




**ASSE VIARIO MARCHE-UMBRIA
E QUADRILATERO DI PENETRAZIONE INTERNA
MAXI LOTTO 2**

LAVORI DI COMPLETAMENTO DELLA DIRETTRICE PERUGIA ANCONA:
SS. 318 DI "VALFABBRICA", TRATTO PIANELLO -VALFABBRICA
SS. 76 "VAL D'ESINO", TRATTI FOSSATO VICO - CANCELLI E ALBACINA - SERRA SAN QUIRICO
"PEDEMONTANA DELLE MARCHE", TRATTO FABRIANO-MUCCIA-SFERCIA.


PROGETTO ESECUTIVO DI DETTAGLIO

<p>CONTRAENTE GENERALE:</p> 	<p><i>Il responsabile del Contraente Generale:</i></p>  Ing. Federico Montanari	<p><i>Il responsabile Integrazioni delle Prestazioni Specialistiche:</i></p>  Ing. Salvatore Lieto
---	---	--

PROGETTAZIONE: Associazione Temporanea di Imprese

Mandataria: **PROGETTAZIONE GRANDI** Mandanti:

			
--	--	---	--

<p>RESPONSABILE DELLA PROGETTAZIONE PER L'A.T.I.</p>  Ing. Antonio Grimaldi	
---	--

VISTO: IL RESPONSABILE DEL PROCEDIMENTO Ing. Giulio Petrizzelli	IL COORDINATORE DELLA SICUREZZA IN FASE DI ESECUZIONE Ing. Salvatore Chirico	IL DIRETTORE DEI LAVORI Ing. Peppino Marascio
--	---	--

<p>2.1.1. - PEDEMONTANA DELLE MARCHE Lotto funzionale del Sub lotto 2.1 - Tratto Fabriano - Matelica Nord OPERE D'ARTE MINORI: OPERE DI ATTRAVERSAMENTO Sistemazione viabilità interferita al km 5+641 - Tombino Ø 800 mm a Pr. 0+427,70 Relazione di calcolo</p>	<p>SCALA: 1:100/50</p> <p>DATA: Luglio 2018</p>
--	---

Codice Unico di Progetto (CUP) **F12C03000050021** (Assegnato CIPE 20-04-2015)

Codice elaborato:

Opera	Tratto	Settore	CEE	WBS	Id. doc.	N. prog.	Rev.
L 0 7 0 3	2 1 1	E	1 1	C S 5 0 0 7	R E L	0 4	A

REV.	DATA	DESCRIZIONE	Redatto		Controllato	Approvato
A	Luglio 2018	Emissione PED	TECNOSTRUTTURE	A. TOSIANI	S. LIETO	A. GRIMALDI

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 1 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-------------------------

I N D I C E

1. INTRODUZIONE.....	2
1.1 IPOTESI DI CALCOLO	2
2. DOCUMENTI DI RIFERIMENTO	5
2.1 NORMATIVE DI CARATTERE GENERALE.....	5
2.2 NORMATIVE SPECIFICHE PER LE STRUTTURE.....	5
3. MATERIALI	6
4. PARAMETRI GEOTECNICI DEL TERRENO.....	8
5. GEOMETRIA DELLA VASCA D' IMBOCCO	9
6. GEOMETRIA DEL MURO DI SOSTEGNO	10
7. CALCOLO DELLA VASCA D' IMBOCCO	11
7.1 AZIONE SISMICA.....	11
7.2 CALCOLO DELLE SPINTE STATICHE	12
7.3 COMBINAZIONI DI CARICO.....	16
6.4.1 Combinazioni per la verifica allo SLU e SLE.....	16
6.4.2 Stato limite di apertura delle fessure.....	18
7.4 DIAGRAMMI DELLE SOLLECITAZIONI.....	19
7.5 VERIFICHE.....	25
8. CALCOLO DEL MURO DI SOSTEGNO	30
8.1 CRITERI E IPOTESI DI CALCOLO.....	31
8.1.1 Criteri di verifica delle sezioni in c.a.	31
8.1.2 Verifiche per gli stati limite ultimi a flessione-pressoflessione	31
8.1.3 Verifica agli stati limite ultimi a taglio.....	31
8.1.4 Verifica agli stati limite d'esercizio	32
8.2 VERIFICA AGLI STATI LIMITI	33
8.2.1 Metodo di analisi - calcolo muro	35
8.2.1.1 <i>Descrizione modello di calcolo.....</i>	<i>35</i>
8.3 MURO: H = 1.90 M	36
8.3.1 Analisi dei carichi	36
8.3.1.1 <i>Carico permanente.....</i>	<i>36</i>
8.3.1.2 <i>Accidentale a tergo del muro.....</i>	<i>36</i>
8.3.1.3 <i>Descrizione analisi sismica.....</i>	<i>37</i>
8.3.2 Risultati verifiche geotecniche.....	38
8.3.3 Risultati verifiche strutturali del muro con H = 1.90 m.....	39
ALLEGATO 1 : TABULATI DI CALCOLO DELLA VASCA D' IMBOCCO	43
ALLEGATO 2 : TABULATI DI CALCOLO DEL MURO DI SOSTEGNO SU FONDAZIONE DIRETTA.....	267

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 2 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-------------------------

1. INTRODUZIONE

La presente relazione riporta i calcoli, e le relative verifiche, delle strutture di imbocco e sbocco del tombino circolare previsto al km. 0+427,70 della viabilità interferita al km 5+641, nell'ambito dei Lavori di completamento della direttrice Perugia - Ancona, Lotto della Pedemontana Marche: Tratto Fabriano - Muccia - Sfercia.

In accordo alle disposizioni dettate dalle "Norme tecniche per le costruzioni" (DM 14.09.2005), sono state effettuate le verifiche agli stati limite di esercizio (SLE) e agli stati limite ultimi (SLU).

Secondo la normativa tecnica in vigore, ai fini della zonazione sismica del territorio italiano (O.P.C.M. 20.03.2003), l'area in oggetto ricade in zona sismica di categoria 2. Pertanto, per strutture di classe 2 (vita utile di 100 anni, sisma con periodo di ritorno di 1000 anni) l'accelerazione orizzontale utilizzata, come da relazione sismica, è pari a $a_g = 0.275g$ (relazione sismica L073211E04000000REL01D par. 5) con suolo di categoria E. A tale accelerazione si è fatto riferimento nei calcoli di verifica riportati nel seguito.

Per la descrizione delle opere si faccia riferimento agli elaborati grafici di progetto da considerarsi parte integrante della presente.

In coda alla relazione è riportato, negli Allegati, il file di input e output delle analisi svolte.

1.1 IPOTESI DI CALCOLO

Per il calcolo delle strutture si è proceduto ad un'analisi con l'ausilio del programma di calcolo automatico agli elementi finiti SAP2000.

Considerata la geometria della struttura dell'imbocco, per il calcolo delle sollecitazioni si è assunto uno schema di calcolo a piastra incastrata su tre lati e libera in testa:

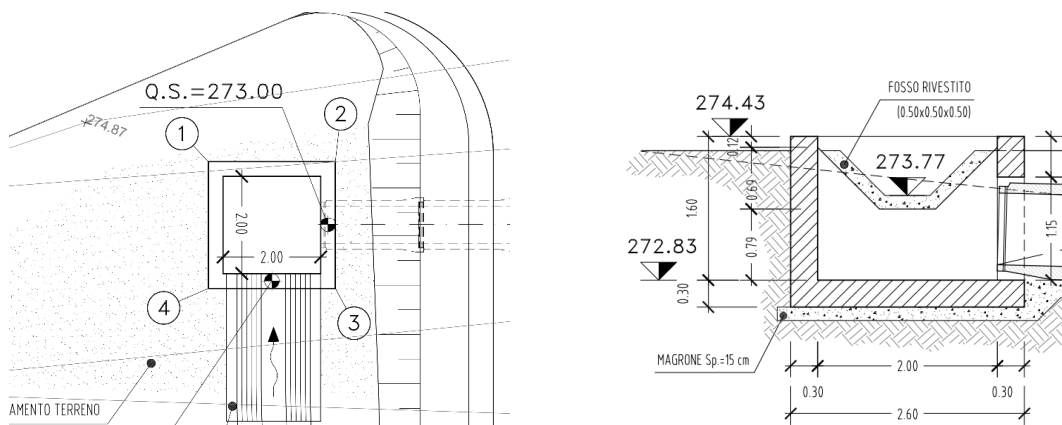


Figura 1: Pianta e sezione vasca di imbocco

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 3 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-------------------------

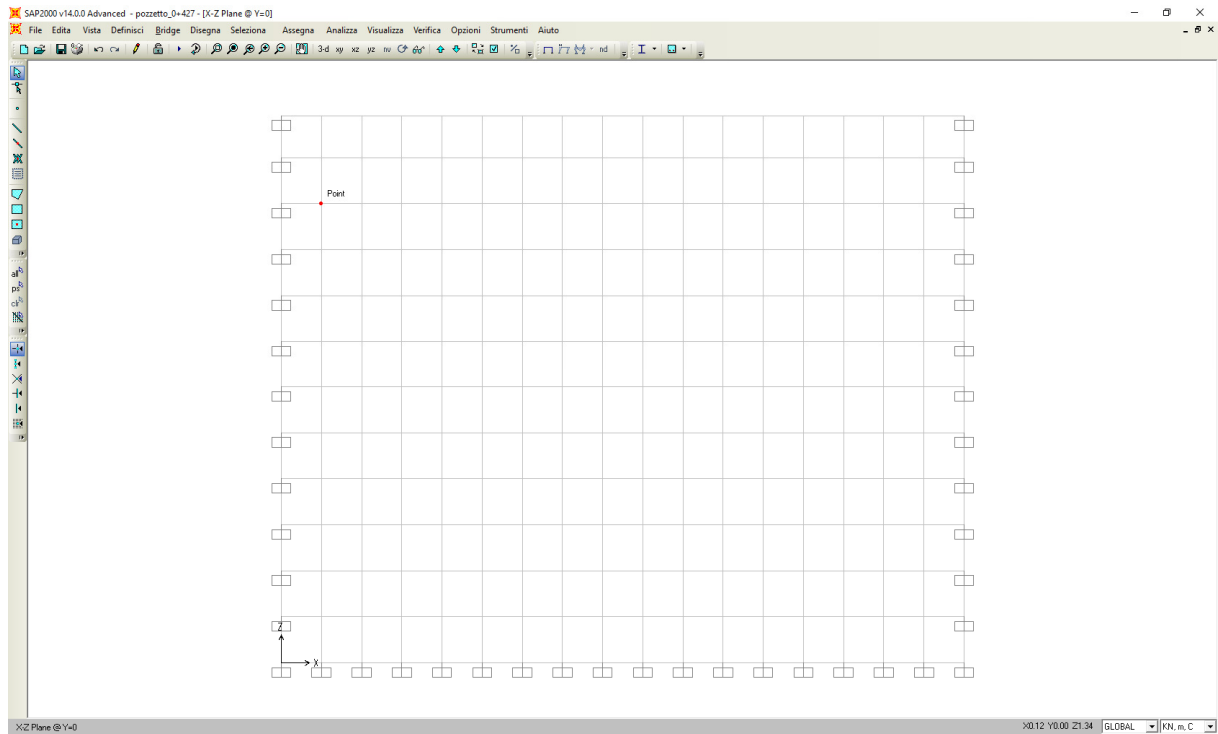


Figura 2: Modello di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 4 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-------------------------

Lo sbocco è costituito da un muro di sostegno del rilevato stradale la cui altezza media dallo spiccatto è pari a 2.90 m:

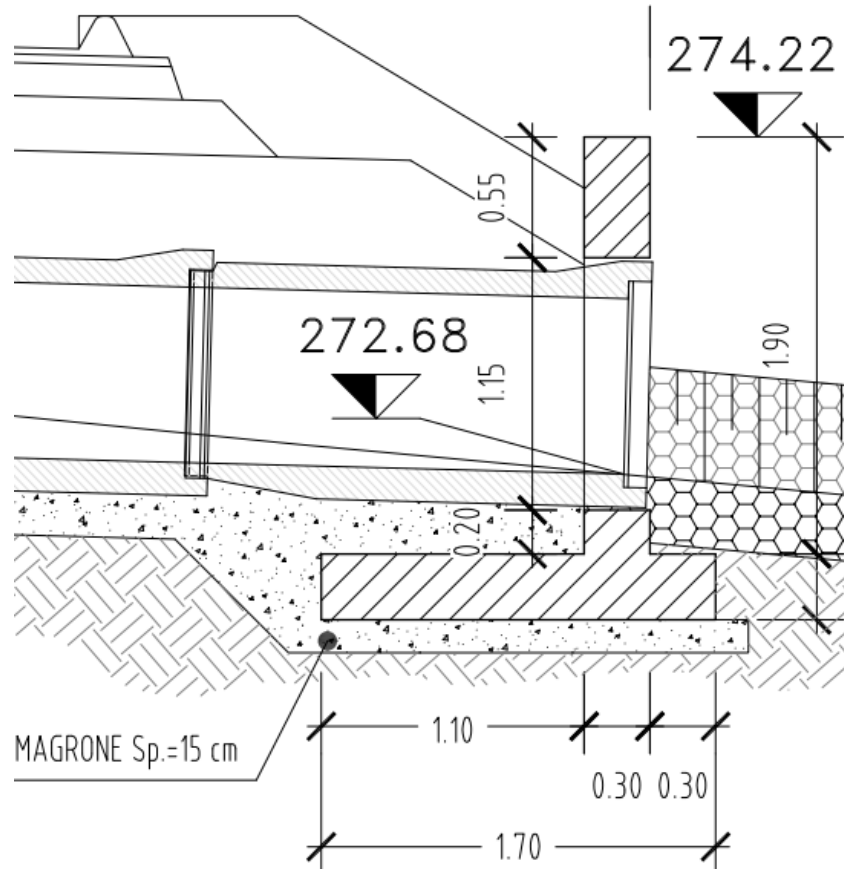


Figura 3: Sezione Muro di sostegno

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 5 di 296

2. DOCUMENTI DI RIFERIMENTO

Nella esecuzione dei calcoli si è fatto riferimento ai seguenti documenti normativi.

2.1 NORMATIVE DI CARATTERE GENERALE

L. 05/11/1971 n. 1086: "Norme per la disciplina delle opere in conglomerato cementizio armato normale e precompresso ed a struttura metallica";

L. 02/02/1974 n. 64: "Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche";

2.2 NORMATIVE SPECIFICHE PER LE STRUTTURE

Decreto Ministeriale 14 settembre 2005 "Norme Tecniche per le Costruzioni".

OPCM 3274 d.d. 20/03/2003: "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modifiche ed integrazioni

CNR-UNI 10011: "Costruzioni di acciaio "Istruzioni per il calcolo, l'esecuzione, il collaudo e la manutenzione".

CNR-UNI 10016: "Travi composte di acciaio e calcestruzzo - Istruzioni per l'impiego nelle costruzioni".

UNI EN 1992-2005: "Progettazione delle strutture di calcestruzzo".

UNI EN 1993-2005: "Progettazione delle strutture di acciaio".

UNI EN 1994-2005: "Progettazione delle strutture composte acciaio-calcestruzzo".

UNI EN 1997-2005: "Progettazione geotecnica".

UNI EN 1998-2005: "Progettazione delle strutture per la resistenza sismica".

UNI EN 206-1-2001: Calcestruzzo: "Specificazione, prestazione, produzione e conformità".

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 6 di 296

3. MATERIALI

Per la realizzazione delle sottostrutture sono stati previsti i seguenti materiali.

Calcestruzzi

I materiali da utilizzare avranno le seguenti caratteristiche:

Tab.1 - FONDAZIONI ed ELEVAZIONI

		Classe di esposizione
		XA2
Classe di resistenza minima:	C_{min}	C32/40
Rapporto massimo acqua/cemento	a/max	0.5
Contenuto minimo di cemento (kg/m ³)	cem _{min}	360

Tab.2 - CALCESTRUZZO PER MAGRONE

Classe di resistenza minima:	C_{min}	C12/15
------------------------------	-----------	--------

Acciaio per armature

Tab.3 - ACCIAIO ARMATURA ORDINARIA

Acciaio in barre ad aderenza migliorata tipo B450C

controllato in stabilimento:

Tensione caratteristica di snervamento:

$$f_{yk} = 450 \text{ MPa}$$

Per la realizzazione dei calcestruzzi, al fine di assicurare i requisiti di qualità e di durabilità, si è fatto riferimento alle specifiche riportate nella norma UNI EN 206-1. pertanto sulla base delle condizioni ambientali prevedibili per le opere in oggetto si riporta nella tabella seguente, in corrispondenza di ogni elemento strutturale, la classe di esposizione, la resistenza caratteristica R_{ck} , il rapporto a/c massimo, il quantitativo di cemento minimo, e l'eventuale percentuale di aria che deve essere inglobata nel calcestruzzo.

Sono previsti inoltre copriferri pari a:

40 mm per le fondazioni e superfici controterra in genere.

Le caratteristiche meccaniche del calcestruzzo in opera sono state valutate conformemente alle specifiche previste dal Decreto Ministeriale 14 settembre 2005, pertanto nella tabella seguente vengono riportati i valori assunti per il modulo elastico e per le resistenze allo stato limite ultimo e di esercizio

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 7 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-------------------------

CARATTERISTICHE MECCANICHE CALCESTRUZZI				
f_{ck}/R_{ck} (Mpa)	E_c (Mpa)	S.L.U		S.L.E
		$f_{cd}=R_{ck}/\gamma_{m,c}$ (Mpa)	$f_{ctd}=f_{ctk}/\gamma_{m,c}$ (Mpa)	$\sigma_c=R_{ck}/(\gamma_{m,c}\times\gamma_{E,c})$ (Mpa)
C32/40	33000	21.05	2.45	19.2 (rara) 14.8 (quasi permanente)

Le caratteristiche meccaniche adottate per l'acciaio sono:

CARATTERISTICHE MECCANICHE ACCIAIO PER C.A.					
TIPO	E_c (Mpa)	f_{tk} (Mpa)	f_{yk} (Mpa)	S.L.U	S.L.E
				$f_{yd} = f_{yk}/\gamma_{m,s}$ (Mpa)	$\sigma_{smax}=f_{yk}/1.25$ (Mpa)
B450C	210000	540	450	391	360

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 8 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-------------------------

4. PARAMETRI GEOTECNICI DEL TERRENO

Nel calcolo dell'opera in oggetto, per quanto riguarda la determinazione della spinta delle terre, della capacità portante del terreno e delle caratteristiche di interazione terreno-struttura, si adottano, a favore di sicurezza, i seguenti parametri geotecnici ricavati dalla "Relazione geotecnica generale sulle opere all'aperto e gallerie artificiali (geotecnica-geomeccanica)" doc.

L0703211E02GE0000REL02M.doc, da tale relazione si ha:

Strato di rinfiacco (RILEVATO)

Descrizione	Terreno di rinfiacco	
Spessore dello strato	2.00	[m]
Peso di volume	20.0000	[kN/mc]
Peso di volume saturo	20.0000	[kN/mc]
Angolo di attrito (ϕ')	35.00	[°]
Angolo di attrito terreno struttura ($0.5\phi'$)	17.50	[°]
Coesione	0.000	[KPa]

Strato di base (EC 2)

Descrizione	Terreno di base	
Peso di volume	19.0000	[kN/mc]
Peso di volume saturo	19.0000	[kN/mc]
Angolo di attrito (ϕ')	24.50	[°]
Angolo di attrito terreno-struttura ($\tan\phi'$)	24.50	[°]
Coesione	10.000	[kPa]

Per il calcolo della spinta sulla vasca si è considerato il coefficiente di spinta a riposo, k_0 . Sul muro di sostegno si adotta il coefficiente di spinta attiva k_a .

La falda non interferisce con l'opera.

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 9 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-------------------------

5. GEOMETRIA DELLA VASCA D' IMBOCCO

Sezione lungo l'asse della parete della vasca di imbocco:

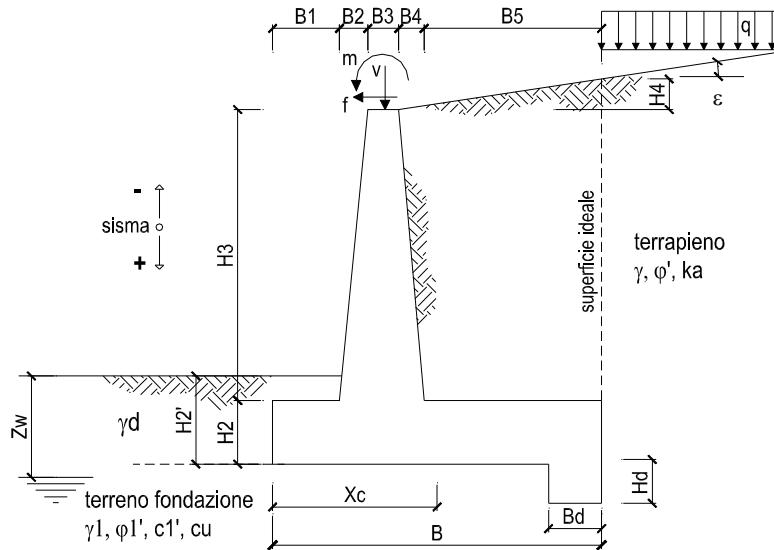


Geometria piastra

Altezza [H]	1.60	[m]
Larghezza [B]	2.00	[m]
Spessore [s]	0.30	[m]

6. GEOMETRIA DEL MURO DI SOSTEGNO

Sezione trasversale muro:



OPERA Hmuro = 1.90 m

DATI DI PROGETTO:

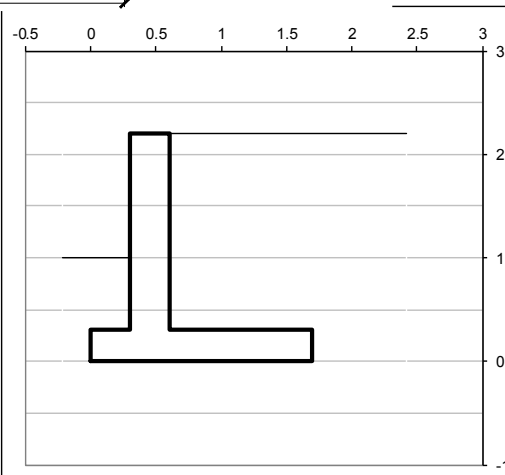
Geometria del Muro

Elevezione	H3 =	1.90	(m)
Aggetto Valle	B2 =	0.00	(m)
Spessore del Muro in Testa	B3 =	0.30	(m)
Aggetto monte	B4 =	0.00	(m)

Geometria della Fondazione

Larghezza Fondazione	B =	1.70	(m)
Spessore Fondazione	H2 =	0.30	(m)
Suola Lato Valle	B1 =	0.30	(m)
Suola Lato Monte	B5 =	1.10	(m)
Altezza dente	Hd =	0.00	(m)
Larghezza dente	Bd =	0.00	(m)
Mezzeria Sezione	Xc =	0.85	(m)

Peso Specifico del Calcestruzzo	γ_{cls} =	25.00	(kN/m ³)
---------------------------------	------------------	-------	----------------------



	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 11 di 296

7. CALCOLO DELLA VASCA D' IMBOCCO

7.1 AZIONE SISMICA

Le strutture, ai sensi della normativa di riferimento, sono assunte di Classe 2 (vita utile 100 anni).

Tutte le azioni sono calcolate considerando un periodo di ritorno per i fenomeni naturali pari a 1000 anni, pertanto nella valutazione della accelerazione orizzontale massima ag si è fatto riferimento alle mappe di pericolosità sismica dell'I.N.G.V. (Istituto Nazionale di Geofisica e Vulcanologia) andando a considerare il parametro ag/g riferito a una probabilità di superamento non maggiore del 5% in 50 anni, come previsto dal paragrafo 3.2.2.3 del D.M.14/09/05.

La tabella sottostante riporta i valori considerati per la zona in esame

Zona sismica	2
Categoria suolo di fondazione	E
Classe della struttura	2
Accelerazione orizzontale massima convenzionale per zona 2 e struttura di classe 2 (vedi par. 3.2.2.3)	0.275g
Fattore S che tiene conto della categoria del suolo di fondazione = E	1.25

In definitiva l'accelerazione orizzontale massima convenzionale per zona 2, struttura di classe 2 e suolo di categoria E = 0.275 g x 1.25 = 0.344 g.

Incremento sismica sul terreno

Visto la tipologia d'opera per il coefficiente di spinta si può assumere una spinta a riposo con:

$$k_0 = 1 - \sin \phi = 0.426 \quad \text{con } \phi = 35^\circ$$

Mentre l'incremento di spinta sismica del terreno si calcola con l'espressione di Wood:

$$\Delta S = ag/g * S * \gamma * H^2 = 0.275 * 1.25 * 20 * 1.60^2 = 17.6 \text{ kN}$$

Da cui:

$$P_s = \Delta S / H = 17.6 / 1.60 = 11.0 \text{ kN/m}^2$$

dove:

γ = peso di volume del terreno;

H = dislivello tra la quota del piano campagna e la quota di fondo scavo;

ΔS = incremento sismico del terreno

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 12 di 296

Forze di inerzia sismiche

Essendo:

$$a_g/g = 0.275$$

$$S = 1.25$$

i due coefficienti sismici orizzontale e verticale da applicare sulle masse strutturali sono pari a:

$$k_h = a_g/g * S/r = 0.344$$

$$k_v = \pm 0.5 * k_h = 0.172$$

7.2 CALCOLO DELLE SPINTE STATICHE

Spinta del terreno e dell'accidentale

Sulle piastre, in esercizio, viene presa in considerazione la spinta del terreno a riposo e di un accidentale pari a 20 kN/m² dovuto al transito del veicolo stradale.

In sismica, come detto in precedenza, viene considerata la forza d'inerzia orizzontale e l'incremento di spinta sismica del terreno mentre il carico accidentale viene assunto nullo.

Spinta del terreno sui piedritti

I parametri geotecnica del terreno sono:

$$\gamma = 20 \text{ kN/m}^3$$

$$\phi = 35^\circ$$

$$K_o = 0.426$$

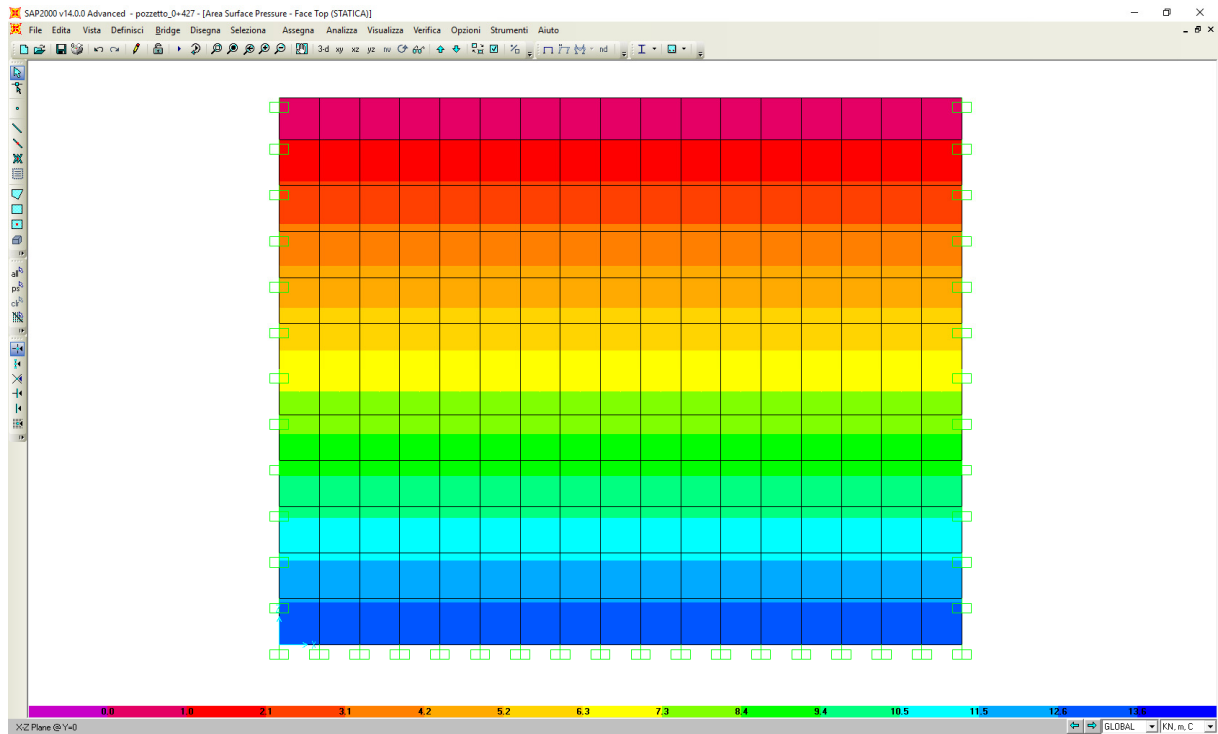
Pertanto la spinta del terreno sulle pareti è pari a:

Esercizio (solo terreno)

$$P_o = 0.426 * 20.00 * 0.00 = 0.00 \text{ kN/m}^2$$

$$P_1 = 0.426 * 20.00 * 1.60 = 13.64 \text{ kN/m}^2$$

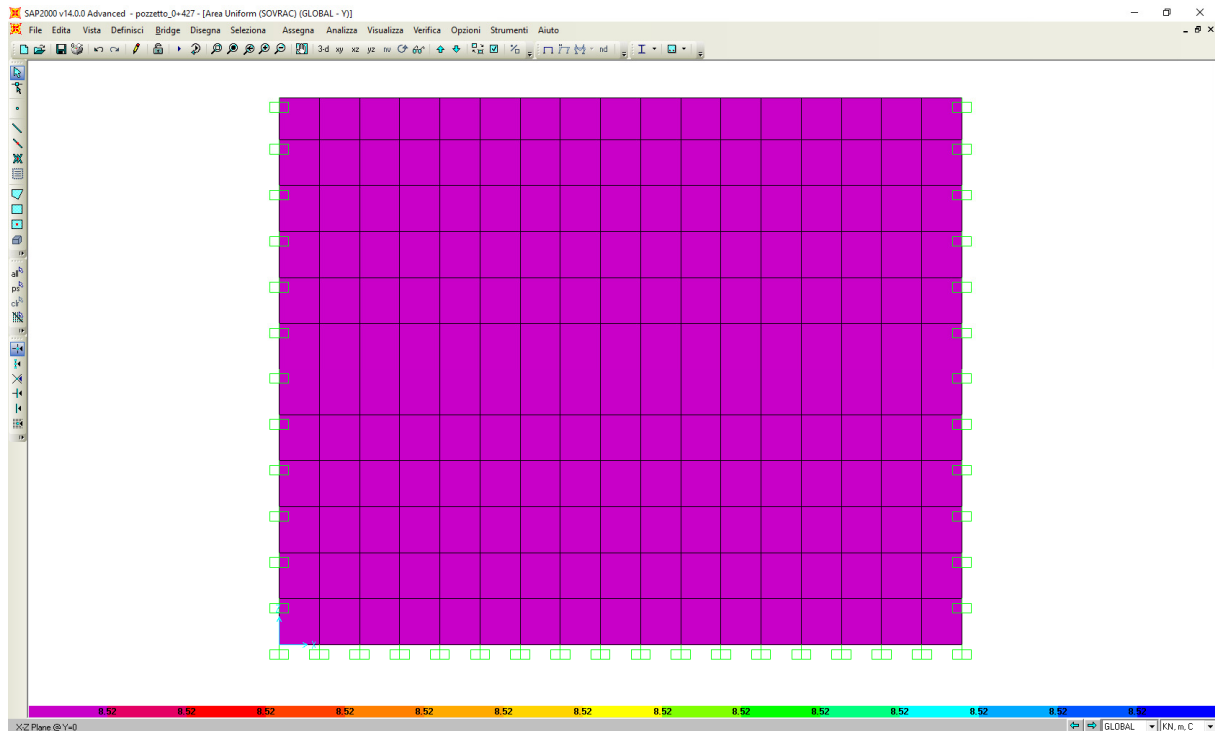
Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 13 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------



Esercizio (solo accidentale)

Pripartito = $20 \cdot 0.426 = 8.52 \text{ kN/m}^2$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 14 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------



Sismica

$$\Delta S = 17.6 \text{ kN/m}^2$$

- incremento di spinta del terreno

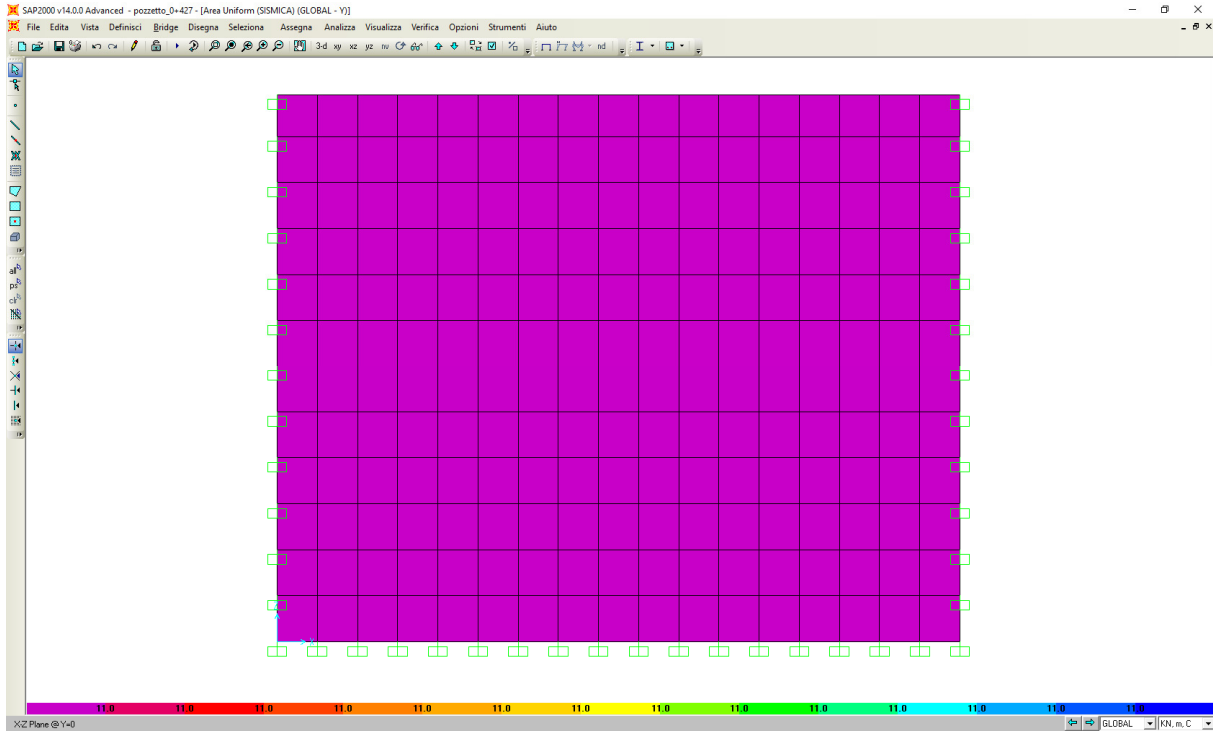
$$P_s = \Delta S/H = 17.6/1.60 = 11.00 \text{ kN/m}^2$$

- applicata a H/2

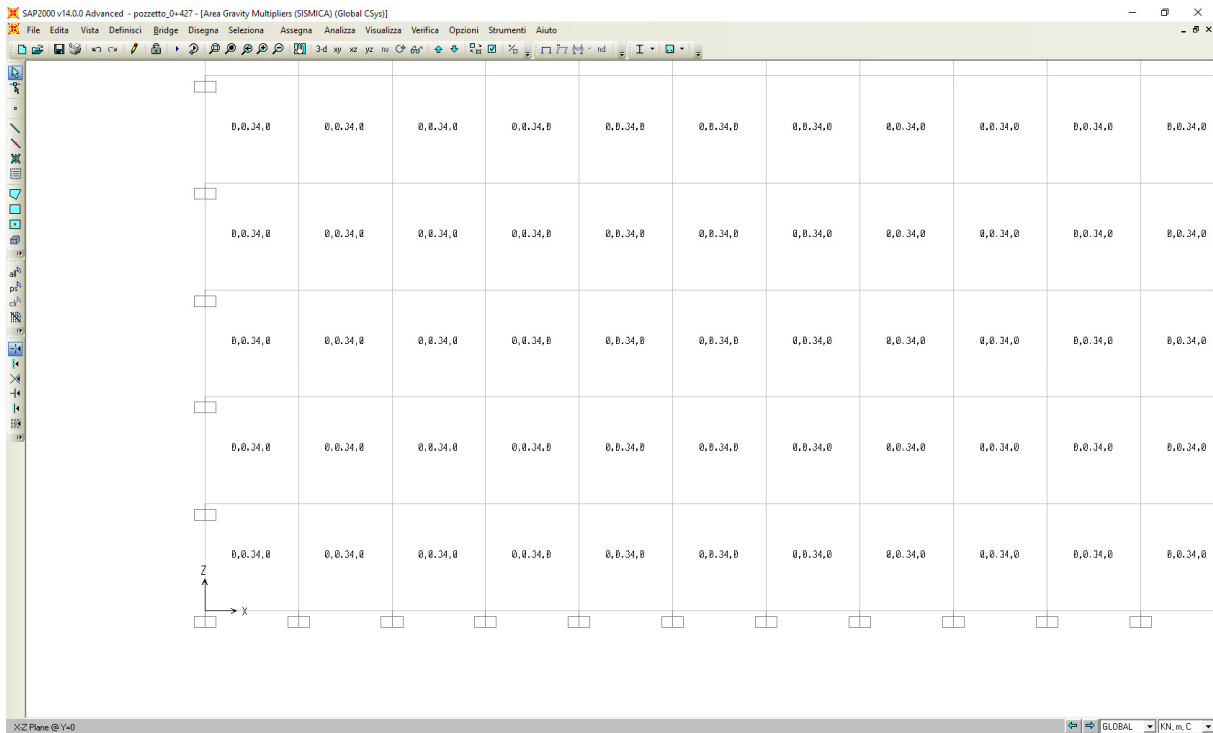
$$F_{h, \text{orizz}} = 0.344 * W$$

-Azione inerziale su W viene calcolato automaticamente dal programma

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 15 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------



Incremento di spinta sismica



Moltiplicatori gravitazionali per le forze inerziali

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 16 di 296

7.3 COMBINAZIONI DI CARICO

Le combinazioni di carico, considerate ai fini delle verifiche, sono stabilite in modo da garantire la sicurezza in conformità a quanto prescritto al cap. 2 delle NT.

6.4.1 Combinazioni per la verifica allo SLU e SLE

Gli stati limite ultimi delle opere interrato si riferiscono allo sviluppo di meccanismi di collasso, determinati dalla mobilitazione della resistenza del terreno, e al raggiungimento della resistenza degli elementi strutturali che compongono l'opera.

Le verifiche agli stati limite ultimi devono essere eseguiti in riferimento ai seguenti stati limite:

- SLU di tipo geotecnico (GEO) e di equilibrio di corpo rigido (EQU)
 - collasso per carico limite dell'insieme fondazione-terreno;
- SLU di tipo strutturale (STR)
 - raggiungimento della resistenza negli elementi strutturali.

Le verifiche saranno condotte utilizzando i coefficienti parziali riportati nelle Tabelle sottostanti (vedi DM 14/09/ 2005 NTC) per i parametri geotecnici e le azioni.

1. combinazione 1 → (A1+M1+R1) → STR
2. combinazione 2 → (A2+M2+R2) → GEO (carico limite)

Tabella 6.2.II - Coefficienti parziali per i parametri del terreno

PARAMETRO	GRANDEZZA ALLA QUALE APPLICARE IL COEFF. PARZIALE	COEFFICIENTE PARZIALE γ_M	M ₁	M ₂
Tangente dell'angolo di resistenza al taglio	$\tan \varphi'_k$	$\gamma_{\varphi'}$	1	1.25
Coesione efficace	c'_k	$\gamma_{c'}$	1	1.25
Resistenza non drenata	c'_{uk}	γ_{cu}	1	1.4
Peso dell'unità di volume	γ	γ_γ	1	1

Nella tabella 5.1.V è indicato un coefficiente maggiore di uno per gli effetti a sfavore di sicurezza e un coefficiente minore del precedente, per gli effetti a favore di sicurezza.

I coefficienti di amplificazione dei carichi γ e i coefficienti di combinazione ψ sono riportati nelle tabelle 5.1.VI.

In particolare nel calcolo della struttura in oggetto si fa riferimento alla combinazione A1 STR.

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 17 di 296

Tabella 5.1.V – Coefficienti parziali di sicurezza per le combinazioni di carico agli SLU

		Coefficiente	EQU ⁽¹⁾	A1 STR	A2 GEO
Carichi permanenti	favorevoli	γ_{G1}	0,90	1,00	1,00
	sfavorevoli		1,10	1,35	1,00
Carichi permanenti non strutturali ⁽²⁾	favorevoli	γ_{G2}	0,00	0,00	0,00
	sfavorevoli		1,50	1,50	1,30
Carichi variabili da traffico	favorevoli	γ_Q	0,00	0,00	0,00
	sfavorevoli		1,35	1,35	1,15
Carichi variabili	favorevoli	γ_{Qi}	0,00	0,00	0,00
	sfavorevoli		1,50	1,50	1,30
Distorsioni e presollecitazioni di progetto	favorevoli	$\gamma_{\epsilon 1}$	0,90	1,00	1,00
	sfavorevoli		1,00 ⁽³⁾	1,00 ⁽⁴⁾	1,00
Ritiro e viscosità, Variazioni termiche, Cedimenti vincolari	favorevoli	$\gamma_{\epsilon 2}, \gamma_{\epsilon 3}, \gamma_{\epsilon 4}$	0,00	0,00	0,00
	sfavorevoli		1,20	1,20	1,00

⁽¹⁾ Equilibrio che non coinvolga i parametri di deformabilità e resistenza del terreno; altrimenti si applicano i valori di GEO.
⁽²⁾ Nel caso in cui i carichi permanenti non strutturali (ad es. carichi permanenti portati) siano compiutamente definiti si potranno adottare gli stessi coefficienti validi per le azioni permanenti.
⁽³⁾ 1,30 per instabilità in strutture con precompressione esterna
⁽⁴⁾ 1,20 per effetti locali

I valori del coefficiente ψ_{2i} sono quelli riportati nella tabella 5.1.VI della norma; la stessa propone nel caso di ponti, e più in generale per opere stradali, di assumere per i carichi dovuti al transito dei mezzi $\psi_{2i} = 0,0$.

Ai fini delle verifiche degli stati limite ultimi si riportano per comodità le combinazioni delle azioni riportate nella normativa sui ponti alla quale è possibile fare riferimento per la simbologia adottata:

$$\text{STR}) \Rightarrow \gamma_{G1} \cdot G_1 + \gamma_{G2} \cdot G_2 + \gamma_{Q1} \cdot Q_{k1} + \sum_i \psi_{0i} \cdot Q_{ki} \Rightarrow (\Phi_d' = \Phi_k')$$

Ai fini delle verifiche degli stati limite di esercizio (fessurazione) si definiscono le seguenti combinazioni:

$$\text{Rara}) \Rightarrow G_1 + G_2 + Q_{k1} + \sum_i \psi_{0i} \cdot Q_{ki}$$

$$\text{Frequente}) \Rightarrow G_1 + G_2 + \psi_{11} \cdot Q_{k1} + \sum_i \psi_{2i} \cdot Q_{ki}$$

$$\text{Quasi permanente}) \Rightarrow G_1 + G_2 + \psi_{21} \cdot Q_{k1} + \sum_i \psi_{2i} \cdot Q_{ki}$$

Per la condizione sismica, le combinazioni per gli stati limite ultimi da prendere in considerazione sono le seguenti:

$$\text{STR}) \Rightarrow E + G_1 + G_2 + \sum_i \psi_{2i} \cdot Q_{ki} \Rightarrow (\Phi_d' = \Phi_k')$$

Dove:

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 18 di 296

$$E1 = \pm 1.00 \times E_Y \pm 0.30 \times E_Z \quad \text{oppure} \quad E2 = \pm 0.30 \times E_Y \pm 1.00 \times E_Z$$

Avendo indicato con E_Y e E_Z rispettivamente le componenti orizzontale e verticale dell'azione sismica. Gli effetti dell'azione sismica saranno valutati tenendo conto delle masse associate ai seguenti carichi gravitazionali:

$$G_1 + G_2 + \sum_i \psi_{2i} \cdot Q_{ki}$$

Le combinazioni di carico vengono ottenute combinando opportunamente i coefficienti innanzi detti.

6.4.2 Stato limite di apertura delle fessure

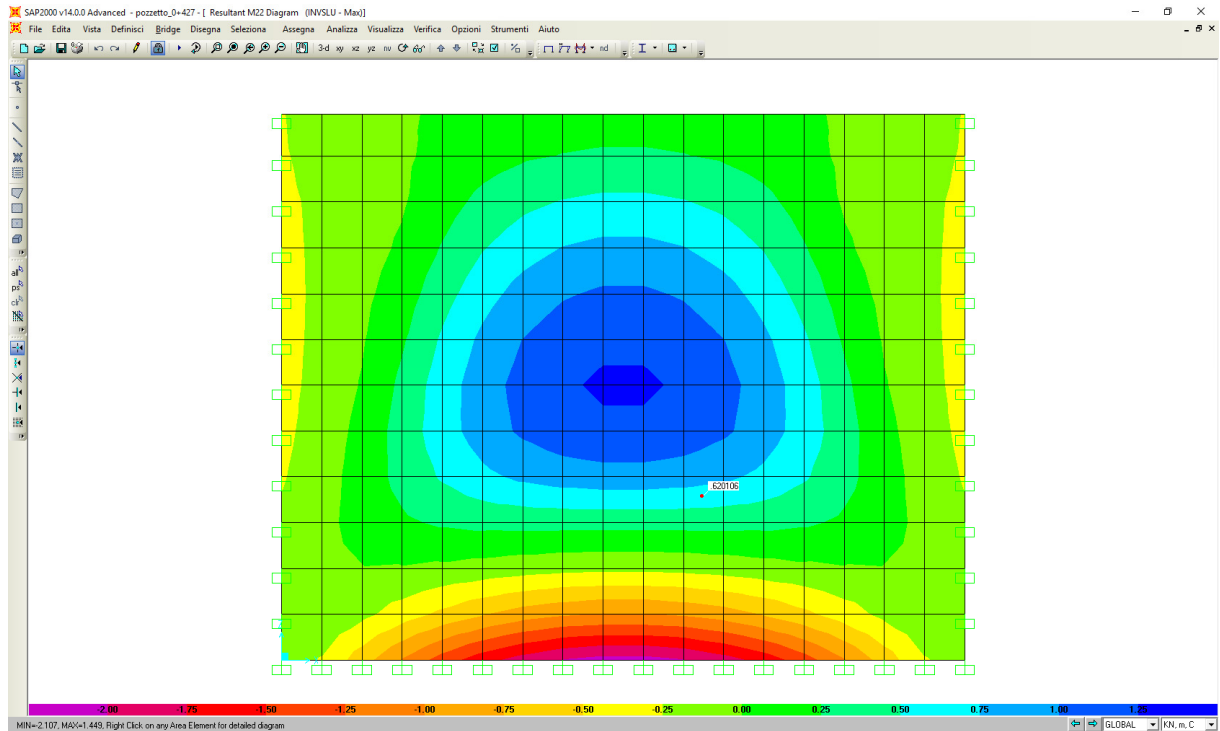
Per le verifiche a fessurazione si adotta la combinazione caratteristica FREQUENTE e QUASI PERMANENTE, così come richiesto del DM 2005 per gli SLE.

Pertanto l'apertura convenzionale delle fessure dovrà risultare:

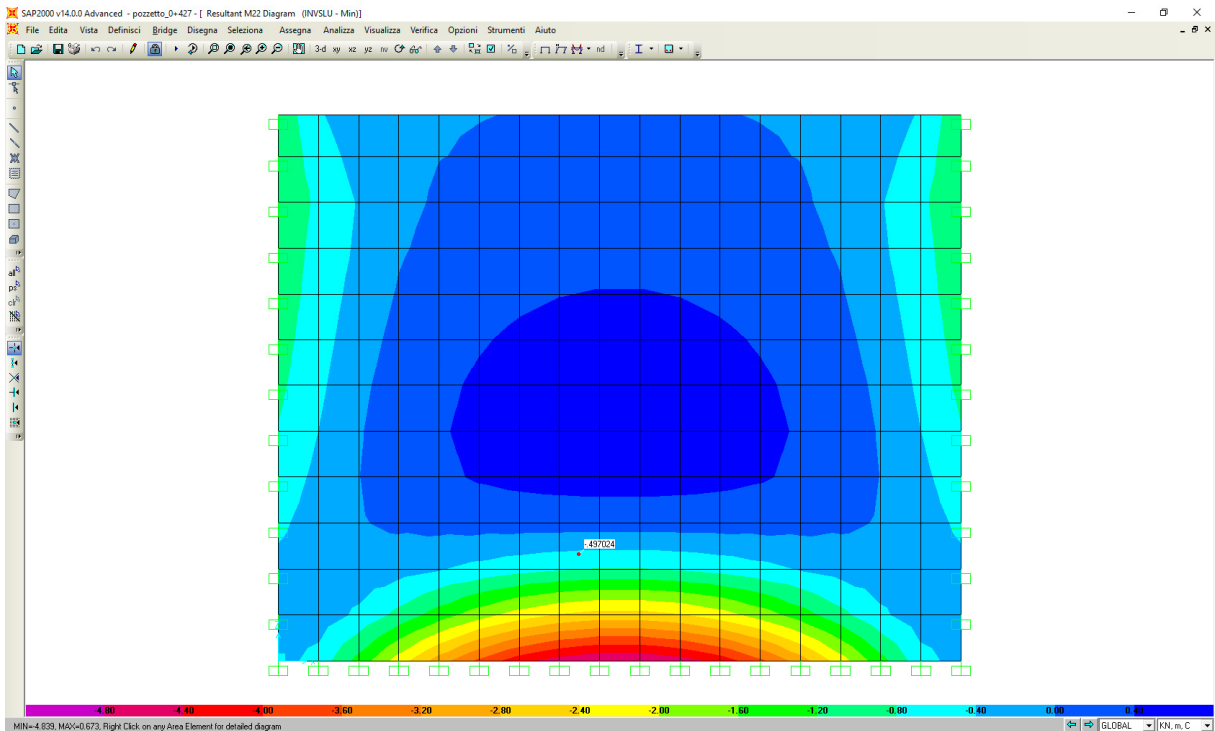
- a) $\delta_f \leq w_1 = 0.20 \text{ mm}$ per strutture in condizioni ambientali aggressive e molto aggressive, così come identificate nel DM 2005, per tutte le strutture a permanente contatto con il terreno e per le zone non ispezionabili di tutte le strutture (comb. Frequente);
- b) $\delta_f \leq w_2 = 0.30 \text{ mm}$ per strutture in condizioni ambientali ordinarie secondo il citato paragrafo del DM 2005 (comb. Quasi permanente).

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 19 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

7.4 DIAGRAMMI DELLE SOLLECITAZIONI

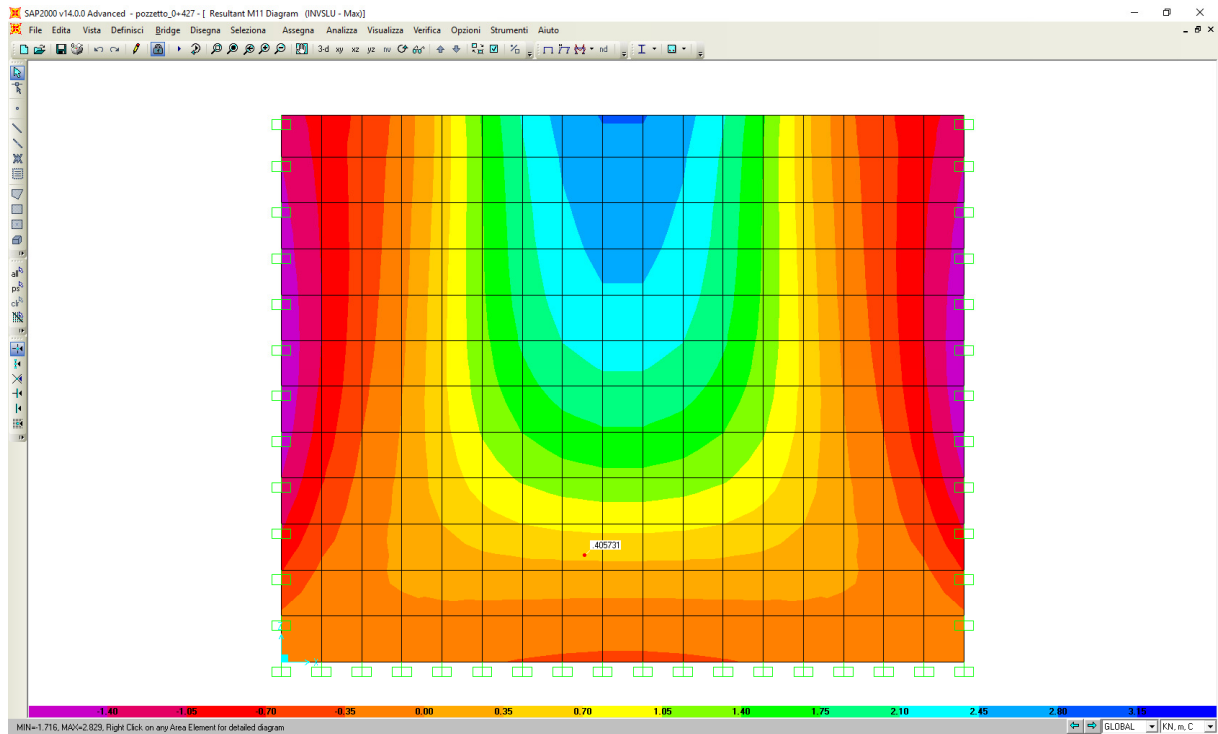


Involuppo Momenti Flettenti SLU: M22 (+)

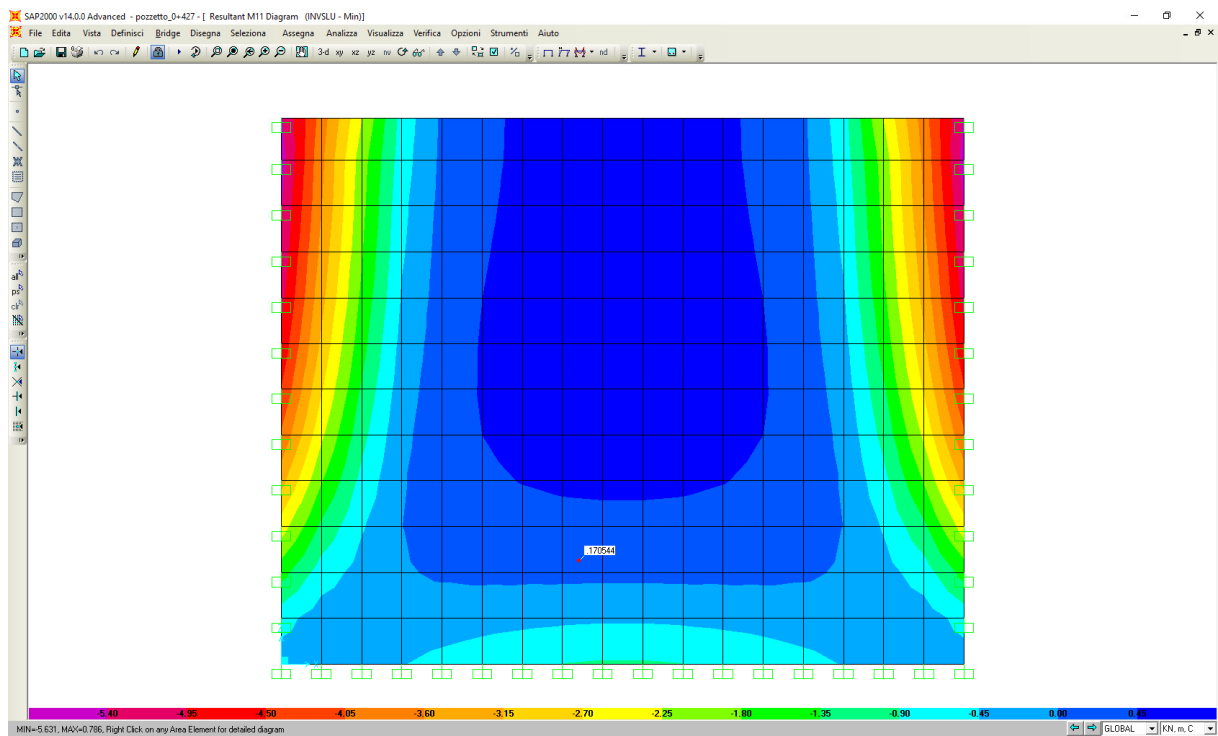


Involuppo Momenti Flettenti SLU: M22 (-)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 20 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

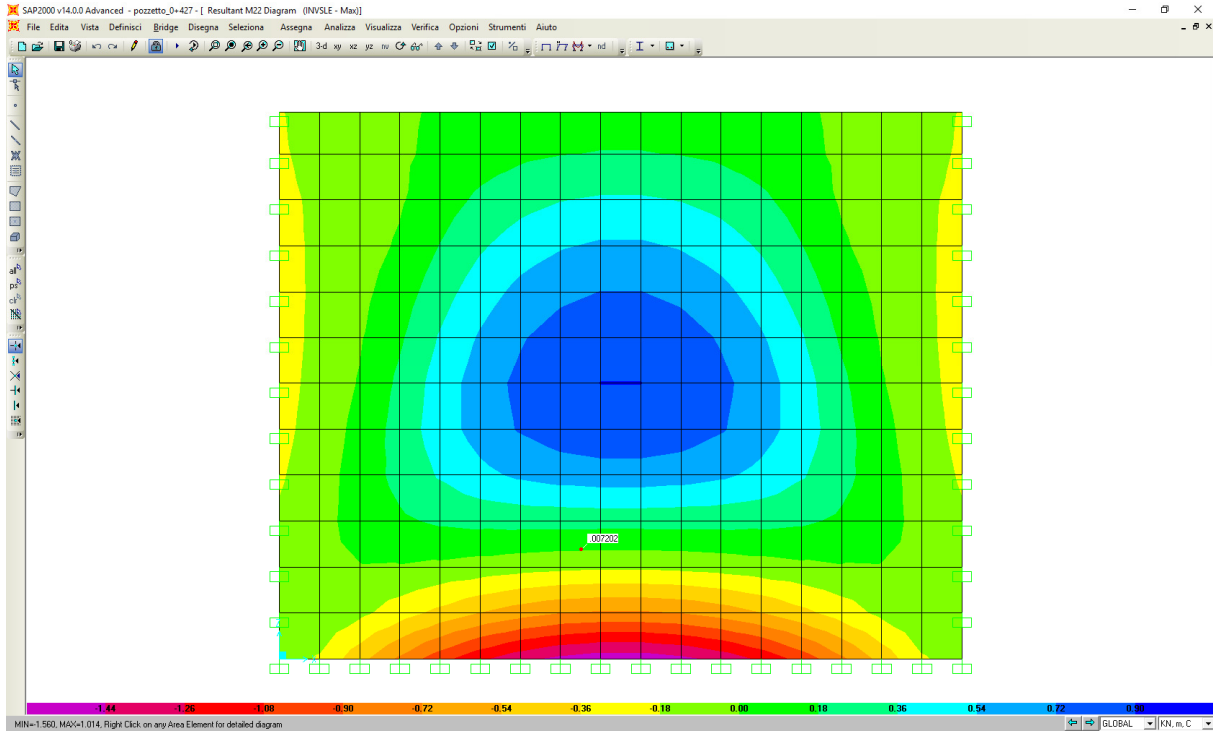


Involuppo Momenti Flettenti SLU: M11(+)

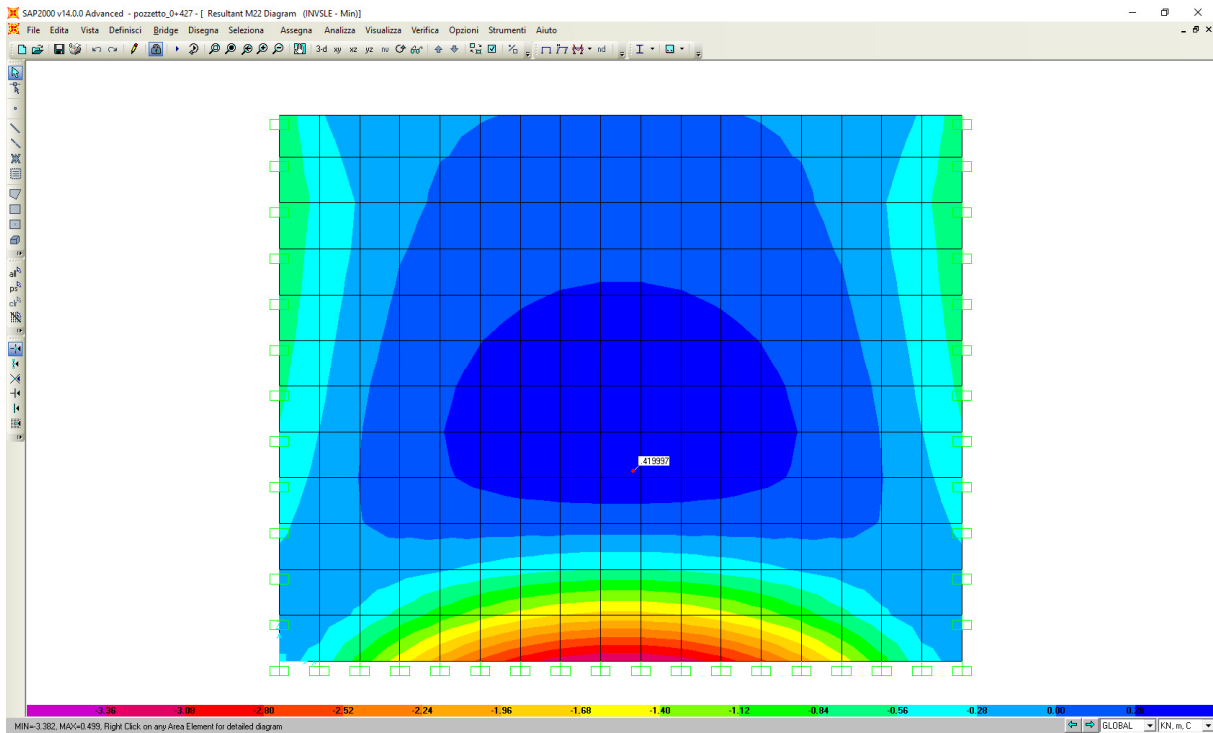


Involuppo Momenti Flettenti SLU: M11(-)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 21 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

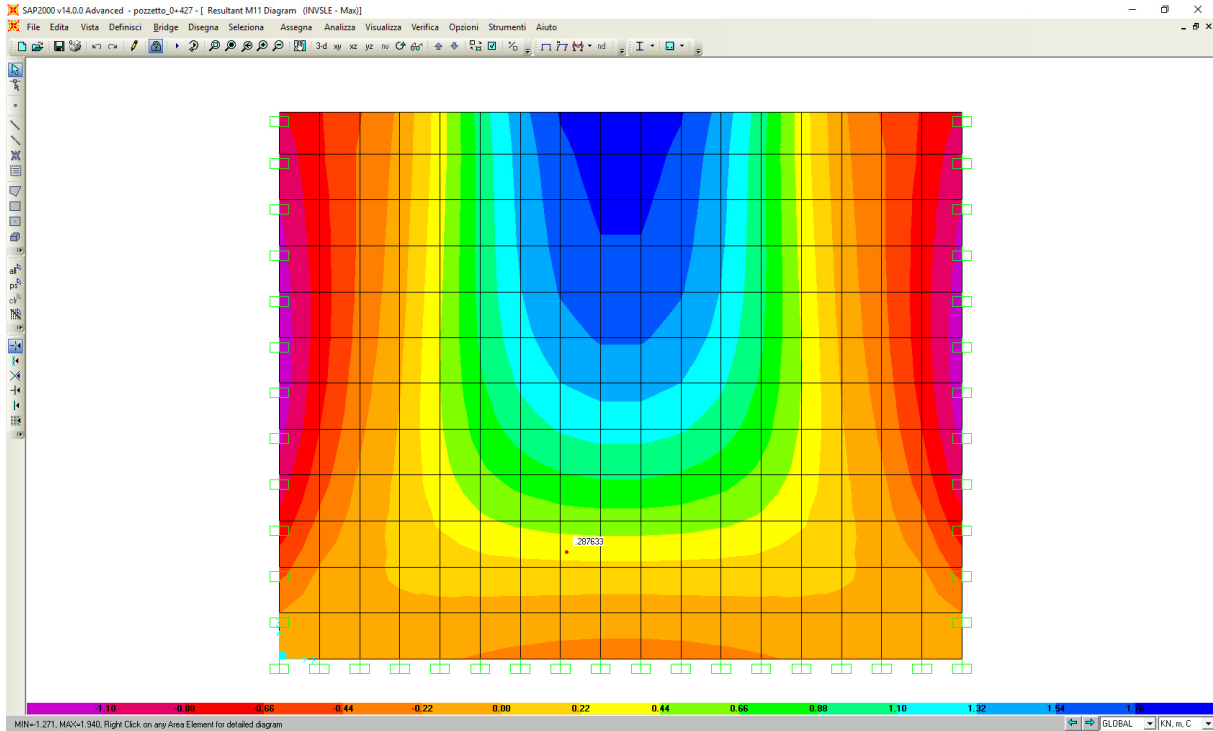


Involuppo Momenti Flettenti SLE: M22 (+)

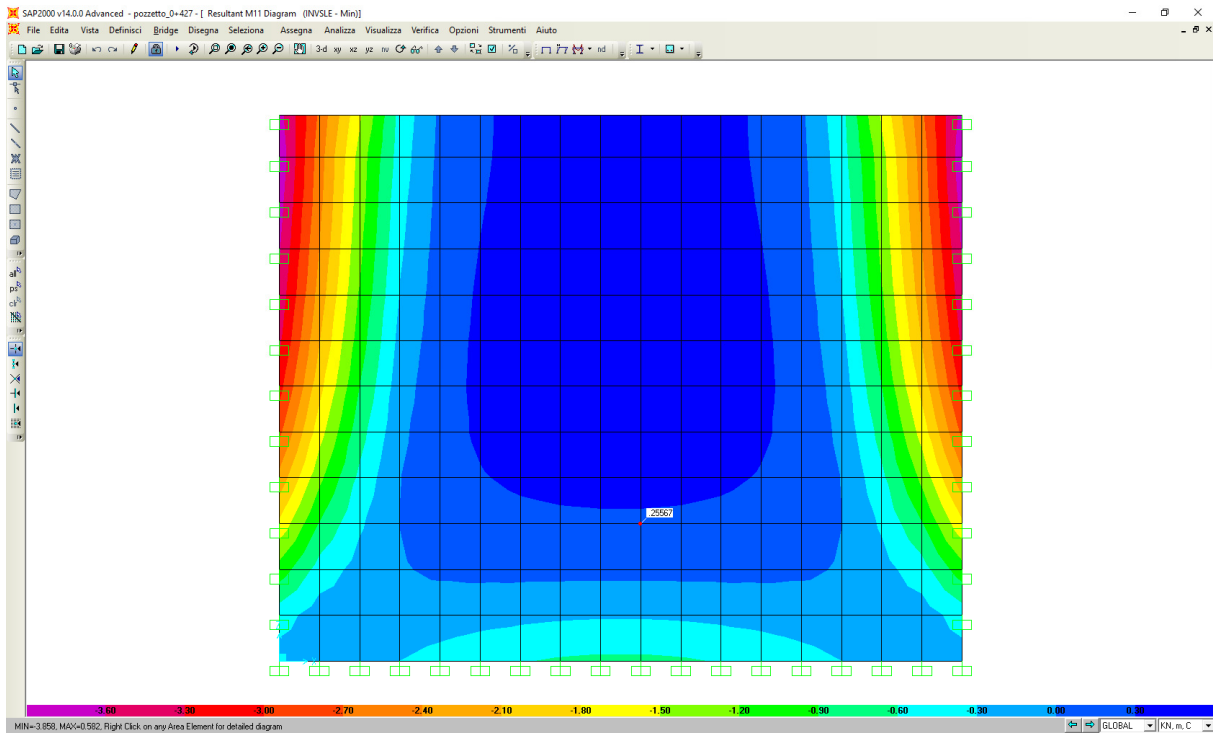


Involuppo Momenti Flettenti SLE: M22 (-)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 22 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

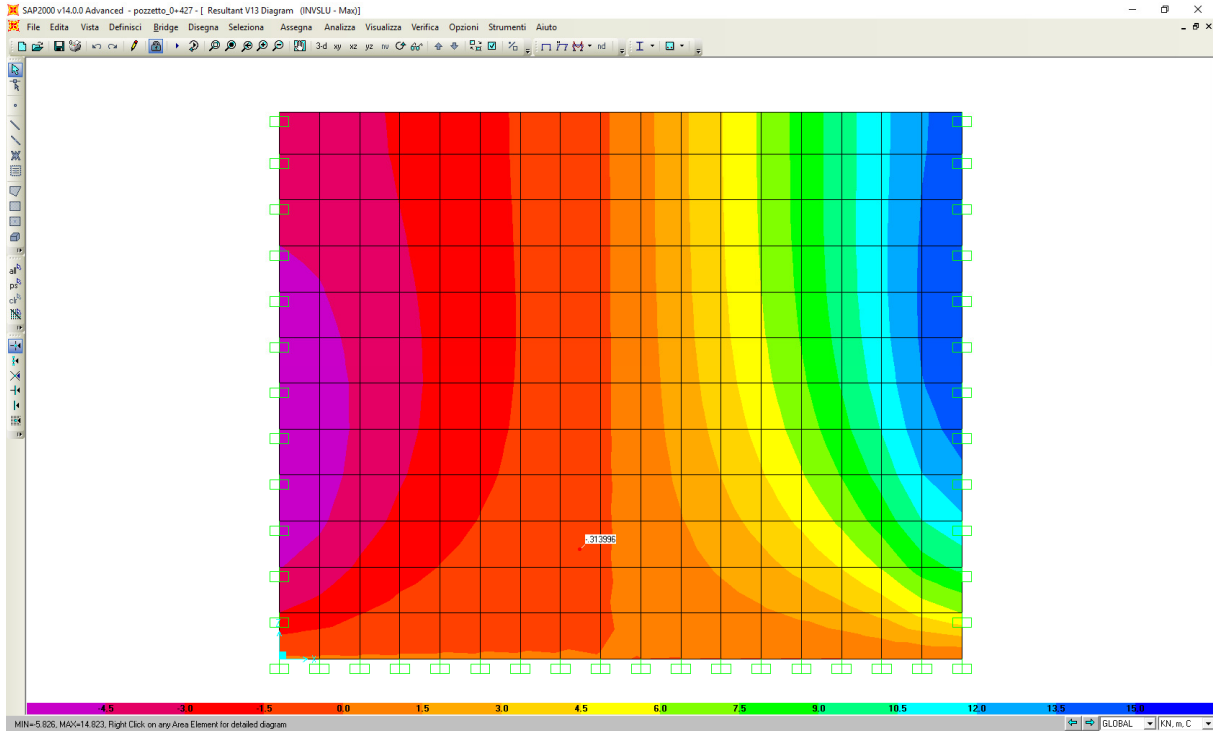


Involuppo Momenti Flettenti SLE: M11 (+)

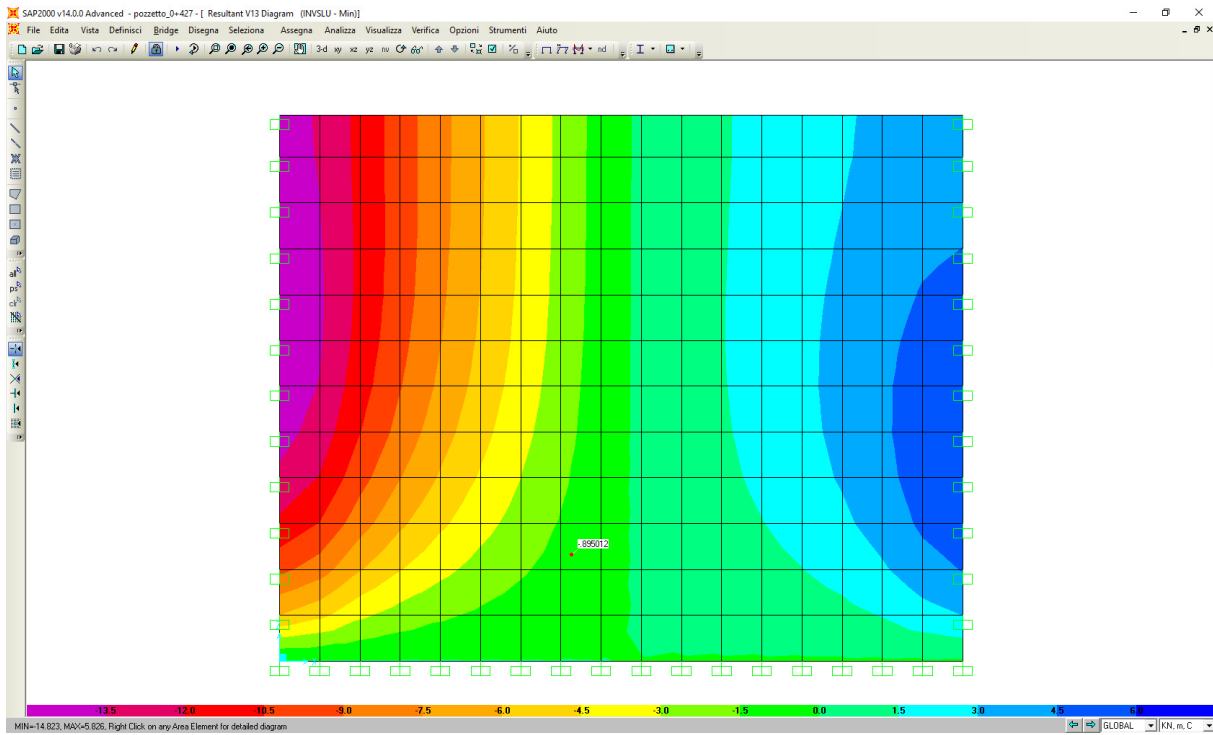


Involuppo Momenti Flettenti SLE: M11 (-)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 23 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

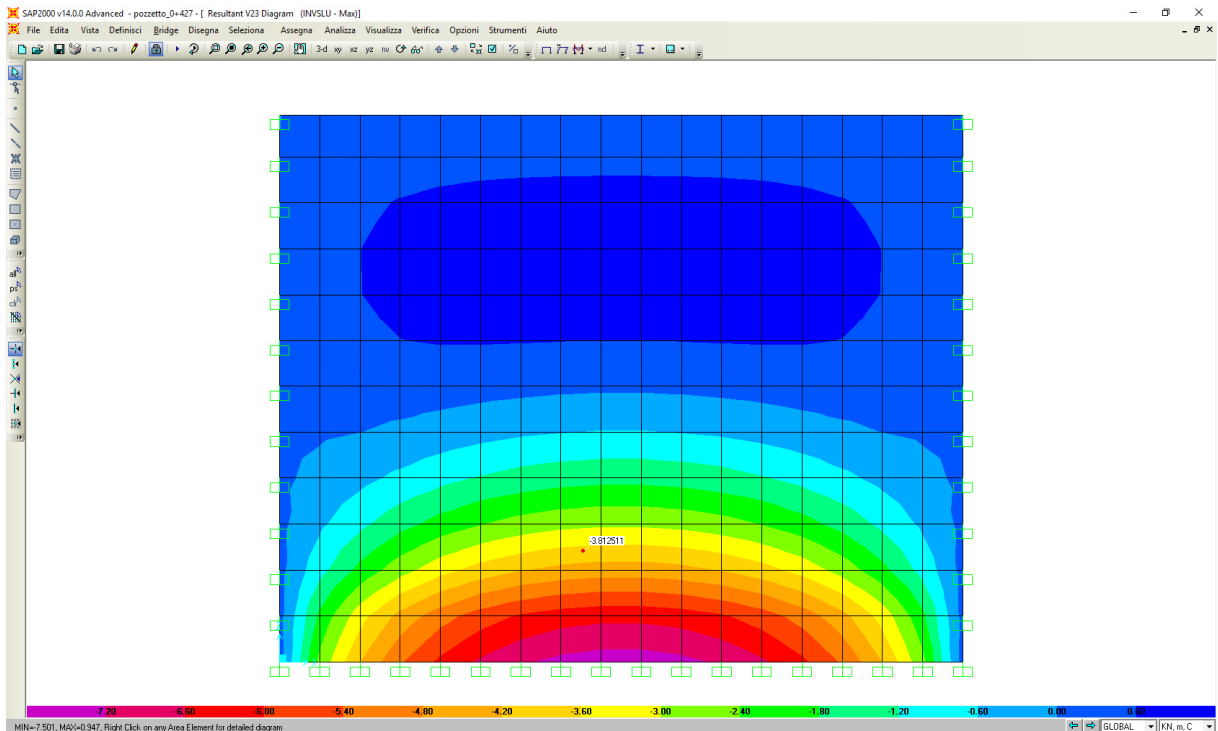


Involuppo Sollecitazioni di Taglio SLU: V13 (+)

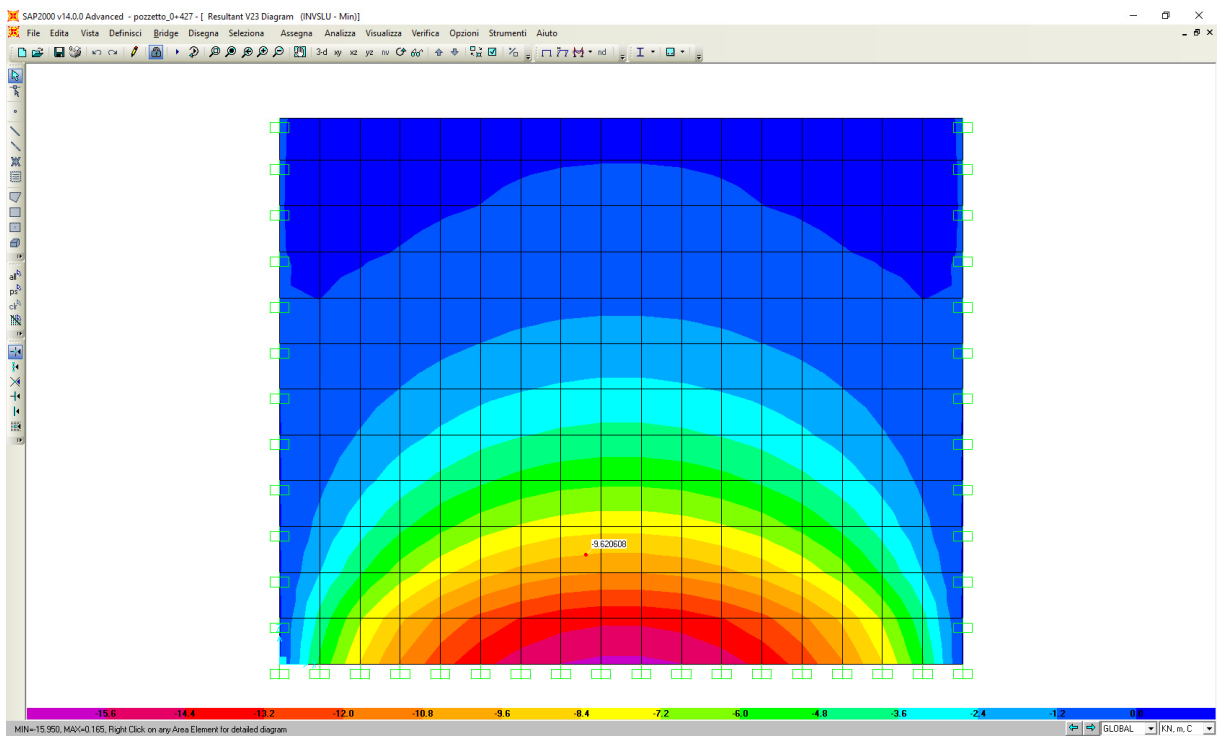


Involuppo Sollecitazioni di Taglio SLU: V13 (-)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 24 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------



Involuppo Sollecitazioni di Taglio SLU: V23 (+)



Involuppo Sollecitazioni di Taglio SLU: V23 (-)

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 25 di 296

Riassumendo si hanno le seguenti sollecitazioni massime:

	SLU	SLE
	kNm	
M22,max	1.29	0.80
M22,min	-4.84	-3.38
M11,max	2.83	1.94
M11,min	-5.61	-3.85

SLU (kN)	
V13,max	14.81
V13,min	-14.81
V23,max	0.91
V23,min	-15.95

7.5 VERIFICHE

Le verifiche degli elementi strutturali che compongono l'opera, sono state eseguite mediante il metodo degli Stati Limite.

Verifica materiali:

Stato Limite Ultimo

Coefficiente di sicurezza calcestruzzo γ_c	1.50
Fattore riduzione da resistenza cubica a cilindrica	0.83
Fattore di riduzione per carichi di lungo periodo	0.85
Coefficiente di sicurezza acciaio	1.15

Verifica Taglio - Metodo dell'inclinazione variabile del traliccio

$$V_{Rd} = [0.18 \cdot k \cdot (100.0 \cdot \rho_l \cdot f_{ck})^{1/3} / \gamma_c + 0.15 \cdot \sigma_{cp}] \cdot b_w \cdot d > (v_{min} + 0.15 \cdot \sigma_{cp}) \cdot b_w \cdot d$$

$$V_{Rsd} = 0.9 \cdot d \cdot A_{sw} / s \cdot (\text{ctg} \alpha + \text{ctg} \theta) \cdot \sin \alpha$$

$$V_{Rcd} = 0.9 \cdot d \cdot b_w \cdot \alpha_c \cdot f_{cd} \cdot (\text{ctg}(\theta) + \text{ctg}(\alpha)) / (1.0 + \text{ctg} \theta^{1/2})$$

con:

d altezza utile sezione [mm]

b_w larghezza minima sezione [mm]

σ_{cp} tensione media di compressione [N/mm²]

ρ_l rapporto geometrico di armatura

A_{sw} area armatura trasversale [mm²]

S interasse tra due armature trasversali consecutive [mm]

α_c coefficiente maggiorativo, funzione di f_{cd} e σ_{cp}

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 26 di 296

$$f_{cd}' = 0.5 * f_{cd}$$

$$k = 1 + (200/d)^{1/2}$$

$$v_{min} = 0.035 * k^{3/2} * f_{ck}^{1/2}$$

Stato Limite di Esercizio

Criteri di scelta per verifiche tensioni di esercizio:

Ambiente poco aggressivo

Limite tensioni di compressione nel calcestruzzo (comb. rare) 19.2 N/mm²

Limite tensioni di compressione nel calcestruzzo (comb. quasi perm.) 14.8 N/mm²

Limite tensioni di trazione nell'acciaio (comb. rare) 360 N/mm²

Criteri verifiche a fessurazione:

Armatura poco sensibile

Ambiente aggressivo

Apertura limite fessure espresse in [mm]

Apertura limite fessure w1= 0.20 w2 = 0.30 w3 = 0.40

Tutte le Verifiche secondo condotte con :

Norme Tecniche 2005 - Approccio 1

Copriferro sezioni 4.00 [cm]

Le verifiche in oggetto sono risultate tutte soddisfatte, come si vede da uno stralcio dei tabulati di calcolo di seguito riportate, mentre i tabulati completi sono riportati negli "Allegati di calcolo"

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 27 di 296

Verifiche delle armature

Di seguito si riportano le verifiche di resistenza delle sezioni più sollecitate.

Inoltre avendo utilizzato un armatura simmetrica su tutto il pozzetto, le verifiche strutturali verranno effettuate solo per la sezione più sollecitata e considerando le armature posposte in 2° strato.

Le sollecitazioni di verifica sono riportate nelle tabelle seguenti.

Sollecitazioni di verifica		
	Mmax (kNm)	Tmax (kN)
SLU - STATICA	5.61	15.95
SLE - RARA	3.38	/

Nota: M positivo se tende le fibre inferiori (contro terra)

Caratteristiche geometriche della sezione

Larghezza b	100 cm
Altezza h	30 cm
Armatura tesa 1° strato Aa	1Φ12/20 = 5.65 cm ²
Copriferro 1° strato c1	5.8 cm
Armatura tesa 2° strato Aa	
Copriferro 2° strato c2	
Armatura compressa 1° strato A'a	1Φ12/20 = 5.65 cm ²
Copriferro armatura compressa c'	24.2 cm

Le sollecitazioni per l'acciaio sono state ottenute trascurando, a favore di sicurezza, le azioni normali di compressione.

Verifiche allo stato limite ultimo per flessione

Sollecitazioni di verifica:

$$M = 5.61 \text{ kNm}$$

Sollecitazioni ultime:

$$M_u = 61.26 \text{ kNm}$$

$$\text{Coeff. sicurezza} = 10.91$$

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 28 di 296

Verifiche allo stato limite di esercizio (condizione rara)

Le verifiche da condurre in combinazione rara riguardano le tensioni di esercizio; nello specifico si verifica che le tensioni nei materiali si mantengano nei seguenti limiti:

$$\sigma_c \leq 19.20 \text{ N/mm}^2$$

$$\sigma_f \leq 360 \text{ N/mm}^2$$

Sollecitazioni di verifica:

$$M = 3.38 \text{ kNm}$$

pertanto:

$$\sigma_c = 0.54 \text{ N/mm}^2$$

$$\sigma_f = 26.74 \text{ N/mm}^2$$

Le verifiche sono rispettate.

Verifiche allo stato limite di esercizio (condizione frequente)

Le verifiche da condurre in combinazione frequente riguardano l'apertura delle fessure; nello specifico si verifica che l'ampiezza delle fessure si mantenga inferiore al valore limite:

$$w_k \leq w_2 = 0.300 \text{ mm.}$$

Sollecitazioni di verifica:

$$M = 3.38 \text{ kNm}$$

$$w_k = 0.020 \text{ mm} \leq w_2$$

Verifiche allo stato limite di esercizio (condizione quasi permanente)

Le verifiche da condurre in combinazione quasi permanente riguardano sia la tensione di esercizio del calcestruzzo sia l'apertura delle fessure; nello specifico si verifica che la tensione nel calcestruzzo si mantenga nel seguente limite:

$$\sigma_c \leq 14.80 \text{ N/mm}^2$$

e che l'ampiezza delle fessure si mantenga inferiore al valore limite:

$$w_k \leq w_1 = 0.200 \text{ mm.}$$

Sollecitazioni di verifica:

$$M = 3.38 \text{ kNm}$$

Nel caso in esame si ha:

$$\sigma_c = 0.54 \text{ N/mm}^2$$

$$w_k = 0.020 \text{ mm} < w_1$$

Verifiche allo stato limite ultimo per Taglio

Di seguito si riporta la verifica a taglio ultimo della sezione in esame:

<i>Elementi senza armatura trasversale a taglio</i>			
<i>- Verifica del conglomerato</i>			
$VRd = [0,18 \cdot k \cdot (100 \cdot \rho \cdot 1 \cdot f_{ck})^{1/3} / \gamma_c + 0,15 \cdot \sigma_{cp}] \cdot bw \cdot d =$	107.36	kN	
VEd =	15.95	kN	ok
con:			
$K = 1 + (200/d)^{1/2} =$	1.933		≤ 2
$R_{ck} =$	40	N/mm ²	
$v_{min} = 0,035 \cdot k^{3/2} \cdot f_{ck}^{1/2} =$	0.542	N/mm ²	
$f_{ck} = 0,83 \cdot R_{ck} =$	33.2	N/mm ²	
$f_{cd} = \alpha_{cc} \cdot f_{ck} / \gamma_c =$	18.81	N/mm ²	
$\rho_1 = A_{sl} / (bw \cdot d) =$	0.00246		$\leq 0,02$
$d =$	230	mm	
$H =$	300	mm	
$bw =$	1000	mm	
$A_{sl} =$	565	mm ²	(1 ϕ 12/20)
$N_{Ed} =$	0.00	kN	
$\sigma_{cp} = N_{Ed} / A_c =$	0.000	N/mm ²	$\leq 0,2 \cdot f_{cd}$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 30 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

8. CALCOLO DEL MURO DI SOSTEGNO

Il presente capitolo riporta le calcolazioni eseguite e le relative verifiche del muro di sostegno ($h=1.90$ m) realizzato allo sbocco del tombino $\phi 800$:

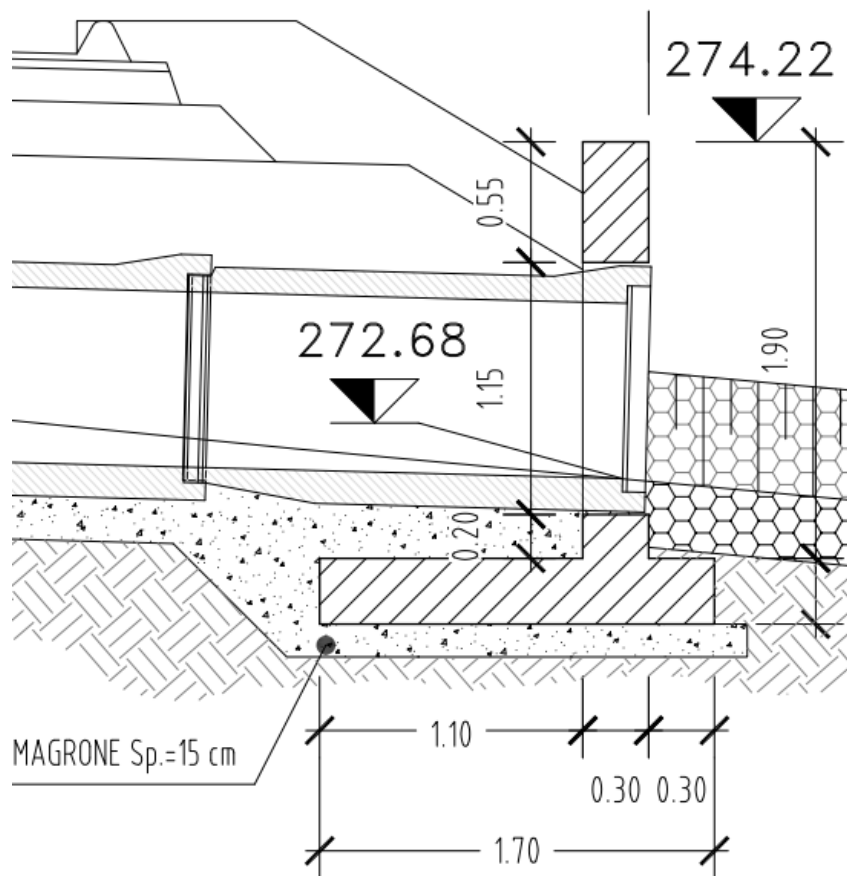


Figura 4: Sezione Muri di sostegno

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 31 di 296

8.1 CRITERI E IPOTESI DI CALCOLO

8.1.1 Criteri di verifica delle sezioni in c.a.

Per le sezioni in cemento armato si effettuano:

- verifiche per gli stati limite ultimi a presso-flessione;
- verifiche per gli stati limite ultimi a taglio;
- verifiche per gli stati limite di esercizio.

8.1.2 Verifiche per gli stati limite ultimi a flessione-presso-flessione

Allo stato limite ultimo, le verifiche a flessione o presso-flessione vengono condotte confrontando (per le sezioni più significative) le resistenze ultime e le sollecitazioni massime agenti, valutando di conseguenza il corrispondente fattore di sicurezza.

8.1.3 Verifica agli stati limite ultimi a taglio

La verifica allo stato limite ultimo per azioni di taglio è condotta secondo quanto prescritto dalla norma UNI EN 1992-1-1:2005, per elementi con armatura a taglio verticali.

Si fa, pertanto, riferimento ai seguenti valori della resistenza di calcolo:

$$V_{Rd,c} = \max \left\{ \left[\frac{0.18}{\gamma_c} \cdot k \cdot (100 \cdot \rho_1 \cdot f_{ck})^{1/3} + 0.15 \cdot \sigma_{cp} \right] \cdot b_w \cdot d; (v_{\min} + 0.15 \cdot \sigma_{cp}) \cdot b_w \cdot d \right\},$$

resistenza di calcolo dell'elemento privo di armatura a taglio

$$V_{Rd,s} = 0.9 \cdot \frac{A_{sw}}{s} \cdot z \cdot f_{ywd} \cdot (\cot \alpha + \cot \vartheta) \cdot \sin \alpha, \text{ valore di progetto dello sforzo di taglio che può}$$

essere sopportato dall'armatura a taglio alla tensione di snervamento

$$V_{Rd,max} = 0.9 \cdot d \cdot b_w \cdot \alpha_c \cdot f'_{cd} (\cot \alpha + \cot \vartheta) / (1 + \cot^2 \vartheta), \text{ valore di progetto del massimo sforzo di}$$

taglio che può essere sopportato dall'elemento, limitato dalla rottura delle bielle compresse.

Nelle espressioni precedenti, i simboli hanno i seguenti significati:

$$k = 1 + \sqrt{\frac{200}{d}} \leq 2 \text{ con } d \text{ in mm;}$$

$$\rho_1 = \frac{A_{sl}}{b_w \cdot d} \leq 0.02;$$

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 32 di 296

- A_{sl} è l'area dell'armatura tesa;
- b_w è la larghezza minima della sezione in zona tesa;
- $\sigma_{cp} = \frac{N_{Ed}}{A_c} < 0.2 \cdot f_{cd}$;
- N_{Ed} è la forza assiale nella sezione dovuta ai carichi;
- A_c è l'area della sezione di calcestruzzo;
- $v_{min} = 0.035 \cdot k^{3/2} \cdot f_{ck}^{1/2}$;
- $1 \leq \cot \theta \leq 2.5$ è l'inclinazione dei puntoni di calcestruzzo rispetto all'asse della trave
- A_{sw} è l'area della sezione trasversale dell'armatura a taglio;
- s è il passo delle staffe;
- f_{ywd} è la tensione di snervamento di progetto dell'armatura a taglio;
- $f'_{cd} = 0.5 \cdot f_{cd}$ è la resistenza ridotta a compressione del calcestruzzo d'anima;
- $\alpha_{cw} = 1$ è un coefficiente che tiene conto dell'interazione tra la tensione nel corrente compresso e qualsiasi tensione di compressione assiale.

8.1.4 Verifica agli stati limite d'esercizio

Si effettuano le seguenti verifiche agli stati limite di esercizio:

- stato limite delle tensioni in esercizio;
- stato limite di fessurazione.

Nel primo caso, si esegue il controllo delle tensioni nei materiali supponendo una legge costitutiva tensioni-deformazioni di tipo lineare. In particolare si controlla la tensione massima di compressione del calcestruzzo e di trazione dell'acciaio, verificando che:

- $\sigma_c < 19.20 N/mm^2$ per combinazione rara delle azioni;
- $\sigma_s < 360 N/mm^2$.

Per il cemento armato precompresso vi sono delle condizioni aggiuntive da verificare, qui di seguito riassunte:

La verifica a fessurazione è stata svolta secondo il metodo proposto della NTC 2005.

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 33 di 296

Tabella 5.1-X

Gruppi di esigenze	Condizioni ambientali	Combinazione di azioni	Armatura			
			Sensibile		Poco sensibile	
			Stato limite	w_d	Stato limite	w_d
a	Ordinarie	frequente	ap. fessure	$\leq w_2$	ap. fessure	$\leq w_3$
		quasi permanente	ap. fessure	$\leq w_1$	ap. fessure	$\leq w_2$
b	Aggressive	frequente	ap. fessure	$\leq w_1$	ap. fessure	$\leq w_2$
		quasi permanente	decompressione	-	ap. fessure	$\leq w_1$
c	Molto aggressive	frequente	formaz. fessure	$\leq w_1$	ap. fessure	$\leq w_1$
		quasi permanente	decompressione	-	ap. fessure	$\leq w_1$

Nel nostro caso, si assume che le condizioni ambientali del sito in cui sorge l'opera siano aggressive e si verifica che il valore limite di apertura della fessura, calcolato per armature poco sensibili, sia al più pari ai seguenti valori nominali:

- $w_1 = 0.3 \text{ mm}$ -combinazione frequente,
- $w_1 = 0.2 \text{ mm}$ -combinazione quasi permanente

8.2 VERIFICA AGLI STATI LIMITI

L'analisi mira a garantire la sicurezza e le prestazioni attese attraverso il conseguimento dei seguenti requisiti :

- sicurezza nei confronti degli Stati Limite di Esercizio.
- sicurezza nei confronti degli Stati Limite Ultimi

Tali verifiche sono state effettuate prevedendo le due seguenti combinazioni di coefficienti:

- Combinazione 1: A1+M1+R1 (STR)
- Combinazione 2: A2+M2+R2 (GEO)

A queste combinazioni si aggiunge la combinazione che prevede l'urto del veicolo in svio in testa al muro (ECC) con coefficienti unitari di combinazione dei carichi permanenti e degli accidentali e coefficiente di sicurezza anch'esso unitario.

Considerando i coefficienti parziali riportati nelle tab delle NTC 2005.

Nelle condizioni di esercizio gli spostamenti dell'opera sono stati valutati per verificarne la compatibilità con la funzionalità dell'opera e con la sicurezza delle opere adiacenti.

In particolare in condizioni sismiche devono essere condotte verifiche nei confronti dello stato limite di

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 34 di 296

danno. Gli spostamenti permanenti indotti dal sisma devono essere compatibili con la funzionalità dell'opera e con quella di eventuali strutture o infrastrutture interagenti con essa.

Nel nostro caso trattasi di muri di controripa, quindi che non hanno funzione di contenimento della sede ferroviaria pertanto tale verifica viene omessa.

In particolare sono stati verificati i seguenti stati limiti ultimi:

- ❖ Verifica del muro di sostegno

SLU di tipo geotecnico (GEO)

- scorrimento sul piano di posa;
- collasso per carico limite dell'insieme fondazione-terreno;
- ribaltamento.

SLU di tipo strutturale (STR)

- raggiungimento della resistenza negli elementi strutturali;

Le rimanenti verifiche devono essere effettuate applicando il primo approccio progettuale (Approccio 1) che prevede le due seguenti combinazioni di coefficienti:

- Combinazione 1: A1+M1+R1 (STR)
- Combinazione 2: A2+M2+R2 (GEO)

Considerando i coefficienti parziali riportati nelle tab. delle NTC 2005.

I risultati delle analisi sono riportati di seguito.

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 35 di 296

8.2.1 Metodo di analisi - calcolo muro

8.2.1.1 Descrizione modello di calcolo

Il progetto e la verifica dei muri di sostegno, sono stati effettuati con l'ausilio di fogli elettronici di comprovata validità.

In tali fogli vengono implementate tutte le caratteristiche geometriche dei muri insieme agli angoli di attrito tra paramento e terreno e tra fondazione e terreno.

Per quanto riguarda l'angolo di attrito tra paramento e terreno si effettua la seguente distinzione:

Caso di muri a mensola con suola sufficientemente lunga, quando cioè l'angolo che la retta passante per lo spigolo lato terreno della testa del muro e lo spigolo lato terreno della fondazione forma con la verticale è superiore a $45-\phi'/2$ con ϕ' angolo di resistenza al taglio del terreno, la spinta sull'opera di sostegno deve essere applicata sul piano verticale a partire dallo spigolo controterra della fondazione assunto come paramento virtuale del muro. Su tale paramento l'angolo di inclinazione δ della risultante della spinta (applicata ad $1/3$ dell'altezza del paramento virtuale) si può assumere uguale all'angolo di inclinazione β del terrapieno, a meno che β non sia superiore all'angolo di resistenza al taglio del terreno ϕ' , nel qual caso si potrà assumere $\delta = \phi'$.

Per muri con suola relativamente corta, quando cioè l'angolo che la retta passante per lo spigolo lato terreno della testa del muro e lo spigolo lato terreno della fondazione forma con la verticale è inferiore a $45-\phi'/2$ con ϕ' angolo di resistenza al taglio del terreno, si può assumere $\delta = \phi'/2$ e la superficie virtuale su cui applicare la spinta diventa il piano che unisce lo spigolo lato terreno della testa del muro e lo spigolo lato terreno della fondazione.

Nel primo caso tutto il peso del terreno al di sopra della suola deve essere considerato stabilizzante nelle verifiche, e ad esso sono da applicarsi le forze di inerzia in fase sismica. Nel secondo caso il terreno da prendere in considerazione è quello contenuto nel triangolo che ha per la lati il paramento verticale, la fondazione del muro e la retta passante per lo spigolo lato terreno della testa del muro e lo spigolo lato terreno della fondazione.

Nel nostro caso i muri sono con mensola corta e quindi $\delta = 0.5*\phi'$.

Nel valutare la stabilità di un muro di sostegno è opportuno che la verifica allo scorrimento della fondazione del muro sia effettuata con riferimento al valore a volume costante o allo stato critico dell'angolo di resistenza al taglio, poichè il meccanismo di scorrimento, che coinvolge spessori molto modesti di terreno e l'inevitabile disturbo connesso con la preparazione del piano di posa della fondazione, possono comportare modifiche significative dei parametri di resistenza. Per questo stesso motivo, nelle analisi svolte in termini di tensioni efficaci, è opportuno trascurare ogni contributo della coesione nelle verifiche allo scorrimento.

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc. REL	N.progr. 04	REV. A	Pag.di Pag. 36 di 296
----------------	---------------	--------------	-----------	---------------	----------------	----------------	-----------	--------------------------

Inoltre nella verifica a scorrimento e a ribaltamento dei muri di sostegno viene trascurata la resistenza passiva antistante il muro.

Nel nostro caso l'angolo di attrito fondazione-terreno nelle verifiche a scorrimento è pari a $\phi'_{cv} = \arctan(\tan\phi')$.

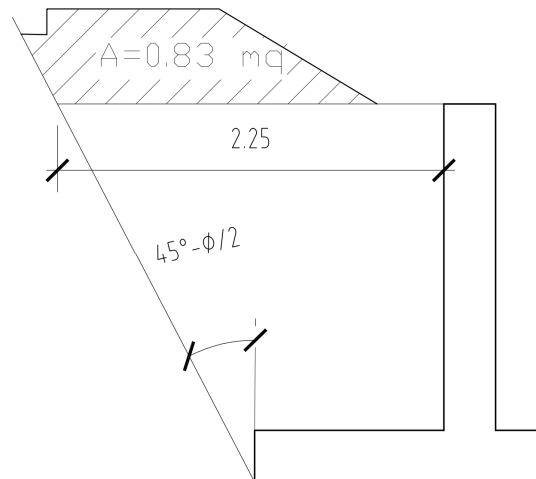
8.3 MURO: H = 1.90 M

8.3.1 Analisi dei carichi

8.3.1.1 Carico permanente

L'analisi viene condotta considerando una larghezza unitaria dell'opera.

Il carico di progetto è rappresentato dal peso proprio dei permanenti (struttura in c.a., terrapieno) e dal sovraccarico accidentale. In particolare il terrapieno che si trova a tergo del muro ad una quota più alta rispetto alla testa del muro, viene considerato come sovraccarico equivalente pari a $20 \cdot 0.83 / 2.25 \approx 8.00$ kN/mq. Tale carico è stato ottenuto calcolando il peso di terrapieno che ricade all'interno del cuneo di spinta sul muro:



8.3.1.2 Accidentale a tergo del muro

A monte si ha un sovraccarico accidentale dovuto al traffico stradale pari a 20.00 kN/m^2 .

	2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto 2.1 Tratto Fabriano-Matelica Nord Opere d'arte minori: opere di attraversamento Sistemazione viabilità interferita al km 5+641 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo								
	Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 37 di 296

8.3.1.3 Descrizione analisi sismica

In condizioni sismiche, nelle analisi eseguite con il metodo pseudostatico, i valori dei coefficienti sismici orizzontali e verticali, nelle verifiche allo stato limite ultimo, possono essere assunti, come definito ai paragrafi precedenti relativi al calcolo della vbasca di imbocco::

$$k_h = S_T \cdot S_S \cdot \frac{a_g}{g} / r ; \quad k_v = \frac{1}{2} \cdot k_h$$

I parametri che caratterizzano l'azione sismica (Terreno di tipo E) sono riportati nella tabella seguente:

$S_s \cdot S_T \cdot a_g / g$	0.343
Coefficiente r	2
$k_h = a_{max} (g) / r$	0.172
$K_v = 0.5 \cdot k_h =$	0.086

Verifica muro - Parametri azione sismica

L'evento sismico è stato modellato considerando due tipi di forze:

- 1) le forze inerziali applicate alle masse strutturali del muro e del terrapieno a tergo del muro;
- 2) l'incremento di spinta sismica del terreno.

Per quanto attiene alle forze inerziali si moltiplica il coefficiente k_h per le masse in questione.

Il secondo contributo consiste in un incremento di spinta ΔF pari alla differenza fra la spinta totale F_{sd} esercitata dal terreno retrostante in condizioni sismiche (calcolata con il metodo di Mononobe-Okabe) e quella statica F_s :

$\Delta F = F_{sd} - F_s =$ incremento di spinta corrispondente all'effetto sismico (applicata a metà del muro).

