all)	-8.09688	17.505093	70.420986	-	-0.000215	-0.006665	-0.000057
135	SLU 1 (NE)(all)	8.422662	16.230572	25.973229	-	-0.000108	-0.003835	-0.000066
136	SLU 1 (NE)(all)	6.729214	16.230571	15.715485	-	-0.000105	-0.00231	-0.000072
1	SLU 2A (SO)(all)	29.135752	4.761504	-0.287915	-	0.000024	-0.000915	0.000028
2	SLU 2A (SO)(all)	-30.72937	4.761499	-0.551697	-	0.000045	-0.001721	0.000021
3	SLU 2A (SO)(all)	29.135751	4.765223	-0.109628	-	0.000026	-0.000915	0.000028
4	SLU 2A (SO)(all)	30.729297	4.765224	-0.492606	-	0.000046	-0.001721	0.000021
5	SLU 2A (SO)(all)	29.135757	4.757886	-0.471035	-	0.000024	-0.000915	0.000028
6	SLU 2A (SO)(all)	30.729375	4.757889	-0.696062	-	0.000046	-0.001721	0.000021
7	SLU 2A (SO)(all)	22.343359	5.44552	-1.635598	-	0.000036	0.003802	0.000024
8	SLU 2A (SO)(all)	-23.12189	5.445507	-1.832418	-	-0.000046	0.00483	0.000019
9	SLU 2A (SO)(all)	22.708468	5.427202	1.989169	-	0.000038	0.003581	0.000024

	10	SLU 2A (SO)(all)	-	23.504859	5.427204	2.851203	-0.000047	0.004577	0.000019
	11	SLU 2A (SO)(all)	-	21.978248	5.465339	-5.62465	0.000039	0.004023	0.000025
	12	SLU 2A (SO)(all)	-	22.738264	5.465342	-6.830022	-0.000005	0.005083	0.000018
	15	SLU 2A (SO)(all)	-	23.958227	5.444148	-1.636402	0.000036	-0.003832	-0.000024
	16	SLU 2A (SO)(all)	-	24.858773	5.444135	-1.833222	-0.000045	-0.004861	-0.000019
	17	SLU 2A (SO)(all)	-	24.322684	5.464	-5.655768	0.000004	-0.004053	-0.000025
	18	SLU 2A (SO)(all)	-	25.263035	5.464003	-6.86114	-0.000049	-0.005113	-0.000018
	19	SLU 2A (SO)(all)	-	23.591391	5.425686	2.018405	0.000038	-0.00361	-0.000024
	20	SLU 2A (SO)(all)	-	24.451453	5.42569	2.880439	-0.000046	-0.004607	-0.000019
	21	SLU 2A (SO)(all)	-	17.114939	4.759186	-0.281359	0.000024	0.00091	-0.000028
	22	SLU 2A (SO)(all)	-	17.761692	4.759181	-0.545141	0.000047	0.001716	-0.000021
	23	SLU 2A (SO)(all)	-	17.114936	4.755578	-0.463529	0.000024	0.00091	-0.000028
	24	SLU 2A (SO)(all)	-	17.761688	4.755582	-0.688556	0.000049	0.001716	-0.000021
	25	SLU 2A (SO)(all)	-	17.114655	4.76284	-0.103857	0.000026	0.00091	-0.000028
	26	SLU 2A (SO)(all)	-	17.761278	4.76284	-0.486835	0.000048	0.001717	-0.000021
	43	SLU 2A (SO)(all)	-	-27.30612	4.809324	-0.287913	0.000024	-0.000915	0.000028
	44	SLU 2A (SO)(all)	-	28.619177	4.731571	-0.551694	0.000045	-0.001721	0.000021
	45	SLU 2A (SO)(all)	-	27.383323	4.809324	-0.223018	0.000024	-0.000915	0.000028
	46	SLU 2A (SO)(all)	-	28.671581	4.731571	-0.546312	0.000045	-0.001721	0.000021
	47	SLU 2A (SO)(all)	-	27.256439	4.809324	-0.35444	0.000024	-0.000915	0.000028
	48	SLU 2A (SO)(all)	-	28.568021	4.731571	-0.651787	0.000045	-0.001721	0.000021
	51	SLU 2A (SO)(all)	-	27.200359	4.814107	-0.223018	0.000024	-0.000915	0.000028
	52	SLU 2A (SO)(all)	-	28.619231	4.740051	-0.546312	0.000045	-0.001721	0.000021
	53	SLU 2A (SO)(all)	-	27.073476	4.8141	-0.35444	0.000024	-0.000915	0.000028
	54	SLU 2A (SO)(all)	-	28.515065	4.740039	-0.651787	0.000045	-0.001721	0.000021
	55	SLU 2A (SO)(all)	-	18.935072	4.807029	-0.281357	0.000024	0.00091	-0.000028

