Autorità Portuale di Augusta

LAVORI DEL PRIMO STRALCIO E DEL SECONDO STRALCIO DELLA TERZA FASE DEL PORTO COMMERCIALE DI AUGUSTA - BANCHINE CONTAINERS -

IMPRESE:

Condotte S.p.A. *Fondata il 7 aprile 1880* (MANDATARIA)

PIACENTINI COSTRUZIONI spa

Cosedil spa (MANDANTI)

PROGETTO ESECUTIVO DI FUSIONE ED INTEGRAZIONE DEL I E II STRALCIO

REV.	DATA	EMISSIONE	RED.	VER.	APPR.
3					
2					
1	100715	PRIMA REVISIONE	F. CASTELLI	F.GIORDANO	F.GIORDANO
0	070315	PRIMA EMISSIONE	F. CASTELLI	F.GIORDANO	F.GIORDANO

PROGETTO	OPERA	TIPO ELAB.	N° ELAB.	REV.	SCALA:
1073	GE00	C	016	B	

TITOLO ELABORATO:

STUDI E RELAZIONI SPECIALISTICHE

RELAZIONE GEOTECNICA INTEGRATIVA

PROGETTAZIONE:

INCO

Dott. Ing. Aldo Müller – Ordine Ingegneri Roma N° 4998

SIGMA INGEGNERIA s.r.l.
Via della Libertà, 201/A
90143 PALERMO
Tel. 091/6254742 - Fax 091/307909
C.F. e P.IVA 02639310826
e-mail: sigmaingsrl@gmail.com

(MANDATARIA)

Ing. Giordano Francesco n. 3152 – Ordine degli Ingegneri della Provincia di Catania

(MANDANTE)

RESPONSABILE DEL PROCEDIMENTO:

CONSULENZA GEOTECNICA:
Prof. Ing. **Francesco Castelli**

Ordine degli Ingegneri Prov. di Catania – Dott. Ing. Francesco Castelli 2508

INDICE

Allegati :

Tabulati di Calcolo PLAXIS

1. PREMESSA

In riscontro al Rapporto di Ispezione Intermedio di ITALSOCOTEC n.C310-PE2-RI-C003-1 del 11 Maggio 2015, agli esiti della riunione tenuta a Roma il giorno 23 Giugno 2015, a quanto riportato nel verbale della riunione tenuta in data 25 Giugno 2015 presso l'Autorità Portuale di Augusta, nonché avuto ulteriore riscontro dell'esito delle verifiche relative ai valori dei parametri a base del modello geotecnico utilizzato nella simulazione numerica implementata mediante il codice di calcolo PLAXIS (Rapporto di Ispezione n.C310-PE2-RI-C004-1 del 06.07.2015), lo scrivente nella qualità di Consulente Geotecnico con la presente relazione integrativa intende dimostrare, sulla base di calcoli e verifiche adeguatamente documentate, che la struttura di banchina a giorno presentata in sede di offerta non è in grado di assicurare i requisiti prestazionali del palancolato di conterminazione.

Tale impossibilità è connessa al fatto che i risultati delle nuove indagini condotte e la maggiore severità dell'azione sismica derivante dall'adeguamento alla nuova normativa tecnica (NTC2008), indicano l'impossibilità di raggiungere la richiesta impermeabilità del palancolato, oltre che i necessari margini di sicurezza della struttura in relazione ai mutati valori dell'azione sismica di progetto.

2. NORMATIVA DI RIFERIMENTO

- Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica (Ordinanza P.C.M. n.3274 del 20.03.2003 e ss.mm.ii.).
- *Eurocodice 1* : Criteri generali di progettazione strutturale, azioni sulle strutture, basi di calcolo. (UNI EN 1991-1-1:5,1991:2004).
- *Eurocodice 7* : *Progettazione Geotecnica* - Regole Generali (UNI ENV 1997-1:3, 1997:2002).
- *Eurocodice 8* : *Progettazione delle strutture per la resistenza sismica* (UNI EN 1998-5:2005) - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

- N.T.C. 2008 - *Norme Tecniche per le Costruzioni* (Decreto Ministeriale 14 Gennaio 2008).
- Consiglio Superiore dei Lavori Pubblici: *Circolare n.617 del 02.02.2009* "Istruzioni per l'applicazione delle Norme Tecniche per le Costruzioni 2008".

3. MODELLO GEOTECNICO

La variazione della soluzione progettuale di offerta è derivata dalle differenti condizioni geotecniche emerse dalla campagna d'indagini condotta prima della progettazione esecutiva, oltre che dal cambiamento della normativa tecnica.

Ad ulteriore chiarimento s'intende precisare:

1) *La campagna di indagini geognostiche e geotecniche eseguita prima dello sviluppo della progettazione esecutiva non ha modificato il modello stratigrafico previsto dal progetto a base di gara, quanto piuttosto, ha consentito una più precisa definizione del* ***modello geotecnico****.*

2) *Tale più precisa definizione del modello geotecnico è derivata dalla possibilità di eseguire una campagna d'indagini (geognostiche e geotecniche) mirata ad accertare, nelle zone più direttamente interessate dalla realizzazione delle opere a mare, le proprietà geotecniche e meccaniche dei terreni di fondazione.*

3) *Il* ***modello geotecnico*** *deducibile dai risultati delle indagini disponibili in fase di gara è costituito da due livelli rappresentati dai terreni limo-argillosi (Livello A), seguiti dalla formazione delle argille grigio-azzurre (Livello B) di base. In virtù dell'approfondimento d'indagine condotto in fase di progettazione esecutiva, la successione stratigrafica nell'area in studio è stata così meglio schematizzata:*

   - limi sabbiosi debolmente argillosi poco consistenti (limi);
   - argille giallastre alterate (argille);
   - argille grigio-azzurre (argille);

   ovvero il ***modello geotecnico*** *è costituito da tre livelli, di cui i primi due (limi sabbiosi debolmente argillosi poco consistenti e le argille giallastre alterate), dotati di scadenti/modeste proprietà meccaniche. L'approfondimento d'indagine ha per-*

messo inoltre di attribuire allo strato definito "molle", che in fase di gara era stato assunto pari a circa 1.0 ÷ 2.0 m, una potenza massima pari a circa 8.0 m.

In considerazione dei risultati delle prove geotecniche in sito e delle analisi di laboratorio è stato possibile attribuire ai litotipi interessati (individuati nel seguito come "*Livello*") i ***valori caratteristici*** dei parametri geotecnici di seguito riportati (*Tabella* **1**). Si ricorda che per *valore caratteristico* di un parametro geotecnico le *NTC2008* intendono *una stima ragionata e cautelativa* del valore del parametro nello stato limite considerato, fermo restando che è responsabilità del progettista la definizione del piano delle indagini, la caratterizzazione e la modellazione geotecnica.

LIVELLO 1 : *limi grigiastri*

γ_k = 18.3 kN/m^3	(peso dell'unità di volume)
c_{uk} = 10 ÷ 50 kPa	(coesione non drenata)
c'_k = 0 kPa	(coesione efficace)
ϕ'_k = 15° ÷ 18°	(angolo di resistenza al taglio efficace)

LIVELLO 2 : *argille giallastre*

γ_k = 18.7 kN/m^3	(peso dell'unità di volume)
c_{uk} = 50 ÷ 100 kPa	(coesione non drenata)
c'_k = 30 kPa	(coesione efficace)
ϕ'_k = 22°	(angolo di resistenza al taglio efficace)

LIVELLO 3 : *argille grigio-azzurre*

γ_k = 19 kN/m^3	(peso dell'unità di volume)
c_{uk} = 150 ÷ 250 kPa	(coesione non drenata)
c'_k = 50 kPa	(coesione efficace)
ϕ'_k = 25°	(angolo di resistenza al taglio efficace)

MATERIALE 4 : *bonifica*

γ_k = 20 kN/m^3	(peso dell'unità di volume)
c'_k = 0 kPa	(coesione efficace)
ϕ'_k = 36°	(angolo di resistenza al taglio efficace)
E = 50 MPa	(modulo elastico)

MATERIALE 5 : *materiale di riempimento*

γ_k = 20 kN/m^3 (peso dell'unità di volume)
c'_k = 0 kPa (coesione efficace)
ϕ'_k = 36° (angolo di resistenza al taglio efficace)
E = 50 MPa (modulo elastico)

MATERIALE 6 : *scogli di 1° categoria*

γ_k = 22 kN/m^3 (peso dell'unità di volume)
c'_k = 0 kPa (coesione efficace)
ϕ'_k = 40° (angolo di resistenza al taglio efficace)
E = 80 MPa (modulo elastico)

MATERIALE 7 : *scogli naturali (da 500 a 1000 kg)*

γ_k = 22 kN/m^3 (peso dell'unità di volume)
c'_k = 0 kPa (coesione efficace)
ϕ'_k = 42° (angolo di resistenza al taglio efficace)
E = 80 MPa (modulo elastico)

Tabella 1a. *Valori Caratteristici dei Parametri Geotecnici*

Materiale		***Argille grigio-azzurre***	***Argille giallastre***	***Limi grigiastri***
Modello		*Hardening Soil*	*Hardening Soil*	*Hardening Soil*
γ_{unsat}	kN/m³	19	18.7	18.3
γ_{sat}	kN/m³	19	18.7	18.3
e_{init}	-	0.7	0.7	0.7
E_{50}^{ref}	kN/m²	18750	12500	8750
E_{oed}	kN/m²	12000	8000	5000
E_{oed}^{ref}	kN/m²	15000	10000	7000
E_{ur}^{ref}	kN/m²	56250	37500	26250
m	-	0.5	0.5	0.5
OCR	-	1.2	1	1
c'	kN/m²	50	30	0
Φ'	°	25	22	18
ψ	°	0	0	0

Tabella 1b. *Valori Caratteristici dei Parametri Geotecnici*

Materiale		**Mat. Riempimento**	**Scogli I Cat.**	**Scogli Naturali**	**Bonifica**
Modello		*Mohr Coulomb*	*Mohr Coulomb*	*Mohr Coulomb*	*Mohr Coulomb*
γ_{unsat}	kN/m³	20	22	22	20
γ_{sat}	kN/m³	20	22	22	20
e_{init}	-	0.6	0.5	0.5	0.7
E	kN/m²	50000	80000	80000	50000
ν	-	0.4	0.4	0.4	0.4
c'	kN/m²	0	0	0	0
Φ'	°	36	40	42	36
ψ	°	0	0	0	0

Per ciascun litotipo individuato nella *Tabella* **1**, oltre ai valori caratteristici dei parametri geotecnici, è riportato il modello costitutivo utilizzato nella simulazione numerica del comportamento della banchina a giorno.

In proposito è opportuno fare rilevare, che nel caso dei terreni di natura limosa/argillosa la simulazione numerica è stata condotta assumendo per essi un modello costitutivo di tipo *hardening soil*.

In questo caso il comportamento del terreno è definito sulla base dei parametri:

- E_{50}^{ref} *= modulo di elasticità secante al 50% della deformazione;*
- E_{oed}^{ref} *= modulo tangenziale ottenuto dalla curva edometrica sul punto di tensione primaria corrispondente a quella in sito*;
- E_{ur}^{ref} *= Modulo elastico di riferimento.*

Alcuni parametri del modello *hardening soil* coincidono con quelli di un modello Mohr-Coulomb non incrudente. Nel caso in esame tali parametri sono stati valutati a partire dai risultati delle prove di laboratorio appositamente eseguite, mediante le relazioni di seguito riportate.

$$E_{oed} = E_{oed}^{ref}\left(\frac{c\cos\varphi - \frac{\sigma'_3}{K_0^{nc}}\sin\varphi}{c\cos\varphi + p^{ref}\sin\varphi}\right)^m \qquad (1)$$

$$E_{50}^{ref} = 1.25E_{oed}^{ref} \qquad E_{ur}^{ref} = 3E_{50}^{ref} \qquad (2)$$

Per quanto riguarda i valori del coefficiente di Poisson, gli stessi sono stati definiti per una condizione prossima a quella di deformazione a volume costante *($\nu \approx 0.5$)*.

Per quanto attiene, infine, le caratteristiche meccaniche delle strutture a scogliera queste sono state scelte in analogia con i valori utilizzati in altri casi documentati nella letteratura tecnica e scientifica. Nel definire la resistenza al taglio dell'ammasso, pertanto, non si è ritenuto di mettere in conto eventuali incrementi legati ad effetti di natura meccanica (mutuo incastro tra gli elementi, scavalcamento tra un elemento e l'altro, ecc.) poiché di difficile valutazione e dei quali peraltro in questi casi (*scogliera*) non si ha riscontro in letteratura.

4. MODELLAZIONE NUMERICA

Per accertare la difficoltà di realizzare la **struttura di banchina a giorno** presentata in sede di offerta è stata implementata la simulazione numerica del comportamento di tale struttura sul **modello geotecnico del PE**.

Il comportamento del sistema struttura-terreno è stato simulato mediante una modellazione numerica agli elementi finiti (FEM). La verifica di stabilità della banchina nelle fasi intermedie di costruzione ed in quella finale è stata eseguita con riferimento alla sezione tipo della soluzione progettuale di offerta.

Le analisi FEM sono state condotte in condizioni di deformazione piana con l'ausilio del codice di calcolo PLAXIS. Le analisi sono state elaborate in condizioni drenate facendo riferimento ad un modello costitutivo tipo *hardening soil* per i terreni di natura argillosa e *Mohr-Coulomb* per i restanti (incoerenti e scogliera).

La discretizzazione del modello agli elementi finiti si compone di 4189 elementi e 34711 nodi, le dimensioni sono 300 m nella direzione orizzontale e 108 m in quella verticale (*Figura* **1**), i vincoli ai bordi sono rappresentati da carrelli lateralmente ed incastro alla base.

Per adattare la soluzione presentata in sede di offerta al nuovo modello geotecnico del PE ***la lunghezza del palancolato di conterminazione è stata aumentata****, in modo che lo stesso risulti infisso per circa 1.0 m nello strato impermeabile di base rappresentato dalle argille grigio-azzurre*.

Con riferimento alle **Fasi Intermedie** di costruzione della banchina a giorno già individuate nella soluzione di offerta, corrispondenti ***1***) alla realizzazione del palancolato di conterminazione, ***2***) all'esecuzione da mare di n.3 file di pali trivellati, ***3***) al graduale riempimento a tergo ed alla realizzazione della scogliera, nella *Figura* **2** sono riportati i risultati ottenuti in termini di spostamenti nella direzione *y* (*cedimenti*).

La modellazione numerica mostra che al completamento del riempimento, per una altezza pari a circa 14 m, i cedimenti del terreno in prossimità del palancolato di conterminazione sono di circa 60 cm e si estendono in un'ampia zona retrostante. Questo effetto, ben noto in letteratura, è da ricondurre alla formazione di un "*profilo di subsidenza*" nel terreno retrostante l'opera di contenimento.

Laddove questo effetto tende a svanire, ad una certa distanza dall'opera di contenimento, i cedimenti del terrapieno risultano comparabili con quelli analogamente stimati nel caso della soluzione del PE (circa 28 ÷ 30 cm).

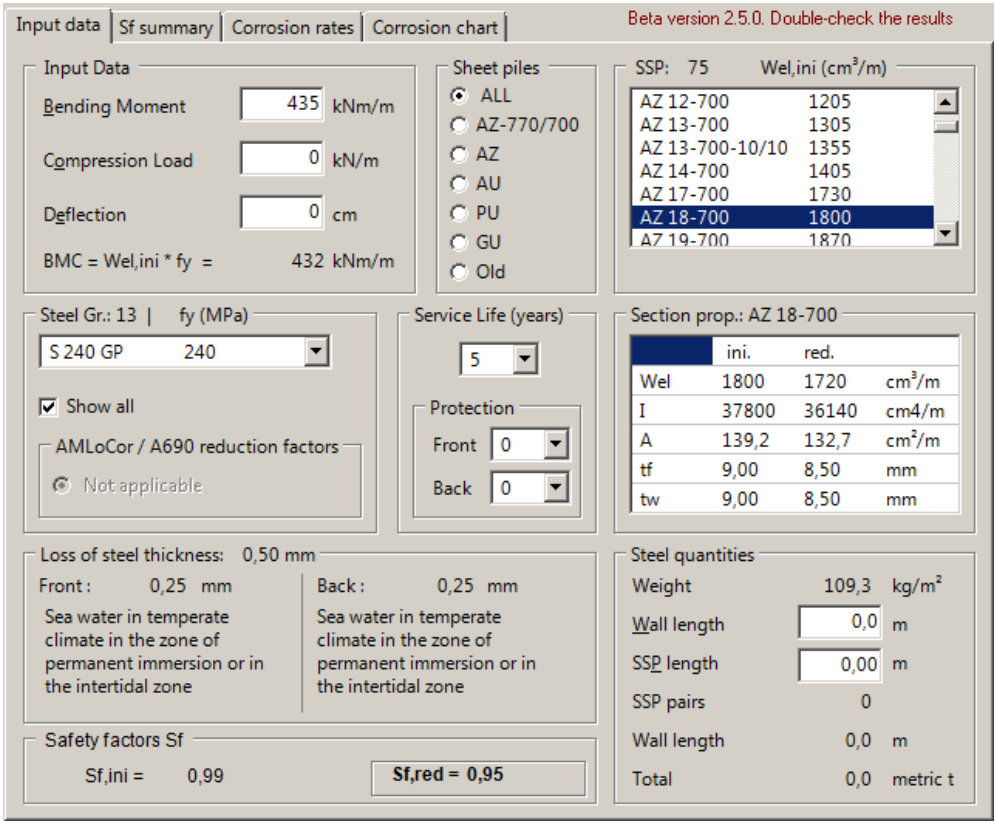
Il fenomeno è parimente mostrato dall'andamento dei vettori spostamento riportato nella *Figura* **3** e dalle curve di spostamento della *Figura* **4**. Come diretta conseguenza di questo fenomeno il palancolato di conterminazione subisce spostamenti orizzontali di circa 28 cm e le sollecitazioni indotte ($M_{flett} \approx$ 435 kNm/m) sullo stesso (*Figura* **5**) **non sono compatibili con la sua funzionalità** (*Tabella* **2**), causandone il danneggiamento dei gargami e pertanto *non garantendone più l'impermeabilità*.

Per analizzare la **stabilità globale** della banchina a giorno il modello agli elementi finiti è stato implementato fino alla fase finale di costruzione, valutandone il comportamento rispetto alle condizioni di carico ed all'azione sismica già definiti nella Relazione Geotecnica allegata al PE, ed a cui si rimanda per questi aspetti.

Il calcolo è stato condotto mediante la procedura *Phi-c reduction* (o *Safety Calculation*). Il codice di calcolo PLAXIS infatti offre quest'opzione per determinare i fattori di sicurezza e per valutare le condizioni di stabilità globale. Con tale analisi vengono ridotte progressivamente le caratteristiche di resistenza del terreno (*tanφ'* e *c'*) fino al completo sviluppo del meccanismo di rottura. Il **fattore di riduzione** è così definito:

$$SF = \frac{resistenza\ disponibile}{resistenza\ a\ rottura} = \frac{\tan \varphi'_{input}}{\tan \varphi'_{reduced}} = \frac{c'_{input}}{c'_{reduced}} \qquad (3)$$

Tabella 2. *Verifica della Palancola alle Sollecitazioni Indotte*



Esso può essere inteso come il margine di sicurezza rispetto ad un fenomeno di instabilità globale. Il pedice *input* si riferisce alla caratteristica di resistenza adottata per l'analisi in esame, mentre il pedice *reduced* si riferisce alla caratteristica di resistenza per la quale si sviluppa il primo cinematismo di rottura.

Se l'analisi *Phi-c reduction* viene lanciata a valle di una fase SLE (con parametri caratteristici) il valore di SF può essere assimilato ad un coefficiente di sicurezza globale.

I risultati ottenuti sono sintetizzati nelle *Figure* **6** e **7** con riferimento alla fase corrispondente all'ultimazione della struttura soggetta all'azione del moto ondoso, oltre ai carichi e sovraccarichi di progetto (*Figura* **6**), ed a quella dovuta al sisma (*Figura* **7**). I risultati ottenuti mostrano che i cedimenti, sempre nell'ambito della zona in cui maggiormente si risente delle deformazioni dell'opera di contenimento, crescono in maniera significativa. Ad una certa distanza dall'opera di contenimento, i cedimenti del terrapieno sono comparabili con quelli stimati nel caso della soluzione del PE.

I corrispondenti valori del **fattore di riduzione** risultano **SF** = **1.16** nel primo caso, mentre lo stesso è **inferiore all'unità** nel caso in cui venga considerata anche l'azione dovuta al sisma (**SF** = **0.84**).

A parità di condizioni, ovvero nella situazione finale, in presenza delle azioni di progetto e di quelle dovute al sisma, il confronto in termini di spostamento orizzontale tra la soluzione di banchina a giorno presentata in sede di offerta (*Figura* **8**) e quella del PE (*Figura* **9**), mostra nel primo caso valori dello spostamenti del terreno e dei pali (*Figura* **10**) di oltre il doppio (circa 33 cm), ulteriormente incompatibili con la funzionalità del palancolato di conterminazione.

5. CONSIDERAZIONI CONCLUSIVE

Dai calcoli e dalle verifiche contenute nella presente relazione ne deriva che la soluzione prevista dal PE presenta caratteristiche prestazionali di gran lunga superiori rispetto a quella presentata in sede di offerta.

La simulazione numerica del comportamento della banchina a giorno sul modello geotecnico del PE ha evidenziato la necessità di ricorrere alla nuova proposta progettuale, dal momento che la prima non garantisce la stabilità e quindi l'impermeabilità del palancolato di conterminazione già nelle fasi costruttive, oltre che nella configurazione finale. Gli spostamenti verticali ed orizzontali del terreno di riempimento e della scogliera nella zona più a diretto contatto con il palancolato di conterminazione generano sollecitazioni di entità tale da causarne il danneggiamento, facendone perdere la richiesta impermeabilità.

La maggiore severità dell'azione sismica derivante dall'adeguamento alla nuova normativa tecnica (*NTC2008*) riduce in maniera significativa i livelli di sicurezza e rende non più idonea la soluzione di banchina a giorno presentata in sede di offerta.