8.3.2 Risultati verifiche geotecniche

Di seguito vengono riportati i risultati delle verifiche geotecniche in forma tabellare esplicitate negli allegati:

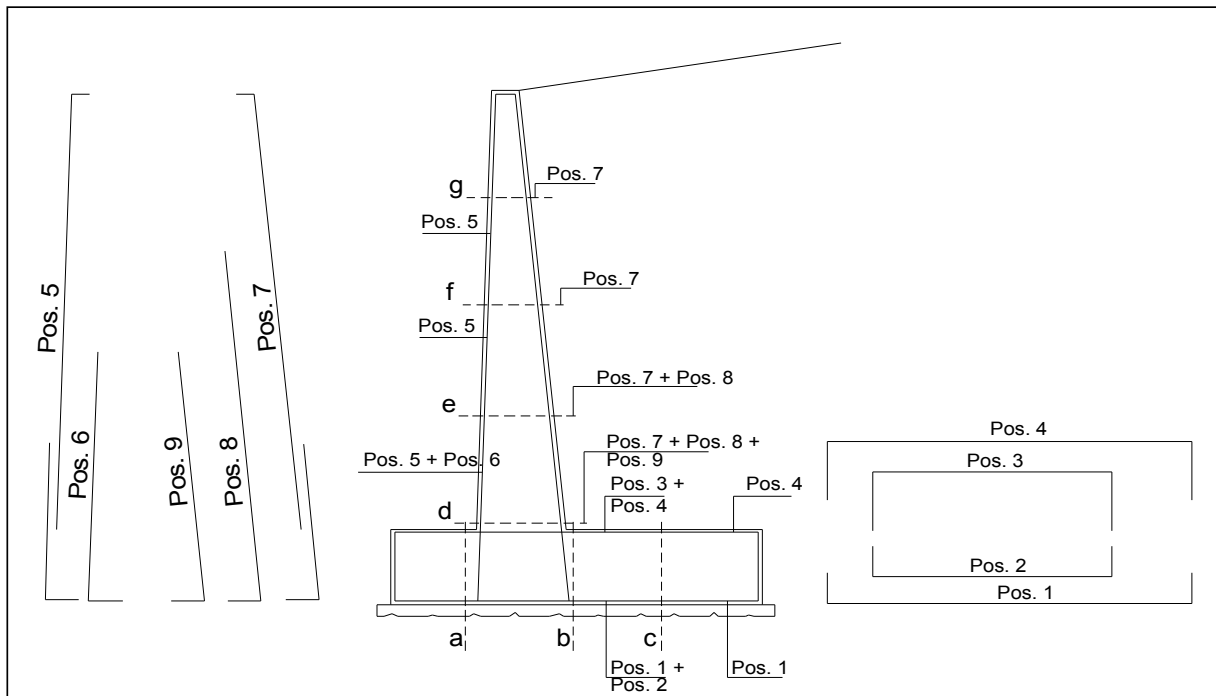
MURO H=1.90 m

CONDIZIONE STATICA				
	Scorrimento	Ribaltamento	Capacità portante	Cedimento della fondazione (mm)
SLE	---	----	----	1.77
CONDIZIONE ALLO SLU E SISMICA				
	Scorrimento	Ribaltamento	Capacità portante	Cedimento della fondazione (mm)
SLU (A1-M1)	1.43	2.41	2.93	---
SLU (A2-M2)	1.19	2.22	1.45	---
SISMICA +	1.13	2.44	1.34	----
SISMICA -	1.11	1.97	1.22	----
	ok	ok	ok	

8.3.3 Risultati verifiche strutturali del muro con H = 1.90 m

Di seguito vengono riportati i risultati delle verifiche strutturali, nelle sezioni indicate in figura, in forma tabellare esplicitate nell'allegato:

SCHEMA DELLE ARMATURE

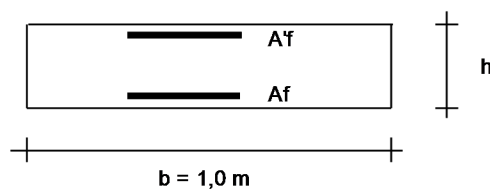


ARMATURE

pos	n°/ml	φ	pos	n°/ml	φ
1	5.0	12	5	5.0	12
2	5.0	0	6	0.0	0
3	5.0	0	7	5.0	12
4	5.0	12	8	0.0	0
			9	5.0	0

Calcola

VERIFICHE



a-a pos 1-2-3-4
 b-b pos 1-2-3-4
 c-c pos 1-4
 d-d pos 5-6-7-8-9
 e-e pos 5-7-8
 f-f pos 5-7
 g-g pos 5-7

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc. REL	N.progr. 04	REV. A	Pag.di Pag. 40 di 296
----------------	---------------	--------------	-----------	---------------	----------------	----------------	-----------	--------------------------

A1-M1

Sez.	M	N	h	Af	A'f	Mu
(-)	(kNm)	(kN)	(m)	(cm ²)	(cm ²)	(kNm)
a - a	3.33	0.00	0.30	5.65	5.65	62.19
b - b	-34.35	0.00	0.30	5.65	5.65	62.19
c - c	-13.11	0.00	0.30	5.65	5.65	62.19
d - d	25.31	23.90	0.30	5.65	5.65	64.71
e - e	13.18	17.22	0.30	5.65	5.65	64.01
f - f	5.39	11.01	0.30	5.65	5.65	63.35
g - g	1.23	5.27	0.30	5.65	5.65	62.75

A2-M2

Sez.	M	N	h	Af	A'f	Mu
(-)	(kNm)	(kN)	(m)	(cm ²)	(cm ²)	(kNm)
a - a	3.54	0.00	0.30	5.65	5.65	63.01
b - b	-26.06	0.00	0.30	5.65	5.65	63.01
c - c	-10.76	0.00	0.30	5.65	5.65	63.01
d - d	26.61	22.50	0.30	5.65	5.65	65.33
e - e	14.00	16.35	0.30	5.65	5.65	64.69
f - f	5.79	10.54	0.30	5.65	5.65	64.10
g - g	1.34	5.10	0.30	5.65	5.65	63.54

SISMA

Sez.	M	N	h	Af	A'f	Mu
(-)	(kNm)	(kN)	(m)	(cm ²)	(cm ²)	(kNm)
a - a	3.55	0.00	0.30	5.65	5.65	62.19
b - b	-25.37	0.00	0.30	5.65	5.65	62.19
c - c	-9.90	0.00	0.30	5.65	5.65	62.19
d - d	23.60	21.32	0.30	5.65	5.65	64.44
e - e	11.12	15.20	0.30	5.65	5.65	63.79
f - f	3.98	9.61	0.30	5.65	5.65	63.20
g - g	0.76	4.54	0.30	5.65	5.65	62.67

SLE e fessurazione
Condizione Statica

Sez.	M	N	h	Af	A'f	σ^c	σ^f	wk	w _{amm}
(-)	(kNm)	(kN)	(m)	(cm ²)	(cm ²)	(N/mm ²)	(N/mm ²)	(mm)	(mm)
a - a	2.56	0.00	0.30	5.65	5.65	0.40	20.13	0.021	0.200
b - b	-16.58	0.00	0.30	5.65	5.65	2.61	130.26	0.139	0.200
c - c	-7.09	0.00	0.30	5.65	5.65	1.12	55.72	0.059	0.200
d - d	17.23	20.86	0.30	5.65	5.65	2.68	115.91	0.121	0.200
e - e	8.94	15.14	0.30	5.65	5.65	1.38	56.17	0.058	0.200
f - f	3.64	9.76	0.30	5.65	5.65	0.55	19.62	0.020	0.200
g - g	0.83	4.71	0.30	5.65	5.65	0.11	2.40	0.002	0.200

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 41 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

Verifica a taglio sezione b-b			
<i>Elementi senza armatura trasversale a taglio</i>			
<i>- Verifica del conglomerato</i>			
$VRd = [0,18 \cdot k \cdot (100 \cdot \rho \cdot 1 \cdot f_{ck})^{1/3} / \gamma_c + 0,15 \cdot \sigma_{cp}] \cdot bw \cdot d =$	107.36	kN	
VEd =	41.43	kN	ok
con:			
$K = 1 + (200/d)^{1/2} =$	1.933		≤ 2
$R_{ck} =$	40	N/mm ²	
$V_{min} = 0,035 \cdot k^{3/2} \cdot f_{ck}^{1/2} =$	0.542	N/mm ²	
$f_{ck} = 0,83 \cdot R_{ck} =$	33.2	N/mm ²	
$f_{cd} = \alpha_{cc} \cdot f_{ck} / \gamma_c =$	18.81	N/mm ²	
$\rho_1 = A_{sl} / (bw \cdot d) =$	0.00246		$\leq 0,02$
$d =$	230	mm	
$H =$	300	mm	
$bw =$	1000	mm	
$A_{sl} =$	565	mm ²	(1ϕ12/20)
$N_{Ed} =$	0.00	kN	
$\sigma_{cp} = N_{Ed} / A_c =$	0.000	N/mm ²	$\leq 0,2 \cdot f_{cd}$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 42 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

Verifica a taglio sezione d-d			
<i>Elementi senza armatura trasversale a taglio</i>			
<i>- Verifica del conglomerato</i>			
$VRd = [0,18 \cdot k \cdot (100 \cdot \rho_1 \cdot f_{ck})^{1/3} / \gamma_c + 0,15 \cdot \sigma_{cp}] \cdot bw \cdot d =$	107.36	kN	
VEd =	31.62	kN	ok
con:			
$K = 1 + (200/d)^{1/2} =$	1.933		≤ 2
$R_{ck} =$	40	N/mm ²	
$V_{min} = 0,035 \cdot k^{3/2} \cdot f_{ck}^{1/2} =$	0.542	N/mm ²	
$f_{ck} = 0,83 \cdot R_{ck} =$	33.2	N/mm ²	
$f_{cd} = \alpha_{cc} \cdot f_{ck} / \gamma_c =$	18.81	N/mm ²	
$\rho_1 = A_{sl} / (bw \cdot d) =$	0.00246		$\leq 0,02$
$d =$	230	mm	
$H =$	300	mm	
$bw =$	1000	mm	
$A_{sl} =$	565	mm ²	(1ϕ12/20)
$N_{Ed} =$	0.00	kN	
$\sigma_{cp} = N_{Ed} / A_c =$	0.000	N/mm ²	$\leq 0,2 \cdot f_{cd}$



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 43 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

ALLEGATO 1 : TABULATI DI CALCOLO DELLA VASCA D' IMBOCCO

SAP2000 v14.0.0 1/15/18 11:34:06

Table: Area Loads - Gravity

Area	LoadPat	CoordSys	MultiplierX	MultiplierY	MultiplierZ
512	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
513	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
514	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
515	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
516	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
517	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
518	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
519	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
520	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
521	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
522	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
523	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
524	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
525	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
526	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
527	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
528	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
529	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
530	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
531	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
532	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
533	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
534	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
535	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
536	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
537	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
538	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
539	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
540	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
541	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
542	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
543	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
544	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
545	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
546	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
547	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
548	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
549	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
550	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
551	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
552	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
553	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
554	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
555	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
556	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
557	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
558	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
559	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
560	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
561	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
562	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
563	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
564	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
565	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
566	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
567	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
568	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
569	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
570	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
571	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
572	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
573	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
574	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
575	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
576	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
577	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
578	SISMICA	GLOBAL	0.000000	-0.344000	0.000000



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 44 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

579	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
580	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
581	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
582	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
583	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
584	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
585	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
586	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
587	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
588	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
589	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
590	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
591	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
592	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
593	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
594	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
595	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
596	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
597	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
598	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
599	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
600	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
601	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
602	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
603	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
604	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
605	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
606	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
607	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
608	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
609	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
610	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
611	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
612	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
613	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
614	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
615	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
616	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
617	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
618	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
619	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
620	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
621	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
622	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
623	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
624	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
625	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
626	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
627	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
628	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
629	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
630	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
631	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
632	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
633	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
634	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
635	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
636	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
637	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
638	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
639	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
640	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
641	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
642	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
643	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
644	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
645	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
646	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
647	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
648	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
649	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
650	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
651	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
652	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
653	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
654	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
655	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
656	SISMICA	GLOBAL	0.000000	-0.344000	0.000000

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 45 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

657	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
658	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
659	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
660	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
661	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
662	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
663	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
664	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
665	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
666	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
667	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
668	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
669	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
670	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
671	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
672	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
673	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
674	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
675	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
676	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
677	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
678	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
679	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
680	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
681	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
682	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
683	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
684	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
685	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
686	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
687	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
688	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
689	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
690	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
691	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
692	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
693	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
694	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
695	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
696	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
697	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
698	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
699	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
700	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
701	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
702	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
703	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
704	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
705	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
706	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
707	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
708	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
709	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
710	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
711	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
712	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
713	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
714	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
715	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
716	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
717	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
718	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
719	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
720	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
721	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
722	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
723	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
724	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
725	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
726	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
727	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
728	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
729	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
730	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
731	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
732	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
733	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
734	SISMICA	GLOBAL	0.000000	-0.344000	0.000000

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 46 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

735	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
736	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
737	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
738	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
739	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
740	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
741	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
742	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
743	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
744	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
745	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
746	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
747	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
748	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
749	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
750	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
751	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
752	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
753	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
754	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
755	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
756	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
757	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
758	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
759	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
760	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
761	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
762	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
763	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
764	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
765	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
766	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
767	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
768	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
769	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
770	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
771	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
772	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
773	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
774	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
775	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
776	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
777	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
778	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
779	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
780	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
781	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
782	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
783	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
784	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
785	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
786	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
787	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
788	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
789	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
790	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
791	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
792	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
793	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
794	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
795	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
796	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
797	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
798	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
799	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
800	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
801	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
802	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
803	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
804	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
805	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
806	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
807	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
808	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
809	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
810	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
811	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
812	SISMICA	GLOBAL	0.000000	-0.344000	0.000000



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 47 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

813	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
814	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
815	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
816	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
817	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
818	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
819	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
820	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
821	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
822	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
823	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
824	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
825	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
826	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
827	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
828	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
829	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
830	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
831	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
832	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
833	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
834	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
835	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
836	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
837	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
838	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
839	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
840	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
841	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
842	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
843	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
844	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
845	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
846	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
847	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
848	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
849	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
850	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
851	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
852	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
853	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
854	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
855	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
856	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
857	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
858	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
859	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
860	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
861	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
862	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
863	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
864	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
865	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
866	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
867	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
868	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
869	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
870	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
871	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
872	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
873	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
874	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
875	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
876	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
877	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
878	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
879	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
880	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
881	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
882	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
883	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
884	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
885	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
886	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
887	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
888	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
889	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
890	SISMICA	GLOBAL	0.000000	-0.344000	0.000000



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 48 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

891	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
892	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
893	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
894	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
895	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
896	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
897	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
898	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
899	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
900	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
901	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
902	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
903	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
904	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
905	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
906	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
907	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
908	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
909	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
910	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
911	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
912	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
913	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
914	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
915	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
916	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
917	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
918	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
919	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
920	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
921	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
922	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
923	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
924	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
925	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
926	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
927	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
928	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
929	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
930	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
931	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
932	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
933	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
934	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
935	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
936	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
937	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
938	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
939	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
940	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
941	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
942	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
943	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
944	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
945	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
946	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
947	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
948	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
949	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
950	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
951	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
952	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
953	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
954	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
955	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
956	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
957	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
958	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
959	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
960	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
961	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
962	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
963	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
964	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
965	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
966	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
967	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
968	SISMICA	GLOBAL	0.000000	-0.344000	0.000000

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 49 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

969	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
970	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
971	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
972	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
973	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
974	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
975	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
976	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
977	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
978	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
979	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
980	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
981	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
982	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
983	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
984	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
985	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
986	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
987	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
988	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
989	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
990	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
991	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
992	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
993	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
994	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
995	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
996	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
997	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
998	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
999	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1000	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1001	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1002	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1003	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1004	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1005	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1006	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1007	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1008	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1009	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1010	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1011	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1012	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1013	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1014	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1015	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1016	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1017	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1018	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1019	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1020	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1021	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1022	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1023	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1024	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1025	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1026	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1027	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1028	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1029	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1030	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1031	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1032	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1033	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1034	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1035	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1036	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1037	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1038	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1039	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1040	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1041	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1042	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1043	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1044	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1045	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1046	SISMICA	GLOBAL	0.000000	-0.344000	0.000000



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 50 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

1047	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1048	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1049	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1050	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1051	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1052	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1053	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1054	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1055	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1056	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1057	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1058	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1059	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1060	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1061	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1062	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1063	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1064	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1065	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1066	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1067	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1068	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1069	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1070	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1071	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1072	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1073	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1074	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1075	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1076	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1077	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1078	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1079	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1080	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1081	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1082	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1083	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1084	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1085	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1086	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1087	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1088	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1089	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1263	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1264	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1265	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1266	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1267	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1268	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1269	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1270	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1271	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1272	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1273	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1274	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1275	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1276	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1277	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1278	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1279	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1280	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1281	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1282	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1283	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1284	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1285	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1286	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1287	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1288	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1289	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1290	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1291	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1292	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1293	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1294	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1295	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1296	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1297	SISMICA	GLOBAL	0.000000	-0.344000	0.000000



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 51 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

1298	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1299	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1300	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1301	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1302	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1303	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1304	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1305	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1306	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1307	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1308	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1309	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1310	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1311	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1312	SISMICA	GLOBAL	0.000000	-0.344000	0.000000
1313	SISMICA	GLOBAL	0.000000	-0.344000	0.000000

Table: Area Loads - Surface Pressure

Area	LoadPat	Face	Pressure KN/m2	JtPattern
512	STATICA	Top	-1.00	STATICA
513	STATICA	Top	-1.00	STATICA
514	STATICA	Top	-1.00	STATICA
515	STATICA	Top	-1.00	STATICA
516	STATICA	Top	-1.00	STATICA
517	STATICA	Top	-1.00	STATICA
518	STATICA	Top	-1.00	STATICA
519	STATICA	Top	-1.00	STATICA
520	STATICA	Top	-1.00	STATICA
521	STATICA	Top	-1.00	STATICA
522	STATICA	Top	-1.00	STATICA
523	STATICA	Top	-1.00	STATICA
524	STATICA	Top	-1.00	STATICA
525	STATICA	Top	-1.00	STATICA
526	STATICA	Top	-1.00	STATICA
527	STATICA	Top	-1.00	STATICA
528	STATICA	Top	-1.00	STATICA
529	STATICA	Top	-1.00	STATICA
530	STATICA	Top	-1.00	STATICA
531	STATICA	Top	-1.00	STATICA
532	STATICA	Top	-1.00	STATICA
533	STATICA	Top	-1.00	STATICA
534	STATICA	Top	-1.00	STATICA
535	STATICA	Top	-1.00	STATICA
536	STATICA	Top	-1.00	STATICA
537	STATICA	Top	-1.00	STATICA
538	STATICA	Top	-1.00	STATICA
539	STATICA	Top	-1.00	STATICA
540	STATICA	Top	-1.00	STATICA
541	STATICA	Top	-1.00	STATICA
542	STATICA	Top	-1.00	STATICA
543	STATICA	Top	-1.00	STATICA
544	STATICA	Top	-1.00	STATICA
545	STATICA	Top	-1.00	STATICA
546	STATICA	Top	-1.00	STATICA
547	STATICA	Top	-1.00	STATICA
548	STATICA	Top	-1.00	STATICA
549	STATICA	Top	-1.00	STATICA
550	STATICA	Top	-1.00	STATICA
551	STATICA	Top	-1.00	STATICA
552	STATICA	Top	-1.00	STATICA
553	STATICA	Top	-1.00	STATICA
554	STATICA	Top	-1.00	STATICA
555	STATICA	Top	-1.00	STATICA
556	STATICA	Top	-1.00	STATICA
557	STATICA	Top	-1.00	STATICA
558	STATICA	Top	-1.00	STATICA
559	STATICA	Top	-1.00	STATICA
560	STATICA	Top	-1.00	STATICA
561	STATICA	Top	-1.00	STATICA
562	STATICA	Top	-1.00	STATICA
563	STATICA	Top	-1.00	STATICA
564	STATICA	Top	-1.00	STATICA
565	STATICA	Top	-1.00	STATICA
566	STATICA	Top	-1.00	STATICA



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 52 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

567	STATICA	Top	-1.00	STATICA
568	STATICA	Top	-1.00	STATICA
569	STATICA	Top	-1.00	STATICA
570	STATICA	Top	-1.00	STATICA
571	STATICA	Top	-1.00	STATICA
572	STATICA	Top	-1.00	STATICA
573	STATICA	Top	-1.00	STATICA
574	STATICA	Top	-1.00	STATICA
575	STATICA	Top	-1.00	STATICA
576	STATICA	Top	-1.00	STATICA
577	STATICA	Top	-1.00	STATICA
578	STATICA	Top	-1.00	STATICA
579	STATICA	Top	-1.00	STATICA
580	STATICA	Top	-1.00	STATICA
581	STATICA	Top	-1.00	STATICA
582	STATICA	Top	-1.00	STATICA
583	STATICA	Top	-1.00	STATICA
584	STATICA	Top	-1.00	STATICA
585	STATICA	Top	-1.00	STATICA
586	STATICA	Top	-1.00	STATICA
587	STATICA	Top	-1.00	STATICA
588	STATICA	Top	-1.00	STATICA
589	STATICA	Top	-1.00	STATICA
590	STATICA	Top	-1.00	STATICA
591	STATICA	Top	-1.00	STATICA
592	STATICA	Top	-1.00	STATICA
593	STATICA	Top	-1.00	STATICA
594	STATICA	Top	-1.00	STATICA
595	STATICA	Top	-1.00	STATICA
596	STATICA	Top	-1.00	STATICA
597	STATICA	Top	-1.00	STATICA
598	STATICA	Top	-1.00	STATICA
599	STATICA	Top	-1.00	STATICA
600	STATICA	Top	-1.00	STATICA
601	STATICA	Top	-1.00	STATICA
602	STATICA	Top	-1.00	STATICA
603	STATICA	Top	-1.00	STATICA
604	STATICA	Top	-1.00	STATICA
605	STATICA	Top	-1.00	STATICA
606	STATICA	Top	-1.00	STATICA
607	STATICA	Top	-1.00	STATICA
608	STATICA	Top	-1.00	STATICA
609	STATICA	Top	-1.00	STATICA
610	STATICA	Top	-1.00	STATICA
611	STATICA	Top	-1.00	STATICA
612	STATICA	Top	-1.00	STATICA
613	STATICA	Top	-1.00	STATICA
614	STATICA	Top	-1.00	STATICA
615	STATICA	Top	-1.00	STATICA
616	STATICA	Top	-1.00	STATICA
617	STATICA	Top	-1.00	STATICA
618	STATICA	Top	-1.00	STATICA
619	STATICA	Top	-1.00	STATICA
620	STATICA	Top	-1.00	STATICA
621	STATICA	Top	-1.00	STATICA
622	STATICA	Top	-1.00	STATICA
623	STATICA	Top	-1.00	STATICA
624	STATICA	Top	-1.00	STATICA
625	STATICA	Top	-1.00	STATICA
626	STATICA	Top	-1.00	STATICA
627	STATICA	Top	-1.00	STATICA
628	STATICA	Top	-1.00	STATICA
629	STATICA	Top	-1.00	STATICA
630	STATICA	Top	-1.00	STATICA
631	STATICA	Top	-1.00	STATICA
632	STATICA	Top	-1.00	STATICA
633	STATICA	Top	-1.00	STATICA
634	STATICA	Top	-1.00	STATICA
635	STATICA	Top	-1.00	STATICA
636	STATICA	Top	-1.00	STATICA
637	STATICA	Top	-1.00	STATICA
638	STATICA	Top	-1.00	STATICA
639	STATICA	Top	-1.00	STATICA
640	STATICA	Top	-1.00	STATICA
641	STATICA	Top	-1.00	STATICA
642	STATICA	Top	-1.00	STATICA
643	STATICA	Top	-1.00	STATICA
644	STATICA	Top	-1.00	STATICA

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 53 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

645	STATICA	Top	-1.00	STATICA
646	STATICA	Top	-1.00	STATICA
647	STATICA	Top	-1.00	STATICA
648	STATICA	Top	-1.00	STATICA
649	STATICA	Top	-1.00	STATICA
650	STATICA	Top	-1.00	STATICA
651	STATICA	Top	-1.00	STATICA
652	STATICA	Top	-1.00	STATICA
653	STATICA	Top	-1.00	STATICA
654	STATICA	Top	-1.00	STATICA
655	STATICA	Top	-1.00	STATICA
656	STATICA	Top	-1.00	STATICA
657	STATICA	Top	-1.00	STATICA
658	STATICA	Top	-1.00	STATICA
659	STATICA	Top	-1.00	STATICA
660	STATICA	Top	-1.00	STATICA
661	STATICA	Top	-1.00	STATICA
662	STATICA	Top	-1.00	STATICA
663	STATICA	Top	-1.00	STATICA
664	STATICA	Top	-1.00	STATICA
665	STATICA	Top	-1.00	STATICA
666	STATICA	Top	-1.00	STATICA
667	STATICA	Top	-1.00	STATICA
668	STATICA	Top	-1.00	STATICA
669	STATICA	Top	-1.00	STATICA
670	STATICA	Top	-1.00	STATICA
671	STATICA	Top	-1.00	STATICA
672	STATICA	Top	-1.00	STATICA
673	STATICA	Top	-1.00	STATICA
674	STATICA	Top	-1.00	STATICA
675	STATICA	Top	-1.00	STATICA
676	STATICA	Top	-1.00	STATICA
677	STATICA	Top	-1.00	STATICA
678	STATICA	Top	-1.00	STATICA
679	STATICA	Top	-1.00	STATICA
680	STATICA	Top	-1.00	STATICA
681	STATICA	Top	-1.00	STATICA
682	STATICA	Top	-1.00	STATICA
683	STATICA	Top	-1.00	STATICA
684	STATICA	Top	-1.00	STATICA
685	STATICA	Top	-1.00	STATICA
686	STATICA	Top	-1.00	STATICA
687	STATICA	Top	-1.00	STATICA
688	STATICA	Top	-1.00	STATICA
689	STATICA	Top	-1.00	STATICA
690	STATICA	Top	-1.00	STATICA
691	STATICA	Top	-1.00	STATICA
692	STATICA	Top	-1.00	STATICA
693	STATICA	Top	-1.00	STATICA
694	STATICA	Top	-1.00	STATICA
695	STATICA	Top	-1.00	STATICA
696	STATICA	Top	-1.00	STATICA
697	STATICA	Top	-1.00	STATICA
698	STATICA	Top	-1.00	STATICA
699	STATICA	Top	-1.00	STATICA
700	STATICA	Top	-1.00	STATICA
701	STATICA	Top	-1.00	STATICA
702	STATICA	Top	-1.00	STATICA
703	STATICA	Top	-1.00	STATICA
704	STATICA	Top	-1.00	STATICA
705	STATICA	Top	-1.00	STATICA
706	STATICA	Top	-1.00	STATICA
707	STATICA	Top	-1.00	STATICA
708	STATICA	Top	-1.00	STATICA
709	STATICA	Top	-1.00	STATICA
710	STATICA	Top	-1.00	STATICA
711	STATICA	Top	-1.00	STATICA
712	STATICA	Top	-1.00	STATICA
713	STATICA	Top	-1.00	STATICA
714	STATICA	Top	-1.00	STATICA
715	STATICA	Top	-1.00	STATICA
716	STATICA	Top	-1.00	STATICA
717	STATICA	Top	-1.00	STATICA
718	STATICA	Top	-1.00	STATICA
719	STATICA	Top	-1.00	STATICA
720	STATICA	Top	-1.00	STATICA
721	STATICA	Top	-1.00	STATICA
722	STATICA	Top	-1.00	STATICA

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 54 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

723	STATICA	Top	-1.00	STATICA
724	STATICA	Top	-1.00	STATICA
725	STATICA	Top	-1.00	STATICA
726	STATICA	Top	-1.00	STATICA
727	STATICA	Top	-1.00	STATICA
728	STATICA	Top	-1.00	STATICA
729	STATICA	Top	-1.00	STATICA
730	STATICA	Top	-1.00	STATICA
731	STATICA	Top	-1.00	STATICA
732	STATICA	Top	-1.00	STATICA
733	STATICA	Top	-1.00	STATICA
734	STATICA	Top	-1.00	STATICA
735	STATICA	Top	-1.00	STATICA
736	STATICA	Top	-1.00	STATICA
737	STATICA	Top	-1.00	STATICA
738	STATICA	Top	-1.00	STATICA
739	STATICA	Top	-1.00	STATICA
740	STATICA	Top	-1.00	STATICA
741	STATICA	Top	-1.00	STATICA
742	STATICA	Top	-1.00	STATICA
743	STATICA	Top	-1.00	STATICA
744	STATICA	Top	-1.00	STATICA
745	STATICA	Top	-1.00	STATICA
746	STATICA	Top	-1.00	STATICA
747	STATICA	Top	-1.00	STATICA
748	STATICA	Top	-1.00	STATICA
749	STATICA	Top	-1.00	STATICA
750	STATICA	Top	-1.00	STATICA
751	STATICA	Top	-1.00	STATICA
752	STATICA	Top	-1.00	STATICA
753	STATICA	Top	-1.00	STATICA
754	STATICA	Top	-1.00	STATICA
755	STATICA	Top	-1.00	STATICA
756	STATICA	Top	-1.00	STATICA
757	STATICA	Top	-1.00	STATICA
758	STATICA	Top	-1.00	STATICA
759	STATICA	Top	-1.00	STATICA
760	STATICA	Top	-1.00	STATICA
761	STATICA	Top	-1.00	STATICA
762	STATICA	Top	-1.00	STATICA
763	STATICA	Top	-1.00	STATICA
764	STATICA	Top	-1.00	STATICA
765	STATICA	Top	-1.00	STATICA
766	STATICA	Top	-1.00	STATICA
767	STATICA	Top	-1.00	STATICA
768	STATICA	Top	-1.00	STATICA
769	STATICA	Top	-1.00	STATICA
770	STATICA	Top	-1.00	STATICA
771	STATICA	Top	-1.00	STATICA
772	STATICA	Top	-1.00	STATICA
773	STATICA	Top	-1.00	STATICA
774	STATICA	Top	-1.00	STATICA
775	STATICA	Top	-1.00	STATICA
776	STATICA	Top	-1.00	STATICA
777	STATICA	Top	-1.00	STATICA
778	STATICA	Top	-1.00	STATICA
779	STATICA	Top	-1.00	STATICA
780	STATICA	Top	-1.00	STATICA
781	STATICA	Top	-1.00	STATICA
782	STATICA	Top	-1.00	STATICA
783	STATICA	Top	-1.00	STATICA
784	STATICA	Top	-1.00	STATICA
785	STATICA	Top	-1.00	STATICA
786	STATICA	Top	-1.00	STATICA
787	STATICA	Top	-1.00	STATICA
788	STATICA	Top	-1.00	STATICA
789	STATICA	Top	-1.00	STATICA
790	STATICA	Top	-1.00	STATICA
791	STATICA	Top	-1.00	STATICA
792	STATICA	Top	-1.00	STATICA
793	STATICA	Top	-1.00	STATICA
794	STATICA	Top	-1.00	STATICA
795	STATICA	Top	-1.00	STATICA
796	STATICA	Top	-1.00	STATICA
797	STATICA	Top	-1.00	STATICA
798	STATICA	Top	-1.00	STATICA
799	STATICA	Top	-1.00	STATICA
800	STATICA	Top	-1.00	STATICA

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 55 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

801	STATICA	Top	-1.00	STATICA
802	STATICA	Top	-1.00	STATICA
803	STATICA	Top	-1.00	STATICA
804	STATICA	Top	-1.00	STATICA
805	STATICA	Top	-1.00	STATICA
806	STATICA	Top	-1.00	STATICA
807	STATICA	Top	-1.00	STATICA
808	STATICA	Top	-1.00	STATICA
809	STATICA	Top	-1.00	STATICA
810	STATICA	Top	-1.00	STATICA
811	STATICA	Top	-1.00	STATICA
812	STATICA	Top	-1.00	STATICA
813	STATICA	Top	-1.00	STATICA
814	STATICA	Top	-1.00	STATICA
815	STATICA	Top	-1.00	STATICA
816	STATICA	Top	-1.00	STATICA
817	STATICA	Top	-1.00	STATICA
818	STATICA	Top	-1.00	STATICA
819	STATICA	Top	-1.00	STATICA
820	STATICA	Top	-1.00	STATICA
821	STATICA	Top	-1.00	STATICA
822	STATICA	Top	-1.00	STATICA
823	STATICA	Top	-1.00	STATICA
824	STATICA	Top	-1.00	STATICA
825	STATICA	Top	-1.00	STATICA
826	STATICA	Top	-1.00	STATICA
827	STATICA	Top	-1.00	STATICA
828	STATICA	Top	-1.00	STATICA
829	STATICA	Top	-1.00	STATICA
830	STATICA	Top	-1.00	STATICA
831	STATICA	Top	-1.00	STATICA
832	STATICA	Top	-1.00	STATICA
833	STATICA	Top	-1.00	STATICA
834	STATICA	Top	-1.00	STATICA
835	STATICA	Top	-1.00	STATICA
836	STATICA	Top	-1.00	STATICA
837	STATICA	Top	-1.00	STATICA
838	STATICA	Top	-1.00	STATICA
839	STATICA	Top	-1.00	STATICA
840	STATICA	Top	-1.00	STATICA
841	STATICA	Top	-1.00	STATICA
842	STATICA	Top	-1.00	STATICA
843	STATICA	Top	-1.00	STATICA
844	STATICA	Top	-1.00	STATICA
845	STATICA	Top	-1.00	STATICA
846	STATICA	Top	-1.00	STATICA
847	STATICA	Top	-1.00	STATICA
848	STATICA	Top	-1.00	STATICA
849	STATICA	Top	-1.00	STATICA
850	STATICA	Top	-1.00	STATICA
851	STATICA	Top	-1.00	STATICA
852	STATICA	Top	-1.00	STATICA
853	STATICA	Top	-1.00	STATICA
854	STATICA	Top	-1.00	STATICA
855	STATICA	Top	-1.00	STATICA
856	STATICA	Top	-1.00	STATICA
857	STATICA	Top	-1.00	STATICA
858	STATICA	Top	-1.00	STATICA
859	STATICA	Top	-1.00	STATICA
860	STATICA	Top	-1.00	STATICA
861	STATICA	Top	-1.00	STATICA
862	STATICA	Top	-1.00	STATICA
863	STATICA	Top	-1.00	STATICA
864	STATICA	Top	-1.00	STATICA
865	STATICA	Top	-1.00	STATICA
866	STATICA	Top	-1.00	STATICA
867	STATICA	Top	-1.00	STATICA
868	STATICA	Top	-1.00	STATICA
869	STATICA	Top	-1.00	STATICA
870	STATICA	Top	-1.00	STATICA
871	STATICA	Top	-1.00	STATICA
872	STATICA	Top	-1.00	STATICA
873	STATICA	Top	-1.00	STATICA
874	STATICA	Top	-1.00	STATICA
875	STATICA	Top	-1.00	STATICA
876	STATICA	Top	-1.00	STATICA
877	STATICA	Top	-1.00	STATICA
878	STATICA	Top	-1.00	STATICA



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 56 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

879	STATICA	Top	-1.00	STATICA
880	STATICA	Top	-1.00	STATICA
881	STATICA	Top	-1.00	STATICA
882	STATICA	Top	-1.00	STATICA
883	STATICA	Top	-1.00	STATICA
884	STATICA	Top	-1.00	STATICA
885	STATICA	Top	-1.00	STATICA
886	STATICA	Top	-1.00	STATICA
887	STATICA	Top	-1.00	STATICA
888	STATICA	Top	-1.00	STATICA
889	STATICA	Top	-1.00	STATICA
890	STATICA	Top	-1.00	STATICA
891	STATICA	Top	-1.00	STATICA
892	STATICA	Top	-1.00	STATICA
893	STATICA	Top	-1.00	STATICA
894	STATICA	Top	-1.00	STATICA
895	STATICA	Top	-1.00	STATICA
896	STATICA	Top	-1.00	STATICA
897	STATICA	Top	-1.00	STATICA
898	STATICA	Top	-1.00	STATICA
899	STATICA	Top	-1.00	STATICA
900	STATICA	Top	-1.00	STATICA
901	STATICA	Top	-1.00	STATICA
902	STATICA	Top	-1.00	STATICA
903	STATICA	Top	-1.00	STATICA
904	STATICA	Top	-1.00	STATICA
905	STATICA	Top	-1.00	STATICA
906	STATICA	Top	-1.00	STATICA
907	STATICA	Top	-1.00	STATICA
908	STATICA	Top	-1.00	STATICA
909	STATICA	Top	-1.00	STATICA
910	STATICA	Top	-1.00	STATICA
911	STATICA	Top	-1.00	STATICA
912	STATICA	Top	-1.00	STATICA
913	STATICA	Top	-1.00	STATICA
914	STATICA	Top	-1.00	STATICA
915	STATICA	Top	-1.00	STATICA
916	STATICA	Top	-1.00	STATICA
917	STATICA	Top	-1.00	STATICA
918	STATICA	Top	-1.00	STATICA
919	STATICA	Top	-1.00	STATICA
920	STATICA	Top	-1.00	STATICA
921	STATICA	Top	-1.00	STATICA
922	STATICA	Top	-1.00	STATICA
923	STATICA	Top	-1.00	STATICA
924	STATICA	Top	-1.00	STATICA
925	STATICA	Top	-1.00	STATICA
926	STATICA	Top	-1.00	STATICA
927	STATICA	Top	-1.00	STATICA
928	STATICA	Top	-1.00	STATICA
929	STATICA	Top	-1.00	STATICA
930	STATICA	Top	-1.00	STATICA
931	STATICA	Top	-1.00	STATICA
932	STATICA	Top	-1.00	STATICA
933	STATICA	Top	-1.00	STATICA
934	STATICA	Top	-1.00	STATICA
935	STATICA	Top	-1.00	STATICA
936	STATICA	Top	-1.00	STATICA
937	STATICA	Top	-1.00	STATICA
938	STATICA	Top	-1.00	STATICA
939	STATICA	Top	-1.00	STATICA
940	STATICA	Top	-1.00	STATICA
941	STATICA	Top	-1.00	STATICA
942	STATICA	Top	-1.00	STATICA
943	STATICA	Top	-1.00	STATICA
944	STATICA	Top	-1.00	STATICA
945	STATICA	Top	-1.00	STATICA
946	STATICA	Top	-1.00	STATICA
947	STATICA	Top	-1.00	STATICA
948	STATICA	Top	-1.00	STATICA
949	STATICA	Top	-1.00	STATICA
950	STATICA	Top	-1.00	STATICA
951	STATICA	Top	-1.00	STATICA
952	STATICA	Top	-1.00	STATICA
953	STATICA	Top	-1.00	STATICA
954	STATICA	Top	-1.00	STATICA
955	STATICA	Top	-1.00	STATICA
956	STATICA	Top	-1.00	STATICA



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 57 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

957	STATICA	Top	-1.00	STATICA
958	STATICA	Top	-1.00	STATICA
959	STATICA	Top	-1.00	STATICA
960	STATICA	Top	-1.00	STATICA
961	STATICA	Top	-1.00	STATICA
962	STATICA	Top	-1.00	STATICA
963	STATICA	Top	-1.00	STATICA
964	STATICA	Top	-1.00	STATICA
965	STATICA	Top	-1.00	STATICA
966	STATICA	Top	-1.00	STATICA
967	STATICA	Top	-1.00	STATICA
968	STATICA	Top	-1.00	STATICA
969	STATICA	Top	-1.00	STATICA
970	STATICA	Top	-1.00	STATICA
971	STATICA	Top	-1.00	STATICA
972	STATICA	Top	-1.00	STATICA
973	STATICA	Top	-1.00	STATICA
974	STATICA	Top	-1.00	STATICA
975	STATICA	Top	-1.00	STATICA
976	STATICA	Top	-1.00	STATICA
977	STATICA	Top	-1.00	STATICA
978	STATICA	Top	-1.00	STATICA
979	STATICA	Top	-1.00	STATICA
980	STATICA	Top	-1.00	STATICA
981	STATICA	Top	-1.00	STATICA
982	STATICA	Top	-1.00	STATICA
983	STATICA	Top	-1.00	STATICA
984	STATICA	Top	-1.00	STATICA
985	STATICA	Top	-1.00	STATICA
986	STATICA	Top	-1.00	STATICA
987	STATICA	Top	-1.00	STATICA
988	STATICA	Top	-1.00	STATICA
989	STATICA	Top	-1.00	STATICA
990	STATICA	Top	-1.00	STATICA
991	STATICA	Top	-1.00	STATICA
992	STATICA	Top	-1.00	STATICA
993	STATICA	Top	-1.00	STATICA
994	STATICA	Top	-1.00	STATICA
995	STATICA	Top	-1.00	STATICA
996	STATICA	Top	-1.00	STATICA
997	STATICA	Top	-1.00	STATICA
998	STATICA	Top	-1.00	STATICA
999	STATICA	Top	-1.00	STATICA
1000	STATICA	Top	-1.00	STATICA
1001	STATICA	Top	-1.00	STATICA
1002	STATICA	Top	-1.00	STATICA
1003	STATICA	Top	-1.00	STATICA
1004	STATICA	Top	-1.00	STATICA
1005	STATICA	Top	-1.00	STATICA
1006	STATICA	Top	-1.00	STATICA
1007	STATICA	Top	-1.00	STATICA
1008	STATICA	Top	-1.00	STATICA
1009	STATICA	Top	-1.00	STATICA
1010	STATICA	Top	-1.00	STATICA
1011	STATICA	Top	-1.00	STATICA
1012	STATICA	Top	-1.00	STATICA
1013	STATICA	Top	-1.00	STATICA
1014	STATICA	Top	-1.00	STATICA
1015	STATICA	Top	-1.00	STATICA
1016	STATICA	Top	-1.00	STATICA
1017	STATICA	Top	-1.00	STATICA
1018	STATICA	Top	-1.00	STATICA
1019	STATICA	Top	-1.00	STATICA
1020	STATICA	Top	-1.00	STATICA
1021	STATICA	Top	-1.00	STATICA
1022	STATICA	Top	-1.00	STATICA
1023	STATICA	Top	-1.00	STATICA
1024	STATICA	Top	-1.00	STATICA
1025	STATICA	Top	-1.00	STATICA
1026	STATICA	Top	-1.00	STATICA
1027	STATICA	Top	-1.00	STATICA
1028	STATICA	Top	-1.00	STATICA
1029	STATICA	Top	-1.00	STATICA
1030	STATICA	Top	-1.00	STATICA
1031	STATICA	Top	-1.00	STATICA
1032	STATICA	Top	-1.00	STATICA
1033	STATICA	Top	-1.00	STATICA
1034	STATICA	Top	-1.00	STATICA

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 58 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

1035	STATICA	Top	-1.00	STATICA
1036	STATICA	Top	-1.00	STATICA
1037	STATICA	Top	-1.00	STATICA
1038	STATICA	Top	-1.00	STATICA
1039	STATICA	Top	-1.00	STATICA
1040	STATICA	Top	-1.00	STATICA
1041	STATICA	Top	-1.00	STATICA
1042	STATICA	Top	-1.00	STATICA
1043	STATICA	Top	-1.00	STATICA
1044	STATICA	Top	-1.00	STATICA
1045	STATICA	Top	-1.00	STATICA
1046	STATICA	Top	-1.00	STATICA
1047	STATICA	Top	-1.00	STATICA
1048	STATICA	Top	-1.00	STATICA
1049	STATICA	Top	-1.00	STATICA
1050	STATICA	Top	-1.00	STATICA
1051	STATICA	Top	-1.00	STATICA
1052	STATICA	Top	-1.00	STATICA
1053	STATICA	Top	-1.00	STATICA
1054	STATICA	Top	-1.00	STATICA
1055	STATICA	Top	-1.00	STATICA
1056	STATICA	Top	-1.00	STATICA
1057	STATICA	Top	-1.00	STATICA
1058	STATICA	Top	-1.00	STATICA
1059	STATICA	Top	-1.00	STATICA
1060	STATICA	Top	-1.00	STATICA
1061	STATICA	Top	-1.00	STATICA
1062	STATICA	Top	-1.00	STATICA
1063	STATICA	Top	-1.00	STATICA
1064	STATICA	Top	-1.00	STATICA
1065	STATICA	Top	-1.00	STATICA
1066	STATICA	Top	-1.00	STATICA
1067	STATICA	Top	-1.00	STATICA
1068	STATICA	Top	-1.00	STATICA
1069	STATICA	Top	-1.00	STATICA
1070	STATICA	Top	-1.00	STATICA
1071	STATICA	Top	-1.00	STATICA
1072	STATICA	Top	-1.00	STATICA
1073	STATICA	Top	-1.00	STATICA
1074	STATICA	Top	-1.00	STATICA
1075	STATICA	Top	-1.00	STATICA
1076	STATICA	Top	-1.00	STATICA
1077	STATICA	Top	-1.00	STATICA
1078	STATICA	Top	-1.00	STATICA
1079	STATICA	Top	-1.00	STATICA
1080	STATICA	Top	-1.00	STATICA
1081	STATICA	Top	-1.00	STATICA
1082	STATICA	Top	-1.00	STATICA
1083	STATICA	Top	-1.00	STATICA
1084	STATICA	Top	-1.00	STATICA
1085	STATICA	Top	-1.00	STATICA
1086	STATICA	Top	-1.00	STATICA
1087	STATICA	Top	-1.00	STATICA
1088	STATICA	Top	-1.00	STATICA
1089	STATICA	Top	-1.00	STATICA
1263	STATICA	Top	-1.00	STATICA
1264	STATICA	Top	-1.00	STATICA
1265	STATICA	Top	-1.00	STATICA
1266	STATICA	Top	-1.00	STATICA
1267	STATICA	Top	-1.00	STATICA
1268	STATICA	Top	-1.00	STATICA
1269	STATICA	Top	-1.00	STATICA
1270	STATICA	Top	-1.00	STATICA
1271	STATICA	Top	-1.00	STATICA
1272	STATICA	Top	-1.00	STATICA
1273	STATICA	Top	-1.00	STATICA
1274	STATICA	Top	-1.00	STATICA
1275	STATICA	Top	-1.00	STATICA
1276	STATICA	Top	-1.00	STATICA
1277	STATICA	Top	-1.00	STATICA
1278	STATICA	Top	-1.00	STATICA
1279	STATICA	Top	-1.00	STATICA
1280	STATICA	Top	-1.00	STATICA
1281	STATICA	Top	-1.00	STATICA
1282	STATICA	Top	-1.00	STATICA
1283	STATICA	Top	-1.00	STATICA
1284	STATICA	Top	-1.00	STATICA
1285	STATICA	Top	-1.00	STATICA

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 59 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

1286	STATICA	Top	-1.00	STATICA
1287	STATICA	Top	-1.00	STATICA
1288	STATICA	Top	-1.00	STATICA
1289	STATICA	Top	-1.00	STATICA
1290	STATICA	Top	-1.00	STATICA
1291	STATICA	Top	-1.00	STATICA
1292	STATICA	Top	-1.00	STATICA
1293	STATICA	Top	-1.00	STATICA
1294	STATICA	Top	-1.00	STATICA
1295	STATICA	Top	-1.00	STATICA
1296	STATICA	Top	-1.00	STATICA
1297	STATICA	Top	-1.00	STATICA
1298	STATICA	Top	-1.00	STATICA
1299	STATICA	Top	-1.00	STATICA
1300	STATICA	Top	-1.00	STATICA
1301	STATICA	Top	-1.00	STATICA
1302	STATICA	Top	-1.00	STATICA
1303	STATICA	Top	-1.00	STATICA
1304	STATICA	Top	-1.00	STATICA
1305	STATICA	Top	-1.00	STATICA
1306	STATICA	Top	-1.00	STATICA
1307	STATICA	Top	-1.00	STATICA
1308	STATICA	Top	-1.00	STATICA
1309	STATICA	Top	-1.00	STATICA
1310	STATICA	Top	-1.00	STATICA
1311	STATICA	Top	-1.00	STATICA
1312	STATICA	Top	-1.00	STATICA
1313	STATICA	Top	-1.00	STATICA

Table: Area Loads - Uniform

Area	LoadPat	CoordSys	Dir	UnifLoad KN/m2
512	SOVRAC	GLOBAL	Y	-8.52
512	SISMICA	GLOBAL	Y	-15.82
513	SOVRAC	GLOBAL	Y	-8.52
513	SISMICA	GLOBAL	Y	-15.82
514	SOVRAC	GLOBAL	Y	-8.52
514	SISMICA	GLOBAL	Y	-15.82
515	SOVRAC	GLOBAL	Y	-8.52
515	SISMICA	GLOBAL	Y	-15.82
516	SOVRAC	GLOBAL	Y	-8.52
516	SISMICA	GLOBAL	Y	-15.82
517	SOVRAC	GLOBAL	Y	-8.52
517	SISMICA	GLOBAL	Y	-15.82
518	SOVRAC	GLOBAL	Y	-8.52
518	SISMICA	GLOBAL	Y	-15.82
519	SOVRAC	GLOBAL	Y	-8.52
519	SISMICA	GLOBAL	Y	-15.82
520	SOVRAC	GLOBAL	Y	-8.52
520	SISMICA	GLOBAL	Y	-15.82
521	SOVRAC	GLOBAL	Y	-8.52
521	SISMICA	GLOBAL	Y	-15.82
522	SOVRAC	GLOBAL	Y	-8.52
522	SISMICA	GLOBAL	Y	-15.82
523	SOVRAC	GLOBAL	Y	-8.52
523	SISMICA	GLOBAL	Y	-15.82
524	SOVRAC	GLOBAL	Y	-8.52
524	SISMICA	GLOBAL	Y	-15.82
525	SOVRAC	GLOBAL	Y	-8.52
525	SISMICA	GLOBAL	Y	-15.82
526	SOVRAC	GLOBAL	Y	-8.52
526	SISMICA	GLOBAL	Y	-15.82
527	SOVRAC	GLOBAL	Y	-8.52
527	SISMICA	GLOBAL	Y	-15.82
528	SOVRAC	GLOBAL	Y	-8.52
528	SISMICA	GLOBAL	Y	-15.82
529	SOVRAC	GLOBAL	Y	-8.52
529	SISMICA	GLOBAL	Y	-15.82
530	SOVRAC	GLOBAL	Y	-8.52
530	SISMICA	GLOBAL	Y	-15.82
531	SOVRAC	GLOBAL	Y	-8.52
531	SISMICA	GLOBAL	Y	-15.82
532	SOVRAC	GLOBAL	Y	-8.52
532	SISMICA	GLOBAL	Y	-15.82
533	SOVRAC	GLOBAL	Y	-8.52

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 60 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

533	SISMICA	GLOBAL	Y	-15.82
534	SOVRAC	GLOBAL	Y	-8.52
534	SISMICA	GLOBAL	Y	-15.82
535	SOVRAC	GLOBAL	Y	-8.52
535	SISMICA	GLOBAL	Y	-15.82
536	SOVRAC	GLOBAL	Y	-8.52
536	SISMICA	GLOBAL	Y	-15.82
537	SOVRAC	GLOBAL	Y	-8.52
537	SISMICA	GLOBAL	Y	-15.82
538	SOVRAC	GLOBAL	Y	-8.52
538	SISMICA	GLOBAL	Y	-15.82
539	SOVRAC	GLOBAL	Y	-8.52
539	SISMICA	GLOBAL	Y	-15.82
540	SOVRAC	GLOBAL	Y	-8.52
540	SISMICA	GLOBAL	Y	-15.82
541	SOVRAC	GLOBAL	Y	-8.52
541	SISMICA	GLOBAL	Y	-15.82
542	SOVRAC	GLOBAL	Y	-8.52
542	SISMICA	GLOBAL	Y	-15.82
543	SOVRAC	GLOBAL	Y	-8.52
543	SISMICA	GLOBAL	Y	-15.82
544	SOVRAC	GLOBAL	Y	-8.52
544	SISMICA	GLOBAL	Y	-15.82
544	SISMICA	GLOBAL	Y	-15.82
545	SOVRAC	GLOBAL	Y	-8.52
545	SISMICA	GLOBAL	Y	-15.82
546	SOVRAC	GLOBAL	Y	-8.52
546	SISMICA	GLOBAL	Y	-15.82
547	SOVRAC	GLOBAL	Y	-8.52
547	SISMICA	GLOBAL	Y	-15.82
548	SOVRAC	GLOBAL	Y	-8.52
548	SISMICA	GLOBAL	Y	-15.82
549	SOVRAC	GLOBAL	Y	-8.52
549	SISMICA	GLOBAL	Y	-15.82
550	SOVRAC	GLOBAL	Y	-8.52
550	SISMICA	GLOBAL	Y	-15.82
551	SOVRAC	GLOBAL	Y	-8.52
551	SISMICA	GLOBAL	Y	-15.82
552	SOVRAC	GLOBAL	Y	-8.52
552	SISMICA	GLOBAL	Y	-15.82
553	SOVRAC	GLOBAL	Y	-8.52
553	SISMICA	GLOBAL	Y	-15.82
554	SOVRAC	GLOBAL	Y	-8.52
554	SISMICA	GLOBAL	Y	-15.82
555	SOVRAC	GLOBAL	Y	-8.52
555	SISMICA	GLOBAL	Y	-15.82
556	SOVRAC	GLOBAL	Y	-8.52
556	SISMICA	GLOBAL	Y	-15.82
557	SOVRAC	GLOBAL	Y	-8.52
557	SISMICA	GLOBAL	Y	-15.82
558	SOVRAC	GLOBAL	Y	-8.52
558	SISMICA	GLOBAL	Y	-15.82
559	SOVRAC	GLOBAL	Y	-8.52
559	SISMICA	GLOBAL	Y	-15.82
560	SOVRAC	GLOBAL	Y	-8.52
560	SISMICA	GLOBAL	Y	-15.82
561	SOVRAC	GLOBAL	Y	-8.52
561	SISMICA	GLOBAL	Y	-15.82
562	SOVRAC	GLOBAL	Y	-8.52
562	SISMICA	GLOBAL	Y	-15.82
563	SOVRAC	GLOBAL	Y	-8.52
563	SISMICA	GLOBAL	Y	-15.82
564	SOVRAC	GLOBAL	Y	-8.52
564	SISMICA	GLOBAL	Y	-15.82
565	SOVRAC	GLOBAL	Y	-8.52
565	SISMICA	GLOBAL	Y	-15.82
566	SOVRAC	GLOBAL	Y	-8.52
566	SISMICA	GLOBAL	Y	-15.82
567	SOVRAC	GLOBAL	Y	-8.52
567	SISMICA	GLOBAL	Y	-15.82
568	SOVRAC	GLOBAL	Y	-8.52
568	SISMICA	GLOBAL	Y	-15.82
569	SOVRAC	GLOBAL	Y	-8.52
569	SISMICA	GLOBAL	Y	-15.82
570	SOVRAC	GLOBAL	Y	-8.52
570	SISMICA	GLOBAL	Y	-15.82
571	SOVRAC	GLOBAL	Y	-8.52
571	SISMICA	GLOBAL	Y	-15.82
572	SOVRAC	GLOBAL	Y	-8.52

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 61 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

572	SISMICA	GLOBAL	Y	-15.82
573	SOVRAC	GLOBAL	Y	-8.52
573	SISMICA	GLOBAL	Y	-15.82
574	SOVRAC	GLOBAL	Y	-8.52
574	SISMICA	GLOBAL	Y	-15.82
575	SOVRAC	GLOBAL	Y	-8.52
575	SISMICA	GLOBAL	Y	-15.82
576	SOVRAC	GLOBAL	Y	-8.52
576	SISMICA	GLOBAL	Y	-15.82
577	SOVRAC	GLOBAL	Y	-8.52
577	SISMICA	GLOBAL	Y	-15.82
578	SOVRAC	GLOBAL	Y	-8.52
578	SISMICA	GLOBAL	Y	-15.82
579	SOVRAC	GLOBAL	Y	-8.52
579	SISMICA	GLOBAL	Y	-15.82
580	SOVRAC	GLOBAL	Y	-8.52
580	SISMICA	GLOBAL	Y	-15.82
581	SOVRAC	GLOBAL	Y	-8.52
581	SISMICA	GLOBAL	Y	-15.82
582	SOVRAC	GLOBAL	Y	-8.52
582	SISMICA	GLOBAL	Y	-15.82
583	SOVRAC	GLOBAL	Y	-8.52
583	SISMICA	GLOBAL	Y	-15.82
584	SOVRAC	GLOBAL	Y	-8.52
584	SISMICA	GLOBAL	Y	-15.82
585	SOVRAC	GLOBAL	Y	-8.52
585	SISMICA	GLOBAL	Y	-15.82
586	SOVRAC	GLOBAL	Y	-8.52
586	SISMICA	GLOBAL	Y	-15.82
587	SOVRAC	GLOBAL	Y	-8.52
587	SISMICA	GLOBAL	Y	-15.82
588	SOVRAC	GLOBAL	Y	-8.52
588	SISMICA	GLOBAL	Y	-15.82
589	SOVRAC	GLOBAL	Y	-8.52
589	SISMICA	GLOBAL	Y	-15.82
590	SOVRAC	GLOBAL	Y	-8.52
590	SISMICA	GLOBAL	Y	-15.82
591	SOVRAC	GLOBAL	Y	-8.52
591	SISMICA	GLOBAL	Y	-15.82
592	SOVRAC	GLOBAL	Y	-8.52
592	SISMICA	GLOBAL	Y	-15.82
593	SOVRAC	GLOBAL	Y	-8.52
593	SISMICA	GLOBAL	Y	-15.82
594	SOVRAC	GLOBAL	Y	-8.52
594	SISMICA	GLOBAL	Y	-15.82
595	SOVRAC	GLOBAL	Y	-8.52
595	SISMICA	GLOBAL	Y	-15.82
596	SOVRAC	GLOBAL	Y	-8.52
596	SISMICA	GLOBAL	Y	-15.82
597	SOVRAC	GLOBAL	Y	-8.52
597	SISMICA	GLOBAL	Y	-15.82
598	SOVRAC	GLOBAL	Y	-8.52
598	SISMICA	GLOBAL	Y	-15.82
599	SOVRAC	GLOBAL	Y	-8.52
599	SISMICA	GLOBAL	Y	-15.82
600	SOVRAC	GLOBAL	Y	-8.52
600	SISMICA	GLOBAL	Y	-15.82
601	SOVRAC	GLOBAL	Y	-8.52
601	SISMICA	GLOBAL	Y	-15.82
602	SOVRAC	GLOBAL	Y	-8.52
602	SISMICA	GLOBAL	Y	-15.82
603	SOVRAC	GLOBAL	Y	-8.52
603	SISMICA	GLOBAL	Y	-15.82
604	SOVRAC	GLOBAL	Y	-8.52
604	SISMICA	GLOBAL	Y	-15.82
605	SOVRAC	GLOBAL	Y	-8.52
605	SISMICA	GLOBAL	Y	-15.82
606	SOVRAC	GLOBAL	Y	-8.52
606	SISMICA	GLOBAL	Y	-15.82
607	SOVRAC	GLOBAL	Y	-8.52
607	SISMICA	GLOBAL	Y	-15.82
608	SOVRAC	GLOBAL	Y	-8.52
608	SISMICA	GLOBAL	Y	-15.82
609	SOVRAC	GLOBAL	Y	-8.52
609	SISMICA	GLOBAL	Y	-15.82
610	SOVRAC	GLOBAL	Y	-8.52
610	SISMICA	GLOBAL	Y	-15.82
611	SOVRAC	GLOBAL	Y	-8.52

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 62 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

611	SISMICA	GLOBAL	Y	-15.82
612	SOVRAC	GLOBAL	Y	-8.52
612	SISMICA	GLOBAL	Y	-15.82
613	SOVRAC	GLOBAL	Y	-8.52
613	SISMICA	GLOBAL	Y	-15.82
614	SOVRAC	GLOBAL	Y	-8.52
614	SISMICA	GLOBAL	Y	-15.82
615	SOVRAC	GLOBAL	Y	-8.52
615	SISMICA	GLOBAL	Y	-15.82
616	SOVRAC	GLOBAL	Y	-8.52
616	SISMICA	GLOBAL	Y	-15.82
617	SOVRAC	GLOBAL	Y	-8.52
617	SISMICA	GLOBAL	Y	-15.82
618	SOVRAC	GLOBAL	Y	-8.52
618	SISMICA	GLOBAL	Y	-15.82
619	SOVRAC	GLOBAL	Y	-8.52
619	SISMICA	GLOBAL	Y	-15.82
620	SOVRAC	GLOBAL	Y	-8.52
620	SISMICA	GLOBAL	Y	-15.82
621	SOVRAC	GLOBAL	Y	-8.52
621	SISMICA	GLOBAL	Y	-15.82
622	SOVRAC	GLOBAL	Y	-8.52
622	SISMICA	GLOBAL	Y	-15.82
623	SOVRAC	GLOBAL	Y	-8.52
623	SISMICA	GLOBAL	Y	-15.82
624	SOVRAC	GLOBAL	Y	-8.52
624	SISMICA	GLOBAL	Y	-15.82
625	SOVRAC	GLOBAL	Y	-8.52
625	SISMICA	GLOBAL	Y	-15.82
626	SOVRAC	GLOBAL	Y	-8.52
626	SISMICA	GLOBAL	Y	-15.82
627	SOVRAC	GLOBAL	Y	-8.52
627	SISMICA	GLOBAL	Y	-15.82
628	SOVRAC	GLOBAL	Y	-8.52
628	SISMICA	GLOBAL	Y	-15.82
629	SOVRAC	GLOBAL	Y	-8.52
629	SISMICA	GLOBAL	Y	-15.82
630	SOVRAC	GLOBAL	Y	-8.52
630	SISMICA	GLOBAL	Y	-15.82
631	SOVRAC	GLOBAL	Y	-8.52
631	SISMICA	GLOBAL	Y	-15.82
632	SOVRAC	GLOBAL	Y	-8.52
632	SISMICA	GLOBAL	Y	-15.82
633	SOVRAC	GLOBAL	Y	-8.52
633	SISMICA	GLOBAL	Y	-15.82
634	SOVRAC	GLOBAL	Y	-8.52
634	SISMICA	GLOBAL	Y	-15.82
635	SOVRAC	GLOBAL	Y	-8.52
635	SISMICA	GLOBAL	Y	-15.82
636	SOVRAC	GLOBAL	Y	-8.52
636	SISMICA	GLOBAL	Y	-15.82
637	SOVRAC	GLOBAL	Y	-8.52
637	SISMICA	GLOBAL	Y	-15.82
638	SOVRAC	GLOBAL	Y	-8.52
638	SISMICA	GLOBAL	Y	-15.82
639	SOVRAC	GLOBAL	Y	-8.52
639	SISMICA	GLOBAL	Y	-15.82
640	SOVRAC	GLOBAL	Y	-8.52
640	SISMICA	GLOBAL	Y	-15.82
641	SOVRAC	GLOBAL	Y	-8.52
641	SISMICA	GLOBAL	Y	-15.82
642	SOVRAC	GLOBAL	Y	-8.52
642	SISMICA	GLOBAL	Y	-15.82
643	SOVRAC	GLOBAL	Y	-8.52
643	SISMICA	GLOBAL	Y	-15.82
644	SOVRAC	GLOBAL	Y	-8.52
644	SISMICA	GLOBAL	Y	-15.82
645	SOVRAC	GLOBAL	Y	-8.52
645	SISMICA	GLOBAL	Y	-15.82
646	SOVRAC	GLOBAL	Y	-8.52
646	SISMICA	GLOBAL	Y	-15.82
647	SOVRAC	GLOBAL	Y	-8.52
647	SISMICA	GLOBAL	Y	-15.82
648	SOVRAC	GLOBAL	Y	-8.52
648	SISMICA	GLOBAL	Y	-15.82
649	SOVRAC	GLOBAL	Y	-8.52
649	SISMICA	GLOBAL	Y	-15.82
650	SOVRAC	GLOBAL	Y	-8.52



QUADRILATERO
Marche Umbria S.p.A.

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 63 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

650	SISMICA	GLOBAL	Y	-15.82
651	SOVRAC	GLOBAL	Y	-8.52
651	SISMICA	GLOBAL	Y	-15.82
652	SOVRAC	GLOBAL	Y	-8.52
652	SISMICA	GLOBAL	Y	-15.82
653	SOVRAC	GLOBAL	Y	-8.52
653	SISMICA	GLOBAL	Y	-15.82
654	SOVRAC	GLOBAL	Y	-8.52
654	SISMICA	GLOBAL	Y	-15.82
655	SOVRAC	GLOBAL	Y	-8.52
655	SISMICA	GLOBAL	Y	-15.82
656	SOVRAC	GLOBAL	Y	-8.52
656	SISMICA	GLOBAL	Y	-15.82
657	SOVRAC	GLOBAL	Y	-8.52
657	SISMICA	GLOBAL	Y	-15.82
658	SOVRAC	GLOBAL	Y	-8.52
658	SISMICA	GLOBAL	Y	-15.82
659	SOVRAC	GLOBAL	Y	-8.52
659	SISMICA	GLOBAL	Y	-15.82
660	SOVRAC	GLOBAL	Y	-8.52
660	SISMICA	GLOBAL	Y	-15.82
661	SOVRAC	GLOBAL	Y	-8.52
661	SISMICA	GLOBAL	Y	-15.82
662	SOVRAC	GLOBAL	Y	-8.52
662	SISMICA	GLOBAL	Y	-15.82
663	SOVRAC	GLOBAL	Y	-8.52
663	SISMICA	GLOBAL	Y	-15.82
664	SOVRAC	GLOBAL	Y	-8.52
664	SISMICA	GLOBAL	Y	-15.82
665	SOVRAC	GLOBAL	Y	-8.52
665	SISMICA	GLOBAL	Y	-15.82
666	SOVRAC	GLOBAL	Y	-8.52
666	SISMICA	GLOBAL	Y	-15.82
667	SOVRAC	GLOBAL	Y	-8.52
667	SISMICA	GLOBAL	Y	-15.82
668	SOVRAC	GLOBAL	Y	-8.52
668	SISMICA	GLOBAL	Y	-15.82
669	SOVRAC	GLOBAL	Y	-8.52
669	SISMICA	GLOBAL	Y	-15.82
670	SOVRAC	GLOBAL	Y	-8.52
670	SISMICA	GLOBAL	Y	-15.82
671	SOVRAC	GLOBAL	Y	-8.52
671	SISMICA	GLOBAL	Y	-15.82
672	SOVRAC	GLOBAL	Y	-8.52
672	SISMICA	GLOBAL	Y	-15.82
673	SOVRAC	GLOBAL	Y	-8.52
673	SISMICA	GLOBAL	Y	-15.82
674	SOVRAC	GLOBAL	Y	-8.52
674	SISMICA	GLOBAL	Y	-15.82
675	SOVRAC	GLOBAL	Y	-8.52
675	SISMICA	GLOBAL	Y	-15.82
676	SOVRAC	GLOBAL	Y	-8.52
676	SISMICA	GLOBAL	Y	-15.82
677	SOVRAC	GLOBAL	Y	-8.52
677	SISMICA	GLOBAL	Y	-15.82
678	SOVRAC	GLOBAL	Y	-8.52
678	SISMICA	GLOBAL	Y	-15.82
679	SOVRAC	GLOBAL	Y	-8.52
679	SISMICA	GLOBAL	Y	-15.82
680	SOVRAC	GLOBAL	Y	-8.52
680	SISMICA	GLOBAL	Y	-15.82
681	SOVRAC	GLOBAL	Y	-8.52
681	SISMICA	GLOBAL	Y	-15.82
682	SOVRAC	GLOBAL	Y	-8.52
682	SISMICA	GLOBAL	Y	-15.82
683	SOVRAC	GLOBAL	Y	-8.52
683	SISMICA	GLOBAL	Y	-15.82
684	SOVRAC	GLOBAL	Y	-8.52
684	SISMICA	GLOBAL	Y	-15.82
685	SOVRAC	GLOBAL	Y	-8.52
685	SISMICA	GLOBAL	Y	-15.82
686	SOVRAC	GLOBAL	Y	-8.52
686	SISMICA	GLOBAL	Y	-15.82
687	SOVRAC	GLOBAL	Y	-8.52
687	SISMICA	GLOBAL	Y	-15.82
688	SOVRAC	GLOBAL	Y	-8.52
688	SISMICA	GLOBAL	Y	-15.82
689	SOVRAC	GLOBAL	Y	-8.52



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 64 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

689	SISMICA	GLOBAL	Y	-15.82
690	SOVRAC	GLOBAL	Y	-8.52
690	SISMICA	GLOBAL	Y	-15.82
691	SOVRAC	GLOBAL	Y	-8.52
691	SISMICA	GLOBAL	Y	-15.82
692	SOVRAC	GLOBAL	Y	-8.52
692	SISMICA	GLOBAL	Y	-15.82
693	SOVRAC	GLOBAL	Y	-8.52
693	SISMICA	GLOBAL	Y	-15.82
694	SOVRAC	GLOBAL	Y	-8.52
694	SISMICA	GLOBAL	Y	-15.82
695	SOVRAC	GLOBAL	Y	-8.52
695	SISMICA	GLOBAL	Y	-15.82
696	SOVRAC	GLOBAL	Y	-8.52
696	SISMICA	GLOBAL	Y	-15.82
697	SOVRAC	GLOBAL	Y	-8.52
697	SISMICA	GLOBAL	Y	-15.82
698	SOVRAC	GLOBAL	Y	-8.52
698	SISMICA	GLOBAL	Y	-15.82
699	SOVRAC	GLOBAL	Y	-8.52
699	SISMICA	GLOBAL	Y	-15.82
700	SOVRAC	GLOBAL	Y	-8.52
700	SISMICA	GLOBAL	Y	-15.82
701	SOVRAC	GLOBAL	Y	-8.52
701	SISMICA	GLOBAL	Y	-15.82
702	SOVRAC	GLOBAL	Y	-8.52
702	SISMICA	GLOBAL	Y	-15.82
703	SOVRAC	GLOBAL	Y	-8.52
703	SISMICA	GLOBAL	Y	-15.82
704	SOVRAC	GLOBAL	Y	-8.52
704	SISMICA	GLOBAL	Y	-15.82
705	SOVRAC	GLOBAL	Y	-8.52
705	SISMICA	GLOBAL	Y	-15.82
706	SOVRAC	GLOBAL	Y	-8.52
706	SISMICA	GLOBAL	Y	-15.82
707	SOVRAC	GLOBAL	Y	-8.52
707	SISMICA	GLOBAL	Y	-15.82
708	SOVRAC	GLOBAL	Y	-8.52
708	SISMICA	GLOBAL	Y	-15.82
709	SOVRAC	GLOBAL	Y	-8.52
709	SISMICA	GLOBAL	Y	-15.82
710	SOVRAC	GLOBAL	Y	-8.52
710	SISMICA	GLOBAL	Y	-15.82
711	SOVRAC	GLOBAL	Y	-8.52
711	SISMICA	GLOBAL	Y	-15.82
712	SOVRAC	GLOBAL	Y	-8.52
712	SISMICA	GLOBAL	Y	-15.82
713	SOVRAC	GLOBAL	Y	-8.52
713	SISMICA	GLOBAL	Y	-15.82
714	SOVRAC	GLOBAL	Y	-8.52
714	SISMICA	GLOBAL	Y	-15.82
715	SOVRAC	GLOBAL	Y	-8.52
715	SISMICA	GLOBAL	Y	-15.82
716	SOVRAC	GLOBAL	Y	-8.52
716	SISMICA	GLOBAL	Y	-15.82
717	SOVRAC	GLOBAL	Y	-8.52
717	SISMICA	GLOBAL	Y	-15.82
718	SOVRAC	GLOBAL	Y	-8.52
718	SISMICA	GLOBAL	Y	-15.82
719	SOVRAC	GLOBAL	Y	-8.52
719	SISMICA	GLOBAL	Y	-15.82
720	SOVRAC	GLOBAL	Y	-8.52
720	SISMICA	GLOBAL	Y	-15.82
721	SOVRAC	GLOBAL	Y	-8.52
721	SISMICA	GLOBAL	Y	-15.82
722	SOVRAC	GLOBAL	Y	-8.52
722	SISMICA	GLOBAL	Y	-15.82
723	SOVRAC	GLOBAL	Y	-8.52
723	SISMICA	GLOBAL	Y	-15.82
724	SOVRAC	GLOBAL	Y	-8.52
724	SISMICA	GLOBAL	Y	-15.82
725	SOVRAC	GLOBAL	Y	-8.52
725	SISMICA	GLOBAL	Y	-15.82
726	SOVRAC	GLOBAL	Y	-8.52
726	SISMICA	GLOBAL	Y	-15.82
727	SOVRAC	GLOBAL	Y	-8.52
727	SISMICA	GLOBAL	Y	-15.82
728	SOVRAC	GLOBAL	Y	-8.52

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 65 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

728	SISMICA	GLOBAL	Y	-15.82
729	SOVRAC	GLOBAL	Y	-8.52
729	SISMICA	GLOBAL	Y	-15.82
730	SOVRAC	GLOBAL	Y	-8.52
730	SISMICA	GLOBAL	Y	-15.82
731	SOVRAC	GLOBAL	Y	-8.52
731	SISMICA	GLOBAL	Y	-15.82
732	SOVRAC	GLOBAL	Y	-8.52
732	SISMICA	GLOBAL	Y	-15.82
733	SOVRAC	GLOBAL	Y	-8.52
733	SISMICA	GLOBAL	Y	-15.82
734	SOVRAC	GLOBAL	Y	-8.52
734	SISMICA	GLOBAL	Y	-15.82
735	SOVRAC	GLOBAL	Y	-8.52
735	SISMICA	GLOBAL	Y	-15.82
736	SOVRAC	GLOBAL	Y	-8.52
736	SISMICA	GLOBAL	Y	-15.82
737	SOVRAC	GLOBAL	Y	-8.52
737	SISMICA	GLOBAL	Y	-15.82
738	SOVRAC	GLOBAL	Y	-8.52
738	SISMICA	GLOBAL	Y	-15.82
739	SOVRAC	GLOBAL	Y	-8.52
739	SISMICA	GLOBAL	Y	-15.82
740	SOVRAC	GLOBAL	Y	-8.52
740	SISMICA	GLOBAL	Y	-15.82
741	SOVRAC	GLOBAL	Y	-8.52
741	SISMICA	GLOBAL	Y	-15.82
742	SOVRAC	GLOBAL	Y	-8.52
742	SISMICA	GLOBAL	Y	-15.82
743	SOVRAC	GLOBAL	Y	-8.52
743	SISMICA	GLOBAL	Y	-15.82
744	SOVRAC	GLOBAL	Y	-8.52
744	SISMICA	GLOBAL	Y	-15.82
745	SOVRAC	GLOBAL	Y	-8.52
745	SISMICA	GLOBAL	Y	-15.82
746	SOVRAC	GLOBAL	Y	-8.52
746	SISMICA	GLOBAL	Y	-15.82
747	SOVRAC	GLOBAL	Y	-8.52
747	SISMICA	GLOBAL	Y	-15.82
748	SOVRAC	GLOBAL	Y	-8.52
748	SISMICA	GLOBAL	Y	-15.82
749	SOVRAC	GLOBAL	Y	-8.52
749	SISMICA	GLOBAL	Y	-15.82
750	SOVRAC	GLOBAL	Y	-8.52
750	SISMICA	GLOBAL	Y	-15.82
751	SOVRAC	GLOBAL	Y	-8.52
751	SISMICA	GLOBAL	Y	-15.82
752	SOVRAC	GLOBAL	Y	-8.52
752	SISMICA	GLOBAL	Y	-15.82
753	SOVRAC	GLOBAL	Y	-8.52
753	SISMICA	GLOBAL	Y	-15.82
754	SOVRAC	GLOBAL	Y	-8.52
754	SISMICA	GLOBAL	Y	-15.82
755	SOVRAC	GLOBAL	Y	-8.52
755	SISMICA	GLOBAL	Y	-15.82
756	SOVRAC	GLOBAL	Y	-8.52
756	SISMICA	GLOBAL	Y	-15.82
757	SOVRAC	GLOBAL	Y	-8.52
757	SISMICA	GLOBAL	Y	-15.82
758	SOVRAC	GLOBAL	Y	-8.52
758	SISMICA	GLOBAL	Y	-15.82
759	SOVRAC	GLOBAL	Y	-8.52
759	SISMICA	GLOBAL	Y	-15.82
760	SOVRAC	GLOBAL	Y	-8.52
760	SISMICA	GLOBAL	Y	-15.82
761	SOVRAC	GLOBAL	Y	-8.52
761	SISMICA	GLOBAL	Y	-15.82
762	SOVRAC	GLOBAL	Y	-8.52
762	SISMICA	GLOBAL	Y	-15.82
763	SOVRAC	GLOBAL	Y	-8.52
763	SISMICA	GLOBAL	Y	-15.82
764	SOVRAC	GLOBAL	Y	-8.52
764	SISMICA	GLOBAL	Y	-15.82
765	SOVRAC	GLOBAL	Y	-8.52
765	SISMICA	GLOBAL	Y	-15.82
766	SOVRAC	GLOBAL	Y	-8.52
766	SISMICA	GLOBAL	Y	-15.82
767	SOVRAC	GLOBAL	Y	-8.52



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 66 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

767	SISMICA	GLOBAL	Y	-15.82
768	SOVRAC	GLOBAL	Y	-8.52
768	SISMICA	GLOBAL	Y	-15.82
769	SOVRAC	GLOBAL	Y	-8.52
769	SISMICA	GLOBAL	Y	-15.82
770	SOVRAC	GLOBAL	Y	-8.52
770	SISMICA	GLOBAL	Y	-15.82
771	SOVRAC	GLOBAL	Y	-8.52
771	SISMICA	GLOBAL	Y	-15.82
772	SOVRAC	GLOBAL	Y	-8.52
772	SISMICA	GLOBAL	Y	-15.82
773	SOVRAC	GLOBAL	Y	-8.52
773	SISMICA	GLOBAL	Y	-15.82
774	SOVRAC	GLOBAL	Y	-8.52
774	SISMICA	GLOBAL	Y	-15.82
775	SOVRAC	GLOBAL	Y	-8.52
775	SISMICA	GLOBAL	Y	-15.82
776	SOVRAC	GLOBAL	Y	-8.52
776	SISMICA	GLOBAL	Y	-15.82
777	SOVRAC	GLOBAL	Y	-8.52
777	SISMICA	GLOBAL	Y	-15.82
778	SOVRAC	GLOBAL	Y	-8.52
778	SISMICA	GLOBAL	Y	-15.82
779	SOVRAC	GLOBAL	Y	-8.52
779	SISMICA	GLOBAL	Y	-15.82
780	SOVRAC	GLOBAL	Y	-8.52
780	SISMICA	GLOBAL	Y	-15.82
781	SOVRAC	GLOBAL	Y	-8.52
781	SISMICA	GLOBAL	Y	-15.82
782	SOVRAC	GLOBAL	Y	-8.52
782	SISMICA	GLOBAL	Y	-15.82
783	SOVRAC	GLOBAL	Y	-8.52
783	SISMICA	GLOBAL	Y	-15.82
784	SOVRAC	GLOBAL	Y	-8.52
784	SISMICA	GLOBAL	Y	-15.82
785	SOVRAC	GLOBAL	Y	-8.52
785	SISMICA	GLOBAL	Y	-15.82
786	SOVRAC	GLOBAL	Y	-8.52
786	SISMICA	GLOBAL	Y	-15.82
787	SOVRAC	GLOBAL	Y	-8.52
787	SISMICA	GLOBAL	Y	-15.82
788	SOVRAC	GLOBAL	Y	-8.52
788	SISMICA	GLOBAL	Y	-15.82
789	SOVRAC	GLOBAL	Y	-8.52
789	SISMICA	GLOBAL	Y	-15.82
790	SOVRAC	GLOBAL	Y	-8.52
790	SISMICA	GLOBAL	Y	-15.82
791	SOVRAC	GLOBAL	Y	-8.52
791	SISMICA	GLOBAL	Y	-15.82
792	SOVRAC	GLOBAL	Y	-8.52
792	SISMICA	GLOBAL	Y	-15.82
793	SOVRAC	GLOBAL	Y	-8.52
793	SISMICA	GLOBAL	Y	-15.82
794	SOVRAC	GLOBAL	Y	-8.52
794	SISMICA	GLOBAL	Y	-15.82
795	SOVRAC	GLOBAL	Y	-8.52
795	SISMICA	GLOBAL	Y	-15.82
796	SOVRAC	GLOBAL	Y	-8.52
796	SISMICA	GLOBAL	Y	-15.82
797	SOVRAC	GLOBAL	Y	-8.52
797	SISMICA	GLOBAL	Y	-15.82
798	SOVRAC	GLOBAL	Y	-8.52
798	SISMICA	GLOBAL	Y	-15.82
799	SOVRAC	GLOBAL	Y	-8.52
799	SISMICA	GLOBAL	Y	-15.82
800	SOVRAC	GLOBAL	Y	-8.52
800	SISMICA	GLOBAL	Y	-15.82
801	SOVRAC	GLOBAL	Y	-8.52
801	SISMICA	GLOBAL	Y	-15.82
802	SOVRAC	GLOBAL	Y	-8.52
802	SISMICA	GLOBAL	Y	-15.82
803	SOVRAC	GLOBAL	Y	-8.52
803	SISMICA	GLOBAL	Y	-15.82
804	SOVRAC	GLOBAL	Y	-8.52
804	SISMICA	GLOBAL	Y	-15.82
805	SOVRAC	GLOBAL	Y	-8.52
805	SISMICA	GLOBAL	Y	-15.82
806	SOVRAC	GLOBAL	Y	-8.52



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 67 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

806	SISMICA	GLOBAL	Y	-15.82
807	SOVRAC	GLOBAL	Y	-8.52
807	SISMICA	GLOBAL	Y	-15.82
808	SOVRAC	GLOBAL	Y	-8.52
808	SISMICA	GLOBAL	Y	-15.82
809	SOVRAC	GLOBAL	Y	-8.52
809	SISMICA	GLOBAL	Y	-15.82
810	SOVRAC	GLOBAL	Y	-8.52
810	SISMICA	GLOBAL	Y	-15.82
811	SOVRAC	GLOBAL	Y	-8.52
811	SISMICA	GLOBAL	Y	-15.82
812	SOVRAC	GLOBAL	Y	-8.52
812	SISMICA	GLOBAL	Y	-15.82
813	SOVRAC	GLOBAL	Y	-8.52
813	SISMICA	GLOBAL	Y	-15.82
814	SOVRAC	GLOBAL	Y	-8.52
814	SISMICA	GLOBAL	Y	-15.82
815	SOVRAC	GLOBAL	Y	-8.52
815	SISMICA	GLOBAL	Y	-15.82
816	SOVRAC	GLOBAL	Y	-8.52
816	SISMICA	GLOBAL	Y	-15.82
817	SOVRAC	GLOBAL	Y	-8.52
817	SISMICA	GLOBAL	Y	-15.82
818	SOVRAC	GLOBAL	Y	-8.52
818	SISMICA	GLOBAL	Y	-15.82
819	SOVRAC	GLOBAL	Y	-8.52
819	SISMICA	GLOBAL	Y	-15.82
820	SOVRAC	GLOBAL	Y	-8.52
820	SISMICA	GLOBAL	Y	-15.82
821	SOVRAC	GLOBAL	Y	-8.52
821	SISMICA	GLOBAL	Y	-15.82
822	SOVRAC	GLOBAL	Y	-8.52
822	SISMICA	GLOBAL	Y	-15.82
823	SOVRAC	GLOBAL	Y	-8.52
823	SISMICA	GLOBAL	Y	-15.82
824	SOVRAC	GLOBAL	Y	-8.52
824	SISMICA	GLOBAL	Y	-15.82
825	SOVRAC	GLOBAL	Y	-8.52
825	SISMICA	GLOBAL	Y	-15.82
826	SOVRAC	GLOBAL	Y	-8.52
826	SISMICA	GLOBAL	Y	-15.82
827	SOVRAC	GLOBAL	Y	-8.52
827	SISMICA	GLOBAL	Y	-15.82
828	SOVRAC	GLOBAL	Y	-8.52
828	SISMICA	GLOBAL	Y	-15.82
829	SOVRAC	GLOBAL	Y	-8.52
829	SISMICA	GLOBAL	Y	-15.82
830	SOVRAC	GLOBAL	Y	-8.52
830	SISMICA	GLOBAL	Y	-15.82
831	SOVRAC	GLOBAL	Y	-8.52
831	SISMICA	GLOBAL	Y	-15.82
832	SOVRAC	GLOBAL	Y	-8.52
832	SISMICA	GLOBAL	Y	-15.82
833	SOVRAC	GLOBAL	Y	-8.52
833	SISMICA	GLOBAL	Y	-15.82
834	SOVRAC	GLOBAL	Y	-8.52
834	SISMICA	GLOBAL	Y	-15.82
835	SOVRAC	GLOBAL	Y	-8.52
835	SISMICA	GLOBAL	Y	-15.82
836	SOVRAC	GLOBAL	Y	-8.52
836	SISMICA	GLOBAL	Y	-15.82
837	SOVRAC	GLOBAL	Y	-8.52
837	SISMICA	GLOBAL	Y	-15.82
838	SOVRAC	GLOBAL	Y	-8.52
838	SISMICA	GLOBAL	Y	-15.82
839	SOVRAC	GLOBAL	Y	-8.52
839	SISMICA	GLOBAL	Y	-15.82
840	SOVRAC	GLOBAL	Y	-8.52
840	SISMICA	GLOBAL	Y	-15.82
841	SOVRAC	GLOBAL	Y	-8.52
841	SISMICA	GLOBAL	Y	-15.82
842	SOVRAC	GLOBAL	Y	-8.52
842	SISMICA	GLOBAL	Y	-15.82
843	SOVRAC	GLOBAL	Y	-8.52
843	SISMICA	GLOBAL	Y	-15.82
844	SOVRAC	GLOBAL	Y	-8.52
844	SISMICA	GLOBAL	Y	-15.82
845	SOVRAC	GLOBAL	Y	-8.52



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 68 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

845	SISMICA	GLOBAL	Y	-15.82
846	SOVRAC	GLOBAL	Y	-8.52
846	SISMICA	GLOBAL	Y	-15.82
847	SOVRAC	GLOBAL	Y	-8.52
847	SISMICA	GLOBAL	Y	-15.82
848	SOVRAC	GLOBAL	Y	-8.52
848	SISMICA	GLOBAL	Y	-15.82
849	SOVRAC	GLOBAL	Y	-8.52
849	SISMICA	GLOBAL	Y	-15.82
850	SOVRAC	GLOBAL	Y	-8.52
850	SISMICA	GLOBAL	Y	-15.82
851	SOVRAC	GLOBAL	Y	-8.52
851	SISMICA	GLOBAL	Y	-15.82
852	SOVRAC	GLOBAL	Y	-8.52
852	SISMICA	GLOBAL	Y	-15.82
853	SOVRAC	GLOBAL	Y	-8.52
853	SISMICA	GLOBAL	Y	-15.82
854	SOVRAC	GLOBAL	Y	-8.52
854	SISMICA	GLOBAL	Y	-15.82
855	SOVRAC	GLOBAL	Y	-8.52
855	SISMICA	GLOBAL	Y	-15.82
856	SOVRAC	GLOBAL	Y	-8.52
856	SISMICA	GLOBAL	Y	-15.82
857	SOVRAC	GLOBAL	Y	-8.52
857	SISMICA	GLOBAL	Y	-15.82
858	SOVRAC	GLOBAL	Y	-8.52
858	SISMICA	GLOBAL	Y	-15.82
859	SOVRAC	GLOBAL	Y	-8.52
859	SISMICA	GLOBAL	Y	-15.82
860	SOVRAC	GLOBAL	Y	-8.52
860	SISMICA	GLOBAL	Y	-15.82
861	SOVRAC	GLOBAL	Y	-8.52
861	SISMICA	GLOBAL	Y	-15.82
862	SOVRAC	GLOBAL	Y	-8.52
862	SISMICA	GLOBAL	Y	-15.82
863	SOVRAC	GLOBAL	Y	-8.52
863	SISMICA	GLOBAL	Y	-15.82
864	SOVRAC	GLOBAL	Y	-8.52
864	SISMICA	GLOBAL	Y	-15.82
865	SOVRAC	GLOBAL	Y	-8.52
865	SISMICA	GLOBAL	Y	-15.82
866	SOVRAC	GLOBAL	Y	-8.52
866	SISMICA	GLOBAL	Y	-15.82
867	SOVRAC	GLOBAL	Y	-8.52
867	SISMICA	GLOBAL	Y	-15.82
868	SOVRAC	GLOBAL	Y	-8.52
868	SISMICA	GLOBAL	Y	-15.82
869	SOVRAC	GLOBAL	Y	-8.52
869	SISMICA	GLOBAL	Y	-15.82
870	SOVRAC	GLOBAL	Y	-8.52
870	SISMICA	GLOBAL	Y	-15.82
871	SOVRAC	GLOBAL	Y	-8.52
871	SISMICA	GLOBAL	Y	-15.82
872	SOVRAC	GLOBAL	Y	-8.52
872	SISMICA	GLOBAL	Y	-15.82
873	SOVRAC	GLOBAL	Y	-8.52
873	SISMICA	GLOBAL	Y	-15.82
874	SOVRAC	GLOBAL	Y	-8.52
874	SISMICA	GLOBAL	Y	-15.82
875	SOVRAC	GLOBAL	Y	-8.52
875	SISMICA	GLOBAL	Y	-15.82
876	SOVRAC	GLOBAL	Y	-8.52
876	SISMICA	GLOBAL	Y	-15.82
877	SOVRAC	GLOBAL	Y	-8.52
877	SISMICA	GLOBAL	Y	-15.82
878	SOVRAC	GLOBAL	Y	-8.52
878	SISMICA	GLOBAL	Y	-15.82
879	SOVRAC	GLOBAL	Y	-8.52
879	SISMICA	GLOBAL	Y	-15.82
880	SOVRAC	GLOBAL	Y	-8.52
880	SISMICA	GLOBAL	Y	-15.82
881	SOVRAC	GLOBAL	Y	-8.52
881	SISMICA	GLOBAL	Y	-15.82
882	SOVRAC	GLOBAL	Y	-8.52
882	SISMICA	GLOBAL	Y	-15.82
883	SOVRAC	GLOBAL	Y	-8.52
883	SISMICA	GLOBAL	Y	-15.82
884	SOVRAC	GLOBAL	Y	-8.52



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 69 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

884	SISMICA	GLOBAL	Y	-15.82
885	SOVRAC	GLOBAL	Y	-8.52
885	SISMICA	GLOBAL	Y	-15.82
886	SOVRAC	GLOBAL	Y	-8.52
886	SISMICA	GLOBAL	Y	-15.82
887	SOVRAC	GLOBAL	Y	-8.52
887	SISMICA	GLOBAL	Y	-15.82
888	SOVRAC	GLOBAL	Y	-8.52
888	SISMICA	GLOBAL	Y	-15.82
889	SOVRAC	GLOBAL	Y	-8.52
889	SISMICA	GLOBAL	Y	-15.82
890	SOVRAC	GLOBAL	Y	-8.52
890	SISMICA	GLOBAL	Y	-15.82
891	SOVRAC	GLOBAL	Y	-8.52
891	SISMICA	GLOBAL	Y	-15.82
892	SOVRAC	GLOBAL	Y	-8.52
892	SISMICA	GLOBAL	Y	-15.82
893	SOVRAC	GLOBAL	Y	-8.52
893	SISMICA	GLOBAL	Y	-15.82
894	SOVRAC	GLOBAL	Y	-8.52
894	SISMICA	GLOBAL	Y	-15.82
895	SOVRAC	GLOBAL	Y	-8.52
895	SISMICA	GLOBAL	Y	-15.82
896	SOVRAC	GLOBAL	Y	-8.52
896	SISMICA	GLOBAL	Y	-15.82
897	SOVRAC	GLOBAL	Y	-8.52
897	SISMICA	GLOBAL	Y	-15.82
898	SOVRAC	GLOBAL	Y	-8.52
898	SISMICA	GLOBAL	Y	-15.82
899	SOVRAC	GLOBAL	Y	-8.52
899	SISMICA	GLOBAL	Y	-15.82
900	SOVRAC	GLOBAL	Y	-8.52
900	SISMICA	GLOBAL	Y	-15.82
901	SOVRAC	GLOBAL	Y	-8.52
901	SISMICA	GLOBAL	Y	-15.82
902	SOVRAC	GLOBAL	Y	-8.52
902	SISMICA	GLOBAL	Y	-15.82
903	SOVRAC	GLOBAL	Y	-8.52
903	SISMICA	GLOBAL	Y	-15.82
904	SOVRAC	GLOBAL	Y	-8.52
904	SISMICA	GLOBAL	Y	-15.82
905	SOVRAC	GLOBAL	Y	-8.52
905	SISMICA	GLOBAL	Y	-15.82
906	SOVRAC	GLOBAL	Y	-8.52
906	SISMICA	GLOBAL	Y	-15.82
907	SOVRAC	GLOBAL	Y	-8.52
907	SISMICA	GLOBAL	Y	-15.82
908	SOVRAC	GLOBAL	Y	-8.52
908	SISMICA	GLOBAL	Y	-15.82
909	SOVRAC	GLOBAL	Y	-8.52
909	SISMICA	GLOBAL	Y	-15.82
910	SOVRAC	GLOBAL	Y	-8.52
910	SISMICA	GLOBAL	Y	-15.82
911	SOVRAC	GLOBAL	Y	-8.52
911	SISMICA	GLOBAL	Y	-15.82
912	SOVRAC	GLOBAL	Y	-8.52
912	SISMICA	GLOBAL	Y	-15.82
913	SOVRAC	GLOBAL	Y	-8.52
913	SISMICA	GLOBAL	Y	-15.82
914	SOVRAC	GLOBAL	Y	-8.52
914	SISMICA	GLOBAL	Y	-15.82
915	SOVRAC	GLOBAL	Y	-8.52
915	SISMICA	GLOBAL	Y	-15.82
916	SOVRAC	GLOBAL	Y	-8.52
916	SISMICA	GLOBAL	Y	-15.82
917	SOVRAC	GLOBAL	Y	-8.52
917	SISMICA	GLOBAL	Y	-15.82
918	SOVRAC	GLOBAL	Y	-8.52
918	SISMICA	GLOBAL	Y	-15.82
919	SOVRAC	GLOBAL	Y	-8.52
919	SISMICA	GLOBAL	Y	-15.82
920	SOVRAC	GLOBAL	Y	-8.52
920	SISMICA	GLOBAL	Y	-15.82
921	SOVRAC	GLOBAL	Y	-8.52
921	SISMICA	GLOBAL	Y	-15.82
922	SOVRAC	GLOBAL	Y	-8.52
922	SISMICA	GLOBAL	Y	-15.82
923	SOVRAC	GLOBAL	Y	-8.52

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 70 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

923	SISMICA	GLOBAL	Y	-15.82
924	SOVRAC	GLOBAL	Y	-8.52
924	SISMICA	GLOBAL	Y	-15.82
925	SOVRAC	GLOBAL	Y	-8.52
925	SISMICA	GLOBAL	Y	-15.82
926	SOVRAC	GLOBAL	Y	-8.52
926	SISMICA	GLOBAL	Y	-15.82
927	SOVRAC	GLOBAL	Y	-8.52
927	SISMICA	GLOBAL	Y	-15.82
928	SOVRAC	GLOBAL	Y	-8.52
928	SISMICA	GLOBAL	Y	-15.82
929	SOVRAC	GLOBAL	Y	-8.52
929	SISMICA	GLOBAL	Y	-15.82
930	SOVRAC	GLOBAL	Y	-8.52
930	SISMICA	GLOBAL	Y	-15.82
931	SOVRAC	GLOBAL	Y	-8.52
931	SISMICA	GLOBAL	Y	-15.82
932	SOVRAC	GLOBAL	Y	-8.52
932	SISMICA	GLOBAL	Y	-15.82
933	SOVRAC	GLOBAL	Y	-8.52
933	SISMICA	GLOBAL	Y	-15.82
934	SOVRAC	GLOBAL	Y	-8.52
934	SISMICA	GLOBAL	Y	-15.82
935	SOVRAC	GLOBAL	Y	-8.52
935	SISMICA	GLOBAL	Y	-15.82
936	SOVRAC	GLOBAL	Y	-8.52
936	SISMICA	GLOBAL	Y	-15.82
937	SOVRAC	GLOBAL	Y	-8.52
937	SISMICA	GLOBAL	Y	-15.82
938	SOVRAC	GLOBAL	Y	-8.52
938	SISMICA	GLOBAL	Y	-15.82
939	SOVRAC	GLOBAL	Y	-8.52
939	SISMICA	GLOBAL	Y	-15.82
940	SOVRAC	GLOBAL	Y	-8.52
940	SISMICA	GLOBAL	Y	-15.82
941	SOVRAC	GLOBAL	Y	-8.52
941	SISMICA	GLOBAL	Y	-15.82
942	SOVRAC	GLOBAL	Y	-8.52
942	SISMICA	GLOBAL	Y	-15.82
943	SOVRAC	GLOBAL	Y	-8.52
943	SISMICA	GLOBAL	Y	-15.82
944	SOVRAC	GLOBAL	Y	-8.52
944	SISMICA	GLOBAL	Y	-15.82
945	SOVRAC	GLOBAL	Y	-8.52
945	SISMICA	GLOBAL	Y	-15.82
946	SOVRAC	GLOBAL	Y	-8.52
946	SISMICA	GLOBAL	Y	-15.82
947	SOVRAC	GLOBAL	Y	-8.52
947	SISMICA	GLOBAL	Y	-15.82
948	SOVRAC	GLOBAL	Y	-8.52
948	SISMICA	GLOBAL	Y	-15.82
949	SOVRAC	GLOBAL	Y	-8.52
949	SISMICA	GLOBAL	Y	-15.82
950	SOVRAC	GLOBAL	Y	-8.52
950	SISMICA	GLOBAL	Y	-15.82
951	SOVRAC	GLOBAL	Y	-8.52
951	SISMICA	GLOBAL	Y	-15.82
952	SOVRAC	GLOBAL	Y	-8.52
952	SISMICA	GLOBAL	Y	-15.82
953	SOVRAC	GLOBAL	Y	-8.52
953	SISMICA	GLOBAL	Y	-15.82
954	SOVRAC	GLOBAL	Y	-8.52
954	SISMICA	GLOBAL	Y	-15.82
955	SOVRAC	GLOBAL	Y	-8.52
955	SISMICA	GLOBAL	Y	-15.82
956	SOVRAC	GLOBAL	Y	-8.52
956	SISMICA	GLOBAL	Y	-15.82
957	SOVRAC	GLOBAL	Y	-8.52
957	SISMICA	GLOBAL	Y	-15.82
958	SOVRAC	GLOBAL	Y	-8.52
958	SISMICA	GLOBAL	Y	-15.82
959	SOVRAC	GLOBAL	Y	-8.52
959	SISMICA	GLOBAL	Y	-15.82
960	SOVRAC	GLOBAL	Y	-8.52
960	SISMICA	GLOBAL	Y	-15.82
961	SOVRAC	GLOBAL	Y	-8.52
961	SISMICA	GLOBAL	Y	-15.82
962	SOVRAC	GLOBAL	Y	-8.52

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 71 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

962	SISMICA	GLOBAL	Y	-15.82
963	SOVRAC	GLOBAL	Y	-8.52
963	SISMICA	GLOBAL	Y	-15.82
964	SOVRAC	GLOBAL	Y	-8.52
964	SISMICA	GLOBAL	Y	-15.82
965	SOVRAC	GLOBAL	Y	-8.52
965	SISMICA	GLOBAL	Y	-15.82
966	SOVRAC	GLOBAL	Y	-8.52
966	SISMICA	GLOBAL	Y	-15.82
967	SOVRAC	GLOBAL	Y	-8.52
967	SISMICA	GLOBAL	Y	-15.82
968	SOVRAC	GLOBAL	Y	-8.52
968	SISMICA	GLOBAL	Y	-15.82
969	SOVRAC	GLOBAL	Y	-8.52
969	SISMICA	GLOBAL	Y	-15.82
970	SOVRAC	GLOBAL	Y	-8.52
970	SISMICA	GLOBAL	Y	-15.82
971	SOVRAC	GLOBAL	Y	-8.52
971	SISMICA	GLOBAL	Y	-15.82
972	SOVRAC	GLOBAL	Y	-8.52
972	SISMICA	GLOBAL	Y	-15.82
973	SOVRAC	GLOBAL	Y	-8.52
973	SISMICA	GLOBAL	Y	-15.82
974	SOVRAC	GLOBAL	Y	-8.52
974	SISMICA	GLOBAL	Y	-15.82
975	SOVRAC	GLOBAL	Y	-8.52
975	SISMICA	GLOBAL	Y	-15.82
976	SOVRAC	GLOBAL	Y	-8.52
976	SISMICA	GLOBAL	Y	-15.82
977	SOVRAC	GLOBAL	Y	-8.52
977	SISMICA	GLOBAL	Y	-15.82
978	SOVRAC	GLOBAL	Y	-8.52
978	SISMICA	GLOBAL	Y	-15.82
979	SOVRAC	GLOBAL	Y	-8.52
979	SISMICA	GLOBAL	Y	-15.82
980	SOVRAC	GLOBAL	Y	-8.52
980	SISMICA	GLOBAL	Y	-15.82
981	SOVRAC	GLOBAL	Y	-8.52
981	SISMICA	GLOBAL	Y	-15.82
982	SOVRAC	GLOBAL	Y	-8.52
982	SISMICA	GLOBAL	Y	-15.82
983	SOVRAC	GLOBAL	Y	-8.52
983	SISMICA	GLOBAL	Y	-15.82
984	SOVRAC	GLOBAL	Y	-8.52
984	SISMICA	GLOBAL	Y	-15.82
985	SOVRAC	GLOBAL	Y	-8.52
985	SISMICA	GLOBAL	Y	-15.82
986	SOVRAC	GLOBAL	Y	-8.52
986	SISMICA	GLOBAL	Y	-15.82
987	SOVRAC	GLOBAL	Y	-8.52
987	SISMICA	GLOBAL	Y	-15.82
988	SOVRAC	GLOBAL	Y	-8.52
988	SISMICA	GLOBAL	Y	-15.82
989	SOVRAC	GLOBAL	Y	-8.52
989	SISMICA	GLOBAL	Y	-15.82
990	SOVRAC	GLOBAL	Y	-8.52
990	SISMICA	GLOBAL	Y	-15.82
991	SOVRAC	GLOBAL	Y	-8.52
991	SISMICA	GLOBAL	Y	-15.82
992	SOVRAC	GLOBAL	Y	-8.52
992	SISMICA	GLOBAL	Y	-15.82
993	SOVRAC	GLOBAL	Y	-8.52
993	SISMICA	GLOBAL	Y	-15.82
994	SOVRAC	GLOBAL	Y	-8.52
994	SISMICA	GLOBAL	Y	-15.82
995	SOVRAC	GLOBAL	Y	-8.52
995	SISMICA	GLOBAL	Y	-15.82
996	SOVRAC	GLOBAL	Y	-8.52
996	SISMICA	GLOBAL	Y	-15.82
997	SOVRAC	GLOBAL	Y	-8.52
997	SISMICA	GLOBAL	Y	-15.82
998	SOVRAC	GLOBAL	Y	-8.52
998	SISMICA	GLOBAL	Y	-15.82
999	SOVRAC	GLOBAL	Y	-8.52
999	SISMICA	GLOBAL	Y	-15.82
1000	SOVRAC	GLOBAL	Y	-8.52
1000	SISMICA	GLOBAL	Y	-15.82
1001	SOVRAC	GLOBAL	Y	-8.52

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 72 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

1001	SISMICA	GLOBAL	Y	-15.82
1002	SOVRAC	GLOBAL	Y	-8.52
1002	SISMICA	GLOBAL	Y	-15.82
1003	SOVRAC	GLOBAL	Y	-8.52
1003	SISMICA	GLOBAL	Y	-15.82
1004	SOVRAC	GLOBAL	Y	-8.52
1004	SISMICA	GLOBAL	Y	-15.82
1005	SOVRAC	GLOBAL	Y	-8.52
1005	SISMICA	GLOBAL	Y	-15.82
1006	SOVRAC	GLOBAL	Y	-8.52
1006	SISMICA	GLOBAL	Y	-15.82
1007	SOVRAC	GLOBAL	Y	-8.52
1007	SISMICA	GLOBAL	Y	-15.82
1008	SOVRAC	GLOBAL	Y	-8.52
1008	SISMICA	GLOBAL	Y	-15.82
1009	SOVRAC	GLOBAL	Y	-8.52
1009	SISMICA	GLOBAL	Y	-15.82
1010	SOVRAC	GLOBAL	Y	-8.52
1010	SISMICA	GLOBAL	Y	-15.82
1011	SOVRAC	GLOBAL	Y	-8.52
1011	SISMICA	GLOBAL	Y	-15.82
1012	SOVRAC	GLOBAL	Y	-8.52
1012	SISMICA	GLOBAL	Y	-15.82
1013	SOVRAC	GLOBAL	Y	-8.52
1013	SISMICA	GLOBAL	Y	-15.82
1014	SOVRAC	GLOBAL	Y	-8.52
1014	SISMICA	GLOBAL	Y	-15.82
1015	SOVRAC	GLOBAL	Y	-8.52
1015	SISMICA	GLOBAL	Y	-15.82
1016	SOVRAC	GLOBAL	Y	-8.52
1016	SISMICA	GLOBAL	Y	-15.82
1017	SOVRAC	GLOBAL	Y	-8.52
1017	SISMICA	GLOBAL	Y	-15.82
1018	SOVRAC	GLOBAL	Y	-8.52
1018	SISMICA	GLOBAL	Y	-15.82
1019	SOVRAC	GLOBAL	Y	-8.52
1019	SISMICA	GLOBAL	Y	-15.82
1020	SOVRAC	GLOBAL	Y	-8.52
1020	SISMICA	GLOBAL	Y	-15.82
1021	SOVRAC	GLOBAL	Y	-8.52
1021	SISMICA	GLOBAL	Y	-15.82
1022	SOVRAC	GLOBAL	Y	-8.52
1022	SISMICA	GLOBAL	Y	-15.82
1023	SOVRAC	GLOBAL	Y	-8.52
1023	SISMICA	GLOBAL	Y	-15.82
1024	SOVRAC	GLOBAL	Y	-8.52
1024	SISMICA	GLOBAL	Y	-15.82
1025	SOVRAC	GLOBAL	Y	-8.52
1025	SISMICA	GLOBAL	Y	-15.82
1026	SOVRAC	GLOBAL	Y	-8.52
1026	SISMICA	GLOBAL	Y	-15.82
1027	SOVRAC	GLOBAL	Y	-8.52
1027	SISMICA	GLOBAL	Y	-15.82
1028	SOVRAC	GLOBAL	Y	-8.52
1028	SISMICA	GLOBAL	Y	-15.82
1029	SOVRAC	GLOBAL	Y	-8.52
1029	SISMICA	GLOBAL	Y	-15.82
1030	SOVRAC	GLOBAL	Y	-8.52
1030	SISMICA	GLOBAL	Y	-15.82
1031	SOVRAC	GLOBAL	Y	-8.52
1031	SISMICA	GLOBAL	Y	-15.82
1032	SOVRAC	GLOBAL	Y	-8.52
1032	SISMICA	GLOBAL	Y	-15.82
1033	SOVRAC	GLOBAL	Y	-8.52
1033	SISMICA	GLOBAL	Y	-15.82
1034	SOVRAC	GLOBAL	Y	-8.52
1034	SISMICA	GLOBAL	Y	-15.82
1035	SOVRAC	GLOBAL	Y	-8.52
1035	SISMICA	GLOBAL	Y	-15.82
1036	SOVRAC	GLOBAL	Y	-8.52
1036	SISMICA	GLOBAL	Y	-15.82
1037	SOVRAC	GLOBAL	Y	-8.52
1037	SISMICA	GLOBAL	Y	-15.82
1038	SOVRAC	GLOBAL	Y	-8.52
1038	SISMICA	GLOBAL	Y	-15.82
1039	SOVRAC	GLOBAL	Y	-8.52
1039	SISMICA	GLOBAL	Y	-15.82
1040	SOVRAC	GLOBAL	Y	-8.52

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 73 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	---------------------------

1040	SISMICA	GLOBAL	Y	-15.82
1041	SOVRAC	GLOBAL	Y	-8.52
1041	SISMICA	GLOBAL	Y	-15.82
1042	SOVRAC	GLOBAL	Y	-8.52
1042	SISMICA	GLOBAL	Y	-15.82
1043	SOVRAC	GLOBAL	Y	-8.52
1043	SISMICA	GLOBAL	Y	-15.82
1044	SOVRAC	GLOBAL	Y	-8.52
1044	SISMICA	GLOBAL	Y	-15.82
1045	SOVRAC	GLOBAL	Y	-8.52
1045	SISMICA	GLOBAL	Y	-15.82
1046	SOVRAC	GLOBAL	Y	-8.52
1046	SISMICA	GLOBAL	Y	-15.82
1047	SOVRAC	GLOBAL	Y	-8.52
1047	SISMICA	GLOBAL	Y	-15.82
1048	SOVRAC	GLOBAL	Y	-8.52
1048	SISMICA	GLOBAL	Y	-15.82
1049	SOVRAC	GLOBAL	Y	-8.52
1049	SISMICA	GLOBAL	Y	-15.82
1050	SOVRAC	GLOBAL	Y	-8.52
1050	SISMICA	GLOBAL	Y	-15.82
1051	SOVRAC	GLOBAL	Y	-8.52
1051	SISMICA	GLOBAL	Y	-15.82
1052	SOVRAC	GLOBAL	Y	-8.52
1052	SISMICA	GLOBAL	Y	-15.82
1053	SOVRAC	GLOBAL	Y	-8.52
1053	SISMICA	GLOBAL	Y	-15.82
1054	SOVRAC	GLOBAL	Y	-8.52
1054	SISMICA	GLOBAL	Y	-15.82
1055	SOVRAC	GLOBAL	Y	-8.52
1055	SISMICA	GLOBAL	Y	-15.82
1056	SOVRAC	GLOBAL	Y	-8.52
1056	SISMICA	GLOBAL	Y	-15.82
1057	SOVRAC	GLOBAL	Y	-8.52
1057	SISMICA	GLOBAL	Y	-15.82
1058	SOVRAC	GLOBAL	Y	-8.52
1058	SISMICA	GLOBAL	Y	-15.82
1059	SOVRAC	GLOBAL	Y	-8.52
1059	SISMICA	GLOBAL	Y	-15.82
1060	SOVRAC	GLOBAL	Y	-8.52
1060	SISMICA	GLOBAL	Y	-15.82
1061	SOVRAC	GLOBAL	Y	-8.52
1061	SISMICA	GLOBAL	Y	-15.82
1062	SOVRAC	GLOBAL	Y	-8.52
1062	SISMICA	GLOBAL	Y	-15.82
1063	SOVRAC	GLOBAL	Y	-8.52
1063	SISMICA	GLOBAL	Y	-15.82
1064	SOVRAC	GLOBAL	Y	-8.52
1064	SISMICA	GLOBAL	Y	-15.82
1065	SOVRAC	GLOBAL	Y	-8.52
1065	SISMICA	GLOBAL	Y	-15.82
1066	SOVRAC	GLOBAL	Y	-8.52
1066	SISMICA	GLOBAL	Y	-15.82
1067	SOVRAC	GLOBAL	Y	-8.52
1067	SISMICA	GLOBAL	Y	-15.82
1068	SOVRAC	GLOBAL	Y	-8.52
1068	SISMICA	GLOBAL	Y	-15.82
1069	SOVRAC	GLOBAL	Y	-8.52
1069	SISMICA	GLOBAL	Y	-15.82
1070	SOVRAC	GLOBAL	Y	-8.52
1070	SISMICA	GLOBAL	Y	-15.82
1071	SOVRAC	GLOBAL	Y	-8.52
1071	SISMICA	GLOBAL	Y	-15.82
1072	SOVRAC	GLOBAL	Y	-8.52
1072	SISMICA	GLOBAL	Y	-15.82
1073	SOVRAC	GLOBAL	Y	-8.52
1073	SISMICA	GLOBAL	Y	-15.82
1074	SOVRAC	GLOBAL	Y	-8.52
1074	SISMICA	GLOBAL	Y	-15.82
1075	SOVRAC	GLOBAL	Y	-8.52
1075	SISMICA	GLOBAL	Y	-15.82
1076	SOVRAC	GLOBAL	Y	-8.52
1076	SISMICA	GLOBAL	Y	-15.82
1077	SOVRAC	GLOBAL	Y	-8.52
1077	SISMICA	GLOBAL	Y	-15.82
1078	SOVRAC	GLOBAL	Y	-8.52
1078	SISMICA	GLOBAL	Y	-15.82
1079	SOVRAC	GLOBAL	Y	-8.52

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 74 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

1079	SISMICA	GLOBAL	Y	-15.82
1080	SOVRAC	GLOBAL	Y	-8.52
1080	SISMICA	GLOBAL	Y	-15.82
1081	SOVRAC	GLOBAL	Y	-8.52
1081	SISMICA	GLOBAL	Y	-15.82
1082	SOVRAC	GLOBAL	Y	-8.52
1082	SISMICA	GLOBAL	Y	-15.82
1083	SOVRAC	GLOBAL	Y	-8.52
1083	SISMICA	GLOBAL	Y	-15.82
1084	SOVRAC	GLOBAL	Y	-8.52
1084	SISMICA	GLOBAL	Y	-15.82
1085	SOVRAC	GLOBAL	Y	-8.52
1085	SISMICA	GLOBAL	Y	-15.82
1086	SOVRAC	GLOBAL	Y	-8.52
1086	SISMICA	GLOBAL	Y	-15.82
1087	SOVRAC	GLOBAL	Y	-8.52
1087	SISMICA	GLOBAL	Y	-15.82
1088	SOVRAC	GLOBAL	Y	-8.52
1088	SISMICA	GLOBAL	Y	-15.82
1089	SOVRAC	GLOBAL	Y	-8.52
1089	SISMICA	GLOBAL	Y	-15.82
1263	SOVRAC	GLOBAL	Y	-8.52
1263	SISMICA	GLOBAL	Y	-15.82
1264	SOVRAC	GLOBAL	Y	-8.52
1264	SISMICA	GLOBAL	Y	-15.82
1265	SOVRAC	GLOBAL	Y	-8.52
1265	SISMICA	GLOBAL	Y	-15.82
1266	SOVRAC	GLOBAL	Y	-8.52
1266	SISMICA	GLOBAL	Y	-15.82
1267	SOVRAC	GLOBAL	Y	-8.52
1267	SISMICA	GLOBAL	Y	-15.82
1268	SOVRAC	GLOBAL	Y	-8.52
1268	SISMICA	GLOBAL	Y	-15.82
1269	SOVRAC	GLOBAL	Y	-8.52
1269	SISMICA	GLOBAL	Y	-15.82
1270	SOVRAC	GLOBAL	Y	-8.52
1270	SISMICA	GLOBAL	Y	-15.82
1271	SOVRAC	GLOBAL	Y	-8.52
1271	SISMICA	GLOBAL	Y	-15.82
1272	SOVRAC	GLOBAL	Y	-8.52
1272	SISMICA	GLOBAL	Y	-15.82
1273	SOVRAC	GLOBAL	Y	-8.52
1273	SISMICA	GLOBAL	Y	-15.82
1274	SOVRAC	GLOBAL	Y	-8.52
1274	SISMICA	GLOBAL	Y	-15.82
1275	SOVRAC	GLOBAL	Y	-8.52
1275	SISMICA	GLOBAL	Y	-15.82
1276	SOVRAC	GLOBAL	Y	-8.52
1276	SISMICA	GLOBAL	Y	-15.82
1277	SOVRAC	GLOBAL	Y	-8.52
1277	SISMICA	GLOBAL	Y	-15.82
1278	SOVRAC	GLOBAL	Y	-8.52
1278	SISMICA	GLOBAL	Y	-15.82
1279	SOVRAC	GLOBAL	Y	-8.52
1279	SISMICA	GLOBAL	Y	-15.82
1280	SOVRAC	GLOBAL	Y	-8.52
1280	SISMICA	GLOBAL	Y	-15.82
1281	SOVRAC	GLOBAL	Y	-8.52
1281	SISMICA	GLOBAL	Y	-15.82
1282	SOVRAC	GLOBAL	Y	-8.52
1282	SISMICA	GLOBAL	Y	-15.82
1283	SOVRAC	GLOBAL	Y	-8.52
1283	SISMICA	GLOBAL	Y	-15.82
1284	SOVRAC	GLOBAL	Y	-8.52
1284	SISMICA	GLOBAL	Y	-15.82
1285	SOVRAC	GLOBAL	Y	-8.52
1285	SISMICA	GLOBAL	Y	-15.82
1286	SOVRAC	GLOBAL	Y	-8.52
1286	SISMICA	GLOBAL	Y	-15.82
1287	SOVRAC	GLOBAL	Y	-8.52
1287	SISMICA	GLOBAL	Y	-15.82
1288	SOVRAC	GLOBAL	Y	-8.52
1288	SISMICA	GLOBAL	Y	-15.82
1289	SOVRAC	GLOBAL	Y	-8.52
1289	SISMICA	GLOBAL	Y	-15.82
1290	SOVRAC	GLOBAL	Y	-8.52
1290	SISMICA	GLOBAL	Y	-15.82
1291	SOVRAC	GLOBAL	Y	-8.52



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 75 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

1291	SISMICA	GLOBAL	Y	-15.82
1292	SOVRAC	GLOBAL	Y	-8.52
1292	SISMICA	GLOBAL	Y	-15.82
1293	SOVRAC	GLOBAL	Y	-8.52
1293	SISMICA	GLOBAL	Y	-15.82
1294	SOVRAC	GLOBAL	Y	-8.52
1294	SISMICA	GLOBAL	Y	-15.82
1295	SOVRAC	GLOBAL	Y	-8.52
1295	SISMICA	GLOBAL	Y	-15.82
1296	SOVRAC	GLOBAL	Y	-8.52
1296	SISMICA	GLOBAL	Y	-15.82
1297	SOVRAC	GLOBAL	Y	-8.52
1297	SISMICA	GLOBAL	Y	-15.82
1298	SOVRAC	GLOBAL	Y	-8.52
1298	SISMICA	GLOBAL	Y	-15.82
1299	SOVRAC	GLOBAL	Y	-8.52
1299	SISMICA	GLOBAL	Y	-15.82
1300	SOVRAC	GLOBAL	Y	-8.52
1300	SISMICA	GLOBAL	Y	-15.82
1301	SOVRAC	GLOBAL	Y	-8.52
1301	SISMICA	GLOBAL	Y	-15.82
1302	SOVRAC	GLOBAL	Y	-8.52
1302	SISMICA	GLOBAL	Y	-15.82
1303	SOVRAC	GLOBAL	Y	-8.52
1303	SISMICA	GLOBAL	Y	-15.82
1304	SOVRAC	GLOBAL	Y	-8.52
1304	SISMICA	GLOBAL	Y	-15.82
1305	SOVRAC	GLOBAL	Y	-8.52
1305	SISMICA	GLOBAL	Y	-15.82
1306	SOVRAC	GLOBAL	Y	-8.52
1306	SISMICA	GLOBAL	Y	-15.82
1307	SOVRAC	GLOBAL	Y	-8.52
1307	SISMICA	GLOBAL	Y	-15.82
1308	SOVRAC	GLOBAL	Y	-8.52
1308	SISMICA	GLOBAL	Y	-15.82
1309	SOVRAC	GLOBAL	Y	-8.52
1309	SISMICA	GLOBAL	Y	-15.82
1310	SOVRAC	GLOBAL	Y	-8.52
1310	SISMICA	GLOBAL	Y	-15.82
1311	SOVRAC	GLOBAL	Y	-8.52
1311	SISMICA	GLOBAL	Y	-15.82
1312	SOVRAC	GLOBAL	Y	-8.52
1312	SISMICA	GLOBAL	Y	-15.82
1313	SOVRAC	GLOBAL	Y	-8.52
1313	SISMICA	GLOBAL	Y	-15.82

Table: Area Section Assignments

Area	Section	MatProp
512	POZZ	Default
513	POZZ	Default
514	POZZ	Default
515	POZZ	Default
516	POZZ	Default
517	POZZ	Default
518	POZZ	Default
519	POZZ	Default
520	POZZ	Default
521	POZZ	Default
522	POZZ	Default
523	POZZ	Default
524	POZZ	Default
525	POZZ	Default
526	POZZ	Default
527	POZZ	Default
528	POZZ	Default
529	POZZ	Default
530	POZZ	Default
531	POZZ	Default
532	POZZ	Default
533	POZZ	Default
534	POZZ	Default
535	POZZ	Default
536	POZZ	Default
537	POZZ	Default



QUADRILATERO
Marche Umbria S.p.A.

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 76 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

538	POZZ	Default
539	POZZ	Default
540	POZZ	Default
541	POZZ	Default
542	POZZ	Default
543	POZZ	Default
544	POZZ	Default
545	POZZ	Default
546	POZZ	Default
547	POZZ	Default
548	POZZ	Default
549	POZZ	Default
550	POZZ	Default
551	POZZ	Default
552	POZZ	Default
553	POZZ	Default
554	POZZ	Default
555	POZZ	Default
556	POZZ	Default
557	POZZ	Default
558	POZZ	Default
559	POZZ	Default
560	POZZ	Default
561	POZZ	Default
562	POZZ	Default
563	POZZ	Default
564	POZZ	Default
565	POZZ	Default
566	POZZ	Default
567	POZZ	Default
568	POZZ	Default
569	POZZ	Default
570	POZZ	Default
571	POZZ	Default
572	POZZ	Default
573	POZZ	Default
574	POZZ	Default
575	POZZ	Default
576	POZZ	Default
577	POZZ	Default
578	POZZ	Default
579	POZZ	Default
580	POZZ	Default
581	POZZ	Default
582	POZZ	Default
583	POZZ	Default
584	POZZ	Default
585	POZZ	Default
586	POZZ	Default
587	POZZ	Default
588	POZZ	Default
589	POZZ	Default
590	POZZ	Default
591	POZZ	Default
592	POZZ	Default
593	POZZ	Default
594	POZZ	Default
595	POZZ	Default
596	POZZ	Default
597	POZZ	Default
598	POZZ	Default
599	POZZ	Default
600	POZZ	Default
601	POZZ	Default
602	POZZ	Default
603	POZZ	Default
604	POZZ	Default
605	POZZ	Default
606	POZZ	Default
607	POZZ	Default
608	POZZ	Default
609	POZZ	Default
610	POZZ	Default
611	POZZ	Default
612	POZZ	Default
613	POZZ	Default
614	POZZ	Default
615	POZZ	Default

**2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto****2.1 Tratto Fabriano-Matelica Nord**

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 77 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

616	POZZ	Default
617	POZZ	Default
618	POZZ	Default
619	POZZ	Default
620	POZZ	Default
621	POZZ	Default
622	POZZ	Default
623	POZZ	Default
624	POZZ	Default
625	POZZ	Default
626	POZZ	Default
627	POZZ	Default
628	POZZ	Default
629	POZZ	Default
630	POZZ	Default
631	POZZ	Default
632	POZZ	Default
633	POZZ	Default
634	POZZ	Default
635	POZZ	Default
636	POZZ	Default
637	POZZ	Default
638	POZZ	Default
639	POZZ	Default
640	POZZ	Default
641	POZZ	Default
642	POZZ	Default
643	POZZ	Default
644	POZZ	Default
645	POZZ	Default
646	POZZ	Default
647	POZZ	Default
648	POZZ	Default
649	POZZ	Default
650	POZZ	Default
651	POZZ	Default
652	POZZ	Default
653	POZZ	Default
654	POZZ	Default
655	POZZ	Default
656	POZZ	Default
657	POZZ	Default
658	POZZ	Default
659	POZZ	Default
660	POZZ	Default
661	POZZ	Default
662	POZZ	Default
663	POZZ	Default
664	POZZ	Default
665	POZZ	Default
666	POZZ	Default
667	POZZ	Default
668	POZZ	Default
669	POZZ	Default
670	POZZ	Default
671	POZZ	Default
672	POZZ	Default
673	POZZ	Default
674	POZZ	Default
675	POZZ	Default
676	POZZ	Default
677	POZZ	Default
678	POZZ	Default
679	POZZ	Default
680	POZZ	Default
681	POZZ	Default
682	POZZ	Default
683	POZZ	Default
684	POZZ	Default
685	POZZ	Default
686	POZZ	Default
687	POZZ	Default
688	POZZ	Default
689	POZZ	Default
690	POZZ	Default
691	POZZ	Default
692	POZZ	Default
693	POZZ	Default



QUADRILATERO
Marche Umbria S.p.A.

