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PONTE CANALE NIE – RELAZIONE DI CALCOLO

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1. Premessa

Il presente elaborato illustra le scelte effettuate per la progettazione strutturale e geotecnica del ponte sul canale NIE. Tale opera fa parte del Progetto di Delocalizzazione dell'area dell'Autoporto e dell'area di servizio dall'attuale area ubicata nel comune di Susa (TO). L'area individuata per la realizzazione del nuovo Autoporto ricade all'interno del territorio comunale di San Didero (TO).

Nel seguito vengono quindi riportate la descrizione delle strutture, la modellazione e le verifiche effettuate.

Dal punto di vista delle analisi strutturali il documento è stato redatto in osservanza delle Norme Tecniche per le Costruzioni di cui al DM 14/01/2008, utilizzando la metodologia di verifica agli Stati Limite.

2. Normativa di riferimento

Nella stesura della presente relazione si sono seguite le indicazioni contenute nella normativa vigente. In particolare si sono considerate le seguenti normative:

- **D.M. LL.PP. 14 Gennaio 2008** - *“Norme tecniche per le costruzioni”*;
- **Circolare LL.PP. 2 Febbraio 2009 n. 617** - *Istruzioni per l'applicazione delle “Norme tecniche per le costruzioni” di cui al D.M. 14 gennaio 2008.*
- **Legge 5 Novembre 1971 n. 1086** - *“Norme per la disciplina delle opere in conglomerato cementizio, normale e precompresso ed a struttura metallica”* ;
- **Circolare LL.PP. 14 Febbraio 1974 n. 11951** - *“Norme per la disciplina delle opere in conglomerato cementizio, normale e precompresso ed a struttura metallica – Istruzioni per l'applicazione”* ;
- **Eurocodice 2 – UNI EN 1992–1–1: 2005** - *“Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici”*
- **Eurocodice 2 – UNI EN 1992–2: 2006** - *“Progettazione delle strutture di calcestruzzo - Parte 2: Ponti di calcestruzzo – Progettazione e dettagli costruttivi”*
- **Eurocodice 2 – UNI EN 1992–1-3: 1995** - *“Progettazione delle strutture di calcestruzzo - Parte 3: Elementi e strutture prefabbricate in calcestruzzo”*
- **Eurocodice 8 – UNI EN 1998–2: 2009** - *“Indicazioni progettuali per la resistenza sismica delle strutture - Parte 2: Ponti”*

3. Descrizione delle strutture

Il ponte sul canale NIE è realizzato con impalcato di travi in c.a.p. in semplice appoggio e soletta in c.a. di spessore minimo 25cm. Il ponte presenta una campata di 21.0m tra le spalle S1 e S2 oltre ad un retrotrave di 0.50m su ciascun lato. Le travi sono disposte ad interasse costante di 2.0m e presentano un'obliquità di 36°; sono collegate, oltre che dalla soletta, da due traversi di testata di spessore 0.30m.

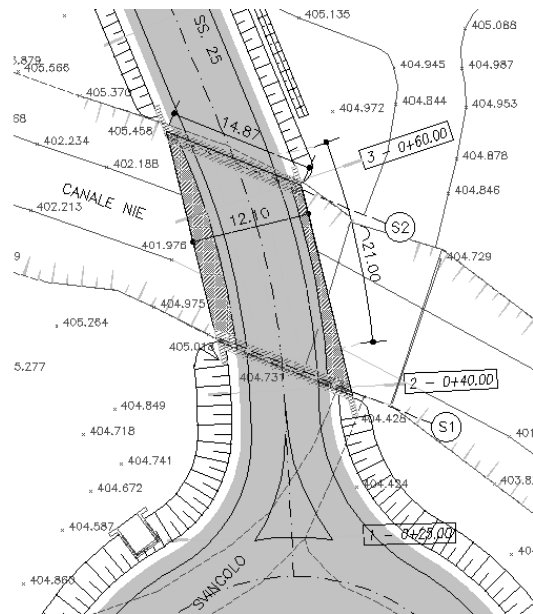


Figura 1 – Planimetria

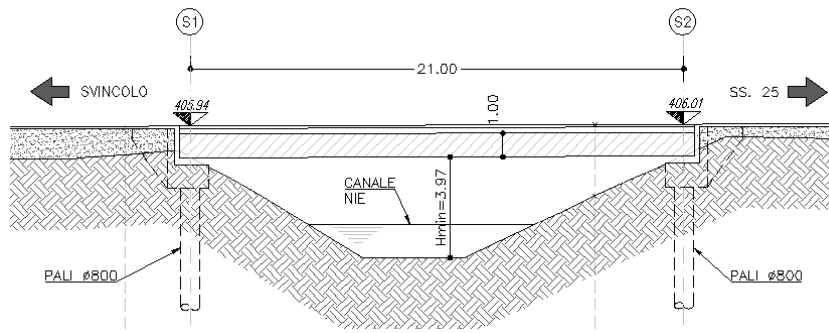


Figura 2 – Profilo

La sezione trasversale delle travi in c.a.p. è del tipo a “V” con altezza pari a 1.0m. La larghezza della carreggiata stradale è di 9.0m e sono previsti due cordoli laterali di larghezza variabile per una larghezza complessiva dell’impalcato di 12.0m (12.1m comprensivo delle velette laterali). A completare l’impalcato ci saranno la pavimentazione, l’impermeabilizzazione (spessore complessivo 10cm) e le barriere di sicurezza.

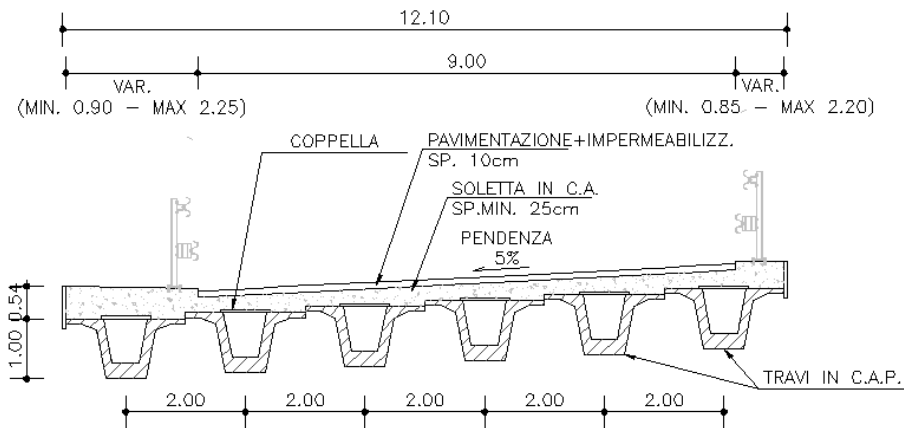


Figura 3 – Sezione trasversale

La soletta collaborante in c.a. è del tipo gettata in opera. Una volta disposte le coppelle si provvede alla posa dell'armatura longitudinale e trasversale e, quindi, al getto della soletta fino agli spessori di progetto.

I collegamenti tra impalcati e spalla sono realizzati mediante apparecchi di appoggio in acciaio-teflon con disco elastomerico confinato di diversa tipologia, quali fisso e multidirezionale, nonché unidirezionale in senso longitudinale o trasversale. Sulla spalla S1 sono previsti appoggi fissi e unidirezionali trasversali, mentre sulla spalla S2 sono posizionati appoggi unidirezionali longitudinali e multidirezionali.

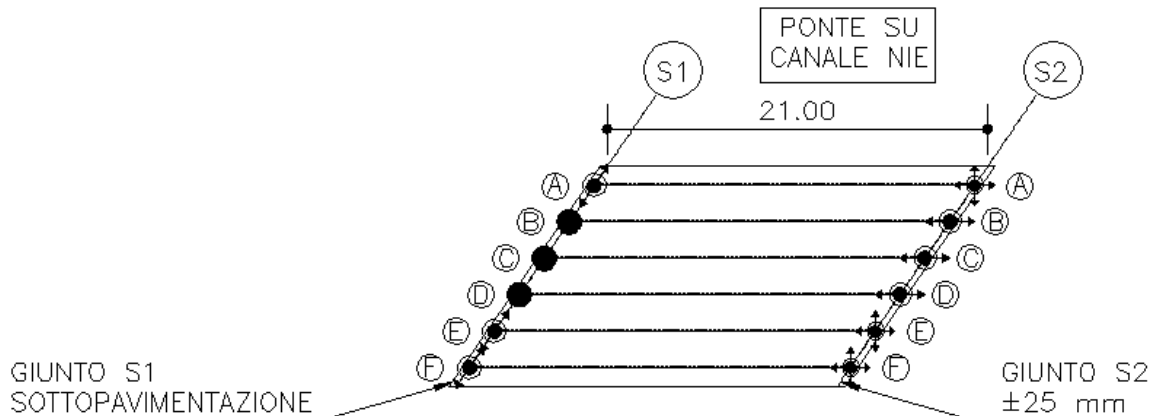


Figura 4 – Schema appoggi

La sottostruttura è costituita da due spalle formate da una trave di base 1.60x1.00m, su sei pali di diametro pari a 0.80m e 8.0m di lunghezza, dalla quale si elevano il muro andatore e le orecchie di risvolto.

Caratteristiche dei materiali

3.1 Conglomerato di classe di resistenza C35/45

(per le travi in c.a.p. e per la solette in c.a.)

Modulo elastico	$E_c = 34625$	MPa
Coefficiente di Poisson	$\nu = 0.20$	
Coefficiente di dilatazione termica	$\alpha = 10 \times 10^{-6}$	$^{\circ}\text{C}^{-1}$
Coefficiente parziale di sicurezza	$\gamma_c = 1.5$	
Resistenza caratt. cubica a compressione	$R_{ck} = 45$	MPa
Resistenza caratt. cilindrica a compressione	$f_{ck} = 37.35$	MPa
Resistenza media cilindrica a compressione	$f_{cm} = 45.35$	MPa
Resistenza media a trazione semplice	$f_{ctm} = 3.35$	MPa
Resistenza caratteristica a trazione semplice	$f_{ctk} = 2.34$	MPa
Resistenza media a trazione per flessione	$f_{cfm} = 4.02$	MPa
Resistenza di calcolo a compressione	$f_{cd} = 21.16$	MPa
Resistenza di calcolo a trazione	$f_{ctd} = 1.56$	MPa
Resistenza tang. caratteristica di aderenza	$f_{bk} = 5.26$	MPa
Resistenza tang. di aderenza di calcolo	$f_{bd} = 3.51$	MPa

3.2 Conglomerato di classe di resistenza C32/40

(per le sottostrutture)

Modulo elastico	$E_c = 33643$	MPa
Coefficiente di Poisson	$\nu = 0.20$	
Coefficiente di dilatazione termica	$\alpha = 10 \times 10^{-6}$	$^{\circ}\text{C}^{-1}$
Coefficiente parziale di sicurezza	$\gamma_c = 1.5$	
Resistenza caratt. cubica a compressione	$R_{ck} = 40$	MPa
Resistenza caratt. cilindrica a compressione	$f_{ck} = 33.20$	MPa
Resistenza media cilindrica a compressione	$f_{cm} = 41.20$	MPa
Resistenza media a trazione semplice	$f_{ctm} = 3.10$	MPa
Resistenza caratteristica a trazione semplice	$f_{ctk} = 2.17$	MPa
Resistenza media a trazione per flessione	$f_{cfm} = 3.72$	MPa
Resistenza di calcolo a compressione	$f_{cd} = 18.81$	MPa
Resistenza di calcolo a trazione	$f_{ctd} = 1.45$	MPa
Resistenza tang. caratteristica di aderenza	$f_{bk} = 4.88$	MPa
Resistenza tang. di aderenza di calcolo	$f_{bd} = 3.25$	MPa

3.3 Conglomerato di classe di resistenza C28/35

(per le strutture di fondazione)

Modulo elastico	$E_c = 32588$	MPa
Coefficiente di Poisson	$\nu = 0.20$	
Coefficiente di dilatazione termica	$\alpha = 10 \times 10^{-6}$	$^{\circ}\text{C}^{-1}$
Coefficiente parziale di sicurezza	$\gamma_c = 1.5$	
Resistenza caratt. cubica a compressione	$R_{ck} = 35$	MPa
Resistenza caratt. cilindrica a compressione	$f_{ck} = 29.05$	MPa
Resistenza media cilindrica a compressione	$f_{cm} = 37.05$	MPa
Resistenza media a trazione semplice	$f_{ctm} = 2.83$	MPa
Resistenza caratteristica a trazione semplice	$f_{ctk} = 1.98$	MPa
Resistenza media a trazione per flessione	$f_{ctm} = 3.40$	MPa
Resistenza di calcolo a compressione	$f_{cd} = 16.46$	MPa
Resistenza di calcolo a trazione	$f_{ctd} = 1.32$	MPa
Resistenza tang. caratteristica di aderenza	$f_{bk} = 4.45$	MPa
Resistenza tang. di aderenza di calcolo	$f_{bd} = 2.97$	MPa

3.4 Acciaio da c.a. tipo B450C saldabile

(per barre e reti di diametro $6.0\text{mm} \leq \varnothing \leq 40.0\text{ mm}$)

Coefficiente parziale di sicurezza	$\gamma_s = 1.15$	
Tensione caratteristica di snervamento	$f_{yk} \geq 450$	MPa
Tensione caratteristica di rottura	$f_{tk} \geq 540$	MPa
Allungamento	$A_{gtk} \geq 7.5\%$	
Resistenza di calcolo	$f_{yd} = 391$	MPa

3.5 Acciaio per armatura da precompressione in trefoli

Coefficiente parziale di sicurezza	$\gamma_s = 1.15$	
Tensione caratteristica di rottura	$f_{ptk} \geq 1860$	MPa
Tensione caratteristica all'1% di deformazione totale	$f_{p(1)k} \geq 1670$	MPa
Allungamento	$A_{gtk} \geq 3.5\%$	
Resistenza di calcolo	$f_{yd} = 1452$	MPa

4. Azioni di progetto

I valori delle azioni di seguito riportati, sono stati considerati come valori caratteristici nelle verifiche agli stati limite. Si riportano di seguito le analisi dei carichi unitari applicati alle membrature costituenti la struttura.

4.1 Azioni gravitazionali

Peso proprio elementi strutturali in c.a. e c.a.p.

- Calcestruzzo ordinario armato 25.00 kN/m³
- Calcestruzzo armato precompresso 25.00 kN/m³

Permanenti strutturali

- Travi 25.0 kN/m³ * 0.54 m² = 13.5 kN/m
- Soletta 25.0 kN/m³ * 0.30 m = 7.50 kN/m²

Permanenti portati

- Pavimentazione 3.00 kN/m²
- Guard-rail 1.00 kN/m
- Cordoli 25.0 kN/m³ * 0.22m = 5.50 kN/m²
25.0 kN/m³ * 0.13m = 3.25 kN/m²

4.2 Ritiro e viscosità

Ritiro

La deformazione totale da ritiro a tempo infinito, comprensivo dell'effetto dell'essiccamento e del ritiro autogeno, è pari a:

$$\varepsilon_{cs} = \varepsilon_{cd} + \varepsilon_{ca} = -0.00030$$

dove:

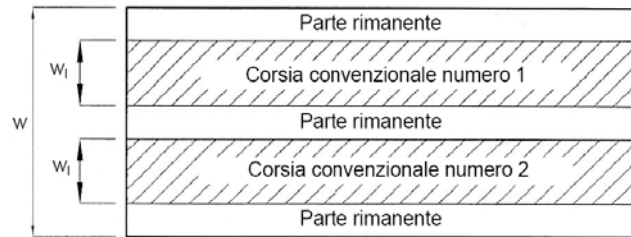
- ε_{cs} è la deformazione totale per ritiro;
- ε_{cd} è la deformazione per ritiro da essiccamento;
- ε_{ca} è la deformazione per ritiro autogeno.

Viscosità

Si è assunto un valore del coefficiente di viscosità a tempo infinito pari a $\phi(\infty, 28\text{gg}) = 2.30$.

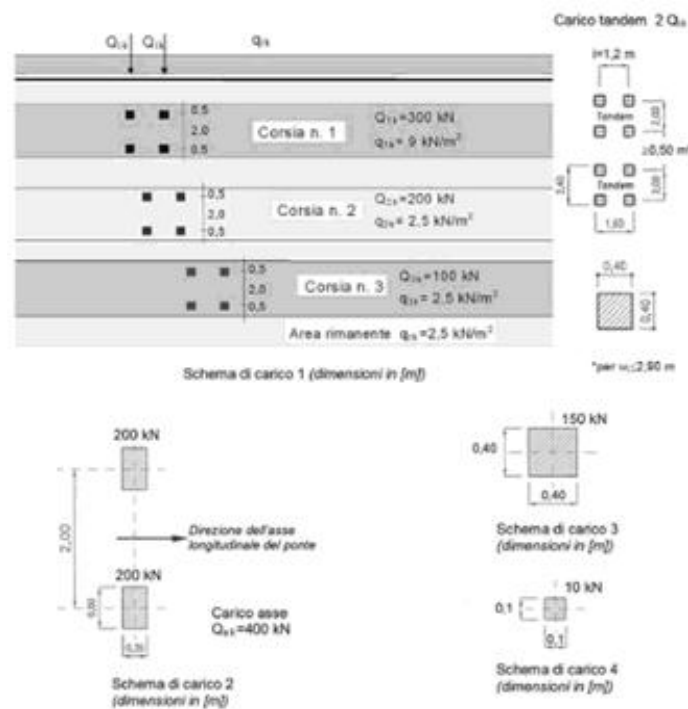
4.3 Azioni variabili da traffico

Ai fini della determinazione degli effetti prodotti dalle azioni variabili da traffico, l'asse viario di 1^a Categoria è stato suddiviso in tre corsie convenzionali di larghezza pari a 3 m.



Schema corsie convenzionali

La posizione e la numerazione delle corsie sono state determinate in modo da indurre le più sfavorevoli condizioni di progetto. I carichi da considerare per ponti di 1^a Categoria sono quelli indicati dalla normativa vigente e schematizzati nel modo seguente:



Schemi di azioni variabili da traffico

Sono stati applicati i carichi definiti dagli Schemi di carico 1-5 così come indicato al par. 5.1.3.3.3 del D.M. 14/01/2008.

Gli schemi adottati per le verifiche globali sono i seguenti:

Corsia	Carico asse Qik [kN]	Numero assi	Carico distribuito qik [kN/m ²]
1	300	2	9.00
2	200	2	2.50
Area rimanente	-	-	2.50
Marciapiede	-	-	2.50

Tabella 1. Schema di carico 1

Corsia	Carico asse Qik [kN]	Numero assi	Carico distribuito qik [kN/m ²]
1	-	-	-
2	-	-	-
Area rimanente	-	-	-
Marciapiede	-	-	5.00

Tabella 2. Schema di carico 5 (folla compatta)

Più in dettaglio si riporta un'immagine delle tre colonne di carico individuate.

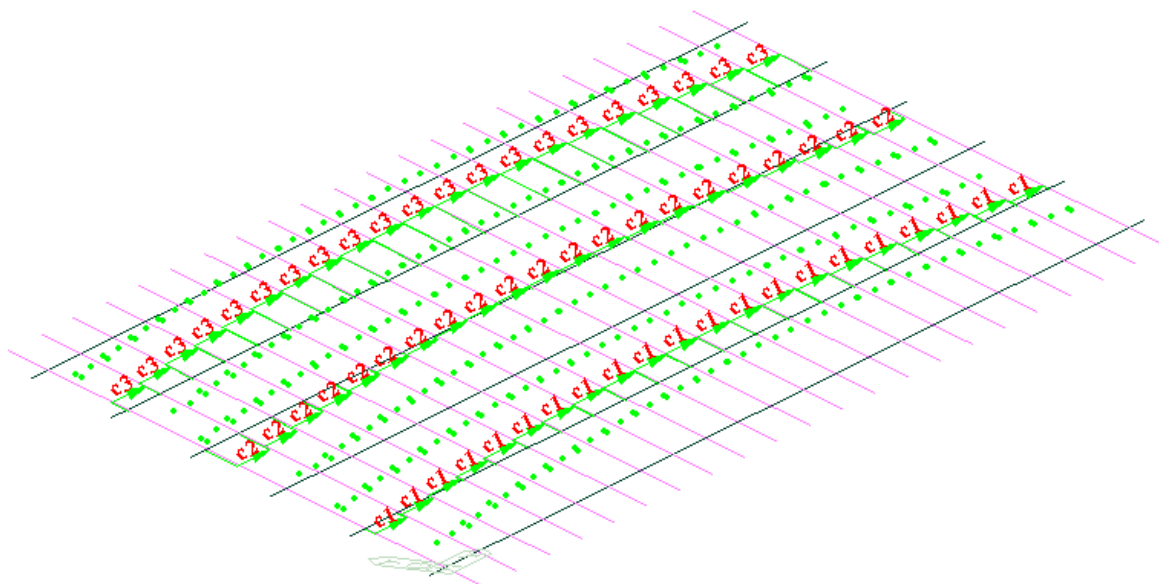


Figura 5 – Moving load case 1 [C1-C2-C3]

4.4 Azioni longitudinale di frenamento o di accelerazione (q_3)

Per i ponti di 1^a categoria, la forza di frenamento o di accelerazione è pari a:

$$180 \text{ kN} \leq q_3 = 0.6 (2Q_{1k}) + 0.10 q_{1k} w_1 L \leq 900 \text{ kN}$$

dove:

- $Q_{1k} = 300 \text{ kN}$ è il carico per asse sulla corsia convenzionale 1;
- $q_{1k} = 9.00 \text{ kN/m}^2$ è il carico distribuito sulla corsia convenzionale 1;
- $w_1 = 3 \text{ m}$ è la larghezza della corsia convenzionale 1;
- L è la lunghezza della zona caricata, pari a 21.0 m.

Pertanto risulta:

$$F = 416.7 \text{ kN}$$

Questa forza, applicata a livello della pavimentazione ed agente lungo l'asse della corsia convenzionale, è stata assunta uniformemente distribuita sulla lunghezza caricata. È stato quindi applicato un carico distribuito di 19.8 kN/m con un'eccentricità verticale di 0.45m.

4.5 Azione centrifuga (q_4)

Nel Tratto C, ad asse curvo, essendo il raggio di curvatura $R < 200 \text{ m}$, l'azione centrifuga si valuta convenzionalmente come:

$$Q_4 = 0.2 Q_v \text{ [kN]}$$

in cui $Q_v = \sum_i 2 Q_{ik}$ è il carico totale dovuto agli assi tandem dello schema di carico 1 agenti sul ponte.

4.6 Azione del vento (q_5)

Le pressioni e depressioni dovute al vento sono state calcolate rispettando il DM 18.01.2008. I coefficienti per il calcolo delle pressioni sono stati ricavati considerando i seguenti dati:

ZONA: 1

$T_R = 200 \text{ anni}$

Classe di rugosità del terreno: D

Categoria di esposizione del sito: II

$c_t = 1.0$

$c_d = 1.0$

$c_p = 2.4$

$a_s = 400.0\text{m}$

$v_{b0} = 25 \text{ m/s}$;

$v_b(T_R) = \alpha_R(T_R) \cdot v_{\text{ref}} = 1.076 \cdot 25 = 26.9 \text{ m/s}$;

$q_b = 0.5 \cdot 1.25 \cdot (26.9)^2 = 452.5 \text{ N/m}^2$;

La pressione del vento è funzione della quota z e vale:

z m	c_e (eq. 3.3.5)	p kN/m ²
0.00	1.80	1.933
2.00	1.80	1.933
4.00	1.80	1.933
4.50	1.87	2.005
5.00	1.93	2.071
5.50	1.99	2.131
6.00	2.04	2.187
6.50	2.09	2.238
7.00	2.13	2.287
7.50	2.17	2.332
8.00	2.21	2.375
8.50	2.25	2.415
9.00	2.29	2.453
9.50	2.32	2.490
10.00	2.35	2.525
10.50	2.38	2.558
11.00	2.41	2.590
11.50	2.44	2.621
12.00	2.47	2.650
23.90	2.93	3.148

Tabella 3. Pressioni del vento

4.6.1 Vento a ponte scarico

L' azione del vento viene considerata agente su una altezza comprensiva delle travi e della soletta.

Il carico a metro lineare vale:

$$q = 3.25 \text{ kN/m.}$$

4.6.2 Vento a ponte carico

L' azione del vento viene considerata agente su una altezza comprensiva delle travi, della soletta, della pavimentazione e del mezzo convenzionale.

Il carico a metro lineare vale:

$$q = 9.55 \text{ kN/m.}$$

4.7 Resistenze passive dei vincoli (q_7)

Si considera una forza d'attrito pari al 3% del carico verticale permanente.

4.8 Urto di veicolo in svio (q_8)

La barriera metallica laterale è di tipo bordo ponte classe H4, a tripla onda con montanti verticali costituiti da profili HEA 100 ad interasse 1.50 m. Considerando il modulo di resistenza plastico del profilo pari a $W_{pl} = 83.01 \text{ cm}^3$ ed una tensione di rottura pari ad $f_t = 430 \text{ MPa}$, si ottiene un momento ultimo sul montante pari a:

$$M_u = 83.01 \times 430 / 1000 = 35.7 \text{ kNm.}$$

Considerando, a vantaggio di sicurezza che l'urto avvenga a 0.60m dalla base del montante, il taglio corrispondente al momento ultimo vale:

$$V = 35.7 / 0.60 = 59.5 \text{ kN.}$$

4.9 Variazioni termiche

Per il dimensionamento dell'escursione degli appoggi e dei giunti si prende in esame una variazione termica stagionale uniforme di $\pm 30^\circ\text{C}$ rispetto alla temperatura media.

4.10 Spinta del terreno

La spinta del terreno sulle pareti della spalla ha un andamento crescente secondo una legge di tipo lineare dall'alto verso il basso. La pendenza del diagramma delle spinte, che risulta quindi di tipo triangolare, è pari al prodotto $\gamma \cdot k_0$ avendo indicato con γ il peso dell'unità di volume del terreno a tergo dell'opera ($\gamma = 20 \text{ kN/m}^3$) e con k_0 il coefficiente di spinta a riposo (per un angolo di attrito $\varphi = 35^\circ$ risulta). Si considera inoltre un sovraccarico stradale di 20 kN/m^2 .

4.11 Azioni sismiche

4.11.1 Azione sismica sull'impalcato

- **Vita nominale e periodo di riferimento**

Per la struttura in oggetto, si assume una vita nominale pari a $V_N = 100$ anni, trattandosi di un'opera infrastrutturale d'importanza strategica.

Ai fini della valutazione delle azioni sismiche, e con riferimento alle conseguenze di un'improvvisa interruzione di operatività o di un eventuale collasso, la struttura in esame rientra nella *classe d'uso IV* a cui corrisponde un coefficiente d'uso $C_U = 2.0$.

Ne consegue che il periodo di riferimento per l'azione sismica è $V_R = V_N \times C_U = 200$ anni.

Le probabilità di superamento P_{VR} nel periodo di riferimento V_R , sono stabilite dalla norma in funzione dei differenti stati limite.

In funzione dei valori del periodo di riferimento V_R e della probabilità di superamento P_{VR} , si definisce il periodo di ritorno T_R mediante la relazione:

$$T_R = -\frac{V_R}{\ln(1 - P_{V_R})}$$

La struttura in oggetto ricade nel comune di San Didero (TO).

Dalla mappatura di microzonazione sismica si ricavano i valori dei parametri di pericolosità sismica a_g , F_0 e T^*_c relativi a ciascuno stato limite analizzato.

• Caratterizzazione sismica dei terreni

Con riferimento al sottosuolo nell'area di progetto, la caratterizzazione ai fini della valutazione della risposta sismica locale è stata effettuata in fase di progettazione mediante indagini geofisiche in grado di stimare la distribuzione delle onde di taglio nei primi 30 m. In particolare, come ampiamente descritto nella Relazione geologico-geotecnica, sono state effettuate indagini di tipo Down-hole e MASW e che hanno permesso di classificare il sottosuolo come di categoria B, ossia *“Rocce tenere e depositi di terreni a grana grossa molto addensati o terreni a grana fina molto consistenti con spessori superiori a 30 m, caratterizzati da un graduale miglioramento delle proprietà meccaniche con la profondità e da valori di $V_{S,30}$ compresi tra 360 m/s e 800 m/s (ovvero $N_{SPT,30} > 50$ nei terreni a grana grossa e $C_u 30 > 250$ kPa nei terreni a grana fina)”*.

Dato l'andamento clivometrico della zona, essa si classifica come categoria topografica **TI**, caratterizzata da superfici pianeggianti o rilevati con inclinazione media $i \leq 15^\circ$.

• Spettri di progetto

Lo spettro di risposta elastico della componente orizzontale è definito dalle espressioni seguenti:

$$\begin{aligned} 0 \leq T < T_B & \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_0 \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_0} \left(1 - \frac{T}{T_B} \right) \right] \\ T_B \leq T < T_C & \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_0 \\ T_C \leq T < T_D & \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_0 \cdot \left(\frac{T_C}{T} \right) \\ T_D \leq T & \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_0 \cdot \left(\frac{T_C T_D}{T^2} \right) \end{aligned}$$

Lo spettro di progetto $S_d(T)$ da utilizzare per le componenti orizzontali è lo spettro elastico corrispondente riferito alla probabilità di superamento nel periodo di riferimento P_{VR} considerata, con le ordinate ridotte sostituendo nelle formule precedenti η con $1/q$, dove q è il fattore di struttura.

Il valore di q da utilizzare per ciascuna direzione orizzontale dell'azione sismica, dipende dalla tipologia strutturale, dal suo grado di iperstaticità, dai criteri di progettazione adottati e tiene conto delle non linearità del materiale. Per la struttura in esame è stata assunto $q = 1.5$. Per il sisma verticale si assume un valore di struttura $q=1$.

Si riportano nel seguito gli spettri di progetto calcolati.

Parametri e punti dello spettro di risposta orizzontale per lo stato limite: SLV

Parametri indipendenti

STATO LIMITE	SLV
a_g	0.201 g
F_o	2.524
T_C^*	0.279 s
S_S	1.197
C_C	1.420
S_T	1.000
q	1.500

Parametri dipendenti

S	1.197
η	0.667
T_B	0.132 s
T_C	0.396 s
T_D	2.402 s

Espressioni dei parametri dipendenti

$$S = S_S \cdot S_T \quad (\text{NTC-08 Eq. 3.2.5})$$

$$\eta = \sqrt{10/(5 + \xi)} \geq 0,55; \quad \eta = 1/q \quad (\text{NTC-08 Eq. 3.2.6; §. 3.2.3.5})$$

$$T_B = T_C / 3 \quad (\text{NTC-07 Eq. 3.2.8})$$

$$T_C = C_C \cdot T_C^* \quad (\text{NTC-07 Eq. 3.2.7})$$

$$T_D = 4,0 \cdot a_g / g + 1,6 \quad (\text{NTC-07 Eq. 3.2.9})$$

Espressioni dello spettro di risposta (NTC-08 Eq. 3.2.4)

$$0 \leq T < T_B \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o} \left(1 - \frac{T}{T_B} \right) \right]$$

$$T_B \leq T < T_C \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o$$

$$T_C \leq T < T_D \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C}{T} \right)$$

$$T_D \leq T \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C T_D}{T^2} \right)$$

Lo spettro di progetto $S_d(T)$ per le verifiche agli Stati Limite Ultimi è ottenuto dalle espressioni dello spettro elastico $S_e(T)$ sostituendo η con $1/q$, dove q è il fattore di struttura. (NTC-08 § 3.2.3.5)

Punti dello spettro di risposta

	T [s]	Se [g]
	0.000	0.240
T_B ←	0.132	0.404
T_C ←	0.396	0.404
	0.491	0.326
	0.587	0.273
	0.682	0.234
	0.778	0.206
	0.873	0.183
	0.969	0.165
	1.065	0.150
	1.160	0.138
	1.256	0.127
	1.351	0.118
	1.447	0.111
	1.542	0.104
	1.638	0.098
	1.733	0.092
		0.087
	1.925	0.083
	2.020	0.079
	2.116	0.076
	2.211	0.072
	2.307	0.069
T_D ←	2.402	0.067
	2.478	0.063
	2.554	0.059
	2.631	0.056
	2.707	0.052
	2.783	
	2.859	0.047
	2.935	0.045
	3.011	0.042
	3.087	
	3.163	0.040
	3.239	0.040
	3.315	0.040
	3.391	0.040
	3.467	0.040
	3.544	0.040
	3.620	0.040
	3.696	0.040
	3.772	0.040
	3.848	0.040
	3.924	0.040
	4.000	0.040

Parametri e punti dello spettro di risposta verticale per lo stato limite: SLV

Parametri indipendenti

STATO LIMITE	SLV
a_{qv}	0.121 g
S_S	1.000
S_T	
q	1.000
T_B	0.050 s
T_C	0.150 s
T_D	1.000 s

Parametri dipendenti

F_v	1.526
S	0.000
η	1.000

Espressioni dei parametri dipendenti

$$S = S_S \cdot S_T \quad (\text{NTC-08 Eq. 3.2.5})$$

$$\eta = 1/q \quad (\text{NTC-08 §. 3.2.3.5})$$

$$F_v = 1,35 \cdot F_0 \cdot \left(\frac{a_g}{g}\right)^{0,5} \quad (\text{NTC-08 Eq. 3.2.11})$$

Espressioni dello spettro di risposta (NTC-08 Eq. 3.2.10)

$$0 \leq T < T_B \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_0} \left(1 - \frac{T}{T_B} \right) \right]$$

$$T_B \leq T < T_C \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_v$$

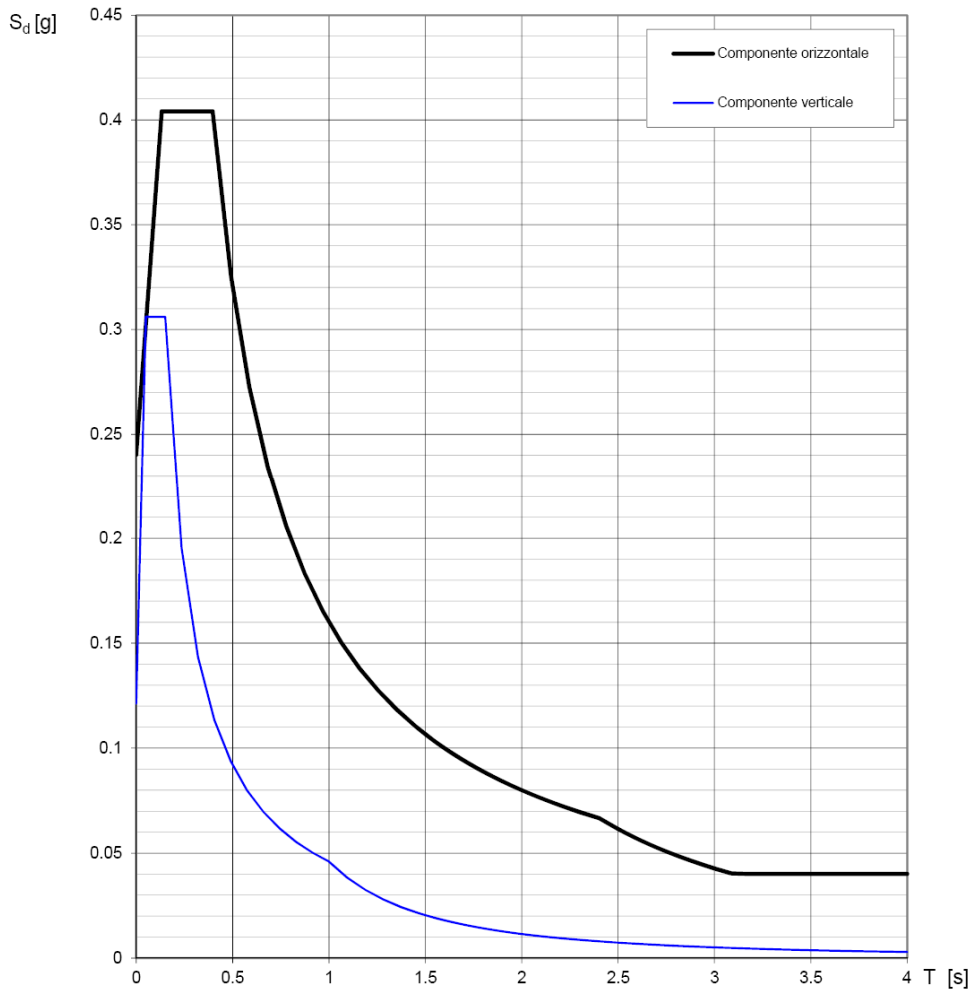
$$T_C \leq T < T_D \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C}{T} \right)$$

$$T_D \leq T \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C \cdot T_D}{T^2} \right)$$

Punti dello spettro di risposta

	T [s]	Se [g]
	0.000	0.121
T_B ←	0.050	0.306
T_C ←	0.150	0.306
	0.235	0.195
	0.320	0.143
	0.405	0.113
	0.490	0.094
	0.575	0.080
	0.660	0.070
	0.745	0.062
	0.830	0.055
	0.915	0.050
T_D ←	1.000	0.046
	1.094	0.038
	1.188	0.033
	1.281	0.028
	1.375	0.024
	1.469	0.021
	1.563	0.019
	1.656	0.017
	1.750	0.015
	1.844	0.014
	1.938	0.012
	2.031	0.011
	2.125	0.010
	2.219	0.009
	2.313	0.009
	2.406	0.008
	2.500	0.007
	2.594	0.007
	2.688	0.006
	2.781	0.006
	2.875	0.006
	2.969	0.005
	3.063	0.005
	3.156	0.005
	3.250	0.004
	3.344	0.004
	3.438	0.004
	3.531	0.004
	3.625	0.003
	3.719	0.003
	3.813	0.003
	3.906	0.003
	4.000	0.003

Spettri di risposta (componenti orizz. e vert.) per lo stato limite: SLV



Lo stato di sollecitazione e di deformazione indotto dal sisma è stato indagato facendo ricorso ad un'analisi statica lineare per il sisma orizzontale ed ad un'analisi dinamica lineare per il sisma verticale. Il periodo di oscillazione orizzontale è stato calcolato considerando la deformabilità dei pali di fondazione ed è pari a $T=0.21s$. Nel calcolo dell'azione sismica orizzontale è stata, quindi, utilizzata l'accelerazione massima spettrale.

Ai fini delle verifiche, sono state considerate le seguenti combinazioni degli effetti delle componenti sismiche permutando i coefficienti di combinazione ed i segni (E_x definisce gli effetti della componente orizzontale dell'azione sismica agente secondo la direzione x, E_y gli effetti della componente orizzontale agente secondo la direzione y, E_z gli effetti della componente verticale agente secondo la direzione z).

$$\begin{aligned} &\pm E_x \pm 0.3 \cdot E_y \pm 0.3 \cdot E_z \\ &\pm E_y \pm 0.3 \cdot E_x \pm 0.3 \cdot E_z \\ &\pm E_z \pm 0.3 \cdot E_x \pm 0.3 \cdot E_y \end{aligned}$$

4.11.2 Incremento di spinta in condizioni sismiche

Oltre alle forze d'inerzia dovute al peso degli elementi strutturali e del terreno dietro le spalla, è necessario, in condizioni sismiche, considerare anche un incremento della spinta del terreno rispetto a quella statica.

Le spinte in stato limite attivo e passivo in condizioni sismiche possono essere determinate con le seguenti formule:

$$S_{aE} = \frac{1}{2} \cdot \gamma \cdot H^2 \cdot (1 \pm K_v) \cdot K_{aE}$$

$$S_{pE} = \frac{1}{2} \cdot \gamma \cdot H^2 \cdot (1 \pm K_v) \cdot K_{pE}$$

dove K_{aE} e K_{pE} sono i coefficienti di spinta in condizioni sismica valutati mediante la formulazione di Mononobe e Okabe e:

- K_h è il coefficiente sismico orizzontale da calcolare come (punto 7.11.6.2.1 del D.M. 14/01/2008)

$$K_h = \beta_m \cdot \frac{a_{\max}}{g}$$

- K_v è il coefficiente sismico verticale pari a $\pm 0.5 K_h$;

Il coefficiente β_m è da assumere unitario per opere che non siano in grado di subire spostamenti relativi rispetto al terreno mentre a_{\max} è l'accelerazione orizzontale massima attesa al sito da poter valutare come:

$$a_{\max} = S_S \cdot S_T \cdot a_g$$

Nel caso in esame risulta:

- $K_h = 0.24$
- $K_v = 0.12$

Risulta, nel caso in esame, un coefficiente $K_{aE} = 0.80$.

L'incremento di spinta è quindi ottenuto come differenza tra la spinta in condizioni sismiche e quella applicata in condizioni statiche. Esso è rappresentato da un carico pseudo-statico di tipo lineare.

5. Modellazione della struttura

Si descrive di seguito il modello agli elementi finiti utilizzato per valutare il campo delle sollecitazioni ed il campo delle deformazioni delle sottostrutture assoggettate ai carichi di progetto. Il modello è stato realizzato con il Programma “MIDAS GEN 2011 (v2.1)”, prodotto da Midas Information Technology Co., Ltd. I risultati ottenuti sono stati validati con verifiche manuali e confronti con risultati ottenuti su modelli semplificati.

I tabulati di calcolo comprensivi della descrizione completa del modello, e dei risultati dell'analisi sono forniti in allegato.

5.1 Descrizione del modello di calcolo dell'impalcato

È stato realizzato il modello di calcolo dell'impalcato utilizzando un modello a graticcio. Le travi principali sono state modellate con elementi monodimensionali tipo *beam* con sezione trasversale comprensiva della porzione di soletta che compete a ciascuna travata. Anche la soletta in direzione trasversale è stata modellata attraverso elementi *beam*. Per non considerare due volte il peso della soletta agli elementi trasversali è stato assegnato un materiale avente peso specifico nullo. I traversi di testata sono stati modellati attraverso elementi *beam* avente sezione trasversale ad “L”. Le quote dei baricentri di tutti gli elementi strutturali sono state opportunamente tenute in conto.

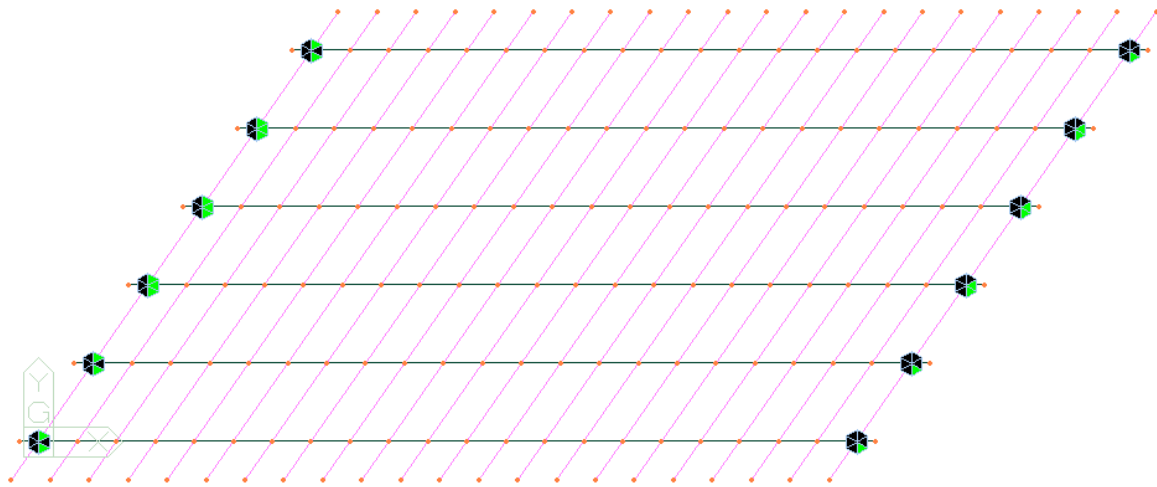


Figura 6 – Vista in pianta del modello a graticcio

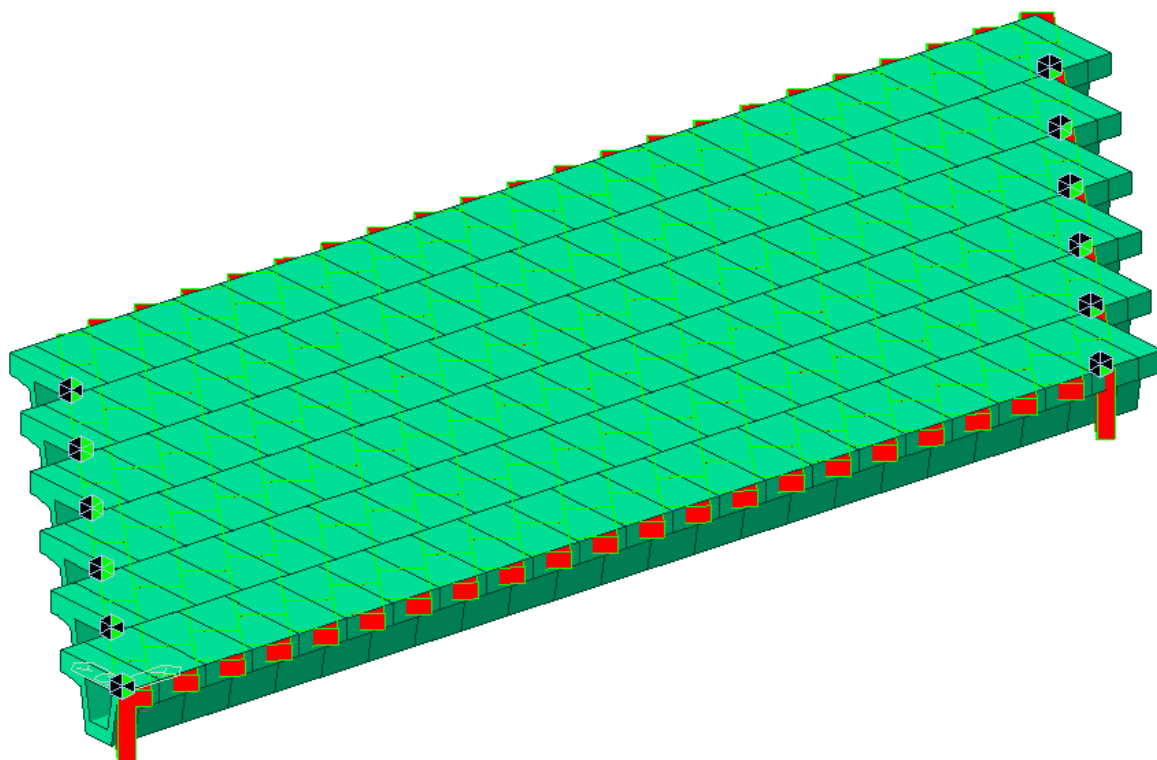


Figura 7 – Vista 3D del modello dell'impalcato

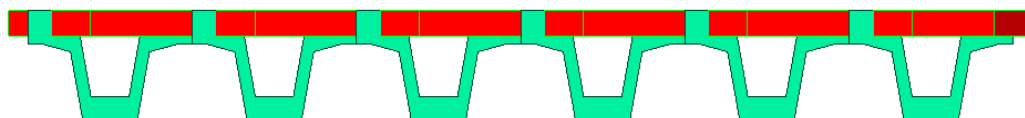


Figura 8 – Sezione trasversale

I vincoli esterni sono stati modellati in accordo con lo schema appoggi illustrato nei precedenti paragrafi. Ove necessario sono stati opportunamente ruotati gli assi locali dei nodi.

6. Condizioni e combinazioni di carico

Sulle membrature sono state applicate le azioni di progetto valutate come specificato al capitolo 5, considerando le condizioni elementari di carico precedentemente riportate. In particolare, il peso proprio degli elementi strutturali è calcolato in automatico dal programma di calcolo, i carichi permanenti, l'azione di frenamento e i carichi del vento sono stati applicati come *beam load*. La variazione termica non è stata inserita nel modello di calcolo, ma i suoi effetti sono stati tenuti in conto con calcoli manuali. L'azione sismica è stata applicata come forza concentrata ad un nodo collegato rigidamente al resto dell'impalcato.

Il valore dell'azione sismica orizzontale è:

$$F_{hx} = F_{hy} = W \cdot S_{de}(T) / g$$

Dove:

- W è il peso sismico dell'impalcato;
- Sde (T) è l'accelerazione spettrale;
- g è l'accelerazione di gravità.

Risulta pertanto:

$$F_{hx} = F_{hy} = 4565 \cdot 0.404 = 1845 \text{ kN}$$

6.1 Condizioni elementari di carico

In base alla modellazione delle azioni adottata, sono state considerate le seguenti condizioni elementari di carico:

G ₁	peso proprio della struttura
G ₂	carichi permanenti portati
q ₃	frenamento
q ₄	azione centrifuga
q _{5_pc}	vento a ponte carico Y
q _{5_ps}	vento a ponte scarico Y
Ex	sisma in direzione X
Ey	sisma in direzione Y

Nel seguito della presente si riportano le diverse combinazioni di carico adottate

6.2 Combinazioni delle azioni agli Stati Limite Ultimi

In base alla vigente normativa, per la definizione delle azioni di calcolo agli stati limite ultimi, a partire dalle condizioni di carico elementari, sono state considerate le seguenti combinazioni delle azioni:

- *Combinazioni delle azioni per le verifiche agli stati limite ultimi* secondo lo schema indicato in tabella 5.1.IV delle “Norme tecniche per le costruzioni” di cui al D.M. 14.01.2008:

$$F_d = \gamma_{g1} \cdot G_1 + \gamma_{g2} \cdot G_2 + \gamma_{Q1} \cdot Q_{k1} + \sum_{i=2}^n (\gamma_{Qi} \cdot \psi_{0i} \cdot Q_{ki})$$

- *Combinazione sismica:*

$$F_d = E + G_1 + G_2 + \sum_{i=1}^n (\psi_{2i} \cdot Q_{ki})$$

avendo assunto per i coefficienti $\gamma_{g,1}$, $\gamma_{g,2}$ e $\gamma_{q,i}$ e per i coefficienti di combinazione Ψ_{0i} , Ψ_{1i} e Ψ_{2i} i valori previsti dalle norme e riportati rispettivamente nelle tabella 5.1.V e 5.1.VI delle “Norme tecniche per le costruzioni” di cui al D.M. 14.01.2008.

6.3 Combinazioni delle azioni agli Stati Limite di Esercizio

Per la definizione delle azioni di calcolo agli Stati Limite di Esercizio, le condizioni di carico elementari sono state cumulate in modo tale da risultare più sfavorevoli, mediante l'espressione:

- combinazioni caratteristiche rare: $F_d = G_1 + G_2 + Q_{k1} + \sum_{i=2}^n (\psi_{0i} \cdot Q_{ki})$
- combinazioni frequenti: $F_d = G_1 + G_2 + \gamma_{11} \cdot Q_{k1} + \sum_{i=2}^n (\psi_{2i} \cdot Q_{ki})$
- combinazioni quasi permanenti: $F_d = G_1 + G_2 + \sum_{i=1}^n (\psi_{2i} \cdot Q_{ki})$

La combinazione di calcolo rara è stata utilizzata per la verifica dello stato limite di tensione in esercizio, la combinazione frequente per le verifiche a fessurazione e la quasi permanente per il controllo della deformabilità.

Si riporta di seguito un riepilogo delle combinazioni SLU SLE ed SLV delle azioni considerate nelle analisi strutturali in cui sono esplicitati i valori dei coefficienti parziali per le azioni γ utilizzati:

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| MIDAS(Modeling, Integrated Design & Analysis Software) |
| midas Gen - Load Combinations |
| | | |
| | | (c)SINCE 1989 |
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| Gen 2011 | |
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DESIGN TYPE : General

LIST OF LOAD COMBINATIONS

NUM	NAME	ACTIVE LOADCASE(FACTOR) +	TYPE	LOADCASE(FACTOR) +	LOADCASE(FACTOR)
1	Q1k c1-c2-c3 - Caratteri	Active (1.000)	Add		
2	Q1f c1-c2-c3 - psi	Active (1.000)	Add		
3	Q2a c1-c2-c3 - psi	Active (1.000) +	Add	q3	(1.000)
4	SLU1 +	Active G1(1.350) + q5_pc(0.900)	Add	G2(1.350) +	Q1k(1.350)
5	SLU2 +	Active G1(1.350) + q5_pc(-0.900)	Add	G2(1.350) +	Q1k(1.350)
6	SLU3 +	Active G1(1.350) + q5_pc(0.900)	Add	G2(1.350) +	Q2a(1.350)
7	SLU4 +	Active G1(1.350) + q5_pc(-0.900)	Add	G2(1.350) +	Q2a(1.350)
8	SLU5 +	Active G1(1.350) + q5_ps(1.500)	Add	G2(1.350) +	Q1f(1.350)
9	SLU6 +	Active G1(1.350) + q5_ps(-1.500)	Add	G2(1.350) +	Q1f(1.350)
10	SLE-R1 +	Active G1(1.000) + q5_pc(0.600)	Add	G2(1.000) +	c1-c2-c3 - Caratteri(1.000)
11	SLE-R2 +	Active G1(1.000) + q5_pc(-0.600)	Add	G2(1.000) +	c1-c2-c3 - Caratteri(1.000)
12	SLE-F1 +	Active G1(1.000) + q5_pc(0.200)	Add	G2(1.000) +	c1-c2-c3 - Caratteri(1.000)
13	SLE-F2 +	Active G1(1.000) + q5_pc(-0.200)	Add	G2(1.000) +	c1-c2-c3 - Caratteri(1.000)
14	SLE-QP	Active G1(1.000) +	Add	G2(1.000) +	c1-c2-c3 - Caratteri(1.000)
15	SLV-x1 +	Active G1(1.000) + Ey(0.300) +	Add	G2(1.000) + SLV-z(0.300)	Ex(1.000)
16	SLV-x2 +	Active G1(1.000) + Ey(-0.300) +	Add	G2(1.000) + SLV-z(0.300)	Ex(1.000)

Ponte Canale NiE – Relazione di calcolo

17	SLV-x3	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(1.000)
		Ey(0.300) +		SLV-z(-0.300)	
18	SLV-x4	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(1.000)
		Ey(-0.300) +		SLV-z(-0.300)	
19	SLV-x5	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-1.000)
		Ey(0.300) +		SLV-z(0.300)	
20	SLV-x6	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-1.000)
		Ey(-0.300) +		SLV-z(0.300)	
21	SLV-x7	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-1.000)
		Ey(0.300) +		SLV-z(-0.300)	
22	SLV-x8	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-1.000)
		Ey(-0.300) +		SLV-z(-0.300)	
23	SLV-y1	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(0.300)
		Ey(1.000) +		SLV-z(0.300)	
24	SLV-y2	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-0.300)
		Ey(1.000) +		SLV-z(0.300)	
25	SLV-y3	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(0.300)
		Ey(1.000) +		SLV-z(-0.300)	
26	SLV-y4	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-0.300)
		Ey(1.000) +		SLV-z(-0.300)	
27	SLV-y5	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(0.300)
		Ey(-1.000) +		SLV-z(0.300)	
28	SLV-y6	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-0.300)
		Ey(-1.000) +		SLV-z(0.300)	
29	SLV-y7	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(0.300)
		Ey(-1.000) +		SLV-z(-0.300)	
30	SLV-y8	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-0.300)
		Ey(-1.000) +		SLV-z(-0.300)	
31	SLV-z1	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(0.300)
		Ey(0.300) +		SLV-z(1.000)	
32	SLV-z2	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-0.300)
		Ey(0.300) +		SLV-z(1.000)	
33	SLV-z3	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(0.300)
		Ey(0.300) +		SLV-z(-1.000)	
34	SLV-z4	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-0.300)
		Ey(0.300) +		SLV-z(-1.000)	
35	SLV-z5	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(0.300)
		Ey(-0.300) +		SLV-z(1.000)	
36	SLV-z6	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-0.300)
		Ey(-0.300) +		SLV-z(1.000)	
37	SLV-z7	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(0.300)
		Ey(-0.300) +		SLV-z(-1.000)	

38	SLV-z8	Active	Add		
		G1(1.000) +		G2(1.000) +	Ex(-0.300)
		Ey(-0.300) +		SLV-z(-1.000)	

39	INVSLU	Active	Envelope		
		SLU1(1.000) +		SLU2(1.000) +	SLU3(1.000)
		SLU4(1.000) +		SLU5(1.000) +	SLU6(1.000)
		(1.000) +		(1.000) +	(1.000)
		(1.000) +		(1.000) +	(1.000)

40	INVSLE-R	Active	Envelope		
		SLE-R1(1.000) +		SLE-R2(1.000) +	(1.000)
		(1.000)			

41	INVSLE-F	Active	Envelope		
		SLE-F1(1.000) +		SLE-F2(1.000) +	(1.000)
		(1.000)			

42	INVSLE-QP	Active	Envelope		
		SLE-QP(1.000) +		(1.000)	

43	INVSLV	Active	Envelope		
		SLV-x1(1.000) +		SLV-x2(1.000) +	SLV-x3(1.000)
		SLV-x4(1.000) +		SLV-x5(1.000) +	SLV-x6(1.000)
		SLV-x7(1.000) +		SLV-x8(1.000) +	SLV-y1(1.000)
		SLV-y2(1.000) +		SLV-y3(1.000) +	SLV-y4(1.000)
		SLV-y5(1.000) +		SLV-y6(1.000) +	SLV-y7(1.000)
		SLV-y8(1.000) +		SLV-z1(1.000) +	SLV-z2(1.000)
		SLV-z3(1.000) +		SLV-z4(1.000) +	SLV-z5(1.000)
		SLV-z6(1.000) +		SLV-z7(1.000) +	SLV-z8(1.000)

7. Verifiche dell'impalcato

7.1 Criteri di verifica allo SLE per le sezioni in c.a.p.

Per gli elementi in c.a.p. sono state condotte verifiche tensionali sia nell'acciaio da precompressione sia nel calcestruzzo.

Verifiche tensionali al tiro

Le tensioni iniziali all'atto della tesatura dei cavi devono rispettare le più restrittive delle seguenti limitazioni:

$$\sigma_{spi} < 0.90f_{p(1)k} \quad \sigma_{spi} < 0.80f_{ptk}$$

Per il calcestruzzo all'atto della precompressione le tensioni di compressione non devono superare il valore di:

$$\sigma_c < 0.70f_{ckj}$$

essendo f_{ckj} la resistenza caratteristica del calcestruzzo all'atto del tiro.

Verifiche tensionali in esercizio

Le massima tensioni del calcestruzzo in esercizio deve rispettare la limitazione seguente

$$\sigma_c < 0.60f_{ck} \quad \text{per combinazione caratteristica (rara)}$$

$$\sigma_c < 0.45f_{ck} \quad \text{per combinazione quasi permanente}$$

7.2 Criteri di verifica allo SLU per le sezioni in c.a.p.

Criteri di verifica a flessione delle sezioni in c.a.p.

Per gli elementi in c.a. soggetti sia a regimi di sforzo estensionali che flessionali, sono state condotte verifiche a presso-flessione o tenso-flessione, controllando che:

$$M_{Rd} = M_{Rd}(N_{Ed}) \geq M_{Ed}$$

dove:

M_{Rd} è il valore di calcolo del momento resistente corrispondente a NEd;

M_{Ed} è il valore di calcolo della componente flettente dell'azione.

Criteri di verifica a taglio delle sezioni in c.a.p.

La resistenza a taglio V_{Rd} di elementi strutturali dotati di specifica armatura a taglio viene valutata sulla base di una adeguata schematizzazione a traliccio. La verifica di resistenza (SLU) si pone con:

$$V_{Rd} \geq V_{Ed}$$

dove V_{Ed} è il valore di calcolo dello sforzo di taglio agente.

Con riferimento all'armatura trasversale, la resistenza di calcolo a "taglio trazione" si calcola con:

$$V_{Rsd} = 0.9 \cdot d \cdot \frac{A_{sw}}{s} \cdot f_{yd} \cdot (ctg \alpha + ctg \theta) \cdot sen \alpha$$

Con riferimento al calcestruzzo d'anima, la resistenza di calcolo a "taglio compressione" si calcola con:

$$V_{Rcd} = 0.9 \cdot d \cdot b_w \cdot \alpha_c \cdot f'_{cd} \cdot \frac{(ctg \alpha + ctg \theta)}{1 + ctg^2 \theta}$$

La resistenza al taglio della trave è la minore delle due sopra definite:

$$V_{Rd} = \min(V_{Rsd}, V_{Rcd})$$

dove:

A_{sw} è l'area dell'armatura trasversale;

s è l'interasse tra due armature trasversali consecutive;

α è l'angolo di inclinazione dell'armatura trasversale rispetto all'asse della trave;

f'_{cd} è la resistenza a compressione ridotta del calcestruzzo d'anima ($f'_{cd} = 0.5 \cdot f_{cd}$).

α_c è un coefficiente maggiorativo.

7.3 Verifiche allo SLE delle travi in c.a.p.

Le verifiche tensionali della trave principale più sollecitata sono state eseguite ripercorrendo le varie fasi realizzative dell'opera. Il software utilizzato per le verifiche è il Precom della Sigma C.

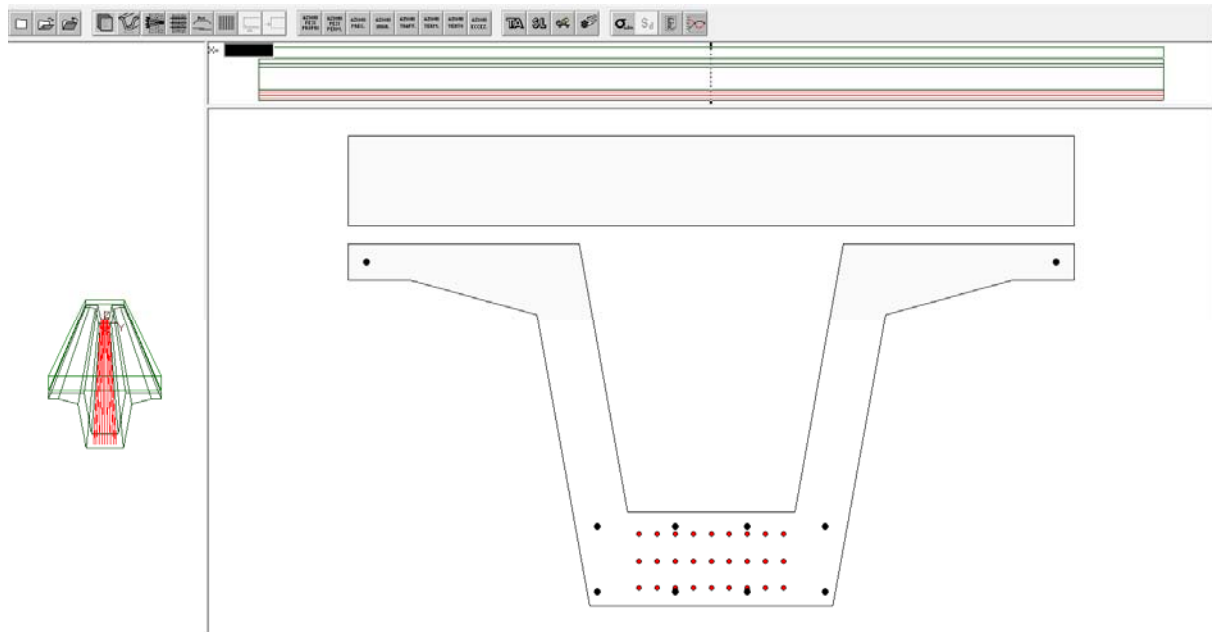


Figura 9 – Sezione trave in c.a.p.

Si riportano di seguito le caratteristiche dei materiali utilizzate nel calcolo.

Dati calcestruzzi

Calcestruzzo : C35/45

Nome calcestruzzo C35/45

Resistenza caratteristica a 28 gg. R_{ck28} 45

Modulo elastico a 28 gg. E_{28} 34625

Resistenza caratteristica a 7 gg R_{ckj} 38.2

Modulo elastico a 7 gg E_j 33270

Ritiro a $t = \infty$ ε_{∞} ($\times 10^3$)3

Coefficiente di viscosità a $t = \infty$ φ_{∞} 2.3

Percentuale ritiro nel ciclo termico su ritiro totale 0 %

Fenomeni lenti nel tempo:

Pt.	t [giorni]	ritiro	viscosità'
1	0	0.000	0.000
2	7	0.150	0.130
3	30	0.400	0.390
4	50	0.470	0.470
5	10000	1.000	1.000

inserisci punto elimina punto

OK Annulla

Acciaio : Trefolo

Nome acciaio Trefolo

Modulo di elasticita' 201000

Tensione caratteristica a rottura f_{ptk} 1860

Tensione caratteristica all' 1% $f_{p(1)k}$ 1670

Calcolo rilassamento

Rilassamento indipendente da tensione di tesatura

Rilassamento indipendente da tensione di tesatura

Caduta (%) per rilass. a $t = \infty$ per ogni valore di σ_{spi} 3

Rilassamento calcolato con prove a lunga durata

Calcolo rilassamento con prove a lunga durata

Caduta (%) σ_{sp} per rilass. a 1000 ore ($\sigma_{spi} = 0.75 f_{ptk}$)

Caduta (%) σ_{sp} per rilass. a n ore ($\sigma_{spi} = 0.75 f_{ptk}$)

Numero ore prova a lunga durata disponibile.....

Caduta (%) σ_{sp} per effetto del ciclo termico..... 0

Rilassamento nel tempo:

Pt.	t [giorni]	Rilass. R t / R inf.
1	0	0.000
2	23	0.280
3	41	0.382
4	500	0.500
5	10000	1.000

inserisci punto elimina punto

OK Annulla

Sono stati utilizzati in totale n°27 trefoli 0.6" di diametro nominale 15.20mm e sezione 139mm².

La posizione dei trefoli e la loro lunghezza sono riassunte nella tabella seguente. Per alcuni trefoli sono predisposte delle guaine nei presi degli appoggi. È stata considerata una lunghezza di ancoraggio di 1.25m

Numero trefoli	Distanza dal lembo inferiore (m)	Numero Guaine	Lunghezza guaine (m)
9	0.200	4	2.50
9	0.125	5	4.00
9	0.050	5	6.00

Tabella 4. Trefoli

La tensione di tiro è pari a $\sigma_{spi} = 1450MPa$ che risulta essere minore della tensione limite definita al precedente par. 8.1. Si ha infatti:

$$0.90f_{p(1)k} = 0.9 \cdot 1670 = 1503MPa$$

$$0.80f_{ptk} = 0.8 \cdot 1860 = 1488MPa$$

da cui:

$$\sigma_{spi} = 1450MPa < 1488MPa$$

Nella seguente tabella sono riportate le azioni equivalenti alla precompressione.

Ascissa sezione trave (m)	Momento flettente (kNm)	Sforzo Normale (kN)
0.000	0.00	0.00
1.250	0.00	0.00
1.250	-1083.62	-2821.70
3.750	-1083.62	-2821.70
3.750	-1276.26	-3426.35
5.250	-1276.26	-3426.35
5.250	-1670.56	-4434.10
7.250	-1670.56	-4434.10
7.250	-2137.68	-5441.85
14.750	-2137.68	-5441.85
14.750	-1667.80	-4434.10
16.750	-1667.80	-4434.10
16.750	-1271.15	-3426.35
18.250	-1271.15	-3426.35
18.250	-1077.81	-2821.70
20.750	-1077.81	-2821.70
20.750	24.24	0.00
22.000	24.24	0.00

Tabella 5. Azioni equivalenti alla precompressione

7.3.1 Verifiche al tiro

Si riportano di seguito i grafici raffiguranti le tensioni del calcestruzzo all'atto del tiro (si precisa che le unità di misura riportate sono kg/cm^2 per le tensioni e cm per le lunghezze)

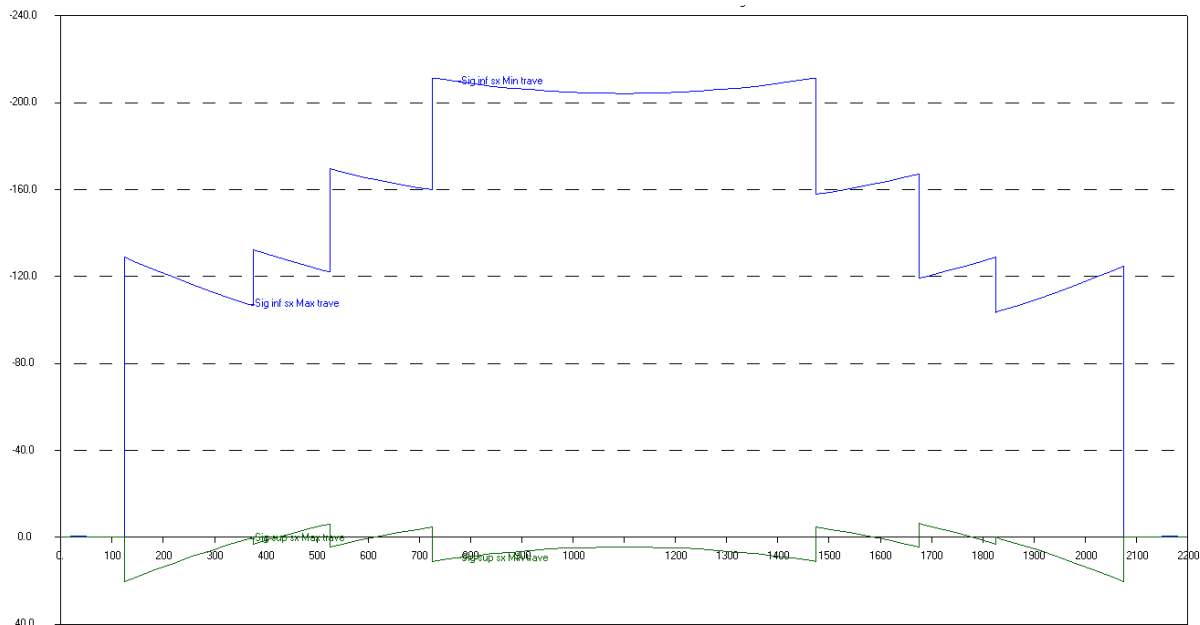


Figura 10 – Tensioni Travi al tiro

La tensione massima al lembo inferiore è pari a $\sigma_c = 21.1$ MPa e risulta essere minore della tensione limite di compressione per il calcestruzzo in fase di tiro. Si ha infatti:

$$21.1 \text{ MPa} < 0.70 f_{ckj} = 0.7 \cdot 31.7 = 22.2 \text{ MPa}$$

Inoltre la massima tensione di trazione al lembo superiore pari a 1.84 MPa risulta essere minore della resistenza a trazione del calcestruzzo pari a $f_{ctd} = 1.87$ MPa.

7.3.2 Verifiche in esercizio

Si riportano di seguito i grafici raffiguranti le tensioni del calcestruzzo della trave precompressa in esercizio per combinazione rara (si precisa che le unità di misura riportate sono kg/cm^2 per le tensioni e cm per le lunghezze).

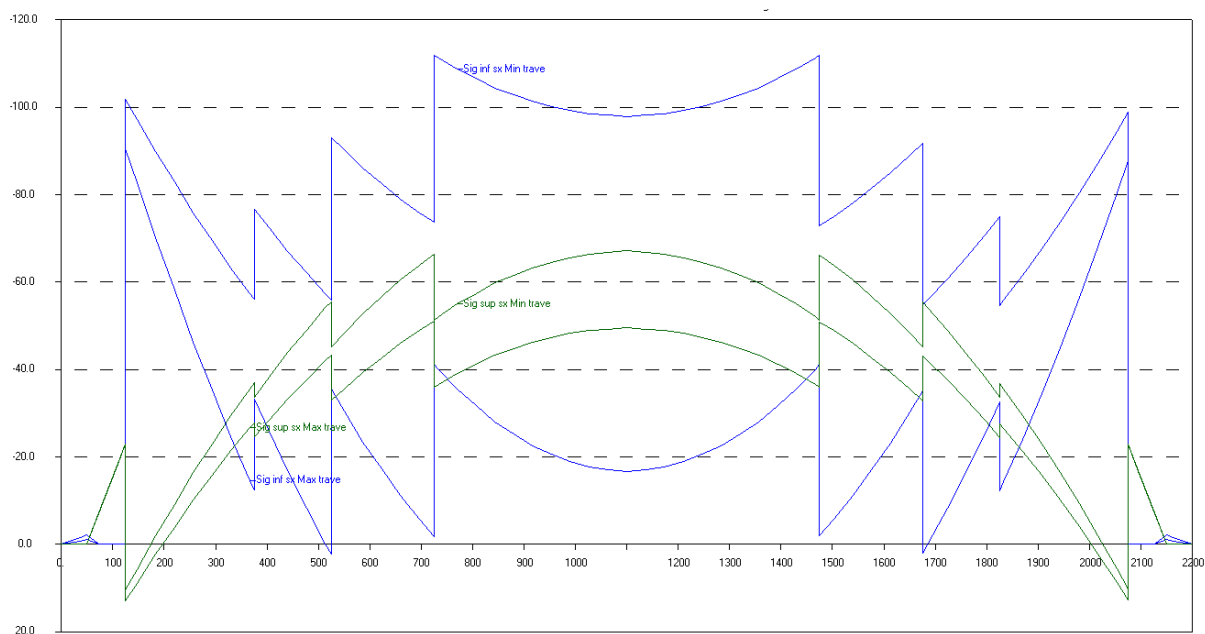


Figura 11 – Tensioni Travi in esercizio

La tensione massima nel calcestruzzo è pari a $\sigma_c = 11.2$ MPa e risulta essere minore della tensione limite per il calcestruzzo in fase di esercizio. Si ha infatti:

$$11.2 \text{ MPa} < 0.60f_{ck} = 0.7 \cdot 37.35 = 22.4 \text{ MPa}$$

7.4 Verifiche allo SLU delle travi in c.a.p.

7.4.1 Sollecitazioni di calcolo

Si riportano di seguito le immagini delle sollecitazioni massime calcolate allo SLU.

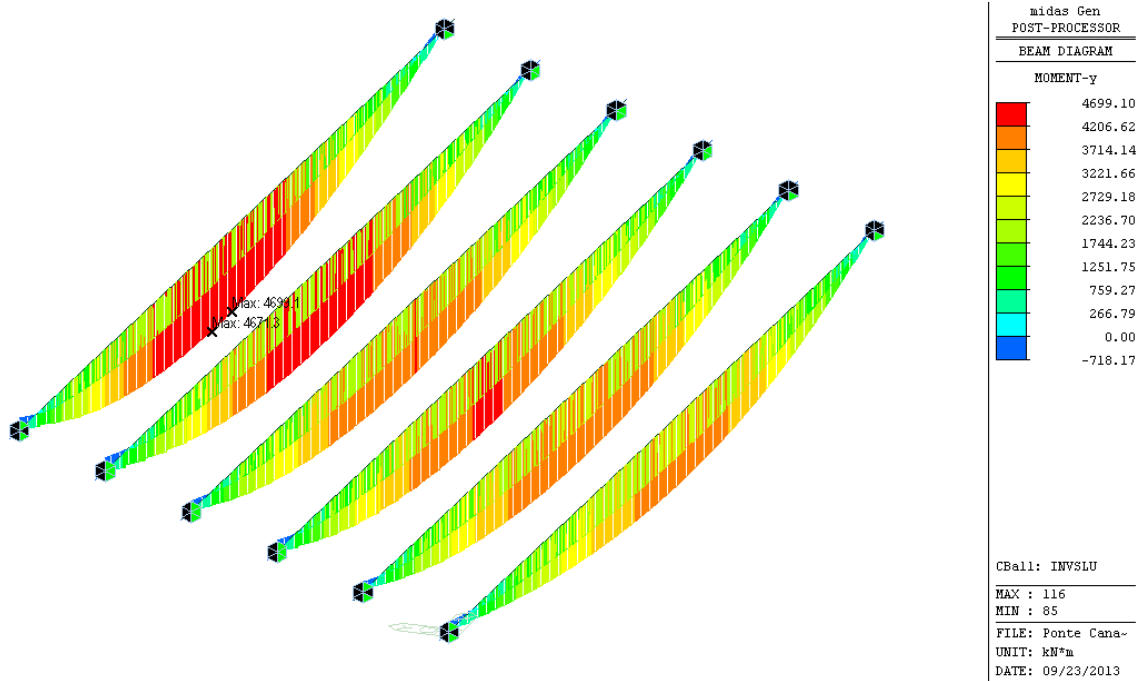


Figura 12 – Momento flettente su travi in c.a.p.

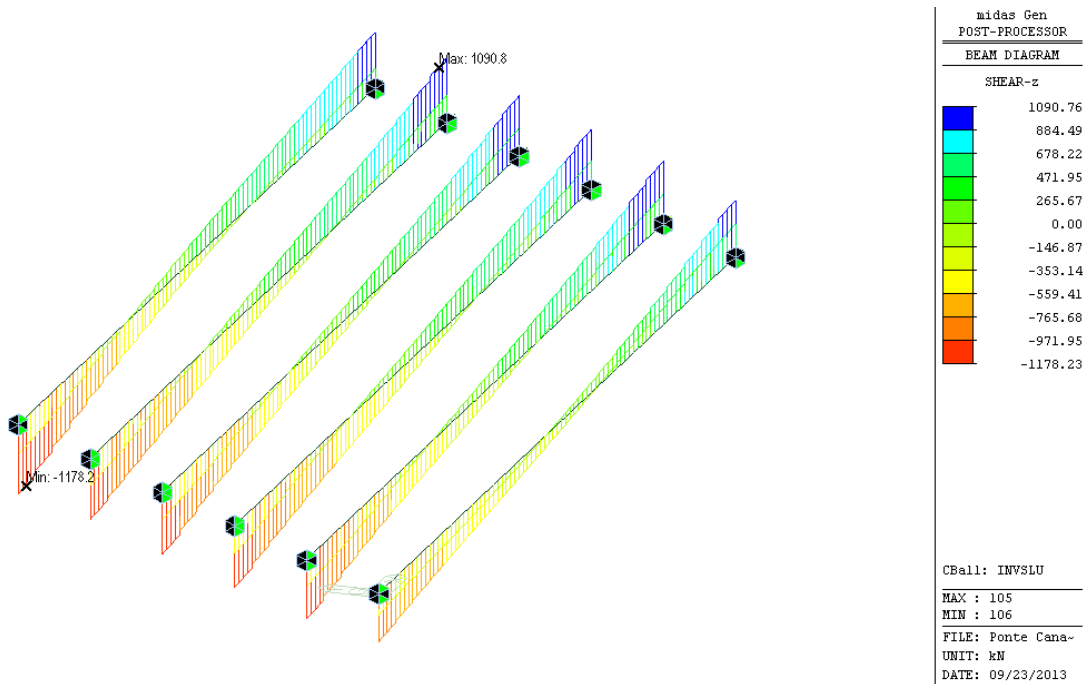


Figura 13 – Taglio su travi in c.a.p.

7.4.2 Verifiche a flessione e taglio

Si riportano di seguito la verifica a flessione e taglio allo SLU della trave in c.a.p. nelle sezione in cui risultano più gravose.

Verifica C.A. S.L.U. - File: Trave SLU

File Materiali Opzioni Visualizza Progetto Sez. Rett. Sismica Normativa: NTC 2008 ?

Titolo: Trave a cassone - SLU

N° Vertici: 17 **Zoom** **N° barre:** 8 **Zoom**

N°	x [cm]	y [cm]
1	-33.5	0
2	33.5	0
3	48.03	80.5
4	83	90
5	100	90
6	100	130

Armadura Precompressione

N° cavi: 27 **Zoom**

N°	As [cm²]	x [cm]	y [cm]	σ_{sp} [MPa]
23	1.39	0	20	1450
24	1.39	7	20	1450
25	1.39	14	20	1450
26	1.39	21	20	1450
27	1.39	28	20	1450

Sollecitazioni S.L.U. Metodo n

N_{Ed} 0 kN
 M_{xEd} 4639 kNm
 M_{yEd} 0 kNm

Materiali

B450C **C35/45**

ϵ_{su} 67.5 ‰ ϵ_{c2} 2 ‰
 f_{yd} 391.3 N/mm² ϵ_{cu} 3.5 ‰
 E_s 200,000 N/mm² f_{cd} 19.83 N/mm²
 E_s/E_c 15 f_{cc}/f_{cd} 1
 ϵ_{syd} 1.957 ‰ $\sigma_{c,adm}$ 13.5 N/mm²
 $\sigma_{s,adm}$ 255 N/mm² τ_{co} 0.8
 τ_{c1} 2.257

P.to applicazione N
 Centro Baricentro cls
 Coord.[cm] xN 0 yN 0

Tipologia
Lato calcestruzzo - Cavo snervato

Metodo di calcolo
 S.L.U.+ S.L.U.- Metodo n

Tipologia flessione
 Retta Deviata

N° rett. 100
Calcola MRd **Dominio M-N**
 L_o 0 cm **Col. modello**

Precompresso

Materiali

σ_c -19.83 N/mm²
 σ_s 391.3 N/mm²
 ϵ_c 3.5 ‰
 ϵ_s 19.81 ‰
 d 126 cm
 x 18.92 x/d 0.1501
 δ 0.7

Armadura Precompressione

Trefolo

ϵ_{su} 67.5 ‰
 f_{yd} 1.452 N/mm²
 E_s/E_c 6
 ϵ_{syd} 7.26 ‰
 $\sigma_{s,adm}$ 1080 N/mm²

σ_{sp} 1.452 N/mm²
 ϵ_{sp} 26.88 ‰ compressa predef.

Verifiche a taglio - D.M. 14-01-2008

Materiali	Geometria sezione	Sollecitazioni di calcolo	Parametri di verifica
Calcestruzzo Rck [Mpa] 45 fck [Mpa] 37.4 fcd [Mpa] 21.2	b [mm] 300 h [mm] 1000 c [mm] 40 d [mm] 960	N_{Ed} [kN] 6000 V_{Ed} [kN] 1178	k 1.46 v_{min} 0.38 ρ_l 0.0044 σ_{cp} 4.2330 v 0.5 $(\sigma_{cp})^*$ 20.000 α_c 2.000 ω_{sw} 0.097 cotg θ 3.055 cotg θ^* 2.500
Acciaio fyk [Mpa] 450 fyd [Mpa] 391.3	Armadura longitudinale n° barre 4 diametro 20 Area [mm²] 1256	VERIFICHE Sezione non armata a taglio V_{Rd} [kN] 310.46 Armare!!!	
	Armadura trasversale Staffe Φ 10 n° bracci 4 A_{sw} [mm²] 314 s [mm] 200	Sezione armata a taglio Crisi armatura a taglio V_{Rsd} [kN] 1326.99 V_{Rcd} [kN] 1891.71 V_{Rd} [kN] 1326.99 Verificato	

7.5 Deformazioni

7.5.1 Frecce calcolate

La deformazione elastica è data da:

$$f_{\text{tot}} = f_{G1} + f_{G2} + f_{Q2}$$

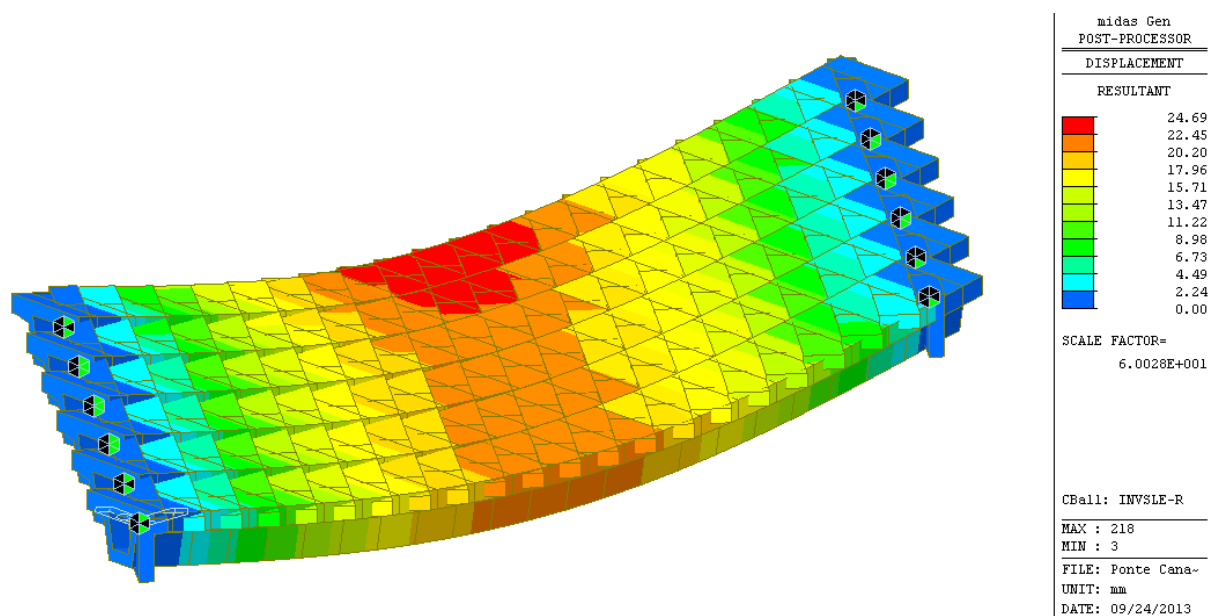
dove:

f_{G1} è la freccia da peso proprio;

f_{G2} è la freccia da carichi permanenti;

f_{Q2} è la freccia dovuta alle azioni da traffico.

Nel caso in esame risulta:



Bisogna verificare che risulti $f_{\text{tot}} < L / 700 = 30.0\text{mm}$.

Essendo lo spostamento massimo pari a 24.7mm la verifica risulta soddisfatta.

7.5.2 Deformazioni orizzontali

Le deformazioni e gli spostamenti in direzione longitudinale sono dovute essenzialmente alle variazioni termiche e al sisma. Il calcolo degli spostamenti da azioni termiche in direzione longitudinale per il dimensionamento dell'escursione di appoggi e giunti viene effettuato con la relazione:

$$\varepsilon_T = \alpha_T \cdot L \cdot \Delta T$$

dove:

α_T è il coefficiente di dilatazione termica pari a $1.0 \times 10^{-5} 1/C^\circ$;

L è la lunghezza dell'impalcato;

ΔT è la componente uniforme della variazione di temperatura considerata a vantaggio di sicurezza pari a $\pm 30^\circ$.

Gli spostamenti longitudinali risultano pari a:

$$\varepsilon_T = 6.30\text{mm}$$

Gli spostamenti sotto azioni sismiche sono pari a 9.50mm.

I giunti e gli appoggi sono capaci di assorbire tali spostamenti.

7.6 Reazioni agli appoggi

Nella tabella seguente si riportano le reazioni massime e minime agli appoggi per l'involuppo delle combinazioni di carico agli Stati Limite Ultimi. Si precisa che tali reazioni non sono compressive delle forze di attrito ai vincoli.



Figura 14 - Numerazione appoggi

<i>Nodo</i>	<i>Load</i>	<i>Reazione Longitudinale (kN)</i>	<i>Reazione Trasversale (kN)</i>	<i>Reazione Verticale (kN)</i>
1	INVSLU(all)	94.7	0.0	765.6
2	INVSLU(all)	248.6	0.0	1508.5
3	INVSLU(all)	122.2	277.0	1151.8
4	INVSLU(all)	64.6	114.6	1206.5
5	INVSLU(all)	46.1	139.0	1216.5
6	INVSLU(all)	39.8	0.0	1851.3
7	INVSLU(all)	0	0	1530.0
8	INVSLU(all)	0	0	1280.5
9	INVSLU(all)	0	85.1	1146.4
10	INVSLU(all)	0	49.4	1141.8
11	INVSLU(all)	0	53.2	1454.1
12	INVSLU(all)	0	0	866.2
1	INVSLV(all)	206.5	0.0	229.7
2	INVSLV(all)	213.7	0.0	507.0
3	INVSLV(all)	357.9	450.0	452.8
4	INVSLV(all)	373.7	366.0	446.9
5	INVSLV(all)	391.6	455.8	379.3
6	INVSLV(all)	263.4	0.0	682.9
7	INVSLV(all)	0	0	786.7
8	INVSLV(all)	0	0	372.4
9	INVSLV(all)	0	329.4	446.6
10	INVSLV(all)	0	262.3	438.8
11	INVSLV(all)	0	336.8	483.6
12	INVSLV(all)	0	0	165.6

Tabella 6. Reazioni agli appoggi

8. Aspetti geotecnici e fondazioni

8.1 Premessa

Dal punto di vista geotecnico e delle fondazioni, il progetto delle strutture è stato redatto secondo le prescrizioni e le indicazioni delle normative tecniche di cui al capitolo II – *Norme e specifiche*; in particolare, sia per quanto concerne le azioni sulle costruzioni, sia per quanto attiene le resistenze dei materiali e le resistenze globali del sistema, la progettazione è stata eseguita secondo le nuove “*Norme Tecniche sulle Costruzioni*” di cui al D.M. 14.01.2008, avendo adottato la metodologia di verifica agli Stati Limite.