ORDINE DEGLI INGEGNERI PROV. DI CATANIA
DOTT. ING. FRANCESCO CASTELLI 2508

Il Consulente Geotecnico
prof. ing. Francesco Castelli

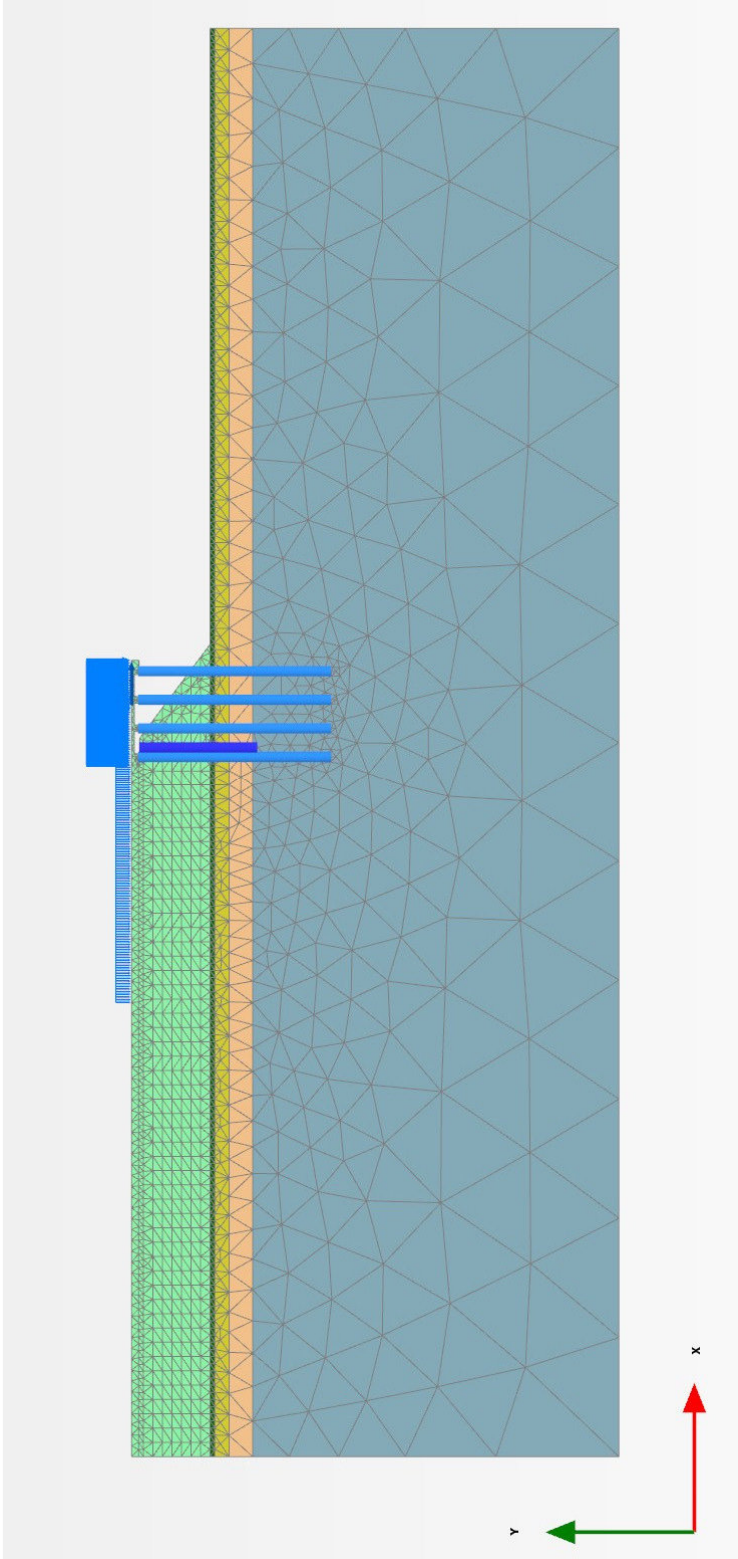


***Figura 1**. Mesh di elementi finiti utilizzata per la modellazione numerica della banchina a giorno*

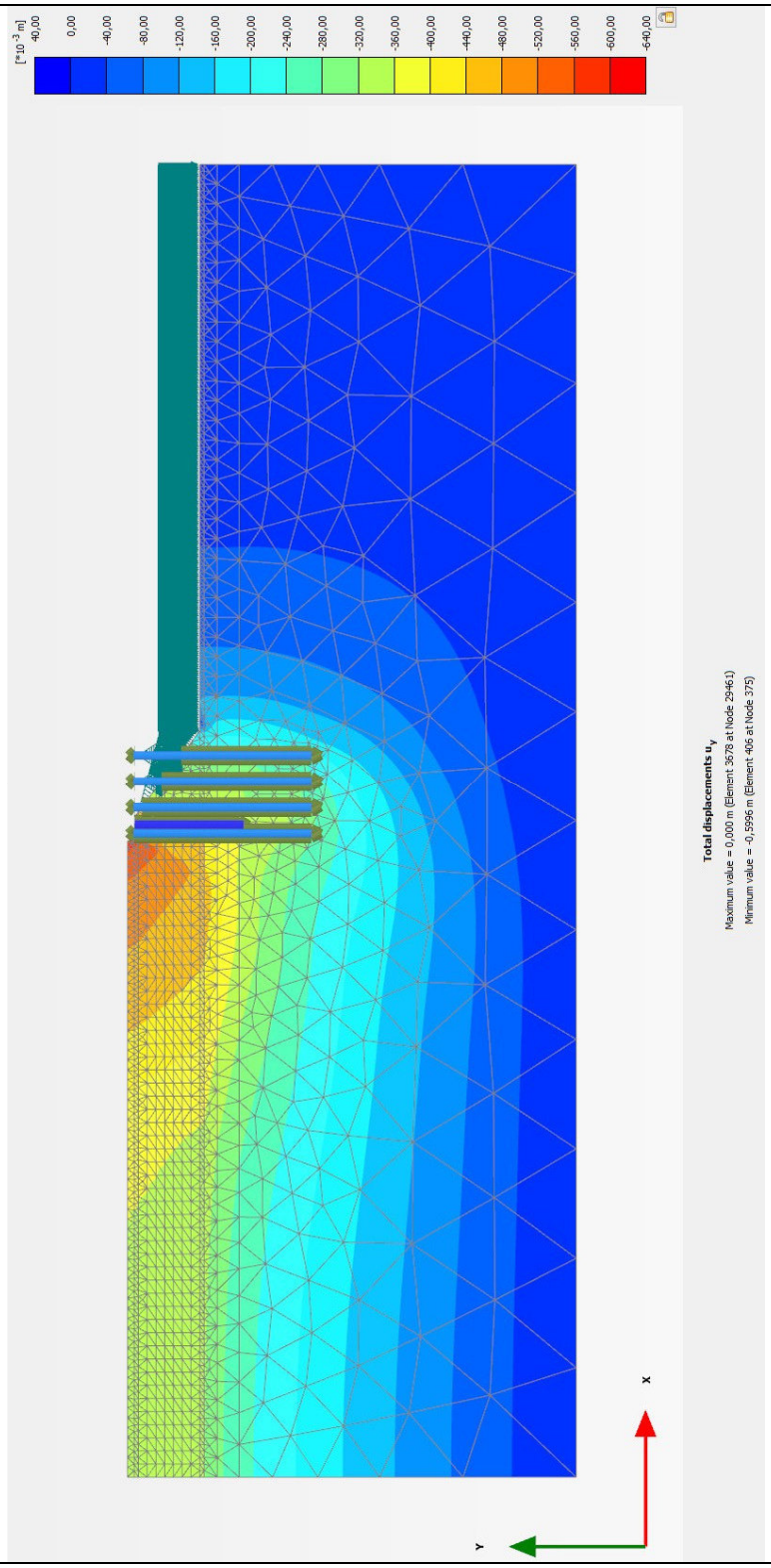


***Figura 2**. Cedimenti nella fase transitoria di costruzione della banchina a giorno*

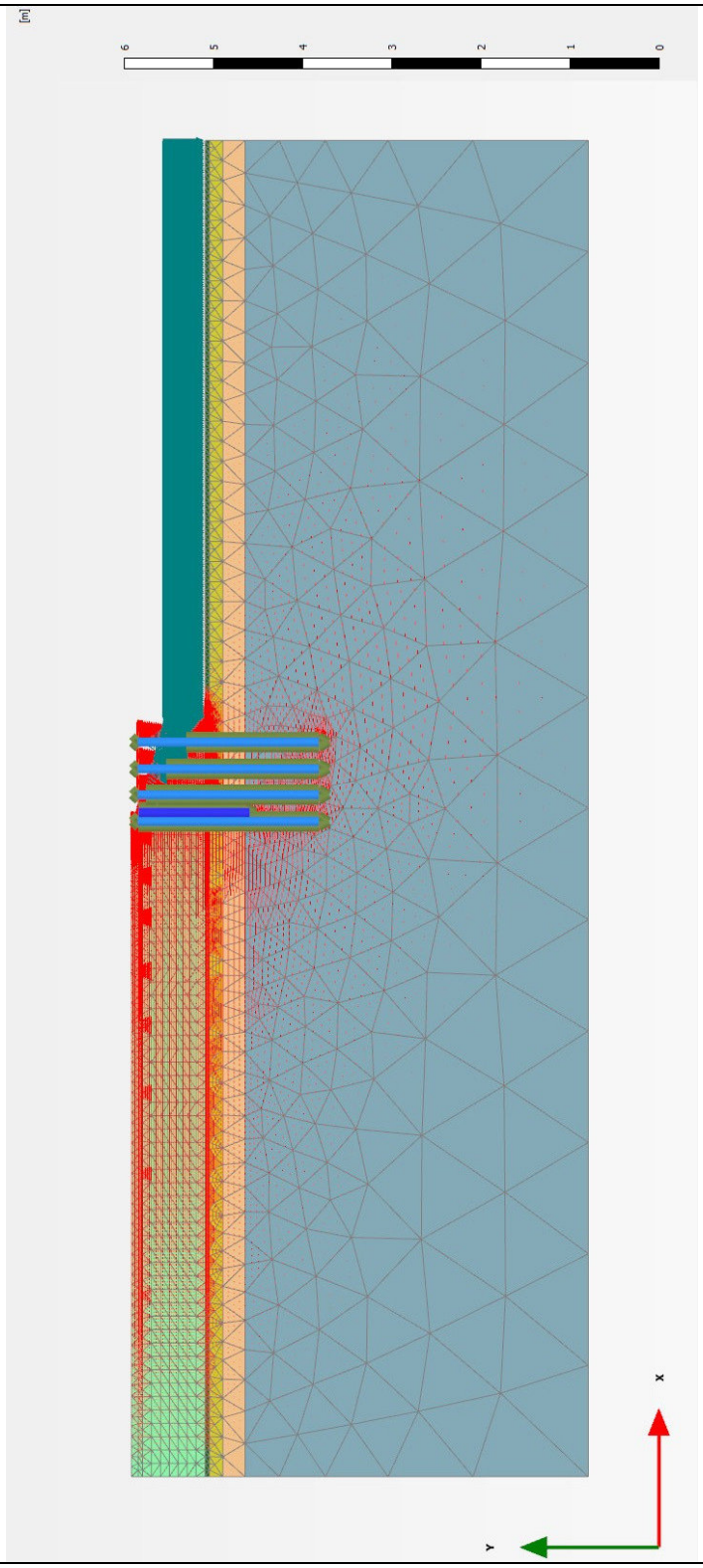


***Figura 3**. Rappresentazione dei vettori spostamento nella fase transitoria di costruzione della banchina*

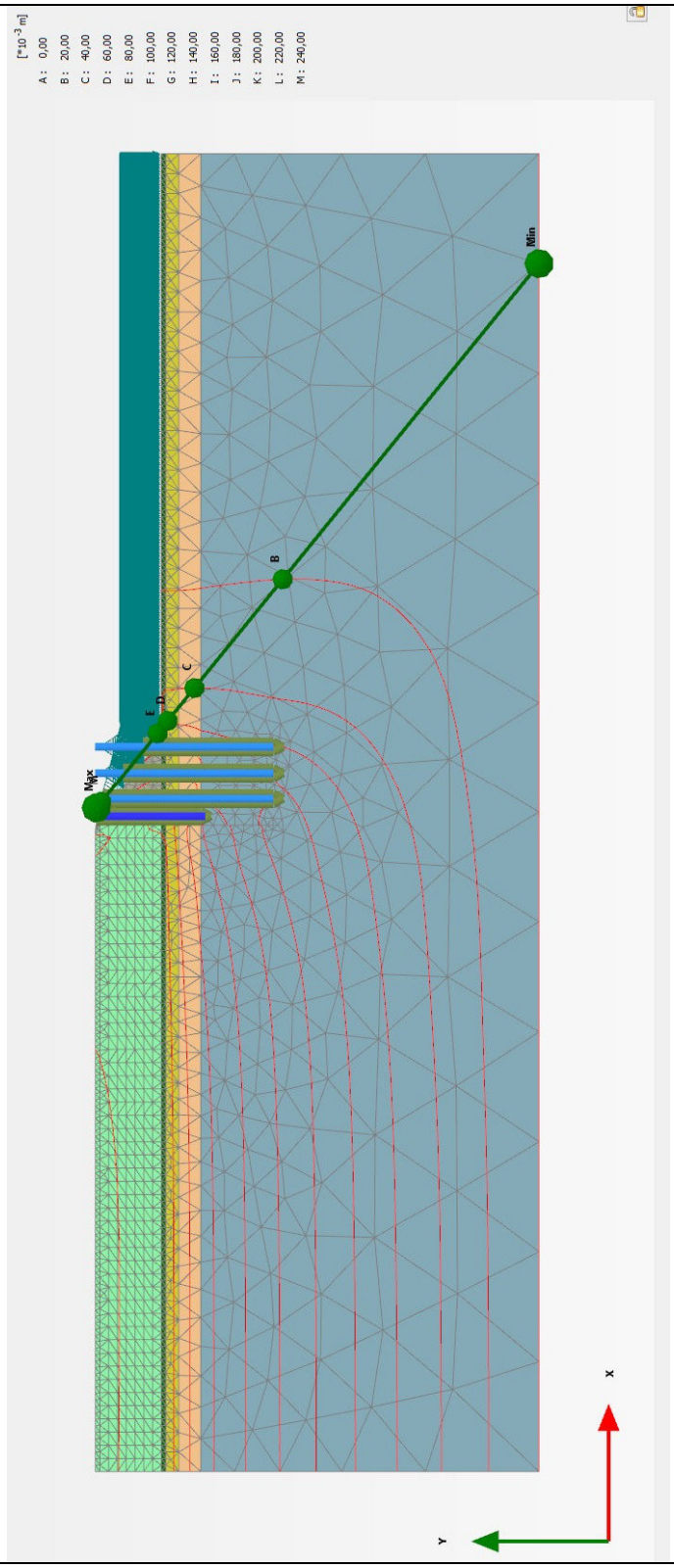


***Figura 4**. Andamento curve spostamento nella fase transitoria di costruzione della banchina*

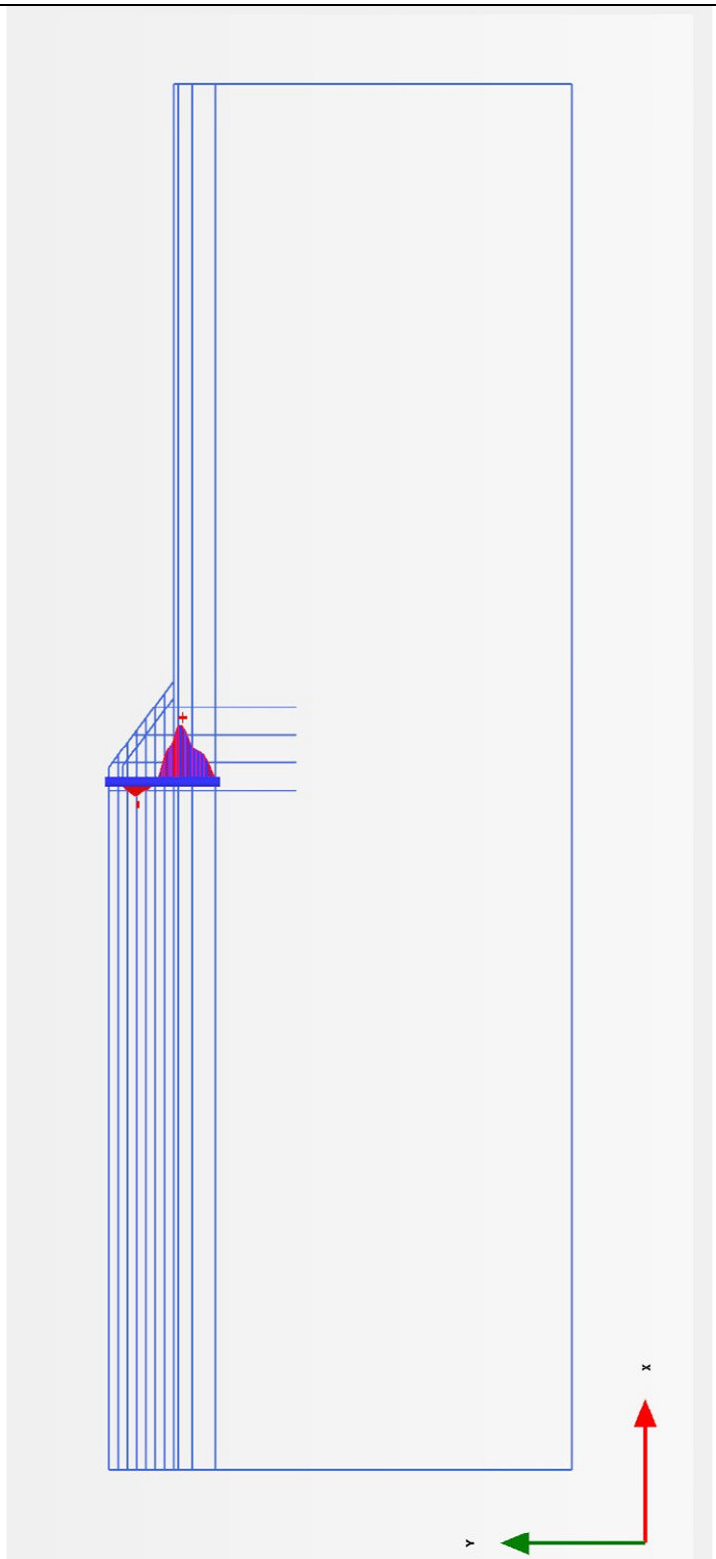


***Figura 5**. Sollecitazioni indotte sul palancolato di conterminazione*

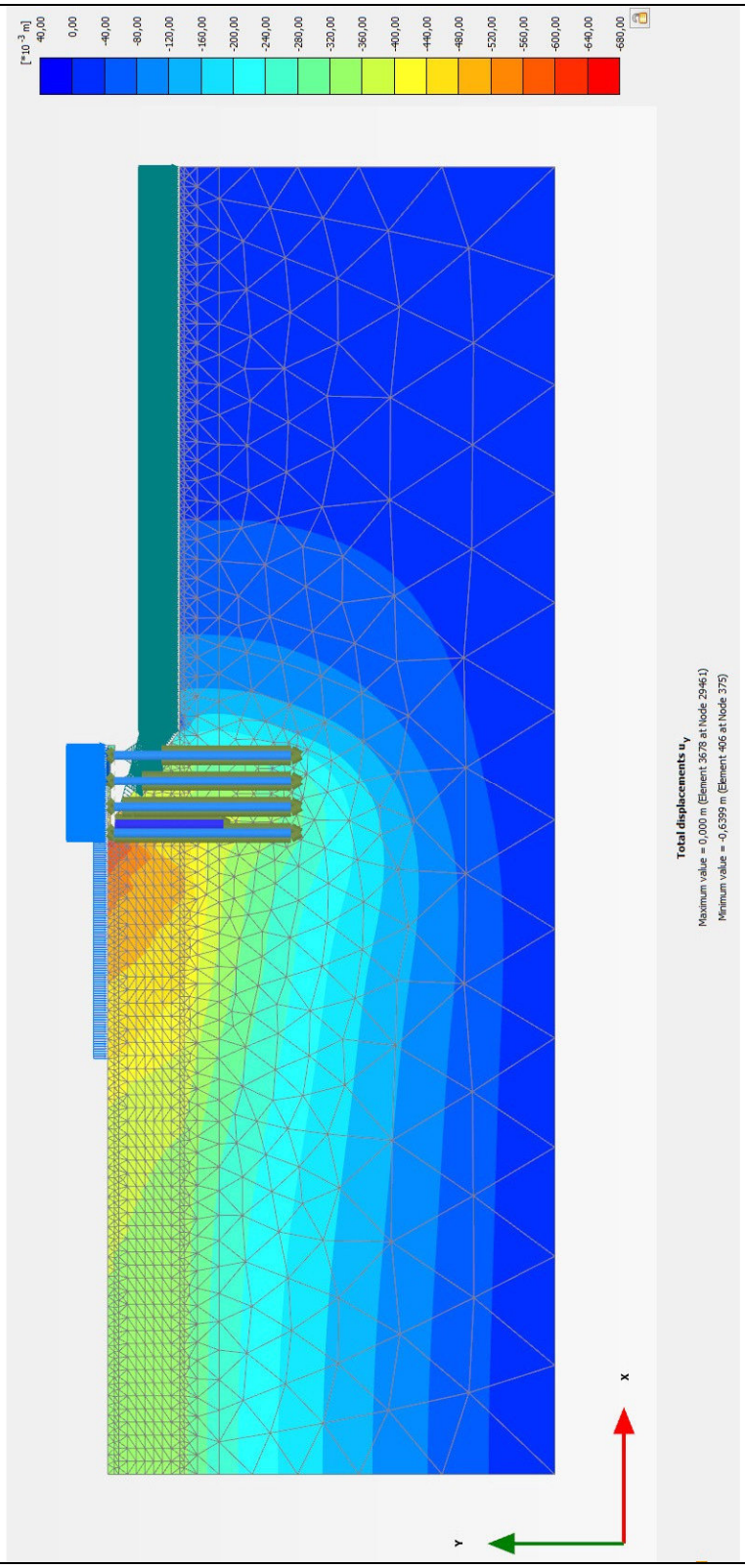


***Figura 6**. Cedimenti della banchina a giorno nella fase finale di costruzione soggetta alle azioni di progetto*

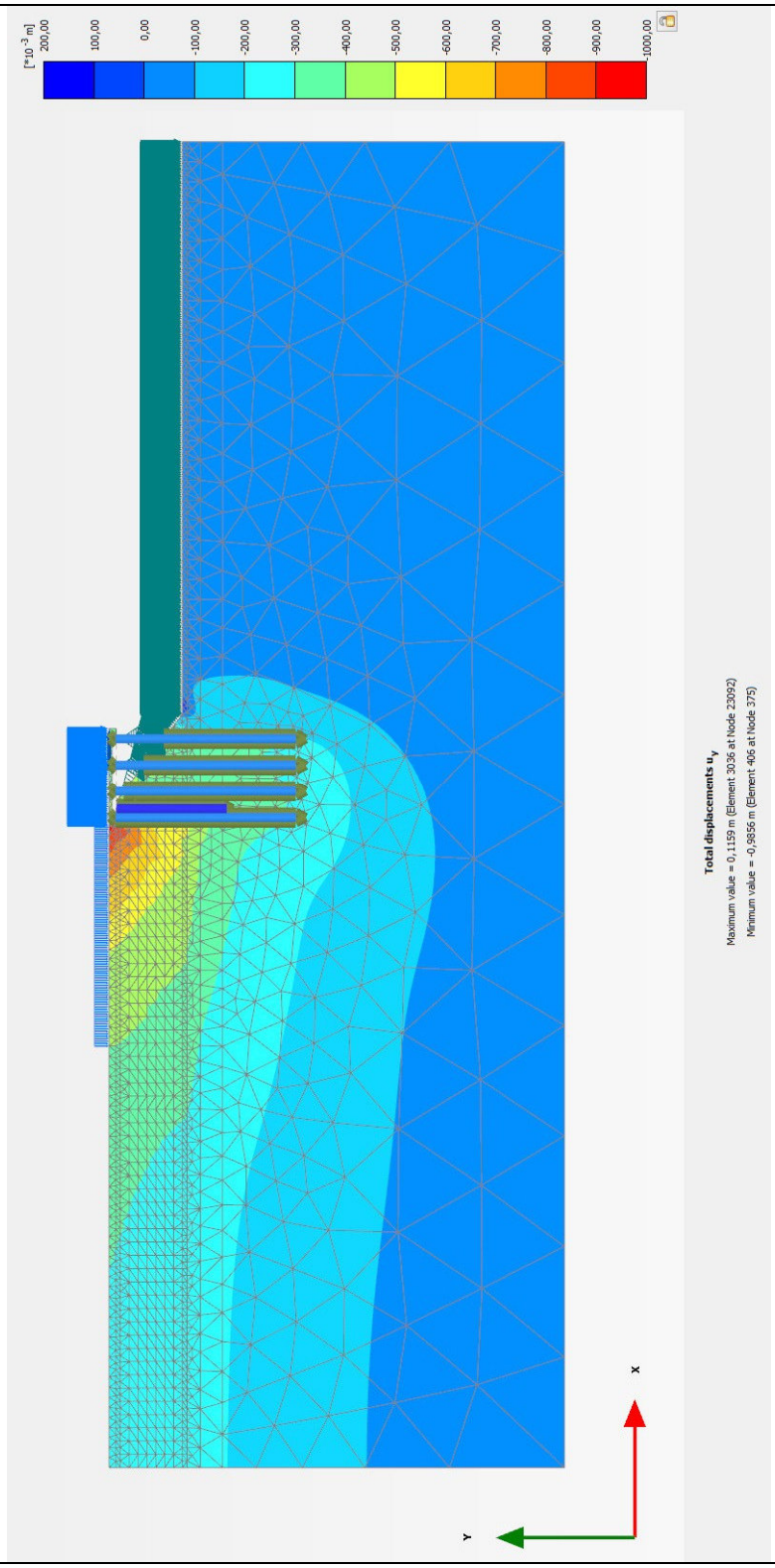


***Figura 7**. Cedimenti della banchina nella fase finale di costruzione soggetta alle azioni di progetto e sisma*

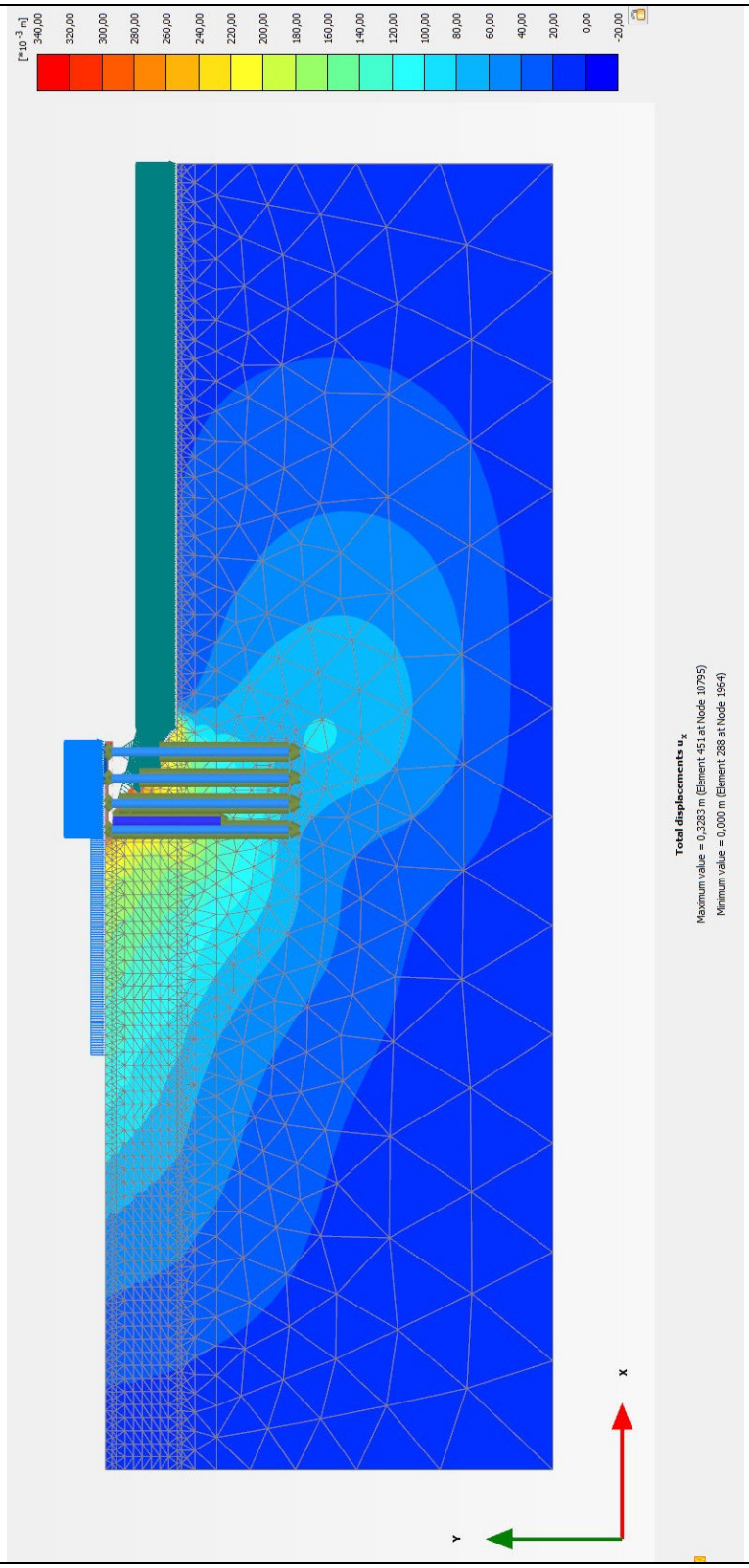


***Figura 8**. Spostamenti banchina nella fase finale di costruzione soggetta alle azioni di progetto e sisma*

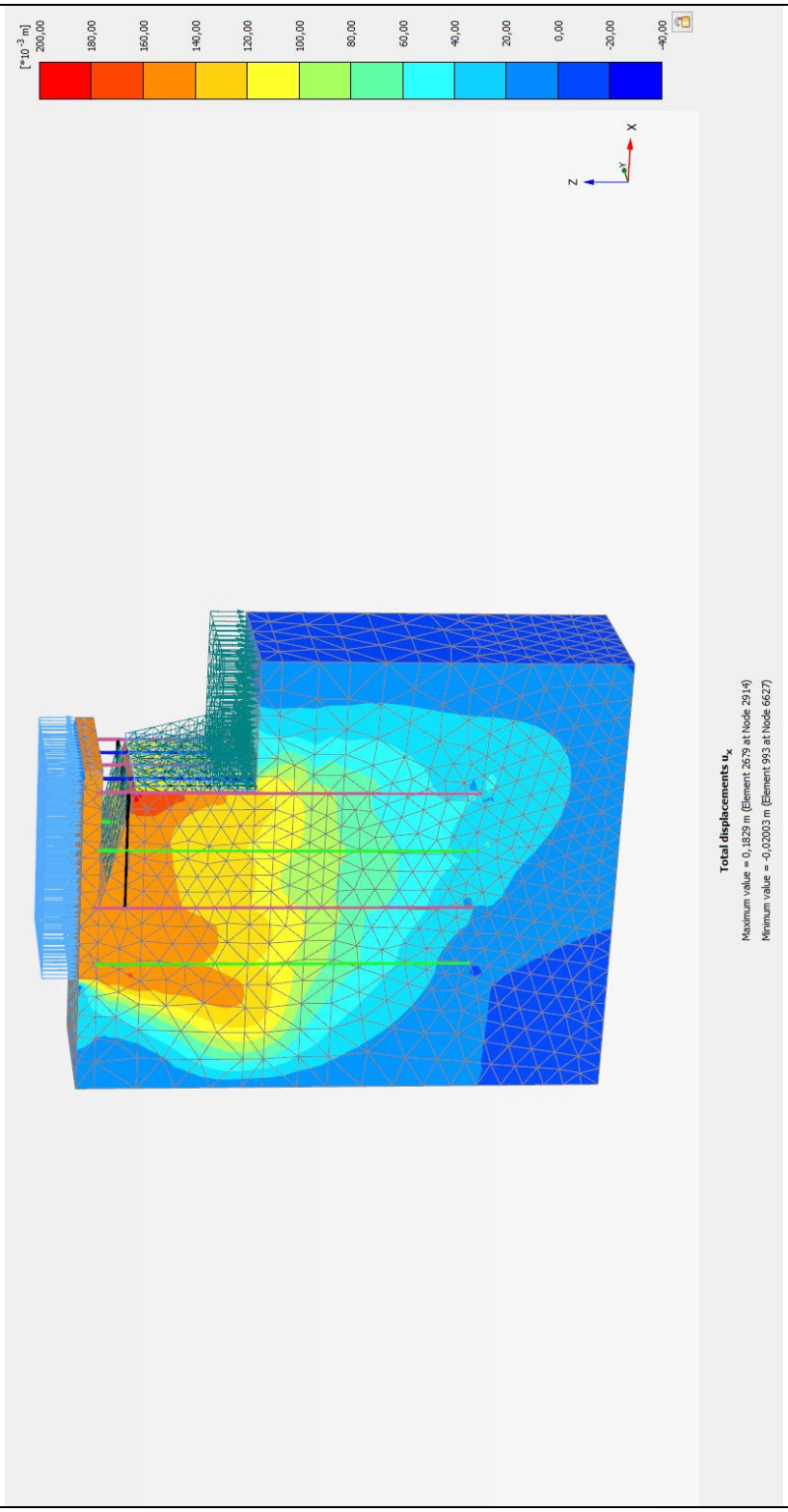
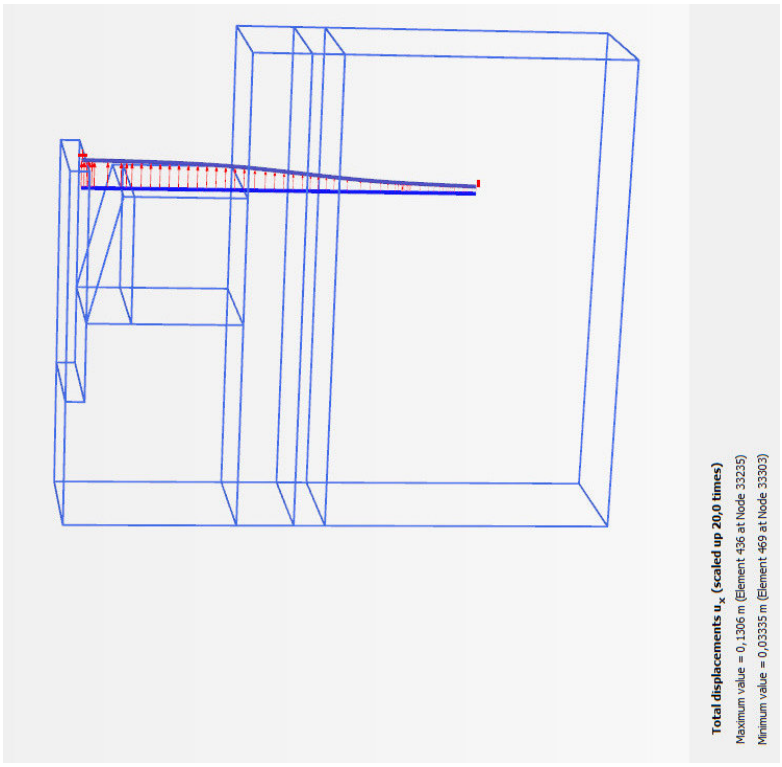