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 78 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

694	POZZ	Default
695	POZZ	Default
696	POZZ	Default
697	POZZ	Default
698	POZZ	Default
699	POZZ	Default
700	POZZ	Default
701	POZZ	Default
702	POZZ	Default
703	POZZ	Default
704	POZZ	Default
705	POZZ	Default
706	POZZ	Default
707	POZZ	Default
708	POZZ	Default
709	POZZ	Default
710	POZZ	Default
711	POZZ	Default
712	POZZ	Default
713	POZZ	Default
714	POZZ	Default
715	POZZ	Default
716	POZZ	Default
717	POZZ	Default
718	POZZ	Default
719	POZZ	Default
720	POZZ	Default
721	POZZ	Default
722	POZZ	Default
723	POZZ	Default
724	POZZ	Default
725	POZZ	Default
726	POZZ	Default
727	POZZ	Default
728	POZZ	Default
729	POZZ	Default
730	POZZ	Default
731	POZZ	Default
732	POZZ	Default
733	POZZ	Default
734	POZZ	Default
735	POZZ	Default
736	POZZ	Default
737	POZZ	Default
738	POZZ	Default
739	POZZ	Default
740	POZZ	Default
741	POZZ	Default
742	POZZ	Default
743	POZZ	Default
744	POZZ	Default
745	POZZ	Default
746	POZZ	Default
747	POZZ	Default
748	POZZ	Default
749	POZZ	Default
750	POZZ	Default
751	POZZ	Default
752	POZZ	Default
753	POZZ	Default
754	POZZ	Default
755	POZZ	Default
756	POZZ	Default
757	POZZ	Default
758	POZZ	Default
759	POZZ	Default
760	POZZ	Default
761	POZZ	Default
762	POZZ	Default
763	POZZ	Default
764	POZZ	Default
765	POZZ	Default
766	POZZ	Default
767	POZZ	Default
768	POZZ	Default
769	POZZ	Default
770	POZZ	Default
771	POZZ	Default

**2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto****2.1 Tratto Fabriano-Matelica Nord**

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 79 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

772	POZZ	Default
773	POZZ	Default
774	POZZ	Default
775	POZZ	Default
776	POZZ	Default
777	POZZ	Default
778	POZZ	Default
779	POZZ	Default
780	POZZ	Default
781	POZZ	Default
782	POZZ	Default
783	POZZ	Default
784	POZZ	Default
785	POZZ	Default
786	POZZ	Default
787	POZZ	Default
788	POZZ	Default
789	POZZ	Default
790	POZZ	Default
791	POZZ	Default
792	POZZ	Default
793	POZZ	Default
794	POZZ	Default
795	POZZ	Default
796	POZZ	Default
797	POZZ	Default
798	POZZ	Default
799	POZZ	Default
800	POZZ	Default
801	POZZ	Default
802	POZZ	Default
803	POZZ	Default
804	POZZ	Default
805	POZZ	Default
806	POZZ	Default
807	POZZ	Default
808	POZZ	Default
809	POZZ	Default
810	POZZ	Default
811	POZZ	Default
812	POZZ	Default
813	POZZ	Default
814	POZZ	Default
815	POZZ	Default
816	POZZ	Default
817	POZZ	Default
818	POZZ	Default
819	POZZ	Default
820	POZZ	Default
821	POZZ	Default
822	POZZ	Default
823	POZZ	Default
824	POZZ	Default
825	POZZ	Default
826	POZZ	Default
827	POZZ	Default
828	POZZ	Default
829	POZZ	Default
830	POZZ	Default
831	POZZ	Default
832	POZZ	Default
833	POZZ	Default
834	POZZ	Default
835	POZZ	Default
836	POZZ	Default
837	POZZ	Default
838	POZZ	Default
839	POZZ	Default
840	POZZ	Default
841	POZZ	Default
842	POZZ	Default
843	POZZ	Default
844	POZZ	Default
845	POZZ	Default
846	POZZ	Default
847	POZZ	Default
848	POZZ	Default
849	POZZ	Default



QUADRILATERO
Marche Umbria S.p.A.

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 80 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

850	POZZ	Default
851	POZZ	Default
852	POZZ	Default
853	POZZ	Default
854	POZZ	Default
855	POZZ	Default
856	POZZ	Default
857	POZZ	Default
858	POZZ	Default
859	POZZ	Default
860	POZZ	Default
861	POZZ	Default
862	POZZ	Default
863	POZZ	Default
864	POZZ	Default
865	POZZ	Default
866	POZZ	Default
867	POZZ	Default
868	POZZ	Default
869	POZZ	Default
870	POZZ	Default
871	POZZ	Default
872	POZZ	Default
873	POZZ	Default
874	POZZ	Default
875	POZZ	Default
876	POZZ	Default
877	POZZ	Default
878	POZZ	Default
879	POZZ	Default
880	POZZ	Default
881	POZZ	Default
882	POZZ	Default
883	POZZ	Default
884	POZZ	Default
885	POZZ	Default
886	POZZ	Default
887	POZZ	Default
888	POZZ	Default
889	POZZ	Default
890	POZZ	Default
891	POZZ	Default
892	POZZ	Default
893	POZZ	Default
894	POZZ	Default
895	POZZ	Default
896	POZZ	Default
897	POZZ	Default
898	POZZ	Default
899	POZZ	Default
900	POZZ	Default
901	POZZ	Default
902	POZZ	Default
903	POZZ	Default
904	POZZ	Default
905	POZZ	Default
906	POZZ	Default
907	POZZ	Default
908	POZZ	Default
909	POZZ	Default
910	POZZ	Default
911	POZZ	Default
912	POZZ	Default
913	POZZ	Default
914	POZZ	Default
915	POZZ	Default
916	POZZ	Default
917	POZZ	Default
918	POZZ	Default
919	POZZ	Default
920	POZZ	Default
921	POZZ	Default
922	POZZ	Default
923	POZZ	Default
924	POZZ	Default
925	POZZ	Default
926	POZZ	Default
927	POZZ	Default



QUADRILATERO
Marche Umbria S.p.A.

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 81 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

928	POZZ	Default
929	POZZ	Default
930	POZZ	Default
931	POZZ	Default
932	POZZ	Default
933	POZZ	Default
934	POZZ	Default
935	POZZ	Default
936	POZZ	Default
937	POZZ	Default
938	POZZ	Default
939	POZZ	Default
940	POZZ	Default
941	POZZ	Default
942	POZZ	Default
943	POZZ	Default
944	POZZ	Default
945	POZZ	Default
946	POZZ	Default
947	POZZ	Default
948	POZZ	Default
949	POZZ	Default
950	POZZ	Default
951	POZZ	Default
952	POZZ	Default
953	POZZ	Default
954	POZZ	Default
955	POZZ	Default
956	POZZ	Default
957	POZZ	Default
958	POZZ	Default
959	POZZ	Default
960	POZZ	Default
961	POZZ	Default
962	POZZ	Default
963	POZZ	Default
964	POZZ	Default
965	POZZ	Default
966	POZZ	Default
967	POZZ	Default
968	POZZ	Default
969	POZZ	Default
970	POZZ	Default
971	POZZ	Default
972	POZZ	Default
973	POZZ	Default
974	POZZ	Default
975	POZZ	Default
976	POZZ	Default
977	POZZ	Default
978	POZZ	Default
979	POZZ	Default
980	POZZ	Default
981	POZZ	Default
982	POZZ	Default
983	POZZ	Default
984	POZZ	Default
985	POZZ	Default
986	POZZ	Default
987	POZZ	Default
988	POZZ	Default
989	POZZ	Default
990	POZZ	Default
991	POZZ	Default
992	POZZ	Default
993	POZZ	Default
994	POZZ	Default
995	POZZ	Default
996	POZZ	Default
997	POZZ	Default
998	POZZ	Default
999	POZZ	Default
1000	POZZ	Default
1001	POZZ	Default
1002	POZZ	Default
1003	POZZ	Default
1004	POZZ	Default
1005	POZZ	Default



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 82 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

1006	POZZ	Default
1007	POZZ	Default
1008	POZZ	Default
1009	POZZ	Default
1010	POZZ	Default
1011	POZZ	Default
1012	POZZ	Default
1013	POZZ	Default
1014	POZZ	Default
1015	POZZ	Default
1016	POZZ	Default
1017	POZZ	Default
1018	POZZ	Default
1019	POZZ	Default
1020	POZZ	Default
1021	POZZ	Default
1022	POZZ	Default
1023	POZZ	Default
1024	POZZ	Default
1025	POZZ	Default
1026	POZZ	Default
1027	POZZ	Default
1028	POZZ	Default
1029	POZZ	Default
1030	POZZ	Default
1031	POZZ	Default
1032	POZZ	Default
1033	POZZ	Default
1034	POZZ	Default
1035	POZZ	Default
1036	POZZ	Default
1037	POZZ	Default
1038	POZZ	Default
1039	POZZ	Default
1040	POZZ	Default
1041	POZZ	Default
1042	POZZ	Default
1043	POZZ	Default
1044	POZZ	Default
1045	POZZ	Default
1046	POZZ	Default
1047	POZZ	Default
1048	POZZ	Default
1049	POZZ	Default
1050	POZZ	Default
1051	POZZ	Default
1052	POZZ	Default
1053	POZZ	Default
1054	POZZ	Default
1055	POZZ	Default
1056	POZZ	Default
1057	POZZ	Default
1058	POZZ	Default
1059	POZZ	Default
1060	POZZ	Default
1061	POZZ	Default
1062	POZZ	Default
1063	POZZ	Default
1064	POZZ	Default
1065	POZZ	Default
1066	POZZ	Default
1067	POZZ	Default
1068	POZZ	Default
1069	POZZ	Default
1070	POZZ	Default
1071	POZZ	Default
1072	POZZ	Default
1073	POZZ	Default
1074	POZZ	Default
1075	POZZ	Default
1076	POZZ	Default
1077	POZZ	Default
1078	POZZ	Default
1079	POZZ	Default
1080	POZZ	Default
1081	POZZ	Default
1082	POZZ	Default
1083	POZZ	Default



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 83 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

1084	POZZ	Default
1085	POZZ	Default
1086	POZZ	Default
1087	POZZ	Default
1088	POZZ	Default
1089	POZZ	Default
1263	POZZ	Default
1264	POZZ	Default
1265	POZZ	Default
1266	POZZ	Default
1267	POZZ	Default
1268	POZZ	Default
1269	POZZ	Default
1270	POZZ	Default
1271	POZZ	Default
1272	POZZ	Default
1273	POZZ	Default
1274	POZZ	Default
1275	POZZ	Default
1276	POZZ	Default
1277	POZZ	Default
1278	POZZ	Default
1279	POZZ	Default
1280	POZZ	Default
1281	POZZ	Default
1282	POZZ	Default
1283	POZZ	Default
1284	POZZ	Default
1285	POZZ	Default
1286	POZZ	Default
1287	POZZ	Default
1288	POZZ	Default
1289	POZZ	Default
1290	POZZ	Default
1291	POZZ	Default
1292	POZZ	Default
1293	POZZ	Default
1294	POZZ	Default
1295	POZZ	Default
1296	POZZ	Default
1297	POZZ	Default
1298	POZZ	Default
1299	POZZ	Default
1300	POZZ	Default
1301	POZZ	Default
1302	POZZ	Default
1303	POZZ	Default
1304	POZZ	Default
1305	POZZ	Default
1306	POZZ	Default
1307	POZZ	Default
1308	POZZ	Default
1309	POZZ	Default
1310	POZZ	Default
1311	POZZ	Default
1312	POZZ	Default
1313	POZZ	Default

Table: Area Section Properties, Part 1 of 4

Section	Material	MatAngle	AreaType	Type	DrillDOF	Thickness	BendThick
Arc		Degrees				m	m
Degrees							
POZZ	CONC	0.000	Shell	Shell-Thick	Yes	0.300000	0.300000

Table: Area Section Properties, Part 2 of 4

Section	InComp	CoordSys	Color	TotalWt KN	TotalMass KN-s2/m	F11Mod	F22Mod
POZZ			2	75.900	7.59	1.000000	1.000000

Table: Area Section Properties, Part 3 of 4



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 84 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

WMod	Section	F12Mod	M11Mod	M22Mod	M12Mod	V13Mod	V23Mod	MMod
1.000000	POZZ	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Table: Area Section Properties, Part 4 of 4

Section	GUID	Notes
POZZ		

Table: Area Section Property Design Parameters

Section	RebarMat	RebarOpt
POZZ	None	Default

Table: Case - Static 1 - Load Assignments

Case	LoadType	LoadName	LoadSF
STATICA	Load pattern	STATICA	1.000000
SISMICA	Load pattern	SISMICA	1.000000
LOAD	Load pattern	LOAD	1.000000
SOVRAC	Load pattern	SOVRAC	1.000000

Table: Combination Definitions, Part 1 of 3

ComboName	ComboType	AutoDesign	CaseType	CaseName	ScaleFactor	SteelDesign
SLU1	Linear Add	No	Linear Static	LOAD	1.350000	No
SLU1			Linear Static	STATICA	1.350000	
SLU2	Linear Add	No	Linear Static	LOAD	1.350000	No
SLU2			Linear Static	STATICA	1.350000	
SLU2			Linear Static	SOVRAC	1.500000	
SISM1	Linear Add	No	Linear Static	LOAD	1.000000	No
SISM1			Linear Static	STATICA	1.000000	
SISM1			Linear Static	SISMICA	1.000000	
SLE1	Linear Add	No	Linear Static	LOAD	1.000000	No
SLE1			Linear Static	STATICA	1.000000	
SLE2	Linear Add	No	Linear Static	LOAD	1.000000	No
SLE2			Linear Static	STATICA	1.000000	
SLE2			Linear Static	SOVRAC	1.000000	
INVSLE	Envelope	No	Response Combo	SLE1	1.000000	No
INVSLE			Response Combo	SLE2	1.000000	
INVSLE	Envelope	No	Response Combo	SLU1	1.000000	No
INVSLE			Response Combo	SLU2	1.000000	
INVSLE			Response Combo	SISM1	1.000000	

Table: Combination Definitions, Part 2 of 3

ComboName	CaseName	ConcDesign	AlumDesign	ColdDesign	GUID
SLU1	LOAD	No	No	No	
SLU1	STATICA				
SLU2	LOAD	No	No	No	
SLU2	STATICA				
SLU2	SOVRAC				
SISM1	LOAD	No	No	No	
SISM1	STATICA				
SISM1	SISMICA				
SLE1	LOAD	No	No	No	
SLE1	STATICA				
SLE2	LOAD	No	No	No	
SLE2	STATICA				



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 85 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

SLE2	SOVRAC			
INVSLE	SLE1	No	No	No
INVSLE	SLE2			
INVSLU	SLU1	No	No	No
INVSLU	SLU2			
INVSLU	SISM1			

Table: Combination Definitions, Part 3 of 3

ComboName	CaseName	Notes
SLU1	LOAD	
SLU1	STATICA	
SLU2	LOAD	
SLU2	STATICA	
SLU2	SOVRAC	
SISM1	LOAD	
SISM1	STATICA	
SISM1	SISMICA	
SLE1	LOAD	
SLE1	STATICA	
SLE2	LOAD	
SLE2	STATICA	
SLE2	SOVRAC	
INVSLE	SLE1	
INVSLE	SLE2	
INVSLU	SLU1	
INVSLU	SLU2	
INVSLU	SISM1	

Table: Connectivity - Area, Part 1 of 2

Area	NumJoints	Joint1	Joint2	Joint3	Joint4	Perimeter m	AreaArea m2
512	4	1015	1050	1051	1016	0.535247	0.017644
513	4	1016	1051	1052	1017	0.535247	0.017644
514	4	1017	1052	1053	1018	0.535247	0.017644
515	4	1018	1053	1054	1019	0.535247	0.017644
516	4	1019	1054	1055	1020	0.535247	0.017644
517	4	1020	1055	1056	1021	0.535247	0.017644
518	4	1021	1056	1057	1022	0.535247	0.017644
519	4	1022	1057	1058	1023	0.535247	0.017644
520	4	1023	1058	1059	1024	0.535247	0.017644
521	4	1024	1059	1060	1025	0.535247	0.017644
522	4	1025	1060	1061	1026	0.535247	0.017644
523	4	1026	1061	1062	1027	0.535247	0.017644
524	4	1027	1062	1063	1028	0.535247	0.017644
525	4	1028	1063	1064	1029	0.535247	0.017644
526	4	1029	1064	1065	1030	0.535247	0.017644
527	4	1030	1065	1066	1031	0.535247	0.017644
528	4	1031	1066	1067	1032	0.535247	0.017644
529	4	1032	1067	1068	1033	0.535247	0.017644
530	4	1033	1068	1069	1034	0.535247	0.017644
531	4	1034	1069	1070	1035	0.535247	0.017644
532	4	1035	1070	1071	1036	0.535247	0.017644
533	4	1036	1071	1072	1037	0.535247	0.017644
534	4	1037	1072	1073	1038	0.535247	0.017644
535	4	1038	1073	1074	1039	0.535247	0.017644
536	4	1039	1074	1075	1040	0.535247	0.017644
537	4	1040	1075	1076	1041	0.535247	0.017644
538	4	1041	1076	1077	1042	0.535247	0.017644
539	4	1042	1077	1078	1043	0.535247	0.017644
540	4	1043	1078	1079	1044	0.535247	0.017644
541	4	1044	1079	1080	1045	0.535247	0.017644
542	4	1045	1080	1081	1046	0.535247	0.017644
543	4	1046	1081	1082	1047	0.535247	0.017644
544	4	1047	1082	1083	1048	0.535247	0.017644
545	4	1048	1083	1084	1049	0.535247	0.017644
546	4	1050	1085	1086	1051	0.504047	0.015809
547	4	1051	1086	1087	1052	0.504047	0.015809
548	4	1052	1087	1088	1053	0.504047	0.015809
549	4	1053	1088	1089	1054	0.504047	0.015809
550	4	1054	1089	1090	1055	0.504047	0.015809
551	4	1055	1090	1091	1056	0.504047	0.015809

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 86 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

552	4	1056	1091	1092	1057	0.504047	0.015809	
553	4	1057	1092	1093	1058	0.504047	0.015809	
554	4	1058	1093	1094	1059	0.504047	0.015809	
555	4	1059	1094	1095	1060	0.504047	0.015809	
556	4	1060	1095	1096	1061	0.504047	0.015809	
557	4	1061	1096	1097	1062	0.504047	0.015809	
558	4	1062	1097	1098	1063	0.504047	0.015809	
559	4	1063	1098	1099	1064	0.504047	0.015809	
560	4	1064	1099	1100	1065	0.504047	0.015809	
561	4	1065	1100	1101	1066	0.504047	0.015809	
562	4	1066	1101	1102	1067	0.504047	0.015809	
563	4	1067	1102	1103	1068	0.504047	0.015809	
564	4	1068	1103	1104	1069	0.504047	0.015809	
565	4	1069	1104	1105	1070	0.504047	0.015809	
566	4	1070	1105	1106	1071	0.504047	0.015809	
567	4	1071	1106	1107	1072	0.504047	0.015809	
568	4	1072	1107	1108	1073	0.504047	0.015809	
569	4	1073	1108	1109	1074	0.504047	0.015809	
570	4	1074	1109	1110	1075	0.504047	0.015809	
571	4	1075	1110	1111	1076	0.504047	0.015809	
572	4	1076	1111	1112	1077	0.504047	0.015809	
573	4	1077	1112	1113	1078	0.504047	0.015809	
574	4	1078	1113	1114	1079	0.504047	0.015809	
575	4	1079	1114	1115	1080	0.504047	0.015809	
576	4	1080	1115	1116	1081	0.504047	0.015809	
577	4	1081	1116	1117	1082	0.504047	0.015809	
578	4	1082	1117	1118	1083	0.504047	0.015809	
579	4	1083	1118	1119	1084	0.504047	0.015809	
580	4	1085	1120	1121	1086	0.504047	0.015809	
581	4	1086	1121	1122	1087	0.504047	0.015809	
582	4	1087	1122	1123	1088	0.504047	0.015809	
583	4	1088	1123	1124	1089	0.504047	0.015809	
584	4	1089	1124	1125	1090	0.504047	0.015809	
585	4	1090	1125	1126	1091	0.504047	0.015809	
586	4	1091	1126	1127	1092	0.504047	0.015809	
587	4	1092	1127	1128	1093	0.504047	0.015809	
588	4	1093	1128	1129	1094	0.504047	0.015809	
589	4	1094	1129	1130	1095	0.504047	0.015809	
590	4	1095	1130	1131	1096	0.504047	0.015809	
591	4	1096	1131	1132	1097	0.504047	0.015809	
592	4	1097	1132	1133	1098	0.504047	0.015809	
593	4	1098	1133	1134	1099	0.504047	0.015809	
594	4	1099	1134	1135	1100	0.504047	0.015809	
595	4	1100	1135	1136	1101	0.504047	0.015809	
596	4	1101	1136	1137	1102	0.504047	0.015809	
597	4	1102	1137	1138	1103	0.504047	0.015809	
598	4	1103	1138	1139	1104	0.504047	0.015809	
599	4	1104	1139	1140	1105	0.504047	0.015809	
600	4	1105	1140	1141	1106	0.504047	0.015809	
601	4	1106	1141	1142	1107	0.504047	0.015809	
602	4	1107	1142	1143	1108	0.504047	0.015809	
603	4	1108	1143	1144	1109	0.504047	0.015809	
604	4	1109	1144	1145	1110	0.504047	0.015809	
605	4	1110	1145	1146	1111	0.504047	0.015809	
606	4	1111	1146	1147	1112	0.504047	0.015809	
607	4	1112	1147	1148	1113	0.504047	0.015809	
608	4	1113	1148	1149	1114	0.504047	0.015809	
609	4	1114	1149	1150	1115	0.504047	0.015809	
610	4	1115	1150	1151	1116	0.504047	0.015809	
611	4	1116	1151	1152	1117	0.504047	0.015809	
612	4	1117	1152	1153	1118	0.504047	0.015809	
613	4	1118	1153	1154	1119	0.504047	0.015809	
614	4	1120	1155	1156	1121	0.504047	0.015809	
615	4	1121	1156	1157	1122	0.504047	0.015809	
616	4	1122	1157	1158	1123	0.504047	0.015809	
617	4	1123	1158	1159	1124	0.504047	0.015809	
618	4	1124	1159	1160	1125	0.504047	0.015809	
619	4	1125	1160	1161	1126	0.504047	0.015809	
620	4	1126	1161	1162	1127	0.504047	0.015809	
621	4	1127	1162	1163	1128	0.504047	0.015809	
622	4	1128	1163	1164	1129	0.504047	0.015809	
623	4	1129	1164	1165	1130	0.504047	0.015809	
624	4	1130	1165	1166	1131	0.504047	0.015809	
625	4	1131	1166	1167	1132	0.504047	0.015809	
626	4	1132	1167	1168	1133	0.504047	0.015809	
627	4	1133	1168	1169	1134	0.504047	0.015809	
628	4	1134	1169	1170	1135	0.504047	0.015809	
629	4	1135	1170	1171	1136	0.504047	0.015809	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 87 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

630	4	1136	1171	1172	1137	0.504047	0.015809	
631	4	1137	1172	1173	1138	0.504047	0.015809	
632	4	1138	1173	1174	1139	0.504047	0.015809	
633	4	1139	1174	1175	1140	0.504047	0.015809	
634	4	1140	1175	1176	1141	0.504047	0.015809	
635	4	1141	1176	1177	1142	0.504047	0.015809	
636	4	1142	1177	1178	1143	0.504047	0.015809	
637	4	1143	1178	1179	1144	0.504047	0.015809	
638	4	1144	1179	1180	1145	0.504047	0.015809	
639	4	1145	1180	1181	1146	0.504047	0.015809	
640	4	1146	1181	1182	1147	0.504047	0.015809	
641	4	1147	1182	1183	1148	0.504047	0.015809	
642	4	1148	1183	1184	1149	0.504047	0.015809	
643	4	1149	1184	1185	1150	0.504047	0.015809	
644	4	1150	1185	1186	1151	0.504047	0.015809	
645	4	1151	1186	1187	1152	0.504047	0.015809	
646	4	1152	1187	1188	1153	0.504047	0.015809	
647	4	1153	1188	1189	1154	0.504047	0.015809	
648	4	1155	1190	1191	1156	0.504047	0.015809	
649	4	1156	1191	1192	1157	0.504047	0.015809	
650	4	1157	1192	1193	1158	0.504047	0.015809	
651	4	1158	1193	1194	1159	0.504047	0.015809	
652	4	1159	1194	1195	1160	0.504047	0.015809	
653	4	1160	1195	1196	1161	0.504047	0.015809	
654	4	1161	1196	1197	1162	0.504047	0.015809	
655	4	1162	1197	1198	1163	0.504047	0.015809	
656	4	1163	1198	1199	1164	0.504047	0.015809	
657	4	1164	1199	1200	1165	0.504047	0.015809	
658	4	1165	1200	1201	1166	0.504047	0.015809	
659	4	1166	1201	1202	1167	0.504047	0.015809	
660	4	1167	1202	1203	1168	0.504047	0.015809	
661	4	1168	1203	1204	1169	0.504047	0.015809	
662	4	1169	1204	1205	1170	0.504047	0.015809	
663	4	1170	1205	1206	1171	0.504047	0.015809	
664	4	1171	1206	1207	1172	0.504047	0.015809	
665	4	1172	1207	1208	1173	0.504047	0.015809	
666	4	1173	1208	1209	1174	0.504047	0.015809	
667	4	1174	1209	1210	1175	0.504047	0.015809	
668	4	1175	1210	1211	1176	0.504047	0.015809	
669	4	1176	1211	1212	1177	0.504047	0.015809	
670	4	1177	1212	1213	1178	0.504047	0.015809	
671	4	1178	1213	1214	1179	0.504047	0.015809	
672	4	1179	1214	1215	1180	0.504047	0.015809	
673	4	1180	1215	1216	1181	0.504047	0.015809	
674	4	1181	1216	1217	1182	0.504047	0.015809	
675	4	1182	1217	1218	1183	0.504047	0.015809	
676	4	1183	1218	1219	1184	0.504047	0.015809	
677	4	1184	1219	1220	1185	0.504047	0.015809	
678	4	1185	1220	1221	1186	0.504047	0.015809	
679	4	1186	1221	1222	1187	0.504047	0.015809	
680	4	1187	1222	1223	1188	0.504047	0.015809	
681	4	1188	1223	1224	1189	0.504047	0.015809	
682	4	1190	1225	1226	1191	0.504047	0.015809	
683	4	1191	1226	1227	1192	0.504047	0.015809	
684	4	1192	1227	1228	1193	0.504047	0.015809	
685	4	1193	1228	1229	1194	0.504047	0.015809	
686	4	1194	1229	1230	1195	0.504047	0.015809	
687	4	1195	1230	1231	1196	0.504047	0.015809	
688	4	1196	1231	1232	1197	0.504047	0.015809	
689	4	1197	1232	1233	1198	0.504047	0.015809	
690	4	1198	1233	1234	1199	0.504047	0.015809	
691	4	1199	1234	1235	1200	0.504047	0.015809	
692	4	1200	1235	1236	1201	0.504047	0.015809	
693	4	1201	1236	1237	1202	0.504047	0.015809	
694	4	1202	1237	1238	1203	0.504047	0.015809	
695	4	1203	1238	1239	1204	0.504047	0.015809	
696	4	1204	1239	1240	1205	0.504047	0.015809	
697	4	1205	1240	1241	1206	0.504047	0.015809	
698	4	1206	1241	1242	1207	0.504047	0.015809	
699	4	1207	1242	1243	1208	0.504047	0.015809	
700	4	1208	1243	1244	1209	0.504047	0.015809	
701	4	1209	1244	1245	1210	0.504047	0.015809	
702	4	1210	1245	1246	1211	0.504047	0.015809	
703	4	1211	1246	1247	1212	0.504047	0.015809	
704	4	1212	1247	1248	1213	0.504047	0.015809	
705	4	1213	1248	1249	1214	0.504047	0.015809	
706	4	1214	1249	1250	1215	0.504047	0.015809	
707	4	1215	1250	1251	1216	0.504047	0.015809	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 88 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

708	4	1216	1251	1252	1217	0.504047	0.015809	
709	4	1217	1252	1253	1218	0.504047	0.015809	
710	4	1218	1253	1254	1219	0.504047	0.015809	
711	4	1219	1254	1255	1220	0.504047	0.015809	
712	4	1220	1255	1256	1221	0.504047	0.015809	
713	4	1221	1256	1257	1222	0.504047	0.015809	
714	4	1222	1257	1258	1223	0.504047	0.015809	
715	4	1223	1258	1259	1224	0.504047	0.015809	
716	4	1225	1260	1261	1226	0.504047	0.015809	
717	4	1226	1261	1262	1227	0.504047	0.015809	
718	4	1227	1262	1263	1228	0.504047	0.015809	
719	4	1228	1263	1264	1229	0.504047	0.015809	
720	4	1229	1264	1265	1230	0.504047	0.015809	
721	4	1230	1265	1266	1231	0.504047	0.015809	
722	4	1231	1266	1267	1232	0.504047	0.015809	
723	4	1232	1267	1268	1233	0.504047	0.015809	
724	4	1233	1268	1269	1234	0.504047	0.015809	
725	4	1234	1269	1270	1235	0.504047	0.015809	
726	4	1235	1270	1271	1236	0.504047	0.015809	
727	4	1236	1271	1272	1237	0.504047	0.015809	
728	4	1237	1272	1273	1238	0.504047	0.015809	
729	4	1238	1273	1274	1239	0.504047	0.015809	
730	4	1239	1274	1275	1240	0.504047	0.015809	
731	4	1240	1275	1276	1241	0.504047	0.015809	
732	4	1241	1276	1277	1242	0.504047	0.015809	
733	4	1242	1277	1278	1243	0.504047	0.015809	
734	4	1243	1278	1279	1244	0.504047	0.015809	
735	4	1244	1279	1280	1245	0.504047	0.015809	
736	4	1245	1280	1281	1246	0.504047	0.015809	
737	4	1246	1281	1282	1247	0.504047	0.015809	
738	4	1247	1282	1283	1248	0.504047	0.015809	
739	4	1248	1283	1284	1249	0.504047	0.015809	
740	4	1249	1284	1285	1250	0.504047	0.015809	
741	4	1250	1285	1286	1251	0.504047	0.015809	
742	4	1251	1286	1287	1252	0.504047	0.015809	
743	4	1252	1287	1288	1253	0.504047	0.015809	
744	4	1253	1288	1289	1254	0.504047	0.015809	
745	4	1254	1289	1290	1255	0.504047	0.015809	
746	4	1255	1290	1291	1256	0.504047	0.015809	
747	4	1256	1291	1292	1257	0.504047	0.015809	
748	4	1257	1292	1293	1258	0.504047	0.015809	
749	4	1258	1293	1294	1259	0.504047	0.015809	
750	4	1260	1295	1296	1261	0.504047	0.015809	
751	4	1261	1296	1297	1262	0.504047	0.015809	
752	4	1262	1297	1298	1263	0.504047	0.015809	
753	4	1263	1298	1299	1264	0.504047	0.015809	
754	4	1264	1299	1300	1265	0.504047	0.015809	
755	4	1265	1300	1301	1266	0.504047	0.015809	
756	4	1266	1301	1302	1267	0.504047	0.015809	
757	4	1267	1302	1303	1268	0.504047	0.015809	
758	4	1268	1303	1304	1269	0.504047	0.015809	
759	4	1269	1304	1305	1270	0.504047	0.015809	
760	4	1270	1305	1306	1271	0.504047	0.015809	
761	4	1271	1306	1307	1272	0.504047	0.015809	
762	4	1272	1307	1308	1273	0.504047	0.015809	
763	4	1273	1308	1309	1274	0.504047	0.015809	
764	4	1274	1309	1310	1275	0.504047	0.015809	
765	4	1275	1310	1311	1276	0.504047	0.015809	
766	4	1276	1311	1312	1277	0.504047	0.015809	
767	4	1277	1312	1313	1278	0.504047	0.015809	
768	4	1278	1313	1314	1279	0.504047	0.015809	
769	4	1279	1314	1315	1280	0.504047	0.015809	
770	4	1280	1315	1316	1281	0.504047	0.015809	
771	4	1281	1316	1317	1282	0.504047	0.015809	
772	4	1282	1317	1318	1283	0.504047	0.015809	
773	4	1283	1318	1319	1284	0.504047	0.015809	
774	4	1284	1319	1320	1285	0.504047	0.015809	
775	4	1285	1320	1321	1286	0.504047	0.015809	
776	4	1286	1321	1322	1287	0.504047	0.015809	
777	4	1287	1322	1323	1288	0.504047	0.015809	
778	4	1288	1323	1324	1289	0.504047	0.015809	
779	4	1289	1324	1325	1290	0.504047	0.015809	
780	4	1290	1325	1326	1291	0.504047	0.015809	
781	4	1291	1326	1327	1292	0.504047	0.015809	
782	4	1292	1327	1328	1293	0.504047	0.015809	
783	4	1293	1328	1329	1294	0.504047	0.015809	
784	4	1295	1330	1331	1296	0.504047	0.015809	
785	4	1296	1331	1332	1297	0.504047	0.015809	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 89 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

786	4	1297	1332	1333	1298	0.504047	0.015809	
787	4	1298	1333	1334	1299	0.504047	0.015809	
788	4	1299	1334	1335	1300	0.504047	0.015809	
789	4	1300	1335	1336	1301	0.504047	0.015809	
790	4	1301	1336	1337	1302	0.504047	0.015809	
791	4	1302	1337	1338	1303	0.504047	0.015809	
792	4	1303	1338	1339	1304	0.504047	0.015809	
793	4	1304	1339	1340	1305	0.504047	0.015809	
794	4	1305	1340	1341	1306	0.504047	0.015809	
795	4	1306	1341	1342	1307	0.504047	0.015809	
796	4	1307	1342	1343	1308	0.504047	0.015809	
797	4	1308	1343	1344	1309	0.504047	0.015809	
798	4	1309	1344	1345	1310	0.504047	0.015809	
799	4	1310	1345	1346	1311	0.504047	0.015809	
800	4	1311	1346	1347	1312	0.504047	0.015809	
801	4	1312	1347	1348	1313	0.504047	0.015809	
802	4	1313	1348	1349	1314	0.504047	0.015809	
803	4	1314	1349	1350	1315	0.504047	0.015809	
804	4	1315	1350	1351	1316	0.504047	0.015809	
805	4	1316	1351	1352	1317	0.504047	0.015809	
806	4	1317	1352	1353	1318	0.504047	0.015809	
807	4	1318	1353	1354	1319	0.504047	0.015809	
808	4	1319	1354	1355	1320	0.504047	0.015809	
809	4	1320	1355	1356	1321	0.504047	0.015809	
810	4	1321	1356	1357	1322	0.504047	0.015809	
811	4	1322	1357	1358	1323	0.504047	0.015809	
812	4	1323	1358	1359	1324	0.504047	0.015809	
813	4	1324	1359	1360	1325	0.504047	0.015809	
814	4	1325	1360	1361	1326	0.504047	0.015809	
815	4	1326	1361	1362	1327	0.504047	0.015809	
816	4	1327	1362	1363	1328	0.504047	0.015809	
817	4	1328	1363	1364	1329	0.504047	0.015809	
818	4	1330	1365	1366	1331	0.504047	0.015809	
819	4	1331	1366	1367	1332	0.504047	0.015809	
820	4	1332	1367	1368	1333	0.504047	0.015809	
821	4	1333	1368	1369	1334	0.504047	0.015809	
822	4	1334	1369	1370	1335	0.504047	0.015809	
823	4	1335	1370	1371	1336	0.504047	0.015809	
824	4	1336	1371	1372	1337	0.504047	0.015809	
825	4	1337	1372	1373	1338	0.504047	0.015809	
826	4	1338	1373	1374	1339	0.504047	0.015809	
827	4	1339	1374	1375	1340	0.504047	0.015809	
828	4	1340	1375	1376	1341	0.504047	0.015809	
829	4	1341	1376	1377	1342	0.504047	0.015809	
830	4	1342	1377	1378	1343	0.504047	0.015809	
831	4	1343	1378	1379	1344	0.504047	0.015809	
832	4	1344	1379	1380	1345	0.504047	0.015809	
833	4	1345	1380	1381	1346	0.504047	0.015809	
834	4	1346	1381	1382	1347	0.504047	0.015809	
835	4	1347	1382	1383	1348	0.504047	0.015809	
836	4	1348	1383	1384	1349	0.504047	0.015809	
837	4	1349	1384	1385	1350	0.504047	0.015809	
838	4	1350	1385	1386	1351	0.504047	0.015809	
839	4	1351	1386	1387	1352	0.504047	0.015809	
840	4	1352	1387	1388	1353	0.504047	0.015809	
841	4	1353	1388	1389	1354	0.504047	0.015809	
842	4	1354	1389	1390	1355	0.504047	0.015809	
843	4	1355	1390	1391	1356	0.504047	0.015809	
844	4	1356	1391	1392	1357	0.504047	0.015809	
845	4	1357	1392	1393	1358	0.504047	0.015809	
846	4	1358	1393	1394	1359	0.504047	0.015809	
847	4	1359	1394	1395	1360	0.504047	0.015809	
848	4	1360	1395	1396	1361	0.504047	0.015809	
849	4	1361	1396	1397	1362	0.504047	0.015809	
850	4	1362	1397	1398	1363	0.504047	0.015809	
851	4	1363	1398	1399	1364	0.504047	0.015809	
852	4	1365	1400	1401	1366	0.504047	0.015809	
853	4	1366	1401	1402	1367	0.504047	0.015809	
854	4	1367	1402	1403	1368	0.504047	0.015809	
855	4	1368	1403	1404	1369	0.504047	0.015809	
856	4	1369	1404	1405	1370	0.504047	0.015809	
857	4	1370	1405	1406	1371	0.504047	0.015809	
858	4	1371	1406	1407	1372	0.504047	0.015809	
859	4	1372	1407	1408	1373	0.504047	0.015809	
860	4	1373	1408	1409	1374	0.504047	0.015809	
861	4	1374	1409	1410	1375	0.504047	0.015809	
862	4	1375	1410	1411	1376	0.504047	0.015809	
863	4	1376	1411	1412	1377	0.504047	0.015809	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 90 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

864	4	1377	1412	1413	1378	0.504047	0.015809	
865	4	1378	1413	1414	1379	0.504047	0.015809	
866	4	1379	1414	1415	1380	0.504047	0.015809	
867	4	1380	1415	1416	1381	0.504047	0.015809	
868	4	1381	1416	1417	1382	0.504047	0.015809	
869	4	1382	1417	1418	1383	0.504047	0.015809	
870	4	1383	1418	1419	1384	0.504047	0.015809	
871	4	1384	1419	1420	1385	0.504047	0.015809	
872	4	1385	1420	1421	1386	0.504047	0.015809	
873	4	1386	1421	1422	1387	0.504047	0.015809	
874	4	1387	1422	1423	1388	0.504047	0.015809	
875	4	1388	1423	1424	1389	0.504047	0.015809	
876	4	1389	1424	1425	1390	0.504047	0.015809	
877	4	1390	1425	1426	1391	0.504047	0.015809	
878	4	1391	1426	1427	1392	0.504047	0.015809	
879	4	1392	1427	1428	1393	0.504047	0.015809	
880	4	1393	1428	1429	1394	0.504047	0.015809	
881	4	1394	1429	1430	1395	0.504047	0.015809	
882	4	1395	1430	1431	1396	0.504047	0.015809	
883	4	1396	1431	1432	1397	0.504047	0.015809	
884	4	1397	1432	1433	1398	0.504047	0.015809	
885	4	1398	1433	1434	1399	0.504047	0.015809	
886	4	1400	1435	1436	1401	0.504047	0.015809	
887	4	1401	1436	1437	1402	0.504047	0.015809	
888	4	1402	1437	1438	1403	0.504047	0.015809	
889	4	1403	1438	1439	1404	0.504047	0.015809	
890	4	1404	1439	1440	1405	0.504047	0.015809	
891	4	1405	1440	1441	1406	0.504047	0.015809	
892	4	1406	1441	1442	1407	0.504047	0.015809	
893	4	1407	1442	1443	1408	0.504047	0.015809	
894	4	1408	1443	1444	1409	0.504047	0.015809	
895	4	1409	1444	1445	1410	0.504047	0.015809	
896	4	1410	1445	1446	1411	0.504047	0.015809	
897	4	1411	1446	1447	1412	0.504047	0.015809	
898	4	1412	1447	1448	1413	0.504047	0.015809	
899	4	1413	1448	1449	1414	0.504047	0.015809	
900	4	1414	1449	1450	1415	0.504047	0.015809	
901	4	1415	1450	1451	1416	0.504047	0.015809	
902	4	1416	1451	1452	1417	0.504047	0.015809	
903	4	1417	1452	1453	1418	0.504047	0.015809	
904	4	1418	1453	1454	1419	0.504047	0.015809	
905	4	1419	1454	1455	1420	0.504047	0.015809	
906	4	1420	1455	1456	1421	0.504047	0.015809	
907	4	1421	1456	1457	1422	0.504047	0.015809	
908	4	1422	1457	1458	1423	0.504047	0.015809	
909	4	1423	1458	1459	1424	0.504047	0.015809	
910	4	1424	1459	1460	1425	0.504047	0.015809	
911	4	1425	1460	1461	1426	0.504047	0.015809	
912	4	1426	1461	1462	1427	0.504047	0.015809	
913	4	1427	1462	1463	1428	0.504047	0.015809	
914	4	1428	1463	1464	1429	0.504047	0.015809	
915	4	1429	1464	1465	1430	0.504047	0.015809	
916	4	1430	1465	1466	1431	0.504047	0.015809	
917	4	1431	1466	1467	1432	0.504047	0.015809	
918	4	1432	1467	1468	1433	0.504047	0.015809	
919	4	1433	1468	1469	1434	0.504047	0.015809	
920	4	1435	1470	1471	1436	0.504047	0.015809	
921	4	1436	1471	1472	1437	0.504047	0.015809	
922	4	1437	1472	1473	1438	0.504047	0.015809	
923	4	1438	1473	1474	1439	0.504047	0.015809	
924	4	1439	1474	1475	1440	0.504047	0.015809	
925	4	1440	1475	1476	1441	0.504047	0.015809	
926	4	1441	1476	1477	1442	0.504047	0.015809	
927	4	1442	1477	1478	1443	0.504047	0.015809	
928	4	1443	1478	1479	1444	0.504047	0.015809	
929	4	1444	1479	1480	1445	0.504047	0.015809	
930	4	1445	1480	1481	1446	0.504047	0.015809	
931	4	1446	1481	1482	1447	0.504047	0.015809	
932	4	1447	1482	1483	1448	0.504047	0.015809	
933	4	1448	1483	1484	1449	0.504047	0.015809	
934	4	1449	1484	1485	1450	0.504047	0.015809	
935	4	1450	1485	1486	1451	0.504047	0.015809	
936	4	1451	1486	1487	1452	0.504047	0.015809	
937	4	1452	1487	1488	1453	0.504047	0.015809	
938	4	1453	1488	1489	1454	0.504047	0.015809	
939	4	1454	1489	1490	1455	0.504047	0.015809	
940	4	1455	1490	1491	1456	0.504047	0.015809	
941	4	1456	1491	1492	1457	0.504047	0.015809	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 91 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

942	4	1457	1492	1493	1458	0.504047	0.015809	
943	4	1458	1493	1494	1459	0.504047	0.015809	
944	4	1459	1494	1495	1460	0.504047	0.015809	
945	4	1460	1495	1496	1461	0.504047	0.015809	
946	4	1461	1496	1497	1462	0.504047	0.015809	
947	4	1462	1497	1498	1463	0.504047	0.015809	
948	4	1463	1498	1499	1464	0.504047	0.015809	
949	4	1464	1499	1500	1465	0.504047	0.015809	
950	4	1465	1500	1501	1466	0.504047	0.015809	
951	4	1466	1501	1502	1467	0.504047	0.015809	
952	4	1467	1502	1503	1468	0.504047	0.015809	
953	4	1468	1503	1504	1469	0.504047	0.015809	
954	4	1470	1505	1506	1471	0.504047	0.015809	
955	4	1471	1506	1507	1472	0.504047	0.015809	
956	4	1472	1507	1508	1473	0.504047	0.015809	
957	4	1473	1508	1509	1474	0.504047	0.015809	
958	4	1474	1509	1510	1475	0.504047	0.015809	
959	4	1475	1510	1511	1476	0.504047	0.015809	
960	4	1476	1511	1512	1477	0.504047	0.015809	
961	4	1477	1512	1513	1478	0.504047	0.015809	
962	4	1478	1513	1514	1479	0.504047	0.015809	
963	4	1479	1514	1515	1480	0.504047	0.015809	
964	4	1480	1515	1516	1481	0.504047	0.015809	
965	4	1481	1516	1517	1482	0.504047	0.015809	
966	4	1482	1517	1518	1483	0.504047	0.015809	
967	4	1483	1518	1519	1484	0.504047	0.015809	
968	4	1484	1519	1520	1485	0.504047	0.015809	
969	4	1485	1520	1521	1486	0.504047	0.015809	
970	4	1486	1521	1522	1487	0.504047	0.015809	
971	4	1487	1522	1523	1488	0.504047	0.015809	
972	4	1488	1523	1524	1489	0.504047	0.015809	
973	4	1489	1524	1525	1490	0.504047	0.015809	
974	4	1490	1525	1526	1491	0.504047	0.015809	
975	4	1491	1526	1527	1492	0.504047	0.015809	
976	4	1492	1527	1528	1493	0.504047	0.015809	
977	4	1493	1528	1529	1494	0.504047	0.015809	
978	4	1494	1529	1530	1495	0.504047	0.015809	
979	4	1495	1530	1531	1496	0.504047	0.015809	
980	4	1496	1531	1532	1497	0.504047	0.015809	
981	4	1497	1532	1533	1498	0.504047	0.015809	
982	4	1498	1533	1534	1499	0.504047	0.015809	
983	4	1499	1534	1535	1500	0.504047	0.015809	
984	4	1500	1535	1536	1501	0.504047	0.015809	
985	4	1501	1536	1537	1502	0.504047	0.015809	
986	4	1502	1537	1538	1503	0.504047	0.015809	
987	4	1503	1538	1539	1504	0.504047	0.015809	
988	4	1505	1540	1541	1506	0.504047	0.015809	
989	4	1506	1541	1542	1507	0.504047	0.015809	
990	4	1507	1542	1543	1508	0.504047	0.015809	
991	4	1508	1543	1544	1509	0.504047	0.015809	
992	4	1509	1544	1545	1510	0.504047	0.015809	
993	4	1510	1545	1546	1511	0.504047	0.015809	
994	4	1511	1546	1547	1512	0.504047	0.015809	
995	4	1512	1547	1548	1513	0.504047	0.015809	
996	4	1513	1548	1549	1514	0.504047	0.015809	
997	4	1514	1549	1550	1515	0.504047	0.015809	
998	4	1515	1550	1551	1516	0.504047	0.015809	
999	4	1516	1551	1552	1517	0.504047	0.015809	
1000	4	1517	1552	1553	1518	0.504047	0.015809	
1001	4	1518	1553	1554	1519	0.504047	0.015809	
1002	4	1519	1554	1555	1520	0.504047	0.015809	
1003	4	1520	1555	1556	1521	0.504047	0.015809	
1004	4	1521	1556	1557	1522	0.504047	0.015809	
1005	4	1522	1557	1558	1523	0.504047	0.015809	
1006	4	1523	1558	1559	1524	0.504047	0.015809	
1007	4	1524	1559	1560	1525	0.504047	0.015809	
1008	4	1525	1560	1561	1526	0.504047	0.015809	
1009	4	1526	1561	1562	1527	0.504047	0.015809	
1010	4	1527	1562	1563	1528	0.504047	0.015809	
1011	4	1528	1563	1564	1529	0.504047	0.015809	
1012	4	1529	1564	1565	1530	0.504047	0.015809	
1013	4	1530	1565	1566	1531	0.504047	0.015809	
1014	4	1531	1566	1567	1532	0.504047	0.015809	
1015	4	1532	1567	1568	1533	0.504047	0.015809	
1016	4	1533	1568	1569	1534	0.504047	0.015809	
1017	4	1534	1569	1570	1535	0.504047	0.015809	
1018	4	1535	1570	1571	1536	0.504047	0.015809	
1019	4	1536	1571	1572	1537	0.504047	0.015809	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 92 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

1020	4	1537	1572	1573	1538	0.504047	0.015809	
1021	4	1538	1573	1574	1539	0.504047	0.015809	
1022	4	1540	1575	1576	1541	0.504047	0.015809	
1023	4	1541	1576	1577	1542	0.504047	0.015809	
1024	4	1542	1577	1578	1543	0.504047	0.015809	
1025	4	1543	1578	1579	1544	0.504047	0.015809	
1026	4	1544	1579	1580	1545	0.504047	0.015809	
1027	4	1545	1580	1581	1546	0.504047	0.015809	
1028	4	1546	1581	1582	1547	0.504047	0.015809	
1029	4	1547	1582	1583	1548	0.504047	0.015809	
1030	4	1548	1583	1584	1549	0.504047	0.015809	
1031	4	1549	1584	1585	1550	0.504047	0.015809	
1032	4	1550	1585	1586	1551	0.504047	0.015809	
1033	4	1551	1586	1587	1552	0.504047	0.015809	
1034	4	1552	1587	1588	1553	0.504047	0.015809	
1035	4	1553	1588	1589	1554	0.504047	0.015809	
1036	4	1554	1589	1590	1555	0.504047	0.015809	
1037	4	1555	1590	1591	1556	0.504047	0.015809	
1038	4	1556	1591	1592	1557	0.504047	0.015809	
1039	4	1557	1592	1593	1558	0.504047	0.015809	
1040	4	1558	1593	1594	1559	0.504047	0.015809	
1041	4	1559	1594	1595	1560	0.504047	0.015809	
1042	4	1560	1595	1596	1561	0.504047	0.015809	
1043	4	1561	1596	1597	1562	0.504047	0.015809	
1044	4	1562	1597	1598	1563	0.504047	0.015809	
1045	4	1563	1598	1599	1564	0.504047	0.015809	
1046	4	1564	1599	1600	1565	0.504047	0.015809	
1047	4	1565	1600	1601	1566	0.504047	0.015809	
1048	4	1566	1601	1602	1567	0.504047	0.015809	
1049	4	1567	1602	1603	1568	0.504047	0.015809	
1050	4	1568	1603	1604	1569	0.504047	0.015809	
1051	4	1569	1604	1605	1570	0.504047	0.015809	
1052	4	1570	1605	1606	1571	0.504047	0.015809	
1053	4	1571	1606	1607	1572	0.504047	0.015809	
1054	4	1572	1607	1608	1573	0.504047	0.015809	
1055	4	1573	1608	1609	1574	0.504047	0.015809	
1056	4	1575	1	1610	1576	0.504047	0.015809	
1057	4	1576	1610	1611	1577	0.504047	0.015809	
1058	4	1577	1611	1612	1578	0.504047	0.015809	
1059	4	1578	1612	1613	1579	0.504047	0.015809	
1060	4	1579	1613	1614	1580	0.504047	0.015809	
1061	4	1580	1614	1615	1581	0.504047	0.015809	
1062	4	1581	1615	1616	1582	0.504047	0.015809	
1063	4	1582	1616	1617	1583	0.504047	0.015809	
1064	4	1583	1617	1618	1584	0.504047	0.015809	
1065	4	1584	1618	1619	1585	0.504047	0.015809	
1066	4	1585	1619	1620	1586	0.504047	0.015809	
1067	4	1586	1620	1621	1587	0.504047	0.015809	
1068	4	1587	1621	1622	1588	0.504047	0.015809	
1069	4	1588	1622	1623	1589	0.504047	0.015809	
1070	4	1589	1623	1624	1590	0.504047	0.015809	
1071	4	1590	1624	1625	1591	0.504047	0.015809	
1072	4	1591	1625	1626	1592	0.504047	0.015809	
1073	4	1592	1626	1627	1593	0.504047	0.015809	
1074	4	1593	1627	1628	1594	0.504047	0.015809	
1075	4	1594	1628	1629	1595	0.504047	0.015809	
1076	4	1595	1629	1630	1596	0.504047	0.015809	
1077	4	1596	1630	1631	1597	0.504047	0.015809	
1078	4	1597	1631	1632	1598	0.504047	0.015809	
1079	4	1598	1632	1633	1599	0.504047	0.015809	
1080	4	1599	1633	1634	1600	0.504047	0.015809	
1081	4	1600	1634	1635	1601	0.504047	0.015809	
1082	4	1601	1635	1636	1602	0.504047	0.015809	
1083	4	1602	1636	1637	1603	0.504047	0.015809	
1084	4	1603	1637	1638	1604	0.504047	0.015809	
1085	4	1604	1638	1639	1605	0.504047	0.015809	
1086	4	1605	1639	1640	1606	0.504047	0.015809	
1087	4	1606	1640	1641	1607	0.504047	0.015809	
1088	4	1607	1641	1642	1608	0.504047	0.015809	
1089	4	1608	1642	443	1609	0.504047	0.015809	
1263	4	1049	1084	195	193	0.566620	0.019997	
1264	4	193	195	196	194	0.566620	0.019997	
1265	4	194	196	19	18	0.566620	0.019997	
1266	4	1084	1119	197	195	0.535420	0.017917	
1267	4	195	197	198	196	0.535420	0.017917	
1268	4	196	198	20	19	0.535420	0.017917	
1269	4	1119	1154	199	197	0.535420	0.017917	
1270	4	197	199	200	198	0.535420	0.017917	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 93 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

1271	4	198	200	21	20	0.535420	0.017917
1272	4	1154	1189	201	199	0.535420	0.017917
1273	4	199	201	202	200	0.535420	0.017917
1274	4	200	202	22	21	0.535420	0.017917
1275	4	1189	1224	203	201	0.535420	0.017917
1276	4	201	203	204	202	0.535420	0.017917
1277	4	202	204	23	22	0.535420	0.017917
1278	4	1224	1259	205	203	0.535420	0.017917
1279	4	203	205	206	204	0.535420	0.017917
1280	4	204	206	24	23	0.535420	0.017917
1281	4	1259	1294	207	205	0.535420	0.017917
1282	4	205	207	208	206	0.535420	0.017917
1283	4	206	208	25	24	0.535420	0.017917
1284	4	1294	1329	209	207	0.535420	0.017917
1285	4	207	209	210	208	0.535420	0.017917
1286	4	208	210	26	25	0.535420	0.017917
1287	4	1329	1364	211	209	0.535420	0.017917
1288	4	209	211	212	210	0.535420	0.017917
1289	4	210	212	27	26	0.535420	0.017917
1290	4	1364	1399	213	211	0.535420	0.017917
1291	4	211	213	214	212	0.535420	0.017917
1292	4	212	214	28	27	0.535420	0.017917
1293	4	1399	1434	215	213	0.535420	0.017917
1294	4	213	215	216	214	0.535420	0.017917
1295	4	214	216	29	28	0.535420	0.017917
1296	4	1434	1469	217	215	0.535420	0.017917
1297	4	215	217	218	216	0.535420	0.017917
1298	4	216	218	30	29	0.535420	0.017917
1299	4	1469	1504	219	217	0.535420	0.017917
1300	4	217	219	220	218	0.535420	0.017917
1301	4	218	220	31	30	0.535420	0.017917
1302	4	1504	1539	221	219	0.535420	0.017917
1303	4	219	221	222	220	0.535420	0.017917
1304	4	220	222	32	31	0.535420	0.017917
1305	4	1539	1574	223	221	0.535420	0.017917
1306	4	221	223	224	222	0.535420	0.017917
1307	4	222	224	33	32	0.535420	0.017917
1308	4	1574	1609	225	223	0.535420	0.017917
1309	4	223	225	226	224	0.535420	0.017917
1310	4	224	226	34	33	0.535420	0.017917
1311	4	1609	443	227	225	0.535420	0.017917
1312	4	225	227	228	226	0.535420	0.017917
1313	4	226	228	2	34	0.535420	0.017917

Table: Connectivity - Area, Part 2 of 2

Area	Volume m3	CentroidX m	CentroidY m	CentroidZ m	GUID
512	0.005293	0.05882	0.00000	2.22501	
513	0.005293	0.17647	0.00000	2.22501	
514	0.005293	0.29412	0.00000	2.22501	
515	0.005293	0.41176	0.00000	2.22501	
516	0.005293	0.52941	0.00000	2.22501	
517	0.005293	0.64706	0.00000	2.22501	
518	0.005293	0.76471	0.00000	2.22501	
519	0.005293	0.88235	0.00000	2.22501	
520	0.005293	1.00000	0.00000	2.22501	
521	0.005293	1.11765	0.00000	2.22501	
522	0.005293	1.23529	0.00000	2.22501	
523	0.005293	1.35294	0.00000	2.22501	
524	0.005293	1.47059	0.00000	2.22501	
525	0.005293	1.58824	0.00000	2.22501	
526	0.005293	1.70588	0.00000	2.22501	
527	0.005293	1.82353	0.00000	2.22501	
528	0.005293	1.94118	0.00000	2.22501	
529	0.005293	2.05882	0.00000	2.22501	
530	0.005293	2.17647	0.00000	2.22501	
531	0.005293	2.29412	0.00000	2.22501	
532	0.005293	2.41176	0.00000	2.22501	
533	0.005293	2.52941	0.00000	2.22501	
534	0.005293	2.64706	0.00000	2.22501	
535	0.005293	2.76471	0.00000	2.22501	
536	0.005293	2.88235	0.00000	2.22501	
537	0.005293	3.00000	0.00000	2.22501	
538	0.005293	3.11765	0.00000	2.22501	
539	0.005293	3.23529	0.00000	2.22501	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 94 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

540	0.005293	3.35294	0.00000	2.22501				
541	0.005293	3.47059	0.00000	2.22501				
542	0.005293	3.58824	0.00000	2.22501				
543	0.005293	3.70588	0.00000	2.22501				
544	0.005293	3.82353	0.00000	2.22501				
545	0.005293	3.94118	0.00000	2.22501				
546	0.004743	0.05882	0.00000	2.08283				
547	0.004743	0.17647	0.00000	2.08283				
548	0.004743	0.29412	0.00000	2.08283				
549	0.004743	0.41176	0.00000	2.08283				
550	0.004743	0.52941	0.00000	2.08283				
551	0.004743	0.64706	0.00000	2.08283				
552	0.004743	0.76471	0.00000	2.08283				
553	0.004743	0.88235	0.00000	2.08283				
554	0.004743	1.00000	0.00000	2.08283				
555	0.004743	1.11765	0.00000	2.08283				
556	0.004743	1.23529	0.00000	2.08283				
557	0.004743	1.35294	0.00000	2.08283				
558	0.004743	1.47059	0.00000	2.08283				
559	0.004743	1.58824	0.00000	2.08283				
560	0.004743	1.70588	0.00000	2.08283				
561	0.004743	1.82353	0.00000	2.08283				
562	0.004743	1.94118	0.00000	2.08283				
563	0.004743	2.05882	0.00000	2.08283				
564	0.004743	2.17647	0.00000	2.08283				
565	0.004743	2.29412	0.00000	2.08283				
566	0.004743	2.41176	0.00000	2.08283				
567	0.004743	2.52941	0.00000	2.08283				
568	0.004743	2.64706	0.00000	2.08283				
569	0.004743	2.76471	0.00000	2.08283				
570	0.004743	2.88235	0.00000	2.08283				
571	0.004743	3.00000	0.00000	2.08283				
572	0.004743	3.11765	0.00000	2.08283				
573	0.004743	3.23529	0.00000	2.08283				
574	0.004743	3.35294	0.00000	2.08283				
575	0.004743	3.47059	0.00000	2.08283				
576	0.004743	3.58824	0.00000	2.08283				
577	0.004743	3.70588	0.00000	2.08283				
578	0.004743	3.82353	0.00000	2.08283				
579	0.004743	3.94118	0.00000	2.08283				
580	0.004743	0.05882	0.00000	1.94846				
581	0.004743	0.17647	0.00000	1.94846				
582	0.004743	0.29412	0.00000	1.94846				
583	0.004743	0.41176	0.00000	1.94846				
584	0.004743	0.52941	0.00000	1.94846				
585	0.004743	0.64706	0.00000	1.94846				
586	0.004743	0.76471	0.00000	1.94846				
587	0.004743	0.88235	0.00000	1.94846				
588	0.004743	1.00000	0.00000	1.94846				
589	0.004743	1.11765	0.00000	1.94846				
590	0.004743	1.23529	0.00000	1.94846				
591	0.004743	1.35294	0.00000	1.94846				
592	0.004743	1.47059	0.00000	1.94846				
593	0.004743	1.58824	0.00000	1.94846				
594	0.004743	1.70588	0.00000	1.94846				
595	0.004743	1.82353	0.00000	1.94846				
596	0.004743	1.94118	0.00000	1.94846				
597	0.004743	2.05882	0.00000	1.94846				
598	0.004743	2.17647	0.00000	1.94846				
599	0.004743	2.29412	0.00000	1.94846				
600	0.004743	2.41176	0.00000	1.94846				
601	0.004743	2.52941	0.00000	1.94846				
602	0.004743	2.64706	0.00000	1.94846				
603	0.004743	2.76471	0.00000	1.94846				
604	0.004743	2.88235	0.00000	1.94846				
605	0.004743	3.00000	0.00000	1.94846				
606	0.004743	3.11765	0.00000	1.94846				
607	0.004743	3.23529	0.00000	1.94846				
608	0.004743	3.35294	0.00000	1.94846				
609	0.004743	3.47059	0.00000	1.94846				
610	0.004743	3.58824	0.00000	1.94846				
611	0.004743	3.70588	0.00000	1.94846				
612	0.004743	3.82353	0.00000	1.94846				
613	0.004743	3.94118	0.00000	1.94846				
614	0.004743	0.05882	0.00000	1.81408				
615	0.004743	0.17647	0.00000	1.81408				
616	0.004743	0.29412	0.00000	1.81408				
617	0.004743	0.41176	0.00000	1.81408				



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 95 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

618	0.004743	0.52941	0.00000	1.81408
619	0.004743	0.64706	0.00000	1.81408
620	0.004743	0.76471	0.00000	1.81408
621	0.004743	0.88235	0.00000	1.81408
622	0.004743	1.00000	0.00000	1.81408
623	0.004743	1.11765	0.00000	1.81408
624	0.004743	1.23529	0.00000	1.81408
625	0.004743	1.35294	0.00000	1.81408
626	0.004743	1.47059	0.00000	1.81408
627	0.004743	1.58824	0.00000	1.81408
628	0.004743	1.70588	0.00000	1.81408
629	0.004743	1.82353	0.00000	1.81408
630	0.004743	1.94118	0.00000	1.81408
631	0.004743	2.05882	0.00000	1.81408
632	0.004743	2.17647	0.00000	1.81408
633	0.004743	2.29412	0.00000	1.81408
634	0.004743	2.41176	0.00000	1.81408
635	0.004743	2.52941	0.00000	1.81408
636	0.004743	2.64706	0.00000	1.81408
637	0.004743	2.76471	0.00000	1.81408
638	0.004743	2.88235	0.00000	1.81408
639	0.004743	3.00000	0.00000	1.81408
640	0.004743	3.11765	0.00000	1.81408
641	0.004743	3.23529	0.00000	1.81408
642	0.004743	3.35294	0.00000	1.81408
643	0.004743	3.47059	0.00000	1.81408
644	0.004743	3.58824	0.00000	1.81408
645	0.004743	3.70588	0.00000	1.81408
646	0.004743	3.82353	0.00000	1.81408
647	0.004743	3.94118	0.00000	1.81408
648	0.004743	0.05882	0.00000	1.67971
649	0.004743	0.17647	0.00000	1.67971
650	0.004743	0.29412	0.00000	1.67971
651	0.004743	0.41176	0.00000	1.67971
652	0.004743	0.52941	0.00000	1.67971
653	0.004743	0.64706	0.00000	1.67971
654	0.004743	0.76471	0.00000	1.67971
655	0.004743	0.88235	0.00000	1.67971
656	0.004743	1.00000	0.00000	1.67971
657	0.004743	1.11765	0.00000	1.67971
658	0.004743	1.23529	0.00000	1.67971
659	0.004743	1.35294	0.00000	1.67971
660	0.004743	1.47059	0.00000	1.67971
661	0.004743	1.58824	0.00000	1.67971
662	0.004743	1.70588	0.00000	1.67971
663	0.004743	1.82353	0.00000	1.67971
664	0.004743	1.94118	0.00000	1.67971
665	0.004743	2.05882	0.00000	1.67971
666	0.004743	2.17647	0.00000	1.67971
667	0.004743	2.29412	0.00000	1.67971
668	0.004743	2.41176	0.00000	1.67971
669	0.004743	2.52941	0.00000	1.67971
670	0.004743	2.64706	0.00000	1.67971
671	0.004743	2.76471	0.00000	1.67971
672	0.004743	2.88235	0.00000	1.67971
673	0.004743	3.00000	0.00000	1.67971
674	0.004743	3.11765	0.00000	1.67971
675	0.004743	3.23529	0.00000	1.67971
676	0.004743	3.35294	0.00000	1.67971
677	0.004743	3.47059	0.00000	1.67971
678	0.004743	3.58824	0.00000	1.67971
679	0.004743	3.70588	0.00000	1.67971
680	0.004743	3.82353	0.00000	1.67971
681	0.004743	3.94118	0.00000	1.67971
682	0.004743	0.05882	0.00000	1.54533
683	0.004743	0.17647	0.00000	1.54533
684	0.004743	0.29412	0.00000	1.54533
685	0.004743	0.41176	0.00000	1.54533
686	0.004743	0.52941	0.00000	1.54533
687	0.004743	0.64706	0.00000	1.54533
688	0.004743	0.76471	0.00000	1.54533
689	0.004743	0.88235	0.00000	1.54533
690	0.004743	1.00000	0.00000	1.54533
691	0.004743	1.11765	0.00000	1.54533
692	0.004743	1.23529	0.00000	1.54533
693	0.004743	1.35294	0.00000	1.54533
694	0.004743	1.47059	0.00000	1.54533
695	0.004743	1.58824	0.00000	1.54533



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 96 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

696	0.004743	1.70588	0.00000	1.54533				
697	0.004743	1.82353	0.00000	1.54533				
698	0.004743	1.94118	0.00000	1.54533				
699	0.004743	2.05882	0.00000	1.54533				
700	0.004743	2.17647	0.00000	1.54533				
701	0.004743	2.29412	0.00000	1.54533				
702	0.004743	2.41176	0.00000	1.54533				
703	0.004743	2.52941	0.00000	1.54533				
704	0.004743	2.64706	0.00000	1.54533				
705	0.004743	2.76471	0.00000	1.54533				
706	0.004743	2.88235	0.00000	1.54533				
707	0.004743	3.00000	0.00000	1.54533				
708	0.004743	3.11765	0.00000	1.54533				
709	0.004743	3.23529	0.00000	1.54533				
710	0.004743	3.35294	0.00000	1.54533				
711	0.004743	3.47059	0.00000	1.54533				
712	0.004743	3.58824	0.00000	1.54533				
713	0.004743	3.70588	0.00000	1.54533				
714	0.004743	3.82353	0.00000	1.54533				
715	0.004743	3.94118	0.00000	1.54533				
716	0.004743	0.05882	0.00000	1.41095				
717	0.004743	0.17647	0.00000	1.41095				
718	0.004743	0.29412	0.00000	1.41095				
719	0.004743	0.41176	0.00000	1.41095				
720	0.004743	0.52941	0.00000	1.41095				
721	0.004743	0.64706	0.00000	1.41095				
722	0.004743	0.76471	0.00000	1.41095				
723	0.004743	0.88235	0.00000	1.41095				
724	0.004743	1.00000	0.00000	1.41095				
725	0.004743	1.11765	0.00000	1.41095				
726	0.004743	1.23529	0.00000	1.41095				
727	0.004743	1.35294	0.00000	1.41095				
728	0.004743	1.47059	0.00000	1.41095				
729	0.004743	1.58824	0.00000	1.41095				
730	0.004743	1.70588	0.00000	1.41095				
731	0.004743	1.82353	0.00000	1.41095				
732	0.004743	1.94118	0.00000	1.41095				
733	0.004743	2.05882	0.00000	1.41095				
734	0.004743	2.17647	0.00000	1.41095				
735	0.004743	2.29412	0.00000	1.41095				
736	0.004743	2.41176	0.00000	1.41095				
737	0.004743	2.52941	0.00000	1.41095				
738	0.004743	2.64706	0.00000	1.41095				
739	0.004743	2.76471	0.00000	1.41095				
740	0.004743	2.88235	0.00000	1.41095				
741	0.004743	3.00000	0.00000	1.41095				
742	0.004743	3.11765	0.00000	1.41095				
743	0.004743	3.23529	0.00000	1.41095				
744	0.004743	3.35294	0.00000	1.41095				
745	0.004743	3.47059	0.00000	1.41095				
746	0.004743	3.58824	0.00000	1.41095				
747	0.004743	3.70588	0.00000	1.41095				
748	0.004743	3.82353	0.00000	1.41095				
749	0.004743	3.94118	0.00000	1.41095				
750	0.004743	0.05882	0.00000	1.27658				
751	0.004743	0.17647	0.00000	1.27658				
752	0.004743	0.29412	0.00000	1.27658				
753	0.004743	0.41176	0.00000	1.27658				
754	0.004743	0.52941	0.00000	1.27658				
755	0.004743	0.64706	0.00000	1.27658				
756	0.004743	0.76471	0.00000	1.27658				
757	0.004743	0.88235	0.00000	1.27658				
758	0.004743	1.00000	0.00000	1.27658				
759	0.004743	1.11765	0.00000	1.27658				
760	0.004743	1.23529	0.00000	1.27658				
761	0.004743	1.35294	0.00000	1.27658				
762	0.004743	1.47059	0.00000	1.27658				
763	0.004743	1.58824	0.00000	1.27658				
764	0.004743	1.70588	0.00000	1.27658				
765	0.004743	1.82353	0.00000	1.27658				
766	0.004743	1.94118	0.00000	1.27658				
767	0.004743	2.05882	0.00000	1.27658				
768	0.004743	2.17647	0.00000	1.27658				
769	0.004743	2.29412	0.00000	1.27658				
770	0.004743	2.41176	0.00000	1.27658				
771	0.004743	2.52941	0.00000	1.27658				
772	0.004743	2.64706	0.00000	1.27658				
773	0.004743	2.76471	0.00000	1.27658				

**2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto****2.1 Tratto Fabriano-Matelica Nord**

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 97 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

774	0.004743	2.88235	0.00000	1.27658
775	0.004743	3.00000	0.00000	1.27658
776	0.004743	3.11765	0.00000	1.27658
777	0.004743	3.23529	0.00000	1.27658
778	0.004743	3.35294	0.00000	1.27658
779	0.004743	3.47059	0.00000	1.27658
780	0.004743	3.58824	0.00000	1.27658
781	0.004743	3.70588	0.00000	1.27658
782	0.004743	3.82353	0.00000	1.27658
783	0.004743	3.94118	0.00000	1.27658
784	0.004743	0.05882	0.00000	1.14220
785	0.004743	0.17647	0.00000	1.14220
786	0.004743	0.29412	0.00000	1.14220
787	0.004743	0.41176	0.00000	1.14220
788	0.004743	0.52941	0.00000	1.14220
789	0.004743	0.64706	0.00000	1.14220
790	0.004743	0.76471	0.00000	1.14220
791	0.004743	0.88235	0.00000	1.14220
792	0.004743	1.00000	0.00000	1.14220
793	0.004743	1.11765	0.00000	1.14220
794	0.004743	1.23529	0.00000	1.14220
795	0.004743	1.35294	0.00000	1.14220
796	0.004743	1.47059	0.00000	1.14220
797	0.004743	1.58824	0.00000	1.14220
798	0.004743	1.70588	0.00000	1.14220
799	0.004743	1.82353	0.00000	1.14220
800	0.004743	1.94118	0.00000	1.14220
801	0.004743	2.05882	0.00000	1.14220
802	0.004743	2.17647	0.00000	1.14220
803	0.004743	2.29412	0.00000	1.14220
804	0.004743	2.41176	0.00000	1.14220
805	0.004743	2.52941	0.00000	1.14220
806	0.004743	2.64706	0.00000	1.14220
807	0.004743	2.76471	0.00000	1.14220
808	0.004743	2.88235	0.00000	1.14220
809	0.004743	3.00000	0.00000	1.14220
810	0.004743	3.11765	0.00000	1.14220
811	0.004743	3.23529	0.00000	1.14220
812	0.004743	3.35294	0.00000	1.14220
813	0.004743	3.47059	0.00000	1.14220
814	0.004743	3.58824	0.00000	1.14220
815	0.004743	3.70588	0.00000	1.14220
816	0.004743	3.82353	0.00000	1.14220
817	0.004743	3.94118	0.00000	1.14220
818	0.004743	0.05882	0.00000	1.00782
819	0.004743	0.17647	0.00000	1.00782
820	0.004743	0.29412	0.00000	1.00782
821	0.004743	0.41176	0.00000	1.00782
822	0.004743	0.52941	0.00000	1.00782
823	0.004743	0.64706	0.00000	1.00782
824	0.004743	0.76471	0.00000	1.00782
825	0.004743	0.88235	0.00000	1.00782
826	0.004743	1.00000	0.00000	1.00782
827	0.004743	1.11765	0.00000	1.00782
828	0.004743	1.23529	0.00000	1.00782
829	0.004743	1.35294	0.00000	1.00782
830	0.004743	1.47059	0.00000	1.00782
831	0.004743	1.58824	0.00000	1.00782
832	0.004743	1.70588	0.00000	1.00782
833	0.004743	1.82353	0.00000	1.00782
834	0.004743	1.94118	0.00000	1.00782
835	0.004743	2.05882	0.00000	1.00782
836	0.004743	2.17647	0.00000	1.00782
837	0.004743	2.29412	0.00000	1.00782
838	0.004743	2.41176	0.00000	1.00782
839	0.004743	2.52941	0.00000	1.00782
840	0.004743	2.64706	0.00000	1.00782
841	0.004743	2.76471	0.00000	1.00782
842	0.004743	2.88235	0.00000	1.00782
843	0.004743	3.00000	0.00000	1.00782
844	0.004743	3.11765	0.00000	1.00782
845	0.004743	3.23529	0.00000	1.00782
846	0.004743	3.35294	0.00000	1.00782
847	0.004743	3.47059	0.00000	1.00782
848	0.004743	3.58824	0.00000	1.00782
849	0.004743	3.70588	0.00000	1.00782
850	0.004743	3.82353	0.00000	1.00782
851	0.004743	3.94118	0.00000	1.00782



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 98 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

852	0.004743	0.05882	0.00000	0.87345				
853	0.004743	0.17647	0.00000	0.87345				
854	0.004743	0.29412	0.00000	0.87345				
855	0.004743	0.41176	0.00000	0.87345				
856	0.004743	0.52941	0.00000	0.87345				
857	0.004743	0.64706	0.00000	0.87345				
858	0.004743	0.76471	0.00000	0.87345				
859	0.004743	0.88235	0.00000	0.87345				
860	0.004743	1.00000	0.00000	0.87345				
861	0.004743	1.11765	0.00000	0.87345				
862	0.004743	1.23529	0.00000	0.87345				
863	0.004743	1.35294	0.00000	0.87345				
864	0.004743	1.47059	0.00000	0.87345				
865	0.004743	1.58824	0.00000	0.87345				
866	0.004743	1.70588	0.00000	0.87345				
867	0.004743	1.82353	0.00000	0.87345				
868	0.004743	1.94118	0.00000	0.87345				
869	0.004743	2.05882	0.00000	0.87345				
870	0.004743	2.17647	0.00000	0.87345				
871	0.004743	2.29412	0.00000	0.87345				
872	0.004743	2.41176	0.00000	0.87345				
873	0.004743	2.52941	0.00000	0.87345				
874	0.004743	2.64706	0.00000	0.87345				
875	0.004743	2.76471	0.00000	0.87345				
876	0.004743	2.88235	0.00000	0.87345				
877	0.004743	3.00000	0.00000	0.87345				
878	0.004743	3.11765	0.00000	0.87345				
879	0.004743	3.23529	0.00000	0.87345				
880	0.004743	3.35294	0.00000	0.87345				
881	0.004743	3.47059	0.00000	0.87345				
882	0.004743	3.58824	0.00000	0.87345				
883	0.004743	3.70588	0.00000	0.87345				
884	0.004743	3.82353	0.00000	0.87345				
885	0.004743	3.94118	0.00000	0.87345				
886	0.004743	0.05882	0.00000	0.73907				
887	0.004743	0.17647	0.00000	0.73907				
888	0.004743	0.29412	0.00000	0.73907				
889	0.004743	0.41176	0.00000	0.73907				
890	0.004743	0.52941	0.00000	0.73907				
891	0.004743	0.64706	0.00000	0.73907				
892	0.004743	0.76471	0.00000	0.73907				
893	0.004743	0.88235	0.00000	0.73907				
894	0.004743	1.00000	0.00000	0.73907				
895	0.004743	1.11765	0.00000	0.73907				
896	0.004743	1.23529	0.00000	0.73907				
897	0.004743	1.35294	0.00000	0.73907				
898	0.004743	1.47059	0.00000	0.73907				
899	0.004743	1.58824	0.00000	0.73907				
900	0.004743	1.70588	0.00000	0.73907				
901	0.004743	1.82353	0.00000	0.73907				
902	0.004743	1.94118	0.00000	0.73907				
903	0.004743	2.05882	0.00000	0.73907				
904	0.004743	2.17647	0.00000	0.73907				
905	0.004743	2.29412	0.00000	0.73907				
906	0.004743	2.41176	0.00000	0.73907				
907	0.004743	2.52941	0.00000	0.73907				
908	0.004743	2.64706	0.00000	0.73907				
909	0.004743	2.76471	0.00000	0.73907				
910	0.004743	2.88235	0.00000	0.73907				
911	0.004743	3.00000	0.00000	0.73907				
912	0.004743	3.11765	0.00000	0.73907				
913	0.004743	3.23529	0.00000	0.73907				
914	0.004743	3.35294	0.00000	0.73907				
915	0.004743	3.47059	0.00000	0.73907				
916	0.004743	3.58824	0.00000	0.73907				
917	0.004743	3.70588	0.00000	0.73907				
918	0.004743	3.82353	0.00000	0.73907				
919	0.004743	3.94118	0.00000	0.73907				
920	0.004743	0.05882	0.00000	0.60469				
921	0.004743	0.17647	0.00000	0.60469				
922	0.004743	0.29412	0.00000	0.60469				
923	0.004743	0.41176	0.00000	0.60469				
924	0.004743	0.52941	0.00000	0.60469				
925	0.004743	0.64706	0.00000	0.60469				
926	0.004743	0.76471	0.00000	0.60469				
927	0.004743	0.88235	0.00000	0.60469				
928	0.004743	1.00000	0.00000	0.60469				
929	0.004743	1.11765	0.00000	0.60469				



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 99 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	--------------------------

930	0.004743	1.23529	0.00000	0.60469				
931	0.004743	1.35294	0.00000	0.60469				
932	0.004743	1.47059	0.00000	0.60469				
933	0.004743	1.58824	0.00000	0.60469				
934	0.004743	1.70588	0.00000	0.60469				
935	0.004743	1.82353	0.00000	0.60469				
936	0.004743	1.94118	0.00000	0.60469				
937	0.004743	2.05882	0.00000	0.60469				
938	0.004743	2.17647	0.00000	0.60469				
939	0.004743	2.29412	0.00000	0.60469				
940	0.004743	2.41176	0.00000	0.60469				
941	0.004743	2.52941	0.00000	0.60469				
942	0.004743	2.64706	0.00000	0.60469				
943	0.004743	2.76471	0.00000	0.60469				
944	0.004743	2.88235	0.00000	0.60469				
945	0.004743	3.00000	0.00000	0.60469				
946	0.004743	3.11765	0.00000	0.60469				
947	0.004743	3.23529	0.00000	0.60469				
948	0.004743	3.35294	0.00000	0.60469				
949	0.004743	3.47059	0.00000	0.60469				
950	0.004743	3.58824	0.00000	0.60469				
951	0.004743	3.70588	0.00000	0.60469				
952	0.004743	3.82353	0.00000	0.60469				
953	0.004743	3.94118	0.00000	0.60469				
954	0.004743	0.05882	0.00000	0.47032				
955	0.004743	0.17647	0.00000	0.47032				
956	0.004743	0.29412	0.00000	0.47032				
957	0.004743	0.41176	0.00000	0.47032				
958	0.004743	0.52941	0.00000	0.47032				
959	0.004743	0.64706	0.00000	0.47032				
960	0.004743	0.76471	0.00000	0.47032				
961	0.004743	0.88235	0.00000	0.47032				
962	0.004743	1.00000	0.00000	0.47032				
963	0.004743	1.11765	0.00000	0.47032				
964	0.004743	1.23529	0.00000	0.47032				
965	0.004743	1.35294	0.00000	0.47032				
966	0.004743	1.47059	0.00000	0.47032				
967	0.004743	1.58824	0.00000	0.47032				
968	0.004743	1.70588	0.00000	0.47032				
969	0.004743	1.82353	0.00000	0.47032				
970	0.004743	1.94118	0.00000	0.47032				
971	0.004743	2.05882	0.00000	0.47032				
972	0.004743	2.17647	0.00000	0.47032				
973	0.004743	2.29412	0.00000	0.47032				
974	0.004743	2.41176	0.00000	0.47032				
975	0.004743	2.52941	0.00000	0.47032				
976	0.004743	2.64706	0.00000	0.47032				
977	0.004743	2.76471	0.00000	0.47032				
978	0.004743	2.88235	0.00000	0.47032				
979	0.004743	3.00000	0.00000	0.47032				
980	0.004743	3.11765	0.00000	0.47032				
981	0.004743	3.23529	0.00000	0.47032				
982	0.004743	3.35294	0.00000	0.47032				
983	0.004743	3.47059	0.00000	0.47032				
984	0.004743	3.58824	0.00000	0.47032				
985	0.004743	3.70588	0.00000	0.47032				
986	0.004743	3.82353	0.00000	0.47032				
987	0.004743	3.94118	0.00000	0.47032				
988	0.004743	0.05882	0.00000	0.33594				
989	0.004743	0.17647	0.00000	0.33594				
990	0.004743	0.29412	0.00000	0.33594				
991	0.004743	0.41176	0.00000	0.33594				
992	0.004743	0.52941	0.00000	0.33594				
993	0.004743	0.64706	0.00000	0.33594				
994	0.004743	0.76471	0.00000	0.33594				
995	0.004743	0.88235	0.00000	0.33594				
996	0.004743	1.00000	0.00000	0.33594				
997	0.004743	1.11765	0.00000	0.33594				
998	0.004743	1.23529	0.00000	0.33594				
999	0.004743	1.35294	0.00000	0.33594				
1000	0.004743	1.47059	0.00000	0.33594				
1001	0.004743	1.58824	0.00000	0.33594				
1002	0.004743	1.70588	0.00000	0.33594				
1003	0.004743	1.82353	0.00000	0.33594				
1004	0.004743	1.94118	0.00000	0.33594				
1005	0.004743	2.05882	0.00000	0.33594				
1006	0.004743	2.17647	0.00000	0.33594				
1007	0.004743	2.29412	0.00000	0.33594				



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 100 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1008	0.004743	2.41176	0.00000	0.33594
1009	0.004743	2.52941	0.00000	0.33594
1010	0.004743	2.64706	0.00000	0.33594
1011	0.004743	2.76471	0.00000	0.33594
1012	0.004743	2.88235	0.00000	0.33594
1013	0.004743	3.00000	0.00000	0.33594
1014	0.004743	3.11765	0.00000	0.33594
1015	0.004743	3.23529	0.00000	0.33594
1016	0.004743	3.35294	0.00000	0.33594
1017	0.004743	3.47059	0.00000	0.33594
1018	0.004743	3.58824	0.00000	0.33594
1019	0.004743	3.70588	0.00000	0.33594
1020	0.004743	3.82353	0.00000	0.33594
1021	0.004743	3.94118	0.00000	0.33594
1022	0.004743	0.05882	0.00000	0.20156
1023	0.004743	0.17647	0.00000	0.20156
1024	0.004743	0.29412	0.00000	0.20156
1025	0.004743	0.41176	0.00000	0.20156
1026	0.004743	0.52941	0.00000	0.20156
1027	0.004743	0.64706	0.00000	0.20156
1028	0.004743	0.76471	0.00000	0.20156
1029	0.004743	0.88235	0.00000	0.20156
1030	0.004743	1.00000	0.00000	0.20156
1031	0.004743	1.11765	0.00000	0.20156
1032	0.004743	1.23529	0.00000	0.20156
1033	0.004743	1.35294	0.00000	0.20156
1034	0.004743	1.47059	0.00000	0.20156
1035	0.004743	1.58824	0.00000	0.20156
1036	0.004743	1.70588	0.00000	0.20156
1037	0.004743	1.82353	0.00000	0.20156
1038	0.004743	1.94118	0.00000	0.20156
1039	0.004743	2.05882	0.00000	0.20156
1040	0.004743	2.17647	0.00000	0.20156
1041	0.004743	2.29412	0.00000	0.20156
1042	0.004743	2.41176	0.00000	0.20156
1043	0.004743	2.52941	0.00000	0.20156
1044	0.004743	2.64706	0.00000	0.20156
1045	0.004743	2.76471	0.00000	0.20156
1046	0.004743	2.88235	0.00000	0.20156
1047	0.004743	3.00000	0.00000	0.20156
1048	0.004743	3.11765	0.00000	0.20156
1049	0.004743	3.23529	0.00000	0.20156
1050	0.004743	3.35294	0.00000	0.20156
1051	0.004743	3.47059	0.00000	0.20156
1052	0.004743	3.58824	0.00000	0.20156
1053	0.004743	3.70588	0.00000	0.20156
1054	0.004743	3.82353	0.00000	0.20156
1055	0.004743	3.94118	0.00000	0.20156
1056	0.004743	0.05882	0.00000	0.06719
1057	0.004743	0.17647	0.00000	0.06719
1058	0.004743	0.29412	0.00000	0.06719
1059	0.004743	0.41176	0.00000	0.06719
1060	0.004743	0.52941	0.00000	0.06719
1061	0.004743	0.64706	0.00000	0.06719
1062	0.004743	0.76471	0.00000	0.06719
1063	0.004743	0.88235	0.00000	0.06719
1064	0.004743	1.00000	0.00000	0.06719
1065	0.004743	1.11765	0.00000	0.06719
1066	0.004743	1.23529	0.00000	0.06719
1067	0.004743	1.35294	0.00000	0.06719
1068	0.004743	1.47059	0.00000	0.06719
1069	0.004743	1.58824	0.00000	0.06719
1070	0.004743	1.70588	0.00000	0.06719
1071	0.004743	1.82353	0.00000	0.06719
1072	0.004743	1.94118	0.00000	0.06719
1073	0.004743	2.05882	0.00000	0.06719
1074	0.004743	2.17647	0.00000	0.06719
1075	0.004743	2.29412	0.00000	0.06719
1076	0.004743	2.41176	0.00000	0.06719
1077	0.004743	2.52941	0.00000	0.06719
1078	0.004743	2.64706	0.00000	0.06719
1079	0.004743	2.76471	0.00000	0.06719
1080	0.004743	2.88235	0.00000	0.06719
1081	0.004743	3.00000	0.00000	0.06719
1082	0.004743	3.11765	0.00000	0.06719
1083	0.004743	3.23529	0.00000	0.06719
1084	0.004743	3.35294	0.00000	0.06719
1085	0.004743	3.47059	0.00000	0.06719

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 101 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1086	0.004743	3.58824	0.00000	0.06719
1087	0.004743	3.70588	0.00000	0.06719
1088	0.004743	3.82353	0.00000	0.06719
1089	0.004743	3.94118	0.00000	0.06719
1263	0.005999	4.06667	0.00000	2.22501
1264	0.005999	4.20000	0.00000	2.22501
1265	0.005999	4.33333	0.00000	2.22501
1266	0.005375	4.06667	0.00000	2.08283
1267	0.005375	4.20000	0.00000	2.08283
1268	0.005375	4.33333	0.00000	2.08283
1269	0.005375	4.06667	0.00000	1.94846
1270	0.005375	4.20000	0.00000	1.94846
1271	0.005375	4.33333	0.00000	1.94846
1272	0.005375	4.06667	0.00000	1.81408
1273	0.005375	4.20000	0.00000	1.81408
1274	0.005375	4.33333	0.00000	1.81408
1275	0.005375	4.06667	0.00000	1.67971
1276	0.005375	4.20000	0.00000	1.67971
1277	0.005375	4.33333	0.00000	1.67971
1278	0.005375	4.06667	0.00000	1.54533
1279	0.005375	4.20000	0.00000	1.54533
1280	0.005375	4.33333	0.00000	1.54533
1281	0.005375	4.06667	0.00000	1.41095
1282	0.005375	4.20000	0.00000	1.41095
1283	0.005375	4.33333	0.00000	1.41095
1284	0.005375	4.06667	0.00000	1.27658
1285	0.005375	4.20000	0.00000	1.27658
1286	0.005375	4.33333	0.00000	1.27658
1287	0.005375	4.06667	0.00000	1.14220
1288	0.005375	4.20000	0.00000	1.14220
1289	0.005375	4.33333	0.00000	1.14220
1290	0.005375	4.06667	0.00000	1.00782
1291	0.005375	4.20000	0.00000	1.00782
1292	0.005375	4.33333	0.00000	1.00782
1293	0.005375	4.06667	0.00000	0.87345
1294	0.005375	4.20000	0.00000	0.87345
1295	0.005375	4.33333	0.00000	0.87345
1296	0.005375	4.06667	0.00000	0.73907
1297	0.005375	4.20000	0.00000	0.73907
1298	0.005375	4.33333	0.00000	0.73907
1299	0.005375	4.06667	0.00000	0.60469
1300	0.005375	4.20000	0.00000	0.60469
1301	0.005375	4.33333	0.00000	0.60469
1302	0.005375	4.06667	0.00000	0.47032
1303	0.005375	4.20000	0.00000	0.47032
1304	0.005375	4.33333	0.00000	0.47032
1305	0.005375	4.06667	0.00000	0.33594
1306	0.005375	4.20000	0.00000	0.33594
1307	0.005375	4.33333	0.00000	0.33594
1308	0.005375	4.06667	0.00000	0.20156
1309	0.005375	4.20000	0.00000	0.20156
1310	0.005375	4.33333	0.00000	0.20156
1311	0.005375	4.06667	0.00000	0.06719
1312	0.005375	4.20000	0.00000	0.06719
1313	0.005375	4.33333	0.00000	0.06719

Table: Element Forces - Area Shells

Area	AreaElem	ShellType	OutputCase	M11 KN-m/m	M22 KN-m/m	V13 KN/m	V23 KN/m
512	1	Shell-Thick	INVSLE	17.4775	3.5307	20.97	4.850E-02
512	1	Shell-Thick	INVSLE	17.8084	3.5265	21.03	4.850E-02
512	1	Shell-Thick	INVSLE	15.3207	1.9574	21.03	-1.123E-02
512	1	Shell-Thick	INVSLE	15.0173	1.9486	20.97	-1.123E-02
512	1	Shell-Thick	INVSLE	6.0322	1.2480	7.77	4.130E-02
512	1	Shell-Thick	INVSLE	6.4146	1.2414	7.92	4.130E-02
512	1	Shell-Thick	INVSLE	5.4794	0.6623	7.92	-6.890E-02
512	1	Shell-Thick	INVSLE	5.1185	0.6588	7.77	-6.890E-02
512	1	Shell-Thick	INVSLE	30.7497	6.1778	36.27	6.547E-02
512	1	Shell-Thick	INVSLE	31.0209	6.1763	36.24	6.547E-02
512	1	Shell-Thick	INVSLE	26.7329	3.4592	36.24	5.565E-02
512	1	Shell-Thick	INVSLE	26.4962	3.4444	36.27	5.565E-02
512	1	Shell-Thick	INVSLE	8.1435	1.6848	10.49	3.295E-02
512	1	Shell-Thick	INVSLE	8.6597	1.6759	10.70	3.295E-02
512	1	Shell-Thick	INVSLE	7.3971	0.8941	10.70	-9.302E-02
512	1	Shell-Thick	INVSLE	6.9100	0.8893	10.49	-9.302E-02

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 102 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

513	2	Shell-Thick	INVSLE	15.2725	1.7995	19.77	-0.16	
513	2	Shell-Thick	INVSLE	13.4070	1.7748	19.73	-0.16	
513	2	Shell-Thick	INVSLE	11.0998	0.8125	19.73	-0.20	
513	2	Shell-Thick	INVSLE	12.9260	0.8558	19.77	-0.20	
513	2	Shell-Thick	INVSLE	5.6101	0.6741	7.59	-0.24	
513	2	Shell-Thick	INVSLE	4.9923	0.6479	7.64	-0.24	
513	2	Shell-Thick	INVSLE	4.0974	0.2699	7.64	-0.21	
513	2	Shell-Thick	INVSLE	4.7101	0.2985	7.59	-0.21	
513	2	Shell-Thick	INVSLE	26.4773	3.1045	33.90	-0.22	
513	2	Shell-Thick	INVSLE	23.1649	3.0817	33.75	-0.22	
513	2	Shell-Thick	INVSLE	19.2199	1.4418	33.75	-0.22	
513	2	Shell-Thick	INVSLE	22.4533	1.5021	33.90	-0.22	
513	2	Shell-Thick	INVSLE	7.5736	0.9100	10.25	-0.34	
513	2	Shell-Thick	INVSLE	6.7396	0.8746	10.32	-0.34	
513	2	Shell-Thick	INVSLE	5.5315	0.3643	10.32	-0.28	
513	2	Shell-Thick	INVSLE	6.3587	0.4030	10.25	-0.28	
514	3	Shell-Thick	INVSLE	11.6545	0.6841	18.42	-0.12	
514	3	Shell-Thick	INVSLE	10.8244	0.6750	18.46	-0.12	
514	3	Shell-Thick	INVSLE	8.6754	0.6068	18.46	-0.15	
514	3	Shell-Thick	INVSLE	9.4588	0.6382	18.42	-0.15	
514	3	Shell-Thick	INVSLE	4.4335	0.2746	7.25	-0.16	
514	3	Shell-Thick	INVSLE	4.1459	0.2481	7.31	-0.16	
514	3	Shell-Thick	INVSLE	3.2926	0.2037	7.31	-0.22	
514	3	Shell-Thick	INVSLE	3.5716	0.2343	7.25	-0.22	
514	3	Shell-Thick	INVSLE	20.0282	1.1588	31.37	-5.909E-02	
514	3	Shell-Thick	INVSLE	18.5689	1.1700	31.40	-5.909E-02	
514	3	Shell-Thick	INVSLE	14.9175	1.0744	31.40	-8.126E-02	
514	3	Shell-Thick	INVSLE	16.2857	1.1066	31.37	-8.126E-02	
514	3	Shell-Thick	INVSLE	5.9853	0.3708	9.78	-0.22	
514	3	Shell-Thick	INVSLE	5.5969	0.3349	9.87	-0.22	
514	3	Shell-Thick	INVSLE	4.4450	0.2749	9.87	-0.29	
514	3	Shell-Thick	INVSLE	4.8216	0.3164	9.78	-0.29	
515	4	Shell-Thick	INVSLE	8.8179	0.5099	17.14	-0.16	
515	4	Shell-Thick	INVSLE	8.1422	0.5004	17.15	-0.16	
515	4	Shell-Thick	INVSLE	6.1521	0.3205	17.15	-0.16	
515	4	Shell-Thick	INVSLE	6.7683	0.3583	17.14	-0.16	
515	4	Shell-Thick	INVSLE	3.4550	0.2137	6.87	-0.21	
515	4	Shell-Thick	INVSLE	3.2009	0.1826	6.91	-0.21	
515	4	Shell-Thick	INVSLE	2.3959	0.1056	6.91	-0.24	
515	4	Shell-Thick	INVSLE	2.6361	0.1433	6.87	-0.24	
515	4	Shell-Thick	INVSLE	15.0368	0.8534	29.05	-8.919E-02	
515	4	Shell-Thick	INVSLE	13.8723	0.8688	29.02	-8.919E-02	
515	4	Shell-Thick	INVSLE	10.5079	0.5696	29.02	-6.043E-02	
515	4	Shell-Thick	INVSLE	11.5602	0.6075	29.05	-6.043E-02	
515	4	Shell-Thick	INVSLE	4.6643	0.2885	9.28	-0.29	
515	4	Shell-Thick	INVSLE	4.3212	0.2466	9.33	-0.29	
515	4	Shell-Thick	INVSLE	3.2345	0.1426	9.33	-0.33	
515	4	Shell-Thick	INVSLE	3.5587	0.1935	9.28	-0.33	
516	5	Shell-Thick	INVSLE	6.2683	0.2637	15.86	-0.16	
516	5	Shell-Thick	INVSLE	5.8604	0.2567	15.84	-0.16	
516	5	Shell-Thick	INVSLE	4.0254	0.2087	15.84	-0.14	
516	5	Shell-Thick	INVSLE	4.3696	0.2460	15.86	-0.14	
516	5	Shell-Thick	INVSLE	2.5348	0.1278	6.45	-0.24	
516	5	Shell-Thick	INVSLE	2.3640	0.0945	6.47	-0.24	
516	5	Shell-Thick	INVSLE	1.6107	0.0668	6.47	-0.26	
516	5	Shell-Thick	INVSLE	1.7653	0.1078	6.45	-0.26	
516	5	Shell-Thick	INVSLE	10.5978	0.4212	26.76	-5.776E-02	
516	5	Shell-Thick	INVSLE	9.9149	0.4448	26.69	-5.776E-02	
516	5	Shell-Thick	INVSLE	6.8256	0.3734	26.69	-3.881E-03	
516	5	Shell-Thick	INVSLE	7.3896	0.4062	26.76	-3.881E-03	
516	5	Shell-Thick	INVSLE	3.4219	0.1725	8.71	-0.32	
516	5	Shell-Thick	INVSLE	3.1913	0.1275	8.74	-0.32	
516	5	Shell-Thick	INVSLE	2.1744	0.0901	8.74	-0.35	
516	5	Shell-Thick	INVSLE	2.3831	0.1456	8.71	-0.35	
517	6	Shell-Thick	INVSLE	4.0740	0.1771	14.58	-0.15	
517	6	Shell-Thick	INVSLE	3.7935	0.1721	14.55	-0.15	
517	6	Shell-Thick	INVSLE	2.1116	0.0686	14.55	-0.13	
517	6	Shell-Thick	INVSLE	2.3242	0.1058	14.58	-0.13	
517	6	Shell-Thick	INVSLE	1.7168	0.0973	6.00	-0.26	
517	6	Shell-Thick	INVSLE	1.5848	0.0624	6.01	-0.26	
517	6	Shell-Thick	INVSLE	0.8861	0.0167	6.01	-0.27	
517	6	Shell-Thick	INVSLE	0.9996	0.0604	6.00	-0.27	
517	6	Shell-Thick	INVSLE	6.8075	0.2696	24.53	-3.199E-02	
517	6	Shell-Thick	INVSLE	6.3547	0.2993	24.44	-3.199E-02	
517	6	Shell-Thick	INVSLE	3.5327	0.1287	24.44	3.209E-02	
517	6	Shell-Thick	INVSLE	3.8603	0.1584	24.53	3.209E-02	
517	6	Shell-Thick	INVSLE	2.3176	0.1314	8.11	-0.35	
517	6	Shell-Thick	INVSLE	2.1395	0.0842	8.12	-0.35	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 103 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

517	6	Shell-Thick	INVS LU	1.1962	0.0226	8.12	-0.36	
517	6	Shell-Thick	INVS LU	1.3495	0.0816	8.11	-0.36	
518	7	Shell-Thick	INVS LE	2.1384	0.0587	13.32	-0.14	
518	7	Shell-Thick	INVS LE	2.0000	0.0562	13.28	-0.14	
518	7	Shell-Thick	INVS LE	0.4675	-0.0093	13.28	-0.11	
518	7	Shell-Thick	INVS LE	0.5373	0.0323	13.32	-0.11	
518	7	Shell-Thick	INVS LE	0.9784	0.0551	5.54	-0.27	
518	7	Shell-Thick	INVS LE	0.8938	0.0193	5.54	-0.27	
518	7	Shell-Thick	INVS LE	0.2508	-0.0127	5.54	-0.27	
518	7	Shell-Thick	INVS LE	0.3160	0.0257	5.54	-0.27	
518	7	Shell-Thick	INVS LU	3.4836	0.0797	22.35	3.787E-03	
518	7	Shell-Thick	INVS LU	3.2829	0.0989	22.25	3.787E-03	
518	7	Shell-Thick	INVS LU	0.7187	-0.0054	22.25	8.017E-02	
518	7	Shell-Thick	INVS LU	0.7939	0.0436	22.35	8.017E-02	
518	7	Shell-Thick	INVS LU	1.3208	0.0628	7.48	-0.36	
518	7	Shell-Thick	INVS LU	1.2066	0.0261	7.48	-0.36	
518	7	Shell-Thick	INVS LU	0.3386	-0.0171	7.48	-0.36	
518	7	Shell-Thick	INVS LU	0.4267	0.0181	7.48	-0.36	
519	8	Shell-Thick	INVS LE	0.4578	0.0312	12.09	-0.13	
519	8	Shell-Thick	INVS LE	0.4170	-0.0048	12.04	-0.13	
519	8	Shell-Thick	INVS LE	-0.3118	-0.0462	12.04	-8.979E-02	
519	8	Shell-Thick	INVS LE	-0.2813	-5.792E-04	12.09	-8.979E-02	
519	8	Shell-Thick	INVS LE	0.3253	-0.0048	5.07	-0.27	
519	8	Shell-Thick	INVS LE	0.2747	-0.0049	5.06	-0.27	
519	8	Shell-Thick	INVS LE	-0.9699	-0.0976	5.06	-0.27	
519	8	Shell-Thick	INVS LE	-0.9975	-0.0650	5.07	-0.27	
519	8	Shell-Thick	INVS LU	0.6380	0.0421	20.23	4.278E-02	
519	8	Shell-Thick	INVS LU	0.5842	-0.0047	20.13	4.278E-02	
519	8	Shell-Thick	INVS LU	-0.4210	-0.0623	20.13	0.12	
519	8	Shell-Thick	INVS LU	-0.3797	-7.819E-04	20.23	0.12	
519	8	Shell-Thick	INVS LU	0.4391	-0.0465	6.84	-0.37	
519	8	Shell-Thick	INVS LU	0.3708	-0.0067	6.83	-0.37	
519	8	Shell-Thick	INVS LU	-1.7331	-0.1571	6.83	-0.37	
519	8	Shell-Thick	INVS LU	-1.8281	-0.1398	6.84	-0.37	
520	9	Shell-Thick	INVS LE	-0.2528	0.0019	10.88	-0.11	
520	9	Shell-Thick	INVS LE	-0.2677	-0.0342	10.83	-0.11	
520	9	Shell-Thick	INVS LE	-0.7979	-0.0694	10.83	-6.856E-02	
520	9	Shell-Thick	INVS LE	-0.8028	-0.0239	10.88	-6.856E-02	
520	9	Shell-Thick	INVS LE	-1.0098	-0.0820	4.59	-0.28	
520	9	Shell-Thick	INVS LE	-0.9526	-0.0796	4.58	-0.28	
520	9	Shell-Thick	INVS LE	-2.1981	-0.1552	4.58	-0.27	
520	9	Shell-Thick	INVS LE	-2.3216	-0.1261	4.59	-0.27	
520	9	Shell-Thick	INVS LU	-0.3413	0.0026	18.18	8.328E-02	
520	9	Shell-Thick	INVS LU	-0.3614	-0.0461	18.07	8.328E-02	
520	9	Shell-Thick	INVS LU	-1.0771	-0.0937	18.07	0.16	
520	9	Shell-Thick	INVS LU	-1.0838	-0.0323	18.18	0.16	
520	9	Shell-Thick	INVS LU	-1.8876	-0.1793	6.20	-0.37	
520	9	Shell-Thick	INVS LU	-1.7468	-0.1323	6.18	-0.37	
520	9	Shell-Thick	INVS LU	-3.8219	-0.2546	6.18	-0.36	
520	9	Shell-Thick	INVS LU	-4.0828	-0.2446	6.20	-0.36	
521	10	Shell-Thick	INVS LE	-0.7575	-0.0187	9.70	-8.935E-02	
521	10	Shell-Thick	INVS LE	-0.7431	-0.0546	9.65	-8.935E-02	
521	10	Shell-Thick	INVS LE	-1.2175	-0.0937	9.65	-4.964E-02	
521	10	Shell-Thick	INVS LE	-1.2512	-0.0486	9.70	-4.964E-02	
521	10	Shell-Thick	INVS LE	-2.2771	-0.1330	4.11	-0.27	
521	10	Shell-Thick	INVS LE	-2.1431	-0.1284	4.10	-0.27	
521	10	Shell-Thick	INVS LE	-3.2515	-0.2156	4.10	-0.27	
521	10	Shell-Thick	INVS LE	-3.4488	-0.1901	4.11	-0.27	
521	10	Shell-Thick	INVS LU	-1.0226	-0.0253	16.18	0.12	
521	10	Shell-Thick	INVS LU	-1.0032	-0.0737	16.09	0.12	
521	10	Shell-Thick	INVS LU	-1.6436	-0.1265	16.09	0.20	
521	10	Shell-Thick	INVS LU	-1.6891	-0.0656	16.18	0.20	
521	10	Shell-Thick	INVS LU	-4.0393	-0.2655	5.55	-0.37	
521	10	Shell-Thick	INVS LU	-3.7665	-0.2140	5.54	-0.37	
521	10	Shell-Thick	INVS LU	-5.6102	-0.3570	5.54	-0.36	
521	10	Shell-Thick	INVS LU	-5.9972	-0.3543	5.55	-0.36	
522	11	Shell-Thick	INVS LE	-1.1962	-0.0414	8.56	-6.935E-02	
522	11	Shell-Thick	INVS LE	-1.1532	-0.0770	8.51	-6.935E-02	
522	11	Shell-Thick	INVS LE	-1.5726	-0.1115	8.51	-3.022E-02	
522	11	Shell-Thick	INVS LE	-1.6339	-0.0672	8.56	-3.022E-02	
522	11	Shell-Thick	INVS LE	-3.3701	-0.1894	3.64	-0.27	
522	11	Shell-Thick	INVS LE	-3.1627	-0.1828	3.63	-0.27	
522	11	Shell-Thick	INVS LE	-4.1382	-0.2577	3.63	-0.26	
522	11	Shell-Thick	INVS LE	-4.4045	-0.2363	3.64	-0.26	
522	11	Shell-Thick	INVS LU	-1.6149	-0.0559	14.25	0.16	
522	11	Shell-Thick	INVS LU	-1.5569	-0.1039	14.16	0.16	
522	11	Shell-Thick	INVS LU	-2.1230	-0.1506	14.16	0.24	
522	11	Shell-Thick	INVS LU	-2.2057	-0.0908	14.25	0.24	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 104 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

522	11 Shell-Thick	INVSLU	-5.8909	-0.3609	4.92	-0.37		
522	11 Shell-Thick	INVSLU	-5.4929	-0.3056	4.90	-0.37		
522	11 Shell-Thick	INVSLU	-7.1135	-0.4273	4.90	-0.35		
522	11 Shell-Thick	INVSLU	-7.6175	-0.4323	4.92	-0.35		
523	12 Shell-Thick	INVSLE	-1.5726	-0.0589	7.44	-4.940E-02		
523	12 Shell-Thick	INVSLE	-1.5055	-0.0942	7.39	-4.940E-02		
523	12 Shell-Thick	INVSLE	-1.8708	-0.1288	7.39	-1.339E-02		
523	12 Shell-Thick	INVSLE	-1.9549	-0.0855	7.44	-1.339E-02		
523	12 Shell-Thick	INVSLE	-4.3016	-0.2304	3.18	-0.27		
523	12 Shell-Thick	INVSLE	-4.0343	-0.2223	3.17	-0.27		
523	12 Shell-Thick	INVSLE	-4.8810	-0.2991	3.17	-0.26		
523	12 Shell-Thick	INVSLE	-5.2021	-0.2816	3.18	-0.26		
523	12 Shell-Thick	INVSLU	-2.1230	-0.0795	12.38	0.20		
523	12 Shell-Thick	INVSLU	-2.0325	-0.1272	12.29	0.20		
523	12 Shell-Thick	INVSLU	-2.5256	-0.1739	12.29	0.27		
523	12 Shell-Thick	INVSLU	-2.6391	-0.1154	12.38	0.27		
523	12 Shell-Thick	INVSLU	-7.4662	-0.4292	4.29	-0.36		
523	12 Shell-Thick	INVSLU	-6.9668	-0.3709	4.27	-0.36		
523	12 Shell-Thick	INVSLU	-8.3718	-0.4965	4.27	-0.35		
523	12 Shell-Thick	INVSLU	-8.9677	-0.5090	4.29	-0.35		
524	13 Shell-Thick	INVSLE	-1.8927	-0.0767	6.35	-3.071E-02		
524	13 Shell-Thick	INVSLE	-1.8033	-0.1117	6.31	-3.071E-02		
524	13 Shell-Thick	INVSLE	-2.1154	-0.1415	6.31	2.294E-03		
524	13 Shell-Thick	INVSLE	-2.2201	-0.0993	6.35	2.294E-03		
524	13 Shell-Thick	INVSLE	-5.0898	-0.2724	2.72	-0.26		
524	13 Shell-Thick	INVSLE	-4.7677	-0.2632	2.71	-0.26		
524	13 Shell-Thick	INVSLE	-5.4893	-0.3281	2.71	-0.25		
524	13 Shell-Thick	INVSLE	-5.8592	-0.3146	2.72	-0.25		
524	13 Shell-Thick	INVSLU	-2.5551	-0.1035	10.56	0.24		
524	13 Shell-Thick	INVSLU	-2.4344	-0.1507	10.48	0.24		
524	13 Shell-Thick	INVSLU	-2.8558	-0.1910	10.48	0.30		
524	13 Shell-Thick	INVSLU	-2.9972	-0.1340	10.56	0.30		
524	13 Shell-Thick	INVSLU	-8.7973	-0.4993	3.67	-0.35		
524	13 Shell-Thick	INVSLU	-8.2053	-0.4389	3.66	-0.35		
524	13 Shell-Thick	INVSLU	-9.4016	-0.5445	3.66	-0.34		
524	13 Shell-Thick	INVSLU	-10.0791	-0.5644	3.67	-0.34		
525	14 Shell-Thick	INVSLE	-2.1601	-0.0907	5.28	-1.335E-02		
525	14 Shell-Thick	INVSLE	-2.0521	-0.1255	5.25	-1.335E-02		
525	14 Shell-Thick	INVSLE	-2.3122	-0.1528	5.25	1.510E-02		
525	14 Shell-Thick	INVSLE	-2.4334	-0.1117	5.28	1.510E-02		
525	14 Shell-Thick	INVSLE	-5.7456	-0.3039	2.27	-0.26		
525	14 Shell-Thick	INVSLE	-5.3789	-0.2940	2.26	-0.26		
525	14 Shell-Thick	INVSLE	-5.9786	-0.3545	2.26	-0.25		
525	14 Shell-Thick	INVSLE	-6.3865	-0.3448	2.27	-0.25		
525	14 Shell-Thick	INVSLU	-2.9161	-0.1224	8.78	0.27		
525	14 Shell-Thick	INVSLU	-2.7704	-0.1694	8.71	0.27		
525	14 Shell-Thick	INVSLU	-3.1215	-0.2063	8.71	0.32		
525	14 Shell-Thick	INVSLU	-3.2851	-0.1508	8.78	0.32		
525	14 Shell-Thick	INVSLU	-9.9034	-0.5512	3.06	-0.35		
525	14 Shell-Thick	INVSLU	-9.2366	-0.4895	3.05	-0.35		
525	14 Shell-Thick	INVSLU	-10.2303	-0.5883	3.05	-0.34		
525	14 Shell-Thick	INVSLU	-10.9706	-0.6151	3.06	-0.34		
526	15 Shell-Thick	INVSLE	-2.3793	-0.1038	4.24	1.918E-03		
526	15 Shell-Thick	INVSLE	-2.2552	-0.1385	4.21	1.918E-03		
526	15 Shell-Thick	INVSLE	-2.4642	-0.1606	4.21	2.582E-02		
526	15 Shell-Thick	INVSLE	-2.5993	-0.1206	4.24	2.582E-02		
526	15 Shell-Thick	INVSLE	-6.2816	-0.3339	1.82	-0.25		
526	15 Shell-Thick	INVSLE	-5.8760	-0.3238	1.82	-0.25		
526	15 Shell-Thick	INVSLE	-6.3569	-0.3719	1.82	-0.25		
526	15 Shell-Thick	INVSLE	-6.7964	-0.3659	1.82	-0.25		
526	15 Shell-Thick	INVSLU	-3.2121	-0.1401	7.04	0.30		
526	15 Shell-Thick	INVSLU	-3.0446	-0.1870	6.99	0.30		
526	15 Shell-Thick	INVSLU	-3.3266	-0.2168	6.99	0.34		
526	15 Shell-Thick	INVSLU	-3.5090	-0.1629	7.04	0.34		
526	15 Shell-Thick	INVSLU	-10.8067	-0.6008	2.46	-0.34		
526	15 Shell-Thick	INVSLU	-10.0747	-0.5387	2.45	-0.34		
526	15 Shell-Thick	INVSLU	-10.8710	-0.6168	2.45	-0.33		
526	15 Shell-Thick	INVSLU	-11.6635	-0.6503	2.46	-0.33		
527	16 Shell-Thick	INVSLE	-2.5534	-0.1139	3.22	1.502E-02		
527	16 Shell-Thick	INVSLE	-2.4167	-0.1487	3.19	1.502E-02		
527	16 Shell-Thick	INVSLE	-2.5752	-0.1666	3.19	3.348E-02		
527	16 Shell-Thick	INVSLE	-2.7205	-0.1277	3.22	3.348E-02		
527	16 Shell-Thick	INVSLE	-6.7057	-0.3561	1.39	-0.25		
527	16 Shell-Thick	INVSLE	-6.2700	-0.3462	1.38	-0.25		
527	16 Shell-Thick	INVSLE	-6.6345	-0.3856	1.38	-0.24		
527	16 Shell-Thick	INVSLE	-7.0964	-0.3830	1.39	-0.24		
527	16 Shell-Thick	INVSLU	-3.4471	-0.1537	5.34	0.32		
527	16 Shell-Thick	INVSLU	-3.2625	-0.2007	5.30	0.32		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 105 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