In particolare, come ampiamente descritto nella Relazione geologico-geotecnica, sono state effettuate indagini di tipo Down-hole e MASW e che hanno permesso di classificare il sottosuolo come di categoria B, ossia “*Rocce tenere e depositi di terreni a grana grossa molto addensati o terreni a grana fina molto consistenti con spessori superiori a 30 m, caratterizzati da un graduale miglioramento delle proprietà meccaniche con la profondità e da valori di $V_{S,30}$ compresi tra 360 m/s e 800 m/s (ovvero $N_{SPT,30} > 50$ nei terreni a grana grossa e $C_u 30 > 250$ kPa nei terreni a grana fina)*”.

La fondazione è di tipo indiretta costituita da pali in c.a. connessi in testa da una trave di collegamento.

8.2 Caratterizzazione meccanica dei terreni

La caratterizzazione meccanica dei terreni di fondazione fa riferimento alle dettagliate indagini geognostiche effettuate ed elaborate nelle relazioni geologiche e geotecniche. Per una completa descrizione dell'area si rimanda alla Relazione geologico-geotecnica. In sintesi, l'area è impostata sui depositi quaternari della Dora Riparia che scorre nelle immediate vicinanze. Dalle analisi delle stratigrafie dei sondaggi realizzati si evince che si tratta di sedimenti prevalentemente medio-grossolani costituiti da ghiaie e ghiaie ciottolose in matrice sabbiosa o sabbioso-limosa, passanti localmente a sabbie limose con ghiaia e locali ciottoli. Il basamento roccioso, che non viene raggiunto dalle opere in progetto, è costituito dai litotipi appartenenti all'Unità tettometamorfica del Dora-Maira.

In base alle unità litostratigrafiche individuate ed in base ai risultati delle prove in foro e di laboratorio realizzate, è stato possibile riconoscere nell'area di studio quattro unità geotecniche fondamentali:

- *unità geotecnica UG1*: comprende l'orizzonte di potenza variabile di terreno di riporto di tipo prevalentemente ghiaioso-ciottoloso con subordinata sabbia limosa;
- *unità geotecnica UG2*: corrispondente ai depositi prevalentemente costituiti da sabbia e sabbia limosa con ghiaia e rari ciottoli presenti localmente nei primi metri al di sotto dei terreni dell' UG1;
- *unità geotecnica UG3*: è l'unità dominante e comprende i depositi più grossolani rappresentati da ghiaie con ciottoli in matrice sabbiosa o sabbioso-limosa caratterizzati da un grado di addensamento da medio ad alto;
- *unità geotecnica UG4*: è costituita da depositi più fini limoso-sabbiosi con subordinata ghiaia. Tali terreni formano livelli discontinui di potenza ridotta (mediamente metrica) intercalati all'interno dei litotipi dell'unità sopradescritta a partire da circa 15m di profondità.

I parametri geotecnici, in riferimento alla relazione geotecnica, sono:

- peso di volume unitario saturo: $\gamma_{sat} = 21 \text{ kN/m}^3$
- peso di volume unitario efficace: $\gamma' = 11 \text{ kN/m}^3$
- coesione: $c = 0 \text{ kPa}$
- angolo di attrito: $\varphi = 35^\circ - 39^\circ$
- modulo elastico: $E = 50 \div 100 \text{ MPa}$

8.3 Criteri di analisi e verifica agli Stati Limite Ultimi

Gli stati limite ultimi delle fondazioni su pali si riferiscono allo sviluppo di meccanismi di collasso determinati dalla mobilitazione della resistenza del terreno e al raggiungimento della resistenza degli elementi strutturali che compongono la fondazione stessa.

Per ogni stato limite ultimo deve essere verificata la condizione:

$$E_d \leq R_d$$

dove E_d rappresenta l'insieme amplificato delle azioni agenti, ed R_d l'insieme delle resistenze, queste ultime corrette in funzione della tipologia del metodo di approccio al calcolo eseguito, della geometria del sistema e delle proprietà meccaniche dei materiali e dei terreni in uso.

Nelle verifiche del complesso terreno – fondazione è stato perseguito l'approccio progettuale di tipo 2, che prevede un'unica combinazione di gruppi di coefficienti (**A1+M1+R3**) da adottare sia nelle verifiche strutturali sia in quelle geotecniche.

Per le azioni agenti sulla struttura sono stati quindi utilizzati i seguenti coefficienti parziali:

Carichi	Coefficiente parziale γ_F (o γ_E)	(A1) STR
Permanenti	γ_{G1}	1.0÷1.3
Perm. non strutturali	γ_{G2}	0.0÷1.5
Variabili	γ_{Qi}	0.0÷1.5

Tabella 7. Coefficienti parziali per le azioni o per l'effetto delle azioni

Ai fini delle resistenze, in funzione del tipo di verifica da eseguire, il valore di progetto può ricavarsi in base alle indicazioni innanzi riportate.

Parametro	Parametro di riferimento	Coefficiente parziale γ_M	(M1)
Tangente dell'angolo di resistenza al taglio	$\tan \varphi'_k$	$\gamma_{\varphi'}$	1.0
Coesione efficace	c'_k	$\gamma_{c'}$	1.0
Resistenza non drenata	c_{uk}	γ_{cu}	1.0
Peso dell'unità di volume	γ	γ_γ	1.0

Tabella 8. Coefficienti parziali per i parametri geotecnici del terreno

Le verifiche, riportate nel seguito della presente, sono state effettuate nei confronti dei seguenti stati limite:

SLU di tipo geotecnico (GEO)

collasso per carico limite verticale del complesso pali-terreno;
collasso per carico limite orizzontale del complesso pali-terreno.

SLU di tipo strutturale (STR)

raggiungimento della resistenza dei pali;
raggiungimento della resistenza della struttura di collegamento dei pali.

Le verifiche del complesso struttura-fondazione sono state eseguite rispettando il criterio di gerarchia delle resistenze.

8.3.1 Verifiche geotecniche dei pali

Carico limite del singolo palo di fondazione per azioni verticali

La capacità portante di un micropalo è data dalla somma dei contributi dovuti alla resistenza alla punta (R_P) e alla resistenza laterale lungo il fusto del palo (R_L).

$$Q_{lim} = R_P + R_L$$

La resistenza laterale R_L è data da:

$$R_L = \pi d_s L_s s$$

dove:

- d_s è il diametro palo;
- L_s è lunghezza del palo;
- s è la resistenza tangenziale all'interfaccia fra palo e terreno.

La tensione tangenziale minima s si assume pari a :

$$s = a + k \cdot \sigma'_{v0} \cdot \mu$$

dove:

- a è un termine coesivo assunto nullo nel caso in esame;
- k è coefficiente empirico che dipende dalla tipologia di palo e dalle proprietà del terreno;
- μ è il coefficiente di attrito posto pari a $tg \varphi$;
- σ'_{v0} è la tensione effettiva litostatica verticale alla profondità z .

La resistenza alla punta R_P può essere assunta pari a:

$$R_P = N_q \cdot \sigma'_{vL} + N_c \cdot c$$

dove:

- σ'_{vL} è la tensione litostatica verticale alla base del palo;
- $N_c \cdot c$ è il termine coesivo assunto nullo nel caso in esame

Per il calcolo del coefficiente N_q si è fatto riferimento alla teoria di Berezantev che ipotizza una sorta di effetto silo ed una. Tale coefficiente risulta essere funzione decrescente del rapporto L/d . Il valore di φ da utilizzare per il calcolo della resistenza alla punta è $\varphi = \varphi_i - 3^\circ$, dove φ_i è il valore dell'angolo di attrito del deposito indisturbato.

Ai fini della determinazione del valore di progetto R_{vert} della resistenza del singolo palo di fondazione, è necessario considerare, in funzione della tipologia di approccio progettuale prescelto, il coefficiente parziale di sicurezza definito dalla normativa, secondo la tabella riportata di seguito.

Resistenza del palo	Simbolo	Pali trivellati
		γ_R
Resistenza alla punta	γ_P	1.35
Resistenza laterale (in compressione)	γ_L	1.15
Resistenza laterale (in trazione)	γ_{LT}	1.25

Tabella 9. Coefficienti parziali per le resistenze per azioni verticali

Dati i coefficienti parziali di sicurezza, la portata verticale, in condizioni di palo compresso allo stato limite ultimo (R_{vert}) ed in condizione di palo teso ($R_{vert,T}$) con i coefficienti A1+M1+R3 è data da:

$$R_{vert} = \frac{R_P}{\gamma_P} + \frac{R_L}{\gamma_L} = \frac{R_P}{1.35} + \frac{R_L}{1.15}$$

$$R_{vert,T} = \frac{R_L}{\gamma_{LT}} = \frac{R_L}{1.25}$$

I valori caratteristici delle resistenze sono ottenuti riducendo quelli calcolati, tramite il corrispondente “coefficiente di correlazione”, definito in funzione del numero di verticali indagate. Più in dettaglio le resistenze caratteristiche a compressione ($R_{vert,k}$) e a trazione ($R_{vert,T,k}$) si valutano come:

$$R_{vert,k} = \text{Min} (R_{vert,media}/\xi_3 ; R_{vert,min}/\xi_4)$$

$$R_{vert,T,k} = \text{Min} (R_{vert,T,media}/\xi_3 ; R_{vert,T,min}/\xi_4)$$

In funzione del numero di verticali indagate, si è assunto $\xi_3=1.45$ e $\xi_4=1.28$.

Carico limite del singolo palo di fondazione per azioni orizzontali

I valori di progetto $R_{orizz,d}$ della resistenza si ottengono dal valore caratteristico $R_{orizz,k}$, determinato utilizzando la teoria di Broms. Si assume, in pratica, che il comportamento dell'interfaccia palo-terreno sia rigido-perfettamente plastico, e cioè che la resistenza del terreno si mobiliti interamente per un qualsiasi valore non nullo dello spostamento e rimanga poi costante al crescere dello spostamento stesso. Si assume, inoltre, che la forma della sezione trasversale sia ininfluyente, e che il valore della reazione del terreno p sia determinato solo dalla dimensione d della sezione del palo misurata normalmente alla direzione dello spostamento.

Per terreni incoerenti, si assume che la resistenza del terreno vari linearmente con la profondità z secondo la legge:

$$p = 3 \cdot k_p \cdot \gamma \cdot z \cdot d$$

- $k_p = (1+\text{sen}\varphi)/(1-\text{sen}\varphi)$ è il coefficiente di spinta passiva che compete allo strato attraversato;
- d è il diametro del palo;
- γ il peso per unità di volume dello strato attraversato.

Ai fini della determinazione del valore di progetto $R_{orizz,d}$ della resistenza del singolo palo di fondazione, è necessario considerare, in funzione della tipologia di approccio progettuale prescelto, il coefficiente parziale di sicurezza definito dalla normativa, secondo la tabella riportata di seguito.

Resistenza	Simbolo	Pali trivellati
		γ
Resistenza ai carichi trasversali	γ_T	1.30

Tabella 10. Coefficienti parziali per le resistenze per azioni orizzontali

Dall'equilibrio alla traslazione si ottiene il valore della forza orizzontale limite T_{lim} sopportabile dal palo. Il valore di progetto si ottiene riducendo quest'ultimo sia attraverso il coefficiente γ_T della colonna R3 della precedente tabella, sia mediante il corrispondente "coefficiente di correlazione" scelto in funzione del numero di verticali indagate.

$$T_{lim,d} = \min \left(\frac{T_{lim,media}}{\gamma_T \cdot \xi_3}, \frac{T_{lim,min}}{\gamma_T \cdot \xi_4} \right)$$

Nel caso in esame il palo si comporta come palo lungo e che quindi il valore limite della forza orizzontale sopportabile dal palo possa essere calcolato come:

$$T_{lim} = k_p \cdot \gamma \cdot d^3 \cdot \sqrt[3]{\left(3.676 \cdot \frac{M_y}{k_p \cdot \gamma \cdot d^4} \right)^2}$$

dove M_y è il momento di plasticizzazione del palo.

8.3.2 Verifiche strutturali dei pali

Calcolo delle sollecitazioni sui pali

Per un palo vincolato in testa ad una fondazione, che ne consenta lo spostamento orizzontale ma ne impedisca la rotazione, il momento flettente massimo, che si registra nella sezione di attacco con la fondazione stessa, può essere calcolato come:

$$M_{max} = C_M \cdot T \cdot \lambda$$

in cui:

C_M un coefficiente che dipende dal rapporto L/λ ;

T il taglio agente in testa al palo;

λ è la lunghezza libera di inflessione del palo da valutare come:

$$\lambda = \sqrt[5]{\frac{E_p \cdot I}{n_h}}$$

dove:

E_p è il modulo di Young del calcestruzzo costituente il palo (C28/35);

I è il momento di inerzia della sezione trasversale del palo ($d = 0.8$ m);

n_h è un parametro che dipende dal tipo di terreno e dal suo stato di addensamento.

Criteria di verifica a flessione delle sezioni in c.a.

Per gli elementi in c.a. soggetti sia a regimi di sforzo estensionali che flessionali, sono state condotte verifiche a presso-flessione o tenso-flessione, controllando che:

$$M_{Rd} = M_{Rd}(N_{Ed}) \geq M_{Ed}$$

dove:

M_{Rd} è il valore di calcolo del momento resistente corrispondente a NEd;

M_{Ed} è il valore di calcolo della componente flettente dell'azione.

Criteria di verifica a taglio delle sezioni in c.a.

La resistenza a taglio V_{Rd} di elementi strutturali dotati di specifica armatura a taglio viene valutata sulla base di una adeguata schematizzazione a traliccio. La verifica di resistenza (SLU) si pone con:

$$V_{Rd} \geq V_{Ed}$$

dove V_{Ed} è il valore di calcolo dello sforzo di taglio agente.

Con riferimento all'armatura trasversale, la resistenza di calcolo a "taglio trazione" si calcola con:

$$V_{Rsd} = 0.9 \cdot d \cdot \frac{A_{sw}}{s} \cdot f_{yd} \cdot (ctg \alpha + ctg \theta) \cdot sen \alpha$$

Con riferimento al calcestruzzo d'anima, la resistenza di calcolo a "taglio compressione" si calcola con:

$$V_{Rcd} = 0.9 \cdot d \cdot b_w \cdot \alpha_c \cdot f'_{cd} \cdot \frac{(ctg \alpha + ctg \theta)}{1 + ctg \theta^2}$$

La resistenza al taglio della trave è la minore delle due sopra definite:

$$V_{Rd} = \min(V_{Rsd}, V_{Rcd})$$

dove:

A_{sw} è l'area dell'armatura trasversale;

s è l'interasse tra due armature trasversali consecutive;

α è l'angolo di inclinazione dell'armatura trasversale rispetto all'asse della trave;

f'_{cd} è la resistenza a compressione ridotta del calcestruzzo d'anima ($f'_{cd} = 0.5 \cdot f_{cd}$).

α_c è un coefficiente maggiorativo.

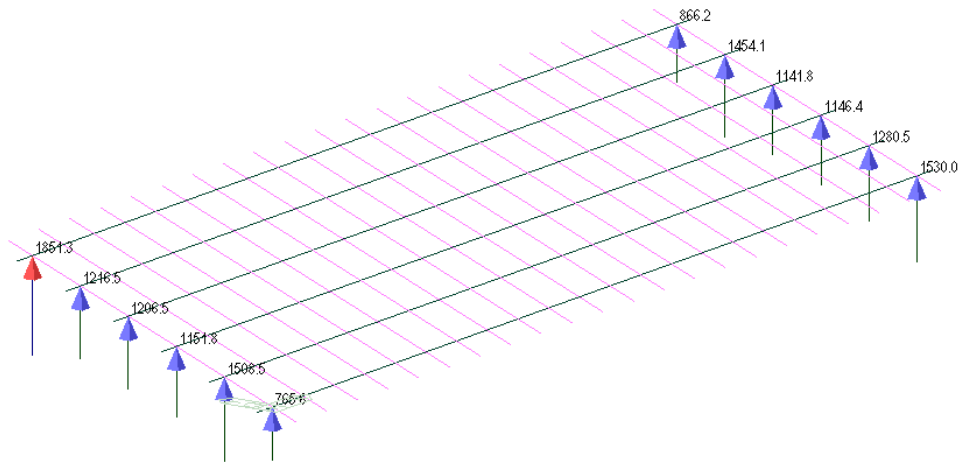
8.4 Ripartizione delle sollecitazioni sui pali

Si è ipotizzato che l'azione sismica e la spinta del terreno si ripartiscono uniformemente su tutti i pali di fondazione, mentre per il calcolo dello sforzo normale massimo si è fatto riferimento al palo maggiormente sollecitato.

8.5 Verifiche a carico limite verticale

Ai fini delle verifiche, il massimo sforzo normale agente in testa al singolo palo non deve eccedere il valore di progetto del carico limite verticale

Si riportano di seguito le massime reazioni agli appoggi calcolati allo SLU.



midas Gen POST-PROCESSOR	
REACTION FORCE	
FORCE-Z	
MIN. REACTION	
NODE=	1
FZ:	765.60
MAX. REACTION	
NODE=	6
FZ:	1851.30
CBall: INVSLU	
MAX :	6
MIN :	1
FILE:	Ponte Cana~
UNIT:	kN
DATE:	09/23/2013

A questi va sommato il peso proprio della porzione di spalla afferente a ciascun palo, pari a circa 215 kN (SLU).

Si riportano di seguito la verifica del palo maggiormente sollecitato.

CALCOLO DELLA CAPACITA' PORTANTE DI UN PALO TRIVELLATO DI MEDIO DIAMETRO

CANTIERE: Autoporto di Susa

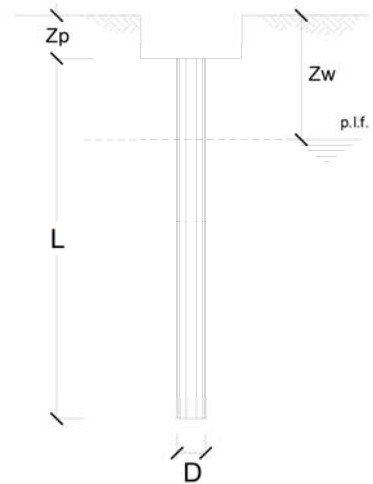
OPERA:

Ponte Canale NiE

DATI DI INPUT:

Diametro del Palo (D): 0.80 (m) Area del Palo (Ap): 0.503 (m²)
 Quota testa Palo dal p.c. (z_p): 1.00 (m) Quota falda dal p.c. (z_w): 1.00 (m)
 Carico Assiale Permanente (G): 800 (kN) Carico Assiale variabile (Q): 784.4 (kN)
 Numero di strati 2 Lpalo = 8.00 (m)

coefficienti parziali			azioni		resistenza laterale e di base			
Metodo di calcolo			permanenti	variabili	γ _b	γ _s	γ _s traz.	
			γ _G	γ _Q				
SLU	A1+M1+R1	<input type="radio"/>	1.30	1.50	1.00	1.00	1.00	
	A2+M1+R2	<input type="radio"/>	1.00	1.30	1.70	1.45	1.60	
	A1+M1+R3	<input type="radio"/>	1.30	1.50	1.35	1.15	1.25	
	SISMA	<input type="radio"/>	1.00	1.00	1.35	1.15	1.25	
DM88			<input type="radio"/>	1.00	1.00	1.00	1.00	
definiti dal progettista			<input checked="" type="radio"/>	1.35	1.35	1.35	1.15	1.25



n	1	2	3	4	5	7	≥10	T.A.	prog.
ξ _s	1.70	1.65	1.60	1.55	1.50	145	1.40	1.00	1.00
ξ _t	1.70	1.55	1.48	1.42	1.34	128	1.21	1.00	1.00

PARAMETRI MEDI

Strato	Spess (m)	Tipo di terreno	Parametri del terreno			
			γ (kN/m ³)	c' med (kPa)	φ' med (°)	c _u med (kPa)
1	0.50	strato 1	19.00		27.0	
2	7.50	strato 2	21.00		37.0	

Coefficienti di Calcolo			
k (-)	μ (-)	a (-)	α (-)
0.55	0.51		0.70
0.40	0.75		0.70

(n.b.: lo spessore degli strati è computato dalla quota di intradosso del plino)

PARAMETRI MINIMI (solo per SLU)

Strato	Spess (m)	Tipo di terreno	Parametri del terreno			
			γ (kN/m ³)	c' min (kPa)	φ' min (°)	c _u min (kPa)
1	0.50	strato 1	18.00		25.0	
2	7.50	strato 2	21.00		35.0	

Coefficienti di Calcolo			
k (-)	μ (-)	a (-)	α (-)
0.58	0.47		0.70
0.43	0.70		0.70

RISULTATI

Strato	Spess (-) (m)	Tipo di terreno	media					minima (solo SLU)				
			Qsi (kN)	Nq (-)	Nc (-)	qb (kPa)	Qbm (kN)	Qsi (kN)	Nq (-)	Nc (-)	qb (kPa)	Qbm (kN)
1	0.50	strato 1	7.4					6.8				
2	7.50	strato 2	366.2	95.71	0.00	10145.0	5099.4	356.0	66.20	0.00	6917.8	3477.3

CARICO ASSIALE AGENTE

$$N_d = N_G \cdot \gamma_G + N_Q \cdot \gamma_Q$$

$$N_d = 2138.9 \text{ (kN)}$$

CAPACITA' PORTANTE MEDIA

$$\text{base } R_{b,cal \text{ med}} = 5099.4 \text{ (kN)}$$

$$\text{laterale } R_{s,cal \text{ med}} = 373.6 \text{ (kN)}$$

$$\text{totale } R_{c,cal \text{ med}} = 5473.1 \text{ (kN)}$$

CAPACITA' PORTANTE MINIMA

$$\text{base } R_{b,cal \text{ min}} = 3477.3 \text{ (kN)}$$

$$\text{laterale } R_{s,cal \text{ min}} = 362.7 \text{ (kN)}$$

$$\text{totale } R_{c,cal \text{ min}} = 3840.0 \text{ (kN)}$$

CAPACITA' PORTANTE CARATTERISTICA

$$R_{b,k} = \text{Min}(R_{b,cal \text{ med}}/\xi_3 ; R_{b,cal \text{ min}}/\xi_4) = 2716.6 \text{ (kN)}$$

$$R_{s,k} = \text{Min}(R_{s,cal \text{ med}}/\xi_3 ; R_{s,cal \text{ min}}/\xi_4) = 257.7 \text{ (kN)}$$

$$R_{c,k} = R_{b,k} + R_{s,k} = 2974.3 \text{ (kN)}$$

CAPACITA' PORTANTE DI PROGETTO

$$R_{c,d} = R_{b,k}/\gamma_b + R_{s,k}/\gamma_s$$

$$R_{c,d} = 2236.4 \text{ (kN)}$$

$$F_s = R_{c,d} / N_d$$

$$F_s = 1.05$$

8.6 Verifiche a carico limite orizzontale

Ai fini delle verifiche, il massimo sforzo di taglio agente in testa al singolo palo non deve eccedere il valore di progetto del carico limite orizzontale.

Il massimo sforzo di taglio sul singolo palo risulta essere:

$$F_V = \frac{F_S + S}{6}$$

dove:

F_V è la forza di taglio sul singolo palo;

F_S è l'azione sismica globale;

S è la spinta del terreno.

Si ha che:

$$F_S = 4565 \cdot \frac{0.606}{1.5} = 1845 \text{ kN}$$

$$F_S = 0.80 \cdot 20 \cdot \frac{2.55^2}{2} \cdot 14.0 = 728 \text{ kN}$$

Da cui:

$$F_V = \frac{1845 + 728}{6} = 429$$

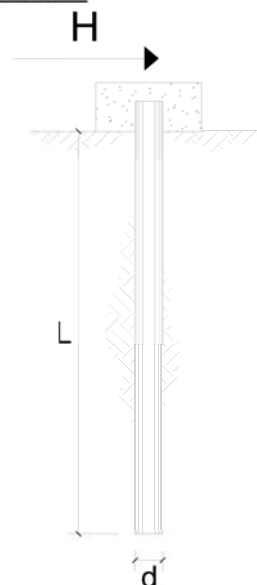
Si riporta di seguito la verifica del palo per carichi orizzontali.

**CARICO LIMITE ORIZZONTALE DI UN PALO IN TERRENI INCOERENTI
PALI CON ROTAZIONE IN TESTA IMPEDITA**

OPERA: Pnte canale NIE

TEORIA DI BASE:

(Broms, 1964)



coefficienti parziali			A		M	R
Metodo di calcolo			permanenti	variabili	$\gamma_{\phi'}$	γ_T
			γ_G	γ_Q		
S13	A1+M1+R1	<input type="radio"/>	1.30	1.50	1.00	1.00
	A2+M1+R2	<input type="radio"/>	1.00	1.30	1.00	1.60
	A1+M1+R3	<input type="radio"/>	1.30	1.50	1.00	1.30
	SISMA	<input checked="" type="radio"/>	1.00	1.00	1.00	1.30
DM88		<input type="radio"/>	1.00	1.00	1.00	1.00
definiti dal progettista		<input type="radio"/>	1.00	1.00	1.00	1.30

n	1	2	3	4	5	7	≥ 10	T.A.	prog.
ξ_3	1.70	1.65	1.60	1.55	1.50	1.45	1.40	1.00	1.00
ξ_4	1.70	1.55	1.48	1.42	1.34	1.28	1.21	1.00	1.00

Palo corto:
$$H = 1.5k_p \gamma d^3 \left(\frac{L}{d}\right)^2$$

Palo intermedio:
$$H = \frac{1}{2} k_p \gamma d^3 \left(\frac{L}{d}\right)^2 + \frac{M_y}{L}$$

Palo lungo:
$$H = k_p \gamma d^3 \sqrt[3]{\left(3.676 \frac{M_y}{k_p \gamma d^4}\right)^2}$$

DATI DI INPUT:

Lunghezza del palo	L =	8.00	(m)	
Diametro del palo	d =	0.80	(m)	
Momento di plasticizzazione della sezione	My =	1512.86	(kN m)	
Angolo di attrito del terreno	ϕ'_{med} =	37.50	(°)	ϕ'_{min} = 35.00 (°)
Angolo di attrito di calcolo del terreno	$\phi'_{med,d}$ =	37.50	(°)	$\phi'_{min,d}$ = 35.00 (°)
Coeff. di spinta passiva ($k_p = (1 + \sin \phi') / (1 - \sin \phi')$)	$k_{p,med}$ =	4.11	(-)	$k_{p,min}$ = 3.69 (-)
Peso di unità di volume (con falda $\gamma = \gamma'$)	γ =	11.00	(kN/m ³)	
Carico Assiale Permanente (G):	G =	428	(kN)	
Carico Assiale variabile (Q):	Q =	0	(kN)	

Palo corto:

$$H1_{med} = 3473.79 \quad (\text{kN})$$

$$H1_{min} = 3117.46 \quad (\text{kN})$$

Palo intermedio:

$$H2_{med} = 1347.04 \quad (\text{kN})$$

$$H2_{min} = 1228.26 \quad (\text{kN})$$

Palo lungo:

$$H3_{med} = 1038.23 \quad (\text{kN})$$

$$H3_{min} = 1001.44 \quad (\text{kN})$$

$$H_{med} = 1038.23 \quad (\text{kN}) \quad \text{palo lungo}$$

$$H_{min} = 1001.44 \quad (\text{kN}) \quad \text{palo lungo}$$

$$H_k = \text{Min}(H_{med}/\xi_3 ; R_{min}/\xi_4) = 716.02 \quad (\text{kN})$$

$$H_d = H_k/\gamma_T = 550.78 \quad (\text{kN})$$

$$F_d = G \cdot \gamma_G + Q \cdot \gamma_Q = 428.00 \quad (\text{kN})$$

$$FS = H_d / F_d = 1.29$$

8.7 Verifiche strutturali dei pali

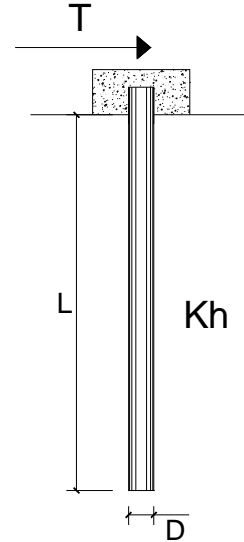
Si riportano nel seguito le verifiche di resistenza a flessione e a taglio del palo di fondazione. Le sollecitazioni risultano essere pari a:

PALI IMPEDITI DI RUOTARE IN TESTA SOGGETTI A FORZE ORIZZONTALI

OPERA: Ponte canale NiE

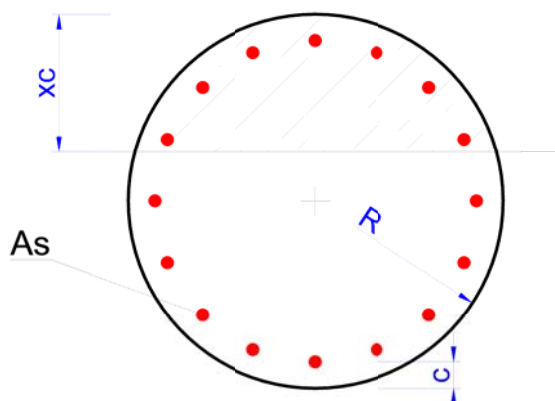
DATI DI INPUT:

Diametro del palo (D):	0.8	(m)
Lunghezza del palo (L)	8	(m)
Coefficiente di reazione laterale (k_h):	25	(N/cm ³)
Forza orizzontale agente (T):	428	(kN)
fck del calcestruzzo:	29.0	(MPa)
fcm del calcestruzzo:	37.0	(MPa)
Ecls ($E = 22000(f_{cm}/10)^{0.3}$):	32575	(MPa)
J ($J = \pi \cdot D^4/64$):	2010619	(cm ⁴)
λ (lunghezza elastica $\lambda = (4 \cdot E J / k_h \cdot D)^{1/4}$):	338.31	(cm)



z	y(z)	p(z)	$\alpha(z)$	M(z)	T(z)
Prof.	Spont.	Press. Lat.	Rotaz.	Mom. Flett.	Taglio
(m)	(cm)	(N/cm ²)	(rad)	(kNm)	(kN)
0.00	0.633	15.81	0.00000	723.977	-428.000
0.16	0.631	15.78	-0.00017	657.115	-407.773
0.32	0.627	15.68	-0.00032	593.485	-387.631
0.48	0.621	15.52	-0.00046	533.065	-367.653
0.64	0.613	15.32	-0.00058	475.823	-347.910
0.80	0.602	15.06	-0.00069	421.718	-328.464
0.96	0.591	14.76	-0.00079	370.696	-309.372
1.12	0.577	14.43	-0.00087	322.697	-290.682
1.28	0.563	14.07	-0.00095	277.654	-272.439
1.44	0.547	13.68	-0.00101	235.491	-254.681
1.60	0.530	13.26	-0.00106	196.128	-237.438
1.76	0.513	12.83	-0.00110	159.482	-220.738
1.92	0.495	12.38	-0.00114	125.462	-204.604
2.08	0.477	11.92	-0.00117	93.977	-189.053
2.24	0.458	11.45	-0.00119	64.933	-174.098
2.40	0.439	10.97	-0.00120	38.233	-159.751
2.56	0.420	10.49	-0.00120	13.780	-146.017
2.72	0.400	10.01	-0.00121	-8.525	-132.899
2.88	0.381	9.53	-0.00120	-28.780	-120.398
3.04	0.362	9.05	-0.00119	-47.085	-108.512
3.20	0.343	8.57	-0.00118	-63.537	-97.235

Si riporta di seguito la verifica a flessione del palo di fondazione.



Geometria della sezione		
[cm]		
Raggio	R	80

Sollecitazioni		
M	724	[kNm]
N	380	[kN]

Armatura As			
n° ferri	Diametro [mm]	Area [cm ²]	copriferro [cm]
20	24	90.48	3
	6	0.00	0
	6	0.00	0
		90.48	

Materiali								
C28/35	γ_c	α_{cc}	Rck [Mpa]	fck [Mpa]	fcd [Mpa]	fcc/fcd	ϵ_{c2}	ϵ_{cu2}
	1.5	0.85	35	28	15.9	1.0	0.200%	0.350%
B450C	γ_s	Es [Mpa]	fyk [Mpa]	fyd [Mpa]	ϵ_{ys}	ϵ_{uk}	α_s	$\epsilon_{ud} = \epsilon_{uk} \alpha_s$
	1.15	200000	450	391.3	0.196%	1.000%	1	1.000%

- N costante
 e costante

calcola

N ultimo
380.0 [kN]

xc
27.48 [cm]

M ultimo
2622.4 [kNm]

FS
3.62

La verifica a taglio si effettua considerando la sezione di calcestruzzo inscritta nella circonferenza del palo avente dimensioni 565x565mm.

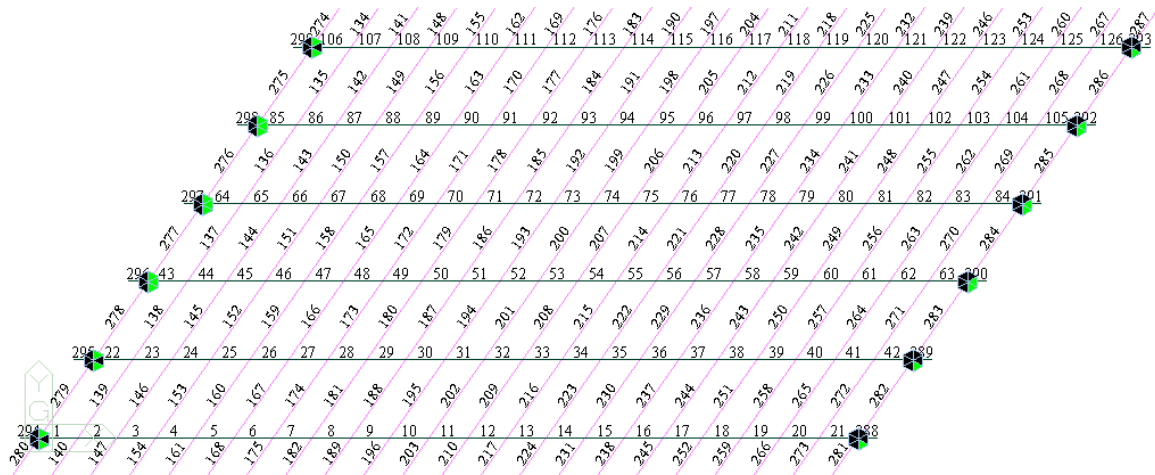
Verifiche a taglio - D.M. 14-01-2008																													
Materiali	Geometria sezione	Sollecitazioni di calcolo	Parametri di verifica																										
<table border="1"> <thead> <tr> <th colspan="2" style="background-color: #0000FF; color: white;">Calcestruzzo</th> </tr> </thead> <tbody> <tr> <td>Rck [Mpa]</td> <td style="background-color: #FFFF00;">35</td> </tr> <tr> <td>fck [Mpa]</td> <td>29.1</td> </tr> <tr> <td>fcd [Mpa]</td> <td>16.5</td> </tr> </tbody> </table>		Calcestruzzo		Rck [Mpa]	35	fck [Mpa]	29.1	fcd [Mpa]	16.5	<table border="1"> <tbody> <tr> <td>N_{Ed} [kN]</td> <td style="background-color: #FFFF00;">380</td> </tr> <tr> <td>V_{Ed} [kN]</td> <td style="background-color: #FFFF00;">428</td> </tr> </tbody> </table>		N _{Ed} [kN]	380	V _{Ed} [kN]	428														
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Conclusioni

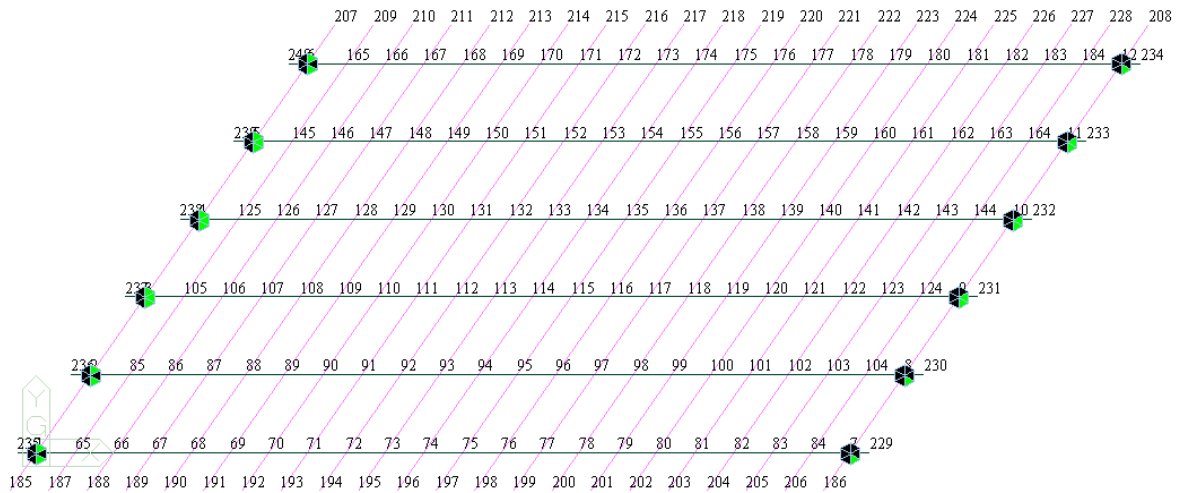
Il progetto è stato redatto in conformità dell'art.17 della Legge 2.2.74 n°64 e dei decreti ministeriali emanati ai sensi degli artt.1 e 3 della medesima legge, ed in particolare delle nuove “*Norme tecniche per le costruzioni*” di cui al D.M. 14 gennaio 2008.

Le analisi condotte confermano che tutte le verifiche prescritte dalla normativa vigente risultano soddisfatte. Le strutture soddisfano, pertanto, i requisiti di sicurezza prescritti dalle vigenti Leggi.

Allegato A – Input Modello di Calcolo



Numerazione elementi



Numerazione nodi

Ponte Canale NiE – Relazione di calcolo

** PROJECT INFORMATION

Project Name :
Date : 2013/9/25

*** CONTROL DATA

Panel Zone Effect : Do not Calculate
Unit System : KN, M
Definition of Frame
- X Direction of Frame : Unbraced I Sway
- Y Direction of Frame : Unbraced I Sway
- Design Type : 3-D
Design Code
- Steel : Eurocode3:05
- Concrete : Eurocode2:04
- SRC : SSRC79

*** LOAD CASE DATA

NO	NAME	TYPE	SELF WEIGHT FACTOR			DESCRIPTION
			X	Y	Z	
1	G1	USER	0.000	0.000	-1.000	peso proprio della struttura
2	G2	USER	0.000	0.000	0.000	carichi permanenti portati
3	q3	USER	0.000	0.000	0.000	frenamento
10	q4	USER	0.000	0.000	0.000	azione centrifuga
6	q5_pc	W	0.000	0.000	0.000	vento a ponte carico Y
7	q5_ps	W	0.000	0.000	0.000	vento a ponte scarico Y
11	Ex	E	0.000	0.000	0.000	sisma in direzione X
12	Ey	E	0.000	0.000	0.000	sisma in direzione Y

*** MATERIAL PROPERTY DATA

NO	NAME	TYPE	MODULUS OF		SHEAR	THERMAL	POISSON	WEIGHT
			ELASTICITY	MODULUS				
4	C35/45	USER	3.463e+007	1.443e+007	1e-005	0.2	25	
6	C35/45_soletta	USER	3.463e+007	1.443e+007	1e-005	0.2	0	

NO	NAME	TYPE	STRENGTH OF DESIGN MATERIAL			
			STEEL	CONCRETE	MAIN REBAR	SUB REBAR

*** NODE DATA

NO	X	Y	Z	TEMPERATURE
1	0	0	0	0
2	1.4	2	0	0
3	2.8	4	0	0
4	4.2	6	0	0
5	5.6	8	0	0
6	7	10	0	0
7	21	0	0	0
8	22.4	2	0	0
9	23.8	4	0	0
10	25.2	6	0	0
11	26.6	8	0	0
12	28	10	0	0
65	1	0	0	0
66	2	0	0	0
67	3	0	0	0
68	4	0	0	0
69	5	0	0	0
70	6	0	0	0
71	7	0	0	0
72	8	0	0	0
73	9	0	0	0
74	10	0	0	0
75	11	0	0	0
76	12	0	0	0
77	13	0	0	0
78	14	0	0	0
79	15	0	0	0
80	16	0	0	0
81	17	0	0	0
82	18	0	0	0
83	19	0	0	0
84	20	0	0	0
85	2.4	2	0	0
86	3.4	2	0	0
87	4.4	2	0	0
88	5.4	2	0	0
89	6.4	2	0	0
90	7.4	2	0	0
91	8.4	2	0	0
92	9.4	2	0	0
93	10.4	2	0	0
94	11.4	2	0	0
95	12.4	2	0	0
96	13.4	2	0	0
97	14.4	2	0	0
98	15.4	2	0	0
99	16.4	2	0	0

Ponte Canale NiE – Relazione di calcolo

100	17.4	2	0	0
101	18.4	2	0	0
102	19.4	2	0	0
103	20.4	2	0	0
104	21.4	2	0	0
105	3.8	4	0	0
106	4.8	4	0	0
107	5.8	4	0	0
108	6.8	4	0	0
109	7.8	4	0	0
110	8.8	4	0	0
111	9.8	4	0	0
112	10.8	4	0	0
113	11.8	4	0	0
114	12.8	4	0	0
115	13.8	4	0	0
116	14.8	4	0	0
117	15.8	4	0	0
118	16.8	4	0	0
119	17.8	4	0	0
120	18.8	4	0	0
121	19.8	4	0	0
122	20.8	4	0	0
123	21.8	4	0	0
124	22.8	4	0	0
125	5.2	6	0	0
126	6.2	6	0	0
127	7.2	6	0	0
128	8.2	6	0	0
129	9.2	6	0	0
130	10.2	6	0	0
131	11.2	6	0	0
132	12.2	6	0	0
133	13.2	6	0	0
134	14.2	6	0	0
135	15.2	6	0	0
136	16.2	6	0	0
137	17.2	6	0	0
138	18.2	6	0	0
139	19.2	6	0	0
140	20.2	6	0	0
141	21.2	6	0	0
142	22.2	6	0	0
143	23.2	6	0	0
144	24.2	6	0	0
145	6.6	8	0	0
146	7.6	8	0	0
147	8.6	8	0	0
148	9.6	8	0	0
149	10.6	8	0	0
150	11.6	8	0	0
151	12.6	8	0	0
152	13.6	8	0	0
153	14.6	8	0	0
154	15.6	8	0	0
155	16.6	8	0	0
156	17.6	8	0	0
157	18.6	8	0	0
158	19.6	8	0	0
159	20.6	8	0	0
160	21.6	8	0	0
161	22.6	8	0	0
162	23.6	8	0	0
163	24.6	8	0	0
164	25.6	8	0	0
165	8	10	0	0
166	9	10	0	0
167	10	10	0	0
168	11	10	0	0
169	12	10	0	0
170	13	10	0	0
171	14	10	0	0
172	15	10	0	0
173	16	10	0	0
174	17	10	0	0
175	18	10	0	0
176	19	10	0	0
177	20	10	0	0
178	21	10	0	0
179	22	10	0	0
180	23	10	0	0
181	24	10	0	0
182	25	10	0	0
183	26	10	0	0
184	27	10	0	0
185	-0.6996	-0.9995	0	0
186	20.3	-0.9995	0	0
187	0.3004	-0.9995	0	0
188	1.3	-0.9995	0	0
189	2.3	-0.9995	0	0
190	3.3	-0.9995	0	0
191	4.3	-0.9995	0	0
192	5.3	-0.9995	0	0
193	6.3	-0.9995	0	0
194	7.3	-0.9995	0	0
195	8.3	-0.9995	0	0
196	9.3	-0.9995	0	0
197	10.3	-0.9995	0	0
198	11.3	-0.9995	0	0
199	12.3	-0.9995	0	0

200	13.3	-0.9995	0	0
201	14.3	-0.9995	0	0
202	15.3	-0.9995	0	0
203	16.3	-0.9995	0	0
204	17.3	-0.9995	0	0
205	18.3	-0.9995	0	0
206	19.3	-0.9995	0	0
207	7.7	11	0	0
208	28.7	11	0	0
209	8.7	11	0	0
210	9.7	11	0	0
211	10.7	11	0	0
212	11.7	11	0	0
213	12.7	11	0	0
214	13.7	11	0	0
215	14.7	11	0	0
216	15.7	11	0	0
217	16.7	11	0	0
218	17.7	11	0	0
219	18.7	11	0	0
220	19.7	11	0	0
221	20.7	11	0	0
222	21.7	11	0	0
223	22.7	11	0	0
224	23.7	11	0	0
225	24.7	11	0	0
226	25.7	11	0	0
227	26.7	11	0	0
228	27.7	11	0	0
229	21.5	0	0	0
230	22.9	2	0	0
231	24.3	4	0	0
232	25.7	6	0	0
233	27.1	8	0	0
234	28.5	10	0	0
235	-0.5	0	0	0
236	0.9	2	0	0
237	2.3	4	0	0
238	3.7	6	0	0
239	5.1	8	0	0
240	6.5	10	0	0
241	14.08	5.03	0	0

*** SUPPORT / SPECIFIED DISPLACEMENT / POINT SPRING SUPPORT

** SUPPORT / SPECIFIED DISPLACEMENT

NODE	SUPPORT DDDRRR	SPECIFIED DISPLACEMENT					
		Dx	Dy	Dz	Rx	Ry	Rz
1	101000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	101000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	111000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	111000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	111000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	101000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	001000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	001000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
9	011000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	011000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
11	011000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	001000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

*** FLOOR DIAPHRAGM / RIGID LINK DATA

MASTER	DDDRRR	NODES OF SAME DISPLACEMENT
241	110001	65to184

*** SECTION PROPERTY DATA

NO	NAME	SHAPE	H	B	tw	tf1	r1
7	Cassone+s~	GEN	0	0	0	0	0
9	Soletta30~	SB	0.3	0.82	0	0	0
10	Testata	L	1.3	0.56	0.3	0.3	0

NO	NAME	STIFFNESS SCALE FACTOR						
		A	Asy	Asz	Ix	Iy	Iz	W
7	Cassone+s~							
9	Soletta30~							
10	Testata							

NO	NAME	AREA [SRC:EQIV.]	MOMENT OF INERTIA			SHAPE FACTOR	
			Ix	Iy	Iz	k-Y	k-Z
7	Cassone+s~	1.139	0.1928	0.1774	0.3095	0.5922	0.3372
9	Soletta30~	0.246	0.005682	0.001845	0.01378	0.8333	0.8333
10	Testata	0.468	0.01257	0.07176	0.00846	0.2991	0.6944

NO	NAME	SECTION MODULUS Sy		SECTION MODULUS Sz	
		I or CONC.	J or STEEL	I or CONC.	J or STEEL

Ponte Canale NiE – Relazione di calcolo

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  9 Soletta30~    0.0123    0.0123    0.03362    0.03362
 10 Testata      0.09785    0.09785    0.02329    0.02329
  
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*** BEAM MEMBER DATA

NO	NODAL	CONNECTIVITY		BEAM END RELEASE		MATERIAL	SECTION	LENGTH
		I	J	I	J			
1	1	65	-	-	-	C35/45 Cassone+soletta	1	
2	65	66	-	-	-	C35/45 Cassone+soletta	1	
3	66	67	-	-	-	C35/45 Cassone+soletta	1	
4	67	68	-	-	-	C35/45 Cassone+soletta	1	
5	68	69	-	-	-	C35/45 Cassone+soletta	1	
6	69	70	-	-	-	C35/45 Cassone+soletta	1	
7	70	71	-	-	-	C35/45 Cassone+soletta	1	
8	71	72	-	-	-	C35/45 Cassone+soletta	1	
9	72	73	-	-	-	C35/45 Cassone+soletta	1	
10	73	74	-	-	-	C35/45 Cassone+soletta	1	
11	74	75	-	-	-	C35/45 Cassone+soletta	1	
12	75	76	-	-	-	C35/45 Cassone+soletta	1	
13	76	77	-	-	-	C35/45 Cassone+soletta	1	
14	77	78	-	-	-	C35/45 Cassone+soletta	1	
15	78	79	-	-	-	C35/45 Cassone+soletta	1	
16	79	80	-	-	-	C35/45 Cassone+soletta	1	
17	80	81	-	-	-	C35/45 Cassone+soletta	1	
18	81	82	-	-	-	C35/45 Cassone+soletta	1	
19	82	83	-	-	-	C35/45 Cassone+soletta	1	
20	83	84	-	-	-	C35/45 Cassone+soletta	1	
21	84	7	-	-	-	C35/45 Cassone+soletta	1	
22	2	85	-	-	-	C35/45 Cassone+soletta	1	
23	85	86	-	-	-	C35/45 Cassone+soletta	1	
24	86	87	-	-	-	C35/45 Cassone+soletta	1	
25	87	88	-	-	-	C35/45 Cassone+soletta	1	
26	88	89	-	-	-	C35/45 Cassone+soletta	1	
27	89	90	-	-	-	C35/45 Cassone+soletta	1	
28	90	91	-	-	-	C35/45 Cassone+soletta	1	
29	91	92	-	-	-	C35/45 Cassone+soletta	1	
30	92	93	-	-	-	C35/45 Cassone+soletta	1	
31	93	94	-	-	-	C35/45 Cassone+soletta	1	
32	94	95	-	-	-	C35/45 Cassone+soletta	1	
33	95	96	-	-	-	C35/45 Cassone+soletta	1	
34	96	97	-	-	-	C35/45 Cassone+soletta	1	
35	97	98	-	-	-	C35/45 Cassone+soletta	1	
36	98	99	-	-	-	C35/45 Cassone+soletta	1	
37	99	100	-	-	-	C35/45 Cassone+soletta	1	
38	100	101	-	-	-	C35/45 Cassone+soletta	1	
39	101	102	-	-	-	C35/45 Cassone+soletta	1	
40	102	103	-	-	-	C35/45 Cassone+soletta	1	
41	103	104	-	-	-	C35/45 Cassone+soletta	1	
42	104	8	-	-	-	C35/45 Cassone+soletta	1	
43	3	105	-	-	-	C35/45 Cassone+soletta	1	
44	105	106	-	-	-	C35/45 Cassone+soletta	1	
45	106	107	-	-	-	C35/45 Cassone+soletta	1	
46	107	108	-	-	-	C35/45 Cassone+soletta	1	
47	108	109	-	-	-	C35/45 Cassone+soletta	1	
48	109	110	-	-	-	C35/45 Cassone+soletta	1	
49	110	111	-	-	-	C35/45 Cassone+soletta	1	
50	111	112	-	-	-	C35/45 Cassone+soletta	1	
51	112	113	-	-	-	C35/45 Cassone+soletta	1	
52	113	114	-	-	-	C35/45 Cassone+soletta	1	
53	114	115	-	-	-	C35/45 Cassone+soletta	1	
54	115	116	-	-	-	C35/45 Cassone+soletta	1	
55	116	117	-	-	-	C35/45 Cassone+soletta	1	
56	117	118	-	-	-	C35/45 Cassone+soletta	1	
57	118	119	-	-	-	C35/45 Cassone+soletta	1	
58	119	120	-	-	-	C35/45 Cassone+soletta	1	
59	120	121	-	-	-	C35/45 Cassone+soletta	1	
60	121	122	-	-	-	C35/45 Cassone+soletta	1	
61	122	123	-	-	-	C35/45 Cassone+soletta	1	
62	123	124	-	-	-	C35/45 Cassone+soletta	1	
63	124	9	-	-	-	C35/45 Cassone+soletta	1	
64	4	125	-	-	-	C35/45 Cassone+soletta	1	
65	125	126	-	-	-	C35/45 Cassone+soletta	1	
66	126	127	-	-	-	C35/45 Cassone+soletta	1	
67	127	128	-	-	-	C35/45 Cassone+soletta	1	
68	128	129	-	-	-	C35/45 Cassone+soletta	1	
69	129	130	-	-	-	C35/45 Cassone+soletta	1	
70	130	131	-	-	-	C35/45 Cassone+soletta	1	
71	131	132	-	-	-	C35/45 Cassone+soletta	1	
72	132	133	-	-	-	C35/45 Cassone+soletta	1	
73	133	134	-	-	-	C35/45 Cassone+soletta	1	
74	134	135	-	-	-	C35/45 Cassone+soletta	1	
75	135	136	-	-	-	C35/45 Cassone+soletta	1	
76	136	137	-	-	-	C35/45 Cassone+soletta	1	
77	137	138	-	-	-	C35/45 Cassone+soletta	1	
78	138	139	-	-	-	C35/45 Cassone+soletta	1	
79	139	140	-	-	-	C35/45 Cassone+soletta	1	
80	140	141	-	-	-	C35/45 Cassone+soletta	1	
81	141	142	-	-	-	C35/45 Cassone+soletta	1	
82	142	143	-	-	-	C35/45 Cassone+soletta	1	
83	143	144	-	-	-	C35/45 Cassone+soletta	1	
84	144	10	-	-	-	C35/45 Cassone+soletta	1	
85	5	145	-	-	-	C35/45 Cassone+soletta	1	
86	145	146	-	-	-	C35/45 Cassone+soletta	1	
87	146	147	-	-	-	C35/45 Cassone+soletta	1	
88	147	148	-	-	-	C35/45 Cassone+soletta	1	
89	148	149	-	-	-	C35/45 Cassone+soletta	1	
90	149	150	-	-	-	C35/45 Cassone+soletta	1	

Ponte Canale NiE – Relazione di calcolo

91	150	151	-	-	C35/45 Cassone+soletta	1
92	151	152	-	-	C35/45 Cassone+soletta	1
93	152	153	-	-	C35/45 Cassone+soletta	1
94	153	154	-	-	C35/45 Cassone+soletta	1
95	154	155	-	-	C35/45 Cassone+soletta	1
96	155	156	-	-	C35/45 Cassone+soletta	1
97	156	157	-	-	C35/45 Cassone+soletta	1
98	157	158	-	-	C35/45 Cassone+soletta	1
99	158	159	-	-	C35/45 Cassone+soletta	1
100	159	160	-	-	C35/45 Cassone+soletta	1
101	160	161	-	-	C35/45 Cassone+soletta	1
102	161	162	-	-	C35/45 Cassone+soletta	1
103	162	163	-	-	C35/45 Cassone+soletta	1
104	163	164	-	-	C35/45 Cassone+soletta	1
105	164	11	-	-	C35/45 Cassone+soletta	1
106	6	165	-	-	C35/45 Cassone+soletta	1
107	165	166	-	-	C35/45 Cassone+soletta	1
108	166	167	-	-	C35/45 Cassone+soletta	1
109	167	168	-	-	C35/45 Cassone+soletta	1
110	168	169	-	-	C35/45 Cassone+soletta	1
111	169	170	-	-	C35/45 Cassone+soletta	1
112	170	171	-	-	C35/45 Cassone+soletta	1
113	171	172	-	-	C35/45 Cassone+soletta	1
114	172	173	-	-	C35/45 Cassone+soletta	1
115	173	174	-	-	C35/45 Cassone+soletta	1
116	174	175	-	-	C35/45 Cassone+soletta	1
117	175	176	-	-	C35/45 Cassone+soletta	1
118	176	177	-	-	C35/45 Cassone+soletta	1
119	177	178	-	-	C35/45 Cassone+soletta	1
120	178	179	-	-	C35/45 Cassone+soletta	1
121	179	180	-	-	C35/45 Cassone+soletta	1
122	180	181	-	-	C35/45 Cassone+soletta	1
123	181	182	-	-	C35/45 Cassone+soletta	1
124	182	183	-	-	C35/45 Cassone+soletta	1
125	183	184	-	-	C35/45 Cassone+soletta	1
126	184	12	-	-	C35/45 Cassone+soletta	1
134	209	165	-	-	C35/45_soletta Soletta30cm	1.22
135	165	145	-	-	C35/45_soletta Soletta30cm	2.441
136	145	125	-	-	C35/45_soletta Soletta30cm	2.441
137	125	105	-	-	C35/45_soletta Soletta30cm	2.441
138	105	85	-	-	C35/45_soletta Soletta30cm	2.441
139	85	65	-	-	C35/45_soletta Soletta30cm	2.441
140	65	187	-	-	C35/45_soletta Soletta30cm	1.22
141	210	166	-	-	C35/45_soletta Soletta30cm	1.22
142	166	146	-	-	C35/45_soletta Soletta30cm	2.441
143	146	126	-	-	C35/45_soletta Soletta30cm	2.441
144	126	106	-	-	C35/45_soletta Soletta30cm	2.441
145	106	86	-	-	C35/45_soletta Soletta30cm	2.441
146	86	66	-	-	C35/45_soletta Soletta30cm	2.441
147	66	188	-	-	C35/45_soletta Soletta30cm	1.22
148	211	167	-	-	C35/45_soletta Soletta30cm	1.22
149	167	147	-	-	C35/45_soletta Soletta30cm	2.441
150	147	127	-	-	C35/45_soletta Soletta30cm	2.441
151	127	107	-	-	C35/45_soletta Soletta30cm	2.441
152	107	87	-	-	C35/45_soletta Soletta30cm	2.441
153	87	67	-	-	C35/45_soletta Soletta30cm	2.441
154	67	189	-	-	C35/45_soletta Soletta30cm	1.22
155	212	168	-	-	C35/45_soletta Soletta30cm	1.22
156	168	148	-	-	C35/45_soletta Soletta30cm	2.441
157	148	128	-	-	C35/45_soletta Soletta30cm	2.441
158	128	108	-	-	C35/45_soletta Soletta30cm	2.441
159	108	88	-	-	C35/45_soletta Soletta30cm	2.441
160	88	68	-	-	C35/45_soletta Soletta30cm	2.441
161	68	190	-	-	C35/45_soletta Soletta30cm	1.22
162	213	169	-	-	C35/45_soletta Soletta30cm	1.22
163	169	149	-	-	C35/45_soletta Soletta30cm	2.441
164	149	129	-	-	C35/45_soletta Soletta30cm	2.441
165	129	109	-	-	C35/45_soletta Soletta30cm	2.441
166	109	89	-	-	C35/45_soletta Soletta30cm	2.441
167	89	69	-	-	C35/45_soletta Soletta30cm	2.441
168	69	191	-	-	C35/45_soletta Soletta30cm	1.22
169	214	170	-	-	C35/45_soletta Soletta30cm	1.22
170	170	150	-	-	C35/45_soletta Soletta30cm	2.441
171	150	130	-	-	C35/45_soletta Soletta30cm	2.441
172	130	110	-	-	C35/45_soletta Soletta30cm	2.441
173	110	90	-	-	C35/45_soletta Soletta30cm	2.441
174	90	70	-	-	C35/45_soletta Soletta30cm	2.441
175	70	192	-	-	C35/45_soletta Soletta30cm	1.22
176	215	171	-	-	C35/45_soletta Soletta30cm	1.22
177	171	151	-	-	C35/45_soletta Soletta30cm	2.441
178	151	131	-	-	C35/45_soletta Soletta30cm	2.441
179	131	111	-	-	C35/45_soletta Soletta30cm	2.441
180	111	91	-	-	C35/45_soletta Soletta30cm	2.441
181	91	71	-	-	C35/45_soletta Soletta30cm	2.441
182	71	193	-	-	C35/45_soletta Soletta30cm	1.22
183	216	172	-	-	C35/45_soletta Soletta30cm	1.22
184	172	152	-	-	C35/45_soletta Soletta30cm	2.441
185	152	132	-	-	C35/45_soletta Soletta30cm	2.441
186	132	112	-	-	C35/45_soletta Soletta30cm	2.441
187	112	92	-	-	C35/45_soletta Soletta30cm	2.441
188	92	72	-	-	C35/45_soletta Soletta30cm	2.441
189	72	194	-	-	C35/45_soletta Soletta30cm	1.22
190	217	173	-	-	C35/45_soletta Soletta30cm	1.22
191	173	153	-	-	C35/45_soletta Soletta30cm	2.441
192	153	133	-	-	C35/45_soletta Soletta30cm	2.441
193	133	113	-	-	C35/45_soletta Soletta30cm	2.441
194	113	93	-	-	C35/45_soletta Soletta30cm	2.441
195	93	73	-	-	C35/45_soletta Soletta30cm	2.441
196	73	195	-	-	C35/45_soletta Soletta30cm	1.22
197	218	174	-	-	C35/45_soletta Soletta30cm	1.22

Ponte Canale NiE – Relazione di calcolo

198	174	154	-	-	C35/45_soletta	Soletta30cm	2.441
199	154	134	-	-	C35/45_soletta	Soletta30cm	2.441
200	134	114	-	-	C35/45_soletta	Soletta30cm	2.441
201	114	94	-	-	C35/45_soletta	Soletta30cm	2.441
202	94	74	-	-	C35/45_soletta	Soletta30cm	2.441
203	74	196	-	-	C35/45_soletta	Soletta30cm	1.22
204	219	175	-	-	C35/45_soletta	Soletta30cm	1.22
205	175	155	-	-	C35/45_soletta	Soletta30cm	2.441
206	155	135	-	-	C35/45_soletta	Soletta30cm	2.441
207	135	115	-	-	C35/45_soletta	Soletta30cm	2.441
208	115	95	-	-	C35/45_soletta	Soletta30cm	2.441
209	95	75	-	-	C35/45_soletta	Soletta30cm	2.441
210	75	197	-	-	C35/45_soletta	Soletta30cm	1.22
211	220	176	-	-	C35/45_soletta	Soletta30cm	1.22
212	176	156	-	-	C35/45_soletta	Soletta30cm	2.441
213	156	136	-	-	C35/45_soletta	Soletta30cm	2.441
214	136	116	-	-	C35/45_soletta	Soletta30cm	2.441
215	116	96	-	-	C35/45_soletta	Soletta30cm	2.441
216	96	76	-	-	C35/45_soletta	Soletta30cm	2.441
217	76	198	-	-	C35/45_soletta	Soletta30cm	1.22
218	221	177	-	-	C35/45_soletta	Soletta30cm	1.22
219	177	157	-	-	C35/45_soletta	Soletta30cm	2.441
220	157	137	-	-	C35/45_soletta	Soletta30cm	2.441
221	137	117	-	-	C35/45_soletta	Soletta30cm	2.441
222	117	97	-	-	C35/45_soletta	Soletta30cm	2.441
223	97	77	-	-	C35/45_soletta	Soletta30cm	2.441
224	77	199	-	-	C35/45_soletta	Soletta30cm	1.22
225	222	178	-	-	C35/45_soletta	Soletta30cm	1.22
226	178	158	-	-	C35/45_soletta	Soletta30cm	2.441
227	158	138	-	-	C35/45_soletta	Soletta30cm	2.441
228	138	118	-	-	C35/45_soletta	Soletta30cm	2.441
229	118	98	-	-	C35/45_soletta	Soletta30cm	2.441
230	98	78	-	-	C35/45_soletta	Soletta30cm	2.441
231	78	200	-	-	C35/45_soletta	Soletta30cm	1.22
232	223	179	-	-	C35/45_soletta	Soletta30cm	1.22
233	179	159	-	-	C35/45_soletta	Soletta30cm	2.441
234	159	139	-	-	C35/45_soletta	Soletta30cm	2.441
235	139	119	-	-	C35/45_soletta	Soletta30cm	2.441
236	119	99	-	-	C35/45_soletta	Soletta30cm	2.441
237	99	79	-	-	C35/45_soletta	Soletta30cm	2.441
238	79	201	-	-	C35/45_soletta	Soletta30cm	1.22
239	224	180	-	-	C35/45_soletta	Soletta30cm	1.22
240	180	160	-	-	C35/45_soletta	Soletta30cm	2.441
241	160	140	-	-	C35/45_soletta	Soletta30cm	2.441
242	140	120	-	-	C35/45_soletta	Soletta30cm	2.441
243	120	100	-	-	C35/45_soletta	Soletta30cm	2.441
244	100	80	-	-	C35/45_soletta	Soletta30cm	2.441
245	80	202	-	-	C35/45_soletta	Soletta30cm	1.22
246	225	181	-	-	C35/45_soletta	Soletta30cm	1.22
247	181	161	-	-	C35/45_soletta	Soletta30cm	2.441
248	161	141	-	-	C35/45_soletta	Soletta30cm	2.441
249	141	121	-	-	C35/45_soletta	Soletta30cm	2.441
250	121	101	-	-	C35/45_soletta	Soletta30cm	2.441
251	101	81	-	-	C35/45_soletta	Soletta30cm	2.441
252	81	203	-	-	C35/45_soletta	Soletta30cm	1.22
253	226	182	-	-	C35/45_soletta	Soletta30cm	1.22
254	182	162	-	-	C35/45_soletta	Soletta30cm	2.441
255	162	142	-	-	C35/45_soletta	Soletta30cm	2.441
256	142	122	-	-	C35/45_soletta	Soletta30cm	2.441
257	122	102	-	-	C35/45_soletta	Soletta30cm	2.441
258	102	82	-	-	C35/45_soletta	Soletta30cm	2.441
259	82	204	-	-	C35/45_soletta	Soletta30cm	1.22
260	227	183	-	-	C35/45_soletta	Soletta30cm	1.22
261	183	163	-	-	C35/45_soletta	Soletta30cm	2.441
262	163	143	-	-	C35/45_soletta	Soletta30cm	2.441
263	143	123	-	-	C35/45_soletta	Soletta30cm	2.441
264	123	103	-	-	C35/45_soletta	Soletta30cm	2.441
265	103	83	-	-	C35/45_soletta	Soletta30cm	2.441
266	83	205	-	-	C35/45_soletta	Soletta30cm	1.22
267	228	184	-	-	C35/45_soletta	Soletta30cm	1.22
268	184	164	-	-	C35/45_soletta	Soletta30cm	2.441
269	164	144	-	-	C35/45_soletta	Soletta30cm	2.441
270	144	124	-	-	C35/45_soletta	Soletta30cm	2.441
271	124	104	-	-	C35/45_soletta	Soletta30cm	2.441
272	104	84	-	-	C35/45_soletta	Soletta30cm	2.441
273	84	206	-	-	C35/45_soletta	Soletta30cm	1.22
274	207	6	-	-	C35/45_soletta	Testata	1.22
275	6	5	-	-	C35/45_soletta	Testata	2.441
276	5	4	-	-	C35/45_soletta	Testata	2.441
277	4	3	-	-	C35/45_soletta	Testata	2.441
278	3	2	-	-	C35/45_soletta	Testata	2.441
279	2	1	-	-	C35/45_soletta	Testata	2.441
280	1	185	-	-	C35/45_soletta	Testata	1.22
281	186	7	-	-	C35/45_soletta	Testata	1.22
282	7	8	-	-	C35/45_soletta	Testata	2.441
283	8	9	-	-	C35/45_soletta	Testata	2.441
284	9	10	-	-	C35/45_soletta	Testata	2.441
285	10	11	-	-	C35/45_soletta	Testata	2.441
286	11	12	-	-	C35/45_soletta	Testata	2.441
287	12	208	-	-	C35/45_soletta	Testata	1.22
288	7	229	-	-	C35/45	Cassone+soletta	0.5
289	8	230	-	-	C35/45	Cassone+soletta	0.5
290	9	231	-	-	C35/45	Cassone+soletta	0.5
291	10	232	-	-	C35/45	Cassone+soletta	0.5
292	11	233	-	-	C35/45	Cassone+soletta	0.5
293	12	234	-	-	C35/45	Cassone+soletta	0.5
294	235	1	-	-	C35/45	Cassone+soletta	0.5
295	236	2	-	-	C35/45	Cassone+soletta	0.5
296	237	3	-	-	C35/45	Cassone+soletta	0.5
297	238	4	-	-	C35/45	Cassone+soletta	0.5

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298	239	5	-	-	C35/45 Cassone+soletta	0.5
299	240	6	-	-	C35/45 Cassone+soletta	0.5

*** TOTAL WEIGHT / VOLUME / SURFACE AREA SUMMARY

SECTION NO	SECTION NAME	SURFACE AREA	VOLUMN	WEIGHT	FRAME NUMBER	TRUSS NUMBER
7	Cassone+soletta	1171	150.4	3760	138	0
9	Soletta30cm	656.2	72.06	0	140	0
10	Testata	109	13.71	0	14	0

*** LOAD DATA

; Self Weight, Nodal Load, Specified Displacement, Beam Load, Floor Load, Finishing Material Load, System Temperature, Nodal Temperature, Element Temperature, Beam Section Temperature, Wind Load, Static Seismic Load, Time History Analysis Data

[LOAD CASE : G1]

** SELF WEIGHT DATA

; X=0, Y=0, Z=-1

[LOAD CASE : G2]

** BEAM LOAD DATA

MEMBER	TYPE	DIR.	PROJ.	D1	P1	D2	P2	D3	P3	D4	P4
1	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
2	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
3	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
4	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
5	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
6	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
7	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
8	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
9	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
10	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
11	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
12	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
13	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
14	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
15	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
16	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
17	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
18	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
19	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
20	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
21	Uniform Load	GZ	NO	0	-10.4	1	-10.4	0	0	0	0
22	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
23	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
24	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
25	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
26	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
27	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
28	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
29	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
30	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
31	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
32	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
33	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
34	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
35	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
36	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
37	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
38	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
39	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
40	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
41	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
42	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
43	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
44	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
45	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
46	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
47	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
48	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
49	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
50	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
51	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
52	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
53	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
54	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
55	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
56	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
57	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
58	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
59	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
60	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
61	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
62	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
63	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
64	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
65	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
66	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
67	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0

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68	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
69	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
70	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
71	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
72	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
73	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
74	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
75	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
76	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
77	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
78	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
79	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
80	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
81	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
82	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
83	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
84	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
85	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
86	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
87	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
88	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
89	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
90	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
91	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
92	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
93	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
94	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
95	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
96	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
97	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
98	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
99	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
100	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
101	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
102	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
103	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
104	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
105	Uniform Load	GZ	NO	0	-6	1	-6	0	0	0	0
106	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
107	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
108	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
109	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
110	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
111	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
112	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
113	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
114	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
115	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
116	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
117	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
118	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
119	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
120	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
121	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
122	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
123	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
124	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
125	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0
126	Uniform Load	GZ	NO	0	-3.9	1	-3.9	0	0	0	0

[LOAD CASE : q3]

** BEAM LOAD DATA

MEMBER	TYPE	DIR.	PROJ.	D1	P1	D2	P2	D3	P3	D4	P4
22	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
23	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
24	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
25	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
26	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
27	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
28	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
29	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
30	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
31	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
32	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
33	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
34	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
35	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
36	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
37	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
38	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
39	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
40	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
41	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0
42	Uniform Load	GX	NO	0	19.8	1	19.8	0	0	0	0

[LOAD CASE : q5_pc]

** BEAM LOAD DATA

MEMBER	TYPE	DIR.	PROJ.	D1	P1	D2	P2	D3	P3	D4	P4
1	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
2	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
3	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
4	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0

Ponte Canale NiE – Relazione di calcolo

5	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
6	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
7	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
8	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
9	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
10	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
11	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
12	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
13	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
14	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
15	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
16	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
17	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
18	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
19	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
20	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0
21	Uniform Load	GY	NO	0	9.55	1	9.55	0	0	0	0

[LOAD CASE : q5_ps]

** BEAM LOAD DATA

MEMBER	TYPE	DIR.	PROJ.	D1	P1	D2	P2	D3	P3	D4	P4
1	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
2	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
3	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
4	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
5	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
6	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
7	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
8	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
9	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
10	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
11	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
12	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
13	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
14	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
15	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
16	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
17	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
18	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
19	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
20	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0
21	Uniform Load	GY	NO	0	3.25	1	3.25	0	0	0	0

[LOAD CASE : Ex]

** NODAL LOAD DATA

NODE	FX	FY	FZ	MX	MY	MZ
241	1845	0	0	0	0	0

[LOAD CASE : Ey]

** NODAL LOAD DATA

NODE	FX	FY	FZ	MX	MY	MZ
241	0	1845	0	0	0	0

*** RESPONSE SPECTRUM FUNCTION DATA

NAME	FUNCTION TYPE	SCALE	GRAVITY DATA
SLV-z (B;~ Normalized Acc.		1	9.806 0:0.121 0.05:0.306 0.15:0.306 0.235:0.195 0.32:0.143

*** RESPONSE SPECTRUM LOAD CASE DATA

NAME	FUNCTION NAME	DIR.	ANGLE	SCALE	PERIOD FACTOR	ACCIDENTAL ECCENTRICITY

*** LOAD COMBINATION DATA

** GENERAL

NO	NAME	TYPE	ACTIVE	DESCRIPTION
1	Q1k	Add	ACTIVE	
2	Q1f	Add	ACTIVE	
3	Q2a	Add	ACTIVE	
4	SLU1	Add	ACTIVE	Q1; +Vy
5	SLU2	Add	ACTIVE	Q1; -Vy
6	SLU3	Add	ACTIVE	Q2a; +Vy
7	SLU4	Add	ACTIVE	Q2a; -Vy
8	SLU5	Add	ACTIVE	+Vy; Q1
9	SLU6	Add	ACTIVE	-Vy; Q1
10	SLE-R1	Add	ACTIVE	Q1; +Vy
11	SLE-R2	Add	ACTIVE	Q1; -Vy
12	SLE-F1	Add	ACTIVE	Q1; +Vy
13	SLE-F2	Add	ACTIVE	Q1; -Vy
14	SLE-QP	Add	ACTIVE	Q1

15	SLV-x1	Add	ACTIVE
16	SLV-x2	Add	ACTIVE
17	SLV-x3	Add	ACTIVE
18	SLV-x4	Add	ACTIVE
19	SLV-x5	Add	ACTIVE
20	SLV-x6	Add	ACTIVE
21	SLV-x7	Add	ACTIVE
22	SLV-x8	Add	ACTIVE
23	SLV-y1	Add	ACTIVE
24	SLV-y2	Add	ACTIVE
25	SLV-y3	Add	ACTIVE
26	SLV-y4	Add	ACTIVE
27	SLV-y5	Add	ACTIVE
28	SLV-y6	Add	ACTIVE
29	SLV-y7	Add	ACTIVE
30	SLV-y8	Add	ACTIVE
31	SLV-z1	Add	ACTIVE
32	SLV-z2	Add	ACTIVE
33	SLV-z3	Add	ACTIVE
34	SLV-z4	Add	ACTIVE
35	SLV-z5	Add	ACTIVE
36	SLV-z6	Add	ACTIVE
37	SLV-z7	Add	ACTIVE
38	SLV-z8	Add	ACTIVE
39	INVS LU	Envelope	ACTIVE
40	INVS LE-R	Envelope	ACTIVE
41	INVS LE-F	Envelope	ACTIVE
42	INVS LE-QP	Envelope	ACTIVE
43	INVS LV	Envelope	ACTIVE