***Figura 9**. Spostamenti soluzione PE nella fase finale di costruzione soggetta alle azioni di progetto e sisma*



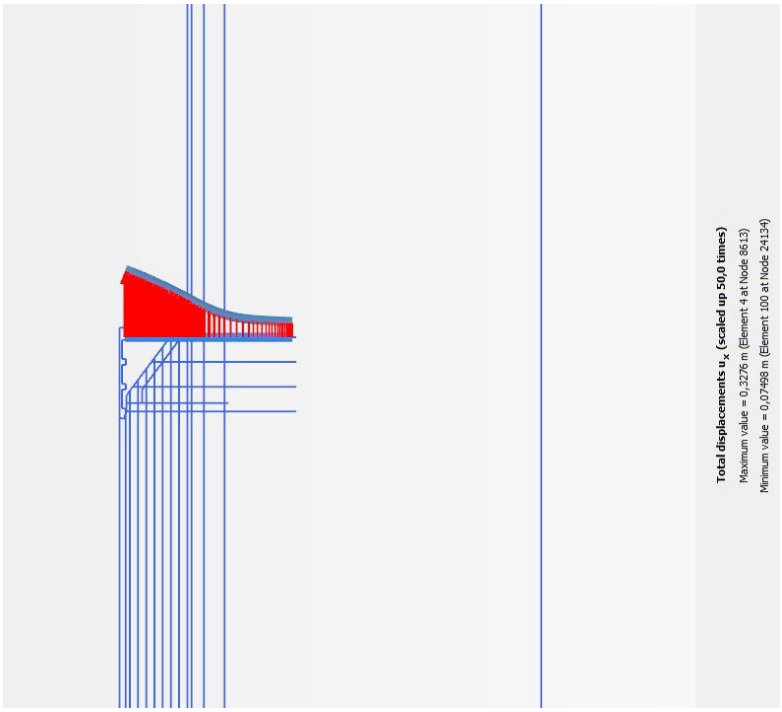
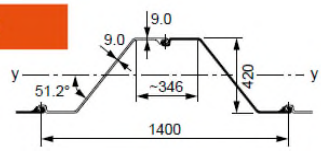


***Figura 10**. Spostamenti orizzontali dei pali nei due casi considerati*

6 APPROFONDIMENTI SULLA AMMISSIBILITA' DEGLI SPOSTAMENTI INDOTTI SUL PALANCOLATO DI CONTERMINAZIONE DI CUI ALL'OFFERTA TECNICA

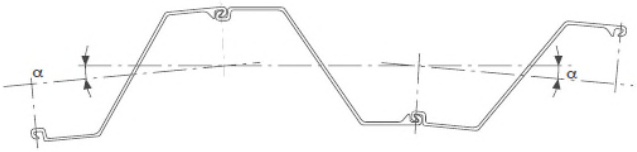
Il palancolato offerto in fase di gara è costituito da elementi AZ-18 700, di cui si riportano le caratteristiche tecniche estratte dal catalogo di uno dei produttori, nello specifico Arcelor-Mittal:

Section	S = Single pile D = Double pile	Sectional area	Mass	Moment of inertia	Elastic section modulus	Radius of gyration	Coating area[1)]
		cm²	kg/m	cm⁴	cm³	cm	m²/m
AZ 18-700 	Per S	97.5	76.5	26460	1260	16.47	0.93
	Per D	194.9	153.0	52920	2520	16.47	1.86
	Per m of wall	139.2	109.3	37800	1800	16.47	1.33

Gli elementi sono dotati di gargami connettivi a guida verticale realizzati ai sensi della norma UNI-EN 10248.
In particolare, in accordo con tale norma, il produttore limita l'operatività della connessione ad un prefissato range di rotazione relativa di un elemento rispetto all'elemento contiguo.
La rotazione massima ammissibile corrisponde ad α_{max} = 5°, come risulta anche dai cataloghi commerciali, di cui di seguito se ne fornisce un estratto:

Interlock

AZ® Larssen interlock in accordance with EN 10248.
All available AZ sheet piles can be interlocked.
Theoretical interlock swing: $\alpha_{max} = 5°$.



Le analisi numeriche del modello di interazione terreno-struttura hanno evidenziato che lo spostamento atteso della parete di palancole AZ18-700, stante il modello geotecnico del Progetto Esecutivo, è pari già nella fase di costruzione a 28 cm.
Ricostruendo la configurazione deformata in pianta del palancolato nello stato finale, come risulta dalla modellazione mediante Plaxis, si evince che in tratti specifici del palancolato **le rotazioni a cui sono sottoposti i gargami risultano maggiori di α_{max} di oltre il 250%**.
Come viene dimostrato più avanti, questo avviene:
- negli angoli del perimetro del palancolato;

- in prossimità di punti localizzati laddove si è in presenza di spostamenti differenziali anche di lieve entità.

L'incompatibilità delle rotazioni dei gargami va considerata con la già dimostrata incompatibilità meccanica delle sezioni, al fine del complessivo giudizio di inadeguatezza del palancolato proposto nell'offerta tecnica alla luce del nuovo modello geotecnico del Progetto Esecutivo, nonché a garantire il rispetto della richiesta stabilità e durabilità della cassa di colmata nei confronti dei requisiti ambientali a cui questa deve assolvere.

6.1 COMPORTAMENTO DEGLI ANGOLI DEL PALANCOLATO

Come noto il palancolato di conterminazione presenta, lungo il suo sviluppo, diverse zone d'angolo.

Nello specifico, si prende ad esempio l'angolo di 90° tra la banchina di testata e la banchina nord.

Il risultato dell'applicazione dello spostamento calcolato mediante la modellazione numerica pari a 280 mm ai tratti convergenti sul punto d'angolo produce un effetto "corda" sugli elementi in prossimità del gargame speciale C-14 con il quale si realizza la curva di 90° del palancolato.

In particolare, si considera la configurazione finale in cui la posizione del vertice rimane pressoché invariata come la più verosimile, in quanto ogni altra soluzione che rispetti il principio di congruenza e di continuità del palancolato, escludendo possibili distacchi in corrispondenza dell'angolo, comporta l'inverosimile regressione verso il terrapieno del punto di vertice.

In questa situazione come è possibile apprezzare dalla ricostruzione geometrica del palancolato deformato riportato in Fig.1, i gargami degli elementi che precedono e succedono l'angolo sono sottoposti a **rotazioni inammissibili di circa 13°**.

Allo stesso modo anche in corrispondenza del gargame speciale d'angolo C-14 **le rotazioni superano notevolmente il valore ammissibile di 5°**.

Applicando lo stesso criterio utilizzato si è potuto stimare lo spostamento che indurrebbe la rotazione ammissibile ai gargami pari a α_{max} = 5°, questo è rappresentato in Fig.2 e vale circa 118 mm.

Risulta dunque che **lo spostamento atteso supera quello ammissibile, con un rapporto spostamento calcolato/spostamento ammissibile pari a 2.37.** Questo a dimostrazione dell'incompatibilità del sistema di conterminazione offerto in fase di gara, superato peraltro dalla soluzione più performante del Progetto Esecutivo di Fusione ed Integrazione.

6.2 COMPORTAMENTO DEI TRATTI RETTILINEI SOGGETTI A CEDIMENTI DIFFERENZIALI

In relazione alle molteplici esperienze sui palancolati simili, in considerazione della notevole entità degli spsotamenti attesi, è d'obbligo prendere in considerazione effetti localizzati del comportamento deformativo dell'insieme terreno-struttura.

Fissato il valore massimo dello spostamento atteso pari a 28 cm, calcolato con le analisi numeriche condotte mediante Plaxis, vale la pena valutare possibili situazioni, ancorché localizzate, in cui si esplichino in maniera differenziale gli effetti dei carichi e dei sovraccarichi. Tale esigenza vale a maggior ragione nel caso in studio, in

cui il palancolato viene contrastato con una scogliera da realizzare progressivamente e contemporaneamente al rinterro a tergo.

L'analisi di sensibilità condotta è basata sulla stima delle componenti rotazionali nei gargami in corrispondenza di spostamenti differenziali compresi tra 0 e 280 mm, prendendo in considerazione un tratto limitato di palancolato composto dal modulo base di 2 e di 3 palancole doppie corrispondenti a ml 1400 e 2100 mm.

I risultati sono rappresentati in Fig.3 e rilevano che:

- in corrispondenza dello spostamento massimo differenziale di 280 mm nel 100% dei casi si supera il valore di rotazione ammissibile di 5°;
- se il cedimento differenziale coinvolge n.2 palancole, nel 75% dei casi il gargame va fuori servizio.

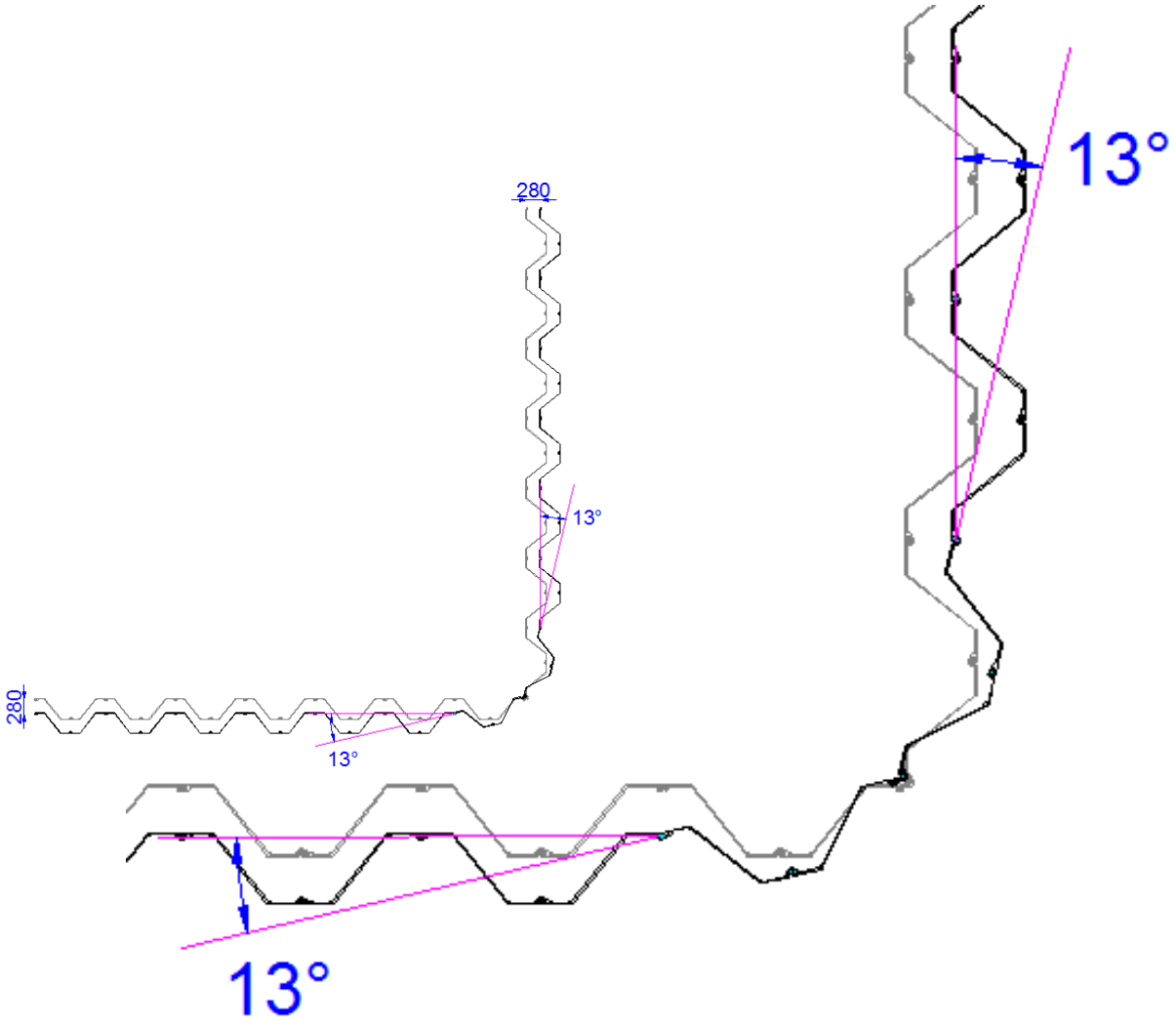


Figura 1 – Configurazione deformata del palancolato in corrispondenza dell'angolo

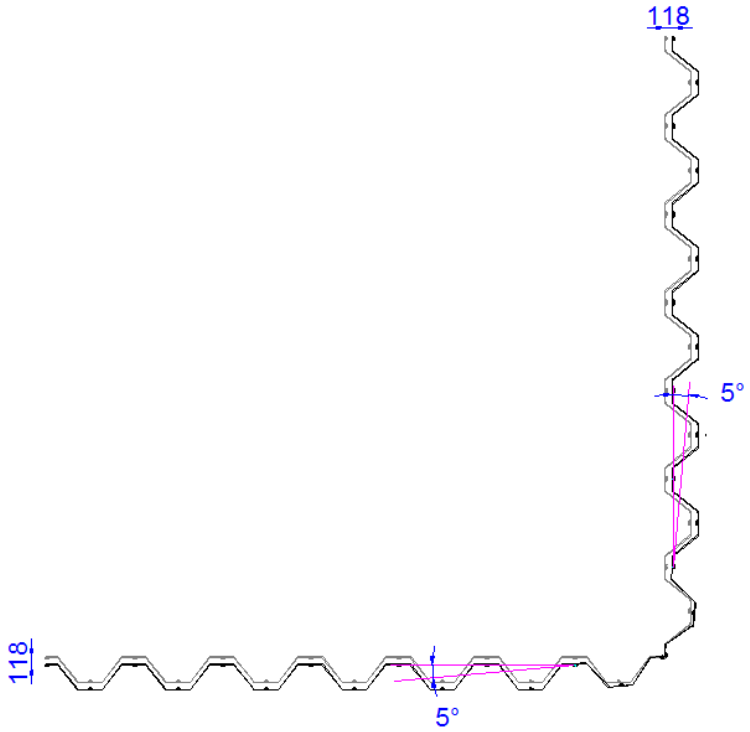


Figura 2 – Configurazione deformata limite ammissibile in corrispondenza dell' angolo

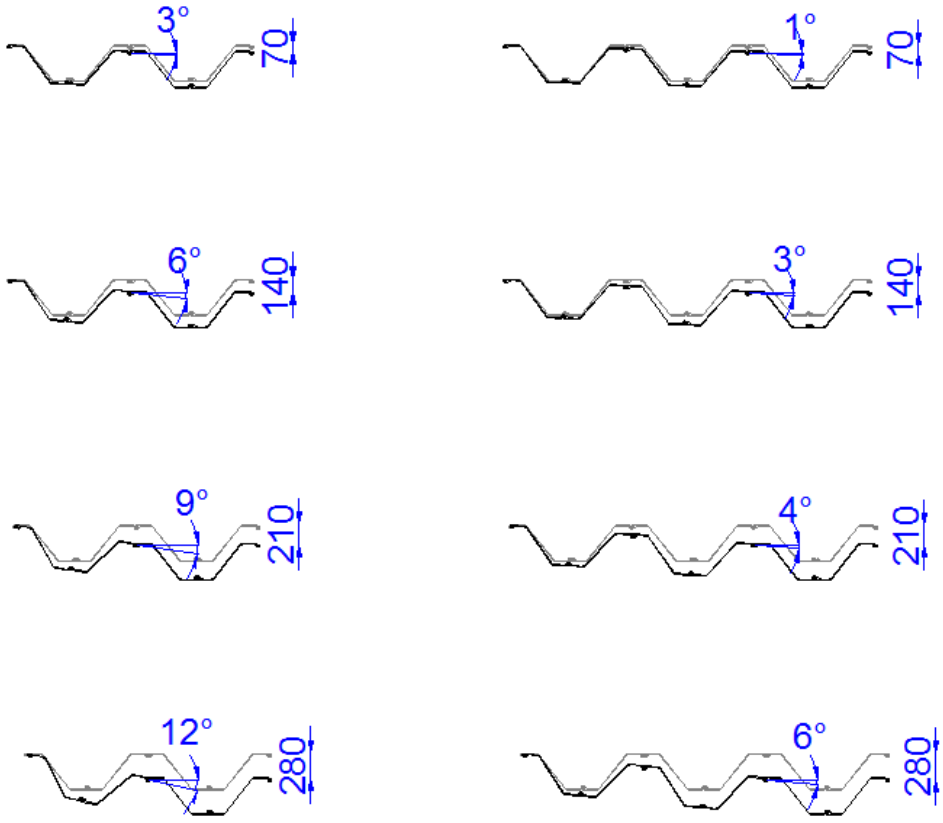


Figura 3 – Risultati dell'analisi degli spostamenti differenziali

PLAXIS Report

INDICE

1.1.1.1.1 Materials - Soil and interfaces - Hardening soil

Identification		**Limi grigiastri**	**Argille giallastre**	**Argille grigio-azzurre**
Identification number		1	2	3
Drainage type		Drained	Drained	Drained
Colour				
Comments				
γ_{unsat}	kN/m³	18,30	18,70	19,00
γ_{sat}	kN/m³	18,30	18,70	19,00
Dilatancy cut-off		No	No	No
e_{init}		0,7000	0,7000	0,7000
e_{min}		0,000	0,000	0,000
e_{max}		999,0	999,0	999,0
Rayleigh α		0,000	0,000	0,000
Rayleigh β		0,000	0,000	0,000
E_{50}^{ref}	kN/m²	8750	12,50E3	18,75E3
E_{oed}^{ref}	kN/m²	7000	10,00E3	15,00E3
E_{ur}^{ref}	kN/m²	26,25E3	37,50E3	56,25E3
power (m)		0,5000	0,5000	0,5000
Use alternatives		No	No	No

Identification		**Limi grigiastri**	**Argille giallastre**	**Argille grigio-azzurre**
C_c		0,05586	0,03910	0,02607
C_s		0,01341	9,384E-3	6,256E-3
e_{init}		0,7000	0,7000	0,7000
c_{ref}	kN/m²	0,000	30,00	50,00
φ (phi)	°	18,00	22,00	25,00
ψ (psi)	°	0,000	0,000	0,000
Set to default values		Yes	Yes	Yes
v_{ur}		0,2000	0,2000	0,2000
p_{ref}	kN/m²	100,0	100,0	100,0
K_0^{nc}		0,6910	0,6254	0,5774
c_{inc}	kN/m²/m	0,000	0,000	0,000
y_{ref}	m	0,000	0,000	0,000
R_f		0,9000	0,9000	0,9000
Tension cut-off		Yes	Yes	Yes
Tensile strength	kN/m²	0,000	0,000	0,000
Undrained behaviour		Standard	Standard	Standard
Skempton-B		0,9866	0,9866	0,9866
v_u		0,4950	0,4950	0,4950
$K_{w,ref}$ / n	kN/m²	1,076E6	1,536E6	2,305E6

Identification		**Limi grigiastri**	**Argille giallastre**	**Argille grigio-azzurre**
Strength		Manual	Manual	Manual
R_{inter}		0,6700	0,6700	0,6700
Consider gap closure		Yes	Yes	Yes
δ_{inter}		0,000	0,000	0,000
R	m² K/kW	0,000	0,000	0,000
K_0 determination		Automatic	Automatic	Automatic
$K_{0,x} = K_{0,z}$		Yes	Yes	Yes
$K_{0,x}$		0,6910	0,6254	0,6429
$K_{0,z}$		0,6910	0,6254	0,6429
OCR		1,000	1,000	1,200
POP	kN/m²	0,000	0,000	0,000
Data set		Standard	Standard	Standard
Type		Coarse	Coarse	Coarse
< 2 µm	%	10,00	10,00	10,00
2 µm - 50 µm	%	13,00	13,00	13,00
50 µm - 2 mm	%	77,00	77,00	77,00
Set to default values		No	No	No
k_x	m/day	0,000	0,000	0,000
k_y	m/day	0,000	0,000	0,000

Identification		**Limi grigiastri**	**Argille giallastre**	**Argille grigio-azzurre**
$-\psi_{unsat}$	m	10,00E3	10,00E3	10,00E3
e_{init}		0,7000	0,7000	0,7000
S_s	1/m	0,000	0,000	0,000
c_k		1,000E15	1,000E15	1,000E15
c_s	kJ/t/K	0,000	0,000	0,000
λ_s	kW/m/K	0,000	0,000	0,000
ρ_s	t/m³	0,000	0,000	0,000
Solid thermal expansion		Linear	Linear	Linear
α_x	1/K	0,000	0,000	0,000
α_y	1/K	0,000	0,000	0,000
α_z	1/K	0,000	0,000	0,000
D_v	m²/day	0,000	0,000	0,000
f_{Tv}		0,000	0,000	0,000
Unfrozen water content		No	No	No

1.1.1.1.2 Materials - Soil and interfaces - Mohr-Coulomb

Identification		Mat. di riempimento	Bonifica	Scogli I Cat.	Scogli Naturali
Identification number		4	5	6	7
Drainage type		Drained	Drained	Drained	Drained
Colour					
Comments					
γ_{unsat}	kN/m³	20,00	20,00	22,00	22,00
γ_{sat}	kN/m³	20,00	20,00	22,00	22,00
Dilatancy cut-off		No	No	No	No
e_{init}		0,6000	0,7000	0,5000	0,5000
e_{min}		0,000	0,000	0,000	0,000
e_{max}		999,0	999,0	999,0	999,0
Rayleigh α		0,000	0,000	0,000	0,000
Rayleigh β		0,000	0,000	0,000	0,000
E	kN/m²	50,00E3	50,00E3	80,00E3	80,00E3
v (nu)		0,4000	0,4000	0,4000	0,4000
G	kN/m²	17,86E3	17,86E3	28,57E3	28,57E3
E_{oed}	kN/m²	107,1E3	107,1E3	171,4E3	171,4E3
c_{ref}	kN/m²	0,000	0,000	0,000	0,000

Identification		Mat. di riempimento	Bonifica	Scogli I Cat.	Scogli Naturali
φ (phi)	°	36,00	36,00	40,00	42,00
ψ (psi)	°	0,000	0,000	0,000	0,000
V_s	m/s	93,59	93,59	112,9	112,9
V_p	m/s	229,2	229,2	276,5	276,5
Set to default values		Yes	Yes	Yes	Yes
E_{inc}	kN/m²/m	0,000	0,000	0,000	0,000
y_{ref}	m	0,000	0,000	0,000	0,000
c_{inc}	kN/m²/m	0,000	0,000	0,000	0,000
y_{ref}	m	0,000	0,000	0,000	0,000
Tension cut-off		Yes	Yes	Yes	Yes
Tensile strength	kN/m²	0,000	0,000	0,000	0,000
Undrained behaviour		Standard	Standard	Standard	Standard
Skempton-B		0,9532	0,9532	0,9532	0,9532
v_u		0,4950	0,4950	0,4950	0,4950
$K_{w,ref}$ / n	kN/m²	1,696E6	1,696E6	2,714E6	2,714E6
Strength		Manual	Manual	Manual	Manual
R_{inter}		0,6700	0,6700	0,6700	0,6700
Consider gap closure		Yes	Yes	Yes	Yes
δ_{inter}		0,000	0,000	0,000	0,000

Identification		**Mat. di riempimento**	**Bonifica**	**Scogli I Cat.**	**Scogli Naturali**
R	m² K/kW	0,000	0,000	0,000	0,000
K_0 determination		Automatic	Manual	Automatic	Automatic
$K_{0,x} = K_{0,z}$		Yes	Yes	Yes	Yes
$K_{0,x}$		0,4122	0,6028	0,4122	0,3843
$K_{0,z}$		0,4122	0,6028	0,4122	0,3843
Data set		Standard	Standard	Standard	Standard
Type		Coarse	Coarse	Coarse	Coarse
< 2 µm	%	10,00	10,00	10,00	10,00
2 µm - 50 µm	%	13,00	13,00	13,00	13,00
50 µm - 2 mm	%	77,00	77,00	77,00	77,00
Set to default values		No	No	No	No
k_x	m/day	0,000	0,000	0,000	0,000
k_y	m/day	0,000	0,000	0,000	0,000
$-\psi_{unsat}$	m	10,00E3	10,00E3	10,00E3	10,00E3
e_{init}		0,6000	0,7000	0,5000	0,5000
S_s	1/m	0,000	0,000	0,000	0,000
c_k		1,000E15	1,000E15	1,000E15	1,000E15
c_s	kJ/t/K	0,000	0,000	0,000	0,000
λ_s	kW/m/K	0,000	0,000	0,000	0,000