527	16 Shell-Thick	INVSLU	-3.4765	-0.2249	5.30		0.35	
527	16 Shell-Thick	INVSLU	-3.6727	-0.1724	5.34		0.35	
527	16 Shell-Thick	INVSLU	-11.5207	-0.6369	1.87		-0.34	
527	16 Shell-Thick	INVSLU	-10.7385	-0.5752	1.86		-0.34	
527	16 Shell-Thick	INVSLU	-11.3417	-0.6395	1.86		-0.33	
527	16 Shell-Thick	INVSLU	-12.1708	-0.6790	1.87		-0.33	
528	17 Shell-Thick	INVSLE	-2.6853	-0.1224	2.21	2.556E-02		
528	17 Shell-Thick	INVSLE	-2.5387	-0.1575	2.19	2.556E-02		
528	17 Shell-Thick	INVSLE	-2.6475	-0.1697	2.19	3.856E-02		
528	17 Shell-Thick	INVSLE	-2.8001	-0.1318	2.21	3.856E-02		
528	17 Shell-Thick	INVSLE	-7.0261	-0.3750	0.95		-0.25	
528	17 Shell-Thick	INVSLE	-6.5665	-0.3659	0.95		-0.25	
528	17 Shell-Thick	INVSLE	-6.8163	-0.3924	0.95		-0.24	
528	17 Shell-Thick	INVSLE	-7.2942	-0.3929	0.95		-0.24	
528	17 Shell-Thick	INVSLU	-3.6252	-0.1653	3.66		0.34	
528	17 Shell-Thick	INVSLU	-3.4272	-0.2126	3.63		0.34	
528	17 Shell-Thick	INVSLU	-3.5741	-0.2291	3.63		0.36	
528	17 Shell-Thick	INVSLU	-3.7801	-0.1779	3.66		0.36	
528	17 Shell-Thick	INVSLU	-12.0598	-0.6679	1.28		-0.33	
528	17 Shell-Thick	INVSLU	-11.2372	-0.6075	1.28		-0.33	
528	17 Shell-Thick	INVSLU	-11.6507	-0.6507	1.28		-0.33	
528	17 Shell-Thick	INVSLU	-12.5057	-0.6957	1.28		-0.33	
529	18 Shell-Thick	INVSLE	-2.7769	-0.1283	1.21	3.342E-02		
529	18 Shell-Thick	INVSLE	-2.6237	-0.1638	1.20	3.342E-02		
529	18 Shell-Thick	INVSLE	-2.6832	-0.1707	1.20	4.055E-02		
529	18 Shell-Thick	INVSLE	-2.8397	-0.1337	1.21	4.055E-02		
529	18 Shell-Thick	INVSLE	-7.2474	-0.3875	0.52		-0.24	
529	18 Shell-Thick	INVSLE	-6.7720	-0.3796	0.52		-0.24	
529	18 Shell-Thick	INVSLE	-6.9085	-0.3949	0.52		-0.24	
529	18 Shell-Thick	INVSLE	-7.3940	-0.3981	0.52		-0.24	
529	18 Shell-Thick	INVSLU	-3.7488	-0.1733	2.00		0.35	
529	18 Shell-Thick	INVSLU	-3.5421	-0.2211	1.98		0.35	
529	18 Shell-Thick	INVSLU	-3.6223	-0.2305	1.98		0.37	
529	18 Shell-Thick	INVSLU	-3.8336	-0.1805	2.00		0.37	
529	18 Shell-Thick	INVSLU	-12.4315	-0.6881	0.70		-0.33	
529	18 Shell-Thick	INVSLU	-11.5823	-0.6299	0.70		-0.33	
529	18 Shell-Thick	INVSLU	-11.8082	-0.6549	0.70		-0.32	
529	18 Shell-Thick	INVSLU	-12.6752	-0.7046	0.70		-0.32	
530	19 Shell-Thick	INVSLE	-2.8297	-0.1322	0.21	3.849E-02		
530	19 Shell-Thick	INVSLE	-2.6728	-0.1682	0.21	3.849E-02		
530	19 Shell-Thick	INVSLE	-2.6832	-0.1694	0.21	3.972E-02		
530	19 Shell-Thick	INVSLE	-2.8407	-0.1332	0.21	3.972E-02		
530	19 Shell-Thick	INVSLE	-7.3738	-0.3956	9.112E-02		-0.24	
530	19 Shell-Thick	INVSLE	-6.8886	-0.3894	9.061E-02		-0.24	
530	19 Shell-Thick	INVSLE	-6.9126	-0.3921	9.061E-02		-0.24	
530	19 Shell-Thick	INVSLE	-7.3993	-0.3976	9.112E-02		-0.24	
530	19 Shell-Thick	INVSLU	-3.8201	-0.1785	0.35		0.36	
530	19 Shell-Thick	INVSLU	-3.6083	-0.2270	0.35		0.36	
530	19 Shell-Thick	INVSLU	-3.6224	-0.2287	0.35		0.36	
530	19 Shell-Thick	INVSLU	-3.8349	-0.1798	0.35		0.36	
530	19 Shell-Thick	INVSLU	-12.6432	-0.7011	0.12		-0.33	
530	19 Shell-Thick	INVSLU	-11.7774	-0.6458	0.12		-0.33	
530	19 Shell-Thick	INVSLU	-11.8170	-0.6504	0.12		-0.32	
530	19 Shell-Thick	INVSLU	-12.6857	-0.7042	0.12		-0.32	
531	20 Shell-Thick	INVSLE	-2.8441	-0.1337	-0.34	4.059E-02		
531	20 Shell-Thick	INVSLE	-2.6869	-0.1704	-0.34	4.059E-02		
531	20 Shell-Thick	INVSLE	-2.6483	-0.1659	-0.34	3.591E-02		
531	20 Shell-Thick	INVSLE	-2.8033	-0.1302	-0.34	3.591E-02		
531	20 Shell-Thick	INVSLE	-7.4060	-0.3983	-0.78		-0.24	
531	20 Shell-Thick	INVSLE	-6.9193	-0.3941	-0.78		-0.24	
531	20 Shell-Thick	INVSLE	-6.8307	-0.3842	-0.78		-0.24	
531	20 Shell-Thick	INVSLE	-7.3107	-0.3916	-0.78		-0.24	
531	20 Shell-Thick	INVSLU	-3.8395	-0.1805	-0.46		0.37	
531	20 Shell-Thick	INVSLU	-3.6273	-0.2300	-0.45		0.37	
531	20 Shell-Thick	INVSLU	-3.5752	-0.2239	-0.45		0.36	
531	20 Shell-Thick	INVSLU	-3.7844	-0.1758	-0.46		0.36	
531	20 Shell-Thick	INVSLU	-12.6961	-0.7051	-1.30		-0.32	
531	20 Shell-Thick	INVSLU	-11.8272	-0.6536	-1.29		-0.32	
531	20 Shell-Thick	INVSLU	-11.6808	-0.6374	-1.29		-0.33	
531	20 Shell-Thick	INVSLU	-12.5376	-0.6946	-1.30		-0.33	
532	21 Shell-Thick	INVSLE	-2.8201	-0.1327	-0.77	3.989E-02		
532	21 Shell-Thick	INVSLE	-2.6655	-0.1702	-0.76	3.989E-02		
532	21 Shell-Thick	INVSLE	-2.5777	-0.1604	-0.76	2.927E-02		
532	21 Shell-Thick	INVSLE	-2.7274	-0.1253	-0.77	2.927E-02		
532	21 Shell-Thick	INVSLE	-7.3444	-0.3952	-1.78		-0.24	
532	21 Shell-Thick	INVSLE	-6.8624	-0.3936	-1.77		-0.24	
532	21 Shell-Thick	INVSLE	-6.6610	-0.3724	-1.77		-0.24	
532	21 Shell-Thick	INVSLE	-7.1280	-0.3812	-1.78		-0.24	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 106 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

532	21 Shell-Thick	INVSLU	-3.8071	-0.1791	-1.04	0.37		
532	21 Shell-Thick	INVSLU	-3.5984	-0.2298	-1.03	0.37		
532	21 Shell-Thick	INVSLU	-3.4799	-0.2166	-1.03	0.35		
532	21 Shell-Thick	INVSLU	-3.6820	-0.1691	-1.04	0.35		
532	21 Shell-Thick	INVSLU	-12.5910	-0.6997	-2.95	-0.32		
532	21 Shell-Thick	INVSLU	-11.7292	-0.6527	-2.93	-0.32		
532	21 Shell-Thick	INVSLU	-11.3959	-0.6182	-2.93	-0.33		
532	21 Shell-Thick	INVSLU	-12.2309	-0.6779	-2.95	-0.33		
533	22 Shell-Thick	INVSLE	-2.7567	-0.1296	-1.20	3.607E-02		
533	22 Shell-Thick	INVSLE	-2.6081	-0.1681	-1.19	3.607E-02		
533	22 Shell-Thick	INVSLE	-2.4709	-0.1525	-1.19	1.989E-02		
533	22 Shell-Thick	INVSLE	-2.6118	-0.1176	-1.20	1.989E-02		
533	22 Shell-Thick	INVSLE	-7.1862	-0.3876	-2.79	-0.24		
533	22 Shell-Thick	INVSLE	-6.7172	-0.3889	-2.77	-0.24		
533	22 Shell-Thick	INVSLE	-6.4018	-0.3545	-2.77	-0.25		
533	22 Shell-Thick	INVSLE	-6.8476	-0.3642	-2.79	-0.25		
533	22 Shell-Thick	INVSLU	-3.7215	-0.1749	-1.62	0.36		
533	22 Shell-Thick	INVSLU	-3.5210	-0.2269	-1.61	0.36		
533	22 Shell-Thick	INVSLU	-3.3357	-0.2058	-1.61	0.33		
533	22 Shell-Thick	INVSLU	-3.5259	-0.1587	-1.62	0.33		
533	22 Shell-Thick	INVSLU	-12.3229	-0.6868	-4.62	-0.33		
533	22 Shell-Thick	INVSLU	-11.4822	-0.6450	-4.59	-0.33		
533	22 Shell-Thick	INVSLU	-10.9602	-0.5888	-4.59	-0.33		
533	22 Shell-Thick	INVSLU	-11.7596	-0.6502	-4.62	-0.33		
534	23 Shell-Thick	INVSLE	-2.6524	-0.1235	-1.64	2.964E-02		
534	23 Shell-Thick	INVSLE	-2.5128	-0.1630	-1.63	2.964E-02		
534	23 Shell-Thick	INVSLE	-2.3254	-0.1431	-1.63	7.865E-03		
534	23 Shell-Thick	INVSLE	-2.4550	-0.1084	-1.64	7.865E-03		
534	23 Shell-Thick	INVSLE	-6.9281	-0.3728	-3.80	-0.24		
534	23 Shell-Thick	INVSLE	-6.4783	-0.3773	-3.78	-0.24		
534	23 Shell-Thick	INVSLE	-6.0473	-0.3341	-3.78	-0.25		
534	23 Shell-Thick	INVSLE	-6.4661	-0.3443	-3.80	-0.25		
534	23 Shell-Thick	INVSLU	-3.5808	-0.1667	-2.21	0.35		
534	23 Shell-Thick	INVSLU	-3.3922	-0.2201	-2.20	0.35		
534	23 Shell-Thick	INVSLU	-3.1393	-0.1932	-2.20	0.31		
534	23 Shell-Thick	INVSLU	-3.3142	-0.1463	-2.21	0.31		
534	23 Shell-Thick	INVSLU	-11.8862	-0.6619	-6.32	-0.33		
534	23 Shell-Thick	INVSLU	-11.0769	-0.6258	-6.27	-0.33		
534	23 Shell-Thick	INVSLU	-10.3633	-0.5555	-6.27	-0.34		
534	23 Shell-Thick	INVSLU	-11.1174	-0.6178	-6.32	-0.34		
535	24 Shell-Thick	INVSLE	-2.5047	-0.1156	-2.08	2.008E-02		
535	24 Shell-Thick	INVSLE	-2.3777	-0.1563	-2.07	2.008E-02		
535	24 Shell-Thick	INVSLE	-2.1395	-0.1308	-2.07	-6.431E-03		
535	24 Shell-Thick	INVSLE	-2.2541	-0.0961	-2.08	-6.431E-03		
535	24 Shell-Thick	INVSLE	-6.5629	-0.3542	-4.84	-0.25		
535	24 Shell-Thick	INVSLE	-6.1417	-0.3623	-4.80	-0.25		
535	24 Shell-Thick	INVSLE	-5.5929	-0.3061	-4.80	-0.26		
535	24 Shell-Thick	INVSLE	-5.9757	-0.3162	-4.84	-0.26		
535	24 Shell-Thick	INVSLU	-3.3814	-0.1561	-2.81	0.33		
535	24 Shell-Thick	INVSLU	-3.2099	-0.2110	-2.79	0.33		
535	24 Shell-Thick	INVSLU	-2.8884	-0.1766	-2.79	0.28		
535	24 Shell-Thick	INVSLU	-3.0431	-0.1297	-2.81	0.28		
535	24 Shell-Thick	INVSLU	-11.2688	-0.6309	-8.04	-0.33		
535	24 Shell-Thick	INVSLU	-10.5065	-0.6013	-7.98	-0.33		
535	24 Shell-Thick	INVSLU	-9.5975	-0.5093	-7.98	-0.34		
535	24 Shell-Thick	INVSLU	-10.2913	-0.5715	-8.04	-0.34		
536	25 Shell-Thick	INVSLE	-2.3110	-0.1042	-2.53	8.370E-03		
536	25 Shell-Thick	INVSLE	-2.1991	-0.1460	-2.52	8.370E-03		
536	25 Shell-Thick	INVSLE	-1.9093	-0.1178	-2.52	-2.297E-02		
536	25 Shell-Thick	INVSLE	-2.0066	-0.0830	-2.53	-2.297E-02		
536	25 Shell-Thick	INVSLE	-6.0840	-0.3265	-5.89	-0.25		
536	25 Shell-Thick	INVSLE	-5.6974	-0.3384	-5.85	-0.25		
536	25 Shell-Thick	INVSLE	-5.0282	-0.2773	-5.85	-0.26		
536	25 Shell-Thick	INVSLE	-5.3695	-0.2870	-5.89	-0.26		
536	25 Shell-Thick	INVSLU	-3.1198	-0.1407	-3.41	0.31		
536	25 Shell-Thick	INVSLU	-2.9688	-0.1971	-3.40	0.31		
536	25 Shell-Thick	INVSLU	-2.5775	-0.1591	-3.40	0.25		
536	25 Shell-Thick	INVSLU	-2.7089	-0.1120	-3.41	0.25		
536	25 Shell-Thick	INVSLU	-10.4594	-0.5843	-9.80	-0.34		
536	25 Shell-Thick	INVSLU	-9.7541	-0.5615	-9.72	-0.34		
536	25 Shell-Thick	INVSLU	-8.6449	-0.4622	-9.72	-0.35		
536	25 Shell-Thick	INVSLU	-9.2693	-0.5235	-9.80	-0.35		
537	26 Shell-Thick	INVSLE	-2.0669	-0.0915	-2.98	-6.365E-03		
537	26 Shell-Thick	INVSLE	-1.9744	-0.1344	-2.97	-6.365E-03		
537	26 Shell-Thick	INVSLE	-1.6319	-0.1011	-2.97	-4.103E-02		
537	26 Shell-Thick	INVSLE	-1.7080	-0.0660	-2.98	-4.103E-02		
537	26 Shell-Thick	INVSLE	-5.4799	-0.2963	-6.97	-0.26		
537	26 Shell-Thick	INVSLE	-5.1387	-0.3121	-6.93	-0.26		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 107 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

537	26 Shell-Thick	INVSLE	-4.3459	-0.2383	-6.93	-0.26		
537	26 Shell-Thick	INVSLE	-4.6355	-0.2470	-6.97	-0.26		
537	26 Shell-Thick	INVSLE	-2.7903	-0.1235	-4.03	0.28		
537	26 Shell-Thick	INVSLE	-2.6654	-0.1814	-4.01	0.28		
537	26 Shell-Thick	INVSLE	-2.2030	-0.1365	-4.01	0.22		
537	26 Shell-Thick	INVSLE	-2.3058	-0.0891	-4.03	0.22		
537	26 Shell-Thick	INVSLE	-9.4378	-0.5338	-11.60	-0.34		
537	26 Shell-Thick	INVSLE	-8.8082	-0.5182	-11.51	-0.34		
537	26 Shell-Thick	INVSLE	-7.4931	-0.3974	-11.51	-0.36		
537	26 Shell-Thick	INVSLE	-8.0302	-0.4569	-11.60	-0.36		
538	27 Shell-Thick	INVSLE	-1.7689	-0.0743	-3.44	-2.236E-02		
538	27 Shell-Thick	INVSLE	-1.6978	-0.1182	-3.43	-2.236E-02		
538	27 Shell-Thick	INVSLE	-1.3017	-0.0848	-3.43	-6.058E-02		
538	27 Shell-Thick	INVSLE	-1.3549	-0.0494	-3.44	-6.058E-02		
538	27 Shell-Thick	INVSLE	-4.7407	-0.2538	-8.08	-0.26		
538	27 Shell-Thick	INVSLE	-4.4505	-0.2735	-8.03	-0.26		
538	27 Shell-Thick	INVSLE	-3.5304	-0.2013	-8.03	-0.27		
538	27 Shell-Thick	INVSLE	-3.7637	-0.2086	-8.08	-0.27		
538	27 Shell-Thick	INVSLE	-2.3880	-0.1003	-4.65	0.25		
538	27 Shell-Thick	INVSLE	-2.2921	-0.1596	-4.63	0.25		
538	27 Shell-Thick	INVSLE	-1.7573	-0.1145	-4.63	0.18		
538	27 Shell-Thick	INVSLE	-1.8291	-0.0667	-4.65	0.18		
538	27 Shell-Thick	INVSLE	-8.1869	-0.4619	-13.45	-0.35		
538	27 Shell-Thick	INVSLE	-7.6425	-0.4536	-13.36	-0.35		
538	27 Shell-Thick	INVSLE	-6.1149	-0.3364	-13.36	-0.36		
538	27 Shell-Thick	INVSLE	-6.5569	-0.3933	-13.45	-0.36		
539	28 Shell-Thick	INVSLE	-1.4113	-0.0568	-3.91	-4.120E-02		
539	28 Shell-Thick	INVSLE	-1.3665	-0.1016	-3.90	-4.120E-02		
539	28 Shell-Thick	INVSLE	-0.9157	-0.0632	-3.90	-8.048E-02		
539	28 Shell-Thick	INVSLE	-0.9414	-0.0274	-3.91	-8.048E-02		
539	28 Shell-Thick	INVSLE	-3.8494	-0.2110	-9.21	-0.26		
539	28 Shell-Thick	INVSLE	-3.6244	-0.2348	-9.16	-0.26		
539	28 Shell-Thick	INVSLE	-2.5732	-0.1490	-9.16	-0.27		
539	28 Shell-Thick	INVSLE	-2.7365	-0.1545	-9.21	-0.27		
539	28 Shell-Thick	INVSLE	-1.9052	-0.0767	-5.28	0.22		
539	28 Shell-Thick	INVSLE	-1.8448	-0.1372	-5.27	0.22		
539	28 Shell-Thick	INVSLE	-1.2362	-0.0853	-5.27	0.14		
539	28 Shell-Thick	INVSLE	-1.2709	-0.0370	-5.28	0.14		
539	28 Shell-Thick	INVSLE	-6.6768	-0.3899	-15.35	-0.36		
539	28 Shell-Thick	INVSLE	-6.2426	-0.3893	-15.26	-0.36		
539	28 Shell-Thick	INVSLE	-4.4953	-0.2485	-15.26	-0.37		
539	28 Shell-Thick	INVSLE	-4.8182	-0.3019	-15.35	-0.37		
540	29 Shell-Thick	INVSLE	-0.9902	-0.0332	-4.39	-5.969E-02		
540	29 Shell-Thick	INVSLE	-0.9727	-0.0785	-4.38	-5.969E-02		
540	29 Shell-Thick	INVSLE	-0.4664	-0.0439	-4.38	-0.10		
540	29 Shell-Thick	INVSLE	-0.4642	-0.0079	-4.39	-0.10		
540	29 Shell-Thick	INVSLE	-2.7941	-0.1502	-10.37	-0.27		
540	29 Shell-Thick	INVSLE	-2.6378	-0.1777	-10.32	-0.27		
540	29 Shell-Thick	INVSLE	-1.4514	-0.1037	-10.32	-0.27		
540	29 Shell-Thick	INVSLE	-1.5425	-0.1071	-10.37	-0.27		
540	29 Shell-Thick	INVSLE	-1.3367	-0.0448	-5.92	0.18		
540	29 Shell-Thick	INVSLE	-1.3131	-0.1060	-5.91	0.18		
540	29 Shell-Thick	INVSLE	-0.6296	-0.0593	-5.91	0.10		
540	29 Shell-Thick	INVSLE	-0.6266	-0.0107	-5.92	0.10		
540	29 Shell-Thick	INVSLE	-4.8860	-0.2859	-17.32	-0.36		
540	29 Shell-Thick	INVSLE	-4.5688	-0.2927	-17.22	-0.36		
540	29 Shell-Thick	INVSLE	-2.5936	-0.1730	-17.22	-0.37		
540	29 Shell-Thick	INVSLE	-2.7929	-0.2222	-17.32	-0.37		
541	30 Shell-Thick	INVSLE	-0.4979	-0.0113	-4.86	-8.097E-02		
541	30 Shell-Thick	INVSLE	-0.5147	-0.0569	-4.86	-8.097E-02		
541	30 Shell-Thick	INVSLE	0.0477	-0.0156	-4.86	-0.12		
541	30 Shell-Thick	INVSLE	0.0846	0.0205	-4.86	-0.12		
541	30 Shell-Thick	INVSLE	-1.5496	-0.0938	-11.57	-0.27		
541	30 Shell-Thick	INVSLE	-1.4845	-0.1250	-11.52	-0.27		
541	30 Shell-Thick	INVSLE	-0.1586	-0.0317	-11.52	-0.27		
541	30 Shell-Thick	INVSLE	-0.1558	-0.0328	-11.57	-0.27		
541	30 Shell-Thick	INVSLE	-0.6722	-0.0152	-6.56	0.14		
541	30 Shell-Thick	INVSLE	-0.6949	-0.0769	-6.56	0.14		
541	30 Shell-Thick	INVSLE	0.0643	-0.0210	-6.56	6.072E-02		
541	30 Shell-Thick	INVSLE	0.1142	0.0277	-6.56	6.072E-02		
541	30 Shell-Thick	INVSLE	-2.7691	-0.1896	-19.34	-0.36		
541	30 Shell-Thick	INVSLE	-2.6090	-0.2039	-19.24	-0.36		
541	30 Shell-Thick	INVSLE	-0.3978	-0.0505	-19.24	-0.37		
541	30 Shell-Thick	INVSLE	-0.4346	-0.0947	-19.34	-0.37		
542	31 Shell-Thick	INVSLE	0.0676	0.0205	-5.34	-9.888E-02		
542	31 Shell-Thick	INVSLE	0.0183	-0.0248	-5.34	-9.888E-02		
542	31 Shell-Thick	INVSLE	1.3411	0.0224	-5.34	-0.14		
542	31 Shell-Thick	INVSLE	1.4337	0.0423	-5.34	-0.14		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 108 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

542	31 Shell-Thick	INVSLE	-0.1047	-0.0072	-12.79	-0.27		
542	31 Shell-Thick	INVSLE	-0.1286	-0.0411	-12.74	-0.27		
542	31 Shell-Thick	INVSLE	0.6372	0.0064	-12.74	-0.27		
542	31 Shell-Thick	INVSLE	0.7062	0.0237	-12.79	-0.27		
542	31 Shell-Thick	INVSLE	0.0913	0.0277	-7.21	9.953E-02		
542	31 Shell-Thick	INVSLE	0.0248	-0.0335	-7.20	9.953E-02		
542	31 Shell-Thick	INVSLE	2.1574	0.0410	-7.20	2.103E-02		
542	31 Shell-Thick	INVSLE	2.2773	0.0572	-7.21	2.103E-02		
542	31 Shell-Thick	INVSLE	-0.3044	-0.0393	-21.43	-0.36		
542	31 Shell-Thick	INVSLE	-0.2990	-0.0600	-21.33	-0.36		
542	31 Shell-Thick	INVSLE	0.8602	0.0087	-21.33	-0.37		
542	31 Shell-Thick	INVSLE	0.9533	0.0022	-21.43	-0.37		
543	32 Shell-Thick	INVSLE	1.5830	0.0645	-5.81	-0.12		
543	32 Shell-Thick	INVSLE	1.4230	0.0279	-5.81	-0.12		
543	32 Shell-Thick	INVSLE	3.0403	0.1331	-5.81	-0.15		
543	32 Shell-Thick	INVSLE	3.2690	0.1371	-5.81	-0.15		
543	32 Shell-Thick	INVSLE	0.7179	0.0462	-14.04	-0.27		
543	32 Shell-Thick	INVSLE	0.6217	0.0018	-14.00	-0.27		
543	32 Shell-Thick	INVSLE	1.2967	0.0478	-14.00	-0.26		
543	32 Shell-Thick	INVSLE	1.4119	0.0831	-14.04	-0.26		
543	32 Shell-Thick	INVSLE	2.5861	0.0898	-7.84	5.109E-02		
543	32 Shell-Thick	INVSLE	2.3522	0.0582	-7.85	5.109E-02		
543	32 Shell-Thick	INVSLE	5.0623	0.2321	-7.85	-1.700E-02		
543	32 Shell-Thick	INVSLE	5.4226	0.1996	-7.84	-1.700E-02		
543	32 Shell-Thick	INVSLE	0.9692	0.0624	-23.58	-0.36		
543	32 Shell-Thick	INVSLE	0.8393	0.0024	-23.50	-0.36		
543	32 Shell-Thick	INVSLE	1.7505	0.0645	-23.50	-0.36		
543	32 Shell-Thick	INVSLE	1.9061	0.1122	-23.58	-0.36		
544	33 Shell-Thick	INVSLE	3.5112	0.1979	-6.26	-0.13		
544	33 Shell-Thick	INVSLE	3.2416	0.1610	-6.28	-0.13		
544	33 Shell-Thick	INVSLE	5.0106	0.1965	-6.28	-0.15		
544	33 Shell-Thick	INVSLE	5.3456	0.2024	-6.26	-0.15		
544	33 Shell-Thick	INVSLE	1.4471	0.0920	-15.31	-0.26		
544	33 Shell-Thick	INVSLE	1.3160	0.0498	-15.28	-0.26		
544	33 Shell-Thick	INVSLE	2.0462	0.0725	-15.28	-0.25		
544	33 Shell-Thick	INVSLE	2.1944	0.1065	-15.31	-0.25		
544	33 Shell-Thick	INVSLE	5.9048	0.3207	-8.46	1.641E-02		
544	33 Shell-Thick	INVSLE	5.4746	0.2899	-8.48	1.641E-02		
544	33 Shell-Thick	INVSLE	8.4482	0.3404	-8.48	-4.291E-02		
544	33 Shell-Thick	INVSLE	8.9998	0.3136	-8.46	-4.291E-02		
544	33 Shell-Thick	INVSLE	1.9535	0.1242	-25.79	-0.35		
544	33 Shell-Thick	INVSLE	1.7766	0.0672	-25.72	-0.35		
544	33 Shell-Thick	INVSLE	2.7624	0.0978	-25.72	-0.33		
544	33 Shell-Thick	INVSLE	2.9625	0.1438	-25.79	-0.33		
545	34 Shell-Thick	INVSLE	5.7915	0.2872	-6.70	-0.16		
545	34 Shell-Thick	INVSLE	5.2490	0.2486	-6.73	-0.16		
545	34 Shell-Thick	INVSLE	7.1718	0.4242	-6.73	-0.16		
545	34 Shell-Thick	INVSLE	7.7770	0.4330	-6.70	-0.16		
545	34 Shell-Thick	INVSLE	2.2861	0.1205	-16.59	-0.25		
545	34 Shell-Thick	INVSLE	2.0664	0.0808	-16.58	-0.25		
545	34 Shell-Thick	INVSLE	2.8496	0.1550	-16.58	-0.23		
545	34 Shell-Thick	INVSLE	3.0846	0.1874	-16.59	-0.23		
545	34 Shell-Thick	INVSLE	9.8565	0.4805	-9.04	-4.337E-02		
545	34 Shell-Thick	INVSLE	8.9396	0.4431	-9.08	-4.337E-02		
545	34 Shell-Thick	INVSLE	12.1841	0.7363	-9.08	-8.328E-02		
545	34 Shell-Thick	INVSLE	13.2183	0.7179	-9.04	-8.328E-02		
545	34 Shell-Thick	INVSLE	3.0862	0.1627	-28.06	-0.34		
545	34 Shell-Thick	INVSLE	2.7896	0.1091	-28.01	-0.34		
545	34 Shell-Thick	INVSLE	3.8469	0.2093	-28.01	-0.31		
545	34 Shell-Thick	INVSLE	4.1643	0.2530	-28.06	-0.31		
546	35 Shell-Thick	INVSLE	17.9373	3.4774	20.91	-1.310E-02		
546	35 Shell-Thick	INVSLE	16.8398	3.4781	21.10	-1.310E-02		
546	35 Shell-Thick	INVSLE	14.4075	3.1050	21.10	-0.27		
546	35 Shell-Thick	INVSLE	15.4224	3.1597	20.91	-0.27		
546	35 Shell-Thick	INVSLE	6.4740	1.2824	7.88	-0.12		
546	35 Shell-Thick	INVSLE	6.2762	1.2676	8.17	-0.12		
546	35 Shell-Thick	INVSLE	5.3375	1.1106	8.17	-0.29		
546	35 Shell-Thick	INVSLE	5.5226	1.1341	7.88	-0.29		
546	35 Shell-Thick	INVSLE	31.2304	6.0226	36.02	-1.768E-02		
546	35 Shell-Thick	INVSLE	29.0897	6.0414	36.09	-1.768E-02		
546	35 Shell-Thick	INVSLE	24.9252	5.4178	36.09	-0.30		
546	35 Shell-Thick	INVSLE	26.9025	5.5087	36.02	-0.30		
546	35 Shell-Thick	INVSLE	8.7399	1.7313	10.63	-0.24		
546	35 Shell-Thick	INVSLE	8.4729	1.7113	11.03	-0.24		
546	35 Shell-Thick	INVSLE	7.2057	1.4993	11.03	-0.39		
546	35 Shell-Thick	INVSLE	7.4555	1.5311	10.63	-0.39		
547	36 Shell-Thick	INVSLE	13.6625	2.8739	19.70	-0.22		
547	36 Shell-Thick	INVSLE	13.4780	2.8529	19.80	-0.22		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 109 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

547	36	Shell-Thick	INVSLE	11.1741	2.0120	19.80	-0.31	
547	36	Shell-Thick	INVSLE	11.3142	2.0628	19.70	-0.31	
547	36	Shell-Thick	INVSLE	5.0921	1.0774	7.63	-0.24	
547	36	Shell-Thick	INVSLE	5.1015	1.0340	7.83	-0.24	
547	36	Shell-Thick	INVSLE	4.1928	0.7070	7.83	-0.42	
547	36	Shell-Thick	INVSLE	4.1800	0.7527	7.63	-0.42	
547	36	Shell-Thick	INVSLE	23.6008	4.9572	33.69	-0.19	
547	36	Shell-Thick	INVSLE	23.1915	4.9622	33.69	-0.19	
547	36	Shell-Thick	INVSLE	19.2699	3.5252	33.69	-0.19	
547	36	Shell-Thick	INVSLE	19.5871	3.5820	33.69	-0.19	
547	36	Shell-Thick	INVSLE	6.8744	1.4546	10.30	-0.33	
547	36	Shell-Thick	INVSLE	6.8871	1.3959	10.57	-0.33	
547	36	Shell-Thick	INVSLE	5.6602	0.9544	10.57	-0.57	
547	36	Shell-Thick	INVSLE	5.6431	1.0162	10.30	-0.57	
548	37	Shell-Thick	INVSLE	11.0498	1.9354	18.49	-0.39	
548	37	Shell-Thick	INVSLE	10.2679	1.9052	18.45	-0.39	
548	37	Shell-Thick	INVSLE	8.1237	1.2475	18.45	-0.36	
548	37	Shell-Thick	INVSLE	8.8444	1.3186	18.49	-0.36	
548	37	Shell-Thick	INVSLE	4.2359	0.7444	7.32	-0.44	
548	37	Shell-Thick	INVSLE	3.9739	0.6827	7.43	-0.44	
548	37	Shell-Thick	INVSLE	3.1113	0.4338	7.43	-0.53	
548	37	Shell-Thick	INVSLE	3.3617	0.5033	7.32	-0.53	
548	37	Shell-Thick	INVSLE	18.9514	3.3165	31.43	-0.34	
548	37	Shell-Thick	INVSLE	17.5666	3.3229	31.23	-0.34	
548	37	Shell-Thick	INVSLE	13.9361	2.1910	31.23	-0.16	
548	37	Shell-Thick	INVSLE	15.2023	2.2641	31.43	-0.16	
548	37	Shell-Thick	INVSLE	5.7185	1.0049	9.88	-0.60	
548	37	Shell-Thick	INVSLE	5.3648	0.9217	10.02	-0.60	
548	37	Shell-Thick	INVSLE	4.2002	0.5857	10.02	-0.72	
548	37	Shell-Thick	INVSLE	4.5384	0.6794	9.88	-0.72	
549	38	Shell-Thick	INVSLE	8.2985	1.2150	17.13	-0.36	
549	38	Shell-Thick	INVSLE	7.8488	1.1869	17.11	-0.36	
549	38	Shell-Thick	INVSLE	5.8600	0.8306	17.11	-0.34	
549	38	Shell-Thick	INVSLE	6.2539	0.8961	17.13	-0.34	
549	38	Shell-Thick	INVSLE	3.2671	0.4933	6.91	-0.52	
549	38	Shell-Thick	INVSLE	3.0947	0.4216	6.99	-0.52	
549	38	Shell-Thick	INVSLE	2.2819	0.2826	6.99	-0.60	
549	38	Shell-Thick	INVSLE	2.4431	0.3618	6.91	-0.60	
549	38	Shell-Thick	INVSLE	14.1330	2.0519	28.99	-0.16	
549	38	Shell-Thick	INVSLE	13.3617	2.0744	28.85	-0.16	
549	38	Shell-Thick	INVSLE	10.0093	1.4660	28.85	-4.072E-02	
549	38	Shell-Thick	INVSLE	10.6730	1.5156	28.99	-4.072E-02	
549	38	Shell-Thick	INVSLE	4.4105	0.6659	9.32	-0.71	
549	38	Shell-Thick	INVSLE	4.1778	0.5691	9.44	-0.71	
549	38	Shell-Thick	INVSLE	3.0805	0.3815	9.44	-0.81	
549	38	Shell-Thick	INVSLE	3.2982	0.4885	9.32	-0.81	
550	39	Shell-Thick	INVSLE	5.9747	0.8182	15.83	-0.37	
550	39	Shell-Thick	INVSLE	5.5599	0.7926	15.78	-0.37	
550	39	Shell-Thick	INVSLE	3.7287	0.4431	15.78	-0.32	
550	39	Shell-Thick	INVSLE	4.0834	0.5090	15.83	-0.32	
550	39	Shell-Thick	INVSLE	2.4156	0.3547	6.47	-0.60	
550	39	Shell-Thick	INVSLE	2.2400	0.2759	6.52	-0.60	
550	39	Shell-Thick	INVSLE	1.4816	0.1409	6.52	-0.64	
550	39	Shell-Thick	INVSLE	1.6435	0.2290	6.47	-0.64	
550	39	Shell-Thick	INVSLE	10.1019	1.3558	26.68	-9.299E-02	
550	39	Shell-Thick	INVSLE	9.4099	1.3917	26.51	-9.299E-02	
550	39	Shell-Thick	INVSLE	6.3344	0.7935	26.51	6.201E-02	
550	39	Shell-Thick	INVSLE	6.9128	0.8336	26.68	6.201E-02	
550	39	Shell-Thick	INVSLE	3.2611	0.4788	8.74	-0.81	
550	39	Shell-Thick	INVSLE	3.0239	0.3724	8.80	-0.81	
550	39	Shell-Thick	INVSLE	2.0002	0.1902	8.80	-0.87	
550	39	Shell-Thick	INVSLE	2.2187	0.3091	8.74	-0.87	
551	40	Shell-Thick	INVSLE	3.8663	0.4540	14.53	-0.33	
551	40	Shell-Thick	INVSLE	3.6196	0.4328	14.46	-0.33	
551	40	Shell-Thick	INVSLE	1.9411	0.1845	14.46	-0.27	
551	40	Shell-Thick	INVSLE	2.1302	0.2442	14.53	-0.27	
551	40	Shell-Thick	INVSLE	1.6218	0.2258	6.01	-0.64	
551	40	Shell-Thick	INVSLE	1.4967	0.1427	6.04	-0.64	
551	40	Shell-Thick	INVSLE	0.7942	0.0426	6.04	-0.66	
551	40	Shell-Thick	INVSLE	0.9054	0.1351	6.01	-0.66	
551	40	Shell-Thick	INVSLE	6.4691	0.7185	24.41	2.963E-02	
551	40	Shell-Thick	INVSLE	6.0814	0.7693	24.23	2.963E-02	
551	40	Shell-Thick	INVSLE	3.2711	0.3490	24.23	0.19	
551	40	Shell-Thick	INVSLE	3.5505	0.3706	24.41	0.19	
551	40	Shell-Thick	INVSLE	2.1895	0.3049	8.11	-0.87	
551	40	Shell-Thick	INVSLE	2.0205	0.1926	8.15	-0.87	
551	40	Shell-Thick	INVSLE	1.0722	0.0575	8.15	-0.90	
551	40	Shell-Thick	INVSLE	1.2223	0.1824	8.11	-0.90	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 110 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

552	41 Shell-Thick	INVSLE	2.0419	0.2064	13.26	-0.29		
552	41 Shell-Thick	INVSLE	1.8738	0.1911	13.18	-0.29		
552	41 Shell-Thick	INVSLE	0.3455	-0.0529	13.18	-0.22		
552	41 Shell-Thick	INVSLE	0.4557	0.0424	13.26	-0.22		
552	41 Shell-Thick	INVSLE	0.9195	0.1353	5.54	-0.67		
552	41 Shell-Thick	INVSLE	0.8179	0.0499	5.55	-0.67		
552	41 Shell-Thick	INVSLE	0.1726	-0.0634	5.55	-0.68		
552	41 Shell-Thick	INVSLE	0.2593	-0.0094	5.54	-0.68		
552	41 Shell-Thick	INVSLE	3.3434	0.2892	22.22	0.14		
552	41 Shell-Thick	INVSLE	3.0982	0.3549	22.03	0.14		
552	41 Shell-Thick	INVSLE	0.5459	-0.0714	22.03	0.31		
552	41 Shell-Thick	INVSLE	0.6834	0.0573	22.22	0.31		
552	41 Shell-Thick	INVSLE	1.2413	0.1827	7.48	-0.90		
552	41 Shell-Thick	INVSLE	1.1042	0.0674	7.49	-0.90		
552	41 Shell-Thick	INVSLE	0.2331	-0.0871	7.49	-0.91		
552	41 Shell-Thick	INVSLE	0.3501	-0.0695	7.48	-0.91		
553	42 Shell-Thick	INVSLE	0.4292	0.0462	12.02	-0.24		
553	42 Shell-Thick	INVSLE	0.3731	-0.0401	11.93	-0.24		
553	42 Shell-Thick	INVSLE	-0.3622	-0.1276	11.93	-0.16		
553	42 Shell-Thick	INVSLE	-0.3133	-0.0315	12.02	-0.16		
553	42 Shell-Thick	INVSLE	0.2893	-0.0319	5.06	-0.68		
553	42 Shell-Thick	INVSLE	0.2259	-0.0406	5.05	-0.68		
553	42 Shell-Thick	INVSLE	-1.0098	-0.2488	5.05	-0.68		
553	42 Shell-Thick	INVSLE	-1.0087	-0.2033	5.06	-0.68		
553	42 Shell-Thick	INVSLE	0.6004	0.0624	20.10	0.27		
553	42 Shell-Thick	INVSLE	0.5438	-0.0413	19.90	0.27		
553	42 Shell-Thick	INVSLE	-0.4890	-0.1722	19.90	0.43		
553	42 Shell-Thick	INVSLE	-0.4230	-0.0426	20.10	0.43		
553	42 Shell-Thick	INVSLE	0.3906	-0.1225	6.83	-0.92		
553	42 Shell-Thick	INVSLE	0.3049	-0.0549	6.82	-0.92		
553	42 Shell-Thick	INVSLE	-1.7608	-0.3894	6.82	-0.91		
553	42 Shell-Thick	INVSLE	-1.8151	-0.4025	6.83	-0.91		
554	43 Shell-Thick	INVSLE	-0.2625	-0.0251	10.81	-0.19		
554	43 Shell-Thick	INVSLE	-0.2991	-0.1112	10.72	-0.19		
554	43 Shell-Thick	INVSLE	-0.8302	-0.1989	10.72	-0.10		
554	43 Shell-Thick	INVSLE	-0.8080	-0.1032	10.81	-0.10		
554	43 Shell-Thick	INVSLE	-0.9649	-0.2146	4.58	-0.68		
554	43 Shell-Thick	INVSLE	-0.9470	-0.2163	4.57	-0.68		
554	43 Shell-Thick	INVSLE	-2.1884	-0.4243	4.57	-0.67		
554	43 Shell-Thick	INVSLE	-2.2592	-0.3872	4.58	-0.67		
554	43 Shell-Thick	INVSLE	-0.3543	-0.0339	18.04	0.39		
554	43 Shell-Thick	INVSLE	-0.4038	-0.1501	17.85	0.39		
554	43 Shell-Thick	INVSLE	-1.1208	-0.2686	17.85	0.55		
554	43 Shell-Thick	INVSLE	-1.0909	-0.1393	18.04	0.55		
554	43 Shell-Thick	INVSLE	-1.7794	-0.4342	6.18	-0.92		
554	43 Shell-Thick	INVSLE	-1.6982	-0.3381	6.16	-0.92		
554	43 Shell-Thick	INVSLE	-3.7633	-0.6857	6.16	-0.91		
554	43 Shell-Thick	INVSLE	-3.9421	-0.7165	6.18	-0.91		
555	44 Shell-Thick	INVSLE	-0.7469	-0.0945	9.63	-0.12		
555	44 Shell-Thick	INVSLE	-0.7525	-0.1798	9.54	-0.12		
555	44 Shell-Thick	INVSLE	-1.2274	-0.2572	9.54	-4.409E-02		
555	44 Shell-Thick	INVSLE	-1.2355	-0.1627	9.63	-4.409E-02		
555	44 Shell-Thick	INVSLE	-2.1783	-0.3891	4.10	-0.68		
555	44 Shell-Thick	INVSLE	-2.0775	-0.3840	4.08	-0.68		
555	44 Shell-Thick	INVSLE	-3.1821	-0.5622	4.08	-0.66		
555	44 Shell-Thick	INVSLE	-3.3322	-0.5344	4.10	-0.66		
555	44 Shell-Thick	INVSLE	-1.0083	-0.1276	16.05	0.51		
555	44 Shell-Thick	INVSLE	-1.0159	-0.2427	15.87	0.51		
555	44 Shell-Thick	INVSLE	-1.6570	-0.3472	15.87	0.67		
555	44 Shell-Thick	INVSLE	-1.6679	-0.2197	16.05	0.67		
555	44 Shell-Thick	INVSLE	-3.8383	-0.7307	5.53	-0.91		
555	44 Shell-Thick	INVSLE	-3.6139	-0.6208	5.51	-0.91		
555	44 Shell-Thick	INVSLE	-5.4488	-0.9159	5.51	-0.89		
555	44 Shell-Thick	INVSLE	-5.7635	-0.9654	5.53	-0.89		
556	45 Shell-Thick	INVSLE	-1.1649	-0.1528	8.49	-6.539E-02		
556	45 Shell-Thick	INVSLE	-1.1462	-0.2368	8.40	-6.539E-02		
556	45 Shell-Thick	INVSLE	-1.5657	-0.3110	8.40	1.209E-02		
556	45 Shell-Thick	INVSLE	-1.5974	-0.2183	8.49	1.209E-02		
556	45 Shell-Thick	INVSLE	-3.2176	-0.5300	3.63	-0.67		
556	45 Shell-Thick	INVSLE	-3.0549	-0.5183	3.61	-0.67		
556	45 Shell-Thick	INVSLE	-4.0268	-0.6891	3.61	-0.65		
556	45 Shell-Thick	INVSLE	-4.2352	-0.6702	3.63	-0.65		
556	45 Shell-Thick	INVSLE	-1.5726	-0.2063	14.13	0.63		
556	45 Shell-Thick	INVSLE	-1.5474	-0.3196	13.96	0.63		
556	45 Shell-Thick	INVSLE	-2.1137	-0.4199	13.96	0.78		
556	45 Shell-Thick	INVSLE	-2.1565	-0.2947	14.13	0.78		
556	45 Shell-Thick	INVSLE	-5.5980	-0.9673	4.90	-0.90		
556	45 Shell-Thick	INVSLE	-5.2682	-0.8447	4.87	-0.90		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 111 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

556	45	Shell-Thick	INVS LU	-6.8808	-1.1275	4.87	-0.87	
556	45	Shell-Thick	INVS LU	-7.2940	-1.1942	4.90	-0.87	
557	46	Shell-Thick	INVS LE	-1.5245	-0.2076	7.38	-7.007E-03	
557	46	Shell-Thick	INVS LE	-1.4810	-0.2902	7.29	-7.007E-03	
557	46	Shell-Thick	INVS LE	-1.8462	-0.3549	7.29	6.485E-02	
557	46	Shell-Thick	INVS LE	-1.9016	-0.2644	7.38	6.485E-02	
557	46	Shell-Thick	INVS LE	-4.1074	-0.6612	3.16	-0.65	
557	46	Shell-Thick	INVS LE	-3.8820	-0.6436	3.14	-0.65	
557	46	Shell-Thick	INVS LE	-4.7255	-0.7895	3.14	-0.63	
557	46	Shell-Thick	INVS LE	-4.9919	-0.7797	3.16	-0.63	
557	46	Shell-Thick	INVS LU	-2.0581	-0.2803	12.26	0.74	
557	46	Shell-Thick	INVS LU	-1.9993	-0.3917	12.11	0.74	
557	46	Shell-Thick	INVS LU	-2.4924	-0.4792	12.11	0.88	
557	46	Shell-Thick	INVS LU	-2.5672	-0.3570	12.26	0.88	
557	46	Shell-Thick	INVS LU	-7.1026	-1.1871	4.27	-0.88	
557	46	Shell-Thick	INVS LU	-6.6663	-1.0534	4.24	-0.88	
557	46	Shell-Thick	INVS LU	-8.0644	-1.2934	4.24	-0.86	
557	46	Shell-Thick	INVS LU	-8.5753	-1.3772	4.27	-0.86	
558	47	Shell-Thick	INVS LE	-1.8286	-0.2537	6.29	4.695E-02	
558	47	Shell-Thick	INVS LE	-1.7651	-0.3348	6.22	4.695E-02	
558	47	Shell-Thick	INVS LE	-2.0772	-0.3937	6.22	0.11	
558	47	Shell-Thick	INVS LE	-2.1513	-0.3054	6.29	0.11	
558	47	Shell-Thick	INVS LE	-4.8563	-0.7681	2.71	-0.64	
558	47	Shell-Thick	INVS LE	-4.5825	-0.7453	2.68	-0.64	
558	47	Shell-Thick	INVS LE	-5.3013	-0.8781	2.68	-0.62	
558	47	Shell-Thick	INVS LE	-5.6113	-0.8766	2.71	-0.62	
558	47	Shell-Thick	INVS LU	-2.4686	-0.3425	10.45	0.84	
558	47	Shell-Thick	INVS LU	-2.3829	-0.4520	10.32	0.84	
558	47	Shell-Thick	INVS LU	-2.8042	-0.5315	10.32	0.96	
558	47	Shell-Thick	INVS LU	-2.9043	-0.4124	10.45	0.96	
558	47	Shell-Thick	INVS LU	-8.3673	-1.3647	3.65	-0.86	
558	47	Shell-Thick	INVS LU	-7.8497	-1.2214	3.62	-0.86	
558	47	Shell-Thick	INVS LU	-9.0400	-1.4399	3.62	-0.84	
558	47	Shell-Thick	INVS LU	-9.6236	-1.5390	3.65	-0.84	
559	48	Shell-Thick	INVS LE	-2.0831	-0.2952	5.24	9.632E-02	
559	48	Shell-Thick	INVS LE	-2.0010	-0.3750	5.17	9.632E-02	
559	48	Shell-Thick	INVS LE	-2.2609	-0.4242	5.17	0.15	
559	48	Shell-Thick	INVS LE	-2.3522	-0.3382	5.24	0.15	
559	48	Shell-Thick	INVS LE	-5.4814	-0.8640	2.26	-0.62	
559	48	Shell-Thick	INVS LE	-5.1620	-0.8369	2.24	-0.62	
559	48	Shell-Thick	INVS LE	-5.7594	-0.9462	2.24	-0.61	
559	48	Shell-Thick	INVS LE	-6.1097	-0.9526	2.26	-0.61	
559	48	Shell-Thick	INVS LU	-2.8122	-0.3986	8.69	0.93	
559	48	Shell-Thick	INVS LU	-2.7013	-0.5063	8.58	0.93	
559	48	Shell-Thick	INVS LU	-3.0522	-0.5726	8.58	1.03	
559	48	Shell-Thick	INVS LU	-3.1755	-0.4566	8.69	1.03	
559	48	Shell-Thick	INVS LU	-9.4221	-1.5235	3.04	-0.84	
559	48	Shell-Thick	INVS LU	-8.8276	-1.3725	3.02	-0.84	
559	48	Shell-Thick	INVS LU	-9.8163	-1.5515	3.02	-0.82	
559	48	Shell-Thick	INVS LU	-10.4670	-1.6650	3.04	-0.82	
560	49	Shell-Thick	INVS LE	-2.2910	-0.3291	4.20	0.14	
560	49	Shell-Thick	INVS LE	-2.1943	-0.4078	4.15	0.14	
560	49	Shell-Thick	INVS LE	-2.4030	-0.4490	4.15	0.19	
560	49	Shell-Thick	INVS LE	-2.5074	-0.3653	4.20	0.19	
560	49	Shell-Thick	INVS LE	-5.9902	-0.9403	1.81	-0.61	
560	49	Shell-Thick	INVS LE	-5.6362	-0.9099	1.80	-0.61	
560	49	Shell-Thick	INVS LE	-6.1152	-1.0020	1.80	-0.60	
560	49	Shell-Thick	INVS LE	-6.4946	-1.0153	1.81	-0.60	
560	49	Shell-Thick	INVS LU	-3.0929	-0.4442	6.97	1.01	
560	49	Shell-Thick	INVS LU	-2.9623	-0.5505	6.88	1.01	
560	49	Shell-Thick	INVS LU	-3.2441	-0.6062	6.88	1.09	
560	49	Shell-Thick	INVS LU	-3.3850	-0.4931	6.97	1.09	
560	49	Shell-Thick	INVS LU	-10.2799	-1.6491	2.45	-0.83	
560	49	Shell-Thick	INVS LU	-9.6275	-1.4922	2.43	-0.83	
560	49	Shell-Thick	INVS LU	-10.4198	-1.6432	2.43	-0.81	
560	49	Shell-Thick	INVS LU	-11.1183	-1.7691	2.45	-0.81	
561	50	Shell-Thick	INVS LE	-2.4565	-0.3575	3.19	0.18	
561	50	Shell-Thick	INVS LE	-2.3472	-0.4354	3.14	0.18	
561	50	Shell-Thick	INVS LE	-2.5056	-0.4667	3.14	0.21	
561	50	Shell-Thick	INVS LE	-2.6208	-0.3848	3.19	0.21	
561	50	Shell-Thick	INVS LE	-6.3943	-1.0043	1.38	-0.60	
561	50	Shell-Thick	INVS LE	-6.0099	-0.9718	1.36	-0.60	
561	50	Shell-Thick	INVS LE	-6.3729	-1.0408	1.36	-0.59	
561	50	Shell-Thick	INVS LE	-6.7768	-1.0602	1.38	-0.59	
561	50	Shell-Thick	INVS LU	-3.3163	-0.4827	5.28	1.07	
561	50	Shell-Thick	INVS LU	-3.1687	-0.5878	5.21	1.07	
561	50	Shell-Thick	INVS LU	-3.3825	-0.6300	5.21	1.14	
561	50	Shell-Thick	INVS LU	-3.5381	-0.5195	5.28	1.14	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 112 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

561	50 Shell-Thick	INVSLU	-10.9606	-1.7544	1.86	-0.81		
561	50 Shell-Thick	INVSLU	-10.2572	-1.5938	1.84	-0.81		
561	50 Shell-Thick	INVSLU	-10.8575	-1.7065	1.84	-0.79		
561	50 Shell-Thick	INVSLU	-11.5962	-1.8435	1.86	-0.79		
562	51 Shell-Thick	INVSLE	-2.5817	-0.3789	2.18	0.20		
562	51 Shell-Thick	INVSLE	-2.4636	-0.4564	2.16	0.20		
562	51 Shell-Thick	INVSLE	-2.5722	-0.4785	2.16	0.23		
562	51 Shell-Thick	INVSLE	-2.6945	-0.3983	2.18	0.23		
562	51 Shell-Thick	INVSLE	-6.6987	-1.0516	0.94	-0.59		
562	51 Shell-Thick	INVSLE	-6.2934	-1.0180	0.94	-0.59		
562	51 Shell-Thick	INVSLE	-6.5422	-1.0670	0.94	-0.58		
562	51 Shell-Thick	INVSLE	-6.9611	-1.0915	0.94	-0.58		
562	51 Shell-Thick	INVSLU	-3.4853	-0.5115	3.62	1.12		
562	51 Shell-Thick	INVSLU	-3.3258	-0.6161	3.57	1.12		
562	51 Shell-Thick	INVSLU	-3.4725	-0.6460	3.57	1.17		
562	51 Shell-Thick	INVSLU	-3.6375	-0.5377	3.62	1.17		
562	51 Shell-Thick	INVSLU	-11.4729	-1.8316	1.28	-0.80		
562	51 Shell-Thick	INVSLU	-10.7346	-1.6692	1.26	-0.80		
562	51 Shell-Thick	INVSLU	-11.1460	-1.7494	1.26	-0.79		
562	51 Shell-Thick	INVSLU	-11.9088	-1.8953	1.28	-0.79		
563	52 Shell-Thick	INVSLE	-2.6691	-0.3944	1.19	0.22		
563	52 Shell-Thick	INVSLE	-2.5446	-0.4718	1.18	0.22		
563	52 Shell-Thick	INVSLE	-2.6040	-0.4838	1.18	0.24		
563	52 Shell-Thick	INVSLE	-2.7308	-0.4049	1.19	0.24		
563	52 Shell-Thick	INVSLE	-6.9104	-1.0856	0.52	-0.58		
563	52 Shell-Thick	INVSLE	-6.4891	-1.0521	0.51	-0.58		
563	52 Shell-Thick	INVSLE	-6.6251	-1.0785	0.51	-0.58		
563	52 Shell-Thick	INVSLE	-7.0537	-1.1070	0.52	-0.58		
563	52 Shell-Thick	INVSLU	-3.6033	-0.5324	1.98	1.16		
563	52 Shell-Thick	INVSLU	-3.4352	-0.6369	1.95	1.16		
563	52 Shell-Thick	INVSLU	-3.5154	-0.6531	1.95	1.19		
563	52 Shell-Thick	INVSLU	-3.6866	-0.5466	1.98	1.19		
563	52 Shell-Thick	INVSLU	-11.8286	-1.8871	0.70	-0.79		
563	52 Shell-Thick	INVSLU	-11.0633	-1.7250	0.69	-0.79		
563	52 Shell-Thick	INVSLU	-11.2881	-1.7681	0.69	-0.78		
563	52 Shell-Thick	INVSLU	-12.0667	-1.9213	0.70	-0.78		
564	53 Shell-Thick	INVSLE	-2.7197	-0.4032	0.21	0.24		
564	53 Shell-Thick	INVSLE	-2.5924	-0.4809	0.21	0.24		
564	53 Shell-Thick	INVSLE	-2.6028	-0.4830	0.21	0.24		
564	53 Shell-Thick	INVSLE	-2.7305	-0.4050	0.21	0.24		
564	53 Shell-Thick	INVSLE	-7.0312	-1.1044	9.049E-02	-0.58		
564	53 Shell-Thick	INVSLE	-6.6029	-1.0721	8.957E-02	-0.58		
564	53 Shell-Thick	INVSLE	-6.6268	-1.0768	8.957E-02	-0.58		
564	53 Shell-Thick	INVSLE	-7.0562	-1.1082	9.049E-02	-0.58		
564	53 Shell-Thick	INVSLU	-3.6716	-0.5443	0.35	1.18		
564	53 Shell-Thick	INVSLU	-3.4997	-0.6493	0.34	1.18		
564	53 Shell-Thick	INVSLU	-3.5138	-0.6521	0.34	1.19		
564	53 Shell-Thick	INVSLU	-3.6861	-0.5468	0.35	1.19		
564	53 Shell-Thick	INVSLU	-12.0309	-1.9176	0.12	-0.78		
564	53 Shell-Thick	INVSLU	-11.2536	-1.7577	0.12	-0.78		
564	53 Shell-Thick	INVSLU	-11.2931	-1.7653	0.12	-0.78		
564	53 Shell-Thick	INVSLU	-12.0725	-1.9237	0.12	-0.78		
565	54 Shell-Thick	INVSLE	-2.7344	-0.4056	-0.34	0.24		
565	54 Shell-Thick	INVSLE	-2.6068	-0.4841	-0.33	0.24		
565	54 Shell-Thick	INVSLE	-2.5683	-0.4763	-0.33	0.23		
565	54 Shell-Thick	INVSLE	-2.6944	-0.3988	-0.34	0.23		
565	54 Shell-Thick	INVSLE	-7.0642	-1.1090	-0.77	-0.58		
565	54 Shell-Thick	INVSLE	-6.6339	-1.0791	-0.76	-0.58		
565	54 Shell-Thick	INVSLE	-6.5458	-1.0621	-0.76	-0.58		
565	54 Shell-Thick	INVSLE	-6.9710	-1.0953	-0.77	-0.58		
565	54 Shell-Thick	INVSLU	-3.6915	-0.5475	-0.45	1.19		
565	54 Shell-Thick	INVSLU	-3.5191	-0.6535	-0.45	1.19		
565	54 Shell-Thick	INVSLU	-3.4671	-0.6430	-0.45	1.17		
565	54 Shell-Thick	INVSLU	-3.6374	-0.5384	-0.45	1.17		
565	54 Shell-Thick	INVSLU	-12.0850	-1.9246	-1.28	-0.78		
565	54 Shell-Thick	INVSLU	-11.3039	-1.7691	-1.27	-0.78		
565	54 Shell-Thick	INVSLU	-11.1582	-1.7413	-1.27	-0.79		
565	54 Shell-Thick	INVSLU	-11.9303	-1.9029	-1.28	-0.79		
566	55 Shell-Thick	INVSLE	-2.7128	-0.4016	-0.76	0.23		
566	55 Shell-Thick	INVSLE	-2.5885	-0.4813	-0.75	0.23		
566	55 Shell-Thick	INVSLE	-2.5009	-0.4633	-0.75	0.21		
566	55 Shell-Thick	INVSLE	-2.6218	-0.3859	-0.76	0.21		
566	55 Shell-Thick	INVSLE	-7.0076	-1.0993	-1.76	-0.58		
566	55 Shell-Thick	INVSLE	-6.5843	-1.0730	-1.74	-0.58		
566	55 Shell-Thick	INVSLE	-6.3838	-1.0332	-1.74	-0.59		
566	55 Shell-Thick	INVSLE	-6.7958	-1.0670	-1.76	-0.59		
566	55 Shell-Thick	INVSLU	-3.6623	-0.5422	-1.03	1.18		
566	55 Shell-Thick	INVSLU	-3.4945	-0.6497	-1.02	1.18		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 113 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

566	55 Shell-Thick	INVSLU	-3.3762	-0.6254	-1.02		1.14	
566	55 Shell-Thick	INVSLU	-3.5394	-0.5210	-1.03		1.14	
566	55 Shell-Thick	INVSLU	-11.9880	-1.9084	-2.92		-0.78	
566	55 Shell-Thick	INVSLU	-11.2180	-1.7593	-2.88		-0.78	
566	55 Shell-Thick	INVSLU	-10.8865	-1.6941	-2.88		-0.79	
566	55 Shell-Thick	INVSLU	-11.6361	-1.8569	-2.92		-0.79	
567	56 Shell-Thick	INVSLE	-2.6544	-0.3908	-1.19		0.22	
567	56 Shell-Thick	INVSLE	-2.5358	-0.4719	-1.18		0.22	
567	56 Shell-Thick	INVSLE	-2.3987	-0.4448	-1.18		0.19	
567	56 Shell-Thick	INVSLE	-2.5121	-0.3671	-1.19		0.19	
567	56 Shell-Thick	INVSLE	-6.8608	-1.0740	-2.76		-0.59	
567	56 Shell-Thick	INVSLE	-6.4495	-1.0524	-2.72		-0.59	
567	56 Shell-Thick	INVSLE	-6.1354	-0.9925	-2.72		-0.60	
567	56 Shell-Thick	INVSLE	-6.5295	-1.0258	-2.76		-0.60	
567	56 Shell-Thick	INVSLU	-3.5835	-0.5276	-1.61		1.15	
567	56 Shell-Thick	INVSLU	-3.4234	-0.6371	-1.59		1.15	
567	56 Shell-Thick	INVSLU	-3.2383	-0.6004	-1.59		1.10	
567	56 Shell-Thick	INVSLU	-3.3913	-0.4956	-1.61		1.10	
567	56 Shell-Thick	INVSLU	-11.7387	-1.8664	-4.57		-0.79	
567	56 Shell-Thick	INVSLU	-10.9879	-1.7254	-4.51		-0.79	
567	56 Shell-Thick	INVSLU	-10.4686	-1.6277	-4.51		-0.80	
567	56 Shell-Thick	INVSLU	-11.1881	-1.7895	-4.57		-0.80	
568	57 Shell-Thick	INVSLE	-2.5571	-0.3739	-1.63		0.20	
568	57 Shell-Thick	INVSLE	-2.4481	-0.4569	-1.61		0.20	
568	57 Shell-Thick	INVSLE	-2.2610	-0.4195	-1.61		0.16	
568	57 Shell-Thick	INVSLE	-2.3629	-0.3412	-1.63		0.16	
568	57 Shell-Thick	INVSLE	-6.6182	-1.0353	-3.77		-0.59	
568	57 Shell-Thick	INVSLE	-6.2285	-1.0193	-3.72		-0.59	
568	57 Shell-Thick	INVSLE	-5.7993	-0.9360	-3.72		-0.61	
568	57 Shell-Thick	INVSLE	-6.1657	-0.9676	-3.77		-0.61	
568	57 Shell-Thick	INVSLU	-3.4521	-0.5048	-2.20		1.12	
568	57 Shell-Thick	INVSLU	-3.3050	-0.6168	-2.18		1.12	
568	57 Shell-Thick	INVSLU	-3.0523	-0.5663	-2.18		1.04	
568	57 Shell-Thick	INVSLU	-3.1899	-0.4606	-2.20		1.04	
568	57 Shell-Thick	INVSLU	-11.3276	-1.8023	-6.25		-0.80	
568	57 Shell-Thick	INVSLU	-10.6123	-1.6716	-6.16		-0.80	
568	57 Shell-Thick	INVSLU	-9.9024	-1.5351	-6.16		-0.82	
568	57 Shell-Thick	INVSLU	-10.5756	-1.6940	-6.25		-0.82	
569	58 Shell-Thick	INVSLE	-2.4192	-0.3495	-2.07		0.17	
569	58 Shell-Thick	INVSLE	-2.3220	-0.4346	-2.05		0.17	
569	58 Shell-Thick	INVSLE	-2.0840	-0.3892	-2.05		0.12	
569	58 Shell-Thick	INVSLE	-2.1726	-0.3099	-2.07		0.12	
569	58 Shell-Thick	INVSLE	-6.2758	-0.9788	-4.79		-0.60	
569	58 Shell-Thick	INVSLE	-5.9121	-0.9694	-4.73		-0.60	
569	58 Shell-Thick	INVSLE	-5.3656	-0.8688	-4.73		-0.62	
569	58 Shell-Thick	INVSLE	-5.7004	-0.8975	-4.79		-0.62	
569	58 Shell-Thick	INVSLU	-3.2659	-0.4719	-2.79		1.06	
569	58 Shell-Thick	INVSLU	-3.1346	-0.5866	-2.77		1.06	
569	58 Shell-Thick	INVSLU	-2.8134	-0.5254	-2.77		0.97	
569	58 Shell-Thick	INVSLU	-2.9329	-0.4184	-2.79		0.97	
569	58 Shell-Thick	INVSLU	-10.7481	-1.7086	-7.95		-0.81	
569	58 Shell-Thick	INVSLU	-10.0754	-1.5896	-7.85		-0.81	
569	58 Shell-Thick	INVSLU	-9.1710	-1.4250	-7.85		-0.84	
569	58 Shell-Thick	INVSLU	-9.7914	-1.5789	-7.95		-0.84	
570	59 Shell-Thick	INVSLE	-2.2368	-0.3195	-2.51		0.13	
570	59 Shell-Thick	INVSLE	-2.1557	-0.4068	-2.49		0.13	
570	59 Shell-Thick	INVSLE	-1.8660	-0.3514	-2.49	6.910E-02		
570	59 Shell-Thick	INVSLE	-1.9369	-0.2709	-2.51	6.910E-02		
570	59 Shell-Thick	INVSLE	-5.8234	-0.9096	-5.84		-0.61	
570	59 Shell-Thick	INVSLE	-5.4971	-0.9077	-5.77		-0.61	
570	59 Shell-Thick	INVSLE	-4.8305	-0.7830	-5.77		-0.63	
570	59 Shell-Thick	INVSLE	-5.1225	-0.8079	-5.84		-0.63	
570	59 Shell-Thick	INVSLU	-3.0197	-0.4313	-3.39		0.99	
570	59 Shell-Thick	INVSLU	-2.9101	-0.5491	-3.37		0.99	
570	59 Shell-Thick	INVSLU	-2.5191	-0.4744	-3.37		0.88	
570	59 Shell-Thick	INVSLU	-2.6149	-0.3658	-3.39		0.88	
570	59 Shell-Thick	INVSLU	-9.9826	-1.5938	-9.70		-0.83	
570	59 Shell-Thick	INVSLU	-9.3718	-1.4885	-9.57		-0.83	
570	59 Shell-Thick	INVSLU	-8.2683	-1.2836	-9.57		-0.85	
570	59 Shell-Thick	INVSLU	-8.8166	-1.4307	-9.70		-0.85	
571	60 Shell-Thick	INVSLE	-2.0074	-0.2812	-2.97	8.626E-02		
571	60 Shell-Thick	INVSLE	-1.9437	-0.3707	-2.95	8.626E-02		
571	60 Shell-Thick	INVSLE	-1.6013	-0.3093	-2.95	1.729E-02		
571	60 Shell-Thick	INVSLE	-1.6535	-0.2274	-2.97	1.729E-02		
571	60 Shell-Thick	INVSLE	-5.2545	-0.8194	-6.91		-0.63	
571	60 Shell-Thick	INVSLE	-4.9684	-0.8256	-6.83		-0.63	
571	60 Shell-Thick	INVSLE	-4.1787	-0.6877	-6.83		-0.65	
571	60 Shell-Thick	INVSLE	-4.4255	-0.7078	-6.91		-0.65	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 114 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

571	60 Shell-Thick	INVS LU	-2.7100	-0.3796	-4.00	0.91		
571	60 Shell-Thick	INVS LU	-2.6240	-0.5005	-3.98	0.91		
571	60 Shell-Thick	INVS LU	-2.1617	-0.4176	-3.98	0.79		
571	60 Shell-Thick	INVS LU	-2.2322	-0.3070	-4.00	0.79		
571	60 Shell-Thick	INVS LU	-9.0200	-1.4435	-11.49	-0.85		
571	60 Shell-Thick	INVS LU	-8.4760	-1.3530	-11.34	-0.85		
571	60 Shell-Thick	INVS LU	-7.1675	-1.1266	-11.34	-0.87		
571	60 Shell-Thick	INVS LU	-7.6400	-1.2649	-11.49	-0.87		
572	61 Shell-Thick	INVS LE	-1.7252	-0.2379	-3.43	3.575E-02		
572	61 Shell-Thick	INVS LE	-1.6842	-0.3297	-3.41	3.575E-02		
572	61 Shell-Thick	INVS LE	-1.2880	-0.2584	-3.41	-3.963E-02		
572	61 Shell-Thick	INVS LE	-1.3163	-0.1751	-3.43	-3.963E-02		
572	61 Shell-Thick	INVS LE	-4.5534	-0.7174	-8.01	-0.64		
572	61 Shell-Thick	INVS LE	-4.3222	-0.7324	-7.93	-0.64		
572	61 Shell-Thick	INVS LE	-3.4057	-0.5690	-7.93	-0.66		
572	61 Shell-Thick	INVS LE	-3.5928	-0.5835	-8.01	-0.66		
572	61 Shell-Thick	INVS LU	-2.3290	-0.3212	-4.63	0.82		
572	61 Shell-Thick	INVS LU	-2.2736	-0.4451	-4.60	0.82		
572	61 Shell-Thick	INVS LU	-1.7388	-0.3488	-4.60	0.68		
572	61 Shell-Thick	INVS LU	-1.7770	-0.2364	-4.63	0.68		
572	61 Shell-Thick	INVS LU	-7.8330	-1.2734	-13.33	-0.87		
572	61 Shell-Thick	INVS LU	-7.3813	-1.1994	-13.17	-0.87		
572	61 Shell-Thick	INVS LU	-5.8614	-0.9293	-13.17	-0.89		
572	61 Shell-Thick	INVS LU	-6.2326	-1.0572	-13.33	-0.89		
573	62 Shell-Thick	INVS LE	-1.3874	-0.1851	-3.90	-1.873E-02		
573	62 Shell-Thick	INVS LE	-1.3688	-0.2788	-3.88	-1.873E-02		
573	62 Shell-Thick	INVS LE	-0.9177	-0.2043	-3.88	-9.822E-02		
573	62 Shell-Thick	INVS LE	-0.9228	-0.1196	-3.90	-9.822E-02		
573	62 Shell-Thick	INVS LE	-3.7120	-0.5892	-9.14	-0.66		
573	62 Shell-Thick	INVS LE	-3.5353	-0.6131	-9.05	-0.66		
573	62 Shell-Thick	INVS LE	-2.4879	-0.4427	-9.05	-0.67		
573	62 Shell-Thick	INVS LE	-2.6168	-0.4509	-9.14	-0.67		
573	62 Shell-Thick	INVS LU	-1.8730	-0.2499	-5.26	0.72		
573	62 Shell-Thick	INVS LU	-1.8479	-0.3764	-5.24	0.72		
573	62 Shell-Thick	INVS LU	-1.2389	-0.2758	-5.24	0.57		
573	62 Shell-Thick	INVS LU	-1.2458	-0.1615	-5.26	0.57		
573	62 Shell-Thick	INVS LU	-6.4077	-1.0579	-15.22	-0.88		
573	62 Shell-Thick	INVS LU	-6.0476	-1.0008	-15.05	-0.88		
573	62 Shell-Thick	INVS LU	-4.3087	-0.7192	-15.05	-0.91		
573	62 Shell-Thick	INVS LU	-4.5812	-0.8350	-15.22	-0.91		
574	63 Shell-Thick	INVS LE	-0.9861	-0.1285	-4.37	-7.742E-02		
574	63 Shell-Thick	INVS LE	-0.9970	-0.2239	-4.36	-7.742E-02		
574	63 Shell-Thick	INVS LE	-0.4900	-0.1386	-4.36	-0.16		
574	63 Shell-Thick	INVS LE	-0.4648	-0.0529	-4.37	-0.16		
574	63 Shell-Thick	INVS LE	-2.7071	-0.4510	-10.31	-0.67		
574	63 Shell-Thick	INVS LE	-2.6065	-0.4843	-10.21	-0.67		
574	63 Shell-Thick	INVS LE	-1.4243	-0.2833	-10.21	-0.68		
574	63 Shell-Thick	INVS LE	-1.4730	-0.2848	-10.31	-0.68		
574	63 Shell-Thick	INVS LU	-1.3312	-0.1735	-5.90	0.61		
574	63 Shell-Thick	INVS LU	-1.3459	-0.3022	-5.88	0.61		
574	63 Shell-Thick	INVS LU	-0.6615	-0.1871	-5.88	0.44		
574	63 Shell-Thick	INVS LU	-0.6275	-0.0714	-5.90	0.44		
574	63 Shell-Thick	INVS LU	-4.7029	-0.8250	-17.19	-0.90		
574	63 Shell-Thick	INVS LU	-4.4730	-0.7864	-17.00	-0.90		
574	63 Shell-Thick	INVS LU	-2.5076	-0.4512	-17.00	-0.92		
574	63 Shell-Thick	INVS LU	-2.6421	-0.5537	-17.19	-0.92		
575	64 Shell-Thick	INVS LE	-0.5199	-0.0599	-4.85	-0.14		
575	64 Shell-Thick	INVS LE	-0.5562	-0.1559	-4.84	-0.14		
575	64 Shell-Thick	INVS LE	0.0075	-0.0713	-4.84	-0.22		
575	64 Shell-Thick	INVS LE	0.0583	0.0149	-4.85	-0.22		
575	64 Shell-Thick	INVS LE	-1.5329	-0.2766	-11.50	-0.67		
575	64 Shell-Thick	INVS LE	-1.4989	-0.3184	-11.41	-0.67		
575	64 Shell-Thick	INVS LE	-0.1771	-0.1193	-11.41	-0.68		
575	64 Shell-Thick	INVS LE	-0.1569	-0.1138	-11.50	-0.68		
575	64 Shell-Thick	INVS LU	-0.7019	-0.0808	-6.55	0.49		
575	64 Shell-Thick	INVS LU	-0.7508	-0.2104	-6.54	0.49		
575	64 Shell-Thick	INVS LU	0.0102	-0.0963	-6.54	0.32		
575	64 Shell-Thick	INVS LU	0.0787	0.0201	-6.55	0.32		
575	64 Shell-Thick	INVS LU	-2.7076	-0.5280	-19.21	-0.91		
575	64 Shell-Thick	INVS LU	-2.5921	-0.5069	-19.02	-0.91		
575	64 Shell-Thick	INVS LU	-0.3912	-0.1750	-19.02	-0.92		
575	64 Shell-Thick	INVS LU	-0.4065	-0.2630	-19.21	-0.92		
576	65 Shell-Thick	INVS LE	0.0228	0.0103	-5.33	-0.20		
576	65 Shell-Thick	INVS LE	-0.0514	-0.0856	-5.34	-0.20		
576	65 Shell-Thick	INVS LE	1.2408	0.0994	-5.34	-0.27		
576	65 Shell-Thick	INVS LE	1.3711	0.1116	-5.33	-0.27		
576	65 Shell-Thick	INVS LE	-0.1516	-0.0954	-12.73	-0.68		
576	65 Shell-Thick	INVS LE	-0.2245	-0.1461	-12.64	-0.68		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 115 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

576	65 Shell-Thick	INVSLE	0.5694	0.0144	-12.64	-0.67		
576	65 Shell-Thick	INVSLE	0.6586	0.1002	-12.73	-0.67		
576	65 Shell-Thick	INVSLE	0.0308	0.0139	-7.20	0.36		
576	65 Shell-Thick	INVSLE	-0.0693	-0.1156	-7.20	0.36		
576	65 Shell-Thick	INVSLE	2.0192	0.1980	-7.20	0.19		
576	65 Shell-Thick	INVSLE	2.1974	0.1524	-7.20	0.19		
576	65 Shell-Thick	INVSLE	-0.3538	-0.2181	-21.31	-0.91		
576	65 Shell-Thick	INVSLE	-0.4254	-0.2163	-21.11	-0.91		
576	65 Shell-Thick	INVSLE	0.7687	0.0194	-21.11	-0.91		
576	65 Shell-Thick	INVSLE	0.8891	0.1249	-21.31	-0.91		
577	66 Shell-Thick	INVSLE	1.4281	0.1442	-5.81	-0.25		
577	66 Shell-Thick	INVSLE	1.2856	0.0873	-5.83	-0.25		
577	66 Shell-Thick	INVSLE	2.8994	0.3186	-5.83	-0.31		
577	66 Shell-Thick	INVSLE	3.0993	0.3371	-5.81	-0.31		
577	66 Shell-Thick	INVSLE	0.6364	0.0990	-13.98	-0.67		
577	66 Shell-Thick	INVSLE	0.5397	0.0052	-13.91	-0.67		
577	66 Shell-Thick	INVSLE	1.2178	0.0996	-13.91	-0.65		
577	66 Shell-Thick	INVSLE	1.3287	0.1839	-13.98	-0.65		
577	66 Shell-Thick	INVSLE	2.3463	0.2014	-7.84	0.24		
577	66 Shell-Thick	INVSLE	2.1507	0.1824	-7.87	0.24		
577	66 Shell-Thick	INVSLE	4.8494	0.5725	-7.87	8.256E-02		
577	66 Shell-Thick	INVSLE	5.1524	0.5147	-7.84	8.256E-02		
577	66 Shell-Thick	INVSLE	0.8591	0.1337	-23.46	-0.91		
577	66 Shell-Thick	INVSLE	0.7286	0.0070	-23.28	-0.91		
577	66 Shell-Thick	INVSLE	1.6441	0.1345	-23.28	-0.88		
577	66 Shell-Thick	INVSLE	1.7938	0.2483	-23.46	-0.88		
578	67 Shell-Thick	INVSLE	3.2836	0.3855	-6.28	-0.30		
578	67 Shell-Thick	INVSLE	2.9701	0.3212	-6.32	-0.30		
578	67 Shell-Thick	INVSLE	4.7350	0.6497	-6.32	-0.36		
578	67 Shell-Thick	INVSLE	5.1089	0.6734	-6.28	-0.36		
578	67 Shell-Thick	INVSLE	1.3434	0.1860	-15.28	-0.65		
578	67 Shell-Thick	INVSLE	1.1922	0.0954	-15.21	-0.65		
578	67 Shell-Thick	INVSLE	1.9267	0.2230	-15.21	-0.62		
578	67 Shell-Thick	INVSLE	2.0923	0.3040	-15.28	-0.62		
578	67 Shell-Thick	INVSLE	5.5334	0.6168	-8.48	0.11		
578	67 Shell-Thick	INVSLE	5.0317	0.5831	-8.53	0.11		
578	67 Shell-Thick	INVSLE	7.9915	1.1444	-8.53	-4.760E-02		
578	67 Shell-Thick	INVSLE	8.6071	1.1018	-8.48	-4.760E-02		
578	67 Shell-Thick	INVSLE	1.8136	0.2511	-25.71	-0.88		
578	67 Shell-Thick	INVSLE	1.6095	0.1288	-25.52	-0.88		
578	67 Shell-Thick	INVSLE	2.6010	0.3010	-25.52	-0.84		
578	67 Shell-Thick	INVSLE	2.8246	0.4103	-25.71	-0.84		
579	68 Shell-Thick	INVSLE	5.3300	0.7426	-6.72	-0.33		
579	68 Shell-Thick	INVSLE	5.0031	0.6783	-6.79	-0.33		
579	68 Shell-Thick	INVSLE	6.9247	0.9862	-6.79	-0.35		
579	68 Shell-Thick	INVSLE	7.3074	1.0130	-6.72	-0.35		
579	68 Shell-Thick	INVSLE	2.1068	0.3099	-16.57	-0.62		
579	68 Shell-Thick	INVSLE	1.9621	0.2270	-16.54	-0.62		
579	68 Shell-Thick	INVSLE	2.7522	0.3482	-16.54	-0.56		
579	68 Shell-Thick	INVSLE	2.9086	0.4233	-16.57	-0.56		
579	68 Shell-Thick	INVSLE	9.0676	1.2443	-9.08	9.627E-03		
579	68 Shell-Thick	INVSLE	8.5296	1.2017	-9.17	9.627E-03		
579	68 Shell-Thick	INVSLE	11.7632	1.7261	-9.17	-0.11		
579	68 Shell-Thick	INVSLE	12.4084	1.6969	-9.08	-0.11		
579	68 Shell-Thick	INVSLE	2.8442	0.4184	-27.98	-0.83		
579	68 Shell-Thick	INVSLE	2.6488	0.3065	-27.84	-0.83		
579	68 Shell-Thick	INVSLE	3.7155	0.4701	-27.84	-0.75		
579	68 Shell-Thick	INVSLE	3.9266	0.5714	-27.98	-0.75		
580	69 Shell-Thick	INVSLE	16.8357	3.2683	21.06	-9.116E-03		
580	69 Shell-Thick	INVSLE	15.8673	3.2723	21.27	-9.116E-03		
580	69 Shell-Thick	INVSLE	13.4195	2.6936	21.27	-0.28		
580	69 Shell-Thick	INVSLE	14.2986	2.7496	21.06	-0.28		
580	69 Shell-Thick	INVSLE	6.2921	1.2499	8.15	-0.10		
580	69 Shell-Thick	INVSLE	6.1129	1.2311	8.53	-0.10		
580	69 Shell-Thick	INVSLE	5.1370	1.0086	8.53	-0.34		
580	69 Shell-Thick	INVSLE	5.3032	1.0364	8.15	-0.34		
580	69 Shell-Thick	INVSLE	29.0623	5.6090	36.03	-1.231E-02		
580	69 Shell-Thick	INVSLE	27.1787	5.6392	36.04	-1.231E-02		
580	69 Shell-Thick	INVSLE	23.0240	4.6474	36.04	-0.22		
580	69 Shell-Thick	INVSLE	24.7298	4.7364	36.03	-0.22		
580	69 Shell-Thick	INVSLE	8.4944	1.6874	11.01	-0.22		
580	69 Shell-Thick	INVSLE	8.2524	1.6620	11.51	-0.22		
580	69 Shell-Thick	INVSLE	6.9349	1.3616	11.51	-0.46		
580	69 Shell-Thick	INVSLE	7.1594	1.3991	11.01	-0.46		
581	70 Shell-Thick	INVSLE	13.5128	2.5850	19.72	-0.30		
581	70 Shell-Thick	INVSLE	12.7570	2.5686	19.83	-0.30		
581	70 Shell-Thick	INVSLE	10.4724	2.2030	19.83	-0.39		
581	70 Shell-Thick	INVSLE	11.1391	2.2791	19.72	-0.39		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 116 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

581	70 Shell-Thick	INVSLE	5.1324	1.0143	7.80	-0.33		
581	70 Shell-Thick	INVSLE	4.9546	0.9601	8.07	-0.33		
581	70 Shell-Thick	INVSLE	4.0280	0.8009	8.07	-0.56		
581	70 Shell-Thick	INVSLE	4.1897	0.8661	7.80	-0.56		
581	70 Shell-Thick	INVSLE	23.2310	4.4064	33.54	-0.26		
581	70 Shell-Thick	INVSLE	21.8049	4.4338	33.47	-0.26		
581	70 Shell-Thick	INVSLE	17.9454	3.8288	33.47	-0.20		
581	70 Shell-Thick	INVSLE	19.1978	3.9177	33.54	-0.20		
581	70 Shell-Thick	INVSLE	6.9288	1.3693	10.53	-0.44		
581	70 Shell-Thick	INVSLE	6.6887	1.2961	10.90	-0.44		
581	70 Shell-Thick	INVSLE	5.4378	1.0812	10.90	-0.76		
581	70 Shell-Thick	INVSLE	5.6561	1.1692	10.53	-0.76		
582	71 Shell-Thick	INVSLE	10.3562	2.1314	18.40	-0.39		
582	71 Shell-Thick	INVSLE	10.0018	2.1000	18.43	-0.39		
582	71 Shell-Thick	INVSLE	7.8661	1.5391	18.43	-0.41		
582	71 Shell-Thick	INVSLE	8.1541	1.6149	18.40	-0.41		
582	71 Shell-Thick	INVSLE	4.0229	0.8465	7.41	-0.55		
582	71 Shell-Thick	INVSLE	3.9206	0.7656	7.59	-0.55		
582	71 Shell-Thick	INVSLE	3.0424	0.5390	7.59	-0.71		
582	71 Shell-Thick	INVSLE	3.1338	0.6274	7.41	-0.71		
582	71 Shell-Thick	INVSLE	17.7005	3.6213	31.15	-0.20		
582	71 Shell-Thick	INVSLE	17.0538	3.6475	30.99	-0.20		
582	71 Shell-Thick	INVSLE	13.4597	2.6987	30.99	-6.029E-02		
582	71 Shell-Thick	INVSLE	13.9757	2.7600	31.15	-6.029E-02		
582	71 Shell-Thick	INVSLE	5.4309	1.1428	10.00	-0.74		
582	71 Shell-Thick	INVSLE	5.2928	1.0335	10.25	-0.74		
582	71 Shell-Thick	INVSLE	4.1073	0.7277	10.25	-0.96		
582	71 Shell-Thick	INVSLE	4.2307	0.8470	10.00	-0.96		
583	72 Shell-Thick	INVSLE	7.9337	1.5274	17.09	-0.46		
583	72 Shell-Thick	INVSLE	7.4204	1.4933	17.03	-0.46		
583	72 Shell-Thick	INVSLE	5.4459	0.9806	17.03	-0.40		
583	72 Shell-Thick	INVSLE	5.8894	1.0616	17.09	-0.40		
583	72 Shell-Thick	INVSLE	3.1411	0.6234	6.98	-0.72		
583	72 Shell-Thick	INVSLE	2.9470	0.5254	7.09	-0.72		
583	72 Shell-Thick	INVSLE	2.1250	0.3215	7.09	-0.81		
583	72 Shell-Thick	INVSLE	2.3051	0.4290	6.98	-0.81		
583	72 Shell-Thick	INVSLE	13.4913	2.5758	28.82	-0.16		
583	72 Shell-Thick	INVSLE	12.6078	2.6157	28.55	-0.16		
583	72 Shell-Thick	INVSLE	9.2968	1.7451	28.55	8.045E-02		
583	72 Shell-Thick	INVSLE	10.0458	1.7952	28.82	8.045E-02		
583	72 Shell-Thick	INVSLE	4.2405	0.8416	9.43	-0.97		
583	72 Shell-Thick	INVSLE	3.9784	0.7093	9.58	-0.97		
583	72 Shell-Thick	INVSLE	2.8688	0.4340	9.58	-1.10		
583	72 Shell-Thick	INVSLE	3.1119	0.5791	9.43	-1.10		
584	73 Shell-Thick	INVSLE	5.6231	0.9960	15.75	-0.41		
584	73 Shell-Thick	INVSLE	5.3105	0.9659	15.67	-0.41		
584	73 Shell-Thick	INVSLE	3.4910	0.5527	15.67	-0.34		
584	73 Shell-Thick	INVSLE	3.7424	0.6238	15.75	-0.34		
584	73 Shell-Thick	INVSLE	2.2775	0.4276	6.51	-0.81		
584	73 Shell-Thick	INVSLE	2.1335	0.3190	6.58	-0.81		
584	73 Shell-Thick	INVSLE	1.3684	0.1511	6.58	-0.87		
584	73 Shell-Thick	INVSLE	1.4999	0.2682	6.51	-0.87		
584	73 Shell-Thick	INVSLE	9.5027	1.6552	26.46	4.217E-02		
584	73 Shell-Thick	INVSLE	8.9946	1.7160	26.20	4.217E-02		
584	73 Shell-Thick	INVSLE	5.9524	1.0183	26.20	0.28		
584	73 Shell-Thick	INVSLE	6.3428	1.0362	26.46	0.28		
584	73 Shell-Thick	INVSLE	3.0746	0.5773	8.79	-1.09		
584	73 Shell-Thick	INVSLE	2.8802	0.4306	8.89	-1.09		
584	73 Shell-Thick	INVSLE	1.8474	0.2040	8.89	-1.17		
584	73 Shell-Thick	INVSLE	2.0248	0.3620	8.79	-1.17		
585	74 Shell-Thick	INVSLE	3.6617	0.5804	14.45	-0.37		
585	74 Shell-Thick	INVSLE	3.3821	0.5581	14.33	-0.37		
585	74 Shell-Thick	INVSLE	1.7181	0.1618	14.33	-0.27		
585	74 Shell-Thick	INVSLE	1.9366	0.2250	14.45	-0.27		
585	74 Shell-Thick	INVSLE	1.5256	0.2710	6.03	-0.87		
585	74 Shell-Thick	INVSLE	1.3823	0.1562	6.07	-0.87		
585	74 Shell-Thick	INVSLE	0.6765	-0.0053	6.07	-0.90		
585	74 Shell-Thick	INVSLE	0.8061	0.1187	6.03	-0.90		
585	74 Shell-Thick	INVSLE	6.1388	0.9392	24.20	0.21		
585	74 Shell-Thick	INVSLE	5.7012	1.0243	23.91	0.21		
585	74 Shell-Thick	INVSLE	2.9260	0.3557	23.91	0.47		
585	74 Shell-Thick	INVSLE	3.2476	0.3482	24.20	0.47		
585	74 Shell-Thick	INVSLE	2.0596	0.3658	8.15	-1.18		
585	74 Shell-Thick	INVSLE	1.8661	0.2109	8.19	-1.18		
585	74 Shell-Thick	INVSLE	0.9133	-0.0072	8.19	-1.22		
585	74 Shell-Thick	INVSLE	1.0883	0.1602	8.15	-1.22		
586	75 Shell-Thick	INVSLE	1.8920	0.1980	13.16	-0.29		
586	75 Shell-Thick	INVSLE	1.7477	0.1858	13.03	-0.29		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 117 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

586	75 Shell-Thick	INVSLE	0.2331	-0.1331	13.03	-0.17		
586	75 Shell-Thick	INVSLE	0.3217	-0.0066	13.16	-0.17		
586	75 Shell-Thick	INVSLE	0.8373	0.1247	5.54	-0.90		
586	75 Shell-Thick	INVSLE	0.7360	0.0068	5.55	-0.90		
586	75 Shell-Thick	INVSLE	0.0891	-0.1472	5.55	-0.91		
586	75 Shell-Thick	INVSLE	0.1775	-0.0977	5.54	-0.91		
586	75 Shell-Thick	INVSLE	3.1152	0.2831	22.00	0.43		
586	75 Shell-Thick	INVSLE	2.9208	0.3933	21.70	0.43		
586	75 Shell-Thick	INVSLE	0.4000	-0.1636	21.70	0.69		
586	75 Shell-Thick	INVSLE	0.4889	-0.0089	22.00	0.69		
586	75 Shell-Thick	INVSLE	1.1303	0.1683	7.48	-1.22		
586	75 Shell-Thick	INVSLE	0.9936	0.0092	7.50	-1.22		
586	75 Shell-Thick	INVSLE	0.1203	-0.2009	7.50	-1.23		
586	75 Shell-Thick	INVSLE	0.2396	-0.2033	7.48	-1.23		
587	76 Shell-Thick	INVSLE	0.3709	0.0022	11.92	-0.20		
587	76 Shell-Thick	INVSLE	0.2938	-0.1117	11.78	-0.20		
587	76 Shell-Thick	INVSLE	-0.4303	-0.2519	11.78	-7.587E-02		
587	76 Shell-Thick	INVSLE	-0.3641	-0.1246	11.92	-7.587E-02		
587	76 Shell-Thick	INVSLE	0.2368	-0.1112	5.05	-0.92		
587	76 Shell-Thick	INVSLE	0.1577	-0.1164	5.04	-0.92		
587	76 Shell-Thick	INVSLE	-1.0746	-0.4320	5.04	-0.91		
587	76 Shell-Thick	INVSLE	-1.0511	-0.3955	5.05	-0.91		
587	76 Shell-Thick	INVSLE	0.5264	0.0030	19.88	0.63		
587	76 Shell-Thick	INVSLE	0.4516	-0.1064	19.58	0.63		
587	76 Shell-Thick	INVSLE	-0.5809	-0.3400	19.58	0.89		
587	76 Shell-Thick	INVSLE	-0.4915	-0.1682	19.88	0.89		
587	76 Shell-Thick	INVSLE	0.3197	-0.2427	6.82	-1.24		
587	76 Shell-Thick	INVSLE	0.2128	-0.1571	6.81	-1.24		
587	76 Shell-Thick	INVSLE	-1.8217	-0.6408	6.81	-1.23		
587	76 Shell-Thick	INVSLE	-1.8477	-0.7097	6.82	-1.23		
588	77 Shell-Thick	INVSLE	-0.2966	-0.1135	10.70	-9.813E-02		
588	77 Shell-Thick	INVSLE	-0.3395	-0.2313	10.56	-9.813E-02		
588	77 Shell-Thick	INVSLE	-0.8696	-0.3517	10.56	2.635E-02		
588	77 Shell-Thick	INVSLE	-0.8387	-0.2259	10.70	2.635E-02		
588	77 Shell-Thick	INVSLE	-0.9694	-0.3984	4.56	-0.91		
588	77 Shell-Thick	INVSLE	-0.9454	-0.3869	4.54	-0.91		
588	77 Shell-Thick	INVSLE	-2.1732	-0.6641	4.54	-0.90		
588	77 Shell-Thick	INVSLE	-2.2461	-0.6429	4.56	-0.90		
588	77 Shell-Thick	INVSLE	-0.4003	-0.1533	17.83	0.85		
588	77 Shell-Thick	INVSLE	-0.4584	-0.3122	17.54	0.85		
588	77 Shell-Thick	INVSLE	-1.1740	-0.4748	17.54	1.10		
588	77 Shell-Thick	INVSLE	-1.1322	-0.3050	17.83	1.10		
588	77 Shell-Thick	INVSLE	-1.7497	-0.7288	6.16	-1.23		
588	77 Shell-Thick	INVSLE	-1.6480	-0.5673	6.13	-1.23		
588	77 Shell-Thick	INVSLE	-3.6848	-1.0264	6.13	-1.21		
588	77 Shell-Thick	INVSLE	-3.8782	-1.1265	6.16	-1.21		
589	78 Shell-Thick	INVSLE	-0.7572	-0.2133	9.53	2.654E-03		
589	78 Shell-Thick	INVSLE	-0.7747	-0.3291	9.39	2.654E-03		
589	78 Shell-Thick	INVSLE	-1.2478	-0.4431	9.39	0.13		
589	78 Shell-Thick	INVSLE	-1.2419	-0.3196	9.53	0.13		
589	78 Shell-Thick	INVSLE	-2.1174	-0.6380	4.08	-0.90		
589	78 Shell-Thick	INVSLE	-2.0271	-0.6141	4.05	-0.90		
589	78 Shell-Thick	INVSLE	-3.1183	-0.8752	4.05	-0.88		
589	78 Shell-Thick	INVSLE	-3.2543	-0.8685	4.08	-0.88		
589	78 Shell-Thick	INVSLE	-1.0223	-0.2880	15.85	1.05		
589	78 Shell-Thick	INVSLE	-1.0459	-0.4442	15.58	1.05		
589	78 Shell-Thick	INVSLE	-1.6845	-0.5982	15.58	1.29		
589	78 Shell-Thick	INVSLE	-1.6766	-0.4314	15.85	1.29		
589	78 Shell-Thick	INVSLE	-3.6946	-1.1305	5.51	-1.22		
589	78 Shell-Thick	INVSLE	-3.4793	-0.9446	5.47	-1.22		
589	78 Shell-Thick	INVSLE	-5.2874	-1.3763	5.47	-1.18		
589	78 Shell-Thick	INVSLE	-5.5879	-1.5051	5.51	-1.18		
590	79 Shell-Thick	INVSLE	-1.1578	-0.3061	8.39	0.10		
590	79 Shell-Thick	INVSLE	-1.1452	-0.4193	8.26	0.10		
590	79 Shell-Thick	INVSLE	-1.5626	-0.5199	8.26	0.22		
590	79 Shell-Thick	INVSLE	-1.5857	-0.3997	8.39	0.22		
590	79 Shell-Thick	INVSLE	-3.1112	-0.8579	3.60	-0.88		
590	79 Shell-Thick	INVSLE	-2.9435	-0.8223	3.57	-0.88		
590	79 Shell-Thick	INVSLE	-3.9032	-1.0483	3.57	-0.85		
590	79 Shell-Thick	INVSLE	-4.1119	-1.0566	3.60	-0.85		
590	79 Shell-Thick	INVSLE	-1.5630	-0.4132	13.94	1.25		
590	79 Shell-Thick	INVSLE	-1.5460	-0.5660	13.69	1.25		
590	79 Shell-Thick	INVSLE	-2.1095	-0.7019	13.69	1.47		
590	79 Shell-Thick	INVSLE	-2.1407	-0.5396	13.94	1.47		
590	79 Shell-Thick	INVSLE	-5.3765	-1.4978	4.87	-1.19		
590	79 Shell-Thick	INVSLE	-5.0288	-1.2896	4.82	-1.19		
590	79 Shell-Thick	INVSLE	-6.6175	-1.6611	4.82	-1.15		
590	79 Shell-Thick	INVSLE	-7.0413	-1.8183	4.87	-1.15		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 118 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

591	80 Shell-Thick	INVSLE	-1.4985	-0.3860	7.28	0.20		
591	80 Shell-Thick	INVSLE	-1.4630	-0.4963	7.16	0.20		
591	80 Shell-Thick	INVSLE	-1.8260	-0.5881	7.16	0.31		
591	80 Shell-Thick	INVSLE	-1.8711	-0.4714	7.28	0.31		
591	80 Shell-Thick	INVSLE	-3.9525	-1.0424	3.14	-0.86		
591	80 Shell-Thick	INVSLE	-3.7289	-0.9958	3.11	-0.86		
591	80 Shell-Thick	INVSLE	-4.5612	-1.2015	3.11	-0.83		
591	80 Shell-Thick	INVSLE	-4.8216	-1.2235	3.14	-0.83		
591	80 Shell-Thick	INVSLE	-2.0230	-0.5211	12.09	1.43		
591	80 Shell-Thick	INVSLE	-1.9751	-0.6700	11.86	1.43		
591	80 Shell-Thick	INVSLE	-2.4651	-0.7940	11.86	1.63		
591	80 Shell-Thick	INVSLE	-2.5260	-0.6364	12.09	1.63		
591	80 Shell-Thick	INVSLE	-6.7982	-1.8036	4.24	-1.16		
591	80 Shell-Thick	INVSLE	-6.3565	-1.5750	4.19	-1.16		
591	80 Shell-Thick	INVSLE	-7.7330	-1.9127	4.19	-1.12		
591	80 Shell-Thick	INVSLE	-8.2430	-2.0957	4.24	-1.12		
592	81 Shell-Thick	INVSLE	-1.7881	-0.4581	6.21	0.29		
592	81 Shell-Thick	INVSLE	-1.7291	-0.5655	6.10	0.29		
592	81 Shell-Thick	INVSLE	-2.0389	-0.6441	6.10	0.39		
592	81 Shell-Thick	INVSLE	-2.1064	-0.5311	6.21	0.39		
592	81 Shell-Thick	INVSLE	-4.6659	-1.2074	2.68	-0.83		
592	81 Shell-Thick	INVSLE	-4.3844	-1.1510	2.65	-0.83		
592	81 Shell-Thick	INVSLE	-5.0933	-1.3247	2.65	-0.81		
592	81 Shell-Thick	INVSLE	-5.4067	-1.3599	2.68	-0.81		
592	81 Shell-Thick	INVSLE	-2.4139	-0.6184	10.30	1.60		
592	81 Shell-Thick	INVSLE	-2.3342	-0.7634	10.10	1.60		
592	81 Shell-Thick	INVSLE	-2.7525	-0.8695	10.10	1.77		
592	81 Shell-Thick	INVSLE	-2.8436	-0.7169	10.30	1.77		
592	81 Shell-Thick	INVSLE	-8.0031	-2.0765	3.62	-1.13		
592	81 Shell-Thick	INVSLE	-7.4636	-1.8301	3.58	-1.13		
592	81 Shell-Thick	INVSLE	-8.6353	-2.1140	3.58	-1.09		
592	81 Shell-Thick	INVSLE	-9.2338	-2.3209	3.62	-1.09		
593	82 Shell-Thick	INVSLE	-2.0285	-0.5187	5.16	0.37		
593	82 Shell-Thick	INVSLE	-1.9515	-0.6234	5.07	0.37		
593	82 Shell-Thick	INVSLE	-2.2093	-0.6913	5.07	0.46		
593	82 Shell-Thick	INVSLE	-2.2936	-0.5817	5.16	0.46		
593	82 Shell-Thick	INVSLE	-5.2562	-1.3436	2.23	-0.81		
593	82 Shell-Thick	INVSLE	-4.9322	-1.2787	2.21	-0.81		
593	82 Shell-Thick	INVSLE	-5.5211	-1.4286	2.21	-0.78		
593	82 Shell-Thick	INVSLE	-5.8723	-1.4753	2.23	-0.78		
593	82 Shell-Thick	INVSLE	-2.7384	-0.7002	8.56	1.74		
593	82 Shell-Thick	INVSLE	-2.6345	-0.8416	8.39	1.74		
593	82 Shell-Thick	INVSLE	-2.9826	-0.9332	8.39	1.90		
593	82 Shell-Thick	INVSLE	-3.0964	-0.7853	8.56	1.90		
593	82 Shell-Thick	INVSLE	-8.9991	-2.3001	3.02	-1.09		
593	82 Shell-Thick	INVSLE	-8.3887	-2.0386	2.98	-1.09		
593	82 Shell-Thick	INVSLE	-9.3616	-2.2837	2.98	-1.06		
593	82 Shell-Thick	INVSLE	-10.0223	-2.5115	3.02	-1.06		
594	83 Shell-Thick	INVSLE	-2.2257	-0.5708	4.14	0.44		
594	83 Shell-Thick	INVSLE	-2.1319	-0.6731	4.06	0.44		
594	83 Shell-Thick	INVSLE	-2.3389	-0.7276	4.06	0.51		
594	83 Shell-Thick	INVSLE	-2.4386	-0.6213	4.14	0.51		
594	83 Shell-Thick	INVSLE	-5.7399	-1.4600	1.79	-0.79		
594	83 Shell-Thick	INVSLE	-5.3753	-1.3883	1.77	-0.79		
594	83 Shell-Thick	INVSLE	-5.8474	-1.5075	1.77	-0.77		
594	83 Shell-Thick	INVSLE	-6.2340	-1.5644	1.79	-0.77		
594	83 Shell-Thick	INVSLE	-3.0047	-0.7705	6.86	1.87		
594	83 Shell-Thick	INVSLE	-2.8781	-0.9087	6.72	1.87		
594	83 Shell-Thick	INVSLE	-3.1575	-0.9823	6.72	2.00		
594	83 Shell-Thick	INVSLE	-3.2921	-0.8387	6.86	2.00		
594	83 Shell-Thick	INVSLE	-9.8150	-2.4911	2.42	-1.06		
594	83 Shell-Thick	INVSLE	-9.1364	-2.2176	2.39	-1.06		
594	83 Shell-Thick	INVSLE	-9.9159	-2.4118	2.39	-1.03		
594	83 Shell-Thick	INVSLE	-10.6352	-2.6582	2.42	-1.03		
595	84 Shell-Thick	INVSLE	-2.3818	-0.6122	3.14	0.50		
595	84 Shell-Thick	INVSLE	-2.2759	-0.7127	3.08	0.50		
595	84 Shell-Thick	INVSLE	-2.4329	-0.7551	3.08	0.56		
595	84 Shell-Thick	INVSLE	-2.5433	-0.6515	3.14	0.56		
595	84 Shell-Thick	INVSLE	-6.1212	-1.5512	1.36	-0.77		
595	84 Shell-Thick	INVSLE	-5.7284	-1.4744	1.34	-0.77		
595	84 Shell-Thick	INVSLE	-6.0860	-1.5673	1.34	-0.75		
595	84 Shell-Thick	INVSLE	-6.4958	-1.6328	1.36	-0.75		
595	84 Shell-Thick	INVSLE	-3.2154	-0.8265	5.20	1.98		
595	84 Shell-Thick	INVSLE	-3.0725	-0.9622	5.09	1.98		
595	84 Shell-Thick	INVSLE	-3.2844	-1.0194	5.09	2.07		
595	84 Shell-Thick	INVSLE	-3.4335	-0.8796	5.20	2.07		
595	84 Shell-Thick	INVSLE	-10.4576	-2.6401	1.84	-1.04		
595	84 Shell-Thick	INVSLE	-9.7320	-2.3576	1.81	-1.04		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 119 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

595	84 Shell-Thick	INVSLU	-10.3223	-2.5092	1.81		-1.01	
595	84 Shell-Thick	INVSLU	-11.0792	-2.7707	1.84		-1.01	
596	85 Shell-Thick	INVSLE	-2.5006	-0.6446	2.15		0.55	
596	85 Shell-Thick	INVSLE	-2.3847	-0.7438	2.11		0.55	
596	85 Shell-Thick	INVSLE	-2.4923	-0.7728	2.11		0.59	
596	85 Shell-Thick	INVSLE	-2.6114	-0.6715	2.15		0.59	
596	85 Shell-Thick	INVSLE	-6.4110	-1.6224	0.93		-0.75	
596	85 Shell-Thick	INVSLE	-5.9936	-1.5422	0.92		-0.75	
596	85 Shell-Thick	INVSLE	-6.2387	-1.6053	0.92		-0.74	
596	85 Shell-Thick	INVSLE	-6.6677	-1.6777	0.93		-0.74	
596	85 Shell-Thick	INVSLU	-3.3758	-0.8702	3.56		2.06	
596	85 Shell-Thick	INVSLU	-3.2193	-1.0042	3.49		2.06	
596	85 Shell-Thick	INVSLU	-3.3646	-1.0433	3.49		2.12	
596	85 Shell-Thick	INVSLU	-3.5254	-0.9065	3.56		2.12	
596	85 Shell-Thick	INVSLU	-10.9455	-2.7563	1.26		-1.02	
596	85 Shell-Thick	INVSLU	-10.1785	-2.4681	1.24		-1.02	
596	85 Shell-Thick	INVSLU	-10.5831	-2.5706	1.24		-1.00	
596	85 Shell-Thick	INVSLU	-11.3715	-2.8445	1.26		-1.00	
597	86 Shell-Thick	INVSLE	-2.5833	-0.6670	1.18		0.58	
597	86 Shell-Thick	INVSLE	-2.4616	-0.7655	1.15		0.58	
597	86 Shell-Thick	INVSLE	-2.5205	-0.7816	1.15		0.60	
597	86 Shell-Thick	INVSLE	-2.6439	-0.6819	1.18		0.60	
597	86 Shell-Thick	INVSLE	-6.6111	-1.6708	0.51		-0.74	
597	86 Shell-Thick	INVSLE	-6.1800	-1.5891	0.50		-0.74	
597	86 Shell-Thick	INVSLE	-6.3140	-1.6242	0.50		-0.73	
597	86 Shell-Thick	INVSLE	-6.7515	-1.7016	0.51		-0.73	
597	86 Shell-Thick	INVSLU	-3.4875	-0.9004	1.95		2.11	
597	86 Shell-Thick	INVSLU	-3.3232	-1.0335	1.91		2.11	
597	86 Shell-Thick	INVSLU	-3.4026	-1.0552	1.91		2.15	
597	86 Shell-Thick	INVSLU	-3.5692	-0.9205	1.95		2.15	
597	86 Shell-Thick	INVSLU	-11.2819	-2.8348	0.69		-1.00	
597	86 Shell-Thick	INVSLU	-10.4920	-2.5442	0.68		-1.00	
597	86 Shell-Thick	INVSLU	-10.7131	-2.6013	0.68		-0.99	
597	86 Shell-Thick	INVSLU	-11.5147	-2.8841	0.69		-0.99	
598	87 Shell-Thick	INVSLE	-2.6321	-0.6799	0.21		0.60	
598	87 Shell-Thick	INVSLE	-2.5069	-0.7785	0.20		0.60	
598	87 Shell-Thick	INVSLE	-2.5172	-0.7813	0.20		0.60	
598	87 Shell-Thick	INVSLE	-2.6427	-0.6825	0.21		0.60	
598	87 Shell-Thick	INVSLE	-6.7279	-1.6985	8.952E-02		-0.73	
598	87 Shell-Thick	INVSLE	-6.2874	-1.6173	8.812E-02		-0.73	
598	87 Shell-Thick	INVSLE	-6.3109	-1.6233	8.812E-02		-0.73	
598	87 Shell-Thick	INVSLE	-6.7524	-1.7039	8.952E-02		-0.73	
598	87 Shell-Thick	INVSLU	-3.5534	-0.9179	0.34		2.15	
598	87 Shell-Thick	INVSLU	-3.3843	-1.0510	0.33		2.15	
598	87 Shell-Thick	INVSLU	-3.3983	-1.0547	0.33		2.15	
598	87 Shell-Thick	INVSLU	-3.5677	-0.9214	0.34		2.15	
598	87 Shell-Thick	INVSLU	-11.4776	-2.8797	0.12		-0.99	
598	87 Shell-Thick	INVSLU	-10.6714	-2.5900	0.12		-0.99	
598	87 Shell-Thick	INVSLU	-10.7102	-2.5998	0.12		-0.99	
598	87 Shell-Thick	INVSLU	-11.5182	-2.8883	0.12		-0.99	
599	88 Shell-Thick	INVSLE	-2.6468	-0.6832	-0.33		0.60	
599	88 Shell-Thick	INVSLE	-2.5223	-0.7824	-0.33		0.60	
599	88 Shell-Thick	INVSLE	-2.4842	-0.7719	-0.33		0.59	
599	88 Shell-Thick	INVSLE	-2.6074	-0.6734	-0.33		0.59	
599	88 Shell-Thick	INVSLE	-6.7603	-1.7048	-0.76		-0.73	
599	88 Shell-Thick	INVSLE	-6.3208	-1.6260	-0.75		-0.73	
599	88 Shell-Thick	INVSLE	-6.2341	-1.6029	-0.75		-0.74	
599	88 Shell-Thick	INVSLE	-6.6691	-1.6847	-0.76		-0.74	
599	88 Shell-Thick	INVSLU	-3.5732	-0.9223	-0.45		2.15	
599	88 Shell-Thick	INVSLU	-3.4051	-1.0563	-0.44		2.15	
599	88 Shell-Thick	INVSLU	-3.3537	-1.0420	-0.44		2.13	
599	88 Shell-Thick	INVSLU	-3.5201	-0.9091	-0.45		2.13	
599	88 Shell-Thick	INVSLU	-11.5304	-2.8896	-1.26		-0.99	
599	88 Shell-Thick	INVSLU	-10.7256	-2.6041	-1.24		-0.99	
599	88 Shell-Thick	INVSLU	-10.5825	-2.5665	-1.24		-1.00	
599	88 Shell-Thick	INVSLU	-11.3791	-2.8574	-1.26		-1.00	
600	89 Shell-Thick	INVSLE	-2.6281	-0.6766	-0.75		0.59	
600	89 Shell-Thick	INVSLE	-2.5066	-0.7772	-0.74		0.59	
600	89 Shell-Thick	INVSLE	-2.4198	-0.7538	-0.74		0.56	
600	89 Shell-Thick	INVSLE	-2.5387	-0.6549	-0.75		0.56	
600	89 Shell-Thick	INVSLE	-6.7105	-1.6895	-1.74		-0.74	
600	89 Shell-Thick	INVSLE	-6.2764	-1.6148	-1.70		-0.74	
600	89 Shell-Thick	INVSLE	-6.0789	-1.5638	-1.70		-0.75	
600	89 Shell-Thick	INVSLE	-6.5032	-1.6450	-1.74		-0.75	
600	89 Shell-Thick	INVSLU	-3.5480	-0.9135	-1.02		2.14	
600	89 Shell-Thick	INVSLU	-3.3839	-1.0493	-1.00		2.14	
600	89 Shell-Thick	INVSLU	-3.2668	-1.0176	-1.00		2.08	
600	89 Shell-Thick	INVSLU	-3.4272	-0.8842	-1.02		2.08	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 120 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

600	89 Shell-Thick	INVSLU	-11.4446	-2.8640	-2.87	-0.99		
600	89 Shell-Thick	INVSLU	-10.6480	-2.5861	-2.81	-0.99		
600	89 Shell-Thick	INVSLU	-10.3220	-2.5031	-2.81	-1.01		
600	89 Shell-Thick	INVSLU	-11.1006	-2.7930	-2.87	-1.01		
601	90 Shell-Thick	INVSLE	-2.5743	-0.6606	-1.18	0.57		
601	90 Shell-Thick	INVSLE	-2.4602	-0.7632	-1.16	0.57		
601	90 Shell-Thick	INVSLE	-2.3244	-0.7262	-1.16	0.52		
601	90 Shell-Thick	INVSLE	-2.4343	-0.6264	-1.18	0.52		
601	90 Shell-Thick	INVSLE	-6.5738	-1.6534	-2.72	-0.74		
601	90 Shell-Thick	INVSLE	-6.1560	-1.5849	-2.66	-0.74		
601	90 Shell-Thick	INVSLE	-5.8466	-1.5038	-2.66	-0.76		
601	90 Shell-Thick	INVSLE	-6.2493	-1.5824	-2.72	-0.76		
601	90 Shell-Thick	INVSLU	-3.4753	-0.8919	-1.59	2.10		
601	90 Shell-Thick	INVSLU	-3.3212	-1.0304	-1.57	2.10		
601	90 Shell-Thick	INVSLU	-3.1379	-0.9804	-1.57	2.01		
601	90 Shell-Thick	INVSLU	-3.2863	-0.8456	-1.59	2.01		
601	90 Shell-Thick	INVSLU	-11.2118	-2.8046	-4.50	-1.01		
601	90 Shell-Thick	INVSLU	-10.4418	-2.5376	-4.41	-1.01		
601	90 Shell-Thick	INVSLU	-9.9312	-2.4054	-4.41	-1.03		
601	90 Shell-Thick	INVSLU	-10.6733	-2.6911	-4.50	-1.03		
602	91 Shell-Thick	INVSLE	-2.4848	-0.6343	-1.61	0.53		
602	91 Shell-Thick	INVSLE	-2.3800	-0.7395	-1.59	0.53		
602	91 Shell-Thick	INVSLE	-2.1945	-0.6903	-1.59	0.47		
602	91 Shell-Thick	INVSLE	-2.2937	-0.5888	-1.61	0.47		
602	91 Shell-Thick	INVSLE	-6.3493	-1.5940	-3.71	-0.76		
602	91 Shell-Thick	INVSLE	-5.9515	-1.5332	-3.64	-0.76		
602	91 Shell-Thick	INVSLE	-5.5286	-1.4258	-3.64	-0.78		
602	91 Shell-Thick	INVSLE	-5.9062	-1.5001	-3.71	-0.78		
602	91 Shell-Thick	INVSLU	-3.3544	-0.8564	-2.17	2.03		
602	91 Shell-Thick	INVSLU	-3.2130	-0.9983	-2.14	2.03		
602	91 Shell-Thick	INVSLU	-2.9626	-0.9319	-2.14	1.92		
602	91 Shell-Thick	INVSLU	-3.0966	-0.7949	-2.17	1.92		
602	91 Shell-Thick	INVSLU	-10.8308	-2.7068	-6.15	-1.02		
602	91 Shell-Thick	INVSLU	-10.0932	-2.4536	-6.02	-1.02		
602	91 Shell-Thick	INVSLU	-9.3949	-2.2788	-6.02	-1.05		
602	91 Shell-Thick	INVSLU	-10.0953	-2.5569	-6.15	-1.05		
603	92 Shell-Thick	INVSLE	-2.3560	-0.5988	-2.05	0.48		
603	92 Shell-Thick	INVSLE	-2.2654	-0.7070	-2.02	0.48		
603	92 Shell-Thick	INVSLE	-2.0294	-0.6442	-2.02	0.41		
603	92 Shell-Thick	INVSLE	-2.1131	-0.5407	-2.05	0.41		
603	92 Shell-Thick	INVSLE	-6.0278	-1.5141	-4.73	-0.78		
603	92 Shell-Thick	INVSLE	-5.6623	-1.4629	-4.64	-0.78		
603	92 Shell-Thick	INVSLE	-5.1237	-1.3246	-4.64	-0.80		
603	92 Shell-Thick	INVSLE	-5.4637	-1.3928	-4.73	-0.80		
603	92 Shell-Thick	INVSLU	-3.1806	-0.8084	-2.76	1.94		
603	92 Shell-Thick	INVSLU	-3.0583	-0.9544	-2.73	1.94		
603	92 Shell-Thick	INVSLU	-2.7398	-0.8697	-2.73	1.80		
603	92 Shell-Thick	INVSLU	-2.8527	-0.7299	-2.76	1.80		
603	92 Shell-Thick	INVSLU	-10.2857	-2.5755	-7.83	-1.05		
603	92 Shell-Thick	INVSLU	-9.6015	-2.3395	-7.67	-1.05		
603	92 Shell-Thick	INVSLU	-8.7119	-2.1136	-7.67	-1.08		
603	92 Shell-Thick	INVSLU	-9.3491	-2.3810	-7.83	-1.08		
604	93 Shell-Thick	INVSLE	-2.1864	-0.5522	-2.49	0.42		
604	93 Shell-Thick	INVSLE	-2.1113	-0.6637	-2.46	0.42		
604	93 Shell-Thick	INVSLE	-1.8238	-0.5901	-2.46	0.33		
604	93 Shell-Thick	INVSLE	-1.8908	-0.4840	-2.49	0.33		
604	93 Shell-Thick	INVSLE	-5.6059	-1.4082	-5.76	-0.80		
604	93 Shell-Thick	INVSLE	-5.2749	-1.3679	-5.66	-0.80		
604	93 Shell-Thick	INVSLE	-4.6177	-1.2058	-5.66	-0.82		
604	93 Shell-Thick	INVSLE	-4.9185	-1.2662	-5.76	-0.82		
604	93 Shell-Thick	INVSLU	-2.9516	-0.7455	-3.36	1.83		
604	93 Shell-Thick	INVSLU	-2.8503	-0.8960	-3.32	1.83		
604	93 Shell-Thick	INVSLU	-2.4622	-0.7967	-3.32	1.66		
604	93 Shell-Thick	INVSLU	-2.5526	-0.6534	-3.36	1.66		
604	93 Shell-Thick	INVSLU	-9.5712	-2.4007	-9.55	-1.07		
604	93 Shell-Thick	INVSLU	-8.9435	-2.1845	-9.36	-1.07		
604	93 Shell-Thick	INVSLU	-7.8574	-1.9198	-9.36	-1.11		
604	93 Shell-Thick	INVSLU	-8.4293	-2.1734	-9.55	-1.11		
605	94 Shell-Thick	INVSLE	-1.9704	-0.4967	-2.94	0.35		
605	94 Shell-Thick	INVSLE	-1.9166	-0.6119	-2.91	0.35		
605	94 Shell-Thick	INVSLE	-1.5765	-0.5248	-2.91	0.24		
605	94 Shell-Thick	INVSLE	-1.6210	-0.4158	-2.94	0.24		
605	94 Shell-Thick	INVSLE	-5.0686	-1.2819	-6.82	-0.82		
605	94 Shell-Thick	INVSLE	-4.7876	-1.2542	-6.70	-0.82		
605	94 Shell-Thick	INVSLE	-4.0086	-1.0597	-6.70	-0.85		
605	94 Shell-Thick	INVSLE	-4.2544	-1.1110	-6.82	-0.85		
605	94 Shell-Thick	INVSLU	-2.6601	-0.6705	-3.97	1.70		
605	94 Shell-Thick	INVSLU	-2.5873	-0.8260	-3.93	1.70		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 121 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