Allegato B – Output Modello di Calcolo

```
*****  
**          Gen 2011          Modeling, Integrated Design & Analysis Software          **  
**          GENERAL STRUCTURE DESIGN SYSTEM          **  
*****  
  
      XXX  XXX  XX  XXXXXXXX  XXXXXXXX  XXXXXXXX  
      XXXX XXXX  XX  XX  XX  XX  XX  XX  XX  XX  
      XX  XXX  XX  XX  XX  XX  XX  XX  XX  
      XX  X  XX  XX  XX  XX  XXXXXXXX  XXXXXXXX  
      XXX  XX  XXX  XXX  XX  XX  XX  XXX  
      XXX  XX  XXX  XXX  XX  XXX  XX  XX  XXX  
      XXX  XX  XXX  XXX  XX  XXX  XX  XX  XXX  
      XXX  XX  XXX  XXXXXXXX  XXX  XX  XXXXXXXX /Gen  
  
          Gen 2011  
  
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          ALL RIGHTS RESERVED.          MIDAS TEAM  
  
*****
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ANALYSIS RESULT OUTPUT

Ponte Canale NiE – Relazione di calcolo

LOAD SET FOR DISPLACEMENT OUTPUT - Load Set 1

<< LOAD COMB/CASE/ENVEL ABBREVIATION TABLE >>

ABBREVIATION	FULL NAME	TYPE	DESCRIPTION
c1-c2--1	c1-c2-c3 - Caratteristico	Moving	
c1-c2--2	c1-c2-c3 - psi	Moving	
INVSLE-1	INVSLE-QP	Gen.Envl	

<< SELECTED LOAD CASE/COMBINATION DETAIL LIST >>

[[Selected Load Cases]]

LOAD CASE	ANAL. TYPE	DESCRIPTION	STATIC LOAD CASE DETAIL TYPE
c1-c2--1	Moving		
c1-c2--2	Moving		
SLV-z	Res.Spec		
G1	Static	peso proprio della struttura	User Defined Load (USER)
G2	Static	carichi permanenti portati	User Defined Load (USER)
q3	Static	frenamento	User Defined Load (USER)
q4	Static	azione centrifuga	User Defined Load (USER)
q5_pc	Static	vento a ponte carico Y	Wind Load on Structure (W)
q5_ps	Static	vento a ponte scarico Y	Wind Load on Structure (W)
Ex	Static	sisma in direzione X	Earthquake (E)
Ey	Static	sisma in direzione Y	Earthquake (E)

[[Selected Load Combinations]]

L. COMB	TYPE	COMBINATION DETAIL							
INVSLE	Gen.Envl	1.000 x SLU1	, 1.000 x SLU2	, 1.000 x SLU3	, 1.000 x SLU4	, 1.000 x SLU5	, 1.000 x SLU6	, 1.000 x SLU7	, 1.000 x SLU8
INVSLE-R	Gen.Envl	1.000 x SLE-R1	, 1.000 x SLE-R2						
INVSLE-F	Gen.Envl	1.000 x SLE-F1	, 1.000 x SLE-F2						
INVSLE-1	Gen.Envl	1.000 x SLE-QP							
INVSLE	Gen.Envl	1.000 x SLV-x1	, 1.000 x SLV-x2	, 1.000 x SLV-x3	, 1.000 x SLV-x4	, 1.000 x SLV-x5	, 1.000 x SLV-x6	, 1.000 x SLV-x7	, 1.000 x SLV-x8
		1.000 x SLV-y1	, 1.000 x SLV-y2	, 1.000 x SLV-y3	, 1.000 x SLV-y4	, 1.000 x SLV-y5	, 1.000 x SLV-y6	, 1.000 x SLV-y7	, 1.000 x SLV-y8
		1.000 x SLV-z1	, 1.000 x SLV-z2	, 1.000 x SLV-z3	, 1.000 x SLV-z4	, 1.000 x SLV-z5	, 1.000 x SLV-z6	, 1.000 x SLV-z7	, 1.000 x SLV-z8

Ponte Canale NiE – Relazione di calcolo

LOAD SET FOR REACTION OUTPUT - Load Set 1

<< LOAD COMB/CASE/ENVEL ABBREVIATION TABLE >>

ABBREVIATION	FULL NAME	TYPE	DESCRIPTION
c1-c2--1	c1-c2-c3 - Caratteristico	Moving	
c1-c2--2	c1-c2-c3 - psi	Moving	

<< SELECTED LOAD CASE/COMBINATION DETAIL LIST >>

[[Selected Load Cases]]

LOAD CASE	ANAL. TYPE	DESCRIPTION	STATIC LOAD CASE DETAIL TYPE
c1-c2--1	Moving		
c1-c2--2	Moving		
SLV-z	Res. Spec		
G1	Static	peso proprio della struttura	User Defined Load (USER)
G2	Static	carichi permanenti portati	User Defined Load (USER)
q3	Static	frenamento	User Defined Load (USER)
q4	Static	azione centrifuga	User Defined Load (USER)
q5_pc	Static	vento a ponte carico Y	Wind Load on Structure (W)
q5_ps	Static	vento a ponte scarico Y	Wind Load on Structure (W)
Ex	Static	sisma in direzione X	Earthquake (E)
Ey	Static	sisma in direzione Y	Earthquake (E)

[[Selected Load Combinations]]

L. COMB	TYPE	COMBINATION DETAIL							
INVS LU	Gen. Envl	1.000 x SLU1	, 1.000 x SLU2	, 1.000 x SLU3	, 1.000 x SLU4	, 1.000 x SLU5	, 1.000 x SLU6	, 1.000 x SLU7	, 1.000 x SLU8
INVS LE-R	Gen. Envl	1.000 x SLE-R1	, 1.000 x SLE-R2						
INVS LE-F	Gen. Envl	1.000 x SLE-F1	, 1.000 x SLE-F2						
INVS LE-1	Gen. Envl	1.000 x SLE-QP							
INVS LV	Gen. Envl	1.000 x SLV-x1	, 1.000 x SLV-x2	, 1.000 x SLV-x3	, 1.000 x SLV-x4	, 1.000 x SLV-x5	, 1.000 x SLV-x6	, 1.000 x SLV-x7	, 1.000 x SLV-x8
		1.000 x SLV-y1	, 1.000 x SLV-y2	, 1.000 x SLV-y3	, 1.000 x SLV-y4	, 1.000 x SLV-y5	, 1.000 x SLV-y6	, 1.000 x SLV-y7	, 1.000 x SLV-y8
		1.000 x SLV-z1	, 1.000 x SLV-z2	, 1.000 x SLV-z3	, 1.000 x SLV-z4	, 1.000 x SLV-z5	, 1.000 x SLV-z6	, 1.000 x SLV-z7	, 1.000 x SLV-z8

Ponte Canale NiE – Relazione di calcolo

LOAD SET FOR ELEMENT OUTPUT - Load Set 1

<< LOAD COMB/CASE/ENVEL ABBREVIATION TABLE >>

ABBREVIATION	FULL NAME	TYPE	DESCRIPTION
c1-c2--1	c1-c2-c3 - Caratteristico	Moving	
c1-c2--2	c1-c2-c3 - psi	Moving	

<< SELECTED LOAD CASE/COMBINATION DETAIL LIST >>

[[Selected Load Cases]]

LOAD CASE	ANAL. TYPE	DESCRIPTION	STATIC LOAD CASE DETAIL TYPE
c1-c2--1	Moving		
c1-c2--2	Moving		
SLV-z	Res. Spec		
G1	Static	peso proprio della struttura	User Defined Load (USER)
G2	Static	carichi permanenti portati	User Defined Load (USER)
q3	Static	frenamento	User Defined Load (USER)
q4	Static	azione centrifuga	User Defined Load (USER)
q5_pc	Static	vento a ponte carico Y	Wind Load on Structure (W)
q5_ps	Static	vento a ponte scarico Y	Wind Load on Structure (W)
Ex	Static	sisma in direzione X	Earthquake (E)
Ey	Static	sisma in direzione Y	Earthquake (E)

[[Selected Load Combinations]]

L. COMB	TYPE	COMBINATION DETAIL							
INWSLU	Gen.Env1	1.000 x SLU1	, 1.000 x SLU2	, 1.000 x SLU3	, 1.000 x SLU4	, 1.000 x SLU5	, 1.000 x SLU6		
INVSLE-R	Gen.Env1	1.000 x SLE-R1	, 1.000 x SLE-R2						
INVSLE-F	Gen.Env1	1.000 x SLE-F1	, 1.000 x SLE-F2						
INVSLE-1	Gen.Env1	1.000 x SLE-QP							
INWSLV	Gen.Env1	1.000 x SLV-x1	, 1.000 x SLV-x2	, 1.000 x SLV-x3	, 1.000 x SLV-x4	, 1.000 x SLV-x5	, 1.000 x SLV-x6	, 1.000 x SLV-x7	, 1.000 x SLV-x8
		1.000 x SLV-y1	, 1.000 x SLV-y2	, 1.000 x SLV-y3	, 1.000 x SLV-y4	, 1.000 x SLV-y5	, 1.000 x SLV-y6	, 1.000 x SLV-y7	, 1.000 x SLV-y8
		1.000 x SLV-z1	, 1.000 x SLV-z2	, 1.000 x SLV-z3	, 1.000 x SLV-z4	, 1.000 x SLV-z5	, 1.000 x SLV-z6	, 1.000 x SLV-z7	, 1.000 x SLV-z8

Ponte Canale NiE – Relazione di calcolo

NODE DISPLACEMENT AND ROTATIONS DEFAULT PRINTOUT

Unit System : kN , m

NODE	LC		UX	UY	UZ	RX	RY	RZ
1	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.000	0.0	0.0	0.0
		G1	0.000	0.000	0.000	0.0	0.0	0.0
	G2	0.000	0.000	0.000	0.0	0.0	-0.0	
	q3	0.000	0.000	0.000	-0.0	0.0	-0.0	
	q4	0.000	0.000	0.000	0.0	0.0	0.0	
	q5_pc	0.000	0.000	0.000	-0.0	-0.0	0.0	
	q5_ps	0.000	0.000	0.000	0.0	0.0	0.0	
	Ex	0.000	0.000	0.000	-0.0	-0.0	-0.0	
	Ey	0.000	0.000	0.000	-0.0	-0.0	0.0	
	INVSLU	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	0.0	-0.0
	INVSLE-R	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	0.0	-0.0
	INVSLE-F	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVSLE-1	Max	0.000	0.000	0.000	0.0	0.0	0.0
Min		0.000	0.000	0.000	0.0	0.0	-0.0	
INVSLV	Max	0.000	0.000	0.000	0.0	0.0	0.0	
	Min	-0.000	-0.000	0.000	0.0	0.0	-0.0	
2	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.000	0.0	0.0	0.0
		G1	-0.000	-0.000	0.000	0.0	0.0	0.0
	G2	-0.000	-0.000	0.000	0.0	0.0	-0.0	
	q3	0.000	0.000	0.000	0.0	0.0	-0.0	
	q4	0.000	0.000	0.000	0.0	0.0	0.0	
	q5_pc	0.000	0.000	0.000	-0.0	-0.0	0.0	
	q5_ps	0.000	0.000	0.000	0.0	0.0	0.0	
	Ex	0.000	0.000	0.000	-0.0	0.0	-0.0	
	Ey	0.000	0.000	0.000	-0.0	0.0	0.0	
	INVSLU	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	0.0	-0.0
	INVSLE-R	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	0.0	-0.0
	INVSLE-F	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	0.0	-0.0
	INVSLE-1	Max	0.000	0.000	0.000	0.0	0.0	0.0
Min		-0.000	-0.000	0.000	0.0	0.0	-0.0	
INVSLV	Max	0.000	0.000	0.000	0.0	0.0	0.0	
	Min	-0.000	-0.000	0.000	0.0	0.0	-0.0	
3	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.000	0.0	0.0	0.0
		G1	0.000	0.000	0.000	0.0	0.0	0.0
	G2	0.000	0.000	0.000	0.0	0.0	-0.0	
	q3	0.000	0.000	0.000	0.0	-0.0	0.0	
	q4	0.000	0.000	0.000	0.0	0.0	0.0	
	q5_pc	0.000	0.000	0.000	-0.0	-0.0	0.0	
	q5_ps	0.000	0.000	0.000	0.0	-0.0	0.0	
	Ex	0.000	0.000	0.000	0.0	-0.0	0.0	
	Ey	0.000	0.000	0.000	0.0	-0.0	0.0	
	INVSLU	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVSLE-R	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVSLE-F	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVSLE-1	Max	0.000	0.000	0.000	0.0	0.0	0.0
Min		0.000	0.000	0.000	0.0	0.0	-0.0	
INVSLV	Max	0.000	0.000	0.000	0.0	0.0	0.0	
	Min	0.000	0.000	0.000	0.0	0.0	-0.0	

Ponte Canale NiE – Relazione di calcolo

4	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.000	0.0	0.0	0.0
	G1		0.000	0.000	0.000	0.0	0.0	0.0
	G2		0.000	0.000	0.000	0.0	0.0	-0.0
	q3		0.000	0.000	0.000	-0.0	0.0	0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	0.000	0.0	0.0	0.0
	q5_ps		0.000	0.000	0.000	-0.0	-0.0	0.0
	Ex		0.000	0.000	0.000	-0.0	0.0	0.0
	Ey		0.000	0.000	0.000	-0.0	-0.0	0.0
	INVS LU	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LE-R	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LE-F	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LE-1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LV	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
5	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.000	0.0	0.0	0.0
	G1		0.000	0.000	0.000	0.0	0.0	0.0
	G2		0.000	0.000	0.000	0.0	0.0	-0.0
	q3		0.000	0.000	0.000	0.0	-0.0	0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	0.000	0.0	0.0	0.0
	q5_ps		0.000	0.000	0.000	-0.0	-0.0	0.0
	Ex		0.000	0.000	0.000	0.0	-0.0	0.0
	Ey		0.000	0.000	0.000	0.0	-0.0	0.0
	INVS LU	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LE-R	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LE-F	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LE-1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LV	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
6	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.000	0.0	0.0	0.0
	G1		0.000	0.000	0.000	0.0	0.0	-0.0
	G2		0.000	0.000	0.000	0.0	0.0	-0.0
	q3		0.000	0.000	0.000	-0.0	0.0	-0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	0.000	0.0	0.0	0.0
	q5_ps		0.000	0.000	0.000	-0.0	-0.0	0.0
	Ex		0.000	0.000	0.000	-0.0	0.0	-0.0
	Ey		0.000	0.000	0.000	-0.0	0.0	0.0
	INVS LU	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LE-R	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LE-F	Max	0.000	0.000	0.000	0.0	0.0	-0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LE-1	Max	0.000	0.000	0.000	0.0	0.0	-0.0
		Min	0.000	0.000	0.000	0.0	0.0	-0.0
	INVS LV	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	0.0	0.0	-0.0
7	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.000	0.0	0.0	0.0
	G1		-0.000	-0.000	0.000	-0.0	-0.0	-0.0

Ponte Canale NiE – Relazione di calcolo

	G2	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
	q3	0.000	0.000	0.000	0.0	0.0	0.0
	q4	0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc	0.000	0.000	0.000	-0.0	0.0	0.0
	q5_ps	0.000	0.000	0.000	0.0	-0.0	-0.0
	Ex	0.000	0.000	0.000	-0.0	0.0	-0.0
	Ey	0.000	0.000	0.000	-0.0	0.0	-0.0
	INVS LU	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0
	INVS LE-R	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0
	INVS LE-F	Max	0.000	-0.000	0.000	-0.0	-0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0
	INVS LE-1	Max	0.000	-0.000	0.000	-0.0	-0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0
	INVS LV	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0
8	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0
	SLV-z (RS)	0.000	0.000	0.000	0.0	0.0	0.0
	G1	0.000	0.000	0.000	-0.0	-0.0	0.0
	G2	0.000	0.000	0.000	-0.0	-0.0	0.0
	q3	0.000	0.000	0.000	0.0	0.0	-0.0
	q4	0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc	0.000	0.000	0.000	-0.0	-0.0	-0.0
	q5_ps	0.000	0.000	0.000	0.0	0.0	-0.0
	Ex	0.000	0.000	0.000	-0.0	0.0	-0.0
	Ey	0.000	0.000	0.000	-0.0	0.0	-0.0
	INVS LU	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	0.000	-0.000	0.000	-0.0	-0.0
	INVS LE-R	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	0.000	-0.000	0.000	-0.0	-0.0
	INVS LE-F	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	0.000	-0.000	0.000	-0.0	-0.0
	INVS LE-1	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	0.000	-0.000	0.000	-0.0	-0.0
	INVS LV	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0
9	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0
	SLV-z (RS)	0.000	0.000	0.000	0.0	0.0	0.0
	G1	0.000	0.000	0.000	-0.0	-0.0	0.0
	G2	0.000	0.000	0.000	-0.0	-0.0	0.0
	q3	0.000	0.000	0.000	0.0	0.0	-0.0
	q4	0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc	0.000	0.000	0.000	-0.0	-0.0	-0.0
	q5_ps	0.000	0.000	0.000	0.0	0.0	-0.0
	Ex	0.000	0.000	0.000	0.0	-0.0	-0.0
	Ey	0.000	0.000	0.000	0.0	-0.0	-0.0
	INVS LU	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0
	INVS LE-R	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0
	INVS LE-F	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0
	INVS LE-1	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0
	INVS LV	Max	0.000	0.000	0.000	-0.0	-0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0
10	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0
	SLV-z (RS)	0.000	0.000	0.000	0.0	0.0	0.0
	G1	0.000	0.000	0.000	-0.0	-0.0	0.0
	G2	0.000	0.000	0.000	-0.0	-0.0	0.0
	q3	0.000	0.000	0.000	0.0	0.0	-0.0
	q4	0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc	0.000	0.000	0.000	-0.0	-0.0	-0.0
	q5_ps	0.000	0.000	0.000	0.0	0.0	-0.0
	Ex	0.000	0.000	0.000	-0.0	-0.0	-0.0
	Ey	0.000	0.000	0.000	0.0	0.0	-0.0

Ponte Canale NiE – Relazione di calcolo

	INVS LU	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0	-0.0
	INVS LE-R	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0	-0.0
	INVS LE-F	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0	-0.0
	INVS LE~1	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0	-0.0
	INVS LV	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0	-0.0
11	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.000	0.0	0.0	0.0
	G1		0.000	0.000	0.000	-0.0	-0.0	0.0
	G2		0.000	0.000	0.000	-0.0	-0.0	0.0
	q3		0.000	0.000	0.000	0.0	-0.0	-0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	0.000	-0.0	-0.0	-0.0
	q5_ps		0.000	0.000	0.000	0.0	0.0	-0.0
	Ex		0.000	0.000	0.000	0.0	-0.0	-0.0
	Ey		0.000	0.000	0.000	0.0	-0.0	-0.0
	INVS LU	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	0.000	0.000	0.000	-0.0	-0.0	-0.0
	INVS LE-R	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	0.000	0.000	0.000	-0.0	-0.0	-0.0
	INVS LE-F	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	0.000	0.000	0.000	-0.0	-0.0	-0.0
	INVS LE~1	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	0.000	0.000	0.000	-0.0	-0.0	-0.0
	INVS LV	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	-0.000	0.000	0.000	-0.0	-0.0	-0.0
12	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.000	0.0	0.0	0.0
	G1		0.000	-0.000	0.000	-0.0	-0.0	-0.0
	G2		0.000	-0.000	0.000	-0.0	-0.0	-0.0
	q3		0.000	0.000	0.000	-0.0	0.0	-0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	0.000	-0.0	-0.0	-0.0
	q5_ps		0.000	0.000	0.000	-0.0	0.0	-0.0
	Ex		0.000	0.000	0.000	-0.0	-0.0	-0.0
	Ey		0.000	0.000	0.000	-0.0	0.0	-0.0
	INVS LU	Max	0.000	0.000	0.000	-0.0	-0.0	-0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
	INVS LE-R	Max	0.000	-0.000	0.000	-0.0	-0.0	-0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
	INVS LE-F	Max	0.000	-0.000	0.000	-0.0	-0.0	-0.0
		Min	0.000	-0.000	0.000	-0.0	-0.0	-0.0
	INVS LE~1	Max	0.000	-0.000	0.000	-0.0	-0.0	-0.0
		Min	0.000	-0.000	0.000	-0.0	-0.0	-0.0
	INVS LV	Max	0.000	0.000	0.000	-0.0	-0.0	0.0
		Min	-0.000	-0.000	0.000	-0.0	-0.0	-0.0
74	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.008	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.005	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.003	0.0	0.0	0.0
	G1		0.000	0.000	-0.010	0.0	0.0	-0.0
	G2		-0.000	-0.000	-0.003	0.0	0.0	-0.0
	q3		0.000	0.000	0.000	0.0	0.0	0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	0.000	-0.0	0.0	-0.0
	q5_ps		0.000	0.000	-0.000	0.0	-0.0	-0.0
	Ex		0.000	0.000	0.000	-0.0	-0.0	-0.0
	Ey		0.000	0.000	0.000	-0.0	-0.0	0.0
	INVS LU	Max	0.000	0.000	-0.017	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.029	-0.0	0.0	-0.0
	INVS LE-R	Max	0.000	0.000	-0.013	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.021	-0.0	0.0	-0.0

Ponte Canale NiE – Relazione di calcolo

	INVSLE-F	Max	0.000	0.000	-0.013	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.021	-0.0	0.0	-0.0
	INVSLE~1	Max	0.000	0.000	-0.013	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.021	-0.0	0.0	-0.0
	INVSLV	Max	0.000	0.000	-0.010	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.016	0.0	0.0	-0.0
94	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.009	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.006	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.003	0.0	0.0	0.0
	G1		0.000	-0.000	-0.010	0.0	0.0	-0.0
	G2		0.000	-0.000	-0.003	0.0	0.0	-0.0
	q3		0.000	0.000	0.000	0.0	0.0	0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	0.000	-0.0	0.0	-0.0
	q5_ps		0.000	0.000	-0.000	0.0	-0.0	-0.0
	Ex		0.000	0.000	0.000	-0.0	-0.0	-0.0
	Ey		0.000	0.000	0.000	-0.0	-0.0	0.0
	INVSLU	Max	0.000	0.000	-0.017	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.029	-0.0	0.0	-0.0
	INVSLE-R	Max	0.000	0.000	-0.013	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.022	-0.0	0.0	-0.0
	INVSLE-F	Max	0.000	0.000	-0.013	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.022	-0.0	0.0	-0.0
	INVSLE~1	Max	0.000	0.000	-0.013	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.022	-0.0	0.0	-0.0
	INVSLV	Max	0.000	0.000	-0.010	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.016	0.0	0.0	-0.0
114	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.009	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.006	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.003	0.0	0.0	0.0
	G1		0.000	-0.000	-0.010	0.0	0.0	-0.0
	G2		0.000	-0.000	-0.002	0.0	0.0	-0.0
	q3		0.000	0.000	-0.000	0.0	0.0	0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	-0.000	-0.0	0.0	-0.0
	q5_ps		0.000	0.000	0.000	0.0	-0.0	-0.0
	Ex		0.000	0.000	-0.000	-0.0	0.0	-0.0
	Ey		0.000	0.000	0.000	-0.0	0.0	0.0
	INVSLU	Max	0.000	0.000	-0.017	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.029	-0.0	-0.0	-0.0
	INVSLE-R	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.022	-0.0	-0.0	-0.0
	INVSLE-F	Max	0.000	0.000	-0.013	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.022	-0.0	-0.0	-0.0
	INVSLE~1	Max	0.000	0.000	-0.013	0.0	0.0	-0.0
		Min	0.000	-0.000	-0.022	-0.0	-0.0	-0.0
	INVSLV	Max	0.000	0.000	-0.010	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.015	0.0	0.0	-0.0
134	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.009	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.006	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.003	0.0	0.0	0.0
	G1		0.000	-0.000	-0.010	0.0	0.0	-0.0
	G2		0.000	-0.000	-0.002	0.0	0.0	-0.0
	q3		0.000	0.000	-0.000	0.0	0.0	0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	-0.000	-0.0	0.0	-0.0
	q5_ps		0.000	0.000	0.000	0.0	-0.0	-0.0
	Ex		0.000	0.000	-0.000	-0.0	0.0	-0.0
	Ey		0.000	0.000	-0.000	-0.0	0.0	0.0
	INVSLU	Max	0.000	0.000	-0.017	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.029	-0.0	-0.0	-0.0
	INVSLE-R	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.022	-0.0	-0.0	-0.0
	INVSLE-F	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	0.000	-0.000	-0.022	-0.0	-0.0	-0.0
	INVSLE~1	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	0.000	-0.000	-0.022	-0.0	-0.0	-0.0
	INVSLV	Max	0.000	0.000	-0.010	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

	Min	-0.000	-0.000	-0.015	0.0	0.0	-0.0	
154	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.011	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.007	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.003	0.0	0.0	0.0
	G1		0.000	-0.000	-0.010	0.0	0.0	-0.0
	G2		0.000	-0.000	-0.002	0.0	0.0	-0.0
	q3		0.000	0.000	-0.000	-0.0	0.0	0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	-0.000	-0.0	0.0	-0.0
	q5_ps		0.000	0.000	0.000	0.0	-0.0	-0.0
	Ex		0.000	0.000	-0.000	-0.0	0.0	-0.0
	Ey		0.000	0.000	-0.000	-0.0	0.0	0.0
	INVS LU	Max	0.000	0.000	-0.016	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.031	-0.0	-0.0	-0.0
	INVS LE-R	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	-0.000	-0.000	-0.023	-0.0	-0.0	-0.0
	INVS LE-F	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	0.000	-0.000	-0.023	-0.0	-0.0	-0.0
	INVS LE~1	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	0.000	-0.000	-0.023	-0.0	-0.0	-0.0
	INVS LV	Max	0.000	0.000	-0.009	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.015	0.0	0.0	-0.0
174	c1-c2--1	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.012	-0.0	-0.0	-0.0
	c1-c2--2	Max	0.000	0.000	0.000	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.007	-0.0	-0.0	-0.0
	SLV-z (RS)		0.000	0.000	0.003	0.0	0.0	0.0
	G1		0.000	-0.000	-0.010	0.0	0.0	-0.0
	G2		0.000	-0.000	-0.002	0.0	0.0	-0.0
	q3		0.000	0.000	-0.000	-0.0	-0.0	0.0
	q4		0.000	0.000	0.000	0.0	0.0	0.0
	q5_pc		0.000	0.000	-0.000	-0.0	0.0	-0.0
	q5_ps		0.000	0.000	0.000	0.0	-0.0	-0.0
	Ex		0.000	0.000	-0.000	-0.0	-0.0	-0.0
	Ey		0.000	0.000	-0.000	-0.0	-0.0	0.0
	INVS LU	Max	0.000	0.000	-0.016	0.0	0.0	0.0
		Min	0.000	-0.000	-0.032	-0.0	-0.0	-0.0
	INVS LE-R	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	0.000	-0.000	-0.024	-0.0	-0.0	-0.0
	INVS LE-F	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	0.000	-0.000	-0.024	-0.0	-0.0	-0.0
	INVS LE~1	Max	0.000	0.000	-0.012	0.0	0.0	-0.0
		Min	0.000	-0.000	-0.024	-0.0	-0.0	-0.0
	INVS LV	Max	0.000	0.000	-0.009	0.0	0.0	0.0
		Min	-0.000	-0.000	-0.015	0.0	0.0	-0.0

Ponte Canale NiE – Relazione di calcolo

BEAM ELEMENT FORCES & MOMENTS DEFAULT PRINTOUT.

Unit System : kN , m

ELEM	MAT	SEC	LC	PT	AXIAL	SHEAR-y	SHEAR-z	TORSION	MOMENT-y	MOMENT-z	
1	4	7	c1-c2--1	Max	I	1.5	3.1	4.4	1.7	0.5	0.5
				J	1.5	3.1	4.4	1.7	173.2	7.6	
				Min	I	-31.1	-9.3	-244.4	-189.4	-119.9	-7.5
				J	-31.1	-9.3	-244.4	-189.4	-85.9	-7.9	
			c1-c2--2	Max	I	1.0	2.0	2.9	0.7	0.2	0.2
				J	1.0	2.0	2.9	0.7	109.6	4.8	
				Min	I	-20.1	-5.9	-154.9	-120.2	-76.0	-4.8
				J	-20.1	-5.9	-154.9	-120.2	-54.4	-5.0	
			SLV-z(RS)	I	6.5	1.1	59.2	36.9	26.6	0.5	
				J	6.5	1.1	59.2	36.9	33.2	0.7	
			G1	I	-24.8	-3.7	-249.8	-153.4	-111.0	-2.8	
				J	-24.8	-3.7	-221.3	-153.4	124.6	0.8	
			G2	I	-5.2	-0.9	-76.2	-23.5	-19.4	0.3	
				J	-5.2	-0.9	-65.8	-23.5	51.6	1.2	
			q3	I	40.9	-24.3	0.2	0.1	0.2	-0.4	
				J	40.9	-24.3	0.2	0.1	0.1	23.9	
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
			q5_pc	I	-34.4	17.1	0.4	-42.4	-26.9	-1.2	
				J	-34.4	7.6	0.4	-28.1	-27.3	-13.5	
			q5_ps	I	-8.5	7.0	-0.0	0.5	0.3	0.2	
				J	-8.5	3.7	-0.0	0.3	0.3	-5.1	
			Ex	I	106.2	-55.1	0.1	0.2	0.1	-0.6	
				J	106.2	-55.1	0.1	0.2	0.0	54.4	
			Ey	I	-113.5	99.8	0.1	0.3	-0.2	3.4	
				J	-113.5	99.8	0.1	0.3	-0.3	-96.4	
			INVSLU	Max	I	47.0	13.4	-433.9	-198.4	-151.2	-1.6
				J	47.0	4.8	-381.3	-211.3	496.3	53.7	
				Min	I	-113.5	-62.4	-770.5	-532.7	-362.2	-14.5
				J	-113.5	-53.8	-717.9	-519.8	97.3	-20.0	
			INVSLE-R	Max	I	-7.9	8.8	-321.4	-149.8	-113.8	-1.3
				J	-7.9	3.1	-282.5	-158.4	365.8	17.8	
				Min	I	-81.8	-24.2	-570.7	-391.8	-266.5	-10.6
				J	-81.8	-18.5	-531.8	-383.2	73.9	-13.9	
			INVSLE-F	Max	I	-21.7	1.9	-321.6	-166.7	-124.5	-1.7
				J	-21.7	0.0	-282.6	-169.6	354.9	12.4	
				Min	I	-68.0	-17.3	-570.5	-374.8	-255.7	-10.2
				J	-68.0	-15.4	-531.6	-371.9	84.8	-8.5	
			INVSLE~1	Max	I	-28.6	-1.5	-321.6	-175.2	-129.9	-2.0
				J	-28.6	-1.5	-282.7	-175.2	349.4	9.7	
Min	I	-61.2		-13.9	-570.5	-366.3	-250.3	-10.0			
J	-61.2	-13.9		-531.5	-366.3	90.3	-5.8				
INVSLE~1	Max	I	117.3	112.1	-266.9	-139.9	-103.7	1.3			
	J	117.3	112.1	-227.9	-139.9	209.5	115.0				
	Min	I	-177.4	-121.3	-385.3	-213.9	-157.0	-6.3			
	J	-177.4	-121.3	-346.3	-213.9	142.9	-110.8				
2	4	7	c1-c2--1	Max	I	0.0	0.0	9.6	12.2	187.3	0.0
				J	0.0	0.0	9.6	12.2	358.8	0.0	
				Min	I	0.0	0.0	-221.3	-206.3	-79.6	0.0
				J	0.0	0.0	-221.3	-206.3	-64.9	0.0	
			c1-c2--2	Max	I	0.0	0.0	7.1	8.5	121.0	0.0
				J	0.0	0.0	7.1	8.5	223.7	0.0	
				Min	I	0.0	0.0	-138.9	-130.8	-50.5	0.0
				J	0.0	0.0	-138.9	-130.8	-40.7	0.0	
			SLV-z(RS)	I	0.0	0.0	59.9	41.9	30.2	0.0	
				J	0.0	0.0	59.9	41.9	89.9	0.0	
			G1	I	0.0	0.0	-231.2	-172.6	116.1	0.0	
				J	0.0	0.0	-202.7	-172.6	333.1	0.0	
			G2	I	0.0	0.0	-68.4	-27.4	47.5	0.0	
				J	0.0	0.0	-57.9	-27.4	110.6	0.0	
			q3	I	0.0	0.0	0.2	0.1	0.2	0.0	
				J	0.0	0.0	0.2	0.1	0.0	0.0	
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
			q5_pc	I	0.0	4.8	-1.0	-36.3	-29.6	0.8	
				J	0.0	-4.8	-1.0	-21.9	-28.6	0.8	
			q5_ps	I	0.0	1.6	0.0	0.4	0.3	0.3	
				J	0.0	-1.6	0.0	0.3	0.3	0.3	
			Ex	I	0.0	0.0	0.0	0.2	0.1	0.0	

Ponte Canale NiE – Relazione di calcolo

		J	0.0	0.0	0.0	0.2	0.0	0.0
		I	0.0	0.0	-0.0	0.3	-0.3	0.0
		J	0.0	0.0	-0.0	0.3	-0.3	0.0
		I	0.0	4.3	-390.6	-220.9	500.4	0.7
		J	0.0	4.3	-338.1	-233.8	1109.2	0.7
		I	0.0	-4.3	-704.1	-581.1	86.7	-0.7
		J	0.0	-4.3	-651.5	-568.2	485.6	-0.7
		I	0.0	2.9	-289.4	-166.1	368.7	0.5
		J	0.0	2.9	-250.5	-174.7	819.7	0.5
		I	0.0	-2.9	-521.5	-428.1	66.2	-0.5
		J	0.0	-2.9	-482.5	-419.5	361.6	-0.5
		I	0.0	1.0	-289.8	-180.6	356.8	0.2
		J	0.0	1.0	-250.9	-183.4	808.3	0.2
		I	0.0	-1.0	-521.1	-413.6	78.0	-0.2
		J	0.0	-1.0	-482.1	-410.7	373.1	-0.2
		I	0.0	0.0	-290.0	-187.8	350.9	0.0
		J	0.0	0.0	-251.1	-187.8	802.6	0.0
		I	0.0	0.0	-520.9	-406.3	84.0	0.0
		J	0.0	0.0	-481.9	-406.3	378.8	0.0
		I	0.0	0.0	-239.7	-158.0	193.9	0.0
		J	0.0	0.0	-200.8	-158.0	533.7	0.0
		I	0.0	0.0	-359.5	-242.0	133.2	0.0
		J	0.0	0.0	-320.6	-242.0	353.8	0.0
3	4	I	0.0	0.0	15.1	10.9	374.1	0.0
		J	0.0	0.0	15.1	10.9	525.5	0.0
		I	0.0	0.0	-198.0	-217.4	-56.7	0.0
		J	0.0	0.0	-198.0	-217.4	-50.6	0.0
		I	0.0	0.0	10.5	7.6	235.8	0.0
		J	0.0	0.0	10.5	7.6	326.7	0.0
		I	0.0	0.0	-124.8	-137.9	-35.6	0.0
		J	0.0	0.0	-124.8	-137.9	-31.8	0.0
		I	0.0	0.0	59.5	47.5	86.3	0.0
		J	0.0	0.0	59.5	47.5	145.6	0.0
		I	0.0	0.0	-214.1	-192.4	323.6	0.0
		J	0.0	0.0	-185.6	-192.4	523.4	0.0
		I	0.0	0.0	-61.6	-32.6	105.6	0.0
		J	0.0	0.0	-51.2	-32.6	162.0	0.0
		I	0.0	0.0	0.2	0.0	0.1	0.0
		J	0.0	0.0	0.2	0.0	-0.0	0.0
		I	0.0	0.0	0.0	0.0	0.0	0.0
		J	0.0	0.0	0.0	0.0	0.0	0.0
		I	0.0	4.8	-2.2	-30.9	-31.5	0.8
		J	0.0	-4.8	-2.2	-16.6	-29.2	0.8
		I	0.0	1.6	0.0	0.4	0.3	0.3
		J	0.0	-1.6	0.0	0.2	0.3	0.3
		I	0.0	0.0	0.0	0.2	0.0	0.0
		J	0.0	0.0	0.0	0.2	0.0	0.0
		I	0.0	0.0	-0.0	0.2	-0.3	0.0
		J	0.0	0.0	-0.0	0.2	-0.3	0.0
		I	0.0	4.3	-349.9	-261.2	1112.7	0.7
		J	0.0	4.3	-297.4	-274.1	1661.0	0.7
		I	0.0	-4.3	-641.6	-625.1	474.4	-0.7
		J	0.0	-4.3	-589.0	-612.2	830.7	-0.7
		I	0.0	2.9	-259.3	-195.6	822.1	0.5
		J	0.0	2.9	-220.4	-204.2	1228.4	0.5
		I	0.0	-2.9	-475.1	-460.9	353.5	-0.5
		J	0.0	-2.9	-436.1	-452.4	617.2	-0.5
		I	0.0	1.0	-260.2	-207.9	809.5	0.2
		J	0.0	1.0	-221.3	-210.8	1216.7	0.2
		I	0.0	-1.0	-474.2	-448.6	366.1	-0.2
		J	0.0	-1.0	-435.3	-445.7	628.9	-0.2
		I	0.0	0.0	-260.7	-214.1	803.2	0.0
		J	0.0	0.0	-221.7	-214.1	1210.9	0.0
		I	0.0	0.0	-473.7	-442.4	372.4	0.0
		J	0.0	0.0	-434.8	-442.4	634.8	0.0
		I	0.0	0.0	-216.2	-177.3	515.5	0.0
		J	0.0	0.0	-177.2	-177.3	831.1	0.0
		I	0.0	0.0	-335.3	-272.7	342.8	0.0
		J	0.0	0.0	-296.4	-272.7	539.7	0.0
4	4	I	0.0	0.0	22.1	3.3	538.2	0.0
		J	0.0	0.0	22.1	3.3	672.9	0.0
		I	0.0	0.0	-178.7	-224.5	-41.8	0.0
		J	0.0	0.0	-178.7	-224.5	-36.0	0.0
		I	0.0	0.0	15.2	2.3	337.2	0.0
		J	0.0	0.0	15.2	2.3	418.3	0.0
		I	0.0	0.0	-112.7	-142.4	-26.4	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-112.7	-142.4	-22.9	0.0
		SLV-z (RS)	I	0.0	0.0	58.1	53.7	141.5	0.0
			J	0.0	0.0	58.1	53.7	199.2	0.0
		G1	I	0.0	0.0	-197.3	-212.2	513.1	0.0
			J	0.0	0.0	-168.8	-212.2	696.1	0.0
		G2	I	0.0	0.0	-55.5	-38.7	156.4	0.0
			J	0.0	0.0	-45.1	-38.7	206.7	0.0
		q3	I	0.0	0.0	0.1	0.0	0.1	0.0
			J	0.0	0.0	0.1	0.0	-0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	4.8	-3.2	-26.1	-32.6	0.8
			J	0.0	-4.8	-3.2	-11.8	-29.3	0.8
		q5_ps	I	0.0	1.6	0.0	0.3	0.4	0.3
			J	0.0	-1.6	0.0	0.1	0.3	0.3
		Ex	I	0.0	0.0	-0.0	0.2	-0.0	0.0
			J	0.0	0.0	-0.0	0.2	0.0	0.0
		Ey	I	0.0	0.0	-0.0	0.2	-0.3	0.0
			J	0.0	0.0	-0.0	0.2	-0.2	0.0
		INVS LU Max	I	0.0	4.3	-308.5	-310.8	1659.7	0.7
			J	0.0	4.3	-256.0	-323.7	2153.5	0.7
		Min	I	0.0	-4.3	-585.5	-665.2	817.9	-0.7
			J	0.0	-4.3	-532.9	-652.3	1143.8	-0.7
		INVS LE-R Max	I	0.0	2.9	-228.8	-231.9	1227.2	0.5
			J	0.0	2.9	-189.8	-240.5	1593.2	0.5
		Min	I	0.0	-2.9	-433.5	-491.0	608.0	-0.5
			J	0.0	-2.9	-394.5	-482.4	849.2	-0.5
		INVS LE-F Max	I	0.0	1.0	-230.1	-242.4	1214.2	0.2
			J	0.0	1.0	-191.1	-245.2	1581.5	0.2
		Min	I	0.0	-1.0	-432.2	-480.6	621.1	-0.2
			J	0.0	-1.0	-393.2	-477.7	860.9	-0.2
		INVS LE~1 Max	I	0.0	0.0	-230.7	-247.6	1207.7	0.0
			J	0.0	0.0	-191.8	-247.6	1575.6	0.0
		Min	I	0.0	0.0	-431.5	-475.4	627.6	0.0
			J	0.0	0.0	-392.6	-475.4	866.8	0.0
		INVS LV Max	I	0.0	0.0	-194.7	-197.1	811.0	0.0
			J	0.0	0.0	-155.7	-197.1	1102.1	0.0
		Min	I	0.0	0.0	-310.9	-304.7	527.9	0.0
			J	0.0	0.0	-272.0	-304.7	703.5	0.0
5	4	7 c1-c2--~1 Max	I	0.0	0.0	22.4	0.1	683.4	0.0
			J	0.0	0.0	22.4	0.1	799.2	0.0
		Min	I	0.0	0.0	-160.0	-227.9	-26.8	0.0
			J	0.0	0.0	-160.0	-227.9	-20.9	0.0
		c1-c2--~2 Max	I	0.0	0.0	15.0	0.0	427.3	0.0
			J	0.0	0.0	15.0	0.0	496.9	0.0
		Min	I	0.0	0.0	-100.8	-144.3	-17.2	0.0
			J	0.0	0.0	-100.8	-144.3	-13.6	0.0
		SLV-z (RS)	I	0.0	0.0	55.6	60.1	194.7	0.0
			J	0.0	0.0	55.6	60.1	249.7	0.0
		G1	I	0.0	0.0	-179.9	-231.4	685.3	0.0
			J	0.0	0.0	-151.4	-231.4	850.9	0.0
		G2	I	0.0	0.0	-49.8	-45.2	200.8	0.0
			J	0.0	0.0	-39.4	-45.2	245.3	0.0
		q3	I	0.0	0.0	0.1	0.0	0.1	0.0
			J	0.0	0.0	0.1	0.0	-0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	4.8	-4.1	-21.7	-33.1	0.8
			J	0.0	-4.8	-4.1	-7.4	-29.0	0.8
		q5_ps	I	0.0	1.6	0.0	0.3	0.4	0.3
			J	0.0	-1.6	0.0	0.1	0.3	0.3
		Ex	I	0.0	0.0	-0.0	0.1	-0.0	0.0
			J	0.0	0.0	-0.0	0.1	-0.0	0.0
		Ey	I	0.0	0.0	-0.0	0.1	-0.3	0.0
			J	0.0	0.0	-0.0	0.1	-0.2	0.0
		INVS LU Max	I	0.0	4.3	-276.1	-353.7	2148.5	0.7
			J	0.0	4.3	-223.5	-366.6	2584.9	0.7
		Min	I	0.0	-4.3	-529.8	-700.6	1130.1	-0.7
			J	0.0	-4.3	-477.2	-687.7	1425.6	-0.7
		INVS LE-R Max	I	0.0	2.9	-204.8	-263.4	1589.3	0.5
			J	0.0	2.9	-165.9	-272.0	1912.8	0.5
		Min	I	0.0	-2.9	-392.2	-517.5	839.3	-0.5
			J	0.0	-2.9	-353.2	-508.9	1057.9	-0.5

Ponte Canale NiE – Relazione di calcolo

			INVSLE-F Max	I	0.0	1.0	-206.4	-272.1	1576.0	0.2
				J	0.0	1.0	-167.5	-275.0	1901.2	0.2
			Min	I	0.0	-1.0	-390.5	-508.8	852.6	-0.2
				J	0.0	-1.0	-351.6	-506.0	1069.6	-0.2
			INVSLE~1 Max	I	0.0	0.0	-207.3	-276.5	1569.4	0.0
				J	0.0	0.0	-168.3	-276.5	1895.4	0.0
			Min	I	0.0	0.0	-389.7	-504.5	859.2	0.0
				J	0.0	0.0	-350.8	-504.5	1075.4	0.0
			INVSLE~1 Max	I	0.0	0.0	-174.1	-216.4	1080.8	0.0
				J	0.0	0.0	-135.2	-216.4	1346.0	0.0
			Min	I	0.0	0.0	-285.3	-336.7	691.2	0.0
				J	0.0	0.0	-246.4	-336.7	846.5	0.0
6	4	7	c1-c2--1 Max	I	0.0	0.0	24.0	0.0	807.5	0.0
				J	0.0	0.0	24.0	0.0	906.8	0.0
			Min	I	0.0	0.0	-142.0	-231.4	-12.7	0.0
				J	0.0	0.0	-142.0	-231.4	-8.3	0.0
			c1-c2--2 Max	I	0.0	0.0	15.8	0.0	504.3	0.0
				J	0.0	0.0	15.8	0.0	563.9	0.0
			Min	I	0.0	0.0	-89.3	-146.4	-8.4	0.0
				J	0.0	0.0	-89.3	-146.4	-5.6	0.0
			SLV-z(RS)	I	0.0	0.0	51.8	66.5	245.0	0.0
				J	0.0	0.0	51.8	66.5	295.8	0.0
			G1	I	0.0	0.0	-161.5	-249.4	840.0	0.0
				J	0.0	0.0	-133.0	-249.4	987.2	0.0
			G2	I	0.0	0.0	-44.2	-51.8	239.3	0.0
				J	0.0	0.0	-33.7	-51.8	278.3	0.0
			q3	I	0.0	0.0	0.1	0.0	0.1	0.0
				J	0.0	0.0	0.1	0.0	-0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	4.8	-4.8	-17.7	-33.2	0.8
				J	0.0	-4.8	-4.8	-3.4	-28.4	0.8
			q5_ps	I	0.0	1.6	0.1	0.2	0.4	0.3
				J	0.0	-1.6	0.1	0.0	0.3	0.3
			Ex	I	0.0	0.0	-0.0	0.1	-0.0	0.0
				J	0.0	0.0	-0.0	0.1	-0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.1	-0.2	0.0
				J	0.0	0.0	-0.0	0.1	-0.2	0.0
			INVSLE~1 Max	I	0.0	4.3	-240.9	-390.6	2577.1	0.7
				J	0.0	4.3	-188.3	-403.5	2958.2	0.7
			Min	I	0.0	-4.3	-473.7	-735.0	1410.0	-0.7
				J	0.0	-4.3	-421.2	-722.1	1671.7	-0.7
			INVSLE-R Max	I	0.0	2.9	-178.8	-290.6	1906.7	0.5
				J	0.0	2.9	-139.8	-299.2	2189.3	0.5
			Min	I	0.0	-2.9	-350.6	-543.2	1046.7	-0.5
				J	0.0	-2.9	-311.6	-534.6	1240.2	-0.5
			INVSLE-F Max	I	0.0	1.0	-180.7	-297.7	1893.5	0.2
				J	0.0	1.0	-141.8	-300.5	2178.0	0.2
			Min	I	0.0	-1.0	-348.6	-536.1	1060.0	-0.2
				J	0.0	-1.0	-309.7	-533.3	1251.6	-0.2
			INVSLE~1 Max	I	0.0	0.0	-181.7	-301.2	1886.8	0.0
				J	0.0	0.0	-142.7	-301.2	2172.3	0.0
			Min	I	0.0	0.0	-347.7	-532.6	1066.6	0.0
				J	0.0	0.0	-308.7	-532.6	1257.2	0.0
			INVSLE~1 Max	I	0.0	0.0	-153.9	-234.6	1324.3	0.0
				J	0.0	0.0	-114.9	-234.6	1561.4	0.0
			Min	I	0.0	0.0	-257.5	-367.8	834.3	0.0
				J	0.0	0.0	-218.6	-367.8	969.6	0.0
7	4	7	c1-c2--1 Max	I	0.0	0.0	26.7	0.0	912.9	0.0
				J	0.0	0.0	26.7	0.0	997.6	0.0
			Min	I	0.0	0.0	-125.7	-236.2	-3.1	0.0
				J	0.0	0.0	-125.7	-236.2	-2.0	0.0
			c1-c2--2 Max	I	0.0	0.0	17.4	0.0	569.5	0.0
				J	0.0	0.0	17.4	0.0	620.5	0.0
			Min	I	0.0	0.0	-79.1	-149.3	-2.2	0.0
				J	0.0	0.0	-79.1	-149.3	-1.4	0.0
			SLV-z(RS)	I	0.0	0.0	46.6	72.7	291.1	0.0
				J	0.0	0.0	46.6	72.7	336.6	0.0
			G1	I	0.0	0.0	-141.8	-265.5	976.5	0.0
				J	0.0	0.0	-113.3	-265.5	1104.1	0.0
			G2	I	0.0	0.0	-38.5	-58.5	272.4	0.0
				J	0.0	0.0	-28.1	-58.5	305.7	0.0
			q3	I	0.0	0.0	0.1	0.0	0.0	0.0
				J	0.0	0.0	0.1	0.0	-0.1	0.0

Ponte Canale NiE – Relazione di calcolo

			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	4.8	-5.5	-14.0	-32.9	0.8	0.8
				J	0.0	-4.8	-5.5	0.3	-27.5	0.8	0.8
			q5_ps	I	0.0	1.6	0.1	0.2	0.4	0.3	0.3
				J	0.0	-1.6	0.1	0.0	0.3	0.3	0.3
			Ex	I	0.0	0.0	-0.0	0.1	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	0.1	-0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.1	-0.2	0.0	0.0
				J	0.0	0.0	-0.0	0.1	-0.2	0.0	0.0
			INVS LU Max	I	0.0	4.3	-202.5	-424.8	2948.0	0.7	0.7
				J	0.0	4.3	-150.0	-437.1	3274.7	0.7	0.7
			Min	I	0.0	-4.3	-418.1	-768.9	1652.2	-0.7	-0.7
				J	0.0	-4.3	-365.5	-756.6	1875.8	-0.7	-0.7
			INVS LE-R Max	I	0.0	2.9	-150.4	-315.6	2181.5	0.5	0.5
				J	0.0	2.9	-111.5	-323.8	2423.8	0.5	0.5
			Min	I	0.0	-2.9	-309.3	-568.7	1226.0	-0.5	-0.5
				J	0.0	-2.9	-270.4	-560.4	1391.3	-0.5	-0.5
			INVS LE-F Max	I	0.0	1.0	-152.6	-321.2	2168.4	0.2	0.2
				J	0.0	1.0	-113.6	-323.9	2412.9	0.2	0.2
			Min	I	0.0	-1.0	-307.2	-563.0	1239.2	-0.2	-0.2
				J	0.0	-1.0	-268.2	-560.3	1402.3	-0.2	-0.2
			INVS LE~1 Max	I	0.0	0.0	-153.7	-324.0	2161.8	0.0	0.0
				J	0.0	0.0	-114.7	-324.0	2407.4	0.0	0.0
			Min	I	0.0	0.0	-306.1	-560.2	1245.8	0.0	0.0
				J	0.0	0.0	-267.1	-560.2	1407.8	0.0	0.0
			INVS LV Max	I	0.0	0.0	-133.7	-251.3	1540.0	0.0	0.0
				J	0.0	0.0	-94.7	-251.3	1746.4	0.0	0.0
			Min	I	0.0	0.0	-227.0	-396.7	957.8	0.0	0.0
				J	0.0	0.0	-188.1	-396.7	1073.1	0.0	0.0
8	4	7	c1-c2--1 Max	I	0.0	0.0	30.6	0.0	1001.3	0.0	0.0
				J	0.0	0.0	30.6	0.0	1070.3	0.0	0.0
			Min	I	0.0	0.0	-111.5	-243.8	-0.7	0.0	0.0
				J	0.0	0.0	-111.5	-243.8	-0.5	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	19.8	0.0	624.1	0.0	0.0
				J	0.0	0.0	19.8	0.0	665.8	0.0	0.0
			Min	I	0.0	0.0	-70.4	-153.2	-0.5	0.0	0.0
				J	0.0	0.0	-70.4	-153.2	-0.4	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	39.9	78.4	332.0	0.0	0.0
				J	0.0	0.0	39.9	78.4	370.8	0.0	0.0
			G1	I	0.0	0.0	-120.6	-279.5	1094.0	0.0	0.0
				J	0.0	0.0	-92.1	-279.5	1200.4	0.0	0.0
			G2	I	0.0	0.0	-32.7	-64.8	300.0	0.0	0.0
				J	0.0	0.0	-22.2	-64.8	327.5	0.0	0.0
			q3	I	0.0	0.0	0.1	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.1	0.0	-0.1	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	4.8	-6.0	-10.5	-32.3	0.8	0.8
				J	0.0	-4.8	-6.0	3.8	-26.3	0.8	0.8
			q5_ps	I	0.0	1.6	0.1	0.1	0.4	0.3	0.3
				J	0.0	-1.6	0.1	-0.0	0.3	0.3	0.3
			Ex	I	0.0	0.0	-0.0	0.1	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	0.1	-0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.1	-0.2	0.0	0.0
				J	0.0	0.0	-0.0	0.1	-0.2	0.0	0.0
			INVS LU Max	I	0.0	4.3	-160.3	-455.4	3262.7	0.7	0.7
				J	0.0	4.3	-107.7	-461.4	3531.2	0.7	0.7
			Min	I	0.0	-4.3	-362.8	-803.5	1851.9	-0.7	-0.7
				J	0.0	-4.3	-310.3	-797.5	2038.1	-0.7	-0.7
			INVS LE-R Max	I	0.0	2.9	-119.1	-338.0	2414.7	0.5	0.5
				J	0.0	2.9	-80.2	-342.0	2613.9	0.5	0.5
			Min	I	0.0	-2.9	-268.4	-594.5	1373.9	-0.5	-0.5
				J	0.0	-2.9	-229.4	-590.5	1511.5	-0.5	-0.5
			INVS LE-F Max	I	0.0	1.0	-121.5	-342.2	2401.7	0.2	0.2
				J	0.0	1.0	-82.6	-343.5	2603.4	0.2	0.2
			Min	I	0.0	-1.0	-266.0	-590.3	1386.9	-0.2	-0.2
				J	0.0	-1.0	-227.0	-588.9	1522.0	-0.2	-0.2
			INVS LE~1 Max	I	0.0	0.0	-122.7	-344.3	2395.3	0.0	0.0
				J	0.0	0.0	-83.8	-344.3	2598.1	0.0	0.0
			Min	I	0.0	0.0	-264.8	-588.2	1393.3	0.0	0.0
				J	0.0	0.0	-225.8	-588.2	1527.3	0.0	0.0
			INVS LV Max	I	0.0	0.0	-113.4	-265.9	1726.0	0.0	0.0
				J	0.0	0.0	-74.5	-265.9	1898.6	0.0	0.0
			Min	I	0.0	0.0	-193.1	-422.8	1062.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-154.2	-422.8	1157.0	0.0	
9	4	7	c1-c2--1 Max	I	0.0	0.0	35.4	0.0	1073.2	0.0
				J	0.0	0.0	35.4	0.0	1124.4	0.0
			Min	I	0.0	0.0	-97.3	-248.7	-0.2	0.0
				J	0.0	0.0	-97.3	-248.7	-0.1	0.0
			c1-c2--2 Max	I	0.0	0.0	22.9	0.0	668.8	0.0
				J	0.0	0.0	22.9	0.0	699.6	0.0
			Min	I	0.0	0.0	-61.7	-155.1	-0.1	0.0
				J	0.0	0.0	-61.7	-155.1	-0.0	0.0
			SLV-z (RS)	I	0.0	0.0	31.4	83.5	366.4	0.0
				J	0.0	0.0	31.4	83.5	397.1	0.0
			G1	I	0.0	0.0	-97.7	-290.9	1191.2	0.0
				J	0.0	0.0	-69.2	-290.9	1274.7	0.0
			G2	I	0.0	0.0	-26.6	-70.7	322.2	0.0
				J	0.0	0.0	-16.1	-70.7	343.6	0.0
			q3	I	0.0	0.0	0.1	0.0	0.0	0.0
				J	0.0	0.0	0.1	0.0	-0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	4.8	-6.5	-7.1	-31.5	0.8
				J	0.0	-4.8	-6.5	7.2	-25.0	0.8
			q5_ps	I	0.0	1.6	0.1	0.1	0.4	0.3
				J	0.0	-1.6	0.1	-0.1	0.3	0.3
			Ex	I	0.0	0.0	-0.0	0.1	-0.0	0.0
				J	0.0	0.0	-0.0	0.1	-0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.0	-0.2	0.0
				J	0.0	0.0	-0.0	0.0	-0.2	0.0
			INVS LU Max	I	0.0	4.3	-114.1	-481.7	3520.3	0.7
				J	0.0	4.3	-61.6	-481.7	3725.1	0.7
			Min	I	0.0	-4.3	-305.0	-830.3	2014.5	-0.7
				J	0.0	-4.3	-252.4	-830.3	2161.9	-0.7
			INVS LE-R Max	I	0.0	2.9	-85.0	-357.3	2605.5	0.5
				J	0.0	2.9	-46.0	-357.3	2757.7	0.5
			Min	I	0.0	-2.9	-225.5	-614.5	1494.3	-0.5
				J	0.0	-2.9	-186.6	-614.6	1603.2	-0.5
			INVS LE-F Max	I	0.0	1.0	-87.6	-360.2	2592.9	0.2
				J	0.0	1.0	-48.6	-360.2	2747.7	0.2
			Min	I	0.0	-1.0	-222.9	-611.7	1507.0	-0.2
				J	0.0	-1.0	-184.0	-611.7	1613.2	-0.2
			INVS LE-1 Max	I	0.0	0.0	-88.9	-361.6	2586.6	0.0
				J	0.0	0.0	-49.9	-361.6	2742.7	0.0
			Min	I	0.0	0.0	-221.6	-610.3	1513.3	0.0
				J	0.0	0.0	-182.7	-610.3	1618.2	0.0
			INVS LV Max	I	0.0	0.0	-92.8	-278.0	1879.9	0.0
				J	0.0	0.0	-53.9	-278.0	2015.4	0.0
			Min	I	0.0	0.0	-155.7	-445.1	1146.9	0.0
				J	0.0	0.0	-116.8	-445.1	1221.1	0.0
10	4	7	c1-c2--1 Max	I	0.0	0.0	41.5	0.0	1127.6	0.0
				J	0.0	0.0	41.5	0.0	1160.1	0.0
			Min	I	0.0	0.0	-82.8	-250.3	0.0	0.0
				J	0.0	0.0	-82.8	-250.3	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	26.7	0.0	702.6	0.0
				J	0.0	0.0	26.7	0.0	722.1	0.0
			Min	I	0.0	0.0	-52.8	-155.0	0.0	0.0
				J	0.0	0.0	-52.8	-155.0	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	21.6	87.8	393.3	0.0
				J	0.0	0.0	21.6	87.8	414.5	0.0
			G1	I	0.0	0.0	-73.1	-299.4	1266.9	0.0
				J	0.0	0.0	-44.6	-299.4	1325.7	0.0
			G2	I	0.0	0.0	-20.1	-76.0	338.9	0.0
				J	0.0	0.0	-9.7	-76.0	353.8	0.0
			q3	I	0.0	0.0	0.1	0.0	0.0	0.0
				J	0.0	0.0	0.1	0.0	-0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	4.8	-7.0	-3.9	-30.5	0.8
				J	0.0	-4.8	-7.0	10.4	-23.5	0.8
			q5_ps	I	0.0	1.6	0.1	0.0	0.3	0.3
				J	0.0	-1.6	0.1	-0.1	0.3	0.3
			Ex	I	0.0	0.0	-0.0	0.1	-0.0	0.0
				J	0.0	0.0	-0.0	0.1	-0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.0	-0.2	0.0
				J	0.0	0.0	-0.0	0.0	-0.2	0.0

Ponte Canale NiE – Relazione di calcolo

			INVSLE Max	I	0.0	4.3	-63.5	-503.2	3717.4	0.7
				J	0.0	4.3	-11.0	-497.3	3854.6	0.7
			Min	I	0.0	-4.3	-243.9	-848.2	2140.3	-0.7
				J	0.0	-4.3	-191.3	-854.1	2246.0	-0.7
			INVSLE-R Max	I	0.0	2.9	-47.5	-373.0	2751.6	0.5
				J	0.0	2.9	-8.6	-369.1	2853.7	0.5
			Min	I	0.0	-2.9	-180.2	-628.0	1587.4	-0.5
				J	0.0	-2.9	-141.2	-632.0	1665.3	-0.5
			INVSLE-F Max	I	0.0	1.0	-50.3	-374.6	2739.4	0.2
				J	0.0	1.0	-11.4	-373.3	2844.3	0.2
			Min	I	0.0	-1.0	-177.4	-626.5	1599.6	-0.2
				J	0.0	-1.0	-138.5	-627.8	1674.8	-0.2
			INVSLE~1 Max	I	0.0	0.0	-51.7	-375.4	2733.3	0.0
				J	0.0	0.0	-12.8	-375.4	2839.6	0.0
			Min	I	0.0	0.0	-176.0	-625.7	1605.8	0.0
				J	0.0	0.0	-137.1	-625.7	1679.5	0.0
			INVSLE Max	I	0.0	0.0	-71.6	-287.6	1999.1	0.0
				J	0.0	0.0	-32.7	-287.6	2094.0	0.0
			Min	I	0.0	0.0	-114.8	-463.2	1212.4	0.0
				J	0.0	0.0	-75.9	-463.2	1264.9	0.0
11	4	7	c1-c2--1 Max	I	0.0	0.0	49.6	0.0	1163.6	0.0
				J	0.0	0.0	49.6	0.0	1175.3	0.0
			Min	I	0.0	0.0	-67.9	-248.7	0.0	0.0
				J	0.0	0.0	-67.9	-248.7	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	31.8	0.0	725.1	0.0
				J	0.0	0.0	31.8	0.0	731.8	0.0
			Min	I	0.0	0.0	-43.4	-152.6	0.0	0.0
				J	0.0	0.0	-43.4	-152.6	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	11.0	91.0	411.4	0.0
				J	0.0	0.0	11.0	91.0	422.1	0.0
			G1	I	0.0	0.0	-46.6	-304.7	1319.6	0.0
				J	0.0	0.0	-18.1	-304.7	1351.9	0.0
			G2	I	0.0	0.0	-13.3	-80.5	349.8	0.0
				J	0.0	0.0	-2.9	-80.5	357.8	0.0
			q3	I	0.0	0.0	0.1	0.0	0.0	0.0
				J	0.0	0.0	0.1	0.0	-0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	4.8	-7.4	-0.8	-29.3	0.8
				J	0.0	-4.8	-7.4	13.6	-21.9	0.8
			q5_ps	I	0.0	1.6	0.1	0.0	0.3	0.3
				J	0.0	-1.6	0.1	-0.2	0.2	0.3
			Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0
				J	0.0	0.0	-0.0	0.0	-0.0	0.0
			Ey	I	0.0	0.0	0.0	0.0	-0.2	0.0
				J	0.0	0.0	0.0	0.0	-0.2	0.0
			INVSLE Max	I	0.0	4.3	-7.2	-519.4	3850.9	0.7
				J	0.0	4.3	45.4	-507.8	3914.6	0.7
			Min	I	0.0	-4.3	-179.1	-856.5	2227.3	-0.7
				J	0.0	-4.3	-126.6	-868.0	2288.4	-0.7
			INVSLE-R Max	I	0.0	2.9	-5.8	-384.8	2850.6	0.5
				J	0.0	2.9	33.1	-377.1	2898.2	0.5
			Min	I	0.0	-2.9	-132.2	-634.4	1651.8	-0.5
				J	0.0	-2.9	-93.3	-642.1	1696.7	-0.5
			INVSLE-F Max	I	0.0	1.0	-8.8	-385.1	2838.8	0.2
				J	0.0	1.0	30.1	-382.5	2889.5	0.2
			Min	I	0.0	-1.0	-129.2	-634.1	1663.5	-0.2
				J	0.0	-1.0	-90.3	-636.6	1705.4	-0.2
			INVSLE~1 Max	I	0.0	0.0	-10.3	-385.2	2833.0	0.0
				J	0.0	0.0	28.7	-385.2	2885.1	0.0
			Min	I	0.0	0.0	-127.7	-633.9	1669.4	0.0
				J	0.0	0.0	-88.8	-633.9	1709.8	0.0
			INVSLE Max	I	0.0	0.0	-48.9	-294.2	2080.8	0.0
				J	0.0	0.0	-9.9	-294.2	2132.0	0.0
			Min	I	0.0	0.0	-70.9	-476.3	1258.0	0.0
				J	0.0	0.0	-31.9	-476.3	1287.6	0.0
12	4	7	c1-c2--1 Max	I	0.0	0.0	59.8	0.0	1179.6	0.0
				J	0.0	0.0	59.8	0.0	1170.5	0.0
			Min	I	0.0	0.0	-52.7	-243.6	0.0	0.0
				J	0.0	0.0	-52.7	-243.6	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	38.3	0.0	735.3	0.0
				J	0.0	0.0	38.3	0.0	729.3	0.0
			Min	I	0.0	0.0	-33.8	-148.2	0.0	0.0
				J	0.0	0.0	-33.8	-148.2	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	5.0	93.2	419.9	0.0
				J	0.0	0.0	5.0	93.2	419.5	0.0

Ponte Canale NiE – Relazione di calcolo

	G1	I	0.0	0.0	-18.1	-306.5	1347.9	0.0		
		J	0.0	0.0	10.4	-306.5	1351.8	0.0		
	G2	I	0.0	0.0	-6.0	-84.3	354.6	0.0		
		J	0.0	0.0	4.4	-84.3	355.4	0.0		
	q3	I	0.0	0.0	0.1	0.0	0.0	0.0		
		J	0.0	0.0	0.1	0.0	-0.1	0.0		
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0		
		J	0.0	0.0	0.0	0.0	0.0	0.0		
	q5_pc	I	0.0	4.8	-8.0	2.3	-27.9	0.8		
		J	0.0	-4.8	-8.0	16.6	-19.9	0.8		
	q5_ps	I	0.0	1.6	0.1	-0.0	0.3	0.3		
		J	0.0	-1.6	0.1	-0.2	0.2	0.3		
	Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0		
		J	0.0	0.0	-0.0	0.0	-0.0	0.0		
	Ey	I	0.0	0.0	0.0	0.0	-0.2	0.0		
		J	0.0	0.0	0.0	0.0	-0.2	0.0		
	INVSLE Max	I	0.0	4.3	55.4	-525.5	3916.1	0.7		
		J	0.0	4.3	107.9	-512.6	3902.8	0.7		
	Min	I	0.0	-4.3	-110.8	-858.6	2273.3	-0.7		
		J	0.0	-4.3	-58.3	-871.5	2286.7	-0.7		
	INVSLE-R Max	I	0.0	2.9	40.5	-389.4	2899.0	0.5		
		J	0.0	2.9	79.4	-380.8	2889.7	0.5		
	Min	I	0.0	-2.9	-81.6	-635.8	1685.8	-0.5		
		J	0.0	-2.9	-42.6	-644.4	1695.3	-0.5		
	INVSLE-F Max	I	0.0	1.0	37.3	-390.3	2887.8	0.2		
		J	0.0	1.0	76.2	-387.5	2881.7	0.2		
	Min	I	0.0	-1.0	-78.4	-634.9	1697.0	-0.2		
		J	0.0	-1.0	-39.4	-637.8	1703.2	-0.2		
	INVSLE~1 Max	I	0.0	0.0	35.7	-390.8	2882.2	0.0		
		J	0.0	0.0	74.6	-390.8	2877.7	0.0		
	Min	I	0.0	0.0	-76.8	-634.4	1702.6	0.0		
		J	0.0	0.0	-37.9	-634.4	1707.2	0.0		
	INVSLE~1 Min	I	0.0	0.0	-19.2	-297.6	2122.5	0.0		
		J	0.0	0.0	19.8	-297.6	2126.8	0.0		
	Min	I	0.0	0.0	-29.1	-484.0	1282.7	0.0		
		J	0.0	0.0	9.8	-484.0	1287.7	0.0		
13	4	7	c1-c2--~1 Max	I	0.0	0.0	72.5	1.8	1175.6	0.0
				J	0.0	0.0	72.5	1.8	1143.7	0.0
			Min	I	0.0	0.0	-38.2	-235.2	0.0	0.0
				J	0.0	0.0	-38.2	-235.2	0.0	0.0
			c1-c2--~2 Max	I	0.0	0.0	46.2	1.2	733.1	0.0
				J	0.0	0.0	46.2	1.2	713.2	0.0
			Min	I	0.0	0.0	-24.5	-141.5	0.0	0.0
				J	0.0	0.0	-24.5	-141.5	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	14.3	94.1	418.2	0.0
				J	0.0	0.0	14.3	94.1	406.3	0.0
	G1	I	0.0	0.0	12.3	-304.8	1350.2	0.0		
		J	0.0	0.0	40.8	-304.8	1323.7	0.0		
	G2	I	0.0	0.0	1.8	-87.0	353.2	0.0		
		J	0.0	0.0	12.3	-87.0	346.1	0.0		
	q3	I	0.0	0.0	0.1	0.0	0.0	0.0		
		J	0.0	0.0	0.1	0.0	-0.1	0.0		
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0		
		J	0.0	0.0	0.0	0.0	0.0	0.0		
	q5_pc	I	0.0	4.8	-8.6	5.3	-26.3	0.8		
		J	0.0	-4.8	-8.6	19.7	-17.7	0.8		
	q5_ps	I	0.0	1.6	0.1	-0.1	0.3	0.3		
		J	0.0	-1.6	0.1	-0.2	0.2	0.3		
	Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0		
		J	0.0	0.0	-0.0	0.0	-0.0	0.0		
	Ey	I	0.0	0.0	0.0	-0.0	-0.2	0.0		
		J	0.0	0.0	0.0	-0.0	-0.2	0.0		
	INVSLE Max	I	0.0	4.3	124.7	-521.7	3910.2	0.7		
		J	0.0	4.3	177.3	-508.8	3814.1	0.7		
	Min	I	0.0	-4.3	-40.2	-851.3	2275.9	-0.7		
		J	0.0	-4.3	12.4	-864.2	2238.2	-0.7		
	INVSLE-R Max	I	0.0	2.9	91.8	-386.8	2894.7	0.5		
		J	0.0	2.9	130.7	-378.2	2824.1	0.5		
	Min	I	0.0	-2.9	-29.2	-630.3	1687.6	-0.5		
		J	0.0	-2.9	9.7	-638.9	1659.2	-0.5		
	INVSLE-F Max	I	0.0	1.0	88.4	-388.9	2884.2	0.2		
		J	0.0	1.0	127.3	-386.1	2817.0	0.2		
	Min	I	0.0	-1.0	-25.8	-628.1	1698.1	-0.2		

Ponte Canale NiE – Relazione di calcolo

		J	0.0	-1.0	13.2	-631.0	1666.3	-0.2	
		INVSLE~1 Max	I	0.0	0.0	86.7	-390.0	2878.9	0.0
			J	0.0	0.0	125.6	-390.0	2813.5	0.0
		Min	I	0.0	0.0	-24.0	-627.1	1703.4	0.0
			J	0.0	0.0	14.9	-627.1	1669.8	0.0
		INVSLE~1 Max	I	0.0	0.0	28.4	-297.8	2121.6	0.0
			J	0.0	0.0	67.4	-297.8	2076.2	0.0
		Min	I	0.0	0.0	-0.2	-485.9	1285.1	0.0
			J	0.0	0.0	38.7	-485.9	1263.4	0.0
14	4	7 c1-c2~1 Max	I	0.0	0.0	88.2	19.1	1149.5	0.0
			J	0.0	0.0	88.2	19.1	1093.3	0.0
		Min	I	0.0	0.0	-25.5	-225.7	0.0	0.0
			J	0.0	0.0	-25.5	-225.7	0.0	0.0
		c1-c2~2 Max	I	0.0	0.0	55.9	12.0	717.2	0.0
			J	0.0	0.0	55.9	12.0	682.5	0.0
		Min	I	0.0	0.0	-16.4	-133.9	0.0	0.0
			J	0.0	0.0	-16.4	-133.9	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	25.5	93.7	406.1	0.0
			J	0.0	0.0	25.5	93.7	382.7	0.0
		G1	I	0.0	0.0	44.8	-299.4	1324.7	0.0
			J	0.0	0.0	73.3	-299.4	1265.7	0.0
		G2	I	0.0	0.0	10.2	-88.8	344.9	0.0
			J	0.0	0.0	20.7	-88.8	329.5	0.0
		q3	I	0.0	0.0	0.1	0.0	0.0	0.0
			J	0.0	0.0	0.1	0.0	-0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	4.8	-9.3	8.3	-24.3	0.8
			J	0.0	-4.8	-9.3	22.7	-15.0	0.8
		q5_ps	I	0.0	1.6	0.1	-0.1	0.3	0.3
			J	0.0	-1.6	0.1	-0.3	0.2	0.3
		Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0
			J	0.0	0.0	-0.0	0.0	-0.0	0.0
		Ey	I	0.0	0.0	0.0	-0.0	-0.2	0.0
			J	0.0	0.0	0.0	-0.0	-0.2	0.0
		INVSLE~1 Max	I	0.0	4.3	201.7	-490.7	3827.7	0.7
			J	0.0	4.3	254.2	-477.8	3642.9	0.7
		Min	I	0.0	-4.3	31.5	-836.1	2232.2	-0.7
			J	0.0	-4.3	84.0	-849.0	2139.9	-0.7
		INVSLE-R Max	I	0.0	2.9	148.8	-364.1	2833.7	0.5
			J	0.0	2.9	187.7	-355.5	2697.5	0.5
		Min	I	0.0	-2.9	23.9	-618.8	1655.1	-0.5
			J	0.0	-2.9	62.9	-627.4	1586.2	-0.5
		INVSLE-F Max	I	0.0	1.0	145.1	-367.4	2824.0	0.2
			J	0.0	1.0	184.0	-364.5	2691.5	0.2
		Min	I	0.0	-1.0	27.6	-615.5	1664.8	-0.2
			J	0.0	-1.0	66.6	-618.3	1592.2	-0.2
		INVSLE~1 Max	I	0.0	0.0	143.2	-369.1	2819.1	0.0
			J	0.0	0.0	182.1	-369.1	2688.5	0.0
		Min	I	0.0	0.0	29.5	-613.8	1669.7	0.0
			J	0.0	0.0	68.4	-613.8	1595.2	0.0
		INVSLE~1 Max	I	0.0	0.0	80.5	-294.4	2075.9	0.0
			J	0.0	0.0	119.4	-294.4	1978.0	0.0
		Min	I	0.0	0.0	29.5	-481.9	1263.5	0.0
			J	0.0	0.0	68.5	-481.9	1212.4	0.0
15	4	7 c1-c2~1 Max	I	0.0	0.0	106.8	36.8	1100.5	0.0
			J	0.0	0.0	106.8	36.8	1017.5	0.0
		Min	I	0.0	0.0	-14.6	-221.1	0.0	0.0
			J	0.0	0.0	-14.6	-221.1	0.0	0.0
		c1-c2~2 Max	I	0.0	0.0	67.3	23.0	687.3	0.0
			J	0.0	0.0	67.3	23.0	636.0	0.0
		Min	I	0.0	0.0	-9.2	-130.5	0.0	0.0
			J	0.0	0.0	-9.2	-130.5	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	36.5	92.0	383.6	0.0
			J	0.0	0.0	36.5	92.0	348.8	0.0
		G1	I	0.0	0.0	79.3	-290.2	1269.7	0.0
			J	0.0	0.0	107.8	-290.2	1176.2	0.0
		G2	I	0.0	0.0	19.3	-89.4	329.5	0.0
			J	0.0	0.0	29.8	-89.4	304.9	0.0
		q3	I	0.0	0.0	0.1	0.0	0.0	0.0
			J	0.0	0.0	0.1	0.0	-0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	4.8	-10.1	11.4	-21.8	0.8

Ponte Canale NiE – Relazione di calcolo

			J	0.0	-4.8	-10.1	25.7	-11.7	0.8
		q5_ps	I	0.0	1.6	0.1	-0.1	0.2	0.3
			J	0.0	-1.6	0.1	-0.3	0.1	0.3
		Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0
			J	0.0	0.0	-0.0	0.0	-0.0	0.0
		Ey	I	0.0	0.0	0.0	-0.0	-0.2	0.0
			J	0.0	0.0	0.0	-0.0	-0.3	0.0
		INVSLE Max	I	0.0	4.3	286.4	-452.6	3664.2	0.7
			J	0.0	4.3	339.0	-439.7	3383.6	0.7
		Min	I	0.0	-4.3	104.3	-821.2	2139.2	-0.7
			J	0.0	-4.3	156.9	-834.1	1988.8	-0.7
		INVSLE-R Max	I	0.0	2.9	211.5	-336.0	2712.8	0.5
			J	0.0	2.9	250.4	-327.4	2505.6	0.5
		Min	I	0.0	-2.9	78.0	-607.6	1586.1	-0.5
			J	0.0	-2.9	116.9	-616.2	1474.0	-0.5
		INVSLE-F Max	I	0.0	1.0	207.4	-340.5	2704.0	0.2
			J	0.0	1.0	246.4	-337.7	2500.9	0.2
		Min	I	0.0	-1.0	82.0	-603.0	1594.8	-0.2
			J	0.0	-1.0	120.9	-605.9	1478.7	-0.2
		INVSLE~1 Max	I	0.0	0.0	205.4	-342.8	2699.7	0.0
			J	0.0	0.0	244.3	-342.8	2498.6	0.0
		Min	I	0.0	0.0	84.0	-600.7	1599.2	0.0
			J	0.0	0.0	123.0	-600.7	1481.1	0.0
		INVSLEV Max	I	0.0	0.0	135.1	-287.6	1982.9	0.0
			J	0.0	0.0	174.0	-287.6	1830.0	0.0
		Min	I	0.0	0.0	62.2	-471.7	1215.4	0.0
			J	0.0	0.0	101.1	-471.7	1132.1	0.0
16	4	7 c1-c2--1 Max	I	0.0	0.0	128.4	53.9	1026.1	0.0
			J	0.0	0.0	128.4	53.9	914.8	0.0
		Min	I	0.0	0.0	-5.7	-219.1	0.0	0.0
			J	0.0	0.0	-5.7	-219.1	0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	80.4	33.7	641.5	0.0
			J	0.0	0.0	80.4	33.7	572.8	0.0
		Min	I	0.0	0.0	-3.2	-129.5	0.0	0.0
			J	0.0	0.0	-3.2	-129.5	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	47.1	89.1	350.9	0.0
			J	0.0	0.0	47.1	89.1	304.9	0.0
		G1	I	0.0	0.0	115.9	-277.5	1183.1	0.0
			J	0.0	0.0	144.4	-277.5	1053.0	0.0
		G2	I	0.0	0.0	29.2	-88.8	306.2	0.0
			J	0.0	0.0	39.6	-88.8	271.8	0.0
		q3	I	0.0	0.0	0.1	0.0	0.0	0.0
			J	0.0	0.0	0.1	0.0	-0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	4.8	-11.1	14.4	-18.8	0.8
			J	0.0	-4.8	-11.1	28.8	-7.7	0.8
		q5_ps	I	0.0	1.6	0.1	-0.2	0.2	0.3
			J	0.0	-1.6	0.1	-0.3	0.1	0.3
		Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0
			J	0.0	0.0	-0.0	0.0	-0.0	0.0
		Ey	I	0.0	0.0	0.0	-0.1	-0.3	0.0
			J	0.0	0.0	0.0	-0.1	-0.3	0.0
		INVSLE Max	I	0.0	4.3	379.2	-408.7	3412.8	0.7
			J	0.0	4.3	431.8	-395.8	3030.4	0.7
		Min	I	0.0	-4.3	178.1	-803.2	1993.7	-0.7
			J	0.0	-4.3	230.6	-816.1	1781.5	-0.7
		INVSLE-R Max	I	0.0	2.9	280.1	-303.7	2526.7	0.5
			J	0.0	2.9	319.1	-295.1	2244.2	0.5
		Min	I	0.0	-2.9	132.7	-594.0	1478.0	-0.5
			J	0.0	-2.9	171.6	-602.6	1320.2	-0.5
		INVSLE-F Max	I	0.0	1.0	275.7	-309.5	2519.2	0.2
			J	0.0	1.0	314.6	-306.6	2241.2	0.2
		Min	I	0.0	-1.0	137.1	-588.2	1485.6	-0.2
			J	0.0	-1.0	176.0	-591.1	1323.3	-0.2
		INVSLE~1 Max	I	0.0	0.0	273.5	-312.4	2515.4	0.0
			J	0.0	0.0	312.4	-312.4	2239.6	0.0
		Min	I	0.0	0.0	139.3	-585.4	1489.3	0.0
			J	0.0	0.0	178.3	-585.4	1324.8	0.0
		INVSLEV Max	I	0.0	0.0	192.1	-277.1	1840.3	0.0
			J	0.0	0.0	231.1	-277.1	1629.9	0.0
		Min	I	0.0	0.0	97.9	-455.4	1138.3	0.0
			J	0.0	0.0	136.8	-455.4	1019.8	0.0
17	4	7 c1-c2--1 Max	I	0.0	0.0	153.1	74.0	923.8	0.0
			J	0.0	0.0	153.1	74.0	783.5	0.0

Ponte Canale NiE – Relazione di calcolo

			Min	I	0.0	0.0	-2.3	-215.4	0.0	0.0	
				J	0.0	0.0	-2.3	-215.4	0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	95.3	46.6	578.3	0.0	
				J	0.0	0.0	95.3	46.6	491.8	0.0	
			Min	I	0.0	0.0	-1.0	-127.5	0.0	0.0	
				J	0.0	0.0	-1.0	-127.5	0.0	0.0	
		SLV-z(RS)		I	0.0	0.0	57.4	85.1	308.2	0.0	
				J	0.0	0.0	57.4	85.1	251.5	0.0	
		G1		I	0.0	0.0	154.3	-261.5	1063.0	0.0	
				J	0.0	0.0	182.8	-261.5	894.4	0.0	
		G2		I	0.0	0.0	39.8	-86.9	274.4	0.0	
				J	0.0	0.0	50.2	-86.9	229.4	0.0	
		q3		I	0.0	0.0	0.1	0.0	0.0	0.0	
				J	0.0	0.0	0.1	0.0	-0.1	0.0	
		q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc		I	0.0	4.8	-12.3	17.7	-15.0	0.8	
				J	0.0	-4.8	-12.3	32.0	-2.6	0.8	
		q5_ps		I	0.0	1.6	0.1	-0.2	0.2	0.3	
				J	0.0	-1.6	0.1	-0.4	0.0	0.3	
		Ex		I	0.0	0.0	-0.0	0.0	-0.0	0.0	
				J	0.0	0.0	-0.0	0.0	-0.0	0.0	
		Ey		I	0.0	0.0	0.0	-0.1	-0.4	0.0	
				J	0.0	0.0	0.0	-0.1	-0.4	0.0	
		INVSLU	Max	I	0.0	4.3	479.8	-354.5	3066.2	0.7	
				J	0.0	4.3	532.3	-341.6	2577.3	0.7	
			Min	I	0.0	-4.3	247.8	-777.0	1792.0	-0.7	
				J	0.0	-4.3	300.4	-789.9	1514.7	-0.7	
		INVSLE-R	Max	I	0.0	2.9	354.6	-263.8	2270.2	0.5	
				J	0.0	2.9	393.5	-255.2	1908.9	0.5	
			Min	I	0.0	-2.9	184.4	-574.4	1328.4	-0.5	
				J	0.0	-2.9	223.3	-582.9	1122.3	-0.5	
		INVSLE-F	Max	I	0.0	1.0	349.6	-270.9	2264.3	0.2	
				J	0.0	1.0	388.6	-268.0	1907.9	0.2	
			Min	I	0.0	-1.0	189.3	-567.3	1334.4	-0.2	
				J	0.0	-1.0	228.3	-570.2	1123.4	-0.2	
		INVSLE~1	Max	I	0.0	0.0	347.2	-274.4	2261.3	0.0	
				J	0.0	0.0	386.1	-274.4	1907.3	0.0	
			Min	I	0.0	0.0	191.8	-563.8	1337.4	0.0	
				J	0.0	0.0	230.7	-563.8	1123.9	0.0	
		INVSLV	Max	I	0.0	0.0	251.5	-263.3	1645.7	0.0	
				J	0.0	0.0	290.4	-263.3	1375.5	0.0	
			Min	I	0.0	0.0	136.7	-433.5	1029.1	0.0	
				J	0.0	0.0	175.6	-433.5	872.3	0.0	
18	4	7	c1-c2--1	Max	I	0.0	0.0	179.3	93.5	792.7	0.0
				J	0.0	0.0	179.3	93.5	623.0	0.0	
			Min	I	0.0	0.0	-1.6	-209.1	-0.0	0.0	
				J	0.0	0.0	-1.6	-209.1	-0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	110.9	59.3	497.1	0.0	
				J	0.0	0.0	110.9	59.3	392.9	0.0	
			Min	I	0.0	0.0	-0.7	-123.9	-0.0	0.0	
				J	0.0	0.0	-0.7	-123.9	-0.0	0.0	
		SLV-z(RS)		I	0.0	0.0	67.1	80.0	255.7	0.0	
				J	0.0	0.0	67.1	80.0	188.9	0.0	
		G1		I	0.0	0.0	194.3	-242.6	907.1	0.0	
				J	0.0	0.0	222.7	-242.6	698.6	0.0	
		G2		I	0.0	0.0	51.2	-83.9	233.4	0.0	
				J	0.0	0.0	61.6	-83.9	177.0	0.0	
		q3		I	0.0	0.0	0.1	0.0	0.0	0.0	
				J	0.0	0.0	0.1	0.0	-0.1	0.0	
		q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc		I	0.0	4.8	-13.8	21.1	-10.0	0.8	
				J	0.0	-4.8	-13.8	35.5	3.7	0.8	
		q5_ps		I	0.0	1.6	0.2	-0.2	0.1	0.3	
				J	0.0	-1.6	0.2	-0.4	-0.1	0.3	
		Ex		I	0.0	0.0	-0.0	0.0	-0.0	0.0	
				J	0.0	0.0	-0.0	0.0	-0.0	0.0	
		Ey		I	0.0	0.0	0.0	-0.1	-0.4	0.0	
				J	0.0	0.0	0.0	-0.1	-0.5	0.0	
		INVSLU	Max	I	0.0	4.3	585.8	-295.5	2618.8	0.7	
				J	0.0	4.3	638.3	-282.6	2026.5	0.7	
			Min	I	0.0	-4.3	316.8	-742.1	1530.7	-0.7	

Ponte Canale NiE – Relazione di calcolo

			J	0.0	-4.3	369.4	-755.0	1178.6	-0.7
		INVSLE-R Max	I	0.0	2.9	433.0	-220.3	1939.2	0.5
			J	0.0	2.9	471.9	-211.7	1500.9	0.5
		Min	I	0.0	-2.9	235.6	-548.3	1134.5	-0.5
			J	0.0	-2.9	274.5	-556.9	873.4	-0.5
		INVSLE-F Max	I	0.0	1.0	427.5	-228.8	1935.2	0.2
			J	0.0	1.0	466.4	-225.9	1499.4	0.2
		Min	I	0.0	-1.0	241.1	-539.8	1138.5	-0.2
			J	0.0	-1.0	280.0	-542.7	874.9	-0.2
		INVSLE~1 Max	I	0.0	0.0	424.7	-233.0	1933.2	0.0
			J	0.0	0.0	463.7	-233.0	1498.7	0.0
		Min	I	0.0	0.0	243.8	-535.6	1140.5	0.0
			J	0.0	0.0	282.8	-535.6	875.6	0.0
		INVSLEV Max	I	0.0	0.0	312.6	-246.5	1396.4	0.0
			J	0.0	0.0	351.5	-246.5	1064.7	0.0
		Min	I	0.0	0.0	178.3	-406.5	884.7	0.0
			J	0.0	0.0	217.2	-406.5	686.6	0.0