	56	SLU 2A (SO)(all)	-	19.479177	4.733495	-0.545138	0.000047	0.001716	-0.000021
	57	SLU 2A (SO)(all)	-	18.886021	4.807029	-0.216429	0.000024	0.00091	-0.000028
	58	SLU 2A (SO)(all)	-	19.433714	4.733495	-0.533925	0.000047	0.001716	-0.000021
	59	SLU 2A (SO)(all)	-	19.011646	4.807029	-0.347918	0.000024	0.00091	-0.000028
	60	SLU 2A (SO)(all)	-	19.526309	4.733495	-0.651063	0.000047	0.001716	-0.000021
	63	SLU 2A (SO)(all)	-	19.068034	4.811815	-0.216429	0.000024	0.00091	-0.000028
	64	SLU 2A (SO)(all)	-	19.718567	4.742399	-0.533925	0.000047	0.001716	-0.000021
	65	SLU 2A (SO)(all)	-	19.193659	4.811808	-0.347918	0.000024	0.00091	-0.000028
	66	SLU 2A (SO)(all)	-	19.810552	4.742387	-0.651063	0.000047	0.001716	-0.000021
	67	SLU 2A (SO)(all)	-	-36.02896	5.573337	-1.635554	0.000036	0.003802	0.000024
	68	SLU 2A (SO)(all)	-	39.139964	5.373708	-1.832369	-0.000046	0.00483	0.000019
	69	SLU 2A (SO)(all)	-	-10.16135	5.571939	-1.636358	0.000036	-0.003832	-0.000024
	70	SLU 2A (SO)(all)	-	11.331154	5.374973	-1.833173	-0.000045	-0.004861	-0.000019
	71	SLU 2A (SO)(all)	-	35.994272	5.573337	-1.732692	0.000035	0.003802	0.000024
	72	SLU 2A (SO)(all)	-	39.098023	5.373708	-1.833795	-0.000046	0.00483	0.000019
	73	SLU 2A (SO)(all)	-	10.228362	5.571939	-1.733475	0.000035	-0.003832	-0.000024
	74	SLU 2A (SO)(all)	-	11.373554	5.374973	-1.83661	-0.000046	-0.004861	-0.000019
	75	SLU 2A (SO)(all)	-	36.095648	5.573337	-1.538209	0.000036	0.003802	0.000024
	76	SLU 2A (SO)(all)	-	39.183328	5.373708	-1.900768	-0.000046	0.00483	0.000019
	77	SLU 2A (SO)(all)	-	10.126359	5.571939	-1.539032	0.000036	-0.003832	-0.000024
	78	SLU 2A (SO)(all)	-	11.291234	5.374973	-1.89956	-0.000045	-0.004861	-0.000019
	83	SLU 2A (SO)(all)	-	36.754581	5.58037	-1.73269	0.000035	0.003802	0.000024
	84	SLU 2A (SO)(all)	-	40.057501	5.374152	-1.833793	-0.000046	0.00483	0.000019
	85	SLU 2A (SO)(all)	-	-9.461868	5.57897	-1.733474	0.000035	-0.003832	-0.000024
	86	SLU 2A (SO)(all)	-	-10.7087	5.375563	-1.836608	-0.000046	-0.004861	-0.000019
	87	SLU 2A (SO)(all)	-	36.855957	5.580481	-1.538207	0.000036	0.003802	0.000024
	88	SLU 2A (SO)(all)	-	40.142808	5.374273	-1.900767	-0.000046	0.00483	0.000019

89	SLU 2A (SO)(all)	-9.359865	5.579082	-1.539031	0.000036	-0.003832	-0.000024
90	SLU 2A (SO)(all)	-10.62638	5.375684	-1.899559	-0.000045	-0.004861	-0.000019
91	SLU 2A (SO)(all)	29.240764	4.873465	5.320981	0.00008	-0.001058	0.000027
92	SLU 2A (SO)(all)	-30.75507	4.873465	10.288407	0.000115	-0.001753	0.000021
93	SLU 2A (SO)(all)	17.004859	4.86926	5.366734	0.00008	0.001069	-0.000027
94	SLU 2A (SO)(all)	17.515746	4.869261	10.33416	0.000121	0.001764	-0.000021
95	SLU 2A (SO)(all)	29.086091	5.043424	17.019817	0.000105	-0.00092	0.000022
96	SLU 2A (SO)(all)	30.267363	5.043424	26.943389	0.000127	-0.001124	0.000022
97	SLU 2A (SO)(all)	17.167203	5.038043	17.221685	0.000106	0.000931	-0.000022
98	SLU 2A (SO)(all)	17.483011	5.038043	27.145257	0.000134	0.001135	-0.000022
99	SLU 2A (SO)(all)	-27.38991	5.209354	22.498732	0.000084	0.000528	0.00002
100	SLU 2A (SO)(all)	28.310131	5.209355	31.703431	-0.000093	0.000928	0.000023
101	SLU 2A (SO)(all)	18.882946	5.205104	22.741723	0.000084	-0.000535	-0.00002
102	SLU 2A (SO)(all)	19.197758	5.205105	31.946421	-0.000088	-0.000936	-0.000023
103	SLU 2A (SO)(all)	25.374369	5.319942	16.929119	0.000062	0.001958	0.000021
104	SLU 2A (SO)(all)	26.278537	5.319943	22.878076	-0.000069	0.002684	0.000023
105	SLU 2A (SO)(all)	20.912419	5.317072	17.100616	0.000062	-0.001977	-0.000021
106	SLU 2A (SO)(all)	21.470297	5.317072	23.049574	-0.000067	-0.002703	-0.000022
107	SLU 2A (SO)(all)	-19.01612	5.619258	45.279849	0.000092	0.00583	0.000028
108	SLU 2A (SO)(all)	19.607451	5.619259	55.773579	-0.000104	0.007148	0.000015
109	SLU 2A (SO)(all)	27.281526	5.618188	-45.50166	0.000092	-0.005851	-0.000028
110	SLU 2A (SO)(all)	28.543063	5.618189	55.995389	-0.000104	-0.007169	-0.000015
111	SLU 2A (SO)(all)	17.531622	5.759407	96.128852	0.000151	0.006878	0.000026
112	SLU 2A (SO)(all)	17.972896	5.759407	117.55935	-0.000173	0.008347	0.000014
113	SLU 2A (SO)(all)	28.759452	5.758606	96.459431	0.000151	-0.006886	-0.000026
114	SLU 2A (SO)(all)	30.144874	5.758607	117.88993	-0.000173	-0.008355	-0.000014
115	SLU 2A (SO)(all)	18.700249	5.91617	175.39611	0.000237	0.005603	0.000017