Identification		**Mat. di riempimento**	**Bonifica**	**Scogli I Cat.**	**Scogli Naturali**
ρ_s	t/m³	0,000	0,000	0,000	0,000
Solid thermal expansion		Linear	Linear	Linear	Linear
α_x	1/K	0,000	0,000	0,000	0,000
α_y	1/K	0,000	0,000	0,000	0,000
α_z	1/K	0,000	0,000	0,000	0,000
D_v	m²/day	0,000	0,000	0,000	0,000
f_{Tv}		0,000	0,000	0,000	0,000
Unfrozen water content		No	No	No	No

1.1.1.1.3 Materials - Soil and interfaces - Linear elastic

Identification		**Cls**
Identification number		8
Drainage type		Non-porous
Colour		
Comments		
γ_{unsat}	kN/m³	25,00
γ_{sat}	kN/m³	25,00
Dilatancy cut-off		No
e_{init}		0,5000
e_{min}		0,000
e_{max}		999,0
Rayleigh α		0,000
Rayleigh β		0,000
E	kN/m²	35,00E6
v (nu)		0,1500
G	kN/m²	15,22E6
E_{oed}	kN/m²	36,96E6
V_s	m/s	2444

Identification		**Cls**
V_p	m/s	3808
Set to default values		Yes
E_{inc}	kN/m²/m	0,000
y_{ref}	m	0,000
Strength		Rigid
R_{inter}		1,000
Consider gap closure		Yes
δ_{inter}		0,000
R	m² K/kW	0,000
K_0 determination		Automatic
$K_{0,x} = K_{0,z}$		Yes
$K_{0,x}$		1,000
$K_{0,z}$		1,000
k_x	m/day	0,000
k_y	m/day	0,000
$-\psi_{unsat}$	m	10,00E3
e_{init}		0,5000
c_k		1,000E15
c_s	kJ/t/K	0,000

Identification		**Cls**
λ_s	kW/m/K	0,000
ρ_s	t/m³	0,000
Solid thermal expansion		Linear
α_x	1/K	0,000
α_y	1/K	0,000
α_z	1/K	0,000
D_v	m²/day	0,000
f_{Tv}		0,000
Unfrozen water content		No

1.1.1.2 Materials - Plates

Identification		AZ 18-700	Palo 1500 c.a. (6,00)
Identification number		1	2
Comments			
Colour			
Material type		Elastic	Elastic
Isotropic		Yes	Yes
End bearing		No	No
EA_1	kN/m	2,860E6	8,394E6
EA_2	kN/m	2,860E6	8,394E6
EI	kN m²/m	77,87E3	1,180E6
d	m	0,5716	1,299
w	kN/m/m	1,100	12,00
v (nu)		0,000	0,000
Rayleigh α		0,000	0,000
Rayleigh β		0,000	0,000
Identification number		1	2
c	kJ/t/K	0,000	0,000
λ	kW/m/K	0,000	0,000

Identification		AZ 18-700	Palo 1500 c.a. (6,00)
ρ	t/m³	0,000	0,000
α	1/K	0,000	0,000

1.1.1.1 Calculation information

Calculation information				
Step info				
Phase	Stabilità Globale [Phase_13]			
Step	Initial			
Calulation mode	Classical mode			
Step type	Safety			
Updated mesh	False			
Solver type	Picos			
Kernel type	64 bit			
Extrapolation factor	0,5000			
Relative stiffness	0,7207E-3			
Multipliers				
Soil weight			ΣM_{Weight}	1,000
Strength reduction factor	M_{sf}	1,641E-3	ΣM_{sf}	0,845
Time	Increment	0,000	End time	0,000
Staged construction				
Active proportion total area	M_{Area}	0,000	ΣM_{Area}	0,9251
Active proportion of stage	M_{Stage}	0,000	ΣM_{Stage}	0,000

Calculation information					
Forces					
F_X	0,000 kN/m				
F_Y	0,000 kN/m				
Consolidation					
Realised $P_{Excess,Max}$	0,000 kN/m^2				

1.1.1.2 Calculation information

Calculation information				
Step info				
Phase	Safety [Phase_22]			
Step	Initial			
Calulation mode	Classical mode			
Step type	Safety			
Updated mesh	False			
Solver type	Picos			
Kernel type	64 bit			
Extrapolation factor	1,000			
Relative stiffness	0,7129E-3			
Multipliers				
Soil weight			ΣM_{Weight}	1,000
Strength reduction factor	M_{sf}	5,738E-3	ΣM_{sf}	1,160
Time	Increment	0,000	End time	0,000
Staged construction				
Active proportion total area	M_{Area}	0,000	ΣM_{Area}	0,9251
Active proportion of stage	M_{Stage}	0,000	ΣM_{Stage}	0,000

Calculation information				
Forces				
F_X	0,000 kN/m			
F_Y	0,000 kN/m			
Consolidation				
Realised $P_{Excess,Max}$	0,000 kN/m^2			

1.1.1.3 Calculation information

Calculation information				
Step info				
Phase	Stabilità [Phase_21]			
Step	Initial			
Calulation mode	Classical mode			
Step type	Safety			
Updated mesh	False			
Solver type	Picos			
Kernel type	64 bit			
Extrapolation factor	0,5000			
Relative stiffness	7,246E-6			
Multipliers				
Soil weight			ΣM_{Weight}	1,000
Strength reduction factor	M_{sf}	1,681E-3	ΣM_{sf}	1,130
Time	Increment	0,000	End time	0,000
Staged construction				
Active proportion total area	M_{Area}	0,000	ΣM_{Area}	0,9125
Active proportion of stage	M_{Stage}	0,000	ΣM_{Stage}	0,000

Calculation information				
Forces				
F_X	0,000 kN/m			
F_Y	0,000 kN/m			
Consolidation				
Realised $P_{Excess,Max}$	0,000 kN/m^2			

1.1.1.4 Calculation information per phase

Identification	Phase	Start from	Calculation type	Loading input	Pore pressure	Time step [day]	First step	Last step	Log
Initial phase [InitialPhase]	0	N/A	Gravity loading	N/A	Phreatic	0,000	55	68	
Plastic nil step [Phase_11]	19	0	Plastic	Ultimate time	Phreatic	0,000	0	1	
Scavo di 1m [Phase_2]	10	19	Plastic	Ultimate time	Phreatic	0,000	23	27	
Infissione Palancola [Phase_1]	7	10	Plastic	Ultimate time	Phreatic	0,000	2	3	
Bonifica [Phase_3]	11	7	Plastic	Ultimate time	Phreatic	0,000	369	382	
Pali [Phase_14]	18	11	Plastic	Ultimate time	Phreatic	0,000	4	8	
1° Riempimento [Phase_4]	12	18	Plastic	Ultimate time	Phreatic	0,000	541	559	
2° Riempimento [Phase_5]	5	12	Plastic	Ultimate time	Phreatic	0,000	28	48	
3° Riempimento [Phase_6]	6	5	Plastic	Ultimate time	Phreatic	0,000	383	401	
4° Riempimento [Phase_7]	8	6	Plastic	Ultimate time	Phreatic	0,000	402	417	
5° Riempimento [Phase_8]	9	8	Plastic	Ultimate time	Phreatic	0,000	454	470	
6° Riempimento [Phase_9]	13	9	Plastic	Ultimate time	Phreatic	0,000	471	497	
7° Riempimento [Phase_10]	14	13	Plastic	Ultimate time	Phreatic	0,000	498	518	
Realiz. Penultimo Strato [Phase_15]	1	14	Plastic	Ultimate time	Phreatic	0,000	418	437	
Palo [Phase_20]	28	1	Plastic	Ultimate time	Phreatic	0,000	49	54	
Realiz. Impalcato [Phase_16]	22	28	Plastic	Ultimate time	Phreatic	0,000	9	14	
Realiz. Ultimo strato [Phase_17]	24	22	Plastic	Ultimate time	Phreatic	0,000	438	446	
Carichi [Phase_18]	25	24	Plastic	Ultimate time	Phreatic	0,000	519	540	
Sisma [Phase_19]	26	25	Plastic	Ultimate time	Phreatic	0,000	15	22	
Stabilità Globale [Phase_13]	17	26	Safety	Incremental multipliers	Use pressures from previous phase	0,000	69	168	
Safety [Phase_22]	30	25	Safety	Incremental multipliers	Use pressures from previous phase	0,000	169	268	
Stabilità [Phase_21]	29	14	Safety	Incremental multipliers	Use pressures from previous phase	0,000	269	368	

3.1.1.1.1.1 Calculation results, Plate, Sisma [Phase_19] (26/22), Table of total displacements

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_3_1	28	1	-18,000	1,100	269,103	-411,859	491,980
Element 1-1 (Plate)	27	2	-18,000	1,075	269,009	-411,859	491,928
(Palo 1500 c.a. (6,00))	26	3	-18,000	1,050	268,917	-411,858	491,877
	25	4	-18,000	1,025	268,826	-411,858	491,827
	172	5	-18,000	1,000	268,737	-411,857	491,778
Plate_2_1	707	1	-12,000	1,100	321,188	-352,547	476,918
Element 2-2 (Plate)	706	2	-12,000	1,075	320,999	-352,547	476,791
(Palo 1500 c.a. (6,00))	705	3	-12,000	1,050	320,815	-352,546	476,667
	704	4	-12,000	1,025	320,635	-352,546	476,545
	3296	5	-12,000	1,000	320,456	-352,545	476,424
Plate_4_1	6222	1	-6,000	1,100	323,863	-322,386	456,968
Element 3-3 (Plate)	6221	2	-6,000	1,075	323,680	-322,386	456,838
(Palo 1500 c.a. (6,00))	6220	3	-6,000	1,050	323,505	-322,386	456,714
	6219	4	-6,000	1,025	323,335	-322,385	456,593
	7351	5	-6,000	1,000	323,167	-322,384	456,474
Plate_1_1	8613	1	0,000	1,100	327,552	-289,951	437,449

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 4-4 (Plate)	8612	2	0,000	1,075	327,377	-289,951	437,318
(Palo 1500 c.a. (6,00))	8611	3	0,000	1,050	327,209	-289,950	437,192
	8610	4	0,000	1,025	327,047	-289,950	437,070
	9836	5	0,000	1,000	326,886	-289,949	436,949
Plate_3_2	172	1	-18,000	1,000	268,737	-411,857	491,778
Element 5-5 (Plate)	175	2	-18,000	0,975	268,647	-411,856	491,728
(Palo 1500 c.a. (6,00))	174	3	-18,000	0,950	268,556	-411,854	491,677
	173	4	-18,000	0,925	268,463	-411,852	491,625
	228	5	-18,000	0,900	267,354	-465,371	536,701
Plate_2_2	3296	1	-12,000	1,000	320,456	-352,545	476,424
Element 6-6 (Plate)	3297	2	-12,000	0,975	320,277	-352,544	476,303
(Palo 1500 c.a. (6,00))	3298	3	-12,000	0,950	320,096	-352,542	476,180
	3299	4	-12,000	0,925	319,911	-352,541	476,055
	3320	5	-12,000	0,900	319,721	-352,539	475,926
Plate_4_2	7351	1	-6,000	1,000	323,167	-322,384	456,474
Element 7-7 (Plate)	7352	2	-6,000	0,975	322,999	-322,383	456,354
(Palo 1500 c.a. (6,00))	7353	3	-6,000	0,950	322,829	-322,381	456,232
	7354	4	-6,000	0,925	322,652	-322,380	456,107
	7375	5	-6,000	0,900	322,468	-322,378	455,975

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_1_2	9836	1	0,000	1,000	326,886	-289,949	436,949
Element 8-8 (Plate)	9839	2	0,000	0,975	326,725	-289,947	436,828
(Palo 1500 c.a. (6,00))	9838	3	0,000	0,950	326,562	-289,945	436,705
	9837	4	0,000	0,925	326,394	-289,943	436,578
	10780	5	0,000	0,900	326,218	-289,941	436,444
Plate_3_3	228	1	-18,000	0,900	267,354	-465,371	536,701
Element 9-9 (Plate)	231	2	-18,000	0,875	267,236	-465,370	536,642
(Palo 1500 c.a. (6,00))	230	3	-18,000	0,850	267,119	-465,365	536,579
	229	4	-18,000	0,825	266,991	-465,361	536,512
	421	5	-18,000	0,800	266,722	-465,308	536,332
Plate_5_1	347	1	-16,000	0,900	271,342	-406,618	488,840
Element 10-10 (Plate)	348	2	-16,000	0,875	271,225	-406,618	488,775
(AZ 18-700)	349	3	-16,000	0,850	271,107	-406,618	488,709
	350	4	-16,000	0,825	270,989	-406,618	488,644
	513	5	-16,000	0,800	270,872	-406,618	488,579
Plate_2_3	3320	1	-12,000	0,900	319,721	-352,539	475,926
Element 11-11 (Plate)	3321	2	-12,000	0,675	317,975	-352,521	474,741
(Palo 1500 c.a. (6,00))	3322	3	-12,000	0,450	316,219	-352,503	473,553
	3323	4	-12,000	0,225	314,452	-352,485	472,362

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	4924	5	-12,000	0,000	312,676	-352,467	471,168
Plate_4_3	7375	1	-6,000	0,900	322,468	-322,378	455,975
Element 12-12 (Plate)	7376	2	-6,000	0,675	320,759	-322,359	454,755
(Palo 1500 c.a. (6,00))	7377	3	-6,000	0,450	319,034	-322,341	453,527
	7378	4	-6,000	0,225	317,294	-322,322	452,291
	8307	5	-6,000	0,000	315,538	-322,304	451,047
Plate_1_3	10780	1	0,000	0,900	326,218	-289,941	436,444
Element 13-13 (Plate)	10781	2	0,000	0,675	324,584	-289,918	435,210
(Palo 1500 c.a. (6,00))	10782	3	0,000	0,450	322,935	-289,895	433,966
	10783	4	0,000	0,225	321,270	-289,873	432,713
	12104	5	0,000	0,000	319,589	-289,850	431,451
Plate_3_4	421	1	-18,000	0,800	266,722	-465,308	536,332
Element 14-14 (Plate)	424	2	-18,000	0,600	266,018	-465,397	536,060
(Palo 1500 c.a. (6,00))	423	3	-18,000	0,400	265,428	-465,458	535,820
	422	4	-18,000	0,200	264,857	-465,493	535,568
	3116	5	-18,000	0,000	264,294	-465,512	535,306
Plate_5_2	513	1	-16,000	0,800	270,872	-406,618	488,579
Element 15-15 (Plate)	514	2	-16,000	0,600	269,930	-406,618	488,058
(AZ 18-700)	515	3	-16,000	0,400	268,989	-406,618	487,538

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	516	4	-16,000	0,200	268,048	-406,618	487,019
	3140	5	-16,000	0,000	267,106	-406,617	486,501
Plate_2_4	4924	1	-12,000	0,000	312,676	-352,467	471,168
Element 16-16 (Plate)	4925	2	-12,000	-0,194	311,133	-352,451	470,134
(Palo 1500 c.a. (6,00))	4926	3	-12,000	-0,389	309,583	-352,436	469,098
	4927	4	-12,000	-0,583	308,027	-352,420	468,061
	6355	5	-12,000	-0,778	306,465	-352,405	467,022
Plate_3_5	3116	1	-18,000	0,000	264,294	-465,512	535,306
Element 17-17 (Plate)	3119	2	-18,000	-0,500	262,586	-465,472	534,430
(Palo 1500 c.a. (6,00))	3118	3	-18,000	-1,000	260,774	-465,350	533,436
	3117	4	-18,000	-1,500	258,853	-465,210	532,377
	6048	5	-18,000	-2,000	256,737	-465,046	531,208
Plate_5_3	3140	1	-16,000	0,000	267,106	-406,617	486,501
Element 18-18 (Plate)	3141	2	-16,000	-0,500	264,753	-406,617	485,213
(AZ 18-700)	3142	3	-16,000	-1,000	262,399	-406,617	483,933
	3143	4	-16,000	-1,500	260,043	-406,616	482,658
	4890	5	-16,000	-2,000	257,684	-406,615	481,391
Plate_4_4	8307	1	-6,000	0,000	315,538	-322,304	451,047
Element 19-19 (Plate)	8308	2	-6,000	-0,500	311,584	-322,262	448,261

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	8309	3	-6,000	-1,000	307,563	-322,221	445,445
	8310	4	-6,000	-1,500	303,479	-322,180	442,606
	9574	5	-6,000	-2,000	299,339	-322,139	439,746
Plate_1_4	12104	1	0,000	0,000	319,589	-289,850	431,451
Element 20-20 (Plate)	12105	2	0,000	-0,500	315,800	-289,799	428,618
(Palo 1500 c.a. (6,00))	12106	3	0,000	-1,000	311,937	-289,749	425,746
	12107	4	0,000	-1,500	308,002	-289,698	422,836
	12356	5	0,000	-2,000	303,995	-289,648	419,892
Plate_2_5	6355	1	-12,000	-0,778	306,465	-352,405	467,022
Element 21-21 (Plate)	6356	2	-12,000	-1,083	303,997	-352,380	465,388
(Palo 1500 c.a. (6,00))	6357	3	-12,000	-1,389	301,516	-352,356	463,753
	6358	4	-12,000	-1,694	299,022	-352,331	462,116
	7461	5	-12,000	-2,000	296,516	-352,307	460,480
Plate_5_4	4890	1	-16,000	-2,000	257,684	-406,615	481,391
Element 22-22 (Plate)	4891	2	-16,000	-2,250	256,504	-406,615	480,759
(AZ 18-700)	4892	3	-16,000	-2,500	255,323	-406,614	480,130
	4893	4	-16,000	-2,750	254,143	-406,613	479,503
	6072	5	-16,000	-3,000	252,962	-406,612	478,877
Plate_2_6	7461	1	-12,000	-2,000	296,516	-352,307	460,480

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 23-23 (Plate)	7462	2	-12,000	-2,381	293,378	-352,276	458,442
(Palo 1500 c.a. (6,00))	7463	3	-12,000	-2,762	290,227	-352,245	456,408
	7464	4	-12,000	-3,143	287,064	-352,215	454,380
	8367	5	-12,000	-3,524	283,892	-352,184	452,359
Plate_3_6	6048	1	-18,000	-2,000	256,737	-465,046	531,208
Element 24-24 (Plate)	6051	2	-18,000	-2,500	254,606	-464,732	529,905
(Palo 1500 c.a. (6,00))	6050	3	-18,000	-3,000	252,435	-464,358	528,537
	6049	4	-18,000	-3,500	250,245	-463,942	527,129
	6239	5	-18,000	-4,000	248,024	-463,468	525,660
Plate_4_5	9574	1	-6,000	-2,000	299,339	-322,139	439,746
Element 25-25 (Plate)	9575	2	-6,000	-2,500	295,146	-322,097	436,873
(Palo 1500 c.a. (6,00))	9576	3	-6,000	-3,000	290,906	-322,056	433,989
	9577	4	-6,000	-3,500	286,624	-322,015	431,100
	9736	5	-6,000	-4,000	282,305	-321,974	428,209
Plate_1_5	12356	1	0,000	-2,000	303,995	-289,648	419,892
Element 26-26 (Plate)	12357	2	0,000	-2,500	299,920	-289,597	416,915
(Palo 1500 c.a. (6,00))	12358	3	0,000	-3,000	295,777	-289,547	413,910
	12359	4	0,000	-3,500	291,567	-289,496	410,877
	12814	5	0,000	-4,000	287,294	-289,446	407,819

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_5_5	6072	1	-16,000	-3,000	252,962	-406,612	478,877
Element 27-27 (Plate)	6075	2	-16,000	-3,250	251,781	-406,611	478,253
(AZ 18-700)	6074	3	-16,000	-3,500	250,600	-406,610	477,632
	6073	4	-16,000	-3,750	249,420	-406,609	477,012
	7161	5	-16,000	-4,000	248,241	-406,607	476,396
Plate_2_7	8367	1	-12,000	-3,524	283,892	-352,184	452,359
Element 28-28 (Plate)	8368	2	-12,000	-3,643	282,899	-352,175	451,729
(Palo 1500 c.a. (6,00))	8369	3	-12,000	-3,762	281,906	-352,165	451,100
	8370	4	-12,000	-3,881	280,912	-352,156	450,472
	8654	5	-12,000	-4,000	279,918	-352,146	449,845
Plate_4_6	9736	1	-6,000	-4,000	282,305	-321,974	428,209
Element 29-29 (Plate)	9737	2	-6,000	-4,321	279,513	-321,947	426,353
(Palo 1500 c.a. (6,00))	9738	3	-6,000	-4,643	276,708	-321,921	424,500
	9739	4	-6,000	-4,964	273,894	-321,894	422,651
	10840	5	-6,000	-5,285	271,070	-321,868	420,806
Plate_3_7	6239	1	-18,000	-4,000	248,024	-463,468	525,660
Element 30-30 (Plate)	6240	2	-18,000	-4,500	245,716	-463,027	524,186
(Palo 1500 c.a. (6,00))	6241	3	-18,000	-5,000	243,431	-462,583	522,725
	6242	4	-18,000	-5,500	241,119	-462,065	521,193

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	7305	5	-18,000	-6,000	238,619	-461,358	519,413
Plate_5_6	7161	1	-16,000	-4,000	248,241	-406,607	476,396
Element 31-31 (Plate)	7162	2	-16,000	-4,500	245,893	-406,603	475,173
(AZ 18-700)	7163	3	-16,000	-5,000	243,555	-406,599	473,964
	7164	4	-16,000	-5,500	241,223	-406,594	472,765
	7285	5	-16,000	-6,000	238,888	-406,588	471,573
Plate_2_8	8654	1	-12,000	-4,000	279,918	-352,146	449,845
Element 32-32 (Plate)	8655	2	-12,000	-4,500	275,740	-352,106	447,226
(Palo 1500 c.a. (6,00))	8656	3	-12,000	-5,000	271,560	-352,066	444,630
	8657	4	-12,000	-5,500	267,384	-352,027	442,060
	9326	5	-12,000	-6,000	263,214	-351,987	439,519
Plate_1_6	12814	1	0,000	-4,000	287,294	-289,446	407,819
Element 33-33 (Plate)	12815	2	0,000	-4,500	282,957	-289,395	404,740
(Palo 1500 c.a. (6,00))	12816	3	0,000	-5,000	278,560	-289,345	401,642
	12817	4	0,000	-5,500	274,103	-289,294	398,527
	15162	5	0,000	-6,000	269,588	-289,244	395,398
Plate_4_7	10840	1	-6,000	-5,285	271,070	-321,868	420,806
Element 34-34 (Plate)	10841	2	-6,000	-5,464	269,497	-321,853	419,783
(Palo 1500 c.a. (6,00))	10842	3	-6,000	-5,643	267,921	-321,838	418,762

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	10843	4	-6,000	-5,821	266,344	-321,823	417,743
	11272	5	-6,000	-6,000	264,764	-321,809	416,726
Plate_3_8	7305	1	-18,000	-6,000	238,619	-461,358	519,413
Element 35-35 (Plate)	7306	2	-18,000	-6,500	235,969	-460,635	517,558
(Palo 1500 c.a. (6,00))	7307	3	-18,000	-7,000	233,589	-459,994	515,906
	7308	4	-18,000	-7,500	230,710	-458,724	513,473
	8283	5	-18,000	-8,000	226,951	-456,788	510,061
Plate_5_7	7285	1	-16,000	-6,000	238,888	-406,588	471,573
Element 36-36 (Plate)	7286	2	-16,000	-6,500	236,543	-406,582	470,385
(AZ 18-700)	7287	3	-16,000	-7,000	234,180	-406,575	469,195
	7288	4	-16,000	-7,500	231,794	-406,568	468,002
	7415	5	-16,000	-8,000	229,379	-406,560	466,804
Plate_2_9	9326	1	-12,000	-6,000	263,214	-351,987	439,519
Element 37-37 (Plate)	9327	2	-12,000	-6,500	259,053	-351,948	437,008
(Palo 1500 c.a. (6,00))	9328	3	-12,000	-7,000	254,903	-351,910	434,530
	9329	4	-12,000	-7,500	250,767	-351,871	432,085
	9340	5	-12,000	-8,000	246,646	-351,833	429,675
Plate_4_8	11272	1	-6,000	-6,000	264,764	-321,809	416,726
Element 38-38 (Plate)	11273	2	-6,000	-6,250	262,553	-321,788	415,309

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	11274	3	-6,000	-6,500	260,339	-321,767	413,897
	11275	4	-6,000	-6,750	258,124	-321,747	412,491
	13130	5	-6,000	-7,000	255,908	-321,726	411,092
Plate_4_8	13130	1	-6,000	-7,000	255,908	-321,726	411,092
Element 38-39 (Plate)	13131	2	-6,000	-7,250	253,692	-321,706	409,700
(Palo 1500 c.a. (6,00))	13132	3	-6,000	-7,500	251,476	-321,685	408,316
	13133	4	-6,000	-7,750	249,262	-321,665	406,940
	13196	5	-6,000	-8,000	247,049	-321,644	405,572
Plate_1_7	15162	1	0,000	-6,000	269,588	-289,244	395,398
Element 39-40 (Plate)	15163	2	0,000	-6,500	265,017	-289,193	392,258
(Palo 1500 c.a. (6,00))	15164	3	0,000	-7,000	260,391	-289,143	389,111
	15165	4	0,000	-7,500	255,713	-289,092	385,958
	15196	5	0,000	-8,000	250,983	-289,042	382,802
Plate_4_9	13196	1	-6,000	-8,000	247,049	-321,644	405,572
Element 40-41 (Plate)	13197	2	-6,000	-8,003	247,019	-321,644	405,553
(Palo 1500 c.a. (6,00))	13198	3	-6,000	-8,007	246,989	-321,644	405,535
	13199	4	-6,000	-8,010	246,959	-321,644	405,516
	14580	5	-6,000	-8,014	246,929	-321,643	405,497
Plate_1_8	15196	1	0,000	-8,000	250,983	-289,042	382,802

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 41-42 (Plate)	15197	2	0,000	-8,448	246,701	-288,996	379,974
(Palo 1500 c.a. (6,00))	15198	3	0,000	-8,896	242,381	-288,951	377,149
	15199	4	0,000	-9,345	238,023	-288,906	374,328
	17051	5	0,000	-9,793	233,629	-288,861	371,514
Plate_3_9	8283	1	-18,000	-8,000	226,951	-456,788	510,061
Element 42-43 (Plate)	8284	2	-18,000	-8,500	223,162	-454,963	506,747
(Palo 1500 c.a. (6,00))	8285	3	-18,000	-9,000	220,213	-452,955	503,649
	8286	4	-18,000	-9,500	216,121	-449,734	498,968
	9534	5	-18,000	-10,000	212,896	-448,211	496,203
Plate_5_8	7415	1	-16,000	-8,000	229,379	-406,560	466,804
Element 43-44 (Plate)	7416	2	-16,000	-8,500	226,939	-406,552	465,603
(AZ 18-700)	7417	3	-16,000	-9,000	224,474	-406,543	464,398
	7418	4	-16,000	-9,500	221,984	-406,533	463,191
	8509	5	-16,000	-10,000	219,475	-406,522	461,984
Plate_2_10	9340	1	-12,000	-8,000	246,646	-351,833	429,675
Element 44-45 (Plate)	9341	2	-12,000	-8,500	242,540	-351,795	427,300
(Palo 1500 c.a. (6,00))	9342	3	-12,000	-9,000	238,452	-351,758	424,962
	9343	4	-12,000	-9,500	234,382	-351,721	422,661
	9910	5	-12,000	-10,000	230,331	-351,684	420,397