605	94 Shell-Thick	INVSLU	-2.1282	-0.7085	-3.93		1.51	
605	94 Shell-Thick	INVSLU	-2.1884	-0.5614	-3.97		1.51	
605	94 Shell-Thick	INVSLU	-8.6614	-2.1924	-11.32		-1.11	
605	94 Shell-Thick	INVSLU	-8.1170	-1.9991	-11.10		-1.11	
605	94 Shell-Thick	INVSLU	-6.8290	-1.6801	-11.10		-1.14	
605	94 Shell-Thick	INVSLU	-7.3081	-1.9171	-11.32		-1.14	
606	95 Shell-Thick	INVSLE	-1.7063	-0.4291	-3.40		0.26	
606	95 Shell-Thick	INVSLE	-1.6732	-0.5479	-3.37		0.26	
606	95 Shell-Thick	INVSLE	-1.2792	-0.4518	-3.37		0.15	
606	95 Shell-Thick	INVSLE	-1.3020	-0.3399	-3.40		0.15	
606	95 Shell-Thick	INVSLE	-4.4121	-1.1254	-7.91		-0.84	
606	95 Shell-Thick	INVSLE	-4.1792	-1.1110	-7.78		-0.84	
606	95 Shell-Thick	INVSLE	-3.2744	-0.8964	-7.78		-0.87	
606	95 Shell-Thick	INVSLE	-3.4680	-0.9371	-7.91		-0.87	
606	95 Shell-Thick	INVSLU	-2.3035	-0.5793	-4.60		1.54	
606	95 Shell-Thick	INVSLU	-2.2588	-0.7396	-4.55		1.54	
606	95 Shell-Thick	INVSLU	-1.7269	-0.6100	-4.55		1.33	
606	95 Shell-Thick	INVSLU	-1.7578	-0.4589	-4.60		1.33	
606	95 Shell-Thick	INVSLU	-7.5498	-1.9327	-13.14		-1.14	
606	95 Shell-Thick	INVSLU	-7.0852	-1.7640	-12.90		-1.14	
606	95 Shell-Thick	INVSLU	-5.5882	-1.4120	-12.90		-1.18	
606	95 Shell-Thick	INVSLU	-5.9796	-1.6296	-13.14		-1.18	
607	96 Shell-Thick	INVSLE	-1.3856	-0.3533	-3.88		0.17	
607	96 Shell-Thick	INVSLE	-1.3807	-0.4755	-3.85		0.17	
607	96 Shell-Thick	INVSLE	-0.9316	-0.3658	-3.85	4.742E-02		
607	96 Shell-Thick	INVSLE	-0.9251	-0.2512	-3.88	4.742E-02		
607	96 Shell-Thick	INVSLE	-3.6130	-0.9487	-9.04		-0.87	
607	96 Shell-Thick	INVSLE	-3.4500	-0.9490	-8.90		-0.87	
607	96 Shell-Thick	INVSLE	-2.4158	-0.6990	-8.90		-0.89	
607	96 Shell-Thick	INVSLE	-2.5344	-0.7283	-9.04		-0.89	
607	96 Shell-Thick	INVSLU	-1.8706	-0.4769	-5.23		1.37	
607	96 Shell-Thick	INVSLU	-1.8639	-0.6419	-5.19		1.37	
607	96 Shell-Thick	INVSLU	-1.2577	-0.4938	-5.19		1.14	
607	96 Shell-Thick	INVSLU	-1.2490	-0.3391	-5.23		1.14	
607	96 Shell-Thick	INVSLU	-6.1959	-1.6391	-15.03		-1.17	
607	96 Shell-Thick	INVSLU	-5.8497	-1.4981	-14.76		-1.17	
607	96 Shell-Thick	INVSLU	-4.1368	-1.0854	-14.76		-1.21	
607	96 Shell-Thick	INVSLU	-4.4005	-1.2816	-15.03		-1.21	
608	97 Shell-Thick	INVSLE	-1.0080	-0.2639	-4.35	7.081E-02		
608	97 Shell-Thick	INVSLE	-1.0270	-0.3888	-4.33	7.081E-02		
608	97 Shell-Thick	INVSLE	-0.5214	-0.2728	-4.33	-5.310E-02		
608	97 Shell-Thick	INVSLE	-0.4905	-0.1558	-4.35	-5.310E-02		
608	97 Shell-Thick	INVSLE	-2.6705	-0.7350	-10.20		-0.89	
608	97 Shell-Thick	INVSLE	-2.5664	-0.7497	-10.06		-0.89	
608	97 Shell-Thick	INVSLE	-1.3976	-0.4845	-10.06		-0.91	
608	97 Shell-Thick	INVSLE	-1.4541	-0.5016	-10.20		-0.91	
608	97 Shell-Thick	INVSLU	-1.3608	-0.3563	-5.88		1.18	
608	97 Shell-Thick	INVSLU	-1.3865	-0.5248	-5.85		1.18	
608	97 Shell-Thick	INVSLU	-0.7039	-0.3682	-5.85		0.94	
608	97 Shell-Thick	INVSLU	-0.6622	-0.2104	-5.88		0.94	
608	97 Shell-Thick	INVSLU	-4.5984	-1.2812	-16.97		-1.20	
608	97 Shell-Thick	INVSLU	-4.3515	-1.1682	-16.69		-1.20	
608	97 Shell-Thick	INVSLU	-2.4137	-0.7301	-16.69		-1.23	
608	97 Shell-Thick	INVSLU	-2.5715	-0.9026	-16.97		-1.23	
609	98 Shell-Thick	INVSLE	-0.5607	-0.1672	-4.84	-3.124E-02		
609	98 Shell-Thick	INVSLE	-0.6152	-0.2942	-4.83	-3.124E-02		
609	98 Shell-Thick	INVSLE	-0.0522	-0.1629	-4.83		-0.16	
609	98 Shell-Thick	INVSLE	0.0152	-0.0446	-4.84		-0.16	
609	98 Shell-Thick	INVSLE	-1.5471	-0.5013	-11.39		-0.91	
609	98 Shell-Thick	INVSLE	-1.5381	-0.5315	-11.25		-0.91	
609	98 Shell-Thick	INVSLE	-0.2308	-0.2233	-11.25		-0.92	
609	98 Shell-Thick	INVSLE	-0.1873	-0.2283	-11.39		-0.92	
609	98 Shell-Thick	INVSLU	-0.7570	-0.2258	-6.54		0.98	
609	98 Shell-Thick	INVSLU	-0.8305	-0.3971	-6.52		0.98	
609	98 Shell-Thick	INVSLU	-0.0705	-0.2199	-6.52		0.73	
609	98 Shell-Thick	INVSLU	0.0205	-0.0602	-6.54		0.73	
609	98 Shell-Thick	INVSLU	-2.6909	-0.8887	-18.99		-1.22	
609	98 Shell-Thick	INVSLU	-2.6083	-0.8067	-18.70		-1.22	
609	98 Shell-Thick	INVSLU	-0.4379	-0.3106	-18.70		-1.24	
609	98 Shell-Thick	INVSLU	-0.4220	-0.4412	-18.99		-1.24	
609	98 Shell-Thick	INVSLE	-0.0493	-0.0540	-5.33		-0.13	
610	99 Shell-Thick	INVSLE	-0.1251	-0.1810	-5.33		-0.13	
610	99 Shell-Thick	INVSLE	1.1450	0.0561	-5.33		-0.25	
610	99 Shell-Thick	INVSLE	1.2503	0.0722	-5.33		-0.25	
610	99 Shell-Thick	INVSLE	-0.2558	-0.2184	-12.62		-0.91	
610	99 Shell-Thick	INVSLE	-0.3065	-0.2620	-12.49		-0.91	
610	99 Shell-Thick	INVSLE	0.4966	-0.0462	-12.49		-0.91	
610	99 Shell-Thick	INVSLE	0.5852	0.0632	-12.62		-0.91	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 122 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

610	99 Shell-Thick	INVSLU	-0.0665	-0.0729	-7.20	0.78		
610	99 Shell-Thick	INVSLU	-0.1689	-0.2443	-7.20	0.78		
610	99 Shell-Thick	INVSLU	1.8969	0.1747	-7.20	0.52		
610	99 Shell-Thick	INVSLU	2.0215	0.0975	-7.20	0.52		
610	99 Shell-Thick	INVSLU	-0.4953	-0.4091	-21.08	-1.23		
610	99 Shell-Thick	INVSLU	-0.5169	-0.3659	-20.79	-1.23		
610	99 Shell-Thick	INVSLU	0.6704	-0.0623	-20.79	-1.23		
610	99 Shell-Thick	INVSLU	0.7900	0.0527	-21.08	-1.23		
611	100 Shell-Thick	INVSLE	1.2734	0.0854	-5.82	-0.23		
611	100 Shell-Thick	INVSLE	1.0889	0.0273	-5.85	-0.23		
611	100 Shell-Thick	INVSLE	2.6877	0.4069	-5.85	-0.34		
611	100 Shell-Thick	INVSLE	2.9325	0.4247	-5.82	-0.34		
611	100 Shell-Thick	INVSLE	0.5489	0.0654	-13.89	-0.91		
611	100 Shell-Thick	INVSLE	0.4288	-0.0602	-13.77	-0.91		
611	100 Shell-Thick	INVSLE	1.1092	0.0955	-13.77	-0.89		
611	100 Shell-Thick	INVSLE	1.2431	0.2119	-13.89	-0.89		
611	100 Shell-Thick	INVSLU	2.1136	0.1183	-7.86	0.57		
611	100 Shell-Thick	INVSLU	1.8543	0.1288	-7.89	0.57		
611	100 Shell-Thick	INVSLU	4.5183	0.7679	-7.89	0.30		
611	100 Shell-Thick	INVSLU	4.8915	0.6714	-7.86	0.30		
611	100 Shell-Thick	INVSLU	0.7410	0.0883	-23.25	-1.23		
611	100 Shell-Thick	INVSLU	0.5789	-0.0813	-22.95	-1.23		
611	100 Shell-Thick	INVSLU	1.4974	0.1290	-22.95	-1.20		
611	100 Shell-Thick	INVSLU	1.6782	0.2861	-23.25	-1.20		
612	101 Shell-Thick	INVSLE	2.9765	0.4617	-6.31	-0.31		
612	101 Shell-Thick	INVSLE	2.7680	0.3947	-6.36	-0.31		
612	101 Shell-Thick	INVSLE	4.5208	0.7863	-6.36	-0.39		
612	101 Shell-Thick	INVSLE	4.7893	0.8131	-6.31	-0.39		
612	101 Shell-Thick	INVSLE	1.2081	0.2080	-15.19	-0.89		
612	101 Shell-Thick	INVSLE	1.0867	0.0879	-15.09	-0.89		
612	101 Shell-Thick	INVSLE	1.8266	0.2480	-15.09	-0.84		
612	101 Shell-Thick	INVSLE	1.9607	0.3597	-15.19	-0.84		
612	101 Shell-Thick	INVSLU	5.0272	0.7559	-8.52	0.37		
612	101 Shell-Thick	INVSLU	4.7178	0.7506	-8.59	0.37		
612	101 Shell-Thick	INVSLU	7.6451	1.4105	-8.59	0.13		
612	101 Shell-Thick	INVSLU	8.0695	1.3389	-8.52	0.13		
612	101 Shell-Thick	INVSLU	1.6309	0.2809	-25.48	-1.20		
612	101 Shell-Thick	INVSLU	1.4670	0.1186	-25.21	-1.20		
612	101 Shell-Thick	INVSLU	2.4659	0.3348	-25.21	-1.13		
612	101 Shell-Thick	INVSLU	2.6469	0.4855	-25.48	-1.13		
613	102 Shell-Thick	INVSLE	5.0275	0.8711	-6.79	-0.38		
613	102 Shell-Thick	INVSLE	4.6015	0.7920	-6.88	-0.38		
613	102 Shell-Thick	INVSLE	6.5079	1.2741	-6.88	-0.45		
613	102 Shell-Thick	INVSLE	7.0030	1.3070	-6.79	-0.45		
613	102 Shell-Thick	INVSLE	1.9840	0.3600	-16.52	-0.84		
613	102 Shell-Thick	INVSLE	1.8007	0.2471	-16.44	-0.84		
613	102 Shell-Thick	INVSLE	2.5982	0.4393	-16.44	-0.77		
613	102 Shell-Thick	INVSLE	2.7958	0.5425	-16.52	-0.77		
613	102 Shell-Thick	INVSLU	8.5569	1.4638	-9.16	0.16		
613	102 Shell-Thick	INVSLU	7.8492	1.4239	-9.28	0.16		
613	102 Shell-Thick	INVSLU	11.0417	2.2422	-9.28	-9.370E-02		
613	102 Shell-Thick	INVSLU	11.8818	2.1934	-9.16	-9.370E-02		
613	102 Shell-Thick	INVSLU	2.6783	0.4860	-27.81	-1.14		
613	102 Shell-Thick	INVSLU	2.4310	0.3336	-27.52	-1.14		
613	102 Shell-Thick	INVSLU	3.5075	0.5930	-27.52	-1.03		
613	102 Shell-Thick	INVSLU	3.7744	0.7324	-27.81	-1.03		
614	103 Shell-Thick	INVSLE	15.9057	3.0783	21.19	-1.024E-02		
614	103 Shell-Thick	INVSLE	14.9456	3.0920	21.39	-1.024E-02		
614	103 Shell-Thick	INVSLE	12.4980	2.6090	21.39	-0.28		
614	103 Shell-Thick	INVSLE	13.3386	2.6755	21.19	-0.28		
614	103 Shell-Thick	INVSLE	6.1450	1.2196	8.50	-0.11		
614	103 Shell-Thick	INVSLE	5.9580	1.2010	8.92	-0.11		
614	103 Shell-Thick	INVSLE	4.9436	1.0050	8.92	-0.38		
614	103 Shell-Thick	INVSLE	5.1085	1.0386	8.50	-0.38		
614	103 Shell-Thick	INVSLU	27.2245	5.2337	35.91	-1.383E-02		
614	103 Shell-Thick	INVSLU	25.3680	5.2848	35.85	-1.383E-02		
614	103 Shell-Thick	INVSLU	21.2583	4.4691	35.85	-0.17		
614	103 Shell-Thick	INVSLU	22.8824	4.5737	35.91	-0.17		
614	103 Shell-Thick	INVSLU	8.2957	1.6465	11.47	-0.22		
614	103 Shell-Thick	INVSLU	8.0432	1.6213	12.04	-0.22		
614	103 Shell-Thick	INVSLU	6.6738	1.3568	12.04	-0.51		
614	103 Shell-Thick	INVSLU	6.8965	1.4021	11.47	-0.51		
615	104 Shell-Thick	INVSLE	12.7901	2.5536	19.80	-0.30		
615	104 Shell-Thick	INVSLE	12.0904	2.5398	19.86	-0.30		
615	104 Shell-Thick	INVSLE	9.8007	1.9908	19.86	-0.36		
615	104 Shell-Thick	INVSLE	10.4089	2.0659	19.80	-0.36		
615	104 Shell-Thick	INVSLE	4.9863	1.0279	8.05	-0.36		
615	104 Shell-Thick	INVSLE	4.8203	0.9666	8.35	-0.36		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 123 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

615	104	Shell-Thick	INVSLE	3.8619	0.7408	8.35	-0.63	
615	104	Shell-Thick	INVSLE	4.0123	0.8127	8.05	-0.63	
615	104	Shell-Thick	INVSLE	21.8396	4.3227	33.41	-0.23	
615	104	Shell-Thick	INVSLE	20.5210	4.3641	33.21	-0.23	
615	104	Shell-Thick	INVSLE	16.6876	3.4403	33.21	-5.248E-02	
615	104	Shell-Thick	INVSLE	17.8266	3.5192	33.41	-5.248E-02	
615	104	Shell-Thick	INVSLE	6.7315	1.3877	10.87	-0.49	
615	104	Shell-Thick	INVSLE	6.5074	1.3049	11.28	-0.49	
615	104	Shell-Thick	INVSLE	5.2135	1.0001	11.28	-0.85	
615	104	Shell-Thick	INVSLE	5.4166	1.0971	10.87	-0.85	
616	105	Shell-Thick	INVSLE	10.0282	1.9619	18.38	-0.39	
616	105	Shell-Thick	INVSLE	9.4044	1.9395	18.36	-0.39	
616	105	Shell-Thick	INVSLE	7.2854	1.5000	18.36	-0.38	
616	105	Shell-Thick	INVSLE	7.8206	1.5818	18.38	-0.38	
616	105	Shell-Thick	INVSLE	3.9504	0.8052	7.57	-0.62	
616	105	Shell-Thick	INVSLE	3.7576	0.7151	7.78	-0.62	
616	105	Shell-Thick	INVSLE	2.8619	0.5230	7.78	-0.80	
616	105	Shell-Thick	INVSLE	3.0376	0.6247	7.57	-0.80	
616	105	Shell-Thick	INVSLE	17.0762	3.3032	30.90	-0.13	
616	105	Shell-Thick	INVSLE	15.9526	3.3593	30.63	-0.13	
616	105	Shell-Thick	INVSLE	12.4150	2.6329	30.63	0.11	
616	105	Shell-Thick	INVSLE	13.3670	2.6917	30.90	0.11	
616	105	Shell-Thick	INVSLE	5.3331	1.0870	10.22	-0.84	
616	105	Shell-Thick	INVSLE	5.0728	0.9653	10.51	-0.84	
616	105	Shell-Thick	INVSLE	3.8635	0.7061	10.51	-1.09	
616	105	Shell-Thick	INVSLE	4.1008	0.8433	10.22	-1.09	
617	106	Shell-Thick	INVSLE	7.4558	1.4966	16.99	-0.40	
617	106	Shell-Thick	INVSLE	7.0835	1.4719	16.91	-0.40	
617	106	Shell-Thick	INVSLE	5.1227	0.9697	16.91	-0.33	
617	106	Shell-Thick	INVSLE	5.4235	1.0423	16.99	-0.33	
617	106	Shell-Thick	INVSLE	2.9791	0.6206	7.08	-0.80	
617	106	Shell-Thick	INVSLE	2.8346	0.5100	7.22	-0.80	
617	106	Shell-Thick	INVSLE	1.9993	0.2955	7.22	-0.91	
617	106	Shell-Thick	INVSLE	2.1306	0.4150	7.08	-0.91	
617	106	Shell-Thick	INVSLE	12.6470	2.5124	28.49	6.487E-02	
617	106	Shell-Thick	INVSLE	12.0106	2.5873	28.15	6.487E-02	
617	106	Shell-Thick	INVSLE	8.7448	1.7515	28.15	0.36	
617	106	Shell-Thick	INVSLE	9.2419	1.7698	28.49	0.36	
617	106	Shell-Thick	INVSLE	4.0218	0.8378	9.56	-1.08	
617	106	Shell-Thick	INVSLE	3.8267	0.6884	9.74	-1.08	
617	106	Shell-Thick	INVSLE	2.6990	0.3989	9.74	-1.23	
617	106	Shell-Thick	INVSLE	2.8764	0.5603	9.56	-1.23	
618	107	Shell-Thick	INVSLE	5.3378	0.9896	15.64	-0.37	
618	107	Shell-Thick	INVSLE	4.9568	0.9721	15.50	-0.37	
618	107	Shell-Thick	INVSLE	3.1579	0.4930	15.50	-0.24	
618	107	Shell-Thick	INVSLE	3.4693	0.5571	15.64	-0.24	
618	107	Shell-Thick	INVSLE	2.1612	0.4189	6.58	-0.92	
618	107	Shell-Thick	INVSLE	1.9907	0.2959	6.65	-0.92	
618	107	Shell-Thick	INVSLE	1.2188	0.0912	6.65	-0.98	
618	107	Shell-Thick	INVSLE	1.3752	0.2236	6.58	-0.98	
618	107	Shell-Thick	INVSLE	9.0215	1.6513	26.15	0.27	
618	107	Shell-Thick	INVSLE	8.3963	1.7562	25.76	0.27	
618	107	Shell-Thick	INVSLE	5.4065	0.9591	25.76	0.62	
618	107	Shell-Thick	INVSLE	5.8976	0.9438	26.15	0.62	
618	107	Shell-Thick	INVSLE	2.9176	0.5655	8.88	-1.24	
618	107	Shell-Thick	INVSLE	2.6874	0.3995	8.98	-1.24	
618	107	Shell-Thick	INVSLE	1.6454	0.1231	8.98	-1.33	
618	107	Shell-Thick	INVSLE	1.8565	0.3019	8.88	-1.33	
619	108	Shell-Thick	INVSLE	3.3956	0.5221	14.31	-0.26	
619	108	Shell-Thick	INVSLE	3.1746	0.5166	14.14	-0.26	
619	108	Shell-Thick	INVSLE	1.5295	0.0809	14.14	-0.12	
619	108	Shell-Thick	INVSLE	1.6905	0.1266	14.31	-0.12	
619	108	Shell-Thick	INVSLE	1.4034	0.2309	6.06	-0.98	
619	108	Shell-Thick	INVSLE	1.2760	0.1010	6.10	-0.98	
619	108	Shell-Thick	INVSLE	0.5661	-0.0881	6.10	-1.01	
619	108	Shell-Thick	INVSLE	0.6814	0.0499	6.06	-1.01	
619	108	Shell-Thick	INVSLE	5.7057	0.8599	23.87	0.57	
619	108	Shell-Thick	INVSLE	5.3762	0.9986	23.46	0.57	
619	108	Shell-Thick	INVSLE	2.6468	0.2769	23.46	0.92	
619	108	Shell-Thick	INVSLE	2.8606	0.2156	23.87	0.92	
619	108	Shell-Thick	INVSLE	1.8946	0.3117	8.18	-1.32	
619	108	Shell-Thick	INVSLE	1.7226	0.1363	8.23	-1.32	
619	108	Shell-Thick	INVSLE	0.7642	-0.1190	8.23	-1.37	
619	108	Shell-Thick	INVSLE	0.9199	0.0674	8.18	-1.37	
620	109	Shell-Thick	INVSLE	1.7458	0.1089	13.02	-0.15	
620	109	Shell-Thick	INVSLE	1.5774	0.1192	12.83	-0.15	
620	109	Shell-Thick	INVSLE	0.0842	-0.2526	12.83	1.810E-02	
620	109	Shell-Thick	INVSLE	0.1954	-0.1119	13.02	1.810E-02	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 124 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

620	109	Shell-Thick	INVSLE	0.7500	0.0609	5.55	-1.01	
620	109	Shell-Thick	INVSLE	0.6352	-0.0716	5.55	-1.01	
620	109	Shell-Thick	INVSLE	-0.0124	-0.2961	5.55	-1.02	
620	109	Shell-Thick	INVSLE	0.0902	-0.2681	5.55	-1.02	
620	109	Shell-Thick	INVSLE	2.9005	0.1646	21.68	0.85	
620	109	Shell-Thick	INVSLE	2.6700	0.3405	21.26	0.85	
620	109	Shell-Thick	INVSLE	0.1963	-0.3410	21.26	1.22	
620	109	Shell-Thick	INVSLE	0.3175	-0.1511	21.68	1.22	
620	109	Shell-Thick	INVSLE	1.0125	0.0823	7.49	-1.37	
620	109	Shell-Thick	INVSLE	0.8575	-0.0966	7.50	-1.37	
620	109	Shell-Thick	INVSLE	-0.0168	-0.4062	7.50	-1.37	
620	109	Shell-Thick	INVSLE	0.1217	-0.4492	7.49	-1.37	
621	110	Shell-Thick	INVSLE	0.2750	-0.0985	11.76	-6.587E-03	
621	110	Shell-Thick	INVSLE	0.2269	-0.2308	11.56	-6.587E-03	
621	110	Shell-Thick	INVSLE	-0.4975	-0.3950	11.56	0.17	
621	110	Shell-Thick	INVSLE	-0.4339	-0.2554	11.76	0.17	
621	110	Shell-Thick	INVSLE	0.1641	-0.2737	5.04	-1.02	
621	110	Shell-Thick	INVSLE	0.0896	-0.2461	5.02	-1.02	
621	110	Shell-Thick	INVSLE	-1.1214	-0.6153	5.02	-1.00	
621	110	Shell-Thick	INVSLE	-1.1237	-0.6092	5.04	-1.00	
621	110	Shell-Thick	INVSLE	0.4037	-0.1330	19.55	1.17	
621	110	Shell-Thick	INVSLE	0.3860	-0.2637	19.15	1.17	
621	110	Shell-Thick	INVSLE	-0.6717	-0.5332	19.15	1.52	
621	110	Shell-Thick	INVSLE	-0.5857	-0.3448	19.55	1.52	
621	110	Shell-Thick	INVSLE	0.2215	-0.4768	6.80	-1.38	
621	110	Shell-Thick	INVSLE	0.1210	-0.3345	6.78	-1.38	
621	110	Shell-Thick	INVSLE	-1.8448	-0.8708	6.78	-1.35	
621	110	Shell-Thick	INVSLE	-1.9236	-1.0194	6.80	-1.35	
622	111	Shell-Thick	INVSLE	-0.3400	-0.2401	10.55	0.14	
622	111	Shell-Thick	INVSLE	-0.3898	-0.3700	10.35	0.14	
622	111	Shell-Thick	INVSLE	-0.9175	-0.5246	10.35	0.31	
622	111	Shell-Thick	INVSLE	-0.8781	-0.3877	10.55	0.31	
622	111	Shell-Thick	INVSLE	-0.9795	-0.6048	4.54	-1.01	
622	111	Shell-Thick	INVSLE	-0.9606	-0.5587	4.51	-1.01	
622	111	Shell-Thick	INVSLE	-2.1679	-0.9049	4.51	-0.98	
622	111	Shell-Thick	INVSLE	-2.2338	-0.9197	4.54	-0.98	
622	111	Shell-Thick	INVSLE	-0.4590	-0.3241	17.52	1.47	
622	111	Shell-Thick	INVSLE	-0.5263	-0.4995	17.13	1.47	
622	111	Shell-Thick	INVSLE	-1.2386	-0.7082	17.13	1.81	
622	111	Shell-Thick	INVSLE	-1.1854	-0.5234	17.52	1.81	
622	111	Shell-Thick	INVSLE	-1.7210	-1.0277	6.13	-1.36	
622	111	Shell-Thick	INVSLE	-1.6224	-0.7825	6.09	-1.36	
622	111	Shell-Thick	INVSLE	-3.6179	-1.3459	6.09	-1.32	
622	111	Shell-Thick	INVSLE	-3.8059	-1.5365	6.13	-1.32	
623	112	Shell-Thick	INVSLE	-0.7819	-0.3712	9.38	0.29	
623	112	Shell-Thick	INVSLE	-0.7964	-0.4976	9.18	0.29	
623	112	Shell-Thick	INVSLE	-1.2664	-0.6360	9.18	0.46	
623	112	Shell-Thick	INVSLE	-1.2611	-0.5034	9.38	0.46	
623	112	Shell-Thick	INVSLE	-2.0762	-0.9083	4.05	-0.98	
623	112	Shell-Thick	INVSLE	-1.9639	-0.8440	4.01	-0.98	
623	112	Shell-Thick	INVSLE	-3.0363	-1.1487	4.01	-0.94	
623	112	Shell-Thick	INVSLE	-3.1900	-1.1854	4.05	-0.94	
623	112	Shell-Thick	INVSLE	-1.0556	-0.5012	15.56	1.77	
623	112	Shell-Thick	INVSLE	-1.0752	-0.6718	15.19	1.77	
623	112	Shell-Thick	INVSLE	-1.7097	-0.8586	15.19	2.09	
623	112	Shell-Thick	INVSLE	-1.7025	-0.6796	15.56	2.09	
623	112	Shell-Thick	INVSLE	-3.5771	-1.5310	5.47	-1.32	
623	112	Shell-Thick	INVSLE	-3.3176	-1.2456	5.41	-1.32	
623	112	Shell-Thick	INVSLE	-5.0887	-1.7434	5.41	-1.27	
623	112	Shell-Thick	INVSLE	-5.4269	-1.9762	5.47	-1.27	
624	113	Shell-Thick	INVSLE	-1.1583	-0.4865	8.25	0.44	
624	113	Shell-Thick	INVSLE	-1.1475	-0.6085	8.06	0.44	
624	113	Shell-Thick	INVSLE	-1.5612	-0.7352	8.06	0.60	
624	113	Shell-Thick	INVSLE	-1.5805	-0.6075	8.25	0.60	
624	113	Shell-Thick	INVSLE	-3.0058	-1.1692	3.57	-0.95	
624	113	Shell-Thick	INVSLE	-2.8312	-1.0871	3.53	-0.95	
624	113	Shell-Thick	INVSLE	-3.7731	-1.3655	3.53	-0.91	
624	113	Shell-Thick	INVSLE	-3.9852	-1.4225	3.57	-0.91	
624	113	Shell-Thick	INVSLE	-1.5637	-0.6568	13.67	2.04	
624	113	Shell-Thick	INVSLE	-1.5491	-0.8215	13.33	2.04	
624	113	Shell-Thick	INVSLE	-2.1076	-0.9925	13.33	2.34	
624	113	Shell-Thick	INVSLE	-2.1337	-0.8202	13.67	2.34	
624	113	Shell-Thick	INVSLE	-5.1483	-1.9608	4.82	-1.28	
624	113	Shell-Thick	INVSLE	-4.7838	-1.6421	4.76	-1.28	
624	113	Shell-Thick	INVSLE	-6.3380	-2.0965	4.76	-1.23	
624	113	Shell-Thick	INVSLE	-6.7736	-2.3676	4.82	-1.23	
625	114	Shell-Thick	INVSLE	-1.4815	-0.5909	7.15	0.58	
625	114	Shell-Thick	INVSLE	-1.4420	-0.7082	6.99	0.58	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 125 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

625	114 Shell-Thick	INVSLE	-1.8012	-0.8187	6.99	0.72		
625	114 Shell-Thick	INVSLE	-1.8481	-0.6965	7.15	0.72		
625	114 Shell-Thick	INVSLE	-3.8035	-1.4035	3.11	-0.91		
625	114 Shell-Thick	INVSLE	-3.5575	-1.3051	3.06	-0.91		
625	114 Shell-Thick	INVSLE	-4.3738	-1.5450	3.06	-0.87		
625	114 Shell-Thick	INVSLE	-4.6522	-1.6218	3.11	-0.87		
625	114 Shell-Thick	INVSLE	-2.0000	-0.7977	11.85	2.30		
625	114 Shell-Thick	INVSLE	-1.9466	-0.9560	11.54	2.30		
625	114 Shell-Thick	INVSLE	-2.4317	-1.1052	11.54	2.57		
625	114 Shell-Thick	INVSLE	-2.4950	-0.9402	11.85	2.57		
625	114 Shell-Thick	INVSLE	-6.4961	-2.3458	4.19	-1.23		
625	114 Shell-Thick	INVSLE	-6.0107	-1.9973	4.13	-1.23		
625	114 Shell-Thick	INVSLE	-7.3571	-2.3873	4.13	-1.17		
625	114 Shell-Thick	INVSLE	-7.9040	-2.6948	4.19	-1.17		
626	115 Shell-Thick	INVSLE	-1.7521	-0.6807	6.09	0.71		
626	115 Shell-Thick	INVSLE	-1.6912	-0.7933	5.94	0.71		
626	115 Shell-Thick	INVSLE	-1.9974	-0.8904	5.94	0.84		
626	115 Shell-Thick	INVSLE	-2.0648	-0.7734	6.09	0.84		
626	115 Shell-Thick	INVSLE	-4.4694	-1.6016	2.65	-0.87		
626	115 Shell-Thick	INVSLE	-4.1730	-1.4884	2.60	-0.87		
626	115 Shell-Thick	INVSLE	-4.8677	-1.6992	2.60	-0.83		
626	115 Shell-Thick	INVSLE	-5.1923	-1.7935	2.65	-0.83		
626	115 Shell-Thick	INVSLE	-2.3653	-0.9189	10.09	2.54		
626	115 Shell-Thick	INVSLE	-2.2831	-1.0709	9.81	2.54		
626	115 Shell-Thick	INVSLE	-2.6965	-1.2020	9.81	2.78		
626	115 Shell-Thick	INVSLE	-2.7875	-1.0441	10.09	2.78		
626	115 Shell-Thick	INVSLE	-7.6204	-2.6697	3.58	-1.18		
626	115 Shell-Thick	INVSLE	-7.0510	-2.2945	3.52	-1.18		
626	115 Shell-Thick	INVSLE	-8.1961	-2.6371	3.52	-1.13		
626	115 Shell-Thick	INVSLE	-8.8190	-2.9765	3.58	-1.13		
627	116 Shell-Thick	INVSLE	-1.9785	-0.7590	5.06	0.82		
627	116 Shell-Thick	INVSLE	-1.8961	-0.8673	4.93	0.82		
627	116 Shell-Thick	INVSLE	-2.1507	-0.9482	4.93	0.94		
627	116 Shell-Thick	INVSLE	-2.2385	-0.8363	5.06	0.94		
627	116 Shell-Thick	INVSLE	-5.0264	-1.7738	2.21	-0.84		
627	116 Shell-Thick	INVSLE	-4.6781	-1.6478	2.16	-0.84		
627	116 Shell-Thick	INVSLE	-5.2550	-1.8219	2.16	-0.80		
627	116 Shell-Thick	INVSLE	-5.6267	-1.9322	2.21	-0.80		
627	116 Shell-Thick	INVSLE	-2.6710	-1.0246	8.38	2.75		
627	116 Shell-Thick	INVSLE	-2.5597	-1.1709	8.14	2.75		
627	116 Shell-Thick	INVSLE	-2.9034	-1.2801	8.14	2.95		
627	116 Shell-Thick	INVSLE	-3.0220	-1.1290	8.38	2.95		
627	116 Shell-Thick	INVSLE	-8.5608	-2.9507	2.98	-1.13		
627	116 Shell-Thick	INVSLE	-7.9041	-2.5529	2.92	-1.13		
627	116 Shell-Thick	INVSLE	-8.8547	-2.8349	2.92	-1.08		
627	116 Shell-Thick	INVSLE	-9.5558	-3.2031	2.98	-1.08		
628	117 Shell-Thick	INVSLE	-2.1621	-0.8237	4.06	0.92		
628	117 Shell-Thick	INVSLE	-2.0642	-0.9283	3.95	0.92		
628	117 Shell-Thick	INVSLE	-2.2683	-0.9946	3.95	1.02		
628	117 Shell-Thick	INVSLE	-2.3707	-0.8871	4.06	1.02		
628	117 Shell-Thick	INVSLE	-5.4770	-1.9142	1.77	-0.80		
628	117 Shell-Thick	INVSLE	-5.0926	-1.7775	1.73	-0.80		
628	117 Shell-Thick	INVSLE	-5.5547	-1.9205	1.73	-0.77		
628	117 Shell-Thick	INVSLE	-5.9582	-2.0444	1.77	-0.77		
628	117 Shell-Thick	INVSLE	-2.9189	-1.1120	6.71	2.92		
628	117 Shell-Thick	INVSLE	-2.7867	-1.2532	6.52	2.92		
628	117 Shell-Thick	INVSLE	-3.0622	-1.3428	6.52	3.09		
628	117 Shell-Thick	INVSLE	-3.2005	-1.1976	6.71	3.09		
628	117 Shell-Thick	INVSLE	-9.3210	-3.1787	2.39	-1.09		
628	117 Shell-Thick	INVSLE	-8.6044	-2.7623	2.34	-1.09		
628	117 Shell-Thick	INVSLE	-9.3657	-2.9941	2.34	-1.04		
628	117 Shell-Thick	INVSLE	-10.1184	-3.3863	2.39	-1.04		
629	118 Shell-Thick	INVSLE	-2.3087	-0.8767	3.07	1.01		
629	118 Shell-Thick	INVSLE	-2.1965	-0.9783	2.99	1.01		
629	118 Shell-Thick	INVSLE	-2.3513	-1.0285	2.99	1.08		
629	118 Shell-Thick	INVSLE	-2.4668	-0.9247	3.07	1.08		
629	118 Shell-Thick	INVSLE	-5.8364	-2.0290	1.34	-0.78		
629	118 Shell-Thick	INVSLE	-5.4177	-1.8841	1.31	-0.78		
629	118 Shell-Thick	INVSLE	-5.7678	-1.9916	1.31	-0.75		
629	118 Shell-Thick	INVSLE	-6.2009	-2.1268	1.34	-0.75		
629	118 Shell-Thick	INVSLE	-3.1168	-1.1836	5.08	3.07		
629	118 Shell-Thick	INVSLE	-2.9653	-1.3206	4.94	3.07		
629	118 Shell-Thick	INVSLE	-3.1742	-1.3884	4.94	3.20		
629	118 Shell-Thick	INVSLE	-3.3302	-1.2484	5.08	3.20		
629	118 Shell-Thick	INVSLE	-9.9272	-3.3651	1.81	-1.05		
629	118 Shell-Thick	INVSLE	-9.1531	-2.9345	1.77	-1.05		
629	118 Shell-Thick	INVSLE	-9.7296	-3.1084	1.77	-1.01		
629	118 Shell-Thick	INVSLE	-10.5310	-3.5208	1.81	-1.01		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 126 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

630	119	Shell-Thick	INVSLE	-2.4193	-0.9169	2.11	1.07	
630	119	Shell-Thick	INVSLE	-2.2981	-1.0162	2.05	1.07	
630	119	Shell-Thick	INVSLE	-2.4042	-1.0511	2.05	1.12	
630	119	Shell-Thick	INVSLE	-2.5277	-0.9503	2.11	1.12	
630	119	Shell-Thick	INVSLE	-6.1063	-2.1149	0.92	-0.75	
630	119	Shell-Thick	INVSLE	-5.6666	-1.9643	0.90	-0.75	
630	119	Shell-Thick	INVSLE	-5.9064	-2.0393	0.90	-0.74	
630	119	Shell-Thick	INVSLE	-6.3561	-2.1832	0.92	-0.74	
630	119	Shell-Thick	INVSLE	-3.2661	-1.2378	3.48	3.18	
630	119	Shell-Thick	INVSLE	-3.1024	-1.3718	3.38	3.18	
630	119	Shell-Thick	INVSLE	-3.2456	-1.4190	3.38	3.27	
630	119	Shell-Thick	INVSLE	-3.4124	-1.2829	3.48	3.27	
630	119	Shell-Thick	INVSLE	-10.3818	-3.5042	1.24	-1.02	
630	119	Shell-Thick	INVSLE	-9.5728	-3.0638	1.22	-1.02	
630	119	Shell-Thick	INVSLE	-9.9677	-3.1852	1.22	-0.99	
630	119	Shell-Thick	INVSLE	-10.7955	-3.6130	1.24	-0.99	
631	120	Shell-Thick	INVSLE	-2.4976	-0.9452	1.15	1.12	
631	120	Shell-Thick	INVSLE	-2.3692	-1.0432	1.12	1.12	
631	120	Shell-Thick	INVSLE	-2.4272	-1.0622	1.12	1.14	
631	120	Shell-Thick	INVSLE	-2.5568	-0.9634	1.15	1.14	
631	120	Shell-Thick	INVSLE	-6.2963	-2.1754	0.50	-0.74	
631	120	Shell-Thick	INVSLE	-5.8388	-2.0217	0.49	-0.74	
631	120	Shell-Thick	INVSLE	-5.9698	-2.0622	0.49	-0.73	
631	120	Shell-Thick	INVSLE	-6.4327	-2.2123	0.50	-0.73	
631	120	Shell-Thick	INVSLE	-3.3717	-1.2760	1.90	3.26	
631	120	Shell-Thick	INVSLE	-3.1984	-1.4083	1.85	3.26	
631	120	Shell-Thick	INVSLE	-3.2767	-1.4339	1.85	3.31	
631	120	Shell-Thick	INVSLE	-3.4517	-1.3005	1.90	3.31	
631	120	Shell-Thick	INVSLE	-10.7013	-3.6019	0.68	-0.99	
631	120	Shell-Thick	INVSLE	-9.8622	-3.1564	0.66	-0.99	
631	120	Shell-Thick	INVSLE	-10.0780	-3.2219	0.66	-0.98	
631	120	Shell-Thick	INVSLE	-10.9272	-3.6607	0.68	-0.98	
632	121	Shell-Thick	INVSLE	-2.5435	-0.9612	0.20	1.14	
632	121	Shell-Thick	INVSLE	-2.4128	-1.0588	0.20	1.14	
632	121	Shell-Thick	INVSLE	-2.4230	-1.0621	0.20	1.15	
632	121	Shell-Thick	INVSLE	-2.5538	-0.9643	0.20	1.15	
632	121	Shell-Thick	INVSLE	-6.4056	-2.2089	8.814E-02	-0.73	
632	121	Shell-Thick	INVSLE	-5.9424	-2.0548	8.619E-02	-0.73	
632	121	Shell-Thick	INVSLE	-5.9655	-2.0618	8.619E-02	-0.73	
632	121	Shell-Thick	INVSLE	-6.4294	-2.2153	8.814E-02	-0.73	
632	121	Shell-Thick	INVSLE	-3.4337	-1.2976	0.33	3.31	
632	121	Shell-Thick	INVSLE	-3.2573	-1.4294	0.32	3.31	
632	121	Shell-Thick	INVSLE	-3.2710	-1.4338	0.32	3.32	
632	121	Shell-Thick	INVSLE	-3.4476	-1.3018	0.33	3.32	
632	121	Shell-Thick	INVSLE	-10.8843	-3.6557	0.12	-0.98	
632	121	Shell-Thick	INVSLE	-10.0355	-3.2098	0.12	-0.98	
632	121	Shell-Thick	INVSLE	-10.0734	-3.2210	0.12	-0.98	
632	121	Shell-Thick	INVSLE	-10.9237	-3.6660	0.12	-0.98	
633	122	Shell-Thick	INVSLE	-2.5589	-0.9651	-0.33	1.15	
633	122	Shell-Thick	INVSLE	-2.4280	-1.0633	-0.32	1.15	
633	122	Shell-Thick	INVSLE	-2.3905	-1.0509	-0.32	1.13	
633	122	Shell-Thick	INVSLE	-2.5204	-0.9532	-0.33	1.13	
633	122	Shell-Thick	INVSLE	-6.4397	-2.2164	-0.75	-0.73	
633	122	Shell-Thick	INVSLE	-5.9745	-2.0646	-0.73	-0.73	
633	122	Shell-Thick	INVSLE	-5.8897	-2.0380	-0.73	-0.73	
633	122	Shell-Thick	INVSLE	-6.3511	-2.1924	-0.75	-0.73	
633	122	Shell-Thick	INVSLE	-3.4545	-1.3028	-0.44	3.32	
633	122	Shell-Thick	INVSLE	-3.2779	-1.4355	-0.43	3.32	
633	122	Shell-Thick	INVSLE	-3.2272	-1.4187	-0.43	3.29	
633	122	Shell-Thick	INVSLE	-3.4026	-1.2869	-0.44	3.29	
633	122	Shell-Thick	INVSLE	-10.9401	-3.6675	-1.23	-0.98	
633	122	Shell-Thick	INVSLE	-10.0871	-3.2256	-1.20	-0.98	
633	122	Shell-Thick	INVSLE	-9.9474	-3.1828	-1.20	-0.99	
633	122	Shell-Thick	INVSLE	-10.7933	-3.6294	-1.23	-0.99	
634	123	Shell-Thick	INVSLE	-2.5425	-0.9569	-0.74	1.13	
634	123	Shell-Thick	INVSLE	-2.4164	-1.0568	-0.73	1.13	
634	123	Shell-Thick	INVSLE	-2.3309	-1.0283	-0.73	1.09	
634	123	Shell-Thick	INVSLE	-2.4550	-0.9298	-0.74	1.09	
634	123	Shell-Thick	INVSLE	-6.3946	-2.1979	-1.70	-0.73	
634	123	Shell-Thick	INVSLE	-5.9394	-2.0512	-1.65	-0.73	
634	123	Shell-Thick	INVSLE	-5.7463	-1.9901	-1.65	-0.75	
634	123	Shell-Thick	INVSLE	-6.1930	-2.1425	-1.70	-0.75	
634	123	Shell-Thick	INVSLE	-3.4324	-1.2918	-1.00	3.29	
634	123	Shell-Thick	INVSLE	-3.2621	-1.4267	-0.98	3.29	
634	123	Shell-Thick	INVSLE	-3.1467	-1.3883	-0.98	3.22	
634	123	Shell-Thick	INVSLE	-3.3143	-1.2552	-1.00	3.22	
634	123	Shell-Thick	INVSLE	-10.8616	-3.6371	-2.81	-0.99	
634	123	Shell-Thick	INVSLE	-10.0249	-3.2042	-2.73	-0.99	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 127 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

634	123	Shell-Thick	INVSLU	-9.7068	-3.1054	-2.73	-1.01	
634	123	Shell-Thick	INVSLU	-10.5277	-3.5489	-2.81	-1.01	
635	124	Shell-Thick	INVSLE	-2.4949	-0.9363	-1.16	1.10	
635	124	Shell-Thick	INVSLE	-2.3753	-1.0387	-1.14	1.10	
635	124	Shell-Thick	INVSLE	-2.2414	-0.9949	-1.14	1.04	
635	124	Shell-Thick	INVSLE	-2.3579	-0.8946	-1.16	1.04	
635	124	Shell-Thick	INVSLE	-6.2722	-2.1523	-2.66	-0.74	
635	124	Shell-Thick	INVSLE	-5.8304	-2.0130	-2.59	-0.74	
635	124	Shell-Thick	INVSLE	-5.5276	-1.9196	-2.59	-0.76	
635	124	Shell-Thick	INVSLE	-5.9566	-2.0674	-2.66	-0.76	
635	124	Shell-Thick	INVSLU	-3.3681	-1.2640	-1.57	3.24	
635	124	Shell-Thick	INVSLU	-3.2066	-1.4022	-1.54	3.24	
635	124	Shell-Thick	INVSLU	-3.0259	-1.3432	-1.54	3.12	
635	124	Shell-Thick	INVSLU	-3.1832	-1.2076	-1.57	3.12	
635	124	Shell-Thick	INVSLU	-10.6526	-3.5624	-4.40	-1.00	
635	124	Shell-Thick	INVSLU	-9.8370	-3.1429	-4.27	-1.00	
635	124	Shell-Thick	INVSLU	-9.3384	-2.9918	-4.27	-1.03	
635	124	Shell-Thick	INVSLU	-10.1297	-3.4275	-4.40	-1.03	
636	125	Shell-Thick	INVSLE	-2.4128	-0.9037	-1.59	1.05	
636	125	Shell-Thick	INVSLE	-2.3050	-1.0095	-1.55	1.05	
636	125	Shell-Thick	INVSLE	-2.1222	-0.9495	-1.55	0.96	
636	125	Shell-Thick	INVSLE	-2.2258	-0.8465	-1.59	0.96	
636	125	Shell-Thick	INVSLE	-6.0643	-2.0809	-3.64	-0.76	
636	125	Shell-Thick	INVSLE	-5.6489	-1.9519	-3.54	-0.76	
636	125	Shell-Thick	INVSLE	-5.2351	-1.8229	-3.54	-0.79	
636	125	Shell-Thick	INVSLE	-5.6329	-1.9636	-3.64	-0.79	
636	125	Shell-Thick	INVSLU	-3.2573	-1.2199	-2.14	3.14	
636	125	Shell-Thick	INVSLU	-3.1118	-1.3629	-2.10	3.14	
636	125	Shell-Thick	INVSLU	-2.8649	-1.2819	-2.10	2.99	
636	125	Shell-Thick	INVSLU	-3.0048	-1.1427	-2.14	2.99	
636	125	Shell-Thick	INVSLU	-10.2988	-3.4460	-6.01	-1.03	
636	125	Shell-Thick	INVSLU	-9.5266	-3.0447	-5.84	-1.03	
636	125	Shell-Thick	INVSLU	-8.8449	-2.8356	-5.84	-1.07	
636	125	Shell-Thick	INVSLU	-9.5838	-3.2590	-6.01	-1.07	
637	126	Shell-Thick	INVSLE	-2.2958	-0.8579	-2.02	0.97	
637	126	Shell-Thick	INVSLE	-2.2012	-0.9679	-1.98	0.97	
637	126	Shell-Thick	INVSLE	-1.9683	-0.8933	-1.98	0.87	
637	126	Shell-Thick	INVSLE	-2.0578	-0.7868	-2.02	0.87	
637	126	Shell-Thick	INVSLE	-5.7704	-1.9800	-4.63	-0.79	
637	126	Shell-Thick	INVSLE	-5.3834	-1.8636	-4.51	-0.79	
637	126	Shell-Thick	INVSLE	-4.8559	-1.7035	-4.51	-0.82	
637	126	Shell-Thick	INVSLE	-5.2210	-1.8346	-4.63	-0.82	
637	126	Shell-Thick	INVSLU	-3.0993	-1.1582	-2.73	3.02	
637	126	Shell-Thick	INVSLU	-2.9716	-1.3067	-2.67	3.02	
637	126	Shell-Thick	INVSLU	-2.6572	-1.2060	-2.67	2.83	
637	126	Shell-Thick	INVSLU	-2.7780	-1.0621	-2.73	2.83	
637	126	Shell-Thick	INVSLU	-9.7997	-3.2813	-7.66	-1.06	
637	126	Shell-Thick	INVSLU	-9.0735	-2.9022	-7.45	-1.06	
637	126	Shell-Thick	INVSLU	-8.2044	-2.6430	-7.45	-1.11	
637	126	Shell-Thick	INVSLU	-8.8892	-3.0497	-7.66	-1.11	
638	127	Shell-Thick	INVSLE	-2.1387	-0.8002	-2.46	0.88	
638	127	Shell-Thick	INVSLE	-2.0632	-0.9150	-2.42	0.88	
638	127	Shell-Thick	INVSLE	-1.7793	-0.8241	-2.42	0.76	
638	127	Shell-Thick	INVSLE	-1.8485	-0.7135	-2.46	0.76	
638	127	Shell-Thick	INVSLE	-5.3769	-1.8531	-5.65	-0.82	
638	127	Shell-Thick	INVSLE	-5.0339	-1.7517	-5.51	-0.82	
638	127	Shell-Thick	INVSLE	-4.3901	-1.5548	-5.51	-0.86	
638	127	Shell-Thick	INVSLE	-4.7063	-1.6741	-5.65	-0.86	
638	127	Shell-Thick	INVSLU	-2.8872	-1.0803	-3.32	2.86	
638	127	Shell-Thick	INVSLU	-2.7854	-1.2353	-3.26	2.86	
638	127	Shell-Thick	INVSLU	-2.4020	-1.1126	-3.26	2.63	
638	127	Shell-Thick	INVSLU	-2.4954	-0.9632	-3.32	2.63	
638	127	Shell-Thick	INVSLU	-9.1321	-3.0741	-9.35	-1.11	
638	127	Shell-Thick	INVSLU	-8.4788	-2.7220	-9.10	-1.11	
638	127	Shell-Thick	INVSLU	-7.4178	-2.4021	-9.10	-1.16	
638	127	Shell-Thick	INVSLU	-8.0204	-2.7880	-9.35	-1.16	
639	128	Shell-Thick	INVSLE	-1.9403	-0.7285	-2.91	0.78	
639	128	Shell-Thick	INVSLE	-1.8840	-0.8484	-2.86	0.78	
639	128	Shell-Thick	INVSLE	-1.5476	-0.7441	-2.86	0.64	
639	128	Shell-Thick	INVSLE	-1.5968	-0.6289	-2.91	0.64	
639	128	Shell-Thick	INVSLE	-4.8823	-1.6935	-6.70	-0.85	
639	128	Shell-Thick	INVSLE	-4.5819	-1.6089	-6.54	-0.85	
639	128	Shell-Thick	INVSLE	-3.8181	-1.3829	-6.54	-0.89	
639	128	Shell-Thick	INVSLE	-4.0875	-1.4882	-6.70	-0.89	
639	128	Shell-Thick	INVSLU	-2.6195	-0.9835	-3.93	2.67	
639	128	Shell-Thick	INVSLU	-2.5434	-1.1454	-3.87	2.67	
639	128	Shell-Thick	INVSLU	-2.0893	-1.0045	-3.87	2.41	
639	128	Shell-Thick	INVSLU	-2.1557	-0.8490	-3.93	2.41	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 128 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

639	128	Shell-Thick	INVSLU	-8.2938	-2.8125	-11.09	-1.15	
639	128	Shell-Thick	INVSLU	-7.7103	-2.4907	-10.80	-1.15	
639	128	Shell-Thick	INVSLU	-6.4509	-2.1238	-10.80	-1.21	
639	128	Shell-Thick	INVSLU	-6.9758	-2.4846	-11.09	-1.21	
640	129	Shell-Thick	INVSLE	-1.6929	-0.6449	-3.37	0.65	
640	129	Shell-Thick	INVSLE	-1.6632	-0.7703	-3.32	0.65	
640	129	Shell-Thick	INVSLE	-1.2730	-0.6495	-3.32	0.50	
640	129	Shell-Thick	INVSLE	-1.2944	-0.5297	-3.37	0.50	
640	129	Shell-Thick	INVSLE	-4.2652	-1.5071	-7.78	-0.89	
640	129	Shell-Thick	INVSLE	-4.0283	-1.4416	-7.60	-0.89	
640	129	Shell-Thick	INVSLE	-3.1409	-1.1769	-7.60	-0.93	
640	129	Shell-Thick	INVSLE	-3.3417	-1.2665	-7.78	-0.93	
640	129	Shell-Thick	INVSLU	-2.2854	-0.8707	-4.55	2.45	
640	129	Shell-Thick	INVSLU	-2.2453	-1.0399	-4.49	2.45	
640	129	Shell-Thick	INVSLU	-1.7185	-0.8769	-4.49	2.16	
640	129	Shell-Thick	INVSLU	-1.7475	-0.7151	-4.55	2.16	
640	129	Shell-Thick	INVSLU	-7.2480	-2.5069	-12.88	-1.20	
640	129	Shell-Thick	INVSLU	-6.7709	-2.2200	-12.56	-1.20	
640	129	Shell-Thick	INVSLU	-5.3070	-1.7884	-12.56	-1.26	
640	129	Shell-Thick	INVSLU	-5.7158	-2.1209	-12.88	-1.26	
641	130	Shell-Thick	INVSLE	-1.3960	-0.5462	-3.85	0.52	
641	130	Shell-Thick	INVSLE	-1.3897	-0.6767	-3.80	0.52	
641	130	Shell-Thick	INVSLE	-0.9439	-0.5441	-3.80	0.36	
641	130	Shell-Thick	INVSLE	-0.9413	-0.4197	-3.85	0.36	
641	130	Shell-Thick	INVSLE	-3.5263	-1.2833	-8.89	-0.93	
641	130	Shell-Thick	INVSLE	-3.3439	-1.2376	-8.70	-0.93	
641	130	Shell-Thick	INVSLE	-2.3279	-0.9468	-8.70	-0.97	
641	130	Shell-Thick	INVSLE	-2.4704	-1.0191	-8.89	-0.97	
641	130	Shell-Thick	INVSLU	-1.8846	-0.7374	-5.19	2.20	
641	130	Shell-Thick	INVSLU	-1.8761	-0.9135	-5.13	2.20	
641	130	Shell-Thick	INVSLU	-1.2743	-0.7346	-5.13	1.89	
641	130	Shell-Thick	INVSLU	-1.2707	-0.5666	-5.19	1.89	
641	130	Shell-Thick	INVSLU	-5.9966	-2.1380	-14.74	-1.25	
641	130	Shell-Thick	INVSLU	-5.6100	-1.8880	-14.38	-1.25	
641	130	Shell-Thick	INVSLU	-3.9328	-1.4137	-14.38	-1.31	
641	130	Shell-Thick	INVSLU	-4.2437	-1.7143	-14.74	-1.31	
642	131	Shell-Thick	INVSLE	-1.0375	-0.4360	-4.33	0.38	
642	131	Shell-Thick	INVSLE	-1.0650	-0.5713	-4.29	0.38	
642	131	Shell-Thick	INVSLE	-0.5624	-0.4222	-4.29	0.20	
642	131	Shell-Thick	INVSLE	-0.5246	-0.2938	-4.33	0.20	
642	131	Shell-Thick	INVSLE	-2.6318	-1.0319	-10.04	-0.96	
642	131	Shell-Thick	INVSLE	-2.5354	-1.0079	-9.85	-0.96	
642	131	Shell-Thick	INVSLE	-1.3868	-0.6754	-9.85	-1.00	
642	131	Shell-Thick	INVSLE	-1.4377	-0.7298	-10.04	-1.00	
642	131	Shell-Thick	INVSLU	-1.4006	-0.5886	-5.85	1.93	
642	131	Shell-Thick	INVSLU	-1.4378	-0.7712	-5.79	1.93	
642	131	Shell-Thick	INVSLU	-0.7592	-0.5700	-5.79	1.60	
642	131	Shell-Thick	INVSLU	-0.7082	-0.3966	-5.85	1.60	
642	131	Shell-Thick	INVSLU	-4.4806	-1.7228	-16.67	-1.30	
642	131	Shell-Thick	INVSLU	-4.2405	-1.5142	-16.29	-1.30	
642	131	Shell-Thick	INVSLU	-2.3429	-0.9690	-16.29	-1.35	
642	131	Shell-Thick	INVSLU	-2.4966	-1.2354	-16.67	-1.35	
643	132	Shell-Thick	INVSLE	-0.6208	-0.3093	-4.83	0.23	
643	132	Shell-Thick	INVSLE	-0.6718	-0.4478	-4.80	0.23	
643	132	Shell-Thick	INVSLE	-0.1103	-0.2892	-4.80	5.819E-02	
643	132	Shell-Thick	INVSLE	-0.0486	-0.1577	-4.83	5.819E-02	
643	132	Shell-Thick	INVSLE	-1.5921	-0.7364	-11.24	-0.99	
643	132	Shell-Thick	INVSLE	-1.5551	-0.7333	-11.04	-0.99	
643	132	Shell-Thick	INVSLE	-0.2678	-0.3782	-11.04	-1.01	
643	132	Shell-Thick	INVSLE	-0.2559	-0.4141	-11.24	-1.01	
643	132	Shell-Thick	INVSLU	-0.8380	-0.4175	-6.51	1.65	
643	132	Shell-Thick	INVSLU	-0.9070	-0.6046	-6.48	1.65	
643	132	Shell-Thick	INVSLU	-0.1489	-0.3904	-6.48	1.30	
643	132	Shell-Thick	INVSLU	-0.0656	-0.2129	-6.51	1.30	
643	132	Shell-Thick	INVSLU	-2.7185	-1.2318	-18.67	-1.34	
643	132	Shell-Thick	INVSLU	-2.5793	-1.0643	-18.27	-1.34	
643	132	Shell-Thick	INVSLU	-0.4505	-0.5240	-18.27	-1.37	
643	132	Shell-Thick	INVSLU	-0.4963	-0.7113	-18.67	-1.37	
644	133	Shell-Thick	INVSLE	-0.1259	-0.1715	-5.33	8.223E-02	
644	133	Shell-Thick	INVSLE	-0.2175	-0.3122	-5.32	8.223E-02	
644	133	Shell-Thick	INVSLE	1.0033	-0.0299	-5.32	-8.960E-02	
644	133	Shell-Thick	INVSLE	1.1366	-0.0040	-5.33	-8.960E-02	
644	133	Shell-Thick	INVSLE	-0.3489	-0.4118	-12.47	-1.01	
644	133	Shell-Thick	INVSLE	-0.4265	-0.4309	-12.28	-1.01	
644	133	Shell-Thick	INVSLE	0.4039	-0.1366	-12.28	-1.02	
644	133	Shell-Thick	INVSLE	0.5076	-0.0480	-12.47	-1.02	
644	133	Shell-Thick	INVSLU	-0.1699	-0.2316	-7.20	1.35	
644	133	Shell-Thick	INVSLU	-0.2936	-0.4215	-7.19	1.35	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 129 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

644	133 Shell-Thick	INVS LU	1.6984	0.0939	-7.19	0.99		
644	133 Shell-Thick	INVS LU	1.8659	-0.0054	-7.20	0.99		
644	133 Shell-Thick	INVS LU	-0.6075	-0.6903	-20.76	-1.37		
644	133 Shell-Thick	INVS LU	-0.6688	-0.5995	-20.34	-1.37		
644	133 Shell-Thick	INVS LU	0.5453	-0.1844	-20.34	-1.38		
644	133 Shell-Thick	INVS LU	0.6853	-0.0990	-20.76	-1.38		
645	134 Shell-Thick	INVS LE	1.0574	-0.0157	-5.84	-5.700E-02		
645	134 Shell-Thick	INVS LE	0.9353	-0.0724	-5.86	-5.700E-02		
645	134 Shell-Thick	INVS LE	2.5149	0.3499	-5.86	-0.21		
645	134 Shell-Thick	INVS LE	2.6951	0.3485	-5.84	-0.21		
645	134 Shell-Thick	INVS LE	0.4323	-0.0349	-13.75	-1.02		
645	134 Shell-Thick	INVS LE	0.3279	-0.1551	-13.57	-1.02		
645	134 Shell-Thick	INVS LE	1.0111	0.0290	-13.57	-1.00		
645	134 Shell-Thick	INVS LE	1.1275	0.1604	-13.75	-1.00		
645	134 Shell-Thick	INVS LU	1.7822	-0.0212	-7.89	1.05		
645	134 Shell-Thick	INVS LU	1.6397	0.0234	-7.91	1.05		
645	134 Shell-Thick	INVS LU	4.2586	0.7219	-7.91	0.70		
645	134 Shell-Thick	INVS LU	4.5130	0.5667	-7.89	0.70		
645	134 Shell-Thick	INVS LU	0.5837	-0.0571	-22.92	-1.37		
645	134 Shell-Thick	INVS LU	0.4427	-0.2094	-22.51	-1.37		
645	134 Shell-Thick	INVS LU	1.3650	0.0392	-22.51	-1.35		
645	134 Shell-Thick	INVS LU	1.5221	0.2165	-22.92	-1.35		
646	135 Shell-Thick	INVS LE	2.7443	0.3778	-6.36	-0.19		
646	135 Shell-Thick	INVS LE	2.4640	0.3202	-6.41	-0.19		
646	135 Shell-Thick	INVS LE	4.1952	0.7847	-6.41	-0.33		
646	135 Shell-Thick	INVS LE	4.5433	0.7969	-6.36	-0.33		
646	135 Shell-Thick	INVS LE	1.0930	0.1522	-15.07	-1.00		
646	135 Shell-Thick	INVS LE	0.9417	0.0164	-14.91	-1.00		
646	135 Shell-Thick	INVS LE	1.6866	0.2157	-14.91	-0.95		
646	135 Shell-Thick	INVS LE	1.8520	0.3421	-15.07	-0.95		
646	135 Shell-Thick	INVS LU	4.6592	0.6394	-8.58	0.75		
646	135 Shell-Thick	INVS LU	4.2293	0.6726	-8.66	0.75		
646	135 Shell-Thick	INVS LU	7.1042	1.4446	-8.66	0.39		
646	135 Shell-Thick	INVS LU	7.6642	1.3244	-8.58	0.39		
646	135 Shell-Thick	INVS LU	1.4755	0.2055	-25.17	-1.35		
646	135 Shell-Thick	INVS LU	1.2713	0.0221	-24.76	-1.35		
646	135 Shell-Thick	INVS LU	2.2769	0.2912	-24.76	-1.28		
646	135 Shell-Thick	INVS LU	2.5001	0.4618	-25.17	-1.28		
647	136 Shell-Thick	INVS LE	4.5821	0.8414	-6.87	-0.29		
647	136 Shell-Thick	INVS LE	4.3221	0.7733	-6.97	-0.29		
647	136 Shell-Thick	INVS LE	6.2137	1.2777	-6.97	-0.38		
647	136 Shell-Thick	INVS LE	6.5423	1.2998	-6.87	-0.38		
647	136 Shell-Thick	INVS LE	1.8081	0.3366	-16.41	-0.95		
647	136 Shell-Thick	INVS LE	1.6804	0.2111	-16.30	-0.95		
647	136 Shell-Thick	INVS LE	2.4889	0.4260	-16.30	-0.85		
647	136 Shell-Thick	INVS LE	2.6294	0.5427	-16.41	-0.85		
647	136 Shell-Thick	INVS LU	7.7989	1.4269	-9.27	0.48		
647	136 Shell-Thick	INVS LU	7.3853	1.4252	-9.41	0.48		
647	136 Shell-Thick	INVS LU	10.5330	2.2653	-9.41	0.16		
647	136 Shell-Thick	INVS LU	11.0798	2.1777	-9.27	0.16		
647	136 Shell-Thick	INVS LU	2.4409	0.4544	-27.47	-1.28		
647	136 Shell-Thick	INVS LU	2.2686	0.2850	-27.11	-1.28		
647	136 Shell-Thick	INVS LU	3.3600	0.5751	-27.11	-1.15		
647	136 Shell-Thick	INVS LU	3.5497	0.7327	-27.47	-1.15		
648	137 Shell-Thick	INVS LE	14.9717	2.8944	21.32	-9.451E-03		
648	137 Shell-Thick	INVS LE	14.0588	2.9117	21.47	-9.451E-03		
648	137 Shell-Thick	INVS LE	11.5986	2.3446	21.47	-0.23		
648	137 Shell-Thick	INVS LE	12.3921	2.4075	21.32	-0.23		
648	137 Shell-Thick	INVS LE	5.9872	1.1888	8.89	-0.11		
648	137 Shell-Thick	INVS LE	5.8053	1.1697	9.31	-0.11		
648	137 Shell-Thick	INVS LE	4.7443	0.9354	9.31	-0.38		
648	137 Shell-Thick	INVS LE	4.9047	0.9691	8.89	-0.38		
648	137 Shell-Thick	INVS LU	25.3903	4.8723	35.74	-1.276E-02		
648	137 Shell-Thick	INVS LU	23.6297	4.9317	35.56	-1.276E-02		
648	137 Shell-Thick	INVS LU	19.5470	3.9788	35.56	-5.918E-02		
648	137 Shell-Thick	INVS LU	21.0748	4.0755	35.74	-5.918E-02		
648	137 Shell-Thick	INVS LU	8.0827	1.6049	12.00	-0.22		
648	137 Shell-Thick	INVS LU	7.8372	1.5791	12.57	-0.22		
648	137 Shell-Thick	INVS LU	6.4048	1.2628	12.57	-0.52		
648	137 Shell-Thick	INVS LU	6.6213	1.3083	12.00	-0.52		
649	138 Shell-Thick	INVS LE	12.1121	2.3195	19.80	-0.27		
649	138 Shell-Thick	INVS LE	11.3095	2.3188	19.82	-0.27		
649	138 Shell-Thick	INVS LE	9.0319	1.8588	19.82	-0.29		
649	138 Shell-Thick	INVS LE	9.7236	1.9338	19.80	-0.29		
649	138 Shell-Thick	INVS LE	4.8493	0.9668	8.33	-0.38		
649	138 Shell-Thick	INVS LE	4.6389	0.9056	8.63	-0.38		
649	138 Shell-Thick	INVS LE	3.6510	0.7000	8.63	-0.64		
649	138 Shell-Thick	INVS LE	3.8399	0.7758	8.33	-0.64		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 130 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

649	138	Shell-Thick	INVS LU	20.5343	3.8881	33.10	-0.15	
649	138	Shell-Thick	INVS LU	19.0450	3.9577	32.80	-0.15	
649	138	Shell-Thick	INVS LU	15.2716	3.2026	32.80	0.12	
649	138	Shell-Thick	INVS LU	16.5464	3.2767	33.10	0.12	
649	138	Shell-Thick	INVS LU	6.5465	1.3051	11.24	-0.51	
649	138	Shell-Thick	INVS LU	6.2625	1.2225	11.65	-0.51	
649	138	Shell-Thick	INVS LU	4.9288	0.9451	11.65	-0.87	
649	138	Shell-Thick	INVS LU	5.1839	1.0473	11.24	-0.87	
650	139	Shell-Thick	INVS LE	9.4229	1.8509	18.32	-0.32	
650	139	Shell-Thick	INVS LE	8.8360	1.8424	18.24	-0.32	
650	139	Shell-Thick	INVS LE	6.7271	1.3116	18.24	-0.25	
650	139	Shell-Thick	INVS LE	7.2251	1.3796	18.32	-0.25	
650	139	Shell-Thick	INVS LE	3.7856	0.7733	7.77	-0.64	
650	139	Shell-Thick	INVS LE	3.5993	0.6813	7.97	-0.64	
650	139	Shell-Thick	INVS LE	2.6807	0.4457	7.97	-0.82	
650	139	Shell-Thick	INVS LE	2.8507	0.5487	7.77	-0.82	
650	139	Shell-Thick	INVS LU	15.9601	3.1005	30.57	4.713E-02	
650	139	Shell-Thick	INVS LU	14.9086	3.1889	30.16	4.713E-02	
650	139	Shell-Thick	INVS LU	11.4194	2.3157	30.16	0.41	
650	139	Shell-Thick	INVS LU	12.2978	2.3431	30.57	0.41	
650	139	Shell-Thick	INVS LU	5.1106	1.0440	10.48	-0.86	
650	139	Shell-Thick	INVS LU	4.8591	0.9198	10.76	-0.86	
650	139	Shell-Thick	INVS LU	3.6190	0.6017	10.76	-1.10	
650	139	Shell-Thick	INVS LU	3.8484	0.7408	10.48	-1.10	
651	140	Shell-Thick	INVS LE	7.0902	1.3177	16.87	-0.29	
651	140	Shell-Thick	INVS LE	6.5726	1.3156	16.72	-0.29	
651	140	Shell-Thick	INVS LE	4.6361	0.8364	16.72	-0.16	
651	140	Shell-Thick	INVS LE	5.0701	0.8943	16.87	-0.16	
651	140	Shell-Thick	INVS LE	2.8577	0.5516	7.20	-0.81	
651	140	Shell-Thick	INVS LE	2.6606	0.4401	7.33	-0.81	
651	140	Shell-Thick	INVS LE	1.8131	0.2199	7.33	-0.93	
651	140	Shell-Thick	INVS LE	1.9939	0.3424	7.20	-0.93	
651	140	Shell-Thick	INVS LU	11.9983	2.2061	28.09	0.32	
651	140	Shell-Thick	INVS LU	11.1091	2.3308	27.61	0.32	
651	140	Shell-Thick	INVS LU	7.9096	1.5512	27.61	0.73	
651	140	Shell-Thick	INVS LU	8.6374	1.5343	28.09	0.73	
651	140	Shell-Thick	INVS LU	3.8579	0.7447	9.72	-1.10	
651	140	Shell-Thick	INVS LU	3.5918	0.5942	9.89	-1.10	
651	140	Shell-Thick	INVS LU	2.4477	0.2969	9.89	-1.25	
651	140	Shell-Thick	INVS LU	2.6918	0.4623	9.72	-1.25	
652	141	Shell-Thick	INVS LE	4.9579	0.8490	15.47	-0.18	
652	141	Shell-Thick	INVS LE	4.6354	0.8591	15.27	-0.18	
652	141	Shell-Thick	INVS LE	2.8595	0.3632	15.27	-8.158E-03	
652	141	Shell-Thick	INVS LE	3.1133	0.3991	15.47	-8.158E-03	
652	141	Shell-Thick	INVS LE	2.0103	0.3491	6.64	-0.92	
652	141	Shell-Thick	INVS LE	1.8579	0.2255	6.71	-0.92	
652	141	Shell-Thick	INVS LE	1.0782	-0.0011	6.71	-0.98	
652	141	Shell-Thick	INVS LE	1.2178	0.1312	6.64	-0.98	
652	141	Shell-Thick	INVS LU	8.3761	1.4287	25.71	0.67	
652	141	Shell-Thick	INVS LU	7.8563	1.5938	25.20	0.67	
652	141	Shell-Thick	INVS LU	4.9252	0.7856	25.20	1.12	
652	141	Shell-Thick	INVS LU	5.3114	0.7098	25.71	1.12	
652	141	Shell-Thick	INVS LU	2.7140	0.4713	8.97	-1.25	
652	141	Shell-Thick	INVS LU	2.5082	0.3044	9.06	-1.25	
652	141	Shell-Thick	INVS LU	1.4556	-0.0014	9.06	-1.32	
652	141	Shell-Thick	INVS LU	1.6440	0.1772	8.97	-1.32	
653	142	Shell-Thick	INVS LE	3.1647	0.3751	14.12	-4.669E-02	
653	142	Shell-Thick	INVS LE	2.8947	0.4045	13.88	-4.669E-02	
653	142	Shell-Thick	INVS LE	1.2782	-0.0684	13.88	0.16	
653	142	Shell-Thick	INVS LE	1.4840	-0.0548	14.12	0.16	
653	142	Shell-Thick	INVS LE	1.2899	0.1434	6.09	-0.98	
653	142	Shell-Thick	INVS LE	1.1432	0.0142	6.11	-0.98	
653	142	Shell-Thick	INVS LE	0.4311	-0.2028	6.11	-1.00	
653	142	Shell-Thick	INVS LE	0.5652	-0.0653	6.09	-1.00	
653	142	Shell-Thick	INVS LU	5.3388	0.6439	23.43	1.04	
653	142	Shell-Thick	INVS LU	4.9258	0.8570	22.89	1.04	
653	142	Shell-Thick	INVS LU	2.2605	0.0875	22.89	1.51	
653	142	Shell-Thick	INVS LU	2.5494	-0.0427	23.43	1.51	
653	142	Shell-Thick	INVS LU	1.7414	0.1936	8.22	-1.33	
653	142	Shell-Thick	INVS LU	1.5434	0.0192	8.25	-1.33	
653	142	Shell-Thick	INVS LU	0.5820	-0.2738	8.25	-1.35	
653	142	Shell-Thick	INVS LU	0.7631	-0.0881	8.22	-1.35	
654	143	Shell-Thick	INVS LE	1.5553	-0.0503	12.81	0.14	
654	143	Shell-Thick	INVS LE	1.4291	-0.0136	12.55	0.14	
654	143	Shell-Thick	INVS LE	-0.0371	-0.3849	12.55	0.36	
654	143	Shell-Thick	INVS LE	0.0346	-0.2478	12.81	0.36	
654	143	Shell-Thick	INVS LE	0.6429	-0.0652	5.55	-1.00	
654	143	Shell-Thick	INVS LE	0.5405	-0.1805	5.53	-1.00	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 131 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

654	143	Shell-Thick	INVSLE	-0.1070	-0.4550	5.53	-0.99	
654	143	Shell-Thick	INVSLE	-0.0149	-0.4702	5.55	-0.99	
654	143	Shell-Thick	INVSLE	2.6133	-0.0678	21.23	1.45	
654	143	Shell-Thick	INVSLE	2.4596	0.1799	20.69	1.45	
654	143	Shell-Thick	INVSLE	0.0439	-0.5196	20.69	1.92	
654	143	Shell-Thick	INVSLE	0.0920	-0.3345	21.23	1.92	
654	143	Shell-Thick	INVSLE	0.8679	-0.0903	7.49	-1.35	
654	143	Shell-Thick	INVSLE	0.7296	-0.2436	7.47	-1.35	
654	143	Shell-Thick	INVSLE	-0.1445	-0.6248	7.47	-1.33	
654	143	Shell-Thick	INVSLE	-0.0201	-0.7282	7.49	-1.33	
655	144	Shell-Thick	INVSLE	0.1921	-0.2300	11.55	0.33	
655	144	Shell-Thick	INVSLE	0.1348	-0.3578	11.29	0.33	
655	144	Shell-Thick	INVSLE	-0.5726	-0.5504	11.29	0.56	
655	144	Shell-Thick	INVSLE	-0.5029	-0.4161	11.55	0.56	
655	144	Shell-Thick	INVSLE	0.0910	-0.4680	5.02	-0.99	
655	144	Shell-Thick	INVSLE	0.0116	-0.3914	4.98	-0.99	
655	144	Shell-Thick	INVSLE	-1.1850	-0.8064	4.98	-0.96	
655	144	Shell-Thick	INVSLE	-1.1778	-0.8495	5.02	-0.96	
655	144	Shell-Thick	INVSLE	0.3093	-0.3105	19.13	1.86	
655	144	Shell-Thick	INVSLE	0.2777	-0.4304	18.60	1.86	
655	144	Shell-Thick	INVSLE	-0.7730	-0.7430	18.60	2.32	
655	144	Shell-Thick	INVSLE	-0.6789	-0.5617	19.13	2.32	
655	144	Shell-Thick	INVSLE	0.1228	-0.7439	6.78	-1.34	
655	144	Shell-Thick	INVSLE	0.0156	-0.5335	6.72	-1.34	
655	144	Shell-Thick	INVSLE	-1.8951	-1.1270	6.72	-1.29	
655	144	Shell-Thick	INVSLE	-1.9604	-1.3521	6.78	-1.29	
656	145	Shell-Thick	INVSLE	-0.3947	-0.3969	10.34	0.54	
656	145	Shell-Thick	INVSLE	-0.4336	-0.5201	10.08	0.54	
656	145	Shell-Thick	INVSLE	-0.9571	-0.6955	10.08	0.77	
656	145	Shell-Thick	INVSLE	-0.9264	-0.5669	10.34	0.77	
656	145	Shell-Thick	INVSLE	-1.0082	-0.8388	4.51	-0.96	
656	145	Shell-Thick	INVSLE	-0.9537	-0.7370	4.45	-0.96	
656	145	Shell-Thick	INVSLE	-2.1347	-1.1108	4.45	-0.91	
656	145	Shell-Thick	INVSLE	-2.2320	-1.1840	4.51	-0.91	
656	145	Shell-Thick	INVSLE	-0.5329	-0.5358	17.11	2.27	
656	145	Shell-Thick	INVSLE	-0.5853	-0.7022	16.60	2.27	
656	145	Shell-Thick	INVSLE	-1.2921	-0.9389	16.60	2.71	
656	145	Shell-Thick	INVSLE	-1.2506	-0.7653	17.11	2.71	
656	145	Shell-Thick	INVSLE	-1.7197	-1.3512	6.08	-1.30	
656	145	Shell-Thick	INVSLE	-1.5570	-1.0274	6.01	-1.30	
656	145	Shell-Thick	INVSLE	-3.5002	-1.5925	6.01	-1.23	
656	145	Shell-Thick	INVSLE	-3.7461	-1.8997	6.08	-1.23	
657	146	Shell-Thick	INVSLE	-0.8070	-0.5468	9.18	0.74	
657	146	Shell-Thick	INVSLE	-0.8185	-0.6640	8.92	0.74	
657	146	Shell-Thick	INVSLE	-1.2832	-0.8252	8.92	0.96	
657	146	Shell-Thick	INVSLE	-1.2791	-0.7031	9.18	0.96	
657	146	Shell-Thick	INVSLE	-2.0232	-1.1667	4.01	-0.92	
657	146	Shell-Thick	INVSLE	-1.9002	-1.0395	3.95	-0.92	
657	146	Shell-Thick	INVSLE	-2.9468	-1.3829	3.95	-0.86	
657	146	Shell-Thick	INVSLE	-3.1086	-1.4843	4.01	-0.86	
657	146	Shell-Thick	INVSLE	-1.0894	-0.7382	15.17	2.66	
657	146	Shell-Thick	INVSLE	-1.1049	-0.8964	14.70	2.66	
657	146	Shell-Thick	INVSLE	-1.7323	-1.1140	14.70	3.08	
657	146	Shell-Thick	INVSLE	-1.7268	-0.9492	15.17	3.08	
657	146	Shell-Thick	INVSLE	-3.4336	-1.8856	5.41	-1.24	
657	146	Shell-Thick	INVSLE	-3.1546	-1.4750	5.33	-1.24	
657	146	Shell-Thick	INVSLE	-4.8760	-2.0297	5.33	-1.16	
657	146	Shell-Thick	INVSLE	-5.2301	-2.3902	5.41	-1.16	
658	147	Shell-Thick	INVSLE	-1.1632	-0.6831	8.06	0.94	
658	147	Shell-Thick	INVSLE	-1.1405	-0.7935	7.82	0.94	
658	147	Shell-Thick	INVSLE	-1.5488	-0.9363	7.82	1.15	
658	147	Shell-Thick	INVSLE	-1.5777	-0.8218	8.06	1.15	
658	147	Shell-Thick	INVSLE	-2.9017	-1.4631	3.53	-0.87	
658	147	Shell-Thick	INVSLE	-2.6921	-1.3118	3.46	-0.87	
658	147	Shell-Thick	INVSLE	-3.6107	-1.6134	3.46	-0.81	
658	147	Shell-Thick	INVSLE	-3.8533	-1.7427	3.53	-0.81	
658	147	Shell-Thick	INVSLE	-1.5703	-0.9221	13.31	3.03	
658	147	Shell-Thick	INVSLE	-1.5397	-1.0712	12.88	3.03	
658	147	Shell-Thick	INVSLE	-2.0909	-1.2641	12.88	3.41	
658	147	Shell-Thick	INVSLE	-2.1299	-1.1095	13.31	3.41	
658	147	Shell-Thick	INVSLE	-4.9176	-2.3676	4.76	-1.17	
658	147	Shell-Thick	INVSLE	-4.4913	-1.9130	4.67	-1.17	
658	147	Shell-Thick	INVSLE	-6.0017	-2.3986	4.67	-1.09	
658	147	Shell-Thick	INVSLE	-6.4921	-2.8105	4.76	-1.09	
659	148	Shell-Thick	INVSLE	-1.4622	-0.8024	6.98	1.13	
659	148	Shell-Thick	INVSLE	-1.4147	-0.9058	6.76	1.13	
659	148	Shell-Thick	INVSLE	-1.7684	-1.0329	6.76	1.32	
659	148	Shell-Thick	INVSLE	-1.8213	-0.9259	6.98	1.32	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 132 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

659	148	Shell-Thick	INVSLE	-3.6375	-1.7192	3.06	-0.81	
659	148	Shell-Thick	INVSLE	-3.3694	-1.5455	2.99	-0.81	
659	148	Shell-Thick	INVSLE	-4.1643	-1.8140	2.99	-0.75	
659	148	Shell-Thick	INVSLE	-4.4614	-1.9684	3.06	-0.75	
659	148	Shell-Thick	INVSLE	-1.9740	-1.0833	11.53	3.37	
659	148	Shell-Thick	INVSLE	-1.9099	-1.2229	11.14	3.37	
659	148	Shell-Thick	INVSLE	-2.3873	-1.3945	11.14	3.71	
659	148	Shell-Thick	INVSLE	-2.4588	-1.2500	11.53	3.71	
659	148	Shell-Thick	INVSLE	-6.1600	-2.7823	4.13	-1.10	
659	148	Shell-Thick	INVSLE	-5.6361	-2.2872	4.04	-1.10	
659	148	Shell-Thick	INVSLE	-6.9427	-2.7198	4.04	-1.02	
659	148	Shell-Thick	INVSLE	-7.5228	-3.1773	4.13	-1.02	
660	149	Shell-Thick	INVSLE	-1.7153	-0.9078	5.94	1.30	
660	149	Shell-Thick	INVSLE	-1.6412	-1.0044	5.75	1.30	
660	149	Shell-Thick	INVSLE	-1.9423	-1.1130	5.75	1.47	
660	149	Shell-Thick	INVSLE	-2.0208	-1.0134	5.94	1.47	
660	149	Shell-Thick	INVSLE	-4.2616	-1.9446	2.61	-0.76	
660	149	Shell-Thick	INVSLE	-3.9289	-1.7508	2.54	-0.76	
660	149	Shell-Thick	INVSLE	-4.6050	-1.9786	2.54	-0.70	
660	149	Shell-Thick	INVSLE	-4.9618	-2.1564	2.61	-0.70	
660	149	Shell-Thick	INVSLE	-2.3157	-1.2255	9.81	3.68	
660	149	Shell-Thick	INVSLE	-2.2157	-1.3560	9.46	3.68	
660	149	Shell-Thick	INVSLE	-2.6221	-1.5026	9.46	3.98	
660	149	Shell-Thick	INVSLE	-2.7280	-1.3681	9.81	3.98	
660	149	Shell-Thick	INVSLE	-7.2143	-3.1469	3.52	-1.02	
660	149	Shell-Thick	INVSLE	-6.5816	-2.6162	3.43	-1.02	
660	149	Shell-Thick	INVSLE	-7.6927	-2.9823	3.43	-0.95	
660	149	Shell-Thick	INVSLE	-8.3722	-3.4817	3.52	-0.95	
661	150	Shell-Thick	INVSLE	-1.9234	-0.9971	4.93	1.45	
661	150	Shell-Thick	INVSLE	-1.8301	-1.0875	4.76	1.45	
661	150	Shell-Thick	INVSLE	-2.0799	-1.1794	4.76	1.60	
661	150	Shell-Thick	INVSLE	-2.1770	-1.0865	4.93	1.60	
661	150	Shell-Thick	INVSLE	-4.7737	-2.1336	2.17	-0.71	
661	150	Shell-Thick	INVSLE	-4.3966	-1.9221	2.11	-0.71	
661	150	Shell-Thick	INVSLE	-4.9574	-2.1153	2.11	-0.66	
661	150	Shell-Thick	INVSLE	-5.3548	-2.3133	2.17	-0.66	
661	150	Shell-Thick	INVSLE	-2.5966	-1.3460	8.14	3.95	
661	150	Shell-Thick	INVSLE	-2.4706	-1.4681	7.84	3.95	
661	150	Shell-Thick	INVSLE	-2.8079	-1.5922	7.84	4.21	
661	150	Shell-Thick	INVSLE	-2.9389	-1.4668	8.14	4.21	
661	150	Shell-Thick	INVSLE	-8.0789	-3.4515	2.92	-0.95	
661	150	Shell-Thick	INVSLE	-7.3728	-2.8899	2.85	-0.95	
661	150	Shell-Thick	INVSLE	-8.2942	-3.2006	2.85	-0.89	
661	150	Shell-Thick	INVSLE	-9.0398	-3.7358	2.92	-0.89	
662	151	Shell-Thick	INVSLE	-2.0941	-1.0724	3.95	1.58	
662	151	Shell-Thick	INVSLE	-1.9820	-1.1574	3.81	1.58	
662	151	Shell-Thick	INVSLE	-2.1822	-1.2310	3.81	1.70	
662	151	Shell-Thick	INVSLE	-2.2971	-1.1441	3.95	1.70	
662	151	Shell-Thick	INVSLE	-5.1942	-2.2927	1.74	-0.66	
662	151	Shell-Thick	INVSLE	-4.7722	-2.0667	1.69	-0.66	
662	151	Shell-Thick	INVSLE	-5.2213	-2.2206	1.69	-0.62	
662	151	Shell-Thick	INVSLE	-5.6593	-2.4361	1.74	-0.62	
662	151	Shell-Thick	INVSLE	-2.8270	-1.4477	6.52	4.18	
662	151	Shell-Thick	INVSLE	-2.6757	-1.5625	6.28	4.18	
662	151	Shell-Thick	INVSLE	-2.9459	-1.6619	6.28	4.39	
662	151	Shell-Thick	INVSLE	-3.1011	-1.5445	6.52	4.39	
662	151	Shell-Thick	INVSLE	-8.7892	-3.7079	2.34	-0.89	
662	151	Shell-Thick	INVSLE	-8.0077	-3.1211	2.28	-0.89	
662	151	Shell-Thick	INVSLE	-8.7455	-3.3682	2.28	-0.84	
662	151	Shell-Thick	INVSLE	-9.5581	-3.9343	2.34	-0.84	
663	152	Shell-Thick	INVSLE	-2.2284	-1.1325	2.99	1.69	
663	152	Shell-Thick	INVSLE	-2.1037	-1.2131	2.89	1.69	
663	152	Shell-Thick	INVSLE	-2.2552	-1.2696	2.89	1.78	
663	152	Shell-Thick	INVSLE	-2.3821	-1.1876	2.99	1.78	
663	152	Shell-Thick	INVSLE	-5.5239	-2.4188	1.31	-0.62	
663	152	Shell-Thick	INVSLE	-5.0730	-2.1812	1.28	-0.62	
663	152	Shell-Thick	INVSLE	-5.4129	-2.2997	1.28	-0.59	
663	152	Shell-Thick	INVSLE	-5.8760	-2.5292	1.31	-0.59	
663	152	Shell-Thick	INVSLE	-3.0083	-1.5289	4.93	4.37	
663	152	Shell-Thick	INVSLE	-2.8400	-1.6377	4.75	4.37	
663	152	Shell-Thick	INVSLE	-3.0446	-1.7140	4.75	4.53	
663	152	Shell-Thick	INVSLE	-3.2158	-1.6032	4.93	4.53	
663	152	Shell-Thick	INVSLE	-9.3456	-3.9104	1.77	-0.84	
663	152	Shell-Thick	INVSLE	-8.5162	-3.3038	1.72	-0.84	
663	152	Shell-Thick	INVSLE	-9.0746	-3.4941	1.72	-0.79	
663	152	Shell-Thick	INVSLE	-9.9276	-4.0849	1.77	-0.79	
664	153	Shell-Thick	INVSLE	-2.3313	-1.1789	2.05	1.78	
664	153	Shell-Thick	INVSLE	-2.1955	-1.2562	1.98	1.78	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 133 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

664	153 Shell-Thick	INVSLE	-2.2994	-1.2948	1.98		1.84	
664	153 Shell-Thick	INVSLE	-2.4366	-1.2165	2.05		1.84	
664	153 Shell-Thick	INVSLE	-5.7763	-2.5159	0.90		-0.59	
664	153 Shell-Thick	INVSLE	-5.2984	-2.2701	0.87		-0.59	
664	153 Shell-Thick	INVSLE	-5.5313	-2.3506	0.87		-0.57	
664	153 Shell-Thick	INVSLE	-6.0173	-2.5910	0.90		-0.57	
664	153 Shell-Thick	INVSLE	-3.1472	-1.5915	3.38		4.52	
664	153 Shell-Thick	INVSLE	-2.9639	-1.6959	3.25		4.52	
664	153 Shell-Thick	INVSLE	-3.1042	-1.7480	3.25		4.63	
664	153 Shell-Thick	INVSLE	-3.2894	-1.6423	3.38		4.63	
664	153 Shell-Thick	INVSLE	-9.7712	-4.0663	1.22		-0.80	
664	153 Shell-Thick	INVSLE	-8.8965	-3.4458	1.18		-0.80	
664	153 Shell-Thick	INVSLE	-9.2790	-3.5750	1.18		-0.77	
664	153 Shell-Thick	INVSLE	-10.1697	-4.1849	1.22		-0.77	
665	154 Shell-Thick	INVSLE	-2.4031	-1.2109	1.12		1.83	
665	154 Shell-Thick	INVSLE	-2.2618	-1.2862	1.08		1.83	
665	154 Shell-Thick	INVSLE	-2.3185	-1.3074	1.08		1.87	
665	154 Shell-Thick	INVSLE	-2.4606	-1.2316	1.12		1.87	
665	154 Shell-Thick	INVSLE	-5.9507	-2.5823	0.49		-0.57	
665	154 Shell-Thick	INVSLE	-5.4597	-2.3317	0.48		-0.57	
665	154 Shell-Thick	INVSLE	-5.5869	-2.3761	0.48		-0.56	
665	154 Shell-Thick	INVSLE	-6.0823	-2.6237	0.49		-0.56	
665	154 Shell-Thick	INVSLE	-3.2442	-1.6347	1.85		4.62	
665	154 Shell-Thick	INVSLE	-3.0534	-1.7364	1.78		4.62	
665	154 Shell-Thick	INVSLE	-3.1300	-1.7650	1.78		4.68	
665	154 Shell-Thick	INVSLE	-3.3219	-1.6626	1.85		4.68	
665	154 Shell-Thick	INVSLE	-10.0645	-4.1725	0.66		-0.77	
665	154 Shell-Thick	INVSLE	-9.1681	-3.5441	0.64		-0.77	
665	154 Shell-Thick	INVSLE	-9.3770	-3.6155	0.64		-0.75	
665	154 Shell-Thick	INVSLE	-10.2821	-4.2381	0.66		-0.75	
666	155 Shell-Thick	INVSLE	-2.4470	-1.2292	0.20		1.87	
666	155 Shell-Thick	INVSLE	-2.3019	-1.3038	0.19		1.87	
666	155 Shell-Thick	INVSLE	-2.3119	-1.3074	0.19		1.87	
666	155 Shell-Thick	INVSLE	-2.4570	-1.2327	0.20		1.87	
666	155 Shell-Thick	INVSLE	-6.0555	-2.6199	8.628E-02		-0.56	
666	155 Shell-Thick	INVSLE	-5.5544	-2.3681	8.371E-02		-0.56	
666	155 Shell-Thick	INVSLE	-5.5768	-2.3757	8.371E-02		-0.55	
666	155 Shell-Thick	INVSLE	-6.0785	-2.6271	8.628E-02		-0.55	
666	155 Shell-Thick	INVSLE	-3.3034	-1.6594	0.32		4.68	
666	155 Shell-Thick	INVSLE	-3.1076	-1.7601	0.31		4.68	
666	155 Shell-Thick	INVSLE	-3.1210	-1.7650	0.31		4.69	
666	155 Shell-Thick	INVSLE	-3.3170	-1.6642	0.32		4.69	
666	155 Shell-Thick	INVSLE	-10.2401	-4.2327	0.12		-0.75	
666	155 Shell-Thick	INVSLE	-9.3261	-3.6023	0.11		-0.75	
666	155 Shell-Thick	INVSLE	-9.3628	-3.6145	0.11		-0.75	
666	155 Shell-Thick	INVSLE	-10.2780	-4.2440	0.12		-0.75	
667	156 Shell-Thick	INVSLE	-2.4619	-1.2336	-0.32		1.88	
667	156 Shell-Thick	INVSLE	-2.3184	-1.3088	-0.31		1.88	
667	156 Shell-Thick	INVSLE	-2.2817	-1.2948	-0.31		1.85	
667	156 Shell-Thick	INVSLE	-2.4245	-1.2200	-0.32		1.85	
667	156 Shell-Thick	INVSLE	-6.0876	-2.6283	-0.73		-0.55	
667	156 Shell-Thick	INVSLE	-5.5895	-2.3788	-0.70		-0.55	
667	156 Shell-Thick	INVSLE	-5.5072	-2.3495	-0.70		-0.56	
667	156 Shell-Thick	INVSLE	-6.0020	-2.6011	-0.73		-0.56	
667	156 Shell-Thick	INVSLE	-3.3235	-1.6653	-0.43		4.69	
667	156 Shell-Thick	INVSLE	-3.1298	-1.7669	-0.42		4.69	
667	156 Shell-Thick	INVSLE	-3.0802	-1.7480	-0.42		4.65	
667	156 Shell-Thick	INVSLE	-3.2731	-1.6470	-0.43		4.65	
667	156 Shell-Thick	INVSLE	-10.2920	-4.2457	-1.20		-0.75	
667	156 Shell-Thick	INVSLE	-9.3827	-3.6196	-1.15		-0.75	
667	156 Shell-Thick	INVSLE	-9.2476	-3.5725	-1.15		-0.76	
667	156 Shell-Thick	INVSLE	-10.1506	-4.2028	-1.20		-0.76	
668	157 Shell-Thick	INVSLE	-2.4494	-1.2241	-0.73		1.86	
668	157 Shell-Thick	INVSLE	-2.3093	-1.3012	-0.71		1.86	
668	157 Shell-Thick	INVSLE	-2.2256	-1.2699	-0.71		1.80	
668	157 Shell-Thick	INVSLE	-2.3644	-1.1936	-0.73		1.80	
668	157 Shell-Thick	INVSLE	-6.0514	-2.6073	-1.65		-0.56	
668	157 Shell-Thick	INVSLE	-5.5593	-2.3636	-1.59		-0.56	
668	157 Shell-Thick	INVSLE	-5.3717	-2.2982	-1.59		-0.58	
668	157 Shell-Thick	INVSLE	-5.8568	-2.5466	-1.65		-0.58	
668	157 Shell-Thick	INVSLE	-3.3066	-1.6525	-0.98		4.66	
668	157 Shell-Thick	INVSLE	-3.1175	-1.7566	-0.95		4.66	
668	157 Shell-Thick	INVSLE	-3.0046	-1.7143	-0.95		4.57	
668	157 Shell-Thick	INVSLE	-3.1919	-1.6113	-0.98		4.57	
668	157 Shell-Thick	INVSLE	-10.2284	-4.2114	-2.72		-0.76	
668	157 Shell-Thick	INVSLE	-9.3281	-3.5955	-2.62		-0.76	
668	157 Shell-Thick	INVSLE	-9.0200	-3.4907	-2.62		-0.78	
668	157 Shell-Thick	INVSLE	-9.9068	-4.1156	-2.72		-0.78	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 134 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

669	158 Shell-Thick	INVSLE	-2.4069	-1.2008	-1.14	1.81		
669	158 Shell-Thick	INVSLE	-2.2758	-1.2812	-1.11	1.81		
669	158 Shell-Thick	INVSLE	-2.1447	-1.2319	-1.11	1.73		
669	158 Shell-Thick	INVSLE	-2.2738	-1.1529	-1.14	1.73		
669	158 Shell-Thick	INVSLE	-5.9401	-2.5575	-2.59	-0.58		
669	158 Shell-Thick	INVSLE	-5.4677	-2.3231	-2.50	-0.58		
669	158 Shell-Thick	INVSLE	-5.1738	-2.2198	-2.50	-0.61		
669	158 Shell-Thick	INVSLE	-5.6352	-2.4616	-2.59	-0.61		
669	158 Shell-Thick	INVSLE	-3.2493	-1.6211	-1.54	4.58		
669	158 Shell-Thick	INVSLE	-3.0723	-1.7296	-1.49	4.58		
669	158 Shell-Thick	INVSLE	-2.8954	-1.6630	-1.49	4.44		
669	158 Shell-Thick	INVSLE	-3.0696	-1.5564	-1.54	4.44		
669	158 Shell-Thick	INVSLE	-10.0372	-4.1308	-4.27	-0.78		
669	158 Shell-Thick	INVSLE	-9.1691	-3.5314	-4.11	-0.78		
669	158 Shell-Thick	INVSLE	-8.6864	-3.3655	-4.11	-0.82		
669	158 Shell-Thick	INVSLE	-9.5332	-3.9791	-4.27	-0.82		
670	159 Shell-Thick	INVSLE	-2.3348	-1.1630	-1.56	1.74		
670	159 Shell-Thick	INVSLE	-2.2141	-1.2478	-1.51	1.74		
670	159 Shell-Thick	INVSLE	-2.0349	-1.1814	-1.51	1.63		
670	159 Shell-Thick	INVSLE	-2.1528	-1.0985	-1.56	1.63		
670	159 Shell-Thick	INVSLE	-5.7554	-2.4767	-3.54	-0.60		
670	159 Shell-Thick	INVSLE	-5.3047	-2.2549	-3.42	-0.60		
670	159 Shell-Thick	INVSLE	-4.9026	-2.1162	-3.42	-0.64		
670	159 Shell-Thick	INVSLE	-5.3386	-2.3479	-3.54	-0.64		
670	159 Shell-Thick	INVSLE	-3.1520	-1.5701	-2.10	4.46		
670	159 Shell-Thick	INVSLE	-2.9890	-1.6845	-2.04	4.46		
670	159 Shell-Thick	INVSLE	-2.7471	-1.5949	-2.04	4.27		
670	159 Shell-Thick	INVSLE	-2.9063	-1.4830	-2.10	4.27		
670	159 Shell-Thick	INVSLE	-9.7219	-4.0001	-5.84	-0.82		
670	159 Shell-Thick	INVSLE	-8.8886	-3.4227	-5.62	-0.82		
670	159 Shell-Thick	INVSLE	-8.2281	-3.2002	-5.62	-0.87		
670	159 Shell-Thick	INVSLE	-9.0328	-3.7967	-5.84	-0.87		
671	160 Shell-Thick	INVSLE	-2.2287	-1.1114	-1.98	1.64		
671	160 Shell-Thick	INVSLE	-2.1245	-1.2016	-1.93	1.64		
671	160 Shell-Thick	INVSLE	-1.8961	-1.1169	-1.93	1.51		
671	160 Shell-Thick	INVSLE	-1.9967	-1.0290	-1.98	1.51		
671	160 Shell-Thick	INVSLE	-5.4855	-2.3666	-4.51	-0.64		
671	160 Shell-Thick	INVSLE	-5.0722	-2.1608	-4.36	-0.64		
671	160 Shell-Thick	INVSLE	-4.5597	-1.9829	-4.36	-0.69		
671	160 Shell-Thick	INVSLE	-4.9539	-2.2013	-4.51	-0.69		
671	160 Shell-Thick	INVSLE	-3.0087	-1.5003	-2.67	4.29		
671	160 Shell-Thick	INVSLE	-2.8680	-1.6222	-2.60	4.29		
671	160 Shell-Thick	INVSLE	-2.5597	-1.5079	-2.60	4.06		
671	160 Shell-Thick	INVSLE	-2.6955	-1.3892	-2.67	4.06		
671	160 Shell-Thick	INVSLE	-9.2622	-3.8221	-7.44	-0.86		
671	160 Shell-Thick	INVSLE	-8.4905	-3.2732	-7.17	-0.86		
671	160 Shell-Thick	INVSLE	-7.6484	-2.9872	-7.17	-0.93		
671	160 Shell-Thick	INVSLE	-8.3832	-3.5608	-7.44	-0.93		
672	161 Shell-Thick	INVSLE	-2.0879	-1.0443	-2.42	1.53		
672	161 Shell-Thick	INVSLE	-2.0008	-1.1409	-2.36	1.53		
672	161 Shell-Thick	INVSLE	-1.7218	-1.0395	-2.36	1.37		
672	161 Shell-Thick	INVSLE	-1.8047	-0.9457	-2.42	1.37		
672	161 Shell-Thick	INVSLE	-5.1308	-2.2227	-5.51	-0.68		
672	161 Shell-Thick	INVSLE	-4.7543	-2.0359	-5.32	-0.68		
672	161 Shell-Thick	INVSLE	-4.1280	-1.8235	-5.32	-0.73		
672	161 Shell-Thick	INVSLE	-4.4816	-2.0255	-5.51	-0.73		
672	161 Shell-Thick	INVSLE	-2.8187	-1.4098	-3.26	4.09		
672	161 Shell-Thick	INVSLE	-2.7011	-1.5402	-3.18	4.09		
672	161 Shell-Thick	INVSLE	-2.3245	-1.4034	-3.18	3.80		
672	161 Shell-Thick	INVSLE	-2.4364	-1.2768	-3.26	3.80		
672	161 Shell-Thick	INVSLE	-8.6593	-3.5893	-9.09	-0.92		
672	161 Shell-Thick	INVSLE	-7.9474	-3.0737	-8.76	-0.92		
672	161 Shell-Thick	INVSLE	-6.9183	-2.7326	-8.76	-0.99		
672	161 Shell-Thick	INVSLE	-7.5858	-3.2777	-9.09	-0.99		
673	162 Shell-Thick	INVSLE	-1.9056	-0.9629	-2.86	1.38		
673	162 Shell-Thick	INVSLE	-1.8428	-1.0667	-2.80	1.38		
673	162 Shell-Thick	INVSLE	-1.5119	-0.9468	-2.80	1.20		
673	162 Shell-Thick	INVSLE	-1.5694	-0.8464	-2.86	1.20		
673	162 Shell-Thick	INVSLE	-4.6725	-2.0484	-6.53	-0.73		
673	162 Shell-Thick	INVSLE	-4.3527	-1.8838	-6.33	-0.73		
673	162 Shell-Thick	INVSLE	-3.6094	-1.6306	-6.33	-0.79		
673	162 Shell-Thick	INVSLE	-3.9015	-1.8137	-6.53	-0.79		
673	162 Shell-Thick	INVSLE	-2.5725	-1.2999	-3.87	3.84		
673	162 Shell-Thick	INVSLE	-2.4878	-1.4401	-3.78	3.84		
673	162 Shell-Thick	INVSLE	-2.0411	-1.2781	-3.78	3.51		
673	162 Shell-Thick	INVSLE	-2.1187	-1.1427	-3.87	3.51		
673	162 Shell-Thick	INVSLE	-7.8810	-3.3071	-10.79	-0.99		
673	162 Shell-Thick	INVSLE	-7.2633	-2.8312	-10.41	-0.99		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 135 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

673	162 Shell-Thick	INVSLU	-6.0417	-2.4237	-10.41	-1.06		
673	162 Shell-Thick	INVSLU	-6.6058	-2.9353	-10.79	-1.06		
674	163 Shell-Thick	INVSLE	-1.6812	-0.8651	-3.32	1.22		
674	163 Shell-Thick	INVSLE	-1.6411	-0.9763	-3.26	1.22		
674	163 Shell-Thick	INVSLE	-1.2564	-0.8405	-3.26	1.02		
674	163 Shell-Thick	INVSLE	-1.2906	-0.7332	-3.32	1.02		
674	163 Shell-Thick	INVSLE	-4.1119	-1.8368	-7.59	-0.78		
674	163 Shell-Thick	INVSLE	-3.8427	-1.6963	-7.36	-0.78		
674	163 Shell-Thick	INVSLE	-2.9777	-1.4101	-7.36	-0.84		
674	163 Shell-Thick	INVSLE	-3.2153	-1.5716	-7.59	-0.84		
674	163 Shell-Thick	INVSLU	-2.2697	-1.1679	-4.49	3.55		
674	163 Shell-Thick	INVSLU	-2.2155	-1.3180	-4.40	3.55		
674	163 Shell-Thick	INVSLU	-1.6962	-1.1347	-4.40	3.18		
674	163 Shell-Thick	INVSLU	-1.7423	-0.9898	-4.49	3.18		
674	163 Shell-Thick	INVSLU	-6.9305	-2.9635	-12.54	-1.06		
674	163 Shell-Thick	INVSLU	-6.3957	-2.5312	-12.13	-1.06		
674	163 Shell-Thick	INVSLU	-4.9737	-2.0707	-12.13	-1.14		
674	163 Shell-Thick	INVSLU	-5.4472	-2.5438	-12.54	-1.14		
675	164 Shell-Thick	INVSLE	-1.4040	-0.7527	-3.80	1.04		
675	164 Shell-Thick	INVSLE	-1.3961	-0.8716	-3.74	1.04		
675	164 Shell-Thick	INVSLE	-0.9559	-0.7173	-3.74	0.83		
675	164 Shell-Thick	INVSLE	-0.9566	-0.6031	-3.80	0.83		
675	164 Shell-Thick	INVSLE	-3.4198	-1.5931	-8.69	-0.84		
675	164 Shell-Thick	INVSLE	-3.2289	-1.4798	-8.45	-0.84		
675	164 Shell-Thick	INVSLE	-2.2381	-1.1516	-8.45	-0.90		
675	164 Shell-Thick	INVSLE	-2.3917	-1.2897	-8.69	-0.90		
675	164 Shell-Thick	INVSLU	-1.8954	-1.0161	-5.13	3.23		
675	164 Shell-Thick	INVSLU	-1.8848	-1.1767	-5.04	3.23		
675	164 Shell-Thick	INVSLU	-1.2905	-0.9683	-5.04	2.82		
675	164 Shell-Thick	INVSLU	-1.2914	-0.8142	-5.13	2.82		
675	164 Shell-Thick	INVSLU	-5.7573	-2.5677	-14.37	-1.13		
675	164 Shell-Thick	INVSLU	-5.3542	-2.1849	-13.91	-1.13		
675	164 Shell-Thick	INVSLU	-3.7249	-1.6552	-13.91	-1.21		
675	164 Shell-Thick	INVSLU	-4.0559	-2.0860	-14.37	-1.21		
676	165 Shell-Thick	INVSLE	-1.0755	-0.6229	-4.29	0.85		
676	165 Shell-Thick	INVSLE	-1.0932	-0.7488	-4.23	0.85		
676	165 Shell-Thick	INVSLE	-0.5951	-0.5799	-4.23	0.63		
676	165 Shell-Thick	INVSLE	-0.5696	-0.4593	-4.29	0.63		
676	165 Shell-Thick	INVSLE	-2.6032	-1.3081	-9.84	-0.89		
676	165 Shell-Thick	INVSLE	-2.4726	-1.2224	-9.58	-0.89		
676	165 Shell-Thick	INVSLE	-1.3499	-0.8634	-9.58	-0.94		
676	165 Shell-Thick	INVSLE	-1.4393	-0.9766	-9.84	-0.94		
676	165 Shell-Thick	INVSLU	-1.4520	-0.8409	-5.79	2.88		
676	165 Shell-Thick	INVSLU	-1.4759	-1.0108	-5.71	2.88		
676	165 Shell-Thick	INVSLU	-0.8034	-0.7829	-5.71	2.44		
676	165 Shell-Thick	INVSLU	-0.7690	-0.6201	-5.79	2.44		
676	165 Shell-Thick	INVSLU	-4.3748	-2.1027	-16.27	-1.20		
676	165 Shell-Thick	INVSLU	-4.0722	-1.7716	-15.78	-1.20		
676	165 Shell-Thick	INVSLU	-2.2252	-1.2081	-15.78	-1.27		
676	165 Shell-Thick	INVSLU	-2.4479	-1.5765	-16.27	-1.27		
677	166 Shell-Thick	INVSLE	-0.6786	-0.4785	-4.80	0.65		
677	166 Shell-Thick	INVSLE	-0.7356	-0.6107	-4.75	0.65		
677	166 Shell-Thick	INVSLE	-0.1779	-0.4243	-4.75	0.42		
677	166 Shell-Thick	INVSLE	-0.1115	-0.2985	-4.80	0.42		
677	166 Shell-Thick	INVSLE	-1.6149	-0.9892	-11.03	-0.94		
677	166 Shell-Thick	INVSLE	-1.5878	-0.9335	-10.76	-0.94		
677	166 Shell-Thick	INVSLE	-0.3288	-0.5330	-10.76	-0.98		
677	166 Shell-Thick	INVSLE	-0.3077	-0.6210	-11.03	-0.98		
677	166 Shell-Thick	INVSLU	-0.9162	-0.6459	-6.48	2.50		
677	166 Shell-Thick	INVSLU	-0.9931	-0.8244	-6.42	2.50		
677	166 Shell-Thick	INVSLU	-0.2402	-0.5728	-6.42	2.04		
677	166 Shell-Thick	INVSLU	-0.1505	-0.4029	-6.48	2.04		
677	166 Shell-Thick	INVSLU	-2.7007	-1.5815	-18.25	-1.32		
677	166 Shell-Thick	INVSLU	-2.5759	-1.3086	-17.73	-1.32		
677	166 Shell-Thick	INVSLU	-0.5038	-0.7358	-17.73	-1.32		
677	166 Shell-Thick	INVSLU	-0.5353	-0.9950	-18.25	-1.32		
678	167 Shell-Thick	INVSLE	-0.2210	-0.3165	-5.32	0.45		
678	167 Shell-Thick	INVSLE	-0.3002	-0.4526	-5.29	0.45		
678	167 Shell-Thick	INVSLE	0.8910	-0.1697	-5.29	0.22		
678	167 Shell-Thick	INVSLE	0.9762	-0.1241	-5.32	0.22		
678	167 Shell-Thick	INVSLE	-0.4789	-0.6263	-12.26	-0.98		
678	167 Shell-Thick	INVSLE	-0.5118	-0.5986	-12.00	-0.98		
678	167 Shell-Thick	INVSLE	0.3199	-0.2535	-12.00	-1.00		
678	167 Shell-Thick	INVSLE	0.4091	-0.2323	-12.26	-1.00		
678	167 Shell-Thick	INVSLU	-0.2984	-0.4273	-7.18	2.10		
678	167 Shell-Thick	INVSLU	-0.4053	-0.6110	-7.15	2.10		
678	167 Shell-Thick	INVSLU	1.5533	-0.0726	-7.15	1.64		
678	167 Shell-Thick	INVSLU	1.6338	-0.1676	-7.18	1.64		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 136 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