	116	SLU 2A (SO)(all)	-	18.934139	5.91617	213.46157	-0.000276	0.006826	0.000009
	117	SLU 2A (SO)(all)	-	23.136508	5.973835	212.81543	0.000276	0.000013	-0.000004
	118	SLU 2A (SO)(all)	-	23.239475	5.973835	258.93615	-0.000324	0.000422	-0.000003
	119	SLU 2A (SO)(all)	-	-27.57879	5.915776	175.67363	0.000237	-0.005588	-0.000017
	120	SLU 2A (SO)(all)	-	28.594174	5.915776	213.73909	-0.000276	-0.006811	-0.000009
	121	SLU 2A (SO)(all)	-	29.169608	5.023554	15.64006	0.000105	-0.001005	0.000022
	122	SLU 2A (SO)(all)	-	30.386506	5.023554	25.243425	0.000129	-0.001273	0.000022
	123	SLU 2A (SO)(all)	-	17.081909	5.018193	15.825655	0.000106	0.001017	-0.000022
	124	SLU 2A (SO)(all)	-	17.404738	5.018193	25.429021	0.000137	0.001285	-0.000022
	125	SLU 2A (SO)(all)	-	24.968922	5.337963	15.121687	0.000057	0.002221	0.000021
	126	SLU 2A (SO)(all)	-	-25.86053	5.337964	20.340512	-0.000065	0.002996	0.000022
	127	SLU 2A (SO)(all)	-	18.121556	5.68727	67.975379	0.000118	0.006443	0.000028
	128	SLU 2A (SO)(all)	-	-18.64188	5.68727	83.420611	-0.000135	0.007849	0.000014
	129	SLU 2A (SO)(all)	-	19.465437	5.937931	188.85357	0.000251	0.00473	0.000014
	130	SLU 2A (SO)(all)	-	-19.65986	5.937931	229.77773	-0.000293	0.005791	0.000007
	131	SLU 2A (SO)(all)	-	26.811438	5.937624	189.08515	0.000251	-0.004711	-0.000014
	132	SLU 2A (SO)(all)	-	27.654062	5.937624	230.00931	-0.000293	-0.005772	-0.000007
	133	SLU 2A (SO)(all)	-	28.173435	5.686326	68.260104	0.000118	-0.006458	-0.000028
	134	SLU 2A (SO)(all)	-	29.516129	5.686326	83.705336	-0.000134	-0.007864	-0.000014
	135	SLU 2A (SO)(all)	-	21.320161	5.335321	15.274098	0.000058	-0.002242	-0.000021
	136	SLU 2A (SO)(all)	-	21.925161	5.335322	20.492923	-0.000063	-0.003017	-0.000022
	1	SLU 2A (NE)(all)	-	-30.72937	4.725433	-0.551697	-0.000049	-0.001721	0.000031
	2	SLU 2A (NE)(all)	-	29.135753	4.725435	-0.287915	-0.000028	-0.000915	0.000027
	3	SLU 2A (NE)(all)	-	30.729297	4.731246	-0.492606	-0.000051	-0.001721	0.000031
	4	SLU 2A (NE)(all)	-	29.135751	4.731242	-0.109628	-0.00003	-0.000915	0.000027
	5	SLU 2A (NE)(all)	-	30.729374	4.721579	-0.696062	-0.000051	-0.001721	0.000031

	6	SLU 2A (NE)(all)	-	29.135757	4.721579	-0.471035	-0.000028	-0.000915	0.000027
	7	SLU 2A (NE)(all)	-	23.121889	5.545559	-1.832418	0.00004	0.00483	0.000024
	8	SLU 2A (NE)(all)	-	22.343359	5.545553	-1.635598	-0.000042	0.003802	0.000025
	9	SLU 2A (NE)(all)	-	23.504858	5.52407	2.851203	0.000041	0.004577	0.000024
	10	SLU 2A (NE)(all)	-	22.708468	5.524071	1.989169	-0.000044	0.003581	0.000025
	11	SLU 2A (NE)(all)	-	22.738264	5.573931	-6.830022	0.000043	0.005083	0.000025
	12	SLU 2A (NE)(all)	-	21.978249	5.573932	-5.62465	-0.000046	0.004023	0.000024
	15	SLU 2A (NE)(all)	-	24.858773	5.544187	-1.833222	0.00004	-0.004861	-0.000024
	16	SLU 2A (NE)(all)	-	23.958228	5.544181	-1.636402	-0.000041	-0.003832	-0.000025
	17	SLU 2A (NE)(all)	-	25.263035	5.572592	-6.86114	0.000043	-0.005113	-0.000025
	18	SLU 2A (NE)(all)	-	24.322685	5.572593	-5.655768	-0.000046	-0.004053	-0.000024
	19	SLU 2A (NE)(all)	-	24.451453	5.522555	2.880439	0.000041	-0.004607	-0.000024
	20	SLU 2A (NE)(all)	-	23.591392	5.522556	2.018405	-0.000043	-0.00361	-0.000025
	21	SLU 2A (NE)(all)	-	17.761691	4.723115	-0.545141	-0.000049	0.001716	-0.000031
	22	SLU 2A (NE)(all)	-	-17.11494	4.723117	-0.281359	-0.000026	0.00091	-0.000027
	23	SLU 2A (NE)(all)	-	17.761688	4.719272	-0.688556	-0.000051	0.001716	-0.000031
	24	SLU 2A (NE)(all)	-	17.114936	4.719272	-0.463529	-0.000026	0.00091	-0.000027
	25	SLU 2A (NE)(all)	-	17.761278	4.728863	-0.486835	-0.000051	0.001717	-0.000031
	26	SLU 2A (NE)(all)	-	17.114656	4.728859	-0.103857	-0.000028	0.00091	-0.000027
	43	SLU 2A (NE)(all)	-	28.619177	4.736589	-0.551694	-0.000049	-0.001721	0.000031
	44	SLU 2A (NE)(all)	-	27.306121	4.669919	-0.287913	-0.000028	-0.000915	0.000027
	45	SLU 2A (NE)(all)	-	28.690934	4.736589	-0.664364	-0.000049	-0.001721	0.000031
	46	SLU 2A (NE)(all)	-	-27.37956	4.669919	-0.365236	-0.000028	-0.000915	0.000027
	47	SLU 2A (NE)(all)	-	28.548667	4.736589	-0.535443	-0.000049	-0.001721	0.000031
	48	SLU 2A (NE)(all)	-	27.260401	4.669919	-0.212234	-0.000028	-0.000915	0.000027
	51	SLU 2A (NE)(all)	-	28.637977	4.740929	-0.664364	-0.000049	-0.001721	0.000031