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_4_10	14580	1	-6,000	-8,014	246,929	-321,643	405,497
Element 45-46 (Plate)	14581	2	-6,000	-8,510	242,541	-321,603	402,808
(Palo 1500 c.a. (6,00))	14582	3	-6,000	-9,007	238,166	-321,563	400,157
	14583	4	-6,000	-9,503	233,809	-321,523	397,547
	15560	5	-6,000	-10,000	229,472	-321,484	394,980
Plate_1_9	17051	1	0,000	-9,793	233,629	-288,861	371,514
Element 46-47 (Plate)	17052	2	0,000	-9,845	233,119	-288,855	371,190
(Palo 1500 c.a. (6,00))	17053	3	0,000	-9,896	232,608	-288,850	370,865
	17054	4	0,000	-9,948	232,098	-288,845	370,541
	17107	5	0,000	-10,000	231,586	-288,840	370,217
Plate_3_10	9534	1	-18,000	-10,000	212,896	-448,211	496,203
Element 47-48 (Plate)	9535	2	-18,000	-10,500	210,770	-447,577	494,721
(Palo 1500 c.a. (6,00))	9536	3	-18,000	-11,000	209,018	-446,709	493,191
	9537	4	-18,000	-11,500	206,247	-444,734	490,230
	10714	5	-18,000	-12,000	203,509	-443,280	487,763
Plate_5_9	8509	1	-16,000	-10,000	219,475	-406,522	461,984
Element 48-49 (Plate)	8510	2	-16,000	-10,500	216,954	-406,511	460,782
(AZ 18-700)	8511	3	-16,000	-11,000	214,436	-406,498	459,590
	8512	4	-16,000	-11,500	211,927	-406,485	458,413

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	9722	5	-16,000	-12,000	209,431	-406,471	457,253
Plate_2_11	9910	1	-12,000	-10,000	230,331	-351,684	420,397
Element 49-50 (Plate)	9911	2	-12,000	-10,500	226,301	-351,647	418,172
(Palo 1500 c.a. (6,00))	9912	3	-12,000	-11,000	222,293	-351,611	415,986
	9913	4	-12,000	-11,500	218,310	-351,575	413,840
	12208	5	-12,000	-12,000	214,352	-351,539	411,736
Plate_4_11	15560	1	-6,000	-10,000	229,472	-321,484	394,980
Element 50-51 (Plate)	15561	2	-6,000	-10,500	225,129	-321,445	392,441
(Palo 1500 c.a. (6,00))	15562	3	-6,000	-11,000	220,810	-321,407	389,948
	15563	4	-6,000	-11,500	216,515	-321,369	387,501
	17427	5	-6,000	-12,000	212,240	-321,332	385,097
Plate_1_10	17107	1	0,000	-10,000	231,586	-288,840	370,217
Element 51-52 (Plate)	17108	2	0,000	-10,250	229,111	-288,814	368,654
(Palo 1500 c.a. (6,00))	17109	3	0,000	-10,500	226,626	-288,789	367,094
	17110	4	0,000	-10,750	224,130	-288,764	365,539
	18659	5	0,000	-11,000	221,624	-288,738	363,987
Plate_1_10	18659	1	0,000	-11,000	221,624	-288,738	363,987
Element 51-53 (Plate)	18660	2	0,000	-11,250	219,108	-288,713	362,441
(Palo 1500 c.a. (6,00))	18661	3	0,000	-11,500	216,583	-288,687	360,900

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	18662	4	0,000	-11,750	214,049	-288,662	359,364
	19563	5	0,000	-12,000	211,506	-288,636	357,835
Plate_1_11	19563	1	0,000	-12,000	211,506	-288,636	357,835
Element 52-54 (Plate)	19564	2	0,000	-12,126	210,223	-288,624	357,068
(Palo 1500 c.a. (6,00))	19565	3	0,000	-12,252	208,938	-288,611	356,302
	19566	4	0,000	-12,378	207,652	-288,598	355,539
	20751	5	0,000	-12,503	206,363	-288,585	354,777
Plate_3_11	10714	1	-18,000	-12,000	203,509	-443,280	487,763
Element 53-55 (Plate)	10715	2	-18,000	-12,500	202,046	-442,605	486,541
(Palo 1500 c.a. (6,00))	10716	3	-18,000	-13,000	200,558	-441,922	485,302
	10717	4	-18,000	-13,500	199,253	-441,343	484,237
	11906	5	-18,000	-14,000	198,272	-440,830	483,366
Plate_5_10	9722	1	-16,000	-12,000	209,431	-406,471	457,253
Element 54-56 (Plate)	9723	2	-16,000	-12,500	206,942	-406,457	456,106
(AZ 18-700)	9724	3	-16,000	-13,000	204,443	-406,444	454,966
	9725	4	-16,000	-13,500	201,922	-406,431	453,826
	11100	5	-16,000	-14,000	199,371	-406,419	452,687
Plate_2_12	12208	1	-12,000	-12,000	214,352	-351,539	411,736
Element 55-57 (Plate)	12209	2	-12,000	-12,500	210,424	-351,503	409,674

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	12210	3	-12,000	-13,000	206,528	-351,467	407,656
	12211	4	-12,000	-13,500	202,669	-351,432	405,684
	13116	5	-12,000	-14,000	198,851	-351,397	403,759
Plate_4_12	17427	1	-6,000	-12,000	212,240	-321,332	385,097
Element 56-58 (Plate)	17428	2	-6,000	-12,500	207,983	-321,295	382,737
(Palo 1500 c.a. (6,00))	17429	3	-6,000	-13,000	203,740	-321,258	380,417
	17430	4	-6,000	-13,500	199,507	-321,222	378,135
	18313	5	-6,000	-14,000	195,282	-321,185	375,892
Plate_1_12	20751	1	0,000	-12,503	206,363	-288,585	354,777
Element 57-59 (Plate)	20752	2	0,000	-12,878	202,521	-288,547	352,525
(Palo 1500 c.a. (6,00))	20753	3	0,000	-13,252	198,665	-288,508	350,293
	20754	4	0,000	-13,626	194,795	-288,470	348,081
	21591	5	0,000	-14,000	190,914	-288,431	345,891
Plate_3_12	11906	1	-18,000	-14,000	198,272	-440,830	483,366
Element 58-60 (Plate)	11909	2	-18,000	-14,250	197,905	-440,540	482,952
(Palo 1500 c.a. (6,00))	11908	3	-18,000	-14,500	197,584	-440,243	482,548
	11907	4	-18,000	-14,750	197,268	-439,927	482,131
	13034	5	-18,000	-15,000	196,785	-439,473	481,519
Plate_5_11	11100	1	-16,000	-14,000	199,371	-406,419	452,687

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 59-61 (Plate)	11101	2	-16,000	-14,250	198,086	-406,413	452,117
(AZ 18-700)	11102	3	-16,000	-14,500	196,792	-406,408	451,547
	11103	4	-16,000	-14,750	195,486	-406,402	450,974
	12248	5	-16,000	-15,000	194,162	-406,395	450,395
Plate_2_13	13116	1	-12,000	-14,000	198,851	-351,397	403,759
Element 60-62 (Plate)	13117	2	-12,000	-14,250	196,958	-351,380	402,815
(Palo 1500 c.a. (6,00))	13118	3	-12,000	-14,500	195,076	-351,362	401,884
	13119	4	-12,000	-14,750	193,206	-351,345	400,964
	14494	5	-12,000	-15,000	191,346	-351,328	400,056
Plate_4_13	18313	1	-6,000	-14,000	195,282	-321,185	375,892
Element 61-63 (Plate)	18314	2	-6,000	-14,250	193,172	-321,167	374,785
(Palo 1500 c.a. (6,00))	18315	3	-6,000	-14,500	191,065	-321,148	373,687
	18316	4	-6,000	-14,750	188,961	-321,130	372,600
	18342	5	-6,000	-15,000	186,860	-321,112	371,523
Plate_1_13	21591	1	0,000	-14,000	190,914	-288,431	345,891
Element 62-64 (Plate)	21592	2	0,000	-14,250	188,315	-288,405	344,442
(Palo 1500 c.a. (6,00))	21593	3	0,000	-14,500	185,713	-288,380	343,005
	21594	4	0,000	-14,750	183,108	-288,354	341,579
	21630	5	0,000	-15,000	180,500	-288,327	340,166

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_3_13	13034	1	-18,000	-15,000	196,785	-439,473	481,519
Element 63-65 (Plate)	13035	2	-18,000	-15,750	193,869	-432,735	474,179
(Palo 1500 c.a. (6,00))	13036	3	-18,000	-16,500	190,493	-426,565	467,167
	13037	4	-18,000	-17,250	186,292	-420,603	460,012
	13228	5	-18,000	-18,000	181,293	-414,837	452,722
Plate_5_12	12248	1	-16,000	-15,000	194,162	-406,395	450,395
Element 64-66 (Plate)	12249	2	-16,000	-15,750	190,061	-406,374	448,624
(AZ 18-700)	12250	3	-16,000	-16,500	185,763	-406,352	446,800
	12251	4	-16,000	-17,250	181,293	-406,329	444,939
	13242	5	-16,000	-18,000	176,701	-406,304	443,065
Plate_2_14	14494	1	-12,000	-15,000	191,346	-351,328	400,056
Element 65-67 (Plate)	14495	2	-12,000	-15,750	185,840	-351,276	397,405
(Palo 1500 c.a. (6,00))	14496	3	-12,000	-16,500	180,451	-351,224	394,868
	14497	4	-12,000	-17,250	175,195	-351,171	392,447
	16176	5	-12,000	-18,000	170,088	-351,120	390,147
Plate_4_14	18342	1	-6,000	-15,000	186,860	-321,112	371,523
Element 66-68 (Plate)	18343	2	-6,000	-15,750	180,596	-321,057	368,364
(Palo 1500 c.a. (6,00))	18344	3	-6,000	-16,500	174,414	-321,002	365,325
	18345	4	-6,000	-17,250	168,350	-320,948	362,421

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	18346	5	-6,000	-18,000	162,435	-320,894	359,664
Plate_1_14	21630	1	0,000	-15,000	180,500	-288,327	340,166
Element 67-69 (Plate)	21631	2	0,000	-15,750	172,691	-288,248	336,020
(Palo 1500 c.a. (6,00))	21632	3	0,000	-16,500	164,957	-288,170	332,043
	21633	4	0,000	-17,250	157,364	-288,091	328,268
	21634	5	0,000	-18,000	149,984	-288,013	324,726
Plate_3_14	13228	1	-18,000	-18,000	181,293	-414,837	452,722
Element 68-70 (Plate)	13231	2	-18,000	-18,625	177,567	-411,569	448,240
(Palo 1500 c.a. (6,00))	13230	3	-18,000	-19,250	173,649	-408,339	443,729
	13229	4	-18,000	-19,875	169,455	-405,062	439,079
	15176	5	-18,000	-20,500	164,942	-401,673	434,220
Plate_3_14	15176	1	-18,000	-20,500	164,942	-401,673	434,220
Element 68-71 (Plate)	15179	2	-18,000	-21,125	160,146	-398,096	429,100
(Palo 1500 c.a. (6,00))	15178	3	-18,000	-21,750	155,152	-394,380	423,801
	15177	4	-18,000	-22,375	150,123	-390,677	418,527
	17087	5	-18,000	-23,000	145,460	-387,225	413,644
Plate_5_13	13242	1	-16,000	-18,000	176,701	-406,304	443,065
Element 69-72 (Plate)	13245	2	-16,000	-18,833	171,511	-406,277	440,995
(AZ 18-700)	13244	3	-16,000	-19,667	166,237	-406,250	438,946

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	13243	4	-16,000	-20,500	160,873	-406,226	436,920
	15300	5	-16,000	-21,333	155,420	-406,205	434,923
Plate_5_13	15300	1	-16,000	-21,333	155,420	-406,205	434,923
Element 69-73 (Plate)	15301	2	-16,000	-21,750	152,667	-406,196	433,938
(AZ 18-700)	15302	3	-16,000	-22,167	149,903	-406,189	432,967
	15303	4	-16,000	-22,583	147,134	-406,183	432,011
	16826	5	-16,000	-23,000	144,366	-406,180	431,072
Plate_2_15	16176	1	-12,000	-18,000	170,088	-351,120	390,147
Element 70-74 (Plate)	16177	2	-12,000	-19,250	161,950	-351,033	386,590
(Palo 1500 c.a. (6,00))	16178	3	-12,000	-20,500	154,316	-350,946	383,375
	16179	4	-12,000	-21,750	147,213	-350,858	380,490
	18583	5	-12,000	-23,000	140,647	-350,768	377,915
Plate_4_15	18346	1	-6,000	-18,000	162,435	-320,894	359,664
Element 71-75 (Plate)	17890	2	-6,000	-19,250	152,995	-320,805	355,420
(Palo 1500 c.a. (6,00))	17891	3	-6,000	-20,500	144,162	-320,717	351,628
	17892	4	-6,000	-21,750	136,010	-320,628	348,283
	19067	5	-6,000	-23,000	128,593	-320,539	345,371
Plate_1_15	21634	1	0,000	-18,000	149,984	-288,013	324,726
Element 72-76 (Plate)	21163	2	0,000	-19,250	138,353	-287,886	319,406

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	21164	3	0,000	-20,500	127,762	-287,763	314,850
	21165	4	0,000	-21,750	118,357	-287,643	311,041
	21166	5	0,000	-23,000	110,219	-287,525	307,927
Plate_5_14	16826	1	-16,000	-23,000	144,366	-406,180	431,072
Element 73-77 (Plate)	16827	2	-16,000	-23,250	142,709	-406,178	430,519
(AZ 18-700)	16828	3	-16,000	-23,500	141,054	-406,177	429,973
	16829	4	-16,000	-23,750	139,401	-406,177	429,433
	16830	5	-16,000	-24,000	137,747	-406,177	428,899
Plate_3_15	17087	1	-18,000	-23,000	145,460	-387,225	413,644
Element 74-78 (Plate)	17090	2	-18,000	-23,711	141,172	-384,776	409,856
(Palo 1500 c.a. (6,00))	17089	3	-18,000	-24,422	137,483	-382,459	406,419
	17088	4	-18,000	-25,132	134,263	-380,059	403,077
	18613	5	-18,000	-25,843	131,391	-377,461	399,676
Plate_3_15	18613	1	-18,000	-25,843	131,391	-377,461	399,676
Element 74-79 (Plate)	18616	2	-18,000	-26,487	128,974	-374,975	396,536
(Palo 1500 c.a. (6,00))	18615	3	-18,000	-27,131	126,602	-372,487	393,414
	18614	4	-18,000	-27,774	124,222	-370,059	390,353
	19881	5	-18,000	-28,418	121,805	-367,728	387,376
Plate_3_15	19881	1	-18,000	-28,418	121,805	-367,728	387,376

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 74-80 (Plate)	19884	2	-18,000	-29,001	119,569	-365,696	384,747
(Palo 1500 c.a. (6,00))	19883	3	-18,000	-29,584	117,270	-363,742	382,178
	19882	4	-18,000	-30,167	114,900	-361,859	379,663
	19969	5	-18,000	-30,750	112,448	-360,040	377,192
Plate_3_15	19969	1	-18,000	-30,750	112,448	-360,040	377,192
Element 74-81 (Plate)	19972	2	-18,000	-31,279	110,151	-358,444	374,987
(Palo 1500 c.a. (6,00))	19971	3	-18,000	-31,807	107,775	-356,891	372,809
	19970	4	-18,000	-32,335	105,322	-355,377	370,656
	20053	5	-18,000	-32,863	102,793	-353,899	368,525
Plate_3_15	20053	1	-18,000	-32,863	102,793	-353,899	368,525
Element 74-82 (Plate)	20056	2	-18,000	-33,341	100,441	-352,587	366,614
(Palo 1500 c.a. (6,00))	20055	3	-18,000	-33,819	98,036	-351,301	364,724
	20054	4	-18,000	-34,298	95,587	-350,041	362,857
	21033	5	-18,000	-34,776	93,106	-348,808	361,021
Plate_3_15	21033	1	-18,000	-34,776	93,106	-348,808	361,021
Element 74-83 (Plate)	21034	2	-18,000	-35,209	90,842	-347,718	359,389
(Palo 1500 c.a. (6,00))	21035	3	-18,000	-35,643	88,572	-346,657	357,793
	21036	4	-18,000	-36,076	86,307	-345,627	356,240
	21101	5	-18,000	-36,509	84,058	-344,633	354,736

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_3_15	21101	1	-18,000	-36,509	84,058	-344,633	354,736
Element 74-84 (Plate)	21104	2	-18,000	-36,901	82,042	-343,764	353,419
(Palo 1500 c.a. (6,00))	21103	3	-18,000	-37,294	80,052	-342,928	352,147
	21102	4	-18,000	-37,686	78,090	-342,121	350,920
	22233	5	-18,000	-38,078	76,157	-341,344	349,737
Plate_3_15	22233	1	-18,000	-38,078	76,157	-341,344	349,737
Element 74-85 (Plate)	22236	2	-18,000	-38,434	74,431	-340,663	348,699
(Palo 1500 c.a. (6,00))	22235	3	-18,000	-38,789	72,727	-340,001	347,693
	22234	4	-18,000	-39,145	71,043	-339,357	346,714
	22257	5	-18,000	-39,500	69,371	-338,726	345,757
Plate_2_16	18583	1	-12,000	-23,000	140,647	-350,768	377,915
Element 75-86 (Plate)	18584	2	-12,000	-24,468	133,598	-350,662	375,250
(Palo 1500 c.a. (6,00))	18585	3	-12,000	-25,935	127,139	-350,557	372,900
	18586	4	-12,000	-27,403	121,111	-350,452	370,789
	19845	5	-12,000	-28,871	115,363	-350,351	368,855
Plate_2_16	19845	1	-12,000	-28,871	115,363	-350,351	368,855
Element 75-87 (Plate)	19846	2	-12,000	-29,908	111,399	-350,282	367,569
(Palo 1500 c.a. (6,00))	19847	3	-12,000	-30,946	107,474	-350,215	366,335
	19848	4	-12,000	-31,984	103,557	-350,153	365,146

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	20881	5	-12,000	-33,022	99,622	-350,097	363,995
Plate_2_16	20881	1	-12,000	-33,022	99,622	-350,097	363,995
Element 75-88 (Plate)	20884	2	-12,000	-33,755	96,819	-350,060	363,203
(Palo 1500 c.a. (6,00))	20883	3	-12,000	-34,489	93,997	-350,028	362,429
	20882	4	-12,000	-35,223	91,153	-349,999	361,674
	22069	5	-12,000	-35,957	88,292	-349,975	360,940
Plate_2_16	22069	1	-12,000	-35,957	88,292	-349,975	360,940
Element 75-89 (Plate)	22070	2	-12,000	-36,476	86,260	-349,960	360,434
(Palo 1500 c.a. (6,00))	22071	3	-12,000	-36,995	84,223	-349,948	359,940
	22072	4	-12,000	-37,513	82,183	-349,938	359,458
	22167	5	-12,000	-38,032	80,142	-349,930	358,990
Plate_2_16	22167	1	-12,000	-38,032	80,142	-349,930	358,990
Element 75-90 (Plate)	22168	2	-12,000	-38,399	78,698	-349,927	358,667
(Palo 1500 c.a. (6,00))	22169	3	-12,000	-38,766	77,255	-349,924	358,351
	22170	4	-12,000	-39,133	75,812	-349,923	358,041
	23134	5	-12,000	-39,500	74,369	-349,922	357,738
Plate_4_16	19067	1	-6,000	-23,000	128,593	-320,539	345,371
Element 76-91 (Plate)	19068	2	-6,000	-24,495	120,740	-320,432	342,425
(Palo 1500 c.a. (6,00))	19069	3	-6,000	-25,989	113,937	-320,326	339,986

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	19070	4	-6,000	-27,484	108,056	-320,222	337,962
	19831	5	-6,000	-28,979	102,927	-320,121	336,261
Plate_4_16	19831	1	-6,000	-28,979	102,927	-320,121	336,261
Element 76-92 (Plate)	19832	2	-6,000	-30,021	99,688	-320,054	335,219
(Palo 1500 c.a. (6,00))	19833	3	-6,000	-31,064	96,646	-319,989	334,266
	19834	4	-6,000	-32,106	93,730	-319,929	333,376
	20911	5	-6,000	-33,149	90,881	-319,874	332,534
Plate_4_16	20911	1	-6,000	-33,149	90,881	-319,874	332,534
Element 76-93 (Plate)	20912	2	-6,000	-33,876	88,908	-319,839	331,966
(Palo 1500 c.a. (6,00))	20913	3	-6,000	-34,603	86,932	-319,808	331,412
	20914	4	-6,000	-35,330	84,948	-319,780	330,871
	22109	5	-6,000	-36,057	82,955	-319,756	330,341
Plate_4_16	22109	1	-6,000	-36,057	82,955	-319,756	330,341
Element 76-94 (Plate)	22110	2	-6,000	-36,564	81,561	-319,741	329,980
(Palo 1500 c.a. (6,00))	22111	3	-6,000	-37,071	80,163	-319,729	329,625
	22112	4	-6,000	-37,578	78,764	-319,719	329,278
	22726	5	-6,000	-38,085	77,365	-319,711	328,938
Plate_4_16	22726	1	-6,000	-38,085	77,365	-319,711	328,938
Element 76-95 (Plate)	22727	2	-6,000	-38,439	76,389	-319,706	328,706

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	22728	3	-6,000	-38,793	75,413	-319,704	328,477
	22729	4	-6,000	-39,146	74,437	-319,702	328,253
	23255	5	-6,000	-39,500	73,462	-319,701	328,033
Plate_1_16	21166	1	0,000	-23,000	110,219	-287,525	307,927
Element 77-96 (Plate)	21140	2	0,000	-24,495	102,192	-287,389	305,018
(Palo 1500 c.a. (6,00))	21141	3	0,000	-25,989	95,871	-287,260	302,836
	21142	4	0,000	-27,484	91,004	-287,138	301,214
	21351	5	0,000	-28,979	87,305	-287,026	300,010
Plate_1_16	21351	1	0,000	-28,979	87,305	-287,026	300,010
Element 77-97 (Plate)	21352	2	0,000	-30,021	85,265	-286,954	299,353
(Palo 1500 c.a. (6,00))	21353	3	0,000	-31,064	83,567	-286,887	298,810
	21354	4	0,000	-32,106	82,132	-286,826	298,354
	22191	5	0,000	-33,149	80,892	-286,772	297,962
Plate_1_16	22191	1	0,000	-33,149	80,892	-286,772	297,962
Element 77-98 (Plate)	22192	2	0,000	-33,876	80,111	-286,738	297,718
(Palo 1500 c.a. (6,00))	22193	3	0,000	-34,603	79,380	-286,707	297,493
	22194	4	0,000	-35,330	78,686	-286,679	297,282
	22992	5	0,000	-36,057	78,017	-286,656	297,083
Plate_1_16	22992	1	0,000	-36,057	78,017	-286,656	297,083

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 77-99 (Plate)	22993	2	0,000	-36,564	77,561	-286,642	296,950
(Palo 1500 c.a. (6,00))	22994	3	0,000	-37,071	77,110	-286,629	296,820
	22995	4	0,000	-37,578	76,663	-286,619	296,695
	24024	5	0,000	-38,085	76,219	-286,611	296,572
Plate_1_16	24024	1	0,000	-38,085	76,219	-286,611	296,572
Element 77-100 (Plate)	24025	2	0,000	-38,439	75,909	-286,607	296,489
(Palo 1500 c.a. (6,00))	24026	3	0,000	-38,793	75,600	-286,603	296,407
	24027	4	0,000	-39,146	75,291	-286,601	296,326
	24134	5	0,000	-39,500	74,981	-286,601	296,247

3.1.1.1.1.2 Calculation results, Plate, Stabilità Globale [Phase_13] (17/168), Table of total displacements

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_3_1	28	1	-18,000	1,100	517,195	-414,090	662,542
Element 1-1 (Plate)	27	2	-18,000	1,075	516,915	-414,090	662,323
(Palo 1500 c.a. (6,00))	26	3	-18,000	1,050	516,644	-414,090	662,112
	25	4	-18,000	1,025	516,379	-414,090	661,904
	172	5	-18,000	1,000	516,116	-414,089	661,699
Plate_2_1	707	1	-12,000	1,100	570,277	-367,156	678,247
Element 2-2 (Plate)	706	2	-12,000	1,075	569,896	-367,156	677,927
(Palo 1500 c.a. (6,00))	705	3	-12,000	1,050	569,527	-367,155	677,616
	704	4	-12,000	1,025	569,167	-367,155	677,313
	3296	5	-12,000	1,000	568,810	-367,154	677,013
Plate_4_1	6222	1	-6,000	1,100	572,168	-348,601	669,999
Element 3-3 (Plate)	6221	2	-6,000	1,075	571,794	-348,601	669,680
(Palo 1500 c.a. (6,00))	6220	3	-6,000	1,050	571,435	-348,600	669,373
	6219	4	-6,000	1,025	571,085	-348,600	669,074
	7351	5	-6,000	1,000	570,739	-348,599	668,778
Plate_1_1	8613	1	0,000	1,100	574,311	-334,933	664,841

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 4-4 (Plate)	8612	2	0,000	1,075	573,937	-334,933	664,517
(Palo 1500 c.a. (6,00))	8611	3	0,000	1,050	573,575	-334,933	664,205
	8610	4	0,000	1,025	573,222	-334,932	663,899
	9836	5	0,000	1,000	572,872	-334,931	663,597
Plate_3_2	172	1	-18,000	1,000	516,116	-414,089	661,699
Element 5-5 (Plate)	175	2	-18,000	0,975	515,853	-414,088	661,493
(Palo 1500 c.a. (6,00))	174	3	-18,000	0,950	515,586	-414,087	661,285
	173	4	-18,000	0,925	515,314	-414,086	661,072
	228	5	-18,000	0,900	514,018	-467,605	694,888
Plate_2_2	3296	1	-12,000	1,000	568,810	-367,154	677,013
Element 6-6 (Plate)	3297	2	-12,000	0,975	568,453	-367,153	676,712
(Palo 1500 c.a. (6,00))	3298	3	-12,000	0,950	568,091	-367,151	676,408
	3299	4	-12,000	0,925	567,720	-367,150	676,096
	3320	5	-12,000	0,900	567,337	-367,148	675,773
Plate_4_2	7351	1	-6,000	1,000	570,739	-348,599	668,778
Element 7-7 (Plate)	7352	2	-6,000	0,975	570,392	-348,597	668,481
(Palo 1500 c.a. (6,00))	7353	3	-6,000	0,950	570,040	-348,596	668,180
	7354	4	-6,000	0,925	569,679	-348,594	667,871
	7375	5	-6,000	0,900	569,302	-348,592	667,549