19	4	7 c1-c2~1 Max	I	0.0	0.0	205.4	108.6	631.8	0.0
			J	0.0	0.0	205.4	108.6	435.6	0.0
		Min	I	0.0	0.0	-1.0	-199.9	-0.0	0.0
			J	0.0	0.0	-1.0	-199.9	-0.6	0.0
		c1-c2~2 Max	I	0.0	0.0	126.4	69.1	397.5	0.0
			J	0.0	0.0	126.4	69.1	277.5	0.0
		Min	I	0.0	0.0	-0.4	-118.7	-0.0	0.0
			J	0.0	0.0	-0.4	-118.7	-0.4	0.0
		SLV-z (RS)	I	0.0	0.0	76.0	74.2	194.0	0.0
			J	0.0	0.0	76.0	74.2	118.2	0.0
		G1	I	0.0	0.0	235.2	-221.9	713.4	0.0
			J	0.0	0.0	263.7	-221.9	464.0	0.0
		G2	I	0.0	0.0	63.4	-79.6	182.3	0.0
			J	0.0	0.0	73.8	-79.6	113.7	0.0
		q3	I	0.0	0.0	0.1	0.0	0.0	0.0
			J	0.0	0.0	0.1	0.0	-0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	4.8	-15.4	25.1	-3.7	0.8
			J	0.0	-4.8	-15.4	39.4	11.7	0.8
		q5_ps	I	0.0	1.6	0.2	-0.3	0.0	0.3
			J	0.0	-1.6	0.2	-0.5	-0.2	0.3
		Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0
			J	0.0	0.0	-0.0	0.0	-0.0	0.0
		Ey	I	0.0	0.0	-0.0	-0.2	-0.5	0.0
			J	0.0	0.0	-0.0	-0.2	-0.5	0.0
		INVSLEU Max	I	0.0	4.3	694.1	-237.9	2065.4	0.7
			J	0.0	4.3	746.7	-225.0	1378.4	0.7
		Min	I	0.0	-4.3	387.9	-699.4	1205.9	-0.7
			J	0.0	-4.3	440.4	-712.3	768.5	-0.7
		INVSLE-R Max	I	0.0	2.9	513.1	-177.9	1529.7	0.5
			J	0.0	2.9	552.1	-169.3	1020.3	0.5
		Min	I	0.0	-2.9	288.3	-516.4	893.5	-0.5
			J	0.0	-2.9	327.3	-525.0	570.1	-0.5
		INVSLE-F Max	I	0.0	1.0	507.0	-187.9	1528.2	0.2
			J	0.0	1.0	545.9	-185.0	1015.6	0.2
		Min	I	0.0	-1.0	294.5	-506.4	895.0	-0.2
			J	0.0	-1.0	333.4	-509.2	574.8	-0.2
		INVSLE~1 Max	I	0.0	0.0	503.9	-192.9	1527.5	0.0
			J	0.0	0.0	542.8	-192.9	1013.2	0.0
		Min	I	0.0	0.0	297.6	-501.4	895.7	0.0
			J	0.0	0.0	336.5	-501.4	577.1	0.0
		INVSLEV Max	I	0.0	0.0	374.6	-227.2	1089.9	0.0
			J	0.0	0.0	413.5	-227.2	696.0	0.0
		Min	I	0.0	0.0	222.5	-375.7	701.5	0.0
			J	0.0	0.0	261.5	-375.7	459.4	0.0
20	4	7 c1-c2~1 Max	I	0.0	0.0	229.4	118.2	443.7	0.0
			J	0.0	0.0	229.4	118.2	231.2	0.0
		Min	I	0.0	0.0	-0.6	-187.7	-0.0	0.0
			J	0.0	0.0	-0.6	-187.7	-21.0	0.0
		c1-c2~2 Max	I	0.0	0.0	140.3	75.4	281.6	0.0
			J	0.0	0.0	140.3	75.4	151.6	0.0
		Min	I	0.0	0.0	-0.3	-111.8	-0.0	0.0
			J	0.0	0.0	-0.3	-111.8	-13.4	0.0
		SLV-z (RS)	I	0.0	0.0	83.5	68.0	123.9	0.0
			J	0.0	0.0	83.5	68.0	40.7	0.0
		G1	I	0.0	0.0	276.0	-200.3	480.1	0.0
			J	0.0	0.0	304.5	-200.3	189.8	0.0

Ponte Canale NiE – Relazione di calcolo

				G2	I	0.0	0.0	76.3	-74.4	120.1	0.0	
					J	0.0	0.0	86.7	-74.4	38.6	0.0	
				q3	I	0.0	0.0	0.1	0.0	-0.0	0.0	
					J	0.0	0.0	0.1	0.0	-0.1	0.0	
				q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	0.0	0.0	0.0	0.0	
				q5_pc	I	0.0	4.8	-17.2	29.7	4.6	0.8	
					J	0.0	-4.8	-17.2	44.0	21.8	0.8	
				q5_ps	I	0.0	1.6	0.2	-0.4	-0.1	0.3	
					J	0.0	-1.6	0.2	-0.5	-0.3	0.3	
				Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0	
					J	0.0	0.0	-0.0	0.0	-0.0	0.0	
				Ey	I	0.0	0.0	-0.1	-0.3	-0.6	0.0	
					J	0.0	0.0	-0.1	-0.3	-0.5	0.0	
				INVS LU Max	I	0.0	4.3	800.8	-184.4	1413.3	0.7	
					J	0.0	4.3	853.3	-171.6	640.1	0.7	
				Min	I	0.0	-4.3	459.3	-651.0	806.1	-0.7	
					J	0.0	-4.3	511.9	-663.9	260.4	-0.7	
				INVS LE-R Max	I	0.0	2.9	592.0	-138.6	1046.6	0.5	
					J	0.0	2.9	631.0	-130.0	472.7	0.5	
				Min	I	0.0	-2.9	341.4	-480.3	597.4	-0.5	
					J	0.0	-2.9	380.3	-488.9	194.3	-0.5	
				INVS LE-F Max	I	0.0	1.0	585.2	-150.5	1044.8	0.2	
					J	0.0	1.0	624.1	-147.6	464.0	0.2	
				Min	I	0.0	-1.0	348.3	-468.4	599.3	-0.2	
					J	0.0	-1.0	387.2	-471.2	203.0	-0.2	
				INVS LE~1 Max	I	0.0	0.0	581.7	-156.4	1043.9	0.0	
					J	0.0	0.0	620.6	-156.4	459.7	0.0	
				Min	I	0.0	0.0	351.7	-462.4	600.2	0.0	
					J	0.0	0.0	390.7	-462.4	207.4	0.0	
				INVS LV Max	I	0.0	0.0	435.8	-206.6	724.3	0.0	
					J	0.0	0.0	474.7	-206.6	269.3	0.0	
				Min	I	0.0	0.0	268.8	-342.7	476.1	0.0	
					J	0.0	0.0	307.7	-342.7	187.5	0.0	
21	4	7	c1-c2~1	Max	I	15.4	14.4	249.3	122.0	235.3	8.7	
					J	15.4	14.4	249.3	122.0	103.6	4.5	
				Min	I	-11.0	-10.7	-0.8	-173.1	-11.3	-7.5	
					J	-11.0	-10.7	-0.8	-173.1	-123.0	-8.0	
				c1-c2~2	Max	I	10.6	10.0	150.9	78.0	153.5	6.2
					J	10.6	10.0	150.9	78.0	66.5	2.7	
				Min	I	-6.7	-6.6	-0.6	-103.5	-7.2	-4.7	
					J	-6.7	-6.6	-0.6	-103.5	-73.8	-5.2	
				SLV-z(RS)	I	4.2	4.9	88.8	61.7	46.6	3.8	
					J	4.2	4.9	88.8	61.7	42.7	1.1	
				G1	I	-10.9	-14.1	315.4	-179.5	205.9	-12.2	
					J	-10.9	-14.1	343.8	-179.5	-123.7	2.0	
				G2	I	-5.3	-5.7	89.6	-68.5	45.8	-4.0	
					J	-5.3	-5.7	100.0	-68.5	-49.0	1.7	
				q3	I	-0.9	-1.3	0.1	0.0	-0.0	-1.2	
					J	-0.9	-1.3	0.1	0.0	-0.2	0.1	
				q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	0.0	0.0	0.0	0.0	
				q5_pc	I	2.8	12.7	-19.0	35.6	15.2	7.2	
					J	2.8	3.2	-19.0	49.9	34.2	-0.8	
				q5_ps	I	-0.9	2.0	0.2	-0.4	-0.2	0.4	
					J	-0.9	-1.2	0.2	-0.6	-0.4	0.1	
				Ex	I	-1.1	-1.6	-0.0	-0.0	-0.0	-1.5	
					J	-1.1	-1.6	-0.0	-0.0	-0.0	0.1	
				Ey	I	-18.1	-25.2	-0.2	-0.3	-0.6	-23.5	
					J	-18.1	-25.2	-0.2	-0.3	-0.4	1.7	
				INVS LU Max	I	1.4	4.1	900.3	-138.0	671.1	-3.6	
					J	1.4	-4.5	952.9	-125.1	-62.4	11.7	
				Min	I	-39.1	-52.6	528.4	-600.5	310.9	-38.3	
					J	-39.1	-44.0	581.0	-613.4	-430.0	-6.6	
				INVS LE-R Max	I	0.9	2.2	665.6	-104.6	496.1	-3.1	
					J	0.9	-3.5	704.6	-96.0	-48.5	8.6	
				Min	I	-28.8	-38.1	392.7	-442.5	231.3	-27.9	
					J	-28.8	-32.4	431.6	-451.1	-316.2	-4.8	
				INVS LE-F Max	I	-0.2	-2.9	658.0	-118.8	490.0	-6.0	
					J	-0.2	-4.8	696.9	-116.0	-62.2	8.3	
				Min	I	-27.7	-33.0	400.3	-428.2	237.4	-25.0	
					J	-27.7	-31.1	439.3	-431.1	-302.5	-4.5	
				INVS LE~1 Max	I	-0.8	-5.4	654.2	-125.9	486.9	-7.4	
					J	-0.8	-5.4	693.1	-125.9	-69.1	8.2	

Ponte Canale NiE – Relazione di calcolo

			Min	I	-27.1	-30.5	404.1	-421.1	240.4	-23.6	
				J	-27.1	-30.5	443.1	-421.1	-295.7	-4.4	
			INVS LV	Max	I	3.5	7.3	493.7	-186.2	298.5	8.9
				J	3.5	7.3	532.7	-186.2	-129.9	5.7	
				Min	I	-35.9	-47.0	316.1	-309.8	204.9	-41.2
				J	-35.9	-47.0	355.0	-309.8	-215.5	1.6	
22	4	7	c1-c2--1	Max	I	25.0	9.8	0.0	18.4	12.5	4.2
				J	25.0	9.8	0.0	18.4	264.4	7.0	
				Min	I	-9.6	-3.9	-350.0	-250.9	-175.1	-12.9
				J	-9.6	-3.9	-350.0	-250.9	-90.4	-20.5	
			c1-c2--2	Max	I	16.2	6.3	0.0	11.2	7.6	2.6
				J	16.2	6.3	0.0	11.2	172.5	4.5	
				Min	I	-6.7	-2.6	-228.9	-160.1	-111.9	-8.2
				J	-6.7	-2.6	-228.9	-160.1	-57.2	-13.0	
			SLV-z(RS)		I	3.6	1.5	69.0	41.1	29.6	0.4
				J	3.6	1.5	69.0	41.1	40.0	1.4	
			G1		I	14.9	5.9	-293.2	-178.6	-131.2	-1.8
				J	14.9	5.9	-264.7	-178.6	147.7	-7.7	
			G2		I	2.8	1.3	-70.9	-22.5	-16.0	1.4
				J	2.8	1.3	-64.9	-22.5	52.0	0.1	
			q3		I	54.5	-20.1	8.6	0.3	-0.1	-0.1
				J	34.7	-20.1	8.6	0.3	0.2	20.0	
			q4		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	
			q5_pc		I	-9.0	18.9	-2.2	-23.6	-17.9	-0.4
				J	-9.0	18.9	-2.2	-23.6	-15.7	-19.4	
			q5_ps		I	-5.4	6.0	0.0	0.3	0.2	0.4
				J	-5.4	6.0	0.0	0.3	0.2	-5.6	
			Ex		I	166.5	-41.5	0.0	1.4	1.1	1.0
				J	166.5	-41.5	0.0	1.4	1.1	42.5	
			Ey		I	-82.9	120.1	0.0	1.1	0.8	8.5
				J	-82.9	120.1	0.0	1.1	0.8	-111.6	
			INVS LU	Max	I	127.5	40.0	-477.9	-225.4	-165.7	5.5
				J	100.8	40.0	-431.4	-225.4	640.6	40.2	
				Min	I	2.9	-38.1	-965.9	-631.4	-451.1	-18.3
				J	2.9	-38.1	-919.4	-631.4	133.4	-55.3	
			INVS LE-R	Max	I	48.1	28.3	-362.8	-168.5	-123.9	4.1
				J	48.1	28.3	-328.3	-168.5	473.5	11.0	
				Min	I	2.7	-8.1	-715.4	-466.2	-333.0	-13.5
				J	2.7	-8.1	-680.9	-466.2	99.9	-39.7	
			INVS LE-F	Max	I	44.5	20.8	-363.7	-178.0	-131.1	3.9
				J	44.5	20.8	-329.2	-178.0	467.2	3.2	
				Min	I	6.3	-0.5	-714.5	-456.7	-325.8	-13.4
				J	6.3	-0.5	-680.0	-456.7	106.2	-32.0	
			INVS LE~1	Max	I	42.7	17.0	-364.1	-182.7	-134.7	3.8
				J	42.7	17.0	-329.6	-182.7	464.1	-0.6	
				Min	I	8.1	3.3	-714.1	-452.0	-322.2	-13.3
				J	8.1	3.3	-679.6	-452.0	109.3	-28.1	
			INVS LV	Max	I	210.2	140.2	-295.1	-159.2	-116.9	8.5
				J	210.2	140.2	-260.6	-159.2	240.2	117.2	
				Min	I	-174.7	-125.8	-433.1	-243.0	-177.4	-9.4
				J	-174.7	-125.8	-398.6	-243.0	159.2	-132.4	
23	4	7	c1-c2--1	Max	I	0.0	0.0	1.1	23.0	275.9	0.0
				J	0.0	0.0	1.1	23.0	523.5	0.0	
				Min	I	0.0	0.0	-303.8	-258.8	-92.3	0.0
				J	0.0	0.0	-303.8	-258.8	-43.6	0.0	
			c1-c2--2	Max	I	0.0	0.0	0.8	14.6	182.6	0.0
				J	0.0	0.0	0.8	14.6	340.7	0.0	
				Min	I	0.0	0.0	-198.0	-165.3	-58.6	0.0
				J	0.0	0.0	-198.0	-165.3	-27.5	0.0	
			SLV-z(RS)		I	0.0	0.0	67.2	44.5	36.6	0.0
				J	0.0	0.0	67.2	44.5	103.5	0.0	
			G1		I	0.0	0.0	-264.3	-190.9	135.8	0.0
				J	0.0	0.0	-235.8	-190.9	385.9	0.0	
			G2		I	0.0	0.0	-64.5	-25.4	49.5	0.0
				J	0.0	0.0	-58.5	-25.4	110.9	0.0	
			q3		I	9.9	0.0	8.6	0.2	-0.1	0.0
				J	-9.9	0.0	8.6	0.2	0.2	0.0	
			q4		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	
			q5_pc		I	0.0	0.0	-1.3	-21.2	-15.9	0.0
				J	0.0	0.0	-1.3	-21.2	-14.6	0.0	
			q5_ps		I	0.0	0.0	0.0	0.3	0.2	0.0
				J	0.0	0.0	0.0	0.3	0.2	0.0	

Ponte Canale NiE – Relazione di calcolo

			Ex	I	0.0	0.0	0.1	0.8	0.7	0.0
				J	0.0	0.0	0.1	0.8	0.6	0.0
			Ey	I	0.0	0.0	0.1	0.6	0.5	0.0
				J	0.0	0.0	0.1	0.6	0.4	0.0
			INVSLU Max	I	13.4	0.0	-430.0	-242.0	636.8	0.0
				J	0.0	0.0	-383.4	-242.0	1390.6	0.0
			Min	I	0.0	0.0	-855.2	-660.5	111.2	0.0
				J	-13.4	0.0	-808.6	-660.5	598.7	0.0
			INVSLE-R Max	I	0.0	0.0	-326.9	-180.6	470.7	0.0
				J	0.0	0.0	-292.5	-180.6	1029.1	0.0
			Min	I	0.0	0.0	-633.4	-487.8	83.4	0.0
				J	0.0	0.0	-598.9	-487.8	444.4	0.0
			INVSLE-F Max	I	0.0	0.0	-327.5	-189.1	464.3	0.0
				J	0.0	0.0	-293.0	-189.1	1023.3	0.0
			Min	I	0.0	0.0	-632.9	-479.4	89.7	0.0
				J	0.0	0.0	-598.4	-479.4	450.3	0.0
			INVSLE~1 Max	I	0.0	0.0	-327.7	-193.3	461.2	0.0
				J	0.0	0.0	-293.2	-193.3	1020.3	0.0
			Min	I	0.0	0.0	-632.6	-475.1	92.9	0.0
				J	0.0	0.0	-598.1	-475.1	453.2	0.0
			INVSLE Max	I	0.0	0.0	-261.6	-171.5	222.2	0.0
				J	0.0	0.0	-227.1	-171.5	600.7	0.0
			Min	I	0.0	0.0	-396.1	-261.3	148.3	0.0
				J	0.0	0.0	-361.6	-261.3	392.9	0.0
24	4	7	c1-c2--1 Max	I	0.0	0.0	13.8	14.2	518.6	0.0
				J	0.0	0.0	13.8	14.2	742.2	0.0
			Min	I	0.0	0.0	-269.1	-266.7	-43.3	0.0
				J	0.0	0.0	-269.1	-266.7	-15.9	0.0
			c1-c2--2 Max	I	0.0	0.0	10.0	8.7	339.5	0.0
				J	0.0	0.0	10.0	8.7	482.2	0.0
			Min	I	0.0	0.0	-175.4	-170.3	-27.3	0.0
				J	0.0	0.0	-175.4	-170.3	-10.3	0.0
			SLV-z(RS)	I	0.0	0.0	64.2	49.9	98.8	0.0
				J	0.0	0.0	64.2	49.9	162.9	0.0
			G1	I	0.0	0.0	-236.9	-209.4	370.2	0.0
				J	0.0	0.0	-208.4	-209.4	592.8	0.0
			G2	I	0.0	0.0	-58.1	-30.6	106.9	0.0
				J	0.0	0.0	-52.1	-30.6	161.9	0.0
			q3	I	9.9	0.0	8.6	0.1	-0.1	0.0
				J	-9.9	0.0	8.6	0.1	0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.7	-18.6	-14.5	0.0
				J	0.0	0.0	-0.7	-18.6	-13.9	0.0
			q5_ps	I	0.0	0.0	0.0	0.2	0.2	0.0
				J	0.0	0.0	0.0	0.2	0.2	0.0
			Ex	I	0.0	0.0	0.1	0.5	0.4	0.0
				J	0.0	0.0	0.1	0.5	0.3	0.0
			Ey	I	0.0	0.0	0.1	0.3	0.2	0.0
				J	0.0	0.0	0.1	0.3	0.2	0.0
			INVSLE Max	I	13.4	0.0	-372.3	-288.1	1357.3	0.0
				J	0.0	0.0	-325.8	-288.1	2033.4	0.0
			Min	I	0.0	0.0	-762.0	-700.8	572.5	0.0
				J	-13.4	0.0	-715.4	-700.8	984.9	0.0
			INVSLE-R Max	I	0.0	0.0	-280.7	-214.7	1004.4	0.0
				J	0.0	0.0	-246.2	-214.7	1505.3	0.0
			Min	I	0.0	0.0	-564.4	-517.9	425.1	0.0
				J	0.0	0.0	-529.9	-517.9	730.5	0.0
			INVSLE-F Max	I	0.0	0.0	-280.9	-222.1	998.6	0.0
				J	0.0	0.0	-246.5	-222.1	1499.7	0.0
			Min	I	0.0	0.0	-564.1	-510.5	430.9	0.0
				J	0.0	0.0	-529.6	-510.5	736.1	0.0
			INVSLE~1 Max	I	0.0	0.0	-281.1	-225.8	995.7	0.0
				J	0.0	0.0	-246.6	-225.8	1497.0	0.0
			Min	I	0.0	0.0	-564.0	-506.7	433.8	0.0
				J	0.0	0.0	-529.5	-506.7	738.9	0.0
			INVSLE Max	I	0.0	0.0	-230.6	-189.9	576.1	0.0
				J	0.0	0.0	-196.1	-189.9	917.8	0.0
			Min	I	0.0	0.0	-359.2	-290.2	378.1	0.0
				J	0.0	0.0	-324.7	-290.2	591.7	0.0
25	4	7	c1-c2--1 Max	I	0.0	0.0	41.3	4.5	724.8	0.0
				J	0.0	0.0	41.3	4.5	913.7	0.0
			Min	I	0.0	0.0	-243.7	-272.6	-14.4	0.0
				J	0.0	0.0	-243.7	-272.6	-1.2	0.0
			c1-c2--2 Max	I	0.0	0.0	29.7	2.1	471.8	0.0

Ponte Canale NiE – Relazione di calcolo

		J	0.0	0.0	29.7	2.1	591.5	0.0		
	Min	I	0.0	0.0	-159.1	-174.2	-9.4	0.0		
		J	0.0	0.0	-159.1	-174.2	-0.8	0.0		
	SLV-z (RS)	I	0.0	0.0	60.2	56.5	157.6	0.0		
		J	0.0	0.0	60.2	56.5	217.6	0.0		
	G1	I	0.0	0.0	-210.3	-230.4	576.1	0.0		
		J	0.0	0.0	-181.9	-230.4	772.2	0.0		
	G2	I	0.0	0.0	-51.7	-37.1	157.0	0.0		
		J	0.0	0.0	-45.7	-37.1	205.7	0.0		
	q3	I	9.9	0.0	8.7	0.1	-0.1	0.0		
		J	-9.9	0.0	8.7	0.1	0.1	0.0		
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0		
		J	0.0	0.0	0.0	0.0	0.0	0.0		
	q5_pc	I	0.0	0.0	-0.2	-15.9	-13.7	0.0		
		J	0.0	0.0	-0.2	-15.9	-13.5	0.0		
	q5_ps	I	0.0	0.0	0.0	0.2	0.2	0.0		
		J	0.0	0.0	0.0	0.2	0.2	0.0		
	Ex	I	0.0	0.0	0.1	0.3	0.2	0.0		
		J	0.0	0.0	0.1	0.3	0.2	0.0		
	Ey	I	0.0	0.0	0.1	0.2	0.1	0.0		
		J	0.0	0.0	0.1	0.2	-0.0	0.0		
	INVS LU Max	I	13.4	0.0	-297.8	-340.6	1980.4	0.0		
		J	0.0	0.0	-251.2	-340.6	2565.8	0.0		
	Min	I	0.0	0.0	-682.9	-743.4	957.9	0.0		
		J	-13.4	0.0	-636.4	-743.4	1306.4	0.0		
	INVS LE-R Max	I	0.0	0.0	-220.6	-253.4	1466.1	0.0		
		J	0.0	0.0	-186.1	-253.4	1899.7	0.0		
	Min	I	0.0	0.0	-505.9	-549.6	710.4	0.0		
		J	0.0	0.0	-471.4	-549.6	968.6	0.0		
	INVS LE-F Max	I	0.0	0.0	-220.7	-259.7	1460.6	0.0		
		J	0.0	0.0	-186.2	-259.7	1894.3	0.0		
	Min	I	0.0	0.0	-505.8	-543.2	715.9	0.0		
		J	0.0	0.0	-471.3	-543.2	974.0	0.0		
	INVS LE-1 Max	I	0.0	0.0	-220.7	-262.9	1457.9	0.0		
		J	0.0	0.0	-186.2	-262.9	1891.6	0.0		
	Min	I	0.0	0.0	-505.7	-540.0	718.7	0.0		
		J	0.0	0.0	-471.3	-540.0	976.7	0.0		
	INVS LV Max	I	0.0	0.0	-201.8	-210.8	890.8	0.0		
		J	0.0	0.0	-167.3	-210.8	1195.5	0.0		
	Min	I	0.0	0.0	-322.2	-324.1	575.4	0.0		
		J	0.0	0.0	-287.7	-324.1	760.2	0.0		
26	4	7	c1-c2-~1 Max	I	0.0	0.0	68.0	1.8	894.5	0.0
				J	0.0	0.0	68.0	1.8	1050.3	0.0
		Min	I	0.0	0.0	-223.7	-275.8	-0.8	0.0	
			J	0.0	0.0	-223.7	-275.8	0.0	0.0	
		c1-c2-~2 Max	I	0.0	0.0	48.6	0.7	579.8	0.0	
			J	0.0	0.0	48.6	0.7	677.6	0.0	
		Min	I	0.0	0.0	-146.3	-176.2	-0.6	0.0	
			J	0.0	0.0	-146.3	-176.2	0.0	0.0	
		SLV-z (RS)	I	0.0	0.0	55.1	63.5	212.1	0.0	
			J	0.0	0.0	55.1	63.5	266.8	0.0	
		G1	I	0.0	0.0	-184.4	-251.4	756.0	0.0	
			J	0.0	0.0	-155.9	-251.4	926.1	0.0	
		G2	I	0.0	0.0	-45.3	-44.1	200.4	0.0	
			J	0.0	0.0	-39.3	-44.1	242.7	0.0	
		q3	I	9.9	0.0	8.7	0.0	-0.1	0.0	
			J	-9.9	0.0	8.7	0.0	0.1	0.0	
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	I	0.0	0.0	0.0	-13.2	-13.1	0.0	
			J	0.0	0.0	0.0	-13.2	-13.1	0.0	
		q5_ps	I	0.0	0.0	0.0	0.2	0.1	0.0	
			J	0.0	0.0	0.0	0.2	0.1	0.0	
		Ex	I	0.0	0.0	0.1	0.2	0.1	0.0	
			J	0.0	0.0	0.1	0.2	0.0	0.0	
		Ey	I	0.0	0.0	0.1	0.1	-0.0	0.0	
			J	0.0	0.0	0.1	0.1	-0.1	0.0	
		INVS LU Max	I	13.4	0.0	-218.2	-384.6	2510.6	0.0	
			J	0.0	0.0	-171.7	-384.6	3007.7	0.0	
		Min	I	0.0	0.0	-612.0	-783.2	1278.3	0.0	
			J	-13.4	0.0	-565.4	-783.2	1566.1	0.0	
		INVS LE-R Max	I	0.0	0.0	-161.7	-285.8	1858.8	0.0	
			J	0.0	0.0	-127.2	-285.8	2227.0	0.0	

Ponte Canale NiE – Relazione di calcolo

			Min	I	0.0	0.0	-453.3	-579.3	947.8	0.0	
				J	0.0	0.0	-418.8	-579.3	1160.9	0.0	
			INVSLE-F	Max	I	0.0	0.0	-161.7	-291.1	1853.6	0.0
				J	0.0	0.0	-127.2	-291.1	2221.8	0.0	
				Min	I	0.0	0.0	-453.3	-574.0	953.0	0.0
				J	0.0	0.0	-418.8	-574.0	1166.2	0.0	
			INVSLE~1	Max	I	0.0	0.0	-161.7	-293.7	1850.9	0.0
				J	0.0	0.0	-127.2	-293.7	2219.2	0.0	
				Min	I	0.0	0.0	-453.3	-571.3	955.7	0.0
				J	0.0	0.0	-418.8	-571.3	1168.8	0.0	
			INVSLE	Max	I	0.0	0.0	-174.5	-231.9	1168.6	0.0
				J	0.0	0.0	-140.0	-231.9	1435.7	0.0	
				Min	I	0.0	0.0	-284.7	-359.1	744.3	0.0
				J	0.0	0.0	-250.3	-359.1	901.9	0.0	
27	4	7	c1-c2--1	Max	I	0.0	0.0	88.2	0.5	1030.9	0.0
				J	0.0	0.0	88.2	0.5	1159.1	0.0	
				Min	I	0.0	0.0	-206.8	-277.6	0.0	0.0
				J	0.0	0.0	-206.8	-277.6	0.0	0.0	
			c1-c2--2	Max	I	0.0	0.0	62.6	0.2	665.7	0.0
				J	0.0	0.0	62.6	0.2	745.9	0.0	
				Min	I	0.0	0.0	-135.6	-177.2	0.0	0.0
				J	0.0	0.0	-135.6	-177.2	0.0	0.0	
			SLV-z(RS)	I	0.0	0.0	49.0	70.5	261.6	0.0	
				J	0.0	0.0	49.0	70.5	310.0	0.0	
			G1	I	0.0	0.0	-158.5	-271.1	911.6	0.0	
				J	0.0	0.0	-130.1	-271.1	1055.9	0.0	
			G2	I	0.0	0.0	-38.8	-51.3	237.4	0.0	
				J	0.0	0.0	-32.8	-51.3	273.3	0.0	
			q3	I	9.9	0.0	8.7	0.0	-0.1	0.0	
				J	-9.9	0.0	8.7	0.0	0.1	0.0	
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
			q5_pc	I	0.0	0.0	0.1	-10.5	-12.6	0.0	
				J	0.0	0.0	0.1	-10.5	-12.7	0.0	
			q5_ps	I	0.0	0.0	0.0	0.1	0.1	0.0	
				J	0.0	0.0	0.0	0.1	0.1	0.0	
			Ex	I	0.0	0.0	0.0	0.1	0.0	0.0	
				J	0.0	0.0	0.0	0.1	-0.0	0.0	
			Ey	I	0.0	0.0	0.0	0.1	-0.1	0.0	
				J	0.0	0.0	0.0	0.1	-0.2	0.0	
			INVSLE	Max	I	13.4	0.0	-147.3	-425.1	2954.3	0.0
				J	0.0	0.0	-100.8	-425.1	3370.6	0.0	
				Min	I	0.0	0.0	-545.7	-819.3	1539.7	0.0
				J	-13.4	0.0	-499.2	-819.3	1783.0	0.0	
			INVSLE-R	Max	I	0.0	0.0	-109.1	-315.6	2187.5	0.0
				J	0.0	0.0	-74.6	-315.6	2495.9	0.0	
				Min	I	0.0	0.0	-404.2	-606.2	1141.5	0.0
				J	0.0	0.0	-369.8	-606.2	1321.6	0.0	
			INVSLE-F	Max	I	0.0	0.0	-109.2	-319.8	2182.5	0.0
				J	0.0	0.0	-74.7	-319.8	2490.8	0.0	
				Min	I	0.0	0.0	-404.2	-602.0	1146.5	0.0
				J	0.0	0.0	-369.7	-602.0	1326.7	0.0	
			INVSLE~1	Max	I	0.0	0.0	-109.2	-321.9	2179.9	0.0
				J	0.0	0.0	-74.7	-321.9	2488.3	0.0	
				Min	I	0.0	0.0	-404.2	-599.9	1149.1	0.0
				J	0.0	0.0	-369.7	-599.9	1329.2	0.0	
			INVSLE	Max	I	0.0	0.0	-148.4	-251.8	1410.7	0.0
				J	0.0	0.0	-113.9	-251.8	1639.3	0.0	
				Min	I	0.0	0.0	-246.4	-392.9	887.4	0.0
				J	0.0	0.0	-211.9	-392.9	1019.1	0.0	
28	4	7	c1-c2--1	Max	I	0.0	0.0	105.2	0.0	1142.0	0.0
				J	0.0	0.0	105.2	0.0	1245.0	0.0	
				Min	I	0.0	0.0	-191.5	-276.9	0.0	0.0
				J	0.0	0.0	-191.5	-276.9	0.0	0.0	
			c1-c2--2	Max	I	0.0	0.0	74.0	0.0	735.5	0.0
				J	0.0	0.0	74.0	0.0	799.9	0.0	
				Min	I	0.0	0.0	-125.9	-176.5	0.0	0.0
				J	0.0	0.0	-125.9	-176.5	0.0	0.0	
			SLV-z(RS)	I	0.0	0.0	41.8	77.1	305.3	0.0	
				J	0.0	0.0	41.8	77.1	346.4	0.0	
			G1	I	0.0	0.0	-132.6	-288.4	1043.7	0.0	
				J	0.0	0.0	-104.1	-288.4	1162.1	0.0	
			G2	I	0.0	0.0	-32.4	-58.2	268.3	0.0	
				J	0.0	0.0	-26.4	-58.2	297.6	0.0	
			q3	I	9.9	0.0	8.7	0.0	-0.1	0.0	

Ponte Canale NiE – Relazione di calcolo

		J	-9.9	0.0	8.7	0.0	0.1	0.0		
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0		
		J	0.0	0.0	0.0	0.0	0.0	0.0		
	q5_pc	I	0.0	0.0	0.0	-7.8	-12.1	0.0		
		J	0.0	0.0	0.0	-7.8	-12.2	0.0		
	q5_ps	I	0.0	0.0	0.0	0.1	0.1	0.0		
		J	0.0	0.0	0.0	0.1	0.1	0.0		
	Ex	I	0.0	0.0	0.0	0.1	-0.0	0.0		
		J	0.0	0.0	0.0	0.1	-0.0	0.0		
	Ey	I	0.0	0.0	0.0	0.0	-0.2	0.0		
		J	0.0	0.0	0.0	0.0	-0.2	0.0		
	INVSLE Max	I	13.4	0.0	-80.7	-460.9	3323.8	0.0		
		J	0.0	0.0	-34.1	-460.9	3662.3	0.0		
	Min	I	0.0	0.0	-481.3	-848.8	1760.1	0.0		
		J	-13.4	0.0	-434.7	-848.8	1959.6	0.0		
	INVSLE-R Max	I	0.0	0.0	-59.8	-341.9	2461.3	0.0		
		J	0.0	0.0	-25.3	-341.9	2712.0	0.0		
	Min	I	0.0	0.0	-356.5	-628.2	1304.7	0.0		
		J	0.0	0.0	-322.0	-628.2	1452.4	0.0		
	INVSLE-F Max	I	0.0	0.0	-59.8	-345.0	2456.4	0.0		
		J	0.0	0.0	-25.3	-345.0	2707.2	0.0		
	Min	I	0.0	0.0	-356.5	-625.1	1309.6	0.0		
		J	0.0	0.0	-322.0	-625.1	1457.3	0.0		
	INVSLE-1 Max	I	0.0	0.0	-59.8	-346.6	2454.0	0.0		
		J	0.0	0.0	-25.3	-346.6	2704.7	0.0		
	Min	I	0.0	0.0	-356.5	-623.5	1312.0	0.0		
		J	0.0	0.0	-322.0	-623.5	1459.7	0.0		
	INVSLE Max	I	0.0	0.0	-123.1	-269.4	1617.3	0.0		
		J	0.0	0.0	-88.6	-269.4	1806.1	0.0		
	Min	I	0.0	0.0	-206.8	-423.7	1006.6	0.0		
		J	0.0	0.0	-172.3	-423.7	1113.2	0.0		
29	4	7	c1-c2--1 Max	I	0.0	0.0	120.0	0.0	1229.3	0.0
				J	0.0	0.0	120.0	0.0	1312.1	0.0
			Min	I	0.0	0.0	-180.0	-279.4	0.0	0.0
				J	0.0	0.0	-180.0	-279.4	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	83.8	0.0	790.2	0.0
				J	0.0	0.0	83.8	0.0	842.5	0.0
			Min	I	0.0	0.0	-119.0	-177.8	0.0	0.0
				J	0.0	0.0	-119.0	-177.8	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	33.6	83.0	342.3	0.0
				J	0.0	0.0	33.6	83.0	375.1	0.0
			G1	I	0.0	0.0	-106.2	-302.6	1152.6	0.0
				J	0.0	0.0	-77.7	-302.6	1244.5	0.0
			G2	I	0.0	0.0	-25.8	-64.7	293.0	0.0
				J	0.0	0.0	-19.8	-64.7	315.8	0.0
			q3	I	9.9	0.0	8.7	0.0	-0.1	0.0
				J	-9.9	0.0	8.7	0.0	0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.1	-5.1	-11.5	0.0
				J	0.0	0.0	-0.1	-5.1	-11.4	0.0
			q5_ps	I	0.0	0.0	0.0	0.1	0.1	0.0
				J	0.0	0.0	0.0	0.1	0.1	0.0
			Ex	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ey	I	0.0	0.0	0.0	0.0	-0.2	0.0
				J	0.0	0.0	0.0	0.0	-0.2	0.0
			INVSLE Max	I	13.4	0.0	-16.1	-491.3	3621.4	0.0
				J	0.0	0.0	30.5	-491.3	3888.0	0.0
			Min	I	0.0	0.0	-421.3	-877.6	1941.0	0.0
				J	-13.4	0.0	-374.7	-877.6	2096.2	0.0
			INVSLE-R Max	I	0.0	0.0	-11.9	-364.2	2681.8	0.0
				J	0.0	0.0	22.6	-364.2	2879.3	0.0
			Min	I	0.0	0.0	-312.0	-649.7	1438.7	0.0
				J	0.0	0.0	-277.5	-649.7	1553.5	0.0
			INVSLE-F Max	I	0.0	0.0	-12.0	-366.3	2677.2	0.0
				J	0.0	0.0	22.5	-366.3	2874.7	0.0
			Min	I	0.0	0.0	-312.0	-647.7	1443.3	0.0
				J	0.0	0.0	-277.5	-647.7	1558.1	0.0
			INVSLE-1 Max	I	0.0	0.0	-12.0	-367.3	2674.9	0.0
				J	0.0	0.0	22.5	-367.3	2872.4	0.0
			Min	I	0.0	0.0	-312.0	-646.7	1445.6	0.0
				J	0.0	0.0	-277.5	-646.7	1560.4	0.0
			INVSLE Max	I	0.0	0.0	-98.4	-284.3	1788.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-63.9	-284.3	1935.5	0.0
		Min	I	0.0	0.0	-165.6	-450.3	1103.2	0.0
			J	0.0	0.0	-131.1	-450.3	1185.2	0.0
30	4	7	c1-c2--~1	Max	I	0.0	0.0	133.9	0.0
			J	0.0	0.0	133.9	0.0	1295.6	0.0
		Min	I	0.0	0.0	-168.9	-288.5	0.0	0.0
			J	0.0	0.0	-168.9	-288.5	0.0	0.0
		c1-c2--~2	Max	I	0.0	0.0	92.8	0.0	831.8
			J	0.0	0.0	92.8	0.0	871.3	0.0
		Min	I	0.0	0.0	-112.3	-183.7	0.0	0.0
			J	0.0	0.0	-112.3	-183.7	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	24.3	88.0	371.8	0.0
			J	0.0	0.0	24.3	88.0	395.3	0.0
		G1	I	0.0	0.0	-79.3	-313.4	1238.0	0.0
			J	0.0	0.0	-50.8	-313.4	1303.0	0.0
		G2	I	0.0	0.0	-19.0	-70.5	311.8	0.0
			J	0.0	0.0	-13.0	-70.5	327.8	0.0
		q3	I	9.9	0.0	8.7	0.0	-0.1	0.0
			J	-9.9	0.0	8.7	0.0	0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-0.3	-2.5	-10.6	0.0
			J	0.0	0.0	-0.3	-2.5	-10.3	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	0.1	0.0
			J	0.0	0.0	0.0	0.0	0.1	0.0
		Ex	I	0.0	0.0	0.0	0.0	-0.1	0.0
			J	0.0	0.0	0.0	0.0	-0.1	0.0
		Ey	I	0.0	0.0	-0.0	0.0	-0.2	0.0
			J	0.0	0.0	-0.0	0.0	-0.2	0.0
		INVS LU	Max	I	13.4	0.0	48.3	-516.0	3850.8
			J	0.0	0.0	94.8	-516.0	4043.3	0.0
		Min	I	0.0	0.0	-361.1	-910.0	2082.4	0.0
			J	-13.4	0.0	-314.5	-910.0	2192.3	0.0
		INVS LE-R	Max	I	0.0	0.0	35.7	-382.4	2851.7
			J	0.0	0.0	70.2	-382.4	2994.4	0.0
		Min	I	0.0	0.0	-267.4	-673.9	1543.4	0.0
			J	0.0	0.0	-233.0	-673.9	1624.6	0.0
		INVS LE-F	Max	I	0.0	0.0	35.6	-383.4	2847.5
			J	0.0	0.0	70.1	-383.4	2990.2	0.0
		Min	I	0.0	0.0	-267.3	-672.9	1547.6	0.0
			J	0.0	0.0	-232.8	-672.9	1628.7	0.0
		INVS LE~1	Max	I	0.0	0.0	35.5	-383.9	2845.3
			J	0.0	0.0	70.0	-383.9	2988.2	0.0
		Min	I	0.0	0.0	-267.3	-672.4	1549.7	0.0
			J	0.0	0.0	-232.8	-672.4	1630.8	0.0
		INVS LV	Max	I	0.0	0.0	-74.0	-295.9	1921.6
			J	0.0	0.0	-39.5	-295.9	2026.2	0.0
		Min	I	0.0	0.0	-122.6	-471.9	1177.8	0.0
			J	0.0	0.0	-88.2	-471.9	1235.4	0.0
31	4	7	c1-c2--~1	Max	I	0.0	0.0	147.0	0.0
			J	0.0	0.0	147.0	0.0	1343.7	0.0
		Min	I	0.0	0.0	-157.2	-295.0	0.0	0.0
			J	0.0	0.0	-157.2	-295.0	0.0	0.0
		c1-c2--~2	Max	I	0.0	0.0	101.3	0.0	862.4
			J	0.0	0.0	101.3	0.0	887.1	0.0
		Min	I	0.0	0.0	-105.1	-186.8	0.0	0.0
			J	0.0	0.0	-105.1	-186.8	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	14.3	91.8	393.0	0.0
			J	0.0	0.0	14.3	91.8	406.4	0.0
		G1	I	0.0	0.0	-51.6	-320.4	1299.4	0.0
			J	0.0	0.0	-23.1	-320.4	1336.8	0.0
		G2	I	0.0	0.0	-12.2	-75.5	324.4	0.0
			J	0.0	0.0	-6.2	-75.5	333.6	0.0
		q3	I	9.9	0.0	8.7	0.0	-0.1	0.0
			J	-9.9	0.0	8.7	0.0	0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-0.6	0.0	-9.5	0.0
			J	0.0	0.0	-0.6	0.0	-9.0	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	0.1	0.0
			J	0.0	0.0	0.0	0.0	0.1	0.0
		Ex	I	0.0	0.0	-0.0	0.0	-0.1	0.0
			J	0.0	0.0	-0.0	0.0	-0.1	0.0

Ponte Canale NiE – Relazione di calcolo

				Ey	I	0.0	0.0	-0.0	0.0	-0.2	0.0
					J	0.0	0.0	-0.0	0.0	-0.2	0.0
				INVSLE Max	I	13.4	0.0	112.9	-534.5	4014.9	0.0
					J	0.0	0.0	159.5	-534.5	4128.5	0.0
				Min	I	0.0	0.0	-298.8	-932.9	2183.5	0.0
					J	-13.4	0.0	-252.2	-932.9	2246.9	0.0
				INVSLE-R Max	I	0.0	0.0	83.6	-395.9	2973.3	0.0
					J	0.0	0.0	118.1	-395.9	3057.5	0.0
				Min	I	0.0	0.0	-221.3	-691.0	1618.2	0.0
					J	0.0	0.0	-186.8	-691.0	1665.0	0.0
				INVSLE-F Max	I	0.0	0.0	83.4	-396.0	2969.5	0.0
					J	0.0	0.0	117.9	-396.0	3053.9	0.0
				Min	I	0.0	0.0	-221.1	-691.0	1622.0	0.0
					J	0.0	0.0	-186.6	-691.0	1668.6	0.0
				INVSLE~1 Max	I	0.0	0.0	83.3	-396.0	2967.6	0.0
					J	0.0	0.0	117.7	-396.0	3052.1	0.0
				Min	I	0.0	0.0	-221.0	-691.0	1623.9	0.0
					J	0.0	0.0	-186.5	-691.0	1670.4	0.0
				INVSLE Max	I	0.0	0.0	-49.5	-304.1	2016.9	0.0
					J	0.0	0.0	-15.0	-304.1	2076.8	0.0
				Min	I	0.0	0.0	-78.0	-487.8	1230.8	0.0
					J	0.0	0.0	-43.5	-487.8	1263.9	0.0
32	4	7	c1-c2--1	Max	I	0.0	0.0	160.1	0.0	1370.9	0.0
					J	0.0	0.0	160.1	0.0	1385.8	0.0
				Min	I	0.0	0.0	-144.9	-297.2	0.0	0.0
					J	0.0	0.0	-144.9	-297.2	0.0	0.0
				c1-c2--2	Max	I	0.0	109.7	0.0	879.8	0.0
					J	0.0	0.0	109.7	0.0	890.1	0.0
				Min	I	0.0	0.0	-97.5	-187.1	0.0	0.0
					J	0.0	0.0	-97.5	-187.1	0.0	0.0
				SLV-z(RS)	I	0.0	0.0	4.7	94.4	405.0	0.0
					J	0.0	0.0	4.7	94.4	407.8	0.0
				G1	I	0.0	0.0	-23.1	-323.5	1336.3	0.0
					J	0.0	0.0	5.4	-323.5	1345.2	0.0
				G2	I	0.0	0.0	-5.1	-79.7	330.9	0.0
					J	0.0	0.0	0.9	-79.7	333.0	0.0
				q3	I	9.9	0.0	8.7	0.0	-0.1	0.0
					J	-9.9	0.0	8.7	0.0	0.1	0.0
				q4	I	0.0	0.0	0.0	0.0	0.0	0.0
					J	0.0	0.0	0.0	0.0	0.0	0.0
				q5_pc	I	0.0	0.0	-0.9	2.5	-8.2	0.0
					J	0.0	0.0	-0.9	2.5	-7.3	0.0
				q5_ps	I	0.0	0.0	0.0	-0.0	0.1	0.0
					J	0.0	0.0	0.0	-0.0	0.1	0.0
				Ex	I	0.0	0.0	-0.0	0.0	-0.1	0.0
					J	0.0	0.0	-0.0	0.0	-0.1	0.0
				Ey	I	0.0	0.0	-0.0	0.0	-0.2	0.0
					J	0.0	0.0	-0.0	0.0	-0.2	0.0
				INVSLE Max	I	13.4	0.0	178.9	-542.0	4108.9	0.0
					J	0.0	0.0	225.5	-542.0	4142.9	0.0
				Min	I	0.0	0.0	-234.5	-947.6	2243.2	0.0
					J	-13.4	0.0	-188.0	-947.6	2259.0	0.0
				INVSLE-R Max	I	0.0	0.0	132.5	-401.6	3043.1	0.0
					J	0.0	0.0	166.9	-401.6	3068.4	0.0
				Min	I	0.0	0.0	-173.7	-701.8	1662.3	0.0
					J	0.0	0.0	-139.2	-701.8	1673.8	0.0
				INVSLE-F Max	I	0.0	0.0	132.1	-402.6	3039.8	0.0
					J	0.0	0.0	166.6	-402.6	3065.4	0.0
				Min	I	0.0	0.0	-173.3	-700.8	1665.6	0.0
					J	0.0	0.0	-138.8	-700.8	1676.7	0.0
				INVSLE~1 Max	I	0.0	0.0	131.9	-403.1	3038.2	0.0
					J	0.0	0.0	166.4	-403.1	3064.0	0.0
				Min	I	0.0	0.0	-173.1	-700.3	1667.2	0.0
					J	0.0	0.0	-138.6	-700.3	1678.2	0.0
				INVSLE Max	I	0.0	0.0	-23.5	-308.7	2072.3	0.0
					J	0.0	0.0	11.0	-308.7	2086.1	0.0
				Min	I	0.0	0.0	-32.9	-497.6	1262.2	0.0
					J	0.0	0.0	1.6	-497.6	1270.3	0.0
33	4	7	c1-c2--1	Max	I	0.0	0.0	173.7	0.0	1377.8	0.0
					J	0.0	0.0	173.7	0.0	1369.4	0.0
				Min	I	0.0	0.0	-131.8	-294.9	0.0	0.0
					J	0.0	0.0	-131.8	-294.9	0.0	0.0
				c1-c2--2	Max	I	0.0	118.3	0.0	884.5	0.0
					J	0.0	0.0	118.3	0.0	880.5	0.0
				Min	I	0.0	0.0	-89.2	-184.5	0.0	0.0
					J	0.0	0.0	-89.2	-184.5	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

		SLV-z (RS)	I	0.0	0.0	9.0	95.7	407.5	0.0
			J	0.0	0.0	9.0	95.7	399.4	0.0
		G1	I	0.0	0.0	6.2	-322.4	1347.8	0.0
			J	0.0	0.0	34.7	-322.4	1327.3	0.0
		G2	I	0.0	0.0	2.2	-82.8	331.1	0.0
			J	0.0	0.0	8.2	-82.8	325.9	0.0
		q3	I	9.9	0.0	8.7	0.0	-0.1	0.0
			J	-9.9	0.0	8.7	0.0	0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-1.2	4.9	-6.5	0.0
			J	0.0	0.0	-1.2	4.9	-5.3	0.0
		q5_ps	I	0.0	0.0	0.0	-0.1	0.1	0.0
			J	0.0	0.0	0.0	-0.1	0.1	0.0
		Ex	I	0.0	0.0	-0.0	0.0	-0.1	0.0
			J	0.0	0.0	-0.0	0.0	-0.0	0.0
		Ey	I	0.0	0.0	-0.0	0.0	-0.2	0.0
			J	0.0	0.0	-0.0	0.0	-0.1	0.0
		INVS LU Max	I	13.4	0.0	246.9	-542.6	4132.3	0.0
			J	0.0	0.0	293.4	-542.6	4085.3	0.0
		Min	I	0.0	0.0	-167.7	-949.4	2260.4	0.0
			J	-13.4	0.0	-121.1	-949.4	2227.1	0.0
		INVS LE-R Max	I	0.0	0.0	182.8	-402.3	3060.5	0.0
			J	0.0	0.0	217.3	-402.3	3025.8	0.0
		Min	I	0.0	0.0	-124.1	-703.0	1675.0	0.0
			J	0.0	0.0	-89.7	-703.0	1650.1	0.0
		INVS LE-F Max	I	0.0	0.0	182.3	-404.2	3057.9	0.0
			J	0.0	0.0	216.8	-404.2	3023.7	0.0
		Min	I	0.0	0.0	-123.7	-701.0	1677.6	0.0
			J	0.0	0.0	-89.2	-701.0	1652.2	0.0
		INVS LE~1 Max	I	0.0	0.0	182.1	-405.2	3056.6	0.0
			J	0.0	0.0	216.6	-405.2	3022.6	0.0
		Min	I	0.0	0.0	-123.4	-700.0	1678.8	0.0
			J	0.0	0.0	-88.9	-700.0	1653.2	0.0
		INVS LV Max	I	0.0	0.0	17.3	-309.5	2086.4	0.0
			J	0.0	0.0	51.8	-309.5	2052.7	0.0
		Min	I	0.0	0.0	-0.6	-500.9	1271.3	0.0
			J	0.0	0.0	33.8	-500.9	1253.8	0.0
34	4	7 c1-c2--1 Max	I	0.0	0.0	187.9	0.0	1363.7	0.0
			J	0.0	0.0	187.9	0.0	1331.9	0.0
		Min	I	0.0	0.0	-118.6	-288.8	0.0	0.0
			J	0.0	0.0	-118.6	-288.8	0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	127.2	0.0	876.1	0.0
			J	0.0	0.0	127.2	0.0	857.7	0.0
		Min	I	0.0	0.0	-80.7	-179.5	0.0	0.0
			J	0.0	0.0	-80.7	-179.5	0.0	0.0
		SLV-z (RS)	I	0.0	0.0	19.6	95.6	400.0	0.0
			J	0.0	0.0	19.6	95.6	381.1	0.0
		G1	I	0.0	0.0	36.2	-317.2	1332.9	0.0
			J	0.0	0.0	64.7	-317.2	1282.4	0.0
		G2	I	0.0	0.0	9.6	-84.8	324.8	0.0
			J	0.0	0.0	15.6	-84.8	312.1	0.0
		q3	I	9.9	0.0	8.7	0.0	-0.1	0.0
			J	-9.9	0.0	8.7	0.0	0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-1.5	7.1	-4.4	0.0
			J	0.0	0.0	-1.5	7.1	-2.9	0.0
		q5_ps	I	0.0	0.0	0.0	-0.1	0.0	0.0
			J	0.0	0.0	0.0	-0.1	0.0	0.0
		Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0
			J	0.0	0.0	-0.0	0.0	-0.0	0.0
		Ey	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
			J	0.0	0.0	-0.0	-0.0	-0.1	0.0
		INVS LU Max	I	13.4	0.0	317.0	-536.3	4082.8	0.0
			J	0.0	0.0	363.5	-536.3	3953.3	0.0
		Min	I	0.0	0.0	-99.6	-939.0	2233.7	0.0
			J	-13.4	0.0	-53.0	-939.0	2150.0	0.0
		INVS LE-R Max	I	0.0	0.0	234.7	-397.7	3024.0	0.0
			J	0.0	0.0	269.2	-397.7	2928.1	0.0
		Min	I	0.0	0.0	-73.7	-695.1	1655.0	0.0
			J	0.0	0.0	-39.2	-695.1	1592.8	0.0
		INVS LE-F Max	I	0.0	0.0	234.1	-400.6	3022.2	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	268.6	-400.6	2927.0	0.0
		Min	I	0.0	0.0	-73.1	-692.2	1656.8	0.0
			J	0.0	0.0	-38.6	-692.2	1594.0	0.0
		INVSLE~1 Max	I	0.0	0.0	233.8	-402.0	3021.4	0.0
			J	0.0	0.0	268.3	-402.0	2926.4	0.0
		Min	I	0.0	0.0	-72.8	-690.8	1657.6	0.0
			J	0.0	0.0	-38.3	-690.8	1594.5	0.0
		INVSLV Max	I	0.0	0.0	65.4	-306.4	2057.7	0.0
			J	0.0	0.0	99.9	-306.4	1975.7	0.0
		Min	I	0.0	0.0	26.3	-497.6	1257.5	0.0
			J	0.0	0.0	60.8	-497.6	1213.4	0.0
35	4	7 c1-c2~1 Max	I	0.0	0.0	203.1	1.9	1328.5	0.0
			J	0.0	0.0	203.1	1.9	1273.3	0.0
		Min	I	0.0	0.0	-106.3	-279.6	0.0	0.0
			J	0.0	0.0	-106.3	-279.6	0.0	0.0
		c1-c2~2 Max	I	0.0	0.0	136.6	1.3	854.7	0.0
			J	0.0	0.0	136.6	1.3	821.9	0.0
		Min	I	0.0	0.0	-72.7	-172.6	0.0	0.0
			J	0.0	0.0	-72.7	-172.6	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	30.0	94.1	382.7	0.0
			J	0.0	0.0	30.0	94.1	353.3	0.0
		G1	I	0.0	0.0	66.9	-307.9	1290.8	0.0
			J	0.0	0.0	95.4	-307.9	1209.6	0.0
		G2	I	0.0	0.0	17.2	-85.7	311.7	0.0
			J	0.0	0.0	23.2	-85.7	291.5	0.0
		q3	I	9.9	0.0	8.7	0.0	-0.1	0.0
			J	-9.9	0.0	8.7	0.0	0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-1.8	9.3	-2.0	0.0
			J	0.0	0.0	-1.8	9.3	-0.3	0.0
		q5_ps	I	0.0	0.0	0.0	-0.1	0.0	0.0
			J	0.0	0.0	0.0	-0.1	0.0	0.0
		Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0
			J	0.0	0.0	-0.0	0.0	-0.0	0.0
		Ey	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
			J	0.0	0.0	-0.0	-0.0	-0.1	0.0
		INVSLE Max	I	13.4	0.0	389.4	-520.4	3958.7	0.0
			J	0.0	0.0	435.9	-520.4	3745.7	0.0
		Min	I	0.0	0.0	-31.5	-917.2	2161.4	0.0
			J	-13.4	0.0	15.0	-917.2	2026.2	0.0
		INVSLE-R Max	I	0.0	0.0	288.3	-386.1	2932.3	0.0
			J	0.0	0.0	322.8	-386.1	2774.6	0.0
		Min	I	0.0	0.0	-23.2	-678.8	1601.3	0.0
			J	0.0	0.0	11.3	-678.8	1500.9	0.0
		INVSLE-F Max	I	0.0	0.0	287.6	-389.8	2931.5	0.0
			J	0.0	0.0	322.1	-389.8	2774.5	0.0
		Min	I	0.0	0.0	-22.5	-675.1	1602.1	0.0
			J	0.0	0.0	12.0	-675.1	1501.0	0.0
		INVSLE~1 Max	I	0.0	0.0	287.2	-391.7	2931.0	0.0
			J	0.0	0.0	321.7	-391.7	2774.4	0.0
		Min	I	0.0	0.0	-22.2	-673.2	1602.5	0.0
			J	0.0	0.0	12.3	-673.2	1501.1	0.0
		INVSLV Max	I	0.0	0.0	114.2	-299.5	1985.3	0.0
			J	0.0	0.0	148.7	-299.5	1854.4	0.0
		Min	I	0.0	0.0	54.1	-487.7	1219.7	0.0
			J	0.0	0.0	88.6	-487.7	1147.7	0.0
36	4	7 c1-c2~1 Max	I	0.0	0.0	218.9	24.7	1272.1	0.0
			J	0.0	0.0	218.9	24.7	1192.5	0.0
		Min	I	0.0	0.0	-94.3	-272.1	0.0	0.0
			J	0.0	0.0	-94.3	-272.1	0.0	0.0
		c1-c2~2 Max	I	0.0	0.0	146.4	15.5	820.0	0.0
			J	0.0	0.0	146.4	15.5	772.4	0.0
		Min	I	0.0	0.0	-65.0	-166.7	0.0	0.0
			J	0.0	0.0	-65.0	-166.7	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	39.9	91.2	355.8	0.0
			J	0.0	0.0	39.9	91.2	316.5	0.0
		G1	I	0.0	0.0	98.1	-294.7	1220.5	0.0
			J	0.0	0.0	126.6	-294.7	1108.1	0.0
		G2	I	0.0	0.0	24.9	-85.4	291.9	0.0
			J	0.0	0.0	30.9	-85.4	263.9	0.0
		q3	I	9.9	0.0	8.7	0.0	-0.1	0.0
			J	-9.9	0.0	8.7	0.0	0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			q5_pc	I	0.0	0.0	-2.0	11.4	0.7	0.0
				J	0.0	0.0	-2.0	11.4	2.6	0.0
			q5_ps	I	0.0	0.0	0.0	-0.1	-0.0	0.0
				J	0.0	0.0	0.0	-0.1	-0.0	0.0
			Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0
				J	0.0	0.0	-0.0	0.0	-0.0	0.0
			Ey	I	0.0	0.0	-0.1	-0.1	-0.1	0.0
				J	0.0	0.0	-0.1	-0.1	-0.0	0.0
			INVSLU Max	I	13.4	0.0	463.5	-469.6	3759.5	0.0
				J	0.0	0.0	510.0	-469.6	3464.5	0.0
			Min	I	0.0	0.0	37.0	-890.7	2040.9	0.0
				J	-13.4	0.0	83.6	-890.7	1849.9	0.0
			INVSLE-R Max	I	0.0	0.0	343.2	-348.6	2784.8	0.0
				J	0.0	0.0	377.7	-348.6	2566.1	0.0
			Min	I	0.0	0.0	27.5	-659.0	1511.9	0.0
				J	0.0	0.0	62.0	-659.0	1370.4	0.0
			INVSLE-F Max	I	0.0	0.0	342.4	-353.2	2784.5	0.0
				J	0.0	0.0	376.9	-353.2	2565.0	0.0
			Min	I	0.0	0.0	28.3	-654.5	1512.2	0.0
				J	0.0	0.0	62.8	-654.5	1371.5	0.0
			INVSLE~1 Max	I	0.0	0.0	342.0	-355.5	2784.4	0.0
				J	0.0	0.0	376.5	-355.5	2564.5	0.0
			Min	I	0.0	0.0	28.7	-652.2	1512.3	0.0
				J	0.0	0.0	63.2	-652.2	1372.0	0.0
			INVSLE~1 Max	I	0.0	0.0	162.9	-288.9	1868.2	0.0
				J	0.0	0.0	197.4	-288.9	1688.5	0.0
			Min	I	0.0	0.0	83.2	-471.4	1156.5	0.0
				J	0.0	0.0	117.7	-471.4	1055.5	0.0
37	4	7	c1-c2--~1 Max	I	0.0	0.0	235.3	47.1	1192.9	0.0
				J	0.0	0.0	235.3	47.1	1087.1	0.0
			Min	I	0.0	0.0	-81.0	-261.1	0.0	0.0
				J	0.0	0.0	-81.0	-261.1	0.0	0.0
			c1-c2--~2 Max	I	0.0	0.0	156.4	29.4	771.3	0.0
				J	0.0	0.0	156.4	29.4	707.6	0.0
			Min	I	0.0	0.0	-56.2	-158.6	0.0	0.0
				J	0.0	0.0	-56.2	-158.6	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	48.8	87.2	319.7	0.0
				J	0.0	0.0	48.8	87.2	271.3	0.0
			G1	I	0.0	0.0	129.6	-277.9	1121.2	0.0
				J	0.0	0.0	158.0	-277.9	977.4	0.0
			G2	I	0.0	0.0	32.7	-84.1	264.9	0.0
				J	0.0	0.0	38.7	-84.1	229.3	0.0
			q3	I	9.9	0.0	8.6	0.0	-0.1	0.0
				J	-9.9	0.0	8.6	0.0	0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-2.1	13.4	3.6	0.0
				J	0.0	0.0	-2.1	13.4	5.7	0.0
			q5_ps	I	0.0	0.0	0.0	-0.2	-0.0	0.0
				J	0.0	0.0	0.0	-0.2	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0
				J	0.0	0.0	-0.0	0.0	-0.0	0.0
			Ey	I	0.0	0.0	-0.1	-0.1	-0.0	0.0
				J	0.0	0.0	-0.1	-0.1	0.0	0.0
			INVSLU Max	I	13.4	0.0	538.5	-413.1	3484.9	0.0
				J	0.0	0.0	585.1	-413.1	3101.7	0.0
			Min	I	0.0	0.0	107.8	-853.3	1867.8	0.0
				J	-13.4	0.0	154.4	-853.3	1623.8	0.0
			INVSLE-R Max	I	0.0	0.0	398.8	-306.9	2581.1	0.0
				J	0.0	0.0	433.2	-306.9	2297.2	0.0
			Min	I	0.0	0.0	80.0	-631.2	1383.9	0.0
				J	0.0	0.0	114.5	-631.2	1203.2	0.0
			INVSLE-F Max	I	0.0	0.0	397.9	-312.2	2579.7	0.0
				J	0.0	0.0	432.4	-312.2	2294.9	0.0
			Min	I	0.0	0.0	80.8	-625.8	1385.4	0.0
				J	0.0	0.0	115.3	-625.8	1205.5	0.0
			INVSLE~1 Max	I	0.0	0.0	397.5	-314.9	2579.0	0.0
				J	0.0	0.0	432.0	-314.9	2293.7	0.0
			Min	I	0.0	0.0	81.2	-623.2	1386.1	0.0
				J	0.0	0.0	115.7	-623.2	1206.6	0.0
			INVSLE~1 Max	I	0.0	0.0	211.1	-274.8	1705.8	0.0
				J	0.0	0.0	245.5	-274.8	1477.9	0.0
			Min	I	0.0	0.0	113.4	-449.3	1066.4	0.0
				J	0.0	0.0	147.9	-449.3	935.3	0.0

Ponte Canale NiE – Relazione di calcolo

38	4	7 c1-c2--1	Max	I	0.0	0.0	252.8	68.9	1089.2	0.0
			J	0.0	0.0	252.8	68.9	952.8	0.0	
			Min	I	0.0	0.0	-63.3	-251.1	0.0	0.0
			J	0.0	0.0	-63.3	-251.1	0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	167.2	43.1	707.4	0.0
			J	0.0	0.0	167.2	43.1	624.4	0.0	
			Min	I	0.0	0.0	-44.3	-151.6	0.0	0.0
			J	0.0	0.0	-44.3	-151.6	0.0	0.0	
		SLV-z(RS)	I	0.0	0.0	56.7	82.3	275.0	0.0	
			J	0.0	0.0	56.7	82.3	218.6	0.0	
		G1	I	0.0	0.0	160.9	-258.4	992.0	0.0	
			J	0.0	0.0	189.4	-258.4	816.8	0.0	
		G2	I	0.0	0.0	40.3	-81.7	230.8	0.0	
			J	0.0	0.0	46.3	-81.7	187.5	0.0	
		q3	I	9.9	0.0	8.6	-0.0	-0.1	0.0	
			J	-9.9	0.0	8.6	-0.0	0.2	0.0	
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	I	0.0	0.0	-2.0	15.4	6.8	0.0	
			J	0.0	0.0	-2.0	15.4	8.8	0.0	
		q5_ps	I	0.0	0.0	0.0	-0.2	-0.1	0.0	
			J	0.0	0.0	0.0	-0.2	-0.1	0.0	
		Ex	I	0.0	0.0	-0.0	0.0	-0.0	0.0	
			J	0.0	0.0	-0.0	0.0	-0.0	0.0	
		Ey	I	0.0	0.0	-0.0	-0.2	-0.0	0.0	
			J	0.0	0.0	-0.0	-0.2	0.0	0.0	
		INVSLU Max	I	13.4	0.0	614.8	-352.3	3127.3	0.0	
			J	0.0	0.0	661.4	-352.3	2650.0	0.0	
			Min	I	0.0	0.0	184.5	-811.9	1644.6	0.0
			J	-13.4	0.0	231.1	-811.9	1347.9	0.0	
		INVSLE-R Max	I	0.0	0.0	455.3	-262.0	2316.1	0.0	
			J	0.0	0.0	489.8	-262.0	1962.4	0.0	
			Min	I	0.0	0.0	136.8	-600.4	1218.8	0.0
			J	0.0	0.0	171.3	-600.4	999.0	0.0	
		INVSLE-F Max	I	0.0	0.0	454.5	-268.1	2313.3	0.0	
			J	0.0	0.0	489.0	-268.1	1958.8	0.0	
			Min	I	0.0	0.0	137.6	-594.3	1221.5	0.0
			J	0.0	0.0	172.1	-594.3	1002.5	0.0	
		INVSLE~1 Max	I	0.0	0.0	454.1	-271.2	2312.0	0.0	
			J	0.0	0.0	488.6	-271.2	1957.1	0.0	
Min	I		0.0	0.0	138.0	-591.2	1222.8	0.0		
J	0.0		0.0	172.5	-591.2	1004.3	0.0			
INVSLEV Max	I	0.0	0.0	258.0	-257.7	1497.8	0.0			
	J	0.0	0.0	292.5	-257.7	1222.9	0.0			
	Min	I	0.0	0.0	144.6	-422.4	947.8	0.0		
	J	0.0	0.0	179.1	-422.4	785.7	0.0			
39	4	7 c1-c2--1	Max	I	0.0	0.0	272.8	96.5	955.9	0.0
			J	0.0	0.0	272.8	96.5	781.8	0.0	
			Min	I	0.0	0.0	-39.9	-240.8	0.0	0.0
			J	0.0	0.0	-39.9	-240.8	-0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	179.6	61.0	624.8	0.0
			J	0.0	0.0	179.6	61.0	517.5	0.0	
			Min	I	0.0	0.0	-28.2	-144.4	0.0	0.0
			J	0.0	0.0	-28.2	-144.4	-0.0	0.0	
		SLV-z(RS)	I	0.0	0.0	63.3	76.8	222.5	0.0	
			J	0.0	0.0	63.3	76.8	159.4	0.0	
		G1	I	0.0	0.0	192.0	-237.0	832.1	0.0	
			J	0.0	0.0	220.4	-237.0	625.9	0.0	
		G2	I	0.0	0.0	47.8	-78.5	189.5	0.0	
			J	0.0	0.0	53.8	-78.5	138.7	0.0	
		q3	I	9.9	0.0	8.6	-0.0	-0.1	0.0	
			J	-9.9	0.0	8.6	-0.0	0.2	0.0	
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	I	0.0	0.0	-1.7	17.3	10.0	0.0	
			J	0.0	0.0	-1.7	17.3	11.7	0.0	
		q5_ps	I	0.0	0.0	0.0	-0.2	-0.1	0.0	
			J	0.0	0.0	0.0	-0.2	-0.1	0.0	
		Ex	I	0.0	0.0	-0.0	-0.0	-0.0	0.0	
			J	0.0	0.0	-0.0	-0.0	0.0	0.0	
		Ey	I	0.0	0.0	-0.0	-0.3	-0.0	0.0	
			J	0.0	0.0	-0.0	-0.3	-0.0	0.0	
		INVSLU Max	I	13.4	0.0	693.4	-280.2	2678.7	0.0	

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	740.0	-280.2	2098.3	0.0
		Min	I	0.0	0.0	268.2	-766.6	1370.0	0.0
			J	-13.4	0.0	314.8	-766.6	1021.7	0.0
		INVSLE-R Max	I	0.0	0.0	513.5	-208.7	1983.5	0.0
			J	0.0	0.0	548.0	-208.7	1553.5	0.0
		Min	I	0.0	0.0	198.8	-566.7	1015.6	0.0
			J	0.0	0.0	233.3	-566.7	757.6	0.0
		INVSLE-F Max	I	0.0	0.0	512.8	-215.6	1979.5	0.0
			J	0.0	0.0	547.3	-215.6	1548.8	0.0
		Min	I	0.0	0.0	199.5	-559.8	1019.6	0.0
			J	0.0	0.0	234.0	-559.8	762.3	0.0
		INVSLE~1 Max	I	0.0	0.0	512.5	-219.0	1977.5	0.0
			J	0.0	0.0	547.0	-219.0	1546.5	0.0
		Min	I	0.0	0.0	199.8	-556.3	1021.6	0.0
			J	0.0	0.0	234.3	-556.3	764.6	0.0
		INVSLV Max	I	0.0	0.0	303.0	-238.7	1244.2	0.0
			J	0.0	0.0	337.5	-238.7	924.1	0.0
		Min	I	0.0	0.0	176.4	-392.4	799.0	0.0
			J	0.0	0.0	210.9	-392.4	605.2	0.0
40	4	7 c1-c2--1 Max	I	0.0	0.0	297.7	120.0	785.7	0.0
			J	0.0	0.0	297.7	120.0	571.4	0.0
		Min	I	0.0	0.0	-15.3	-226.7	-0.0	0.0
			J	0.0	0.0	-15.3	-226.7	-8.0	0.0
		c1-c2--2 Max	I	0.0	0.0	195.2	76.3	518.2	0.0
			J	0.0	0.0	195.2	76.3	384.2	0.0
		Min	I	0.0	0.0	-11.0	-134.6	-0.0	0.0
			J	0.0	0.0	-11.0	-134.6	-5.2	0.0
		SLV-z(RS)	I	0.0	0.0	68.3	71.2	163.3	0.0
			J	0.0	0.0	68.3	71.2	95.1	0.0
		G1	I	0.0	0.0	222.2	-215.7	640.7	0.0
			J	0.0	0.0	250.7	-215.7	404.3	0.0
		G2	I	0.0	0.0	54.8	-74.8	140.8	0.0
			J	0.0	0.0	60.8	-74.8	83.1	0.0
		q3	I	9.9	0.0	8.6	-0.0	-0.1	0.0
			J	-9.9	0.0	8.6	-0.0	0.2	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-1.2	19.2	13.1	0.0
			J	0.0	0.0	-1.2	19.2	14.3	0.0
		q5_ps	I	0.0	0.0	0.0	-0.2	-0.1	0.0
			J	0.0	0.0	0.0	-0.2	-0.2	0.0
		Ex	I	0.0	0.0	-0.0	-0.0	-0.0	0.0
			J	0.0	0.0	-0.0	-0.0	-0.0	0.0
		Ey	I	0.0	0.0	0.0	-0.5	-0.1	0.0
			J	0.0	0.0	0.0	-0.5	-0.2	0.0
		INVSLU Max	I	13.4	0.0	776.8	-212.8	2127.7	0.0
			J	0.0	0.0	823.4	-212.8	1442.1	0.0
		Min	I	0.0	0.0	352.3	-715.5	1043.2	0.0
			J	-13.4	0.0	398.8	-715.5	634.2	0.0
		INVSLE-R Max	I	0.0	0.0	575.3	-158.9	1575.2	0.0
			J	0.0	0.0	609.8	-158.9	1067.3	0.0
		Min	I	0.0	0.0	261.0	-528.7	773.7	0.0
			J	0.0	0.0	295.5	-528.7	470.8	0.0
		INVSLE-F Max	I	0.0	0.0	574.9	-166.6	1569.9	0.0
			J	0.0	0.0	609.4	-166.6	1061.5	0.0
		Min	I	0.0	0.0	261.5	-521.0	778.9	0.0
			J	0.0	0.0	296.0	-521.0	476.5	0.0
		INVSLE~1 Max	I	0.0	0.0	574.6	-170.4	1567.3	0.0
			J	0.0	0.0	609.1	-170.4	1058.7	0.0
		Min	I	0.0	0.0	261.7	-517.2	781.6	0.0
			J	0.0	0.0	296.2	-517.2	479.3	0.0
		INVSLV Max	I	0.0	0.0	345.3	-219.2	944.9	0.0
			J	0.0	0.0	379.8	-219.2	582.4	0.0
		Min	I	0.0	0.0	208.6	-361.8	618.2	0.0
			J	0.0	0.0	243.1	-361.8	392.2	0.0
41	4	7 c1-c2--1 Max	I	0.0	0.0	331.3	137.4	568.8	0.0
			J	0.0	0.0	331.3	137.4	317.2	0.0
		Min	I	0.0	0.0	-2.9	-210.7	-6.9	0.0
			J	0.0	0.0	-2.9	-210.7	-51.3	0.0
		c1-c2--2 Max	I	0.0	0.0	216.3	87.5	380.2	0.0
			J	0.0	0.0	216.3	87.5	217.6	0.0
		Min	I	0.0	0.0	-2.1	-123.5	-4.5	0.0
			J	0.0	0.0	-2.1	-123.5	-31.7	0.0
		SLV-z(RS)	I	0.0	0.0	71.6	66.2	98.3	0.0
			J	0.0	0.0	71.6	66.2	27.1	0.0
		G1	I	0.0	0.0	251.3	-196.9	416.8	0.0

Ponte Canale NiE – Relazione di calcolo

		J	0.0	0.0	279.8	-196.9	151.2	0.0		
	G2	I	0.0	0.0	61.2	-71.2	84.9	0.0		
		J	0.0	0.0	67.2	-71.2	20.7	0.0		
	q3	I	9.9	0.0	8.6	-0.0	-0.0	0.0		
		J	-9.9	0.0	8.6	-0.0	0.2	0.0		
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0		
		J	0.0	0.0	0.0	0.0	0.0	0.0		
	q5_pc	I	0.0	0.0	-0.3	21.3	15.9	0.0		
		J	0.0	0.0	-0.3	21.3	16.2	0.0		
	q5_ps	I	0.0	0.0	0.0	-0.3	-0.2	0.0		
		J	0.0	0.0	0.0	-0.3	-0.2	0.0		
	Ex	I	0.0	0.0	0.0	-0.0	-0.0	0.0		
		J	0.0	0.0	0.0	-0.0	-0.0	0.0		
	Ey	I	0.0	0.0	0.1	-0.9	-0.4	0.0		
		J	0.0	0.0	0.1	-0.9	-0.5	0.0		
	INVSU Max	I	13.4	0.0	869.4	-157.2	1459.5	0.0		
		J	0.0	0.0	916.0	-157.2	674.9	0.0		
	Min	I	0.0	0.0	417.8	-665.4	653.6	0.0		
		J	-13.4	0.0	464.3	-665.4	148.1	0.0		
	INVSLE-R Max	I	0.0	0.0	644.0	-117.9	1080.0	0.0		
		J	0.0	0.0	678.5	-117.9	498.8	0.0		
	Min	I	0.0	0.0	309.5	-491.5	485.2	0.0		
		J	0.0	0.0	344.0	-491.5	110.8	0.0		
	INVSLE-F Max	I	0.0	0.0	643.9	-126.4	1073.7	0.0		
		J	0.0	0.0	678.4	-126.4	492.3	0.0		
	Min	I	0.0	0.0	309.6	-483.0	491.6	0.0		
		J	0.0	0.0	344.1	-483.0	117.3	0.0		
	INVSLE~1 Max	I	0.0	0.0	643.8	-130.6	1070.5	0.0		
		J	0.0	0.0	678.3	-130.6	489.1	0.0		
	Min	I	0.0	0.0	309.7	-478.7	494.8	0.0		
		J	0.0	0.0	344.2	-478.7	120.6	0.0		
	INVSU Max	I	0.0	0.0	384.2	-201.5	600.1	0.0		
		J	0.0	0.0	418.7	-201.5	199.2	0.0		
	Min	I	0.0	0.0	240.9	-334.5	403.3	0.0		
		J	0.0	0.0	275.4	-334.5	144.6	0.0		
42	4	7	c1-c2--1 Max	I	7.3	10.4	372.9	149.1	306.6	17.3
				J	7.3	10.4	372.9	149.1	117.0	7.5
			Min	I	-8.5	-10.9	-0.0	-207.9	-47.7	-22.8
				J	-8.5	-10.9	-0.0	-207.9	-161.4	-15.3
			c1-c2--2 Max	I	4.6	6.4	243.0	95.2	208.6	10.5
				J	4.6	6.4	243.0	95.2	74.9	4.5
			Min	I	-5.9	-7.2	-0.0	-121.7	-29.6	-14.6
				J	-5.9	-7.2	-0.0	-121.7	-95.1	-9.9
			SLV-z(RS)	I	2.8	3.4	72.8	62.9	29.0	4.3
				J	2.8	3.4	72.8	62.9	44.6	1.0
			G1	I	8.0	10.0	278.9	-184.4	158.9	10.3
				J	8.0	10.0	307.4	-184.4	-134.2	0.3
			G2	I	3.0	3.5	66.9	-68.5	21.7	5.2
				J	3.0	3.5	72.9	-68.5	-48.2	1.8
			q3	I	16.7	-4.4	8.6	-0.0	-0.0	-4.1
				J	-3.1	-4.4	8.6	-0.0	0.3	0.3
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	-6.2	-8.2	0.8	23.4	18.1	-8.3
				J	-6.2	-8.2	0.8	23.4	17.3	-0.1
			q5_ps	I	-1.1	-1.5	-0.0	-0.3	-0.2	-1.5
				J	-1.1	-1.5	-0.0	-0.3	-0.2	0.1
			Ex	I	-2.9	-4.1	0.0	-0.1	-0.0	-3.9
				J	-2.9	-4.1	0.0	-0.1	-0.1	0.2
			Ey	I	-45.3	-65.0	0.3	-1.7	-0.9	-61.3
				J	-45.3	-65.0	0.3	-1.7	-1.2	3.7
			INVSU Max	I	49.3	39.7	971.0	-119.1	674.0	51.8
				J	30.3	39.7	1017.6	-119.1	-72.8	13.0
			Min	I	-2.2	-4.7	466.1	-643.1	163.1	-17.2
				J	-2.8	-4.7	512.7	-643.1	-479.8	-18.0
			INVSLE-R Max	I	22.0	28.9	719.2	-89.8	498.1	37.8
				J	22.0	28.9	753.7	-89.8	-55.1	9.6
			Min	I	-1.2	-2.3	345.3	-474.8	122.1	-12.2
				J	-1.2	-2.3	379.8	-474.8	-354.2	-13.3
			INVSLE-F Max	I	19.5	25.6	718.9	-99.2	490.9	34.5
				J	19.5	25.6	753.4	-99.2	-62.0	9.6
			Min	I	1.3	1.0	345.7	-465.5	129.3	-8.9
				J	1.3	1.0	380.2	-465.5	-347.3	-13.3

Ponte Canale NiE – Relazione di calcolo

					INVSLE~1 Max	I	18.3	23.9	718.7	-103.8	487.2	32.8
						J	18.3	23.9	753.2	-103.8	-65.4	9.5
					Min	I	2.5	2.6	345.8	-460.8	132.9	-7.2
						J	2.5	2.6	380.3	-460.8	-343.9	-13.3
					INVSLE Max	I	58.0	80.7	418.8	-189.5	209.9	79.2
						J	58.0	80.7	453.2	-189.5	-137.5	6.1
					Min	I	-36.0	-53.7	272.9	-316.4	151.3	-48.2
						J	-36.0	-53.7	307.4	-316.4	-227.4	-2.0
43	4	7	c1-c2~1	Max	I	19.2	6.7	0.0	60.8	38.6	12.1	
						J	19.2	6.7	0.0	60.8	350.7	10.6
				Min	I	-7.3	-4.5	-393.8	-284.0	-196.0	-15.9	
						J	-7.3	-4.5	-393.8	-284.0	-93.4	-19.8
			c1-c2~2	Max	I	12.4	4.3	0.0	38.3	25.0	7.5	
						J	12.4	4.3	0.0	38.3	233.9	6.5
				Min	I	-5.1	-3.0	-264.1	-179.9	-124.4	-10.1	
						J	-5.1	-3.0	-264.1	-179.9	-59.1	-12.5
			SLV-z(RS)		I	1.7	0.7	68.8	36.8	26.0	0.8	
						J	1.7	0.7	68.8	36.8	43.5	0.6
			G1		I	7.7	2.8	-299.0	-166.8	-121.6	-0.5	
						J	7.7	2.8	-270.5	-166.8	163.2	-3.4
			G2		I	1.2	0.6	-67.7	-19.0	-13.2	1.4	
						J	1.2	0.6	-61.7	-19.0	51.6	0.9
			q3		I	102.5	-1.6	0.1	-0.4	-0.2	-0.8	
						J	102.5	-1.6	0.1	-0.4	-0.3	0.8
			q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
						J	0.0	0.0	0.0	0.0	0.0	
			q5_pc		I	15.4	24.9	-1.8	-12.1	-9.2	0.1	
						J	15.4	24.9	-1.8	-12.1	-7.4	-24.8
			q5_ps		I	4.8	8.4	0.0	0.1	0.1	0.3	
						J	4.8	8.4	0.0	0.1	0.0	-8.1
			Ex		I	449.8	30.6	-0.3	-1.8	-1.5	-2.5	
						J	449.8	30.6	-0.3	-1.8	-1.2	-33.0
			Ey		I	132.5	187.7	-0.2	-1.6	-1.3	5.8	
						J	132.5	187.7	-0.2	-1.6	-1.1	-181.8
			INVSLE Max		I	181.1	36.0	-493.4	-157.9	-121.4	17.6	
						J	181.1	36.0	-446.9	-157.9	770.1	33.2
			Min		I	-11.6	-24.1	-1028.4	-645.1	-454.8	-20.4	
						J	-11.6	-24.1	-981.8	-645.1	157.2	-52.4
			INVSLE-R Max		I	37.4	25.0	-365.7	-117.8	-90.6	13.0	
						J	37.4	25.0	-331.2	-117.8	569.9	23.0
			Min		I	-7.6	-16.0	-761.6	-477.0	-336.3	-15.1	
						J	-7.6	-16.0	-727.1	-477.0	116.9	-37.2
			INVSLE-F Max		I	31.2	15.1	-366.4	-122.6	-94.3	13.0	
						J	31.2	15.1	-331.9	-122.6	566.9	13.1
			Min		I	-1.4	-6.1	-760.9	-472.2	-332.6	-15.1	
						J	-1.4	-6.1	-726.4	-472.2	119.9	-27.2
			INVSLE~1 Max		I	28.1	10.1	-366.8	-125.0	-96.1	13.0	
						J	28.1	10.1	-332.3	-125.0	565.4	8.1
			Min		I	1.7	-1.1	-760.6	-469.8	-330.7	-15.0	
						J	1.7	-1.1	-726.1	-469.8	121.4	-22.3
			INVSLE Max		I	499.0	200.4	-297.8	-147.9	-107.9	7.7	
						J	499.0	200.4	-263.3	-147.9	258.9	189.5
			Min		I	-481.1	-193.7	-435.7	-223.6	-161.6	-5.9	
						J	-481.1	-193.7	-401.2	-223.6	170.6	-194.4
44	4	7	c1-c2~1	Max	I	0.0	0.0	18.4	51.1	334.7	0.0	
						J	0.0	0.0	18.4	51.1	618.2	0.0
			Min		I	0.0	0.0	-347.7	-299.2	-98.3	0.0	
						J	0.0	0.0	-347.7	-299.2	-31.1	0.0
			c1-c2~2	Max	I	0.0	0.0	13.6	32.1	224.0	0.0	
						J	0.0	0.0	13.6	32.1	411.1	0.0
			Min		I	0.0	0.0	-232.9	-189.9	-62.5	0.0	
						J	0.0	0.0	-232.9	-189.9	-20.0	0.0
			SLV-z(RS)		I	0.0	0.0	67.2	41.3	40.0	0.0	
						J	0.0	0.0	67.2	41.3	107.0	0.0
			G1		I	0.0	0.0	-270.7	-184.2	150.0	0.0	
						J	0.0	0.0	-242.2	-184.2	406.4	0.0
			G2		I	0.0	0.0	-61.6	-22.7	49.0	0.0	
						J	0.0	0.0	-55.6	-22.7	107.6	0.0
			q3		I	0.0	0.0	0.1	-0.3	-0.1	0.0	
						J	0.0	0.0	0.1	-0.3	-0.2	0.0
			q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
						J	0.0	0.0	0.0	0.0	0.0	
			q5_pc		I	0.0	0.0	-1.6	-11.6	-7.9	0.0	
						J	0.0	0.0	-1.6	-11.6	-6.4	0.0

Ponte Canale NiE – Relazione di calcolo

			q5_ps	I	0.0	0.0	0.0	0.1	0.1	0.0
				J	0.0	0.0	0.0	0.1	0.0	0.0
			Ex	I	0.0	0.0	-0.2	-1.1	-0.8	0.0
				J	0.0	0.0	-0.2	-1.1	-0.6	0.0
			Ey	I	0.0	0.0	-0.1	-1.0	-0.8	0.0
				J	0.0	0.0	-0.1	-1.0	-0.6	0.0
			INVS LU Max	I	0.0	0.0	-422.4	-199.8	727.7	0.0
				J	0.0	0.0	-375.8	-199.8	1534.3	0.0
			Min	I	0.0	0.0	-919.3	-693.7	128.8	0.0
				J	0.0	0.0	-872.8	-693.7	646.3	0.0
			INVS LE-R Max	I	0.0	0.0	-313.0	-148.8	538.5	0.0
				J	0.0	0.0	-278.5	-148.8	1136.1	0.0
			Min	I	0.0	0.0	-680.9	-513.1	95.9	0.0
				J	0.0	0.0	-646.4	-513.1	479.1	0.0
			INVS LE-F Max	I	0.0	0.0	-313.6	-153.4	535.3	0.0
				J	0.0	0.0	-279.1	-153.4	1133.6	0.0
			Min	I	0.0	0.0	-680.3	-508.4	99.1	0.0
				J	0.0	0.0	-645.8	-508.4	481.7	0.0
			INVS LE~1 Max	I	0.0	0.0	-313.9	-155.8	533.7	0.0
				J	0.0	0.0	-279.4	-155.8	1132.3	0.0
			Min	I	0.0	0.0	-680.0	-506.1	100.7	0.0
				J	0.0	0.0	-645.5	-506.1	483.0	0.0
			INVS LV Max	I	0.0	0.0	-265.0	-164.9	239.4	0.0
				J	0.0	0.0	-230.5	-164.9	621.4	0.0
			Min	I	0.0	0.0	-399.6	-248.8	158.6	0.0
				J	0.0	0.0	-365.1	-248.8	406.7	0.0
45	4	7	c1-c2--~1 Max	I	0.0	0.0	46.9	34.0	595.2	0.0
				J	0.0	0.0	46.9	34.0	839.7	0.0
			Min	I	0.0	0.0	-316.6	-312.8	-32.0	0.0
				J	0.0	0.0	-316.6	-312.8	-1.1	0.0
			c1-c2--~2 Max	I	0.0	0.0	34.0	21.3	396.7	0.0
				J	0.0	0.0	34.0	21.3	555.9	0.0
			Min	I	0.0	0.0	-212.0	-199.1	-20.6	0.0
				J	0.0	0.0	-212.0	-199.1	-0.8	0.0
			SLV-z(RS)	I	0.0	0.0	64.2	47.7	102.2	0.0
				J	0.0	0.0	64.2	47.7	166.3	0.0
			G1	I	0.0	0.0	-242.6	-206.6	389.7	0.0
				J	0.0	0.0	-214.1	-206.6	618.0	0.0
			G2	I	0.0	0.0	-55.3	-28.3	103.7	0.0
				J	0.0	0.0	-49.3	-28.3	156.0	0.0
			q3	I	0.0	0.0	0.1	-0.2	0.0	0.0
				J	0.0	0.0	0.1	-0.2	-0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-1.4	-10.8	-6.7	0.0
				J	0.0	0.0	-1.4	-10.8	-5.3	0.0
			q5_ps	I	0.0	0.0	0.0	0.1	0.1	0.0
				J	0.0	0.0	0.0	0.1	0.0	0.0
			Ex	I	0.0	0.0	-0.1	-0.6	-0.4	0.0
				J	0.0	0.0	-0.1	-0.6	-0.3	0.0
			Ey	I	0.0	0.0	-0.1	-0.6	-0.4	0.0
				J	0.0	0.0	-0.1	-0.6	-0.3	0.0
			INVS LU Max	I	0.0	0.0	-337.7	-261.5	1475.6	0.0
				J	0.0	0.0	-291.1	-261.5	2183.4	0.0
			Min	I	0.0	0.0	-831.0	-749.2	616.8	0.0
				J	0.0	0.0	-784.4	-749.2	1038.7	0.0
			INVS LE-R Max	I	0.0	0.0	-250.2	-194.4	1092.6	0.0
				J	0.0	0.0	-215.7	-194.4	1617.0	0.0
			Min	I	0.0	0.0	-615.4	-554.2	457.3	0.0
				J	0.0	0.0	-580.9	-554.2	769.8	0.0
			INVS LE-F Max	I	0.0	0.0	-250.8	-198.8	1089.9	0.0
				J	0.0	0.0	-216.3	-198.8	1614.8	0.0
			Min	I	0.0	0.0	-614.9	-549.9	460.0	0.0
				J	0.0	0.0	-580.4	-549.9	771.9	0.0
			INVS LE~1 Max	I	0.0	0.0	-251.0	-200.9	1088.6	0.0
				J	0.0	0.0	-216.6	-200.9	1613.8	0.0
			Min	I	0.0	0.0	-614.6	-547.7	461.3	0.0
				J	0.0	0.0	-580.1	-547.7	772.9	0.0
			INVS LV Max	I	0.0	0.0	-233.7	-186.9	595.7	0.0
				J	0.0	0.0	-199.2	-186.9	940.5	0.0
			Min	I	0.0	0.0	-362.2	-283.0	390.9	0.0
				J	0.0	0.0	-327.7	-283.0	607.6	0.0
46	4	7	c1-c2--~1 Max	I	0.0	0.0	80.1	14.1	813.2	0.0
				J	0.0	0.0	80.1	14.1	1017.6	0.0
			Min	I	0.0	0.0	-292.0	-324.7	-1.1	0.0
				J	0.0	0.0	-292.0	-324.7	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

	c1-c2--2 Max	I	0.0	0.0	57.8	8.3	539.3	0.0	
		J	0.0	0.0	57.8	8.3	670.6	0.0	
	Min	I	0.0	0.0	-196.0	-207.7	-0.8	0.0	
		J	0.0	0.0	-196.0	-207.7	0.0	0.0	
	SLV-z (RS)	I	0.0	0.0	59.8	55.1	160.7	0.0	
		J	0.0	0.0	59.8	55.1	220.5	0.0	
	G1	I	0.0	0.0	-214.7	-231.1	599.9	0.0	
		J	0.0	0.0	-186.2	-231.1	800.4	0.0	
	G2	I	0.0	0.0	-49.0	-35.1	151.3	0.0	
		J	0.0	0.0	-43.0	-35.1	197.4	0.0	
	q3	I	0.0	0.0	0.1	-0.1	0.1	0.0	
		J	0.0	0.0	0.1	-0.1	-0.1	0.0	
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
		J	0.0	0.0	0.0	0.0	0.0	0.0	
	q5_pc	I	0.0	0.0	-1.2	-9.8	-5.4	0.0	
		J	0.0	0.0	-1.2	-9.8	-4.2	0.0	
	q5_ps	I	0.0	0.0	0.0	0.1	0.1	0.0	
		J	0.0	0.0	0.0	0.1	0.0	0.0	
	Ex	I	0.0	0.0	-0.1	-0.4	-0.1	0.0	
		J	0.0	0.0	-0.1	-0.4	-0.1	0.0	
	Ey	I	0.0	0.0	-0.0	-0.4	-0.2	0.0	
		J	0.0	0.0	-0.0	-0.4	-0.2	0.0	
	INVS LU Max	I	0.0	0.0	-246.8	-331.4	2116.9	0.0	
		J	0.0	0.0	-200.2	-331.4	2724.4	0.0	
	Min	I	0.0	0.0	-751.3	-806.5	1007.9	0.0	
		J	0.0	0.0	-704.8	-806.5	1343.1	0.0	
	INVS LE-R Max	I	0.0	0.0	-182.9	-246.1	1567.7	0.0	
		J	0.0	0.0	-148.4	-246.1	2017.8	0.0	
	Min	I	0.0	0.0	-556.5	-596.8	746.9	0.0	
		J	0.0	0.0	-522.0	-596.8	995.2	0.0	
	INVS LE-F Max	I	0.0	0.0	-183.4	-250.1	1565.6	0.0	
		J	0.0	0.0	-148.9	-250.1	2016.1	0.0	
	Min	I	0.0	0.0	-556.0	-592.8	749.1	0.0	
		J	0.0	0.0	-521.5	-592.8	996.9	0.0	
	INVS LE-1 Max	I	0.0	0.0	-183.6	-252.0	1564.5	0.0	
		J	0.0	0.0	-149.1	-252.0	2015.3	0.0	
	Min	I	0.0	0.0	-555.7	-590.9	750.2	0.0	
		J	0.0	0.0	-521.2	-590.9	997.7	0.0	
	INVS LV Max	I	0.0	0.0	-203.8	-210.8	912.1	0.0	
		J	0.0	0.0	-169.3	-210.8	1218.2	0.0	
	Min	I	0.0	0.0	-323.5	-321.5	590.4	0.0	
		J	0.0	0.0	-289.1	-321.5	777.2	0.0	
47	4	7 c1-c2--1 Max	I	0.0	0.0	102.0	3.8	989.3	0.0
		J	0.0	0.0	102.0	3.8	1154.6	0.0	
	Min	I	0.0	0.0	-271.8	-333.3	0.0	0.0	
		J	0.0	0.0	-271.8	-333.3	0.0	0.0	
	c1-c2--2 Max	I	0.0	0.0	73.3	1.5	652.9	0.0	
		J	0.0	0.0	73.3	1.5	758.1	0.0	
	Min	I	0.0	0.0	-183.0	-213.9	0.0	0.0	
		J	0.0	0.0	-183.0	-213.9	0.0	0.0	
	SLV-z (RS)	I	0.0	0.0	54.2	62.9	214.7	0.0	
		J	0.0	0.0	54.2	62.9	268.7	0.0	
	G1	I	0.0	0.0	-186.7	-255.3	782.6	0.0	
		J	0.0	0.0	-158.3	-255.3	955.1	0.0	
	G2	I	0.0	0.0	-42.6	-42.3	192.3	0.0	
		J	0.0	0.0	-36.6	-42.3	231.9	0.0	
	q3	I	0.0	0.0	0.1	-0.1	0.1	0.0	
		J	0.0	0.0	0.1	-0.1	-0.0	0.0	
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
		J	0.0	0.0	0.0	0.0	0.0	0.0	
	q5_pc	I	0.0	0.0	-1.1	-8.6	-4.2	0.0	
		J	0.0	0.0	-1.1	-8.6	-3.1	0.0	
	q5_ps	I	0.0	0.0	0.0	0.1	0.0	0.0	
		J	0.0	0.0	0.0	0.1	0.0	0.0	
	Ex	I	0.0	0.0	-0.0	-0.3	-0.0	0.0	
		J	0.0	0.0	-0.0	-0.3	0.0	0.0	
	Ey	I	0.0	0.0	-0.0	-0.3	-0.1	0.0	
		J	0.0	0.0	-0.0	-0.3	-0.1	0.0	
	INVS LU Max	I	0.0	0.0	-171.0	-388.7	2655.5	0.0	
		J	0.0	0.0	-124.4	-388.7	3163.9	0.0	
	Min	I	0.0	0.0	-677.5	-859.4	1312.3	0.0	
		J	0.0	0.0	-631.0	-859.4	1599.6	0.0	

Ponte Canale NiE – Relazione di calcolo

			INVSLE-R Max	I	0.0	0.0	-126.7	-288.5	1966.7	0.0
				J	0.0	0.0	-92.2	-288.5	2343.5	0.0
			Min	I	0.0	0.0	-501.8	-636.0	972.4	0.0
				J	0.0	0.0	-467.3	-636.0	1185.1	0.0
			INVSLE-F Max	I	0.0	0.0	-127.2	-292.0	1965.0	0.0
				J	0.0	0.0	-92.7	-292.0	2342.2	0.0
			Min	I	0.0	0.0	-501.4	-632.6	974.1	0.0
				J	0.0	0.0	-466.9	-632.6	1186.4	0.0
			INVSLE~1 Max	I	0.0	0.0	-127.4	-293.7	1964.2	0.0
				J	0.0	0.0	-92.9	-293.7	2341.6	0.0
			Min	I	0.0	0.0	-501.1	-630.8	974.9	0.0
				J	0.0	0.0	-466.7	-630.8	1187.0	0.0
			INVSLV Max	I	0.0	0.0	-175.2	-234.4	1189.6	0.0
				J	0.0	0.0	-140.7	-234.4	1455.8	0.0
			Min	I	0.0	0.0	-283.6	-360.6	760.2	0.0
				J	0.0	0.0	-249.1	-360.6	918.3	0.0
48	4	7	c1-c2--1 Max	I	0.0	0.0	117.1	1.7	1128.1	0.0
				J	0.0	0.0	117.1	1.7	1257.8	0.0
			Min	I	0.0	0.0	-254.2	-336.6	0.0	0.0
				J	0.0	0.0	-254.2	-336.6	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	83.7	0.7	741.6	0.0
				J	0.0	0.0	83.7	0.7	823.3	0.0
			Min	I	0.0	0.0	-171.8	-216.7	0.0	0.0
				J	0.0	0.0	-171.8	-216.7	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	47.4	70.6	263.1	0.0
				J	0.0	0.0	47.4	70.6	310.2	0.0
			G1	I	0.0	0.0	-158.8	-277.6	938.8	0.0
				J	0.0	0.0	-130.3	-277.6	1083.3	0.0
			G2	I	0.0	0.0	-36.1	-49.5	226.9	0.0
				J	0.0	0.0	-30.1	-49.5	260.1	0.0
			q3	I	0.0	0.0	0.1	-0.0	0.1	0.0
				J	0.0	0.0	0.1	-0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-1.0	-7.3	-3.0	0.0
				J	0.0	0.0	-1.0	-7.3	-2.0	0.0
			q5_ps	I	0.0	0.0	0.0	0.1	0.0	0.0
				J	0.0	0.0	0.0	0.1	0.0	0.0
			Ex	I	0.0	0.0	-0.0	-0.2	0.0	0.0
				J	0.0	0.0	-0.0	-0.2	0.0	0.0
			Ey	I	0.0	0.0	0.0	-0.2	-0.1	0.0
				J	0.0	0.0	0.0	-0.2	-0.1	0.0
			INVSLE Max	I	0.0	0.0	-104.2	-432.9	3099.3	0.0
				J	0.0	0.0	-57.6	-432.9	3513.3	0.0
			Min	I	0.0	0.0	-607.2	-902.7	1570.9	0.0
				J	0.0	0.0	-560.6	-902.7	1811.6	0.0
			INVSLE-R Max	I	0.0	0.0	-77.3	-321.1	2295.6	0.0
				J	0.0	0.0	-42.8	-321.1	2602.3	0.0
			Min	I	0.0	0.0	-449.7	-668.2	1163.9	0.0
				J	0.0	0.0	-415.2	-668.2	1342.1	0.0
			INVSLE-F Max	I	0.0	0.0	-77.7	-324.0	2294.4	0.0