	52	SLU 2A (NE)(all)	-	27.196597	4.664373	-0.365236	-0.000028	-0.000915	0.000027
	53	SLU 2A (NE)(all)	-	28.496318	4.740922	-0.535443	-0.000049	-0.001721	0.000031
	54	SLU 2A (NE)(all)	-	27.077438	4.664366	-0.212234	-0.000028	-0.000915	0.000027
	55	SLU 2A (NE)(all)	-	19.479177	4.734295	-0.545138	-0.000049	0.001716	-0.000031
	56	SLU 2A (NE)(all)	-	18.935072	4.671843	-0.281357	-0.000026	0.00091	-0.000027
	57	SLU 2A (NE)(all)	-	19.403716	4.734295	-0.657776	-0.000049	0.001716	-0.000031
	58	SLU 2A (NE)(all)	-	18.889049	4.671843	-0.352849	-0.000026	0.00091	-0.000027
	59	SLU 2A (NE)(all)	-	19.556306	4.734295	-0.528921	-0.000049	0.001716	-0.000031
	60	SLU 2A (NE)(all)	-	19.008817	4.671843	-0.211509	-0.000026	0.00091	-0.000027
	63	SLU 2A (NE)(all)	-	19.687959	4.738637	-0.657775	-0.000049	0.001716	-0.000031
	64	SLU 2A (NE)(all)	-	19.071062	4.666721	-0.352849	-0.000026	0.00091	-0.000027
	65	SLU 2A (NE)(all)	-	-19.84116	4.73863	-0.528921	-0.000049	0.001716	-0.000031
	66	SLU 2A (NE)(all)	-	19.190831	4.666714	-0.211509	-0.000026	0.00091	-0.000027
	67	SLU 2A (NE)(all)	-	39.139964	5.581244	-1.832369	0.00004	0.00483	0.000024
	68	SLU 2A (NE)(all)	-	-36.02896	5.395209	-1.635554	-0.000042	0.003802	0.000025
	69	SLU 2A (NE)(all)	-	11.331154	5.579846	-1.833173	0.00004	-0.004861	-0.000024
	70	SLU 2A (NE)(all)	-	-10.16135	5.396474	-1.636358	-0.000041	-0.003832	-0.000025
	71	SLU 2A (NE)(all)	-	39.080862	5.581244	-1.883067	0.000039	0.00483	0.000024
	72	SLU 2A (NE)(all)	-	35.993236	5.395209	-1.520649	-0.000042	0.003802	0.000025
	73	SLU 2A (NE)(all)	-	11.393863	5.579846	-1.883851	0.000039	-0.004861	-0.000024
	74	SLU 2A (NE)(all)	-	-10.22916	5.396474	-1.523463	-0.000041	-0.003832	-0.000025
	75	SLU 2A (NE)(all)	-	39.200488	5.581244	-1.851532	0.00004	0.00483	0.000024
	76	SLU 2A (NE)(all)	-	36.096913	5.395209	-1.750258	-0.000042	0.003802	0.000025
	77	SLU 2A (NE)(all)	-	11.270924	5.579846	-1.852356	0.00004	-0.004861	-0.000024
	78	SLU 2A (NE)(all)	-	10.125791	5.396474	-1.749051	-0.000041	-0.003832	-0.000025
	83	SLU 2A (NE)(all)	-	40.040342	5.587609	-1.883066	0.000039	0.00483	0.000024
	84	SLU 2A (NE)(all)	-	36.753546	5.386815	-1.520647	-0.000042	0.003802	0.000025

	85	SLU 2A (NE)(all)	-	10.729009	5.586209	-1.88385	0.000039	-0.004861	-0.000024
	86	SLU 2A (NE)(all)	-9.462666	5.388226	-1.523462	-0.000041	-0.003832	-0.000025	
	87	SLU 2A (NE)(all)	-	40.159967	5.587724	-1.851531	0.000004	0.00483	0.000024
	88	SLU 2A (NE)(all)	-	36.857223	5.386926	-1.750257	-0.000042	0.003802	0.000025
	89	SLU 2A (NE)(all)	-10.60607	5.586325	-1.852354	0.000004	-0.004861	-0.000024	
	90	SLU 2A (NE)(all)	-9.359297	5.388338	-1.749049	-0.000041	-0.003832	-0.000025	
	91	SLU 2A (NE)(all)	-	30.755069	4.917489	10.288407	-0.000125	-0.001753	0.00003
	92	SLU 2A (NE)(all)	-	29.240764	4.917487	5.320981	-0.000088	-0.001058	0.000027
	93	SLU 2A (NE)(all)	-	17.515746	4.913285	10.33416	-0.000125	0.001764	-0.00003
	94	SLU 2A (NE)(all)	-	17.004859	4.913283	5.366734	-0.000082	0.001069	-0.000027
	95	SLU 2A (NE)(all)	-	30.267362	5.168224	26.943389	-0.00014	-0.001124	0.000027
	96	SLU 2A (NE)(all)	-	29.086091	5.168223	17.019817	-0.000116	-0.00092	0.000027
	97	SLU 2A (NE)(all)	-17.48301	5.162843	27.145257	-0.000139	0.001135	-0.000027	
	98	SLU 2A (NE)(all)	-	17.167203	5.162842	17.221685	-0.000109	0.000931	-0.000026
	99	SLU 2A (NE)(all)	-	28.310131	5.350009	31.703431	-0.000088	0.000928	0.000024
	100	SLU 2A (NE)(all)	-	27.389911	5.350007	22.498732	-0.000094	0.000528	0.000028
	101	SLU 2A (NE)(all)	-	19.197758	5.345759	31.946421	-0.000088	-0.000936	-0.000025
	102	SLU 2A (NE)(all)	-	18.882946	5.345757	22.741723	-0.00009	-0.000535	-0.000028
	103	SLU 2A (NE)(all)	-	26.278536	5.439189	22.878076	0.000061	0.002684	0.000023
	104	SLU 2A (NE)(all)	-	25.374369	5.439187	16.929119	-0.00007	0.001958	0.000028
	105	SLU 2A (NE)(all)	-	21.470296	5.436318	23.049574	0.000061	-0.002703	-0.000023
	106	SLU 2A (NE)(all)	-	20.912419	5.436316	17.100616	-0.000067	-0.001977	-0.000028
	107	SLU 2A (NE)(all)	-19.60745	5.810613	55.773579	0.000092	0.007148	0.000027	
	108	SLU 2A (NE)(all)	-19.01612	5.810614	45.279849	-0.000103	0.00583	0.00002	
	109	SLU 2A (NE)(all)	-	28.543062	5.809543	55.995389	0.000093	-0.007169	-0.000028
	110	SLU 2A (NE)(all)	-	27.281527	5.809544	-45.50166	-0.000103	-0.005851	-0.00002
	111	SLU 2A (NE)(all)	-	17.972896	6.028843	117.55935	0.000155	0.008347	0.000025