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_1_2	9836	1	0,000	1,000	572,872	-334,931	663,597
Element 8-8 (Plate)	9839	2	0,000	0,975	572,522	-334,929	663,294
(Palo 1500 c.a. (6,00))	9838	3	0,000	0,950	572,167	-334,927	662,987
	9837	4	0,000	0,925	571,804	-334,925	662,673
	10780	5	0,000	0,900	571,428	-334,923	662,347
Plate_3_3	228	1	-18,000	0,900	514,018	-467,605	694,888
Element 9-9 (Plate)	231	2	-18,000	0,875	513,711	-467,605	694,660
(Palo 1500 c.a. (6,00))	230	3	-18,000	0,850	513,404	-467,601	694,431
	229	4	-18,000	0,825	513,086	-467,597	694,193
	421	5	-18,000	0,800	512,628	-467,544	693,819
Plate_5_1	347	1	-16,000	0,900	520,098	-414,520	665,078
Element 10-10 (Plate)	348	2	-16,000	0,875	519,759	-414,520	664,813
(AZ 18-700)	349	3	-16,000	0,850	519,421	-414,520	664,548
	350	4	-16,000	0,825	519,082	-414,520	664,284
	513	5	-16,000	0,800	518,743	-414,520	664,019
Plate_2_3	3320	1	-12,000	0,900	567,337	-367,148	675,773
Element 11-11 (Plate)	3321	2	-12,000	0,675	563,799	-367,130	672,795
(Palo 1500 c.a. (6,00))	3322	3	-12,000	0,450	560,233	-367,113	669,801
	3323	4	-12,000	0,225	556,642	-367,095	666,790

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	4924	5	-12,000	0,000	553,025	-367,077	663,764
Plate_4_3	7375	1	-6,000	0,900	569,302	-348,592	667,549
Element 12-12 (Plate)	7376	2	-6,000	0,675	565,819	-348,572	664,570
(Palo 1500 c.a. (6,00))	7377	3	-6,000	0,450	562,305	-348,551	661,570
	7378	4	-6,000	0,225	558,761	-348,531	658,550
	8307	5	-6,000	0,000	555,189	-348,511	655,511
Plate_1_3	10780	1	0,000	0,900	571,428	-334,923	662,347
Element 13-13 (Plate)	10781	2	0,000	0,675	567,956	-334,899	659,341
(Palo 1500 c.a. (6,00))	10782	3	0,000	0,450	564,456	-334,875	656,317
	10783	4	0,000	0,225	560,930	-334,851	653,275
	12104	5	0,000	0,000	557,378	-334,827	650,215
Plate_3_4	421	1	-18,000	0,800	512,628	-467,544	693,819
Element 14-14 (Plate)	424	2	-18,000	0,600	510,396	-467,639	692,236
(Palo 1500 c.a. (6,00))	423	3	-18,000	0,400	508,268	-467,705	690,713
	422	4	-18,000	0,200	506,147	-467,745	689,181
	3116	5	-18,000	0,000	504,024	-467,768	687,639
Plate_5_2	513	1	-16,000	0,800	518,743	-414,520	664,019
Element 15-15 (Plate)	514	2	-16,000	0,600	516,035	-414,520	661,905
(AZ 18-700)	515	3	-16,000	0,400	513,326	-414,520	659,796

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	516	4	-16,000	0,200	510,617	-414,520	657,690
	3140	5	-16,000	0,000	507,908	-414,520	655,589
Plate_2_4	4924	1	-12,000	0,000	553,025	-367,077	663,764
Element 16-16 (Plate)	4925	2	-12,000	-0,194	549,880	-367,062	661,137
(Palo 1500 c.a. (6,00))	4926	3	-12,000	-0,389	546,716	-367,047	658,500
	4927	4	-12,000	-0,583	543,534	-367,032	655,852
	6355	5	-12,000	-0,778	540,335	-367,016	653,194
Plate_3_5	3116	1	-18,000	0,000	504,024	-467,768	687,639
Element 17-17 (Plate)	3119	2	-18,000	-0,500	498,362	-467,740	683,481
(Palo 1500 c.a. (6,00))	3118	3	-18,000	-1,000	492,525	-467,630	679,160
	3117	4	-18,000	-1,500	486,507	-467,501	674,720
	6048	5	-18,000	-2,000	480,223	-467,349	670,096
Plate_5_3	3140	1	-16,000	0,000	507,908	-414,520	655,589
Element 18-18 (Plate)	3141	2	-16,000	-0,500	501,135	-414,519	650,356
(AZ 18-700)	3142	3	-16,000	-1,000	494,357	-414,519	645,147
	3143	4	-16,000	-1,500	487,572	-414,518	639,962
	4890	5	-16,000	-2,000	480,777	-414,516	634,800
Plate_4_4	8307	1	-6,000	0,000	555,189	-348,511	655,511
Element 19-19 (Plate)	8308	2	-6,000	-0,500	547,149	-348,466	648,692

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	8309	3	-6,000	-1,000	538,977	-348,421	641,790
	8310	4	-6,000	-1,500	530,679	-348,377	634,812
	9574	5	-6,000	-2,000	522,260	-348,332	627,767
Plate_1_4	12104	1	0,000	0,000	557,378	-334,827	650,215
Element 20-20 (Plate)	12105	2	0,000	-0,500	549,391	-334,774	643,354
(Palo 1500 c.a. (6,00))	12106	3	0,000	-1,000	541,280	-334,721	636,413
	12107	4	0,000	-1,500	533,047	-334,668	629,398
	12356	5	0,000	-2,000	524,698	-334,615	622,315
Plate_2_5	6355	1	-12,000	-0,778	540,335	-367,016	653,194
Element 21-21 (Plate)	6356	2	-12,000	-1,083	535,271	-366,992	648,998
(Palo 1500 c.a. (6,00))	6357	3	-12,000	-1,389	530,165	-366,968	644,780
	6358	4	-12,000	-1,694	525,019	-366,944	640,541
	7461	5	-12,000	-2,000	519,835	-366,920	636,285
Plate_5_4	4890	1	-16,000	-2,000	480,777	-414,516	634,800
Element 22-22 (Plate)	4891	2	-16,000	-2,250	477,374	-414,515	632,226
(AZ 18-700)	4892	3	-16,000	-2,500	473,966	-414,514	629,656
	4893	4	-16,000	-2,750	470,552	-414,513	627,089
	6072	5	-16,000	-3,000	467,130	-414,512	624,524
Plate_2_6	7461	1	-12,000	-2,000	519,835	-366,920	636,285

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 23-23 (Plate)	7462	2	-12,000	-2,381	513,320	-366,890	630,956
(Palo 1500 c.a. (6,00))	7463	3	-12,000	-2,762	506,751	-366,859	625,606
	7464	4	-12,000	-3,143	500,132	-366,829	620,238
	8367	5	-12,000	-3,524	493,467	-366,798	614,859
Plate_3_6	6048	1	-18,000	-2,000	480,223	-467,349	670,096
Element 24-24 (Plate)	6051	2	-18,000	-2,500	473,854	-467,046	665,334
(Palo 1500 c.a. (6,00))	6050	3	-18,000	-3,000	467,378	-466,683	660,481
	6049	4	-18,000	-3,500	460,818	-466,279	655,567
	6239	5	-18,000	-4,000	454,163	-465,817	650,576
Plate_4_5	9574	1	-6,000	-2,000	522,260	-348,332	627,767
Element 25-25 (Plate)	9575	2	-6,000	-2,500	513,729	-348,287	620,662
(Palo 1500 c.a. (6,00))	9576	3	-6,000	-3,000	505,092	-348,242	613,507
	9577	4	-6,000	-3,500	496,356	-348,197	606,309
	9736	5	-6,000	-4,000	487,527	-348,152	599,076
Plate_1_5	12356	1	0,000	-2,000	524,698	-334,615	622,315
Element 26-26 (Plate)	12357	2	0,000	-2,500	516,236	-334,562	615,167
(Palo 1500 c.a. (6,00))	12358	3	0,000	-3,000	507,664	-334,509	607,963
	12359	4	0,000	-3,500	498,986	-334,456	600,706
	12814	5	0,000	-4,000	490,206	-334,403	593,403

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_5_5	6072	1	-16,000	-3,000	467,130	-414,512	624,524
Element 27-27 (Plate)	6075	2	-16,000	-3,250	463,700	-414,511	621,962
(AZ 18-700)	6074	3	-16,000	-3,500	460,261	-414,510	619,402
	6073	4	-16,000	-3,750	456,814	-414,508	616,844
	7161	5	-16,000	-4,000	453,359	-414,507	614,288
Plate_2_7	8367	1	-12,000	-3,524	493,467	-366,798	614,859
Element 28-28 (Plate)	8368	2	-12,000	-3,643	491,376	-366,789	613,176
(Palo 1500 c.a. (6,00))	8369	3	-12,000	-3,762	489,281	-366,779	611,492
	8370	4	-12,000	-3,881	487,182	-366,770	609,808
	8654	5	-12,000	-4,000	485,079	-366,760	608,124
Plate_4_6	9736	1	-6,000	-4,000	487,527	-348,152	599,076
Element 29-29 (Plate)	9737	2	-6,000	-4,321	481,807	-348,123	594,414
(Palo 1500 c.a. (6,00))	9738	3	-6,000	-4,643	476,054	-348,095	589,743
	9739	4	-6,000	-4,964	470,269	-348,066	585,066
	10840	5	-6,000	-5,285	464,453	-348,037	580,385
Plate_3_7	6239	1	-18,000	-4,000	454,163	-465,817	650,576
Element 30-30 (Plate)	6240	2	-18,000	-4,500	447,360	-465,387	645,535
(Palo 1500 c.a. (6,00))	6241	3	-18,000	-5,000	440,520	-464,954	640,500
	6242	4	-18,000	-5,500	433,597	-464,447	635,388

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	7305	5	-18,000	-6,000	426,432	-463,752	630,008
Plate_5_6	7161	1	-16,000	-4,000	453,359	-414,507	614,288
Element 31-31 (Plate)	7162	2	-16,000	-4,500	446,426	-414,503	609,187
(AZ 18-700)	7163	3	-16,000	-5,000	439,463	-414,499	604,100
	7164	4	-16,000	-5,500	432,466	-414,495	599,027
	7285	5	-16,000	-6,000	425,430	-414,490	593,963
Plate_2_8	8654	1	-12,000	-4,000	485,079	-366,760	608,124
Element 32-32 (Plate)	8655	2	-12,000	-4,500	476,211	-366,720	601,050
(Palo 1500 c.a. (6,00))	8656	3	-12,000	-5,000	467,292	-366,680	593,983
	8657	4	-12,000	-5,500	458,331	-366,640	586,935
	9326	5	-12,000	-6,000	449,337	-366,600	579,913
Plate_1_6	12814	1	0,000	-4,000	490,206	-334,403	593,403
Element 33-33 (Plate)	12815	2	0,000	-4,500	481,327	-334,350	586,059
(Palo 1500 c.a. (6,00))	12816	3	0,000	-5,000	472,354	-334,297	578,682
	12817	4	0,000	-5,500	463,290	-334,244	571,276
	15162	5	0,000	-6,000	454,139	-334,191	563,849
Plate_4_7	10840	1	-6,000	-5,285	464,453	-348,037	580,385
Element 34-34 (Plate)	10841	2	-6,000	-5,464	461,207	-348,021	577,781
(Palo 1500 c.a. (6,00))	10842	3	-6,000	-5,643	457,953	-348,005	575,177

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	10843	4	-6,000	-5,821	454,690	-347,989	572,572
	11272	5	-6,000	-6,000	451,419	-347,973	569,969
Plate_3_8	7305	1	-18,000	-6,000	426,432	-463,752	630,008
Element 35-35 (Plate)	7306	2	-18,000	-6,500	419,066	-463,040	624,518
(Palo 1500 c.a. (6,00))	7307	3	-18,000	-7,000	411,923	-462,410	619,277
	7308	4	-18,000	-7,500	404,238	-461,151	613,244
	8283	5	-18,000	-8,000	395,635	-459,227	606,149
Plate_5_7	7285	1	-16,000	-6,000	425,430	-414,490	593,963
Element 36-36 (Plate)	7286	2	-16,000	-6,500	418,349	-414,485	588,909
(AZ 18-700)	7287	3	-16,000	-7,000	411,218	-414,480	583,861
	7288	4	-16,000	-7,500	404,031	-414,475	578,818
	7415	5	-16,000	-8,000	396,789	-414,470	573,782
Plate_2_9	9326	1	-12,000	-6,000	449,337	-366,600	579,913
Element 37-37 (Plate)	9327	2	-12,000	-6,500	440,319	-366,561	572,929
(Palo 1500 c.a. (6,00))	9328	3	-12,000	-7,000	431,285	-366,522	565,990
	9329	4	-12,000	-7,500	422,244	-366,483	559,106
	9340	5	-12,000	-8,000	413,202	-366,444	552,284
Plate_4_8	11272	1	-6,000	-6,000	451,419	-347,973	569,969
Element 38-38 (Plate)	11273	2	-6,000	-6,250	446,831	-347,950	566,328

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	11274	3	-6,000	-6,500	442,228	-347,928	562,689
	11275	4	-6,000	-6,750	437,613	-347,905	559,055
	13130	5	-6,000	-7,000	432,986	-347,882	555,427
Plate_4_8	13130	1	-6,000	-7,000	432,986	-347,882	555,427
Element 38-39 (Plate)	13131	2	-6,000	-7,250	428,348	-347,860	551,805
(Palo 1500 c.a. (6,00))	13132	3	-6,000	-7,500	423,701	-347,837	548,191
	13133	4	-6,000	-7,750	419,046	-347,814	544,586
	13196	5	-6,000	-8,000	414,383	-347,791	540,992
Plate_1_7	15162	1	0,000	-6,000	454,139	-334,191	563,849
Element 39-40 (Plate)	15163	2	0,000	-6,500	444,905	-334,138	556,407
(Palo 1500 c.a. (6,00))	15164	3	0,000	-7,000	435,592	-334,085	548,956
	15165	4	0,000	-7,500	426,203	-334,031	541,503
	15196	5	0,000	-8,000	416,741	-333,978	534,055
Plate_4_9	13196	1	-6,000	-8,000	414,383	-347,791	540,992
Element 40-41 (Plate)	13197	2	-6,000	-8,003	414,320	-347,791	540,943
(Palo 1500 c.a. (6,00))	13198	3	-6,000	-8,007	414,256	-347,791	540,894
	13199	4	-6,000	-8,010	414,193	-347,790	540,846
	14580	5	-6,000	-8,014	414,129	-347,790	540,797
Plate_1_8	15196	1	0,000	-8,000	416,741	-333,978	534,055

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 41-42 (Plate)	15197	2	0,000	-8,448	408,202	-333,931	527,389
(Palo 1500 c.a. (6,00))	15198	3	0,000	-8,896	399,611	-333,883	520,737
	15199	4	0,000	-9,345	390,970	-333,836	514,105
	17051	5	0,000	-9,793	382,283	-333,788	507,499
Plate_3_9	8283	1	-18,000	-8,000	395,635	-459,227	606,149
Element 42-43 (Plate)	8284	2	-18,000	-8,500	386,967	-457,412	599,141
(Palo 1500 c.a. (6,00))	8285	3	-18,000	-9,000	379,110	-455,416	592,561
	8286	4	-18,000	-9,500	370,085	-452,207	584,341
	9534	5	-18,000	-10,000	361,906	-450,695	578,016
Plate_5_8	7415	1	-16,000	-8,000	396,789	-414,470	573,782
Element 43-44 (Plate)	7416	2	-16,000	-8,500	389,496	-414,464	568,759
(AZ 18-700)	7417	3	-16,000	-9,000	382,155	-414,458	563,754
	7418	4	-16,000	-9,500	374,773	-414,453	558,771
	8509	5	-16,000	-10,000	367,355	-414,447	553,820
Plate_2_10	9340	1	-12,000	-8,000	413,202	-366,444	552,284
Element 44-45 (Plate)	9341	2	-12,000	-8,500	404,166	-366,406	545,531
(Palo 1500 c.a. (6,00))	9342	3	-12,000	-9,000	395,144	-366,368	538,855
	9343	4	-12,000	-9,500	386,140	-366,331	532,262
	9910	5	-12,000	-10,000	377,162	-366,294	525,759

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_4_10	14580	1	-6,000	-8,014	414,129	-347,790	540,797
Element 45-46 (Plate)	14581	2	-6,000	-8,510	404,853	-347,745	533,696
(Palo 1500 c.a. (6,00))	14582	3	-6,000	-9,007	395,566	-347,699	526,657
	14583	4	-6,000	-9,503	386,281	-347,654	519,689
	15560	5	-6,000	-10,000	377,008	-347,610	512,804
Plate_1_9	17051	1	0,000	-9,793	382,283	-333,788	507,499
Element 46-47 (Plate)	17052	2	0,000	-9,845	381,277	-333,783	506,738
(Palo 1500 c.a. (6,00))	17053	3	0,000	-9,896	380,270	-333,777	505,977
	17054	4	0,000	-9,948	379,263	-333,772	505,217
	17107	5	0,000	-10,000	378,255	-333,766	504,457
Plate_3_10	9534	1	-18,000	-10,000	361,906	-450,695	578,016
Element 47-48 (Plate)	9535	2	-18,000	-10,500	354,810	-450,073	573,111
(Palo 1500 c.a. (6,00))	9536	3	-18,000	-11,000	348,074	-449,219	568,289
	9537	4	-18,000	-11,500	340,308	-447,256	562,003
	10714	5	-18,000	-12,000	332,563	-445,815	556,191
Plate_5_9	8509	1	-16,000	-10,000	367,355	-414,447	553,820
Element 48-49 (Plate)	8510	2	-16,000	-10,500	359,913	-414,441	548,907
(AZ 18-700)	8511	3	-16,000	-11,000	352,461	-414,435	544,045
	8512	4	-16,000	-11,500	345,009	-414,429	539,242

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	9722	5	-16,000	-12,000	337,561	-414,423	534,503
Plate_2_11	9910	1	-12,000	-10,000	377,162	-366,294	525,759
Element 49-50 (Plate)	9911	2	-12,000	-10,500	368,217	-366,258	519,354
(Palo 1500 c.a. (6,00))	9912	3	-12,000	-11,000	359,312	-366,222	513,053
	9913	4	-12,000	-11,500	350,452	-366,186	506,862
	12208	5	-12,000	-12,000	341,644	-366,151	500,787
Plate_4_11	15560	1	-6,000	-10,000	377,008	-347,610	512,804
Element 50-51 (Plate)	15561	2	-6,000	-10,500	367,697	-347,565	505,967
(Palo 1500 c.a. (6,00))	15562	3	-6,000	-11,000	358,419	-347,521	499,234
	15563	4	-6,000	-11,500	349,185	-347,477	492,616
	17427	5	-6,000	-12,000	340,003	-347,434	486,119
Plate_1_10	17107	1	0,000	-10,000	378,255	-333,766	504,457
Element 51-52 (Plate)	17108	2	0,000	-10,250	373,379	-333,740	500,794
(Palo 1500 c.a. (6,00))	17109	3	0,000	-10,500	368,491	-333,713	497,142
	17110	4	0,000	-10,750	363,590	-333,686	493,502
	18659	5	0,000	-11,000	358,677	-333,660	489,876
Plate_1_10	18659	1	0,000	-11,000	358,677	-333,660	489,876
Element 51-53 (Plate)	18660	2	0,000	-11,250	353,753	-333,633	486,263
(Palo 1500 c.a. (6,00))	18661	3	0,000	-11,500	348,819	-333,606	482,667

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	18662	4	0,000	-11,750	343,874	-333,579	479,087
	19563	5	0,000	-12,000	338,922	-333,552	475,526
Plate_1_11	19563	1	0,000	-12,000	338,922	-333,552	475,526
Element 52-54 (Plate)	19564	2	0,000	-12,126	336,426	-333,538	473,740
(Palo 1500 c.a. (6,00))	19565	3	0,000	-12,252	333,928	-333,524	471,960
	19566	4	0,000	-12,378	331,429	-333,511	470,186
	20751	5	0,000	-12,503	328,928	-333,497	468,416
Plate_3_11	10714	1	-18,000	-12,000	332,563	-445,815	556,191
Element 53-55 (Plate)	10715	2	-18,000	-12,500	326,086	-445,152	551,808
(Palo 1500 c.a. (6,00))	10716	3	-18,000	-13,000	319,580	-444,481	547,444
	10717	4	-18,000	-13,500	313,262	-443,913	543,315
	11906	5	-18,000	-14,000	307,280	-443,411	539,476
Plate_5_10	9722	1	-16,000	-12,000	337,561	-414,423	534,503
Element 54-56 (Plate)	9723	2	-16,000	-12,500	330,111	-414,418	529,825
(AZ 18-700)	9724	3	-16,000	-13,000	322,645	-414,413	525,203
	9725	4	-16,000	-13,500	315,153	-414,410	520,632
	11100	5	-16,000	-14,000	307,639	-414,409	516,117
Plate_2_12	12208	1	-12,000	-12,000	341,644	-366,151	500,787
Element 55-57 (Plate)	12209	2	-12,000	-12,500	332,896	-366,116	494,834

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	12210	3	-12,000	-13,000	324,215	-366,082	489,011
	12211	4	-12,000	-13,500	315,609	-366,049	483,323
	13116	5	-12,000	-14,000	307,090	-366,016	477,778
Plate_4_12	17427	1	-6,000	-12,000	340,003	-347,434	486,119
Element 56-58 (Plate)	17428	2	-6,000	-12,500	330,880	-347,391	479,753
(Palo 1500 c.a. (6,00))	17429	3	-6,000	-13,000	321,824	-347,349	473,521
	17430	4	-6,000	-13,500	312,837	-347,308	467,429
	18313	5	-6,000	-14,000	303,924	-347,266	461,480
Plate_1_12	20751	1	0,000	-12,503	328,928	-333,497	468,416
Element 57-59 (Plate)	20752	2	0,000	-12,878	321,488	-333,456	463,192
(Palo 1500 c.a. (6,00))	20753	3	0,000	-13,252	314,043	-333,414	458,026
	20754	4	0,000	-13,626	306,599	-333,373	452,924
	21591	5	0,000	-14,000	299,161	-333,331	447,892
Plate_3_12	11906	1	-18,000	-14,000	307,280	-443,411	539,476
Element 58-60 (Plate)	11909	2	-18,000	-14,250	304,421	-443,127	537,619
(Palo 1500 c.a. (6,00))	11908	3	-18,000	-14,500	301,615	-442,835	535,794
	11907	4	-18,000	-14,750	298,823	-442,526	533,970
	13034	5	-18,000	-15,000	295,871	-442,077	531,951
Plate_5_11	11100	1	-16,000	-14,000	307,639	-414,409	516,117

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 59-61 (Plate)	11101	2	-16,000	-14,250	303,879	-414,409	513,885
(AZ 18-700)	11102	3	-16,000	-14,500	300,119	-414,410	511,670
	11103	4	-16,000	-14,750	296,356	-414,411	509,473
	12248	5	-16,000	-15,000	292,590	-414,411	507,293
Plate_2_13	13116	1	-12,000	-14,000	307,090	-366,016	477,778
Element 60-62 (Plate)	13117	2	-12,000	-14,250	302,865	-366,000	475,061
(Palo 1500 c.a. (6,00))	13118	3	-12,000	-14,500	298,665	-365,984	472,382
	13119	4	-12,000	-14,750	294,491	-365,969	469,742
	14494	5	-12,000	-15,000	290,343	-365,954	467,142
Plate_4_13	18313	1	-6,000	-14,000	303,924	-347,266	461,480
Element 61-63 (Plate)	18314	2	-6,000	-14,250	299,495	-347,246	458,560
(Palo 1500 c.a. (6,00))	18315	3	-6,000	-14,500	295,087	-347,225	455,677
	18316	4	-6,000	-14,750	290,699	-347,205	452,833
	18342	5	-6,000	-15,000	286,334	-347,186	450,028
Plate_1_13	21591	1	0,000	-14,000	299,161	-333,331	447,892
Element 62-64 (Plate)	21592	2	0,000	-14,250	294,199	-333,304	444,572
(Palo 1500 c.a. (6,00))	21593	3	0,000	-14,500	289,245	-333,276	441,288
	21594	4	0,000	-14,750	284,300	-333,249	438,042
	21630	5	0,000	-15,000	279,365	-333,221	434,835

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_3_13	13034	1	-18,000	-15,000	295,871	-442,077	531,951
Element 63-65 (Plate)	13035	2	-18,000	-15,750	285,614	-435,357	520,683
(Palo 1500 c.a. (6,00))	13036	3	-18,000	-16,500	275,018	-429,204	509,756
	13037	4	-18,000	-17,250	263,757	-423,260	498,715
	13228	5	-18,000	-18,000	251,902	-417,513	487,618
Plate_5_12	12248	1	-16,000	-15,000	292,590	-414,411	507,293
Element 64-66 (Plate)	12249	2	-16,000	-15,750	281,274	-414,415	500,854
(AZ 18-700)	12250	3	-16,000	-16,500	269,975	-414,418	494,600
	12251	4	-16,000	-17,250	258,768	-414,422	488,576
	13242	5	-16,000	-18,000	247,736	-414,426	482,827
Plate_2_14	14494	1	-12,000	-15,000	290,343	-365,954	467,142
Element 65-67 (Plate)	14495	2	-12,000	-15,750	278,078	-365,910	459,584
(Palo 1500 c.a. (6,00))	14496	3	-12,000	-16,500	266,109	-365,867	452,408
	14497	4	-12,000	-17,250	254,476	-365,825	445,630
	16176	5	-12,000	-18,000	243,221	-365,785	439,266
Plate_4_14	18342	1	-6,000	-15,000	286,334	-347,186	450,028
Element 66-68 (Plate)	18343	2	-6,000	-15,750	273,396	-347,128	441,863
(Palo 1500 c.a. (6,00))	18344	3	-6,000	-16,500	260,741	-347,072	434,102
	18345	4	-6,000	-17,250	248,423	-347,016	426,772

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	18346	5	-6,000	-18,000	236,500	-346,962	419,899
Plate_1_14	21630	1	0,000	-15,000	279,365	-333,221	434,835
Element 67-69 (Plate)	21631	2	0,000	-15,750	264,661	-333,139	425,473
(Palo 1500 c.a. (6,00))	21632	3	0,000	-16,500	250,181	-333,057	416,555
	21633	4	0,000	-17,250	236,022	-332,975	408,141
	21634	5	0,000	-18,000	222,287	-332,893	400,287
Plate_3_14	13228	1	-18,000	-18,000	251,902	-417,513	487,618
Element 68-70 (Plate)	13231	2	-18,000	-18,625	242,650	-414,259	480,093
(Palo 1500 c.a. (6,00))	13230	3	-18,000	-19,250	233,405	-411,044	472,689
	13229	4	-18,000	-19,875	224,104	-407,781	465,304
	15176	5	-18,000	-20,500	214,721	-404,406	457,874
Plate_3_14	15176	1	-18,000	-20,500	214,721	-404,406	457,874
Element 68-71 (Plate)	15179	2	-18,000	-21,125	205,311	-400,841	450,362
(Palo 1500 c.a. (6,00))	15178	3	-18,000	-21,750	195,974	-397,137	442,859
	15177	4	-18,000	-22,375	186,887	-393,445	435,576
	17087	5	-18,000	-23,000	178,462	-390,004	428,896
Plate_5_13	13242	1	-16,000	-18,000	247,736	-414,426	482,827
Element 69-72 (Plate)	13245	2	-16,000	-18,833	235,759	-414,429	476,796
(AZ 18-700)	13244	3	-16,000	-19,667	224,078	-414,432	471,131