				J	0.0	0.0	-43.2	-324.0	2601.5	0.0
			Min	I	0.0	0.0	-449.3	-665.2	1165.1	0.0
				J	0.0	0.0	-414.8	-665.2	1342.9	0.0
			INVSLE~1 Max	I	0.0	0.0	-77.8	-325.5	2293.8	0.0
				J	0.0	0.0	-43.4	-325.5	2601.1	0.0
			Min	I	0.0	0.0	-449.1	-663.8	1165.7	0.0
				J	0.0	0.0	-414.6	-663.8	1343.3	0.0
			INVSLV Max	I	0.0	0.0	-147.5	-256.4	1428.8	0.0
				J	0.0	0.0	-113.0	-256.4	1653.6	0.0
			Min	I	0.0	0.0	-242.3	-397.8	902.5	0.0
				J	0.0	0.0	-207.8	-397.8	1033.1	0.0
49	4	7	c1-c2--1 Max	I	0.0	0.0	127.3	0.3	1234.0	0.0
				J	0.0	0.0	127.3	0.3	1334.2	0.0
			Min	I	0.0	0.0	-238.2	-334.4	0.0	0.0
				J	0.0	0.0	-238.2	-334.4	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	90.6	0.1	808.6	0.0
				J	0.0	0.0	90.6	0.1	871.2	0.0
			Min	I	0.0	0.0	-161.7	-215.6	0.0	0.0
				J	0.0	0.0	-161.7	-215.6	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	39.5	77.7	305.1	0.0
				J	0.0	0.0	39.5	77.7	344.3	0.0
			G1	I	0.0	0.0	-130.7	-297.1	1069.2	0.0
				J	0.0	0.0	-102.2	-297.1	1185.6	0.0
			G2	I	0.0	0.0	-29.6	-56.5	255.2	0.0
				J	0.0	0.0	-23.6	-56.5	281.9	0.0

Ponte Canale NiE – Relazione di calcolo

			q3	I	0.0	0.0	0.1	-0.0	0.1	0.0
				J	0.0	0.0	0.1	-0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.9	-5.9	-1.8	0.0
				J	0.0	0.0	-0.9	-5.9	-0.9	0.0
			q5_ps	I	0.0	0.0	0.0	0.1	0.0	0.0
				J	0.0	0.0	0.0	0.1	0.0	0.0
			Ex	I	0.0	0.0	0.0	-0.1	0.0	0.0
				J	0.0	0.0	0.0	-0.1	0.0	0.0
			Ey	I	0.0	0.0	0.0	-0.1	-0.0	0.0
				J	0.0	0.0	0.0	-0.1	-0.1	0.0
			INVSLU Max	I	0.0	0.0	-43.6	-471.6	3455.6	0.0
				J	0.0	0.0	2.9	-471.6	3783.1	0.0
			Min	I	0.0	0.0	-538.7	-934.1	1786.4	0.0
				J	0.0	0.0	-492.2	-934.1	1980.3	0.0
			INVSLE-R Max	I	0.0	0.0	-32.4	-349.7	2559.6	0.0
				J	0.0	0.0	2.1	-349.7	2802.2	0.0
			Min	I	0.0	0.0	-399.0	-691.5	1323.4	0.0
				J	0.0	0.0	-364.5	-691.5	1467.0	0.0
			INVSLE-F Max	I	0.0	0.0	-32.8	-352.0	2558.8	0.0
				J	0.0	0.0	1.7	-352.0	2801.8	0.0
			Min	I	0.0	0.0	-398.6	-689.2	1324.1	0.0
				J	0.0	0.0	-364.1	-689.2	1467.3	0.0
			INVSLE~1 Max	I	0.0	0.0	-33.0	-353.2	2558.5	0.0
				J	0.0	0.0	1.5	-353.2	2801.7	0.0
			Min	I	0.0	0.0	-398.4	-688.0	1324.5	0.0
				J	0.0	0.0	-364.0	-688.0	1467.5	0.0
			INVSLEV Max	I	0.0	0.0	-120.7	-275.7	1629.6	0.0
				J	0.0	0.0	-86.2	-275.7	1811.9	0.0
			Min	I	0.0	0.0	-199.8	-431.3	1019.3	0.0
				J	0.0	0.0	-165.3	-431.3	1123.1	0.0
50	4	7	c1-c2--1 Max	I	0.0	0.0	139.1	0.0	1313.5	0.0
				J	0.0	0.0	139.1	0.0	1387.3	0.0
			Min	I	0.0	0.0	-222.8	-328.0	0.0	0.0
				J	0.0	0.0	-222.8	-328.0	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	98.7	0.0	858.6	0.0
				J	0.0	0.0	98.7	0.0	904.4	0.0
			Min	I	0.0	0.0	-152.0	-212.2	0.0	0.0
				J	0.0	0.0	-152.0	-212.2	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	30.7	83.9	339.9	0.0
				J	0.0	0.0	30.7	83.9	370.3	0.0
			G1	I	0.0	0.0	-102.3	-312.9	1174.4	0.0
				J	0.0	0.0	-73.9	-312.9	1262.5	0.0
			G2	I	0.0	0.0	-23.0	-62.8	277.5	0.0
				J	0.0	0.0	-17.0	-62.8	297.5	0.0
			q3	I	0.0	0.0	0.1	-0.0	0.1	0.0
				J	0.0	0.0	0.1	-0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.9	-4.4	-0.6	0.0
				J	0.0	0.0	-0.9	-4.4	0.3	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.0	0.0
			Ex	I	0.0	0.0	0.0	-0.1	0.0	0.0
				J	0.0	0.0	0.0	-0.1	0.0	0.0
			Ey	I	0.0	0.0	0.0	-0.1	-0.0	0.0
				J	0.0	0.0	0.0	-0.1	-0.1	0.0
			INVSLU Max	I	0.0	0.0	19.4	-503.2	3733.8	0.0
				J	0.0	0.0	65.9	-503.2	3979.0	0.0
			Min	I	0.0	0.0	-470.8	-953.9	1959.4	0.0
				J	0.0	0.0	-424.3	-953.9	2105.6	0.0
			INVSLE-R Max	I	0.0	0.0	14.3	-373.1	2765.7	0.0
				J	0.0	0.0	48.8	-373.1	2947.4	0.0
			Min	I	0.0	0.0	-348.7	-706.3	1451.5	0.0
				J	0.0	0.0	-314.2	-706.3	1559.7	0.0
			INVSLE-F Max	I	0.0	0.0	13.9	-374.8	2765.5	0.0
				J	0.0	0.0	48.4	-374.8	2947.3	0.0
			Min	I	0.0	0.0	-348.3	-704.5	1451.7	0.0
				J	0.0	0.0	-313.9	-704.5	1559.9	0.0
			INVSLE~1 Max	I	0.0	0.0	13.7	-375.7	2765.3	0.0
				J	0.0	0.0	48.2	-375.7	2947.2	0.0
			Min	I	0.0	0.0	-348.2	-703.7	1451.8	0.0
				J	0.0	0.0	-313.7	-703.7	1559.9	0.0

Ponte Canale NiE – Relazione di calcolo

			INVS LV Max	I	0.0	0.0	-94.6	-291.7	1791.7	0.0
				J	0.0	0.0	-60.1	-291.7	1930.2	0.0
			Min	I	0.0	0.0	-156.1	-459.7	1111.9	0.0
				J	0.0	0.0	-121.6	-459.7	1189.6	0.0
51	4	7	c1-c2--1 Max	I	0.0	0.0	150.7	0.0	1369.6	0.0
				J	0.0	0.0	150.7	0.0	1419.6	0.0
			Min	I	0.0	0.0	-208.2	-324.6	0.0	0.0
				J	0.0	0.0	-208.2	-324.6	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	106.1	0.0	893.7	0.0
				J	0.0	0.0	106.1	0.0	924.7	0.0
			Min	I	0.0	0.0	-142.7	-209.8	0.0	0.0
				J	0.0	0.0	-142.7	-209.8	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	21.1	89.1	366.7	0.0
				J	0.0	0.0	21.1	89.1	387.5	0.0
			G1	I	0.0	0.0	-73.8	-324.5	1254.3	0.0
				J	0.0	0.0	-45.3	-324.5	1313.9	0.0
			G2	I	0.0	0.0	-16.3	-68.5	293.6	0.0
				J	0.0	0.0	-10.3	-68.5	306.9	0.0
			q3	I	0.0	0.0	0.1	-0.0	0.1	0.0
				J	0.0	0.0	0.1	-0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.9	-2.9	0.7	0.0
				J	0.0	0.0	-0.9	-2.9	1.6	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.0	0.0
			Ex	I	0.0	0.0	0.0	-0.1	0.0	0.0
				J	0.0	0.0	0.0	-0.1	0.0	0.0
			Ey	I	0.0	0.0	0.0	-0.0	-0.1	0.0
				J	0.0	0.0	0.0	-0.0	-0.1	0.0
			INVSLU Max	I	0.0	0.0	82.6	-527.9	3939.3	0.0
				J	0.0	0.0	129.1	-527.9	4106.0	0.0
			Min	I	0.0	0.0	-403.5	-971.4	2089.1	0.0
				J	0.0	0.0	-356.9	-971.4	2186.7	0.0
			INVSLE-R Max	I	0.0	0.0	61.1	-391.2	2917.9	0.0
				J	0.0	0.0	95.6	-391.2	3041.3	0.0
			Min	I	0.0	0.0	-298.8	-719.3	1547.6	0.0
				J	0.0	0.0	-264.3	-719.3	1619.9	0.0
			INVSLE-F Max	I	0.0	0.0	60.7	-392.4	2917.7	0.0
				J	0.0	0.0	95.2	-392.4	3040.7	0.0
			Min	I	0.0	0.0	-298.5	-718.2	1547.8	0.0
				J	0.0	0.0	-264.0	-718.2	1620.5	0.0
			INVSLE~1 Max	I	0.0	0.0	60.5	-393.0	2917.5	0.0
				J	0.0	0.0	95.0	-393.0	3040.4	0.0
			Min	I	0.0	0.0	-298.3	-717.6	1547.9	0.0
				J	0.0	0.0	-263.8	-717.6	1620.8	0.0
			INVS LV Max	I	0.0	0.0	-69.0	-303.9	1914.6	0.0
				J	0.0	0.0	-34.6	-303.9	2008.3	0.0
			Min	I	0.0	0.0	-111.2	-482.1	1181.3	0.0
				J	0.0	0.0	-76.7	-482.1	1233.3	0.0
52	4	7	c1-c2--1 Max	I	0.0	0.0	162.0	0.0	1405.1	0.0
				J	0.0	0.0	162.0	0.0	1432.0	0.0
			Min	I	0.0	0.0	-193.7	-321.2	0.0	0.0
				J	0.0	0.0	-193.7	-321.2	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	113.2	0.0	916.0	0.0
				J	0.0	0.0	113.2	0.0	932.6	0.0
			Min	I	0.0	0.0	-133.5	-208.4	0.0	0.0
				J	0.0	0.0	-133.5	-208.4	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	10.9	92.9	384.8	0.0
				J	0.0	0.0	10.9	92.9	395.5	0.0
			G1	I	0.0	0.0	-45.0	-331.7	1309.1	0.0
				J	0.0	0.0	-16.5	-331.7	1339.8	0.0
			G2	I	0.0	0.0	-9.6	-73.2	303.7	0.0
				J	0.0	0.0	-3.6	-73.2	310.4	0.0
			q3	I	0.0	0.0	0.1	-0.0	0.1	0.0
				J	0.0	0.0	0.1	-0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.9	-1.4	2.0	0.0
				J	0.0	0.0	-0.9	-1.4	2.9	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.0	0.0
			Ex	I	0.0	0.0	0.0	-0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	0.0	-0.0	0.0	0.0
			I	0.0	0.0	0.0	-0.0	-0.1	0.0
			J	0.0	0.0	0.0	-0.0	-0.1	0.0
			I	0.0	0.0	145.7	-545.3	4076.0	0.0
			J	0.0	0.0	192.3	-545.3	4163.5	0.0
			I	0.0	0.0	-336.1	-981.5	2175.5	0.0
			J	0.0	0.0	-289.5	-981.5	2225.1	0.0
			I	0.0	0.0	107.9	-404.0	3019.1	0.0
			J	0.0	0.0	142.4	-404.0	3083.9	0.0
			I	0.0	0.0	-248.9	-726.9	1611.6	0.0
			J	0.0	0.0	-214.4	-726.9	1648.5	0.0
			I	0.0	0.0	107.5	-404.6	3018.3	0.0
			J	0.0	0.0	142.0	-404.6	3082.7	0.0
			I	0.0	0.0	-248.5	-726.4	1612.4	0.0
			J	0.0	0.0	-214.0	-726.4	1649.6	0.0
			I	0.0	0.0	107.3	-404.9	3018.0	0.0
			J	0.0	0.0	141.8	-404.9	3082.2	0.0
			I	0.0	0.0	-248.3	-726.1	1612.8	0.0
			J	0.0	0.0	-213.8	-726.1	1650.2	0.0
			I	0.0	0.0	-43.7	-312.0	1997.7	0.0
			J	0.0	0.0	-9.2	-312.0	2045.7	0.0
			I	0.0	0.0	-65.6	-497.8	1228.0	0.0
			J	0.0	0.0	-31.1	-497.8	1254.7	0.0
53	4	7	I	0.0	0.0	173.6	0.0	1420.6	0.0
			J	0.0	0.0	173.6	0.0	1424.1	0.0
			I	0.0	0.0	-179.6	-326.0	0.0	0.0
			J	0.0	0.0	-179.6	-326.0	0.0	0.0
			I	0.0	0.0	120.5	0.0	925.8	0.0
			J	0.0	0.0	120.5	0.0	927.8	0.0
			I	0.0	0.0	-124.4	-210.1	0.0	0.0
			J	0.0	0.0	-124.4	-210.1	0.0	0.0
			I	0.0	0.0	2.2	95.3	393.9	0.0
			J	0.0	0.0	2.2	95.3	394.1	0.0
			I	0.0	0.0	-16.0	-334.2	1338.5	0.0
			J	0.0	0.0	12.5	-334.2	1340.2	0.0
			I	0.0	0.0	-2.9	-76.9	307.9	0.0
			J	0.0	0.0	3.1	-76.9	307.8	0.0
			I	0.0	0.0	0.1	-0.0	0.1	0.0
			J	0.0	0.0	0.1	-0.0	-0.0	0.0
			I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
			I	0.0	0.0	-0.9	0.0	3.3	0.0
			J	0.0	0.0	-0.9	0.0	4.2	0.0
			I	0.0	0.0	0.0	0.0	-0.0	0.0
			J	0.0	0.0	0.0	0.0	-0.1	0.0
			I	0.0	0.0	0.0	-0.0	0.0	0.0
			J	0.0	0.0	0.0	-0.0	0.0	0.0
			I	0.0	0.0	0.0	0.0	-0.1	0.0
			J	0.0	0.0	0.0	0.0	-0.1	0.0
			I	0.0	0.0	209.7	-555.0	4143.4	0.0
			J	0.0	0.0	256.3	-555.0	4151.0	0.0
			I	0.0	0.0	-268.7	-995.2	2219.5	0.0
			J	0.0	0.0	-222.1	-995.2	2220.8	0.0
			I	0.0	0.0	155.3	-411.1	3069.0	0.0
			J	0.0	0.0	189.8	-411.1	3074.6	0.0
			I	0.0	0.0	-199.0	-737.2	1644.3	0.0
			J	0.0	0.0	-164.5	-737.2	1645.4	0.0
			I	0.0	0.0	154.9	-411.1	3067.6	0.0
			J	0.0	0.0	189.4	-411.1	3072.9	0.0
			I	0.0	0.0	-198.6	-737.2	1645.7	0.0
			J	0.0	0.0	-164.1	-737.2	1647.1	0.0
			I	0.0	0.0	154.7	-411.1	3067.0	0.0
			J	0.0	0.0	189.2	-411.1	3072.0	0.0
			I	0.0	0.0	-198.4	-737.2	1646.3	0.0
			J	0.0	0.0	-163.9	-737.2	1647.9	0.0
			I	0.0	0.0	-16.7	-315.8	2040.3	0.0
			J	0.0	0.0	17.8	-315.8	2042.1	0.0
			I	0.0	0.0	-21.0	-506.4	1252.4	0.0
			J	0.0	0.0	13.4	-506.4	1253.8	0.0
54	4	7	I	0.0	0.0	185.6	0.0	1416.0	0.0
			J	0.0	0.0	185.6	0.0	1396.6	0.0
			I	0.0	0.0	-165.9	-326.4	0.0	0.0
			J	0.0	0.0	-165.9	-326.4	0.0	0.0
			I	0.0	0.0	128.0	0.0	923.1	0.0
			J	0.0	0.0	128.0	0.0	910.9	0.0
			I	0.0	0.0	-115.6	-208.9	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

		J	0.0	0.0	-115.6	-208.9	0.0	0.0
		I	0.0	0.0	10.7	96.1	393.6	0.0
		J	0.0	0.0	10.7	96.1	383.3	0.0
		I	0.0	0.0	13.2	-332.0	1342.2	0.0
		J	0.0	0.0	41.7	-332.0	1314.8	0.0
		I	0.0	0.0	3.9	-79.5	306.0	0.0
		J	0.0	0.0	9.9	-79.5	299.1	0.0
		I	0.0	0.0	0.1	-0.0	0.1	0.0
		J	0.0	0.0	0.1	-0.0	-0.0	0.0
		I	0.0	0.0	0.0	0.0	0.0	0.0
		J	0.0	0.0	0.0	0.0	0.0	0.0
		I	0.0	0.0	-0.9	1.4	4.7	0.0
		J	0.0	0.0	-0.9	1.4	5.6	0.0
		I	0.0	0.0	0.0	-0.0	-0.1	0.0
		J	0.0	0.0	0.0	-0.0	-0.1	0.0
		I	0.0	0.0	0.0	-0.0	0.0	0.0
		J	0.0	0.0	0.0	-0.0	0.0	0.0
		I	0.0	0.0	0.0	0.1	-0.1	0.0
		J	0.0	0.0	0.0	0.1	-0.1	0.0
		I	0.0	0.0	274.5	-554.3	4141.0	0.0
		J	0.0	0.0	321.0	-554.3	4069.3	0.0
		I	0.0	0.0	-201.6	-997.5	2220.9	0.0
		J	0.0	0.0	-155.1	-997.5	2173.7	0.0
		I	0.0	0.0	203.2	-410.7	3067.1	0.0
		J	0.0	0.0	237.7	-410.7	3013.9	0.0
		I	0.0	0.0	-149.3	-738.8	1645.4	0.0
		J	0.0	0.0	-114.8	-738.8	1610.6	0.0
		I	0.0	0.0	202.9	-411.3	3065.2	0.0
		J	0.0	0.0	237.4	-411.3	3011.7	0.0
		I	0.0	0.0	-148.9	-738.3	1647.3	0.0
		J	0.0	0.0	-114.5	-738.3	1612.8	0.0
		I	0.0	0.0	202.7	-411.6	3064.3	0.0
		J	0.0	0.0	237.2	-411.6	3010.6	0.0
		I	0.0	0.0	-148.8	-738.0	1648.3	0.0
		J	0.0	0.0	-114.3	-738.0	1613.9	0.0
		I	0.0	0.0	27.8	-315.4	2042.0	0.0
		J	0.0	0.0	62.3	-315.4	1997.3	0.0
		I	0.0	0.0	6.4	-507.7	1254.6	0.0
		J	0.0	0.0	40.9	-507.7	1230.5	0.0
55	4	I	0.0	0.0	198.5	0.0	1393.6	0.0
		J	0.0	0.0	198.5	0.0	1350.4	0.0
		I	0.0	0.0	-152.4	-322.4	0.0	0.0
		J	0.0	0.0	-152.4	-322.4	0.0	0.0
		I	0.0	0.0	135.9	0.0	909.5	0.0
		J	0.0	0.0	135.9	0.0	882.5	0.0
		I	0.0	0.0	-106.8	-204.9	0.0	0.0
		J	0.0	0.0	-106.8	-204.9	0.0	0.0
		I	0.0	0.0	20.9	95.5	384.0	0.0
		J	0.0	0.0	20.9	95.5	363.5	0.0
		I	0.0	0.0	42.5	-325.2	1320.2	0.0
		J	0.0	0.0	71.0	-325.2	1263.4	0.0
		I	0.0	0.0	10.6	-81.0	298.2	0.0
		J	0.0	0.0	16.6	-81.0	284.6	0.0
		I	0.0	0.0	0.1	-0.0	0.1	0.0
		J	0.0	0.0	0.1	-0.0	-0.0	0.0
		I	0.0	0.0	0.0	0.0	0.0	0.0
		J	0.0	0.0	0.0	0.0	0.0	0.0
		I	0.0	0.0	-0.8	2.8	6.1	0.0
		J	0.0	0.0	-0.8	2.8	6.9	0.0
		I	0.0	0.0	0.0	-0.0	-0.1	0.0
		J	0.0	0.0	0.0	-0.0	-0.1	0.0
		I	0.0	0.0	0.0	-0.0	0.0	0.0
		J	0.0	0.0	0.0	-0.0	0.0	0.0
		I	0.0	0.0	0.0	0.1	-0.1	0.0
		J	0.0	0.0	0.0	0.1	-0.1	0.0
		I	0.0	0.0	340.4	-545.8	4071.8	0.0
		J	0.0	0.0	387.0	-545.8	3919.1	0.0
		I	0.0	0.0	-134.6	-986.0	2179.4	0.0
		J	0.0	0.0	-88.1	-986.0	2083.6	0.0
		I	0.0	0.0	252.1	-404.5	3015.7	0.0
		J	0.0	0.0	286.6	-404.5	2902.6	0.0
		I	0.0	0.0	-99.7	-730.2	1614.8	0.0
		J	0.0	0.0	-65.2	-730.2	1543.9	0.0

Ponte Canale NiE – Relazione di calcolo

			INVSLE-F Max	I	0.0	0.0	251.8	-405.6	3013.3	0.0
				J	0.0	0.0	286.3	-405.6	2899.8	0.0
			Min	I	0.0	0.0	-99.4	-729.1	1617.2	0.0
				J	0.0	0.0	-64.9	-729.1	1546.7	0.0
			INVSLE~1 Max	I	0.0	0.0	251.6	-406.2	3012.1	0.0
				J	0.0	0.0	286.1	-406.2	2898.4	0.0
			Min	I	0.0	0.0	-99.2	-728.5	1618.4	0.0
				J	0.0	0.0	-64.7	-728.5	1548.0	0.0
			INVSLEV Max	I	0.0	0.0	74.1	-310.7	2002.5	0.0
				J	0.0	0.0	108.5	-310.7	1911.5	0.0
			Min	I	0.0	0.0	32.3	-501.7	1234.4	0.0
				J	0.0	0.0	66.7	-501.7	1184.5	0.0
56	4	7	c1-c2--1 Max	I	0.0	0.0	212.4	0.0	1350.6	0.0
				J	0.0	0.0	212.4	0.0	1283.3	0.0
			Min	I	0.0	0.0	-139.6	-314.3	0.0	0.0
				J	0.0	0.0	-139.6	-314.3	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	144.5	0.0	883.1	0.0
				J	0.0	0.0	144.5	0.0	841.1	0.0
			Min	I	0.0	0.0	-98.4	-198.4	0.0	0.0
				J	0.0	0.0	-98.4	-198.4	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	30.6	93.3	365.2	0.0
				J	0.0	0.0	30.6	93.3	335.0	0.0
			G1	I	0.0	0.0	71.9	-313.8	1272.1	0.0
				J	0.0	0.0	100.4	-313.8	1186.0	0.0
			G2	I	0.0	0.0	17.3	-81.3	284.5	0.0
				J	0.0	0.0	23.3	-81.3	264.2	0.0
			q3	I	0.0	0.0	0.1	0.0	0.1	0.0
				J	0.0	0.0	0.1	0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.6	4.0	7.5	0.0
				J	0.0	0.0	-0.6	4.0	8.1	0.0
			q5_ps	I	0.0	0.0	0.0	-0.0	-0.1	0.0
				J	0.0	0.0	0.0	-0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.1	-0.1	0.0
				J	0.0	0.0	-0.0	0.1	-0.1	0.0
			INVSLEU Max	I	0.0	0.0	407.8	-529.7	3931.4	0.0
				J	0.0	0.0	454.3	-529.7	3697.4	0.0
			Min	I	0.0	0.0	-68.6	-961.3	2094.6	0.0
				J	0.0	0.0	-22.1	-961.3	1950.3	0.0
			INVSLE-R Max	I	0.0	0.0	302.0	-392.7	2911.7	0.0
				J	0.0	0.0	336.5	-392.7	2738.3	0.0
			Min	I	0.0	0.0	-50.8	-711.8	1552.1	0.0
				J	0.0	0.0	-16.3	-711.8	1445.3	0.0
			INVSLE-F Max	I	0.0	0.0	301.7	-394.3	2908.7	0.0
				J	0.0	0.0	336.2	-394.3	2735.0	0.0
			Min	I	0.0	0.0	-50.6	-710.2	1555.1	0.0
				J	0.0	0.0	-16.1	-710.2	1448.5	0.0
			INVSLE~1 Max	I	0.0	0.0	301.6	-395.1	2907.2	0.0
				J	0.0	0.0	336.1	-395.1	2733.4	0.0
			Min	I	0.0	0.0	-50.4	-709.4	1556.6	0.0
				J	0.0	0.0	-15.9	-709.4	1450.1	0.0
			INVSLEV Max	I	0.0	0.0	119.8	-301.7	1921.8	0.0
				J	0.0	0.0	154.3	-301.7	1785.1	0.0
			Min	I	0.0	0.0	58.6	-488.4	1191.4	0.0
				J	0.0	0.0	93.1	-488.4	1115.2	0.0
57	4	7	c1-c2--1 Max	I	0.0	0.0	227.2	14.6	1285.3	0.0
				J	0.0	0.0	227.2	14.6	1193.1	0.0
			Min	I	0.0	0.0	-126.2	-304.4	0.0	0.0
				J	0.0	0.0	-126.2	-304.4	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	153.5	9.6	842.6	0.0
				J	0.0	0.0	153.5	9.6	785.0	0.0
			Min	I	0.0	0.0	-89.5	-190.6	0.0	0.0
				J	0.0	0.0	-89.5	-190.6	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	39.5	89.8	337.6	0.0
				J	0.0	0.0	39.5	89.8	298.4	0.0
			G1	I	0.0	0.0	101.2	-298.2	1197.6	0.0
				J	0.0	0.0	129.6	-298.2	1082.2	0.0
			G2	I	0.0	0.0	23.9	-80.3	264.8	0.0
				J	0.0	0.0	29.9	-80.3	237.9	0.0
			q3	I	0.0	0.0	0.1	0.0	0.1	0.0
				J	0.0	0.0	0.1	0.0	-0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.4	5.1	8.7	0.0	0.0
				J	0.0	0.0	-0.4	5.1	9.1	0.0	0.0
			q5_ps	I	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0
				J	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.2	-0.1	0.0	0.0
				J	0.0	0.0	-0.0	0.2	-0.0	0.0	0.0
			INVSLU Max	I	0.0	0.0	475.9	-486.7	3717.2	0.0	0.0
				J	0.0	0.0	522.4	-486.7	3401.0	0.0	0.0
			Min	I	0.0	0.0	-1.9	-926.6	1966.5	0.0	0.0
				J	0.0	0.0	44.6	-926.6	1773.9	0.0	0.0
			INVSLE-R Max	I	0.0	0.0	352.5	-360.8	2752.9	0.0	0.0
				J	0.0	0.0	387.0	-360.8	2518.6	0.0	0.0
			Min	I	0.0	0.0	-1.4	-686.0	1457.2	0.0	0.0
				J	0.0	0.0	33.1	-686.0	1314.7	0.0	0.0
			INVSLE-F Max	I	0.0	0.0	352.3	-362.9	2749.4	0.0	0.0
				J	0.0	0.0	386.8	-362.9	2515.0	0.0	0.0
			Min	I	0.0	0.0	-1.2	-684.0	1460.7	0.0	0.0
				J	0.0	0.0	33.2	-684.0	1318.3	0.0	0.0
			INVSLE~1 Max	I	0.0	0.0	352.2	-363.9	2747.7	0.0	0.0
				J	0.0	0.0	386.7	-363.9	2513.2	0.0	0.0
			Min	I	0.0	0.0	-1.2	-682.9	1462.4	0.0	0.0
				J	0.0	0.0	33.3	-682.9	1320.1	0.0	0.0
			INVSLV Max	I	0.0	0.0	164.6	-288.7	1800.1	0.0	0.0
				J	0.0	0.0	199.1	-288.7	1618.6	0.0	0.0
			Min	I	0.0	0.0	85.6	-468.3	1124.8	0.0	0.0
				J	0.0	0.0	120.0	-468.3	1021.7	0.0	0.0
58	4	7	c1-c2--1 Max	I	0.0	0.0	243.0	42.0	1196.9	0.0	0.0
				J	0.0	0.0	243.0	42.0	1076.9	0.0	0.0
			Min	I	0.0	0.0	-110.7	-297.0	0.0	0.0	0.0
				J	0.0	0.0	-110.7	-297.0	0.0	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	163.4	26.5	787.4	0.0	0.0
				J	0.0	0.0	163.4	26.5	712.3	0.0	0.0
			Min	I	0.0	0.0	-79.0	-184.4	0.0	0.0	0.0
				J	0.0	0.0	-79.0	-184.4	0.0	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	47.5	85.0	302.0	0.0	0.0
				J	0.0	0.0	47.5	85.0	254.7	0.0	0.0
			G1	I	0.0	0.0	130.3	-278.8	1096.4	0.0	0.0
				J	0.0	0.0	158.8	-278.8	951.9	0.0	0.0
			G2	I	0.0	0.0	30.4	-78.2	239.3	0.0	0.0
				J	0.0	0.0	36.4	-78.2	205.9	0.0	0.0
			q3	I	0.0	0.0	0.1	0.0	0.1	0.0	0.0
				J	0.0	0.0	0.1	0.0	-0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.1	6.2	9.7	0.0	0.0
				J	0.0	0.0	-0.1	6.2	9.8	0.0	0.0
			q5_ps	I	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0
				J	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.3	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	0.3	0.0	0.0	0.0
			INVSLU Max	I	0.0	0.0	545.1	-419.6	3427.8	0.0	0.0
				J	0.0	0.0	591.7	-419.6	3025.7	0.0	0.0
			Min	I	0.0	0.0	67.4	-888.4	1794.6	0.0	0.0
				J	0.0	0.0	113.9	-888.4	1554.2	0.0	0.0
			INVSLE-R Max	I	0.0	0.0	403.8	-311.3	2538.4	0.0	0.0
				J	0.0	0.0	438.3	-311.3	2240.6	0.0	0.0
			Min	I	0.0	0.0	49.9	-657.7	1330.0	0.0	0.0
				J	0.0	0.0	84.4	-657.7	1151.9	0.0	0.0
			INVSLE-F Max	I	0.0	0.0	403.8	-313.7	2534.6	0.0	0.0
				J	0.0	0.0	438.2	-313.7	2236.7	0.0	0.0
			Min	I	0.0	0.0	50.0	-655.2	1333.8	0.0	0.0
				J	0.0	0.0	84.4	-655.2	1155.8	0.0	0.0
			INVSLE~1 Max	I	0.0	0.0	403.7	-315.0	2532.6	0.0	0.0
				J	0.0	0.0	438.2	-315.0	2234.7	0.0	0.0
			Min	I	0.0	0.0	50.0	-654.0	1335.8	0.0	0.0
				J	0.0	0.0	84.5	-654.0	1157.8	0.0	0.0
			INVSLV Max	I	0.0	0.0	208.2	-271.9	1637.7	0.0	0.0
				J	0.0	0.0	242.7	-271.9	1412.5	0.0	0.0
			Min	I	0.0	0.0	113.2	-442.1	1033.8	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	147.7	-442.1	903.1	0.0	
59	4	7	c1-c2--1 Max	I	0.0	0.0	260.3	68.9	1095.2	0.0
				J	0.0	0.0	260.3	68.9	943.9	0.0
			Min	I	0.0	0.0	-92.3	-287.1	0.0	0.0
				J	0.0	0.0	-92.3	-287.1	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	174.2	43.2	720.1	0.0
				J	0.0	0.0	174.2	43.2	620.3	0.0
			Min	I	0.0	0.0	-66.3	-176.9	0.0	0.0
				J	0.0	0.0	-66.3	-176.9	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	54.3	79.2	258.9	0.0
				J	0.0	0.0	54.3	79.2	204.7	0.0
			G1	I	0.0	0.0	159.2	-256.4	968.2	0.0
				J	0.0	0.0	187.7	-256.4	794.7	0.0
			G2	I	0.0	0.0	36.7	-75.0	208.0	0.0
				J	0.0	0.0	42.7	-75.0	168.3	0.0
			q3	I	0.0	0.0	0.1	0.0	0.1	0.0
				J	0.0	0.0	0.1	0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	0.3	7.1	10.3	0.0
				J	0.0	0.0	0.3	7.1	10.1	0.0
			q5_ps	I	0.0	0.0	-0.0	-0.1	-0.1	0.0
				J	0.0	0.0	-0.0	-0.1	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	0.0	0.0	0.0
				J	0.0	0.0	-0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.4	0.1	0.0
				J	0.0	0.0	-0.0	0.4	0.1	0.0
			INVSU Max	I	0.0	0.0	616.3	-348.0	3075.7	0.0
				J	0.0	0.0	662.8	-348.0	2583.3	0.0
			Min	I	0.0	0.0	139.7	-841.4	1578.5	0.0
				J	0.0	0.0	186.3	-841.4	1290.8	0.0
			INVSLE-R Max	I	0.0	0.0	456.5	-258.3	2277.6	0.0
				J	0.0	0.0	491.0	-258.3	1912.9	0.0
			Min	I	0.0	0.0	103.5	-622.8	1169.9	0.0
				J	0.0	0.0	138.0	-622.8	956.9	0.0
			INVSLE-F Max	I	0.0	0.0	456.4	-261.1	2273.5	0.0
				J	0.0	0.0	490.8	-261.1	1908.9	0.0
			Min	I	0.0	0.0	103.7	-620.0	1174.1	0.0
				J	0.0	0.0	138.1	-620.0	960.9	0.0
			INVSLE-1 Max	I	0.0	0.0	456.3	-262.5	2271.4	0.0
				J	0.0	0.0	490.8	-262.5	1906.9	0.0
			Min	I	0.0	0.0	103.7	-618.6	1176.2	0.0
				J	0.0	0.0	138.2	-618.6	962.9	0.0
			INVSLE Max	I	0.0	0.0	250.3	-252.1	1435.1	0.0
				J	0.0	0.0	284.8	-252.1	1167.6	0.0
			Min	I	0.0	0.0	141.6	-410.8	917.2	0.0
				J	0.0	0.0	176.1	-410.8	758.2	0.0
60	4	7	c1-c2--1 Max	I	0.0	0.0	280.0	93.7	970.0	0.0
				J	0.0	0.0	280.0	93.7	783.5	0.0
			Min	I	0.0	0.0	-69.6	-274.3	-0.0	0.0
				J	0.0	0.0	-69.6	-274.3	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	186.7	58.7	640.3	0.0
				J	0.0	0.0	186.7	58.7	520.4	0.0
			Min	I	0.0	0.0	-50.3	-167.6	-0.0	0.0
				J	0.0	0.0	-50.3	-167.6	-0.0	0.0
			SLV-z (RS)	I	0.0	0.0	60.0	72.9	209.3	0.0
				J	0.0	0.0	60.0	72.9	149.4	0.0
			G1	I	0.0	0.0	187.9	-232.1	812.2	0.0
				J	0.0	0.0	216.4	-232.1	610.0	0.0
			G2	I	0.0	0.0	42.9	-71.0	170.9	0.0
				J	0.0	0.0	48.9	-71.0	125.0	0.0
			q3	I	0.0	0.0	0.1	0.0	0.1	0.0
				J	0.0	0.0	0.1	0.0	-0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	0.8	7.8	10.6	0.0
				J	0.0	0.0	0.8	7.8	9.9	0.0
			q5_ps	I	0.0	0.0	-0.0	-0.1	-0.1	0.0
				J	0.0	0.0	-0.0	-0.1	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	0.1	0.0	0.0
				J	0.0	0.0	-0.0	0.1	0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.6	0.2	0.0
				J	0.0	0.0	-0.0	0.6	0.2	0.0

Ponte Canale NiE – Relazione di calcolo

			INVS LU Max	I	0.0	0.0	690.4	-275.6	2646.2	0.0
				J	0.0	0.0	736.9	-275.6	2058.8	0.0
			Min	I	0.0	0.0	217.0	-786.4	1317.6	0.0
				J	0.0	0.0	263.6	-786.4	983.3	0.0
			INVS LE-R Max	I	0.0	0.0	511.3	-204.6	1959.4	0.0
				J	0.0	0.0	545.8	-204.6	1524.4	0.0
			Min	I	0.0	0.0	160.8	-582.0	976.7	0.0
				J	0.0	0.0	195.3	-582.0	729.1	0.0
			INVS LE-F Max	I	0.0	0.0	511.0	-207.8	1955.2	0.0
				J	0.0	0.0	545.5	-207.8	1520.4	0.0
			Min	I	0.0	0.0	161.1	-578.9	980.9	0.0
				J	0.0	0.0	195.6	-578.9	733.0	0.0
			INVS LE~1 Max	I	0.0	0.0	510.9	-209.3	1953.1	0.0
				J	0.0	0.0	545.4	-209.3	1518.4	0.0
			Min	I	0.0	0.0	161.3	-577.3	983.1	0.0
				J	0.0	0.0	195.7	-577.3	735.0	0.0
			INVS LV Max	I	0.0	0.0	290.8	-230.0	1192.4	0.0
				J	0.0	0.0	325.3	-230.0	884.4	0.0
			Min	I	0.0	0.0	170.8	-376.1	773.7	0.0
				J	0.0	0.0	205.3	-376.1	585.5	0.0
61	4	7	c1-c2--1 Max	I	0.0	0.0	302.9	118.0	810.3	0.0
				J	0.0	0.0	302.9	118.0	583.1	0.0
			Min	I	0.0	0.0	-36.4	-257.2	-0.0	0.0
				J	0.0	0.0	-36.4	-257.2	-11.3	0.0
			c1-c2--2 Max	I	0.0	0.0	201.5	74.4	537.8	0.0
				J	0.0	0.0	201.5	74.4	390.2	0.0
			Min	I	0.0	0.0	-26.5	-155.5	-0.0	0.0
				J	0.0	0.0	-26.5	-155.5	-7.4	0.0
			SLV-z(RS)	I	0.0	0.0	64.3	66.3	154.0	0.0
				J	0.0	0.0	64.3	66.3	89.8	0.0
			G1	I	0.0	0.0	216.4	-207.4	627.6	0.0
				J	0.0	0.0	244.9	-207.4	397.0	0.0
			G2	I	0.0	0.0	48.9	-66.3	128.0	0.0
				J	0.0	0.0	54.9	-66.3	76.1	0.0
			q3	I	0.0	0.0	0.1	0.0	0.1	0.0
				J	0.0	0.0	0.1	0.0	-0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	1.3	8.4	10.4	0.0
				J	0.0	0.0	1.3	8.4	9.1	0.0
			q5_ps	I	0.0	0.0	-0.0	-0.1	-0.1	0.0
				J	0.0	0.0	-0.0	-0.1	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	0.1	0.0	0.0
				J	0.0	0.0	-0.0	0.1	0.0	0.0
			Ey	I	0.0	0.0	-0.1	1.0	0.4	0.0
				J	0.0	0.0	-0.1	1.0	0.5	0.0
			INVS LU Max	I	0.0	0.0	768.2	-202.7	2123.3	0.0
				J	0.0	0.0	814.8	-202.7	1433.9	0.0
			Min	I	0.0	0.0	307.8	-724.2	1010.7	0.0
				J	0.0	0.0	354.4	-724.2	615.1	0.0
			INVS LE-R Max	I	0.0	0.0	569.0	-150.7	1572.1	0.0
				J	0.0	0.0	603.4	-150.7	1061.6	0.0
			Min	I	0.0	0.0	228.1	-535.9	749.3	0.0
				J	0.0	0.0	262.6	-535.9	456.2	0.0
			INVS LE-F Max	I	0.0	0.0	568.5	-154.0	1568.0	0.0
				J	0.0	0.0	602.9	-154.0	1057.9	0.0
			Min	I	0.0	0.0	228.6	-532.6	753.5	0.0
				J	0.0	0.0	263.1	-532.6	459.9	0.0
			INVS LE~1 Max	I	0.0	0.0	568.2	-155.7	1565.9	0.0
				J	0.0	0.0	602.7	-155.7	1056.1	0.0
			Min	I	0.0	0.0	228.9	-530.9	755.6	0.0
				J	0.0	0.0	263.3	-530.9	461.7	0.0
			INVS LV Max	I	0.0	0.0	329.6	-207.1	909.7	0.0
				J	0.0	0.0	364.1	-207.1	563.0	0.0
			Min	I	0.0	0.0	201.0	-340.4	601.4	0.0
				J	0.0	0.0	235.5	-340.4	383.1	0.0
62	4	7	c1-c2--1 Max	I	0.0	0.0	330.6	137.9	609.1	0.0
				J	0.0	0.0	330.6	137.9	341.8	0.0
			Min	I	0.0	0.0	-12.9	-237.3	-8.9	0.0
				J	0.0	0.0	-12.9	-237.3	-58.5	0.0
			c1-c2--2 Max	I	0.0	0.0	219.5	87.4	407.3	0.0
				J	0.0	0.0	219.5	87.4	230.8	0.0
			Min	I	0.0	0.0	-9.6	-141.5	-5.8	0.0
				J	0.0	0.0	-9.6	-141.5	-35.9	0.0
			SLV-z(RS)	I	0.0	0.0	67.1	60.2	94.1	0.0
				J	0.0	0.0	67.1	60.2	27.3	0.0

Ponte Canale NiE – Relazione di calcolo

				G1	I	0.0	0.0	244.6	-184.7	413.1	0.0
					J	0.0	0.0	273.1	-184.7	154.2	0.0
				G2	I	0.0	0.0	54.8	-61.5	79.1	0.0
					J	0.0	0.0	60.8	-61.5	21.3	0.0
				q3	I	0.0	0.0	0.2	0.1	0.1	0.0
					J	0.0	0.0	0.2	0.1	-0.1	0.0
				q4	I	0.0	0.0	0.0	0.0	0.0	0.0
					J	0.0	0.0	0.0	0.0	0.0	0.0
				q5_pc	I	0.0	0.0	1.8	8.7	9.5	0.0
					J	0.0	0.0	1.8	8.7	7.8	0.0
				q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
					J	0.0	0.0	-0.0	-0.0	-0.1	0.0
				Ex	I	0.0	0.0	-0.0	0.1	0.1	0.0
					J	0.0	0.0	-0.0	0.1	0.1	0.0
				Ey	I	0.0	0.0	-0.0	1.6	0.8	0.0
					J	0.0	0.0	-0.0	1.6	0.9	0.0
				INVSLE Max	I	0.0	0.0	852.1	-138.3	1495.3	0.0
					J	0.0	0.0	898.7	-138.3	705.4	0.0
				Min	I	0.0	0.0	385.2	-660.5	644.0	0.0
					J	0.0	0.0	431.8	-660.5	151.0	0.0
				INVSLE-R Max	I	0.0	0.0	631.1	-103.0	1107.0	0.0
					J	0.0	0.0	665.6	-103.0	522.0	0.0
				Min	I	0.0	0.0	285.5	-488.7	477.6	0.0
					J	0.0	0.0	319.9	-488.7	112.4	0.0
				INVSLE-F Max	I	0.0	0.0	630.4	-106.5	1103.2	0.0
					J	0.0	0.0	664.8	-106.5	518.9	0.0
				Min	I	0.0	0.0	286.2	-485.2	481.5	0.0
					J	0.0	0.0	320.6	-485.2	115.5	0.0
				INVSLE~1 Max	I	0.0	0.0	630.0	-108.2	1101.3	0.0
					J	0.0	0.0	664.5	-108.2	517.3	0.0
				Min	I	0.0	0.0	286.5	-483.5	483.4	0.0
					J	0.0	0.0	321.0	-483.5	117.1	0.0
				INVSLEV Max	I	0.0	0.0	366.6	-185.4	586.6	0.0
					J	0.0	0.0	401.0	-185.4	203.2	0.0
				Min	I	0.0	0.0	232.2	-306.8	397.8	0.0
					J	0.0	0.0	266.7	-306.8	147.9	0.0
63	4	7	c1-c2--~1	Max	I	13.1	4.8	370.5	149.0	362.0	13.0
					J	13.1	4.8	370.5	149.0	110.5	12.8
				Min	I	-13.6	-2.4	0.0	-226.2	-51.0	-16.2
					J	-13.6	-2.4	0.0	-226.2	-166.9	-19.0
				c1-c2--~2	Max	9.2	3.0	246.8	94.9	244.1	7.8
					J	9.2	3.0	246.8	94.9	70.4	7.7
				Min	I	-9.4	-1.7	0.0	-134.5	-31.3	-10.4
					J	-9.4	-1.7	0.0	-134.5	-99.8	-12.2
				SLV-z(RS)	I	1.0	1.4	68.5	55.2	30.7	2.1
					J	1.0	1.4	68.5	55.2	38.5	0.9
				G1	I	2.9	4.7	272.9	-167.0	166.7	4.6
					J	2.9	4.7	301.3	-167.0	-120.4	-0.1
				G2	I	1.3	1.1	60.6	-57.0	24.1	2.4
					J	1.3	1.1	66.6	-57.0	-39.5	1.3
				q3	I	3.1	-13.8	0.2	0.1	0.1	-13.7
					J	3.1	-13.8	0.2	0.1	-0.1	0.2
				q4	I	0.0	0.0	0.0	0.0	0.0	0.0
					J	0.0	0.0	0.0	0.0	0.0	0.0
				q5_pc	I	3.5	-20.8	2.2	8.8	8.1	-20.6
					J	3.5	-20.8	2.2	8.8	5.9	0.2
				q5_ps	I	1.7	-6.7	-0.0	-0.0	-0.0	-6.7
					J	1.7	-6.7	-0.0	-0.0	-0.0	0.1
				Ex	I	3.9	-15.1	-0.0	0.2	0.1	-14.9
					J	3.9	-15.1	-0.0	0.2	0.1	0.1
				Ey	I	54.3	-237.0	-0.0	2.6	1.5	-234.3
					J	54.3	-237.0	-0.0	2.6	1.5	2.6
				INVSLE Max	I	26.6	33.0	952.2	-93.4	753.4	45.6
					J	26.6	33.0	998.8	-93.4	-61.4	19.2
				Min	I	-15.9	-31.8	448.2	-615.6	181.3	-41.5
					J	-15.9	-31.8	494.7	-615.6	-446.6	-24.1
				INVSLE-R Max	I	19.4	23.0	705.2	-69.8	557.5	32.4
					J	19.4	23.0	739.7	-69.8	-45.9	14.2
				Min	I	-11.6	-9.1	332.1	-455.4	134.9	-21.6
					J	-11.6	-9.1	366.6	-455.4	-330.4	-17.8
				INVSLE-F Max	I	18.0	14.7	704.4	-73.3	554.3	24.2
					J	18.0	14.7	738.8	-73.3	-48.3	14.1
				Min	I	-10.2	-0.8	333.0	-451.9	138.1	-13.3

Ponte Canale NiE – Relazione di calcolo

		J	-10.2	-0.8	367.5	-451.9	-328.1	-17.7		
		INVSLE~1 Max	I	17.3	10.6	703.9	-75.1	552.7	20.1	
			J	17.3	10.6	738.4	-75.1	-49.4	14.1	
		Min	I	-9.5	3.4	333.4	-450.2	139.7	-9.2	
			J	-9.5	3.4	367.9	-450.2	-326.9	-17.7	
		INVSLE~1 Max	I	60.0	247.7	402.0	-168.0	221.9	246.5	
			J	60.0	247.7	436.4	-168.0	-120.9	4.2	
		Min	I	-51.6	-236.1	264.9	-280.1	159.5	-232.4	
			J	-51.6	-236.1	299.4	-280.1	-198.9	-1.7	
64	4	7 c1-c2~1	Max	I	22.3	4.8	0.0	86.6	70.0	15.7
			J	22.3	4.8	0.0	86.6	315.3	13.4	
		Min	I	-7.4	-3.4	-386.7	-329.8	-232.4	-18.5	
			J	-7.4	-3.4	-386.7	-329.8	-98.6	-21.5	
		c1-c2~2	Max	I	14.4	3.1	0.0	53.0	43.5	9.9
			J	14.4	3.1	0.0	53.0	215.3	8.4	
		Min	I	-5.3	-2.4	-257.2	-206.9	-146.7	-11.6	
			J	-5.3	-2.4	-257.2	-206.9	-62.8	-13.5	
		SLV-z(RS)	I	2.7	0.6	67.7	36.1	25.1	0.8	
			J	2.7	0.6	67.7	36.1	43.3	0.6	
		G1	I	11.6	2.4	-301.4	-167.1	-120.5	-0.4	
			J	11.6	2.4	-272.9	-167.1	166.6	-2.7	
		G2	I	2.0	0.4	-64.6	-18.8	-12.9	1.3	
			J	2.0	0.4	-58.6	-18.8	48.7	0.9	
		q3	I	94.9	-0.3	0.0	0.1	0.1	0.1	
			J	94.9	-0.3	0.0	0.1	0.1	0.4	
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	I	17.5	24.9	-1.8	-6.7	-5.1	0.8	
			J	17.5	24.9	-1.8	-6.7	-3.2	-24.1	
		q5_ps	I	5.6	8.3	0.0	0.1	0.1	0.4	
			J	5.6	8.3	0.0	0.1	0.0	-7.9	
		Ex	I	458.1	30.8	0.1	0.4	0.4	1.3	
			J	458.1	30.8	0.1	0.4	0.3	-29.5	
		Ey	I	107.2	192.3	0.1	0.3	0.2	9.4	
			J	107.2	192.3	0.1	0.3	0.1	-182.9	
		INVSLE~1 Max	I	181.6	32.5	-492.4	-128.1	-81.2	23.2	
			J	181.6	32.5	-445.8	-128.1	719.2	37.2	
		Min	I	-7.4	-23.1	-1017.7	-702.2	-498.5	-24.4	
			J	-7.4	-23.1	-971.2	-702.2	154.7	-53.1	
		INVSLE~R	Max	I	46.4	22.5	-364.9	-95.4	-60.5	17.1
			J	46.4	22.5	-330.4	-95.4	532.5	26.0	
		Min	I	-4.3	-15.5	-753.8	-519.7	-369.0	-18.0	
			J	-4.3	-15.5	-719.3	-519.7	114.8	-37.7	
		INVSLE~F	Max	I	39.4	12.5	-365.6	-98.0	-62.5	16.8
			J	39.4	12.5	-331.1	-98.0	531.2	16.4	
		Min	I	2.7	-5.5	-753.0	-517.1	-366.9	-17.7	
			J	2.7	-5.5	-718.5	-517.1	116.1	-28.1	
		INVSLE~1 Max	I	35.9	7.5	-366.0	-99.4	-63.5	16.7	
			J	35.9	7.5	-331.5	-99.4	530.6	11.5	
		Min	I	6.2	-0.6	-752.7	-515.7	-365.9	-17.6	
			J	6.2	-0.6	-718.2	-515.7	116.7	-23.3	
		INVSLE~1 Max	I	504.6	204.5	-298.3	-149.7	-108.1	10.9	
			J	504.6	204.5	-263.8	-149.7	258.7	190.1	
		Min	I	-477.4	-198.9	-433.7	-222.2	-158.8	-9.0	
			J	-477.4	-198.9	-399.3	-222.2	171.9	-193.8	
65	4	7 c1-c2~1	Max	I	0.0	0.0	1.1	81.5	325.9	0.0
			J	0.0	0.0	1.1	81.5	575.8	0.0	
		Min	I	0.0	0.0	-333.4	-347.1	-105.3	0.0	
			J	0.0	0.0	-333.4	-347.1	-24.9	0.0	
		c1-c2~2	Max	I	0.0	0.0	0.9	49.8	224.2	0.0
			J	0.0	0.0	0.9	49.8	387.5	0.0	
		Min	I	0.0	0.0	-221.6	-218.4	-67.3	0.0	
			J	0.0	0.0	-221.6	-218.4	-16.4	0.0	
		SLV-z(RS)	I	0.0	0.0	66.2	40.6	40.1	0.0	
			J	0.0	0.0	66.2	40.6	106.1	0.0	
		G1	I	0.0	0.0	-273.1	-184.7	154.2	0.0	
			J	0.0	0.0	-244.6	-184.7	413.1	0.0	
		G2	I	0.0	0.0	-58.6	-22.5	46.3	0.0	
			J	0.0	0.0	-52.6	-22.5	102.0	0.0	
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	I	0.0	0.0	-1.8	-6.6	-3.6	0.0	

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-1.8	-6.6	-1.8	0.0
		q5_ps	I	0.0	0.0	0.0	0.1	0.0	0.0
			J	0.0	0.0	0.0	0.1	0.0	0.0
		Ex	I	0.0	0.0	0.1	0.1	0.1	0.0
			J	0.0	0.0	0.1	0.1	0.0	0.0
		Ey	I	0.0	0.0	0.1	-0.0	0.0	0.0
			J	0.0	0.0	0.1	-0.0	-0.1	0.0
		INVSLE Max	I	0.0	0.0	-444.7	-163.8	713.8	0.0
			J	0.0	0.0	-398.2	-163.8	1474.2	0.0
		Min	I	0.0	0.0	-899.5	-754.2	125.3	0.0
			J	0.0	0.0	-853.0	-754.2	660.0	0.0
		INVSLE-R Max	I	0.0	0.0	-329.5	-121.7	528.5	0.0
			J	0.0	0.0	-295.0	-121.7	1091.9	0.0
		Min	I	0.0	0.0	-666.2	-558.2	93.1	0.0
			J	0.0	0.0	-631.7	-558.2	489.0	0.0
		INVSLE-F Max	I	0.0	0.0	-330.2	-124.4	527.1	0.0
			J	0.0	0.0	-295.7	-124.4	1091.2	0.0
		Min	I	0.0	0.0	-665.5	-555.6	94.5	0.0
			J	0.0	0.0	-631.0	-555.6	489.7	0.0
		INVSLE~1 Max	I	0.0	0.0	-330.6	-125.7	526.4	0.0
			J	0.0	0.0	-296.1	-125.7	1090.8	0.0
		Min	I	0.0	0.0	-665.2	-554.3	95.2	0.0
			J	0.0	0.0	-630.7	-554.3	490.1	0.0
		INVSLEV Max	I	0.0	0.0	-265.5	-166.6	240.7	0.0
			J	0.0	0.0	-231.0	-166.6	621.1	0.0
		Min	I	0.0	0.0	-398.0	-247.8	160.3	0.0
			J	0.0	0.0	-363.5	-247.8	408.9	0.0
66	4	7 c1-c2--1 Max	I	0.0	0.0	12.9	67.0	579.8	0.0
			J	0.0	0.0	12.9	67.0	782.6	0.0
		Min	I	0.0	0.0	-293.8	-363.4	-27.5	0.0
			J	0.0	0.0	-293.8	-363.4	0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	9.4	40.8	392.5	0.0
			J	0.0	0.0	9.4	40.8	520.8	0.0
		Min	I	0.0	0.0	-195.5	-229.7	-18.1	0.0
			J	0.0	0.0	-195.5	-229.7	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	63.2	46.9	101.6	0.0
			J	0.0	0.0	63.2	46.9	164.7	0.0
		G1	I	0.0	0.0	-244.9	-207.4	397.0	0.0
			J	0.0	0.0	-216.4	-207.4	627.6	0.0
		G2	I	0.0	0.0	-52.5	-27.8	98.4	0.0
			J	0.0	0.0	-46.5	-27.8	147.9	0.0
		q3	I	0.0	0.0	0.0	0.0	-0.0	0.0
			J	0.0	0.0	0.0	0.0	-0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-1.7	-6.3	-2.1	0.0
			J	0.0	0.0	-1.7	-6.3	-0.4	0.0
		q5_ps	I	0.0	0.0	0.0	0.1	0.0	0.0
			J	0.0	0.0	0.0	0.1	-0.0	0.0
		Ex	I	0.0	0.0	0.1	-0.0	-0.1	0.0
			J	0.0	0.0	0.1	-0.0	-0.1	0.0
		Ey	I	0.0	0.0	0.0	-0.1	-0.1	0.0
			J	0.0	0.0	0.0	-0.1	-0.1	0.0
		INVSLE Max	I	0.0	0.0	-382.5	-221.4	1453.3	0.0
			J	0.0	0.0	-335.9	-221.4	2103.7	0.0
		Min	I	0.0	0.0	-799.5	-813.9	629.6	0.0
			J	0.0	0.0	-753.0	-813.9	1046.5	0.0
		INVSLE-R Max	I	0.0	0.0	-283.4	-164.4	1076.4	0.0
			J	0.0	0.0	-248.9	-164.4	1558.3	0.0
		Min	I	0.0	0.0	-592.1	-602.5	466.5	0.0
			J	0.0	0.0	-557.6	-602.5	775.2	0.0
		INVSLE-F Max	I	0.0	0.0	-284.1	-167.0	1075.5	0.0
			J	0.0	0.0	-249.6	-167.0	1558.1	0.0
		Min	I	0.0	0.0	-591.5	-599.9	467.4	0.0
			J	0.0	0.0	-557.0	-599.9	775.4	0.0
		INVSLE~1 Max	I	0.0	0.0	-284.4	-168.2	1075.1	0.0
			J	0.0	0.0	-249.9	-168.2	1558.0	0.0
		Min	I	0.0	0.0	-591.1	-598.7	467.8	0.0
			J	0.0	0.0	-556.6	-598.7	775.4	0.0
		INVSLEV Max	I	0.0	0.0	-234.2	-188.3	597.0	0.0
			J	0.0	0.0	-199.7	-188.3	940.2	0.0
		Min	I	0.0	0.0	-360.6	-282.2	393.7	0.0
			J	0.0	0.0	-326.1	-282.2	610.6	0.0
67	4	7 c1-c2--1 Max	I	0.0	0.0	35.9	46.9	783.4	0.0
			J	0.0	0.0	35.9	46.9	947.9	0.0

Ponte Canale NiE – Relazione di calcolo

			Min	I	0.0	0.0	-265.5	-373.5	0.0	0.0	
				J	0.0	0.0	-265.5	-373.5	0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	25.7	28.4	523.5	0.0	
				J	0.0	0.0	25.7	28.4	626.0	0.0	
			Min	I	0.0	0.0	-176.9	-236.8	0.0	0.0	
				J	0.0	0.0	-176.9	-236.8	0.0	0.0	
		SLV-z(RS)		I	0.0	0.0	58.7	54.2	159.5	0.0	
				J	0.0	0.0	58.7	54.2	218.1	0.0	
		G1		I	0.0	0.0	-216.4	-232.1	610.0	0.0	
				J	0.0	0.0	-187.9	-232.1	812.2	0.0	
		G2		I	0.0	0.0	-46.3	-34.1	143.5	0.0	
				J	0.0	0.0	-40.3	-34.1	186.9	0.0	
		q3		I	0.0	0.0	0.0	-0.0	-0.0	0.0	
				J	0.0	0.0	0.0	-0.0	-0.0	0.0	
		q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc		I	0.0	0.0	-1.6	-6.0	-0.6	0.0	
				J	0.0	0.0	-1.6	-6.0	1.0	0.0	
		q5_ps		I	0.0	0.0	0.0	0.1	0.0	0.0	
				J	0.0	0.0	0.0	0.1	-0.0	0.0	
		Ex		I	0.0	0.0	0.0	-0.1	-0.1	0.0	
				J	0.0	0.0	0.0	-0.1	-0.1	0.0	
		Ey		I	0.0	0.0	0.0	-0.1	-0.1	0.0	
				J	0.0	0.0	0.0	-0.1	-0.1	0.0	
		INVSLU	Max	I	0.0	0.0	-304.8	-290.7	2075.4	0.0	
				J	0.0	0.0	-258.2	-290.7	2629.3	0.0	
			Min	I	0.0	0.0	-714.5	-868.9	1016.7	0.0	
				J	0.0	0.0	-668.0	-868.9	1347.7	0.0	
		INVSLE-R	Max	I	0.0	0.0	-225.9	-215.7	1537.3	0.0	
				J	0.0	0.0	-191.4	-215.7	1947.5	0.0	
			Min	I	0.0	0.0	-529.2	-643.3	753.2	0.0	
				J	0.0	0.0	-494.7	-643.3	998.4	0.0	
		INVSLE-F	Max	I	0.0	0.0	-226.5	-218.1	1537.0	0.0	
				J	0.0	0.0	-192.0	-218.1	1947.1	0.0	
			Min	I	0.0	0.0	-528.5	-640.9	753.4	0.0	
				J	0.0	0.0	-494.0	-640.9	998.8	0.0	
		INVSLE~1	Max	I	0.0	0.0	-226.8	-219.3	1536.9	0.0	
				J	0.0	0.0	-192.3	-219.3	1946.9	0.0	
			Min	I	0.0	0.0	-528.2	-639.7	753.5	0.0	
				J	0.0	0.0	-493.7	-639.7	999.0	0.0	
		INVSLV	Max	I	0.0	0.0	-204.0	-211.9	913.1	0.0	
				J	0.0	0.0	-169.5	-211.9	1217.2	0.0	
			Min	I	0.0	0.0	-321.5	-320.5	594.0	0.0	
				J	0.0	0.0	-287.0	-320.5	780.8	0.0	
68	4	7	c1-c2--1	Max	I	0.0	0.0	61.8	22.9	947.3	0.0
				J	0.0	0.0	61.8	22.9	1082.6	0.0	
			Min	I	0.0	0.0	-243.1	-376.7	0.0	0.0	
				J	0.0	0.0	-243.1	-376.7	0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	44.1	13.6	627.6	0.0	
				J	0.0	0.0	44.1	13.6	711.4	0.0	
			Min	I	0.0	0.0	-162.4	-239.5	0.0	0.0	
				J	0.0	0.0	-162.4	-239.5	0.0	0.0	
		SLV-z(RS)		I	0.0	0.0	52.9	61.9	212.6	0.0	
				J	0.0	0.0	52.9	61.9	265.5	0.0	
		G1		I	0.0	0.0	-187.7	-256.4	794.7	0.0	
				J	0.0	0.0	-159.2	-256.4	968.2	0.0	
		G2		I	0.0	0.0	-40.1	-40.9	182.2	0.0	
				J	0.0	0.0	-34.1	-40.9	219.3	0.0	
		q3		I	0.0	0.0	-0.0	-0.0	-0.0	0.0	
				J	0.0	0.0	-0.0	-0.0	-0.0	0.0	
		q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc		I	0.0	0.0	-1.5	-5.5	0.9	0.0	
				J	0.0	0.0	-1.5	-5.5	2.5	0.0	
		q5_ps		I	0.0	0.0	0.0	0.1	-0.0	0.0	
				J	0.0	0.0	0.0	0.1	-0.0	0.0	
		Ex		I	0.0	0.0	-0.0	-0.1	-0.1	0.0	
				J	0.0	0.0	-0.0	-0.1	-0.1	0.0	
		Ey		I	0.0	0.0	-0.0	-0.1	-0.1	0.0	
				J	0.0	0.0	-0.0	-0.1	-0.1	0.0	
		INVSLU	Max	I	0.0	0.0	-222.8	-365.5	2598.5	0.0	
				J	0.0	0.0	-176.2	-365.5	3066.8	0.0	
			Min	I	0.0	0.0	-637.1	-914.8	1317.9	0.0	

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-590.5	-914.8	1600.8	0.0
		INVSLE-R Max	I	0.0	0.0	-165.1	-271.1	1924.7	0.0
			J	0.0	0.0	-130.6	-271.1	2271.5	0.0
		Min	I	0.0	0.0	-471.8	-677.2	976.3	0.0
			J	0.0	0.0	-437.3	-677.2	1186.0	0.0
		INVSLE-F Max	I	0.0	0.0	-165.7	-273.3	1924.4	0.0
			J	0.0	0.0	-131.2	-273.3	2270.6	0.0
		Min	I	0.0	0.0	-471.2	-675.1	976.7	0.0
			J	0.0	0.0	-436.7	-675.1	1187.0	0.0
		INVSLE~1 Max	I	0.0	0.0	-166.0	-274.4	1924.2	0.0
			J	0.0	0.0	-131.5	-274.4	2270.1	0.0
		Min	I	0.0	0.0	-470.9	-674.0	976.9	0.0
			J	0.0	0.0	-436.4	-674.0	1187.5	0.0
		INVSLEV Max	I	0.0	0.0	-174.9	-235.3	1189.6	0.0
			J	0.0	0.0	-140.4	-235.3	1453.0	0.0
		Min	I	0.0	0.0	-280.8	-359.3	764.2	0.0
			J	0.0	0.0	-246.3	-359.3	921.9	0.0
69	4	7 c1-c2--~1 Max	I	0.0	0.0	79.9	3.5	1076.0	0.0
			J	0.0	0.0	79.9	3.5	1189.5	0.0
		Min	I	0.0	0.0	-224.1	-377.5	0.0	0.0
			J	0.0	0.0	-224.1	-377.5	0.0	0.0
		c1-c2--~2 Max	I	0.0	0.0	56.7	1.7	708.4	0.0
			J	0.0	0.0	56.7	1.7	778.9	0.0
		Min	I	0.0	0.0	-150.2	-240.9	0.0	0.0
			J	0.0	0.0	-150.2	-240.9	0.0	0.0
		SLV-z (RS)	I	0.0	0.0	45.9	69.4	260.0	0.0
			J	0.0	0.0	45.9	69.4	305.9	0.0
		G1	I	0.0	0.0	-158.8	-278.8	951.9	0.0
			J	0.0	0.0	-130.3	-278.8	1096.4	0.0
		G2	I	0.0	0.0	-33.8	-47.6	214.6	0.0
			J	0.0	0.0	-27.8	-47.6	245.4	0.0
		q3	I	0.0	0.0	-0.0	-0.0	-0.0	0.0
			J	0.0	0.0	-0.0	-0.0	-0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-1.4	-4.9	2.4	0.0
			J	0.0	0.0	-1.4	-4.9	3.8	0.0
		q5_ps	I	0.0	0.0	0.0	0.1	-0.0	0.0
			J	0.0	0.0	0.0	0.1	-0.0	0.0
		Ex	I	0.0	0.0	-0.0	-0.1	-0.1	0.0
			J	0.0	0.0	-0.0	-0.1	-0.1	0.0
		Ey	I	0.0	0.0	-0.0	-0.1	-0.1	0.0
			J	0.0	0.0	-0.0	-0.1	-0.1	0.0
		INVSLEU Max	I	0.0	0.0	-150.8	-431.6	3029.6	0.0
			J	0.0	0.0	-104.2	-431.6	3420.8	0.0
		Min	I	0.0	0.0	-563.8	-954.7	1572.6	0.0
			J	0.0	0.0	-517.3	-954.7	1808.1	0.0
		INVSLE-R Max	I	0.0	0.0	-111.8	-320.0	2244.0	0.0
			J	0.0	0.0	-77.3	-320.0	2533.7	0.0
		Min	I	0.0	0.0	-417.5	-706.9	1165.1	0.0
			J	0.0	0.0	-383.1	-706.9	1339.6	0.0
		INVSLE-F Max	I	0.0	0.0	-112.3	-322.0	2243.0	0.0
			J	0.0	0.0	-77.9	-322.0	2532.2	0.0
		Min	I	0.0	0.0	-417.0	-704.9	1166.1	0.0
			J	0.0	0.0	-382.5	-704.9	1341.1	0.0
		INVSLE~1 Max	I	0.0	0.0	-112.6	-323.0	2242.5	0.0
			J	0.0	0.0	-78.1	-323.0	2531.4	0.0
		Min	I	0.0	0.0	-416.7	-704.0	1166.5	0.0
			J	0.0	0.0	-382.2	-704.0	1341.9	0.0
		INVSLEV Max	I	0.0	0.0	-146.6	-257.0	1426.6	0.0
			J	0.0	0.0	-112.1	-257.0	1647.8	0.0
		Min	I	0.0	0.0	-238.5	-395.9	906.4	0.0
			J	0.0	0.0	-204.0	-395.9	1035.9	0.0
70	4	7 c1-c2--~1 Max	I	0.0	0.0	94.2	0.7	1181.3	0.0
			J	0.0	0.0	94.2	0.7	1273.1	0.0
		Min	I	0.0	0.0	-206.7	-375.0	0.0	0.0
			J	0.0	0.0	-206.7	-375.0	0.0	0.0
		c1-c2--~2 Max	I	0.0	0.0	66.4	0.3	774.4	0.0
			J	0.0	0.0	66.4	0.3	831.6	0.0
		Min	I	0.0	0.0	-139.1	-239.9	0.0	0.0
			J	0.0	0.0	-139.1	-239.9	0.0	0.0
		SLV-z (RS)	I	0.0	0.0	37.9	76.3	300.8	0.0
			J	0.0	0.0	37.9	76.3	338.6	0.0
		G1	I	0.0	0.0	-129.6	-298.2	1082.2	0.0
			J	0.0	0.0	-101.2	-298.2	1197.6	0.0

Ponte Canale NiE – Relazione di calcolo

			G2	I	0.0	0.0	-27.4	-54.0	241.0	0.0
				J	0.0	0.0	-21.4	-54.0	265.4	0.0
			q3	I	0.0	0.0	-0.0	-0.0	-0.0	0.0
				J	0.0	0.0	-0.0	-0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-1.3	-4.2	3.8	0.0
				J	0.0	0.0	-1.3	-4.2	5.1	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	-0.1	-0.1	0.0
				J	0.0	0.0	-0.0	-0.1	-0.1	0.0
			Ey	I	0.0	0.0	-0.0	-0.1	-0.1	0.0
				J	0.0	0.0	-0.0	-0.1	-0.1	0.0
			INVSLU Max	I	0.0	0.0	-83.8	-470.7	3384.5	0.0
				J	0.0	0.0	-37.2	-470.7	3698.4	0.0
			Min	I	0.0	0.0	-492.3	-985.5	1782.8	0.0
				J	0.0	0.0	-445.7	-985.5	1970.4	0.0
			INVSLE-R Max	I	0.0	0.0	-62.1	-348.9	2506.8	0.0
				J	0.0	0.0	-27.6	-348.9	2739.2	0.0
			Min	I	0.0	0.0	-364.6	-729.7	1320.9	0.0
				J	0.0	0.0	-330.1	-729.7	1459.9	0.0
			INVSLE-F Max	I	0.0	0.0	-62.6	-350.6	2505.3	0.0
				J	0.0	0.0	-28.2	-350.6	2737.1	0.0
			Min	I	0.0	0.0	-364.0	-728.1	1322.4	0.0
				J	0.0	0.0	-329.6	-728.1	1462.0	0.0
			INVSLE~1 Max	I	0.0	0.0	-62.9	-351.5	2504.5	0.0
				J	0.0	0.0	-28.4	-351.5	2736.1	0.0
			Min	I	0.0	0.0	-363.8	-727.2	1323.2	0.0
				J	0.0	0.0	-329.3	-727.2	1463.0	0.0
			INVSLEV Max	I	0.0	0.0	-119.2	-275.8	1624.0	0.0
				J	0.0	0.0	-84.7	-275.8	1801.6	0.0
			Min	I	0.0	0.0	-195.0	-428.6	1022.3	0.0
				J	0.0	0.0	-160.5	-428.6	1124.4	0.0
71	4	7	c1-c2--1 Max	I	0.0	0.0	108.1	0.0	1265.0	0.0
				J	0.0	0.0	108.1	0.0	1336.0	0.0
			Min	I	0.0	0.0	-190.4	-367.4	0.0	0.0
				J	0.0	0.0	-190.4	-367.4	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	75.8	0.0	826.8	0.0
				J	0.0	0.0	75.8	0.0	871.3	0.0
			Min	I	0.0	0.0	-128.8	-235.3	0.0	0.0
				J	0.0	0.0	-128.8	-235.3	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	28.9	82.3	334.2	0.0
				J	0.0	0.0	28.9	82.3	363.0	0.0
			G1	I	0.0	0.0	-100.4	-313.8	1186.0	0.0
				J	0.0	0.0	-71.9	-313.8	1272.1	0.0
			G2	I	0.0	0.0	-21.1	-59.8	261.3	0.0
				J	0.0	0.0	-15.1	-59.8	279.4	0.0
			q3	I	0.0	0.0	-0.0	-0.0	-0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-1.2	-3.5	5.2	0.0
				J	0.0	0.0	-1.2	-3.5	6.4	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	-0.0	-0.0	0.0
				J	0.0	0.0	-0.0	-0.0	-0.0	0.0
			Ey	I	0.0	0.0	-0.0	-0.1	-0.0	0.0
				J	0.0	0.0	-0.0	-0.1	-0.0	0.0
			INVSLE Max	I	0.0	0.0	-16.9	-501.3	3666.2	0.0
				J	0.0	0.0	29.7	-501.3	3903.7	0.0
			Min	I	0.0	0.0	-422.0	-1003.5	1949.2	0.0
				J	0.0	0.0	-375.4	-1003.5	2088.8	0.0
			INVSLE-R Max	I	0.0	0.0	-12.6	-371.6	2715.4	0.0
				J	0.0	0.0	21.9	-371.6	2891.2	0.0
			Min	I	0.0	0.0	-312.5	-743.1	1444.2	0.0
				J	0.0	0.0	-278.0	-743.1	1547.6	0.0
			INVSLE-F Max	I	0.0	0.0	-13.0	-373.0	2713.3	0.0
				J	0.0	0.0	21.4	-373.0	2888.7	0.0
			Min	I	0.0	0.0	-312.0	-741.7	1446.2	0.0
				J	0.0	0.0	-277.5	-741.7	1550.2	0.0
			INVSLE~1 Max	I	0.0	0.0	-13.3	-373.7	2712.3	0.0
				J	0.0	0.0	21.2	-373.7	2887.4	0.0

Ponte Canale NiE – Relazione di calcolo

			Min	I	0.0	0.0	-311.8	-741.0	1447.3	0.0
				J	0.0	0.0	-277.3	-741.0	1551.5	0.0
			INVS LV Max	I	0.0	0.0	-92.5	-291.3	1781.5	0.0
				J	0.0	0.0	-58.0	-291.3	1914.4	0.0
			Min	I	0.0	0.0	-150.3	-456.0	1113.1	0.0
				J	0.0	0.0	-115.9	-456.0	1188.5	0.0
72	4	7	c1-c2--1 Max	I	0.0	0.0	122.8	0.0	1331.4	0.0
				J	0.0	0.0	122.8	0.0	1381.1	0.0
			Min	I	0.0	0.0	-174.8	-353.9	0.0	0.0
				J	0.0	0.0	-174.8	-353.9	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	85.7	0.0	868.8	0.0
				J	0.0	0.0	85.7	0.0	900.2	0.0
			Min	I	0.0	0.0	-118.8	-226.8	0.0	0.0
				J	0.0	0.0	-118.8	-226.8	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	19.3	87.2	359.3	0.0
				J	0.0	0.0	19.3	87.2	378.5	0.0
			G1	I	0.0	0.0	-71.0	-325.2	1263.4	0.0
				J	0.0	0.0	-42.5	-325.2	1320.2	0.0
			G2	I	0.0	0.0	-14.7	-64.9	275.8	0.0
				J	0.0	0.0	-8.7	-64.9	287.5	0.0
			q3	I	0.0	0.0	-0.0	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-1.0	-2.8	6.5	0.0
				J	0.0	0.0	-1.0	-2.8	7.5	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	-0.0	-0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	-0.0	-0.0	0.0
				J	0.0	0.0	-0.0	-0.0	-0.0	0.0
			INVS LU Max	I	0.0	0.0	50.9	-524.1	3881.1	0.0
				J	0.0	0.0	97.5	-524.1	4041.5	0.0
			Min	I	0.0	0.0	-352.6	-1006.8	2072.1	0.0
				J	0.0	0.0	-306.0	-1006.8	2163.6	0.0
			INVS LE-R Max	I	0.0	0.0	37.7	-388.4	2874.5	0.0
				J	0.0	0.0	72.1	-388.4	2993.2	0.0
			Min	I	0.0	0.0	-261.1	-745.6	1535.3	0.0
				J	0.0	0.0	-226.6	-745.6	1603.2	0.0
			INVS LE-F Max	I	0.0	0.0	37.3	-389.6	2871.9	0.0
				J	0.0	0.0	71.7	-389.6	2990.2	0.0
			Min	I	0.0	0.0	-260.7	-744.5	1537.9	0.0
				J	0.0	0.0	-226.2	-744.5	1606.2	0.0
			INVS LE~1 Max	I	0.0	0.0	37.1	-390.1	2870.6	0.0
				J	0.0	0.0	71.5	-390.1	2988.7	0.0
			Min	I	0.0	0.0	-260.5	-744.0	1539.2	0.0
				J	0.0	0.0	-226.0	-744.0	1607.7	0.0
			INVS LV Max	I	0.0	0.0	-66.4	-302.9	1898.6	0.0
				J	0.0	0.0	-31.9	-302.9	1986.2	0.0
			Min	I	0.0	0.0	-105.0	-477.3	1179.9	0.0
				J	0.0	0.0	-70.5	-477.3	1229.2	0.0
73	4	7	c1-c2--1 Max	I	0.0	0.0	137.3	0.0	1385.4	0.0
				J	0.0	0.0	137.3	0.0	1413.3	0.0
			Min	I	0.0	0.0	-160.0	-334.4	0.0	0.0
				J	0.0	0.0	-160.0	-334.4	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	95.3	0.0	903.9	0.0
				J	0.0	0.0	95.3	0.0	921.8	0.0
			Min	I	0.0	0.0	-109.2	-214.4	0.0	0.0
				J	0.0	0.0	-109.2	-214.4	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	9.3	90.8	375.8	0.0
				J	0.0	0.0	9.3	90.8	385.0	0.0
			G1	I	0.0	0.0	-41.7	-332.0	1314.8	0.0
				J	0.0	0.0	-13.2	-332.0	1342.2	0.0
			G2	I	0.0	0.0	-8.4	-69.1	284.5	0.0
				J	0.0	0.0	-2.4	-69.1	289.8	0.0
			q3	I	0.0	0.0	-0.0	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.8	-2.0	7.6	0.0
				J	0.0	0.0	-0.8	-2.0	8.5	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0

Ponte Canale NiE – Relazione di calcolo

			Ex	I	0.0	0.0	-0.0	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			INVSLE Max	I	0.0	0.0	118.5	-539.7	4036.1	0.0
				J	0.0	0.0	165.0	-539.7	4118.9	0.0
			Min	I	0.0	0.0	-284.3	-994.8	2152.1	0.0
				J	0.0	0.0	-237.8	-994.8	2195.7	0.0
			INVSLE-R Max	I	0.0	0.0	87.7	-399.9	2989.2	0.0
				J	0.0	0.0	122.2	-399.9	3050.5	0.0
			Min	I	0.0	0.0	-210.5	-736.8	1594.7	0.0
				J	0.0	0.0	-176.1	-736.8	1627.0	0.0
			INVSLE-F Max	I	0.0	0.0	87.4	-400.7	2986.1	0.0
				J	0.0	0.0	121.8	-400.7	3047.1	0.0
			Min	I	0.0	0.0	-210.2	-735.9	1597.7	0.0
				J	0.0	0.0	-175.7	-735.9	1630.4	0.0
			INVSLE~1 Max	I	0.0	0.0	87.2	-401.1	2984.6	0.0
				J	0.0	0.0	121.7	-401.1	3045.4	0.0
			Min	I	0.0	0.0	-210.0	-735.5	1599.3	0.0
				J	0.0	0.0	-175.5	-735.5	1632.1	0.0
			INVSLEV Max	I	0.0	0.0	-40.7	-310.4	1975.1	0.0
				J	0.0	0.0	-6.3	-310.4	2017.1	0.0
			Min	I	0.0	0.0	-59.4	-491.9	1223.4	0.0
				J	0.0	0.0	-24.9	-491.9	1247.1	0.0
74	4	7	c1-c2--1 Max	I	0.0	0.0	151.8	0.0	1419.7	0.0
				J	0.0	0.0	151.8	0.0	1424.8	0.0
			Min	I	0.0	0.0	-146.0	-312.2	0.0	0.0
				J	0.0	0.0	-146.0	-312.2	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	104.9	0.0	926.7	0.0
				J	0.0	0.0	104.9	0.0	930.2	0.0
			Min	I	0.0	0.0	-100.1	-200.5	0.0	0.0
				J	0.0	0.0	-100.1	-200.5	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	2.3	92.9	383.3	0.0
				J	0.0	0.0	2.3	92.9	382.3	0.0
			G1	I	0.0	0.0	-12.5	-334.2	1340.2	0.0
				J	0.0	0.0	16.0	-334.2	1338.5	0.0
			G2	I	0.0	0.0	-2.1	-72.3	287.5	0.0
				J	0.0	0.0	3.9	-72.3	286.6	0.0
			q3	I	0.0	0.0	0.0	-0.0	0.0	0.0
				J	0.0	0.0	0.0	-0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.6	-1.3	8.6	0.0
				J	0.0	0.0	-0.6	-1.3	9.3	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	0.0	0.0	0.0
				J	0.0	0.0	-0.0	0.0	0.0	0.0
			INVSLE Max	I	0.0	0.0	185.9	-547.6	4121.7	0.0
				J	0.0	0.0	232.4	-547.6	4125.6	0.0
			Min	I	0.0	0.0	-217.3	-971.4	2189.6	0.0
				J	0.0	0.0	-170.8	-971.4	2185.4	0.0
			INVSLE-R Max	I	0.0	0.0	137.6	-405.7	3052.6	0.0
				J	0.0	0.0	172.1	-405.7	3055.4	0.0
			Min	I	0.0	0.0	-160.9	-719.5	1622.5	0.0
				J	0.0	0.0	-126.4	-719.5	1619.5	0.0
			INVSLE-F Max	I	0.0	0.0	137.4	-406.3	3049.1	0.0
				J	0.0	0.0	171.9	-406.3	3051.7	0.0
			Min	I	0.0	0.0	-160.7	-719.0	1626.0	0.0
				J	0.0	0.0	-126.2	-719.0	1623.2	0.0
			INVSLE~1 Max	I	0.0	0.0	137.3	-406.5	3047.4	0.0
				J	0.0	0.0	171.7	-406.5	3049.8	0.0
			Min	I	0.0	0.0	-160.5	-718.7	1627.7	0.0
				J	0.0	0.0	-126.1	-718.7	1625.0	0.0
			INVSLEV Max	I	0.0	0.0	-12.2	-313.6	2011.1	0.0
				J	0.0	0.0	22.3	-313.6	2007.3	0.0
			Min	I	0.0	0.0	-16.9	-499.4	1244.3	0.0
				J	0.0	0.0	17.6	-499.4	1242.7	0.0
75	4	7	c1-c2--1 Max	I	0.0	0.0	166.5	0.0	1433.9	0.0
				J	0.0	0.0	166.5	0.0	1415.1	0.0
			Min	I	0.0	0.0	-132.4	-303.9	0.0	0.0
				J	0.0	0.0	-132.4	-303.9	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	114.3	0.0	936.7	0.0

Ponte Canale NiE – Relazione di calcolo

		J	0.0	0.0	114.3	0.0	925.1	0.0	
	Min	I	0.0	0.0	-91.2	-194.6	0.0	0.0	
		J	0.0	0.0	-91.2	-194.6	0.0	0.0	
	SLV-z (RS)	I	0.0	0.0	11.5	93.5	381.7	0.0	
		J	0.0	0.0	11.5	93.5	370.6	0.0	
	G1	I	0.0	0.0	16.5	-331.7	1339.8	0.0	
		J	0.0	0.0	45.0	-331.7	1309.1	0.0	
	G2	I	0.0	0.0	4.1	-74.5	285.0	0.0	
		J	0.0	0.0	10.1	-74.5	277.8	0.0	
	q3	I	0.0	0.0	0.0	-0.0	0.0	0.0	
		J	0.0	0.0	0.0	-0.0	0.0	0.0	
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
		J	0.0	0.0	0.0	0.0	0.0	0.0	
	q5_pc	I	0.0	0.0	-0.4	-0.6	9.5	0.0	
		J	0.0	0.0	-0.4	-0.6	9.9	0.0	
	q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0	
		J	0.0	0.0	0.0	0.0	-0.1	0.0	
	Ex	I	0.0	0.0	-0.0	-0.0	0.0	0.0	
		J	0.0	0.0	-0.0	-0.0	0.1	0.0	
	Ey	I	0.0	0.0	0.0	0.0	0.0	0.0	
		J	0.0	0.0	0.0	0.0	0.0	0.0	
	INVSLU Max	I	0.0	0.0	253.1	-547.8	4137.7	0.0	
		J	0.0	0.0	299.6	-547.8	4061.5	0.0	
	Min	I	0.0	0.0	-151.2	-959.2	2185.0	0.0	
		J	0.0	0.0	-104.6	-959.2	2133.4	0.0	
	INVSLE-R Max	I	0.0	0.0	187.4	-405.8	3064.4	0.0	
		J	0.0	0.0	221.9	-405.8	3007.9	0.0	
	Min	I	0.0	0.0	-112.0	-710.4	1619.1	0.0	
		J	0.0	0.0	-77.5	-710.4	1581.0	0.0	
	INVSLE-F Max	I	0.0	0.0	187.3	-406.0	3060.6	0.0	
		J	0.0	0.0	221.8	-406.0	3003.9	0.0	
	Min	I	0.0	0.0	-111.8	-710.2	1622.9	0.0	
		J	0.0	0.0	-77.3	-710.2	1584.9	0.0	
	INVSLE~1 Max	I	0.0	0.0	187.2	-406.1	3058.7	0.0	
		J	0.0	0.0	221.7	-406.1	3002.0	0.0	
	Min	I	0.0	0.0	-111.7	-710.1	1624.8	0.0	
		J	0.0	0.0	-77.2	-710.1	1586.9	0.0	
	INVSLE~2 Max	I	0.0	0.0	32.2	-312.6	2006.6	0.0	
		J	0.0	0.0	66.6	-312.6	1957.5	0.0	
	Min	I	0.0	0.0	9.1	-499.7	1243.0	0.0	
		J	0.0	0.0	43.6	-499.7	1216.3	0.0	
76	4	7 c1-c2~1 Max	I	0.0	0.0	181.1	0.0	1426.2	0.0
		J	0.0	0.0	181.1	0.0	1384.2	0.0	
	Min	I	0.0	0.0	-119.4	-303.3	0.0	0.0	
		J	0.0	0.0	-119.4	-303.3	0.0	0.0	
	c1-c2~2 Max	I	0.0	0.0	123.6	0.0	932.8	0.0	
		J	0.0	0.0	123.6	0.0	906.6	0.0	
	Min	I	0.0	0.0	-82.7	-193.7	0.0	0.0	
		J	0.0	0.0	-82.7	-193.7	0.0	0.0	
	SLV-z (RS)	I	0.0	0.0	21.2	92.7	371.1	0.0	
		J	0.0	0.0	21.2	92.7	350.2	0.0	
	G1	I	0.0	0.0	45.3	-324.5	1313.9	0.0	
		J	0.0	0.0	73.8	-324.5	1254.3	0.0	
	G2	I	0.0	0.0	10.3	-75.6	277.0	0.0	
		J	0.0	0.0	16.3	-75.6	263.7	0.0	
	q3	I	0.0	0.0	0.0	-0.0	0.0	0.0	
		J	0.0	0.0	0.0	-0.0	0.0	0.0	
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
		J	0.0	0.0	0.0	0.0	0.0	0.0	
	q5_pc	I	0.0	0.0	-0.2	0.1	10.1	0.0	
		J	0.0	0.0	-0.2	0.1	10.3	0.0	
	q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0	
		J	0.0	0.0	0.0	0.0	-0.1	0.0	
	Ex	I	0.0	0.0	-0.0	0.0	0.1	0.0	
		J	0.0	0.0	-0.0	0.0	0.1	0.0	
	Ey	I	0.0	0.0	0.0	0.1	0.0	0.0	
		J	0.0	0.0	0.0	0.1	0.0	0.0	
	INVSLU Max	I	0.0	0.0	319.7	-540.0	4082.2	0.0	
		J	0.0	0.0	366.3	-540.0	3927.2	0.0	
	Min	I	0.0	0.0	-86.3	-949.6	2138.6	0.0	
		J	0.0	0.0	-39.8	-949.6	2040.2	0.0	
	INVSLE-R Max	I	0.0	0.0	236.8	-400.0	3023.2	0.0	
		J	0.0	0.0	271.3	-400.0	2908.4	0.0	

Ponte Canale NiE – Relazione di calcolo

			Min	I	0.0	0.0	-64.0	-703.4	1584.8	0.0
				J	0.0	0.0	-29.5	-703.4	1511.9	0.0
			INVSLE-F Max	I	0.0	0.0	236.8	-400.0	3019.1	0.0
				J	0.0	0.0	271.2	-400.0	2904.3	0.0
			Min	I	0.0	0.0	-63.9	-703.4	1588.9	0.0
				J	0.0	0.0	-29.4	-703.4	1516.0	0.0
			INVSLE~1 Max	I	0.0	0.0	236.7	-400.0	3017.1	0.0
				J	0.0	0.0	271.2	-400.0	2902.2	0.0
			Min	I	0.0	0.0	-63.9	-703.4	1590.9	0.0
				J	0.0	0.0	-29.4	-703.4	1518.1	0.0
			INVSLV Max	I	0.0	0.0	76.8	-307.3	1962.1	0.0
				J	0.0	0.0	111.2	-307.3	1868.3	0.0
			Min	I	0.0	0.0	34.4	-492.8	1219.7	0.0
				J	0.0	0.0	68.9	-492.8	1167.8	0.0
77	4	7	c1-c2--1 Max	I	0.0	0.0	195.9	0.0	1396.8	0.0
				J	0.0	0.0	195.9	0.0	1330.1	0.0
			Min	I	0.0	0.0	-107.0	-302.6	-0.0	0.0
				J	0.0	0.0	-107.0	-302.6	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	132.9	0.0	915.0	0.0
				J	0.0	0.0	132.9	0.0	873.2	0.0
			Min	I	0.0	0.0	-74.4	-192.4	-0.0	0.0
				J	0.0	0.0	-74.4	-192.4	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	30.3	90.4	351.8	0.0
				J	0.0	0.0	30.3	90.4	321.8	0.0
			G1	I	0.0	0.0	73.9	-312.9	1262.5	0.0
				J	0.0	0.0	102.3	-312.9	1174.4	0.0
			G2	I	0.0	0.0	16.3	-75.5	263.7	0.0
				J	0.0	0.0	22.3	-75.5	244.4	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	0.1	0.7	10.5	0.0
				J	0.0	0.0	0.1	0.7	10.4	0.0
			q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
				J	0.0	0.0	-0.0	-0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.1	0.0
				J	0.0	0.0	0.0	0.0	0.1	0.0
			Ey	I	0.0	0.0	0.0	0.1	0.1	0.0
				J	0.0	0.0	0.0	0.1	0.0	0.0
			INVSLE Max	I	0.0	0.0	386.3	-523.6	3955.4	0.0
				J	0.0	0.0	432.8	-523.6	3720.3	0.0
			Min	I	0.0	0.0	-22.9	-933.4	2050.9	0.0
				J	0.0	0.0	23.7	-933.4	1906.0	0.0
			INVSLE-R Max	I	0.0	0.0	286.1	-387.9	2929.2	0.0
				J	0.0	0.0	320.6	-387.9	2755.1	0.0
			Min	I	0.0	0.0	-16.9	-691.4	1519.9	0.0
				J	0.0	0.0	17.6	-691.4	1412.6	0.0
			INVSLE-F Max	I	0.0	0.0	286.1	-388.2	2925.0	0.0
				J	0.0	0.0	320.5	-388.2	2751.0	0.0
			Min	I	0.0	0.0	-16.9	-691.1	1524.1	0.0
				J	0.0	0.0	17.6	-691.1	1416.7	0.0
			INVSLE~1 Max	I	0.0	0.0	286.0	-388.3	2923.0	0.0
				J	0.0	0.0	320.5	-388.3	2748.9	0.0
			Min	I	0.0	0.0	-16.9	-690.9	1526.2	0.0
				J	0.0	0.0	17.6	-690.9	1418.8	0.0
			INVSLV Max	I	0.0	0.0	120.5	-297.9	1878.0	0.0
				J	0.0	0.0	155.0	-297.9	1740.6	0.0
			Min	I	0.0	0.0	59.8	-478.8	1174.3	0.0
				J	0.0	0.0	94.3	-478.8	1097.0	0.0
78	4	7	c1-c2--1 Max	I	0.0	0.0	211.2	8.5	1344.5	0.0
				J	0.0	0.0	211.2	8.5	1250.0	0.0
			Min	I	0.0	0.0	-95.7	-298.1	-0.0	0.0
				J	0.0	0.0	-95.7	-298.1	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	142.4	5.8	882.5	0.0
				J	0.0	0.0	142.4	5.8	822.9	0.0
			Min	I	0.0	0.0	-66.9	-188.5	-0.0	0.0
				J	0.0	0.0	-66.9	-188.5	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	38.7	86.8	324.4	0.0
				J	0.0	0.0	38.7	86.8	285.9	0.0
			G1	I	0.0	0.0	102.2	-297.1	1185.6	0.0
				J	0.0	0.0	130.7	-297.1	1069.2	0.0
			G2	I	0.0	0.0	22.2	-74.3	245.2	0.0
				J	0.0	0.0	28.2	-74.3	220.0	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	0.0	0.0	0.0	0.0
			I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.4	1.3	10.6	0.0
			J	0.0	0.0	0.4	1.3	10.2	0.0
		q5_pc	I	0.0	0.0	0.4	1.3	10.6	0.0
			J	0.0	0.0	0.4	1.3	10.2	0.0
		q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
			J	0.0	0.0	-0.0	-0.0	-0.1	0.0
		Ex	I	0.0	0.0	0.0	0.0	0.1	0.0
			J	0.0	0.0	0.0	0.0	0.1	0.0
		Ey	I	0.0	0.0	0.0	0.1	0.1	0.0
			J	0.0	0.0	0.0	0.1	0.1	0.0
		INVSLE Max	I	0.0	0.0	453.5	-488.7	3756.2	0.0
			J	0.0	0.0	500.0	-488.7	3437.1	0.0
		Min	I	0.0	0.0	38.4	-904.9	1922.0	0.0
			J	0.0	0.0	84.9	-904.9	1731.2	0.0
		INVSLE-R Max	I	0.0	0.0	335.9	-362.1	2781.7	0.0
			J	0.0	0.0	370.4	-362.1	2545.3	0.0
		Min	I	0.0	0.0	28.5	-670.2	1424.4	0.0
			J	0.0	0.0	62.9	-670.2	1283.1	0.0
		INVSLE-F Max	I	0.0	0.0	335.7	-362.6	2777.5	0.0
			J	0.0	0.0	370.2	-362.6	2541.3	0.0
		Min	I	0.0	0.0	28.6	-669.7	1428.7	0.0
			J	0.0	0.0	63.1	-669.7	1287.1	0.0
		INVSLE~1 Max	I	0.0	0.0	335.6	-362.9	2775.3	0.0
			J	0.0	0.0	370.1	-362.9	2539.2	0.0
		Min	I	0.0	0.0	28.7	-669.5	1430.8	0.0
			J	0.0	0.0	63.2	-669.5	1289.2	0.0
		INVSLE~1 Min	I	0.0	0.0	163.1	-284.6	1755.2	0.0
			J	0.0	0.0	197.5	-284.6	1575.1	0.0
		Min	I	0.0	0.0	85.7	-458.2	1106.4	0.0
			J	0.0	0.0	120.2	-458.2	1003.2	0.0
79	4	7 c1-c2--1 Max	I	0.0	0.0	227.4	33.1	1266.6	0.0
			J	0.0	0.0	227.4	33.1	1142.4	0.0
		Min	I	0.0	0.0	-85.4	-291.6	-0.0	0.0
			J	0.0	0.0	-85.4	-291.6	-0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	152.3	21.7	833.4	0.0
			J	0.0	0.0	152.3	21.7	754.7	0.0
		Min	I	0.0	0.0	-60.2	-183.1	-0.0	0.0
			J	0.0	0.0	-60.2	-183.1	-0.0	0.0
		SLV-z(RS)	I	0.0	0.0	46.1	82.0	289.4	0.0
			J	0.0	0.0	46.1	82.0	243.4	0.0
		G1	I	0.0	0.0	130.3	-277.6	1083.3	0.0
			J	0.0	0.0	158.8	-277.6	938.8	0.0
		G2	I	0.0	0.0	28.0	-72.1	221.5	0.0
			J	0.0	0.0	34.0	-72.1	190.4	0.0
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	0.8	1.8	10.4	0.0