	112	SLU 2A (NE)(all)	-	17.531622	6.028843	96.128852	-0.000169	0.006878	0.000016
	113	SLU 2A (NE)(all)	-	30.144873	6.028042	117.88993	0.000155	-0.008355	-0.000025
	114	SLU 2A (NE)(all)	-	28.759452	6.028043	96.459431	-0.000169	-0.006886	-0.000016
	115	SLU 2A (NE)(all)	-	18.934138	6.284788	213.46157	0.000249	0.006826	0.000015
	116	SLU 2A (NE)(all)	-	18.700249	6.284786	175.39611	-0.000264	0.005603	0.000011
	117	SLU 2A (NE)(all)	-	23.239475	6.40358	258.93615	0.00029	0.000422	-0.000003
	118	SLU 2A (NE)(all)	-	23.136509	6.403579	212.81543	-0.000309	0.000013	-0.000004
	119	SLU 2A (NE)(all)	-	28.594174	6.284394	213.73909	0.000249	-0.006811	-0.000015
	120	SLU 2A (NE)(all)	-	-27.57879	6.284393	175.67363	-0.000264	-0.005588	-0.000011
	121	SLU 2A (NE)(all)	-	30.386505	5.141253	25.243425	-0.000142	-0.001273	0.000027
	122	SLU 2A (NE)(all)	-	29.169609	5.141251	15.64006	-0.000116	-0.001005	0.000026
	123	SLU 2A (NE)(all)	-	17.404738	5.135892	25.429021	-0.000142	0.001285	-0.000027
	124	SLU 2A (NE)(all)	-	17.081909	5.13589	15.825655	-0.000109	0.001017	-0.000026
	125	SLU 2A (NE)(all)	-	25.860529	5.452573	20.340512	0.000057	0.002996	0.000023
	126	SLU 2A (NE)(all)	-	24.968923	5.452572	15.121687	-0.000065	0.002221	0.000028
	127	SLU 2A (NE)(all)	-	18.641879	5.916117	83.420611	0.00012	0.007849	0.000027
	128	SLU 2A (NE)(all)	-	18.121556	5.916118	67.975379	-0.000133	0.006443	0.000018
	129	SLU 2A (NE)(all)	-	-19.65986	6.322962	229.77773	0.000264	0.005791	0.000012
	130	SLU 2A (NE)(all)	-	19.465437	6.32296	188.85357	-0.00028	0.00473	0.000009
	131	SLU 2A (NE)(all)	-	27.654062	6.322655	230.00931	0.000264	-0.005772	-0.000012
	132	SLU 2A (NE)(all)	-	26.811438	6.322653	189.08515	-0.00028	-0.004711	-0.000009
	133	SLU 2A (NE)(all)	-	29.516129	5.915173	83.705336	0.00012	-0.007864	-0.000027
	134	SLU 2A (NE)(all)	-	28.173436	5.915174	68.260104	-0.000133	-0.006458	-0.000018
	135	SLU 2A (NE)(all)	-	-21.92516	5.449931	20.492923	0.000057	-0.003017	-0.000023
	136	SLU 2A (NE)(all)	-	21.320161	5.44993	15.274098	-0.000063	-0.002242	-0.000027
	1	SLC(all)	-	66.062864	46.649313	-0.235502	0.000035	-0.000715	0.00034

	2	SLC(all)	-	66.064757	46.649309	-0.225508	-0.000035	-0.000751	-0.00034
	3	SLC(all)	-	66.047582	46.704146	-0.105949	0.000036	-0.000715	0.00034
	4	SLC(all)	-	66.049475	46.704147	-0.096058	-0.000036	-0.000751	-0.00034
	5	SLC(all)	-	66.077871	46.59527	-0.371068	0.000034	-0.000715	0.00034
	6	SLC(all)	-	66.079764	46.595272	-0.369541	-0.000034	-0.000751	-0.00034
	7	SLC(all)	-	59.394879	56.651465	-1.216593	0.000059	0.002892	0.000279
	8	SLC(all)	-	59.407327	56.651474	-1.221364	-0.000059	0.002894	-0.000279
	9	SLC(all)	-	59.195798	56.413197	1.545078	0.00006	0.002726	0.000279
	10	SLC(all)	-	59.209132	56.413195	1.549145	-0.00006	0.002728	-0.00028
	11	SLC(all)	-	59.589978	56.897425	-4.244465	0.000063	0.003055	0.000279
	12	SLC(all)	-	59.601672	56.897423	-4.245257	-0.000063	0.003057	-0.000279
	15	SLC(all)	-	59.395093	56.652472	-1.216525	0.000059	-0.002892	-0.000279
	16	SLC(all)	-	59.403111	56.652482	-1.222537	-0.000059	-0.002894	0.000279
	17	SLC(all)	-	59.590184	56.898408	-4.244465	0.000063	-0.003055	-0.000279
	18	SLC(all)	-	59.597227	56.898406	-4.245083	-0.000062	-0.003056	0.000279
	19	SLC(all)	-	59.196039	-56.41431	1.545055	0.00006	-0.002726	-0.00028
	20	SLC(all)	-	59.204818	56.414307	1.549753	-0.00006	-0.002728	0.00028
	21	SLC(all)	-	66.062823	46.650527	-0.234874	0.000035	0.000715	-0.00034
	22	SLC(all)	-	66.066007	-46.65053	-0.247298	-0.000033	0.000743	0.00034
	23	SLC(all)	-	66.07783	46.596478	-0.370991	0.000034	0.000715	-0.00034
	24	SLC(all)	-	66.081013	46.596476	-0.372556	-0.000033	0.000743	0.00034
	25	SLC(all)	-	66.047541	46.705416	-0.1049	0.000036	0.000715	-0.00034
	26	SLC(all)	-	66.050723	46.705416	-0.127129	-0.000034	0.000743	0.00034
	43	SLC(all)	-	64.695953	46.656894	-0.2355	0.000035	-0.000715	0.00034
	44	SLC(all)	-	64.727002	46.656412	-0.225507	-0.000035	-0.000751	-0.00034
	45	SLC(all)	-	64.982968	46.656894	-0.210738	0.000035	-0.000715	0.00034