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	13243	4	-16,000	-20,500	212,658	-414,435	465,810
	15300	5	-16,000	-21,333	201,467	-414,437	460,811
Plate_5_13	15300	1	-16,000	-21,333	201,467	-414,437	460,811
Element 69-73 (Plate)	15301	2	-16,000	-21,750	195,954	-414,438	458,428
(AZ 18-700)	15302	3	-16,000	-22,167	190,492	-414,439	456,122
	15303	4	-16,000	-22,583	185,079	-414,441	453,889
	16826	5	-16,000	-23,000	179,708	-414,443	451,727
Plate_2_15	16176	1	-12,000	-18,000	243,221	-365,785	439,266
Element 70-74 (Plate)	16177	2	-12,000	-19,250	225,405	-365,721	429,604
(Palo 1500 c.a. (6,00))	16178	3	-12,000	-20,500	208,867	-365,662	421,111
	16179	4	-12,000	-21,750	193,672	-365,607	413,736
	18583	5	-12,000	-23,000	179,843	-365,555	407,399
Plate_4_15	18346	1	-6,000	-18,000	236,500	-346,962	419,899
Element 71-75 (Plate)	17890	2	-6,000	-19,250	217,663	-346,876	409,512
(Palo 1500 c.a. (6,00))	17891	3	-6,000	-20,500	200,263	-346,796	400,466
	17892	4	-6,000	-21,750	184,385	-346,721	392,701
	19067	5	-6,000	-23,000	170,062	-346,650	386,118
Plate_1_15	21634	1	0,000	-18,000	222,287	-332,893	400,287
Element 72-76 (Plate)	21163	2	0,000	-19,250	200,675	-332,761	388,588

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	21164	3	0,000	-20,500	181,034	-332,637	378,709
	21165	4	0,000	-21,750	163,636	-332,517	370,600
	21166	5	0,000	-23,000	148,609	-332,403	364,110
Plate_5_14	16826	1	-16,000	-23,000	179,708	-414,443	451,727
Element 73-77 (Plate)	16827	2	-16,000	-23,250	176,502	-414,444	450,463
(AZ 18-700)	16828	3	-16,000	-23,500	173,303	-414,445	449,220
	16829	4	-16,000	-23,750	170,108	-414,446	447,998
	16830	5	-16,000	-24,000	166,911	-414,446	446,794
Plate_3_15	17087	1	-18,000	-23,000	178,462	-390,004	428,896
Element 74-78 (Plate)	17090	2	-18,000	-23,711	170,266	-387,568	423,319
(Palo 1500 c.a. (6,00))	17089	3	-18,000	-24,422	163,067	-385,262	418,351
	17088	4	-18,000	-25,132	156,719	-382,872	413,705
	18613	5	-18,000	-25,843	151,077	-380,285	409,196
Plate_3_15	18613	1	-18,000	-25,843	151,077	-380,285	409,196
Element 74-79 (Plate)	18616	2	-18,000	-26,487	146,433	-377,809	405,194
(Palo 1500 c.a. (6,00))	18615	3	-18,000	-27,131	142,075	-375,329	401,319
	18614	4	-18,000	-27,774	137,923	-372,909	397,598
	19881	5	-18,000	-28,418	133,923	-370,586	394,042
Plate_3_15	19881	1	-18,000	-28,418	133,923	-370,586	394,042

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 74-80 (Plate)	19884	2	-18,000	-29,001	130,396	-368,561	390,948
(Palo 1500 c.a. (6,00))	19883	3	-18,000	-29,584	126,925	-366,613	387,963
	19882	4	-18,000	-30,167	123,488	-364,737	385,074
	19969	5	-18,000	-30,750	120,060	-362,924	382,268
Plate_3_15	19969	1	-18,000	-30,750	120,060	-362,924	382,268
Element 74-81 (Plate)	19972	2	-18,000	-31,279	116,948	-361,333	379,787
(Palo 1500 c.a. (6,00))	19971	3	-18,000	-31,807	113,815	-359,786	377,359
	19970	4	-18,000	-32,335	110,655	-358,277	374,976
	20053	5	-18,000	-32,863	107,463	-356,804	372,636
Plate_3_15	20053	1	-18,000	-32,863	107,463	-356,804	372,636
Element 74-82 (Plate)	20056	2	-18,000	-33,341	104,545	-355,496	370,550
(Palo 1500 c.a. (6,00))	20055	3	-18,000	-33,819	101,602	-354,214	368,498
	20054	4	-18,000	-34,298	98,641	-352,958	366,483
	21033	5	-18,000	-34,776	95,669	-351,729	364,508
Plate_3_15	21033	1	-18,000	-34,776	95,669	-351,729	364,508
Element 74-83 (Plate)	21034	2	-18,000	-35,209	92,977	-350,643	362,761
(Palo 1500 c.a. (6,00))	21035	3	-18,000	-35,643	90,293	-349,585	361,057
	21036	4	-18,000	-36,076	87,626	-348,558	359,404
	21101	5	-18,000	-36,509	84,984	-347,567	357,806

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_3_15	21101	1	-18,000	-36,509	84,984	-347,567	357,806
Element 74-84 (Plate)	21104	2	-18,000	-36,901	82,621	-346,702	356,410
(Palo 1500 c.a. (6,00))	21103	3	-18,000	-37,294	80,288	-345,867	355,064
	21102	4	-18,000	-37,686	77,987	-345,063	353,766
	22233	5	-18,000	-38,078	75,719	-344,288	352,516
Plate_3_15	22233	1	-18,000	-38,078	75,719	-344,288	352,516
Element 74-85 (Plate)	22236	2	-18,000	-38,434	73,692	-343,608	351,421
(Palo 1500 c.a. (6,00))	22235	3	-18,000	-38,789	71,687	-342,948	350,360
	22234	4	-18,000	-39,145	69,702	-342,304	349,329
	22257	5	-18,000	-39,500	67,728	-341,674	348,322
Plate_2_16	18583	1	-12,000	-23,000	179,843	-365,555	407,399
Element 75-86 (Plate)	18584	2	-12,000	-24,468	165,330	-365,499	401,153
(Palo 1500 c.a. (6,00))	18585	3	-12,000	-25,935	152,505	-365,446	395,991
	18586	4	-12,000	-27,403	141,102	-365,395	391,693
	19845	5	-12,000	-28,871	130,826	-365,345	388,062
Plate_2_16	19845	1	-12,000	-28,871	130,826	-365,345	388,062
Element 75-87 (Plate)	19846	2	-12,000	-29,908	124,088	-365,311	385,811
(Palo 1500 c.a. (6,00))	19847	3	-12,000	-30,946	117,687	-365,280	383,770
	19848	4	-12,000	-31,984	111,546	-365,251	381,904

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	20881	5	-12,000	-33,022	105,600	-365,225	380,185
Plate_2_16	20881	1	-12,000	-33,022	105,600	-365,225	380,185
Element 75-88 (Plate)	20884	2	-12,000	-33,755	101,486	-365,208	379,047
(Palo 1500 c.a. (6,00))	20883	3	-12,000	-34,489	97,431	-365,194	377,968
	20882	4	-12,000	-35,223	93,424	-365,183	376,944
	22069	5	-12,000	-35,957	89,458	-365,174	375,972
Plate_2_16	22069	1	-12,000	-35,957	89,458	-365,174	375,972
Element 75-89 (Plate)	22070	2	-12,000	-36,476	86,675	-365,170	375,315
(Palo 1500 c.a. (6,00))	22071	3	-12,000	-36,995	83,908	-365,167	374,683
	22072	4	-12,000	-37,513	81,154	-365,166	374,075
	22167	5	-12,000	-38,032	78,411	-365,165	373,489
Plate_2_16	22167	1	-12,000	-38,032	78,411	-365,165	373,489
Element 75-90 (Plate)	22168	2	-12,000	-38,399	76,476	-365,165	373,087
(Palo 1500 c.a. (6,00))	22169	3	-12,000	-38,766	74,544	-365,166	372,696
	22170	4	-12,000	-39,133	72,612	-365,166	372,315
	23134	5	-12,000	-39,500	70,680	-365,166	371,943
Plate_4_16	19067	1	-6,000	-23,000	170,062	-346,650	386,118
Element 76-91 (Plate)	19068	2	-6,000	-24,495	154,971	-346,568	379,638
(Palo 1500 c.a. (6,00))	19069	3	-6,000	-25,989	141,938	-346,488	374,433

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	19070	4	-6,000	-27,484	130,698	-346,411	370,247
	19831	5	-6,000	-28,979	120,931	-346,338	366,844
Plate_4_16	19831	1	-6,000	-28,979	120,931	-346,338	366,844
Element 76-92 (Plate)	19832	2	-6,000	-30,021	114,806	-346,291	364,826
(Palo 1500 c.a. (6,00))	19833	3	-6,000	-31,064	109,112	-346,247	363,032
	19834	4	-6,000	-32,106	103,742	-346,207	361,416
	20911	5	-6,000	-33,149	98,602	-346,171	359,939
Plate_4_16	20911	1	-6,000	-33,149	98,602	-346,171	359,939
Element 76-93 (Plate)	20912	2	-6,000	-33,876	95,113	-346,148	358,978
(Palo 1500 c.a. (6,00))	20913	3	-6,000	-34,603	91,681	-346,129	358,065
	20914	4	-6,000	-35,330	88,296	-346,112	357,197
	22109	5	-6,000	-36,057	84,949	-346,099	356,371
Plate_4_16	22109	1	-6,000	-36,057	84,949	-346,099	356,371
Element 76-94 (Plate)	22110	2	-6,000	-36,564	82,634	-346,091	355,820
(Palo 1500 c.a. (6,00))	22111	3	-6,000	-37,071	80,334	-346,086	355,287
	22112	4	-6,000	-37,578	78,047	-346,082	354,773
	22726	5	-6,000	-38,085	75,771	-346,080	354,277
Plate_4_16	22726	1	-6,000	-38,085	75,771	-346,080	354,277
Element 76-95 (Plate)	22727	2	-6,000	-38,439	74,188	-346,079	353,941

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	22728	3	-6,000	-38,793	72,607	-346,078	353,613
	22729	4	-6,000	-39,146	71,027	-346,078	353,291
	23255	5	-6,000	-39,500	69,446	-346,078	352,977
Plate_1_16	21166	1	0,000	-23,000	148,609	-332,403	364,110
Element 77-96 (Plate)	21140	2	0,000	-24,495	133,750	-332,274	358,183
(Palo 1500 c.a. (6,00))	21141	3	0,000	-25,989	121,916	-332,156	353,824
	21142	4	0,000	-27,484	112,568	-332,047	350,610
	21351	5	0,000	-28,979	105,135	-331,947	348,199
Plate_1_16	21351	1	0,000	-28,979	105,135	-331,947	348,199
Element 77-97 (Plate)	21352	2	0,000	-30,021	100,814	-331,884	346,858
(Palo 1500 c.a. (6,00))	21353	3	0,000	-31,064	97,039	-331,826	345,724
	21354	4	0,000	-32,106	93,692	-331,774	344,749
	22191	5	0,000	-33,149	90,677	-331,728	343,898
Plate_1_16	22191	1	0,000	-33,149	90,677	-331,728	343,898
Element 77-98 (Plate)	22192	2	0,000	-33,876	88,730	-331,701	343,364
(Palo 1500 c.a. (6,00))	22193	3	0,000	-34,603	86,887	-331,678	342,869
	22194	4	0,000	-35,330	85,132	-331,658	342,410
	22992	5	0,000	-36,057	83,449	-331,643	341,981
Plate_1_16	22992	1	0,000	-36,057	83,449	-331,643	341,981

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 77-99 (Plate)	22993	2	0,000	-36,564	82,311	-331,635	341,697
(Palo 1500 c.a. (6,00))	22994	3	0,000	-37,071	81,195	-331,629	341,424
	22995	4	0,000	-37,578	80,097	-331,624	341,160
	24024	5	0,000	-38,085	79,009	-331,621	340,904
Plate_1_16	24024	1	0,000	-38,085	79,009	-331,621	340,904
Element 77-100 (Plate)	24025	2	0,000	-38,439	78,255	-331,620	340,728
(Palo 1500 c.a. (6,00))	24026	3	0,000	-38,793	77,501	-331,620	340,555
	24027	4	0,000	-39,146	76,749	-331,619	340,385
	24134	5	0,000	-39,500	75,995	-331,619	340,216

3.1.1.1.1.3 Calculation results, Plate, Carichi [Phase_18] (25/540), Table of total displacements

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_3_1	28	1	-18,000	1,100	201,937	-396,331	444,811
Element 1-1 (Plate)	27	2	-18,000	1,075	201,869	-396,331	444,780
(Palo 1500 c.a. (6,00))	26	3	-18,000	1,050	201,803	-396,331	444,750
	25	4	-18,000	1,025	201,738	-396,330	444,720
	172	5	-18,000	1,000	201,672	-396,329	444,689
Plate_2_1	707	1	-12,000	1,100	254,082	-336,521	421,668
Element 2-2 (Plate)	706	2	-12,000	1,075	253,919	-336,520	421,569
(Palo 1500 c.a. (6,00))	705	3	-12,000	1,050	253,760	-336,520	421,473
	704	4	-12,000	1,025	253,603	-336,519	421,378
	3296	5	-12,000	1,000	253,448	-336,518	421,284
Plate_4_1	6222	1	-6,000	1,100	256,810	-305,653	399,218
Element 3-3 (Plate)	6221	2	-6,000	1,075	256,652	-305,653	399,117
(Palo 1500 c.a. (6,00))	6220	3	-6,000	1,050	256,502	-305,652	399,020
	6219	4	-6,000	1,025	256,356	-305,652	398,925
	7351	5	-6,000	1,000	256,211	-305,651	398,832
Plate_1_1	8613	1	0,000	1,100	260,622	-272,062	376,752

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 4-4 (Plate)	8612	2	0,000	1,075	260,472	-272,062	376,648
(Palo 1500 c.a. (6,00))	8611	3	0,000	1,050	260,328	-272,062	376,548
	8610	4	0,000	1,025	260,188	-272,061	376,451
	9836	5	0,000	1,000	260,050	-272,060	376,354
Plate_3_2	172	1	-18,000	1,000	201,672	-396,329	444,689
Element 5-5 (Plate)	175	2	-18,000	0,975	201,607	-396,328	444,659
(Palo 1500 c.a. (6,00))	174	3	-18,000	0,950	201,542	-396,327	444,628
	173	4	-18,000	0,925	201,475	-396,325	444,596
	228	5	-18,000	0,900	200,393	-449,844	492,460
Plate_2_2	3296	1	-12,000	1,000	253,448	-336,518	421,284
Element 6-6 (Plate)	3297	2	-12,000	0,975	253,292	-336,517	421,190
(Palo 1500 c.a. (6,00))	3298	3	-12,000	0,950	253,135	-336,516	421,094
	3299	4	-12,000	0,925	252,975	-336,514	420,997
	3320	5	-12,000	0,900	252,811	-336,512	420,897
Plate_4_2	7351	1	-6,000	1,000	256,211	-305,651	398,832
Element 7-7 (Plate)	7352	2	-6,000	0,975	256,066	-305,650	398,738
(Palo 1500 c.a. (6,00))	7353	3	-6,000	0,950	255,919	-305,648	398,642
	7354	4	-6,000	0,925	255,768	-305,647	398,544
	7375	5	-6,000	0,900	255,609	-305,645	398,440

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_1_2	9836	1	0,000	1,000	260,050	-272,060	376,354
Element 8-8 (Plate)	9839	2	0,000	0,975	259,912	-272,058	376,258
(Palo 1500 c.a. (6,00))	9838	3	0,000	0,950	259,772	-272,057	376,160
	9837	4	0,000	0,925	259,627	-272,055	376,059
	10780	5	0,000	0,900	259,476	-272,052	375,952
Plate_3_3	228	1	-18,000	0,900	200,393	-449,844	492,460
Element 9-9 (Plate)	231	2	-18,000	0,875	200,303	-449,843	492,422
(Palo 1500 c.a. (6,00))	230	3	-18,000	0,850	200,215	-449,838	492,382
	229	4	-18,000	0,825	200,115	-449,834	492,338
	421	5	-18,000	0,800	199,875	-449,781	492,192
Plate_5_1	347	1	-16,000	0,900	204,133	-391,635	441,643
Element 10-10 (Plate)	348	2	-16,000	0,875	204,047	-391,635	441,603
(AZ 18-700)	349	3	-16,000	0,850	203,961	-391,635	441,563
	350	4	-16,000	0,825	203,875	-391,635	441,524
	513	5	-16,000	0,800	203,789	-391,635	441,484
Plate_2_3	3320	1	-12,000	0,900	252,811	-336,512	420,897
Element 11-11 (Plate)	3321	2	-12,000	0,675	251,306	-336,494	419,980
(Palo 1500 c.a. (6,00))	3322	3	-12,000	0,450	249,794	-336,476	419,062
	3323	4	-12,000	0,225	248,273	-336,458	418,143

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	4924	5	-12,000	0,000	246,745	-336,440	417,223
Plate_4_3	7375	1	-6,000	0,900	255,609	-305,645	398,440
Element 12-12 (Plate)	7376	2	-6,000	0,675	254,138	-305,626	397,484
(Palo 1500 c.a. (6,00))	7377	3	-6,000	0,450	252,653	-305,608	396,522
	7378	4	-6,000	0,225	251,155	-305,589	395,555
	8307	5	-6,000	0,000	249,645	-305,570	394,583
Plate_1_3	10780	1	0,000	0,900	259,476	-272,052	375,952
Element 13-13 (Plate)	10781	2	0,000	0,675	258,069	-272,030	374,967
(Palo 1500 c.a. (6,00))	10782	3	0,000	0,450	256,649	-272,008	373,975
	10783	4	0,000	0,225	255,216	-271,985	372,976
	12104	5	0,000	0,000	253,769	-271,963	371,971
Plate_3_4	421	1	-18,000	0,800	199,875	-449,781	492,192
Element 14-14 (Plate)	424	2	-18,000	0,600	199,398	-449,871	492,081
(Palo 1500 c.a. (6,00))	423	3	-18,000	0,400	199,038	-449,933	491,992
	422	4	-18,000	0,200	198,698	-449,969	491,887
	3116	5	-18,000	0,000	198,370	-449,988	491,772
Plate_5_2	513	1	-16,000	0,800	203,789	-391,635	441,484
Element 15-15 (Plate)	514	2	-16,000	0,600	203,100	-391,635	441,166
(AZ 18-700)	515	3	-16,000	0,400	202,411	-391,635	440,850

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	516	4	-16,000	0,200	201,722	-391,635	440,534
	3140	5	-16,000	0,000	201,034	-391,635	440,219
Plate_2_4	4924	1	-12,000	0,000	246,745	-336,440	417,223
Element 16-16 (Plate)	4925	2	-12,000	-0,194	245,419	-336,425	416,428
(Palo 1500 c.a. (6,00))	4926	3	-12,000	-0,389	244,089	-336,409	415,632
	4927	4	-12,000	-0,583	242,753	-336,393	414,837
	6355	5	-12,000	-0,778	241,414	-336,378	414,042
Plate_3_5	3116	1	-18,000	0,000	198,370	-449,988	491,772
Element 17-17 (Plate)	3119	2	-18,000	-0,500	197,254	-449,951	491,289
(Palo 1500 c.a. (6,00))	3118	3	-18,000	-1,000	196,046	-449,831	490,695
	3117	4	-18,000	-1,500	194,737	-449,693	490,047
	6048	5	-18,000	-2,000	193,243	-449,531	489,306
Plate_5_3	3140	1	-16,000	0,000	201,034	-391,635	440,219
Element 18-18 (Plate)	3141	2	-16,000	-0,500	199,313	-391,635	439,435
(AZ 18-700)	3142	3	-16,000	-1,000	197,591	-391,635	438,657
	3143	4	-16,000	-1,500	195,869	-391,634	437,883
	4890	5	-16,000	-2,000	194,146	-391,633	437,115
Plate_4_4	8307	1	-6,000	0,000	249,645	-305,570	394,583
Element 19-19 (Plate)	8308	2	-6,000	-0,500	246,243	-305,529	392,408

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	8309	3	-6,000	-1,000	242,786	-305,488	390,215
	8310	4	-6,000	-1,500	239,276	-305,447	388,009
	9574	5	-6,000	-2,000	235,721	-305,406	385,794
Plate_1_4	12104	1	0,000	0,000	253,769	-271,963	371,971
Element 20-20 (Plate)	12105	2	0,000	-0,500	250,506	-271,913	369,716
(Palo 1500 c.a. (6,00))	12106	3	0,000	-1,000	247,179	-271,863	367,433
	12107	4	0,000	-1,500	243,789	-271,813	365,124
	12356	5	0,000	-2,000	240,339	-271,763	362,792
Plate_2_5	6355	1	-12,000	-0,778	241,414	-336,378	414,042
Element 21-21 (Plate)	6356	2	-12,000	-1,083	239,299	-336,353	412,793
(Palo 1500 c.a. (6,00))	6357	3	-12,000	-1,389	237,176	-336,329	411,545
	6358	4	-12,000	-1,694	235,045	-336,304	410,300
	7461	5	-12,000	-2,000	232,906	-336,280	409,059
Plate_5_4	4890	1	-16,000	-2,000	194,146	-391,633	437,115
Element 22-22 (Plate)	4891	2	-16,000	-2,250	193,285	-391,632	436,732
(AZ 18-700)	4892	3	-16,000	-2,500	192,424	-391,631	436,351
	4893	4	-16,000	-2,750	191,564	-391,630	435,971
	6072	5	-16,000	-3,000	190,703	-391,629	435,593
Plate_2_6	7461	1	-12,000	-2,000	232,906	-336,280	409,059

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 23-23 (Plate)	7462	2	-12,000	-2,381	230,233	-336,249	407,517
(Palo 1500 c.a. (6,00))	7463	3	-12,000	-2,762	227,551	-336,218	405,983
	7464	4	-12,000	-3,143	224,865	-336,188	404,458
	8367	5	-12,000	-3,524	222,176	-336,157	402,944
Plate_3_6	6048	1	-18,000	-2,000	193,243	-449,531	489,306
Element 24-24 (Plate)	6051	2	-18,000	-2,500	191,741	-449,219	488,428
(Palo 1500 c.a. (6,00))	6050	3	-18,000	-3,000	190,207	-448,847	487,485
	6049	4	-18,000	-3,500	188,662	-448,433	486,503
	6239	5	-18,000	-4,000	187,092	-447,961	485,461
Plate_4_5	9574	1	-6,000	-2,000	235,721	-305,406	385,794
Element 25-25 (Plate)	9575	2	-6,000	-2,500	232,123	-305,364	383,573
(Palo 1500 c.a. (6,00))	9576	3	-6,000	-3,000	228,488	-305,323	381,352
	9577	4	-6,000	-3,500	224,821	-305,282	379,133
	9736	5	-6,000	-4,000	221,127	-305,241	376,921
Plate_1_5	12356	1	0,000	-2,000	240,339	-271,763	362,792
Element 26-26 (Plate)	12357	2	0,000	-2,500	236,831	-271,713	360,440
(Palo 1500 c.a. (6,00))	12358	3	0,000	-3,000	233,265	-271,663	358,069
	12359	4	0,000	-3,500	229,643	-271,613	355,682
	12814	5	0,000	-4,000	225,968	-271,564	353,282

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_5_5	6072	1	-16,000	-3,000	190,703	-391,629	435,593
Element 27-27 (Plate)	6075	2	-16,000	-3,250	189,843	-391,628	435,216
(AZ 18-700)	6074	3	-16,000	-3,500	188,984	-391,627	434,841
	6073	4	-16,000	-3,750	188,127	-391,626	434,468
	7161	5	-16,000	-4,000	187,273	-391,624	434,097
Plate_2_7	8367	1	-12,000	-3,524	222,176	-336,157	402,944
Element 28-28 (Plate)	8368	2	-12,000	-3,643	221,335	-336,148	402,473
(Palo 1500 c.a. (6,00))	8369	3	-12,000	-3,762	220,494	-336,138	402,003
	8370	4	-12,000	-3,881	219,654	-336,128	401,535
	8654	5	-12,000	-4,000	218,813	-336,119	401,068
Plate_4_6	9736	1	-6,000	-4,000	221,127	-305,241	376,921
Element 29-29 (Plate)	9737	2	-6,000	-4,321	218,741	-305,214	375,504
(Palo 1500 c.a. (6,00))	9738	3	-6,000	-4,643	216,347	-305,188	374,093
	9739	4	-6,000	-4,964	213,946	-305,161	372,688
	10840	5	-6,000	-5,285	211,540	-305,135	371,290
Plate_3_7	6239	1	-18,000	-4,000	187,092	-447,961	485,461
Element 30-30 (Plate)	6240	2	-18,000	-4,500	185,441	-447,522	484,422
(Palo 1500 c.a. (6,00))	6241	3	-18,000	-5,000	183,817	-447,080	483,393
	6242	4	-18,000	-5,500	182,171	-446,564	482,292

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	7305	5	-18,000	-6,000	180,339	-445,859	480,950
Plate_5_6	7161	1	-16,000	-4,000	187,273	-391,624	434,097
Element 31-31 (Plate)	7162	2	-16,000	-4,500	185,574	-391,620	433,364
(AZ 18-700)	7163	3	-16,000	-5,000	183,890	-391,616	432,641
	7164	4	-16,000	-5,500	182,215	-391,610	431,927
	7285	5	-16,000	-6,000	180,542	-391,604	431,218
Plate_2_8	8654	1	-12,000	-4,000	218,813	-336,119	401,068
Element 32-32 (Plate)	8655	2	-12,000	-4,500	215,285	-336,079	399,120
(Palo 1500 c.a. (6,00))	8656	3	-12,000	-5,000	211,764	-336,039	397,198
	8657	4	-12,000	-5,500	208,253	-336,000	395,304
	9326	5	-12,000	-6,000	204,755	-335,961	393,439
Plate_1_6	12814	1	0,000	-4,000	225,968	-271,564	353,282
Element 33-33 (Plate)	12815	2	0,000	-4,500	222,240	-271,514	350,871
(Palo 1500 c.a. (6,00))	12816	3	0,000	-5,000	218,462	-271,464	348,451
	12817	4	0,000	-5,500	214,635	-271,414	346,026
	15162	5	0,000	-6,000	210,761	-271,364	343,596
Plate_4_7	10840	1	-6,000	-5,285	211,540	-305,135	371,290
Element 34-34 (Plate)	10841	2	-6,000	-5,464	210,200	-305,120	370,516
(Palo 1500 c.a. (6,00))	10842	3	-6,000	-5,643	208,859	-305,105	369,745

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	10843	4	-6,000	-5,821	207,517	-305,091	368,977
	11272	5	-6,000	-6,000	206,175	-305,076	368,211
Plate_3_8	7305	1	-18,000	-6,000	180,339	-445,859	480,950
Element 35-35 (Plate)	7306	2	-18,000	-6,500	178,360	-445,138	479,542
(Palo 1500 c.a. (6,00))	7307	3	-18,000	-7,000	176,654	-444,500	478,316
	7308	4	-18,000	-7,500	174,450	-443,231	476,326
	8283	5	-18,000	-8,000	171,368	-441,297	473,403
Plate_5_7	7285	1	-16,000	-6,000	180,542	-391,604	431,218
Element 36-36 (Plate)	7286	2	-16,000	-6,500	178,862	-391,597	430,512
(AZ 18-700)	7287	3	-16,000	-7,000	177,169	-391,590	429,805
	7288	4	-16,000	-7,500	175,457	-391,582	429,094
	7415	5	-16,000	-8,000	173,722	-391,574	428,380
Plate_2_9	9326	1	-12,000	-6,000	204,755	-335,961	393,439
Element 37-37 (Plate)	9327	2	-12,000	-6,500	201,271	-335,922	391,604
(Palo 1500 c.a. (6,00))	9328	3	-12,000	-7,000	197,803	-335,883	389,799
	9329	4	-12,000	-7,500	194,352	-335,844	388,026
	9340	5	-12,000	-8,000	190,919	-335,806	386,285
Plate_4_8	11272	1	-6,000	-6,000	206,175	-305,076	368,211
Element 38-38 (Plate)	11273	2	-6,000	-6,250	204,296	-305,055	367,145