			J	0.0	0.0	0.8	1.8	9.6	0.0
		q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
			J	0.0	0.0	-0.0	-0.0	-0.1	0.0
		Ex	I	0.0	0.0	0.0	0.0	0.1	0.0
			J	0.0	0.0	0.0	0.0	0.1	0.0
		Ey	I	0.0	0.0	0.0	0.2	0.1	0.0
			J	0.0	0.0	0.0	0.2	0.1	0.0
		INVSLE Max	I	0.0	0.0	521.3	-425.7	3480.6	0.0
			J	0.0	0.0	567.9	-425.7	3075.3	0.0
		Min	I	0.0	0.0	97.8	-867.4	1752.1	0.0
			J	0.0	0.0	144.3	-867.4	1515.7	0.0
		INVSLE-R Max	I	0.0	0.0	386.1	-315.5	2577.6	0.0
			J	0.0	0.0	420.6	-315.5	2277.4	0.0
		Min	I	0.0	0.0	72.5	-642.4	1298.5	0.0
			J	0.0	0.0	107.0	-642.4	1123.4	0.0
		INVSLE-F Max	I	0.0	0.0	385.8	-316.2	2573.4	0.0
			J	0.0	0.0	420.3	-316.2	2273.5	0.0
		Min	I	0.0	0.0	72.8	-641.7	1302.7	0.0
			J	0.0	0.0	107.3	-641.7	1127.3	0.0
		INVSLE~1 Max	I	0.0	0.0	385.7	-316.5	2571.3	0.0
			J	0.0	0.0	420.2	-316.5	2271.6	0.0
		Min	I	0.0	0.0	72.9	-641.3	1304.8	0.0
			J	0.0	0.0	107.4	-641.3	1129.2	0.0
		INVSLE~1 Min	I	0.0	0.0	204.4	-267.6	1594.1	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	238.9	-267.6	1372.6	0.0	
		Min	I	0.0	0.0	112.2	-431.8	1015.4	0.0	
			J	0.0	0.0	146.7	-431.8	885.8	0.0	
80	4	7 c1-c2--1	Max	I	0.0	0.0	245.1	62.4	1161.1	0.0
			J	0.0	0.0	245.1	62.4	1001.4	0.0	
		Min	I	0.0	0.0	-72.9	-286.2	-0.0	0.0	
			J	0.0	0.0	-72.9	-286.2	-0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	163.3	39.7	766.5	0.0
			J	0.0	0.0	163.3	39.7	664.4	0.0	
		Min	I	0.0	0.0	-51.8	-178.7	-0.0	0.0	
			J	0.0	0.0	-51.8	-178.7	-0.0	0.0	
		SLV-z(RS)	I	0.0	0.0	52.5	76.3	247.5	0.0	
			J	0.0	0.0	52.5	76.3	195.2	0.0	
		G1	I	0.0	0.0	158.3	-255.3	955.1	0.0	
			J	0.0	0.0	186.7	-255.3	782.6	0.0	
		G2	I	0.0	0.0	33.8	-68.8	192.7	0.0	
			J	0.0	0.0	39.8	-68.8	155.9	0.0	
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	-0.0	0.0	
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	I	0.0	0.0	1.1	2.2	9.9	0.0	
			J	0.0	0.0	1.1	2.2	8.8	0.0	
		q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0	
			J	0.0	0.0	-0.0	-0.0	-0.1	0.0	
		Ex	I	0.0	0.0	0.0	0.0	0.1	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	
		Ey	I	0.0	0.0	0.0	0.2	0.1	0.0	
			J	0.0	0.0	0.0	0.2	0.1	0.0	
		INVSU Max	I	0.0	0.0	591.1	-351.3	3125.8	0.0	
			J	0.0	0.0	637.7	-351.3	2626.7	0.0	
		Min	I	0.0	0.0	159.9	-825.9	1540.6	0.0	
			J	0.0	0.0	206.4	-825.9	1259.0	0.0	
		INVSLE-R	Max	I	0.0	0.0	437.8	-260.3	2314.7	0.0
			J	0.0	0.0	472.3	-260.3	1945.1	0.0	
		Min	I	0.0	0.0	118.5	-611.6	1141.8	0.0	
			J	0.0	0.0	153.0	-611.6	933.2	0.0	
		INVSLE-F	Max	I	0.0	0.0	437.3	-261.2	2310.8	0.0
			J	0.0	0.0	471.8	-261.2	1941.6	0.0	
		Min	I	0.0	0.0	118.9	-610.7	1145.8	0.0	
			J	0.0	0.0	153.4	-610.7	936.7	0.0	
		INVSLE~1	Max	I	0.0	0.0	437.1	-261.7	2308.8	0.0
			J	0.0	0.0	471.6	-261.7	1939.9	0.0	
		Min	I	0.0	0.0	119.1	-610.3	1147.7	0.0	
			J	0.0	0.0	153.6	-610.3	938.4	0.0	
		INVSU Max	I	0.0	0.0	244.5	-247.7	1395.3	0.0	
			J	0.0	0.0	279.0	-247.7	1133.6	0.0	
		Min	I	0.0	0.0	139.6	-400.5	900.1	0.0	
			J	0.0	0.0	174.0	-400.5	743.3	0.0	
81	4	7 c1-c2--1	Max	I	0.0	0.0	265.3	90.7	1022.2	0.0
			J	0.0	0.0	265.3	90.7	821.9	0.0	
		Min	I	0.0	0.0	-56.2	-279.7	-0.0	0.0	
			J	0.0	0.0	-56.2	-279.7	-0.1	0.0	
		c1-c2--2	Max	I	0.0	0.0	175.8	57.1	677.5	0.0
			J	0.0	0.0	175.8	57.1	548.5	0.0	
		Min	I	0.0	0.0	-40.3	-173.8	-0.0	0.0	
			J	0.0	0.0	-40.3	-173.8	-0.1	0.0	
		SLV-z(RS)	I	0.0	0.0	57.7	70.1	199.7	0.0	
			J	0.0	0.0	57.7	70.1	142.1	0.0	
		G1	I	0.0	0.0	186.2	-231.1	800.3	0.0	
			J	0.0	0.0	214.7	-231.1	599.9	0.0	
		G2	I	0.0	0.0	39.5	-64.8	158.7	0.0	
			J	0.0	0.0	45.5	-64.8	116.2	0.0	
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	-0.0	0.0	
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	I	0.0	0.0	1.4	2.5	9.0	0.0	
			J	0.0	0.0	1.4	2.5	7.5	0.0	
		q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0	
			J	0.0	0.0	-0.0	-0.0	-0.1	0.0	
		Ex	I	0.0	0.0	0.0	0.0	0.0	0.0	
			J	0.0	0.0	0.0	0.0	0.0	0.0	

Ponte Canale NiE – Relazione di calcolo

		SLV-z (RS)	I	0.0	0.0	64.4	57.8	89.6	0.0
			J	0.0	0.0	64.4	57.8	25.5	0.0
		G1	I	0.0	0.0	242.2	-184.2	406.4	0.0
			J	0.0	0.0	270.7	-184.2	149.9	0.0
		G2	I	0.0	0.0	50.8	-55.6	74.4	0.0
			J	0.0	0.0	56.8	-55.6	20.6	0.0
		q3	I	0.0	0.0	0.0	-0.0	-0.0	0.0
			J	0.0	0.0	0.0	-0.0	-0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	2.0	2.9	6.1	0.0
			J	0.0	0.0	2.0	2.9	4.1	0.0
		q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
			J	0.0	0.0	-0.0	-0.0	-0.0	0.0
		Ex	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ey	I	0.0	0.0	0.0	0.0	-0.0	0.0
			J	0.0	0.0	0.0	0.0	-0.1	0.0
		INVSLU Max	I	0.0	0.0	833.7	-141.4	1491.6	0.0
			J	0.0	0.0	880.3	-141.4	709.4	0.0
		Min	I	0.0	0.0	376.9	-669.8	630.1	0.0
			J	0.0	0.0	423.4	-669.8	147.7	0.0
		INVSLE-R Max	I	0.0	0.0	617.4	-104.9	1104.5	0.0
			J	0.0	0.0	651.9	-104.9	525.2	0.0
		Min	I	0.0	0.0	279.3	-496.0	467.1	0.0
			J	0.0	0.0	313.8	-496.0	109.6	0.0
		INVSLE-F Max	I	0.0	0.0	616.6	-106.1	1102.0	0.0
			J	0.0	0.0	651.1	-106.1	523.5	0.0
		Min	I	0.0	0.0	280.1	-494.8	469.6	0.0
			J	0.0	0.0	314.6	-494.8	111.3	0.0
		INVSLE~1 Max	I	0.0	0.0	616.2	-106.7	1100.8	0.0
			J	0.0	0.0	650.7	-106.7	522.7	0.0
		Min	I	0.0	0.0	280.5	-494.2	470.8	0.0
			J	0.0	0.0	315.0	-494.2	112.1	0.0
		INVSLV Max	I	0.0	0.0	357.4	-182.0	570.5	0.0
			J	0.0	0.0	391.9	-182.0	196.1	0.0
		Min	I	0.0	0.0	228.7	-297.6	391.3	0.0
			J	0.0	0.0	263.1	-297.6	145.0	0.0
84	4	7 c1-c2--1 Max	I	14.7	4.8	361.0	141.0	345.8	13.5
			J	14.7	4.8	361.0	141.0	103.6	13.0
		Min	I	-13.9	-2.4	0.0	-238.1	-53.4	-16.6
			J	-13.9	-2.4	0.0	-238.1	-171.1	-19.7
		c1-c2--2 Max	I	10.0	3.0	237.3	89.1	235.0	8.2
			J	10.0	3.0	237.3	89.1	65.2	7.9
		Min	I	-9.4	-1.7	0.0	-146.2	-32.4	-10.5
			J	-9.4	-1.7	0.0	-146.2	-106.0	-12.4
		SLV-z (RS)	I	0.5	1.5	65.7	53.0	29.0	2.3
			J	0.5	1.5	65.7	53.0	37.3	1.0
		G1	I	0.6	5.0	270.5	-166.9	163.1	5.5
			J	0.6	5.0	299.0	-166.9	-121.6	0.5
		G2	I	0.3	1.2	56.6	-51.5	23.5	2.5
			J	0.3	1.2	62.6	-51.5	-36.1	1.2
		q3	I	0.5	-15.0	0.0	-0.0	-0.0	-14.4
			J	0.5	-15.0	0.0	-0.0	-0.0	0.6
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.2	-20.8	2.2	3.0	4.2	-19.9
			J	0.2	-20.8	2.2	3.0	2.0	0.9
		q5_ps	I	0.2	-6.7	-0.0	-0.0	-0.1	-6.4
			J	0.2	-6.7	-0.0	-0.0	-0.0	0.3
		Ex	I	0.5	-14.2	0.0	0.0	0.0	-13.5
			J	0.5	-14.2	0.0	0.0	-0.0	0.7
		Ey	I	7.5	-243.2	0.1	-0.3	-0.3	-232.3
			J	7.5	-243.2	0.1	-0.3	-0.3	10.9
		INVSLU Max	I	21.3	33.6	930.9	-101.8	722.5	46.8
			J	21.3	33.6	977.5	-101.8	-71.3	20.8
		Min	I	-17.8	-32.8	439.6	-618.9	176.0	-40.6
			J	-17.8	-32.8	486.2	-618.9	-445.8	-25.0
		INVSLE-R Max	I	15.7	23.5	689.4	-75.6	534.9	33.4
			J	15.7	23.5	723.9	-75.6	-52.9	15.3
		Min	I	-13.2	-8.7	325.8	-458.2	130.7	-20.5
			J	-13.2	-8.7	360.3	-458.2	-330.1	-18.5
		INVSLE-F Max	I	15.6	15.2	688.6	-76.8	533.2	25.4

Ponte Canale NiE – Relazione di calcolo

			J	15.6	15.2	723.0	-76.8	-53.7	14.9
		Min	I	-13.1	-0.3	326.7	-457.1	132.3	-12.6
			J	-13.1	-0.3	361.2	-457.1	-329.3	-18.1
		INVSLE~1 Max	I	15.6	11.0	688.1	-77.4	532.4	21.4
			J	15.6	11.0	722.6	-77.4	-54.2	14.8
		Min	I	-13.0	3.8	327.1	-456.5	133.2	-8.6
			J	-13.0	3.8	361.6	-456.5	-328.9	-17.9
		INVSLV Max	I	8.7	254.1	392.8	-165.3	215.7	245.0
			J	8.7	254.1	427.3	-165.3	-120.3	13.2
		Min	I	-6.9	-241.7	261.4	-271.5	157.5	-229.1
			J	-6.9	-241.7	295.9	-271.5	-195.2	-9.7
85	4	7 c1-c2~1 Max	I	25.5	4.1	0.0	102.7	82.0	14.0
			J	25.5	4.1	0.0	102.7	316.1	12.4
		Min	I	-7.8	-2.4	-376.8	-381.9	-278.8	-17.2
			J	-7.8	-2.4	-376.8	-381.9	-117.9	-20.2
		c1-c2~2 Max	I	16.4	2.7	0.0	63.9	51.3	9.0
			J	16.4	2.7	0.0	63.9	218.5	7.9
		Min	I	-5.6	-1.7	-247.5	-240.0	-174.9	-10.7
			J	-5.6	-1.7	-247.5	-240.0	-75.2	-12.7
		SLV-z(RS)	I	3.7	0.4	67.9	39.8	28.0	0.7
			J	3.7	0.4	67.9	39.8	40.6	0.6
		G1	I	15.4	2.0	-307.4	-184.1	-134.1	0.1
			J	15.4	2.0	-278.9	-184.1	159.1	-1.9
		G2	I	2.8	0.3	-62.4	-22.2	-15.7	1.3
			J	2.8	0.3	-56.4	-22.2	43.7	1.0
		q3	I	87.3	0.5	-0.0	-0.3	-0.3	-0.5
			J	87.3	0.5	-0.0	-0.3	-0.3	-1.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	19.5	24.5	-2.0	-4.7	-3.5	0.6
			J	19.5	24.5	-2.0	-4.7	-1.6	-23.9
		q5_ps	I	6.4	8.2	0.0	-0.0	-0.0	0.2
			J	6.4	8.2	0.0	-0.0	-0.0	-7.9
		Ex	I	466.3	28.4	-0.1	-2.2	-1.8	-2.5
			J	466.3	28.4	-0.1	-2.2	-1.7	-30.9
		Ey	I	81.8	194.8	-0.1	-1.6	-1.3	7.1
			J	81.8	194.8	-0.1	-1.6	-1.2	-187.8
		INVSLU Max	I	182.2	30.7	-497.4	-135.7	-88.2	21.2
			J	182.2	30.7	-450.8	-135.7	701.8	37.0
		Min	I	-3.5	-22.2	-1009.6	-798.4	-581.8	-21.9
			J	-3.5	-22.2	-963.0	-798.4	113.2	-50.2
		INVSLE-R Max	I	55.5	21.1	-368.6	-100.8	-65.6	15.6
			J	55.5	21.1	-334.1	-100.8	519.8	25.8
		Min	I	-1.3	-14.8	-747.7	-591.1	-430.7	-16.2
			J	-1.3	-14.8	-713.2	-591.1	84.0	-35.6
		INVSLE-F Max	I	47.7	11.3	-369.4	-102.7	-67.0	15.4
			J	47.7	11.3	-334.9	-102.7	519.1	16.2
		Min	I	6.5	-5.0	-746.9	-589.2	-429.3	-16.0
			J	6.5	-5.0	-712.4	-589.2	84.6	-26.0
		INVSLE~1 Max	I	43.8	6.4	-369.8	-103.7	-67.7	15.3
			J	43.8	6.4	-335.3	-103.7	518.8	11.5
		Min	I	10.5	-0.1	-746.5	-588.3	-428.6	-15.9
			J	10.5	-0.1	-712.0	-588.3	84.9	-21.2
		INVSLV Max	I	510.2	205.8	-301.8	-165.4	-120.8	9.4
			J	510.2	205.8	-267.3	-165.4	244.3	196.2
		Min	I	-473.7	-201.2	-437.7	-247.3	-178.7	-6.7
			J	-473.7	-201.2	-403.2	-247.3	161.3	-198.2
86	4	7 c1-c2~1 Max	I	0.0	0.0	12.7	89.6	290.6	0.0
			J	0.0	0.0	12.7	89.6	577.5	0.0
		Min	I	0.0	0.0	-347.2	-388.7	-121.3	0.0
			J	0.0	0.0	-347.2	-388.7	-27.2	0.0
		c1-c2~2 Max	I	0.0	0.0	9.4	55.0	200.6	0.0
			J	0.0	0.0	9.4	55.0	394.5	0.0
		Min	I	0.0	0.0	-227.9	-243.9	-77.4	0.0
			J	0.0	0.0	-227.9	-243.9	-18.0	0.0
		SLV-z(RS)	I	0.0	0.0	66.5	43.2	38.6	0.0
			J	0.0	0.0	66.5	43.2	104.9	0.0
		G1	I	0.0	0.0	-279.8	-196.7	151.3	0.0
			J	0.0	0.0	-251.3	-196.7	416.9	0.0
		G2	I	0.0	0.0	-56.6	-24.8	42.1	0.0
			J	0.0	0.0	-50.6	-24.8	95.7	0.0
		q3	I	0.0	0.0	-0.0	-0.2	-0.2	0.0
			J	0.0	0.0	-0.0	-0.2	-0.2	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			q5_pc	I	0.0	0.0	-2.0	-4.5	-1.6	0.0
				J	0.0	0.0	-2.0	-4.5	0.4	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.0	0.0
			Ex	I	0.0	0.0	-0.1	-1.3	-1.2	0.0
				J	0.0	0.0	-0.1	-1.3	-1.0	0.0
			Ey	I	0.0	0.0	-0.1	-0.9	-0.8	0.0
				J	0.0	0.0	-0.1	-0.9	-0.7	0.0
			INVSLU Max	I	0.0	0.0	-435.2	-174.0	654.9	0.0
				J	0.0	0.0	-388.7	-174.0	1472.0	0.0
			Min	I	0.0	0.0	-924.6	-827.8	95.9	0.0
				J	0.0	0.0	-878.0	-827.8	654.9	0.0
			INVSLE-R Max	I	0.0	0.0	-322.5	-129.2	485.0	0.0
				J	0.0	0.0	-288.0	-129.2	1090.3	0.0
			Min	I	0.0	0.0	-684.8	-612.9	71.1	0.0
				J	0.0	0.0	-650.3	-612.9	485.2	0.0
			INVSLE-F Max	I	0.0	0.0	-323.3	-131.0	484.3	0.0
				J	0.0	0.0	-288.8	-131.0	1090.2	0.0
			Min	I	0.0	0.0	-684.0	-611.1	71.8	0.0
				J	0.0	0.0	-649.5	-611.1	485.3	0.0
			INVSLE~1 Max	I	0.0	0.0	-323.7	-131.9	484.0	0.0
				J	0.0	0.0	-289.2	-131.9	1090.1	0.0
			Min	I	0.0	0.0	-683.6	-610.2	72.1	0.0
				J	0.0	0.0	-649.1	-610.2	485.4	0.0
			INVSLEV Max	I	0.0	0.0	-269.8	-177.7	232.6	0.0
				J	0.0	0.0	-235.3	-177.7	618.0	0.0
			Min	I	0.0	0.0	-403.0	-265.3	154.3	0.0
				J	0.0	0.0	-368.5	-265.3	407.2	0.0
87	4	7	c1-c2~1 Max	I	0.0	0.0	34.4	74.9	546.7	0.0
				J	0.0	0.0	34.4	74.9	808.6	0.0
			Min	I	0.0	0.0	-325.5	-396.8	-29.5	0.0
				J	0.0	0.0	-325.5	-396.8	0.0	0.0
			c1-c2~2 Max	I	0.0	0.0	24.9	45.7	373.1	0.0
				J	0.0	0.0	24.9	45.7	543.6	0.0
			Min	I	0.0	0.0	-214.6	-248.5	-19.5	0.0
				J	0.0	0.0	-214.6	-248.5	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	63.2	48.5	101.3	0.0
				J	0.0	0.0	63.2	48.5	164.5	0.0
			G1	I	0.0	0.0	-250.7	-215.6	404.3	0.0
				J	0.0	0.0	-222.2	-215.6	640.7	0.0
			G2	I	0.0	0.0	-50.6	-29.2	92.9	0.0
				J	0.0	0.0	-44.6	-29.2	140.5	0.0
			q3	I	0.0	0.0	-0.0	-0.1	-0.1	0.0
				J	0.0	0.0	-0.0	-0.1	-0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-1.9	-4.4	0.3	0.0
				J	0.0	0.0	-1.9	-4.4	2.2	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.0	0.0
			Ex	I	0.0	0.0	-0.2	-0.7	-0.7	0.0
				J	0.0	0.0	-0.2	-0.7	-0.5	0.0
			Ey	I	0.0	0.0	-0.1	-0.6	-0.5	0.0
				J	0.0	0.0	-0.1	-0.6	-0.3	0.0
			INVSLU Max	I	0.0	0.0	-358.6	-225.4	1409.5	0.0
				J	0.0	0.0	-312.0	-225.4	2148.1	0.0
			Min	I	0.0	0.0	-847.8	-870.0	631.1	0.0
				J	0.0	0.0	-801.3	-870.0	1052.6	0.0
			INVSLE-R Max	I	0.0	0.0	-265.7	-167.3	1044.0	0.0
				J	0.0	0.0	-231.2	-167.3	1591.1	0.0
			Min	I	0.0	0.0	-627.9	-644.2	467.5	0.0
				J	0.0	0.0	-593.4	-644.2	779.9	0.0
			INVSLE-F Max	I	0.0	0.0	-266.5	-169.0	1043.9	0.0
				J	0.0	0.0	-232.0	-169.0	1590.2	0.0
			Min	I	0.0	0.0	-627.1	-642.4	467.6	0.0
				J	0.0	0.0	-592.6	-642.4	780.8	0.0
			INVSLE~1 Max	I	0.0	0.0	-266.9	-169.9	1043.9	0.0
				J	0.0	0.0	-232.4	-169.9	1589.8	0.0
			Min	I	0.0	0.0	-626.7	-641.5	467.6	0.0
				J	0.0	0.0	-592.3	-641.5	781.2	0.0
			INVSLEV Max	I	0.0	0.0	-238.0	-195.9	598.8	0.0
				J	0.0	0.0	-203.5	-195.9	946.0	0.0
			Min	I	0.0	0.0	-364.6	-293.6	395.5	0.0
				J	0.0	0.0	-330.1	-293.6	616.5	0.0

Ponte Canale NiE – Relazione di calcolo

88	4	7 c1-c2--1 Max	I	0.0	0.0	67.1	57.7	778.6	0.0			
			J	0.0	0.0	67.1	57.7	1013.0	0.0			
			Min	I	0.0	0.0	-308.1	-402.2	0.0	0.0		
				J	0.0	0.0	-308.1	-402.2	-0.0	0.0		
			c1-c2--2 Max	I	0.0	0.0	48.3	35.0	522.8	0.0		
				J	0.0	0.0	48.3	35.0	673.9	0.0		
		Min		I	0.0	0.0	-204.4	-251.5	0.0	0.0		
			J	0.0	0.0	-204.4	-251.5	-0.0	0.0			
		SLV-z (RS)	I	0.0	0.0	58.3	54.8	160.1	0.0			
			J	0.0	0.0	58.3	54.8	218.4	0.0			
		G1	I	0.0	0.0	-220.4	-237.0	625.9	0.0			
			J	0.0	0.0	-191.9	-237.0	832.1	0.0			
		G2	I	0.0	0.0	-44.4	-34.5	136.9	0.0			
			J	0.0	0.0	-38.4	-34.5	178.3	0.0			
		q3	I	0.0	0.0	-0.0	-0.1	-0.1	0.0			
			J	0.0	0.0	-0.0	-0.1	-0.0	0.0			
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0			
			J	0.0	0.0	0.0	0.0	0.0	0.0			
		q5_pc	I	0.0	0.0	-1.8	-4.2	2.1	0.0			
			J	0.0	0.0	-1.8	-4.2	3.9	0.0			
		q5_ps	I	0.0	0.0	0.0	0.0	-0.0	0.0			
			J	0.0	0.0	0.0	0.0	-0.1	0.0			
		Ex	I	0.0	0.0	-0.1	-0.4	-0.4	0.0			
			J	0.0	0.0	-0.1	-0.4	-0.2	0.0			
		Ey	I	0.0	0.0	-0.1	-0.4	-0.2	0.0			
			J	0.0	0.0	-0.1	-0.4	-0.1	0.0			
		INVSLU Max	I	0.0	0.0	-265.4	-284.8	2082.8	0.0			
			J	0.0	0.0	-218.8	-284.8	2735.1	0.0			
			Min	I	0.0	0.0	-775.2	-913.2	1027.8	0.0		
				J	0.0	0.0	-728.6	-913.2	1360.5	0.0		
		INVSLE-R Max	I	0.0	0.0	-196.7	-211.2	1542.6	0.0			
			J	0.0	0.0	-162.2	-211.2	2025.8	0.0			
			Min	I	0.0	0.0	-574.1	-676.2	761.5	0.0		
				J	0.0	0.0	-539.6	-676.2	1008.1	0.0		
		INVSLE-F Max	I	0.0	0.0	-197.4	-212.9	1541.8	0.0			
			J	0.0	0.0	-162.9	-212.9	2024.2	0.0			
			Min	I	0.0	0.0	-573.4	-674.5	762.4	0.0		
				J	0.0	0.0	-538.9	-674.5	1009.6	0.0		
		INVSLE~1 Max	I	0.0	0.0	-197.8	-213.8	1541.4	0.0			
			J	0.0	0.0	-163.3	-213.8	2023.4	0.0			
			Min	I	0.0	0.0	-573.0	-673.6	762.8	0.0		
				J	0.0	0.0	-538.5	-673.6	1010.4	0.0		
		INVSLEV Max	I	0.0	0.0	-206.5	-216.4	923.1	0.0			
			J	0.0	0.0	-172.0	-216.4	1228.9	0.0			
			Min	I	0.0	0.0	-323.3	-326.5	602.5	0.0		
				J	0.0	0.0	-288.8	-326.5	791.9	0.0		
		89	4	7 c1-c2--1 Max	I	0.0	0.0	89.5	37.6	987.4	0.0	
					J	0.0	0.0	89.5	37.6	1187.6	0.0	
					Min	I	0.0	0.0	-291.8	-403.4	-0.0	0.0
						J	0.0	0.0	-291.8	-403.4	-0.0	0.0
					c1-c2--2 Max	I	0.0	0.0	64.0	22.6	656.0	0.0
						J	0.0	0.0	64.0	22.6	785.3	0.0
				Min		I	0.0	0.0	-194.9	-252.2	-0.0	0.0
					J	0.0	0.0	-194.9	-252.2	-0.0	0.0	
SLV-z (RS)	I			0.0	0.0	52.0	61.5	213.6	0.0			
	J			0.0	0.0	52.0	61.5	265.5	0.0			
G1	I			0.0	0.0	-189.4	-258.3	816.8	0.0			
	J			0.0	0.0	-160.9	-258.3	992.0	0.0			
G2	I			0.0	0.0	-38.2	-40.1	174.3	0.0			
	J			0.0	0.0	-32.2	-40.1	209.5	0.0			
q3	I			0.0	0.0	-0.0	-0.0	-0.0	0.0			
	J			0.0	0.0	-0.0	-0.0	-0.0	0.0			
q4	I			0.0	0.0	0.0	0.0	0.0	0.0			
	J			0.0	0.0	0.0	0.0	0.0	0.0			
q5_pc	I			0.0	0.0	-1.7	-4.0	3.8	0.0			
	J			0.0	0.0	-1.7	-4.0	5.5	0.0			
q5_ps	I			0.0	0.0	0.0	0.0	-0.0	0.0			
	J			0.0	0.0	0.0	0.0	-0.1	0.0			
Ex	I			0.0	0.0	-0.1	-0.2	-0.2	0.0			
	J			0.0	0.0	-0.1	-0.2	-0.1	0.0			
Ey	I			0.0	0.0	-0.1	-0.2	-0.0	0.0			
	J			0.0	0.0	-0.1	-0.2	0.0	0.0			
INVSLU Max	I			0.0	0.0	-184.9	-348.6	2674.5	0.0			

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-138.3	-348.6	3230.1	0.0
		Min	I	0.0	0.0	-702.6	-951.0	1334.5	0.0
			J	0.0	0.0	-656.1	-951.0	1617.0	0.0
		INVSLE-R Max	I	0.0	0.0	-137.1	-258.5	1980.8	0.0
			J	0.0	0.0	-102.6	-258.5	2392.3	0.0
		Min	I	0.0	0.0	-520.3	-704.2	988.8	0.0
			J	0.0	0.0	-485.9	-704.2	1198.2	0.0
		INVSLE-F Max	I	0.0	0.0	-137.7	-260.1	1979.3	0.0
			J	0.0	0.0	-103.2	-260.1	2390.1	0.0
		Min	I	0.0	0.0	-519.7	-702.6	990.3	0.0
			J	0.0	0.0	-485.2	-702.6	1200.4	0.0
		INVSLE~1 Max	I	0.0	0.0	-138.1	-260.9	1978.5	0.0
			J	0.0	0.0	-103.6	-260.9	2389.0	0.0
		Min	I	0.0	0.0	-519.4	-701.8	991.1	0.0
			J	0.0	0.0	-484.9	-701.8	1201.5	0.0
		INVSLE~1 Max	I	0.0	0.0	-138.1	-260.9	1978.5	0.0
			J	0.0	0.0	-103.6	-260.9	2389.0	0.0
		Min	I	0.0	0.0	-519.4	-701.8	991.1	0.0
			J	0.0	0.0	-484.9	-701.8	1201.5	0.0
		INVSLE~1 Min	I	0.0	0.0	-175.6	-236.9	1204.8	0.0
			J	0.0	0.0	-141.1	-236.9	1467.0	0.0
		Min	I	0.0	0.0	-279.6	-360.1	777.4	0.0
			J	0.0	0.0	-245.1	-360.1	935.9	0.0
90	4	7 c1-c2--1 Max	I	0.0	0.0	112.9	15.6	1169.9	0.0
			J	0.0	0.0	112.9	15.6	1334.0	0.0
		Min	I	0.0	0.0	-274.0	-405.2	-0.0	0.0
			J	0.0	0.0	-274.0	-405.2	-0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	80.4	9.0	772.6	0.0
			J	0.0	0.0	80.4	9.0	878.8	0.0
		Min	I	0.0	0.0	-184.3	-254.3	-0.0	0.0
			J	0.0	0.0	-184.3	-254.3	-0.0	0.0
		SLV-z(RS)	I	0.0	0.0	44.5	68.0	260.7	0.0
			J	0.0	0.0	44.5	68.0	305.0	0.0
		G1	I	0.0	0.0	-158.0	-277.9	977.4	0.0
			J	0.0	0.0	-129.6	-277.9	1121.2	0.0
		G2	I	0.0	0.0	-31.8	-45.8	205.4	0.0
			J	0.0	0.0	-25.8	-45.8	234.2	0.0
		q3	I	0.0	0.0	-0.0	-0.0	-0.0	0.0
			J	0.0	0.0	-0.0	-0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-1.5	-3.7	5.4	0.0
			J	0.0	0.0	-1.5	-3.7	6.9	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
			J	0.0	0.0	0.0	0.0	-0.1	0.0
		Ex	I	0.0	0.0	-0.1	-0.1	-0.0	0.0
			J	0.0	0.0	-0.1	-0.1	0.1	0.0
		Ey	I	0.0	0.0	-0.1	-0.2	0.1	0.0
			J	0.0	0.0	-0.1	-0.2	0.1	0.0
		INVSLE~1 Max	I	0.0	0.0	-102.5	-412.7	3181.0	0.0
			J	0.0	0.0	-56.0	-412.7	3636.9	0.0
		Min	I	0.0	0.0	-627.5	-987.4	1591.9	0.0
			J	0.0	0.0	-580.9	-987.4	1823.6	0.0
		INVSLE-R Max	I	0.0	0.0	-76.0	-305.9	2355.9	0.0
			J	0.0	0.0	-41.6	-305.9	2693.5	0.0
		Min	I	0.0	0.0	-464.7	-731.1	1179.5	0.0
			J	0.0	0.0	-430.2	-731.1	1351.2	0.0
		INVSLE-F Max	I	0.0	0.0	-76.6	-307.4	2353.8	0.0
			J	0.0	0.0	-42.1	-307.4	2690.8	0.0
		Min	I	0.0	0.0	-464.1	-729.6	1181.7	0.0
			J	0.0	0.0	-429.6	-729.6	1354.0	0.0
		INVSLE~1 Max	I	0.0	0.0	-76.9	-308.2	2352.7	0.0
			J	0.0	0.0	-42.4	-308.2	2689.4	0.0
		Min	I	0.0	0.0	-463.8	-728.9	1182.8	0.0
			J	0.0	0.0	-429.3	-728.9	1355.4	0.0
		INVSLE~1 Min	I	0.0	0.0	-145.4	-255.7	1443.6	0.0
			J	0.0	0.0	-110.9	-255.7	1660.5	0.0
		Min	I	0.0	0.0	-234.4	-391.8	922.0	0.0
			J	0.0	0.0	-199.9	-391.8	1050.3	0.0
91	4	7 c1-c2--1 Max	I	0.0	0.0	133.9	2.8	1325.0	0.0
			J	0.0	0.0	133.9	2.8	1452.7	0.0
		Min	I	0.0	0.0	-255.2	-409.1	-0.0	0.0
			J	0.0	0.0	-255.2	-409.1	-0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	94.9	1.5	872.0	0.0
			J	0.0	0.0	94.9	1.5	954.7	0.0
		Min	I	0.0	0.0	-172.8	-258.7	-0.0	0.0
			J	0.0	0.0	-172.8	-258.7	-0.0	0.0
		SLV-z(RS)	I	0.0	0.0	36.0	73.9	300.6	0.0
			J	0.0	0.0	36.0	73.9	336.3	0.0
		G1	I	0.0	0.0	-126.6	-294.7	1108.1	0.0

Ponte Canale NiE – Relazione di calcolo

		J	0.0	0.0	-98.1	-294.7	1220.5	0.0		
	G2	I	0.0	0.0	-25.5	-51.1	230.3	0.0		
		J	0.0	0.0	-19.5	-51.1	252.8	0.0		
	q3	I	0.0	0.0	-0.0	-0.0	0.0	0.0		
		J	0.0	0.0	-0.0	-0.0	0.0	0.0		
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0		
		J	0.0	0.0	0.0	0.0	0.0	0.0		
	q5_pc	I	0.0	0.0	-1.3	-3.4	6.9	0.0		
		J	0.0	0.0	-1.3	-3.4	8.2	0.0		
	q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0		
		J	0.0	0.0	0.0	0.0	-0.1	0.0		
	Ex	I	0.0	0.0	-0.0	-0.0	0.1	0.0		
		J	0.0	0.0	-0.0	-0.0	0.1	0.0		
	Ey	I	0.0	0.0	-0.0	-0.1	0.1	0.0		
		J	0.0	0.0	-0.0	-0.1	0.2	0.0		
	INVSLU Max	I	0.0	0.0	-23.4	-459.9	3601.8	0.0		
		J	0.0	0.0	23.2	-459.9	3957.4	0.0		
	Min	I	0.0	0.0	-551.0	-1022.2	1800.6	0.0		
		J	0.0	0.0	-504.4	-1022.2	1981.5	0.0		
	INVSLE-R Max	I	0.0	0.0	-17.4	-340.9	2667.6	0.0		
		J	0.0	0.0	17.1	-340.9	2930.8	0.0		
	Min	I	0.0	0.0	-408.1	-757.0	1334.3	0.0		
		J	0.0	0.0	-373.6	-757.0	1468.3	0.0		
	INVSLE-F Max	I	0.0	0.0	-17.9	-342.3	2664.8	0.0		
		J	0.0	0.0	16.6	-342.3	2927.5	0.0		
	Min	I	0.0	0.0	-407.5	-755.6	1337.0	0.0		
		J	0.0	0.0	-373.1	-755.6	1471.6	0.0		
	INVSLE~1 Max	I	0.0	0.0	-18.2	-343.0	2663.4	0.0		
		J	0.0	0.0	16.3	-343.0	2925.9	0.0		
	Min	I	0.0	0.0	-407.3	-754.9	1338.4	0.0		
		J	0.0	0.0	-372.8	-754.9	1473.2	0.0		
	INVSLE~2 Max	I	0.0	0.0	-116.0	-271.8	1639.0	0.0		
		J	0.0	0.0	-81.6	-271.8	1809.6	0.0		
	Min	I	0.0	0.0	-188.1	-419.8	1037.8	0.0		
		J	0.0	0.0	-153.6	-419.8	1136.9	0.0		
92	4	7	c1-c2--1 Max	I	0.0	0.0	152.5	0.1	1451.7	0.0
				J	0.0	0.0	152.5	0.1	1543.6	0.0
			Min	I	0.0	0.0	-236.3	-408.8	-0.0	0.0
				J	0.0	0.0	-236.3	-408.8	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	107.6	0.0	953.3	0.0
				J	0.0	0.0	107.6	0.0	1012.8	0.0
			Min	I	0.0	0.0	-161.1	-260.3	-0.0	0.0
				J	0.0	0.0	-161.1	-260.3	-0.0	0.0
			SLV-z (RS)	I	0.0	0.0	26.9	79.0	332.3	0.0
				J	0.0	0.0	26.9	79.0	358.8	0.0
	G1	I	0.0	0.0	-95.4	-307.9	1209.6	0.0		
		J	0.0	0.0	-66.9	-307.9	1290.7	0.0		
	G2	I	0.0	0.0	-19.1	-56.0	249.1	0.0		
		J	0.0	0.0	-13.1	-56.0	265.3	0.0		
	q3	I	0.0	0.0	-0.0	0.0	0.0	0.0		
		J	0.0	0.0	-0.0	0.0	0.0	0.0		
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0		
		J	0.0	0.0	0.0	0.0	0.0	0.0		
	q5_pc	I	0.0	0.0	-1.1	-3.1	8.2	0.0		
		J	0.0	0.0	-1.1	-3.1	9.3	0.0		
	q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0		
		J	0.0	0.0	0.0	0.0	-0.1	0.0		
	Ex	I	0.0	0.0	-0.0	-0.0	0.1	0.0		
		J	0.0	0.0	-0.0	-0.0	0.1	0.0		
	Ey	I	0.0	0.0	-0.0	-0.1	0.2	0.0		
		J	0.0	0.0	-0.0	-0.1	0.2	0.0		
	INVSLE Max	I	0.0	0.0	52.2	-488.3	3936.4	0.0		
		J	0.0	0.0	98.8	-488.3	4192.8	0.0		
	Min	I	0.0	0.0	-474.7	-1045.8	1961.8	0.0		
		J	0.0	0.0	-428.1	-1045.8	2092.3	0.0		
	INVSLE-R Max	I	0.0	0.0	38.6	-361.9	2915.3	0.0		
		J	0.0	0.0	73.1	-361.9	3105.2	0.0		
	Min	I	0.0	0.0	-351.5	-774.5	1453.8	0.0		
		J	0.0	0.0	-317.1	-774.5	1550.4	0.0		
	INVSLE-F Max	I	0.0	0.0	38.2	-363.1	2912.0	0.0		
		J	0.0	0.0	72.7	-363.1	3101.5	0.0		
	Min	I	0.0	0.0	-351.1	-773.2	1457.0	0.0		
		J	0.0	0.0	-316.6	-773.2	1554.1	0.0		

Ponte Canale NiE – Relazione di calcolo

			INVSLE~1 Max	I	0.0	0.0	38.0	-363.8	2910.4	0.0
				J	0.0	0.0	72.5	-363.8	3099.6	0.0
			Min	I	0.0	0.0	-350.9	-772.6	1458.7	0.0
				J	0.0	0.0	-316.4	-772.6	1556.0	0.0
			INVSLE~1 Max	I	0.0	0.0	-87.7	-284.8	1791.1	0.0
				J	0.0	0.0	-53.2	-284.8	1914.8	0.0
			Min	I	0.0	0.0	-141.5	-442.9	1126.3	0.0
				J	0.0	0.0	-107.0	-442.9	1197.1	0.0
93	4	7	c1-c2--1 Max	I	0.0	0.0	169.3	0.0	1549.5	0.0
				J	0.0	0.0	169.3	0.0	1608.1	0.0
			Min	I	0.0	0.0	-217.9	-402.2	-0.0	0.0
				J	0.0	0.0	-217.9	-402.2	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	118.9	0.0	1016.0	0.0
				J	0.0	0.0	118.9	0.0	1054.1	0.0
			Min	I	0.0	0.0	-149.6	-257.5	-0.0	0.0
				J	0.0	0.0	-149.6	-257.5	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	17.4	83.1	355.4	0.0
				J	0.0	0.0	17.4	83.1	372.2	0.0
			G1	I	0.0	0.0	-64.7	-317.2	1282.4	0.0
				J	0.0	0.0	-36.2	-317.2	1332.9	0.0
			G2	I	0.0	0.0	-12.9	-60.1	262.0	0.0
				J	0.0	0.0	-6.9	-60.1	271.9	0.0
			q3	I	0.0	0.0	-0.0	0.0	0.0	0.0
				J	0.0	0.0	-0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.8	-2.7	9.3	0.0
				J	0.0	0.0	-0.8	-2.7	10.1	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	0.0	0.1	0.0
				J	0.0	0.0	-0.0	0.0	0.1	0.0
			Ey	I	0.0	0.0	0.0	-0.1	0.2	0.0
				J	0.0	0.0	0.0	-0.1	0.2	0.0
			INVSLE Max	I	0.0	0.0	124.5	-506.9	4185.0	0.0
				J	0.0	0.0	171.1	-506.9	4346.5	0.0
			Min	I	0.0	0.0	-399.7	-1054.9	2076.5	0.0
				J	0.0	0.0	-353.1	-1054.9	2157.3	0.0
			INVSLE-R Max	I	0.0	0.0	92.2	-375.7	3099.4	0.0
				J	0.0	0.0	126.7	-375.7	3218.9	0.0
			Min	I	0.0	0.0	-296.0	-781.2	1538.8	0.0
				J	0.0	0.0	-261.5	-781.2	1598.7	0.0
			INVSLE-F Max	I	0.0	0.0	91.8	-376.8	3095.7	0.0
				J	0.0	0.0	126.3	-376.8	3214.9	0.0
			Min	I	0.0	0.0	-295.7	-780.1	1542.5	0.0
				J	0.0	0.0	-261.2	-780.1	1602.7	0.0
			INVSLE~1 Max	I	0.0	0.0	91.7	-377.3	3093.8	0.0
				J	0.0	0.0	126.1	-377.3	3212.8	0.0
			Min	I	0.0	0.0	-295.5	-779.6	1544.4	0.0
				J	0.0	0.0	-261.0	-779.6	1604.8	0.0
			INVSLE~1 Max	I	0.0	0.0	-60.2	-294.2	1899.9	0.0
				J	0.0	0.0	-25.7	-294.2	1977.0	0.0
			Min	I	0.0	0.0	-95.0	-460.4	1188.8	0.0
				J	0.0	0.0	-60.6	-460.4	1232.5	0.0
94	4	7	c1-c2--1 Max	I	0.0	0.0	186.1	0.0	1618.9	0.0
				J	0.0	0.0	186.1	0.0	1645.5	0.0
			Min	I	0.0	0.0	-200.3	-388.6	-0.0	0.0
				J	0.0	0.0	-200.3	-388.6	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	130.1	0.0	1060.5	0.0
				J	0.0	0.0	130.1	0.0	1078.1	0.0
			Min	I	0.0	0.0	-138.4	-249.9	-0.0	0.0
				J	0.0	0.0	-138.4	-249.9	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	8.1	86.0	369.6	0.0
				J	0.0	0.0	8.1	86.0	376.4	0.0
			G1	I	0.0	0.0	-34.7	-322.4	1327.3	0.0
				J	0.0	0.0	-6.2	-322.4	1347.7	0.0
			G2	I	0.0	0.0	-6.8	-63.5	269.1	0.0
				J	0.0	0.0	-0.8	-63.5	273.0	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.6	-2.4	10.2	0.0
				J	0.0	0.0	-0.6	-2.4	10.7	0.0

Ponte Canale NiE – Relazione di calcolo

			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.1	0.0
				J	0.0	0.0	0.0	0.0	0.1	0.0
			Ey	I	0.0	0.0	0.0	-0.0	0.2	0.0
				J	0.0	0.0	0.0	-0.0	0.2	0.0
			INVSLU Max	I	0.0	0.0	195.7	-518.8	4349.9	0.0
				J	0.0	0.0	242.3	-518.8	4419.0	0.0
			Min	I	0.0	0.0	-326.9	-1047.7	2146.1	0.0
				J	0.0	0.0	-280.4	-1047.7	2178.3	0.0
			INVSLE-R Max	I	0.0	0.0	144.9	-384.5	3221.5	0.0
				J	0.0	0.0	179.4	-384.5	3272.6	0.0
			Min	I	0.0	0.0	-242.1	-775.9	1590.3	0.0
				J	0.0	0.0	-207.7	-775.9	1614.3	0.0
			INVSLE-F Max	I	0.0	0.0	144.7	-385.4	3217.4	0.0
				J	0.0	0.0	179.2	-385.4	3268.3	0.0
			Min	I	0.0	0.0	-241.9	-775.0	1594.4	0.0
				J	0.0	0.0	-207.4	-775.0	1618.5	0.0
			INVSLE~1 Max	I	0.0	0.0	144.6	-385.9	3215.4	0.0
				J	0.0	0.0	179.1	-385.9	3266.2	0.0
			Min	I	0.0	0.0	-241.8	-774.5	1596.4	0.0
				J	0.0	0.0	-207.3	-774.5	1620.7	0.0
			INVSLE~1 Max	I	0.0	0.0	-33.4	-299.9	1966.2	0.0
				J	0.0	0.0	1.1	-299.9	1997.2	0.0
			Min	I	0.0	0.0	-49.6	-471.9	1226.7	0.0
				J	0.0	0.0	-15.1	-471.9	1244.2	0.0
95	4	7	c1-c2--1 Max	I	0.0	0.0	202.5	0.0	1660.5	0.0
				J	0.0	0.0	202.5	0.0	1657.5	0.0
			Min	I	0.0	0.0	-183.8	-368.6	-0.0	0.0
				J	0.0	0.0	-183.8	-368.6	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	140.8	0.0	1087.2	0.0
				J	0.0	0.0	140.8	0.0	1085.8	0.0
			Min	I	0.0	0.0	-127.7	-238.1	-0.0	0.0
				J	0.0	0.0	-127.7	-238.1	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	5.1	87.6	374.7	0.0
				J	0.0	0.0	5.1	87.6	371.6	0.0
			G1	I	0.0	0.0	-5.4	-323.5	1345.2	0.0
				J	0.0	0.0	23.1	-323.5	1336.3	0.0
			G2	I	0.0	0.0	-0.9	-66.1	270.7	0.0
				J	0.0	0.0	5.1	-66.1	268.6	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.3	-2.0	10.8	0.0
				J	0.0	0.0	-0.3	-2.0	11.1	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.1	0.0
				J	0.0	0.0	0.0	0.0	0.1	0.0
			Ey	I	0.0	0.0	0.0	-0.0	0.2	0.0
				J	0.0	0.0	0.0	-0.0	0.1	0.0
			INVSLU Max	I	0.0	0.0	265.2	-524.1	4432.9	0.0
				J	0.0	0.0	311.7	-524.1	4414.3	0.0
			Min	I	0.0	0.0	-256.9	-1025.3	2171.7	0.0
				J	0.0	0.0	-210.3	-1025.3	2156.7	0.0
			INVSLE-R Max	I	0.0	0.0	196.4	-388.3	3282.9	0.0
				J	0.0	0.0	230.9	-388.3	3269.1	0.0
			Min	I	0.0	0.0	-190.3	-759.3	1609.4	0.0
				J	0.0	0.0	-155.8	-759.3	1598.3	0.0
			INVSLE-F Max	I	0.0	0.0	196.3	-389.1	3278.6	0.0
				J	0.0	0.0	230.8	-389.1	3264.7	0.0
			Min	I	0.0	0.0	-190.2	-758.5	1613.7	0.0
				J	0.0	0.0	-155.7	-758.5	1602.7	0.0
			INVSLE~1 Max	I	0.0	0.0	196.2	-389.5	3276.4	0.0
				J	0.0	0.0	230.7	-389.5	3262.4	0.0
			Min	I	0.0	0.0	-190.1	-758.1	1615.9	0.0
				J	0.0	0.0	-155.6	-758.1	1604.9	0.0
			INVSLE~1 Max	I	0.0	0.0	-1.2	-301.9	1990.7	0.0
				J	0.0	0.0	33.3	-301.9	1976.6	0.0
			Min	I	0.0	0.0	-11.4	-477.1	1241.1	0.0
				J	0.0	0.0	23.1	-477.1	1233.3	0.0
96	4	7	c1-c2--1 Max	I	0.0	0.0	218.3	0.0	1678.4	0.0
				J	0.0	0.0	218.3	0.0	1645.4	0.0
			Min	I	0.0	0.0	-168.4	-343.9	-0.0	0.0
				J	0.0	0.0	-168.4	-343.9	-0.0	0.0

Ponte Canale NiE – Relazione di calcolo

		c1-c2--2	Max	I	0.0	0.0	150.9	0.0	1098.9	0.0	
				J	0.0	0.0	150.9	0.0	1078.2	0.0	
			Min	I	0.0	0.0	-117.6	-223.2	-0.0	0.0	
				J	0.0	0.0	-117.6	-223.2	-0.0	0.0	
		SLV-z(RS)		I	0.0	0.0	13.2	88.0	370.8	0.0	
				J	0.0	0.0	13.2	88.0	358.0	0.0	
		G1		I	0.0	0.0	23.1	-320.4	1336.8	0.0	
				J	0.0	0.0	51.6	-320.4	1299.4	0.0	
		G2		I	0.0	0.0	4.8	-67.7	267.0	0.0	
				J	0.0	0.0	10.8	-67.7	259.2	0.0	
		q3		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc		I	0.0	0.0	-0.0	-1.6	11.2	0.0	
				J	0.0	0.0	-0.0	-1.6	11.2	0.0	
		q5_ps		I	0.0	0.0	0.0	0.0	-0.1	0.0	
				J	0.0	0.0	0.0	0.0	-0.1	0.0	
		Ex		I	0.0	0.0	0.0	0.0	0.1	0.0	
				J	0.0	0.0	0.0	0.0	0.1	0.0	
		Ey		I	0.0	0.0	0.1	0.0	0.2	0.0	
				J	0.0	0.0	0.1	0.0	0.1	0.0	
		INVSU Max		I	0.0	0.0	332.4	-522.6	4441.0	0.0	
				J	0.0	0.0	379.0	-522.6	4335.4	0.0	
		Min		I	0.0	0.0	-189.7	-989.6	2155.0	0.0	
				J	0.0	0.0	-143.1	-989.6	2094.0	0.0	
		INVSLE-R Max		I	0.0	0.0	246.2	-387.2	3288.9	0.0	
				J	0.0	0.0	280.7	-387.2	3210.7	0.0	
		Min		I	0.0	0.0	-140.5	-733.0	1597.1	0.0	
				J	0.0	0.0	-106.0	-733.0	1551.9	0.0	
		INVSLE-F Max		I	0.0	0.0	246.2	-387.8	3284.4	0.0	
				J	0.0	0.0	280.7	-387.8	3206.2	0.0	
		Min		I	0.0	0.0	-140.5	-732.3	1601.5	0.0	
				J	0.0	0.0	-106.0	-732.3	1556.4	0.0	
		INVSLE-1 Max		I	0.0	0.0	246.2	-388.1	3282.2	0.0	
				J	0.0	0.0	280.7	-388.1	3204.0	0.0	
		Min		I	0.0	0.0	-140.5	-732.0	1603.8	0.0	
				J	0.0	0.0	-106.0	-732.0	1558.6	0.0	
		INVSU Max		I	0.0	0.0	41.2	-300.2	1974.7	0.0	
				J	0.0	0.0	75.7	-300.2	1916.7	0.0	
		Min		I	0.0	0.0	14.7	-476.1	1232.9	0.0	
				J	0.0	0.0	49.2	-476.1	1200.5	0.0	
97	4	7	c1-c2--1	Max	I	0.0	0.0	233.8	0.0	1669.7	0.0
				J	0.0	0.0	233.8	0.0	1606.4	0.0	
			Min	I	0.0	0.0	-153.8	-319.7	-0.0	0.0	
				J	0.0	0.0	-153.8	-319.7	-0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	160.7	0.0	1093.6	0.0	
				J	0.0	0.0	160.7	0.0	1053.3	0.0	
			Min	I	0.0	0.0	-107.9	-207.3	-0.0	0.0	
				J	0.0	0.0	-107.9	-207.3	-0.0	0.0	
		SLV-z(RS)		I	0.0	0.0	22.2	87.1	358.3	0.0	
				J	0.0	0.0	22.2	87.1	336.3	0.0	
		G1		I	0.0	0.0	50.8	-313.4	1303.0	0.0	
				J	0.0	0.0	79.3	-313.4	1237.9	0.0	
		G2		I	0.0	0.0	10.4	-68.5	258.2	0.0	
				J	0.0	0.0	16.4	-68.5	244.8	0.0	
		q3		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc		I	0.0	0.0	0.3	-1.2	11.3	0.0	
				J	0.0	0.0	0.3	-1.2	11.0	0.0	
		q5_ps		I	0.0	0.0	-0.0	0.0	-0.1	0.0	
				J	0.0	0.0	-0.0	0.0	-0.1	0.0	
		Ex		I	0.0	0.0	0.0	0.0	0.1	0.0	
				J	0.0	0.0	0.0	0.0	0.1	0.0	
		Ey		I	0.0	0.0	0.1	0.0	0.1	0.0	
				J	0.0	0.0	0.1	0.0	0.1	0.0	
		INVSU Max		I	0.0	0.0	398.4	-514.4	4371.9	0.0	
				J	0.0	0.0	444.9	-514.4	4180.3	0.0	
		Min		I	0.0	0.0	-125.4	-948.3	2097.4	0.0	
				J	0.0	0.0	-78.8	-948.3	1991.8	0.0	

Ponte Canale NiE – Relazione di calcolo

			INVSLE-R Max	I	0.0	0.0	295.1	-381.2	3237.7	0.0
				J	0.0	0.0	329.6	-381.2	3095.8	0.0
			Min	I	0.0	0.0	-92.9	-702.4	1554.4	0.0
				J	0.0	0.0	-58.4	-702.4	1476.2	0.0
			INVSLE-F Max	I	0.0	0.0	295.0	-381.6	3233.2	0.0
				J	0.0	0.0	329.4	-381.6	3091.4	0.0
			Min	I	0.0	0.0	-92.8	-701.9	1558.9	0.0
				J	0.0	0.0	-58.3	-701.9	1480.6	0.0
			INVSLE~1 Max	I	0.0	0.0	294.9	-381.9	3230.9	0.0
				J	0.0	0.0	329.4	-381.9	3089.2	0.0
			Min	I	0.0	0.0	-92.7	-701.6	1561.2	0.0
				J	0.0	0.0	-58.2	-701.6	1482.8	0.0
			INVSLEV Max	I	0.0	0.0	83.3	-294.8	1919.5	0.0
				J	0.0	0.0	117.8	-294.8	1819.1	0.0
			Min	I	0.0	0.0	39.0	-469.0	1202.9	0.0
				J	0.0	0.0	73.5	-469.0	1146.5	0.0
98	4	7	c1-c2--1 Max	I	0.0	0.0	249.2	0.0	1633.3	0.0
				J	0.0	0.0	249.2	0.0	1541.9	0.0
			Min	I	0.0	0.0	-139.2	-302.1	-0.0	0.0
				J	0.0	0.0	-139.2	-302.1	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	170.4	0.0	1070.3	0.0
				J	0.0	0.0	170.4	0.0	1012.0	0.0
			Min	I	0.0	0.0	-98.2	-194.7	-0.0	0.0
				J	0.0	0.0	-98.2	-194.7	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	30.6	85.0	337.5	0.0
				J	0.0	0.0	30.6	85.0	307.0	0.0
			G1	I	0.0	0.0	77.7	-302.6	1244.5	0.0
				J	0.0	0.0	106.2	-302.6	1152.6	0.0
			G2	I	0.0	0.0	15.7	-68.3	244.6	0.0
				J	0.0	0.0	21.7	-68.3	225.8	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	0.6	-0.9	11.1	0.0
				J	0.0	0.0	0.6	-0.9	10.6	0.0
			q5_ps	I	0.0	0.0	-0.0	0.0	-0.1	0.0
				J	0.0	0.0	-0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.1	0.0
				J	0.0	0.0	0.0	0.0	0.1	0.0
			Ey	I	0.0	0.0	0.1	0.1	0.1	0.0
				J	0.0	0.0	0.1	0.1	0.0	0.0
			INVSLEU Max	I	0.0	0.0	463.1	-500.0	4225.3	0.0
				J	0.0	0.0	509.7	-500.0	3951.9	0.0
			Min	I	0.0	0.0	-62.2	-909.4	2000.3	0.0
				J	0.0	0.0	-15.7	-909.4	1851.3	0.0
			INVSLE-R Max	I	0.0	0.0	343.0	-370.4	3129.1	0.0
				J	0.0	0.0	377.5	-370.4	2926.6	0.0
			Min	I	0.0	0.0	-46.0	-673.5	1482.4	0.0
				J	0.0	0.0	-11.6	-673.5	1372.1	0.0
			INVSLE-F Max	I	0.0	0.0	342.8	-370.8	3124.6	0.0
				J	0.0	0.0	377.3	-370.8	2922.4	0.0
			Min	I	0.0	0.0	-45.8	-673.2	1486.9	0.0
				J	0.0	0.0	-11.3	-673.2	1376.3	0.0
			INVSLE~1 Max	I	0.0	0.0	342.7	-371.0	3122.4	0.0
				J	0.0	0.0	377.2	-371.0	2920.3	0.0
			Min	I	0.0	0.0	-45.7	-673.0	1489.1	0.0
				J	0.0	0.0	-11.2	-673.0	1378.4	0.0
			INVSLEV Max	I	0.0	0.0	124.0	-286.0	1826.6	0.0
				J	0.0	0.0	158.5	-286.0	1685.4	0.0
			Min	I	0.0	0.0	62.9	-456.0	1151.6	0.0
				J	0.0	0.0	97.3	-456.0	1071.4	0.0
99	4	7	c1-c2--1 Max	I	0.0	0.0	264.8	0.0	1570.0	0.0
				J	0.0	0.0	264.8	0.0	1447.7	0.0
			Min	I	0.0	0.0	-123.4	-287.9	-0.0	0.0
				J	0.0	0.0	-123.4	-287.9	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	180.2	0.0	1029.7	0.0
				J	0.0	0.0	180.2	0.0	951.3	0.0
			Min	I	0.0	0.0	-87.6	-185.1	-0.0	0.0
				J	0.0	0.0	-87.6	-185.1	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	38.2	81.8	309.1	0.0
				J	0.0	0.0	38.2	81.8	271.0	0.0
			G1	I	0.0	0.0	104.1	-288.4	1162.1	0.0
				J	0.0	0.0	132.6	-288.4	1043.7	0.0
			G2	I	0.0	0.0	20.9	-67.3	226.2	0.0
				J	0.0	0.0	26.9	-67.3	202.4	0.0

Ponte Canale NiE – Relazione di calcolo

			q3	I	0.0	0.0	0.0	0.0	-0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	0.8	-0.5	10.7	0.0
				J	0.0	0.0	0.8	-0.5	9.8	0.0
			q5_ps	I	0.0	0.0	-0.0	0.0	-0.1	0.0
				J	0.0	0.0	-0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.1	0.0
				J	0.0	0.0	0.0	0.0	0.1	0.0
			Ey	I	0.0	0.0	0.1	0.1	0.0	0.0
				J	0.0	0.0	0.1	0.1	-0.1	0.0
			INVSLU Max	I	0.0	0.0	526.9	-479.6	4003.3	0.0
				J	0.0	0.0	573.5	-479.6	3645.4	0.0
			Min	I	0.0	0.0	1.3	-869.2	1864.6	0.0
				J	0.0	0.0	47.9	-869.2	1673.3	0.0
			INVSLE-R Max	I	0.0	0.0	390.3	-355.3	2964.7	0.0
				J	0.0	0.0	424.8	-355.3	2699.7	0.0
			Min	I	0.0	0.0	1.0	-643.8	1381.9	0.0
				J	0.0	0.0	35.5	-643.8	1240.2	0.0
			INVSLE-F Max	I	0.0	0.0	389.9	-355.5	2960.4	0.0
				J	0.0	0.0	424.4	-355.5	2695.7	0.0
			Min	I	0.0	0.0	1.4	-643.6	1386.2	0.0
				J	0.0	0.0	35.9	-643.6	1244.1	0.0
			INVSLE~1 Max	I	0.0	0.0	389.8	-355.6	2958.3	0.0
				J	0.0	0.0	424.3	-355.6	2693.8	0.0
			Min	I	0.0	0.0	1.5	-643.5	1388.3	0.0
				J	0.0	0.0	36.0	-643.5	1246.1	0.0
			INVSLV Max	I	0.0	0.0	163.2	-273.8	1697.4	0.0
				J	0.0	0.0	197.7	-273.8	1517.1	0.0
			Min	I	0.0	0.0	86.8	-437.5	1079.2	0.0
				J	0.0	0.0	121.3	-437.5	975.0	0.0
100	4	7	c1-c2--1 Max	I	0.0	0.0	281.2	16.1	1475.8	0.0
				J	0.0	0.0	281.2	16.1	1320.1	0.0
			Min	I	0.0	0.0	-105.5	-274.5	-0.0	0.0
				J	0.0	0.0	-105.5	-274.5	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	190.5	10.9	968.9	0.0
				J	0.0	0.0	190.5	10.9	868.7	0.0
			Min	I	0.0	0.0	-75.3	-176.0	-0.0	0.0
				J	0.0	0.0	-75.3	-176.0	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	44.8	77.6	273.9	0.0
				J	0.0	0.0	44.8	77.6	229.1	0.0
			G1	I	0.0	0.0	130.1	-271.1	1055.9	0.0
				J	0.0	0.0	158.5	-271.1	911.6	0.0
			G2	I	0.0	0.0	25.9	-65.3	203.5	0.0
				J	0.0	0.0	31.9	-65.3	174.5	0.0
			q3	I	0.0	0.0	0.0	0.0	-0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	1.1	-0.2	9.9	0.0
				J	0.0	0.0	1.1	-0.2	8.8	0.0
			q5_ps	I	0.0	0.0	-0.0	0.0	-0.1	0.0
				J	0.0	0.0	-0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.1	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	0.1	0.2	-0.0	0.0
				J	0.0	0.0	0.1	0.2	-0.1	0.0
			INVSLU Max	I	0.0	0.0	591.1	-432.3	3701.4	0.0
				J	0.0	0.0	637.7	-432.3	3256.4	0.0
			Min	I	0.0	0.0	67.2	-825.0	1691.2	0.0
				J	0.0	0.0	113.7	-825.0	1458.3	0.0
			INVSLE-R Max	I	0.0	0.0	437.8	-320.2	2741.1	0.0
				J	0.0	0.0	472.3	-320.2	2411.6	0.0
			Min	I	0.0	0.0	49.8	-611.1	1253.4	0.0
				J	0.0	0.0	84.3	-611.1	1080.8	0.0
			INVSLE-F Max	I	0.0	0.0	437.4	-320.3	2737.2	0.0
				J	0.0	0.0	471.9	-320.3	2408.0	0.0
			Min	I	0.0	0.0	50.3	-611.0	1257.4	0.0
				J	0.0	0.0	84.8	-611.0	1084.4	0.0
			INVSLE~1 Max	I	0.0	0.0	437.1	-320.3	2735.2	0.0
				J	0.0	0.0	471.6	-320.3	2406.3	0.0
			Min	I	0.0	0.0	50.5	-611.0	1259.4	0.0
				J	0.0	0.0	85.0	-611.0	1086.1	0.0

Ponte Canale NiE – Relazione di calcolo

			INVS LV Max	I	0.0	0.0	200.8	-258.7	1533.3	0.0
				J	0.0	0.0	235.3	-258.7	1315.3	0.0
			Min	I	0.0	0.0	111.2	-414.2	985.4	0.0
				J	0.0	0.0	145.6	-414.2	856.9	0.0
101	4	7	c1-c2--1 Max	I	0.0	0.0	299.1	39.1	1348.5	0.0
				J	0.0	0.0	299.1	39.1	1158.3	0.0
			Min	I	0.0	0.0	-84.3	-267.1	-0.0	0.0
				J	0.0	0.0	-84.3	-267.1	-0.1	0.0
			c1-c2--2 Max	I	0.0	0.0	201.7	25.7	886.3	0.0
				J	0.0	0.0	201.7	25.7	763.5	0.0
			Min	I	0.0	0.0	-60.6	-169.4	-0.0	0.0
				J	0.0	0.0	-60.6	-169.4	-0.0	0.0
			SLV-z (RS)	I	0.0	0.0	50.4	72.8	232.7	0.0
				J	0.0	0.0	50.4	72.8	182.4	0.0
			G1	I	0.0	0.0	155.9	-251.4	926.1	0.0
				J	0.0	0.0	184.4	-251.4	756.0	0.0
			G2	I	0.0	0.0	30.9	-62.6	176.3	0.0
				J	0.0	0.0	36.9	-62.6	142.4	0.0
			q3	I	0.0	0.0	0.0	0.0	-0.0	0.0
				J	0.0	0.0	0.0	0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	1.4	0.0	8.9	0.0
				J	0.0	0.0	1.4	0.0	7.5	0.0
			q5_ps	I	0.0	0.0	-0.0	0.0	-0.1	0.0
				J	0.0	0.0	-0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.1	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	0.0	0.4	-0.0	0.0
				J	0.0	0.0	0.0	0.4	-0.1	0.0
			INVS LU Max	I	0.0	0.0	657.1	-371.2	3316.8	0.0
				J	0.0	0.0	703.7	-371.2	2783.2	0.0
			Min	I	0.0	0.0	137.1	-784.7	1480.2	0.0
				J	0.0	0.0	183.7	-784.7	1205.9	0.0
			INVS LE-R Max	I	0.0	0.0	486.6	-275.0	2456.3	0.0
				J	0.0	0.0	521.1	-275.0	2061.1	0.0
			Min	I	0.0	0.0	101.7	-581.2	1097.0	0.0
				J	0.0	0.0	136.1	-581.2	893.8	0.0
			INVS LE-F Max	I	0.0	0.0	486.1	-275.0	2452.7	0.0
				J	0.0	0.0	520.6	-275.0	2058.1	0.0
			Min	I	0.0	0.0	102.2	-581.2	1100.6	0.0
				J	0.0	0.0	136.7	-581.2	896.8	0.0
			INVS LE~1 Max	I	0.0	0.0	485.8	-275.0	2450.9	0.0
				J	0.0	0.0	520.3	-275.0	2056.6	0.0
			Min	I	0.0	0.0	102.5	-581.2	1102.4	0.0
				J	0.0	0.0	137.0	-581.2	898.3	0.0
			INVS LV Max	I	0.0	0.0	237.2	-241.2	1335.2	0.0
				J	0.0	0.0	271.7	-241.2	1080.8	0.0
			Min	I	0.0	0.0	136.4	-386.9	869.6	0.0
				J	0.0	0.0	170.8	-386.9	716.0	0.0
102	4	7	c1-c2--1 Max	I	0.0	0.0	319.9	62.1	1184.6	0.0
				J	0.0	0.0	319.9	62.1	952.4	0.0
			Min	I	0.0	0.0	-58.2	-256.8	-0.1	0.0
				J	0.0	0.0	-58.2	-256.8	-2.3	0.0
			c1-c2--2 Max	I	0.0	0.0	214.9	40.2	779.7	0.0
				J	0.0	0.0	214.9	40.2	628.9	0.0
			Min	I	0.0	0.0	-42.2	-161.7	-0.1	0.0
				J	0.0	0.0	-42.2	-161.7	-1.5	0.0
			SLV-z (RS)	I	0.0	0.0	54.9	67.5	186.5	0.0
				J	0.0	0.0	54.9	67.5	131.6	0.0
			G1	I	0.0	0.0	181.8	-230.4	772.2	0.0
				J	0.0	0.0	210.3	-230.4	576.1	0.0
			G2	I	0.0	0.0	35.9	-59.2	144.7	0.0
				J	0.0	0.0	41.9	-59.2	105.8	0.0
			q3	I	0.0	0.0	-0.0	0.0	-0.0	0.0
				J	0.0	0.0	-0.0	0.0	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	1.6	0.3	7.6	0.0
				J	0.0	0.0	1.6	0.3	6.1	0.0
			q5_ps	I	0.0	0.0	-0.0	0.0	-0.1	0.0
				J	0.0	0.0	-0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.1	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	0.0	0.1	0.0	0.0
			I	0.0	0.0	-0.0	0.6	0.0	0.0
			J	0.0	0.0	-0.0	0.6	0.0	0.0
			I	0.0	0.0	727.2	-306.9	2843.8	0.0
			J	0.0	0.0	773.7	-306.9	2211.7	0.0
			I	0.0	0.0	213.9	-737.9	1230.7	0.0
			J	0.0	0.0	260.5	-737.9	912.0	0.0
			I	0.0	0.0	538.6	-227.4	2106.0	0.0
			J	0.0	0.0	573.0	-227.4	1637.9	0.0
			I	0.0	0.0	158.6	-546.6	912.1	0.0
			J	0.0	0.0	193.1	-546.6	675.9	0.0
			I	0.0	0.0	537.9	-227.5	2103.0	0.0
			J	0.0	0.0	572.4	-227.5	1635.4	0.0
			I	0.0	0.0	159.2	-546.4	915.2	0.0
			J	0.0	0.0	193.7	-546.4	678.4	0.0
			I	0.0	0.0	537.6	-227.6	2101.4	0.0
			J	0.0	0.0	572.1	-227.6	1634.2	0.0
			I	0.0	0.0	159.5	-546.4	916.7	0.0
			J	0.0	0.0	194.0	-546.4	679.6	0.0
			I	0.0	0.0	272.7	-221.9	1103.3	0.0
			J	0.0	0.0	307.1	-221.9	813.5	0.0
			I	0.0	0.0	162.8	-357.3	730.4	0.0
			J	0.0	0.0	197.3	-357.3	550.3	0.0
103	4	7	I	0.0	0.0	345.4	82.6	974.3	0.0
			J	0.0	0.0	345.4	82.6	694.6	0.0
			I	0.0	0.0	-25.3	-246.9	-2.5	0.0
			J	0.0	0.0	-25.3	-246.9	-16.6	0.0
			I	0.0	0.0	231.1	52.8	642.0	0.0
			J	0.0	0.0	231.1	52.8	458.7	0.0
			I	0.0	0.0	-18.5	-154.6	-1.6	0.0
			J	0.0	0.0	-18.5	-154.6	-10.3	0.0
			I	0.0	0.0	58.3	62.2	135.8	0.0
			J	0.0	0.0	58.3	62.2	77.6	0.0
			I	0.0	0.0	208.4	-209.4	592.8	0.0
			J	0.0	0.0	236.9	-209.4	370.2	0.0
			I	0.0	0.0	41.0	-55.5	108.6	0.0
			J	0.0	0.0	47.0	-55.5	64.6	0.0
			I	0.0	0.0	-0.0	0.1	0.0	0.0
			J	0.0	0.0	-0.0	0.1	0.0	0.0
			I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
			I	0.0	0.0	1.8	0.5	6.1	0.0
			J	0.0	0.0	1.8	0.5	4.4	0.0
			I	0.0	0.0	-0.0	0.0	-0.1	0.0
			J	0.0	0.0	-0.0	0.0	-0.0	0.0
			I	0.0	0.0	0.0	0.1	0.0	0.0
			J	0.0	0.0	0.0	0.1	0.0	0.0
			I	0.0	0.0	-0.1	1.0	0.2	0.0
			J	0.0	0.0	-0.1	1.0	0.3	0.0
			I	0.0	0.0	804.6	-245.6	2267.7	0.0
			J	0.0	0.0	851.1	-245.6	1528.6	0.0
			I	0.0	0.0	300.8	-691.4	938.0	0.0
			J	0.0	0.0	347.4	-691.4	560.6	0.0
			I	0.0	0.0	595.8	-181.9	1679.4	0.0
			J	0.0	0.0	630.3	-181.9	1132.0	0.0
			I	0.0	0.0	223.0	-512.1	695.2	0.0
			J	0.0	0.0	257.5	-512.1	415.5	0.0
			I	0.0	0.0	595.1	-182.1	1676.9	0.0
			J	0.0	0.0	629.6	-182.1	1130.3	0.0
			I	0.0	0.0	223.7	-511.9	697.7	0.0
			J	0.0	0.0	258.2	-511.9	417.3	0.0
			I	0.0	0.0	594.8	-182.2	1675.7	0.0
			J	0.0	0.0	629.3	-182.2	1129.4	0.0
			I	0.0	0.0	224.0	-511.8	698.9	0.0
			J	0.0	0.0	258.5	-511.8	418.2	0.0
			I	0.0	0.0	307.7	-202.4	837.3	0.0
			J	0.0	0.0	342.2	-202.4	512.5	0.0
			I	0.0	0.0	191.0	-327.4	565.5	0.0
			J	0.0	0.0	225.5	-327.4	357.1	0.0
104	4	7	I	0.0	0.0	380.6	97.5	708.6	0.0
			J	0.0	0.0	380.6	97.5	389.2	0.0
			I	0.0	0.0	-3.2	-239.1	-15.8	0.0
			J	0.0	0.0	-3.2	-239.1	-62.2	0.0
			I	0.0	0.0	253.6	61.9	466.4	0.0
			J	0.0	0.0	253.6	61.9	256.2	0.0
			I	0.0	0.0	-2.4	-149.3	-9.8	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-2.4	-149.3	-37.7	0.0
		SLV-z (RS)	I	0.0	0.0	60.7	57.4	81.6	0.0
			J	0.0	0.0	60.7	57.4	21.2	0.0
		G1	I	0.0	0.0	235.8	-190.9	385.9	0.0
			J	0.0	0.0	264.3	-190.9	135.8	0.0
		G2	I	0.0	0.0	46.3	-51.7	67.4	0.0
			J	0.0	0.0	52.3	-51.7	18.1	0.0
		q3	I	0.0	0.0	-0.0	0.1	0.0	0.0
			J	0.0	0.0	-0.0	0.1	0.1	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	1.9	0.7	4.5	0.0
			J	0.0	0.0	1.9	0.7	2.6	0.0
		q5_ps	I	0.0	0.0	-0.0	0.0	-0.0	0.0
			J	0.0	0.0	-0.0	0.0	-0.0	0.0
		Ex	I	0.0	0.0	-0.0	0.1	0.1	0.0
			J	0.0	0.0	-0.0	0.1	0.1	0.0
		Ey	I	0.0	0.0	-0.2	1.7	0.7	0.0
			J	0.0	0.0	-0.2	1.7	0.9	0.0
		INVSLE Max	I	0.0	0.0	896.4	-195.2	1572.6	0.0
			J	0.0	0.0	943.0	-195.2	735.6	0.0
		Min	I	0.0	0.0	374.9	-651.0	586.7	0.0
			J	0.0	0.0	421.5	-651.0	121.5	0.0
		INVSLE-R Max	I	0.0	0.0	663.9	-144.7	1164.6	0.0
			J	0.0	0.0	698.4	-144.7	544.7	0.0
		Min	I	0.0	0.0	277.8	-482.2	434.9	0.0
			J	0.0	0.0	312.3	-482.2	90.2	0.0
		INVSLE-F Max	I	0.0	0.0	663.1	-145.0	1162.8	0.0
			J	0.0	0.0	697.6	-145.0	543.7	0.0
		Min	I	0.0	0.0	278.6	-481.9	436.7	0.0
			J	0.0	0.0	313.1	-481.9	91.2	0.0
		INVSLE~1 Max	I	0.0	0.0	662.7	-145.1	1161.9	0.0
			J	0.0	0.0	697.2	-145.1	543.1	0.0
		Min	I	0.0	0.0	279.0	-481.7	437.6	0.0
			J	0.0	0.0	313.5	-481.7	91.7	0.0
		INVSLE Max	I	0.0	0.0	343.0	-184.7	535.1	0.0
			J	0.0	0.0	377.4	-184.7	175.4	0.0
		Min	I	0.0	0.0	221.4	-300.6	371.5	0.0
			J	0.0	0.0	255.9	-300.6	132.4	0.0
105	4	7 c1-c2--1 Max	I	10.4	4.8	427.3	100.4	392.9	12.9
			J	10.4	4.8	427.3	100.4	59.2	12.3
		Min	I	-8.4	-3.0	-0.0	-230.3	-59.8	-14.5
			J	-8.4	-3.0	-0.0	-230.3	-158.7	-16.8
		c1-c2--2 Max	I	6.6	3.1	283.9	63.7	257.3	7.9
			J	6.6	3.1	283.9	63.7	37.6	7.7
		Min	I	-5.9	-2.1	-0.0	-143.6	-36.1	-9.2
			J	-5.9	-2.1	-0.0	-143.6	-99.2	-10.5
		SLV-z (RS)	I	1.9	1.5	62.1	54.2	24.2	2.6
			J	1.9	1.5	62.1	54.2	38.5	1.1
		G1	I	6.2	5.1	264.7	-178.6	147.7	6.7
			J	6.2	5.1	293.2	-178.6	-131.2	1.6
		G2	I	1.2	1.3	52.1	-48.7	20.6	2.6
			J	1.2	1.3	58.1	-48.7	-34.5	1.3
		q3	I	3.8	-16.0	-0.0	0.2	0.1	-15.4
			J	3.8	-16.0	-0.0	0.2	0.1	0.6
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	4.1	-20.5	2.0	0.9	2.7	-19.7
			J	4.1	-20.5	2.0	0.9	0.7	0.8
		q5_ps	I	1.4	-6.6	-0.0	0.1	0.0	-6.3
			J	1.4	-6.6	-0.0	0.1	0.0	0.3
		Ex	I	2.4	-13.0	-0.0	0.2	0.1	-12.5
			J	2.4	-13.0	-0.0	0.2	0.1	0.5
		Ey	I	54.2	-245.9	-0.4	2.9	1.6	-236.9
			J	54.2	-245.9	-0.4	2.9	2.0	9.1
		INVSLE Max	I	27.8	33.6	1006.2	-170.5	760.1	47.8
			J	27.8	33.6	1052.8	-170.5	-143.2	21.2
		Min	I	-4.9	-34.1	425.8	-618.6	144.1	-38.3
			J	-4.9	-34.1	472.3	-618.6	-438.6	-19.4
		INVSLE-R Max	I	20.3	23.5	745.2	-126.4	562.8	34.1
			J	20.3	23.5	779.7	-126.4	-106.1	15.7
		Min	I	-3.4	-8.8	315.6	-458.2	106.9	-17.0
			J	-3.4	-8.8	350.0	-458.2	-324.8	-14.3

Ponte Canale NiE – Relazione di calcolo

			INVSLE-F Max	I	18.7	15.3	744.4	-126.7	561.8	26.2
				J	18.7	15.3	778.9	-126.7	-106.4	15.4
			Min	I	-1.7	-0.6	316.3	-457.8	108.0	-9.1
				J	-1.7	-0.6	350.8	-457.8	-324.5	-14.0
			INVSLE~1 Max	I	17.8	11.2	744.0	-126.9	561.2	22.3
				J	17.8	11.2	778.5	-126.9	-106.5	15.2
			Min	I	-0.9	3.5	316.7	-457.6	108.5	-5.2
				J	-0.9	3.5	351.2	-457.6	-324.4	-13.9
			INVSLE~2 Max	I	62.9	256.7	379.0	-172.2	193.0	250.7
				J	62.9	256.7	413.5	-172.2	-126.5	12.5
			Min	I	-48.0	-243.9	254.5	-282.5	143.6	-232.0
				J	-48.0	-243.9	289.0	-282.5	-204.8	-6.7
106	4	7	c1-c2--1 Max	I	25.1	7.5	0.2	87.3	78.8	7.4
				J	25.1	7.5	0.2	87.3	344.8	9.0
			Min	I	-62.0	-19.6	-446.7	-367.8	-272.9	-12.0
				J	-62.0	-19.6	-446.7	-367.8	-46.9	-4.6
			c1-c2--2 Max	I	16.3	5.3	0.1	54.5	49.5	4.8
				J	16.3	5.3	0.1	54.5	236.1	5.7
			Min	I	-39.3	-12.4	-288.9	-232.1	-172.2	-7.6
				J	-39.3	-12.4	-288.9	-232.1	-30.7	-3.3
			SLV-z(RS)	I	5.3	2.7	75.0	39.6	25.7	0.4
				J	5.3	2.7	75.0	39.6	49.8	2.5
			G1	I	-24.8	-11.1	-343.9	-179.7	-123.8	-1.9
				J	-24.8	-11.1	-315.4	-179.7	205.8	9.2
			G2	I	-3.7	-2.1	-62.4	-26.4	-15.6	0.3
				J	-3.7	-2.1	-58.5	-24.1	44.8	2.4
			q3	I	35.6	-10.1	0.0	0.4	0.3	0.4
				J	35.6	-10.1	0.0	0.4	0.3	10.5
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	-9.0	16.0	-2.6	-3.2	-2.2	0.7
				J	-9.0	16.0	-2.6	-3.2	0.4	-15.3
			q5_ps	I	-2.8	5.4	0.0	0.1	0.1	0.3
				J	-2.8	5.4	0.0	0.1	0.1	-5.1
			Ex	I	198.1	-45.7	0.1	2.3	1.8	2.8
				J	198.1	-45.7	0.1	2.3	1.7	48.5
			Ey	I	-125.1	148.8	0.1	1.3	1.6	6.4
				J	-125.1	148.8	0.1	1.3	1.5	-142.4
			INVSLE~3 Max	I	39.8	6.6	-545.8	-157.6	-79.9	8.5
				J	39.8	6.6	-502.1	-154.4	804.2	51.3
			Min	I	-130.3	-62.8	-1153.8	-777.7	-558.6	-19.1
				J	-130.3	-62.8	-1110.1	-774.6	274.6	-4.2
			INVSLE~4 Max	I	2.0	3.8	-404.5	-116.9	-59.3	6.2
				J	2.0	3.8	-372.1	-114.6	595.7	29.8
			Min	I	-95.9	-42.5	-854.5	-575.9	-413.6	-14.1
				J	-95.9	-42.5	-822.1	-573.6	203.4	-2.1
			INVSLE~5 Max	I	-1.6	-2.6	-405.5	-118.2	-60.2	5.9
				J	-1.6	-2.6	-373.2	-115.9	595.5	23.6
			Min	I	-92.3	-36.1	-853.4	-574.6	-412.7	-13.8
				J	-92.3	-36.1	-821.0	-572.3	203.6	4.0
			INVSLE~6 Max	I	-3.4	-5.8	-406.1	-118.8	-60.6	5.8
				J	-3.4	-5.8	-373.7	-116.5	595.4	20.6
			Min	I	-90.5	-32.9	-852.9	-574.0	-412.3	-13.6
				J	-90.5	-32.9	-820.5	-571.7	203.7	7.0
			INVSLE~7 Max	I	208.7	150.1	-331.2	-165.5	-112.7	5.7
				J	208.7	150.1	-298.8	-163.1	301.4	169.4
			Min	I	-265.7	-176.6	-481.3	-246.9	-166.2	-9.0
				J	-265.7	-176.6	-448.9	-244.5	199.8	-146.1
107	4	7	c1-c2--1 Max	I	0.0	0.0	0.0	81.4	324.3	0.0
				J	0.0	0.0	0.0	81.4	675.3	0.0
			Min	I	0.0	0.0	-411.3	-394.8	-77.0	0.0
				J	0.0	0.0	-411.3	-394.8	-0.2	0.0
			c1-c2--2 Max	I	0.0	0.0	0.0	50.4	222.3	0.0
				J	0.0	0.0	0.0	50.4	453.0	0.0
			Min	I	0.0	0.0	-268.1	-248.6	-49.9	0.0
				J	0.0	0.0	-268.1	-248.6	-0.1	0.0
			SLV-z(RS)	I	0.0	0.0	71.0	44.8	46.6	0.0
				J	0.0	0.0	71.0	44.8	117.4	0.0
			G1	I	0.0	0.0	-304.5	-200.4	189.8	0.0
				J	0.0	0.0	-276.0	-200.4	480.0	0.0
			G2	I	0.0	0.0	-56.3	-29.1	42.8	0.0
				J	0.0	0.0	-52.4	-26.8	97.1	0.0
			q3	I	0.0	0.0	0.0	0.2	0.2	0.0
				J	0.0	0.0	0.0	0.2	0.2	0.0

Ponte Canale NiE – Relazione di calcolo

			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-2.4	-3.4	0.1	0.0	0.0	0.0
				J	0.0	0.0	-2.4	-3.4	2.5	0.0	0.0	0.0
			q5_ps	I	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
			Ex	I	0.0	0.0	0.1	1.5	1.3	0.0	0.0	0.0
				J	0.0	0.0	0.1	1.5	1.1	0.0	0.0	0.0
			Ey	I	0.0	0.0	0.1	0.8	1.1	0.0	0.0	0.0
				J	0.0	0.0	0.1	0.8	1.0	0.0	0.0	0.0
			INVSLU Max	I	0.0	0.0	-484.9	-196.9	751.8	0.0	0.0	0.0
				J	0.0	0.0	-441.1	-193.7	1693.0	0.0	0.0	0.0
			Min	I	0.0	0.0	-1044.5	-846.0	209.9	0.0	0.0	0.0
				J	0.0	0.0	-1000.8	-842.8	776.6	0.0	0.0	0.0
			INVSLE-R Max	I	0.0	0.0	-359.3	-146.1	556.9	0.0	0.0	0.0
				J	0.0	0.0	-326.9	-143.7	1253.9	0.0	0.0	0.0
			Min	I	0.0	0.0	-773.6	-626.4	155.5	0.0	0.0	0.0
				J	0.0	0.0	-741.2	-624.1	575.4	0.0	0.0	0.0
			INVSLE-F Max	I	0.0	0.0	-360.3	-147.4	556.9	0.0	0.0	0.0
				J	0.0	0.0	-327.9	-145.1	1252.9	0.0	0.0	0.0
			Min	I	0.0	0.0	-772.6	-625.1	155.5	0.0	0.0	0.0
				J	0.0	0.0	-740.2	-622.7	576.4	0.0	0.0	0.0
			INVSLE~1 Max	I	0.0	0.0	-360.8	-148.1	556.8	0.0	0.0	0.0
				J	0.0	0.0	-328.4	-145.8	1252.4	0.0	0.0	0.0
			Min	I	0.0	0.0	-772.1	-624.4	155.5	0.0	0.0	0.0
				J	0.0	0.0	-739.7	-622.0	577.0	0.0	0.0	0.0
			INVSLV Max	I	0.0	0.0	-289.8	-184.0	279.8	0.0	0.0	0.0
				J	0.0	0.0	-257.4	-181.7	695.2	0.0	0.0	0.0
			Min	I	0.0	0.0	-431.9	-275.0	185.2	0.0	0.0	0.0
				J	0.0	0.0	-399.5	-272.7	459.1	0.0	0.0	0.0
108	4	7	c1-c2--1 Max	I	0.0	0.0	14.1	70.4	644.9	0.0	0.0	0.0
				J	0.0	0.0	14.1	70.4	961.8	0.0	0.0	0.0
			Min	I	0.0	0.0	-370.8	-415.6	-3.6	0.0	0.0	0.0
				J	0.0	0.0	-370.8	-415.6	-0.0	0.0	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	10.3	43.2	434.2	0.0	0.0	0.0
				J	0.0	0.0	10.3	43.2	637.6	0.0	0.0	0.0
			Min	I	0.0	0.0	-243.3	-261.3	-2.5	0.0	0.0	0.0
				J	0.0	0.0	-243.3	-261.3	-0.0	0.0	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	65.0	50.6	113.9	0.0	0.0	0.0
				J	0.0	0.0	65.0	50.6	178.8	0.0	0.0	0.0
			G1	I	0.0	0.0	-263.7	-221.9	464.0	0.0	0.0	0.0
				J	0.0	0.0	-235.2	-221.9	713.4	0.0	0.0	0.0
			G2	I	0.0	0.0	-49.5	-32.8	94.4	0.0	0.0	0.0
				J	0.0	0.0	-45.6	-30.5	141.9	0.0	0.0	0.0
			q3	I	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-2.2	-3.5	2.3	0.0	0.0	0.0
				J	0.0	0.0	-2.2	-3.5	4.5	0.0	0.0	0.0
			q5_ps	I	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.1	-0.0	0.0	0.0	0.0
			Ex	I	0.0	0.0	0.1	1.0	0.9	0.0	0.0	0.0
				J	0.0	0.0	0.1	1.0	0.7	0.0	0.0	0.0
			Ey	I	0.0	0.0	0.1	0.5	0.8	0.0	0.0	0.0
				J	0.0	0.0	0.1	0.5	0.7	0.0	0.0	0.0
			INVSLU Max	I	0.0	0.0	-401.6	-245.7	1626.4	0.0	0.0	0.0
				J	0.0	0.0	-357.9	-242.5	2457.1	0.0	0.0	0.0
			Min	I	0.0	0.0	-925.3	-908.2	746.9	0.0	0.0	0.0
				J	0.0	0.0	-881.6	-905.0	1150.6	0.0	0.0	0.0
			INVSLE-R Max	I	0.0	0.0	-297.6	-182.2	1204.6	0.0	0.0	0.0
				J	0.0	0.0	-265.3	-179.9	1819.8	0.0	0.0	0.0
			Min	I	0.0	0.0	-685.3	-672.5	553.4	0.0	0.0	0.0
				J	0.0	0.0	-652.9	-670.2	852.6	0.0	0.0	0.0
			INVSLE-F Max	I	0.0	0.0	-298.5	-183.6	1203.7	0.0	0.0	0.0
				J	0.0	0.0	-266.1	-181.3	1818.0	0.0	0.0	0.0
			Min	I	0.0	0.0	-684.4	-671.1	554.3	0.0	0.0	0.0
				J	0.0	0.0	-652.0	-668.7	854.4	0.0	0.0	0.0
			INVSLE~1 Max	I	0.0	0.0	-299.0	-184.3	1203.2	0.0	0.0	0.0
				J	0.0	0.0	-266.6	-182.0	1817.1	0.0	0.0	0.0
			Min	I	0.0	0.0	-684.0	-670.4	554.8	0.0	0.0	0.0
				J	0.0	0.0	-651.6	-668.0	855.3	0.0	0.0	0.0
			INVSLV Max	I	0.0	0.0	-248.1	-203.7	672.7	0.0	0.0	0.0
				J	0.0	0.0	-215.7	-201.4	1034.5	0.0	0.0	0.0
			Min	I	0.0	0.0	-378.2	-305.7	444.0	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-345.8	-303.4	676.1	0.0	
109	4	7	c1-c2--1 Max	I	0.0	0.0	42.4	57.3	938.5	0.0
				J	0.0	0.0	42.4	57.3	1191.6	0.0
			Min	I	0.0	0.0	-331.8	-429.7	-0.0	0.0
				J	0.0	0.0	-331.8	-429.7	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	30.7	35.0	623.6	0.0
				J	0.0	0.0	30.7	35.0	784.6	0.0
			Min	I	0.0	0.0	-218.9	-270.0	-0.0	0.0
				J	0.0	0.0	-218.9	-270.0	-0.0	0.0
			SLV-z (RS)	I	0.0	0.0	57.5	56.4	175.3	0.0
				J	0.0	0.0	57.5	56.4	232.7	0.0
			G1	I	0.0	0.0	-222.8	-242.7	698.6	0.0
				J	0.0	0.0	-194.3	-242.7	907.1	0.0
			G2	I	0.0	0.0	-42.3	-37.0	138.9	0.0
				J	0.0	0.0	-38.4	-34.7	179.2	0.0
			q3	I	0.0	0.0	0.0	0.1	0.1	0.0
				J	0.0	0.0	0.0	0.1	0.1	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-2.0	-3.6	4.3	0.0
				J	0.0	0.0	-2.0	-3.6	6.2	0.0
			q5_ps	I	0.0	0.0	0.0	0.1	-0.0	0.0
				J	0.0	0.0	0.0	0.1	-0.0	0.0
			Ex	I	0.0	0.0	0.1	0.7	0.6	0.0
				J	0.0	0.0	0.1	0.7	0.5	0.0
			Ey	I	0.0	0.0	0.1	0.3	0.6	0.0
				J	0.0	0.0	0.1	0.3	0.5	0.0
			INVS LU Max	I	0.0	0.0	-298.7	-297.0	2401.4	0.0
				J	0.0	0.0	-255.0	-293.8	3080.8	0.0
			Min	I	0.0	0.0	-807.4	-960.9	1126.7	0.0
				J	0.0	0.0	-763.7	-957.8	1460.8	0.0
			INVS LE-R Max	I	0.0	0.0	-221.4	-220.2	1778.5	0.0
				J	0.0	0.0	-189.0	-217.9	2281.6	0.0
			Min	I	0.0	0.0	-598.0	-711.6	834.9	0.0
				J	0.0	0.0	-565.6	-709.2	1082.5	0.0
			INVS LE-F Max	I	0.0	0.0	-222.2	-221.7	1776.8	0.0
				J	0.0	0.0	-189.8	-219.3	2279.1	0.0
			Min	I	0.0	0.0	-597.2	-710.1	836.6	0.0
				J	0.0	0.0	-564.8	-707.8	1085.0	0.0
			INVS LE-1 Max	I	0.0	0.0	-222.6	-222.4	1776.0	0.0
				J	0.0	0.0	-190.2	-220.0	2277.9	0.0
			Min	I	0.0	0.0	-596.8	-709.4	837.4	0.0
				J	0.0	0.0	-564.4	-707.1	1086.2	0.0
			INVS LV Max	I	0.0	0.0	-207.5	-223.0	1013.0	0.0
				J	0.0	0.0	-175.1	-220.7	1319.2	0.0
			Min	I	0.0	0.0	-322.5	-336.4	661.8	0.0
				J	0.0	0.0	-290.1	-334.1	853.3	0.0
110	4	7	c1-c2--1 Max	I	0.0	0.0	69.9	42.8	1179.5	0.0
				J	0.0	0.0	69.9	42.8	1372.7	0.0
			Min	I	0.0	0.0	-296.4	-436.8	-0.0	0.0
				J	0.0	0.0	-296.4	-436.8	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	50.1	26.0	778.1	0.0
				J	0.0	0.0	50.1	26.0	899.6	0.0
			Min	I	0.0	0.0	-196.6	-274.5	-0.0	0.0
				J	0.0	0.0	-196.6	-274.5	-0.0	0.0
			SLV-z (RS)	I	0.0	0.0	48.8	62.1	229.5	0.0
				J	0.0	0.0	48.8	62.1	278.3	0.0
			G1	I	0.0	0.0	-182.8	-261.5	894.4	0.0
				J	0.0	0.0	-154.3	-261.5	1063.0	0.0
			G2	I	0.0	0.0	-35.0	-41.4	176.0	0.0
				J	0.0	0.0	-31.1	-39.1	209.1	0.0
			q3	I	0.0	0.0	0.0	0.1	0.1	0.0
				J	0.0	0.0	0.0	0.1	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-1.7	-3.5	6.1	0.0
				J	0.0	0.0	-1.7	-3.5	7.8	0.0
			q5_ps	I	0.0	0.0	0.0	0.1	-0.0	0.0
				J	0.0	0.0	0.0	0.1	-0.1	0.0
			Ex	I	0.0	0.0	0.1	0.5	0.4	0.0
				J	0.0	0.0	0.1	0.5	0.3	0.0
			Ey	I	0.0	0.0	0.1	0.2	0.4	0.0
				J	0.0	0.0	0.1	0.2	0.3	0.0

Ponte Canale NiE – Relazione di calcolo

			INVSLE Max	I	0.0	0.0	-198.0	-348.0	3042.9	0.0
				J	0.0	0.0	-154.3	-344.8	3577.4	0.0
			Min	I	0.0	0.0	-695.6	-1001.7	1439.6	0.0
				J	0.0	0.0	-651.9	-998.6	1710.2	0.0
			INVSLE-R Max	I	0.0	0.0	-146.8	-258.0	2253.6	0.0
				J	0.0	0.0	-114.4	-255.6	2649.4	0.0
			Min	I	0.0	0.0	-515.2	-741.8	1066.8	0.0
				J	0.0	0.0	-482.8	-739.5	1267.3	0.0
			INVSLE-F Max	I	0.0	0.0	-147.5	-259.4	2251.2	0.0
				J	0.0	0.0	-115.1	-257.1	2646.3	0.0
			Min	I	0.0	0.0	-514.5	-740.4	1069.2	0.0
				J	0.0	0.0	-482.1	-738.0	1270.5	0.0
			INVSLE~1 Max	I	0.0	0.0	-147.8	-260.1	2250.0	0.0
				J	0.0	0.0	-115.4	-257.8	2644.7	0.0
			Min	I	0.0	0.0	-514.2	-739.7	1070.5	0.0
				J	0.0	0.0	-481.8	-737.3	1272.0	0.0
			INVSLE Max	I	0.0	0.0	-168.9	-240.6	1300.2	0.0
				J	0.0	0.0	-136.5	-238.3	1550.5	0.0
			Min	I	0.0	0.0	-266.6	-365.2	840.7	0.0
				J	0.0	0.0	-234.3	-362.9	993.6	0.0
111	4	7	c1-c2--1 Max	I	0.0	0.0	93.7	26.7	1373.7	0.0
				J	0.0	0.0	93.7	26.7	1513.8	0.0
			Min	I	0.0	0.0	-265.5	-436.6	-0.0	0.0
				J	0.0	0.0	-265.5	-436.6	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	66.4	16.1	902.0	0.0