	46	SLC(all)	-	-	-0.312891	-0.000035	-0.000751	-0.00034
	47	SLC(all)	-	-	-0.316543	0.000035	-0.000715	0.00034
	48	SLC(all)	-	-	-0.207091	-0.000035	-0.000751	-0.00034
	51	SLC(all)	-	-	-0.210738	0.000035	-0.000715	0.00034
	52	SLC(all)	-	-	-0.312891	-0.000035	-0.000751	-0.00034
	53	SLC(all)	-	-	-0.316543	0.000035	-0.000715	0.00034
	54	SLC(all)	-	-	-0.207091	-0.000035	-0.000751	-0.00034
	55	SLC(all)	-	-	-0.234873	0.000035	0.000715	-0.00034
	56	SLC(all)	-	-	-0.247296	-0.000033	0.000743	0.00034
	57	SLC(all)	-	-	-0.210525	0.000035	0.000715	-0.00034
	58	SLC(all)	-	-	-0.31576	-0.000033	0.000743	0.00034
	59	SLC(all)	-	-	-0.316379	0.000035	0.000715	-0.00034
	60	SLC(all)	-	-	-0.218598	-0.000033	0.000743	0.00034
	63	SLC(all)	-	-	-0.210525	0.000035	0.000715	-0.00034
	64	SLC(all)	-	-	-0.31576	-0.000033	0.000743	0.00034
	65	SLC(all)	-	-	-0.316379	0.000035	0.000715	-0.00034
	66	SLC(all)	-	-	-0.218598	-0.000033	0.000743	0.00034
	67	SLC(all)	-	-	-1.216561	0.000059	0.002892	0.000279
	68	SLC(all)	-	-	-1.221331	-0.000059	0.002894	-0.000279
	69	SLC(all)	-	-	-1.216492	0.000059	-0.002892	-0.000279
	70	SLC(all)	-	-	-1.222504	-0.000058	-0.002894	0.000279
	71	SLC(all)	-	-	-1.375325	0.000059	0.002892	0.000279
	72	SLC(all)	-	-	-1.218015	-0.000059	0.002894	-0.000279
	73	SLC(all)	-	-	-1.375289	0.000059	-0.002892	-0.000279
	74	SLC(all)	-	-	-1.219856	-0.000059	-0.002894	0.000279
	75	SLC(all)	-	-	-1.216558	0.000059	0.002892	0.000279
	76	SLC(all)	-	-	-1.376729	-0.000059	0.002894	-0.000279
	77	SLC(all)	-	-	-1.216552	0.000059	-0.002892	-0.000279
	78	SLC(all)	-	-	-1.375591	-0.000058	-0.002894	0.000279

	83	SLC(all)	-	68.999064	56.646637	-1.375324	0.000059	0.002892	0.000279
	84	SLC(all)	-	69.011099	56.646897	-1.218014	-0.000059	0.002894	-0.000279
	85	SLC(all)	-	68.998814	56.645592	-1.375288	0.000059	-0.002892	-0.000279
	86	SLC(all)	-	69.011339	56.645843	-1.219855	-0.000059	-0.002894	0.000279
	87	SLC(all)	-	69.007456	56.64672	-1.216557	0.000059	0.002892	0.000279
	88	SLC(all)	-	69.002603	56.646815	-1.376728	-0.000059	0.002894	-0.000279
	89	SLC(all)	-	69.007671	56.645675	-1.216551	0.000059	-0.002892	-0.000279
	90	SLC(all)	-	69.002616	-56.64576	-1.37559	-0.000058	-0.002894	0.000279
	91	SLC(all)	-	65.685851	48.31632	4.211264	0.000085	-0.000824	0.000337
	92	SLC(all)	-	65.687461	48.31632	4.425111	-0.000085	-0.000848	-0.000337
	93	SLC(all)	-	65.685828	48.319043	4.211662	0.000086	0.000824	-0.000336
	94	SLC(all)	-	65.688229	48.319042	4.399702	-0.000081	0.000847	0.000337
	95	SLC(all)	-	64.844382	50.986673	13.201616	0.000115	-0.000701	-0.00032
	96	SLC(all)	-	64.849606	50.986673	13.515094	-0.000115	-0.000701	0.00032
	97	SLC(all)	-	64.844388	50.990441	13.200562	0.000115	0.000701	0.00032
	98	SLC(all)	-	64.849606	50.990441	13.508097	-0.00011	0.000701	-0.00032
	99	SLC(all)	-	62.872767	53.515113	17.281105	0.000099	0.000417	-0.000303
	100	SLC(all)	-	62.888448	53.515113	17.436317	-0.000099	0.000431	0.000303
	101	SLC(all)	-	62.872686	53.518222	17.280928	0.000099	-0.000417	0.000303
	102	SLC(all)	-	62.888767	53.518222	17.430573	-0.000096	-0.000434	-0.000303
	103	SLC(all)	-	-60.94648	54.986327	12.958594	0.00008	0.001502	-0.000291
	104	SLC(all)	-	60.966189	54.986326	13.017778	-0.00008	0.001513	0.000291
	105	SLC(all)	-	60.947243	54.988442	12.958637	0.00008	-0.001502	0.00029
	106	SLC(all)	-	60.96158	54.988442	13.002594	-0.000078	-0.00151	-0.00029
	107	SLC(all)	-	61.219351	58.750145	34.183593	0.00012	0.004391	0.000261
	108	SLC(all)	-	61.223585	58.750144	34.217459	-0.00012	0.004392	-0.000261
	109	SLC(all)	-	-	-58.75093	-34.18408	0.00012	-0.004391	-0.000261

			61.219382					
	110	SLC(all)	-	-	-	-0.00012	-0.004392	0.000261
	111	SLC(all)	61.222282	58.750929	34.194189	0.000192	0.005162	0.00022
	112	SLC(all)	61.744443	60.409024	72.411276	-0.000192	0.005165	-0.00022
	113	SLC(all)	61.746348	60.409023	72.426922	0.000192	-0.005162	-0.00022
	114	SLC(all)	61.744445	60.409612	72.411027	-0.000192	-0.005163	0.00022
	115	SLC(all)	61.746292	60.409611	72.432842	0.000295	0.004199	0.000123
	116	SLC(all)	59.984567	62.245942	131.76462	-0.000295	0.004202	-0.000123
	117	SLC(all)	59.988171	62.245942	131.80021	0.000355	-0.000043	0
	118	SLC(all)	55.815244	62.919789	159.57152	-0.000355	0.000043	0
	119	SLC(all)	55.817442	-62.91979	159.63615	0.000295	-0.004198	-0.000123
	120	SLC(all)	59.984604	62.246231	131.76466	-0.000295	-0.004206	0.000123
	121	SLC(all)	59.986605	62.246231	131.80181	0.000115	-0.000768	0.000322
	122	SLC(all)	64.994197	50.666162	12.153656	-0.000115	-0.000768	-0.000322
	123	SLC(all)	-64.99848	50.666162	12.469916	0.000115	0.000768	-0.000322
	124	SLC(all)	64.994212	50.669894	12.152553	-0.000109	0.000768	0.000322
	125	SLC(all)	64.998192	50.669894	12.463794	0.000076	0.001701	-0.000289
	126	SLC(all)	60.574869	55.226684	11.57154	-0.000076	0.001711	0.000289
	127	SLC(all)	60.593832	55.226684	11.617293	0.000152	0.004844	0.000245
	128	SLC(all)	61.615148	-59.55775	51.260896	-0.000152	0.004845	-0.000245
	129	SLC(all)	61.616827	-59.55775	51.287946	0.000313	0.003545	0.000097
	130	SLC(all)	59.223607	62.499956	141.80917	-0.000313	0.003549	-0.000097
	131	SLC(all)	59.227478	62.499956	141.85053	0.000313	-0.003545	-0.000097
	132	SLC(all)	59.223661	62.500181	141.80908	-0.000313	-0.003551	0.000097
	133	SLC(all)	59.225289	62.500181	141.85756	0.000152	-0.004844	-0.000245
	134	SLC(all)	61.615115	59.558444	-51.26103	-0.000152	-0.004845	0.000245
			61.617946	59.558443	51.277665			