678	167 Shell-Thick	INVSLU	-0.7779	-0.9854	-20.31		-1.32	
678	167 Shell-Thick	INVSLU	-0.7571	-0.8300	-19.78		-1.32	
678	167 Shell-Thick	INVSLU	0.4319	-0.3423	-19.78		-1.35	
678	167 Shell-Thick	INVSLU	0.5522	-0.3578	-20.31		-1.35	
679	168 Shell-Thick	INVSLE	0.8880	-0.1398	-5.86		0.25	
679	168 Shell-Thick	INVSLE	0.7199	-0.2280	-5.86		0.25	
679	168 Shell-Thick	INVSLE	2.2702	0.2328	-5.86	2.906E-02		
679	168 Shell-Thick	INVSLE	2.5002	0.1934	-5.86	2.906E-02		
679	168 Shell-Thick	INVSLE	0.3265	-0.2260	-13.55		-1.00	
679	168 Shell-Thick	INVSLE	0.2029	-0.2778	-13.30		-1.00	
679	168 Shell-Thick	INVSLE	0.8867	-0.0657	-13.30		-1.00	
679	168 Shell-Thick	INVSLE	1.0226	0.0642	-13.55		-1.00	
679	168 Shell-Thick	INVSLU	1.5391	-0.1887	-7.91		1.69	
679	168 Shell-Thick	INVSLU	1.3195	-0.1702	-7.91		1.69	
679	168 Shell-Thick	INVSLU	3.8746	0.5789	-7.91		1.22	
679	168 Shell-Thick	INVSLU	4.2137	0.3433	-7.91		1.22	
679	168 Shell-Thick	INVSLU	0.4408	-0.3259	-22.47		-1.35	
679	168 Shell-Thick	INVSLU	0.2739	-0.3751	-21.93		-1.35	
679	168 Shell-Thick	INVSLU	1.1971	-0.0887	-21.93		-1.34	
679	168 Shell-Thick	INVSLU	1.3805	0.0866	-22.47		-1.34	
680	169 Shell-Thick	INVSLE	2.4198	0.2119	-6.40	6.777E-02		
680	169 Shell-Thick	INVSLE	2.2099	0.1862	-6.45	6.777E-02		
680	169 Shell-Thick	INVSLE	3.9170	0.6781	-6.45		-0.12	
680	169 Shell-Thick	INVSLE	4.1927	0.6599	-6.40		-0.12	
680	169 Shell-Thick	INVSLE	0.9413	0.0510	-14.88		-0.99	
680	169 Shell-Thick	INVSLE	0.8112	-0.0839	-14.66		-0.99	
680	169 Shell-Thick	INVSLE	1.5618	0.1409	-14.66		-0.95	
680	169 Shell-Thick	INVSLE	1.7043	0.2675	-14.88		-0.95	
680	169 Shell-Thick	INVSLU	4.1344	0.3985	-8.65		1.30	
680	169 Shell-Thick	INVSLU	3.8319	0.4994	-8.71		1.30	
680	169 Shell-Thick	INVSLU	6.6482	1.3011	-8.71		0.84	
680	169 Shell-Thick	INVSLU	7.0783	1.1150	-8.65		0.84	
680	169 Shell-Thick	INVSLU	1.2707	0.0689	-24.72		-1.34	
680	169 Shell-Thick	INVSLU	1.0951	-0.1133	-24.19		-1.34	
680	169 Shell-Thick	INVSLU	2.1085	0.1902	-24.19		-1.29	
680	169 Shell-Thick	INVSLU	2.3008	0.3611	-24.72		-1.29	
681	170 Shell-Thick	INVSLE	4.2719	0.6989	-6.96	-9.629E-02		
681	170 Shell-Thick	INVSLE	3.8864	0.6489	-7.06	-9.629E-02		
681	170 Shell-Thick	INVSLE	5.7514	1.1216	-7.06		-0.25	
681	170 Shell-Thick	INVSLE	6.2170	1.1180	-6.96		-0.25	
681	170 Shell-Thick	INVSLE	1.6769	0.2595	-16.26		-0.95	
681	170 Shell-Thick	INVSLE	1.5030	0.1316	-16.09		-0.95	
681	170 Shell-Thick	INVSLE	2.3206	0.3499	-16.09		-0.87	
681	170 Shell-Thick	INVSLE	2.5103	0.4671	-16.26		-0.87	
681	170 Shell-Thick	INVSLU	7.2811	1.2084	-9.40		0.90	
681	170 Shell-Thick	INVSLU	6.6503	1.2487	-9.53		0.90	
681	170 Shell-Thick	INVSLU	9.7299	2.0165	-9.53		0.47	
681	170 Shell-Thick	INVSLU	10.5153	1.8728	-9.40		0.47	
681	170 Shell-Thick	INVSLU	2.2638	0.3503	-27.05		-1.29	
681	170 Shell-Thick	INVSLU	2.0290	0.1776	-26.56		-1.29	
681	170 Shell-Thick	INVSLU	3.1328	0.4723	-26.56		-1.17	
681	170 Shell-Thick	INVSLU	3.3889	0.6306	-27.05		-1.17	
682	171 Shell-Thick	INVSLE	14.0953	2.7126	21.39	-1.326E-02		
682	171 Shell-Thick	INVSLE	13.1616	2.7387	21.45	-1.326E-02		
682	171 Shell-Thick	INVSLE	10.7055	2.1967	21.45		-0.17	
682	171 Shell-Thick	INVSLE	11.5054	2.2603	21.39		-0.17	
682	171 Shell-Thick	INVSLE	5.8385	1.1555	9.28		-0.11	
682	171 Shell-Thick	INVSLE	5.6338	1.1390	9.68		-0.11	
682	171 Shell-Thick	INVSLE	4.5305	0.9020	9.68		-0.37	
682	171 Shell-Thick	INVSLE	4.7085	0.9366	9.28		-0.37	
682	171 Shell-Thick	INVSLU	23.6701	4.5183	35.44	-1.790E-02		
682	171 Shell-Thick	INVSLU	21.8910	4.5939	35.10	-1.790E-02		
682	171 Shell-Thick	INVSLU	17.8663	3.6980	35.10	6.814E-02		
682	171 Shell-Thick	INVSLU	19.3873	3.7953	35.44	6.814E-02		
682	171 Shell-Thick	INVSLU	7.8820	1.5599	12.53		-0.23	
682	171 Shell-Thick	INVSLU	7.6056	1.5376	13.07		-0.23	
682	171 Shell-Thick	INVSLU	6.1161	1.2176	13.07		-0.50	
682	171 Shell-Thick	INVSLU	6.3565	1.2644	12.53		-0.50	
683	172 Shell-Thick	INVSLE	11.3304	2.1869	19.77		-0.21	
683	172 Shell-Thick	INVSLE	10.5283	2.1996	19.70		-0.21	
683	172 Shell-Thick	INVSLE	8.2587	1.6302	19.70		-0.15	
683	172 Shell-Thick	INVSLE	8.9510	1.6912	19.77		-0.15	
683	172 Shell-Thick	INVSLE	4.6678	0.9355	8.61		-0.36	
683	172 Shell-Thick	INVSLE	4.4443	0.8777	8.89		-0.36	
683	172 Shell-Thick	INVSLE	3.4243	0.6211	8.89		-0.61	
683	172 Shell-Thick	INVSLE	3.6267	0.6932	8.61		-0.61	
683	172 Shell-Thick	INVSLU	19.0566	3.6381	32.72	-3.687E-02		
683	172 Shell-Thick	INVSLU	17.5835	3.7325	32.24	-3.687E-02		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 137 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

683	172	Shell-Thick	INVS LU	13.8649	2.8005	32.24	0.38	
683	172	Shell-Thick	INVS LU	15.1252	2.8485	32.72	0.38	
683	172	Shell-Thick	INVS LU	6.3015	1.2629	11.62	-0.49	
683	172	Shell-Thick	INVS LU	5.9998	1.1848	12.00	-0.49	
683	172	Shell-Thick	INVS LU	4.6228	0.8385	12.00	-0.82	
683	172	Shell-Thick	INVS LU	4.8961	0.9358	11.62	-0.82	
684	173	Shell-Thick	INVS LE	8.8408	1.6302	18.20	-0.19	
684	173	Shell-Thick	INVS LE	8.1501	1.6475	18.03	-0.19	
684	173	Shell-Thick	INVS LE	6.0671	1.1491	18.03	-4.861E-02	
684	173	Shell-Thick	INVS LE	6.6573	1.1990	18.20	-4.861E-02	
684	173	Shell-Thick	INVS LE	3.6225	0.6959	7.95	-0.60	
684	173	Shell-Thick	INVS LE	3.3918	0.6110	8.13	-0.60	
684	173	Shell-Thick	INVS LE	2.4546	0.3721	8.13	-0.76	
684	173	Shell-Thick	INVS LE	2.6654	0.4705	7.95	-0.76	
684	173	Shell-Thick	INVS LU	14.8921	2.7135	30.07	0.28	
684	173	Shell-Thick	INVS LU	13.6680	2.8494	29.51	0.28	
684	173	Shell-Thick	INVS LU	10.2562	2.0501	29.51	0.78	
684	173	Shell-Thick	INVS LU	11.2865	2.0438	30.07	0.78	
684	173	Shell-Thick	INVS LU	4.8904	0.9395	10.74	-0.81	
684	173	Shell-Thick	INVS LU	4.5789	0.8249	10.98	-0.81	
684	173	Shell-Thick	INVS LU	3.3137	0.5024	10.98	-1.03	
684	173	Shell-Thick	INVS LU	3.5983	0.6352	10.74	-1.03	
685	174	Shell-Thick	INVS LE	6.5678	1.1507	16.69	-8.422E-02	
685	174	Shell-Thick	INVS LE	6.0740	1.1809	16.45	-8.422E-02	
685	174	Shell-Thick	INVS LE	4.1631	0.6486	16.45	0.13	
685	174	Shell-Thick	INVS LE	4.5752	0.6730	16.69	0.13	
685	174	Shell-Thick	INVS LE	2.6794	0.4770	7.32	-0.76	
685	174	Shell-Thick	INVS LE	2.4851	0.3745	7.42	-0.76	
685	174	Shell-Thick	INVS LE	1.6252	0.1202	7.42	-0.84	
685	174	Shell-Thick	INVS LE	1.8043	0.2329	7.32	-0.84	
685	174	Shell-Thick	INVS LU	11.0769	1.9319	27.56	0.70	
685	174	Shell-Thick	INVS LU	10.2357	2.1159	26.93	0.70	
685	174	Shell-Thick	INVS LU	7.1061	1.2612	26.93	1.25	
685	174	Shell-Thick	INVS LU	7.7885	1.1834	27.56	1.25	
685	174	Shell-Thick	INVS LU	3.6172	0.6440	9.88	-1.02	
685	174	Shell-Thick	INVS LU	3.3549	0.5056	10.01	-1.02	
685	174	Shell-Thick	INVS LU	2.1940	0.1623	10.01	-1.14	
685	174	Shell-Thick	INVS LU	2.4358	0.3145	9.88	-1.14	
686	175	Shell-Thick	INVS LE	4.6170	0.6434	15.24	8.356E-02	
686	175	Shell-Thick	INVS LE	4.2144	0.6968	14.95	8.356E-02	
686	175	Shell-Thick	INVS LE	2.4735	0.2013	14.95	0.34	
686	175	Shell-Thick	INVS LE	2.8017	0.1978	15.24	0.34	
686	175	Shell-Thick	INVS LE	1.8704	0.2450	6.70	-0.85	
686	175	Shell-Thick	INVS LE	1.6883	0.1340	6.73	-0.85	
686	175	Shell-Thick	INVS LE	0.9042	-0.1079	6.73	-0.88	
686	175	Shell-Thick	INVS LE	1.0723	0.0125	6.70	-0.88	
686	175	Shell-Thick	INVS LU	7.8021	1.1055	25.15	1.16	
686	175	Shell-Thick	INVS LU	7.1438	1.3493	24.48	1.16	
686	175	Shell-Thick	INVS LU	4.2933	0.5599	24.48	1.75	
686	175	Shell-Thick	INVS LU	4.8072	0.4125	25.15	1.75	
686	175	Shell-Thick	INVS LU	2.5251	0.3307	9.04	-1.14	
686	175	Shell-Thick	INVS LU	2.2792	0.1809	9.09	-1.14	
686	175	Shell-Thick	INVS LU	1.2207	-0.1457	9.09	-1.18	
686	175	Shell-Thick	INVS LU	1.4476	0.0169	9.04	-1.18	
687	176	Shell-Thick	INVS LE	2.8664	0.1819	13.86	0.31	
687	176	Shell-Thick	INVS LE	2.6357	0.2625	13.54	0.31	
687	176	Shell-Thick	INVS LE	1.0530	-0.2265	13.54	0.59	
687	176	Shell-Thick	INVS LE	1.2225	-0.2029	13.86	0.59	
687	176	Shell-Thick	INVS LE	1.1504	0.0282	6.10	-0.88	
687	176	Shell-Thick	INVS LE	1.0169	-0.0854	6.09	-0.88	
687	176	Shell-Thick	INVS LE	0.3040	-0.3237	6.09	-0.87	
687	176	Shell-Thick	INVS LE	0.4268	-0.2663	6.10	-0.87	
687	176	Shell-Thick	INVS LU	4.8563	0.3602	22.85	1.68	
687	176	Shell-Thick	INVS LU	4.5130	0.6660	22.17	1.68	
687	176	Shell-Thick	INVS LU	1.9215	-0.1137	22.17	2.28	
687	176	Shell-Thick	INVS LU	2.1452	-0.2739	22.85	2.28	
687	176	Shell-Thick	INVS LU	1.5530	0.0380	8.24	-1.18	
687	176	Shell-Thick	INVS LU	1.3727	-0.1153	8.22	-1.18	
687	176	Shell-Thick	INVS LU	0.4104	-0.4370	8.22	-1.17	
687	176	Shell-Thick	INVS LU	0.5761	-0.3689	8.24	-1.17	
688	177	Shell-Thick	INVS LE	1.3893	-0.1835	12.54	0.55	
688	177	Shell-Thick	INVS LE	1.2403	-0.1546	12.20	0.55	
688	177	Shell-Thick	INVS LE	-0.1888	-0.5193	12.20	0.85	
688	177	Shell-Thick	INVS LE	-0.0950	-0.4017	12.54	0.85	
688	177	Shell-Thick	INVS LE	0.5415	-0.2673	5.53	-0.87	
688	177	Shell-Thick	INVS LE	0.4322	-0.2946	5.49	-0.87	
688	177	Shell-Thick	INVS LE	-0.2117	-0.6143	5.49	-0.83	
688	177	Shell-Thick	INVS LE	-0.1121	-0.6900	5.53	-0.83	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 138 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

688	177	Shell-Thick	INVS LU	2.3723	-0.2477	20.67	2.20	
688	177	Shell-Thick	INVS LU	2.1773	0.0076	19.98	2.20	
688	177	Shell-Thick	INVS LU	-0.1622	-0.7011	19.98	2.80	
688	177	Shell-Thick	INVS LU	-0.0753	-0.5424	20.67	2.80	
688	177	Shell-Thick	INVS LU	0.7311	-0.3734	7.47	-1.18	
688	177	Shell-Thick	INVS LU	0.5835	-0.3976	7.40	-1.18	
688	177	Shell-Thick	INVS LU	-0.2858	-0.8435	7.40	-1.12	
688	177	Shell-Thick	INVS LU	-0.1513	-1.0243	7.47	-1.12	
689	178	Shell-Thick	INVS LE	0.0842	-0.3803	11.28	0.82	
689	178	Shell-Thick	INVS LE	0.0694	-0.4858	10.93	0.82	
689	178	Shell-Thick	INVS LE	-0.6348	-0.6951	10.93	1.12	
689	178	Shell-Thick	INVS LE	-0.5793	-0.5848	11.28	1.12	
689	178	Shell-Thick	INVS LE	0.0069	-0.6813	4.98	-0.83	
689	178	Shell-Thick	INVS LE	-0.0559	-0.5356	4.91	-0.83	
689	178	Shell-Thick	INVS LE	-1.2155	-0.9623	4.91	-0.77	
689	178	Shell-Thick	INVS LE	-1.2465	-1.0775	4.98	-0.77	
689	178	Shell-Thick	INVS LU	0.1737	-0.5135	18.58	2.74	
689	178	Shell-Thick	INVS LU	0.2147	-0.5933	17.91	2.74	
689	178	Shell-Thick	INVS LU	-0.8570	-0.9384	17.91	3.32	
689	178	Shell-Thick	INVS LU	-0.7821	-0.7895	18.58	3.32	
689	178	Shell-Thick	INVS LU	0.0094	-1.0302	6.72	-1.12	
689	178	Shell-Thick	INVS LU	-0.0755	-0.7305	6.63	-1.12	
689	178	Shell-Thick	INVS LU	-1.8890	-1.3391	6.63	-1.04	
689	178	Shell-Thick	INVS LU	-2.0202	-1.6488	6.72	-1.04	
690	179	Shell-Thick	INVS LE	-0.4436	-0.5619	10.07	1.09	
690	179	Shell-Thick	INVS LE	-0.4766	-0.6592	9.73	1.09	
690	179	Shell-Thick	INVS LE	-0.9929	-0.8522	9.73	1.38	
690	179	Shell-Thick	INVS LE	-0.9664	-0.7506	10.07	1.38	
690	179	Shell-Thick	INVS LE	-1.0147	-1.0602	4.45	-0.78	
690	179	Shell-Thick	INVS LE	-0.9515	-0.8804	4.37	-0.78	
690	179	Shell-Thick	INVS LE	-2.0974	-1.2741	4.37	-0.70	
690	179	Shell-Thick	INVS LE	-2.2015	-1.4267	4.45	-0.70	
690	179	Shell-Thick	INVS LU	-0.5988	-0.7585	16.59	3.25	
690	179	Shell-Thick	INVS LU	-0.6434	-0.8900	15.96	3.25	
690	179	Shell-Thick	INVS LU	-1.3404	-1.1505	15.96	3.80	
690	179	Shell-Thick	INVS LU	-1.3047	-1.0133	16.59	3.80	
690	179	Shell-Thick	INVS LU	-1.6771	-1.6380	6.01	-1.05	
690	179	Shell-Thick	INVS LU	-1.5022	-1.2217	5.90	-1.05	
690	179	Shell-Thick	INVS LU	-3.3783	-1.7833	5.90	-0.95	
690	179	Shell-Thick	INVS LU	-3.6337	-2.2108	6.01	-0.95	
691	180	Shell-Thick	INVS LE	-0.8334	-0.7274	8.92	1.36	
691	180	Shell-Thick	INVS LE	-0.8262	-0.8155	8.60	1.36	
691	180	Shell-Thick	INVS LE	-1.2833	-0.9891	8.60	1.64	
691	180	Shell-Thick	INVS LE	-1.2954	-0.8978	8.92	1.64	
691	180	Shell-Thick	INVS LE	-1.9708	-1.4043	3.95	-0.71	
691	180	Shell-Thick	INVS LE	-1.8034	-1.1916	3.86	-0.71	
691	180	Shell-Thick	INVS LE	-2.8181	-1.5442	3.86	-0.63	
691	180	Shell-Thick	INVS LE	-3.0194	-1.7344	3.95	-0.63	
691	180	Shell-Thick	INVS LU	-1.1251	-0.9820	14.69	3.75	
691	180	Shell-Thick	INVS LU	-1.1153	-1.1009	14.10	3.75	
691	180	Shell-Thick	INVS LU	-1.7324	-1.3353	14.10	4.27	
691	180	Shell-Thick	INVS LU	-1.7489	-1.2120	14.69	4.27	
691	180	Shell-Thick	INVS LU	-3.2898	-2.1893	5.33	-0.95	
691	180	Shell-Thick	INVS LU	-2.9365	-1.6650	5.21	-0.95	
691	180	Shell-Thick	INVS LU	-4.5979	-2.1879	5.21	-0.85	
691	180	Shell-Thick	INVS LU	-5.0186	-2.7046	5.33	-0.85	
692	181	Shell-Thick	INVS LE	-1.1597	-0.8748	7.82	1.61	
692	181	Shell-Thick	INVS LE	-1.1241	-0.9531	7.52	1.61	
692	181	Shell-Thick	INVS LE	-1.5243	-1.1087	7.52	1.87	
692	181	Shell-Thick	INVS LE	-1.5641	-1.0277	7.82	1.87	
692	181	Shell-Thick	INVS LE	-2.7712	-1.7084	3.46	-0.63	
692	181	Shell-Thick	INVS LE	-2.5359	-1.4641	3.37	-0.63	
692	181	Shell-Thick	INVS LE	-3.4244	-1.7810	3.37	-0.55	
692	181	Shell-Thick	INVS LE	-3.6893	-2.0056	3.46	-0.55	
692	181	Shell-Thick	INVS LU	-1.5656	-1.1810	12.87	4.22	
692	181	Shell-Thick	INVS LU	-1.5175	-1.2866	12.33	4.22	
692	181	Shell-Thick	INVS LU	-2.0578	-1.4968	12.33	4.69	
692	181	Shell-Thick	INVS LU	-2.1116	-1.3874	12.87	4.69	
692	181	Shell-Thick	INVS LU	-4.6399	-2.6750	4.67	-0.85	
692	181	Shell-Thick	INVS LU	-4.1731	-2.0567	4.55	-0.85	
692	181	Shell-Thick	INVS LU	-5.6277	-2.5607	4.55	-0.74	
692	181	Shell-Thick	INVS LU	-6.1537	-3.1396	4.67	-0.74	
693	182	Shell-Thick	INVS LE	-1.4376	-1.0059	6.76	1.85	
693	182	Shell-Thick	INVS LE	-1.3698	-1.0743	6.49	1.85	
693	182	Shell-Thick	INVS LE	-1.7159	-1.2097	6.49	2.09	
693	182	Shell-Thick	INVS LE	-1.7868	-1.1393	6.76	2.09	
693	182	Shell-Thick	INVS LE	-3.4561	-1.9784	3.00	-0.56	
693	182	Shell-Thick	INVS LE	-3.1418	-1.7052	2.91	-0.56	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 139 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

693	182 Shell-Thick	INVSLE	-3.9102	-1.9798	2.91	-0.48		
693	182 Shell-Thick	INVSLE	-4.2487	-2.2369	3.00	-0.48		
693	182 Shell-Thick	INVSLE	-1.9408	-1.3579	11.13	4.65		
693	182 Shell-Thick	INVSLE	-1.8493	-1.4504	10.65	4.65		
693	182 Shell-Thick	INVSLE	-2.3164	-1.6332	10.65	5.07		
693	182 Shell-Thick	INVSLE	-2.4121	-1.5380	11.13	5.07		
693	182 Shell-Thick	INVSLE	-5.7968	-3.1061	4.04	-0.75		
693	182 Shell-Thick	INVSLE	-5.1967	-2.4367	3.92	-0.75		
693	182 Shell-Thick	INVSLE	-6.4548	-2.8728	3.92	-0.65		
693	182 Shell-Thick	INVSLE	-7.1037	-3.5097	4.04	-0.65		
694	183 Shell-Thick	INVSLE	-1.6672	-1.1190	5.75	2.07		
694	183 Shell-Thick	INVSLE	-1.5763	-1.1782	5.51	2.07		
694	183 Shell-Thick	INVSLE	-1.8700	-1.2950	5.51	2.28		
694	183 Shell-Thick	INVSLE	-1.9635	-1.2342	5.75	2.28		
694	183 Shell-Thick	INVSLE	-4.0218	-2.2097	2.55	-0.48		
694	183 Shell-Thick	INVSLE	-3.6541	-1.9104	2.46	-0.48		
694	183 Shell-Thick	INVSLE	-4.3065	-2.1482	2.46	-0.41		
694	183 Shell-Thick	INVSLE	-4.6948	-2.4339	2.55	-0.41		
694	183 Shell-Thick	INVSLE	-2.2507	-1.5107	9.46	5.03		
694	183 Shell-Thick	INVSLE	-2.1279	-1.5905	9.04	5.03		
694	183 Shell-Thick	INVSLE	-2.5246	-1.7483	9.04	5.40		
694	183 Shell-Thick	INVSLE	-2.6507	-1.6662	9.46	5.40		
694	183 Shell-Thick	INVSLE	-6.7524	-3.4745	3.44	-0.65		
694	183 Shell-Thick	INVSLE	-6.0637	-2.7595	3.33	-0.65		
694	183 Shell-Thick	INVSLE	-7.1320	-3.1376	3.33	-0.55		
694	183 Shell-Thick	INVSLE	-7.8621	-3.8250	3.44	-0.55		
695	184 Shell-Thick	INVSLE	-1.8584	-1.2161	4.76	2.26		
695	184 Shell-Thick	INVSLE	-1.7439	-1.2669	4.56	2.26		
695	184 Shell-Thick	INVSLE	-1.9874	-1.3638	4.56	2.44		
695	184 Shell-Thick	INVSLE	-2.1038	-1.3119	4.76	2.44		
695	184 Shell-Thick	INVSLE	-4.4949	-2.4084	2.11	-0.41		
695	184 Shell-Thick	INVSLE	-4.0704	-2.0865	2.04	-0.41		
695	184 Shell-Thick	INVSLE	-4.6114	-2.2831	2.04	-0.35		
695	184 Shell-Thick	INVSLE	-5.0522	-2.5942	2.11	-0.35		
695	184 Shell-Thick	INVSLE	-2.5089	-1.6418	7.84	5.37		
695	184 Shell-Thick	INVSLE	-2.3543	-1.7103	7.48	5.37		
695	184 Shell-Thick	INVSLE	-2.6831	-1.8411	7.48	5.68		
695	184 Shell-Thick	INVSLE	-2.8401	-1.7711	7.84	5.68		
695	184 Shell-Thick	INVSLE	-7.5521	-3.7909	2.85	-0.56		
695	184 Shell-Thick	INVSLE	-6.7682	-3.0369	2.75	-0.56		
695	184 Shell-Thick	INVSLE	-7.6541	-3.3492	2.75	-0.47		
695	184 Shell-Thick	INVSLE	-8.4712	-4.0811	2.85	-0.47		
696	185 Shell-Thick	INVSLE	-2.0122	-1.2964	3.81	2.43		
696	185 Shell-Thick	INVSLE	-1.8813	-1.3398	3.65	2.43		
696	185 Shell-Thick	INVSLE	-2.0761	-1.4182	3.65	2.58		
696	185 Shell-Thick	INVSLE	-2.2084	-1.3739	3.81	2.58		
696	185 Shell-Thick	INVSLE	-4.8745	-2.5715	1.69	-0.35		
696	185 Shell-Thick	INVSLE	-4.4127	-2.2306	1.63	-0.35		
696	185 Shell-Thick	INVSLE	-4.8454	-2.3902	1.63	-0.30		
696	185 Shell-Thick	INVSLE	-5.3203	-2.7224	1.69	-0.30		
696	185 Shell-Thick	INVSLE	-2.7164	-1.7501	6.28	5.66		
696	185 Shell-Thick	INVSLE	-2.5398	-1.8087	5.98	5.66		
696	185 Shell-Thick	INVSLE	-2.8027	-1.9146	5.98	5.91		
696	185 Shell-Thick	INVSLE	-2.9813	-1.8547	6.28	5.91		
696	185 Shell-Thick	INVSLE	-8.1937	-4.0501	2.28	-0.48		
696	185 Shell-Thick	INVSLE	-7.3481	-3.2635	2.20	-0.48		
696	185 Shell-Thick	INVSLE	-8.0567	-3.5173	2.20	-0.40		
696	185 Shell-Thick	INVSLE	-8.9289	-4.2862	2.28	-0.40		
697	186 Shell-Thick	INVSLE	-2.1351	-1.3613	2.89	2.57		
697	186 Shell-Thick	INVSLE	-1.9889	-1.3987	2.76	2.57		
697	186 Shell-Thick	INVSLE	-2.1363	-1.4579	2.76	2.68		
697	186 Shell-Thick	INVSLE	-2.2834	-1.4198	2.89	2.68		
697	186 Shell-Thick	INVSLE	-5.1784	-2.7034	1.28	-0.30		
697	186 Shell-Thick	INVSLE	-4.6796	-2.3476	1.23	-0.30		
697	186 Shell-Thick	INVSLE	-5.0071	-2.4677	1.23	-0.26		
697	186 Shell-Thick	INVSLE	-5.5154	-2.8172	1.28	-0.26		
697	186 Shell-Thick	INVSLE	-2.8824	-1.8377	4.75	5.89		
697	186 Shell-Thick	INVSLE	-2.6850	-1.8883	4.52	5.89		
697	186 Shell-Thick	INVSLE	-2.8840	-1.9682	4.52	6.09		
697	186 Shell-Thick	INVSLE	-3.0826	-1.9167	4.75	6.09		
697	186 Shell-Thick	INVSLE	-8.7075	-4.2599	1.73	-0.41		
697	186 Shell-Thick	INVSLE	-7.7998	-3.4480	1.66	-0.41		
697	186 Shell-Thick	INVSLE	-8.3361	-3.6387	1.66	-0.35		
697	186 Shell-Thick	INVSLE	-9.2632	-4.4377	1.73	-0.35		
698	187 Shell-Thick	INVSLE	-2.2277	-1.4104	1.98	2.67		
698	187 Shell-Thick	INVSLE	-2.0724	-1.4434	1.89	2.67		
698	187 Shell-Thick	INVSLE	-2.1733	-1.4842	1.89	2.75		
698	187 Shell-Thick	INVSLE	-2.3292	-1.4507	1.98	2.75		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 140 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

698	187	Shell-Thick	INVSLE	-5.4058	-2.8027	0.88	-0.26	
698	187	Shell-Thick	INVSLE	-4.8861	-2.4361	0.84	-0.26	
698	187	Shell-Thick	INVSLE	-5.1103	-2.5191	0.84	-0.23	
698	187	Shell-Thick	INVSLE	-5.6365	-2.8815	0.88	-0.23	
698	187	Shell-Thick	INVSLE	-3.0074	-1.9040	3.25	6.07	
698	187	Shell-Thick	INVSLE	-2.7977	-1.9486	3.10	6.07	
698	187	Shell-Thick	INVSLE	-2.9339	-2.0037	3.10	6.21	
698	187	Shell-Thick	INVSLE	-3.1444	-1.9585	3.25	6.21	
698	187	Shell-Thick	INVSLE	-9.0912	-4.4173	1.18	-0.35	
698	187	Shell-Thick	INVSLE	-8.1489	-3.5872	1.14	-0.35	
698	187	Shell-Thick	INVSLE	-8.5161	-3.7193	1.14	-0.31	
698	187	Shell-Thick	INVSLE	-9.4717	-4.5406	1.18	-0.31	
699	188	Shell-Thick	INVSLE	-2.2942	-1.4447	1.08	2.75	
699	188	Shell-Thick	INVSLE	-2.1314	-1.4749	1.03	2.75	
699	188	Shell-Thick	INVSLE	-2.1865	-1.4970	1.03	2.79	
699	188	Shell-Thick	INVSLE	-2.3496	-1.4666	1.08	2.79	
699	188	Shell-Thick	INVSLE	-5.5683	-2.8720	0.48	-0.23	
699	188	Shell-Thick	INVSLE	-5.0297	-2.4988	0.46	-0.23	
699	188	Shell-Thick	INVSLE	-5.1522	-2.5438	0.46	-0.22	
699	188	Shell-Thick	INVSLE	-5.6941	-2.9147	0.48	-0.22	
699	188	Shell-Thick	INVSLE	-3.0972	-1.9503	1.78	6.20	
699	188	Shell-Thick	INVSLE	-2.8774	-1.9911	1.69	6.20	
699	188	Shell-Thick	INVSLE	-2.9518	-2.0210	1.69	6.27	
699	188	Shell-Thick	INVSLE	-3.1720	-1.9799	1.78	6.27	
699	188	Shell-Thick	INVSLE	-9.3649	-4.5272	0.65	-0.32	
699	188	Shell-Thick	INVSLE	-8.3906	-3.6862	0.62	-0.32	
699	188	Shell-Thick	INVSLE	-8.5912	-3.7576	0.62	-0.29	
699	188	Shell-Thick	INVSLE	-9.5725	-4.5940	0.65	-0.29	
700	189	Shell-Thick	INVSLE	-2.3341	-1.4640	0.19	2.79	
700	189	Shell-Thick	INVSLE	-2.1695	-1.4931	0.18	2.79	
700	189	Shell-Thick	INVSLE	-2.1792	-1.4969	0.18	2.79	
700	189	Shell-Thick	INVSLE	-2.3438	-1.4678	0.19	2.79	
700	189	Shell-Thick	INVSLE	-5.6631	-2.9106	8.387E-02	-0.22	
700	189	Shell-Thick	INVSLE	-5.1201	-2.5353	8.059E-02	-0.22	
700	189	Shell-Thick	INVSLE	-5.1416	-2.5429	8.059E-02	-0.22	
700	189	Shell-Thick	INVSLE	-5.6850	-2.9180	8.387E-02	-0.22	
700	189	Shell-Thick	INVSLE	-3.1511	-1.9764	0.31	6.27	
700	189	Shell-Thick	INVSLE	-2.9289	-2.0157	0.30	6.27	
700	189	Shell-Thick	INVSLE	-2.9420	-2.0208	0.30	6.28	
700	189	Shell-Thick	INVSLE	-3.1641	-1.9815	0.31	6.28	
700	189	Shell-Thick	INVSLE	-9.5235	-4.5881	0.11	-0.29	
700	189	Shell-Thick	INVSLE	-8.5416	-3.7438	0.11	-0.29	
700	189	Shell-Thick	INVSLE	-8.5769	-3.7560	0.11	-0.29	
700	189	Shell-Thick	INVSLE	-9.5597	-4.5997	0.11	-0.29	
701	190	Shell-Thick	INVSLE	-2.3499	-1.4687	-0.31	2.80	
701	190	Shell-Thick	INVSLE	-2.1854	-1.4984	-0.30	2.80	
701	190	Shell-Thick	INVSLE	-2.1497	-1.4838	-0.30	2.77	
701	190	Shell-Thick	INVSLE	-2.3140	-1.4544	-0.31	2.77	
701	190	Shell-Thick	INVSLE	-5.6975	-2.9194	-0.70	-0.21	
701	190	Shell-Thick	INVSLE	-5.1526	-2.5463	-0.67	-0.21	
701	190	Shell-Thick	INVSLE	-5.0733	-2.5167	-0.67	-0.23	
701	190	Shell-Thick	INVSLE	-5.6157	-2.8916	-0.70	-0.23	
701	190	Shell-Thick	INVSLE	-3.1724	-1.9828	-0.42	6.29	
701	190	Shell-Thick	INVSLE	-2.9502	-2.0229	-0.40	6.29	
701	190	Shell-Thick	INVSLE	-2.9021	-2.0032	-0.40	6.24	
701	190	Shell-Thick	INVSLE	-3.1239	-1.9634	-0.42	6.24	
701	190	Shell-Thick	INVSLE	-9.5794	-4.6016	-1.15	-0.29	
701	190	Shell-Thick	INVSLE	-8.5934	-3.7614	-1.10	-0.29	
701	190	Shell-Thick	INVSLE	-8.4637	-3.7144	-1.10	-0.30	
701	190	Shell-Thick	INVSLE	-9.4445	-4.5582	-1.15	-0.30	
702	191	Shell-Thick	INVSLE	-2.3398	-1.4588	-0.71	2.77	
702	191	Shell-Thick	INVSLE	-2.1809	-1.4908	-0.68	2.77	
702	191	Shell-Thick	INVSLE	-2.0996	-1.4576	-0.68	2.71	
702	191	Shell-Thick	INVSLE	-2.2579	-1.4260	-0.71	2.71	
702	191	Shell-Thick	INVSLE	-5.6657	-2.8983	-1.59	-0.22	
702	191	Shell-Thick	INVSLE	-5.1331	-2.5319	-1.52	-0.22	
702	191	Shell-Thick	INVSLE	-4.9527	-2.4643	-1.52	-0.25	
702	191	Shell-Thick	INVSLE	-5.4795	-2.8345	-1.59	-0.25	
702	191	Shell-Thick	INVSLE	-3.1587	-1.9694	-0.95	6.24	
702	191	Shell-Thick	INVSLE	-2.9442	-2.0126	-0.92	6.24	
702	191	Shell-Thick	INVSLE	-2.8345	-1.9678	-0.92	6.13	
702	191	Shell-Thick	INVSLE	-3.0482	-1.9251	-0.95	6.13	
702	191	Shell-Thick	INVSLE	-9.5225	-4.5676	-2.62	-0.30	
702	191	Shell-Thick	INVSLE	-8.5567	-3.7392	-2.50	-0.30	
702	191	Shell-Thick	INVSLE	-8.2611	-3.6317	-2.50	-0.34	
702	191	Shell-Thick	INVSLE	-9.2154	-4.4678	-2.62	-0.34	
703	192	Shell-Thick	INVSLE	-2.3048	-1.4339	-1.11	2.71	
703	192	Shell-Thick	INVSLE	-2.1531	-1.4698	-1.06	2.71	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 141 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

703	192 Shell-Thick	INVSLE	-2.0257	-1.4183	-1.06	2.62		
703	192 Shell-Thick	INVSLE	-2.1765	-1.3830	-1.11	2.62		
703	192 Shell-Thick	INVSLE	-5.5717	-2.8464	-2.50	-0.25		
703	192 Shell-Thick	INVSLE	-5.0536	-2.4910	-2.38	-0.25		
703	192 Shell-Thick	INVSLE	-4.7706	-2.3865	-2.38	-0.28		
703	192 Shell-Thick	INVSLE	-5.2800	-2.7477	-2.50	-0.28		
703	192 Shell-Thick	INVSLE	-3.1115	-1.9358	-1.49	6.15		
703	192 Shell-Thick	INVSLE	-2.9067	-1.9843	-1.44	6.15		
703	192 Shell-Thick	INVSLE	-2.7347	-1.9148	-1.44	5.98		
703	192 Shell-Thick	INVSLE	-2.9382	-1.8671	-1.49	5.98		
703	192 Shell-Thick	INVSLE	-9.3601	-4.4845	-4.11	-0.33		
703	192 Shell-Thick	INVSLE	-8.4170	-3.6751	-3.91	-0.33		
703	192 Shell-Thick	INVSLE	-7.9535	-3.5092	-3.91	-0.38		
703	192 Shell-Thick	INVSLE	-8.8790	-4.3303	-4.11	-0.38		
704	193 Shell-Thick	INVSLE	-2.2413	-1.3941	-1.51	2.63		
704	193 Shell-Thick	INVSLE	-2.1030	-1.4357	-1.46	2.63		
704	193 Shell-Thick	INVSLE	-1.9287	-1.3650	-1.46	2.49		
704	193 Shell-Thick	INVSLE	-2.0655	-1.3244	-1.51	2.49		
704	193 Shell-Thick	INVSLE	-5.4055	-2.7644	-3.42	-0.28		
704	193 Shell-Thick	INVSLE	-4.9174	-2.4244	-3.26	-0.28		
704	193 Shell-Thick	INVSLE	-4.5302	-2.2805	-3.26	-0.33		
704	193 Shell-Thick	INVSLE	-5.0061	-2.6286	-3.42	-0.33		
704	193 Shell-Thick	INVSLE	-3.0257	-1.8821	-2.04	6.00		
704	193 Shell-Thick	INVSLE	-2.8390	-1.9381	-1.97	6.00		
704	193 Shell-Thick	INVSLE	-2.6037	-1.8427	-1.97	5.76		
704	193 Shell-Thick	INVSLE	-2.7885	-1.7879	-2.04	5.76		
704	193 Shell-Thick	INVSLE	-9.0749	-4.3533	-5.62	-0.38		
704	193 Shell-Thick	INVSLE	-8.1811	-3.5709	-5.36	-0.38		
704	193 Shell-Thick	INVSLE	-7.5470	-3.3422	-5.36	-0.44		
704	193 Shell-Thick	INVSLE	-8.4161	-4.1410	-5.62	-0.44		
705	194 Shell-Thick	INVSLE	-2.1495	-1.3385	-1.93	2.51		
705	194 Shell-Thick	INVSLE	-2.0255	-1.3870	-1.86	2.51		
705	194 Shell-Thick	INVSLE	-1.8030	-1.2979	-1.86	2.34		
705	194 Shell-Thick	INVSLE	-1.9252	-1.2506	-1.93	2.34		
705	194 Shell-Thick	INVSLE	-5.1691	-2.6493	-4.36	-0.33		
705	194 Shell-Thick	INVSLE	-4.7114	-2.3286	-4.17	-0.33		
705	194 Shell-Thick	INVSLE	-4.2172	-2.1480	-4.17	-0.39		
705	194 Shell-Thick	INVSLE	-4.6596	-2.4788	-4.36	-0.39		
705	194 Shell-Thick	INVSLE	-2.9018	-1.8070	-2.61	5.79		
705	194 Shell-Thick	INVSLE	-2.7344	-1.8725	-2.52	5.79		
705	194 Shell-Thick	INVSLE	-2.4341	-1.7522	-2.52	5.50		
705	194 Shell-Thick	INVSLE	-2.5990	-1.6883	-2.61	5.50		
705	194 Shell-Thick	INVSLE	-8.6708	-4.1693	-7.17	-0.44		
705	194 Shell-Thick	INVSLE	-7.8261	-3.4206	-6.84	-0.44		
705	194 Shell-Thick	INVSLE	-7.0168	-3.1337	-6.84	-0.52		
705	194 Shell-Thick	INVSLE	-7.8305	-3.9031	-7.17	-0.52		
706	195 Shell-Thick	INVSLE	-2.0233	-1.2674	-2.36	2.35		
706	195 Shell-Thick	INVSLE	-1.9208	-1.3243	-2.28	2.35		
706	195 Shell-Thick	INVSLE	-1.6488	-1.2153	-2.28	2.16		
706	195 Shell-Thick	INVSLE	-1.7488	-1.1600	-2.36	2.16		
706	195 Shell-Thick	INVSLE	-4.8467	-2.5026	-5.32	-0.38		
706	195 Shell-Thick	INVSLE	-4.4381	-2.2057	-5.10	-0.38		
706	195 Shell-Thick	INVSLE	-3.8341	-1.9840	-5.10	-0.45		
706	195 Shell-Thick	INVSLE	-4.2231	-2.2939	-5.32	-0.45		
706	195 Shell-Thick	INVSLE	-2.7314	-1.7110	-3.18	5.53		
706	195 Shell-Thick	INVSLE	-2.5931	-1.7878	-3.08	5.53		
706	195 Shell-Thick	INVSLE	-2.2259	-1.6407	-3.08	5.18		
706	195 Shell-Thick	INVSLE	-2.3608	-1.5661	-3.18	5.18		
706	195 Shell-Thick	INVSLE	-8.1207	-3.9350	-8.76	-0.52		
706	195 Shell-Thick	INVSLE	-7.3572	-3.2279	-8.37	-0.52		
706	195 Shell-Thick	INVSLE	-6.3682	-2.8754	-8.37	-0.61		
706	195 Shell-Thick	INVSLE	-7.0925	-3.6087	-8.76	-0.61		
707	196 Shell-Thick	INVSLE	-1.8625	-1.1792	-2.80	2.18		
707	196 Shell-Thick	INVSLE	-1.7810	-1.2454	-2.72	2.18		
707	196 Shell-Thick	INVSLE	-1.4576	-1.1179	-2.72	1.95		
707	196 Shell-Thick	INVSLE	-1.5361	-1.0537	-2.80	1.95		
707	196 Shell-Thick	INVSLE	-4.4398	-2.3198	-6.32	-0.45		
707	196 Shell-Thick	INVSLE	-4.0771	-2.0500	-6.07	-0.45		
707	196 Shell-Thick	INVSLE	-3.3590	-1.7915	-6.07	-0.52		
707	196 Shell-Thick	INVSLE	-3.6987	-2.0767	-6.32	-0.52		
707	196 Shell-Thick	INVSLE	-2.5144	-1.5919	-3.78	5.22		
707	196 Shell-Thick	INVSLE	-2.4044	-1.6813	-3.67	5.22		
707	196 Shell-Thick	INVSLE	-1.9678	-1.5092	-3.67	4.82		
707	196 Shell-Thick	INVSLE	-2.0737	-1.4224	-3.78	4.82		
707	196 Shell-Thick	INVSLE	-7.4286	-3.6426	-10.41	-0.60		
707	196 Shell-Thick	INVSLE	-6.7396	-2.9830	-9.95	-0.60		
707	196 Shell-Thick	INVSLE	-5.5638	-2.5727	-9.95	-0.71		
707	196 Shell-Thick	INVSLE	-6.2065	-3.2630	-10.41	-0.71		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 142 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

708	197 Shell-Thick	INVSLE	-1.6578	-1.0746	-3.26	1.97		
708	197 Shell-Thick	INVSLE	-1.6063	-1.1511	-3.17	1.97		
708	197 Shell-Thick	INVSLE	-1.2296	-1.0033	-3.17	1.72		
708	197 Shell-Thick	INVSLE	-1.2772	-0.9295	-3.26	1.72		
708	197 Shell-Thick	INVSLE	-3.9242	-2.1033	-7.36	-0.52		
708	197 Shell-Thick	INVSLE	-3.6318	-1.8646	-7.07	-0.52		
708	197 Shell-Thick	INVSLE	-2.7958	-1.5639	-7.07	-0.60		
708	197 Shell-Thick	INVSLE	-3.0599	-1.8214	-7.36	-0.60		
708	197 Shell-Thick	INVSLE	-2.2381	-1.4507	-4.40	4.86		
708	197 Shell-Thick	INVSLE	-2.1684	-1.5539	-4.28	4.86		
708	197 Shell-Thick	INVSLE	-1.6600	-1.3545	-4.28	4.41		
708	197 Shell-Thick	INVSLE	-1.7242	-1.2548	-4.40	4.41		
708	197 Shell-Thick	INVSLE	-6.5523	-3.2963	-12.12	-0.70		
708	197 Shell-Thick	INVSLE	-5.9807	-2.6920	-11.60	-0.70		
708	197 Shell-Thick	INVSLE	-4.6119	-2.2139	-11.60	-0.81		
708	197 Shell-Thick	INVSLE	-5.1271	-2.8557	-12.12	-0.81		
709	198 Shell-Thick	INVSLE	-1.4097	-0.9517	-3.74	1.74		
709	198 Shell-Thick	INVSLE	-1.3844	-1.0386	-3.65	1.74		
709	198 Shell-Thick	INVSLE	-0.9520	-0.8727	-3.65	1.47		
709	198 Shell-Thick	INVSLE	-0.9726	-0.7889	-3.74	1.47		
709	198 Shell-Thick	INVSLE	-3.3044	-1.8474	-8.44	-0.59		
709	198 Shell-Thick	INVSLE	-3.0714	-1.6419	-8.13	-0.59		
709	198 Shell-Thick	INVSLE	-2.1115	-1.3052	-8.13	-0.67		
709	198 Shell-Thick	INVSLE	-2.3122	-1.5321	-8.44	-0.67		
709	198 Shell-Thick	INVSLE	-1.9032	-1.2848	-5.05	4.46		
709	198 Shell-Thick	INVSLE	-1.8690	-1.4021	-4.92	4.46		
709	198 Shell-Thick	INVSLE	-1.2852	-1.1781	-4.92	3.96		
709	198 Shell-Thick	INVSLE	-1.3130	-1.0650	-5.05	3.96		
709	198 Shell-Thick	INVSLE	-5.5014	-2.8861	-13.90	-0.80		
709	198 Shell-Thick	INVSLE	-5.0276	-2.3415	-13.33	-0.80		
709	198 Shell-Thick	INVSLE	-3.4560	-1.8268	-13.33	-0.91		
709	198 Shell-Thick	INVSLE	-3.8656	-2.3940	-13.90	-0.91		
710	199 Shell-Thick	INVSLE	-1.1039	-0.8117	-4.23	1.50		
710	199 Shell-Thick	INVSLE	-1.1166	-0.9091	-4.15	1.50		
710	199 Shell-Thick	INVSLE	-0.6262	-0.7236	-4.15	1.21		
710	199 Shell-Thick	INVSLE	-0.6072	-0.6303	-4.23	1.21		
710	199 Shell-Thick	INVSLE	-2.5423	-1.5553	-9.57	-0.67		
710	199 Shell-Thick	INVSLE	-2.4039	-1.3865	-9.24	-0.67		
710	199 Shell-Thick	INVSLE	-1.3155	-1.0084	-9.24	-0.75		
710	199 Shell-Thick	INVSLE	-1.4148	-1.2032	-9.57	-0.75		
710	199 Shell-Thick	INVSLE	-1.4902	-1.0958	-5.72	4.01		
710	199 Shell-Thick	INVSLE	-1.5074	-1.2273	-5.60	4.01		
710	199 Shell-Thick	INVSLE	-0.8453	-0.9769	-5.60	3.47		
710	199 Shell-Thick	INVSLE	-0.8197	-0.8509	-5.72	3.47		
710	199 Shell-Thick	INVSLE	-4.2103	-2.4176	-15.76	-0.91		
710	199 Shell-Thick	INVSLE	-3.8967	-1.9434	-15.15	-0.91		
710	199 Shell-Thick	INVSLE	-2.1149	-1.4041	-15.15	-1.01		
710	199 Shell-Thick	INVSLE	-2.3514	-1.8675	-15.76	-1.01		
711	200 Shell-Thick	INVSLE	-0.7435	-0.6531	-4.75	1.24		
711	200 Shell-Thick	INVSLE	-0.7843	-0.7598	-4.68	1.24		
711	200 Shell-Thick	INVSLE	-0.2326	-0.5572	-4.68	0.94		
711	200 Shell-Thick	INVSLE	-0.1847	-0.4552	-4.75	0.94		
711	200 Shell-Thick	INVSLE	-1.6518	-1.2221	-10.75	-0.74		
711	200 Shell-Thick	INVSLE	-1.5819	-1.0902	-10.41	-0.74		
711	200 Shell-Thick	INVSLE	-0.3574	-0.6776	-10.41	-0.81		
711	200 Shell-Thick	INVSLE	-0.3836	-0.8385	-10.75	-0.81		
711	200 Shell-Thick	INVSLE	-1.0037	-0.8816	-6.42	3.54		
711	200 Shell-Thick	INVSLE	-1.0589	-1.0257	-6.31	3.54		
711	200 Shell-Thick	INVSLE	-0.3141	-0.7522	-6.31	2.97		
711	200 Shell-Thick	INVSLE	-0.2494	-0.6145	-6.42	2.97		
711	200 Shell-Thick	INVSLE	-2.7050	-1.8819	-17.71	-1.00		
711	200 Shell-Thick	INVSLE	-2.5068	-1.5214	-17.06	-1.00		
711	200 Shell-Thick	INVSLE	-0.5021	-0.9328	-17.06	-1.09		
711	200 Shell-Thick	INVSLE	-0.6142	-1.2830	-17.71	-1.09		
712	201 Shell-Thick	INVSLE	-0.3060	-0.4767	-5.29	0.97		
712	201 Shell-Thick	INVSLE	-0.3916	-0.5916	-5.24	0.97		
712	201 Shell-Thick	INVSLE	0.7409	-0.3112	-5.24	0.67		
712	201 Shell-Thick	INVSLE	0.8468	-0.2644	-5.29	0.67		
712	201 Shell-Thick	INVSLE	-0.5716	-0.8497	-11.99	-0.81		
712	201 Shell-Thick	INVSLE	-0.6246	-0.7574	-11.65	-0.81		
712	201 Shell-Thick	INVSLE	0.2237	-0.3732	-11.65	-0.86		
712	201 Shell-Thick	INVSLE	0.3187	-0.4388	-11.99	-0.86		
712	201 Shell-Thick	INVSLE	-0.4130	-0.6436	-7.15	3.03		
712	201 Shell-Thick	INVSLE	-0.5286	-0.7987	-7.07	3.03		
712	201 Shell-Thick	INVSLE	1.3406	-0.2395	-7.07	2.43		
712	201 Shell-Thick	INVSLE	1.4591	-0.3570	-7.15	2.43		
712	201 Shell-Thick	INVSLE	-0.8796	-1.2823	-19.76	-1.09		
712	201 Shell-Thick	INVSLE	-0.8948	-1.0473	-19.08	-1.09		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 143 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

712	201	Shell-Thick	INVS LU	0.3020	-0.5038	-19.08	-1.16	
712	201	Shell-Thick	INVS LU	0.4302	-0.6411	-19.76	-1.16	
713	202	Shell-Thick	INVS LE	0.6634	-0.2844	-5.86	0.70	
713	202	Shell-Thick	INVS LE	0.5397	-0.3856	-5.83	0.70	
713	202	Shell-Thick	INVS LE	2.0557	0.0945	-5.83	0.41	
713	202	Shell-Thick	INVS LE	2.2375	-1.139E-04	-5.86	0.41	
713	202	Shell-Thick	INVS LE	0.1984	-0.4414	-13.28	-0.85	
713	202	Shell-Thick	INVS LE	0.0895	-0.4041	-12.95	-0.85	
713	202	Shell-Thick	INVS LE	0.7724	-0.1700	-12.95	-0.88	
713	202	Shell-Thick	INVS LE	0.8915	-0.0572	-13.28	-0.88	
713	202	Shell-Thick	INVS LU	1.2025	-0.3840	-7.91	2.51	
713	202	Shell-Thick	INVS LU	1.0617	-0.3642	-7.87	2.51	
713	202	Shell-Thick	INVS LU	3.5438	0.4013	-7.87	1.91	
713	202	Shell-Thick	INVS LU	3.7984	0.0661	-7.91	1.91	
713	202	Shell-Thick	INVS LU	0.2679	-0.6235	-21.90	-1.15	
713	202	Shell-Thick	INVS LU	0.1208	-0.5455	-21.22	-1.15	
713	202	Shell-Thick	INVS LU	1.0427	-0.2295	-21.22	-1.18	
713	202	Shell-Thick	INVS LU	1.2036	-0.0772	-21.90	-1.18	
714	203	Shell-Thick	INVS LE	2.1523	0.0113	-6.44	0.45	
714	203	Shell-Thick	INVS LE	1.8732	0.0295	-6.45	0.45	
714	203	Shell-Thick	INVS LE	3.5438	0.5156	-6.45	0.18	
714	203	Shell-Thick	INVS LE	3.8940	0.4499	-6.44	0.18	
714	203	Shell-Thick	INVS LE	0.8059	-0.0737	-14.64	-0.88	
714	203	Shell-Thick	INVS LE	0.6500	-0.1951	-14.33	-0.88	
714	203	Shell-Thick	INVS LE	1.4026	0.0431	-14.33	-0.86	
714	203	Shell-Thick	INVS LE	1.5720	0.1555	-14.64	-0.86	
714	203	Shell-Thick	INVS LU	3.7136	0.1099	-8.70	1.98	
714	203	Shell-Thick	INVS LU	3.2916	0.2901	-8.71	1.98	
714	203	Shell-Thick	INVS LU	6.0268	1.0636	-8.71	1.39	
714	203	Shell-Thick	INVS LU	6.5867	0.7913	-8.70	1.39	
714	203	Shell-Thick	INVS LU	1.0880	-0.0994	-24.15	-1.18	
714	203	Shell-Thick	INVS LU	0.8774	-0.2634	-23.47	-1.18	
714	203	Shell-Thick	INVS LU	1.8935	0.0581	-23.47	-1.17	
714	203	Shell-Thick	INVS LU	2.1223	0.2099	-24.15	-1.17	
715	204	Shell-Thick	INVS LE	3.8271	0.4743	-7.05	0.22	
715	204	Shell-Thick	INVS LE	3.4669	0.4624	-7.12	0.22	
715	204	Shell-Thick	INVS LE	5.3042	0.9917	-7.12	-1.199E-02	
715	204	Shell-Thick	INVS LE	5.7419	0.9518	-7.05	-1.199E-02	
715	204	Shell-Thick	INVS LE	1.4958	0.1423	-16.06	-0.86	
715	204	Shell-Thick	INVS LE	1.3259	0.0257	-15.80	-0.86	
715	204	Shell-Thick	INVS LE	2.1530	0.2794	-15.80	-0.80	
715	204	Shell-Thick	INVS LE	2.3372	0.3864	-16.06	-0.80	
715	204	Shell-Thick	INVS LU	6.5306	0.8594	-9.52	1.47	
715	204	Shell-Thick	INVS LU	5.9497	0.9688	-9.61	1.47	
715	204	Shell-Thick	INVS LU	8.9584	1.8177	-9.61	0.90	
715	204	Shell-Thick	INVS LU	9.6900	1.6075	-9.52	0.90	
715	204	Shell-Thick	INVS LU	2.0193	0.1921	-26.51	-1.16	
715	204	Shell-Thick	INVS LU	1.7900	0.0347	-25.86	-1.16	
715	204	Shell-Thick	INVS LU	2.9066	0.3773	-25.86	-1.08	
715	204	Shell-Thick	INVS LU	3.1553	0.5216	-26.51	-1.08	
716	205	Shell-Thick	INVS LE	13.1862	2.5244	21.38	-1.822E-02	
716	205	Shell-Thick	INVS LE	12.2177	2.5564	21.32	-1.822E-02	
716	205	Shell-Thick	INVS LE	9.7693	1.9739	21.32	-6.588E-02	
716	205	Shell-Thick	INVS LE	10.6050	2.0309	21.38	-6.588E-02	
716	205	Shell-Thick	INVS LE	5.6622	1.1155	9.65	-0.12	
716	205	Shell-Thick	INVS LE	5.4229	1.1016	10.00	-0.12	
716	205	Shell-Thick	INVS LE	4.2791	0.8386	10.00	-0.33	
716	205	Shell-Thick	INVS LE	4.4911	0.8710	9.65	-0.33	
716	205	Shell-Thick	INVS LU	21.9111	4.1582	34.99	-2.460E-02	
716	205	Shell-Thick	INVS LU	20.0972	4.2434	34.45	-2.460E-02	
716	205	Shell-Thick	INVS LU	16.1358	3.2905	34.45	0.24	
716	205	Shell-Thick	INVS LU	17.6947	3.3760	34.99	0.24	
716	205	Shell-Thick	INVS LU	7.6440	1.5059	13.03	-0.24	
716	205	Shell-Thick	INVS LU	7.3209	1.4871	13.50	-0.24	
716	205	Shell-Thick	INVS LU	5.7768	1.1321	13.50	-0.44	
716	205	Shell-Thick	INVS LU	6.0630	1.1758	13.03	-0.44	
717	206	Shell-Thick	INVS LE	10.5398	1.9694	19.64	-0.12	
717	206	Shell-Thick	INVS LE	9.6778	2.0040	19.46	-0.12	
717	206	Shell-Thick	INVS LE	7.4350	1.4671	19.46	4.231E-02	
717	206	Shell-Thick	INVS LE	8.1777	1.5124	19.64	4.231E-02	
717	206	Shell-Thick	INVS LE	4.4690	0.8697	8.86	-0.32	
717	206	Shell-Thick	INVS LE	4.2078	0.8211	9.09	-0.32	
717	206	Shell-Thick	INVS LE	3.1627	0.5613	9.09	-0.52	
717	206	Shell-Thick	INVS LE	3.3991	0.6267	8.86	-0.52	
717	206	Shell-Thick	INVS LU	17.5796	3.2447	32.14	0.11	
717	206	Shell-Thick	INVS LU	16.0209	3.3757	31.47	0.11	
717	206	Shell-Thick	INVS LU	12.3893	2.5174	31.47	0.70	
717	206	Shell-Thick	INVS LU	13.7190	2.5395	32.14	0.70	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 144 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

717	206	Shell-Thick	INVS LU	6.0331	1.1741	11.97	-0.44	
717	206	Shell-Thick	INVS LU	5.6805	1.1085	12.28	-0.44	
717	206	Shell-Thick	INVS LU	4.2696	0.7578	12.28	-0.71	
717	206	Shell-Thick	INVS LU	4.5888	0.8460	11.97	-0.71	
718	207	Shell-Thick	INVS LE	8.1473	1.4644	17.99	-6.059E-03	
718	207	Shell-Thick	INVS LE	7.4557	1.5132	17.71	-6.059E-03	
718	207	Shell-Thick	INVS LE	5.4021	0.9460	17.71	0.25	
718	207	Shell-Thick	INVS LE	5.9960	0.9626	17.99	0.25	
718	207	Shell-Thick	INVS LE	3.4111	0.6314	8.12	-0.52	
718	207	Shell-Thick	INVS LE	3.1685	0.5602	8.24	-0.52	
718	207	Shell-Thick	INVS LE	2.2146	0.2817	8.24	-0.63	
718	207	Shell-Thick	INVS LE	2.4381	0.3658	8.12	-0.63	
718	207	Shell-Thick	INVS LU	13.6394	2.4303	29.45	0.59	
718	207	Shell-Thick	INVS LU	12.4272	2.6182	28.68	0.59	
718	207	Shell-Thick	INVS LU	9.0985	1.7164	28.68	1.26	
718	207	Shell-Thick	INVS LU	10.1219	1.6547	29.45	1.26	
718	207	Shell-Thick	INVS LU	4.6050	0.8524	10.96	-0.70	
718	207	Shell-Thick	INVS LU	4.2775	0.7563	11.13	-0.70	
718	207	Shell-Thick	INVS LU	2.9896	0.3804	11.13	-0.85	
718	207	Shell-Thick	INVS LU	3.2914	0.4938	10.96	-0.85	
719	208	Shell-Thick	INVS LE	6.0541	0.9306	16.42	0.20	
719	208	Shell-Thick	INVS LE	5.4894	1.0071	16.06	0.20	
719	208	Shell-Thick	INVS LE	3.6201	0.4896	16.06	0.51	
719	208	Shell-Thick	INVS LE	4.0975	0.4714	16.42	0.51	
719	208	Shell-Thick	INVS LE	2.4973	0.3767	7.40	-0.63	
719	208	Shell-Thick	INVS LE	2.2728	0.2943	7.45	-0.63	
719	208	Shell-Thick	INVS LE	1.4064	0.0294	7.45	-0.68	
719	208	Shell-Thick	INVS LE	1.6141	0.1232	7.40	-0.68	
719	208	Shell-Thick	INVS LU	10.1786	1.5730	26.87	1.16	
719	208	Shell-Thick	INVS LU	9.2195	1.8336	26.05	1.16	
719	208	Shell-Thick	INVS LU	6.1872	1.0231	26.05	1.88	
719	208	Shell-Thick	INVS LU	6.9774	0.8752	26.87	1.88	
719	208	Shell-Thick	INVS LU	3.3713	0.5086	10.00	-0.86	
719	208	Shell-Thick	INVS LU	3.0682	0.3973	10.06	-0.86	
719	208	Shell-Thick	INVS LU	1.8987	0.0397	10.06	-0.91	
719	208	Shell-Thick	INVS LU	2.1790	0.1663	10.00	-0.91	
720	209	Shell-Thick	INVS LE	4.1823	0.4525	14.93	0.47	
720	209	Shell-Thick	INVS LE	3.8059	0.5625	14.53	0.47	
720	209	Shell-Thick	INVS LE	2.1062	0.0403	14.53	0.82	
720	209	Shell-Thick	INVS LE	2.4120	-0.0226	14.93	0.82	
720	209	Shell-Thick	INVS LE	1.6945	0.1387	6.73	-0.68	
720	209	Shell-Thick	INVS LE	1.5196	0.0526	6.71	-0.68	
720	209	Shell-Thick	INVS LE	0.7341	-0.2142	6.71	-0.66	
720	209	Shell-Thick	INVS LE	0.8966	-0.1199	6.73	-0.66	
720	209	Shell-Thick	INVS LU	7.0673	0.8165	24.45	1.79	
720	209	Shell-Thick	INVS LU	6.4572	1.1538	23.59	1.79	
720	209	Shell-Thick	INVS LU	3.6973	0.3355	23.59	2.54	
720	209	Shell-Thick	INVS LU	4.1694	0.0903	24.45	2.54	
720	209	Shell-Thick	INVS LU	2.2875	0.1872	9.08	-0.91	
720	209	Shell-Thick	INVS LU	2.0514	0.0711	9.07	-0.91	
720	209	Shell-Thick	INVS LU	0.9910	-0.2892	9.07	-0.90	
720	209	Shell-Thick	INVS LU	1.2104	-0.1619	9.08	-0.90	
721	210	Shell-Thick	INVS LE	2.5904	-0.0267	13.52	0.77	
721	210	Shell-Thick	INVS LE	2.3243	0.1236	13.09	0.77	
721	210	Shell-Thick	INVS LE	0.7882	-0.3606	13.09	1.15	
721	210	Shell-Thick	INVS LE	0.9919	-0.3436	13.52	1.15	
721	210	Shell-Thick	INVS LE	1.0165	-0.0998	6.09	-0.67	
721	210	Shell-Thick	INVS LE	0.8725	-0.1827	6.03	-0.67	
721	210	Shell-Thick	INVS LE	0.1641	-0.4336	6.03	-0.62	
721	210	Shell-Thick	INVS LE	0.2975	-0.4693	6.09	-0.62	
721	210	Shell-Thick	INVS LU	4.4156	0.0582	22.14	2.45	
721	210	Shell-Thick	INVS LU	4.0077	0.4789	21.28	2.45	
721	210	Shell-Thick	INVS LU	1.5118	-0.2761	21.28	3.20	
721	210	Shell-Thick	INVS LU	1.7971	-0.4639	22.14	3.20	
721	210	Shell-Thick	INVS LU	1.3722	-0.1347	8.22	-0.90	
721	210	Shell-Thick	INVS LU	1.1779	-0.2466	8.14	-0.90	
721	210	Shell-Thick	INVS LU	0.2216	-0.5853	8.14	-0.83	
721	210	Shell-Thick	INVS LU	0.4016	-0.6524	8.22	-0.83	
722	211	Shell-Thick	INVS LE	1.1846	-0.3208	12.19	1.12	
722	211	Shell-Thick	INVS LE	1.0780	-0.2705	11.75	1.12	
722	211	Shell-Thick	INVS LE	-0.3015	-0.6351	11.75	1.50	
722	211	Shell-Thick	INVS LE	-0.2181	-0.5547	12.19	1.50	
722	211	Shell-Thick	INVS LE	0.4262	-0.4630	5.49	-0.62	
722	211	Shell-Thick	INVS LE	0.3355	-0.3964	5.39	-0.62	
722	211	Shell-Thick	INVS LE	-0.3066	-0.7325	5.39	-0.54	
722	211	Shell-Thick	INVS LE	-0.2503	-0.8916	5.49	-0.54	
722	211	Shell-Thick	INVS LU	2.0641	-0.4331	19.96	3.13	
722	211	Shell-Thick	INVS LU	1.9389	-0.1245	19.12	3.13	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 145 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

722	211	Shell-Thick	INVSLE	-0.3126	-0.8455	19.12	3.86	
722	211	Shell-Thick	INVSLE	-0.2876	-0.7488	19.96	3.86	
722	211	Shell-Thick	INVSLE	0.5754	-0.6464	7.41	-0.84	
722	211	Shell-Thick	INVSLE	0.4529	-0.5351	7.28	-0.84	
722	211	Shell-Thick	INVSLE	-0.4147	-1.0035	7.28	-0.73	
722	211	Shell-Thick	INVSLE	-0.3427	-1.2822	7.41	-0.73	
723	212	Shell-Thick	INVSLE	0.0037	-0.5296	10.93	1.46	
723	212	Shell-Thick	INVSLE	-0.0081	-0.5944	10.49	1.46	
723	212	Shell-Thick	INVSLE	-0.6924	-0.8145	10.49	1.84	
723	212	Shell-Thick	INVSLE	-0.6424	-0.7458	10.93	1.84	
723	212	Shell-Thick	INVSLE	-0.0672	-0.8752	4.91	-0.55	
723	212	Shell-Thick	INVSLE	-0.1233	-0.6384	4.80	-0.55	
723	212	Shell-Thick	INVSLE	-1.2475	-1.0641	4.80	-0.45	
723	212	Shell-Thick	INVSLE	-1.2797	-1.2716	4.91	-0.45	
723	212	Shell-Thick	INVSLE	0.0860	-0.7149	17.90	3.79	
723	212	Shell-Thick	INVSLE	0.1253	-0.6894	17.09	3.79	
723	212	Shell-Thick	INVSLE	-0.9348	-1.0996	17.09	4.50	
723	212	Shell-Thick	INVSLE	-0.8672	-1.0068	17.90	4.50	
723	212	Shell-Thick	INVSLE	-0.0908	-1.2760	6.63	-0.74	
723	212	Shell-Thick	INVSLE	-0.1664	-0.8684	6.48	-0.74	
723	212	Shell-Thick	INVSLE	-1.8913	-1.4740	6.48	-0.60	
723	212	Shell-Thick	INVSLE	-2.0187	-1.8814	6.63	-0.60	
724	213	Shell-Thick	INVSLE	-0.4925	-0.7199	9.73	1.81	
724	213	Shell-Thick	INVSLE	-0.5014	-0.7723	9.31	1.81	
724	213	Shell-Thick	INVSLE	-1.0073	-0.9731	9.31	2.18	
724	213	Shell-Thick	INVSLE	-1.0022	-0.9182	9.73	2.18	
724	213	Shell-Thick	INVSLE	-1.0257	-1.2490	4.37	-0.45	
724	213	Shell-Thick	INVSLE	-0.9125	-0.9689	4.25	-0.45	
724	213	Shell-Thick	INVSLE	-2.0164	-1.3576	4.25	-0.35	
724	213	Shell-Thick	INVSLE	-2.1649	-1.6142	4.37	-0.35	
724	213	Shell-Thick	INVSLE	-0.6649	-0.9718	15.95	4.44	
724	213	Shell-Thick	INVSLE	-0.6769	-1.0426	15.18	4.44	
724	213	Shell-Thick	INVSLE	-1.3599	-1.3136	15.18	5.11	
724	213	Shell-Thick	INVSLE	-1.3530	-1.2396	15.95	5.11	
724	213	Shell-Thick	INVSLE	-1.6440	-1.8626	5.90	-0.61	
724	213	Shell-Thick	INVSLE	-1.3891	-1.3376	5.74	-0.61	
724	213	Shell-Thick	INVSLE	-3.1865	-1.8904	5.74	-0.47	
724	213	Shell-Thick	INVSLE	-3.5132	-2.4213	5.90	-0.47	
725	214	Shell-Thick	INVSLE	-0.8462	-0.8921	8.60	2.15	
725	214	Shell-Thick	INVSLE	-0.8221	-0.9309	8.20	2.15	
725	214	Shell-Thick	INVSLE	-1.2680	-1.1116	8.20	2.50	
725	214	Shell-Thick	INVSLE	-1.2949	-1.0709	8.60	2.50	
725	214	Shell-Thick	INVSLE	-1.8852	-1.5866	3.86	-0.35	
725	214	Shell-Thick	INVSLE	-1.6916	-1.2643	3.74	-0.35	
725	214	Shell-Thick	INVSLE	-2.6660	-1.6151	3.74	-0.24	
725	214	Shell-Thick	INVSLE	-2.8899	-1.9173	3.86	-0.24	
725	214	Shell-Thick	INVSLE	-1.1424	-1.2043	14.10	5.05	
725	214	Shell-Thick	INVSLE	-1.1099	-1.2568	13.39	5.05	
725	214	Shell-Thick	INVSLE	-1.7118	-1.5006	13.39	5.67	
725	214	Shell-Thick	INVSLE	-1.7482	-1.4457	14.10	5.67	
725	214	Shell-Thick	INVSLE	-3.0900	-2.3920	5.21	-0.47	
725	214	Shell-Thick	INVSLE	-2.6999	-1.7568	5.04	-0.47	
725	214	Shell-Thick	INVSLE	-4.2871	-2.2559	5.04	-0.32	
725	214	Shell-Thick	INVSLE	-4.7394	-2.8989	5.21	-0.32	
726	215	Shell-Thick	INVSLE	-1.1475	-1.0456	7.52	2.47	
726	215	Shell-Thick	INVSLE	-1.0851	-1.0708	7.16	2.47	
726	215	Shell-Thick	INVSLE	-1.4746	-1.2300	7.16	2.79	
726	215	Shell-Thick	INVSLE	-1.5384	-1.2038	7.52	2.79	
726	215	Shell-Thick	INVSLE	-2.6242	-1.8874	3.37	-0.25	
726	215	Shell-Thick	INVSLE	-2.3352	-1.5257	3.25	-0.25	
726	215	Shell-Thick	INVSLE	-3.1875	-1.8350	3.25	-0.14	
726	215	Shell-Thick	INVSLE	-3.5007	-2.1807	3.37	-0.14	
726	215	Shell-Thick	INVSLE	-1.5491	-1.4115	12.33	5.62	
726	215	Shell-Thick	INVSLE	-1.4649	-1.4456	11.69	5.62	
726	215	Shell-Thick	INVSLE	-1.9907	-1.6606	11.69	6.19	
726	215	Shell-Thick	INVSLE	-2.0769	-1.6252	12.33	6.19	
726	215	Shell-Thick	INVSLE	-4.3366	-2.8636	4.56	-0.33	
726	215	Shell-Thick	INVSLE	-3.7847	-2.1279	4.39	-0.33	
726	215	Shell-Thick	INVSLE	-5.1739	-2.5680	4.39	-0.19	
726	215	Shell-Thick	INVSLE	-5.7761	-3.3135	4.56	-0.19	
727	216	Shell-Thick	INVSLE	-1.3960	-1.1799	6.49	2.77	
727	216	Shell-Thick	INVSLE	-1.3062	-1.1919	6.17	2.77	
727	216	Shell-Thick	INVSLE	-1.6418	-1.3308	6.17	3.05	
727	216	Shell-Thick	INVSLE	-1.7325	-1.3182	6.49	3.05	
727	216	Shell-Thick	INVSLE	-3.2354	-2.1499	2.91	-0.14	
727	216	Shell-Thick	INVSLE	-2.8825	-1.7518	2.80	-0.14	
727	216	Shell-Thick	INVSLE	-3.6179	-2.0229	2.80	-4.075E-02	
727	216	Shell-Thick	INVSLE	-3.9911	-2.4076	2.91	-4.075E-02	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 146 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

727	216	Shell-Thick	INVS LU	-1.8846	-1.5928	10.65	6.14	
727	216	Shell-Thick	INVS LU	-1.7634	-1.6090	10.07	6.14	
727	216	Shell-Thick	INVS LU	-2.2165	-1.7966	10.07	6.64	
727	216	Shell-Thick	INVS LU	-2.3389	-1.7796	10.65	6.64	
727	216	Shell-Thick	INVS LU	-5.3685	-3.2747	3.93	-0.19	
727	216	Shell-Thick	INVS LU	-4.7104	-2.4489	3.77	-0.19	
727	216	Shell-Thick	INVS LU	-5.9094	-2.8348	3.77	-5.501E-02	
727	216	Shell-Thick	INVS LU	-6.6102	-3.6709	3.93	-5.501E-02	
728	217	Shell-Thick	INVS LE	-1.6045	-1.2962	5.51	3.04	
728	217	Shell-Thick	INVS LE	-1.4859	-1.2960	5.22	3.04	
728	217	Shell-Thick	INVS LE	-1.7703	-1.4138	5.22	3.29	
728	217	Shell-Thick	INVS LE	-1.8892	-1.4140	5.51	3.29	
728	217	Shell-Thick	INVS LE	-3.7521	-2.3777	2.47	-4.453E-02	
728	217	Shell-Thick	INVS LE	-3.3292	-1.9473	2.36	-4.453E-02	
728	217	Shell-Thick	INVS LE	-3.9532	-2.1772	2.36	4.749E-02	
728	217	Shell-Thick	INVS LE	-4.3919	-2.5971	2.47	4.749E-02	
728	217	Shell-Thick	INVS LU	-2.1661	-1.7499	9.04	6.61	
728	217	Shell-Thick	INVS LU	-2.0060	-1.7496	8.53	6.61	
728	217	Shell-Thick	INVS LU	-2.3900	-1.9087	8.53	7.05	
728	217	Shell-Thick	INVS LU	-2.5504	-1.9089	9.04	7.05	
728	217	Shell-Thick	INVS LU	-6.2424	-3.6318	3.33	-6.012E-02	
728	217	Shell-Thick	INVS LU	-5.4666	-2.7266	3.19	-6.012E-02	
728	217	Shell-Thick	INVS LU	-6.4845	-3.0623	3.19	6.411E-02	
728	217	Shell-Thick	INVS LU	-7.2940	-3.9692	3.33	6.411E-02	
729	218	Shell-Thick	INVS LE	-1.7737	-1.3944	4.56	3.27	
729	218	Shell-Thick	INVS LE	-1.6348	-1.3832	4.32	3.27	
729	218	Shell-Thick	INVS LE	-1.8701	-1.4814	4.32	3.49	
729	218	Shell-Thick	INVS LE	-2.0089	-1.4927	4.56	3.49	
729	218	Shell-Thick	INVS LE	-4.1715	-2.5693	2.04	4.380E-02	
729	218	Shell-Thick	INVS LE	-3.7021	-2.1107	1.95	4.380E-02	
729	218	Shell-Thick	INVS LE	-4.2186	-2.3032	1.95	0.12	
729	218	Shell-Thick	INVS LE	-4.7009	-2.7533	2.04	0.12	
729	218	Shell-Thick	INVS LU	-2.3945	-1.8825	7.49	7.01	
729	218	Shell-Thick	INVS LU	-2.2070	-1.8673	7.06	7.01	
729	218	Shell-Thick	INVS LU	-2.5246	-1.9998	7.06	7.39	
729	218	Shell-Thick	INVS LU	-2.7121	-2.0151	7.49	7.39	
729	218	Shell-Thick	INVS LU	-6.9520	-3.9317	2.76	5.913E-02	
729	218	Shell-Thick	INVS LU	-6.0993	-2.9586	2.63	5.913E-02	
729	218	Shell-Thick	INVS LU	-6.9421	-3.2562	2.63	0.17	
729	218	Shell-Thick	INVS LU	-7.8225	-4.2152	2.76	0.17	
730	219	Shell-Thick	INVS LE	-1.9121	-1.4760	3.65	3.47	
730	219	Shell-Thick	INVS LE	-1.7534	-1.4553	3.45	3.47	
730	219	Shell-Thick	INVS LE	-1.9414	-1.5335	3.45	3.65	
730	219	Shell-Thick	INVS LE	-2.0998	-1.5544	3.65	3.65	
730	219	Shell-Thick	INVS LE	-4.5161	-2.7288	1.63	0.12	
730	219	Shell-Thick	INVS LE	-3.9989	-2.2468	1.56	0.12	
730	219	Shell-Thick	INVS LE	-4.4120	-2.3998	1.56	0.19	
730	219	Shell-Thick	INVS LE	-4.9387	-2.8757	1.63	0.19	
730	219	Shell-Thick	INVS LU	-2.5814	-1.9926	5.99	7.36	
730	219	Shell-Thick	INVS LU	-2.3672	-1.9647	5.64	7.36	
730	219	Shell-Thick	INVS LU	-2.6209	-2.0702	5.64	7.66	
730	219	Shell-Thick	INVS LU	-2.8347	-2.0985	5.99	7.66	
730	219	Shell-Thick	INVS LU	-7.5357	-4.1816	2.20	0.16	
730	219	Shell-Thick	INVS LU	-6.6027	-3.1646	2.10	0.16	
730	219	Shell-Thick	INVS LU	-7.2769	-3.4045	2.10	0.25	
730	219	Shell-Thick	INVS LU	-8.2307	-4.4078	2.20	0.25	
731	220	Shell-Thick	INVS LE	-2.0202	-1.5409	2.76	3.64	
731	220	Shell-Thick	INVS LE	-1.8489	-1.5126	2.60	3.64	
731	220	Shell-Thick	INVS LE	-1.9909	-1.5719	2.60	3.77	
731	220	Shell-Thick	INVS LE	-2.1619	-1.6005	2.76	3.77	
731	220	Shell-Thick	INVS LE	-4.7844	-2.8553	1.23	0.19	
731	220	Shell-Thick	INVS LE	-4.2380	-2.3546	1.17	0.19	
731	220	Shell-Thick	INVS LE	-4.5502	-2.4713	1.17	0.24	
731	220	Shell-Thick	INVS LE	-5.1037	-2.9673	1.23	0.24	
731	220	Shell-Thick	INVS LU	-2.7273	-2.0802	4.53	7.64	
731	220	Shell-Thick	INVS LU	-2.4960	-2.0420	4.26	7.64	
731	220	Shell-Thick	INVS LU	-2.6877	-2.1220	4.26	7.88	
731	220	Shell-Thick	INVS LU	-2.9186	-2.1606	4.53	7.88	
731	220	Shell-Thick	INVS LU	-7.9898	-4.3795	1.67	0.25	
731	220	Shell-Thick	INVS LU	-7.0084	-3.3310	1.59	0.25	
731	220	Shell-Thick	INVS LU	-7.5181	-3.5142	1.59	0.32	
731	220	Shell-Thick	INVS LU	-8.5151	-4.5524	1.67	0.32	
732	221	Shell-Thick	INVS LE	-2.1038	-1.5904	1.89	3.77	
732	221	Shell-Thick	INVS LE	-1.9210	-1.5563	1.78	3.77	
732	221	Shell-Thick	INVS LE	-2.0182	-1.5967	1.78	3.86	
732	221	Shell-Thick	INVS LE	-2.2006	-1.6310	1.89	3.86	
732	221	Shell-Thick	INVS LE	-4.9915	-2.9519	0.84	0.24	
732	221	Shell-Thick	INVS LE	-4.4169	-2.4376	0.80	0.24	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 147 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

732	221	Shell-Thick	INVSLE	-4.6307	-2.5169	0.80	0.27	
732	221	Shell-Thick	INVSLE	-5.2098	-3.0282	0.84	0.27	
732	221	Shell-Thick	INVSLE	-2.8401	-2.1470	3.10	7.86	
732	221	Shell-Thick	INVSLE	-2.5933	-2.1010	2.91	7.86	
732	221	Shell-Thick	INVSLE	-2.7245	-2.1555	2.91	8.02	
732	221	Shell-Thick	INVSLE	-2.9708	-2.2018	3.10	8.02	
732	221	Shell-Thick	INVSLE	-8.3402	-4.5307	1.14	0.32	
732	221	Shell-Thick	INVSLE	-7.3112	-3.4595	1.08	0.32	
732	221	Shell-Thick	INVSLE	-7.6602	-3.5839	1.08	0.37	
732	221	Shell-Thick	INVSLE	-8.6993	-4.6484	1.14	0.37	
733	222	Shell-Thick	INVSLE	-2.1625	-1.6245	1.03	3.86	
733	222	Shell-Thick	INVSLE	-1.9745	-1.5868	0.97	3.86	
733	222	Shell-Thick	INVSLE	-2.0275	-1.6088	0.97	3.91	
733	222	Shell-Thick	INVSLE	-2.2153	-1.6467	1.03	3.91	
733	222	Shell-Thick	INVSLE	-5.1349	-3.0181	0.46	0.27	
733	222	Shell-Thick	INVSLE	-4.5481	-2.4954	0.44	0.27	
733	222	Shell-Thick	INVSLE	-4.6648	-2.5389	0.44	0.29	
733	222	Shell-Thick	INVSLE	-5.2540	-3.0600	0.46	0.29	
733	222	Shell-Thick	INVSLE	-2.9194	-2.1931	1.69	8.01	
733	222	Shell-Thick	INVSLE	-2.6656	-2.1421	1.59	8.01	
733	222	Shell-Thick	INVSLE	-2.7372	-2.1719	1.59	8.10	
733	222	Shell-Thick	INVSLE	-2.9907	-2.2231	1.69	8.10	
733	222	Shell-Thick	INVSLE	-8.5818	-4.6341	0.62	0.37	
733	222	Shell-Thick	INVSLE	-7.5324	-3.5492	0.59	0.37	
733	222	Shell-Thick	INVSLE	-7.7230	-3.6174	0.59	0.39	
733	222	Shell-Thick	INVSLE	-8.7778	-4.6988	0.62	0.39	
734	223	Shell-Thick	INVSLE	-2.2000	-1.6440	0.18	3.91	
734	223	Shell-Thick	INVSLE	-2.0083	-1.6046	0.17	3.91	
734	223	Shell-Thick	INVSLE	-2.0176	-1.6084	0.17	3.91	
734	223	Shell-Thick	INVSLE	-2.2092	-1.6478	0.18	3.91	
734	223	Shell-Thick	INVSLE	-5.2245	-3.0556	8.082E-02	0.29	
734	223	Shell-Thick	INVSLE	-4.6274	-2.5298	7.676E-02	0.29	
734	223	Shell-Thick	INVSLE	-4.6479	-2.5372	7.676E-02	0.29	
734	223	Shell-Thick	INVSLE	-5.2453	-3.0629	8.082E-02	0.29	
734	223	Shell-Thick	INVSLE	-2.9699	-2.2194	0.30	8.10	
734	223	Shell-Thick	INVSLE	-2.7112	-2.1663	0.28	8.10	
734	223	Shell-Thick	INVSLE	-2.7238	-2.1713	0.28	8.11	
734	223	Shell-Thick	INVSLE	-2.9824	-2.2245	0.30	8.11	
734	223	Shell-Thick	INVSLE	-8.7318	-4.6926	0.11	0.39	
734	223	Shell-Thick	INVSLE	-7.6645	-3.6027	0.10	0.39	
734	223	Shell-Thick	INVSLE	-7.6981	-3.6143	0.10	0.40	
734	223	Shell-Thick	INVSLE	-8.7660	-4.7039	0.11	0.40	
735	224	Shell-Thick	INVSLE	-2.2148	-1.6488	-0.30	3.92	
735	224	Shell-Thick	INVSLE	-2.0253	-1.6100	-0.28	3.92	
735	224	Shell-Thick	INVSLE	-1.9911	-1.5955	-0.28	3.88	
735	224	Shell-Thick	INVSLE	-2.1805	-1.6342	-0.30	3.88	
735	224	Shell-Thick	INVSLE	-5.2555	-3.0643	-0.67	0.29	
735	224	Shell-Thick	INVSLE	-4.6630	-2.5408	-0.63	0.29	
735	224	Shell-Thick	INVSLE	-4.5876	-2.5121	-0.63	0.28	
735	224	Shell-Thick	INVSLE	-5.1781	-3.0370	-0.67	0.28	
735	224	Shell-Thick	INVSLE	-2.9899	-2.2259	-0.40	8.11	
735	224	Shell-Thick	INVSLE	-2.7342	-2.1735	-0.38	8.11	
735	224	Shell-Thick	INVSLE	-2.6879	-2.1539	-0.38	8.06	
735	224	Shell-Thick	INVSLE	-2.9436	-2.2062	-0.40	8.06	
735	224	Shell-Thick	INVSLE	-8.7816	-4.7058	-1.10	0.40	
735	224	Shell-Thick	INVSLE	-7.7217	-3.6202	-1.03	0.40	
735	224	Shell-Thick	INVSLE	-7.5986	-3.5751	-1.03	0.38	
735	224	Shell-Thick	INVSLE	-8.6542	-4.6636	-1.10	0.38	
736	225	Shell-Thick	INVSLE	-2.2090	-1.6390	-0.68	3.89	
736	225	Shell-Thick	INVSLE	-2.0233	-1.6029	-0.65	3.89	
736	225	Shell-Thick	INVSLE	-1.9451	-1.5701	-0.65	3.81	
736	225	Shell-Thick	INVSLE	-2.1309	-1.6061	-0.68	3.81	
736	225	Shell-Thick	INVSLE	-5.2340	-3.0442	-1.52	0.28	
736	225	Shell-Thick	INVSLE	-4.6482	-2.5282	-1.43	0.28	
736	225	Shell-Thick	INVSLE	-4.4761	-2.4638	-1.43	0.25	
736	225	Shell-Thick	INVSLE	-5.0579	-2.9826	-1.52	0.25	
736	225	Shell-Thick	INVSLE	-2.9821	-2.2126	-0.92	8.06	
736	225	Shell-Thick	INVSLE	-2.7315	-2.1639	-0.87	8.06	
736	225	Shell-Thick	INVSLE	-2.6259	-2.1196	-0.87	7.93	
736	225	Shell-Thick	INVSLE	-2.8767	-2.1682	-0.92	7.93	
736	225	Shell-Thick	INVSLE	-8.7420	-4.6738	-2.50	0.38	
736	225	Shell-Thick	INVSLE	-7.6920	-3.6011	-2.35	0.38	
736	225	Shell-Thick	INVSLE	-7.4111	-3.5002	-2.35	0.34	
736	225	Shell-Thick	INVSLE	-8.4522	-4.5787	-2.50	0.34	
737	226	Shell-Thick	INVSLE	-2.1796	-1.6145	-1.07	3.82	
737	226	Shell-Thick	INVSLE	-2.0039	-1.5832	-1.02	3.82	
737	226	Shell-Thick	INVSLE	-1.8812	-1.5316	-1.02	3.70	
737	226	Shell-Thick	INVSLE	-2.0571	-1.5628	-1.07	3.70	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 148 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

737	226	Shell-Thick	INVSLE	-5.1518	-2.9953	-2.39	0.25	
737	226	Shell-Thick	INVSLE	-4.5881	-2.4922	-2.25	0.25	
737	226	Shell-Thick	INVSLE	-4.3184	-2.3907	-2.25	0.21	
737	226	Shell-Thick	INVSLE	-4.8755	-2.8981	-2.39	0.21	
737	226	Shell-Thick	INVSLE	-2.9425	-2.1796	-1.44	7.95	
737	226	Shell-Thick	INVSLE	-2.7053	-2.1374	-1.37	7.95	
737	226	Shell-Thick	INVSLE	-2.5397	-2.0677	-1.37	7.75	
737	226	Shell-Thick	INVSLE	-2.7770	-2.1098	-1.44	7.75	
737	226	Shell-Thick	INVSLE	-8.5985	-4.5966	-3.91	0.34	
737	226	Shell-Thick	INVSLE	-7.5849	-3.5463	-3.68	0.34	
737	226	Shell-Thick	INVSLE	-7.1446	-3.3868	-3.68	0.28	
737	226	Shell-Thick	INVSLE	-8.1438	-4.4466	-3.91	0.28	
738	227	Shell-Thick	INVSLE	-2.1276	-1.5747	-1.46	3.71	
738	227	Shell-Thick	INVSLE	-1.9630	-1.5502	-1.39	3.71	
738	227	Shell-Thick	INVSLE	-1.7949	-1.4800	-1.39	3.55	
738	227	Shell-Thick	INVSLE	-1.9597	-1.5043	-1.46	3.55	
738	227	Shell-Thick	INVSLE	-5.0125	-2.9160	-3.27	0.21	
738	227	Shell-Thick	INVSLE	-4.4720	-2.4309	-3.08	0.21	
738	227	Shell-Thick	INVSLE	-4.1024	-2.2933	-3.08	0.15	
738	227	Shell-Thick	INVSLE	-4.6341	-2.7842	-3.27	0.15	
738	227	Shell-Thick	INVSLE	-2.8723	-2.1258	-1.97	7.76	
738	227	Shell-Thick	INVSLE	-2.6501	-2.0928	-1.88	7.76	
738	227	Shell-Thick	INVSLE	-2.4231	-1.9979	-1.88	7.49	
738	227	Shell-Thick	INVSLE	-2.6456	-2.0308	-1.97	7.49	
738	227	Shell-Thick	INVSLE	-8.3579	-4.4715	-5.36	0.29	
738	227	Shell-Thick	INVSLE	-7.3814	-3.4522	-5.05	0.29	
738	227	Shell-Thick	INVSLE	-6.7783	-3.2364	-5.05	0.20	
738	227	Shell-Thick	INVSLE	-7.7355	-4.2685	-5.36	0.20	
739	228	Shell-Thick	INVSLE	-2.0481	-1.5194	-1.87	3.56	
739	228	Shell-Thick	INVSLE	-1.9014	-1.5038	-1.78	3.56	
739	228	Shell-Thick	INVSLE	-1.6867	-1.4137	-1.78	3.36	
739	228	Shell-Thick	INVSLE	-1.8332	-1.4293	-1.87	3.36	
739	228	Shell-Thick	INVSLE	-4.8030	-2.8065	-4.17	0.15	
739	228	Shell-Thick	INVSLE	-4.3033	-2.3449	-3.94	0.15	
739	228	Shell-Thick	INVSLE	-3.8317	-2.1681	-3.94	7.883E-02	
739	228	Shell-Thick	INVSLE	-4.3192	-2.6378	-4.17	7.883E-02	
739	228	Shell-Thick	INVSLE	-2.7649	-2.0512	-2.52	7.52	
739	228	Shell-Thick	INVSLE	-2.5669	-2.0301	-2.40	7.52	
739	228	Shell-Thick	INVSLE	-2.2770	-1.9085	-2.40	7.17	
739	228	Shell-Thick	INVSLE	-2.4748	-1.9296	-2.52	7.17	
739	228	Shell-Thick	INVSLE	-7.9976	-4.2991	-6.84	0.21	
739	228	Shell-Thick	INVSLE	-7.0886	-3.3202	-6.45	0.21	
739	228	Shell-Thick	INVSLE	-6.3191	-3.0430	-6.45	0.11	
739	228	Shell-Thick	INVSLE	-7.2020	-4.0391	-6.84	0.11	
740	229	Shell-Thick	INVSLE	-1.9411	-1.4475	-2.28	3.38	
740	229	Shell-Thick	INVSLE	-1.8128	-1.4423	-2.19	3.38	
740	229	Shell-Thick	INVSLE	-1.5497	-1.3328	-2.19	3.14	
740	229	Shell-Thick	INVSLE	-1.6777	-1.3381	-2.28	3.14	
740	229	Shell-Thick	INVSLE	-4.5256	-2.6638	-5.10	8.240E-02	
740	229	Shell-Thick	INVSLE	-4.0656	-2.2302	-4.83	8.240E-02	
740	229	Shell-Thick	INVSLE	-3.4881	-2.0164	-4.83	-4.850E-03	
740	229	Shell-Thick	INVSLE	-3.9333	-2.4598	-5.10	-4.850E-03	
740	229	Shell-Thick	INVSLE	-2.6205	-1.9541	-3.08	7.20	
740	229	Shell-Thick	INVSLE	-2.4473	-1.9472	-2.95	7.20	
740	229	Shell-Thick	INVSLE	-2.0921	-1.7993	-2.95	6.79	
740	229	Shell-Thick	INVSLE	-2.2649	-1.8064	-3.08	6.79	
740	229	Shell-Thick	INVSLE	-7.5227	-4.0742	-8.37	0.11	
740	229	Shell-Thick	INVSLE	-6.6780	-3.1438	-7.90	0.11	
740	229	Shell-Thick	INVSLE	-5.7360	-2.8246	-7.90	-6.548E-03	
740	229	Shell-Thick	INVSLE	-6.5490	-3.7606	-8.37	-6.548E-03	
741	230	Shell-Thick	INVSLE	-1.7989	-1.3588	-2.72	3.16	
741	230	Shell-Thick	INVSLE	-1.6973	-1.3658	-2.61	3.16	
741	230	Shell-Thick	INVSLE	-1.3840	-1.2353	-2.61	2.89	
741	230	Shell-Thick	INVSLE	-1.4847	-1.2289	-2.72	2.89	
741	230	Shell-Thick	INVSLE	-4.1603	-2.4883	-6.07	-1.171E-03	
741	230	Shell-Thick	INVSLE	-3.7621	-2.0881	-5.76	-1.171E-03	
741	230	Shell-Thick	INVSLE	-3.0753	-1.8332	-5.76	-9.898E-02	
741	230	Shell-Thick	INVSLE	-3.4543	-2.2462	-6.07	-9.898E-02	
741	230	Shell-Thick	INVSLE	-2.4285	-1.8344	-3.67	6.83	
741	230	Shell-Thick	INVSLE	-2.2913	-1.8439	-3.52	6.83	
741	230	Shell-Thick	INVSLE	-1.8684	-1.6677	-3.52	6.35	
741	230	Shell-Thick	INVSLE	-2.0043	-1.6590	-3.67	6.35	
741	230	Shell-Thick	INVSLE	-6.8987	-3.7981	-9.95	-1.580E-03	
741	230	Shell-Thick	INVSLE	-6.1565	-2.9272	-9.41	-1.580E-03	
741	230	Shell-Thick	INVSLE	-5.0367	-2.5645	-9.41	-0.13	
741	230	Shell-Thick	INVSLE	-5.7384	-3.4259	-9.95	-0.13	
742	231	Shell-Thick	INVSLE	-1.6216	-1.2518	-3.17	2.91	
742	231	Shell-Thick	INVSLE	-1.5451	-1.2720	-3.05	2.91	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 149 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

742	231	Shell-Thick	INVSLE	-1.1791	-1.1213	-3.05	2.60	
742	231	Shell-Thick	INVSLE	-1.2542	-1.1020	-3.17	2.60	
742	231	Shell-Thick	INVSLE	-3.7105	-2.2762	-7.08	-9.430E-02	
742	231	Shell-Thick	INVSLE	-3.3680	-1.9130	-6.73	-9.430E-02	
742	231	Shell-Thick	INVSLE	-2.5666	-1.6201	-6.73	-0.20	
742	231	Shell-Thick	INVSLE	-2.8863	-1.9983	-7.08	-0.20	
742	231	Shell-Thick	INVSLE	-2.1891	-1.6900	-4.28	6.39	
742	231	Shell-Thick	INVSLE	-2.0859	-1.7173	-4.12	6.39	
742	231	Shell-Thick	INVSLE	-1.5918	-1.5138	-4.12	5.85	
742	231	Shell-Thick	INVSLE	-1.6932	-1.4877	-4.28	5.85	
742	231	Shell-Thick	INVSLE	-6.1329	-3.4640	-11.60	-0.13	
742	231	Shell-Thick	INVSLE	-5.4819	-2.6788	-10.99	-0.13	
742	231	Shell-Thick	INVSLE	-4.1754	-2.2620	-10.99	-0.27	
742	231	Shell-Thick	INVSLE	-4.7789	-3.0377	-11.60	-0.27	
743	232	Shell-Thick	INVSLE	-1.3973	-1.1265	-3.65	2.63	
743	232	Shell-Thick	INVSLE	-1.3565	-1.1610	-3.52	2.63	
743	232	Shell-Thick	INVSLE	-0.9354	-0.9889	-3.52	2.29	
743	232	Shell-Thick	INVSLE	-0.9735	-0.9561	-3.65	2.29	
743	232	Shell-Thick	INVSLE	-3.1456	-2.0279	-8.13	-0.20	
743	232	Shell-Thick	INVSLE	-2.8887	-1.7068	-7.75	-0.20	
743	232	Shell-Thick	INVSLE	-1.9679	-1.3724	-7.75	-0.30	
743	232	Shell-Thick	INVSLE	-2.1960	-1.7127	-8.13	-0.30	
743	232	Shell-Thick	INVSLE	-1.8863	-1.5207	-4.93	5.90	
743	232	Shell-Thick	INVSLE	-1.8313	-1.5673	-4.76	5.90	
743	232	Shell-Thick	INVSLE	-1.2628	-1.3350	-4.76	5.30	
743	232	Shell-Thick	INVSLE	-1.3142	-1.2908	-4.93	5.30	
743	232	Shell-Thick	INVSLE	-5.1730	-3.0733	-13.33	-0.26	
743	232	Shell-Thick	INVSLE	-4.6654	-2.3860	-12.65	-0.26	
743	232	Shell-Thick	INVSLE	-3.1652	-1.9103	-12.65	-0.41	
743	232	Shell-Thick	INVSLE	-3.6137	-2.5900	-13.33	-0.41	
744	233	Shell-Thick	INVSLE	-1.1270	-0.9817	-4.15	2.32	
744	233	Shell-Thick	INVSLE	-1.1168	-1.0304	-4.03	2.32	
744	233	Shell-Thick	INVSLE	-0.6371	-0.8378	-4.03	1.96	
744	233	Shell-Thick	INVSLE	-0.6438	-0.7913	-4.15	1.96	
744	233	Shell-Thick	INVSLE	-2.4737	-1.7407	-9.24	-0.30	
744	233	Shell-Thick	INVSLE	-2.2873	-1.4638	-8.83	-0.30	
744	233	Shell-Thick	INVSLE	-1.2399	-1.0908	-8.83	-0.41	
744	233	Shell-Thick	INVSLE	-1.3929	-1.3899	-9.24	-0.41	
744	233	Shell-Thick	INVSLE	-1.5215	-1.3252	-5.60	5.36	
744	233	Shell-Thick	INVSLE	-1.5077	-1.3910	-5.43	5.36	
744	233	Shell-Thick	INVSLE	-0.8601	-1.1310	-5.43	4.71	
744	233	Shell-Thick	INVSLE	-0.8691	-1.0683	-5.60	4.71	
744	233	Shell-Thick	INVSLE	-4.0352	-2.6209	-15.14	-0.40	
744	233	Shell-Thick	INVSLE	-3.6447	-2.0412	-14.40	-0.40	
744	233	Shell-Thick	INVSLE	-1.9389	-1.5105	-14.40	-0.55	
744	233	Shell-Thick	INVSLE	-2.2615	-2.0839	-15.14	-0.55	
745	234	Shell-Thick	INVSLE	-0.7928	-0.8169	-4.68	1.99	
745	234	Shell-Thick	INVSLE	-0.8269	-0.8800	-4.56	1.99	
745	234	Shell-Thick	INVSLE	-0.2856	-0.6678	-4.56	1.62	
745	234	Shell-Thick	INVSLE	-0.2459	-0.6084	-4.68	1.62	
745	234	Shell-Thick	INVSLE	-1.6480	-1.4136	-10.41	-0.40	
745	234	Shell-Thick	INVSLE	-1.5746	-1.1850	-9.98	-0.40	
745	234	Shell-Thick	INVSLE	-0.3950	-0.7747	-9.98	-0.51	
745	234	Shell-Thick	INVSLE	-0.4267	-1.0311	-10.41	-0.51	
745	234	Shell-Thick	INVSLE	-1.0702	-1.1029	-6.32	4.77	
745	234	Shell-Thick	INVSLE	-1.1163	-1.1879	-6.16	4.77	
745	234	Shell-Thick	INVSLE	-0.3855	-0.8988	-6.16	4.08	
745	234	Shell-Thick	INVSLE	-0.3320	-0.8214	-6.32	4.08	
745	234	Shell-Thick	INVSLE	-2.6398	-2.1056	-17.05	-0.55	
745	234	Shell-Thick	INVSLE	-2.4417	-1.6455	-16.26	-0.55	
745	234	Shell-Thick	INVSLE	-0.5497	-1.0619	-16.26	-0.68	
745	234	Shell-Thick	INVSLE	-0.6363	-1.5213	-17.05	-0.68	
746	235	Shell-Thick	INVSLE	-0.3985	-0.6336	-5.24	1.65	
746	235	Shell-Thick	INVSLE	-0.4652	-0.7091	-5.14	1.65	
746	235	Shell-Thick	INVSLE	0.6237	-0.4198	-5.14	1.27	
746	235	Shell-Thick	INVSLE	0.6812	-0.4060	-5.24	1.27	
746	235	Shell-Thick	INVSLE	-0.6875	-1.0495	-11.64	-0.50	
746	235	Shell-Thick	INVSLE	-0.6975	-0.8690	-11.20	-0.50	
746	235	Shell-Thick	INVSLE	0.1422	-0.4771	-11.20	-0.59	
746	235	Shell-Thick	INVSLE	0.2156	-0.6320	-11.64	-0.59	
746	235	Shell-Thick	INVSLE	-0.5379	-0.8554	-7.07	4.15	
746	235	Shell-Thick	INVSLE	-0.6280	-0.9573	-6.93	4.15	
746	235	Shell-Thick	INVSLE	1.1822	-0.3534	-6.93	3.42	
746	235	Shell-Thick	INVSLE	1.2211	-0.5482	-7.07	3.42	
746	235	Shell-Thick	INVSLE	-1.0227	-1.5319	-19.06	-0.68	
746	235	Shell-Thick	INVSLE	-0.9765	-1.1971	-18.24	-0.68	
746	235	Shell-Thick	INVSLE	0.1919	-0.6440	-18.24	-0.80	
746	235	Shell-Thick	INVSLE	0.2911	-0.8940	-19.06	-0.80	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 150 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

747	236	Shell-Thick	INVSLE	0.4777	-0.4292	-5.83	1.30	
747	236	Shell-Thick	INVSLE	0.3244	-0.5112	-5.75	1.30	
747	236	Shell-Thick	INVSLE	1.7931	-0.0397	-5.75	0.92	
747	236	Shell-Thick	INVSLE	2.0058	-0.1911	-5.83	0.92	
747	236	Shell-Thick	INVSLE	0.0830	-0.6411	-12.94	-0.59	
747	236	Shell-Thick	INVSLE	-0.0340	-0.5156	-12.50	-0.59	
747	236	Shell-Thick	INVSLE	0.6428	-0.2709	-12.50	-0.65	
747	236	Shell-Thick	INVSLE	0.7697	-0.2091	-12.94	-0.65	
747	236	Shell-Thick	INVSLE	0.9355	-0.5795	-7.86	3.49	
747	236	Shell-Thick	INVSLE	0.7400	-0.5061	-7.76	3.49	
747	236	Shell-Thick	INVSLE	3.1271	0.2283	-7.76	2.75	
747	236	Shell-Thick	INVSLE	3.4392	-0.2301	-7.86	2.75	
747	236	Shell-Thick	INVSLE	0.1120	-0.8973	-21.19	-0.79	
747	236	Shell-Thick	INVSLE	-0.0459	-0.6961	-20.34	-0.79	
747	236	Shell-Thick	INVSLE	0.8677	-0.3657	-20.34	-0.88	
747	236	Shell-Thick	INVSLE	1.0390	-0.2850	-21.19	-0.88	
748	237	Shell-Thick	INVSLE	1.8117	-0.2087	-6.45	0.97	
748	237	Shell-Thick	INVSLE	1.5601	-0.1256	-6.41	0.97	
748	237	Shell-Thick	INVSLE	3.1884	0.3884	-6.41	0.60	
748	237	Shell-Thick	INVSLE	3.5067	0.2608	-6.45	0.60	
748	237	Shell-Thick	INVSLE	0.6430	-0.2120	-14.32	-0.65	
748	237	Shell-Thick	INVSLE	0.4957	-0.3048	-13.90	-0.65	
748	237	Shell-Thick	INVSLE	1.2475	-0.0416	-13.90	-0.68	
748	237	Shell-Thick	INVSLE	1.4063	0.0435	-14.32	-0.68	
748	237	Shell-Thick	INVSLE	3.1669	-0.2050	-8.71	2.83	
748	237	Shell-Thick	INVSLE	2.7943	0.0822	-8.66	2.83	
748	237	Shell-Thick	INVSLE	5.4391	0.8870	-8.66	2.08	
748	237	Shell-Thick	INVSLE	5.9423	0.5127	-8.71	2.08	
748	237	Shell-Thick	INVSLE	0.8680	-0.2862	-23.44	-0.87	
748	237	Shell-Thick	INVSLE	0.6692	-0.4114	-22.58	-0.87	
748	237	Shell-Thick	INVSLE	1.6842	-0.0561	-22.58	-0.91	
748	237	Shell-Thick	INVSLE	1.8985	0.0587	-23.44	-0.91	
749	238	Shell-Thick	INVSLE	3.4024	0.2755	-7.11	0.64	
749	238	Shell-Thick	INVSLE	2.9836	0.3119	-7.13	0.64	
749	238	Shell-Thick	INVSLE	4.7771	0.8204	-7.13	0.31	
749	238	Shell-Thick	INVSLE	5.2787	0.7286	-7.11	0.31	
749	238	Shell-Thick	INVSLE	1.3164	0.0269	-15.77	-0.68	
749	238	Shell-Thick	INVSLE	1.1220	-0.0681	-15.39	-0.68	
749	238	Shell-Thick	INVSLE	1.9524	0.1941	-15.39	-0.66	
749	238	Shell-Thick	INVSLE	2.1626	0.2784	-15.77	-0.66	
749	238	Shell-Thick	INVSLE	5.8215	0.5637	-9.60	2.17	
749	238	Shell-Thick	INVSLE	5.1424	0.7526	-9.62	2.17	
749	238	Shell-Thick	INVSLE	8.0526	1.5468	-9.62	1.44	
749	238	Shell-Thick	INVSLE	8.8921	1.2508	-9.60	1.44	
749	238	Shell-Thick	INVSLE	1.7771	0.0363	-25.81	-0.91	
749	238	Shell-Thick	INVSLE	1.5147	-0.0919	-24.97	-0.91	
749	238	Shell-Thick	INVSLE	2.6357	0.2620	-24.97	-0.89	
749	238	Shell-Thick	INVSLE	2.9195	0.3758	-25.81	-0.89	
750	239	Shell-Thick	INVSLE	12.2380	2.3225	21.25	-2.669E-02	
750	239	Shell-Thick	INVSLE	11.1974	2.3646	21.03	-2.669E-02	
750	239	Shell-Thick	INVSLE	8.7774	1.7985	21.03	5.921E-02	
750	239	Shell-Thick	INVSLE	9.6775	1.8505	21.25	5.921E-02	
750	239	Shell-Thick	INVSLE	5.4482	1.0646	9.97	-0.13	
750	239	Shell-Thick	INVSLE	5.1537	1.0558	10.24	-0.13	
750	239	Shell-Thick	INVSLE	3.9792	0.7868	10.24	-0.26	
750	239	Shell-Thick	INVSLE	4.2421	0.8168	9.97	-0.26	
750	239	Shell-Thick	INVSLE	20.1118	3.7812	34.34	-3.604E-02	
750	239	Shell-Thick	INVSLE	18.2057	3.8823	33.55	-3.604E-02	
750	239	Shell-Thick	INVSLE	14.3416	2.9717	33.55	0.43	
750	239	Shell-Thick	INVSLE	15.9805	3.0492	34.34	0.43	
750	239	Shell-Thick	INVSLE	7.3550	1.4372	13.46	-0.26	
750	239	Shell-Thick	INVSLE	6.9575	1.4253	13.83	-0.26	
750	239	Shell-Thick	INVSLE	5.3719	1.0621	13.83	-0.35	
750	239	Shell-Thick	INVSLE	5.7268	1.1027	13.46	-0.35	
751	240	Shell-Thick	INVSLE	9.6791	1.7961	19.41	-3.360E-03	
751	240	Shell-Thick	INVSLE	8.7852	1.8548	19.07	-3.360E-03	
751	240	Shell-Thick	INVSLE	6.5775	1.2637	19.07	0.30	
751	240	Shell-Thick	INVSLE	7.3552	1.2827	19.41	0.30	
751	240	Shell-Thick	INVSLE	4.2268	0.8135	9.07	-0.26	
751	240	Shell-Thick	INVSLE	3.9332	0.7778	9.22	-0.26	
751	240	Shell-Thick	INVSLE	2.8683	0.4847	9.22	-0.39	
751	240	Shell-Thick	INVSLE	3.1373	0.5371	9.07	-0.39	
751	240	Shell-Thick	INVSLE	16.0017	2.9354	31.40	0.30	
751	240	Shell-Thick	INVSLE	14.4117	3.1037	30.48	0.30	
751	240	Shell-Thick	INVSLE	10.8788	2.1670	30.48	1.10	
751	240	Shell-Thick	INVSLE	12.2464	2.1474	31.40	1.10	
751	240	Shell-Thick	INVSLE	5.7062	1.0982	12.25	-0.36	
751	240	Shell-Thick	INVSLE	5.3098	1.0501	12.45	-0.36	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 151 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

751	240	Shell-Thick	INVSLU	3.8723	0.6544	12.45	-0.53	
751	240	Shell-Thick	INVSLU	4.2353	0.7250	12.25	-0.53	
752	241	Shell-Thick	INVSLE	7.4381	1.2471	17.67	0.24	
752	241	Shell-Thick	INVSLE	6.6937	1.3391	17.23	0.24	
752	241	Shell-Thick	INVSLE	4.6893	0.7952	17.23	0.62	
752	241	Shell-Thick	INVSLE	5.3316	0.7714	17.67	0.62	
752	241	Shell-Thick	INVSLE	3.1801	0.5434	8.23	-0.39	
752	241	Shell-Thick	INVSLE	2.9064	0.4946	8.28	-0.39	
752	241	Shell-Thick	INVSLE	1.9449	0.2091	8.28	-0.44	
752	241	Shell-Thick	INVSLE	2.1976	0.2721	8.23	-0.44	
752	241	Shell-Thick	INVSLU	12.3757	2.0632	28.62	0.97	
752	241	Shell-Thick	INVSLU	11.0856	2.3184	27.62	0.97	
752	241	Shell-Thick	INVSLU	7.8718	1.4747	27.62	1.85	
752	241	Shell-Thick	INVSLU	8.9658	1.3505	28.62	1.85	
752	241	Shell-Thick	INVSLU	4.2932	0.7336	11.11	-0.53	
752	241	Shell-Thick	INVSLU	3.9236	0.6677	11.17	-0.53	
752	241	Shell-Thick	INVSLU	2.6256	0.2823	11.17	-0.59	
752	241	Shell-Thick	INVSLU	2.9668	0.3673	11.11	-0.59	
753	242	Shell-Thick	INVSLE	5.4564	0.7506	16.04	0.57	
753	242	Shell-Thick	INVSLE	4.9048	0.8840	15.54	0.57	
753	242	Shell-Thick	INVSLE	3.0859	0.3347	15.54	1.01	
753	242	Shell-Thick	INVSLE	3.5552	0.2562	16.04	1.01	
753	242	Shell-Thick	INVSLE	2.2776	0.2855	7.44	-0.44	
753	242	Shell-Thick	INVSLE	2.0515	0.2330	7.42	-0.44	
753	242	Shell-Thick	INVSLE	1.1841	-0.0579	7.42	-0.42	
753	242	Shell-Thick	INVSLE	1.3949	0.0047	7.44	-0.42	
753	242	Shell-Thick	INVSLU	9.1426	1.2900	26.02	1.74	
753	242	Shell-Thick	INVSLU	8.2136	1.6389	24.97	1.74	
753	242	Shell-Thick	INVSLU	5.2914	0.7899	24.97	2.66	
753	242	Shell-Thick	INVSLU	6.0603	0.5478	26.02	2.66	
753	242	Shell-Thick	INVSLU	3.0747	0.3854	10.05	-0.59	
753	242	Shell-Thick	INVSLU	2.7695	0.3146	10.01	-0.59	
753	242	Shell-Thick	INVSLU	1.5985	-0.0782	10.01	-0.56	
753	242	Shell-Thick	INVSLU	1.8831	0.0063	10.05	-0.56	
754	243	Shell-Thick	INVSLE	3.7571	0.2499	14.51	0.96	
754	243	Shell-Thick	INVSLE	3.3483	0.4338	13.98	0.96	
754	243	Shell-Thick	INVSLE	1.7063	-0.0680	13.98	1.43	
754	243	Shell-Thick	INVSLE	2.0436	-0.2043	14.51	1.43	
754	243	Shell-Thick	INVSLE	1.5171	0.0241	6.71	-0.42	
754	243	Shell-Thick	INVSLE	1.3312	-0.0234	6.63	-0.42	
754	243	Shell-Thick	INVSLE	0.5519	-0.2968	6.63	-0.35	
754	243	Shell-Thick	INVSLE	0.7255	-0.2411	6.71	-0.35	
754	243	Shell-Thick	INVSLU	6.3546	0.5118	23.56	2.55	
754	243	Shell-Thick	INVSLU	5.6875	0.9640	22.50	2.55	
754	243	Shell-Thick	INVSLU	3.0450	0.1973	22.50	3.48	
754	243	Shell-Thick	INVSLU	3.5721	-0.1617	23.56	3.48	
754	243	Shell-Thick	INVSLU	2.0481	0.0325	9.06	-0.57	
754	243	Shell-Thick	INVSLU	1.7971	-0.0316	8.95	-0.57	
754	243	Shell-Thick	INVSLU	0.7451	-0.4007	8.95	-0.47	
754	243	Shell-Thick	INVSLU	0.9794	-0.3254	9.06	-0.47	
755	244	Shell-Thick	INVSLE	2.2636	-0.1998	13.09	1.38	
755	244	Shell-Thick	INVSLE	2.0363	0.0375	12.53	1.38	
755	244	Shell-Thick	INVSLE	0.5559	-0.4469	12.53	1.87	
755	244	Shell-Thick	INVSLE	0.7269	-0.4759	13.09	1.87	
755	244	Shell-Thick	INVSLE	0.8640	-0.2178	6.03	-0.35	
755	244	Shell-Thick	INVSLE	0.7377	-0.2551	5.91	-0.35	
755	244	Shell-Thick	INVSLE	0.0388	-0.5185	5.91	-0.24	
755	244	Shell-Thick	INVSLE	0.1571	-0.6466	6.03	-0.24	
755	244	Shell-Thick	INVSLU	3.8866	-0.1788	21.27	3.39	
755	244	Shell-Thick	INVSLU	3.5422	0.3768	20.21	3.39	
755	244	Shell-Thick	INVSLU	1.1556	-0.3639	20.21	4.31	
755	244	Shell-Thick	INVSLU	1.3876	-0.6424	21.27	4.31	
755	244	Shell-Thick	INVSLU	1.1664	-0.2941	8.14	-0.47	
755	244	Shell-Thick	INVSLU	0.9959	-0.3444	7.97	-0.47	
755	244	Shell-Thick	INVSLU	0.0524	-0.6999	7.97	-0.33	
755	244	Shell-Thick	INVSLU	0.2121	-0.8986	8.14	-0.33	
756	245	Shell-Thick	INVSLE	1.0062	-0.4495	11.75	1.82	
756	245	Shell-Thick	INVSLE	0.8988	-0.3376	11.19	1.82	
756	245	Shell-Thick	INVSLE	-0.3858	-0.7141	11.19	2.31	
756	245	Shell-Thick	INVSLE	-0.3084	-0.6875	11.75	2.31	
756	245	Shell-Thick	INVSLE	0.3213	-0.6314	5.40	-0.25	
756	245	Shell-Thick	INVSLE	0.2380	-0.4722	5.25	-0.25	
756	245	Shell-Thick	INVSLE	-0.4280	-0.7789	5.25	-0.12	
756	245	Shell-Thick	INVSLE	-0.3687	-1.0407	5.40	-0.12	
756	245	Shell-Thick	INVSLU	1.8005	-0.6068	19.11	4.23	
756	245	Shell-Thick	INVSLU	1.6652	-0.1816	18.09	4.23	
756	245	Shell-Thick	INVSLU	-0.4769	-0.8540	18.09	5.12	
756	245	Shell-Thick	INVSLU	-0.4163	-0.9281	19.11	5.12	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 152 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