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	11274	3	-6,000	-6,500	202,417	-305,035	366,086
	11275	4	-6,000	-6,750	200,539	-305,014	365,034
	13130	5	-6,000	-7,000	198,662	-304,994	363,989
Plate_4_8	13130	1	-6,000	-7,000	198,662	-304,994	363,989
Element 38-39 (Plate)	13131	2	-6,000	-7,250	196,786	-304,973	362,951
(Palo 1500 c.a. (6,00))	13132	3	-6,000	-7,500	194,913	-304,953	361,922
	13133	4	-6,000	-7,750	193,042	-304,932	360,900
	13196	5	-6,000	-8,000	191,174	-304,912	359,887
Plate_1_7	15162	1	0,000	-6,000	210,761	-271,364	343,596
Element 39-40 (Plate)	15163	2	0,000	-6,500	206,841	-271,314	341,167
(Palo 1500 c.a. (6,00))	15164	3	0,000	-7,000	202,878	-271,264	338,738
	15165	4	0,000	-7,500	198,872	-271,214	336,314
	15196	5	0,000	-8,000	194,826	-271,164	333,897
Plate_4_9	13196	1	-6,000	-8,000	191,174	-304,912	359,887
Element 40-41 (Plate)	13197	2	-6,000	-8,003	191,149	-304,912	359,874
(Palo 1500 c.a. (6,00))	13198	3	-6,000	-8,007	191,123	-304,912	359,860
	13199	4	-6,000	-8,010	191,098	-304,911	359,846
	14580	5	-6,000	-8,014	191,073	-304,911	359,832
Plate_1_8	15196	1	0,000	-8,000	194,826	-271,164	333,897

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 41-42 (Plate)	15197	2	0,000	-8,448	191,166	-271,120	331,738
(Palo 1500 c.a. (6,00))	15198	3	0,000	-8,896	187,475	-271,075	329,589
	15199	4	0,000	-9,345	183,757	-271,030	327,451
	17051	5	0,000	-9,793	180,010	-270,986	325,326
Plate_3_9	8283	1	-18,000	-8,000	171,368	-441,297	473,403
Element 42-43 (Plate)	8284	2	-18,000	-8,500	168,257	-439,473	470,581
(Palo 1500 c.a. (6,00))	8285	3	-18,000	-9,000	165,988	-437,467	467,899
	8286	4	-18,000	-9,500	162,580	-434,248	463,684
	9534	5	-18,000	-10,000	160,041	-432,726	461,373
Plate_5_8	7415	1	-16,000	-8,000	173,722	-391,574	428,380
Element 43-44 (Plate)	7416	2	-16,000	-8,500	171,964	-391,564	427,662
(AZ 18-700)	7417	3	-16,000	-9,000	170,185	-391,554	426,940
	7418	4	-16,000	-9,500	168,385	-391,543	426,215
	8509	5	-16,000	-10,000	166,568	-391,531	425,490
Plate_2_10	9340	1	-12,000	-8,000	190,919	-335,806	386,285
Element 44-45 (Plate)	9341	2	-12,000	-8,500	187,505	-335,768	384,576
(Palo 1500 c.a. (6,00))	9342	3	-12,000	-9,000	184,111	-335,731	382,899
	9343	4	-12,000	-9,500	180,738	-335,693	381,256
	9910	5	-12,000	-10,000	177,386	-335,656	379,645

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_4_10	14580	1	-6,000	-8,014	191,073	-304,911	359,832
Element 45-46 (Plate)	14581	2	-6,000	-8,510	187,374	-304,871	357,848
(Palo 1500 c.a. (6,00))	14582	3	-6,000	-9,007	183,695	-304,831	355,901
	14583	4	-6,000	-9,503	180,038	-304,791	353,993
	15560	5	-6,000	-10,000	176,406	-304,752	352,126
Plate_1_9	17051	1	0,000	-9,793	180,010	-270,986	325,326
Element 46-47 (Plate)	17052	2	0,000	-9,845	179,576	-270,980	325,081
(Palo 1500 c.a. (6,00))	17053	3	0,000	-9,896	179,141	-270,975	324,837
	17054	4	0,000	-9,948	178,706	-270,970	324,593
	17107	5	0,000	-10,000	178,270	-270,965	324,349
Plate_3_10	9534	1	-18,000	-10,000	160,041	-432,726	461,373
Element 47-48 (Plate)	9535	2	-18,000	-10,500	158,605	-432,094	460,283
(Palo 1500 c.a. (6,00))	9536	3	-18,000	-11,000	157,545	-431,228	459,106
	9537	4	-18,000	-11,500	155,471	-429,254	456,542
	10714	5	-18,000	-12,000	153,433	-427,802	454,484
Plate_5_9	8509	1	-16,000	-10,000	166,568	-391,531	425,490
Element 48-49 (Plate)	8510	2	-16,000	-10,500	164,742	-391,518	424,766
(AZ 18-700)	8511	3	-16,000	-11,000	162,920	-391,504	424,050
	8512	4	-16,000	-11,500	161,108	-391,489	423,343

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	9722	5	-16,000	-12,000	159,310	-391,474	422,649
Plate_2_11	9910	1	-12,000	-10,000	177,386	-335,656	379,645
Element 49-50 (Plate)	9911	2	-12,000	-10,500	174,057	-335,619	378,069
(Palo 1500 c.a. (6,00))	9912	3	-12,000	-11,000	170,753	-335,582	376,526
	9913	4	-12,000	-11,500	167,475	-335,545	375,018
	12208	5	-12,000	-12,000	164,225	-335,509	373,545
Plate_4_11	15560	1	-6,000	-10,000	176,406	-304,752	352,126
Element 50-51 (Plate)	15561	2	-6,000	-10,500	172,775	-304,713	350,287
(Palo 1500 c.a. (6,00))	15562	3	-6,000	-11,000	169,172	-304,675	348,491
	15563	4	-6,000	-11,500	165,595	-304,637	346,735
	17427	5	-6,000	-12,000	162,039	-304,600	345,019
Plate_1_10	17107	1	0,000	-10,000	178,270	-270,965	324,349
Element 51-52 (Plate)	17108	2	0,000	-10,250	176,162	-270,940	323,174
(Palo 1500 c.a. (6,00))	17109	3	0,000	-10,500	174,046	-270,915	322,005
	17110	4	0,000	-10,750	171,923	-270,890	320,841
	18659	5	0,000	-11,000	169,792	-270,865	319,683
Plate_1_10	18659	1	0,000	-11,000	169,792	-270,865	319,683
Element 51-53 (Plate)	18660	2	0,000	-11,250	167,654	-270,840	318,531
(Palo 1500 c.a. (6,00))	18661	3	0,000	-11,500	165,509	-270,815	317,386

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	18662	4	0,000	-11,750	163,358	-270,790	316,248
	19563	5	0,000	-12,000	161,201	-270,764	315,117
Plate_1_11	19563	1	0,000	-12,000	161,201	-270,764	315,117
Element 52-54 (Plate)	19564	2	0,000	-12,126	160,113	-270,752	314,551
(Palo 1500 c.a. (6,00))	19565	3	0,000	-12,252	159,023	-270,739	313,987
	19566	4	0,000	-12,378	157,932	-270,727	313,425
	20751	5	0,000	-12,503	156,840	-270,714	312,866
Plate_3_11	10714	1	-18,000	-12,000	153,433	-427,802	454,484
Element 53-55 (Plate)	10715	2	-18,000	-12,500	152,674	-427,129	453,595
(Palo 1500 c.a. (6,00))	10716	3	-18,000	-13,000	151,891	-426,448	452,690
	10717	4	-18,000	-13,500	151,290	-425,870	451,945
	11906	5	-18,000	-14,000	151,014	-425,359	451,371
Plate_5_10	9722	1	-16,000	-12,000	159,310	-391,474	422,649
Element 54-56 (Plate)	9723	2	-16,000	-12,500	157,520	-391,459	421,963
(AZ 18-700)	9724	3	-16,000	-13,000	155,721	-391,443	421,280
	9725	4	-16,000	-13,500	153,899	-391,428	420,596
	11100	5	-16,000	-14,000	152,051	-391,414	419,910
Plate_2_12	12208	1	-12,000	-12,000	164,225	-335,509	373,545
Element 55-57 (Plate)	12209	2	-12,000	-12,500	161,006	-335,472	372,108

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	12210	3	-12,000	-13,000	157,822	-335,436	370,709
	12211	4	-12,000	-13,500	154,676	-335,400	369,348
	13116	5	-12,000	-14,000	151,573	-335,364	368,026
Plate_4_12	17427	1	-6,000	-12,000	162,039	-304,600	345,019
Element 56-58 (Plate)	17428	2	-6,000	-12,500	158,503	-304,563	343,339
(Palo 1500 c.a. (6,00))	17429	3	-6,000	-13,000	154,983	-304,526	341,695
	17430	4	-6,000	-13,500	151,474	-304,490	340,086
	18313	5	-6,000	-14,000	147,975	-304,453	338,509
Plate_1_12	20751	1	0,000	-12,503	156,840	-270,714	312,866
Element 57-59 (Plate)	20752	2	0,000	-12,878	153,587	-270,676	311,215
(Palo 1500 c.a. (6,00))	20753	3	0,000	-13,252	150,324	-270,639	309,585
	20754	4	0,000	-13,626	147,052	-270,601	307,976
	21591	5	0,000	-14,000	143,772	-270,563	306,390
Plate_3_12	11906	1	-18,000	-14,000	151,014	-425,359	451,371
Element 58-60 (Plate)	11909	2	-18,000	-14,250	151,000	-425,070	451,094
(Palo 1500 c.a. (6,00))	11908	3	-18,000	-14,500	151,031	-424,774	450,825
	11907	4	-18,000	-14,750	151,067	-424,459	450,540
	13034	5	-18,000	-15,000	150,936	-424,005	450,069
Plate_5_11	11100	1	-16,000	-14,000	152,051	-391,414	419,910

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 59-61 (Plate)	11101	2	-16,000	-14,250	151,118	-391,407	419,567
(AZ 18-700)	11102	3	-16,000	-14,500	150,177	-391,401	419,223
	11103	4	-16,000	-14,750	149,225	-391,394	418,876
	12248	5	-16,000	-15,000	148,255	-391,386	418,524
Plate_2_13	13116	1	-12,000	-14,000	151,573	-335,364	368,026
Element 60-62 (Plate)	13117	2	-12,000	-14,250	150,038	-335,346	367,381
(Palo 1500 c.a. (6,00))	13118	3	-12,000	-14,500	148,514	-335,329	366,745
	13119	4	-12,000	-14,750	147,001	-335,311	366,119
	14494	5	-12,000	-15,000	145,500	-335,293	365,502
Plate_4_13	18313	1	-6,000	-14,000	147,975	-304,453	338,509
Element 61-63 (Plate)	18314	2	-6,000	-14,250	146,229	-304,435	337,733
(Palo 1500 c.a. (6,00))	18315	3	-6,000	-14,500	144,486	-304,416	336,965
	18316	4	-6,000	-14,750	142,746	-304,398	336,206
	18342	5	-6,000	-15,000	141,010	-304,379	335,456
Plate_1_13	21591	1	0,000	-14,000	143,772	-270,563	306,390
Element 62-64 (Plate)	21592	2	0,000	-14,250	141,577	-270,538	305,344
(Palo 1500 c.a. (6,00))	21593	3	0,000	-14,500	139,380	-270,512	304,309
	21594	4	0,000	-14,750	137,181	-270,487	303,285
	21630	5	0,000	-15,000	134,980	-270,461	302,273

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_3_13	13034	1	-18,000	-15,000	150,936	-424,005	450,069
Element 63-65 (Plate)	13035	2	-18,000	-15,750	149,073	-417,270	443,100
(Palo 1500 c.a. (6,00))	13036	3	-18,000	-16,500	146,745	-411,102	436,508
	13037	4	-18,000	-17,250	143,582	-405,144	429,834
	13228	5	-18,000	-18,000	139,608	-399,382	423,080
Plate_5_12	12248	1	-16,000	-15,000	148,255	-391,386	418,524
Element 64-66 (Plate)	12249	2	-16,000	-15,750	145,221	-391,363	417,437
(AZ 18-700)	12250	3	-16,000	-16,500	141,987	-391,338	416,300
	12251	4	-16,000	-17,250	138,572	-391,311	415,123
	13242	5	-16,000	-18,000	135,017	-391,284	413,924
Plate_2_14	14494	1	-12,000	-15,000	145,500	-335,293	365,502
Element 65-67 (Plate)	14495	2	-12,000	-15,750	141,064	-335,240	363,710
(Palo 1500 c.a. (6,00))	14496	3	-12,000	-16,500	136,739	-335,187	362,006
	14497	4	-12,000	-17,250	132,537	-335,134	360,390
	16176	5	-12,000	-18,000	128,468	-335,081	358,864
Plate_4_14	18342	1	-6,000	-15,000	141,010	-304,379	335,456
Element 66-68 (Plate)	18343	2	-6,000	-15,750	135,839	-304,324	333,265
(Palo 1500 c.a. (6,00))	18344	3	-6,000	-16,500	130,749	-304,269	331,172
	18345	4	-6,000	-17,250	125,770	-304,214	329,188

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	18346	5	-6,000	-18,000	120,931	-304,160	327,319
Plate_1_14	21630	1	0,000	-15,000	134,980	-270,461	302,273
Element 67-69 (Plate)	21631	2	0,000	-15,750	128,399	-270,384	299,322
(Palo 1500 c.a. (6,00))	21632	3	0,000	-16,500	121,897	-270,307	296,521
	21633	4	0,000	-17,250	115,536	-270,230	293,892
	21634	5	0,000	-18,000	109,378	-270,154	291,456
Plate_3_14	13228	1	-18,000	-18,000	139,608	-399,382	423,080
Element 68-70 (Plate)	13231	2	-18,000	-18,625	136,722	-396,117	419,048
(Palo 1500 c.a. (6,00))	13230	3	-18,000	-19,250	133,632	-392,890	414,994
	13229	4	-18,000	-19,875	130,249	-389,616	410,811
	15176	5	-18,000	-20,500	126,530	-386,230	406,428
Plate_3_14	15176	1	-18,000	-20,500	126,530	-386,230	406,428
Element 68-71 (Plate)	15179	2	-18,000	-21,125	122,509	-382,656	401,789
(Palo 1500 c.a. (6,00))	15178	3	-18,000	-21,750	118,272	-378,944	396,972
	15177	4	-18,000	-22,375	113,978	-375,244	392,173
	17087	5	-18,000	-23,000	110,030	-371,796	387,735
Plate_5_13	13242	1	-16,000	-18,000	135,017	-391,284	413,924
Element 69-72 (Plate)	13245	2	-16,000	-18,833	130,956	-391,254	412,588
(AZ 18-700)	13244	3	-16,000	-19,667	126,783	-391,225	411,256

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	13243	4	-16,000	-20,500	122,496	-391,199	409,929
	15300	5	-16,000	-21,333	118,100	-391,177	408,616
Plate_5_13	15300	1	-16,000	-21,333	118,100	-391,177	408,616
Element 69-73 (Plate)	15301	2	-16,000	-21,750	115,869	-391,168	407,968
(AZ 18-700)	15302	3	-16,000	-22,167	113,623	-391,160	407,328
	15303	4	-16,000	-22,583	111,369	-391,154	406,700
	16826	5	-16,000	-23,000	109,114	-391,150	406,084
Plate_2_15	16176	1	-12,000	-18,000	128,468	-335,081	358,864
Element 70-74 (Plate)	16177	2	-12,000	-19,250	122,018	-334,993	356,523
(Palo 1500 c.a. (6,00))	16178	3	-12,000	-20,500	116,008	-334,904	354,427
	16179	4	-12,000	-21,750	110,454	-334,815	352,563
	18583	5	-12,000	-23,000	105,355	-334,724	350,912
Plate_4_15	18346	1	-6,000	-18,000	120,931	-304,160	327,319
Element 71-75 (Plate)	17890	2	-6,000	-19,250	113,250	-304,070	324,476
(Palo 1500 c.a. (6,00))	17891	3	-6,000	-20,500	106,122	-303,981	321,972
	17892	4	-6,000	-21,750	99,609	-303,891	319,799
	19067	5	-6,000	-23,000	93,751	-303,800	317,937
Plate_1_15	21634	1	0,000	-18,000	109,378	-270,154	291,456
Element 72-76 (Plate)	21163	2	0,000	-19,250	99,739	-270,030	287,861

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	21164	3	0,000	-20,500	91,051	-269,909	284,853
	21165	4	0,000	-21,750	83,429	-269,791	282,396
	21166	5	0,000	-23,000	76,936	-269,675	280,435
Plate_5_14	16826	1	-16,000	-23,000	109,114	-391,150	406,084
Element 73-77 (Plate)	16827	2	-16,000	-23,250	107,763	-391,148	405,721
(AZ 18-700)	16828	3	-16,000	-23,500	106,414	-391,147	405,364
	16829	4	-16,000	-23,750	105,066	-391,147	405,012
	16830	5	-16,000	-24,000	103,718	-391,147	404,665
Plate_3_15	17087	1	-18,000	-23,000	110,030	-371,796	387,735
Element 74-78 (Plate)	17090	2	-18,000	-23,711	106,528	-369,351	384,407
(Palo 1500 c.a. (6,00))	17089	3	-18,000	-24,422	103,597	-367,039	381,379
	17088	4	-18,000	-25,132	101,109	-364,642	378,400
	18613	5	-18,000	-25,843	98,942	-362,049	375,325
Plate_3_15	18613	1	-18,000	-25,843	98,942	-362,049	375,325
Element 74-79 (Plate)	18616	2	-18,000	-26,487	97,145	-359,567	372,459
(Palo 1500 c.a. (6,00))	18615	3	-18,000	-27,131	95,374	-357,082	369,599
	18614	4	-18,000	-27,774	93,580	-354,658	366,796
	19881	5	-18,000	-28,418	91,734	-352,330	364,076
Plate_3_15	19881	1	-18,000	-28,418	91,734	-352,330	364,076

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 74-80 (Plate)	19884	2	-18,000	-29,001	90,003	-350,301	361,679
(Palo 1500 c.a. (6,00))	19883	3	-18,000	-29,584	88,201	-348,350	359,343
	19882	4	-18,000	-30,167	86,318	-346,470	357,061
	19969	5	-18,000	-30,750	84,346	-344,655	354,826
Plate_3_15	19969	1	-18,000	-30,750	84,346	-344,655	354,826
Element 74-81 (Plate)	19972	2	-18,000	-31,279	82,476	-343,061	352,836
(Palo 1500 c.a. (6,00))	19971	3	-18,000	-31,807	80,524	-341,511	350,876
	19970	4	-18,000	-32,335	78,489	-340,000	348,942
	20053	5	-18,000	-32,863	76,374	-338,524	347,032
Plate_3_15	20053	1	-18,000	-32,863	76,374	-338,524	347,032
Element 74-82 (Plate)	20056	2	-18,000	-33,341	74,394	-337,214	345,322
(Palo 1500 c.a. (6,00))	20055	3	-18,000	-33,819	72,359	-335,930	343,634
	20054	4	-18,000	-34,298	70,278	-334,671	341,971
	21033	5	-18,000	-34,776	68,162	-333,440	340,336
Plate_3_15	21033	1	-18,000	-34,776	68,162	-333,440	340,336
Element 74-83 (Plate)	21034	2	-18,000	-35,209	66,227	-332,352	338,886
(Palo 1500 c.a. (6,00))	21035	3	-18,000	-35,643	64,285	-331,292	337,471
	21036	4	-18,000	-36,076	62,347	-330,263	336,097
	21101	5	-18,000	-36,509	60,423	-329,270	334,768

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Plate_3_15	21101	1	-18,000	-36,509	60,423	-329,270	334,768
Element 74-84 (Plate)	21104	2	-18,000	-36,901	58,701	-328,403	333,608
(Palo 1500 c.a. (6,00))	21103	3	-18,000	-37,294	57,004	-327,567	332,490
	21102	4	-18,000	-37,686	55,334	-326,761	331,413
	22233	5	-18,000	-38,078	53,693	-325,985	330,377
Plate_3_15	22233	1	-18,000	-38,078	53,693	-325,985	330,377
Element 74-85 (Plate)	22236	2	-18,000	-38,434	52,231	-325,304	329,470
(Palo 1500 c.a. (6,00))	22235	3	-18,000	-38,789	50,791	-324,643	328,592
	22234	4	-18,000	-39,145	49,370	-323,999	327,739
	22257	5	-18,000	-39,500	47,962	-323,368	326,905
Plate_2_16	18583	1	-12,000	-23,000	105,355	-334,724	350,912
Element 75-86 (Plate)	18584	2	-12,000	-24,468	99,919	-334,616	349,216
(Palo 1500 c.a. (6,00))	18585	3	-12,000	-25,935	94,962	-334,510	347,728
	18586	4	-12,000	-27,403	90,339	-334,405	346,393
	19845	5	-12,000	-28,871	85,913	-334,303	345,166
Plate_2_16	19845	1	-12,000	-28,871	85,913	-334,303	345,166
Element 75-87 (Plate)	19846	2	-12,000	-29,908	82,840	-334,234	344,347
(Palo 1500 c.a. (6,00))	19847	3	-12,000	-30,946	79,776	-334,167	343,558
	19848	4	-12,000	-31,984	76,694	-334,105	342,795

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	20881	5	-12,000	-33,022	73,573	-334,048	342,055
Plate_2_16	20881	1	-12,000	-33,022	73,573	-334,048	342,055
Element 75-88 (Plate)	20884	2	-12,000	-33,755	71,335	-334,012	341,545
(Palo 1500 c.a. (6,00))	20883	3	-12,000	-34,489	69,068	-333,979	341,046
	20882	4	-12,000	-35,223	66,775	-333,951	340,561
	22069	5	-12,000	-35,957	64,459	-333,926	340,091
Plate_2_16	22069	1	-12,000	-35,957	64,459	-333,926	340,091
Element 75-89 (Plate)	22070	2	-12,000	-36,476	62,810	-333,911	339,768
(Palo 1500 c.a. (6,00))	22071	3	-12,000	-36,995	61,154	-333,899	339,453
	22072	4	-12,000	-37,513	59,494	-333,889	339,148
	22167	5	-12,000	-38,032	57,831	-333,882	338,853
Plate_2_16	22167	1	-12,000	-38,032	57,831	-333,882	338,853
Element 75-90 (Plate)	22168	2	-12,000	-38,399	56,654	-333,878	338,651
(Palo 1500 c.a. (6,00))	22169	3	-12,000	-38,766	55,478	-333,876	338,454
	22170	4	-12,000	-39,133	54,301	-333,875	338,262
	23134	5	-12,000	-39,500	53,125	-333,874	338,074
Plate_4_16	19067	1	-6,000	-23,000	93,751	-303,800	317,937
Element 76-91 (Plate)	19068	2	-6,000	-24,495	87,640	-303,692	316,085
(Palo 1500 c.a. (6,00))	19069	3	-6,000	-25,989	82,442	-303,586	314,581

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
	19070	4	-6,000	-27,484	78,035	-303,481	313,353
	19831	5	-6,000	-28,979	74,258	-303,380	312,336
Plate_4_16	19831	1	-6,000	-28,979	74,258	-303,380	312,336
Element 76-92 (Plate)	19832	2	-6,000	-30,021	71,900	-303,312	311,718
(Palo 1500 c.a. (6,00))	19833	3	-6,000	-31,064	69,694	-303,248	311,153
	19834	4	-6,000	-32,106	67,578	-303,188	310,628
	20911	5	-6,000	-33,149	65,499	-303,132	310,128
Plate_4_16	20911	1	-6,000	-33,149	65,499	-303,132	310,128
Element 76-93 (Plate)	20912	2	-6,000	-33,876	64,047	-303,098	309,791
(Palo 1500 c.a. (6,00))	20913	3	-6,000	-34,603	62,584	-303,066	309,461
	20914	4	-6,000	-35,330	61,105	-303,039	309,138
	22109	5	-6,000	-36,057	59,610	-303,015	308,822
Plate_4_16	22109	1	-6,000	-36,057	59,610	-303,015	308,822
Element 76-94 (Plate)	22110	2	-6,000	-36,564	58,560	-303,000	308,607
(Palo 1500 c.a. (6,00))	22111	3	-6,000	-37,071	57,505	-302,988	308,397
	22112	4	-6,000	-37,578	56,447	-302,978	308,191
	22726	5	-6,000	-38,085	55,387	-302,970	307,991
Plate_4_16	22726	1	-6,000	-38,085	55,387	-302,970	307,991
Element 76-95 (Plate)	22727	2	-6,000	-38,439	54,648	-302,966	307,855

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
(Palo 1500 c.a. (6,00))	22728	3	-6,000	-38,793	53,909	-302,963	307,722
	22729	4	-6,000	-39,146	53,170	-302,961	307,591
	23255	5	-6,000	-39,500	52,431	-302,960	307,464
Plate_1_16	21166	1	0,000	-23,000	76,936	-269,675	280,435
Element 77-96 (Plate)	21140	2	0,000	-24,495	70,677	-269,542	278,654
(Palo 1500 c.a. (6,00))	21141	3	0,000	-25,989	65,913	-269,415	277,360
	21142	4	0,000	-27,484	62,414	-269,295	276,433
	21351	5	0,000	-28,979	59,921	-269,184	275,773
Plate_1_16	21351	1	0,000	-28,979	59,921	-269,184	275,773
Element 77-97 (Plate)	21352	2	0,000	-30,021	58,646	-269,113	275,429
(Palo 1500 c.a. (6,00))	21353	3	0,000	-31,064	57,661	-269,047	275,157
	21354	4	0,000	-32,106	56,899	-268,988	274,940
	22191	5	0,000	-33,149	56,298	-268,934	274,763
Plate_1_16	22191	1	0,000	-33,149	56,298	-268,934	274,763
Element 77-98 (Plate)	22192	2	0,000	-33,876	55,947	-268,900	274,659
(Palo 1500 c.a. (6,00))	22193	3	0,000	-34,603	55,636	-268,870	274,566
	22194	4	0,000	-35,330	55,353	-268,843	274,482
	22992	5	0,000	-36,057	55,089	-268,820	274,407
Plate_1_16	22992	1	0,000	-36,057	55,089	-268,820	274,407

Structural element	Node [10^3]	Local number	X [m]	Y [m]	u_x [10^{-3} m]	u_y [10^{-3} m]	|u| [10^{-3} m]
Element 77-99 (Plate)	22993	2	0,000	-36,564	54,912	-268,806	274,357
(Palo 1500 c.a. (6,00))	22994	3	0,000	-37,071	54,738	-268,794	274,311
	22995	4	0,000	-37,578	54,566	-268,784	274,267
	24024	5	0,000	-38,085	54,396	-268,776	274,225
Plate_1_16	24024	1	0,000	-38,085	54,396	-268,776	274,225
Element 77-100 (Plate)	24025	2	0,000	-38,439	54,277	-268,772	274,198
(Palo 1500 c.a. (6,00))	24026	3	0,000	-38,793	54,159	-268,769	274,171
	24027	4	0,000	-39,146	54,040	-268,767	274,146
	24134	5	0,000	-39,500	53,921	-268,766	274,122