	135	SLC(all)	60.575522	55.228631	11.571569	0.000077	-0.001701	0.000288
	136	SLC(all)	60.588767	-55.22863	11.605229	-0.000075	-0.001708	-0.000288
	1	SLV(all)	58.397706	39.7839	-0.231339	0.000032	-0.000708	0.000291
	2	SLV(all)	58.399325	39.783897	-0.223477	-0.000032	-0.000738	-0.000291
	3	SLV(all)	58.382472	39.830577	-0.101254	0.000034	-0.000708	0.000291
	4	SLV(all)	58.384091	39.830578	-0.093198	-0.000034	-0.000738	-0.000291
	5	SLV(all)	58.412712	39.737897	-0.36697	0.000032	-0.000708	0.000291
	6	SLV(all)	58.414331	39.7379	-0.365716	-0.000032	-0.000738	-0.000291
	7	SLV(all)	51.720123	48.306116	-1.215767	0.000055	0.002883	0.000239
	8	SLV(all)	51.730439	48.306125	-1.219699	-0.000055	0.002885	-0.000239
	9	SLV(all)	51.521432	48.102943	1.536933	0.000056	0.002717	0.000239
	10	SLV(all)	51.532476	48.102941	1.539886	-0.000056	0.002719	-0.000239
	11	SLV(all)	51.915235	48.515856	-4.235472	0.000058	0.003047	0.000239
	12	SLV(all)	51.924933	48.515854	-4.236124	-0.000058	0.003048	-0.000239
	15	SLV(all)	-51.7203	48.307125	-1.21571	0.000055	-0.002883	-0.000239
	16	SLV(all)	51.726972	48.307134	-1.220664	-0.000054	-0.002885	0.000239
	17	SLV(all)	51.915406	-48.51684	-4.235472	0.000058	-0.003047	-0.000239
	18	SLV(all)	51.921277	48.516838	-4.235981	-0.000058	-0.003048	0.000239
	19	SLV(all)	51.521632	48.104057	1.536914	0.000056	-0.002717	-0.000239
	20	SLV(all)	-51.52893	48.104055	1.540037	-0.000055	-0.002719	0.000239
	21	SLV(all)	58.397672	39.785117	-0.230823	0.000032	0.000709	-0.000291
	22	SLV(all)	58.40036	39.785121	-0.241023	-0.000031	0.000731	0.000291
	23	SLV(all)	58.412678	39.739109	-0.366907	0.000032	0.000709	-0.000291
	24	SLV(all)	58.415366	39.739106	-0.368191	-0.000031	0.000731	0.000291
	25	SLV(all)	58.382438	-39.83185	-0.10039	0.000034	0.000709	-0.000291
	26	SLV(all)	58.385125	39.831849	-0.118659	-0.000032	0.000731	0.000291

	43	SLV(all)	-57.03274	39.796027	-0.231338	0.000032	-0.000708	0.000291
			-	-				
	44	SLV(all)	57.058296	39.795545	-0.223476	-0.000032	-0.000738	-0.000291
			-	-				
	45	SLV(all)	57.279443	39.796027	-0.202904	0.000032	-0.000708	0.000291
			-	-				
	46	SLV(all)	57.285803	39.795545	-0.305707	-0.000032	-0.000738	-0.000291
			-	-				
	47	SLV(all)	57.260292	39.796027	-0.308709	0.000032	-0.000708	0.000291
			-	-				
	48	SLV(all)	57.305044	39.795545	-0.199906	-0.000032	-0.000738	-0.000291
			-	-				
	51	SLV(all)	57.145033	39.797242	-0.202904	0.000032	-0.000708	0.000291
			-	-				
	52	SLV(all)	57.153528	39.796754	-0.305707	-0.000032	-0.000738	-0.000291
			-	-				
	53	SLV(all)	57.125883	39.797237	-0.308709	0.000032	-0.000708	0.000291
			-	-				
	54	SLV(all)	57.172769	39.796759	-0.199906	-0.000032	-0.000738	-0.000291
			-	-				
	55	SLV(all)	57.033863	39.794313	-0.230822	0.000032	0.000709	-0.000291
			-	-				
	56	SLV(all)	57.049639	39.794104	-0.241022	-0.000031	0.000731	0.000291
			-	-				
	57	SLV(all)	57.280098	39.794313	-0.202725	0.000032	0.000709	-0.000291
			-	-				
	58	SLV(all)	57.277372	39.794104	-0.307293	-0.000031	0.000731	0.000291
			-	-				
	59	SLV(all)	57.261884	39.794313	-0.308579	0.000032	0.000709	-0.000291
			-	-				
	60	SLV(all)	57.296162	39.794104	-0.210131	-0.000031	0.000731	0.000291
			-	-				
	63	SLV(all)	57.145633	39.795529	-0.202725	0.000032	0.000709	-0.000291
			-	-				
	64	SLV(all)	57.144686	39.794999	-0.307293	-0.000031	0.000731	0.000291
			-	-				
	65	SLV(all)	57.127418	39.795524	-0.308579	0.000032	0.000709	-0.000291
			-	-				
	66	SLV(all)	57.163477	39.795004	-0.210131	-0.000031	0.000731	0.000291
			-	-				
	67	SLV(all)	60.559996	48.317545	-1.215734	0.000055	0.002883	0.000239
			-	-				
	68	SLV(all)	60.562765	48.317725	-1.219666	-0.000055	0.002885	-0.000239
			-	-				
	69	SLV(all)	60.559982	48.316502	-1.215677	0.000055	-0.002883	-0.000239
			-	-				
	70	SLV(all)	60.562906	-48.31678	-1.220631	-0.000054	-0.002885	0.000239
			-	-				
	71	SLV(all)	60.751598	48.317545	-1.36286	0.000054	0.002883	0.000239
			-	-				
	72	SLV(all)	60.762811	48.317724	-1.205299	-0.000055	0.002885	-0.000239
			-	-				
	73	SLV(all)	60.751352	48.316502	-1.362829	0.000054	-0.002883	-0.000239
			-	-				
	74	SLV(all)	60.763065	48.316779	-1.207078	-0.000054	-0.002885	0.000239
			-	-				
	75	SLV(all)	-60.75999	48.317545	-1.204094	0.000055	0.002883	0.000239
			-	-				
	76	SLV(all)	-	-	-1.364014	-0.000054	0.002885	-0.000239