				J	0.0	0.0	66.4	16.1	988.8	0.0
			Min	I	0.0	0.0	-177.1	-274.7	-0.0	0.0
				J	0.0	0.0	-177.1	-274.7	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	39.4	67.3	275.6	0.0
				J	0.0	0.0	39.4	67.3	314.9	0.0
			G1	I	0.0	0.0	-144.4	-277.5	1053.0	0.0
				J	0.0	0.0	-115.9	-277.5	1183.1	0.0
			G2	I	0.0	0.0	-27.8	-45.7	206.0	0.0
				J	0.0	0.0	-23.9	-43.4	231.9	0.0
			q3	I	0.0	0.0	0.0	0.1	0.0	0.0
				J	0.0	0.0	0.0	0.1	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-1.4	-3.4	7.7	0.0
				J	0.0	0.0	-1.4	-3.4	9.1	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.1	0.4	0.3	0.0
				J	0.0	0.0	0.1	0.4	0.2	0.0
			Ey	I	0.0	0.0	0.1	0.1	0.3	0.0
				J	0.0	0.0	0.1	0.1	0.3	0.0
			INVSLE Max	I	0.0	0.0	-104.7	-397.2	3561.1	0.0
				J	0.0	0.0	-61.0	-394.0	3962.1	0.0
			Min	I	0.0	0.0	-592.1	-1028.9	1692.7	0.0
				J	0.0	0.0	-548.4	-1025.8	1902.0	0.0
			INVSLE-R Max	I	0.0	0.0	-77.6	-294.4	2637.4	0.0
				J	0.0	0.0	-45.3	-292.1	2934.3	0.0
			Min	I	0.0	0.0	-438.5	-761.9	1254.4	0.0
				J	0.0	0.0	-406.1	-759.6	1409.5	0.0
			INVSLE-F Max	I	0.0	0.0	-78.2	-295.8	2634.3	0.0
				J	0.0	0.0	-45.8	-293.5	2930.6	0.0
			Min	I	0.0	0.0	-437.9	-760.6	1257.5	0.0
				J	0.0	0.0	-405.6	-758.2	1413.2	0.0
			INVSLE~1 Max	I	0.0	0.0	-78.5	-296.5	2632.7	0.0
				J	0.0	0.0	-46.1	-294.2	2928.8	0.0
			Min	I	0.0	0.0	-437.7	-759.9	1259.0	0.0
				J	0.0	0.0	-405.3	-757.5	1415.0	0.0
			INVSLE Max	I	0.0	0.0	-132.7	-255.8	1534.8	0.0
				J	0.0	0.0	-100.3	-253.5	1730.0	0.0
			Min	I	0.0	0.0	-211.6	-390.6	983.3	0.0
				J	0.0	0.0	-179.2	-388.3	1099.9	0.0
112	4	7	c1-c2--1 Max	I	0.0	0.0	113.3	11.2	1526.6	0.0
				J	0.0	0.0	113.3	11.2	1619.7	0.0
			Min	I	0.0	0.0	-238.6	-430.7	-0.0	0.0
				J	0.0	0.0	-238.6	-430.7	-0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	79.5	6.8	999.0	0.0
				J	0.0	0.0	79.5	6.8	1055.4	0.0
			Min	I	0.0	0.0	-160.0	-271.6	-0.0	0.0
				J	0.0	0.0	-160.0	-271.6	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	29.5	71.7	312.8	0.0
				J	0.0	0.0	29.5	71.7	342.3	0.0

Ponte Canale NiE – Relazione di calcolo

			G1	I	0.0	0.0	-107.8	-290.2	1176.1	0.0
				J	0.0	0.0	-79.3	-290.2	1269.7	0.0
			G2	I	0.0	0.0	-20.8	-49.7	229.0	0.0
				J	0.0	0.0	-16.9	-47.4	247.9	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-1.1	-3.3	9.1	0.0
				J	0.0	0.0	-1.1	-3.3	10.2	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.3	0.2	0.0
				J	0.0	0.0	0.0	0.3	0.1	0.0
			Ey	I	0.0	0.0	0.0	0.0	0.2	0.0
				J	0.0	0.0	0.0	0.0	0.2	0.0
			INVSLE Max	I	0.0	0.0	-19.7	-440.8	3966.0	0.0
				J	0.0	0.0	24.0	-437.7	4244.5	0.0
			Min	I	0.0	0.0	-496.8	-1043.3	1888.7	0.0
				J	0.0	0.0	-453.0	-1040.1	2039.5	0.0
			INVSLE-R Max	I	0.0	0.0	-14.7	-326.8	2937.2	0.0
				J	0.0	0.0	17.7	-324.4	3143.4	0.0
			Min	I	0.0	0.0	-367.9	-772.6	1399.7	0.0
				J	0.0	0.0	-335.5	-770.2	1511.5	0.0
			INVSLE-F Max	I	0.0	0.0	-15.1	-328.1	2933.5	0.0
				J	0.0	0.0	17.3	-325.7	3139.3	0.0
			Min	I	0.0	0.0	-367.5	-771.3	1403.3	0.0
				J	0.0	0.0	-335.1	-768.9	1515.5	0.0
			INVSLE~1 Max	I	0.0	0.0	-15.3	-328.7	2931.7	0.0
				J	0.0	0.0	17.0	-326.4	3137.3	0.0
			Min	I	0.0	0.0	-367.2	-770.6	1405.1	0.0
				J	0.0	0.0	-334.9	-768.3	1517.6	0.0
			INVSLEV Max	I	0.0	0.0	-99.1	-268.1	1718.1	0.0
				J	0.0	0.0	-66.7	-265.8	1860.0	0.0
			Min	I	0.0	0.0	-158.2	-411.8	1092.2	0.0
				J	0.0	0.0	-125.8	-409.4	1175.2	0.0
113	4	7	c1-c2--~1 Max	I	0.0	0.0	130.5	3.0	1644.5	0.0
				J	0.0	0.0	130.5	3.0	1701.4	0.0
			Min	I	0.0	0.0	-214.9	-425.7	-0.0	0.0
				J	0.0	0.0	-214.9	-425.7	-0.0	0.0
			c1-c2--~2 Max	I	0.0	0.0	90.7	1.7	1073.7	0.0
				J	0.0	0.0	90.7	1.7	1107.5	0.0
			Min	I	0.0	0.0	-145.1	-269.9	-0.0	0.0
				J	0.0	0.0	-145.1	-269.9	-0.0	0.0
			SLV-z(RS)	I	0.0	0.0	19.4	75.3	340.8	0.0
				J	0.0	0.0	19.4	75.3	360.1	0.0
			G1	I	0.0	0.0	-73.3	-299.4	1265.7	0.0
				J	0.0	0.0	-44.8	-299.4	1324.7	0.0
			G2	I	0.0	0.0	-14.2	-53.2	245.3	0.0
				J	0.0	0.0	-10.3	-50.9	257.6	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	-0.8	-3.1	10.3	0.0
				J	0.0	0.0	-0.8	-3.1	11.1	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
				J	0.0	0.0	0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	0.0	0.2	0.1	0.0
				J	0.0	0.0	0.0	0.2	0.1	0.0
			Ey	I	0.0	0.0	0.0	-0.0	0.2	0.0
				J	0.0	0.0	0.0	-0.0	0.2	0.0
			INVSLE Max	I	0.0	0.0	58.8	-469.3	4269.1	0.0
				J	0.0	0.0	102.5	-466.1	4443.0	0.0
			Min	I	0.0	0.0	-408.9	-1053.5	2030.6	0.0
				J	0.0	0.0	-365.2	-1050.3	2126.1	0.0
			INVSLE-R Max	I	0.0	0.0	43.5	-347.8	3161.6	0.0
				J	0.0	0.0	75.9	-345.5	3290.4	0.0
			Min	I	0.0	0.0	-302.8	-780.1	1504.8	0.0
				J	0.0	0.0	-270.5	-777.8	1575.6	0.0
			INVSLE-F Max	I	0.0	0.0	43.2	-349.0	3157.5	0.0
				J	0.0	0.0	75.6	-346.7	3285.9	0.0
			Min	I	0.0	0.0	-302.5	-778.9	1509.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-270.1	-776.6	1580.1	0.0
		INVSLE~1 Max	I	0.0	0.0	43.0	-349.6	3155.5	0.0
			J	0.0	0.0	75.4	-347.3	3283.7	0.0
		Min	I	0.0	0.0	-302.4	-778.3	1511.0	0.0
			J	0.0	0.0	-270.0	-776.0	1582.3	0.0
		INVSLE~1 Min	I	0.0	0.0	-68.0	-277.2	1851.9	0.0
			J	0.0	0.0	-35.7	-274.8	1942.5	0.0
		Min	I	0.0	0.0	-106.9	-428.0	1170.1	0.0
			J	0.0	0.0	-74.5	-425.7	1222.1	0.0
114	4	7 c1-c2--1 Max	I	0.0	0.0	151.1	0.3	1734.5	0.0
			J	0.0	0.0	151.1	0.3	1752.7	0.0
		Min	I	0.0	0.0	-194.2	-419.3	-0.0	0.0
			J	0.0	0.0	-194.2	-419.3	-0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	104.2	0.2	1131.2	0.0
			J	0.0	0.0	104.2	0.2	1140.2	0.0
		Min	I	0.0	0.0	-131.9	-267.6	-0.0	0.0
			J	0.0	0.0	-131.9	-267.6	-0.0	0.0
		SLV-z(RS)	I	0.0	0.0	9.4	78.0	359.4	0.0
			J	0.0	0.0	9.4	78.0	368.5	0.0
		G1	I	0.0	0.0	-40.8	-304.8	1323.7	0.0
			J	0.0	0.0	-12.3	-304.8	1350.2	0.0
		G2	I	0.0	0.0	-7.9	-56.2	255.2	0.0
			J	0.0	0.0	-4.0	-53.8	261.2	0.0
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-0.5	-2.8	11.2	0.0
			J	0.0	0.0	-0.5	-2.8	11.6	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
			J	0.0	0.0	0.0	0.0	-0.1	0.0
		Ex	I	0.0	0.0	0.0	0.2	0.1	0.0
			J	0.0	0.0	0.0	0.2	0.0	0.0
		Ey	I	0.0	0.0	-0.0	-0.0	0.2	0.0
			J	0.0	0.0	-0.0	-0.0	0.2	0.0
		INVSLE~1 Max	I	0.0	0.0	138.6	-484.4	4483.1	0.0
			J	0.0	0.0	182.4	-481.3	4552.0	0.0
		Min	I	0.0	0.0	-328.4	-1055.9	2121.5	0.0
			J	0.0	0.0	-284.6	-1052.8	2165.0	0.0
		INVSLE~1 Min	I	0.0	0.0	102.7	-359.0	3320.1	0.0
			J	0.0	0.0	135.1	-356.7	3371.1	0.0
		Min	I	0.0	0.0	-243.2	-782.0	1572.2	0.0
			J	0.0	0.0	-210.8	-779.7	1604.4	0.0
		INVSLE~1 Min	I	0.0	0.0	102.5	-360.1	3315.6	0.0
			J	0.0	0.0	134.9	-357.8	3366.4	0.0
		Min	I	0.0	0.0	-243.0	-780.9	1576.7	0.0
			J	0.0	0.0	-210.6	-778.5	1609.1	0.0
		INVSLE~1 Min	I	0.0	0.0	102.4	-360.7	3313.4	0.0
			J	0.0	0.0	134.8	-358.4	3364.1	0.0
		Min	I	0.0	0.0	-242.9	-780.3	1578.9	0.0
			J	0.0	0.0	-210.5	-778.0	1611.4	0.0
		INVSLE~1 Min	I	0.0	0.0	-39.4	-282.9	1938.4	0.0
			J	0.0	0.0	-7.0	-280.6	1980.0	0.0
		Min	I	0.0	0.0	-58.1	-439.0	1219.4	0.0
			J	0.0	0.0	-25.7	-436.7	1242.8	0.0
115	4	7 c1-c2--1 Max	I	0.0	0.0	171.9	0.0	1792.2	0.0
			J	0.0	0.0	171.9	0.0	1774.4	0.0
		Min	I	0.0	0.0	-176.0	-406.1	-0.0	0.0
			J	0.0	0.0	-176.0	-406.1	-0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	117.6	0.0	1168.1	0.0
			J	0.0	0.0	117.6	0.0	1154.1	0.0
		Min	I	0.0	0.0	-120.1	-260.5	-0.0	0.0
			J	0.0	0.0	-120.1	-260.5	-0.0	0.0
		SLV-z(RS)	I	0.0	0.0	2.1	79.6	368.4	0.0
			J	0.0	0.0	2.1	79.6	367.7	0.0
		G1	I	0.0	0.0	-10.4	-306.5	1351.8	0.0
			J	0.0	0.0	18.1	-306.5	1347.9	0.0
		G2	I	0.0	0.0	-2.1	-58.4	259.2	0.0
			J	0.0	0.0	1.8	-56.1	259.3	0.0
		q3	I	0.0	0.0	-0.0	0.0	-0.0	0.0
			J	0.0	0.0	-0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	-0.2	-2.5	11.8	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-0.2	-2.5	11.9	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	-0.1	0.0
			J	0.0	0.0	0.0	0.0	-0.1	0.0
		Ex	I	0.0	0.0	0.0	0.1	0.0	0.0
			J	0.0	0.0	0.0	0.1	0.0	0.0
		Ey	I	0.0	0.0	-0.0	-0.1	0.2	0.0
			J	0.0	0.0	-0.0	-0.1	0.2	0.0
		INVSLE Max	I	0.0	0.0	215.4	-490.4	4604.9	0.0
			J	0.0	0.0	259.1	-487.3	4575.9	0.0
		Min	I	0.0	0.0	-254.6	-1043.2	2164.3	0.0
			J	0.0	0.0	-210.8	-1040.1	2159.0	0.0
		INVSLE-R Max	I	0.0	0.0	159.6	-363.5	3410.3	0.0
			J	0.0	0.0	191.9	-361.1	3388.8	0.0
		Min	I	0.0	0.0	-188.6	-772.6	1604.0	0.0
			J	0.0	0.0	-156.2	-770.3	1600.1	0.0
		INVSLE-F Max	I	0.0	0.0	159.5	-364.5	3405.6	0.0
			J	0.0	0.0	191.9	-362.1	3384.0	0.0
		Min	I	0.0	0.0	-188.5	-771.6	1608.7	0.0
			J	0.0	0.0	-156.1	-769.2	1604.8	0.0
		INVSLE~1 Max	I	0.0	0.0	159.5	-365.0	3403.2	0.0
			J	0.0	0.0	191.8	-362.7	3381.6	0.0
		Min	I	0.0	0.0	-188.5	-771.1	1611.0	0.0
			J	0.0	0.0	-156.1	-768.7	1607.2	0.0
		INVSLEV Max	I	0.0	0.0	-10.3	-285.3	1979.5	0.0
			J	0.0	0.0	22.1	-283.0	1975.0	0.0
		Min	I	0.0	0.0	-14.6	-444.7	1242.5	0.0
			J	0.0	0.0	17.8	-442.4	1239.5	0.0
116	4	7 c1-c2--1 Max	I	0.0	0.0	191.8	0.0	1818.8	0.0
			J	0.0	0.0	191.8	0.0	1767.8	0.0
		Min	I	0.0	0.0	-159.8	-385.5	-0.0	0.0
			J	0.0	0.0	-159.8	-385.5	-0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	130.3	0.0	1185.0	0.0
			J	0.0	0.0	130.3	0.0	1150.0	0.0
		Min	I	0.0	0.0	-109.6	-248.4	-0.0	0.0
			J	0.0	0.0	-109.6	-248.4	-0.0	0.0
		SLV-z(RS)	I	0.0	0.0	10.5	80.2	368.2	0.0
			J	0.0	0.0	10.5	80.2	358.0	0.0
		G1	I	0.0	0.0	18.1	-304.7	1351.9	0.0
			J	0.0	0.0	46.6	-304.7	1319.6	0.0
		G2	I	0.0	0.0	3.4	-60.1	257.6	0.0
			J	0.0	0.0	7.3	-57.7	252.2	0.0
		q3	I	0.0	0.0	-0.0	0.0	-0.0	0.0
			J	0.0	0.0	-0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	0.1	-2.3	12.1	0.0
			J	0.0	0.0	0.1	-2.3	11.9	0.0
		q5_ps	I	0.0	0.0	-0.0	0.0	-0.1	0.0
			J	0.0	0.0	-0.0	0.0	-0.1	0.0
		Ex	I	0.0	0.0	0.0	0.1	0.0	0.0
			J	0.0	0.0	0.0	0.1	0.0	0.0
		Ey	I	0.0	0.0	-0.0	-0.1	0.2	0.0
			J	0.0	0.0	-0.0	-0.1	0.2	0.0
		INVSLE Max	I	0.0	0.0	288.0	-490.3	4639.1	0.0
			J	0.0	0.0	331.8	-487.2	4519.3	0.0
		Min	I	0.0	0.0	-186.9	-1014.9	2161.9	0.0
			J	0.0	0.0	-143.2	-1011.7	2111.2	0.0
		INVSLE-R Max	I	0.0	0.0	213.3	-363.4	3435.6	0.0
			J	0.0	0.0	245.7	-361.0	3346.8	0.0
		Min	I	0.0	0.0	-138.4	-751.6	1602.2	0.0
			J	0.0	0.0	-106.0	-749.3	1564.6	0.0
		INVSLE-F Max	I	0.0	0.0	213.3	-364.3	3430.7	0.0
			J	0.0	0.0	245.7	-361.9	3342.0	0.0
		Min	I	0.0	0.0	-138.4	-750.7	1607.1	0.0
			J	0.0	0.0	-106.0	-748.4	1569.4	0.0
		INVSLE~1 Max	I	0.0	0.0	213.3	-364.7	3428.3	0.0
			J	0.0	0.0	245.6	-362.4	3339.6	0.0
		Min	I	0.0	0.0	-138.3	-750.3	1609.5	0.0
			J	0.0	0.0	-106.0	-747.9	1571.8	0.0
		INVSLEV Max	I	0.0	0.0	32.0	-284.4	1977.7	0.0
			J	0.0	0.0	64.4	-282.1	1929.9	0.0
		Min	I	0.0	0.0	11.0	-445.1	1241.3	0.0
			J	0.0	0.0	43.4	-442.7	1213.7	0.0
117	4	7 c1-c2--1 Max	I	0.0	0.0	210.8	0.0	1815.1	0.0
			J	0.0	0.0	210.8	0.0	1733.6	0.0

Ponte Canale NiE – Relazione di calcolo

			Min	I	0.0	0.0	-144.4	-358.8	-0.0	0.0	
				J	0.0	0.0	-144.4	-358.8	-0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	142.4	0.0	1182.4	0.0	
				J	0.0	0.0	142.4	0.0	1128.2	0.0	
			Min	I	0.0	0.0	-99.6	-232.2	-0.0	0.0	
				J	0.0	0.0	-99.6	-232.2	-0.0	0.0	
		SLV-z(RS)		I	0.0	0.0	19.2	79.8	359.0	0.0	
				J	0.0	0.0	19.2	79.8	340.1	0.0	
		G1		I	0.0	0.0	44.6	-299.4	1325.7	0.0	
				J	0.0	0.0	73.1	-299.4	1266.9	0.0	
		G2		I	0.0	0.0	8.5	-61.0	250.7	0.0	
				J	0.0	0.0	12.4	-58.6	240.2	0.0	
		q3		I	0.0	0.0	-0.0	0.0	-0.0	0.0	
				J	0.0	0.0	-0.0	0.0	0.0	0.0	
		q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc		I	0.0	0.0	0.4	-2.0	12.1	0.0	
				J	0.0	0.0	0.4	-2.0	11.7	0.0	
		q5_ps		I	0.0	0.0	-0.0	0.0	-0.1	0.0	
				J	0.0	0.0	-0.0	0.0	-0.1	0.0	
		Ex		I	0.0	0.0	-0.0	0.1	0.0	0.0	
				J	0.0	0.0	-0.0	0.1	0.0	0.0	
		Ey		I	0.0	0.0	-0.0	-0.1	0.2	0.0	
				J	0.0	0.0	-0.0	-0.1	0.2	0.0	
		INVSLU Max		I	0.0	0.0	356.6	-484.7	4589.4	0.0	
				J	0.0	0.0	400.3	-481.5	4385.4	0.0	
		Min		I	0.0	0.0	-123.7	-972.6	2117.2	0.0	
				J	0.0	0.0	-80.0	-969.4	2024.1	0.0	
		INVSLE-R Max		I	0.0	0.0	264.1	-359.2	3398.7	0.0	
				J	0.0	0.0	296.5	-356.8	3247.7	0.0	
		Min		I	0.0	0.0	-91.6	-720.3	1569.1	0.0	
				J	0.0	0.0	-59.2	-718.0	1500.1	0.0	
		INVSLE-F Max		I	0.0	0.0	263.9	-360.0	3393.9	0.0	
				J	0.0	0.0	296.3	-357.6	3243.0	0.0	
		Min		I	0.0	0.0	-91.5	-719.5	1574.0	0.0	
				J	0.0	0.0	-59.1	-717.2	1504.8	0.0	
		INVSLE~1 Max		I	0.0	0.0	263.9	-360.3	3391.5	0.0	
				J	0.0	0.0	296.2	-358.0	3240.7	0.0	
		Min		I	0.0	0.0	-91.4	-719.1	1576.4	0.0	
				J	0.0	0.0	-59.0	-716.8	1507.1	0.0	
		INVSLV Max		I	0.0	0.0	72.3	-280.4	1935.4	0.0	
				J	0.0	0.0	104.6	-278.1	1847.3	0.0	
		Min		I	0.0	0.0	33.9	-440.3	1217.3	0.0	
				J	0.0	0.0	66.3	-437.9	1166.9	0.0	
118	4	7	c1-c2--1	Max	I	0.0	0.0	228.7	0.0	1781.1	0.0
				J	0.0	0.0	228.7	0.0	1671.5	0.0	
			Min	I	0.0	0.0	-129.9	-326.7	-0.0	0.0	
				J	0.0	0.0	-129.9	-326.7	-0.0	0.0	
		c1-c2--2	Max	I	0.0	0.0	153.7	0.0	1160.4	0.0	
				J	0.0	0.0	153.7	0.0	1088.6	0.0	
			Min	I	0.0	0.0	-90.1	-212.3	-0.0	0.0	
				J	0.0	0.0	-90.1	-212.3	-0.0	0.0	
		SLV-z(RS)		I	0.0	0.0	27.0	78.5	341.5	0.0	
				J	0.0	0.0	27.0	78.5	314.7	0.0	
		G1		I	0.0	0.0	69.2	-290.9	1274.7	0.0	
				J	0.0	0.0	97.7	-290.9	1191.2	0.0	
		G2		I	0.0	0.0	13.2	-61.1	238.9	0.0	
				J	0.0	0.0	17.1	-58.8	223.8	0.0	
		q3		I	0.0	0.0	-0.0	-0.0	-0.0	0.0	
				J	0.0	0.0	-0.0	-0.0	0.0	0.0	
		q4		I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc		I	0.0	0.0	0.7	-1.7	11.8	0.0	
				J	0.0	0.0	0.7	-1.7	11.1	0.0	
		q5_ps		I	0.0	0.0	-0.0	0.0	-0.1	0.0	
				J	0.0	0.0	-0.0	0.0	-0.1	0.0	
		Ex		I	0.0	0.0	-0.0	0.1	0.0	0.0	
				J	0.0	0.0	-0.0	0.1	0.0	0.0	
		Ey		I	0.0	0.0	-0.1	-0.2	0.2	0.0	
				J	0.0	0.0	-0.1	-0.2	0.3	0.0	
		INVSLU Max		I	0.0	0.0	420.6	-473.7	4458.6	0.0	
				J	0.0	0.0	464.3	-470.6	4176.8	0.0	
		Min		I	0.0	0.0	-64.8	-917.8	2032.7	0.0	

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	-21.1	-914.7	1900.2	0.0
		INVSLE-R Max	I	0.0	0.0	311.5	-351.0	3301.8	0.0
			J	0.0	0.0	343.9	-348.7	3093.2	0.0
		Min	I	0.0	0.0	-48.0	-679.8	1506.5	0.0
			J	0.0	0.0	-15.6	-677.4	1408.3	0.0
		INVSLE-F Max	I	0.0	0.0	311.2	-351.7	3297.1	0.0
			J	0.0	0.0	343.6	-349.4	3088.7	0.0
		Min	I	0.0	0.0	-47.7	-679.1	1511.2	0.0
			J	0.0	0.0	-15.3	-676.7	1412.8	0.0
		INVSLE~1 Max	I	0.0	0.0	311.1	-352.0	3294.7	0.0
			J	0.0	0.0	343.5	-349.7	3086.5	0.0
		Min	I	0.0	0.0	-47.5	-678.8	1513.6	0.0
			J	0.0	0.0	-15.1	-676.4	1415.0	0.0
		INVSLE Max	I	0.0	0.0	109.4	-273.5	1855.2	0.0
			J	0.0	0.0	141.8	-271.2	1729.8	0.0
		Min	I	0.0	0.0	55.4	-430.6	1172.0	0.0
			J	0.0	0.0	87.8	-428.2	1100.2	0.0
119	4	7 c1-c2~~1 Max	I	0.0	0.0	245.9	0.0	1718.4	0.0
			J	0.0	0.0	245.9	0.0	1579.3	0.0
		Min	I	0.0	0.0	-116.8	-290.5	-0.0	0.0
			J	0.0	0.0	-116.8	-290.5	-0.1	0.0
		c1-c2~~2 Max	I	0.0	0.0	164.5	0.0	1120.1	0.0
			J	0.0	0.0	164.5	0.0	1029.5	0.0
		Min	I	0.0	0.0	-81.4	-189.6	-0.0	0.0
			J	0.0	0.0	-81.4	-189.6	-0.0	0.0
		SLV-z (RS)	I	0.0	0.0	33.8	76.2	316.4	0.0
			J	0.0	0.0	33.8	76.2	282.8	0.0
		G1	I	0.0	0.0	92.1	-279.5	1200.3	0.0
			J	0.0	0.0	120.6	-279.5	1094.0	0.0
		G2	I	0.0	0.0	17.4	-60.6	222.7	0.0
			J	0.0	0.0	21.3	-58.2	203.3	0.0
		q3	I	0.0	0.0	-0.0	-0.0	0.0	0.0
			J	0.0	0.0	-0.0	-0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	1.0	-1.4	11.3	0.0
			J	0.0	0.0	1.0	-1.4	10.3	0.0
		q5_ps	I	0.0	0.0	-0.0	0.0	-0.1	0.0
			J	0.0	0.0	-0.0	0.0	-0.1	0.0
		Ex	I	0.0	0.0	-0.0	0.1	0.0	0.0
			J	0.0	0.0	-0.0	0.1	0.0	0.0
		Ey	I	0.0	0.0	-0.1	-0.3	0.3	0.0
			J	0.0	0.0	-0.1	-0.3	0.3	0.0
		INVSLE Max	I	0.0	0.0	480.8	-457.9	4251.2	0.0
			J	0.0	0.0	524.5	-454.7	3892.7	0.0
		Min	I	0.0	0.0	-10.6	-852.6	1910.9	0.0
			J	0.0	0.0	33.1	-849.4	1742.0	0.0
		INVSLE-R Max	I	0.0	0.0	356.1	-339.3	3148.3	0.0
			J	0.0	0.0	388.5	-336.9	2882.8	0.0
		Min	I	0.0	0.0	-7.8	-631.4	1416.2	0.0
			J	0.0	0.0	24.6	-629.1	1291.0	0.0
		INVSLE-F Max	I	0.0	0.0	355.7	-339.8	3143.8	0.0
			J	0.0	0.0	388.1	-337.5	2878.7	0.0
		Min	I	0.0	0.0	-7.4	-630.9	1420.8	0.0
			J	0.0	0.0	25.0	-628.5	1295.2	0.0
		INVSLE~1 Max	I	0.0	0.0	355.5	-340.1	3141.5	0.0
			J	0.0	0.0	387.9	-337.7	2876.6	0.0
		Min	I	0.0	0.0	-7.2	-630.6	1423.0	0.0
			J	0.0	0.0	25.2	-628.3	1297.3	0.0
		INVSLE Max	I	0.0	0.0	143.4	-263.8	1739.6	0.0
			J	0.0	0.0	175.8	-261.4	1580.2	0.0
		Min	I	0.0	0.0	75.7	-416.4	1106.5	0.0
			J	0.0	0.0	108.1	-414.0	1014.4	0.0
120	4	7 c1-c2~~1 Max	I	0.0	0.0	263.0	0.0	1626.3	0.0
			J	0.0	0.0	263.0	0.0	1456.2	0.0
		Min	I	0.0	0.0	-103.5	-260.6	-0.3	0.0
			J	0.0	0.0	-103.5	-260.6	-0.5	0.0
		c1-c2~~2 Max	I	0.0	0.0	175.2	0.0	1060.8	0.0
			J	0.0	0.0	175.2	0.0	950.3	0.0
		Min	I	0.0	0.0	-72.6	-165.7	-0.2	0.0
			J	0.0	0.0	-72.6	-165.7	-0.3	0.0
		SLV-z (RS)	I	0.0	0.0	39.5	73.1	284.7	0.0
			J	0.0	0.0	39.5	73.1	245.4	0.0
		G1	I	0.0	0.0	113.3	-265.5	1104.1	0.0
			J	0.0	0.0	141.8	-265.5	976.5	0.0

Ponte Canale NiE – Relazione di calcolo

			G2	I	0.0	0.0	21.3	-59.3	202.4	0.0
				J	0.0	0.0	25.2	-56.9	179.1	0.0
			q3	I	0.0	0.0	-0.0	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	1.2	-1.1	10.5	0.0
				J	0.0	0.0	1.2	-1.1	9.3	0.0
			q5_ps	I	0.0	0.0	-0.0	0.0	-0.1	0.0
				J	0.0	0.0	-0.0	0.0	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	0.0	0.0	0.0
				J	0.0	0.0	-0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.1	-0.4	0.3	0.0
				J	0.0	0.0	-0.1	-0.4	0.3	0.0
			INVS LU Max	I	0.0	0.0	537.9	-437.5	3968.7	0.0
				J	0.0	0.0	581.6	-434.3	3534.4	0.0
			Min	I	0.0	0.0	41.0	-791.3	1753.9	0.0
				J	0.0	0.0	84.7	-788.1	1551.1	0.0
			INVS LE-R Max	I	0.0	0.0	398.4	-324.2	2939.1	0.0
				J	0.0	0.0	430.8	-321.8	2617.4	0.0
			Min	I	0.0	0.0	30.5	-586.1	1299.9	0.0
				J	0.0	0.0	62.8	-583.7	1149.6	0.0
			INVS LE-F Max	I	0.0	0.0	397.9	-324.6	2934.9	0.0
				J	0.0	0.0	430.3	-322.3	2613.7	0.0
			Min	I	0.0	0.0	30.9	-585.6	1304.1	0.0
				J	0.0	0.0	63.3	-583.3	1153.3	0.0
			INVS LE~1 Max	I	0.0	0.0	397.6	-324.8	2932.8	0.0
				J	0.0	0.0	430.0	-322.5	2611.9	0.0
			Min	I	0.0	0.0	31.2	-585.4	1306.2	0.0
				J	0.0	0.0	63.6	-583.1	1155.1	0.0
			INVS LV Max	I	0.0	0.0	174.2	-251.6	1591.3	0.0
				J	0.0	0.0	206.6	-249.2	1401.2	0.0
			Min	I	0.0	0.0	95.1	-398.1	1021.7	0.0
				J	0.0	0.0	127.5	-395.7	910.2	0.0
121	4	7	c1-c2--1 Max	I	0.0	0.0	279.8	0.0	1501.2	0.0
				J	0.0	0.0	279.8	0.0	1300.1	0.0
			Min	I	0.0	0.0	-89.1	-238.7	-1.0	0.0
				J	0.0	0.0	-89.1	-238.7	-1.5	0.0
			c1-c2--2 Max	I	0.0	0.0	185.9	0.0	979.9	0.0
				J	0.0	0.0	185.9	0.0	849.3	0.0
			Min	I	0.0	0.0	-63.1	-152.4	-0.6	0.0
				J	0.0	0.0	-63.1	-152.4	-1.0	0.0
			SLV-z (RS)	I	0.0	0.0	44.0	69.4	247.5	0.0
				J	0.0	0.0	44.0	69.4	203.6	0.0
			G1	I	0.0	0.0	133.0	-249.3	987.2	0.0
				J	0.0	0.0	161.5	-249.3	839.9	0.0
			G2	I	0.0	0.0	24.7	-57.3	178.3	0.0
				J	0.0	0.0	28.6	-55.0	151.7	0.0
			q3	I	0.0	0.0	-0.0	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	1.4	-0.9	9.5	0.0
				J	0.0	0.0	1.4	-0.9	8.1	0.0
			q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
				J	0.0	0.0	-0.0	-0.0	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	0.0	0.0	0.0
				J	0.0	0.0	-0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.1	-0.5	0.3	0.0
				J	0.0	0.0	-0.1	-0.5	0.3	0.0
			INVS LU Max	I	0.0	0.0	592.0	-413.2	3608.7	0.0
				J	0.0	0.0	635.8	-410.0	3101.1	0.0
			Min	I	0.0	0.0	91.4	-737.0	1563.6	0.0
				J	0.0	0.0	135.1	-733.8	1329.3	0.0
			INVS LE-R Max	I	0.0	0.0	438.5	-306.1	2672.5	0.0
				J	0.0	0.0	470.8	-303.8	2296.6	0.0
			Min	I	0.0	0.0	67.8	-545.8	1158.8	0.0
				J	0.0	0.0	100.2	-543.5	985.2	0.0
			INVS LE-F Max	I	0.0	0.0	437.9	-306.5	2668.7	0.0
				J	0.0	0.0	470.3	-304.1	2293.4	0.0
			Min	I	0.0	0.0	68.4	-545.5	1162.6	0.0
				J	0.0	0.0	100.7	-543.2	988.4	0.0
			INVS LE~1 Max	I	0.0	0.0	437.6	-306.6	2666.8	0.0
				J	0.0	0.0	470.0	-304.3	2291.8	0.0

Ponte Canale NiE – Relazione di calcolo

			Min	I	0.0	0.0	68.6	-545.3	1164.5	0.0
				J	0.0	0.0	101.0	-543.0	990.1	0.0
			INVS LV Max	I	0.0	0.0	201.8	-237.1	1413.1	0.0
				J	0.0	0.0	234.1	-234.8	1195.3	0.0
			Min	I	0.0	0.0	113.8	-376.2	918.0	0.0
				J	0.0	0.0	146.2	-373.8	787.9	0.0
122	4	7	c1-c2--1 Max	I	0.0	0.0	297.1	6.9	1340.1	0.0
				J	0.0	0.0	297.1	6.9	1107.9	0.0
			Min	I	0.0	0.0	-74.0	-224.7	-2.9	0.0
				J	0.0	0.0	-74.0	-224.7	-4.5	0.0
			c1-c2--2 Max	I	0.0	0.0	196.8	4.8	875.2	0.0
				J	0.0	0.0	196.8	4.8	724.1	0.0
			Min	I	0.0	0.0	-52.8	-143.2	-1.8	0.0
				J	0.0	0.0	-52.8	-143.2	-2.8	0.0
			SLV-z(RS)	I	0.0	0.0	47.2	65.1	205.7	0.0
				J	0.0	0.0	47.2	65.1	158.7	0.0
			G1	I	0.0	0.0	151.4	-231.4	850.9	0.0
				J	0.0	0.0	179.9	-231.4	685.2	0.0
			G2	I	0.0	0.0	27.8	-54.6	151.0	0.0
				J	0.0	0.0	31.7	-52.3	121.2	0.0
			q3	I	0.0	0.0	-0.0	-0.0	-0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	1.6	-0.7	8.2	0.0
				J	0.0	0.0	1.6	-0.7	6.7	0.0
			q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
				J	0.0	0.0	-0.0	-0.0	-0.1	0.0
			Ex	I	0.0	0.0	-0.0	0.0	0.0	0.0
				J	0.0	0.0	-0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	-0.0	-0.8	0.2	0.0
				J	0.0	0.0	-0.0	-0.8	0.2	0.0
			INVS LU Max	I	0.0	0.0	644.4	-376.2	3169.1	0.0
				J	0.0	0.0	688.1	-373.0	2590.5	0.0
			Min	I	0.0	0.0	140.6	-690.1	1341.2	0.0
				J	0.0	0.0	184.3	-687.0	1076.6	0.0
			INVS LE-R Max	I	0.0	0.0	477.2	-278.7	2346.9	0.0
				J	0.0	0.0	509.6	-276.4	1918.4	0.0
			Min	I	0.0	0.0	104.3	-511.2	994.0	0.0
				J	0.0	0.0	136.6	-508.8	798.0	0.0
			INVS LE-F Max	I	0.0	0.0	476.6	-279.0	2343.6	0.0
				J	0.0	0.0	509.0	-276.6	1915.8	0.0
			Min	I	0.0	0.0	104.9	-510.9	997.3	0.0
				J	0.0	0.0	137.3	-508.6	800.6	0.0
			INVS LE~1 Max	I	0.0	0.0	476.3	-279.1	2342.0	0.0
				J	0.0	0.0	508.6	-276.8	1914.4	0.0
			Min	I	0.0	0.0	105.2	-510.8	999.0	0.0
				J	0.0	0.0	137.6	-508.4	802.0	0.0
			INVS LV Max	I	0.0	0.0	226.3	-220.7	1207.7	0.0
				J	0.0	0.0	258.7	-218.4	965.2	0.0
			Min	I	0.0	0.0	132.0	-351.3	796.1	0.0
				J	0.0	0.0	164.4	-349.0	647.8	0.0
123	4	7	c1-c2--1 Max	I	0.0	0.0	314.5	23.9	1141.4	0.0
				J	0.0	0.0	314.5	23.9	878.5	0.0
			Min	I	0.0	0.0	-57.9	-210.2	-7.1	0.0
				J	0.0	0.0	-57.9	-210.2	-11.6	0.0
			c1-c2--2 Max	I	0.0	0.0	207.8	15.9	745.2	0.0
				J	0.0	0.0	207.8	15.9	574.0	0.0
			Min	I	0.0	0.0	-41.6	-133.2	-4.4	0.0
				J	0.0	0.0	-41.6	-133.2	-7.2	0.0
			SLV-z(RS)	I	0.0	0.0	49.1	60.3	160.7	0.0
				J	0.0	0.0	49.1	60.3	111.7	0.0
			G1	I	0.0	0.0	168.8	-212.2	696.1	0.0
				J	0.0	0.0	197.3	-212.2	513.1	0.0
			G2	I	0.0	0.0	30.4	-51.3	120.7	0.0
				J	0.0	0.0	34.3	-48.9	88.3	0.0
			q3	I	0.0	0.0	-0.0	-0.1	-0.0	0.0
				J	0.0	0.0	-0.0	-0.1	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	1.7	-0.5	6.8	0.0
				J	0.0	0.0	1.7	-0.5	5.1	0.0
			q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
				J	0.0	0.0	-0.0	-0.0	-0.1	0.0

Ponte Canale NiE – Relazione di calcolo

			Ex	I	0.0	0.0	-0.0	-0.0	0.0	0.0
				J	0.0	0.0	-0.0	-0.0	0.0	0.0
			Ey	I	0.0	0.0	0.0	-1.1	0.1	0.0
				J	0.0	0.0	0.0	-1.1	0.0	0.0
			INVSLE Max	I	0.0	0.0	695.0	-323.0	2649.6	0.0
				J	0.0	0.0	738.7	-319.9	2002.3	0.0
			Min	I	0.0	0.0	189.3	-639.9	1086.9	0.0
				J	0.0	0.0	233.0	-636.7	791.6	0.0
			INVSLE-R Max	I	0.0	0.0	514.7	-239.3	1962.2	0.0
				J	0.0	0.0	547.1	-237.0	1482.9	0.0
			Min	I	0.0	0.0	140.3	-474.0	805.5	0.0
				J	0.0	0.0	172.7	-471.6	586.7	0.0
			INVSLE-F Max	I	0.0	0.0	514.0	-239.5	1959.5	0.0
				J	0.0	0.0	546.4	-237.2	1480.8	0.0
			Min	I	0.0	0.0	141.0	-473.8	808.3	0.0
				J	0.0	0.0	173.4	-471.4	588.7	0.0
			INVSLE~1 Max	I	0.0	0.0	513.7	-239.6	1958.1	0.0
				J	0.0	0.0	546.1	-237.3	1479.8	0.0
			Min	I	0.0	0.0	141.4	-473.7	809.6	0.0
				J	0.0	0.0	173.7	-471.3	589.8	0.0
			INVSLE Max	I	0.0	0.0	248.3	-202.8	977.5	0.0
				J	0.0	0.0	280.7	-200.5	713.1	0.0
			Min	I	0.0	0.0	150.1	-324.1	656.0	0.0
				J	0.0	0.0	182.5	-321.8	489.6	0.0
124	4	7	c1-c2--1 Max	I	0.0	0.0	332.2	38.5	902.2	0.0
				J	0.0	0.0	332.2	38.5	610.7	0.0
			Min	I	0.0	0.0	-31.9	-200.0	-15.8	0.0
				J	0.0	0.0	-31.9	-200.0	-28.1	0.0
			c1-c2--2 Max	I	0.0	0.0	218.9	25.2	588.3	0.0
				J	0.0	0.0	218.9	25.2	398.4	0.0
			Min	I	0.0	0.0	-23.1	-126.1	-9.7	0.0
				J	0.0	0.0	-23.1	-126.1	-16.9	0.0
			SLV-z (RS)	I	0.0	0.0	49.8	55.3	113.6	0.0
				J	0.0	0.0	49.8	55.3	63.9	0.0
			G1	I	0.0	0.0	185.6	-192.3	523.4	0.0
				J	0.0	0.0	214.1	-192.3	323.6	0.0
			G2	I	0.0	0.0	32.8	-47.3	87.8	0.0
				J	0.0	0.0	36.7	-44.9	53.1	0.0
			q3	I	0.0	0.0	0.0	-0.1	-0.0	0.0
				J	0.0	0.0	0.0	-0.1	-0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	1.8	-0.3	5.2	0.0
				J	0.0	0.0	1.8	-0.3	3.5	0.0
			q5_ps	I	0.0	0.0	-0.0	-0.0	-0.1	0.0
				J	0.0	0.0	-0.0	-0.0	-0.0	0.0
			Ex	I	0.0	0.0	0.0	-0.0	0.0	0.0
				J	0.0	0.0	0.0	-0.0	0.0	0.0
			Ey	I	0.0	0.0	0.1	-1.6	-0.2	0.0
				J	0.0	0.0	0.1	-1.6	-0.3	0.0
			INVSLE Max	I	0.0	0.0	745.0	-271.2	2047.9	0.0
				J	0.0	0.0	788.7	-268.0	1336.0	0.0
			Min	I	0.0	0.0	250.2	-593.7	799.2	0.0
				J	0.0	0.0	293.9	-590.6	467.4	0.0
			INVSLE-R Max	I	0.0	0.0	551.7	-200.9	1516.6	0.0
				J	0.0	0.0	584.1	-198.6	989.4	0.0
			Min	I	0.0	0.0	185.4	-439.8	592.4	0.0
				J	0.0	0.0	217.8	-437.4	346.5	0.0
			INVSLE-F Max	I	0.0	0.0	551.0	-201.0	1514.5	0.0
				J	0.0	0.0	583.4	-198.7	988.0	0.0
			Min	I	0.0	0.0	186.1	-439.6	594.5	0.0
				J	0.0	0.0	218.5	-437.3	347.9	0.0
			INVSLE~1 Max	I	0.0	0.0	550.6	-201.1	1513.5	0.0
				J	0.0	0.0	583.0	-198.8	987.3	0.0
			Min	I	0.0	0.0	186.5	-439.6	595.5	0.0
				J	0.0	0.0	218.9	-437.2	348.6	0.0
			INVSLE Max	I	0.0	0.0	268.2	-183.8	724.9	0.0
				J	0.0	0.0	300.6	-181.4	440.7	0.0
			Min	I	0.0	0.0	168.6	-295.4	497.6	0.0
				J	0.0	0.0	201.0	-293.1	312.6	0.0
125	4	7	c1-c2--1 Max	I	0.0	0.0	350.1	47.7	624.9	0.0
				J	0.0	0.0	350.1	47.7	307.4	0.0
			Min	I	0.0	0.0	-14.0	-189.6	-34.2	0.0
				J	0.0	0.0	-14.0	-189.6	-55.4	0.0
			c1-c2--2 Max	I	0.0	0.0	229.8	30.9	406.1	0.0

Ponte Canale NiE – Relazione di calcolo

		J	0.0	0.0	229.8	30.9	199.8	0.0	
	Min	I	0.0	0.0	-10.4	-119.4	-20.4	0.0	
		J	0.0	0.0	-10.4	-119.4	-33.6	0.0	
	SLV-z (RS)	I	0.0	0.0	49.4	50.1	65.7	0.0	
		J	0.0	0.0	49.4	50.1	16.7	0.0	
	G1	I	0.0	0.0	202.7	-172.5	333.1	0.0	
		J	0.0	0.0	231.2	-172.5	116.2	0.0	
	G2	I	0.0	0.0	34.9	-42.5	52.8	0.0	
		J	0.0	0.0	38.8	-40.2	15.9	0.0	
	q3	I	0.0	0.0	0.0	-0.2	-0.1	0.0	
		J	0.0	0.0	0.0	-0.2	-0.1	0.0	
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
		J	0.0	0.0	0.0	0.0	0.0	0.0	
	q5_pc	I	0.0	0.0	1.8	-0.3	3.5	0.0	
		J	0.0	0.0	1.8	-0.3	1.7	0.0	
	q5_ps	I	0.0	0.0	-0.0	-0.1	-0.1	0.0	
		J	0.0	0.0	-0.0	-0.1	-0.0	0.0	
	Ex	I	0.0	0.0	0.0	-0.1	-0.0	0.0	
		J	0.0	0.0	0.0	-0.1	-0.0	0.0	
	Ey	I	0.0	0.0	0.2	-2.4	-0.7	0.0	
		J	0.0	0.0	0.2	-2.4	-0.9	0.0	
	INVS LU Max	I	0.0	0.0	795.1	-225.6	1367.8	0.0	
		J	0.0	0.0	838.8	-222.4	594.9	0.0	
	Min	I	0.0	0.0	300.3	-546.5	471.6	0.0	
		J	0.0	0.0	344.0	-543.4	102.0	0.0	
	INVS LE-R Max	I	0.0	0.0	588.8	-167.1	1013.0	0.0	
		J	0.0	0.0	621.2	-164.8	440.5	0.0	
	Min	I	0.0	0.0	222.5	-404.8	349.6	0.0	
		J	0.0	0.0	254.9	-402.5	75.6	0.0	
	INVS LE-F Max	I	0.0	0.0	588.1	-167.2	1011.6	0.0	
		J	0.0	0.0	620.5	-164.9	439.9	0.0	
	Min	I	0.0	0.0	223.3	-404.7	351.0	0.0	
		J	0.0	0.0	255.7	-402.4	76.3	0.0	
	INVS LE~1 Max	I	0.0	0.0	587.7	-167.3	1010.9	0.0	
		J	0.0	0.0	620.1	-165.0	439.5	0.0	
	Min	I	0.0	0.0	223.6	-404.7	351.7	0.0	
		J	0.0	0.0	256.0	-402.3	76.7	0.0	
	INVS LV Max	I	0.0	0.0	287.1	-164.2	451.9	0.0	
		J	0.0	0.0	319.4	-161.8	149.1	0.0	
	Min	I	0.0	0.0	188.2	-265.9	320.0	0.0	
		J	0.0	0.0	220.6	-263.6	115.1	0.0	
126	4	7 c1-c2~1 Max	I	1.8	1.4	368.6	48.7	310.0	2.0
		J	1.8	1.4	368.6	48.7	17.4	6.9	
	Min	I	-10.8	-14.8	-0.6	-176.2	-59.8	-13.6	
		J	-10.8	-14.8	-0.6	-176.2	-112.9	-6.2	
	c1-c2~2 Max	I	1.3	1.1	241.3	31.4	199.6	1.4	
		J	1.3	1.1	241.3	31.4	11.5	4.4	
	Min	I	-6.9	-9.7	-0.3	-111.1	-36.2	-8.9	
		J	-6.9	-9.7	-0.3	-111.1	-71.5	-3.9	
	SLV-z (RS)	I	1.6	3.4	48.0	44.8	18.4	2.4	
		J	1.6	3.4	48.0	44.8	30.4	1.0	
	G1	I	-6.9	-12.5	221.3	-153.3	124.6	-9.9	
		J	-6.9	-12.5	249.8	-153.3	-111.0	2.6	
	G2	I	-0.5	-1.9	37.0	-37.1	16.0	-0.9	
		J	-0.5	-1.9	40.9	-34.7	-23.0	0.9	
	q3	I	-3.4	-5.5	0.0	-0.2	-0.1	-4.8	
		J	-3.4	-5.5	0.0	-0.2	-0.1	0.7	
	q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
		J	0.0	0.0	0.0	0.0	0.0	0.0	
	q5_pc	I	-4.4	-7.2	1.9	-0.3	1.7	-6.3	
		J	-4.4	-7.2	1.9	-0.3	-0.2	0.9	
	q5_ps	I	-1.4	-2.3	-0.0	-0.1	-0.1	-2.0	
		J	-1.4	-2.3	-0.0	-0.1	-0.0	0.3	
	Ex	I	-2.8	-4.5	0.0	-0.2	-0.1	-4.0	
		J	-2.8	-4.5	0.0	-0.2	-0.1	0.6	
	Ey	I	-52.6	-85.2	0.3	-3.5	-1.5	-74.4	
		J	-52.6	-85.2	0.3	-3.5	-1.8	10.8	
	INVS LU Max	I	-3.5	-11.0	848.1	-191.0	609.8	-6.3	
		J	-3.5	-11.0	891.8	-187.9	-157.1	14.9	
	Min	I	-28.5	-46.3	346.3	-495.1	107.5	-38.8	
		J	-28.5	-46.3	390.1	-491.9	-333.4	-4.5	
	INVS LE-R Max	I	-2.9	-8.6	628.1	-141.5	451.6	-5.1	
		J	-2.9	-8.6	660.5	-139.2	-116.4	11.0	

Ponte Canale NiE – Relazione di calcolo

			Min	I	-20.8	-33.5	256.7	-366.7	79.7	-28.2
				J	-20.8	-33.5	289.1	-364.4	-246.9	-3.2
		INVSLE-F	Max	I	-4.7	-11.5	627.3	-141.6	450.9	-7.6
				J	-4.7	-11.5	659.7	-139.3	-116.5	10.6
			Min	I	-19.0	-30.6	257.4	-366.6	80.4	-25.7
				J	-19.0	-30.6	289.8	-364.3	-246.9	-2.9
		INVSLE~1	Max	I	-5.5	-12.9	627.0	-141.7	450.6	-8.9
				J	-5.5	-12.9	659.4	-139.4	-116.5	10.5
			Min	I	-18.1	-29.2	257.8	-366.5	80.8	-24.5
				J	-18.1	-29.2	290.2	-364.2	-246.8	-2.7
		INVSLV	Max	I	46.5	73.2	306.5	-144.4	159.5	65.5
				J	46.5	73.2	338.8	-142.1	-103.0	14.8
			Min	I	-61.3	-101.9	210.2	-236.3	121.7	-87.1
				J	-61.3	-101.9	242.6	-234.0	-164.9	-7.7
288	4	7	c1-c2--1	Max	I	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		c1-c2--2	Max	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		SLV-z(RS)		I	0.0	0.0	0.2	0.0	0.1	0.0
				J	0.0	0.0	0.2	0.0	0.0	0.0
		G1		I	0.0	0.0	-14.2	0.0	-3.6	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		G2		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		q3		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		q4		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_ps		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		Ex		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		Ey		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE	Max	I	0.0	0.0	-19.2	0.0	-4.8	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	-19.2	0.0	-4.8	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE-R	Max	I	0.0	0.0	-14.2	0.0	-3.6	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE-F	Max	I	0.0	0.0	-14.2	0.0	-3.6	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE~1	Max	I	0.0	0.0	-14.2	0.0	-3.6	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLV	Max	I	0.0	0.0	-14.0	0.0	-3.4	0.0
				J	0.0	0.0	0.2	0.0	0.0	0.0
			Min	I	0.0	0.0	-14.5	0.0	-3.7	0.0
				J	0.0	0.0	-0.2	0.0	0.0	0.0
289	4	7	c1-c2--1	Max	I	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		c1-c2--2	Max	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		SLV-z(RS)		I	0.0	0.0	0.2	0.0	0.1	0.0
				J	0.0	0.0	0.2	0.0	0.0	0.0
		G1		I	0.0	0.0	-14.2	0.0	-3.6	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		G2		I	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0
		q3		I	0.0	0.0	0.0	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	0.0	0.0	0.0	0.0
			I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ex	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ey	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLU Max	I	0.0	0.0	-19.2	0.0	-4.8	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-19.2	0.0	-4.8	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE-R Max	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE-F Max	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE~1 Max	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLV Max	I	0.0	0.0	-14.1	0.0	-3.5	0.0
			J	0.0	0.0	0.2	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.4	0.0	-3.7	0.0
			J	0.0	0.0	-0.2	0.0	0.0	0.0
290	4	7 c1-c2--1 Max	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		c1-c2--2 Max	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	0.2	0.0	0.1	0.0
			J	0.0	0.0	0.2	0.0	0.0	0.0
		G1	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		G2	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ex	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ey	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLU Max	I	0.0	0.0	-19.2	0.0	-4.8	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-19.2	0.0	-4.8	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE-R Max	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE-F Max	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE~1 Max	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLV Max	I	0.0	0.0	-14.1	0.0	-3.5	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	0.2	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.4	0.0	-3.6	0.0
			J	0.0	0.0	-0.2	0.0	0.0	0.0
291	4	7 c1-c2--1	Max	I	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		c1-c2--2	Max	I	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	0.2	0.0	0.1	0.0
			J	0.0	0.0	0.2	0.0	0.0	0.0
		G1	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		G2	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ex	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ey	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLU	Max	I	0.0	0.0	-19.2	0.0	-4.8
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-19.2	0.0	-4.8	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE-R	Max	I	0.0	0.0	-14.2	0.0	-3.6
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE-F	Max	I	0.0	0.0	-14.2	0.0	-3.6
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLE~1	Max	I	0.0	0.0	-14.2	0.0	-3.6
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLV	Max	I	0.0	0.0	-14.1	0.0	-3.5
			J	0.0	0.0	0.2	0.0	0.0	0.0
		Min	I	0.0	0.0	-14.4	0.0	-3.6	0.0
			J	0.0	0.0	-0.2	0.0	0.0	0.0
292	4	7 c1-c2--1	Max	I	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		c1-c2--2	Max	I	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		SLV-z(RS)	I	0.0	0.0	0.1	0.0	0.1	0.0
			J	0.0	0.0	0.1	0.0	0.0	0.0
		G1	I	0.0	0.0	-14.2	0.0	-3.6	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		G2	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ex	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

				SLV-z (RS)	I	0.0	0.0	0.2	0.0	0.0	0.0
					J	0.0	0.0	0.2	0.0	0.1	0.0
			G1	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			G2	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			INVSLU Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	19.2	0.0	-4.8	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	19.2	0.0	-4.8	0.0	0.0
			INVSLE-R Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLE-F Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLE~1 Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLV Max	I	0.0	0.0	0.2	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.5	0.0	-3.5	0.0	0.0
			Min	I	0.0	0.0	-0.2	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.0	0.0	-3.7	0.0	0.0
295	4	7	c1-c2--1 Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			c1-c2--2 Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			SLV-z (RS)	I	0.0	0.0	0.2	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.2	0.0	0.1	0.0	0.0
			G1	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			G2	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			INVSLU Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	19.2	0.0	-4.8	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	19.2	0.0	-4.8	0.0	0.0
			INVSLE-R Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLE-F Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			J	0.0	0.0	14.2	0.0	-3.6	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		INVSLE~1 Max	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		INVSLV Max	I	0.0	0.0	0.2	0.0	0.0	0.0
			J	0.0	0.0	14.5	0.0	-3.5	0.0
		Min	I	0.0	0.0	-0.2	0.0	0.0	0.0
			J	0.0	0.0	14.0	0.0	-3.7	0.0
296	4	7 c1-c2~1	Max	I	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		c1-c2~2	Max	I	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		SLV-z (RS)	I	0.0	0.0	0.2	0.0	0.0	0.0
			J	0.0	0.0	0.2	0.0	0.1	0.0
		G1	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		G2	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ex	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Ey	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		INVSLU Max	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	19.2	0.0	-4.8	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	19.2	0.0	-4.8	0.0
		INVSLE-R Max	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		INVSLE-F Max	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		INVSLE~1 Max	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		INVSLV Max	I	0.0	0.0	0.2	0.0	0.0	0.0
			J	0.0	0.0	14.4	0.0	-3.5	0.0
		Min	I	0.0	0.0	-0.2	0.0	0.0	0.0
			J	0.0	0.0	14.1	0.0	-3.6	0.0
297	4	7 c1-c2~1	Max	I	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		c1-c2~2	Max	I	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		Min	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		SLV-z (RS)	I	0.0	0.0	0.2	0.0	0.0	0.0
			J	0.0	0.0	0.2	0.0	0.1	0.0
		G1	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	14.2	0.0	-3.6	0.0
		G2	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q3	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0
		q4	I	0.0	0.0	0.0	0.0	0.0	0.0
			J	0.0	0.0	0.0	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

			q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			INVSLU Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	19.2	0.0	-4.8	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	19.2	0.0	-4.8	0.0	0.0
			INVSLE-R Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLE-F Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLE~1 Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLV Max	I	0.0	0.0	0.2	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.4	0.0	-3.5	0.0	0.0
			Min	I	0.0	0.0	-0.2	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.1	0.0	-3.6	0.0	0.0
298	4	7	c1-c2~1 Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			c1-c2~2 Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			SLV-z(RS)	I	0.0	0.0	0.2	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.2	0.0	0.1	0.0	0.0
			G1	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			G2	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			INVSLU Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	19.2	0.0	-4.8	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	19.2	0.0	-4.8	0.0	0.0
			INVSLE-R Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLE-F Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLE~1 Max	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.2	0.0	-3.6	0.0	0.0
			INVSLV Max	I	0.0	0.0	0.2	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.4	0.0	-3.5	0.0	0.0
			Min	I	0.0	0.0	-0.2	0.0	0.0	0.0	0.0
				J	0.0	0.0	14.1	0.0	-3.7	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

299	4	7	c1-c2--1	Max	I	0.0	0.0	0.0	0.0	0.0	0.0
					J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
			c1-c2--2	Max	I	0.0	0.0	0.0	0.0	0.0	0.0
					J	0.0	0.0	0.0	0.0	0.0	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	
				J	0.0	0.0	0.0	0.0	0.0	0.0	
			SLV-z (RS)	I	0.0	0.0	0.1	0.0	0.0	0.0	
					J	0.0	0.0	0.1	0.0	0.1	0.0
			G1	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	14.2	0.0	-3.6	0.0
			G2	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	0.0	0.0	0.0	0.0
			q3	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	0.0	0.0	0.0	0.0
			q4	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_pc	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	0.0	0.0	0.0	0.0
			q5_ps	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	0.0	0.0	0.0	0.0
			Ex	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	0.0	0.0	0.0	0.0
			Ey	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	0.0	0.0	0.0	0.0
			INVSLU Max	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	19.2	0.0	-4.8	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	19.2	0.0	-4.8	0.0
			INVSLE-R Max	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	14.2	0.0	-3.6	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	14.2	0.0	-3.6	0.0
			INVSLE-F Max	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	14.2	0.0	-3.6	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	14.2	0.0	-3.6	0.0
			INVSLE-1 Max	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	14.2	0.0	-3.6	0.0
			Min	I	0.0	0.0	0.0	0.0	0.0	0.0	
					J	0.0	0.0	14.2	0.0	-3.6	0.0
			INVSLE-1 Max	I	0.0	0.0	0.1	0.0	0.0	0.0	
					J	0.0	0.0	14.4	0.0	-3.5	0.0
			Min	I	0.0	0.0	-0.1	0.0	0.0	0.0	
					J	0.0	0.0	14.1	0.0	-3.6	0.0

Ponte Canale NiE – Relazione di calcolo

REACTION FORCES & MOMENTS DEFAULT PRINTOUT.

Unit System : kN , m

Node	LC		FX	FY	FZ	MX	MY	MZ
1	c1-c2--1	Max	20.0	0.5	198.7	0.0	0.0	0.0
		Min	-0.7	-14.0	-122.7	0.0	0.0	0.0
	c1-c2--2	Max	12.9	0.3	125.9	0.0	0.0	0.0
		Min	-0.5	-9.0	-77.8	0.0	0.0	0.0
	SLV-z (RS)	G1	4.0	2.8	30.4	0.0	0.0	0.0
		G2	16.3	-11.4	140.3	0.0	0.0	0.0
		G3	2.7	-1.9	57.7	0.0	0.0	0.0
		q3	-38.5	26.9	-0.6	0.0	0.0	0.0
		q4	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	31.7	-22.2	-28.3	0.0	0.0	0.0
		q5_ps	8.9	-6.2	0.2	0.0	0.0	0.0
		Ex	-96.3	67.4	-2.2	0.0	0.0	0.0
		Ey	121.3	-84.9	-2.1	0.0	0.0	0.0
		INVS LU	Max	81.3	38.9	561.0	0.0	0.0
	Min		-55.5	-56.9	76.2	0.0	0.0	0.0
	INVS LE-R	Max	58.1	0.5	413.6	0.0	0.0	0.0
		Min	-0.7	-40.7	58.3	0.0	0.0	0.0
	INVS LE-F	Max	45.4	-8.4	402.3	0.0	0.0	0.0
		Min	12.0	-31.8	69.6	0.0	0.0	0.0
	INVS LE-1	Max	39.0	-12.8	396.7	0.0	0.0	0.0
Min		18.3	-27.3	75.3	0.0	0.0	0.0	
INVS LV	Max	170.4	92.7	229.7	0.0	0.0	0.0	
	Min	-132.4	-119.3	166.2	0.0	0.0	0.0	
2	c1-c2--1	Max	2.9	8.5	458.8	0.0	0.0	0.0
		Min	-12.1	-2.0	-0.2	0.0	0.0	0.0
	c1-c2--2	Max	2.1	5.7	301.8	0.0	0.0	0.0
		Min	-8.1	-1.4	-0.1	0.0	0.0	0.0
	SLV-z (RS)	G1	2.0	1.4	79.4	0.0	0.0	0.0
		G2	-8.2	5.8	346.6	0.0	0.0	0.0
		G3	-1.4	1.0	79.6	0.0	0.0	0.0
		q3	-46.3	32.4	-8.2	0.0	0.0	0.0
		q4	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	14.4	-10.1	21.9	0.0	0.0	0.0
		q5_ps	6.4	-4.5	-0.2	0.0	0.0	0.0
		Ex	-132.0	92.4	2.5	0.0	0.0	0.0
		Ey	111.3	-77.9	2.3	0.0	0.0	0.0
		INVS LU	Max	3.8	69.6	1214.6	0.0	0.0
	Min		-99.5	-2.7	544.5	0.0	0.0	0.0
	INVS LE-R	Max	1.9	21.3	898.2	0.0	0.0	0.0
		Min	-30.4	-1.3	412.9	0.0	0.0	0.0
	INVS LE-F	Max	-3.9	17.3	889.4	0.0	0.0	0.0
		Min	-24.7	2.7	421.7	0.0	0.0	0.0
	INVS LE-1	Max	-6.8	15.3	885.1	0.0	0.0	0.0
Min		-21.8	4.7	426.1	0.0	0.0	0.0	
INVS LV	Max	156.4	123.0	507.0	0.0	0.0	0.0	
	Min	-175.7	-109.4	345.4	0.0	0.0	0.0	
3	c1-c2--1	Max	14.3	22.3	425.2	0.0	0.0	0.0
		Min	-18.9	-13.7	-2.2	0.0	0.0	0.0
	c1-c2--2	Max	10.0	15.5	286.6	0.0	0.0	0.0
		Min	-12.4	-9.5	-1.6	0.0	0.0	0.0
	SLV-z (RS)	G1	1.3	0.7	69.6	0.0	0.0	0.0
		G2	-5.8	0.3	314.1	0.0	0.0	0.0
		G3	-0.6	0.2	68.2	0.0	0.0	0.0
		q3	-113.0	-13.0	0.4	0.0	0.0	0.0
		q4	0.0	0.0	0.0	0.0	0.0	0.0
		q5_pc	-18.8	-29.3	5.3	0.0	0.0	0.0
		q5_ps	-6.3	-10.5	-0.0	0.0	0.0	0.0
		Ex	-493.9	-92.2	1.6	0.0	0.0	0.0
		Ey	-171.2	-241.6	1.3	0.0	0.0	0.0
		INVS LU	Max	27.5	57.2	1094.9	0.0	0.0
	Min		-194.9	-56.0	508.4	0.0	0.0	0.0
	INVS LE-R	Max	19.1	40.4	810.7	0.0	0.0	0.0
		Min	-36.6	-30.7	377.0	0.0	0.0	0.0
	INVS LE-F	Max	11.6	28.7	808.5	0.0	0.0	0.0
		Min	-29.1	-19.0	379.1	0.0	0.0	0.0
	INVS LE-1	Max	7.8	22.9	807.5	0.0	0.0	0.0
Min		-25.3	-13.1	380.2	0.0	0.0	0.0	
INVS LV	Max	539.2	270.0	452.8	0.0	0.0	0.0	
	Min	-552.1	-268.9	311.9	0.0	0.0	0.0	

Ponte Canale NiE – Relazione di calcolo

4	c1-c2--1	Max	13.2	10.8	480.8	0.0	0.0	0.0
		Min	-25.6	-18.0	-3.3	0.0	0.0	0.0
	c1-c2--2	Max	9.1	7.4	322.8	0.0	0.0	0.0
		Min	-16.6	-12.4	-2.5	0.0	0.0	0.0
	SLV-z (RS)		2.5	0.3	67.6	0.0	0.0	0.0
	G1		-10.9	-1.5	314.7	0.0	0.0	0.0
	G2		-1.8	-0.2	64.4	0.0	0.0	0.0
	q3		-95.3	-0.2	-0.2	0.0	0.0	0.0
	q4		0.0	0.0	0.0	0.0	0.0	0.0
	q5_pc		-17.4	-24.6	3.9	0.0	0.0	0.0
	q5_ps		-5.6	-8.4	-0.0	0.0	0.0	0.0
	Ex		-459.7	-33.2	-0.0	0.0	0.0	0.0
	Ey		-108.5	-194.1	-0.4	0.0	0.0	0.0
	INVS LU	Max	16.3	34.4	1164.4	0.0	0.0	0.0
		Min	-183.8	-48.6	503.8	0.0	0.0	0.0
	INVS LE-R	Max	10.9	23.9	862.2	0.0	0.0	0.0
		Min	-48.7	-34.4	373.4	0.0	0.0	0.0
	INVS LE-F	Max	4.0	14.0	860.7	0.0	0.0	0.0
		Min	-41.8	-24.6	375.0	0.0	0.0	0.0
	INVS LE-1	Max	0.5	9.1	859.9	0.0	0.0	0.0
		Min	-38.3	-19.7	375.7	0.0	0.0	0.0
	INVS LV	Max	480.3	202.5	446.9	0.0	0.0	0.0
		Min	-505.7	-205.8	311.3	0.0	0.0	0.0
5	c1-c2--1	Max	16.2	36.7	413.3	0.0	0.0	0.0
		Min	-12.4	-15.9	-11.1	0.0	0.0	0.0
	c1-c2--2	Max	11.1	23.5	285.5	0.0	0.0	0.0
		Min	-8.3	-10.5	-7.3	0.0	0.0	0.0
	SLV-z (RS)		1.1	3.6	56.2	0.0	0.0	0.0
	G1		-2.2	16.2	268.0	0.0	0.0	0.0
	G2		-0.7	2.5	53.4	0.0	0.0	0.0
	q3		-94.1	-10.3	-0.5	0.0	0.0	0.0
	q4		0.0	0.0	0.0	0.0	0.0	0.0
	q5_pc		-23.7	-30.5	1.5	0.0	0.0	0.0
	q5_ps		-7.9	-10.4	-0.1	0.0	0.0	0.0
	Ex		-508.5	-90.1	-3.4	0.0	0.0	0.0
	Ey		-109.7	-235.4	-2.1	0.0	0.0	0.0
	INVS LU	Max	39.3	102.2	993.2	0.0	0.0	0.0
		Min	-163.4	-30.3	417.6	0.0	0.0	0.0
	INVS LE-R	Max	27.6	73.7	735.6	0.0	0.0	0.0
		Min	-29.5	-15.5	309.4	0.0	0.0	0.0
	INVS LE-F	Max	18.1	61.5	735.0	0.0	0.0	0.0
		Min	-20.0	-3.3	310.0	0.0	0.0	0.0
	INVS LE-1	Max	13.3	55.3	734.7	0.0	0.0	0.0
		Min	-15.3	2.8	310.3	0.0	0.0	0.0
	INVS LV	Max	538.9	282.2	379.3	0.0	0.0	0.0
		Min	-544.7	-244.8	263.6	0.0	0.0	0.0
6	c1-c2--1	Max	26.3	7.0	657.6	0.0	0.0	0.0
		Min	-10.0	-18.4	-41.3	0.0	0.0	0.0
	c1-c2--2	Max	16.7	4.8	412.4	0.0	0.0	0.0
		Min	-6.9	-11.7	-26.2	0.0	0.0	0.0
	SLV-z (RS)		2.3	1.6	104.7	0.0	0.0	0.0
	G1		10.9	-7.6	496.3	0.0	0.0	0.0
	G2		1.8	-1.2	81.1	0.0	0.0	0.0
	q3		-28.7	20.1	0.2	0.0	0.0	0.0
	q4		0.0	0.0	0.0	0.0	0.0	0.0
	q5_pc		13.8	-9.7	5.7	0.0	0.0	0.0
	q5_ps		4.5	-3.2	-0.0	0.0	0.0	0.0
	Ex		-154.6	108.2	1.6	0.0	0.0	0.0
	Ey		156.8	-109.7	1.0	0.0	0.0	0.0
	INVS LU	Max	65.1	30.4	1672.3	0.0	0.0	0.0
		Min	-43.4	-45.6	718.5	0.0	0.0	0.0
	INVS LE-R	Max	47.3	3.9	1238.3	0.0	0.0	0.0
		Min	-5.6	-33.1	532.6	0.0	0.0	0.0
	INVS LE-F	Max	41.7	0.0	1236.1	0.0	0.0	0.0
		Min	-0.0	-29.2	534.9	0.0	0.0	0.0
	INVS LE-1	Max	39.0	-1.9	1234.9	0.0	0.0	0.0
		Min	2.7	-27.3	536.0	0.0	0.0	0.0
	INVS LV	Max	216.5	133.8	682.9	0.0	0.0	0.0
		Min	-191.1	-151.5	471.9	0.0	0.0	0.0
7	c1-c2--1	Max	0.0	0.0	369.6	0.0	0.0	0.0
		Min	0.0	0.0	-81.5	0.0	0.0	0.0
	c1-c2--2	Max	0.0	0.0	218.9	0.0	0.0	0.0
		Min	0.0	0.0	-52.0	0.0	0.0	0.0
	SLV-z (RS)		0.0	0.0	136.2	0.0	0.0	0.0
	G1		0.0	0.0	496.3	0.0	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

G2	0.0	0.0	153.1	0.0	0.0	0.0
q3	0.0	0.0	-0.1	0.0	0.0	0.0
q4	0.0	0.0	0.0	0.0	0.0	0.0
q5_pc	0.0	0.0	-51.8	0.0	0.0	0.0
q5_ps	0.0	0.0	0.5	0.0	0.0	0.0
Ex	0.0	0.0	-0.2	0.0	0.0	0.0
Ey	0.0	0.0	-3.4	0.0	0.0	0.0
INVS LU	Max	0.0	1422.3	0.0	0.0	0.0
	Min	0.0	720.0	0.0	0.0	0.0
INVS LE-R	Max	0.0	1050.1	0.0	0.0	0.0
	Min	0.0	536.8	0.0	0.0	0.0
INVS LE-F	Max	0.0	1029.3	0.0	0.0	0.0
	Min	0.0	557.5	0.0	0.0	0.0
INVS LE-1	Max	0.0	1019.0	0.0	0.0	0.0
	Min	0.0	567.9	0.0	0.0	0.0
INVS LV	Max	0.0	786.7	0.0	0.0	0.0
	Min	0.0	512.1	0.0	0.0	0.0
8 c1-c2--1	Max	0.0	450.8	0.0	0.0	0.0
	Min	0.0	-2.6	0.0	0.0	0.0
c1-c2--2	Max	0.0	303.0	0.0	0.0	0.0
	Min	0.0	-1.9	0.0	0.0	0.0
SLV-z (RS)	0.0	0.0	53.4	0.0	0.0	0.0
G1	0.0	0.0	267.9	0.0	0.0	0.0
G2	0.0	0.0	49.8	0.0	0.0	0.0
q3	0.0	0.0	8.9	0.0	0.0	0.0
q4	0.0	0.0	0.0	0.0	0.0	0.0
q5_pc	0.0	0.0	27.1	0.0	0.0	0.0
q5_ps	0.0	0.0	-0.2	0.0	0.0	0.0
Ex	0.0	0.0	0.3	0.0	0.0	0.0
Ey	0.0	0.0	4.0	0.0	0.0	0.0
INVS LU	Max	0.0	1062.0	0.0	0.0	0.0
	Min	0.0	401.0	0.0	0.0	0.0
INVS LE-R	Max	0.0	784.9	0.0	0.0	0.0
	Min	0.0	298.8	0.0	0.0	0.0
INVS LE-F	Max	0.0	774.0	0.0	0.0	0.0
	Min	0.0	309.7	0.0	0.0	0.0
INVS LE-1	Max	0.0	768.6	0.0	0.0	0.0
	Min	0.0	315.1	0.0	0.0	0.0
INVS LV	Max	0.0	372.4	0.0	0.0	0.0
	Min	0.0	263.0	0.0	0.0	0.0
9 c1-c2--1	Max	0.0	16.2	438.0	0.0	0.0
	Min	0.0	-17.0	-0.1	0.0	0.0
c1-c2--2	Max	0.0	11.3	293.1	0.0	0.0
	Min	0.0	-11.9	-0.0	0.0	0.0
SLV-z (RS)	0.0	0.0	0.3	67.2	0.0	0.0
G1	0.0	0.0	0.3	314.9	0.0	0.0
G2	0.0	0.0	-0.6	63.7	0.0	0.0
q3	0.0	0.0	-18.7	0.3	0.0	0.0
q4	0.0	0.0	0.0	0.0	0.0	0.0
q5_pc	0.0	0.0	-26.6	6.1	0.0	0.0
q5_ps	0.0	0.0	-9.4	-0.0	0.0	0.0
Ex	0.0	0.0	-21.2	0.1	0.0	0.0
Ey	0.0	0.0	-322.7	2.1	0.0	0.0
INVS LU	Max	0.0	45.5	1107.9	0.0	0.0
	Min	0.0	-65.7	505.6	0.0	0.0
INVS LE-R	Max	0.0	31.9	820.2	0.0	0.0
	Min	0.0	-33.2	374.9	0.0	0.0
INVS LE-F	Max	0.0	21.3	817.8	0.0	0.0
	Min	0.0	-22.6	377.4	0.0	0.0
INVS LE-1	Max	0.0	16.0	816.6	0.0	0.0
	Min	0.0	-17.3	378.6	0.0	0.0
INVS LV	Max	0.0	328.9	446.6	0.0	0.0
	Min	0.0	-329.4	310.7	0.0	0.0
10 c1-c2--1	Max	0.0	15.3	424.0	0.0	0.0
	Min	0.0	-14.3	-4.2	0.0	0.0
c1-c2--2	Max	0.0	10.6	280.6	0.0	0.0
	Min	0.0	-10.4	-3.1	0.0	0.0
SLV-z (RS)	0.0	0.0	1.2	64.7	0.0	0.0
G1	0.0	0.0	3.7	313.9	0.0	0.0
G2	0.0	0.0	0.9	60.1	0.0	0.0
q3	0.0	0.0	-15.7	0.0	0.0	0.0
q4	0.0	0.0	0.0	0.0	0.0	0.0
q5_pc	0.0	0.0	-21.1	4.1	0.0	0.0
q5_ps	0.0	0.0	-7.0	-0.1	0.0	0.0
Ex	0.0	0.0	-14.7	-0.1	0.0	0.0
Ey	0.0	0.0	-253.3	-0.1	0.0	0.0

Ponte Canale NiE – Relazione di calcolo

	INVS LU	Max	0.0	45.9	1081.0	0.0	0.0	0.0
		Min	0.0	-48.0	495.6	0.0	0.0	0.0
	INVS LE-R	Max	0.0	32.6	800.5	0.0	0.0	0.0
		Min	0.0	-22.4	367.4	0.0	0.0	0.0
	INVS LE-F	Max	0.0	24.2	798.8	0.0	0.0	0.0
		Min	0.0	-13.9	369.0	0.0	0.0	0.0
	INVS LE~1	Max	0.0	19.9	798.0	0.0	0.0	0.0
		Min	0.0	-9.7	369.8	0.0	0.0	0.0
	INVS LV	Max	0.0	262.7	438.8	0.0	0.0	0.0
		Min	0.0	-253.5	309.3	0.0	0.0	0.0
11	c1-c2--1	Max	0.0	9.7	511.1	0.0	0.0	0.0
		Min	0.0	-11.4	-0.0	0.0	0.0	0.0
	c1-c2--2	Max	0.0	6.9	340.5	0.0	0.0	0.0
		Min	0.0	-7.2	-0.0	0.0	0.0	0.0
	SLV-z (RS)		0.0	1.7	72.2	0.0	0.0	0.0
	G1		0.0	-5.8	346.8	0.0	0.0	0.0
	G2		0.0	-0.7	63.0	0.0	0.0	0.0
	q3		0.0	-21.6	-0.3	0.0	0.0	0.0
	q4		0.0	0.0	0.0	0.0	0.0	0.0
	q5_pc		0.0	-26.5	2.3	0.0	0.0	0.0
	q5_ps		0.0	-8.6	-0.2	0.0	0.0	0.0
	Ex		0.0	-16.5	-0.3	0.0	0.0	0.0
	Ey		0.0	-325.4	-4.9	0.0	0.0	0.0
	INVS LU	Max	0.0	28.1	1245.3	0.0	0.0	0.0
		Min	0.0	-71.6	550.7	0.0	0.0	0.0
	INVS LE-R	Max	0.0	19.1	922.3	0.0	0.0	0.0
		Min	0.0	-33.9	408.4	0.0	0.0	0.0
	INVS LE-F	Max	0.0	8.4	921.4	0.0	0.0	0.0
		Min	0.0	-23.3	409.3	0.0	0.0	0.0
	INVS LE~1	Max	0.0	3.1	920.9	0.0	0.0	0.0
		Min	0.0	-18.0	409.8	0.0	0.0	0.0
	INVS LV	Max	0.0	324.3	483.6	0.0	0.0	0.0
		Min	0.0	-337.3	336.0	0.0	0.0	0.0
12	c1-c2--1	Max	0.0	0.0	335.1	0.0	0.0	0.0
		Min	0.0	0.0	-89.2	0.0	0.0	0.0
	c1-c2--2	Max	0.0	0.0	214.8	0.0	0.0	0.0
		Min	0.0	0.0	-54.2	0.0	0.0	0.0
	SLV-z (RS)		0.0	0.0	13.3	0.0	0.0	0.0
	G1		0.0	0.0	140.2	0.0	0.0	0.0
	G2		0.0	0.0	11.3	0.0	0.0	0.0
	q3		0.0	0.0	0.1	0.0	0.0	0.0
	q4		0.0	0.0	0.0	0.0	0.0	0.0
	q5_pc		0.0	0.0	2.2	0.0	0.0	0.0
	q5_ps		0.0	0.0	0.0	0.0	0.0	0.0
	Ex		0.0	0.0	0.2	0.0	0.0	0.0
	Ey		0.0	0.0	2.4	0.0	0.0	0.0
	INVS LU	Max	0.0	0.0	658.9	0.0	0.0	0.0
		Min	0.0	0.0	82.1	0.0	0.0	0.0
	INVS LE-R	Max	0.0	0.0	487.9	0.0	0.0	0.0
		Min	0.0	0.0	61.0	0.0	0.0	0.0
	INVS LE-F	Max	0.0	0.0	487.1	0.0	0.0	0.0
		Min	0.0	0.0	61.9	0.0	0.0	0.0
	INVS LE~1	Max	0.0	0.0	486.6	0.0	0.0	0.0
		Min	0.0	0.0	62.3	0.0	0.0	0.0
	INVS LV	Max	0.0	0.0	165.6	0.0	0.0	0.0
		Min	0.0	0.0	137.4	0.0	0.0	0.0

SUMMATION OF REACTION FORCES

LC	SUM-FX	SUM-FY	SUM-FZ
SLV-z (RS)	0.0	0.0	809.6
G1	0.0	-0.0	3760.1
G2	0.0	-0.0	805.3
q3	-415.8	0.0	0.0
q4	0.0	0.0	0.0
q5_pc	-0.0	-200.6	0.0
q5_ps	0.0	-68.2	0.0

Ponte Canale NiE – Relazione di calcolo

Ex	-1845.0	-0.0	0.0
Ey	-0.0	-1845.0	0.0

Ponte Canale NiE – Relazione di calcolo

REACTION FORCES & MOMENTS LOCAL PRINTOUT.

Unit System : kN , m

Node	LC		FX	FY	FZ	MX	MY	MZ	
1	c1-c2--1	Max	24.5	0.0	198.7	0.0	0.0	0.0	
		Min	-0.8	-0.0	-122.7	0.0	0.0	0.0	
	c1-c2--2	Max	15.7	0.0	125.9	0.0	0.0	0.0	
		Min	-0.6	-0.0	-77.8	0.0	0.0	0.0	
	SLV-z (RS)	G1	4.9	0.0	30.4	0.0	0.0	0.0	
		G2	19.8	-0.0	140.3	0.0	0.0	0.0	
		G3	3.3	-0.0	57.7	0.0	0.0	0.0	
		q3	-47.0	-0.0	-0.6	0.0	0.0	0.0	
		q4	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	38.7	-0.0	-28.3	0.0	0.0	0.0	
		q5_ps	10.8	-0.0	0.2	0.0	0.0	0.0	
		Ex	-117.5	-0.0	-2.2	0.0	0.0	0.0	
		Ey	148.0	-0.0	-2.1	0.0	0.0	0.0	
		INVSLE	Max	99.2	-0.0	561.0	0.0	0.0	0.0
			Min	-67.8	-0.0	76.2	0.0	0.0	0.0
	INVSLE-R	Max	70.9	-0.0	413.6	0.0	0.0	0.0	
		Min	-0.9	-0.0	58.3	0.0	0.0	0.0	
	INVSLE-F	Max	55.4	-0.0	402.3	0.0	0.0	0.0	
		Min	14.6	-0.0	69.6	0.0	0.0	0.0	
	INVSLE-1	Max	47.6	-0.0	396.7	0.0	0.0	0.0	
Min		22.3	-0.0	75.3	0.0	0.0	0.0		
INVSLE	Max	208.0	0.0	229.7	0.0	0.0	0.0		
	Min	-161.6	-0.0	166.2	0.0	0.0	0.0		
2	c1-c2--1	Max	3.5	0.0	458.8	0.0	0.0	0.0	
		Min	-14.8	-0.0	-0.2	0.0	0.0	0.0	
	c1-c2--2	Max	2.5	0.0	301.8	0.0	0.0	0.0	
		Min	-9.9	-0.0	-0.1	0.0	0.0	0.0	
	SLV-z (RS)	G1	2.4	0.0	79.4	0.0	0.0	0.0	
		G2	-10.1	0.0	346.6	0.0	0.0	0.0	
		G3	-1.7	0.0	79.6	0.0	0.0	0.0	
		q3	-56.5	0.0	-8.2	0.0	0.0	0.0	
		q4	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	17.5	-0.0	21.9	0.0	0.0	0.0	
		q5_ps	7.9	-0.0	-0.2	0.0	0.0	0.0	
		Ex	-161.1	-0.0	2.5	0.0	0.0	0.0	
		Ey	135.9	-0.0	2.3	0.0	0.0	0.0	
		INVSLE	Max	4.7	0.0	1214.6	0.0	0.0	0.0
			Min	-121.4	-0.0	544.5	0.0	0.0	0.0
	INVSLE-R	Max	2.3	0.0	898.2	0.0	0.0	0.0	
		Min	-37.1	-0.0	412.9	0.0	0.0	0.0	
	INVSLE-F	Max	-4.7	0.0	889.4	0.0	0.0	0.0	
		Min	-30.1	-0.0	421.7	0.0	0.0	0.0	
	INVSLE-1	Max	-8.2	0.0	885.1	0.0	0.0	0.0	
Min		-26.6	0.0	426.1	0.0	0.0	0.0		
INVSLE	Max	190.9	0.0	507.0	0.0	0.0	0.0		
	Min	-214.4	-0.0	345.4	0.0	0.0	0.0		
3	c1-c2--1	Max	3.9	26.1	425.2	0.0	0.0	0.0	
		Min	-10.8	-21.0	-2.2	0.0	0.0	0.0	
	c1-c2--2	Max	2.7	18.2	286.6	0.0	0.0	0.0	
		Min	-7.0	-14.4	-1.6	0.0	0.0	0.0	
	SLV-z (RS)	G1	1.1	0.9	69.6	0.0	0.0	0.0	
		G2	-5.0	-3.1	314.1	0.0	0.0	0.0	
		G3	-0.6	-0.2	68.2	0.0	0.0	0.0	
		q3	-85.1	-75.4	0.4	0.0	0.0	0.0	
		q4	0.0	0.0	0.0	0.0	0.0	0.0	
		q5_pc	1.4	-34.8	5.3	0.0	0.0	0.0	
		q5_ps	0.9	-12.2	-0.0	0.0	0.0	0.0	
		Ex	-351.8	-358.8	1.6	0.0	0.0	0.0	
		Ey	-1.7	-296.1	1.3	0.0	0.0	0.0	
		INVSLE	Max	-1.1	62.2	1094.9	0.0	0.0	0.0
			Min	-133.1	-157.0	508.4	0.0	0.0	0.0
	INVSLE-R	Max	-0.9	43.8	810.7	0.0	0.0	0.0	
		Min	-17.3	-45.1	377.0	0.0	0.0	0.0	
	INVSLE-F	Max	-1.5	29.9	808.5	0.0	0.0	0.0	
		Min	-16.7	-31.2	379.1	0.0	0.0	0.0	
	INVSLE-1	Max	-1.7	22.9	807.5	0.0	0.0	0.0	
Min		-16.4	-24.2	380.2	0.0	0.0	0.0		
INVSLE	Max	347.0	444.6	452.8	0.0	0.0	0.0		
	Min	-358.2	-451.1	311.9	0.0	0.0	0.0		

Ponte Canale NiE – Relazione di calcolo

4	c1-c2--1	Max	6.2	16.3	480.8	0.0	0.0	0.0
		Min	-14.0	-26.4	-3.3	0.0	0.0	0.0
	c1-c2--2	Max	4.4	11.2	322.8	0.0	0.0	0.0
		Min	-9.0	-17.4	-2.5	0.0	0.0	0.0
	SLV-z (RS)		1.9	1.6	67.6	0.0	0.0	0.0
	G1		-8.1	-7.5	314.7	0.0	0.0	0.0
	G2		-1.3	-1.2	64.4	0.0	0.0	0.0
	q3		-78.0	-54.8	-0.2	0.0	0.0	0.0
	q4		0.0	0.0	0.0	0.0	0.0	0.0
	q5_pc		-0.2	-30.1	3.9	0.0	0.0	0.0
	q5_ps		0.2	-10.1	-0.0	0.0	0.0	0.0
	Ex		-357.5	-290.8	-0.0	0.0	0.0	0.0
	Ey		22.4	-221.2	-0.4	0.0	0.0	0.0
	INVS LU	Max	-4.3	37.5	1164.4	0.0	0.0	0.0
		Min	-130.2	-136.2	503.8	0.0	0.0	0.0
	INVS LE-R	Max	-3.2	25.7	862.2	0.0	0.0	0.0
		Min	-23.5	-53.1	373.4	0.0	0.0	0.0
	INVS LE-F	Max	-3.3	13.7	860.7	0.0	0.0	0.0
		Min	-23.4	-41.1	375.0	0.0	0.0	0.0
	INVS LE-1	Max	-3.3	7.7	859.9	0.0	0.0	0.0
		Min	-23.4	-35.1	375.7	0.0	0.0	0.0
	INVS LV	Max	355.4	349.0	446.9	0.0	0.0	0.0
		Min	-374.3	-366.3	311.3	0.0	0.0	0.0
5	c1-c2--1	Max	5.5	35.3	413.3	0.0	0.0	0.0
		Min	-19.2	-19.1	-11.1	0.0	0.0	0.0
	c1-c2--2	Max	3.8	23.0	285.5	0.0	0.0	0.0
		Min	-12.3	-12.5	-7.3	0.0	0.0	0.0
	SLV-z (RS)		2.7	2.7	56.2	0.0	0.0	0.0
	G1		-11.0	12.0	268.0	0.0	0.0	0.0
	G2		-2.0	1.7	53.4	0.0	0.0	0.0
	q3		-71.1	-62.4	-0.5	0.0	0.0	0.0
	q4		0.0	0.0	0.0	0.0	0.0	0.0
	q5_pc		-1.9	-38.6	1.5	0.0	0.0	0.0
	q5_ps		-0.5	-13.1	-0.1	0.0	0.0	0.0
	Ex		-364.9	-365.4	-3.4	0.0	0.0	0.0
	Ey		45.1	-255.7	-2.1	0.0	0.0	0.0
	INVS LU	Max	-8.5	100.8	993.2	0.0	0.0	0.0
		Min	-132.0	-117.5	417.6	0.0	0.0	0.0
	INVS LE-R	Max	-6.4	72.1	735.6	0.0	0.0	0.0
		Min	-33.4	-28.5	309.4	0.0	0.0	0.0
	INVS LE-F	Max	-7.2	56.7	735.0	0.0	0.0	0.0
		Min	-32.7	-13.1	310.0	0.0	0.0	0.0
	INVS LE-1	Max	-7.6	49.0	734.7	0.0	0.0	0.0
		Min	-32.3	-5.4	310.3	0.0	0.0	0.0
	INVS LV	Max	366.2	456.6	379.3	0.0	0.0	0.0
		Min	-392.4	-429.3	263.6	0.0	0.0	0.0
6	c1-c2--1	Max	32.1	0.0	657.6	0.0	0.0	0.0
		Min	-12.2	-0.0	-41.3	0.0	0.0	0.0
	c1-c2--2	Max	20.3	0.0	412.4	0.0	0.0	0.0
		Min	-8.4	-0.0	-26.2	0.0	0.0	0.0
	SLV-z (RS)		2.8	0.0	104.7	0.0	0.0	0.0
	G1		13.3	-0.0	496.3	0.0	0.0	0.0
	G2		2.2	-0.0	81.1	0.0	0.0	0.0
	q3		-35.0	-0.0	0.2	0.0	0.0	0.0
	q4		0.0	0.0	0.0	0.0	0.0	0.0
	q5_pc		16.9	-0.0	5.7	0.0	0.0	0.0
	q5_ps		5.5	0.0	-0.0	0.0	0.0	0.0
	Ex		-188.7	0.0	1.6	0.0	0.0	0.0
	Ey		191.3	-0.0	1.0	0.0	0.0	0.0