756	245	Shell-Thick	INVSLE	0.4338	-0.8797	7.29	-0.34	
756	245	Shell-Thick	INVSLE	0.3213	-0.6375	7.08	-0.34	
756	245	Shell-Thick	INVSLE	-0.5841	-1.0612	7.08	-0.16	
756	245	Shell-Thick	INVSLE	-0.5069	-1.4579	7.29	-0.16	
757	246	Shell-Thick	INVSLE	-0.0882	-0.6596	10.49	2.27	
757	246	Shell-Thick	INVSLE	-0.0474	-0.6655	9.95	2.27	
757	246	Shell-Thick	INVSLE	-0.7253	-0.8884	9.95	2.74	
757	246	Shell-Thick	INVSLE	-0.6999	-0.8806	10.49	2.74	
757	246	Shell-Thick	INVSLE	-0.1420	-1.0184	4.81	-0.12	
757	246	Shell-Thick	INVSLE	-0.1703	-0.6689	4.64	-0.12	
757	246	Shell-Thick	INVSLE	-1.2330	-1.0771	4.64	2.131E-02	
757	246	Shell-Thick	INVSLE	-1.3110	-1.4020	4.81	2.131E-02	
757	246	Shell-Thick	INVSLE	-0.0259	-0.8905	17.09	5.05	
757	246	Shell-Thick	INVSLE	0.0950	-0.6728	16.11	5.05	
757	246	Shell-Thick	INVSLE	-0.9791	-1.1993	16.11	5.90	
757	246	Shell-Thick	INVSLE	-0.9449	-1.1888	17.09	5.90	
757	246	Shell-Thick	INVSLE	-0.1917	-1.4346	6.49	-0.17	
757	246	Shell-Thick	INVSLE	-0.2299	-0.9035	6.27	-0.17	
757	246	Shell-Thick	INVSLE	-1.8217	-1.4824	6.27	2.877E-02	
757	246	Shell-Thick	INVSLE	-2.0197	-2.0065	6.49	2.877E-02	
758	247	Shell-Thick	INVSLE	-0.5241	-0.8519	9.32	2.71	
758	247	Shell-Thick	INVSLE	-0.5131	-0.8395	8.80	2.71	
758	247	Shell-Thick	INVSLE	-1.0037	-1.0396	8.80	3.16	
758	247	Shell-Thick	INVSLE	-1.0162	-1.0511	9.32	3.16	
758	247	Shell-Thick	INVSLE	-0.9998	-1.3736	4.26	1.451E-02	
758	247	Shell-Thick	INVSLE	-0.8614	-0.9690	4.09	1.451E-02	
758	247	Shell-Thick	INVSLE	-1.9129	-1.3362	4.09	0.16	
758	247	Shell-Thick	INVSLE	-2.0825	-1.7202	4.26	0.16	
758	247	Shell-Thick	INVSLE	-0.7075	-1.1501	15.19	5.83	
758	247	Shell-Thick	INVSLE	-0.6927	-1.1191	14.27	5.83	
758	247	Shell-Thick	INVSLE	-1.3550	-1.4035	14.27	6.63	
758	247	Shell-Thick	INVSLE	-1.3719	-1.4190	15.19	6.63	
758	247	Shell-Thick	INVSLE	-1.5515	-1.9785	5.75	1.959E-02	
758	247	Shell-Thick	INVSLE	-1.2653	-1.3275	5.52	1.959E-02	
758	247	Shell-Thick	INVSLE	-2.9672	-1.8484	5.52	0.22	
758	247	Shell-Thick	INVSLE	-3.3190	-2.4960	5.75	0.22	
759	248	Shell-Thick	INVSLE	-0.8479	-1.0228	8.21	3.13	
759	248	Shell-Thick	INVSLE	-0.7916	-0.9919	7.73	3.13	
759	248	Shell-Thick	INVSLE	-1.2226	-1.1698	7.73	3.55	
759	248	Shell-Thick	INVSLE	-1.2786	-1.2011	8.21	3.55	
759	248	Shell-Thick	INVSLE	-1.7845	-1.6885	3.74	0.16	
759	248	Shell-Thick	INVSLE	-1.5318	-1.2321	3.57	0.16	
759	248	Shell-Thick	INVSLE	-2.4587	-1.5598	3.57	0.30	
759	248	Shell-Thick	INVSLE	-2.7350	-2.0006	3.74	0.30	
759	248	Shell-Thick	INVSLE	-1.1447	-1.3808	13.39	6.57	
759	248	Shell-Thick	INVSLE	-1.0687	-1.3390	12.55	6.57	
759	248	Shell-Thick	INVSLE	-1.6505	-1.5793	12.55	7.31	
759	248	Shell-Thick	INVSLE	-1.7261	-1.6214	13.39	7.31	
759	248	Shell-Thick	INVSLE	-2.8706	-2.4605	5.05	0.21	
759	248	Shell-Thick	INVSLE	-2.3902	-1.6993	4.83	0.21	
759	248	Shell-Thick	INVSLE	-3.8921	-2.1642	4.83	0.41	
759	248	Shell-Thick	INVSLE	-4.4240	-2.9277	5.05	0.41	
760	249	Shell-Thick	INVSLE	-1.1133	-1.1737	7.16	3.52	
760	249	Shell-Thick	INVSLE	-1.0245	-1.1245	6.73	3.52	
760	249	Shell-Thick	INVSLE	-1.3993	-1.2803	6.73	3.90	
760	249	Shell-Thick	INVSLE	-1.4871	-1.3303	7.16	3.90	
760	249	Shell-Thick	INVSLE	-2.4324	-1.9669	3.26	0.30	
760	249	Shell-Thick	INVSLE	-2.1030	-1.4618	3.10	0.30	
760	249	Shell-Thick	INVSLE	-2.9112	-1.7502	3.10	0.44	
760	249	Shell-Thick	INVSLE	-3.2600	-2.2426	3.26	0.44	
760	249	Shell-Thick	INVSLE	-1.5029	-1.5845	11.69	7.25	
760	249	Shell-Thick	INVSLE	-1.3831	-1.5181	10.93	7.25	
760	249	Shell-Thick	INVSLE	-1.8891	-1.7284	10.93	7.92	
760	249	Shell-Thick	INVSLE	-2.0076	-1.7958	11.69	7.92	
760	249	Shell-Thick	INVSLE	-3.9622	-2.8867	4.40	0.40	
760	249	Shell-Thick	INVSLE	-3.3536	-2.0240	4.18	0.40	
760	249	Shell-Thick	INVSLE	-4.6644	-2.4332	4.18	0.59	
760	249	Shell-Thick	INVSLE	-5.3160	-3.3005	4.40	0.59	
761	250	Shell-Thick	INVSLE	-1.3360	-1.3047	6.17	3.88	
761	250	Shell-Thick	INVSLE	-1.2127	-1.2383	5.78	3.88	
761	250	Shell-Thick	INVSLE	-1.5350	-1.3722	5.78	4.22	
761	250	Shell-Thick	INVSLE	-1.6564	-1.4399	6.17	4.22	
761	250	Shell-Thick	INVSLE	-2.9829	-2.2090	2.80	0.43	
761	250	Shell-Thick	INVSLE	-2.5687	-1.6599	2.65	0.43	
761	250	Shell-Thick	INVSLE	-3.2655	-1.9082	2.65	0.56	
761	250	Shell-Thick	INVSLE	-3.6939	-2.4480	2.80	0.56	
761	250	Shell-Thick	INVSLE	-1.8036	-1.7613	10.08	7.87	
761	250	Shell-Thick	INVSLE	-1.6371	-1.6718	9.41	7.87	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 153 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

761	250	Shell-Thick	INVSLU	-2.0722	-1.8524	9.41	8.46	
761	250	Shell-Thick	INVSLU	-2.2361	-1.9438	10.08	8.46	
761	250	Shell-Thick	INVSLU	-4.8927	-3.2576	3.78	0.59	
761	250	Shell-Thick	INVSLU	-4.1412	-2.3040	3.58	0.59	
761	250	Shell-Thick	INVSLU	-5.2722	-2.6565	3.58	0.76	
761	250	Shell-Thick	INVSLU	-6.0567	-3.6171	3.78	0.76	
762	251	Shell-Thick	INVSLE	-1.5168	-1.4165	5.23	4.20	
762	251	Shell-Thick	INVSLE	-1.3690	-1.3344	4.89	4.20	
762	251	Shell-Thick	INVSLE	-1.6413	-1.4476	4.89	4.50	
762	251	Shell-Thick	INVSLE	-1.7871	-1.5312	5.23	4.50	
762	251	Shell-Thick	INVSLE	-3.4317	-2.4157	2.37	0.56	
762	251	Shell-Thick	INVSLE	-2.9606	-1.8271	2.24	0.56	
762	251	Shell-Thick	INVSLE	-3.5505	-2.0385	2.24	0.67	
762	251	Shell-Thick	INVSLE	-4.0329	-2.6196	2.37	0.67	
762	251	Shell-Thick	INVSLU	-2.0476	-1.9123	8.54	8.42	
762	251	Shell-Thick	INVSLU	-1.8481	-1.8015	7.96	8.42	
762	251	Shell-Thick	INVSLU	-2.2158	-1.9543	7.96	8.94	
762	251	Shell-Thick	INVSLU	-2.4125	-2.0671	8.54	8.94	
762	251	Shell-Thick	INVSLU	-5.6522	-3.5743	3.20	0.75	
762	251	Shell-Thick	INVSLU	-4.8062	-2.5406	3.02	0.75	
762	251	Shell-Thick	INVSLU	-5.7644	-2.8407	3.02	0.91	
762	251	Shell-Thick	INVSLU	-6.6372	-3.8819	3.20	0.91	
763	252	Shell-Thick	INVSLE	-1.6662	-1.5106	4.32	4.48	
763	252	Shell-Thick	INVSLE	-1.4939	-1.4146	4.03	4.48	
763	252	Shell-Thick	INVSLE	-1.7189	-1.5074	4.03	4.74	
763	252	Shell-Thick	INVSLE	-1.8889	-1.6050	4.32	4.74	
763	252	Shell-Thick	INVSLE	-3.8058	-2.5900	1.96	0.67	
763	252	Shell-Thick	INVSLE	-3.2751	-1.9676	1.84	0.67	
763	252	Shell-Thick	INVSLE	-3.7633	-2.1412	1.84	0.77	
763	252	Shell-Thick	INVSLE	-4.3019	-2.7584	1.96	0.77	
763	252	Shell-Thick	INVSLU	-2.2494	-2.0393	7.07	8.90	
763	252	Shell-Thick	INVSLU	-2.0168	-1.9097	6.57	8.90	
763	252	Shell-Thick	INVSLU	-2.3205	-2.0350	6.57	9.34	
763	252	Shell-Thick	INVSLU	-2.5500	-2.1668	7.07	9.34	
763	252	Shell-Thick	INVSLU	-6.2868	-3.8418	2.64	0.90	
763	252	Shell-Thick	INVSLU	-5.3406	-2.7393	2.49	0.90	
763	252	Shell-Thick	INVSLU	-6.1339	-2.9857	2.49	1.04	
763	252	Shell-Thick	INVSLU	-7.1000	-4.0960	2.64	1.04	
764	253	Shell-Thick	INVSLE	-1.7849	-1.5875	3.45	4.72	
764	253	Shell-Thick	INVSLE	-1.5963	-1.4797	3.22	4.72	
764	253	Shell-Thick	INVSLE	-1.7756	-1.5536	3.22	4.93	
764	253	Shell-Thick	INVSLE	-1.9622	-1.6629	3.45	4.93	
764	253	Shell-Thick	INVSLE	-4.1029	-2.7324	1.56	0.77	
764	253	Shell-Thick	INVSLE	-3.5342	-2.0817	1.47	0.77	
764	253	Shell-Thick	INVSLE	-3.9240	-2.2207	1.47	0.85	
764	253	Shell-Thick	INVSLE	-4.4986	-2.8676	1.56	0.85	
764	253	Shell-Thick	INVSLU	-2.4097	-2.1431	5.65	9.31	
764	253	Shell-Thick	INVSLU	-2.1550	-1.9975	5.24	9.31	
764	253	Shell-Thick	INVSLU	-2.3971	-2.0974	5.24	9.66	
764	253	Shell-Thick	INVSLU	-2.6490	-2.2449	5.65	9.66	
764	253	Shell-Thick	INVSLU	-6.7908	-4.0601	2.11	1.03	
764	253	Shell-Thick	INVSLU	-5.7815	-2.9005	1.98	1.03	
764	253	Shell-Thick	INVSLU	-6.4152	-3.0980	1.98	1.15	
764	253	Shell-Thick	INVSLU	-7.4399	-4.2646	2.11	1.15	
765	254	Shell-Thick	INVSLE	-1.8800	-1.6487	2.61	4.92	
765	254	Shell-Thick	INVSLE	-1.6760	-1.5314	2.43	4.92	
765	254	Shell-Thick	INVSLE	-1.8114	-1.5867	2.43	5.08	
765	254	Shell-Thick	INVSLE	-2.0136	-1.7053	2.61	5.08	
765	254	Shell-Thick	INVSLE	-4.3417	-2.8462	1.18	0.85	
765	254	Shell-Thick	INVSLE	-3.7351	-2.1729	1.11	0.85	
765	254	Shell-Thick	INVSLE	-4.0297	-2.2770	1.11	0.91	
765	254	Shell-Thick	INVSLE	-4.6401	-2.9478	1.18	0.91	
765	254	Shell-Thick	INVSLU	-2.5381	-2.2258	4.27	9.64	
765	254	Shell-Thick	INVSLU	-2.2626	-2.0673	3.96	9.64	
765	254	Shell-Thick	INVSLU	-2.4454	-2.1420	3.96	9.91	
765	254	Shell-Thick	INVSLU	-2.7184	-2.3022	4.27	9.91	
765	254	Shell-Thick	INVSLU	-7.1962	-4.2348	1.59	1.14	
765	254	Shell-Thick	INVSLU	-6.1228	-3.0297	1.49	1.14	
765	254	Shell-Thick	INVSLU	-6.6020	-3.1775	1.49	1.23	
765	254	Shell-Thick	INVSLU	-7.6859	-4.3885	1.59	1.23	
766	255	Shell-Thick	INVSLE	-1.9515	-1.6948	1.78	5.07	
766	255	Shell-Thick	INVSLE	-1.7388	-1.5703	1.66	5.07	
766	255	Shell-Thick	INVSLE	-1.8314	-1.6081	1.66	5.18	
766	255	Shell-Thick	INVSLE	-2.0427	-1.7335	1.78	5.18	
766	255	Shell-Thick	INVSLE	-4.5196	-2.9315	0.81	0.91	
766	255	Shell-Thick	INVSLE	-3.8928	-2.2418	0.75	0.91	
766	255	Shell-Thick	INVSLE	-4.0943	-2.3131	0.75	0.95	
766	255	Shell-Thick	INVSLE	-4.7236	-3.0013	0.81	0.95	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 154 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

766	255	Shell-Thick	INVSLU	-2.6345	-2.2880	2.92	9.89	
766	255	Shell-Thick	INVSLU	-2.3474	-2.1199	2.71	9.89	
766	255	Shell-Thick	INVSLU	-2.4724	-2.1709	2.71	10.08	
766	255	Shell-Thick	INVSLU	-2.7577	-2.3403	2.92	10.08	
766	255	Shell-Thick	INVSLU	-7.4977	-4.3656	1.09	1.23	
766	255	Shell-Thick	INVSLU	-6.3906	-3.1271	1.02	1.23	
766	255	Shell-Thick	INVSLU	-6.7184	-3.2285	1.02	1.28	
766	255	Shell-Thick	INVSLU	-7.8324	-4.4713	1.09	1.28	
767	256	Shell-Thick	INVSLE	-2.0041	-1.7268	0.97	5.17	
767	256	Shell-Thick	INVSLE	-1.7841	-1.5976	0.90	5.17	
767	256	Shell-Thick	INVSLE	-1.8346	-1.6180	0.90	5.23	
767	256	Shell-Thick	INVSLE	-2.0538	-1.7478	0.97	5.23	
767	256	Shell-Thick	INVSLE	-4.6493	-2.9907	0.44	0.95	
767	256	Shell-Thick	INVSLE	-4.0036	-2.2907	0.41	0.95	
767	256	Shell-Thick	INVSLE	-4.1137	-2.3292	0.41	0.98	
767	256	Shell-Thick	INVSLE	-4.7605	-3.0286	0.44	0.98	
767	256	Shell-Thick	INVSLU	-2.7055	-2.3312	1.59	10.07	
767	256	Shell-Thick	INVSLU	-2.4085	-2.1568	1.48	10.07	
767	256	Shell-Thick	INVSLU	-2.4767	-2.1843	1.48	10.17	
767	256	Shell-Thick	INVSLU	-2.7726	-2.3595	1.59	10.17	
767	256	Shell-Thick	INVSLU	-7.7169	-4.4564	0.59	1.28	
767	256	Shell-Thick	INVSLU	-6.5774	-3.1964	0.56	1.28	
767	256	Shell-Thick	INVSLU	-6.7565	-3.2511	0.56	1.32	
767	256	Shell-Thick	INVSLU	-7.8993	-4.5138	0.59	1.32	
768	257	Shell-Thick	INVSLE	-2.0367	-1.7449	0.17	5.23	
768	257	Shell-Thick	INVSLE	-1.8156	-1.6137	0.16	5.23	
768	257	Shell-Thick	INVSLE	-1.8245	-1.6171	0.16	5.24	
768	257	Shell-Thick	INVSLE	-2.0454	-1.7485	0.17	5.24	
768	257	Shell-Thick	INVSLE	-4.7267	-3.0240	7.707E-02	0.97	
768	257	Shell-Thick	INVSLE	-4.0778	-2.3198	7.215E-02	0.97	
768	257	Shell-Thick	INVSLE	-4.0973	-2.3264	7.215E-02	0.98	
768	257	Shell-Thick	INVSLE	-4.7461	-3.0306	7.707E-02	0.98	
768	257	Shell-Thick	INVSLU	-2.7495	-2.3556	0.28	10.17	
768	257	Shell-Thick	INVSLU	-2.4510	-2.1785	0.26	10.17	
768	257	Shell-Thick	INVSLU	-2.4630	-2.1831	0.26	10.19	
768	257	Shell-Thick	INVSLU	-2.7612	-2.3605	0.28	10.19	
768	257	Shell-Thick	INVSLU	-7.8462	-4.5073	0.10	1.32	
768	257	Shell-Thick	INVSLU	-6.7013	-3.2377	9.740E-02	1.32	
768	257	Shell-Thick	INVSLU	-6.7329	-3.2470	9.740E-02	1.32	
768	257	Shell-Thick	INVSLU	-7.8779	-4.5173	0.10	1.32	
769	258	Shell-Thick	INVSLE	-2.0523	-1.7496	-0.28	5.24	
769	258	Shell-Thick	INVSLE	-1.8315	-1.6189	-0.27	5.24	
769	258	Shell-Thick	INVSLE	-1.7988	-1.6054	-0.27	5.20	
769	258	Shell-Thick	INVSLE	-2.0201	-1.7359	-0.28	5.20	
769	258	Shell-Thick	INVSLE	-4.7601	-3.0322	-0.63	0.98	
769	258	Shell-Thick	INVSLE	-4.1097	-2.3301	-0.59	0.98	
769	258	Shell-Thick	INVSLE	-4.0387	-2.3048	-0.59	0.96	
769	258	Shell-Thick	INVSLE	-4.6879	-3.0076	-0.63	0.96	
769	258	Shell-Thick	INVSLU	-2.7707	-2.3620	-0.38	10.19	
769	258	Shell-Thick	INVSLU	-2.4725	-2.1855	-0.36	10.19	
769	258	Shell-Thick	INVSLU	-2.4284	-2.1673	-0.36	10.12	
769	258	Shell-Thick	INVSLU	-2.7271	-2.3434	-0.38	10.12	
769	258	Shell-Thick	INVSLU	-7.9001	-4.5195	-1.03	1.32	
769	258	Shell-Thick	INVSLU	-6.7517	-3.2524	-0.96	1.32	
769	258	Shell-Thick	INVSLU	-6.6360	-3.2163	-0.96	1.30	
769	258	Shell-Thick	INVSLU	-7.7815	-4.4823	-1.03	1.30	
770	259	Shell-Thick	INVSLE	-2.0488	-1.7408	-0.65	5.21	
770	259	Shell-Thick	INVSLE	-1.8342	-1.6133	-0.61	5.21	
770	259	Shell-Thick	INVSLE	-1.7597	-1.5826	-0.61	5.12	
770	259	Shell-Thick	INVSLE	-1.9752	-1.7095	-0.65	5.12	
770	259	Shell-Thick	INVSLE	-4.7427	-3.0152	-1.44	0.96	
770	259	Shell-Thick	INVSLE	-4.1063	-2.3217	-1.34	0.96	
770	259	Shell-Thick	INVSLE	-3.9443	-2.2637	-1.34	0.93	
770	259	Shell-Thick	INVSLE	-4.5781	-2.9589	-1.44	0.93	
770	259	Shell-Thick	INVSLU	-2.7658	-2.3501	-0.88	10.13	
770	259	Shell-Thick	INVSLU	-2.4761	-2.1779	-0.82	10.13	
770	259	Shell-Thick	INVSLU	-2.3756	-2.1365	-0.82	9.98	
770	259	Shell-Thick	INVSLU	-2.6665	-2.3079	-0.88	9.98	
770	259	Shell-Thick	INVSLU	-7.8666	-4.4930	-2.35	1.30	
770	259	Shell-Thick	INVSLU	-6.7412	-3.2405	-2.18	1.30	
770	259	Shell-Thick	INVSLU	-6.4776	-3.1582	-2.18	1.25	
770	259	Shell-Thick	INVSLU	-7.5964	-4.4077	-2.35	1.25	
771	260	Shell-Thick	INVSLE	-2.0276	-1.7183	-1.02	5.13	
771	260	Shell-Thick	INVSLE	-1.8205	-1.5964	-0.95	5.13	
771	260	Shell-Thick	INVSLE	-1.7036	-1.5484	-0.95	4.99	
771	260	Shell-Thick	INVSLE	-1.9121	-1.6693	-1.02	4.99	
771	260	Shell-Thick	INVSLE	-4.6797	-2.9723	-2.25	0.93	
771	260	Shell-Thick	INVSLE	-4.0587	-2.2934	-2.10	0.93	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 155 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

771	260	Shell-Thick	INVSLE	-3.8043	-2.2031	-2.10	0.87	
771	260	Shell-Thick	INVSLE	-4.4216	-2.8845	-2.25	0.87	
771	260	Shell-Thick	INVSLE	-2.7372	-2.3197	-1.37	9.99	
771	260	Shell-Thick	INVSLE	-2.4577	-2.1552	-1.29	9.99	
771	260	Shell-Thick	INVSLE	-2.2999	-2.0904	-1.29	9.76	
771	260	Shell-Thick	INVSLE	-2.5813	-2.2535	-1.37	9.76	
771	260	Shell-Thick	INVSLE	-7.7552	-4.4266	-3.69	1.26	
771	260	Shell-Thick	INVSLE	-6.6541	-3.2007	-3.42	1.26	
771	260	Shell-Thick	INVSLE	-6.2403	-3.0724	-3.42	1.18	
771	260	Shell-Thick	INVSLE	-7.3316	-4.2936	-3.69	1.18	
772	261	Shell-Thick	INVSLE	-1.9848	-1.6817	-1.40	5.00	
772	261	Shell-Thick	INVSLE	-1.7919	-1.5682	-1.31	5.00	
772	261	Shell-Thick	INVSLE	-1.6316	-1.5018	-1.31	4.81	
772	261	Shell-Thick	INVSLE	-1.8262	-1.6142	-1.40	4.81	
772	261	Shell-Thick	INVSLE	-4.5605	-2.9033	-3.09	0.88	
772	261	Shell-Thick	INVSLE	-3.9716	-2.2455	-2.88	0.88	
772	261	Shell-Thick	INVSLE	-3.6232	-2.1207	-2.88	0.80	
772	261	Shell-Thick	INVSLE	-4.2062	-2.7822	-3.09	0.80	
772	261	Shell-Thick	INVSLE	-2.6795	-2.2703	-1.88	9.78	
772	261	Shell-Thick	INVSLE	-2.4190	-2.1171	-1.77	9.78	
772	261	Shell-Thick	INVSLE	-2.2026	-2.0275	-1.77	9.46	
772	261	Shell-Thick	INVSLE	-2.4654	-2.1791	-1.88	9.46	
772	261	Shell-Thick	INVSLE	-7.5472	-4.3198	-5.05	1.18	
772	261	Shell-Thick	INVSLE	-6.4994	-3.1331	-4.69	1.18	
772	261	Shell-Thick	INVSLE	-5.9327	-2.9557	-4.69	1.08	
772	261	Shell-Thick	INVSLE	-6.9661	-4.1366	-5.05	1.08	
773	262	Shell-Thick	INVSLE	-1.9213	-1.6301	-1.79	4.83	
773	262	Shell-Thick	INVSLE	-1.7433	-1.5272	-1.68	4.83	
773	262	Shell-Thick	INVSLE	-1.5381	-1.4423	-1.68	4.59	
773	262	Shell-Thick	INVSLE	-1.7181	-1.5438	-1.79	4.59	
773	262	Shell-Thick	INVSLE	-4.3885	-2.8059	-3.95	0.81	
773	262	Shell-Thick	INVSLE	-3.8318	-2.1752	-3.68	0.81	
773	262	Shell-Thick	INVSLE	-3.3863	-2.0162	-3.68	0.71	
773	262	Shell-Thick	INVSLE	-3.9355	-2.6519	-3.95	0.71	
773	262	Shell-Thick	INVSLE	-2.5937	-2.2006	-2.41	9.49	
773	262	Shell-Thick	INVSLE	-2.3534	-2.0618	-2.27	9.49	
773	262	Shell-Thick	INVSLE	-2.0764	-1.9471	-2.27	9.09	
773	262	Shell-Thick	INVSLE	-2.3195	-2.0841	-2.41	9.09	
773	262	Shell-Thick	INVSLE	-7.2496	-4.1693	-6.46	1.09	
773	262	Shell-Thick	INVSLE	-6.2537	-3.0336	-6.00	1.09	
773	262	Shell-Thick	INVSLE	-5.5296	-2.8080	-6.00	0.96	
773	262	Shell-Thick	INVSLE	-6.5067	-3.9368	-6.46	0.96	
774	263	Shell-Thick	INVSLE	-1.8306	-1.5629	-2.19	4.61	
774	263	Shell-Thick	INVSLE	-1.6752	-1.4731	-2.07	4.61	
774	263	Shell-Thick	INVSLE	-1.4235	-1.3682	-2.07	4.33	
774	263	Shell-Thick	INVSLE	-1.5808	-1.4566	-2.19	4.33	
774	263	Shell-Thick	INVSLE	-4.1473	-2.6795	-4.84	0.72	
774	263	Shell-Thick	INVSLE	-3.6430	-2.0823	-4.52	0.72	
774	263	Shell-Thick	INVSLE	-3.0975	-1.8861	-4.52	0.61	
774	263	Shell-Thick	INVSLE	-3.5911	-2.4904	-4.84	0.61	
774	263	Shell-Thick	INVSLE	-2.4713	-2.1099	-2.96	9.12	
774	263	Shell-Thick	INVSLE	-2.2615	-1.9887	-2.79	9.12	
774	263	Shell-Thick	INVSLE	-1.9218	-1.8470	-2.79	8.64	
774	263	Shell-Thick	INVSLE	-2.1340	-1.9665	-2.96	8.64	
774	263	Shell-Thick	INVSLE	-6.8338	-3.9743	-7.91	0.97	
774	263	Shell-Thick	INVSLE	-5.9249	-2.9025	-7.36	0.97	
774	263	Shell-Thick	INVSLE	-5.0387	-2.6240	-7.36	0.82	
774	263	Shell-Thick	INVSLE	-5.9223	-3.6891	-7.91	0.82	
775	264	Shell-Thick	INVSLE	-1.7129	-1.4787	-2.61	4.35	
775	264	Shell-Thick	INVSLE	-1.5801	-1.4039	-2.47	4.35	
775	264	Shell-Thick	INVSLE	-1.2796	-1.2787	-2.47	4.02	
775	264	Shell-Thick	INVSLE	-1.4142	-1.3522	-2.61	4.02	
775	264	Shell-Thick	INVSLE	-3.8402	-2.5211	-5.76	0.61	
775	264	Shell-Thick	INVSLE	-3.3855	-1.9628	-5.39	0.61	
775	264	Shell-Thick	INVSLE	-2.7352	-1.7301	-5.39	0.49	
775	264	Shell-Thick	INVSLE	-3.1766	-2.2972	-5.76	0.49	
775	264	Shell-Thick	INVSLE	-2.3125	-1.9962	-3.53	8.68	
775	264	Shell-Thick	INVSLE	-2.1331	-1.8953	-3.34	8.68	
775	264	Shell-Thick	INVSLE	-1.7274	-1.7262	-3.34	8.12	
775	264	Shell-Thick	INVSLE	-1.9092	-1.8254	-3.53	8.12	
775	264	Shell-Thick	INVSLE	-6.3071	-3.7300	-9.41	0.83	
775	264	Shell-Thick	INVSLE	-5.4791	-2.7336	-8.78	0.83	
775	264	Shell-Thick	INVSLE	-4.4233	-2.4033	-8.78	0.66	
775	264	Shell-Thick	INVSLE	-5.2203	-3.3931	-9.41	0.66	
776	265	Shell-Thick	INVSLE	-1.5587	-1.3765	-3.06	4.05	
776	265	Shell-Thick	INVSLE	-1.4579	-1.3189	-2.91	4.05	
776	265	Shell-Thick	INVSLE	-1.1061	-1.1720	-2.91	3.68	
776	265	Shell-Thick	INVSLE	-1.2080	-1.2290	-3.06	3.68	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 156 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

776	265	Shell-Thick	INVSLE	-3.4426	-2.3297	-6.73	0.49	
776	265	Shell-Thick	INVSLE	-3.0634	-1.8164	-6.31	0.49	
776	265	Shell-Thick	INVSLE	-2.3041	-1.5443	-6.31	0.36	
776	265	Shell-Thick	INVSLE	-2.6651	-2.0695	-6.73	0.36	
776	265	Shell-Thick	INVSLE	-2.1043	-1.8583	-4.13	8.16	
776	265	Shell-Thick	INVSLE	-1.9681	-1.7805	-3.92	8.16	
776	265	Shell-Thick	INVSLE	-1.4933	-1.5822	-3.92	7.53	
776	265	Shell-Thick	INVSLE	-1.6307	-1.6591	-4.13	7.53	
776	265	Shell-Thick	INVSLE	-5.6273	-3.4350	-10.99	0.67	
776	265	Shell-Thick	INVSLE	-4.9252	-2.5268	-10.27	0.67	
776	265	Shell-Thick	INVSLE	-3.6934	-2.1406	-10.27	0.48	
776	265	Shell-Thick	INVSLE	-4.3549	-3.0442	-10.99	0.48	
777	266	Shell-Thick	INVSLE	-1.3681	-1.2553	-3.53	3.71	
777	266	Shell-Thick	INVSLE	-1.2972	-1.2159	-3.37	3.71	
777	266	Shell-Thick	INVSLE	-0.8908	-1.0470	-3.37	3.30	
777	266	Shell-Thick	INVSLE	-0.9621	-1.0861	-3.53	3.30	
777	266	Shell-Thick	INVSLE	-2.9598	-2.1027	-7.75	0.36	
777	266	Shell-Thick	INVSLE	-2.6481	-1.6388	-7.29	0.36	
777	266	Shell-Thick	INVSLE	-1.7731	-1.3273	-7.29	0.22	
777	266	Shell-Thick	INVSLE	-2.0626	-1.8058	-7.75	0.22	
777	266	Shell-Thick	INVSLE	-1.8469	-1.6947	-4.77	7.58	
777	266	Shell-Thick	INVSLE	-1.7512	-1.6414	-4.54	7.58	
777	266	Shell-Thick	INVSLE	-1.2026	-1.4134	-4.54	6.88	
777	266	Shell-Thick	INVSLE	-1.2989	-1.4662	-4.77	6.88	
777	266	Shell-Thick	INVSLE	-4.8056	-3.0852	-12.65	0.49	
777	266	Shell-Thick	INVSLE	-4.2147	-2.2759	-11.85	0.49	
777	266	Shell-Thick	INVSLE	-2.7962	-1.8339	-11.85	0.30	
777	266	Shell-Thick	INVSLE	-3.3388	-2.6403	-12.65	0.30	
778	267	Shell-Thick	INVSLE	-1.1266	-1.1136	-4.03	3.33	
778	267	Shell-Thick	INVSLE	-1.0977	-1.0937	-3.86	3.33	
778	267	Shell-Thick	INVSLE	-0.6335	-0.9027	-3.86	2.89	
778	267	Shell-Thick	INVSLE	-0.6611	-0.9234	-4.03	2.89	
778	267	Shell-Thick	INVSLE	-2.3554	-1.8375	-8.83	0.23	
778	267	Shell-Thick	INVSLE	-2.1460	-1.4288	-8.33	0.23	
778	267	Shell-Thick	INVSLE	-1.1496	-1.0781	-8.33	7.675E-02	
778	267	Shell-Thick	INVSLE	-1.3297	-1.5062	-8.83	7.675E-02	
778	267	Shell-Thick	INVSLE	-1.5209	-1.5034	-5.44	6.93	
778	267	Shell-Thick	INVSLE	-1.4819	-1.4765	-5.21	6.93	
778	267	Shell-Thick	INVSLE	-0.8552	-1.2187	-5.21	6.16	
778	267	Shell-Thick	INVSLE	-0.8925	-1.2467	-5.44	6.16	
778	267	Shell-Thick	INVSLE	-3.7803	-2.6769	-14.40	0.30	
778	267	Shell-Thick	INVSLE	-3.3616	-1.9791	-13.52	0.30	
778	267	Shell-Thick	INVSLE	-1.7482	-1.4817	-13.52	0.10	
778	267	Shell-Thick	INVSLE	-2.1050	-2.1820	-14.40	0.10	
779	268	Shell-Thick	INVSLE	-0.8351	-0.9517	-4.57	2.93	
779	268	Shell-Thick	INVSLE	-0.8426	-0.9511	-4.40	2.93	
779	268	Shell-Thick	INVSLE	-0.3158	-0.7370	-4.40	2.47	
779	268	Shell-Thick	INVSLE	-0.3060	-0.7391	-4.57	2.47	
779	268	Shell-Thick	INVSLE	-1.6398	-1.5354	-9.98	8.362E-02	
779	268	Shell-Thick	INVSLE	-1.5166	-1.1843	-9.45	8.362E-02	
779	268	Shell-Thick	INVSLE	-0.3898	-0.7916	-9.45	-6.354E-02	
779	268	Shell-Thick	INVSLE	-0.4781	-1.1658	-9.98	-6.354E-02	
779	268	Shell-Thick	INVSLE	-1.1274	-1.2848	-6.16	6.23	
779	268	Shell-Thick	INVSLE	-1.1374	-1.2840	-5.94	6.23	
779	268	Shell-Thick	INVSLE	-0.4264	-0.8549	-5.94	5.40	
779	268	Shell-Thick	INVSLE	-0.4131	-0.9978	-6.16	5.40	
779	268	Shell-Thick	INVSLE	-2.5730	-2.2123	-16.26	0.11	
779	268	Shell-Thick	INVSLE	-2.2982	-1.6338	-15.31	0.11	
779	268	Shell-Thick	INVSLE	-0.5373	-1.0768	-15.31	-8.579E-02	
779	268	Shell-Thick	INVSLE	-0.6778	-1.6606	-16.26	-8.579E-02	
780	269	Shell-Thick	INVSLE	-0.4725	-0.7668	-5.14	2.50	
780	269	Shell-Thick	INVSLE	-0.5311	-0.7856	-4.98	2.50	
780	269	Shell-Thick	INVSLE	0.4938	-0.4751	-4.98	2.02	
780	269	Shell-Thick	INVSLE	0.5483	-0.5369	-5.14	2.02	
780	269	Shell-Thick	INVSLE	-0.7610	-1.1895	-11.20	-5.759E-02	
780	269	Shell-Thick	INVSLE	-0.7702	-0.9006	-10.65	-5.759E-02	
780	269	Shell-Thick	INVSLE	0.0622	-0.5522	-10.65	-0.20	
780	269	Shell-Thick	INVSLE	0.1260	-0.7941	-11.20	-0.20	
780	269	Shell-Thick	INVSLE	-0.6379	-1.0352	-6.94	5.47	
780	269	Shell-Thick	INVSLE	-0.7170	-1.0339	-6.72	5.47	
780	269	Shell-Thick	INVSLE	0.9942	-0.3857	-6.72	4.59	
780	269	Shell-Thick	INVSLE	1.0380	-0.7248	-6.94	4.59	
780	269	Shell-Thick	INVSLE	-1.0955	-1.6796	-18.23	-7.775E-02	
780	269	Shell-Thick	INVSLE	-1.0757	-1.2330	-17.22	-7.775E-02	
780	269	Shell-Thick	INVSLE	0.0839	-0.7455	-17.22	-0.26	
780	269	Shell-Thick	INVSLE	0.1701	-1.1107	-18.23	-0.26	
781	270	Shell-Thick	INVSLE	0.2622	-0.5635	-5.75	2.06	
781	270	Shell-Thick	INVSLE	0.1463	-0.5844	-5.62	2.06	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 157 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

781	270	Shell-Thick	INVSLE	1.5593	-0.1133	-5.62	1.58	
781	270	Shell-Thick	INVSLE	1.7281	-0.3119	-5.75	1.58	
781	270	Shell-Thick	INVSLE	-0.0410	-0.8116	-12.50	-0.19	
781	270	Shell-Thick	INVSLE	-0.1400	-0.5994	-11.94	-0.19	
781	270	Shell-Thick	INVSLE	0.5259	-0.3430	-11.94	-0.31	
781	270	Shell-Thick	INVSLE	0.6320	-0.3756	-12.50	-0.31	
781	270	Shell-Thick	INVSLE	0.6138	-0.7608	-7.77	4.68	
781	270	Shell-Thick	INVSLE	0.4783	-0.5670	-7.58	4.68	
781	270	Shell-Thick	INVSLE	2.7577	0.1532	-7.58	3.76	
781	270	Shell-Thick	INVSLE	2.9991	-0.4211	-7.77	3.76	
781	270	Shell-Thick	INVSLE	-0.0554	-1.1328	-20.32	-0.25	
781	270	Shell-Thick	INVSLE	-0.1890	-0.8092	-19.28	-0.25	
781	270	Shell-Thick	INVSLE	0.7100	-0.4631	-19.28	-0.42	
781	270	Shell-Thick	INVSLE	0.8532	-0.5166	-20.32	-0.42	
782	271	Shell-Thick	INVSLE	1.4972	-0.3358	-6.41	1.62	
782	271	Shell-Thick	INVSLE	1.2202	-0.2199	-6.31	1.62	
782	271	Shell-Thick	INVSLE	2.7899	0.2684	-6.31	1.14	
782	271	Shell-Thick	INVSLE	3.1342	0.0603	-6.41	1.14	
782	271	Shell-Thick	INVSLE	0.4877	-0.3830	-13.89	-0.30	
782	271	Shell-Thick	INVSLE	0.3333	-0.3865	-13.34	-0.30	
782	271	Shell-Thick	INVSLE	1.0767	-0.1193	-13.34	-0.39	
782	271	Shell-Thick	INVSLE	1.2424	-0.0761	-13.89	-0.39	
782	271	Shell-Thick	INVSLE	2.6678	-0.4378	-8.66	3.85	
782	271	Shell-Thick	INVSLE	2.2486	-0.0266	-8.52	3.85	
782	271	Shell-Thick	INVSLE	4.7765	0.7179	-8.52	2.92	
782	271	Shell-Thick	INVSLE	5.3279	0.2185	-8.66	2.92	
782	271	Shell-Thick	INVSLE	0.6584	-0.5242	-22.56	-0.41	
782	271	Shell-Thick	INVSLE	0.4500	-0.5218	-21.50	-0.41	
782	271	Shell-Thick	INVSLE	1.4536	-0.1610	-21.50	-0.53	
782	271	Shell-Thick	INVSLE	1.6773	-0.1027	-22.56	-0.53	
783	272	Shell-Thick	INVSLE	2.9191	0.0631	-7.12	1.19	
783	272	Shell-Thick	INVSLE	2.5114	0.1669	-7.07	1.19	
783	272	Shell-Thick	INVSLE	4.2527	0.7060	-7.07	0.74	
783	272	Shell-Thick	INVSLE	4.7378	0.5505	-7.12	0.74	
783	272	Shell-Thick	INVSLE	1.1118	-0.0966	-15.37	-0.39	
783	272	Shell-Thick	INVSLE	0.9177	-0.1567	-14.85	-0.39	
783	272	Shell-Thick	INVSLE	1.7463	0.1307	-14.85	-0.44	
783	272	Shell-Thick	INVSLE	1.9544	0.1815	-15.37	-0.44	
783	272	Shell-Thick	INVSLE	5.0149	0.2482	-9.62	3.02	
783	272	Shell-Thick	INVSLE	4.3595	0.5422	-9.54	3.02	
783	272	Shell-Thick	INVSLE	7.1592	1.3731	-9.54	2.10	
783	272	Shell-Thick	INVSLE	7.9655	0.9784	-9.62	2.10	
783	272	Shell-Thick	INVSLE	1.5009	-0.1304	-24.94	-0.52	
783	272	Shell-Thick	INVSLE	1.2389	-0.2116	-23.88	-0.52	
783	272	Shell-Thick	INVSLE	2.3575	0.1764	-23.88	-0.59	
783	272	Shell-Thick	INVSLE	2.6384	0.2450	-24.94	-0.59	
784	273	Shell-Thick	INVSLE	11.2005	2.1025	20.98	-3.651E-02	
784	273	Shell-Thick	INVSLE	10.0790	2.1534	20.56	-3.651E-02	
784	273	Shell-Thick	INVSLE	7.7019	1.5755	20.56	0.22	
784	273	Shell-Thick	INVSLE	8.6855	1.6167	20.98	0.22	
784	273	Shell-Thick	INVSLE	5.1701	0.9995	10.21	-0.15	
784	273	Shell-Thick	INVSLE	4.8099	0.9965	10.37	-0.15	
784	273	Shell-Thick	INVSLE	3.6142	0.7123	10.37	-0.17	
784	273	Shell-Thick	INVSLE	3.9416	0.7373	10.21	-0.17	
784	273	Shell-Thick	INVSLE	18.1935	3.3815	33.46	-4.929E-02	
784	273	Shell-Thick	INVSLE	16.1891	3.4951	32.38	-4.929E-02	
784	273	Shell-Thick	INVSLE	12.4421	2.5765	32.38	0.67	
784	273	Shell-Thick	INVSLE	14.1866	2.6365	33.46	0.67	
784	273	Shell-Thick	INVSLE	6.9796	1.3493	13.79	-0.27	
784	273	Shell-Thick	INVSLE	6.4934	1.3453	14.00	-0.27	
784	273	Shell-Thick	INVSLE	4.8791	0.9616	14.00	-0.23	
784	273	Shell-Thick	INVSLE	5.3212	0.9954	13.79	-0.23	
785	274	Shell-Thick	INVSLE	8.7699	1.5708	19.02	0.15	
785	274	Shell-Thick	INVSLE	7.8199	1.6620	18.49	0.15	
785	274	Shell-Thick	INVSLE	5.6707	1.1028	18.49	0.62	
785	274	Shell-Thick	INVSLE	6.5015	1.0913	19.02	0.62	
785	274	Shell-Thick	INVSLE	3.9429	0.7325	9.20	-0.18	
785	274	Shell-Thick	INVSLE	3.6050	0.7155	9.24	-0.18	
785	274	Shell-Thick	INVSLE	2.5328	0.4207	9.24	-0.21	
785	274	Shell-Thick	INVSLE	2.8438	0.4558	9.20	-0.21	
785	274	Shell-Thick	INVSLE	14.3674	2.5428	30.41	0.53	
785	274	Shell-Thick	INVSLE	12.7076	2.7595	29.21	0.53	
785	274	Shell-Thick	INVSLE	9.3096	1.8939	29.21	1.57	
785	274	Shell-Thick	INVSLE	10.7431	1.8282	30.41	1.57	
785	274	Shell-Thick	INVSLE	5.3229	0.9889	12.42	-0.24	
785	274	Shell-Thick	INVSLE	4.8667	0.9660	12.47	-0.24	
785	274	Shell-Thick	INVSLE	3.4193	0.5679	12.47	-0.28	
785	274	Shell-Thick	INVSLE	3.8391	0.6153	12.42	-0.28	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 158 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

786	275	Shell-Thick	INVSLE	6.6602	1.0654	17.21	0.55	
786	275	Shell-Thick	INVSLE	5.9103	1.2083	16.59	0.55	
786	275	Shell-Thick	INVSLE	3.9681	0.6419	16.59	1.10	
786	275	Shell-Thick	INVSLE	4.6217	0.5632	17.21	1.10	
786	275	Shell-Thick	INVSLE	2.9085	0.4628	8.27	-0.22	
786	275	Shell-Thick	INVSLE	2.6188	0.4438	8.21	-0.22	
786	275	Shell-Thick	INVSLE	1.6583	0.1371	8.21	-0.16	
786	275	Shell-Thick	INVSLE	1.9284	0.1692	8.27	-0.16	
786	275	Shell-Thick	INVSLE	11.0106	1.7642	27.58	1.44	
786	275	Shell-Thick	INVSLE	9.7273	2.0949	26.31	1.44	
786	275	Shell-Thick	INVSLE	6.6466	1.2273	26.31	2.56	
786	275	Shell-Thick	INVSLE	7.7450	1.0200	27.58	2.56	
786	275	Shell-Thick	INVSLE	3.9265	0.6248	11.16	-0.29	
786	275	Shell-Thick	INVSLE	3.5354	0.5992	11.08	-0.29	
786	275	Shell-Thick	INVSLE	2.2387	0.1851	11.08	-0.22	
786	275	Shell-Thick	INVSLE	2.6033	0.2284	11.16	-0.22	
787	276	Shell-Thick	INVSLE	4.8532	0.5538	15.53	1.03	
787	276	Shell-Thick	INVSLE	4.2789	0.7598	14.85	1.03	
787	276	Shell-Thick	INVSLE	2.5310	0.2446	14.85	1.62	
787	276	Shell-Thick	INVSLE	3.0233	0.0932	15.53	1.62	
787	276	Shell-Thick	INVSLE	2.0457	0.1851	7.41	-0.17	
787	276	Shell-Thick	INVSLE	1.8072	0.1745	7.28	-0.17	
787	276	Shell-Thick	INVSLE	0.9495	-0.1167	7.28	-6.056E-02	
787	276	Shell-Thick	INVSLE	1.1727	-0.0959	7.41	-6.056E-02	
787	276	Shell-Thick	INVSLE	8.1088	0.9813	24.94	2.43	
787	276	Shell-Thick	INVSLE	7.1453	1.4385	23.63	2.43	
787	276	Shell-Thick	INVSLE	4.3649	0.6635	23.63	3.58	
787	276	Shell-Thick	INVSLE	5.1692	0.3124	24.94	3.58	
787	276	Shell-Thick	INVSLE	2.7617	0.2499	10.01	-0.23	
787	276	Shell-Thick	INVSLE	2.4397	0.2355	9.83	-0.23	
787	276	Shell-Thick	INVSLE	1.2818	-0.1575	9.83	-8.176E-02	
787	276	Shell-Thick	INVSLE	1.5832	-0.1295	10.01	-8.176E-02	
788	277	Shell-Thick	INVSLE	3.2827	0.0959	13.97	1.57	
788	277	Shell-Thick	INVSLE	2.9086	0.3693	13.27	1.57	
788	277	Shell-Thick	INVSLE	1.3362	-0.1272	13.27	2.18	
788	277	Shell-Thick	INVSLE	1.6464	-0.3501	13.97	2.18	
788	277	Shell-Thick	INVSLE	1.3186	-0.0741	6.63	-6.878E-02	
788	277	Shell-Thick	INVSLE	1.1468	-0.0698	6.45	-6.878E-02	
788	277	Shell-Thick	INVSLE	0.3814	-0.3520	6.45	8.618E-02	
788	277	Shell-Thick	INVSLE	0.5437	-0.3581	6.63	8.618E-02	
788	277	Shell-Thick	INVSLE	5.5602	0.2930	22.49	3.47	
788	277	Shell-Thick	INVSLE	4.9516	0.8784	21.18	3.47	
788	277	Shell-Thick	INVSLE	2.4434	0.1335	21.18	4.61	
788	277	Shell-Thick	INVSLE	2.9251	-0.3674	22.49	4.61	
788	277	Shell-Thick	INVSLE	1.7801	-0.1000	8.95	-9.286E-02	
788	277	Shell-Thick	INVSLE	1.5482	-0.0942	8.71	-9.286E-02	
788	277	Shell-Thick	INVSLE	0.5149	-0.4753	8.71	0.12	
788	277	Shell-Thick	INVSLE	0.7339	-0.4847	8.95	0.12	
789	278	Shell-Thick	INVSLE	1.9578	-0.3238	12.53	2.13	
789	278	Shell-Thick	INVSLE	1.7337	7.942E-04	11.83	2.13	
789	278	Shell-Thick	INVSLE	0.3259	-0.4439	11.83	2.74	
789	278	Shell-Thick	INVSLE	0.4967	-0.5776	12.53	2.74	
789	278	Shell-Thick	INVSLE	0.7189	-0.3443	5.91	7.668E-02	
789	278	Shell-Thick	INVSLE	0.6016	-0.2992	5.70	7.668E-02	
789	278	Shell-Thick	INVSLE	-0.0790	-0.5572	5.70	0.26	
789	278	Shell-Thick	INVSLE	0.0320	-0.7537	5.91	0.26	
789	278	Shell-Thick	INVSLE	3.3944	-0.3681	20.21	4.51	
789	278	Shell-Thick	INVSLE	3.0466	0.3487	18.93	4.51	
789	278	Shell-Thick	INVSLE	0.7954	-0.3126	18.93	5.62	
789	278	Shell-Thick	INVSLE	1.0356	-0.7798	20.21	5.62	
789	278	Shell-Thick	INVSLE	0.9706	-0.4679	7.98	0.10	
789	278	Shell-Thick	INVSLE	0.8122	-0.4039	7.70	0.10	
789	278	Shell-Thick	INVSLE	-0.1067	-0.7522	7.70	0.35	
789	278	Shell-Thick	INVSLE	0.0432	-1.0439	7.98	0.35	
790	279	Shell-Thick	INVSLE	0.8113	-0.5489	11.20	2.70	
790	279	Shell-Thick	INVSLE	0.7583	-0.3160	10.51	2.70	
790	279	Shell-Thick	INVSLE	-0.4431	-0.7283	10.51	3.30	
790	279	Shell-Thick	INVSLE	-0.3921	-0.7860	11.20	3.30	
790	279	Shell-Thick	INVSLE	0.2145	-0.7322	5.25	0.25	
790	279	Shell-Thick	INVSLE	0.1612	-0.5013	5.03	0.25	
790	279	Shell-Thick	INVSLE	-0.5003	-0.7399	5.03	0.45	
790	279	Shell-Thick	INVSLE	-0.4872	-1.1181	5.25	0.45	
790	279	Shell-Thick	INVSLE	1.5033	-0.7411	18.09	5.53	
790	279	Shell-Thick	INVSLE	1.4507	-0.1011	16.87	5.53	
790	279	Shell-Thick	INVSLE	-0.5665	-0.7149	16.87	6.60	
790	279	Shell-Thick	INVSLE	-0.5294	-1.0612	18.09	6.60	
790	279	Shell-Thick	INVSLE	0.2896	-1.0160	7.09	0.34	
790	279	Shell-Thick	INVSLE	0.2176	-0.6768	6.79	0.34	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 159 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

790	279	Shell-Thick	INVSLU	-0.6839	-0.9988	6.79	0.60	
790	279	Shell-Thick	INVSLU	-0.6720	-1.5593	7.09	0.60	
791	280	Shell-Thick	INVSLE	-0.1426	-0.7557	9.96	3.25	
791	280	Shell-Thick	INVSLE	-0.0755	-0.6028	9.31	3.25	
791	280	Shell-Thick	INVSLE	-0.7369	-0.8959	9.31	3.83	
791	280	Shell-Thick	INVSLE	-0.7319	-0.9684	9.96	3.83	
791	280	Shell-Thick	INVSLE	-0.1976	-1.0897	4.65	0.44	
791	280	Shell-Thick	INVSLE	-0.2029	-0.6832	4.42	0.44	
791	280	Shell-Thick	INVSLE	-1.1940	-0.9685	4.42	0.64	
791	280	Shell-Thick	INVSLE	-1.2934	-1.4341	4.65	0.64	
791	280	Shell-Thick	INVSLU	-0.0787	-1.0202	16.12	6.52	
791	280	Shell-Thick	INVSLU	0.0722	-0.5096	14.97	6.52	
791	280	Shell-Thick	INVSLU	-0.9948	-1.0527	14.97	7.53	
791	280	Shell-Thick	INVSLU	-0.9881	-1.3073	16.12	7.53	
791	280	Shell-Thick	INVSLU	-0.2668	-1.5212	6.28	0.59	
791	280	Shell-Thick	INVSLU	-0.2739	-0.9223	5.97	0.59	
791	280	Shell-Thick	INVSLU	-1.7241	-1.3184	5.97	0.86	
791	280	Shell-Thick	INVSLU	-1.9444	-2.0059	6.28	0.86	
792	281	Shell-Thick	INVSLE	-0.5432	-0.9379	8.81	3.79	
792	281	Shell-Thick	INVSLE	-0.4952	-0.8403	8.20	3.79	
792	281	Shell-Thick	INVSLE	-0.9654	-1.0298	8.20	4.33	
792	281	Shell-Thick	INVSLE	-1.0111	-1.1290	8.81	4.33	
792	281	Shell-Thick	INVSLE	-0.9615	-1.4016	4.10	0.63	
792	281	Shell-Thick	INVSLE	-0.7597	-0.8478	3.87	0.63	
792	281	Shell-Thick	INVSLE	-1.7500	-1.1752	3.87	0.83	
792	281	Shell-Thick	INVSLE	-1.9748	-1.7140	4.10	0.83	
792	281	Shell-Thick	INVSLU	-0.7333	-1.2661	14.29	7.46	
792	281	Shell-Thick	INVSLU	-0.6685	-0.8564	13.22	7.46	
792	281	Shell-Thick	INVSLU	-1.3032	-1.3438	13.22	8.39	
792	281	Shell-Thick	INVSLU	-1.3650	-1.5242	14.29	8.39	
792	281	Shell-Thick	INVSLU	-1.4467	-1.9618	5.53	0.85	
792	281	Shell-Thick	INVSLU	-1.0664	-1.1456	5.22	0.85	
792	281	Shell-Thick	INVSLU	-2.6598	-1.6084	5.22	1.12	
792	281	Shell-Thick	INVSLU	-3.0923	-2.4016	5.53	1.12	
793	282	Shell-Thick	INVSLE	-0.8236	-1.0990	7.74	4.30	
793	282	Shell-Thick	INVSLE	-0.7368	-0.9767	7.17	4.30	
793	282	Shell-Thick	INVSLE	-1.1477	-1.1418	7.17	4.80	
793	282	Shell-Thick	INVSLE	-1.2313	-1.2664	7.74	4.80	
793	282	Shell-Thick	INVSLE	-1.6356	-1.6784	3.58	0.82	
793	282	Shell-Thick	INVSLE	-1.3409	-1.0611	3.37	0.82	
793	282	Shell-Thick	INVSLE	-2.2103	-1.3471	3.37	1.01	
793	282	Shell-Thick	INVSLE	-2.5228	-1.9528	3.58	1.01	
793	282	Shell-Thick	INVSLU	-1.1119	-1.4836	12.57	8.33	
793	282	Shell-Thick	INVSLU	-0.9947	-1.1590	11.59	8.33	
793	282	Shell-Thick	INVSLU	-1.5494	-1.5415	11.59	9.18	
793	282	Shell-Thick	INVSLU	-1.6623	-1.7097	12.57	9.18	
793	282	Shell-Thick	INVSLU	-2.5771	-2.3528	4.84	1.11	
793	282	Shell-Thick	INVSLU	-2.0414	-1.4452	4.55	1.11	
793	282	Shell-Thick	INVSLU	-3.4425	-1.8494	4.55	1.37	
793	282	Shell-Thick	INVSLU	-4.0205	-2.7487	4.84	1.37	
794	283	Shell-Thick	INVSLE	-1.0576	-1.2378	6.74	4.77	
794	283	Shell-Thick	INVSLE	-0.9299	-1.0921	6.22	4.77	
794	283	Shell-Thick	INVSLE	-1.2863	-1.2346	6.22	5.22	
794	283	Shell-Thick	INVSLE	-1.4095	-1.3834	6.74	5.22	
794	283	Shell-Thick	INVSLE	-2.2086	-1.9165	3.11	1.01	
794	283	Shell-Thick	INVSLE	-1.8129	-1.2411	2.91	1.01	
794	283	Shell-Thick	INVSLE	-2.5703	-1.4889	2.91	1.18	
794	283	Shell-Thick	INVSLE	-2.9778	-2.1566	3.11	1.18	
794	283	Shell-Thick	INVSLU	-1.4278	-1.6711	10.95	9.13	
794	283	Shell-Thick	INVSLU	-1.2553	-1.4139	10.07	9.13	
794	283	Shell-Thick	INVSLU	-1.7365	-1.6667	10.07	9.90	
794	283	Shell-Thick	INVSLU	-1.9029	-1.8676	10.95	9.90	
794	283	Shell-Thick	INVSLU	-3.5434	-2.7035	4.20	1.36	
794	283	Shell-Thick	INVSLU	-2.8369	-1.6978	3.92	1.36	
794	283	Shell-Thick	INVSLU	-4.0592	-2.0481	3.92	1.60	
794	283	Shell-Thick	INVSLU	-4.7963	-3.0532	4.20	1.60	
795	284	Shell-Thick	INVSLE	-1.2462	-1.3567	5.79	5.19	
795	284	Shell-Thick	INVSLE	-1.0893	-1.1892	5.33	5.19	
795	284	Shell-Thick	INVSLE	-1.3946	-1.3100	5.33	5.60	
795	284	Shell-Thick	INVSLE	-1.5468	-1.4808	5.79	5.60	
795	284	Shell-Thick	INVSLE	-2.6752	-2.1206	2.66	1.18	
795	284	Shell-Thick	INVSLE	-2.2107	-1.3924	2.48	1.18	
795	284	Shell-Thick	INVSLE	-2.8617	-1.6036	2.48	1.34	
795	284	Shell-Thick	INVSLE	-3.3348	-2.3263	2.66	1.34	
795	284	Shell-Thick	INVSLU	-1.6824	-1.8315	9.42	9.85	
795	284	Shell-Thick	INVSLU	-1.4705	-1.6055	8.64	9.85	
795	284	Shell-Thick	INVSLU	-1.8827	-1.7686	8.64	10.53	
795	284	Shell-Thick	INVSLU	-2.0882	-1.9990	9.42	10.53	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 160 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

795	284	Shell-Thick	INVSLU	-4.3323	-3.0065	3.60	1.59	
795	284	Shell-Thick	INVSLU	-3.5112	-1.9103	3.35	1.59	
795	284	Shell-Thick	INVSLU	-4.5630	-2.2090	3.35	1.81	
795	284	Shell-Thick	INVSLU	-5.4081	-3.3068	3.60	1.81	
796	285	Shell-Thick	INVSLE	-1.4024	-1.4566	4.90	5.57	
796	285	Shell-Thick	INVSLE	-1.2160	-1.2696	4.50	5.57	
796	285	Shell-Thick	INVSLE	-1.4736	-1.3701	4.50	5.92	
796	285	Shell-Thick	INVSLE	-1.6549	-1.5605	4.90	5.92	
796	285	Shell-Thick	INVSLE	-3.0668	-2.2923	2.25	1.33	
796	285	Shell-Thick	INVSLE	-2.5301	-1.5177	2.09	1.33	
796	285	Shell-Thick	INVSLE	-3.0809	-1.6938	2.09	1.47	
796	285	Shell-Thick	INVSLE	-3.6226	-2.4653	2.25	1.47	
796	285	Shell-Thick	INVSLU	-1.8932	-1.9664	7.97	10.49	
796	285	Shell-Thick	INVSLU	-1.6416	-1.7140	7.30	10.49	
796	285	Shell-Thick	INVSLU	-1.9893	-1.8496	7.30	11.08	
796	285	Shell-Thick	INVSLU	-2.2341	-2.1066	7.97	11.08	
796	285	Shell-Thick	INVSLU	-4.9970	-3.2615	3.03	1.80	
796	285	Shell-Thick	INVSLU	-4.0539	-2.0861	2.81	1.80	
796	285	Shell-Thick	INVSLU	-4.9449	-2.3352	2.81	1.99	
796	285	Shell-Thick	INVSLU	-5.9045	-3.5145	3.03	1.99	
797	286	Shell-Thick	INVSLE	-1.5268	-1.5392	4.04	5.91	
797	286	Shell-Thick	INVSLE	-1.3203	-1.3351	3.71	5.91	
797	286	Shell-Thick	INVSLE	-1.5325	-1.4168	3.71	6.20	
797	286	Shell-Thick	INVSLE	-1.7343	-1.6241	4.04	6.20	
797	286	Shell-Thick	INVSLE	-3.3803	-2.4342	1.85	1.47	
797	286	Shell-Thick	INVSLE	-2.7961	-1.6194	1.71	1.47	
797	286	Shell-Thick	INVSLE	-3.2510	-1.7636	1.71	1.59	
797	286	Shell-Thick	INVSLE	-3.8384	-2.5764	1.85	1.59	
797	286	Shell-Thick	INVSLU	-2.0611	-2.0779	6.59	11.05	
797	286	Shell-Thick	INVSLU	-1.7824	-1.8023	6.02	11.05	
797	286	Shell-Thick	INVSLU	-2.0688	-1.9127	6.02	11.54	
797	286	Shell-Thick	INVSLU	-2.3413	-2.1925	6.59	11.54	
797	286	Shell-Thick	INVSLU	-5.5297	-3.4721	2.50	1.98	
797	286	Shell-Thick	INVSLU	-4.5075	-2.2289	2.31	1.98	
797	286	Shell-Thick	INVSLU	-5.2438	-2.4329	2.31	2.15	
797	286	Shell-Thick	INVSLU	-6.2784	-3.6806	2.50	2.15	
798	287	Shell-Thick	INVSLE	-1.6281	-1.6061	3.23	6.19	
798	287	Shell-Thick	INVSLE	-1.4023	-1.3875	2.95	6.19	
798	287	Shell-Thick	INVSLE	-1.5713	-1.4516	2.95	6.42	
798	287	Shell-Thick	INVSLE	-1.7929	-1.6730	3.23	6.42	
798	287	Shell-Thick	INVSLE	-3.6377	-2.5494	1.47	1.59	
798	287	Shell-Thick	INVSLE	-3.0054	-1.7013	1.36	1.59	
798	287	Shell-Thick	INVSLE	-3.3685	-1.8143	1.36	1.69	
798	287	Shell-Thick	INVSLE	-4.0022	-2.6617	1.47	1.69	
798	287	Shell-Thick	INVSLU	-2.1980	-2.1682	5.26	11.52	
798	287	Shell-Thick	INVSLU	-1.8931	-1.8732	4.80	11.52	
798	287	Shell-Thick	INVSLU	-2.1212	-1.9597	4.80	11.92	
798	287	Shell-Thick	INVSLU	-2.4205	-2.2586	5.26	11.92	
798	287	Shell-Thick	INVSLU	-5.9681	-3.6433	1.99	2.14	
798	287	Shell-Thick	INVSLU	-4.8644	-2.3438	1.84	2.14	
798	287	Shell-Thick	INVSLU	-5.4527	-2.5038	1.84	2.28	
798	287	Shell-Thick	INVSLU	-6.5642	-3.8081	1.99	2.28	
799	288	Shell-Thick	INVSLE	-1.7066	-1.6585	2.43	6.41	
799	288	Shell-Thick	INVSLE	-1.4689	-1.4283	2.23	6.41	
799	288	Shell-Thick	INVSLE	-1.5962	-1.4761	2.23	6.59	
799	288	Shell-Thick	INVSLE	-1.8306	-1.7086	2.43	6.59	
799	288	Shell-Thick	INVSLE	-3.8363	-2.6395	1.11	1.68	
799	288	Shell-Thick	INVSLE	-3.1757	-1.7648	1.02	1.68	
799	288	Shell-Thick	INVSLE	-3.4498	-1.8496	1.02	1.76	
799	288	Shell-Thick	INVSLE	-4.1111	-2.7239	1.11	1.76	
799	288	Shell-Thick	INVSLU	-2.3039	-2.2390	3.97	11.90	
799	288	Shell-Thick	INVSLU	-1.9829	-1.9282	3.62	11.90	
799	288	Shell-Thick	INVSLU	-2.1549	-1.9928	3.62	12.20	
799	288	Shell-Thick	INVSLU	-2.4713	-2.3067	3.97	12.20	
799	288	Shell-Thick	INVSLU	-6.3060	-3.7770	1.50	2.27	
799	288	Shell-Thick	INVSLU	-5.1550	-2.4330	1.38	2.27	
799	288	Shell-Thick	INVSLU	-5.5992	-2.5530	1.38	2.37	
799	288	Shell-Thick	INVSLU	-6.7556	-3.9013	1.50	2.37	
800	289	Shell-Thick	INVSLE	-1.7680	-1.6979	1.66	6.59	
800	289	Shell-Thick	INVSLE	-1.5195	-1.4590	1.52	6.59	
800	289	Shell-Thick	INVSLE	-1.6065	-1.4912	1.52	6.71	
800	289	Shell-Thick	INVSLE	-1.8525	-1.7318	1.66	6.71	
800	289	Shell-Thick	INVSLE	-3.9915	-2.7072	0.76	1.76	
800	289	Shell-Thick	INVSLE	-3.3032	-1.8131	0.70	1.76	
800	289	Shell-Thick	INVSLE	-3.4907	-1.8702	0.70	1.81	
800	289	Shell-Thick	INVSLE	-4.1790	-2.7644	0.76	1.81	
800	289	Shell-Thick	INVSLU	-2.3868	-2.2922	2.71	12.19	
800	289	Shell-Thick	INVSLU	-2.0513	-1.9697	2.47	12.19	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 161 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

800	289	Shell-Thick	INVS LU	-2.1688	-2.0131	2.47	12.40	
800	289	Shell-Thick	INVS LU	-2.5009	-2.3380	2.71	12.40	
800	289	Shell-Thick	INVS LU	-6.5699	-3.8777	1.02	2.37	
800	289	Shell-Thick	INVS LU	-5.3716	-2.5008	0.94	2.37	
800	289	Shell-Thick	INVS LU	-5.6756	-2.5816	0.94	2.44	
800	289	Shell-Thick	INVS LU	-6.8768	-3.9619	1.02	2.44	
801	290	Shell-Thick	INVS LE	-1.8116	-1.7249	0.91	6.71	
801	290	Shell-Thick	INVS LE	-1.5587	-1.4804	0.83	6.71	
801	290	Shell-Thick	INVS LE	-1.6062	-1.4978	0.83	6.78	
801	290	Shell-Thick	INVS LE	-1.8576	-1.7434	0.91	6.78	
801	290	Shell-Thick	INVS LE	-4.0994	-2.7536	0.41	1.81	
801	290	Shell-Thick	INVS LE	-3.4003	-1.8471	0.38	1.81	
801	290	Shell-Thick	INVS LE	-3.5027	-1.8781	0.38	1.84	
801	290	Shell-Thick	INVS LE	-4.2016	-2.7848	0.41	1.84	
801	290	Shell-Thick	INVS LU	-2.4457	-2.3287	1.48	12.39	
801	290	Shell-Thick	INVS LU	-2.1043	-1.9985	1.35	12.39	
801	290	Shell-Thick	INVS LU	-2.1684	-2.0220	1.35	12.51	
801	290	Shell-Thick	INVS LU	-2.5078	-2.3535	1.48	12.51	
801	290	Shell-Thick	INVS LU	-6.7523	-3.9464	0.56	2.44	
801	290	Shell-Thick	INVS LU	-5.5359	-2.5485	0.51	2.44	
801	290	Shell-Thick	INVS LU	-5.7018	-2.5925	0.51	2.48	
801	290	Shell-Thick	INVS LU	-6.9196	-3.9924	0.56	2.48	
802	291	Shell-Thick	INVS LE	-1.8413	-1.7405	0.16	6.78	
802	291	Shell-Thick	INVS LE	-1.5853	-1.4933	0.15	6.78	
802	291	Shell-Thick	INVS LE	-1.5937	-1.4962	0.15	6.79	
802	291	Shell-Thick	INVS LE	-1.8494	-1.7436	0.16	6.79	
802	291	Shell-Thick	INVS LE	-4.1706	-2.7801	7.255E-02	1.84	
802	291	Shell-Thick	INVS LE	-3.4619	-1.8684	6.671E-02	1.84	
802	291	Shell-Thick	INVS LE	-3.4800	-1.8737	6.671E-02	1.84	
802	291	Shell-Thick	INVS LE	-4.1884	-2.7856	7.255E-02	1.84	
802	291	Shell-Thick	INVS LU	-2.4858	-2.3496	0.26	12.50	
802	291	Shell-Thick	INVS LU	-2.1401	-2.0159	0.24	12.50	
802	291	Shell-Thick	INVS LU	-2.1514	-2.0199	0.24	12.52	
802	291	Shell-Thick	INVS LU	-2.4966	-2.3539	0.26	12.52	
802	291	Shell-Thick	INVS LU	-6.8717	-3.9858	9.794E-02	2.48	
802	291	Shell-Thick	INVS LU	-5.6381	-2.5786	9.006E-02	2.48	
802	291	Shell-Thick	INVS LU	-5.6674	-2.5861	9.006E-02	2.49	
802	291	Shell-Thick	INVS LU	-6.9008	-3.9939	9.794E-02	2.49	
803	292	Shell-Thick	INVS LE	-1.8554	-1.7447	-0.27	6.79	
803	292	Shell-Thick	INVS LE	-1.6022	-1.4981	-0.25	6.79	
803	292	Shell-Thick	INVS LE	-1.5715	-1.4866	-0.25	6.74	
803	292	Shell-Thick	INVS LE	-1.8255	-1.7327	-0.27	6.74	
803	292	Shell-Thick	INVS LE	-4.1994	-2.7872	-0.59	1.84	
803	292	Shell-Thick	INVS LE	-3.4967	-1.8776	-0.54	1.84	
803	292	Shell-Thick	INVS LE	-3.4307	-1.8571	-0.54	1.82	
803	292	Shell-Thick	INVS LE	-4.1329	-2.7670	-0.59	1.82	
803	292	Shell-Thick	INVS LU	-2.5048	-2.3554	-0.36	12.52	
803	292	Shell-Thick	INVS LU	-2.1629	-2.0224	-0.33	12.52	
803	292	Shell-Thick	INVS LU	-2.1216	-2.0068	-0.33	12.45	
803	292	Shell-Thick	INVS LU	-2.4644	-2.3392	-0.36	12.45	
803	292	Shell-Thick	INVS LU	-6.9175	-3.9961	-0.96	2.49	
803	292	Shell-Thick	INVS LU	-5.6937	-2.5917	-0.87	2.49	
803	292	Shell-Thick	INVS LU	-5.5867	-2.5627	-0.87	2.46	
803	292	Shell-Thick	INVS LU	-6.8086	-3.9664	-0.96	2.46	
804	293	Shell-Thick	INVS LE	-1.8562	-1.7378	-0.61	6.75	
804	293	Shell-Thick	INVS LE	-1.6069	-1.4947	-0.56	6.75	
804	293	Shell-Thick	INVS LE	-1.5370	-1.4686	-0.56	6.65	
804	293	Shell-Thick	INVS LE	-1.7881	-1.7104	-0.61	6.65	
804	293	Shell-Thick	INVS LE	-4.1928	-2.7749	-1.34	1.82	
804	293	Shell-Thick	INVS LE	-3.4973	-1.8745	-1.22	1.82	
804	293	Shell-Thick	INVS LE	-3.3466	-1.8283	-1.22	1.78	
804	293	Shell-Thick	INVS LE	-4.0416	-2.7289	-1.34	1.78	
804	293	Shell-Thick	INVS LU	-2.5059	-2.3460	-0.82	12.46	
804	293	Shell-Thick	INVS LU	-2.1694	-2.0179	-0.76	12.46	
804	293	Shell-Thick	INVS LU	-2.0749	-1.9826	-0.76	12.29	
804	293	Shell-Thick	INVS LU	-2.4140	-2.3091	-0.82	12.29	
804	293	Shell-Thick	INVS LU	-6.9023	-3.9776	-2.19	2.46	
804	293	Shell-Thick	INVS LU	-5.6894	-2.5876	-1.99	2.46	
804	293	Shell-Thick	INVS LU	-5.4450	-2.5222	-1.99	2.41	
804	293	Shell-Thick	INVS LU	-6.6547	-3.9100	-2.19	2.41	
805	294	Shell-Thick	INVS LE	-1.8407	-1.7194	-0.96	6.65	
805	294	Shell-Thick	INVS LE	-1.6016	-1.4831	-0.88	6.65	
805	294	Shell-Thick	INVS LE	-1.4917	-1.4417	-0.88	6.49	
805	294	Shell-Thick	INVS LE	-1.7336	-1.6761	-0.96	6.49	
805	294	Shell-Thick	INVS LE	-4.1419	-2.7428	-2.10	1.78	
805	294	Shell-Thick	INVS LE	-3.4699	-1.8592	-1.92	1.78	
805	294	Shell-Thick	INVS LE	-3.2334	-1.7858	-1.92	1.72	
805	294	Shell-Thick	INVS LE	-3.9043	-2.6700	-2.10	1.72	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 162 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

805	294	Shell-Thick	INVSLU	-2.4850	-2.3212	-1.29	12.30
805	294	Shell-Thick	INVSLU	-2.1621	-2.0022	-1.19	12.30
805	294	Shell-Thick	INVSLU	-2.0138	-1.9463	-1.19	12.03
805	294	Shell-Thick	INVSLU	-2.3403	-2.2628	-1.29	12.03
805	294	Shell-Thick	INVSLU	-6.8104	-3.9295	-3.43	2.41
805	294	Shell-Thick	INVSLU	-5.6364	-2.5664	-3.13	2.41
805	294	Shell-Thick	INVSLU	-5.2531	-2.4624	-3.13	2.32
805	294	Shell-Thick	INVSLU	-6.4215	-3.8225	-3.43	2.32
806	295	Shell-Thick	INVSLE	-1.8102	-1.6889	-1.32	6.50
806	295	Shell-Thick	INVSLE	-1.5822	-1.4624	-1.22	6.50
806	295	Shell-Thick	INVSLE	-1.4312	-1.4051	-1.22	6.29
806	295	Shell-Thick	INVSLE	-1.6629	-1.6292	-1.32	6.29
806	295	Shell-Thick	INVSLE	-4.0517	-2.6895	-2.88	1.72
806	295	Shell-Thick	INVSLE	-3.4036	-1.8298	-2.64	1.72
806	295	Shell-Thick	INVSLE	-3.0791	-1.7287	-2.64	1.63
806	295	Shell-Thick	INVSLE	-3.7256	-2.5894	-2.88	1.63
806	295	Shell-Thick	INVSLU	-2.4438	-2.2800	-1.78	12.05
806	295	Shell-Thick	INVSLU	-2.1359	-1.9742	-1.64	12.05
806	295	Shell-Thick	INVSLU	-1.9322	-1.8969	-1.64	11.69
806	295	Shell-Thick	INVSLU	-2.2449	-2.1994	-1.78	11.69
806	295	Shell-Thick	INVSLU	-6.6511	-3.8499	-4.70	2.32
806	295	Shell-Thick	INVSLU	-5.5157	-2.5253	-4.29	2.32
806	295	Shell-Thick	INVSLU	-4.9900	-2.3822	-4.29	2.20
806	295	Shell-Thick	INVSLU	-6.1177	-3.7029	-4.70	2.20
807	296	Shell-Thick	INVSLE	-1.7597	-1.6455	-1.69	6.30
807	296	Shell-Thick	INVSLE	-1.5498	-1.4319	-1.56	6.30
807	296	Shell-Thick	INVSLE	-1.3565	-1.3574	-1.56	6.03
807	296	Shell-Thick	INVSLE	-1.5705	-1.5682	-1.69	6.03
807	296	Shell-Thick	INVSLE	-3.9088	-2.6139	-3.69	1.63
807	296	Shell-Thick	INVSLE	-3.3031	-1.7856	-3.38	1.63
807	296	Shell-Thick	INVSLE	-2.8883	-1.6542	-3.38	1.52
807	296	Shell-Thick	INVSLE	-3.4907	-2.4846	-3.69	1.52
807	296	Shell-Thick	INVSLU	-2.3756	-2.2214	-2.28	11.72
807	296	Shell-Thick	INVSLU	-2.0923	-1.9330	-2.11	11.72
807	296	Shell-Thick	INVSLU	-1.8313	-1.8325	-2.11	11.26
807	296	Shell-Thick	INVSLU	-2.1202	-2.1171	-2.28	11.26
807	296	Shell-Thick	INVSLU	-6.4010	-3.7369	-6.01	2.21
807	296	Shell-Thick	INVSLU	-5.3363	-2.4636	-5.49	2.21
807	296	Shell-Thick	INVSLU	-4.6646	-2.2776	-5.49	2.06
807	296	Shell-Thick	INVSLU	-5.7175	-3.5472	-6.01	2.06
808	297	Shell-Thick	INVSLE	-1.6898	-1.5880	-2.07	6.05
808	297	Shell-Thick	INVSLE	-1.4987	-1.3900	-1.92	6.05
808	297	Shell-Thick	INVSLE	-1.2609	-1.2973	-1.92	5.72
808	297	Shell-Thick	INVSLE	-1.4567	-1.4922	-2.07	5.72
808	297	Shell-Thick	INVSLE	-3.7170	-2.5135	-4.53	1.53
808	297	Shell-Thick	INVSLE	-3.1528	-1.7234	-4.16	1.53
808	297	Shell-Thick	INVSLE	-2.6437	-1.5608	-4.16	1.39
808	297	Shell-Thick	INVSLE	-3.2033	-2.3539	-4.53	1.39
808	297	Shell-Thick	INVSLU	-2.2812	-2.1438	-2.80	11.30
808	297	Shell-Thick	INVSLU	-2.0232	-1.8764	-2.60	11.30
808	297	Shell-Thick	INVSLU	-1.7022	-1.7514	-2.60	10.75
808	297	Shell-Thick	INVSLU	-1.9665	-2.0144	-2.80	10.75
808	297	Shell-Thick	INVSLU	-6.0678	-3.5868	-7.37	2.06
808	297	Shell-Thick	INVSLU	-5.0709	-2.3765	-6.75	2.06
808	297	Shell-Thick	INVSLU	-4.2473	-2.1466	-6.75	1.88
808	297	Shell-Thick	INVSLU	-5.2287	-3.3532	-7.37	1.88
809	298	Shell-Thick	INVSLE	-1.5929	-1.5149	-2.48	5.74
809	298	Shell-Thick	INVSLE	-1.4291	-1.3355	-2.31	5.74
809	298	Shell-Thick	INVSLE	-1.1448	-1.2231	-2.31	5.37
809	298	Shell-Thick	INVSLE	-1.3131	-1.3994	-2.48	5.37
809	298	Shell-Thick	INVSLE	-3.4566	-2.3862	-5.40	1.40
809	298	Shell-Thick	INVSLE	-2.9568	-1.6418	-4.97	1.40
809	298	Shell-Thick	INVSLE	-2.3498	-1.4451	-4.97	1.25
809	298	Shell-Thick	INVSLE	-2.8416	-2.1946	-5.40	1.25
809	298	Shell-Thick	INVSLU	-2.1504	-2.0451	-3.35	10.78
809	298	Shell-Thick	INVSLU	-1.9293	-1.8029	-3.12	10.78
809	298	Shell-Thick	INVSLU	-1.5454	-1.6512	-3.12	10.14
809	298	Shell-Thick	INVSLU	-1.7726	-1.8892	-3.35	10.14
809	298	Shell-Thick	INVSLU	-5.6179	-3.3965	-8.79	1.89
809	298	Shell-Thick	INVSLU	-4.7283	-2.2624	-8.06	1.89
809	298	Shell-Thick	INVSLU	-3.7472	-1.9842	-8.06	1.68
809	298	Shell-Thick	INVSLU	-4.6142	-3.1167	-8.79	1.68
810	299	Shell-Thick	INVSLE	-1.4690	-1.4249	-2.91	5.39
810	299	Shell-Thick	INVSLE	-1.3322	-1.2663	-2.72	5.39
810	299	Shell-Thick	INVSLE	-0.9982	-1.1328	-2.72	4.96
810	299	Shell-Thick	INVSLE	-1.1394	-1.2883	-2.91	4.96
810	299	Shell-Thick	INVSLE	-3.1318	-2.2293	-6.33	1.25
810	299	Shell-Thick	INVSLE	-2.6926	-1.5370	-5.84	1.25

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 163 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

810	299	Shell-Thick	INVSLE	-1.9818	-1.3044	-5.84	1.08	
810	299	Shell-Thick	INVSLE	-2.4102	-2.0037	-6.33	1.08	
810	299	Shell-Thick	INVSLE	-1.9832	-1.9236	-3.93	10.19	
810	299	Shell-Thick	INVSLE	-1.7985	-1.7096	-3.67	10.19	
810	299	Shell-Thick	INVSLE	-1.3476	-1.5033	-3.67	9.46	
810	299	Shell-Thick	INVSLE	-1.5382	-1.7392	-3.93	9.46	
810	299	Shell-Thick	INVSLE	-5.0600	-3.1622	-10.28	1.69	
810	299	Shell-Thick	INVSLE	-4.2702	-2.1155	-9.45	1.69	
810	299	Shell-Thick	INVSLE	-3.1225	-1.7866	-9.45	1.46	
810	299	Shell-Thick	INVSLE	-3.8838	-2.8334	-10.28	1.46	
811	300	Shell-Thick	INVSLE	-1.3068	-1.3158	-3.38	4.99	
811	300	Shell-Thick	INVSLE	-1.2077	-1.1807	-3.16	4.99	
811	300	Shell-Thick	INVSLE	-0.8209	-1.0250	-3.16	4.51	
811	300	Shell-Thick	INVSLE	-0.9233	-1.1578	-3.38	4.51	
811	300	Shell-Thick	INVSLE	-2.7141	-2.0393	-7.30	1.09	
811	300	Shell-Thick	INVSLE	-2.3650	-1.4063	-6.76	1.09	
811	300	Shell-Thick	INVSLE	-1.5452	-1.1364	-6.76	0.90	
811	300	Shell-Thick	INVSLE	-1.8778	-1.7802	-7.30	0.90	
811	300	Shell-Thick	INVSLE	-1.7642	-1.7764	-4.56	9.51	
811	300	Shell-Thick	INVSLE	-1.6304	-1.5939	-4.27	9.51	
811	300	Shell-Thick	INVSLE	-1.1082	-1.2656	-4.27	8.69	
811	300	Shell-Thick	INVSLE	-1.2465	-1.5631	-4.56	8.69	
811	300	Shell-Thick	INVSLE	-4.3460	-2.8781	-11.86	1.47	
811	300	Shell-Thick	INVSLE	-3.7071	-1.9323	-10.92	1.47	
811	300	Shell-Thick	INVSLE	-2.3851	-1.5509	-10.92	1.22	
811	300	Shell-Thick	INVSLE	-2.9845	-2.5018	-11.86	1.22	
812	301	Shell-Thick	INVSLE	-1.1060	-1.1870	-3.87	4.54	
812	301	Shell-Thick	INVSLE	-1.0426	-1.0767	-3.65	4.54	
812	301	Shell-Thick	INVSLE	-0.5985	-0.8968	-3.65	4.02	
812	301	Shell-Thick	INVSLE	-0.6644	-1.0054	-3.87	4.02	
812	301	Shell-Thick	INVSLE	-2.2097	-1.8155	-8.35	0.91	
812	301	Shell-Thick	INVSLE	-1.9427	-1.2470	-7.75	0.91	
812	301	Shell-Thick	INVSLE	-1.0055	-0.9358	-7.75	0.72	
812	301	Shell-Thick	INVSLE	-1.2513	-1.5182	-8.35	0.72	
812	301	Shell-Thick	INVSLE	-1.4931	-1.6025	-5.23	8.75	
812	301	Shell-Thick	INVSLE	-1.4075	-1.4444	-4.93	8.75	
812	301	Shell-Thick	INVSLE	-0.8080	-0.9810	-4.93	7.85	
812	301	Shell-Thick	INVSLE	-0.8969	-1.3573	-5.23	7.85	
812	301	Shell-Thick	INVSLE	-3.4896	-2.5452	-13.53	1.23	
812	301	Shell-Thick	INVSLE	-2.9864	-1.7089	-12.50	1.23	
812	301	Shell-Thick	INVSLE	-1.4774	-1.2692	-12.50	0.97	
812	301	Shell-Thick	INVSLE	-1.9320	-2.1265	-13.53	0.97	
813	302	Shell-Thick	INVSLE	-0.8499	-1.0353	-4.41	4.05	
813	302	Shell-Thick	INVSLE	-0.8354	-0.9514	-4.18	4.05	
813	302	Shell-Thick	INVSLE	-0.3298	-0.7051	-4.18	3.49	
813	302	Shell-Thick	INVSLE	-0.3444	-0.8324	-4.41	3.49	
813	302	Shell-Thick	INVSLE	-1.5786	-1.5511	-9.46	0.72	
813	302	Shell-Thick	INVSLE	-1.4315	-1.0536	-8.82	0.72	
813	302	Shell-Thick	INVSLE	-0.3702	-0.7487	-8.82	0.52	
813	302	Shell-Thick	INVSLE	-0.4873	-1.2224	-9.46	0.52	
813	302	Shell-Thick	INVSLE	-1.1473	-1.3976	-5.95	7.91	
813	302	Shell-Thick	INVSLE	-1.1277	-1.1721	-5.64	7.91	
813	302	Shell-Thick	INVSLE	-0.4170	-0.6547	-5.64	6.94	
813	302	Shell-Thick	INVSLE	-0.4650	-1.1237	-5.95	6.94	
813	302	Shell-Thick	INVSLE	-2.4237	-2.1713	-15.32	0.98	
813	302	Shell-Thick	INVSLE	-2.1229	-1.4377	-14.20	0.98	
813	302	Shell-Thick	INVSLE	-0.5058	-1.0107	-14.20	0.71	
813	302	Shell-Thick	INVSLE	-0.6792	-1.7087	-15.32	0.71	
814	303	Shell-Thick	INVSLE	-0.5378	-0.8624	-4.99	3.53	
814	303	Shell-Thick	INVSLE	-0.5676	-0.8048	-4.76	3.53	
814	303	Shell-Thick	INVSLE	0.4066	-0.4326	-4.76	2.94	
814	303	Shell-Thick	INVSLE	0.4030	-0.6343	-4.99	2.94	
814	303	Shell-Thick	INVSLE	-0.8308	-1.2518	-10.66	0.53	
814	303	Shell-Thick	INVSLE	-0.7903	-0.8284	-9.98	0.53	
814	303	Shell-Thick	INVSLE	0.0056	-0.5758	-9.98	0.33	
814	303	Shell-Thick	INVSLE	0.0371	-0.8804	-10.66	0.33	
814	303	Shell-Thick	INVSLE	-0.7260	-1.1643	-6.73	7.02	
814	303	Shell-Thick	INVSLE	-0.7662	-0.8557	-6.43	7.02	
814	303	Shell-Thick	INVSLE	0.8715	-0.2665	-6.43	5.97	
814	303	Shell-Thick	INVSLE	0.8274	-0.8563	-6.73	5.97	
814	303	Shell-Thick	INVSLE	-1.1706	-1.7483	-17.23	0.72	
814	303	Shell-Thick	INVSLE	-1.1003	-1.1219	-16.04	0.72	
814	303	Shell-Thick	INVSLE	0.0076	-0.7773	-16.04	0.45	
814	303	Shell-Thick	INVSLE	0.0500	-1.2254	-17.23	0.45	
815	304	Shell-Thick	INVSLE	0.0861	-0.6631	-5.62	2.99	
815	304	Shell-Thick	INVSLE	-0.0250	-0.5592	-5.40	2.99	
815	304	Shell-Thick	INVSLE	1.3159	-0.1317	-5.40	2.38	
815	304	Shell-Thick	INVSLE	1.4766	-0.4178	-5.62	2.38	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 164 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

815	304	Shell-Thick	INVSLE	-0.1468	-0.9035	-11.94	0.34	
815	304	Shell-Thick	INVSLE	-0.2352	-0.6319	-11.25	0.34	
815	304	Shell-Thick	INVSLE	0.4112	-0.3831	-11.25	0.15	
815	304	Shell-Thick	INVSLE	0.5050	-0.5089	-11.94	0.15	
815	304	Shell-Thick	INVSLE	0.3561	-0.8952	-7.59	6.06	
815	304	Shell-Thick	INVSLE	0.2187	-0.4749	-7.29	6.06	
815	304	Shell-Thick	INVSLE	2.3650	0.1598	-7.29	4.96	
815	304	Shell-Thick	INVSLE	2.6033	-0.5641	-7.59	4.96	
815	304	Shell-Thick	INVSLE	-0.1982	-1.2558	-19.28	0.46	
815	304	Shell-Thick	INVSLE	-0.3176	-0.8531	-18.03	0.46	
815	304	Shell-Thick	INVSLE	0.5552	-0.5172	-18.03	0.20	
815	304	Shell-Thick	INVSLE	0.6818	-0.7007	-19.28	0.20	
816	305	Shell-Thick	INVSLE	1.1597	-0.4447	-6.31	2.43	
816	305	Shell-Thick	INVSLE	0.9137	-0.2594	-6.12	2.43	
816	305	Shell-Thick	INVSLE	2.4135	0.2219	-6.12	1.82	
816	305	Shell-Thick	INVSLE	2.7190	-0.0833	-6.31	1.82	
816	305	Shell-Thick	INVSLE	0.3255	-0.5250	-13.34	0.16	
816	305	Shell-Thick	INVSLE	0.1861	-0.4372	-12.64	0.16	
816	305	Shell-Thick	INVSLE	0.9139	-0.1624	-12.64	-8.013E-03	
816	305	Shell-Thick	INVSLE	1.0617	-0.1753	-13.34	-8.013E-03	
816	305	Shell-Thick	INVSLE	2.1270	-0.6003	-8.52	5.06	
816	305	Shell-Thick	INVSLE	1.7575	-0.0533	-8.26	5.06	
816	305	Shell-Thick	INVSLE	4.1524	0.6674	-8.26	3.93	
816	305	Shell-Thick	INVSLE	4.6408	0.0233	-8.52	3.93	
816	305	Shell-Thick	INVSLE	0.4395	-0.7209	-21.49	0.22	
816	305	Shell-Thick	INVSLE	0.2512	-0.5902	-20.19	0.22	
816	305	Shell-Thick	INVSLE	1.2338	-0.2192	-20.19	-1.082E-02	
816	305	Shell-Thick	INVSLE	1.4333	-0.2367	-21.49	-1.082E-02	
817	306	Shell-Thick	INVSLE	2.4490	-0.0891	-7.06	1.87	
817	306	Shell-Thick	INVSLE	2.0264	0.0962	-6.91	1.87	
817	306	Shell-Thick	INVSLE	3.6954	0.5968	-6.91	1.27	
817	306	Shell-Thick	INVSLE	4.1948	0.3604	-7.06	1.27	
817	306	Shell-Thick	INVSLE	0.9076	-0.1983	-14.84	6.438E-04	
817	306	Shell-Thick	INVSLE	0.7068	-0.2117	-14.15	6.438E-04	
817	306	Shell-Thick	INVSLE	1.5231	0.0738	-14.15	-0.13	
817	306	Shell-Thick	INVSLE	1.7376	0.0781	-14.84	-0.13	
817	306	Shell-Thick	INVSLE	4.2365	0.0375	-9.54	4.03	
817	306	Shell-Thick	INVSLE	3.5566	0.4532	-9.33	4.03	
817	306	Shell-Thick	INVSLE	6.2144	1.2033	-9.33	2.89	
817	306	Shell-Thick	INVSLE	7.0442	0.6878	-9.54	2.89	
817	306	Shell-Thick	INVSLE	1.2252	-0.2677	-23.86	8.691E-04	
817	306	Shell-Thick	INVSLE	0.9541	-0.2857	-22.55	8.691E-04	
817	306	Shell-Thick	INVSLE	2.0561	0.0996	-22.55	-0.18	
817	306	Shell-Thick	INVSLE	2.3457	0.1054	-23.86	-0.18	
818	307	Shell-Thick	INVSLE	10.0670	1.8601	20.51	-4.871E-02	
818	307	Shell-Thick	INVSLE	8.8525	1.9238	19.85	-4.871E-02	
818	307	Shell-Thick	INVSLE	6.5454	1.3714	19.85	0.42	
818	307	Shell-Thick	INVSLE	7.6203	1.4010	20.51	0.42	
818	307	Shell-Thick	INVSLE	4.8168	0.9172	10.35	-0.16	
818	307	Shell-Thick	INVSLE	4.3802	0.9222	10.35	-0.16	
818	307	Shell-Thick	INVSLE	3.1792	0.6378	10.35	-5.288E-02	
818	307	Shell-Thick	INVSLE	3.5802	0.6566	10.35	-5.288E-02	
818	307	Shell-Thick	INVSLE	16.1551	2.9536	32.30	-6.575E-02	
818	307	Shell-Thick	INVSLE	14.0386	3.0851	30.87	-6.575E-02	
818	307	Shell-Thick	INVSLE	10.4489	2.2220	30.87	0.96	
818	307	Shell-Thick	INVSLE	12.3053	2.2642	32.30	0.96	
818	307	Shell-Thick	INVSLE	6.5027	1.2382	13.97	-0.29	
818	307	Shell-Thick	INVSLE	5.9133	1.2450	13.97	-0.29	
818	307	Shell-Thick	INVSLE	4.2919	0.8611	13.97	-7.138E-02	
818	307	Shell-Thick	INVSLE	4.8333	0.8864	13.97	-7.138E-02	
819	308	Shell-Thick	INVSLE	7.7849	1.3638	18.46	0.34	
819	308	Shell-Thick	INVSLE	6.7987	1.4921	17.69	0.34	
819	308	Shell-Thick	INVSLE	4.7266	0.9273	17.69	1.01	
819	308	Shell-Thick	INVSLE	5.6003	0.8741	18.46	1.01	
819	308	Shell-Thick	INVSLE	3.6028	0.6508	9.22	-6.498E-02	
819	308	Shell-Thick	INVSLE	3.2248	0.6573	9.11	-6.498E-02	
819	308	Shell-Thick	INVSLE	2.1581	0.3497	9.11	3.220E-02	
819	308	Shell-Thick	INVSLE	2.5100	0.3606	9.22	3.220E-02	
819	308	Shell-Thick	INVSLE	12.6346	2.1907	29.17	0.80	
819	308	Shell-Thick	INVSLE	10.9430	2.4602	27.63	0.80	
819	308	Shell-Thick	INVSLE	7.7051	1.5971	27.63	2.15	
819	308	Shell-Thick	INVSLE	9.1839	1.4695	29.17	2.15	
819	308	Shell-Thick	INVSLE	4.8638	0.8785	12.45	-8.773E-02	
819	308	Shell-Thick	INVSLE	4.3535	0.8874	12.30	-8.773E-02	
819	308	Shell-Thick	INVSLE	2.9134	0.4721	12.30	4.348E-02	
819	308	Shell-Thick	INVSLE	3.3884	0.4868	12.45	4.348E-02	
820	309	Shell-Thick	INVSLE	5.8548	0.8583	16.57	0.94	
820	309	Shell-Thick	INVSLE	5.0847	1.0656	15.73	0.94	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 165 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

820	309	Shell-Thick	INVSLE	3.2298	0.5468	15.73	1.68	
820	309	Shell-Thick	INVSLE	3.9057	0.4023	16.57	1.68	
820	309	Shell-Thick	INVSLE	2.6078	0.3686	8.20	1.915E-02	
820	309	Shell-Thick	INVSLE	2.2978	0.3892	8.01	1.915E-02	
820	309	Shell-Thick	INVSLE	1.3529	0.0897	8.01	0.19	
820	309	Shell-Thick	INVSLE	1.6433	0.0821	8.20	0.19	
820	309	Shell-Thick	INVSLE	9.6200	1.4262	26.27	2.01	
820	309	Shell-Thick	INVSLE	8.3164	1.8499	24.68	2.01	
820	309	Shell-Thick	INVSLE	5.4063	1.0769	24.68	3.40	
820	309	Shell-Thick	INVSLE	6.5293	0.7735	26.27	3.40	
820	309	Shell-Thick	INVSLE	3.5206	0.4976	11.08	2.586E-02	
820	309	Shell-Thick	INVSLE	3.1021	0.5255	10.81	2.586E-02	
820	309	Shell-Thick	INVSLE	1.8264	0.1211	10.81	0.26	
820	309	Shell-Thick	INVSLE	2.2184	0.1108	11.08	0.26	
821	310	Shell-Thick	INVSLE	4.2067	0.4015	14.85	1.61	
821	310	Shell-Thick	INVSLE	3.6606	0.6940	13.97	1.61	
821	310	Shell-Thick	INVSLE	2.0000	0.1974	13.97	2.38	
821	310	Shell-Thick	INVSLE	2.4732	-0.0467	14.85	2.38	
821	310	Shell-Thick	INVSLE	1.7885	0.0994	7.29	0.18	
821	310	Shell-Thick	INVSLE	1.5571	0.1423	7.03	0.18	
821	310	Shell-Thick	INVSLE	0.7201	-0.1504	7.03	0.40	
821	310	Shell-Thick	INVSLE	0.9393	-0.1853	7.29	0.40	
821	310	Shell-Thick	INVSLE	7.0110	0.7518	23.62	3.27	
821	310	Shell-Thick	INVSLE	6.0999	1.3337	22.02	3.27	
821	310	Shell-Thick	INVSLE	3.4841	0.6008	22.02	4.68	
821	310	Shell-Thick	INVSLE	4.2520	0.1140	23.62	4.68	
821	310	Shell-Thick	INVSLE	2.4145	0.1341	9.84	0.24	
821	310	Shell-Thick	INVSLE	2.1020	0.1921	9.49	0.24	
821	310	Shell-Thick	INVSLE	0.9721	-0.2031	9.49	0.54	
821	310	Shell-Thick	INVSLE	1.2681	-0.2502	9.84	0.54	
822	311	Shell-Thick	INVSLE	2.8217	-0.0354	13.27	2.32	
822	311	Shell-Thick	INVSLE	2.4601	0.3479	12.39	2.32	
822	311	Shell-Thick	INVSLE	0.9784	-0.0891	12.39	3.09	
822	311	Shell-Thick	INVSLE	1.2809	-0.4235	13.27	3.09	
822	311	Shell-Thick	INVSLE	1.1214	-0.1615	6.46	0.39	
822	311	Shell-Thick	INVSLE	0.9599	-0.0899	6.17	0.39	
822	311	Shell-Thick	INVSLE	0.2203	-0.3567	6.17	0.64	
822	311	Shell-Thick	INVSLE	0.3742	-0.4332	6.46	0.64	
822	311	Shell-Thick	INVSLE	4.7935	0.1107	21.18	4.56	
822	311	Shell-Thick	INVSLE	4.1997	0.8555	19.60	4.56	
822	311	Shell-Thick	INVSLE	1.8575	0.2212	19.60	5.94	
822	311	Shell-Thick	INVSLE	2.3323	-0.4446	21.18	5.94	
822	311	Shell-Thick	INVSLE	1.5138	-0.2180	8.72	0.52	
822	311	Shell-Thick	INVSLE	1.2958	-0.1213	8.32	0.52	
822	311	Shell-Thick	INVSLE	0.2974	-0.4816	8.32	0.87	
822	311	Shell-Thick	INVSLE	0.5052	-0.5864	8.72	0.87	
823	312	Shell-Thick	INVSLE	1.6366	-0.3957	11.84	3.04	
823	312	Shell-Thick	INVSLE	1.4692	0.0604	10.97	3.04	
823	312	Shell-Thick	INVSLE	0.1475	-0.3403	10.97	3.80	
823	312	Shell-Thick	INVSLE	0.2718	-0.6404	11.84	3.80	
823	312	Shell-Thick	INVSLE	0.5711	-0.4134	5.71	0.63	
823	312	Shell-Thick	INVSLE	0.4847	-0.2922	5.40	0.63	
823	312	Shell-Thick	INVSLE	-0.1687	-0.5383	5.40	0.90	
823	312	Shell-Thick	INVSLE	-0.0845	-0.7857	5.71	0.90	
823	312	Shell-Thick	INVSLE	2.8722	-0.4340	18.95	5.83	
823	312	Shell-Thick	INVSLE	2.6107	0.4693	17.43	5.83	
823	312	Shell-Thick	INVSLE	0.5142	-0.1108	17.43	7.16	
823	312	Shell-Thick	INVSLE	0.6850	-0.8646	18.95	7.16	
823	312	Shell-Thick	INVSLE	0.7710	-0.5608	7.71	0.85	
823	312	Shell-Thick	INVSLE	0.6544	-0.3945	7.29	0.85	
823	312	Shell-Thick	INVSLE	-0.2277	-0.7267	7.29	1.21	
823	312	Shell-Thick	INVSLE	-0.1141	-1.0824	7.71	1.21	
824	313	Shell-Thick	INVSLE	0.6530	-0.6100	10.53	3.75	
824	313	Shell-Thick	INVSLE	0.6322	-0.1945	9.69	3.75	
824	313	Shell-Thick	INVSLE	-0.4753	-0.5409	9.69	4.48	
824	313	Shell-Thick	INVSLE	-0.4480	-0.8273	10.53	4.48	
824	313	Shell-Thick	INVSLE	0.1268	-0.7583	5.04	0.89	
824	313	Shell-Thick	INVSLE	0.1003	-0.4726	4.73	0.89	
824	313	Shell-Thick	INVSLE	-0.5417	-0.6892	4.73	1.16	
824	313	Shell-Thick	INVSLE	-0.5543	-1.0827	5.04	1.16	
824	313	Shell-Thick	INVSLE	1.2632	-0.8235	16.89	7.06	
824	313	Shell-Thick	INVSLE	1.2489	0.1279	15.45	7.06	
824	313	Shell-Thick	INVSLE	-0.6187	-0.3689	15.45	8.32	
824	313	Shell-Thick	INVSLE	-0.6048	-1.1169	16.89	8.32	
824	313	Shell-Thick	INVSLE	0.1712	-1.0460	6.80	1.20	
824	313	Shell-Thick	INVSLE	0.1354	-0.6380	6.38	1.20	
824	313	Shell-Thick	INVSLE	-0.7413	-0.9305	6.38	1.57	
824	313	Shell-Thick	INVSLE	-0.7642	-1.5000	6.80	1.57	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 166 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

825	314	Shell-Thick	INVSLE	-0.1856	-0.7959	9.32	4.43	
825	314	Shell-Thick	INVSLE	-0.0505	-0.4011	8.54	4.43	
825	314	Shell-Thick	INVSLE	-0.7099	-0.7081	8.54	5.12	
825	314	Shell-Thick	INVSLE	-0.7417	-0.9907	9.32	5.12	
825	314	Shell-Thick	INVSLE	-0.2397	-1.0505	4.43	1.15	
825	314	Shell-Thick	INVSLE	-0.2037	-0.6247	4.13	1.15	
825	314	Shell-Thick	INVSLE	-1.0911	-0.8165	4.13	1.42	
825	314	Shell-Thick	INVSLE	-1.2484	-1.3430	4.43	1.42	
825	314	Shell-Thick	INVSLE	-0.1229	-1.0745	14.99	8.24	
825	314	Shell-Thick	INVSLE	0.1272	-0.1419	13.65	8.24	
825	314	Shell-Thick	INVSLE	-0.9584	-0.5823	13.65	9.41	
825	314	Shell-Thick	INVSLE	-1.0013	-1.3374	14.99	9.41	
825	314	Shell-Thick	INVSLE	-0.3235	-1.4564	5.99	1.55	
825	314	Shell-Thick	INVSLE	-0.2750	-0.8433	5.57	1.55	
825	314	Shell-Thick	INVSLE	-1.5332	-1.1022	5.57	1.92	
825	314	Shell-Thick	INVSLE	-1.8360	-1.8659	5.99	1.92	
826	315	Shell-Thick	INVSLE	-0.5334	-0.9591	8.22	5.08	
826	315	Shell-Thick	INVSLE	-0.4504	-0.5760	7.49	5.08	
826	315	Shell-Thick	INVSLE	-0.8934	-0.8375	7.49	5.72	
826	315	Shell-Thick	INVSLE	-0.9705	-1.1278	8.22	5.72	
826	315	Shell-Thick	INVSLE	-0.8728	-1.3069	3.88	1.41	
826	315	Shell-Thick	INVSLE	-0.6255	-0.7545	3.59	1.41	
826	315	Shell-Thick	INVSLE	-1.5424	-0.9192	3.59	1.66	
826	315	Shell-Thick	INVSLE	-1.8053	-1.5582	3.88	1.66	
826	315	Shell-Thick	INVSLE	-0.7200	-1.2948	13.24	9.33	
826	315	Shell-Thick	INVSLE	-0.6080	-0.3689	12.00	9.33	
826	315	Shell-Thick	INVSLE	-1.2060	-0.7428	12.00	10.42	
826	315	Shell-Thick	INVSLE	-1.3102	-1.5225	13.24	10.42	
826	315	Shell-Thick	INVSLE	-1.2664	-1.8164	5.24	1.90	
826	315	Shell-Thick	INVSLE	-0.8707	-1.0186	4.85	1.90	
826	315	Shell-Thick	INVSLE	-2.2950	-1.2409	4.85	2.25	
826	315	Shell-Thick	INVSLE	-2.7733	-2.1682	5.24	2.25	
827	316	Shell-Thick	INVSLE	-0.7753	-1.0971	7.19	5.68	
827	316	Shell-Thick	INVSLE	-0.6443	-0.7145	6.53	5.68	
827	316	Shell-Thick	INVSLE	-1.0303	-0.9387	6.53	6.27	
827	316	Shell-Thick	INVSLE	-1.1536	-1.2433	7.19	6.27	
827	316	Shell-Thick	INVSLE	-1.4547	-1.5204	3.38	1.66	
827	316	Shell-Thick	INVSLE	-1.0890	-0.8611	3.11	1.66	
827	316	Shell-Thick	INVSLE	-1.8928	-1.0020	3.11	1.89	
827	316	Shell-Thick	INVSLE	-2.2668	-1.7394	3.38	1.89	
827	316	Shell-Thick	INVSLE	-1.0466	-1.4810	11.61	10.35	
827	316	Shell-Thick	INVSLE	-0.8699	-0.5446	10.49	10.35	
827	316	Shell-Thick	INVSLE	-1.3909	-0.8653	10.49	11.33	
827	316	Shell-Thick	INVSLE	-1.5574	-1.6784	11.61	11.33	
827	316	Shell-Thick	INVSLE	-2.2426	-2.1161	4.56	2.24	
827	316	Shell-Thick	INVSLE	-1.6047	-1.1624	4.20	2.24	
827	316	Shell-Thick	INVSLE	-2.8931	-1.3528	4.20	2.56	
827	316	Shell-Thick	INVSLE	-3.5577	-2.4226	4.56	2.56	
828	317	Shell-Thick	INVSLE	-0.9680	-1.2140	6.24	6.23	
828	317	Shell-Thick	INVSLE	-0.8023	-0.8261	5.64	6.23	
828	317	Shell-Thick	INVSLE	-1.1355	-1.0136	5.64	6.76	
828	317	Shell-Thick	INVSLE	-1.2932	-1.3376	6.24	6.76	
828	317	Shell-Thick	INVSLE	-1.9262	-1.7009	2.92	1.89	
828	317	Shell-Thick	INVSLE	-1.4779	-0.9486	2.67	1.89	
828	317	Shell-Thick	INVSLE	-2.1756	-1.0667	2.67	2.10	
828	317	Shell-Thick	INVSLE	-2.6283	-1.8856	2.92	2.10	
828	317	Shell-Thick	INVSLE	-1.3068	-1.6389	10.09	11.28	
828	317	Shell-Thick	INVSLE	-1.0831	-0.6841	9.09	11.28	
828	317	Shell-Thick	INVSLE	-1.5330	-0.9519	9.09	12.15	
828	317	Shell-Thick	INVSLE	-1.7458	-1.8058	10.09	12.15	
828	317	Shell-Thick	INVSLE	-3.0373	-2.3692	3.94	2.55	
828	317	Shell-Thick	INVSLE	-2.2614	-1.2806	3.61	2.55	
828	317	Shell-Thick	INVSLE	-3.3817	-1.4401	3.61	2.84	
828	317	Shell-Thick	INVSLE	-4.1766	-2.6278	3.94	2.84	
829	318	Shell-Thick	INVSLE	-1.1263	-1.3106	5.35	6.73	
829	318	Shell-Thick	INVSLE	-0.9261	-0.9121	4.83	6.73	
829	318	Shell-Thick	INVSLE	-1.2110	-1.0674	4.83	7.19	
829	318	Shell-Thick	INVSLE	-1.4026	-1.4143	5.35	7.19	
829	318	Shell-Thick	INVSLE	-2.3220	-1.8483	2.49	2.10	
829	318	Shell-Thick	INVSLE	-1.7881	-1.0185	2.27	2.10	
829	318	Shell-Thick	INVSLE	-2.3873	-1.1164	2.27	2.29	
829	318	Shell-Thick	INVSLE	-2.9216	-2.0036	2.49	2.29	
829	318	Shell-Thick	INVSLE	-1.5205	-1.7693	8.67	12.11	
829	318	Shell-Thick	INVSLE	-1.2502	-0.7887	7.79	12.11	
829	318	Shell-Thick	INVSLE	-1.6348	-1.0105	7.79	12.88	
829	318	Shell-Thick	INVSLE	-1.8936	-1.9093	8.67	12.88	
829	318	Shell-Thick	INVSLE	-3.7086	-2.5759	3.37	2.83	
829	318	Shell-Thick	INVSLE	-2.7877	-1.3750	3.07	2.83	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 167 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

829	318 Shell-Thick	INVSLU	-3.7515	-1.5072	3.07	3.09		
829	318 Shell-Thick	INVSLU	-4.6829	-2.7933	3.37	3.09		
830	319 Shell-Thick	INVSLE	-1.2516	-1.3898	4.52	7.17		
830	319 Shell-Thick	INVSLE	-1.0273	-0.9780	4.06	7.17		
830	319 Shell-Thick	INVSLE	-1.2669	-1.1042	4.06	7.57		
830	319 Shell-Thick	INVSLE	-1.4830	-1.4749	4.52	7.57		
830	319 Shell-Thick	INVSLE	-2.6386	-1.9684	2.10	2.28		
830	319 Shell-Thick	INVSLE	-2.0471	-1.0740	1.90	2.28		
830	319 Shell-Thick	INVSLE	-2.5529	-1.1535	1.90	2.45		
830	319 Shell-Thick	INVSLE	-3.1430	-2.0958	2.10	2.45		
830	319 Shell-Thick	INVSLU	-1.6896	-1.8762	7.32	12.84		
830	319 Shell-Thick	INVSLU	-1.3869	-0.8666	6.56	12.84		
830	319 Shell-Thick	INVSLU	-1.7103	-1.0469	6.56	13.50		
830	319 Shell-Thick	INVSLU	-2.0021	-1.9910	7.32	13.50		
830	319 Shell-Thick	INVSLU	-4.2470	-2.7442	2.83	3.08		
830	319 Shell-Thick	INVSLU	-3.2297	-1.4499	2.57	3.08		
830	319 Shell-Thick	INVSLU	-4.0442	-1.5573	2.57	3.31		
830	319 Shell-Thick	INVSLU	-5.0679	-2.9225	2.83	3.31		
831	320 Shell-Thick	INVSLE	-1.3540	-1.4534	3.72	7.55		
831	320 Shell-Thick	INVSLE	-1.1064	-1.0272	3.34	7.55		
831	320 Shell-Thick	INVSLE	-1.3035	-1.1272	3.34	7.89		
831	320 Shell-Thick	INVSLE	-1.5435	-1.5218	3.72	7.89		
831	320 Shell-Thick	INVSLE	-2.9011	-2.0640	1.72	2.45		
831	320 Shell-Thick	INVSLE	-2.2510	-1.1171	1.56	2.45		
831	320 Shell-Thick	INVSLE	-2.6686	-1.1803	1.56	2.59		
831	320 Shell-Thick	INVSLE	-3.3155	-2.1664	1.72	2.59		
831	320 Shell-Thick	INVSLU	-1.8279	-1.9621	6.04	13.47		
831	320 Shell-Thick	INVSLU	-1.4937	-0.9230	5.41	13.47		
831	320 Shell-Thick	INVSLU	-1.7597	-1.0657	5.41	14.03		
831	320 Shell-Thick	INVSLU	-2.0837	-2.0544	6.04	14.03		
831	320 Shell-Thick	INVSLU	-4.6952	-2.8780	2.33	3.31		
831	320 Shell-Thick	INVSLU	-3.5784	-1.5081	2.11	3.31		
831	320 Shell-Thick	INVSLU	-4.2516	-1.5934	2.11	3.50		
831	320 Shell-Thick	INVSLU	-5.3703	-3.0213	2.33	3.50		
832	321 Shell-Thick	INVSLE	-1.4338	-1.5037	2.97	7.87		
832	321 Shell-Thick	INVSLE	-1.1713	-1.0633	2.66	7.87		
832	321 Shell-Thick	INVSLE	-1.3280	-1.1405	2.66	8.14		
832	321 Shell-Thick	INVSLE	-1.5840	-1.5568	2.97	8.14		
832	321 Shell-Thick	INVSLE	-3.1064	-2.1388	1.37	2.59		
832	321 Shell-Thick	INVSLE	-2.4200	-1.1500	1.24	2.59		
832	321 Shell-Thick	INVSLE	-2.7527	-1.1988	1.24	2.70		
832	321 Shell-Thick	INVSLE	-3.4358	-2.2184	1.37	2.70		
832	321 Shell-Thick	INVSLU	-1.9357	-2.0299	4.82	14.00		
832	321 Shell-Thick	INVSLU	-1.5813	-0.9626	4.30	14.00		
832	321 Shell-Thick	INVSLU	-1.7927	-1.0729	4.30	14.45		
832	321 Shell-Thick	INVSLU	-2.1384	-2.1017	4.82	14.45		
832	321 Shell-Thick	INVSLU	-5.0460	-2.9826	1.85	3.49		
832	321 Shell-Thick	INVSLU	-3.8679	-1.5526	1.67	3.49		
832	321 Shell-Thick	INVSLU	-4.4048	-1.6184	1.67	3.65		
832	321 Shell-Thick	INVSLU	-5.5832	-3.0940	1.85	3.65		
833	322 Shell-Thick	INVSLE	-1.4981	-1.5423	2.24	8.13		
833	322 Shell-Thick	INVSLE	-1.2216	-1.0898	2.00	8.13		
833	322 Shell-Thick	INVSLE	-1.3396	-1.1460	2.00	8.34		
833	322 Shell-Thick	INVSLE	-1.6108	-1.5815	2.24	8.34		
833	322 Shell-Thick	INVSLE	-3.2725	-2.1959	1.03	2.70		
833	322 Shell-Thick	INVSLE	-2.5497	-1.1749	0.93	2.70		
833	322 Shell-Thick	INVSLE	-2.8009	-1.2105	0.93	2.79		
833	322 Shell-Thick	INVSLE	-3.5202	-2.2545	1.03	2.79		
833	322 Shell-Thick	INVSLU	-2.0225	-2.0821	3.63	14.43		
833	322 Shell-Thick	INVSLU	-1.6491	-0.9910	3.24	14.43		
833	322 Shell-Thick	INVSLU	-1.8084	-1.0711	3.24	14.77		
833	322 Shell-Thick	INVSLU	-2.1746	-2.1351	3.63	14.77		
833	322 Shell-Thick	INVSLU	-5.3301	-3.0624	1.39	3.65		
833	322 Shell-Thick	INVSLU	-4.0898	-1.5861	1.25	3.65		
833	322 Shell-Thick	INVSLU	-4.4954	-1.6342	1.25	3.77		
833	322 Shell-Thick	INVSLU	-5.7343	-3.1445	1.39	3.77		
834	323 Shell-Thick	INVSLE	-1.5464	-1.5708	1.53	8.33		
834	323 Shell-Thick	INVSLE	-1.2626	-1.1088	1.36	8.33		
834	323 Shell-Thick	INVSLE	-1.3431	-1.1465	1.36	8.47		
834	323 Shell-Thick	INVSLE	-1.6231	-1.5971	1.53	8.47		
834	323 Shell-Thick	INVSLE	-3.3956	-2.2375	0.70	2.79		
834	323 Shell-Thick	INVSLE	-2.6547	-1.1930	0.63	2.79		
834	323 Shell-Thick	INVSLE	-2.8263	-1.2168	0.63	2.85		
834	323 Shell-Thick	INVSLE	-3.5646	-2.2770	0.70	2.85		
834	323 Shell-Thick	INVSLU	-2.0876	-2.1205	2.48	14.76		
834	323 Shell-Thick	INVSLU	-1.7045	-1.0112	2.21	14.76		
834	323 Shell-Thick	INVSLU	-1.8132	-1.0649	2.21	14.99		
834	323 Shell-Thick	INVSLU	-2.1912	-2.1561	2.48	14.99		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 168 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