			60.754315	48.317724				
	77	SLV(all)	60.760208	48.316502	-1.204092	0.000055	-0.002883	-0.000239
	78	SLV(all)	60.754342	48.316779	-1.362813	-0.000054	-0.002885	0.000239
	83	SLV(all)	61.309729	48.318146	-1.362859	0.000054	0.002883	0.000239
	84	SLV(all)	61.321192	48.318406	-1.205298	-0.000055	0.002885	-0.000239
	85	SLV(all)	61.309482	48.317102	-1.362828	0.000054	-0.002883	-0.000239
	86	SLV(all)	61.321411	48.317353	-1.207077	-0.000054	-0.002885	0.000239
	87	SLV(all)	61.318121	48.318229	-1.204093	0.000055	0.002883	0.000239
	88	SLV(all)	61.312696	48.318324	-1.364013	-0.000054	0.002885	-0.000239
	89	SLV(all)	61.318339	48.317185	-1.204091	0.000055	-0.002883	-0.000239
	90	SLV(all)	61.312687	48.317271	-1.362812	-0.000054	-0.002885	0.000239
	91	SLV(all)	58.021554	41.203216	4.167563	0.000081	-0.000818	0.000288
	92	SLV(all)	58.022938	41.203216	4.343925	-0.000081	-0.000837	-0.000288
	93	SLV(all)	58.021535	41.205941	4.167893	0.000081	0.000817	-0.000288
	94	SLV(all)	58.023574	-41.20594	4.323014	-0.000077	0.000837	0.000288
	95	SLV(all)	57.178938	43.477707	13.110577	0.000109	-0.000699	-0.000274
	96	SLV(all)	57.183314	43.477707	13.369266	-0.000109	-0.000699	0.000274
	97	SLV(all)	57.178943	43.481477	13.109703	0.000109	0.000699	0.000274
	98	SLV(all)	57.183315	43.481477	13.363504	-0.000104	0.000699	-0.000274
	99	SLV(all)	55.204275	45.632275	17.205579	0.000093	0.000414	-0.000259
	100	SLV(all)	55.217237	45.632275	17.31994	-0.000093	0.000425	0.000259
	101	SLV(all)	55.204208	45.635386	17.205432	0.000093	-0.000413	0.000259
	102	SLV(all)	55.217499	45.635385	17.315203	-0.00009	-0.000427	-0.000259
	103	SLV(all)	53.275382	46.886372	12.908232	0.000075	0.001496	-0.000249
	104	SLV(all)	53.291632	46.886371	12.947912	-0.000074	0.001504	0.000249
	105	SLV(all)	53.27601	46.888489	12.908268	0.000075	-0.001496	0.000249
	106	SLV(all)	53.28785	46.888488	12.935376	-0.000073	-0.001502	-0.000249
	107	SLV(all)	53.54481	-	-	0.000112	0.00438	0.000224

				50.095898	34.096613			
	108	SLV(all)	53.548369	-	-	-0.000112	0.004382	-0.000224
	109	SLV(all)	-	-	-	0.000112	-0.00438	-0.000224
	110	SLV(all)	53.547291	-	-34.10527	-0.000112	-0.004381	0.000224
	111	SLV(all)	54.071355	-	-	0.00018	0.005151	0.000189
	112	SLV(all)	54.072985	-	-	-0.00018	0.005154	-0.000189
	113	SLV(all)	-	-	-	0.00018	-0.005151	-0.000189
	114	SLV(all)	54.072939	-	-	-0.00018	-0.005152	0.000189
	115	SLV(all)	52.315594	-	-	0.000278	0.00419	0.000105
	116	SLV(all)	52.318632	-	-	-0.000278	0.004193	-0.000105
	117	SLV(all)	48.149236	-	-	0.000333	-0.000037	0
	118	SLV(all)	48.151108	-	-	-0.000333	0.000037	0
	119	SLV(all)	-	-	-	0.000278	-0.00419	-0.000105
	120	SLV(all)	-	-	-	-0.000278	-0.004196	0.000105
	121	SLV(all)	57.329038	-	-	0.000109	-0.000765	0.000276
	122	SLV(all)	57.332637	-	-	-0.000109	-0.000766	-0.000276
	123	SLV(all)	57.329051	-	-	0.000109	0.000765	-0.000276
	124	SLV(all)	57.332399	-	-	-0.000103	0.000765	0.000276
	125	SLV(all)	-	-	-	0.000071	0.001695	-0.000247
	126	SLV(all)	52.903173	-	-	-0.000071	0.001701	0.000247
	127	SLV(all)	52.918817	-	-	0.000142	0.004833	0.00021
	128	SLV(all)	53.941129	-	-	-0.000142	0.004834	-0.00021
	129	SLV(all)	53.942572	-	-	0.000295	0.003537	0.000084
	130	SLV(all)	51.555577	-	-	-0.000294	0.00354	-0.000084
	131	SLV(all)	51.558835	-	-	0.000295	-0.003537	-0.000084
	132	SLV(all)	-	-	-	-0.000294	-0.003542	0.000084
			51.555621	-53.29474	141.51436			
			51.557024	-53.29474	141.55406			

	133	SLV(all)	- 53.941102	- 50.785415	- -51.13609	0.000142	-0.004833	-0.00021
	134	SLV(all)	-53.9435	- 50.785414	- 51.149693	-0.000142	-0.004834	0.00021
	135	SLV(all)	52.903712	- 47.093234	11.527176	0.000071	-0.001695	0.000247
	136	SLV(all)	52.91466	- 47.093234	11.546872	-0.00007	-0.001699	-0.000247