	INVS LU	Max	79.4	0.0	1672.3	0.0	0.0	0.0
		Min	-53.0	-0.0	718.5	0.0	0.0	0.0
	INVS LE-R	Max	57.7	0.0	1238.3	0.0	0.0	0.0
		Min	-6.8	-0.0	532.6	0.0	0.0	0.0
	INVS LE-F	Max	51.0	0.0	1236.1	0.0	0.0	0.0
		Min	-0.1	-0.0	534.9	0.0	0.0	0.0
	INVS LE-1	Max	47.6	-0.0	1234.9	0.0	0.0	0.0
		Min	3.3	-0.0	536.0	0.0	0.0	0.0
	INVS LV	Max	264.3	0.0	682.9	0.0	0.0	0.0
		Min	-233.3	-0.0	471.9	0.0	0.0	0.0

Allegato C – Input/Output Modello Precom

CALCESTRUZZI

trave : calcestruzzo C35/45

caratteristiche meccaniche fino a 8 gg :

Rck =389.3986

Ec =339143.73

Resist. a trazione cls (per verifica a fessurazione):

fcm=37.114

caratteristiche meccaniche da 8 gg a tempo infinito :

Rck =458.7156

Ec =352956.17

Resist. a trazione cls (per verifica a fessurazione):

fcm=41.397

Fenomeni lenti

Ritiro totale a t=inf. = 0.00030

Coeff. viscosita' a t=inf. = 2.300

Ritiro iniz. per ciclo term.= 0.00000

sviluppo nel tempo :	giorni	ritiro	viscosita'
	Bs	Bf	
	0	0.000	0.000
	7	0.150	0.130
	30	0.400	0.390
	50	0.470	0.470
	10000	1.000	1.000

soletta : calcestruzzo C35/45

caratteristiche meccaniche fino a 8 gg :

Rck =389.3986

Ec =339143.73

Resist. a trazione cls (per verifica a fessurazione):

fcm=37.114

caratteristiche meccaniche da 8 gg a tempo infinito :

Rck =458.7156

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Ritiro totale a t=inf. = 0.00030

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sviluppo nel tempo :	giorni	ritiro	viscosita'
	Bs	Bf	
	0	0.000	0.000
	7	0.150	0.130
	30	0.400	0.390
	50	0.470	0.470
	10000	1.000	1.000

ACCIAI

Cavo 1 : livello1

Tipo acciaio: Trefolo

Caratteristiche meccaniche : Ea =2048929.68

fptk=18960.24

fp1k=17023.45

Fenomeni lenti

Rilassamento % totale a t=inf. = 3.000%

Caduta di tensione totale a tempo infinito = -443.425

sviluppo nel tempo :	giorni	Br
	0	0.000
23	0.280	
41	0.382	
500	0.500	
10000	1.000	

Posizione 1 : B450C

caratteristiche meccaniche : Ea =2140672.80

ftk =5504.59

fyk =4587.16

Posizione 2 : B450C

caratteristiche meccaniche : Ea =2140672.80

ftk =5504.59

fyk =4587.16

Posizione 3 : B450C

caratteristiche meccaniche : Ea =2140672.80

ftk =5504.59

fyk =4587.16

Posizione 4 : B450C

caratteristiche meccaniche : Ea =2140672.80
ftk =5504.59
fyk =4587.16

Posizione 5 : B450C

caratteristiche meccaniche : Ea =2140672.80
ftk =5504.59
fyk =4587.16

Posizione 6 : B450C

caratteristiche meccaniche : Ea =2140672.80
ftk =5504.59
fyk =4587.16

Posizione 7 : B450C

caratteristiche meccaniche : Ea =2140672.80
ftk =5504.59
fyk =4587.16

Posizione 8 : B450C

caratteristiche meccaniche : Ea =2140672.80
ftk =5504.59
fyk =4587.16

Posizione 9 : B450C

caratteristiche meccaniche : Ea =2140672.80
ftk =5504.59
fyk =4587.16

Posizione 10 : B450C

caratteristiche meccaniche : Ea =2140672.80
ftk =5504.59
fyk =4587.16

COMBINAZIONI

comb.	Gk	Pk	Ik	Qk	Tk	Wk	Ak
TA1	1.000	1.000	1.000	1.000	1.000	0.600	0.000

ZONE DI STAFFATURA

Zona	De scri z.	Staffe	X in.	X fin.	Lungh.	Acciaio	Getti staffati
1	2	4d.78/20	0.00	350.00	350.00	B450C	trave
2	3	4d.5/20	350.00	1850.00	1500.00	B450C	trave
3	4	4d.785/20	1850.00	2200.00	350.00	B450C	trave

=====

SEZIONE x = 50

=====

Giorno n. 0

--> Cambio fase: inizio presenza getto n. 1 trave

DATI SEZIONE DI VERIFICA

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59
Coordinate baricentro x = 0.00 y = 53.07
Momento d'inerzia rispetto all'asse Y = 6394422
Momento d'inerzia rispetto all'asse Z = 10951662
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
Posiz. 1: coeff. di omogen. n = 6.312
Posiz. 2: coeff. di omogen. n = 6.312
Posiz. 3: coeff. di omogen. n = 6.312
Posiz. 4: coeff. di omogen. n = 6.312
Posiz. 5: coeff. di omogen. n = 6.312
Posiz. 6: coeff. di omogen. n = 6.312

Posiz. 7: coeff. di omogen. n = 6.312
 Posiz. 8: coeff. di omogen. n = 6.312
 Posiz. 9: coeff. di omogen. n = 6.312
 Posiz. 10: coeff. di omogen. n = 6.312
 Area = 5501.36
 Coordinate baricentro x = 0.00 y = 52.61
 Momento d'inerzia rispetto all'asse Y = 6574849
 Momento d'inerzia rispetto all'asse Z = 11191032

Caratteristiche geometriche sezione parzializzata:

quota z asse neutro = 84.13
 Spessore anime = 15.00
 Numero anime = 2
 Momento statico S = 16013
 Momento d'inerzia J = 1331967

COMBINAZIONE TA1

Giorno n. 7

--> Inserimento azione permanente n. 1: Peso trave
 --> Inserimento Cavo di precompressione n. 1

DATI SEZIONE DI VERIFICA

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59
 Coordinate baricentro x = 0.00 y = 53.07
 Momento d'inerzia rispetto all'asse Y = 6394422
 Momento d'inerzia rispetto all'asse Z = 10951662
 Spessore anima singola = 15.00
 Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
 Posiz. 1: coeff. di omogen. n = 6.312
 Posiz. 2: coeff. di omogen. n = 6.312
 Posiz. 3: coeff. di omogen. n = 6.312
 Posiz. 4: coeff. di omogen. n = 6.312
 Posiz. 5: coeff. di omogen. n = 6.312
 Posiz. 6: coeff. di omogen. n = 6.312
 Posiz. 7: coeff. di omogen. n = 6.312
 Posiz. 8: coeff. di omogen. n = 6.312
 Posiz. 9: coeff. di omogen. n = 6.312
 Posiz. 10: coeff. di omogen. n = 6.312
 Area = 5501.36
 Coordinate baricentro x = 0.00 y = 52.61
 Momento d'inerzia rispetto all'asse Y = 6574849
 Momento d'inerzia rispetto all'asse Z = 11191032

Caratteristiche geometriche sezione parzializzata:

quota z asse neutro = 84.13
 Spessore anime = 15.00
 Numero anime = 2
 Momento statico S = 16013
 Momento d'inerzia J = 1331967

COMBINAZIONE TA1

Sollecitazioni generate da

--> Peso trave
 momento flettente = -16850.68
 sforzo normale = 0.00
 taglio = 6743.24
 momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	-0.45	0.00	2.93

pos.	quota z	σ_{acc}
1	95.00	43.98

2	95.00	43.98
3	4.00	-4.22
4	4.00	-4.22
5	4.00	-4.22
6	4.00	-4.22
7	22.00	5.31
8	22.00	5.31
9	22.00	5.31
10	22.00	5.31

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-0.45	0.00	2.93	0.00	91912.08

pos.	quota z	σ_{acc}
1	95.00	43.98
2	95.00	43.98
3	4.00	-4.22
4	4.00	-4.22
5	4.00	-4.22
6	4.00	-4.22
7	22.00	5.31
8	22.00	5.31
9	22.00	5.31
10	22.00	5.31

Giorno n. 8

--> Variazione modulo elastico calcestruzzo C35/45
--> Variazione modulo elastico calcestruzzo C35/45

DATI SEZIONE DI VERIFICA

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59
Coordinate baricentro x = 0,00 y = 53,07
Momento d'inerzia rispetto all'asse Y = 6394422
Momento d'inerzia rispetto all'asse Z = 10951662
Spessore anima singola = 15,00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1,000
Posiz. 1: coeff. di omogen. n = 6,312
Posiz. 2: coeff. di omogen. n = 6,312
Posiz. 3: coeff. di omogen. n = 6,312
Posiz. 4: coeff. di omogen. n = 6,312
Posiz. 5: coeff. di omogen. n = 6,312
Posiz. 6: coeff. di omogen. n = 6,312
Posiz. 7: coeff. di omogen. n = 6,312
Posiz. 8: coeff. di omogen. n = 6,312
Posiz. 9: coeff. di omogen. n = 6,312
Posiz. 10: coeff. di omogen. n = 6,312
Area = 5501.36
Coordinate baricentro x = 0,00 y = 52,61
Momento d'inerzia rispetto all'asse Y = 6574849
Momento d'inerzia rispetto all'asse Z = 11191032

Giorno n. 30

--> Inserimento azione permanente n. 2: Peso soletta

DATI SEZIONE DI VERIFICA

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59
Coordinate baricentro x = 0.00 y = 53.07
Momento d'inerzia rispetto all'asse Y = 6394422
Momento d'inerzia rispetto all'asse Z = 10951662
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
Posiz. 1: coeff. di omogen. n = 6.065
Posiz. 2: coeff. di omogen. n = 6.065
Posiz. 3: coeff. di omogen. n = 6.065
Posiz. 4: coeff. di omogen. n = 6.065
Posiz. 5: coeff. di omogen. n = 6.065
Posiz. 6: coeff. di omogen. n = 6.065
Posiz. 7: coeff. di omogen. n = 6.065
Posiz. 8: coeff. di omogen. n = 6.065
Posiz. 9: coeff. di omogen. n = 6.065
Posiz. 10: coeff. di omogen. n = 6.065
Area = 5496.40
Coordinate baricentro x = 0.00 y = 52.63
Momento d'inerzia rispetto all'asse Y = 6566509
Momento d'inerzia rispetto all'asse Z = 11179901

Caratteristiche geometriche sezione parzializzata:

quota z asse neutro = 84.13
Spessore anime = 15.00
Numero anime = 2
Momento statico S = 16013
Momento d'inerzia J = 1331967

COMBINAZIONE TA1

Sollecitazioni generate da

--> Peso soletta
momento flettente = -15618.13
sforzo normale = 0.00
taglio = 6250.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	-0.42	0.00	2.71
pos.	quota z	σ_{acc}	
1	95.00	40.76	
2	95.00	40.76	
3	4.00	-3.91	
4	4.00	-3.91	
5	4.00	-3.91	
6	4.00	-3.91	
7	22.00	4.92	
8	22.00	4.92	
9	22.00	4.92	
10	22.00	4.92	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-0.87	0.00	5.64	0.00	177101.17
pos.	quota z	σ_{acc}			
1	95.00	84.74			
2	95.00	84.74			
3	4.00	-8.14			
4	4.00	-8.14			
5	4.00	-8.14			
6	4.00	-8.14			
7	22.00	10.24			
8	22.00	10.24			
9	22.00	10.24			
10	22.00	10.24			

Giorno n. 50

--> Cambio fase: inizio presenza getto n. 2 soletta
--> Inserimento azione permanente n. 3: permanente

DATI SEZIONE DI VERIFICA

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673

6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 10394.59
Coordinate baricentro x = 0.00 y = 84.06
Momento d'inerzia rispetto all'asse Y = 17428194
Momento d'inerzia rispetto all'asse Z = 27618329
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
Getto 2: coeff. di omogen. n = 1.000
Posiz. 1: coeff. di omogen. n = 6.065
Posiz. 2: coeff. di omogen. n = 6.065
Posiz. 3: coeff. di omogen. n = 6.065
Posiz. 4: coeff. di omogen. n = 6.065
Posiz. 5: coeff. di omogen. n = 6.065
Posiz. 6: coeff. di omogen. n = 6.065
Posiz. 7: coeff. di omogen. n = 6.065
Posiz. 8: coeff. di omogen. n = 6.065
Posiz. 9: coeff. di omogen. n = 6.065
Posiz. 10: coeff. di omogen. n = 6.065
Area = 10496.40
Coordinate baricentro x = 0.00 y = 83.53
Momento d'inerzia rispetto all'asse Y = 17845536
Momento d'inerzia rispetto all'asse Z = 27846568

Caratteristiche geometriche sezione parzializzata:

quota z asse neutro = 114.52
Spessore anime = 15.00
Numero anime = 2
Momento statico S = 23954
Momento d'inerzia J = 2607134

COMBINAZIONE TA1

Sollecitazioni generate da
--> permanente
momento flettente = -7641.90
sforzo normale = 0.00
taglio = 3058.10
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	-0.21	0.00	1.33
2	0.00	0.00	

pos.	quota z	σ_{acc}
1	95.00	19.94
2	95.00	19.94
3	4.00	-1.91
4	4.00	-1.91
5	4.00	-1.91
6	4.00	-1.91
7	22.00	2.41
8	22.00	2.41
9	22.00	2.41
10	22.00	2.41

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-1.08	0.00	6.97	0.00	218783.90
2	0.00	0.00			0.00

pos.	quota z	σ_{acc}
1	95.00	104.68
2	95.00	104.68
3	4.00	-10.05
4	4.00	-10.05
5	4.00	-10.05
6	4.00	-10.05
7	22.00	12.64
8	22.00	12.64
9	22.00	12.64
10	22.00	12.64

A tempo infinito

--> Inserimento azione da traffico n. 1: accidentale
--> Inserimento azione indiretta n. 1: Ritiro differenziale

DATI SEZIONE DI VERIFICA

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 10394.59
Coordinate baricentro x = 0.00 y = 84.06
Momento d'inerzia rispetto all'asse Y = 17428194
Momento d'inerzia rispetto all'asse Z = 27618329
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
Getto 2: coeff. di omogen. n = 1.000
Posiz. 1: coeff. di omogen. n = 6.065
Posiz. 2: coeff. di omogen. n = 6.065
Posiz. 3: coeff. di omogen. n = 6.065
Posiz. 4: coeff. di omogen. n = 6.065
Posiz. 5: coeff. di omogen. n = 6.065
Posiz. 6: coeff. di omogen. n = 6.065
Posiz. 7: coeff. di omogen. n = 6.065
Posiz. 8: coeff. di omogen. n = 6.065
Posiz. 9: coeff. di omogen. n = 6.065
Posiz. 10: coeff. di omogen. n = 6.065
Area = 10496.40
Coordinate baricentro x = 0.00 y = 83.53
Momento d'inerzia rispetto all'asse Y = 17845536
Momento d'inerzia rispetto all'asse Z = 27846568

Caratteristiche geometriche sezione parzializzata:

quota z asse neutro = 114.52
Spessore anime = 15.00
Numero anime = 2
Momento statico S = 23954
Momento d'inerzia J = 2607134

COMBINAZIONE TA1

COMBINAZIONE TA 1/1

azione da traffico n. 1:
--> accidentale (sottocaso Mfmax)
momento flettente = -42030.43
sforzo normale = 0.00
taglio = 16819.57
momento torcente = 0.00

Sollecitazioni di combinazione:
momento flettente = -42030.43
sforzo normale = 0.00
taglio = 16819.57
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	-1.13	0.00	7.30
2	0.00	0.00	

pos.	quota z	σ_{acc}
1	95.00	109.69
2	95.00	109.69
3	4.00	-10.53
4	4.00	-10.53
5	4.00	-10.53
6	4.00	-10.53
7	22.00	13.25
8	22.00	13.25
9	22.00	13.25
10	22.00	13.25

Tensioni totali nei materiali in questa combinazione:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-2.21	0.00	14.27	0.00	448038.95
2	0.00	0.00			0.00

pos.	quota z	σ_{acc}
1	95.00	214.38
2	95.00	214.38
3	4.00	-20.58
4	4.00	-20.58
5	4.00	-20.58
6	4.00	-20.58

7	22.00	25.89
8	22.00	25.89
9	22.00	25.89
10	22.00	25.89

COMBINAZIONE TA 1/2

azione indiretta n. 1:

--> Ritiro differenziale
momento flettente = 38595.31
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

Sollecitazioni di combinazione:
momento flettente = 38595.31
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	0.00	-0.13	0.00
2	0.08	-0.01	

pos.	quota z	σ_{acc}
1	95.00	-1.59
2	95.00	-1.59
3	4.00	3.13
4	4.00	3.13
5	4.00	3.13
6	4.00	3.13
7	22.00	2.19
8	22.00	2.19
9	22.00	2.19
10	22.00	2.19

Tensioni totali nei materiali in questa combinazione:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-1.08	-0.13	6.97	0.00	218783.90
2	0.08	-0.01			0.00

pos.	quota z	σ_{acc}
1	95.00	103.10
2	95.00	103.10
3	4.00	-6.92
4	4.00	-6.92
5	4.00	-6.92
6	4.00	-6.92
7	22.00	14.84
8	22.00	14.84
9	22.00	14.84
10	22.00	14.84

COMBINAZIONE TA 1/3

azione indiretta n. 1:

--> Ritiro differenziale
momento flettente = 38595.31
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

azione da traffico n. 1:
--> accidentale (sottocaso Mfmax)
momento flettente = -42030.43
sforzo normale = 0.00
taglio = 16819.57
momento torcente = 0.00

Sollecitazioni di combinazione:
momento flettente = -3435.12
sforzo normale = -1154.17
taglio = 16819.57
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	-0.12	-0.11	0.00
2	0.12	0.13	

pos.	quota z	σ_{acc}
1	95.00	-1.50
2	95.00	-1.50
3	4.00	-1.62
4	4.00	-1.62
5	4.00	-1.62
6	4.00	-1.62
7	22.00	-1.59
8	22.00	-1.59
9	22.00	-1.59
10	22.00	-1.59

Tensioni totali nei materiali in questa combinazione:

getto	σ	σ_e	τ	σ_{min}	σ_{staffe}
1	-1.19	-0.11	6.97	0.00	218783.90
2	0.12	0.13			0.00

pos.	quota z	σ_{acc}
1	95.00	103.19
2	95.00	103.19
3	4.00	-11.67
4	4.00	-11.67
5	4.00	-11.67
6	4.00	-11.67
7	22.00	11.05
8	22.00	11.05
9	22.00	11.05
10	22.00	11.05

=====

SEZIONE x = 726

=====

Giorno n. 0

--> Cambio fase: inizio presenza getto n. 1 trave

DATI SEZIONE DI VERIFICA

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59

Coordinate baricentro x = 0.00 y = 53.07

Momento d'inerzia rispetto all'asse Y = 6394422

Momento d'inerzia rispetto all'asse Z = 10951662

Spessore anima singola = 15.00

Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000

Posiz. 1: coeff. di omogen. n = 6.312

Posiz. 2: coeff. di omogen. n = 6.312

Posiz. 3: coeff. di omogen. n = 6.312

Posiz. 4: coeff. di omogen. n = 6.312

Posiz. 5: coeff. di omogen. n = 6.312

Posiz. 6: coeff. di omogen. n = 6.312

Posiz. 7: coeff. di omogen. n = 6.312

Posiz. 8: coeff. di omogen. n = 6.312

Posiz. 9: coeff. di omogen. n = 6.312

Posiz. 10: coeff. di omogen. n = 6.312

Area = 5501.36

Coordinate baricentro x = 0.00 y = 52.61

Momento d'inerzia rispetto all'asse Y = 6574849

Momento d'inerzia rispetto all'asse Z = 11191032

Caratteristiche geometriche sezione parzializzata:

quota z asse neutro = 84.13

Spessore anime = 15.00

Numero anime = 2

Momento statico S = 16013

Momento d'inerzia J = 1331967

COMBINAZIONE TA1

Giorno n. 7

--> Inserimento azione permanente n. 1: Peso trave

--> Inserimento Cavo di precompressione n. 1

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930

1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930
1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930
1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27
Area totale trefoli = 37.530
Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59
Coordinate baricentro x = 0.00 y = 53.07
Momento d'inerzia rispetto all'asse Y = 6394422
Momento d'inerzia rispetto all'asse Z = 10951662
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
Cavo 1: coeff. di omogen. n = 6.041
Posiz. 1: coeff. di omogen. n = 6.312
Posiz. 2: coeff. di omogen. n = 6.312
Posiz. 3: coeff. di omogen. n = 6.312
Posiz. 4: coeff. di omogen. n = 6.312
Posiz. 5: coeff. di omogen. n = 6.312
Posiz. 6: coeff. di omogen. n = 6.312
Posiz. 7: coeff. di omogen. n = 6.312
Posiz. 8: coeff. di omogen. n = 6.312
Posiz. 9: coeff. di omogen. n = 6.312
Posiz. 10: coeff. di omogen. n = 6.312
Area = 5690.57
Coordinate baricentro x = 0.00 y = 51.27
Momento d'inerzia rispetto all'asse Y = 6876173
Momento d'inerzia rispetto all'asse Z = 11222566

M rottura sezione positivo = 35456836
M rottura sezione negativo = -1581043

COMBINAZIONE TA1

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	0.00	0.00	0.00	1.74	0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	14780.84	0.00		
pos.	quota z	σ_{acc}			
1	95.00	0.00			
2	95.00	0.00			
3	4.00	0.00			
4	4.00	0.00			
5	4.00	0.00			
6	4.00	0.00			
7	22.00	0.00			
8	22.00	0.00			
9	22.00	0.00			
10	22.00	0.00			

Sollecitazioni generate da
--> Cavo di precompressione n. 1
momento flettente = -21790864.00

sforzo normale = -554724.78
taglio = 0.00
momento torcente = 0.00

Sollecitazioni generate da

--> Peso trave
momento flettente = 6462583.16
sforzo normale = 0.00
taglio = 5043.94
momento torcente = 0.00

Variazioni di tensione nei materiali:

getto	σ_i	σ_e	τ
1	-211.78	11.14	2.23
cavo	quota z	σ_p	σ_{ccr}
1	12.50	-1111.11	-183.91
pos.	quota z	σ_{acc}	
1	95.00	-0.04	
2	95.00	-0.04	
3	4.00	-1280.47	
4	4.00	-1280.47	
5	4.00	-1280.47	
6	4.00	-1280.47	
7	22.00	-1027.19	
8	22.00	-1027.19	
9	22.00	-1027.19	
10	22.00	-1027.19	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-211.78	11.14	2.23	0.05	3880.74
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	13669.72	-183.91		
pos.	quota z	σ_{acc}			
1	95.00	-0.04			
2	95.00	-0.04			
3	4.00	-1280.47			
4	4.00	-1280.47			
5	4.00	-1280.47			
6	4.00	-1280.47			
7	22.00	-1027.19			
8	22.00	-1027.19			
9	22.00	-1027.19			
10	22.00	-1027.19			

Coefficiente di sicurezza a rottura per M positivo = 5.4865
Coefficiente di sicurezza a fessurazione per M positivo = 6.2538

Giorno n. 8

--> Variazione modulo elastico calcestruzzo C35/45

--> Variazione modulo elastico calcestruzzo C35/45

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930
1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930
1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930
1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27

Area totale trefoli = 37.530

Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59

Coordinate baricentro x = 0.00 y = 53.07

Momento d'inerzia rispetto all'asse Y = 6394422

Momento d'inerzia rispetto all'asse Z = 10951662

Spessore anima singola = 15.00

Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000

Cavo 1: coeff. di omogen. n = 6.041

Posiz. 1: coeff. di omogen. n = 6.312

Posiz. 2: coeff. di omogen. n = 6.312

Posiz. 3: coeff. di omogen. n = 6.312

Posiz. 4: coeff. di omogen. n = 6.312

Posiz. 5: coeff. di omogen. n = 6.312

Posiz. 6: coeff. di omogen. n = 6.312

Posiz. 7: coeff. di omogen. n = 6.312

Posiz. 8: coeff. di omogen. n = 6.312

Posiz. 9: coeff. di omogen. n = 6.312

Posiz. 10: coeff. di omogen. n = 6.312

Area = 5690.57

Coordinate baricentro x = 0.00 y = 51.27

Momento d'inerzia rispetto all'asse Y = 6876173

Momento d'inerzia rispetto all'asse Z = 11222566

M rottura sezione positivo = 35456836

M rottura sezione negativo = -1581043

COMBINAZIONE TA1

CALCOLO CADUTE DI TENSIONE

Periodo dal giorno n. 7 al giorno n. 8

Cadute di tensione nel cavo n. 1 :

(indice mat. getto = 1 / indice mat. cavo = 1)

PD2_C3A_MUS_1539_A_AP_NOT.docx

cavo attivato all'inizio di questo periodo
rilassamento acciaio = -43.19
ritiro calcestruzzo = -6.68
viscosità calcestruzzo = -28.89
cavo composto da 27 trefoli $A_p = 37.53$
caduta totale di precompressione nel cavo = -2955.71

sollecitazioni generate nella trave dalla
caduta di precompressione nel cavo:
momento flettente = 116107.18
sforzo normale = 2955.71
taglio = 0.00
momento torcente = 0.00

Variazioni di tensione nei materiali:

getto	σ_i	σ_e	τ
1	1.39	-0.30	0.00
cavo	quota z	σ_p	σ_{ccr}
1	12.50	7.09	1.17
pos.	quota z	σ_{acc}	
1	95.00	-1.38	
2	95.00	-1.38	
3	4.00	8.32	
4	4.00	8.32	
5	4.00	8.32	
6	4.00	8.32	
7	22.00	6.40	
8	22.00	6.40	
9	22.00	6.40	
10	22.00	6.40	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-210.39	10.84	2.23	0.05	3901.51
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	13598.06	-182.74		
pos.	quota z	σ_{acc}			
1	95.00	-1.42			
2	95.00	-1.42			
3	4.00	-1272.15			
4	4.00	-1272.15			
5	4.00	-1272.15			
6	4.00	-1272.15			
7	22.00	-1020.80			
8	22.00	-1020.80			
9	22.00	-1020.80			
10	22.00	-1020.80			

Giorno n. 30

--> Inserimento azione permanente n. 2: Peso soletta

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930
1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930
1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930
1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27

Area totale trefoli = 37.530

Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59

Coordinate baricentro x = 0.00 y = 53.07

Momento d'inerzia rispetto all'asse Y = 6394422

Momento d'inerzia rispetto all'asse Z = 10951662

Spessore anima singola = 15.00

Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000

Cavo 1: coeff. di omogen. n = 5.805

Posiz. 1: coeff. di omogen. n = 6.065

Posiz. 2: coeff. di omogen. n = 6.065

Posiz. 3: coeff. di omogen. n = 6.065

Posiz. 4: coeff. di omogen. n = 6.065

Posiz. 5: coeff. di omogen. n = 6.065

Posiz. 6: coeff. di omogen. n = 6.065

Posiz. 7: coeff. di omogen. n = 6.065

Posiz. 8: coeff. di omogen. n = 6.065

Posiz. 9: coeff. di omogen. n = 6.065

Posiz. 10: coeff. di omogen. n = 6.065

Area = 5676.73

Coordinate baricentro x = 0.00 y = 51.35

Momento d'inerzia rispetto all'asse Y = 6854426

Momento d'inerzia rispetto all'asse Z = 11209957

M rottura sezione positivo = 35456836

M rottura sezione negativo = -1581043

COMBINAZIONE TA1

CALCOLO CADUTE DI TENSIONE

Periodo dal giorno n. 8 al giorno n. 30

Cadute di tensione nel cavo n. 1 :

(indice mat. getto = 1 / indice mat. cavo = 1)

cavo attivato prima dell'inizio di questo periodo

rilassamento acciaio = -118.76

ritiro calcestruzzo = -146.99

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viscosita' calcestruzzo = -606.79
cavo composto da 27 trefoli Ap = 37.53
caduta totale di precompressione nel cavo = -32746.28

sollecitazioni generate nella trave dalla
caduta di precompressione nel cavo:
momento flettente = 1286348.96
sforzo normale = 32746.28
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	15.41	-3.36	0.00
cavo	quota z	σ_p	σ_{ccr}
1	12.50	75.81	13.06
pos.	quota z	σ_{acc}	
1	95.00	-14.69	
2	95.00	-14.69	
3	4.00	88.88	
4	4.00	88.88	
5	4.00	88.88	
6	4.00	88.88	
7	22.00	68.40	
8	22.00	68.40	
9	22.00	68.40	
10	22.00	68.40	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-194.99	7.48	2.23	0.05	4156.05
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	12801.34	-169.68		
pos.	quota z	σ_{acc}			
1	95.00	-16.11			
2	95.00	-16.11			
3	4.00	-1183.27			
4	4.00	-1183.27			
5	4.00	-1183.27			
6	4.00	-1183.27			
7	22.00	-952.40			
8	22.00	-952.40			
9	22.00	-952.40			
10	22.00	-952.40			

Sollecitazioni generate da

--> Peso soletta
momento flettente = 5989874.26
sforzo normale = 0.00
taglio = 4675.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	44.88	-42.51	2.06
cavo	quota z	σ_p	σ_{ccr}
1	12.50	197.10	33.95
pos.	quota z	σ_{acc}	
1	95.00	-231.33	
2	95.00	-231.33	
3	4.00	250.97	
4	4.00	250.97	
5	4.00	250.97	
6	4.00	250.97	
7	22.00	155.57	
8	22.00	155.57	
9	22.00	155.57	
10	22.00	155.57	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-150.11	-35.04	4.29	0.20	15409.14
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	12998.43	-135.73		
pos.	quota z	σ_{acc}			
1	95.00	-247.44			
2	95.00	-247.44			
3	4.00	-932.29			
4	4.00	-932.29			
5	4.00	-932.29			
6	4.00	-932.29			
7	22.00	-796.83			
8	22.00	-796.83			
9	22.00	-796.83			
10	22.00	-796.83			

Coefficiente di sicurezza a rottura per M positivo = 2.8474
Coefficiente di sicurezza a fessurazione per M positivo = 3.0528

Giorno n. 50

--> Cambio fase: inizio presenza getto n. 2 soletta
--> Inserimento azione permanente n. 3: permanente

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930
1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930
1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930
1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27
Area totale trefoli = 37.530
Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 10394.59
Coordinate baricentro x = 0.00 y = 84.06
Momento d'inerzia rispetto all'asse Y = 17428194
Momento d'inerzia rispetto all'asse Z = 27618329
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
Getto 2: coeff. di omogen. n = 1.000
Cavo 1: coeff. di omogen. n = 5.805
Posiz. 1: coeff. di omogen. n = 6.065
Posiz. 2: coeff. di omogen. n = 6.065
Posiz. 3: coeff. di omogen. n = 6.065
Posiz. 4: coeff. di omogen. n = 6.065
Posiz. 5: coeff. di omogen. n = 6.065
Posiz. 6: coeff. di omogen. n = 6.065
Posiz. 7: coeff. di omogen. n = 6.065
Posiz. 8: coeff. di omogen. n = 6.065
Posiz. 9: coeff. di omogen. n = 6.065
Posiz. 10: coeff. di omogen. n = 6.065
Area = 10676.73
Coordinate baricentro x = 0.00 y = 82.33
Momento d'inerzia rispetto all'asse Y = 18746758
Momento d'inerzia rispetto all'asse Z = 27876623

M rottura sezione positivo = 70774344
M rottura sezione negativo = -1581043

COMBINAZIONE TA1

CALCOLO CADUTE DI TENSIONE

Periodo dal giorno n. 30 al giorno n. 50

Cadute di tensione nel cavo n. 1 :
(indice mat. getto = 1 / indice mat. cavo = 1)
cavo attivato prima dell'inizio di questo periodo
rilassamento acciaio = -8.47
ritiro calcestruzzo = -43.03
viscosita' calcestruzzo = -144.97
cavo composto da 27 trefoli $A_p = 37.53$
caduta totale di precompressione nel cavo = -7373.53

sollecitazioni generate nella trave dalla
caduta di precompressione nel cavo:

momento flettente = 517830.39
sforzo normale = 7373.53
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	2.96	0.20	0.00
2	0.06	-0.63	

cavo	quota z	σ_p	σ_{ccr}
1	12.50	15.21	2.62

pos.	quota z	σ_{acc}
1	95.00	2.07
2	95.00	2.07
3	4.00	17.31
4	4.00	17.31
5	4.00	17.31
6	4.00	17.31
7	22.00	14.30
8	22.00	14.30
9	22.00	14.30
10	22.00	14.30

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-147.15	-34.83	4.29	0.33	25550.18
2	0.06	-0.63			0.00

cavo	quota z	σ_p	σ_{ccr}
1	12.50	12817.17	-133.11

pos.	quota z	σ_{acc}
1	95.00	-245.38
2	95.00	-245.38
3	4.00	-914.98
4	4.00	-914.98
5	4.00	-914.98
6	4.00	-914.98
7	22.00	-782.53
8	22.00	-782.53
9	22.00	-782.53
10	22.00	-782.53

Sollecitazioni generate da

--> permanente
momento flettente = 2930825.35
sforzo normale = 0.00
taglio = 2287.46
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	12.87	-2.76	0.79
2	-3.54	-7.45	

cavo	quota z	σ_p	σ_{ccr}
1	12.50	63.37	10.92

pos.	quota z	σ_{acc}
1	95.00	-12.01
2	95.00	-12.01
3	4.00	74.27
4	4.00	74.27
5	4.00	74.27
6	4.00	74.27
7	22.00	57.20
8	22.00	57.20
9	22.00	57.20
10	22.00	57.20

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-134.28	-37.60	5.08	0.47	35768.72
2	-3.48	-8.08			0.00

cavo	quota z	σ_p	σ_{ccr}
------	---------	------------	----------------

1	12.50	12880.54	-122.19
pos.	quota z	σ_{acc}	
1	95.00	-257.39	
2	95.00	-257.39	
3	4.00	-840.71	
4	4.00	-840.71	
5	4.00	-840.71	
6	4.00	-840.71	
7	22.00	-725.33	
8	22.00	-725.33	
9	22.00	-725.33	
10	22.00	-725.33	

Coefficiente di sicurezza a rottura per M positivo = 4.6007
Coefficiente di sicurezza a fessurazione per M positivo = 3.6003

A tempo infinito
--> Inserimento azione da traffico n. 1: accidentale
--> Inserimento azione indiretta n. 1: Ritiro differenziale

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930
1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930
1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930
1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27
Area totale trefoli = 37.530
Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 10394.59
Coordinate baricentro x = 0.00 y = 84.06
Momento d'inerzia rispetto all'asse Y = 17428194
Momento d'inerzia rispetto all'asse Z = 27618329
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
Getto 2: coeff. di omogen. n = 1.000
Cavo 1: coeff. di omogen. n = 5.805
Posiz. 1: coeff. di omogen. n = 6.065
Posiz. 2: coeff. di omogen. n = 6.065
Posiz. 3: coeff. di omogen. n = 6.065
Posiz. 4: coeff. di omogen. n = 6.065
Posiz. 5: coeff. di omogen. n = 6.065
Posiz. 6: coeff. di omogen. n = 6.065
Posiz. 7: coeff. di omogen. n = 6.065
Posiz. 8: coeff. di omogen. n = 6.065
Posiz. 9: coeff. di omogen. n = 6.065
Posiz. 10: coeff. di omogen. n = 6.065
Area = 10676.73
Coordinate baricentro x = 0.00 y = 82.33
Momento d'inerzia rispetto all'asse Y = 18746758
Momento d'inerzia rispetto all'asse Z = 27876623

M rottura sezione positivo = 70774344
M rottura sezione negativo = -1581043

COMBINAZIONE TA1

CALCOLO CADUTE DI TENSIONE

Periodo dal giorno n. 50 a tempo infinito.

Cadute di tensione nel cavo n. 1 :

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(indice mat. getto = 1 / indice mat. cavo = 1)
cavo attivato prima dell'inizio di questo periodo
rilassamento acciaio = -273.01
ritiro calcestruzzo = -325.78
viscosita' calcestruzzo = -864.67
cavo composto da 27 trefoli $A_p = 37.53$
caduta totale di precompressione nel cavo = -54923.63

sollecitazioni generate nella trave dalla
caduta di precompressione nel cavo:
momento flettente = 3857194.52
sforzo normale = 54923.63
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	22.08	1.51	0.00
2	0.48	-4.66	
cavo	quota z	σ_p	σ_{ccr}
1	12.50	113.27	19.51
pos.	quota z	σ_{acc}	
1	95.00	15.39	
2	95.00	15.39	
3	4.00	128.95	
4	4.00	128.95	
5	4.00	128.95	
6	4.00	128.95	
7	22.00	106.48	
8	22.00	106.48	
9	22.00	106.48	
10	22.00	106.48	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-112.19	-36.09	5.08	0.52	39410.98
2	-3.00	-12.74			0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	11530.35	-102.68		
pos.	quota z	σ_{acc}			
1	95.00	-242.00			
2	95.00	-242.00			
3	4.00	-711.77			
4	4.00	-711.77			
5	4.00	-711.77			
6	4.00	-711.77			
7	22.00	-618.85			
8	22.00	-618.85			
9	22.00	-618.85			
10	22.00	-618.85			

COMBINAZIONE TA 1/2

azione indiretta n. 1:

--> Ritiro differenziale
momento flettente = 38595.31
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

Sollecitazioni di combinazione:

momento flettente = 38595.31
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	0.07	-0.15	0.00
2	-0.16	-0.21	
cavo	quota z	σ_p	σ_{ccr}
1	12.50	0.25	0.04
pos.	quota z	σ_{acc}	
1	95.00	-0.82	
2	95.00	-0.82	
3	4.00	0.37	
4	4.00	0.37	
5	4.00	0.37	
6	4.00	0.37	
7	22.00	0.14	
8	22.00	0.14	
9	22.00	0.14	
10	22.00	0.14	

Tensioni totali nei materiali in questa combinazione:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-112.12	-36.23	5.08	0.51	39326.91
2	-3.16	-12.95			0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	11530.60	-102.64		
pos.	quota z	σ_{acc}			
1	95.00	-242.82			
2	95.00	-242.82			
3	4.00	-711.39			
4	4.00	-711.39			
5	4.00	-711.39			
6	4.00	-711.39			
7	22.00	-618.71			
8	22.00	-618.71			
9	22.00	-618.71			
10	22.00	-618.71			

Coefficiente di sicurezza a rottura per M positivo = 4.5892

COMBINAZIONE TA 1/3

azione indiretta n. 1:

--> Ritiro differenziale
momento flettente = 38595.31
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

azione da traffico n. 1:

--> accidentale (sottocaso Mfmax)
momento flettente = 16119539.42
sforzo normale = 0.00
taglio = 12581.04
momento torcente = 0.00

Sollecitazioni di combinazione:

momento flettente = 16158134.74
sforzo normale = -1154.17
taglio = 12581.04
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	70.86	-15.34	4.36
2	-19.65	-41.20	
cavo	quota z	σ_p	σ_{ccr}
1	12.50	348.81	60.09
pos.	quota z	σ_{acc}	
1	95.00	-66.90	
2	95.00	-66.90	
3	4.00	408.87	
4	4.00	408.87	
5	4.00	408.87	
6	4.00	408.87	
7	22.00	314.76	
8	22.00	314.76	
9	22.00	314.76	
10	22.00	314.76	

Tensioni totali nei materiali in questa combinazione:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-41.33	-51.43	9.44	1.73	132427.44
2	-22.65	-53.94			0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	11879.16	-42.59		
pos.	quota z	σ_{acc}			
1	95.00	-308.90			
2	95.00	-308.90			
3	4.00	-302.90			
4	4.00	-302.90			
5	4.00	-302.90			
6	4.00	-302.90			
7	22.00	-304.09			
8	22.00	-304.09			
9	22.00	-304.09			
10	22.00	-304.09			

Coefficiente di sicurezza a rottura per M positivo = 2.2439

COMBINAZIONE TA 1/1

azione da traffico n. 1:
--> accidentale (sottocaso Mfmax)
momento flettente = 16119539.42
sforzo normale = 0.00
taglio = 12581.04
momento torcente = 0.00

Sollecitazioni di combinazione:
momento flettente = 16119539.42
sforzo normale = 0.00
taglio = 12581.04
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	70.79	-15.19	4.36
2	-19.49	-40.99	

cavo	quota z	σ_p	σ_{ccr}
1	12.50	348.56	60.04

pos.	quota z	σ_{acc}
1	95.00	-66.07
2	95.00	-66.07
3	4.00	408.49
4	4.00	408.49
5	4.00	408.49
6	4.00	408.49
7	22.00	314.62
8	22.00	314.62
9	22.00	314.62
10	22.00	314.62

Tensioni totali nei materiali in questa combinazione:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-41.40	-51.28	9.44	1.74	132697.52
2	-22.49	-53.73			0.00

cavo	quota z	σ_p	σ_{ccr}
1	12.50	11878.91	-42.64

pos.	quota z	σ_{acc}
1	95.00	-308.08
2	95.00	-308.08
3	4.00	-303.27
4	4.00	-303.27
5	4.00	-303.27
6	4.00	-303.27
7	22.00	-304.22
8	22.00	-304.22
9	22.00	-304.22
10	22.00	-304.22

Coefficiente di sicurezza a rottura per M positivo = 2.2466

Cadute di tensione totali

cavo	σ_{spi}	ril. acc.	ritiro cls	visc. cls	totali	
1	14780.84	-443.43	-522.48	-1645.32	-2611.22	(17.67%)

=====

SEZIONE x = 1100

=====

Giorno n. 0

--> Cambio fase: inizio presenza getto n. 1 trave

DATI SEZIONE DI VERIFICA

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59
Coordinate baricentro x = 0.00 y = 53.07
Momento d'inerzia rispetto all'asse Y = 6394422
Momento d'inerzia rispetto all'asse Z = 10951662
Spessore anima singola = 15.00

Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
 Posiz. 1: coeff. di omogen. n = 6.312
 Posiz. 2: coeff. di omogen. n = 6.312
 Posiz. 3: coeff. di omogen. n = 6.312
 Posiz. 4: coeff. di omogen. n = 6.312
 Posiz. 5: coeff. di omogen. n = 6.312
 Posiz. 6: coeff. di omogen. n = 6.312
 Posiz. 7: coeff. di omogen. n = 6.312
 Posiz. 8: coeff. di omogen. n = 6.312
 Posiz. 9: coeff. di omogen. n = 6.312
 Posiz. 10: coeff. di omogen. n = 6.312
 Area = 5501.36
 Coordinate baricentro x = 0.00 y = 52.61
 Momento d'inerzia rispetto all'asse Y = 6574849
 Momento d'inerzia rispetto all'asse Z = 11191032

Caratteristiche geometriche sezione parzializzata:

quota z asse neutro = 84.13
 Spessore anime = 15.00
 Numero anime = 2
 Momento statico S = 16013
 Momento d'inerzia J = 1331967

COMBINAZIONE TA1

Giorno n. 7

--> Inserimento azione permanente n. 1: Peso trave
 --> Inserimento Cavo di precompressione n. 1

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930
1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930
1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930
1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27

Area totale trefoli = 37.530

Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59
 Coordinate baricentro x = 0.00 y = 53.07
 Momento d'inerzia rispetto all'asse Y = 6394422
 Momento d'inerzia rispetto all'asse Z = 10951662
 Spessore anima singola = 15.00

Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
 Cavo 1: coeff. di omogen. n = 6.041
 Posiz. 1: coeff. di omogen. n = 6.312
 Posiz. 2: coeff. di omogen. n = 6.312
 Posiz. 3: coeff. di omogen. n = 6.312
 Posiz. 4: coeff. di omogen. n = 6.312
 Posiz. 5: coeff. di omogen. n = 6.312
 Posiz. 6: coeff. di omogen. n = 6.312
 Posiz. 7: coeff. di omogen. n = 6.312
 Posiz. 8: coeff. di omogen. n = 6.312
 Posiz. 9: coeff. di omogen. n = 6.312
 Posiz. 10: coeff. di omogen. n = 6.312
 Area = 5690.57
 Coordinate baricentro x = 0.00 y = 51.27
 Momento d'inerzia rispetto all'asse Y = 6876173
 Momento d'inerzia rispetto all'asse Z = 11222566
 M rottura sezione positivo = 35456836
 M rottura sezione negativo = -1581043

COMBINAZIONE TA1

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	0.00	0.00	0.00	0.01	0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	14780.84	0.00		
pos.	quota z	σ_{acc}			
1	95.00	0.00			
2	95.00	0.00			
3	4.00	0.00			
4	4.00	0.00			
5	4.00	0.00			
6	4.00	0.00			
7	22.00	0.00			
8	22.00	0.00			
9	22.00	0.00			
10	22.00	0.00			

Sollecitazioni generate da

--> Cavo di precompressione n. 1
 momento flettente = -21790864.00
 sforzo normale = -554724.78
 taglio = 0.00
 momento torcente = 0.00

Sollecitazioni generate da

--> Peso trave
 momento flettente = 7417561.25
 sforzo normale = 0.00
 taglio = 0.00
 momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	-204.66	4.37	0.00
cavo	quota z	σ_p	σ_{ccr}
1	12.50	-1078.58	-178.53
pos.	quota z	σ_{acc}	
1	95.00	-38.37	
2	95.00	-38.37	
3	4.00	-1239.02	
4	4.00	-1239.02	
5	4.00	-1239.02	
6	4.00	-1239.02	
7	22.00	-1001.53	
8	22.00	-1001.53	
9	22.00	-1001.53	
10	22.00	-1001.53	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-204.66	4.37	0.00	0.00	0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	13702.26	-178.53		
pos.	quota z	σ_{acc}			
1	95.00	-38.37			
2	95.00	-38.37			
3	4.00	-1239.02			
4	4.00	-1239.02			
5	4.00	-1239.02			
6	4.00	-1239.02			
7	22.00	-1001.53			

8	22.00	-1001.53
9	22.00	-1001.53
10	22.00	-1001.53

Coefficiente di sicurezza a rottura per M positivo = 4.7801
Coefficiente di sicurezza a fessurazione per M positivo = 5.4486

Giorno n. 8

--> Variazione modulo elastico calcestruzzo C35/45

--> Variazione modulo elastico calcestruzzo C35/45

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930
1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930
1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930
1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27
Area totale trefoli = 37.530
Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59
Coordinate baricentro x = 0.00 y = 53.07
Momento d'inerzia rispetto all'asse Y = 6394422
Momento d'inerzia rispetto all'asse Z = 10951662
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
Cavo 1: coeff. di omogen. n = 6.041
Posiz. 1: coeff. di omogen. n = 6.312
Posiz. 2: coeff. di omogen. n = 6.312
Posiz. 3: coeff. di omogen. n = 6.312
Posiz. 4: coeff. di omogen. n = 6.312
Posiz. 5: coeff. di omogen. n = 6.312
Posiz. 6: coeff. di omogen. n = 6.312
Posiz. 7: coeff. di omogen. n = 6.312
Posiz. 8: coeff. di omogen. n = 6.312
Posiz. 9: coeff. di omogen. n = 6.312
Posiz. 10: coeff. di omogen. n = 6.312
Area = 5690.57
Coordinate baricentro x = 0.00 y = 51.27
Momento d'inerzia rispetto all'asse Y = 6876173
Momento d'inerzia rispetto all'asse Z = 11222566

M rottura sezione positivo = 35456836
M rottura sezione negativo = -1581043

COMBINAZIONE TA1

CALCOLO CADUTE DI TENSIONE

Periodo dal giorno n. 7 al giorno n. 8

Cadute di tensione nel cavo n. 1 :
(indice mat. getto = 1 / indice mat. cavo = 1)
cavo attivato all'inizio di questo periodo
rilassamento acciaio = -43.19
ritiro calcestruzzo = -6.68
viscosita' calcestruzzo = -28.04
cavo composto da 27 trefoli $A_p = 37.53$
caduta totale di precompressione nel cavo = -2923.97

sollecitazioni generate nella trave dalla
caduta di precompressione nel cavo:
momento flettente = 114860.17
sforzo normale = 2923.97
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	1.37	-0.30	0.00
cavo	quota z	σ_p	σ_{ccr}
1	12.50	7.02	1.16
pos.	quota z	σ_{acc}	
1	95.00	-1.37	
2	95.00	-1.37	
3	4.00	8.23	
4	4.00	8.23	
5	4.00	8.23	
6	4.00	8.23	
7	22.00	6.33	
8	22.00	6.33	
9	22.00	6.33	
10	22.00	6.33	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-203.29	4.07	0.00	0.00	0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	13631.36	-177.37		
pos.	quota z	σ_{acc}			
1	95.00	-39.74			
2	95.00	-39.74			
3	4.00	-1230.80			
4	4.00	-1230.80			
5	4.00	-1230.80			
6	4.00	-1230.80			
7	22.00	-995.20			
8	22.00	-995.20			
9	22.00	-995.20			
10	22.00	-995.20			

Giorno n. 30

--> Inserimento azione permanente n. 2: Peso soletta

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930
1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930
1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930

1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27
Area totale trefoli = 37.530
Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 5394.59
Coordinate baricentro x = 0,00 y = 53,07
Momento d'inerzia rispetto all'asse Y = 6394422
Momento d'inerzia rispetto all'asse Z = 10951662
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1,000
Cavo 1: coeff. di omogen. n = 5,805
Posiz. 1: coeff. di omogen. n = 6,065
Posiz. 2: coeff. di omogen. n = 6,065
Posiz. 3: coeff. di omogen. n = 6,065
Posiz. 4: coeff. di omogen. n = 6,065
Posiz. 5: coeff. di omogen. n = 6,065
Posiz. 6: coeff. di omogen. n = 6,065
Posiz. 7: coeff. di omogen. n = 6,065
Posiz. 8: coeff. di omogen. n = 6,065
Posiz. 9: coeff. di omogen. n = 6,065
Posiz. 10: coeff. di omogen. n = 6,065
Area = 5676.73
Coordinate baricentro x = 0,00 y = 51,35
Momento d'inerzia rispetto all'asse Y = 6854426
Momento d'inerzia rispetto all'asse Z = 11209957

M rottura sezione positivo = 35456836
M rottura sezione negativo = -1581043

COMBINAZIONE TA1

CALCOLO CADUTE DI TENSIONE

Periodo dal giorno n. 8 al giorno n. 30

Cadute di tensione nel cavo n. 1 :
(indice mat. getto = 1 / indice mat. cavo = 1)
cavo attivato prima dell'inizio di questo periodo
rilassamento acciaio = -118.76
ritiro calcestruzzo = -146.99
viscosita' calcestruzzo = -588.95
cavo composto da 27 trefoli Ap = 37.53
caduta totale di precompressione nel cavo = -32076.79

sollecitazioni generate nella trave dalla caduta di precompressione nel cavo:
momento flettente = 1260050.05
sforzo normale = 32076.79
taglio = 0,00
momento torcente = 0,00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	15.09	-3.29	0.00
cavo	quota z	σ_p	σ_{ccr}
1	12.50	74.26	12.79
pos.	quota z	σ_{acc}	
1	95.00	-14.39	
2	95.00	-14.39	
3	4.00	87.07	
4	4.00	87.07	
5	4.00	87.07	
6	4.00	87.07	
7	22.00	67.00	
8	22.00	67.00	
9	22.00	67.00	
10	22.00	67.00	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-188.20	0.78	0.00	0.00	0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	12850.93	-164.57		
pos.	quota z	σ_{acc}			
1	95.00	-54.13			
2	95.00	-54.13			
3	4.00	-1143.73			
4	4.00	-1143.73			
5	4.00	-1143.73			
6	4.00	-1143.73			
7	22.00	-928.21			
8	22.00	-928.21			
9	22.00	-928.21			
10	22.00	-928.21			

Sollecitazioni generate da

--> Peso soletta
momento flettente = 6875000.00
sforzo normale = 0.00
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	51.51	-48.79	0.00
cavo	quota z	σ_p	σ_{ccr}
1	12.50	226.22	38.97
pos.	quota z	σ_{acc}	
1	95.00	-265.51	
2	95.00	-265.51	
3	4.00	288.06	
4	4.00	288.06	
5	4.00	288.06	
6	4.00	288.06	
7	22.00	178.56	
8	22.00	178.56	
9	22.00	178.56	
10	22.00	178.56	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-136.69	-48.01	0.00	0.00	0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	13077.15	-125.61		
pos.	quota z	σ_{acc}			
1	95.00	-319.64			
2	95.00	-319.64			
3	4.00	-855.67			
4	4.00	-855.67			
5	4.00	-855.67			
6	4.00	-855.67			
7	22.00	-749.65			
8	22.00	-749.65			
9	22.00	-749.65			
10	22.00	-749.65			

Coefficiente di sicurezza a rottura per M positivo = 2.4808

Coefficiente di sicurezza a fessurazione per M positivo = 2.6631

Giorno n. 50

--> Cambio fase: inizio presenza getto n. 2 soletta

--> Inserimento azione permanente n. 3: permanente

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930
1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930

1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930
1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27
Area totale trefoli = 37.530
Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 10394.59
Coordinate baricentro x = 0.00 y = 84.06
Momento d'inerzia rispetto all'asse Y = 17428194
Momento d'inerzia rispetto all'asse Z = 27618329
Spessore anima singola = 15.00
Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000
Getto 2: coeff. di omogen. n = 1.000
Cavo 1: coeff. di omogen. n = 5.805
Posiz. 1: coeff. di omogen. n = 6.065
Posiz. 2: coeff. di omogen. n = 6.065
Posiz. 3: coeff. di omogen. n = 6.065
Posiz. 4: coeff. di omogen. n = 6.065
Posiz. 5: coeff. di omogen. n = 6.065
Posiz. 6: coeff. di omogen. n = 6.065
Posiz. 7: coeff. di omogen. n = 6.065
Posiz. 8: coeff. di omogen. n = 6.065
Posiz. 9: coeff. di omogen. n = 6.065
Posiz. 10: coeff. di omogen. n = 6.065
Area = 10676.73
Coordinate baricentro x = 0.00 y = 82.33
Momento d'inerzia rispetto all'asse Y = 18746758
Momento d'inerzia rispetto all'asse Z = 27876623

M rottura sezione positivo = 70774344
M rottura sezione negativo = -1581043

COMBINAZIONE TA1

CALCOLO CADUTE DI TENSIONE

Periodo dal giorno n. 30 al giorno n. 50

Cadute di tensione nel cavo n. 1 :
(indice mat. getto = 1 / indice mat. cavo = 1)
cavo attivato prima dell'inizio di questo periodo
rilassamento acciaio = -8.47
ritiro calcestruzzo = -43.03
viscosita' calcestruzzo = -134.16
cavo composto da 27 trefoli Ap = 37.53
caduta totale di precompressione nel cavo = -6967.75

sollecitazioni generate nella trave dalla

caduta di precompressione nel cavo:

momento flettente = 489333.30
sforzo normale = 6967.75
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	2.80	0.19	0.00
2	0.06	-0.59	

cavo	quota z	σ_p	σ_{ccr}
1	12.50	14.37	2.48

pos.	quota z	σ_{acc}
1	95.00	1.95

2	95.00	1.95
3	4.00	16.36
4	4.00	16.36
5	4.00	16.36
6	4.00	16.36
7	22.00	13.51
8	22.00	13.51
9	22.00	13.51
10	22.00	13.51

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-133.89	-47.82	0.00	0.00	0.00
2	0.06	-0.59			0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	12905.86	-123.13		
pos.	quota z	σ_{acc}			
1	95.00	-317.69			
2	95.00	-317.69			
3	4.00	-839.32			
4	4.00	-839.32			
5	4.00	-839.32			
6	4.00	-839.32			
7	22.00	-736.14			
8	22.00	-736.14			
9	22.00	-736.14			
10	22.00	-736.14			

Sollecitazioni generate da

--> permanente

momento flettente = 3363914.40

sforzo normale = 0.00

taglio = 0.00

momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ_i	σ_e	τ
1	14.77	-3.17	0.00
2	-4.07	-8.55	
cavo	quota z	σ_p	σ_{ccr}
1	12.50	72.74	12.53
pos.	quota z	σ_{acc}	
1	95.00	-13.79	
2	95.00	-13.79	
3	4.00	85.25	
4	4.00	85.25	
5	4.00	85.25	
6	4.00	85.25	
7	22.00	65.66	
8	22.00	65.66	
9	22.00	65.66	
10	22.00	65.66	

Tensioni totali nei materiali:

getto	σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1	-119.12	-50.99	0.00	0.00	0.00
2	-4.01	-9.15			0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	12978.60	-110.60		
pos.	quota z	σ_{acc}			
1	95.00	-331.48			
2	95.00	-331.48			
3	4.00	-754.07			
4	4.00	-754.07			
5	4.00	-754.07			
6	4.00	-754.07			
7	22.00	-670.48			
8	22.00	-670.48			
9	22.00	-670.48			
10	22.00	-670.48			

Coefficiente di sicurezza a rottura per M positivo = 4.0084

Coefficiente di sicurezza a fessurazione per M positivo = 3.0700

A tempo infinito

--> Inserimento azione da traffico n. 1: accidentale

--> Inserimento azione indiretta n. 1: Ritiro differenziale

DATI SEZIONE DI VERIFICA

Posizioni trefoli

cavo	y	z	n.trefoli	area tot.	modulo E
------	---	---	-----------	-----------	----------

1	-20.00	20.00	1	1.39	2048930
1	-15.00	20.00	1	1.39	2048930
1	-10.00	20.00	1	1.39	2048930
1	-5.00	20.00	1	1.39	2048930
1	0.00	20.00	1	1.39	2048930
1	5.00	20.00	1	1.39	2048930
1	10.00	20.00	1	1.39	2048930
1	15.00	20.00	1	1.39	2048930
1	20.00	20.00	1	1.39	2048930
1	-20.00	12.50	1	1.39	2048930
1	-15.00	12.50	1	1.39	2048930
1	-10.00	12.50	1	1.39	2048930
1	-5.00	12.50	1	1.39	2048930
1	0.00	12.50	1	1.39	2048930
1	5.00	12.50	1	1.39	2048930
1	10.00	12.50	1	1.39	2048930
1	15.00	12.50	1	1.39	2048930
1	20.00	12.50	1	1.39	2048930
1	-20.00	5.00	1	1.39	2048930
1	-15.00	5.00	1	1.39	2048930
1	-10.00	5.00	1	1.39	2048930
1	-5.00	5.00	1	1.39	2048930
1	0.00	5.00	1	1.39	2048930
1	5.00	5.00	1	1.39	2048930
1	10.00	5.00	1	1.39	2048930
1	15.00	5.00	1	1.39	2048930
1	20.00	5.00	1	1.39	2048930

N. totale trefoli = 27

Area totale trefoli = 37.530

Baricentro trefoli : y= 0.000 z= 12.500

n. posizioni di armature lente = 10

pos.	y	z	area	modulo E
1	-95.000	95.000	2.010	2140673
2	95.000	95.000	2.010	2140673
3	-10.000	4.000	2.010	2140673
4	10.000	4.000	2.010	2140673
5	31.500	4.000	2.010	2140673
6	-31.500	4.000	2.010	2140673
7	-10.000	22.000	2.010	2140673
8	10.000	22.000	2.010	2140673
9	31.500	22.000	2.010	2140673
10	-31.500	22.000	2.010	2140673

Caratteristiche geometriche sezione di solo cls:

Area = 10394.59

Coordinate baricentro x = 0.00 y = 84.06

Momento d'inerzia rispetto all'asse Y = 17428194

Momento d'inerzia rispetto all'asse Z = 27618329

Spessore anima singola = 15.00

Numero anime = 2

Caratteristiche geometriche sezione omogeneizzata:

Getto 1: coeff. di omogen. n = 1.000

Getto 2: coeff. di omogen. n = 1.000

Cavo 1: coeff. di omogen. n = 5.805

Posiz. 1: coeff. di omogen. n = 6.065

Posiz. 2: coeff. di omogen. n = 6.065

Posiz. 3: coeff. di omogen. n = 6.065

Posiz. 4: coeff. di omogen. n = 6.065

Posiz. 5: coeff. di omogen. n = 6.065

Posiz. 6: coeff. di omogen. n = 6.065

Posiz. 7: coeff. di omogen. n = 6.065

Posiz. 8: coeff. di omogen. n = 6.065

Posiz. 9: coeff. di omogen. n = 6.065

Posiz. 10: coeff. di omogen. n = 6.065

Area = 10676.73

Coordinate baricentro x = 0.00 y = 82.33

Momento d'inerzia rispetto all'asse Y = 18746758

Momento d'inerzia rispetto all'asse Z = 27876623

M rottura sezione positivo = 70774344

M rottura sezione negativo = -1581043

COMBINAZIONE TA1

CALCOLO CADUTE DI TENSIONE

Periodo dal giorno n. 50 a tempo infinito.

Cadute di tensione nel cavo n. 1 :

(indice mat. getto = 1 / indice mat. cavo = 1)

cavo attivato prima dell'inizio di questo periodo

rilassamento acciaio = -273.01

ritiro calcestruzzo = -325.78

viscosita' calcestruzzo = -782.64

cavo composto da 27 trefoli $A_p = 37.53$

caduta totale di precompressione nel cavo = -51845.21

sollecitazioni generate nella trave dalla

caduta di precompressione nel cavo:

momento flettente = 3641001.83

sforzo normale = 51845.21

taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto		σ_i	σ_e	τ
1		20.85	1.42	0.00
2		0.45	-4.40	
cavo		quota z	σ_p	σ_{CCR}
1		12.50	106.92	18.42
pos.		quota z	σ_{acc}	
1		95.00	14.53	
2		95.00	14.53	
3		4.00	121.72	
4		4.00	121.72	
5		4.00	121.72	
6		4.00	121.72	
7		22.00	100.52	
8		22.00	100.52	
9		22.00	100.52	
10		22.00	100.52	

Tensioni totali nei materiali:

getto		σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1		-98.27	-49.57	0.00	0.00	0.00
2		-3.55	-13.55			0.00
cavo		quota z	σ_p	σ_{CCR}		
1		12.50	11704.08	-92.18		
pos.		quota z	σ_{acc}			
1		95.00	-316.95			
2		95.00	-316.95			
3		4.00	-632.35			
4		4.00	-632.35			
5		4.00	-632.35			
6		4.00	-632.35			
7		22.00	-569.96			
8		22.00	-569.96			
9		22.00	-569.96			
10		22.00	-569.96			

COMBINAZIONE TA 1/2

azione indiretta n. 1:

--> Ritiro differenziale
momento flettente = 38595.31
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

Sollecitazioni di combinazione:
momento flettente = 38595.31
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto		σ_i	σ_e	τ
1		0.07	-0.15	0.00
2		-0.16	-0.21	
cavo		quota z	σ_p	σ_{CCR}
1		12.50	0.25	0.04
pos.		quota z	σ_{acc}	
1		95.00	-0.82	
2		95.00	-0.82	
3		4.00	0.37	
4		4.00	0.37	
5		4.00	0.37	
6		4.00	0.37	
7		22.00	0.14	
8		22.00	0.14	
9		22.00	0.14	
10		22.00	0.14	

Tensioni totali nei materiali in questa combinazione:

getto		σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1		-98.20	-49.71	0.00	0.00	0.00
2		-3.71	-13.76			0.00
cavo		quota z	σ_p	σ_{CCR}		
1		12.50	11704.34	-92.14		
pos.		quota z	σ_{acc}			
1		95.00	-317.78			
2		95.00	-317.78			
3		4.00	-631.98			
4		4.00	-631.98			

5	4.00	-631.98
6	4.00	-631.98
7	22.00	-569.83
8	22.00	-569.83
9	22.00	-569.83
10	22.00	-569.83

Coefficiente di sicurezza a rottura per M positivo = 3.9997

COMBINAZIONE TA 1/3

azione indiretta n. 1:

--> Ritiro differenziale
momento flettente = 38595.31
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

azione da traffico n. 1:

--> accidentale (sottocaso Mfmax)
momento flettente = 18501529.20
sforzo normale = 0.00
taglio = 0.00
momento torcente = 0.00

Sollecitazioni di combinazione:

momento flettente = 18540124.51
sforzo normale = -1154.17
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto	σ	σ_e	τ
1	81.32	-17.59	0.00
2	-22.53	-47.26	
cavo	quota z	σ_p	σ_{ccr}
1	12.50	400.32	68.96
pos.	quota z	σ_{acc}	
1	95.00	-76.66	
2	95.00	-76.66	
3	4.00	469.23	
4	4.00	469.23	
5	4.00	469.23	
6	4.00	469.23	
7	22.00	361.25	
8	22.00	361.25	
9	22.00	361.25	
10	22.00	361.25	

Tensioni totali nei materiali in questa combinazione:

getto	σ	σ_e	τ	σ_{min}	σ_{staffe}
1	-16.95	-67.15	0.00	0.00	0.00
2	-26.08	-60.81			0.00
cavo	quota z	σ_p	σ_{ccr}		
1	12.50	12104.40	-23.22		
pos.	quota z	σ_{acc}			
1	95.00	-393.61			
2	95.00	-393.61			
3	4.00	-163.12			
4	4.00	-163.12			
5	4.00	-163.12			
6	4.00	-163.12			
7	22.00	-208.71			
8	22.00	-208.71			
9	22.00	-208.71			
10	22.00	-208.71			

Coefficiente di sicurezza a rottura per M positivo = 1.9553

COMBINAZIONE TA 1/1

azione da traffico n. 1:

--> accidentale (sottocaso Mfmax)
momento flettente = 18501529.20
sforzo normale = 0.00
taglio = 0.00
momento torcente = 0.00

Sollecitazioni di combinazione:

momento flettente = 18501529.20
sforzo normale = 0.00
taglio = 0.00
momento torcente = 0.00

Variazione di tensione nei materiali:

getto		σ_i	σ_e	τ
1		81.25	-17.44	0.00
2		-22.37	-47.05	
cavo		quota z	σ_p	σ_{ccr}
1		12.50	400.07	68.92
pos.		quota z	σ_{acc}	
1		95.00	-75.84	
2		95.00	-75.84	
3		4.00	468.86	
4		4.00	468.86	
5		4.00	468.86	
6		4.00	468.86	
7		22.00	361.11	
8		22.00	361.11	
9		22.00	361.11	
10		22.00	361.11	

Tensioni totali nei materiali in questa combinazione:

getto		σ_i	σ_e	τ	σ_{min}	σ_{staffe}
1		-17.02	-67.01	0.00	0.00	0.00
2		-25.93	-60.59			0.00
cavo		quota z	σ_p	σ_{ccr}		
1		12.50	12104.15	-23.26		
pos.		quota z	σ_{acc}			
1		95.00	-392.79			
2		95.00	-392.79			
3		4.00	-163.49			
4		4.00	-163.49			
5		4.00	-163.49			
6		4.00	-163.49			
7		22.00	-208.85			
8		22.00	-208.85			
9		22.00	-208.85			
10		22.00	-208.85			

Coefficiente di sicurezza a rottura per M positivo = 1.9574

Cadute di tensione totali

cavo	σ_{spi}	ril. acc.	ritiro cls	visc. cls	totali	
1	14780.84	-443.43	-522.48	-1533.80	-2499.70	(16.91%)