834	323	Shell-Thick	INVS LU	-5.5399	-3.1206	0.95	3.76	
834	323	Shell-Thick	INVS LU	-4.2690	-1.6105	0.85	3.76	
834	323	Shell-Thick	INVS LU	-4.5463	-1.6427	0.85	3.85	
834	323	Shell-Thick	INVS LU	-5.8159	-3.1760	0.95	3.85	
835	324	Shell-Thick	INVS LE	-1.5833	-1.5903	0.83	8.47	
835	324	Shell-Thick	INVS LE	-1.2932	-1.1229	0.74	8.47	
835	324	Shell-Thick	INVS LE	-1.3371	-1.1430	0.74	8.55	
835	324	Shell-Thick	INVS LE	-1.6250	-1.6045	0.83	8.55	
835	324	Shell-Thick	INVS LE	-3.4883	-2.2661	0.38	2.85	
835	324	Shell-Thick	INVS LE	-2.7299	-1.2057	0.34	2.85	
835	324	Shell-Thick	INVS LE	-2.8237	-1.2185	0.34	2.88	
835	324	Shell-Thick	INVS LE	-3.5803	-2.2874	0.38	2.88	
835	324	Shell-Thick	INVS LU	-2.1374	-2.1469	1.35	14.98	
835	324	Shell-Thick	INVS LU	-1.7458	-1.0268	1.21	14.98	
835	324	Shell-Thick	INVS LU	-1.8051	-1.0554	1.21	15.11	
835	324	Shell-Thick	INVS LU	-2.1937	-2.1661	1.35	15.11	
835	324	Shell-Thick	INVS LU	-5.6975	-3.1606	0.52	3.85	
835	324	Shell-Thick	INVS LU	-4.3961	-1.6277	0.47	3.85	
835	324	Shell-Thick	INVS LU	-4.5475	-1.6449	0.47	3.89	
835	324	Shell-Thick	INVS LU	-5.8477	-3.1904	0.52	3.89	
836	325	Shell-Thick	INVS LE	-1.6074	-1.6016	0.15	8.54	
836	325	Shell-Thick	INVS LE	-1.3171	-1.1332	0.13	8.54	
836	325	Shell-Thick	INVS LE	-1.3248	-1.1366	0.13	8.56	
836	325	Shell-Thick	INVS LE	-1.6147	-1.6041	0.15	8.56	
836	325	Shell-Thick	INVS LE	-3.5456	-2.2827	6.720E-02	2.88	
836	325	Shell-Thick	INVS LE	-2.7859	-1.2139	6.042E-02	2.88	
836	325	Shell-Thick	INVS LE	-2.8024	-1.2160	6.042E-02	2.89	
836	325	Shell-Thick	INVS LE	-3.5616	-2.2865	6.720E-02	2.89	
836	325	Shell-Thick	INVS LU	-2.1701	-2.1621	0.24	15.11	
836	325	Shell-Thick	INVS LU	-1.7780	-1.0396	0.21	15.11	
836	325	Shell-Thick	INVS LU	-1.7885	-1.0445	0.21	15.13	
836	325	Shell-Thick	INVS LU	-2.1799	-2.1655	0.24	15.13	
836	325	Shell-Thick	INVS LU	-5.7932	-3.1837	9.072E-02	3.89	
836	325	Shell-Thick	INVS LU	-4.4891	-1.6387	8.156E-02	3.89	
836	325	Shell-Thick	INVS LU	-4.5159	-1.6416	8.156E-02	3.90	
836	325	Shell-Thick	INVS LU	-5.8194	-3.1891	9.072E-02	3.90	
837	326	Shell-Thick	INVS LE	-1.6221	-1.6052	-0.25	8.56	
837	326	Shell-Thick	INVS LE	-1.3323	-1.1406	-0.22	8.56	
837	326	Shell-Thick	INVS LE	-1.3040	-1.1275	-0.22	8.51	
837	326	Shell-Thick	INVS LE	-1.5949	-1.5960	-0.25	8.51	
837	326	Shell-Thick	INVS LE	-3.5764	-2.2882	-0.54	2.89	
837	326	Shell-Thick	INVS LE	-2.8159	-1.2179	-0.48	2.89	
837	326	Shell-Thick	INVS LE	-2.7555	-1.2095	-0.48	2.87	
837	326	Shell-Thick	INVS LE	-3.5166	-2.2746	-0.54	2.87	
837	326	Shell-Thick	INVS LU	-2.1898	-2.1670	-0.33	15.13	
837	326	Shell-Thick	INVS LU	-1.7986	-1.0509	-0.30	15.13	
837	326	Shell-Thick	INVS LU	-1.7603	-1.0323	-0.30	15.05	
837	326	Shell-Thick	INVS LU	-2.1532	-2.1546	-0.33	15.05	
837	326	Shell-Thick	INVS LU	-5.8428	-3.1915	-0.88	3.90	
837	326	Shell-Thick	INVS LU	-4.5363	-1.6441	-0.78	3.90	
837	326	Shell-Thick	INVS LU	-4.4387	-1.6329	-0.78	3.87	
837	326	Shell-Thick	INVS LU	-5.7451	-3.1725	-0.88	3.87	
838	327	Shell-Thick	INVS LE	-1.6246	-1.6010	-0.57	8.51	
838	327	Shell-Thick	INVS LE	-1.3414	-1.1452	-0.51	8.51	
838	327	Shell-Thick	INVS LE	-1.2767	-1.1149	-0.51	8.40	
838	327	Shell-Thick	INVS LE	-1.5628	-1.5799	-0.57	8.40	
838	327	Shell-Thick	INVS LE	-3.5732	-2.2826	-1.23	2.87	
838	327	Shell-Thick	INVS LE	-2.8276	-1.2179	-1.10	2.87	
838	327	Shell-Thick	INVS LE	-2.6898	-1.1987	-1.10	2.82	
838	327	Shell-Thick	INVS LE	-3.4369	-2.2511	-1.23	2.82	
838	327	Shell-Thick	INVS LU	-2.1933	-2.1614	-0.76	15.06	
838	327	Shell-Thick	INVS LU	-1.8108	-1.0610	-0.69	15.06	
838	327	Shell-Thick	INVS LU	-1.7235	-1.0178	-0.69	14.87	
838	327	Shell-Thick	INVS LU	-2.1098	-2.1328	-0.76	14.87	
838	327	Shell-Thick	INVS LU	-5.8327	-3.1837	-2.00	3.87	
838	327	Shell-Thick	INVS LU	-4.5512	-1.6441	-1.78	3.87	
838	327	Shell-Thick	INVS LU	-4.3284	-1.6182	-1.78	3.80	
838	327	Shell-Thick	INVS LU	-5.6101	-3.1397	-2.00	3.80	
839	328	Shell-Thick	INVS LE	-1.6172	-1.5889	-0.89	8.40	
839	328	Shell-Thick	INVS LE	-1.3412	-1.1463	-0.80	8.40	
839	328	Shell-Thick	INVS LE	-1.2395	-1.0980	-0.80	8.23	
839	328	Shell-Thick	INVS LE	-1.5199	-1.5552	-0.89	8.23	
839	328	Shell-Thick	INVS LE	-3.5422	-2.2653	-1.93	2.82	
839	328	Shell-Thick	INVS LE	-2.8121	-1.2135	-1.73	2.82	
839	328	Shell-Thick	INVS LE	-2.5955	-1.1828	-1.73	2.74	
839	328	Shell-Thick	INVS LE	-3.3281	-2.2152	-1.93	2.74	
839	328	Shell-Thick	INVS LU	-2.1832	-2.1450	-1.20	14.88	
839	328	Shell-Thick	INVS LU	-1.8107	-1.0685	-1.08	14.88	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 169 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

839	328	Shell-Thick	INVS LU	-1.6733	-0.9998	-1.08	14.58
839	328	Shell-Thick	INVS LU	-2.0519	-2.0996	-1.20	14.58
839	328	Shell-Thick	INVS LU	-5.7745	-3.1595	-3.14	3.81
839	328	Shell-Thick	INVS LU	-4.5178	-1.6382	-2.80	3.81
839	328	Shell-Thick	INVS LU	-4.1679	-1.5968	-2.80	3.70
839	328	Shell-Thick	INVS LU	-5.4250	-3.0895	-3.14	3.70
840	329	Shell-Thick	INVS LE	-1.5959	-1.5680	-1.22	8.23
840	329	Shell-Thick	INVS LE	-1.3336	-1.1431	-1.10	8.23
840	329	Shell-Thick	INVS LE	-1.1938	-1.0747	-1.10	7.99
840	329	Shell-Thick	INVS LE	-1.4618	-1.5209	-1.22	7.99
840	329	Shell-Thick	INVS LE	-3.4727	-2.2350	-2.65	2.74
840	329	Shell-Thick	INVS LE	-2.7752	-1.2040	-2.37	2.74
840	329	Shell-Thick	INVS LE	-2.4780	-1.1608	-2.37	2.64
840	329	Shell-Thick	INVS LE	-3.1782	-2.1647	-2.65	2.64
840	329	Shell-Thick	INVS LU	-2.1545	-2.1168	-1.65	14.60
840	329	Shell-Thick	INVS LU	-1.8004	-1.0724	-1.49	14.60
840	329	Shell-Thick	INVS LU	-1.6117	-0.9748	-1.49	14.20
840	329	Shell-Thick	INVS LU	-1.9734	-2.0532	-1.65	14.20
840	329	Shell-Thick	INVS LU	-5.6491	-3.1173	-4.31	3.71
840	329	Shell-Thick	INVS LU	-4.4468	-1.6255	-3.85	3.71
840	329	Shell-Thick	INVS LU	-3.9672	-1.5670	-3.85	3.56
840	329	Shell-Thick	INVS LU	-5.1686	-3.0189	-4.31	3.56
841	330	Shell-Thick	INVS LE	-1.5618	-1.5374	-1.57	8.01
841	330	Shell-Thick	INVS LE	-1.3140	-1.1330	-1.42	8.01
841	330	Shell-Thick	INVS LE	-1.1345	-1.0428	-1.42	7.70
841	330	Shell-Thick	INVS LE	-1.3893	-1.4756	-1.57	7.70
841	330	Shell-Thick	INVS LE	-3.3694	-2.1898	-3.39	2.64
841	330	Shell-Thick	INVS LE	-2.7042	-1.1883	-3.04	2.64
841	330	Shell-Thick	INVS LE	-2.3236	-1.1312	-3.04	2.51
841	330	Shell-Thick	INVS LE	-2.9916	-2.0976	-3.39	2.51
841	330	Shell-Thick	INVS LU	-2.1084	-2.0754	-2.12	14.22
841	330	Shell-Thick	INVS LU	-1.7738	-1.0688	-1.92	14.22
841	330	Shell-Thick	INVS LU	-1.5316	-0.9402	-1.92	13.71
841	330	Shell-Thick	INVS LU	-1.8755	-1.9920	-2.12	13.71
841	330	Shell-Thick	INVS LU	-5.4655	-3.0541	-5.51	3.57
841	330	Shell-Thick	INVS LU	-4.3163	-1.6043	-4.93	3.57
841	330	Shell-Thick	INVS LU	-3.7025	-1.5272	-4.93	3.39
841	330	Shell-Thick	INVS LU	-4.8496	-2.9250	-5.51	3.39
842	331	Shell-Thick	INVS LE	-1.5091	-1.4954	-1.93	7.71
842	331	Shell-Thick	INVS LE	-1.2832	-1.1143	-1.75	7.71
842	331	Shell-Thick	INVS LE	-1.0624	-0.9991	-1.75	7.34
842	331	Shell-Thick	INVS LE	-1.2957	-1.4176	-1.93	7.34
842	331	Shell-Thick	INVS LE	-3.2166	-2.1272	-4.17	2.52
842	331	Shell-Thick	INVS LE	-2.6040	-1.1651	-3.75	2.52
842	331	Shell-Thick	INVS LE	-2.1370	-1.0924	-3.75	2.36
842	331	Shell-Thick	INVS LE	-2.7508	-2.0110	-4.17	2.36
842	331	Shell-Thick	INVS LU	-2.0372	-2.0188	-2.61	13.74
842	331	Shell-Thick	INVS LU	-1.7324	-1.0553	-2.37	13.74
842	331	Shell-Thick	INVS LU	-1.4342	-0.8909	-2.37	13.12
842	331	Shell-Thick	INVS LU	-1.7492	-1.9138	-2.61	13.12
842	331	Shell-Thick	INVS LU	-5.1966	-2.9664	-6.77	3.40
842	331	Shell-Thick	INVS LU	-4.1355	-1.5729	-6.06	3.40
842	331	Shell-Thick	INVS LU	-3.3831	-1.4747	-6.06	3.18
842	331	Shell-Thick	INVS LU	-4.4381	-2.8038	-6.77	3.18
843	332	Shell-Thick	INVS LE	-1.4380	-1.4407	-2.32	7.36
843	332	Shell-Thick	INVS LE	-1.2347	-1.0832	-2.11	7.36
843	332	Shell-Thick	INVS LE	-0.9698	-0.9401	-2.11	6.93
843	332	Shell-Thick	INVS LE	-1.1812	-1.3449	-2.32	6.93
843	332	Shell-Thick	INVS LE	-3.0183	-2.0444	-4.99	2.36
843	332	Shell-Thick	INVS LE	-2.4569	-1.1323	-4.49	2.36
843	332	Shell-Thick	INVS LE	-1.8986	-1.0421	-4.49	2.18
843	332	Shell-Thick	INVS LE	-2.4600	-1.9011	-4.99	2.18
843	332	Shell-Thick	INVS LU	-1.9413	-1.9449	-3.13	13.16
843	332	Shell-Thick	INVS LU	-1.6669	-1.0262	-2.85	13.16
843	332	Shell-Thick	INVS LU	-1.3092	-0.8219	-2.85	12.44
843	332	Shell-Thick	INVS LU	-1.5946	-1.8156	-3.13	12.44
843	332	Shell-Thick	INVS LU	-4.8509	-2.8505	-8.08	3.19
843	332	Shell-Thick	INVS LU	-3.8742	-1.5286	-7.26	3.19
843	332	Shell-Thick	INVS LU	-2.9758	-1.4068	-7.26	2.94
843	332	Shell-Thick	INVS LU	-3.9429	-2.6500	-8.08	2.94
844	333	Shell-Thick	INVS LE	-1.3399	-1.3707	-2.73	6.95
844	333	Shell-Thick	INVS LE	-1.1686	-1.0365	-2.50	6.95
844	333	Shell-Thick	INVS LE	-0.8568	-0.8628	-2.50	6.46
844	333	Shell-Thick	INVS LE	-1.0359	-1.2558	-2.73	6.46
844	333	Shell-Thick	INVS LE	-2.7523	-1.9370	-5.85	2.19
844	333	Shell-Thick	INVS LE	-2.2676	-1.0878	-5.29	2.19
844	333	Shell-Thick	INVS LE	-1.6135	-0.9783	-5.29	1.98
844	333	Shell-Thick	INVS LE	-2.0944	-1.7657	-5.85	1.98

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 170 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

844	333 Shell-Thick	INVSLU	-1.8089	-1.8504	-3.69	12.48		
844	333 Shell-Thick	INVSLU	-1.5777	-0.9770	-3.37	12.48		
844	333 Shell-Thick	INVSLU	-1.1567	-0.7289	-3.37	11.65		
844	333 Shell-Thick	INVSLU	-1.3985	-1.6953	-3.69	11.65		
844	333 Shell-Thick	INVSLU	-4.3902	-2.7000	-9.47	2.95		
844	333 Shell-Thick	INVSLU	-3.5419	-1.4686	-8.52	2.95		
844	333 Shell-Thick	INVSLU	-2.4909	-1.3207	-8.52	2.67		
844	333 Shell-Thick	INVSLU	-3.3218	-2.4601	-9.47	2.67		
845	334 Shell-Thick	INVSLE	-1.2144	-1.2839	-3.18	6.49		
845	334 Shell-Thick	INVSLE	-1.0751	-0.9706	-2.92	6.49		
845	334 Shell-Thick	INVSLE	-0.7124	-0.7613	-2.92	5.93		
845	334 Shell-Thick	INVSLE	-0.8593	-1.1470	-3.18	5.93		
845	334 Shell-Thick	INVSLE	-2.4231	-1.8032	-6.78	1.99		
845	334 Shell-Thick	INVSLE	-2.0115	-1.0295	-6.14	1.99		
845	334 Shell-Thick	INVSLE	-1.2544	-0.8978	-6.14	1.76		
845	334 Shell-Thick	INVSLE	-1.6589	-1.5983	-6.78	1.76		
845	334 Shell-Thick	INVSLU	-1.6394	-1.7333	-4.29	11.70		
845	334 Shell-Thick	INVSLU	-1.4513	-0.9024	-3.94	11.70		
845	334 Shell-Thick	INVSLU	-0.9618	-0.6030	-3.94	10.77		
845	334 Shell-Thick	INVSLU	-1.1601	-1.5485	-4.29	10.77		
845	334 Shell-Thick	INVSLU	-3.8248	-2.5123	-10.95	2.68		
845	334 Shell-Thick	INVSLU	-3.0975	-1.3898	-9.88	2.68		
845	334 Shell-Thick	INVSLU	-1.8830	-1.2121	-9.88	2.37		
845	334 Shell-Thick	INVSLU	-2.5861	-2.2255	-10.95	2.37		
846	335 Shell-Thick	INVSLE	-1.0485	-1.1768	-3.66	5.96		
846	335 Shell-Thick	INVSLE	-0.9529	-0.8798	-3.38	5.96		
846	335 Shell-Thick	INVSLE	-0.5354	-0.6349	-3.38	5.35		
846	335 Shell-Thick	INVSLE	-0.6370	-1.0182	-3.66	5.35		
846	335 Shell-Thick	INVSLE	-1.9996	-1.6357	-7.77	1.77		
846	335 Shell-Thick	INVSLE	-1.6933	-0.9540	-7.07	1.77		
846	335 Shell-Thick	INVSLE	-0.8268	-0.7995	-7.07	1.52		
846	335 Shell-Thick	INVSLE	-1.1192	-1.3998	-7.77	1.52		
846	335 Shell-Thick	INVSLU	-1.4154	-1.5887	-4.94	10.83		
846	335 Shell-Thick	INVSLU	-1.2865	-0.7938	-4.56	10.83		
846	335 Shell-Thick	INVSLU	-0.7228	-0.4440	-4.56	9.79		
846	335 Shell-Thick	INVSLU	-0.8599	-1.3745	-4.94	9.79		
846	335 Shell-Thick	INVSLU	-3.1025	-2.2771	-12.53	2.38		
846	335 Shell-Thick	INVSLU	-2.5517	-1.2878	-11.34	2.38		
846	335 Shell-Thick	INVSLU	-1.1647	-1.0793	-11.34	2.05		
846	335 Shell-Thick	INVSLU	-1.6784	-1.9470	-12.53	2.05		
847	336 Shell-Thick	INVSLE	-0.8407	-1.0491	-4.19	5.39		
847	336 Shell-Thick	INVSLE	-0.7881	-0.7630	-3.89	5.39		
847	336 Shell-Thick	INVSLE	-0.2945	-0.4732	-3.89	4.72		
847	336 Shell-Thick	INVSLE	-0.3672	-0.8646	-4.19	4.72		
847	336 Shell-Thick	INVSLE	-1.4874	-1.4361	-8.84	1.53		
847	336 Shell-Thick	INVSLE	-1.2805	-0.8598	-8.07	1.53		
847	336 Shell-Thick	INVSLE	-0.3100	-0.6785	-8.07	1.26		
847	336 Shell-Thick	INVSLE	-0.4816	-1.1592	-8.84	1.26		
847	336 Shell-Thick	INVSLU	-1.1349	-1.4163	-5.66	9.86		
847	336 Shell-Thick	INVSLU	-1.0639	-0.6507	-5.25	9.86		
847	336 Shell-Thick	INVSLU	-0.2766	-0.2352	-5.25	8.73		
847	336 Shell-Thick	INVSLU	-0.4957	-1.1672	-5.66	8.73		
847	336 Shell-Thick	INVSLU	-2.2373	-1.9967	-14.22	2.06		
847	336 Shell-Thick	INVSLU	-1.8514	-1.1607	-12.93	2.06		
847	336 Shell-Thick	INVSLU	-0.4184	-0.9160	-12.93	1.71		
847	336 Shell-Thick	INVSLU	-0.6674	-1.6092	-14.22	1.71		
848	337 Shell-Thick	INVSLE	-0.5728	-0.8956	-4.77	4.76		
848	337 Shell-Thick	INVSLE	-0.5768	-0.6096	-4.46	4.76		
848	337 Shell-Thick	INVSLE	0.3375	-0.2820	-4.46	4.05		
848	337 Shell-Thick	INVSLE	0.2988	-0.6888	-4.77	4.05		
848	337 Shell-Thick	INVSLE	-0.8457	-1.1921	-10.00	1.27		
848	337 Shell-Thick	INVSLE	-0.7766	-0.7420	-9.18	1.27		
848	337 Shell-Thick	INVSLE	-0.0324	-0.5364	-9.18	1.00		
848	337 Shell-Thick	INVSLE	-0.0299	-0.8845	-10.00	1.00		
848	337 Shell-Thick	INVSLU	-0.7733	-1.2091	-6.44	8.81		
848	337 Shell-Thick	INVSLU	-0.7787	-0.4561	-6.02	8.81		
848	337 Shell-Thick	INVSLU	0.7663	0.0129	-6.02	7.58		
848	337 Shell-Thick	INVSLU	0.6801	-0.9299	-6.44	7.58		
848	337 Shell-Thick	INVSLU	-1.1826	-1.6538	-16.05	1.72		
848	337 Shell-Thick	INVSLU	-1.0784	-1.0016	-14.66	1.72		
848	337 Shell-Thick	INVSLU	-0.0437	-0.7241	-14.66	1.35		
848	337 Shell-Thick	INVSLU	-0.0404	-1.2235	-16.05	1.35		
849	338 Shell-Thick	INVSLE	-0.0802	-0.7193	-5.41	4.10		
849	338 Shell-Thick	INVSLE	-0.1418	-0.4251	-5.10	4.10		
849	338 Shell-Thick	INVSLE	1.1142	-0.0431	-5.10	3.35		
849	338 Shell-Thick	INVSLE	1.2153	-0.4844	-5.41	3.35		
849	338 Shell-Thick	INVSLE	-0.2408	-0.9131	-11.26	1.01		
849	338 Shell-Thick	INVSLE	-0.2996	-0.6015	-10.40	1.01		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 171 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

849	338	Shell-Thick	INVSLE	0.3191	-0.3660	-10.40	0.74	
849	338	Shell-Thick	INVSLE	0.3791	-0.5571	-11.26	0.74	
849	338	Shell-Thick	INVSLE	0.1060	-0.9710	-7.31	7.68	
849	338	Shell-Thick	INVSLE	0.0412	-0.2206	-6.89	7.68	
849	338	Shell-Thick	INVSLE	2.0363	0.3313	-6.89	6.38	
849	338	Shell-Thick	INVSLE	2.1849	-0.6414	-7.31	6.38	
849	338	Shell-Thick	INVSLE	-0.3251	-1.2618	-18.04	1.37	
849	338	Shell-Thick	INVSLE	-0.4045	-0.8121	-16.55	1.37	
849	338	Shell-Thick	INVSLE	0.4308	-0.4941	-16.55	1.00	
849	338	Shell-Thick	INVSLE	0.5117	-0.7630	-18.04	1.00	
850	339	Shell-Thick	INVSLE	0.8577	-0.5127	-6.13	3.41	
850	339	Shell-Thick	INVSLE	0.6253	-0.1908	-5.83	3.41	
850	339	Shell-Thick	INVSLE	2.0348	0.2267	-5.83	2.63	
850	339	Shell-Thick	INVSLE	2.3218	-0.1974	-6.13	2.63	
850	339	Shell-Thick	INVSLE	0.1793	-0.5787	-12.64	0.75	
850	339	Shell-Thick	INVSLE	0.0527	-0.4309	-11.76	0.75	
850	339	Shell-Thick	INVSLE	0.7535	-0.1740	-11.76	0.49	
850	339	Shell-Thick	INVSLE	0.8862	-0.2596	-12.64	0.49	
850	339	Shell-Thick	INVSLE	1.6443	-0.6554	-8.27	6.48	
850	339	Shell-Thick	INVSLE	1.2894	0.0877	-7.87	6.48	
850	339	Shell-Thick	INVSLE	3.5207	0.6913	-7.87	5.12	
850	339	Shell-Thick	INVSLE	3.9866	-0.1253	-8.27	5.12	
850	339	Shell-Thick	INVSLE	0.2420	-0.7912	-20.19	1.02	
850	339	Shell-Thick	INVSLE	0.0712	-0.5818	-18.64	1.02	
850	339	Shell-Thick	INVSLE	1.0172	-0.2348	-18.64	0.66	
850	339	Shell-Thick	INVSLE	1.1964	-0.3505	-20.19	0.66	
851	340	Shell-Thick	INVSLE	1.9685	-0.2112	-6.92	2.70	
851	340	Shell-Thick	INVSLE	1.5701	0.0768	-6.65	2.70	
851	340	Shell-Thick	INVSLE	3.1511	0.5555	-6.65	1.92	
851	340	Shell-Thick	INVSLE	3.6170	0.2227	-6.92	1.92	
851	340	Shell-Thick	INVSLE	0.6976	-0.2846	-14.15	0.50	
851	340	Shell-Thick	INVSLE	0.5062	-0.2362	-13.27	0.50	
851	340	Shell-Thick	INVSLE	1.2996	0.0488	-13.27	0.27	
851	340	Shell-Thick	INVSLE	1.5016	-0.0064	-14.15	0.27	
851	340	Shell-Thick	INVSLE	3.4422	-0.1261	-9.34	5.24	
851	340	Shell-Thick	INVSLE	2.8038	0.4398	-8.97	5.24	
851	340	Shell-Thick	INVSLE	5.2981	1.1430	-8.97	3.84	
851	340	Shell-Thick	INVSLE	6.0701	0.4883	-9.34	3.84	
851	340	Shell-Thick	INVSLE	0.9418	-0.3842	-22.54	0.68	
851	340	Shell-Thick	INVSLE	0.6833	-0.3189	-20.95	0.68	
851	340	Shell-Thick	INVSLE	1.7545	0.0659	-20.95	0.36	
851	340	Shell-Thick	INVSLE	2.0271	-0.0087	-22.54	0.36	
852	341	Shell-Thick	INVSLE	8.8157	1.5952	19.82	-6.161E-02	
852	341	Shell-Thick	INVSLE	7.5189	1.6717	18.86	-6.161E-02	
852	341	Shell-Thick	INVSLE	5.3071	1.1366	18.86	0.66	
852	341	Shell-Thick	INVSLE	6.4718	1.1482	19.82	0.66	
852	341	Shell-Thick	INVSLE	4.3728	0.8159	10.34	-0.18	
852	341	Shell-Thick	INVSLE	3.8585	0.8304	10.15	-0.18	
852	341	Shell-Thick	INVSLE	2.6697	0.5450	10.15	0.10	
852	341	Shell-Thick	INVSLE	3.1486	0.5541	10.34	0.10	
852	341	Shell-Thick	INVSLE	13.9678	2.4990	30.81	-8.318E-02	
852	341	Shell-Thick	INVSLE	11.7637	2.6473	28.97	-8.318E-02	
852	341	Shell-Thick	INVSLE	8.3655	1.8227	28.97	1.31	
852	341	Shell-Thick	INVSLE	10.3255	1.8371	30.81	1.31	
852	341	Shell-Thick	INVSLE	5.9032	1.1015	13.95	-0.31	
852	341	Shell-Thick	INVSLE	5.2089	1.1210	13.70	-0.31	
852	341	Shell-Thick	INVSLE	3.6041	0.7358	13.70	0.14	
852	341	Shell-Thick	INVSLE	4.2507	0.7481	13.95	0.14	
853	342	Shell-Thick	INVSLE	6.7381	1.1227	17.67	0.57	
853	342	Shell-Thick	INVSLE	5.7197	1.2980	16.61	0.57	
853	342	Shell-Thick	INVSLE	3.7554	0.7908	16.61	1.50	
853	342	Shell-Thick	INVSLE	4.6654	0.6877	17.67	1.50	
853	342	Shell-Thick	INVSLE	3.2071	0.5490	9.11	8.232E-02	
853	342	Shell-Thick	INVSLE	2.7902	0.5860	8.81	8.232E-02	
853	342	Shell-Thick	INVSLE	1.7478	0.2925	8.81	0.34	
853	342	Shell-Thick	INVSLE	2.1388	0.2727	9.11	0.34	
853	342	Shell-Thick	INVSLE	10.8328	1.7880	27.59	1.14	
853	342	Shell-Thick	INVSLE	9.1169	2.1236	25.65	1.14	
853	342	Shell-Thick	INVSLE	6.0835	1.3687	25.65	2.84	
853	342	Shell-Thick	INVSLE	7.5953	1.1689	27.59	2.84	
853	342	Shell-Thick	INVSLE	4.3296	0.7411	12.30	0.11	
853	342	Shell-Thick	INVSLE	3.7667	0.7911	11.90	0.11	
853	342	Shell-Thick	INVSLE	2.3595	0.3949	11.90	0.46	
853	342	Shell-Thick	INVSLE	2.8873	0.3682	12.30	0.46	
854	343	Shell-Thick	INVSLE	5.0038	0.6809	15.73	1.42	
854	343	Shell-Thick	INVSLE	4.2509	0.9644	14.62	1.42	
854	343	Shell-Thick	INVSLE	2.5057	0.4827	14.62	2.39	
854	343	Shell-Thick	INVSLE	3.1753	0.2545	15.73	2.39	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 172 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

854	343	Shell-Thick	INVSLE	2.2709	0.2815	8.01	0.32	
854	343	Shell-Thick	INVSLE	1.9554	0.3517	7.65	0.32	
854	343	Shell-Thick	INVSLE	1.0415	0.0604	7.65	0.64	
854	343	Shell-Thick	INVSLE	1.3406	0.0010	8.01	0.64	
854	343	Shell-Thick	INVSLE	8.1730	1.1441	24.67	2.69	
854	343	Shell-Thick	INVSLE	6.9128	1.6749	22.70	2.69	
854	343	Shell-Thick	INVSLE	4.2037	0.9723	22.70	4.41	
854	343	Shell-Thick	INVSLE	5.3029	0.5484	24.67	4.41	
854	343	Shell-Thick	INVSLE	3.0657	0.3800	10.82	0.43	
854	343	Shell-Thick	INVSLE	2.6398	0.4747	10.32	0.43	
854	343	Shell-Thick	INVSLE	1.4060	0.0816	10.32	0.87	
854	343	Shell-Thick	INVSLE	1.8098	0.0014	10.82	0.87	
855	344	Shell-Thick	INVSLE	3.5626	0.2612	13.98	2.31	
855	344	Shell-Thick	INVSLE	3.0381	0.6599	12.85	2.31	
855	344	Shell-Thick	INVSLE	1.4911	0.2441	12.85	3.29	
855	344	Shell-Thick	INVSLE	1.9497	-0.1110	13.98	3.29	
855	344	Shell-Thick	INVSLE	1.5222	0.0192	7.04	0.62	
855	344	Shell-Thick	INVSLE	1.2999	0.1302	6.63	0.62	
855	344	Shell-Thick	INVSLE	0.4997	-0.1353	6.63	0.98	
855	344	Shell-Thick	INVSLE	0.7124	-0.2400	7.04	0.98	
855	344	Shell-Thick	INVSLE	5.9287	0.5418	22.02	4.27	
855	344	Shell-Thick	INVSLE	5.0538	1.2742	20.07	4.27	
855	344	Shell-Thick	INVSLE	2.6407	0.6841	20.07	5.98	
855	344	Shell-Thick	INVSLE	3.3845	0.0387	22.02	5.98	
855	344	Shell-Thick	INVSLE	2.0550	0.0260	9.50	0.84	
855	344	Shell-Thick	INVSLE	1.7548	0.1758	8.95	0.84	
855	344	Shell-Thick	INVSLE	0.6746	-0.1827	8.95	1.32	
855	344	Shell-Thick	INVSLE	0.9617	-0.3241	9.50	1.32	
856	345	Shell-Thick	INVSLE	2.3502	-0.0947	12.41	3.23	
856	345	Shell-Thick	INVSLE	2.0476	0.4192	11.30	3.23	
856	345	Shell-Thick	INVSLE	0.6749	0.0477	11.30	4.19	
856	345	Shell-Thick	INVSLE	0.9305	-0.4354	12.41	4.19	
856	345	Shell-Thick	INVSLE	0.9195	-0.2158	6.18	0.96	
856	345	Shell-Thick	INVSLE	0.7883	-0.0604	5.75	0.96	
856	345	Shell-Thick	INVSLE	0.0870	-0.3031	5.75	1.34	
856	345	Shell-Thick	INVSLE	0.2154	-0.4569	6.18	1.34	
856	345	Shell-Thick	INVSLE	4.0092	0.0457	19.63	5.85	
856	345	Shell-Thick	INVSLE	3.5080	0.9755	17.74	5.85	
856	345	Shell-Thick	INVSLE	1.3566	0.4545	17.74	7.50	
856	345	Shell-Thick	INVSLE	1.7598	-0.4105	19.63	7.50	
856	345	Shell-Thick	INVSLE	1.2413	-0.2914	8.34	1.30	
856	345	Shell-Thick	INVSLE	1.0642	-0.0815	7.77	1.30	
856	345	Shell-Thick	INVSLE	0.1175	-0.4091	7.77	1.80	
856	345	Shell-Thick	INVSLE	0.2908	-0.6168	8.34	1.80	
857	346	Shell-Thick	INVSLE	1.3503	-0.4110	10.99	4.13	
857	346	Shell-Thick	INVSLE	1.2253	0.2174	9.93	4.13	
857	346	Shell-Thick	INVSLE	0.0104	-0.0906	9.93	5.05	
857	346	Shell-Thick	INVSLE	0.1009	-0.6394	10.99	5.05	
857	346	Shell-Thick	INVSLE	0.4404	-0.4286	5.42	1.32	
857	346	Shell-Thick	INVSLE	0.3850	-0.2267	4.99	1.32	
857	346	Shell-Thick	INVSLE	-0.2289	-0.4362	4.99	1.69	
857	346	Shell-Thick	INVSLE	-0.1718	-0.6964	5.42	1.69	
857	346	Shell-Thick	INVSLE	2.4055	-0.3906	17.45	7.38	
857	346	Shell-Thick	INVSLE	2.1997	0.7324	15.66	7.38	
857	346	Shell-Thick	INVSLE	0.2879	0.3101	15.66	8.95	
857	346	Shell-Thick	INVSLE	0.4171	-0.7625	17.45	8.95	
857	346	Shell-Thick	INVSLE	0.5945	-0.5786	7.32	1.78	
857	346	Shell-Thick	INVSLE	0.5198	-0.3061	6.74	1.78	
857	346	Shell-Thick	INVSLE	-0.3090	-0.5889	6.74	2.29	
857	346	Shell-Thick	INVSLE	-0.2320	-0.9487	7.32	2.29	
858	347	Shell-Thick	INVSLE	0.5086	-0.6090	9.72	5.00	
858	347	Shell-Thick	INVSLE	0.5617	0.0711	8.72	5.00	
858	347	Shell-Thick	INVSLE	-0.4651	-0.1926	8.72	5.87	
858	347	Shell-Thick	INVSLE	-0.4775	-0.7953	9.72	5.87	
858	347	Shell-Thick	INVSLE	0.0539	-0.6663	4.74	1.68	
858	347	Shell-Thick	INVSLE	0.0725	-0.3612	4.33	1.68	
858	347	Shell-Thick	INVSLE	-0.5136	-0.5432	4.33	2.04	
858	347	Shell-Thick	INVSLE	-0.5876	-0.9165	4.74	2.04	
858	347	Shell-Thick	INVSLE	1.0358	-0.7328	15.48	8.85	
858	347	Shell-Thick	INVSLE	1.1290	0.5724	13.81	8.85	
858	347	Shell-Thick	INVSLE	-0.5699	0.2138	13.81	10.31	
858	347	Shell-Thick	INVSLE	-0.6446	-1.0571	15.48	10.31	
858	347	Shell-Thick	INVSLE	0.0728	-0.9081	6.41	2.27	
858	347	Shell-Thick	INVSLE	0.0979	-0.4876	5.85	2.27	
858	347	Shell-Thick	INVSLE	-0.7006	-0.7333	5.85	2.75	
858	347	Shell-Thick	INVSLE	-0.8098	-1.2555	6.41	2.75	
859	348	Shell-Thick	INVSLE	-0.1764	-0.7637	8.56	5.82	
859	348	Shell-Thick	INVSLE	0.0110	-0.0405	7.64	5.82	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 173 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

859	348	Shell-Thick	INVSLE	-0.6442	-0.2529	7.64	6.63	
859	348	Shell-Thick	INVSLE	-0.7116	-0.9213	8.56	6.63	
859	348	Shell-Thick	INVSLE	-0.2508	-0.8816	4.15	2.03	
859	348	Shell-Thick	INVSLE	-0.1747	-0.4713	3.75	2.03	
859	348	Shell-Thick	INVSLE	-0.9367	-0.6228	3.75	2.37	
859	348	Shell-Thick	INVSLE	-1.1368	-1.0859	4.15	2.37	
859	348	Shell-Thick	INVSLE	-0.0902	-1.0182	13.69	10.22	
859	348	Shell-Thick	INVSLE	0.2264	0.4591	12.14	10.22	
859	348	Shell-Thick	INVSLE	-0.8697	0.1762	12.14	11.57	
859	348	Shell-Thick	INVSLE	-0.9606	-1.2437	13.69	11.57	
859	348	Shell-Thick	INVSLE	-0.3386	-1.2078	5.60	2.73	
859	348	Shell-Thick	INVSLE	-0.2358	-0.6363	5.07	2.73	
859	348	Shell-Thick	INVSLE	-1.3085	-0.8408	5.07	3.20	
859	348	Shell-Thick	INVSLE	-1.6299	-1.4907	5.60	3.20	
860	349	Shell-Thick	INVSLE	-0.4968	-0.8898	7.51	6.59	
860	349	Shell-Thick	INVSLE	-0.3648	-0.1114	6.67	6.59	
860	349	Shell-Thick	INVSLE	-0.7740	-0.2855	6.67	7.33	
860	349	Shell-Thick	INVSLE	-0.8949	-1.0239	7.51	7.33	
860	349	Shell-Thick	INVSLE	-0.7510	-1.0482	3.61	2.36	
860	349	Shell-Thick	INVSLE	-0.4271	-0.5554	3.25	2.36	
860	349	Shell-Thick	INVSLE	-1.2604	-0.6818	3.25	2.67	
860	349	Shell-Thick	INVSLE	-1.5880	-1.2203	3.61	2.67	
860	349	Shell-Thick	INVSLE	-0.6707	-1.2013	12.04	11.50	
860	349	Shell-Thick	INVSLE	-0.4924	0.4034	10.64	11.50	
860	349	Shell-Thick	INVSLE	-1.0449	0.1739	10.64	12.73	
860	349	Shell-Thick	INVSLE	-1.2081	-1.3822	12.04	12.73	
860	349	Shell-Thick	INVSLE	-1.0519	-1.4389	4.87	3.18	
860	349	Shell-Thick	INVSLE	-0.5859	-0.7498	4.38	3.18	
860	349	Shell-Thick	INVSLE	-1.8245	-0.9204	4.38	3.61	
860	349	Shell-Thick	INVSLE	-2.3917	-1.6769	4.87	3.61	
861	350	Shell-Thick	INVSLE	-0.6894	-0.9932	6.55	7.29	
861	350	Shell-Thick	INVSLE	-0.5159	-0.1558	5.79	7.29	
861	350	Shell-Thick	INVSLE	-0.8706	-0.2917	5.79	7.96	
861	350	Shell-Thick	INVSLE	-1.0320	-1.1034	6.55	7.96	
861	350	Shell-Thick	INVSLE	-1.2123	-1.1809	3.13	2.66	
861	350	Shell-Thick	INVSLE	-0.7903	-0.6196	2.79	2.66	
861	350	Shell-Thick	INVSLE	-1.5178	-0.7216	2.79	2.95	
861	350	Shell-Thick	INVSLE	-1.9387	-1.3179	3.13	2.95	
861	350	Shell-Thick	INVSLE	-0.9306	-1.3409	10.53	12.66	
861	350	Shell-Thick	INVSLE	-0.6965	0.3821	9.26	12.66	
861	350	Shell-Thick	INVSLE	-1.1754	0.2069	9.26	13.77	
861	350	Shell-Thick	INVSLE	-1.3932	-1.4897	10.53	13.77	
861	350	Shell-Thick	INVSLE	-1.8187	-1.6224	4.22	3.60	
861	350	Shell-Thick	INVSLE	-1.1085	-0.8365	3.77	3.60	
861	350	Shell-Thick	INVSLE	-2.2683	-0.9741	3.77	3.99	
861	350	Shell-Thick	INVSLE	-2.9901	-1.8113	4.22	3.99	
862	351	Shell-Thick	INVSLE	-0.8450	-1.0745	5.67	7.93	
862	351	Shell-Thick	INVSLE	-0.6316	-0.1742	4.99	7.93	
862	351	Shell-Thick	INVSLE	-0.9371	-0.2802	4.99	8.53	
862	351	Shell-Thick	INVSLE	-1.1377	-1.1651	5.67	8.53	
862	351	Shell-Thick	INVSLE	-1.5973	-1.2786	2.69	2.95	
862	351	Shell-Thick	INVSLE	-1.0758	-0.6653	2.39	2.95	
862	351	Shell-Thick	INVSLE	-1.7066	-0.7471	2.39	3.21	
862	351	Shell-Thick	INVSLE	-2.2219	-1.3892	2.69	3.21	
862	351	Shell-Thick	INVSLE	-1.1408	-1.4506	9.13	13.72	
862	351	Shell-Thick	INVSLE	-0.8526	0.3953	8.00	13.72	
862	351	Shell-Thick	INVSLE	-1.2651	0.2612	8.00	14.70	
862	351	Shell-Thick	INVSLE	-1.5358	-1.5729	9.13	14.70	
862	351	Shell-Thick	INVSLE	-2.4696	-1.7568	3.63	3.98	
862	351	Shell-Thick	INVSLE	-1.5908	-0.8982	3.23	3.98	
862	351	Shell-Thick	INVSLE	-2.5989	-1.0086	3.23	4.33	
862	351	Shell-Thick	INVSLE	-3.4793	-1.9090	3.63	4.33	
863	352	Shell-Thick	INVSLE	-0.9661	-1.1383	4.85	8.50	
863	352	Shell-Thick	INVSLE	-0.7245	-0.1756	4.25	8.50	
863	352	Shell-Thick	INVSLE	-0.9847	-0.2553	4.25	9.02	
863	352	Shell-Thick	INVSLE	-1.2138	-1.2108	4.85	9.02	
863	352	Shell-Thick	INVSLE	-1.9025	-1.3511	2.29	3.20	
863	352	Shell-Thick	INVSLE	-1.3126	-0.6971	2.03	3.20	
863	352	Shell-Thick	INVSLE	-1.8528	-0.7610	2.03	3.43	
863	352	Shell-Thick	INVSLE	-2.4346	-1.4364	2.29	3.43	
863	352	Shell-Thick	INVSLE	-1.3042	-1.5367	7.82	14.65	
863	352	Shell-Thick	INVSLE	-0.9780	0.4290	6.84	14.65	
863	352	Shell-Thick	INVSLE	-1.3293	0.3311	6.84	15.51	
863	352	Shell-Thick	INVSLE	-1.6386	-1.6346	7.82	15.51	
863	352	Shell-Thick	INVSLE	-2.9883	-1.8559	3.09	4.32	
863	352	Shell-Thick	INVSLE	-1.9946	-0.9411	2.73	4.32	
863	352	Shell-Thick	INVSLE	-2.8594	-1.0274	2.73	4.63	
863	352	Shell-Thick	INVSLE	-3.8502	-1.9730	3.09	4.63	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 174 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

864	353	Shell-Thick	INVSLE	-1.0642	-1.1867	4.08	9.00	
864	353	Shell-Thick	INVSLE	-0.7955	-0.1638	3.57	9.00	
864	353	Shell-Thick	INVSLE	-1.0140	-0.2226	3.57	9.45	
864	353	Shell-Thick	INVSLE	-1.2706	-1.2442	4.08	9.45	
864	353	Shell-Thick	INVSLE	-2.1557	-1.4010	1.92	3.42	
864	353	Shell-Thick	INVSLE	-1.4968	-0.7174	1.69	3.42	
864	353	Shell-Thick	INVSLE	-1.9526	-0.7667	1.69	3.62	
864	353	Shell-Thick	INVSLE	-2.6014	-1.4668	1.92	3.62	
864	353	Shell-Thick	INVSLE	-1.4367	-1.6020	6.60	15.48	
864	353	Shell-Thick	INVSLE	-1.0739	0.4782	5.75	15.48	
864	353	Shell-Thick	INVSLE	-1.3688	0.4083	5.75	16.21	
864	353	Shell-Thick	INVSLE	-1.7154	-1.6797	6.60	16.21	
864	353	Shell-Thick	INVSLE	-3.4214	-1.9235	2.59	4.62	
864	353	Shell-Thick	INVSLE	-2.3100	-0.9685	2.28	4.62	
864	353	Shell-Thick	INVSLE	-3.0410	-1.0350	2.28	4.89	
864	353	Shell-Thick	INVSLE	-4.1446	-2.0135	2.59	4.89	
865	354	Shell-Thick	INVSLE	-1.1400	-1.2231	3.36	9.43	
865	354	Shell-Thick	INVSLE	-0.8534	-0.1445	2.93	9.43	
865	354	Shell-Thick	INVSLE	-1.0327	-0.1866	2.93	9.81	
865	354	Shell-Thick	INVSLE	-1.3086	-1.2674	3.36	9.81	
865	354	Shell-Thick	INVSLE	-2.3534	-1.4347	1.57	3.61	
865	354	Shell-Thick	INVSLE	-1.6500	-0.7295	1.38	3.61	
865	354	Shell-Thick	INVSLE	-2.0255	-0.7666	1.38	3.78	
865	354	Shell-Thick	INVSLE	-2.7190	-1.4836	1.57	3.78	
865	354	Shell-Thick	INVSLE	-1.5390	-1.6512	5.43	16.18	
865	354	Shell-Thick	INVSLE	-1.1520	0.5339	4.73	16.18	
865	354	Shell-Thick	INVSLE	-1.3941	0.4859	4.73	16.80	
865	354	Shell-Thick	INVSLE	-1.7666	-1.7110	5.43	16.80	
865	354	Shell-Thick	INVSLE	-3.7605	-1.9686	2.12	4.88	
865	354	Shell-Thick	INVSLE	-2.5739	-0.9849	1.87	4.88	
865	354	Shell-Thick	INVSLE	-3.1768	-1.0350	1.87	5.10	
865	354	Shell-Thick	INVSLE	-4.3547	-2.0353	2.12	5.10	
866	355	Shell-Thick	INVSLE	-1.2015	-1.2497	2.67	9.79	
866	355	Shell-Thick	INVSLE	-0.8979	-0.1220	2.33	9.79	
866	355	Shell-Thick	INVSLE	-1.0403	-0.1510	2.33	10.10	
866	355	Shell-Thick	INVSLE	-1.3346	-1.2830	2.67	10.10	
866	355	Shell-Thick	INVSLE	-2.5158	-1.4560	1.25	3.78	
866	355	Shell-Thick	INVSLE	-1.7679	-0.7360	1.09	3.78	
866	355	Shell-Thick	INVSLE	-2.0671	-0.7631	1.09	3.91	
866	355	Shell-Thick	INVSLE	-2.8055	-1.4915	1.25	3.91	
866	355	Shell-Thick	INVSLE	-1.6220	-1.6871	4.33	16.77	
866	355	Shell-Thick	INVSLE	-1.2121	0.5899	3.76	16.77	
866	355	Shell-Thick	INVSLE	-1.4044	0.5587	3.76	17.27	
866	355	Shell-Thick	INVSLE	-1.8017	-1.7321	4.33	17.27	
866	355	Shell-Thick	INVSLE	-4.0400	-1.9966	1.68	5.10	
866	355	Shell-Thick	INVSLE	-2.7768	-0.9936	1.48	5.10	
866	355	Shell-Thick	INVSLE	-3.2578	-1.0302	1.48	5.28	
866	355	Shell-Thick	INVSLE	-4.5113	-2.0449	1.68	5.28	
867	356	Shell-Thick	INVSLE	-1.2483	-1.2688	2.01	10.09	
867	356	Shell-Thick	INVSLE	-0.9350	-0.1001	1.75	10.09	
867	356	Shell-Thick	INVSLE	-1.0421	-0.1194	1.75	10.31	
867	356	Shell-Thick	INVSLE	-1.3481	-1.2927	2.01	10.31	
867	356	Shell-Thick	INVSLE	-2.6391	-1.4690	0.94	3.91	
867	356	Shell-Thick	INVSLE	-1.8663	-0.7390	0.82	3.91	
867	356	Shell-Thick	INVSLE	-2.0918	-0.7580	0.82	4.01	
867	356	Shell-Thick	INVSLE	-2.8568	-1.4936	0.94	4.01	
867	356	Shell-Thick	INVSLE	-1.6852	-1.7011	3.26	17.25	
867	356	Shell-Thick	INVSLE	-1.2623	0.6407	2.83	17.25	
867	356	Shell-Thick	INVSLE	-1.4068	0.6211	2.83	17.63	
867	356	Shell-Thick	INVSLE	-1.8199	-1.7265	3.26	17.63	
867	356	Shell-Thick	INVSLE	-4.2519	-2.0131	1.26	5.28	
867	356	Shell-Thick	INVSLE	-2.9462	-0.9977	1.11	5.28	
867	356	Shell-Thick	INVSLE	-3.3090	-1.0232	1.11	5.41	
867	356	Shell-Thick	INVSLE	-4.6065	-2.0465	1.26	5.41	
868	357	Shell-Thick	INVSLE	-1.2860	-1.2822	1.37	10.31	
868	357	Shell-Thick	INVSLE	-0.9637	-0.0822	1.19	10.31	
868	357	Shell-Thick	INVSLE	-1.0368	-0.0938	1.19	10.47	
868	357	Shell-Thick	INVSLE	-1.3537	-1.2979	1.37	10.47	
868	357	Shell-Thick	INVSLE	-2.7378	-1.4767	0.64	4.01	
868	357	Shell-Thick	INVSLE	-1.9402	-0.7404	0.56	4.01	
868	357	Shell-Thick	INVSLE	-2.0943	-0.7525	0.56	4.08	
868	357	Shell-Thick	INVSLE	-2.8860	-1.4924	0.64	4.08	
868	357	Shell-Thick	INVSLE	-1.7360	-1.7022	2.23	17.61	
868	357	Shell-Thick	INVSLE	-1.3010	0.6811	1.93	17.61	
868	357	Shell-Thick	INVSLE	-1.3997	0.6701	1.93	17.87	
868	357	Shell-Thick	INVSLE	-1.8276	-1.7180	2.23	17.87	
868	357	Shell-Thick	INVSLE	-4.4213	-2.0227	0.86	5.41	
868	357	Shell-Thick	INVSLE	-3.0725	-0.9995	0.75	5.41	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 175 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

868	357	Shell-Thick	INVSLU	-3.3207	-1.0159	0.75	5.50	
868	357	Shell-Thick	INVSLU	-4.6628	-2.0439	0.86	5.50	
869	358	Shell-Thick	INVSLE	-1.3134	-1.2911	0.75	10.46	
869	358	Shell-Thick	INVSLE	-0.9882	-0.0703	0.65	10.46	
869	358	Shell-Thick	INVSLE	-1.0281	-0.0763	0.65	10.55	
869	358	Shell-Thick	INVSLE	-1.3502	-1.2995	0.75	10.55	
869	358	Shell-Thick	INVSLE	-2.8070	-1.4815	0.35	4.08	
869	358	Shell-Thick	INVSLE	-2.0013	-0.7415	0.30	4.08	
869	358	Shell-Thick	INVSLE	-2.0854	-0.7478	0.30	4.11	
869	358	Shell-Thick	INVSLE	-2.8877	-1.4898	0.35	4.11	
869	358	Shell-Thick	INVSLU	-1.7730	-1.7022	1.21	17.86	
869	358	Shell-Thick	INVSLU	-1.3341	0.7079	1.05	17.86	
869	358	Shell-Thick	INVSLU	-1.3879	0.7025	1.05	18.01	
869	358	Shell-Thick	INVSLU	-1.8228	-1.7104	1.21	18.01	
869	358	Shell-Thick	INVSLU	-4.5391	-2.0285	0.47	5.50	
869	358	Shell-Thick	INVSLU	-3.1760	-1.0010	0.41	5.50	
869	358	Shell-Thick	INVSLU	-3.3115	-1.0096	0.41	5.55	
869	358	Shell-Thick	INVSLU	-4.6706	-2.0397	0.47	5.55	
870	359	Shell-Thick	INVSLE	-1.3342	-1.2967	0.13	10.55	
870	359	Shell-Thick	INVSLE	-1.0069	-0.0665	0.11	10.55	
870	359	Shell-Thick	INVSLE	-1.0139	-0.0675	0.11	10.56	
870	359	Shell-Thick	INVSLE	-1.3407	-1.2982	0.13	10.56	
870	359	Shell-Thick	INVSLE	-2.8573	-1.4851	6.100E-02	4.11	
870	359	Shell-Thick	INVSLE	-2.0436	-0.7432	5.327E-02	4.11	
870	359	Shell-Thick	INVSLE	-2.0585	-0.7443	5.327E-02	4.12	
870	359	Shell-Thick	INVSLE	-2.8714	-1.4868	6.100E-02	4.12	
870	359	Shell-Thick	INVSLU	-1.8012	-1.7037	0.21	18.00	
870	359	Shell-Thick	INVSLU	-1.3593	0.7183	0.18	18.00	
870	359	Shell-Thick	INVSLU	-1.3688	0.7173	0.18	18.03	
870	359	Shell-Thick	INVSLU	-1.8099	-1.7054	0.21	18.03	
870	359	Shell-Thick	INVSLU	-4.6236	-2.0332	8.235E-02	5.55	
870	359	Shell-Thick	INVSLU	-3.2459	-1.0034	7.192E-02	5.55	
870	359	Shell-Thick	INVSLU	-3.2699	-1.0048	7.192E-02	5.56	
870	359	Shell-Thick	INVSLU	-4.6464	-2.0354	8.235E-02	5.56	
871	360	Shell-Thick	INVSLE	-1.3467	-1.2993	-0.22	10.56	
871	360	Shell-Thick	INVSLE	-1.0226	-0.0715	-0.20	10.56	
871	360	Shell-Thick	INVSLE	-0.9970	-0.0678	-0.20	10.51	
871	360	Shell-Thick	INVSLE	-1.3227	-1.2940	-0.22	10.51	
871	360	Shell-Thick	INVSLE	-2.8823	-1.4884	-0.48	4.12	
871	360	Shell-Thick	INVSLE	-2.0760	-0.7462	-0.42	4.12	
871	360	Shell-Thick	INVSLE	-2.0218	-0.7421	-0.42	4.10	
871	360	Shell-Thick	INVSLE	-2.8298	-1.4835	-0.48	4.10	
871	360	Shell-Thick	INVSLU	-1.8180	-1.7078	-0.30	18.03	
871	360	Shell-Thick	INVSLU	-1.3806	0.7108	-0.27	18.03	
871	360	Shell-Thick	INVSLU	-1.3459	0.7141	-0.27	17.94	
871	360	Shell-Thick	INVSLU	-1.7857	-1.7033	-0.30	17.94	
871	360	Shell-Thick	INVSLU	-4.6630	-2.0377	-0.79	5.56	
871	360	Shell-Thick	INVSLU	-3.2975	-1.0073	-0.68	5.56	
871	360	Shell-Thick	INVSLU	-3.2103	-1.0018	-0.68	5.53	
871	360	Shell-Thick	INVSLU	-4.5775	-2.0312	-0.79	5.53	
872	361	Shell-Thick	INVSLE	-1.3532	-1.2989	-0.51	10.51	
872	361	Shell-Thick	INVSLE	-1.0331	-0.0855	-0.45	10.51	
872	361	Shell-Thick	INVSLE	-0.9744	-0.0765	-0.45	10.38	
872	361	Shell-Thick	INVSLE	-1.2986	-1.2866	-0.51	10.38	
872	361	Shell-Thick	INVSLE	-2.8896	-1.4915	-1.11	4.10	
872	361	Shell-Thick	INVSLE	-2.0907	-0.7504	-0.96	4.10	
872	361	Shell-Thick	INVSLE	-1.9669	-0.7408	-0.96	4.04	
872	361	Shell-Thick	INVSLE	-2.7701	-1.4796	-1.11	4.04	
872	361	Shell-Thick	INVSLU	-1.8268	-1.7149	-0.69	17.94	
872	361	Shell-Thick	INVSLU	-1.3946	0.6855	-0.61	17.94	
872	361	Shell-Thick	INVSLU	-1.3155	0.6938	-0.61	17.74	
872	361	Shell-Thick	INVSLU	-1.7531	-1.7034	-0.69	17.74	
872	361	Shell-Thick	INVSLU	-4.6711	-2.0425	-1.79	5.53	
872	361	Shell-Thick	INVSLU	-3.3171	-1.0130	-1.55	5.53	
872	361	Shell-Thick	INVSLU	-3.1177	-1.0000	-1.55	5.46	
872	361	Shell-Thick	INVSLU	-4.4764	-2.0264	-1.79	5.46	
873	362	Shell-Thick	INVSLE	-1.3508	-1.2954	-0.81	10.39	
873	362	Shell-Thick	INVSLE	-1.0404	-0.1080	-0.71	10.39	
873	362	Shell-Thick	INVSLE	-0.9481	-0.0922	-0.71	10.19	
873	362	Shell-Thick	INVSLE	-1.2647	-1.2752	-0.81	10.19	
873	362	Shell-Thick	INVSLE	-2.8702	-1.4937	-1.74	4.04	
873	362	Shell-Thick	INVSLE	-2.0945	-0.7556	-1.51	4.04	
873	362	Shell-Thick	INVSLE	-1.9001	-0.7396	-1.51	3.95	
873	362	Shell-Thick	INVSLE	-2.6820	-1.4735	-1.74	3.95	
873	362	Shell-Thick	INVSLU	-1.8236	-1.7236	-1.09	17.75	
873	362	Shell-Thick	INVSLU	-1.4045	0.6430	-0.95	17.75	
873	362	Shell-Thick	INVSLU	-1.2799	0.6586	-0.95	17.42	
873	362	Shell-Thick	INVSLU	-1.7074	-1.7035	-1.09	17.42	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 176 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

873	362	Shell-Thick	INVSLU	-4.6320	-2.0462	-2.82	5.46	
873	362	Shell-Thick	INVSLU	-3.3170	-1.0201	-2.44	5.46	
873	362	Shell-Thick	INVSLU	-3.0041	-0.9985	-2.44	5.34	
873	362	Shell-Thick	INVSLU	-4.3255	-2.0190	-2.82	5.34	
874	363	Shell-Thick	INVSLE	-1.3413	-1.2877	-1.11	10.20	
874	363	Shell-Thick	INVSLE	-1.0410	-0.1373	-0.98	10.20	
874	363	Shell-Thick	INVSLE	-0.9140	-0.1128	-0.98	9.93	
874	363	Shell-Thick	INVSLE	-1.2225	-1.2586	-1.11	9.93	
874	363	Shell-Thick	INVSLE	-2.8299	-1.4934	-2.39	3.96	
874	363	Shell-Thick	INVSLE	-2.0774	-0.7609	-2.08	3.96	
874	363	Shell-Thick	INVSLE	-1.8103	-0.7374	-2.08	3.84	
874	363	Shell-Thick	INVSLE	-2.5711	-1.4632	-2.39	3.84	
874	363	Shell-Thick	INVSLU	-1.8107	-1.7319	-1.50	17.44	
874	363	Shell-Thick	INVSLU	-1.4053	0.5859	-1.32	17.44	
874	363	Shell-Thick	INVSLU	-1.2339	0.6115	-1.32	16.99	
874	363	Shell-Thick	INVSLU	-1.6504	-1.6992	-1.50	16.99	
874	363	Shell-Thick	INVSLU	-4.5562	-2.0470	-3.87	5.34	
874	363	Shell-Thick	INVSLU	-3.2792	-1.0273	-3.36	5.34	
874	363	Shell-Thick	INVSLU	-2.8496	-0.9955	-3.36	5.18	
874	363	Shell-Thick	INVSLU	-4.1349	-2.0061	-3.87	5.18	
875	364	Shell-Thick	INVSLE	-1.3200	-1.2748	-1.43	9.94	
875	364	Shell-Thick	INVSLE	-1.0365	-0.1716	-1.26	9.94	
875	364	Shell-Thick	INVSLE	-0.8734	-0.1354	-1.26	9.60	
875	364	Shell-Thick	INVSLE	-1.1666	-1.2354	-1.43	9.60	
875	364	Shell-Thick	INVSLE	-2.7563	-1.4884	-3.06	3.84	
875	364	Shell-Thick	INVSLE	-2.0448	-0.7653	-2.67	3.84	
875	364	Shell-Thick	INVSLE	-1.7029	-0.7325	-2.67	3.69	
875	364	Shell-Thick	INVSLE	-2.4232	-1.4460	-3.06	3.69	
875	364	Shell-Thick	INVSLU	-1.7820	-1.7209	-1.93	17.02	
875	364	Shell-Thick	INVSLU	-1.3993	0.5167	-1.70	17.02	
875	364	Shell-Thick	INVSLU	-1.1791	0.5571	-1.70	16.45	
875	364	Shell-Thick	INVSLU	-1.5750	-1.6678	-1.93	16.45	
875	364	Shell-Thick	INVSLU	-4.4220	-2.0413	-4.95	5.18	
875	364	Shell-Thick	INVSLU	-3.2141	-1.0331	-4.31	5.18	
875	364	Shell-Thick	INVSLU	-2.6647	-0.9889	-4.31	4.98	
875	364	Shell-Thick	INVSLU	-3.8803	-1.9837	-4.95	4.98	
876	365	Shell-Thick	INVSLE	-1.2879	-1.2550	-1.77	9.61	
876	365	Shell-Thick	INVSLE	-1.0219	-0.2077	-1.56	9.61	
876	365	Shell-Thick	INVSLE	-0.8206	-0.1563	-1.56	9.20	
876	365	Shell-Thick	INVSLE	-1.0979	-1.2033	-1.77	9.20	
876	365	Shell-Thick	INVSLE	-2.6541	-1.4759	-3.77	3.69	
876	365	Shell-Thick	INVSLE	-1.9831	-0.7669	-3.29	3.69	
876	365	Shell-Thick	INVSLE	-1.5625	-0.7229	-3.29	3.51	
876	365	Shell-Thick	INVSLE	-2.2429	-1.4178	-3.77	3.51	
876	365	Shell-Thick	INVSLU	-1.7387	-1.6942	-2.38	16.48	
876	365	Shell-Thick	INVSLU	-1.3796	0.4407	-2.10	16.48	
876	365	Shell-Thick	INVSLU	-1.1078	0.5008	-2.10	15.80	
876	365	Shell-Thick	INVSLU	-1.4821	-1.6244	-2.38	15.80	
876	365	Shell-Thick	INVSLU	-4.2384	-2.0256	-6.09	4.99	
876	365	Shell-Thick	INVSLU	-3.0977	-1.0353	-5.31	4.99	
876	365	Shell-Thick	INVSLU	-2.4228	-0.9759	-5.31	4.74	
876	365	Shell-Thick	INVSLU	-3.5708	-1.9463	-6.09	4.74	
877	366	Shell-Thick	INVSLE	-1.2383	-1.2259	-2.12	9.22	
877	366	Shell-Thick	INVSLE	-0.9980	-0.2421	-1.88	9.22	
877	366	Shell-Thick	INVSLE	-0.7562	-0.1717	-1.88	8.73	
877	366	Shell-Thick	INVSLE	-1.0085	-1.1602	-2.12	8.73	
877	366	Shell-Thick	INVSLE	-2.5056	-1.4514	-4.52	3.51	
877	366	Shell-Thick	INVSLE	-1.8971	-0.7638	-3.96	3.51	
877	366	Shell-Thick	INVSLE	-1.3943	-0.7062	-3.96	3.30	
877	366	Shell-Thick	INVSLE	-2.0107	-1.3755	-4.52	3.30	
877	366	Shell-Thick	INVSLU	-1.6718	-1.6550	-2.87	15.83	
877	366	Shell-Thick	INVSLU	-1.3473	0.3628	-2.54	15.83	
877	366	Shell-Thick	INVSLU	-1.0209	0.4480	-2.54	15.02	
877	366	Shell-Thick	INVSLU	-1.3615	-1.5663	-2.87	15.02	
877	366	Shell-Thick	INVSLU	-3.9752	-1.9933	-7.29	4.74	
877	366	Shell-Thick	INVSLU	-2.9397	-1.0311	-6.36	4.74	
877	366	Shell-Thick	INVSLU	-2.1341	-0.9533	-6.36	4.45	
877	366	Shell-Thick	INVSLU	-3.1728	-1.8892	-7.29	4.45	
878	367	Shell-Thick	INVSLE	-1.1715	-1.1857	-2.51	8.75	
878	367	Shell-Thick	INVSLE	-0.9575	-0.2708	-2.23	8.75	
878	367	Shell-Thick	INVSLE	-0.6720	-0.1757	-2.23	8.19	
878	367	Shell-Thick	INVSLE	-0.8985	-1.1028	-2.51	8.19	
878	367	Shell-Thick	INVSLE	-2.3152	-1.4121	-5.31	3.31	
878	367	Shell-Thick	INVSLE	-1.7680	-0.7535	-4.67	3.31	
878	367	Shell-Thick	INVSLE	-1.1771	-0.6792	-4.67	3.06	
878	367	Shell-Thick	INVSLE	-1.7308	-1.3124	-5.31	3.06	
878	367	Shell-Thick	INVSLU	-1.5815	-1.6007	-3.39	15.07	
878	367	Shell-Thick	INVSLU	-1.2926	0.2891	-3.01	15.07	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 177 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

878	367	Shell-Thick	INVSLE	-0.9071	0.4081	-3.01	14.14
878	367	Shell-Thick	INVSLE	-1.2130	-1.4888	-3.39	14.14
878	367	Shell-Thick	INVSLE	-3.6416	-1.9403	-8.56	4.46
878	367	Shell-Thick	INVSLE	-2.7079	-1.0172	-7.49	4.46
878	367	Shell-Thick	INVSLE	-1.7629	-0.9169	-7.49	4.13
878	367	Shell-Thick	INVSLE	-2.6960	-1.8032	-8.56	4.13
879	368	Shell-Thick	INVSLE	-1.0774	-1.1306	-2.93	8.22
879	368	Shell-Thick	INVSLE	-0.9001	-0.2878	-2.62	8.22
879	368	Shell-Thick	INVSLE	-0.5674	-0.1653	-2.62	7.58
879	368	Shell-Thick	INVSLE	-0.7566	-1.0293	-2.93	7.58
879	368	Shell-Thick	INVSLE	-2.0587	-1.3506	-6.17	3.07
879	368	Shell-Thick	INVSLE	-1.6002	-0.7328	-5.44	3.07
879	368	Shell-Thick	INVSLE	-0.9159	-0.6396	-5.44	2.79
879	368	Shell-Thick	INVSLE	-1.3763	-1.2265	-6.17	2.79
879	368	Shell-Thick	INVSLE	-1.4545	-1.5264	-3.96	14.19
879	368	Shell-Thick	INVSLE	-1.2152	0.2283	-3.53	14.19
879	368	Shell-Thick	INVSLE	-0.7660	0.3848	-3.53	13.13
879	368	Shell-Thick	INVSLE	-1.0214	-1.3896	-3.96	13.13
879	368	Shell-Thick	INVSLE	-3.1966	-1.8563	-9.92	4.14
879	368	Shell-Thick	INVSLE	-2.4120	-0.9893	-8.71	4.14
879	368	Shell-Thick	INVSLE	-1.3200	-0.8635	-8.71	3.77
879	368	Shell-Thick	INVSLE	-2.0949	-1.6854	-9.92	3.77
880	369	Shell-Thick	INVSLE	-0.9550	-1.0590	-3.40	7.61
880	369	Shell-Thick	INVSLE	-0.8155	-0.2898	-3.05	7.61
880	369	Shell-Thick	INVSLE	-0.4305	-0.1308	-3.05	6.90
880	369	Shell-Thick	INVSLE	-0.5814	-0.9348	-3.40	6.90
880	369	Shell-Thick	INVSLE	-1.7401	-1.2654	-7.09	2.80
880	369	Shell-Thick	INVSLE	-1.3687	-0.6992	-6.28	2.80
880	369	Shell-Thick	INVSLE	-0.5823	-0.5828	-6.28	2.49
880	369	Shell-Thick	INVSLE	-0.9516	-1.1075	-7.09	2.49
880	369	Shell-Thick	INVSLE	-1.2893	-1.4297	-4.58	13.20
880	369	Shell-Thick	INVSLE	-1.1009	0.1851	-4.11	13.20
880	369	Shell-Thick	INVSLE	-0.5812	0.3932	-4.11	12.02
880	369	Shell-Thick	INVSLE	-0.7849	-1.2619	-4.58	12.02
880	369	Shell-Thick	INVSLE	-2.6506	-1.7392	-11.38	3.78
880	369	Shell-Thick	INVSLE	-2.0103	-0.9440	-10.03	3.78
880	369	Shell-Thick	INVSLE	-0.8089	-0.7867	-10.03	3.37
880	369	Shell-Thick	INVSLE	-1.3808	-1.5210	-11.38	3.37
881	370	Shell-Thick	INVSLE	-0.7903	-0.9655	-3.91	6.94
881	370	Shell-Thick	INVSLE	-0.7011	-0.2672	-3.53	6.94
881	370	Shell-Thick	INVSLE	-0.1803	-0.0726	-3.53	6.16
881	370	Shell-Thick	INVSLE	-0.3570	-0.8188	-3.91	6.16
881	370	Shell-Thick	INVSLE	-1.3275	-1.1451	-8.10	2.50
881	370	Shell-Thick	INVSLE	-1.0766	-0.6479	-7.21	2.50
881	370	Shell-Thick	INVSLE	-0.2588	-0.5075	-7.21	2.17
881	370	Shell-Thick	INVSLE	-0.4207	-0.9570	-8.10	2.17
881	370	Shell-Thick	INVSLE	-1.0668	-1.3034	-5.27	12.09
881	370	Shell-Thick	INVSLE	-0.9465	0.1742	-4.76	12.09
881	370	Shell-Thick	INVSLE	-0.0893	0.4318	-4.76	10.79
881	370	Shell-Thick	INVSLE	-0.4819	-1.1053	-5.27	10.79
881	370	Shell-Thick	INVSLE	-1.9504	-1.5728	-12.96	3.38
881	370	Shell-Thick	INVSLE	-1.5119	-0.8747	-11.48	3.38
881	370	Shell-Thick	INVSLE	-0.3493	-0.6851	-11.48	2.93
881	370	Shell-Thick	INVSLE	-0.5775	-1.3127	-12.96	2.93
882	371	Shell-Thick	INVSLE	-0.5793	-0.8500	-4.48	6.21
882	371	Shell-Thick	INVSLE	-0.5422	-0.2201	-4.07	6.21
882	371	Shell-Thick	INVSLE	0.3265	0.0245	-4.07	5.36
882	371	Shell-Thick	INVSLE	0.2126	-0.6748	-4.48	5.36
882	371	Shell-Thick	INVSLE	-0.8238	-0.9925	-9.21	2.19
882	371	Shell-Thick	INVSLE	-0.6920	-0.5774	-8.24	2.19
882	371	Shell-Thick	INVSLE	-0.0351	-0.4071	-8.24	1.83
882	371	Shell-Thick	INVSLE	-0.0792	-0.7595	-9.21	1.83
882	371	Shell-Thick	INVSLE	-0.7821	-1.1474	-6.05	10.88
882	371	Shell-Thick	INVSLE	-0.7320	0.1944	-5.50	10.88
882	371	Shell-Thick	INVSLE	0.7457	0.5250	-5.50	9.46
882	371	Shell-Thick	INVSLE	0.5509	-0.8576	-6.05	9.46
882	371	Shell-Thick	INVSLE	-1.1488	-1.3612	-14.69	2.95
882	371	Shell-Thick	INVSLE	-0.9567	-0.7795	-13.07	2.95
882	371	Shell-Thick	INVSLE	-0.0474	-0.5496	-13.07	2.47
882	371	Shell-Thick	INVSLE	-0.1069	-1.0380	-14.69	2.47
883	372	Shell-Thick	INVSLE	-0.1897	-0.7052	-5.12	5.42
883	372	Shell-Thick	INVSLE	-0.2141	-0.1330	-4.70	5.42
883	372	Shell-Thick	INVSLE	0.9376	0.1535	-4.70	4.51
883	372	Shell-Thick	INVSLE	0.9928	-0.5060	-5.12	4.51
883	372	Shell-Thick	INVSLE	-0.3029	-0.7905	-10.43	1.85
883	372	Shell-Thick	INVSLE	-0.3317	-0.4808	-9.39	1.85
883	372	Shell-Thick	INVSLE	0.2476	-0.2836	-9.39	1.48
883	372	Shell-Thick	INVSLE	0.2736	-0.5241	-10.43	1.48

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 178 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

883	372 Shell-Thick	INVS LU	-0.0584	-0.8894	-6.91	9.56		
883	372 Shell-Thick	INVS LU	-0.0776	0.2703	-6.34	9.56		
883	372 Shell-Thick	INVS LU	1.7378	0.6605	-6.34	8.03		
883	372 Shell-Thick	INVS LU	1.8268	-0.5451	-6.91	8.03		
883	372 Shell-Thick	INVS LU	-0.4089	-1.0800	-16.58	2.49		
883	372 Shell-Thick	INVS LU	-0.4478	-0.6491	-14.84	2.49		
883	372 Shell-Thick	INVS LU	0.3343	-0.3829	-14.84	1.99		
883	372 Shell-Thick	INVS LU	0.3694	-0.7102	-16.58	1.99		
884	373 Shell-Thick	INVS LE	0.5765	-0.5347	-5.84	4.57		
884	373 Shell-Thick	INVS LE	0.3942	-0.0126	-5.41	4.57		
884	373 Shell-Thick	INVS LE	1.6963	0.3368	-5.41	3.62		
884	373 Shell-Thick	INVS LE	1.9209	-0.2283	-5.84	3.62		
884	373 Shell-Thick	INVS LE	0.0481	-0.5499	-11.78	1.49		
884	373 Shell-Thick	INVS LE	-0.0492	-0.3594	-10.69	1.49		
884	373 Shell-Thick	INVS LE	0.6127	-0.1285	-10.69	1.12		
884	373 Shell-Thick	INVS LE	0.7113	-0.3044	-11.78	1.12		
884	373 Shell-Thick	INVS LU	1.1893	-0.5675	-7.88	8.15		
884	373 Shell-Thick	INVS LU	0.9085	0.3896	-7.31	8.15		
884	373 Shell-Thick	INVS LU	2.9529	0.8765	-7.31	6.53		
884	373 Shell-Thick	INVS LU	3.3236	-0.1399	-7.88	6.53		
884	373 Shell-Thick	INVS LU	0.0649	-0.7446	-18.66	2.02		
884	373 Shell-Thick	INVS LU	-0.0665	-0.4852	-16.82	2.02		
884	373 Shell-Thick	INVS LU	0.8272	-0.1735	-16.82	1.51		
884	373 Shell-Thick	INVS LU	0.9602	-0.4110	-18.66	1.51		
885	374 Shell-Thick	INVS LE	1.5193	-0.2465	-6.66	3.69		
885	374 Shell-Thick	INVS LE	1.1436	0.1642	-6.24	3.69		
885	374 Shell-Thick	INVS LE	2.6115	0.5576	-6.24	2.71		
885	374 Shell-Thick	INVS LE	3.0475	0.1070	-6.66	2.71		
885	374 Shell-Thick	INVS LE	0.4992	-0.3297	-13.28	1.14		
885	374 Shell-Thick	INVS LE	0.3208	-0.2040	-12.16	1.14		
885	374 Shell-Thick	INVS LE	1.0762	0.0511	-12.16	0.77		
885	374 Shell-Thick	INVS LE	1.2622	-0.0795	-13.28	0.77		
885	374 Shell-Thick	INVS LU	2.7022	-0.1500	-8.98	6.65		
885	374 Shell-Thick	INVS LU	2.0977	0.5913	-8.42	6.65		
885	374 Shell-Thick	INVS LU	4.3919	1.1450	-8.42	4.97		
885	374 Shell-Thick	INVS LU	5.1178	0.3233	-8.98	4.97		
885	374 Shell-Thick	INVS LU	0.6739	-0.4451	-20.96	1.53		
885	374 Shell-Thick	INVS LU	0.4331	-0.2754	-19.03	1.53		
885	374 Shell-Thick	INVS LU	1.4528	0.0690	-19.03	1.04		
885	374 Shell-Thick	INVS LU	1.7040	-0.1073	-20.96	1.04		
886	375 Shell-Thick	INVS LE	7.4559	1.3085	18.85	-7.544E-02		
886	375 Shell-Thick	INVS LE	6.0964	1.4020	17.53	-7.544E-02		
886	375 Shell-Thick	INVS LE	4.0170	0.9160	17.53	0.96		
886	375 Shell-Thick	INVS LE	5.2513	0.9057	18.85	0.96		
886	375 Shell-Thick	INVS LE	3.8344	0.6949	10.15	-0.19		
886	375 Shell-Thick	INVS LE	3.2473	0.7215	9.72	-0.19		
886	375 Shell-Thick	INVS LE	2.0950	0.4505	9.72	0.30		
886	375 Shell-Thick	INVS LE	2.6471	0.4471	10.15	0.30		
886	375 Shell-Thick	INVS LU	11.6555	2.0200	28.94	-0.10		
886	375 Shell-Thick	INVS LU	9.4003	2.1911	26.58	-0.10		
886	375 Shell-Thick	INVS LU	6.2459	1.4558	26.58	1.74		
886	375 Shell-Thick	INVS LU	8.2712	1.4376	28.94	1.74		
886	375 Shell-Thick	INVS LU	5.1764	0.9381	13.70	-0.33		
886	375 Shell-Thick	INVS LU	4.3839	0.9740	13.12	-0.33		
886	375 Shell-Thick	INVS LU	2.8282	0.6082	13.12	0.40		
886	375 Shell-Thick	INVS LU	3.5736	0.6036	13.70	0.40		
887	376 Shell-Thick	INVS LE	5.6289	0.8928	16.61	0.87		
887	376 Shell-Thick	INVS LE	4.6128	1.1237	15.21	0.87		
887	376 Shell-Thick	INVS LE	2.7864	0.6690	15.21	2.10		
887	376 Shell-Thick	INVS LE	3.7072	0.5013	16.61	2.10		
887	376 Shell-Thick	INVS LE	2.7533	0.4437	8.82	0.27		
887	376 Shell-Thick	INVS LE	2.3115	0.5185	8.30	0.27		
887	376 Shell-Thick	INVS LE	1.3148	0.2424	8.30	0.73		
887	376 Shell-Thick	INVS LE	1.7342	0.1823	8.82	0.73		
887	376 Shell-Thick	INVS LU	8.9636	1.4135	25.65	1.56		
887	376 Shell-Thick	INVS LU	7.2814	1.8254	23.23	1.56		
887	376 Shell-Thick	INVS LU	4.4930	1.1637	23.23	3.68		
887	376 Shell-Thick	INVS LU	5.9953	0.8712	25.65	3.68		
887	376 Shell-Thick	INVS LU	3.7169	0.5990	11.91	0.37		
887	376 Shell-Thick	INVS LU	3.1205	0.7000	11.20	0.37		
887	376 Shell-Thick	INVS LU	1.7749	0.3273	11.20	0.99		
887	376 Shell-Thick	INVS LU	2.3411	0.2461	11.91	0.99		
888	377 Shell-Thick	INVS LE	4.1387	0.5022	14.63	2.00		
888	377 Shell-Thick	INVS LE	3.4152	0.8802	13.20	2.00		
888	377 Shell-Thick	INVS LE	1.8130	0.4994	13.20	3.25		
888	377 Shell-Thick	INVS LE	2.4630	0.1701	14.63	3.25		
888	377 Shell-Thick	INVS LE	1.9085	0.1916	7.66	0.70		
888	377 Shell-Thick	INVS LE	1.5971	0.3245	7.08	0.70		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 179 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

888	377	Shell-Thick	INVSLE	0.7356	0.0728	7.08	1.21	
888	377	Shell-Thick	INVSLE	1.0340	-0.0516	7.66	1.21	
888	377	Shell-Thick	INVSLE	6.7250	0.8624	22.71	3.51	
888	377	Shell-Thick	INVSLE	5.5235	1.5246	20.30	3.51	
888	377	Shell-Thick	INVSLE	3.0623	0.9941	20.30	5.63	
888	377	Shell-Thick	INVSLE	4.1200	0.4272	22.71	5.63	
888	377	Shell-Thick	INVSLE	2.5765	0.2587	10.34	0.95	
888	377	Shell-Thick	INVSLE	2.1561	0.4380	9.56	0.95	
888	377	Shell-Thick	INVSLE	0.9931	0.0982	9.56	1.63	
888	377	Shell-Thick	INVSLE	1.3959	-0.0697	10.34	1.63	
889	378	Shell-Thick	INVSLE	2.9112	0.1804	12.88	3.17	
889	378	Shell-Thick	INVSLE	2.4498	0.7060	11.48	3.17	
889	378	Shell-Thick	INVSLE	1.0411	0.3829	11.48	4.40	
889	378	Shell-Thick	INVSLE	1.4514	-0.1092	12.88	4.40	
889	378	Shell-Thick	INVSLE	1.2462	-0.0342	6.65	1.18	
889	378	Shell-Thick	INVSLE	1.0520	0.1610	6.06	1.18	
889	378	Shell-Thick	INVSLE	0.3059	-0.0647	6.06	1.70	
889	378	Shell-Thick	INVSLE	0.4960	-0.2574	6.65	1.70	
889	378	Shell-Thick	INVSLE	4.8420	0.4293	20.10	5.47	
889	378	Shell-Thick	INVSLE	4.0706	1.3380	17.76	5.47	
889	378	Shell-Thick	INVSLE	1.8935	0.9018	17.76	7.53	
889	378	Shell-Thick	INVSLE	2.5593	0.0627	20.10	7.53	
889	378	Shell-Thick	INVSLE	1.6824	-0.0461	8.98	1.60	
889	378	Shell-Thick	INVSLE	1.4203	0.2174	8.17	1.60	
889	378	Shell-Thick	INVSLE	0.4130	-0.0873	8.17	2.30	
889	378	Shell-Thick	INVSLE	0.6697	-0.3475	8.98	2.30	
890	379	Shell-Thick	INVSLE	1.9106	-0.0908	11.33	4.32	
890	379	Shell-Thick	INVSLE	1.6643	0.5809	9.99	4.32	
890	379	Shell-Thick	INVSLE	0.4265	0.3328	9.99	5.50	
890	379	Shell-Thick	INVSLE	0.6372	-0.3157	11.33	5.50	
890	379	Shell-Thick	INVSLE	0.7304	-0.2343	5.77	1.68	
890	379	Shell-Thick	INVSLE	0.6346	0.0249	5.19	1.68	
890	379	Shell-Thick	INVSLE	-0.0121	-0.1633	5.19	2.19	
890	379	Shell-Thick	INVSLE	0.0859	-0.4242	5.77	2.19	
890	379	Shell-Thick	INVSLE	3.2792	0.0757	17.78	7.39	
890	379	Shell-Thick	INVSLE	2.8585	1.2258	15.56	7.39	
890	379	Shell-Thick	INVSLE	0.9351	0.9081	15.56	9.33	
890	379	Shell-Thick	INVSLE	1.2765	-0.1899	17.78	9.33	
890	379	Shell-Thick	INVSLE	0.9860	-0.3164	7.79	2.27	
890	379	Shell-Thick	INVSLE	0.8566	0.0336	7.00	2.27	
890	379	Shell-Thick	INVSLE	-0.0163	-0.2204	7.00	2.96	
890	379	Shell-Thick	INVSLE	0.1160	-0.5727	7.79	2.96	
891	380	Shell-Thick	INVSLE	1.0834	-0.2908	9.97	5.43	
891	380	Shell-Thick	INVSLE	1.0402	0.5199	8.70	5.43	
891	380	Shell-Thick	INVSLE	-0.0498	0.3253	8.70	6.54	
891	380	Shell-Thick	INVSLE	-0.0258	-0.4732	9.97	6.54	
891	380	Shell-Thick	INVSLE	0.3254	-0.3975	5.02	2.17	
891	380	Shell-Thick	INVSLE	0.3189	-0.0758	4.46	2.17	
891	380	Shell-Thick	INVSLE	-0.2429	-0.2324	4.46	2.66	
891	380	Shell-Thick	INVSLE	-0.2282	-0.5599	5.02	2.66	
891	380	Shell-Thick	INVSLE	1.9623	-0.1670	15.71	9.21	
891	380	Shell-Thick	INVSLE	1.8767	1.2107	13.63	9.21	
891	380	Shell-Thick	INVSLE	0.1741	0.9719	13.63	11.03	
891	380	Shell-Thick	INVSLE	0.2088	-0.3727	15.71	11.03	
891	380	Shell-Thick	INVSLE	0.4394	-0.5367	6.77	2.93	
891	380	Shell-Thick	INVSLE	0.4306	-0.1024	6.01	2.93	
891	380	Shell-Thick	INVSLE	-0.3279	-0.3137	6.01	3.59	
891	380	Shell-Thick	INVSLE	-0.3080	-0.7558	6.77	3.59	
892	381	Shell-Thick	INVSLE	0.4181	-0.4423	8.76	6.48	
892	381	Shell-Thick	INVSLE	0.5345	0.5000	7.59	6.48	
892	381	Shell-Thick	INVSLE	-0.4103	0.3647	7.59	7.50	
892	381	Shell-Thick	INVSLE	-0.4631	-0.5724	8.76	7.50	
892	381	Shell-Thick	INVSLE	0.0130	-0.5308	4.36	2.64	
892	381	Shell-Thick	INVSLE	0.0777	-0.1491	3.83	2.64	
892	381	Shell-Thick	INVSLE	-0.4236	-0.2713	3.83	3.10	
892	381	Shell-Thick	INVSLE	-0.5487	-0.6612	4.36	3.10	
892	381	Shell-Thick	INVSLE	0.8879	-0.3397	13.86	10.93	
892	381	Shell-Thick	INVSLE	1.0642	1.2528	11.94	10.93	
892	381	Shell-Thick	INVSLE	-0.4389	1.1022	11.94	12.61	
892	381	Shell-Thick	INVSLE	-0.6252	-0.4693	13.86	12.61	
892	381	Shell-Thick	INVSLE	0.0176	-0.7166	5.88	3.56	
892	381	Shell-Thick	INVSLE	0.1048	-0.2013	5.17	3.56	
892	381	Shell-Thick	INVSLE	-0.5738	-0.3663	5.17	4.18	
892	381	Shell-Thick	INVSLE	-0.7535	-0.8926	5.88	4.18	
893	382	Shell-Thick	INVSLE	-0.1306	-0.5374	7.68	7.45	
893	382	Shell-Thick	INVSLE	0.1409	0.5263	6.61	7.45	
893	382	Shell-Thick	INVSLE	-0.5263	0.4331	6.61	8.39	
893	382	Shell-Thick	INVSLE	-0.6412	-0.6327	7.68	8.39	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 180 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

893	382 Shell-Thick	INVSLE	-0.2323	-0.6312	3.78	3.08		
893	382 Shell-Thick	INVSLE	-0.1021	-0.1935	3.30	3.08		
893	382 Shell-Thick	INVSLE	-0.7013	-0.2883	3.30	3.50		
893	382 Shell-Thick	INVSLE	-0.9705	-0.7364	3.78	3.50		
893	382 Shell-Thick	INVSLE	-0.0125	-0.4287	12.20	12.51		
893	382 Shell-Thick	INVSLE	0.4228	1.3610	10.45	12.51		
893	382 Shell-Thick	INVSLE	-0.7105	1.2695	10.45	14.05		
893	382 Shell-Thick	INVSLE	-0.8656	-0.5124	12.20	14.05		
893	382 Shell-Thick	INVSLE	-0.3137	-0.8521	5.10	4.16		
893	382 Shell-Thick	INVSLE	-0.1378	-0.2613	4.45	4.16		
893	382 Shell-Thick	INVSLE	-0.9729	-0.3891	4.45	4.73		
893	382 Shell-Thick	INVSLE	-1.3596	-0.9941	5.10	4.73		
894	383 Shell-Thick	INVSLE	-0.4195	-0.5947	6.71	8.34		
894	383 Shell-Thick	INVSLE	-0.1778	0.5809	5.74	8.34		
894	383 Shell-Thick	INVSLE	-0.6076	0.5291	5.74	9.19		
894	383 Shell-Thick	INVSLE	-0.7703	-0.6526	6.71	9.19		
894	383 Shell-Thick	INVSLE	-0.5645	-0.7062	3.27	3.49		
894	383 Shell-Thick	INVSLE	-0.2399	-0.2168	2.83	3.49		
894	383 Shell-Thick	INVSLE	-0.9147	-0.2853	2.83	3.87		
894	383 Shell-Thick	INVSLE	-1.2931	-0.7862	3.27	3.87		
894	383 Shell-Thick	INVSLE	-0.5664	-0.4653	10.69	13.97		
894	383 Shell-Thick	INVSLE	-0.1059	1.5060	9.11	13.97		
894	383 Shell-Thick	INVSLE	-0.8202	1.4734	9.11	15.35		
894	383 Shell-Thick	INVSLE	-1.0399	-0.4976	10.69	15.35		
894	383 Shell-Thick	INVSLE	-0.7838	-0.9534	4.41	4.71		
894	383 Shell-Thick	INVSLE	-0.3238	-0.2927	3.82	4.71		
894	383 Shell-Thick	INVSLE	-1.2810	-0.3851	3.82	5.23		
894	383 Shell-Thick	INVSLE	-1.8993	-1.0614	4.41	5.23		
895	384 Shell-Thick	INVSLE	-0.5669	-0.6135	5.83	9.15		
895	384 Shell-Thick	INVSLE	-0.3413	0.6630	4.96	9.15		
895	384 Shell-Thick	INVSLE	-0.6590	0.6398	4.96	9.91		
895	384 Shell-Thick	INVSLE	-0.8664	-0.6469	5.83	9.91		
895	384 Shell-Thick	INVSLE	-0.9214	-0.7570	2.82	3.86		
895	384 Shell-Thick	INVSLE	-0.4213	-0.2206	2.42	3.86		
895	384 Shell-Thick	INVSLE	-1.0640	-0.2689	2.42	4.21		
895	384 Shell-Thick	INVSLE	-1.5493	-0.8177	2.82	4.21		
895	384 Shell-Thick	INVSLE	-0.7653	-0.4471	9.32	15.29		
895	384 Shell-Thick	INVSLE	-0.4607	1.6876	7.90	15.29		
895	384 Shell-Thick	INVSLE	-0.8897	1.6937	7.90	16.52		
895	384 Shell-Thick	INVSLE	-1.1696	-0.4488	9.32	16.52		
895	384 Shell-Thick	INVSLE	-1.3325	-1.0219	3.80	5.22		
895	384 Shell-Thick	INVSLE	-0.5808	-0.2978	3.27	5.22		
895	384 Shell-Thick	INVSLE	-1.5335	-0.3630	3.27	5.68		
895	384 Shell-Thick	INVSLE	-2.3413	-1.1039	3.80	5.68		
896	385 Shell-Thick	INVSLE	-0.6782	-0.6077	5.02	9.88		
896	385 Shell-Thick	INVSLE	-0.4198	0.7596	4.26	9.88		
896	385 Shell-Thick	INVSLE	-0.6924	0.7609	4.26	10.55		
896	385 Shell-Thick	INVSLE	-0.9327	-0.6182	5.02	10.55		
896	385 Shell-Thick	INVSLE	-1.1992	-0.7899	2.41	4.20		
896	385 Shell-Thick	INVSLE	-0.6195	-0.2112	2.06	4.20		
896	385 Shell-Thick	INVSLE	-1.1748	-0.2422	2.06	4.50		
896	385 Shell-Thick	INVSLE	-1.7375	-0.8332	2.41	4.50		
896	385 Shell-Thick	INVSLE	-0.9155	-0.3963	8.05	16.47		
896	385 Shell-Thick	INVSLE	-0.5667	1.8853	6.81	16.47		
896	385 Shell-Thick	INVSLE	-0.9348	1.9241	6.81	17.56		
896	385 Shell-Thick	INVSLE	-1.2591	-0.3689	8.05	17.56		
896	385 Shell-Thick	INVSLE	-1.8035	-1.0664	3.26	5.67		
896	385 Shell-Thick	INVSLE	-0.8662	-0.2851	2.79	5.67		
896	385 Shell-Thick	INVSLE	-1.7342	-0.3270	2.79	6.08		
896	385 Shell-Thick	INVSLE	-2.6707	-1.1249	3.26	6.08		
897	386 Shell-Thick	INVSLE	-0.7663	-0.5806	4.29	10.52		
897	386 Shell-Thick	INVSLE	-0.4771	0.8665	3.62	10.52		
897	386 Shell-Thick	INVSLE	-0.7090	0.8833	3.62	11.10		
897	386 Shell-Thick	INVSLE	-0.9804	-0.5772	4.29	11.10		
897	386 Shell-Thick	INVSLE	-1.4274	-0.8076	2.04	4.49		
897	386 Shell-Thick	INVSLE	-0.7686	-0.1915	1.74	4.49		
897	386 Shell-Thick	INVSLE	-1.2440	-0.2100	1.74	4.76		
897	386 Shell-Thick	INVSLE	-1.8833	-0.8381	2.04	4.76		
897	386 Shell-Thick	INVSLE	-1.0345	-0.3174	6.88	17.51		
897	386 Shell-Thick	INVSLE	-0.6441	2.0934	5.80	17.51		
897	386 Shell-Thick	INVSLE	-0.9571	2.1512	5.80	18.46		
897	386 Shell-Thick	INVSLE	-1.3235	-0.2746	6.88	18.46		
897	386 Shell-Thick	INVSLE	-2.1941	-1.0902	2.76	6.07		
897	386 Shell-Thick	INVSLE	-1.1066	-0.2586	2.35	6.07		
897	386 Shell-Thick	INVSLE	-1.8645	-0.2835	2.35	6.42		
897	386 Shell-Thick	INVSLE	-2.9304	-1.1314	2.76	6.42		
898	387 Shell-Thick	INVSLE	-0.8324	-0.5420	3.60	11.08		
898	387 Shell-Thick	INVSLE	-0.5226	0.9748	3.03	11.08		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 181 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

898	387	Shell-Thick	INVSLE	-0.7167	1.0020	3.03	11.58	
898	387	Shell-Thick	INVSLE	-1.0102	-0.5279	3.60	11.58	
898	387	Shell-Thick	INVSLE	-1.6025	-0.8149	1.71	4.75	
898	387	Shell-Thick	INVSLE	-0.8915	-0.1663	1.45	4.75	
898	387	Shell-Thick	INVSLE	-1.2916	-0.1752	1.45	4.98	
898	387	Shell-Thick	INVSLE	-1.9836	-0.8349	1.71	4.98	
898	387	Shell-Thick	INVSLE	-1.1237	-0.2255	5.79	18.42	
898	387	Shell-Thick	INVSLE	-0.7055	2.2981	4.87	18.42	
898	387	Shell-Thick	INVSLE	-0.9676	2.3670	4.87	19.23	
898	387	Shell-Thick	INVSLE	-1.3638	-0.1719	5.79	19.23	
898	387	Shell-Thick	INVSLE	-2.4955	-1.1001	2.31	6.42	
898	387	Shell-Thick	INVSLE	-1.3192	-0.2244	1.96	6.42	
898	387	Shell-Thick	INVSLE	-1.9583	-0.2365	1.96	6.72	
898	387	Shell-Thick	INVSLE	-3.1123	-1.1271	2.31	6.72	
899	388	Shell-Thick	INVSLE	-0.8853	-0.4964	2.96	11.56	
899	388	Shell-Thick	INVSLE	-0.5561	1.0796	2.49	11.56	
899	388	Shell-Thick	INVSLE	-0.7153	1.1111	2.49	11.97	
899	388	Shell-Thick	INVSLE	-1.0299	-0.4775	2.96	11.97	
899	388	Shell-Thick	INVSLE	-1.7464	-0.8147	1.40	4.97	
899	388	Shell-Thick	INVSLE	-0.9832	-0.1383	1.18	4.97	
899	388	Shell-Thick	INVSLE	-1.3130	-0.1410	1.18	5.16	
899	388	Shell-Thick	INVSLE	-2.0577	-0.8274	1.40	5.16	
899	388	Shell-Thick	INVSLE	-1.1952	-0.1273	4.77	19.20	
899	388	Shell-Thick	INVSLE	-0.7507	2.4918	4.00	19.20	
899	388	Shell-Thick	INVSLE	-0.9656	2.5630	4.00	19.87	
899	388	Shell-Thick	INVSLE	-1.3903	-0.0719	4.77	19.87	
899	388	Shell-Thick	INVSLE	-2.7449	-1.0999	1.89	6.71	
899	388	Shell-Thick	INVSLE	-1.4785	-0.1867	1.60	6.71	
899	388	Shell-Thick	INVSLE	-2.0061	-0.1903	1.60	6.97	
899	388	Shell-Thick	INVSLE	-3.2495	-1.1169	1.89	6.97	
900	389	Shell-Thick	INVSLE	-0.9250	-0.4503	2.35	11.96	
900	389	Shell-Thick	INVSLE	-0.5841	1.1748	1.97	11.96	
900	389	Shell-Thick	INVSLE	-0.7103	1.2061	1.97	12.29	
900	389	Shell-Thick	INVSLE	-1.0389	-0.4299	2.35	12.29	
900	389	Shell-Thick	INVSLE	-1.8550	-0.8103	1.11	5.16	
900	389	Shell-Thick	INVSLE	-1.0609	-0.1108	0.93	5.16	
900	389	Shell-Thick	INVSLE	-1.3233	-0.1097	0.93	5.31	
900	389	Shell-Thick	INVSLE	-2.1014	-0.8176	1.11	5.31	
900	389	Shell-Thick	INVSLE	-1.2488	-0.0328	3.79	19.85	
900	389	Shell-Thick	INVSLE	-0.7885	2.6656	3.17	19.85	
900	389	Shell-Thick	INVSLE	-0.9589	2.7320	3.17	20.39	
900	389	Shell-Thick	INVSLE	-1.4025	0.0197	3.79	20.39	
900	389	Shell-Thick	INVSLE	-2.9335	-1.0939	1.49	6.96	
900	389	Shell-Thick	INVSLE	-1.6140	-0.1496	1.26	6.96	
900	389	Shell-Thick	INVSLE	-2.0341	-0.1482	1.26	7.17	
900	389	Shell-Thick	INVSLE	-3.3334	-1.1038	1.49	7.17	
901	390	Shell-Thick	INVSLE	-0.9575	-0.4078	1.77	12.28	
901	390	Shell-Thick	INVSLE	-0.6055	1.2561	1.48	12.28	
901	390	Shell-Thick	INVSLE	-0.7004	1.2836	1.48	12.53	
901	390	Shell-Thick	INVSLE	-1.0426	-0.3894	1.77	12.53	
901	390	Shell-Thick	INVSLE	-1.9445	-0.8040	0.83	5.31	
901	390	Shell-Thick	INVSLE	-1.1193	-0.0861	0.70	5.31	
901	390	Shell-Thick	INVSLE	-1.3171	-0.0834	0.70	5.42	
901	390	Shell-Thick	INVSLE	-2.1291	-0.8079	0.83	5.42	
901	390	Shell-Thick	INVSLE	-1.2926	0.0517	2.85	20.37	
901	390	Shell-Thick	INVSLE	-0.8174	2.8127	2.39	20.37	
901	390	Shell-Thick	INVSLE	-0.9455	2.8688	2.39	20.78	
901	390	Shell-Thick	INVSLE	-1.4075	0.0960	2.85	20.78	
901	390	Shell-Thick	INVSLE	-3.0891	-1.0854	1.12	7.16	
901	390	Shell-Thick	INVSLE	-1.7150	-0.1163	0.94	7.16	
901	390	Shell-Thick	INVSLE	-2.0323	-0.1126	0.94	7.32	
901	390	Shell-Thick	INVSLE	-3.3890	-1.0907	1.12	7.32	
902	391	Shell-Thick	INVSLE	-0.9818	-0.3727	1.20	12.53	
902	391	Shell-Thick	INVSLE	-0.6250	1.3200	1.01	12.53	
902	391	Shell-Thick	INVSLE	-0.6897	1.3406	1.01	12.70	
902	391	Shell-Thick	INVSLE	-1.0396	-0.3586	1.20	12.70	
902	391	Shell-Thick	INVSLE	-2.0100	-0.7978	0.56	5.42	
902	391	Shell-Thick	INVSLE	-1.1710	-0.0663	0.47	5.42	
902	391	Shell-Thick	INVSLE	-1.3060	-0.0635	0.47	5.50	
902	391	Shell-Thick	INVSLE	-2.1356	-0.7997	0.56	5.50	
902	391	Shell-Thick	INVSLE	-1.3255	0.1202	1.95	20.77	
902	391	Shell-Thick	INVSLE	-0.8437	2.9276	1.63	20.77	
902	391	Shell-Thick	INVSLE	-0.9310	2.9687	1.63	21.05	
902	391	Shell-Thick	INVSLE	-1.4034	0.1529	1.95	21.05	
902	391	Shell-Thick	INVSLE	-3.2023	-1.0771	0.76	7.32	
902	391	Shell-Thick	INVSLE	-1.8041	-0.0895	0.64	7.32	
902	391	Shell-Thick	INVSLE	-2.0208	-0.0857	0.64	7.42	
902	391	Shell-Thick	INVSLE	-3.4065	-1.0796	0.76	7.42	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 182 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

903	392 Shell-Thick	INVSLE	-1.0023	-0.3480	0.66	12.70		
903	392 Shell-Thick	INVSLE	-0.6409	1.3635	0.55	12.70		
903	392 Shell-Thick	INVSLE	-0.6762	1.3754	0.55	12.79		
903	392 Shell-Thick	INVSLE	-1.0336	-0.3399	0.66	12.79		
903	392 Shell-Thick	INVSLE	-2.0634	-0.7933	0.31	5.50		
903	392 Shell-Thick	INVSLE	-1.2101	-0.0527	0.26	5.50		
903	392 Shell-Thick	INVSLE	-1.2839	-0.0508	0.26	5.54		
903	392 Shell-Thick	INVSLE	-2.1316	-0.7941	0.31	5.54		
903	392 Shell-Thick	INVSLE	-1.3531	0.1685	1.06	21.04		
903	392 Shell-Thick	INVSLE	-0.8653	3.0058	0.89	21.04		
903	392 Shell-Thick	INVSLE	-0.9129	3.0292	0.89	21.20		
903	392 Shell-Thick	INVSLE	-1.3954	0.1868	1.06	21.20		
903	392 Shell-Thick	INVSLE	-3.2938	-1.0710	0.41	7.42		
903	392 Shell-Thick	INVSLE	-1.8701	-0.0711	0.35	7.42		
903	392 Shell-Thick	INVSLE	-1.9885	-0.0686	0.35	7.48		
903	392 Shell-Thick	INVSLE	-3.4048	-1.0720	0.41	7.48		
904	393 Shell-Thick	INVSLE	-1.0172	-0.3353	0.12	12.79		
904	393 Shell-Thick	INVSLE	-0.6568	1.3848	9.636E-02	12.79		
904	393 Shell-Thick	INVSLE	-0.6630	1.3868	9.636E-02	12.80		
904	393 Shell-Thick	INVSLE	-1.0227	-0.3342	0.12	12.80		
904	393 Shell-Thick	INVSLE	-2.0987	-0.7914	5.396E-02	5.54		
904	393 Shell-Thick	INVSLE	-1.2464	-0.0464	4.532E-02	5.54		
904	393 Shell-Thick	INVSLE	-1.2595	-0.0461	4.532E-02	5.55		
904	393 Shell-Thick	INVSLE	-2.1106	-0.7916	5.396E-02	5.55		
904	393 Shell-Thick	INVSLE	-1.3732	0.1935	0.19	21.19		
904	393 Shell-Thick	INVSLE	-0.8866	3.0445	0.16	21.19		
904	393 Shell-Thick	INVSLE	-0.8951	3.0484	0.16	21.22		
904	393 Shell-Thick	INVSLE	-1.3806	0.1962	0.19	21.22		
904	393 Shell-Thick	INVSLE	-3.3528	-1.0684	7.285E-02	7.48		
904	393 Shell-Thick	INVSLE	-1.9303	-0.0626	6.119E-02	7.48		
904	393 Shell-Thick	INVSLE	-1.9513	-0.0622	6.119E-02	7.49		
904	393 Shell-Thick	INVSLE	-3.3721	-1.0687	7.285E-02	7.49		
905	394 Shell-Thick	INVSLE	-1.0297	-0.3359	-0.20	12.81		
905	394 Shell-Thick	INVSLE	-0.6703	1.3829	-0.17	12.81		
905	394 Shell-Thick	INVSLE	-0.6476	1.3748	-0.17	12.74		
905	394 Shell-Thick	INVSLE	-1.0093	-0.3419	-0.20	12.74		
905	394 Shell-Thick	INVSLE	-2.1249	-0.7927	-0.42	5.55		
905	394 Shell-Thick	INVSLE	-1.2731	-0.0479	-0.36	5.55		
905	394 Shell-Thick	INVSLE	-1.2256	-0.0492	-0.36	5.52		
905	394 Shell-Thick	INVSLE	-2.0806	-0.7924	-0.42	5.52		
905	394 Shell-Thick	INVSLE	-1.3901	0.1937	-0.27	21.22		
905	394 Shell-Thick	INVSLE	-0.9049	3.0421	-0.23	21.22		
905	394 Shell-Thick	INVSLE	-0.8743	3.0262	-0.23	21.12		
905	394 Shell-Thick	INVSLE	-1.3626	0.1805	-0.27	21.12		
905	394 Shell-Thick	INVSLE	-3.3950	-1.0701	-0.69	7.49		
905	394 Shell-Thick	INVSLE	-1.9720	-0.0647	-0.57	7.49		
905	394 Shell-Thick	INVSLE	-1.8958	-0.0665	-0.57	7.45		
905	394 Shell-Thick	INVSLE	-3.3228	-1.0698	-0.69	7.45		
906	395 Shell-Thick	INVSLE	-1.0372	-0.3497	-0.45	12.75		
906	395 Shell-Thick	INVSLE	-0.6842	1.3575	-0.38	12.75		
906	395 Shell-Thick	INVSLE	-0.6323	1.3401	-0.38	12.61		
906	395 Shell-Thick	INVSLE	-0.9907	-0.3622	-0.45	12.61		
906	395 Shell-Thick	INVSLE	-2.1344	-0.7972	-0.97	5.52		
906	395 Shell-Thick	INVSLE	-1.2977	-0.0574	-0.81	5.52		
906	395 Shell-Thick	INVSLE	-1.1894	-0.0600	-0.81	5.46		
906	395 Shell-Thick	INVSLE	-2.0331	-0.7961	-0.97	5.46		
906	395 Shell-Thick	INVSLE	-1.4002	0.1691	-0.61	21.13		
906	395 Shell-Thick	INVSLE	-0.9237	2.9981	-0.52	21.13		
906	395 Shell-Thick	INVSLE	-0.8536	2.9636	-0.52	20.90		
906	395 Shell-Thick	INVSLE	-1.3375	0.1409	-0.61	20.90		
906	395 Shell-Thick	INVSLE	-3.4067	-1.0762	-1.57	7.45		
906	395 Shell-Thick	INVSLE	-2.0092	-0.0775	-1.31	7.45		
906	395 Shell-Thick	INVSLE	-1.8353	-0.0810	-1.31	7.37		
906	395 Shell-Thick	INVSLE	-3.2420	-1.0748	-1.57	7.37		
907	396 Shell-Thick	INVSLE	-1.0420	-0.3762	-0.71	12.62		
907	396 Shell-Thick	INVSLE	-0.6956	1.3093	-0.60	12.62		
907	396 Shell-Thick	INVSLE	-0.6138	1.2842	-0.60	12.40		
907	396 Shell-Thick	INVSLE	-0.9687	-0.3937	-0.71	12.40		
907	396 Shell-Thick	INVSLE	-2.1340	-0.8046	-1.52	5.46		
907	396 Shell-Thick	INVSLE	-1.3118	-0.0744	-1.28	5.46		
907	396 Shell-Thick	INVSLE	-1.1413	-0.0774	-1.28	5.36		
907	396 Shell-Thick	INVSLE	-1.9746	-0.8019	-1.52	5.36		
907	396 Shell-Thick	INVSLE	-1.4067	0.1206	-0.96	20.91		
907	396 Shell-Thick	INVSLE	-0.9390	2.9139	-0.81	20.91		
907	396 Shell-Thick	INVSLE	-0.8287	2.8631	-0.81	20.56		
907	396 Shell-Thick	INVSLE	-1.3077	0.0796	-0.96	20.56		
907	396 Shell-Thick	INVSLE	-3.4002	-1.0862	-2.46	7.37		
907	396 Shell-Thick	INVSLE	-2.0265	-0.1005	-2.06	7.37		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 183 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

907	396 Shell-Thick	INVSLU	-1.7530	-0.1045	-2.06	7.24		
907	396 Shell-Thick	INVSLU	-3.1411	-1.0825	-2.46	7.24		
908	397 Shell-Thick	INVSLE	-1.0406	-0.4132	-0.99	12.41		
908	397 Shell-Thick	INVSLE	-0.7065	1.2398	-0.83	12.41		
908	397 Shell-Thick	INVSLE	-0.5940	1.2095	-0.83	12.11		
908	397 Shell-Thick	INVSLE	-0.9391	-0.4340	-0.99	12.11		
908	397 Shell-Thick	INVSLE	-2.1135	-0.8139	-2.10	5.36		
908	397 Shell-Thick	INVSLE	-1.3219	-0.0983	-1.76	5.36		
908	397 Shell-Thick	INVSLE	-1.0879	-0.1004	-1.76	5.23		
908	397 Shell-Thick	INVSLE	-1.8935	-0.8085	-2.10	5.23		
908	397 Shell-Thick	INVSLU	-1.4049	0.0514	-1.33	20.58		
908	397 Shell-Thick	INVSLU	-0.9537	2.7915	-1.12	20.58		
908	397 Shell-Thick	INVSLU	-0.8019	2.7284	-1.12	20.09		
908	397 Shell-Thick	INVSLU	-1.2678	3.687E-04	-1.33	20.09		
908	397 Shell-Thick	INVSLU	-3.3576	-1.0988	-3.39	7.24		
908	397 Shell-Thick	INVSLU	-2.0356	-0.1327	-2.83	7.24		
908	397 Shell-Thick	INVSLU	-1.6606	-0.1355	-2.83	7.06		
908	397 Shell-Thick	INVSLU	-3.0003	-1.0915	-3.39	7.06		
909	398 Shell-Thick	INVSLE	-1.0346	-0.4588	-1.27	12.12		
909	398 Shell-Thick	INVSLE	-0.7130	1.1515	-1.07	12.12		
909	398 Shell-Thick	INVSLE	-0.5683	1.1195	-1.07	11.74		
909	398 Shell-Thick	INVSLE	-0.9034	-0.4793	-1.27	11.74		
909	398 Shell-Thick	INVSLE	-2.0786	-0.8240	-2.69	5.23		
909	398 Shell-Thick	INVSLE	-1.3168	-0.1278	-2.26	5.23		
909	398 Shell-Thick	INVSLE	-1.0166	-0.1269	-2.26	5.06		
909	398 Shell-Thick	INVSLE	-1.7953	-0.8140	-2.69	5.06		
909	398 Shell-Thick	INVSLU	-1.3967	-0.0353	-1.71	20.11		
909	398 Shell-Thick	INVSLU	-0.9625	2.6350	-1.45	20.11		
909	398 Shell-Thick	INVSLU	-0.7672	2.5648	-1.45	19.50		
909	398 Shell-Thick	INVSLU	-1.2195	-0.0912	-1.71	19.50		
909	398 Shell-Thick	INVSLU	-3.2892	-1.1124	-4.34	7.06		
909	398 Shell-Thick	INVSLU	-2.0169	-0.1725	-3.64	7.06		
909	398 Shell-Thick	INVSLU	-1.5364	-0.1713	-3.64	6.83		
909	398 Shell-Thick	INVSLU	-2.8297	-1.0989	-4.34	6.83		
910	399 Shell-Thick	INVSLE	-1.0189	-0.5087	-1.57	11.76		
910	399 Shell-Thick	INVSLE	-0.7167	1.0477	-1.33	11.76		
910	399 Shell-Thick	INVSLE	-0.5381	1.0179	-1.33	11.30		
910	399 Shell-Thick	INVSLE	-0.8555	-0.5262	-1.57	11.30		
910	399 Shell-Thick	INVSLE	-2.0154	-0.8327	-3.32	5.06		
910	399 Shell-Thick	INVSLE	-1.3023	-0.1610	-2.79	5.06		
910	399 Shell-Thick	INVSLE	-0.9333	-0.1550	-2.79	4.85		
910	399 Shell-Thick	INVSLE	-1.6643	-0.8164	-3.32	4.85		
910	399 Shell-Thick	INVSLU	-1.3755	-0.1329	-2.12	19.52		
910	399 Shell-Thick	INVSLU	-0.9676	2.4493	-1.80	19.52		
910	399 Shell-Thick	INVSLU	-0.7264	2.3781	-1.80	18.78		
910	399 Shell-Thick	INVSLU	-1.1549	-0.1896	-2.12	18.78		
910	399 Shell-Thick	INVSLU	-3.1710	-1.1242	-5.35	6.83		
910	399 Shell-Thick	INVSLU	-1.9813	-0.2173	-4.49	6.83		
910	399 Shell-Thick	INVSLU	-1.3916	-0.2093	-4.49	6.55		
910	399 Shell-Thick	INVSLU	-2.6023	-1.1022	-5.35	6.55		
911	400 Shell-Thick	INVSLE	-0.9943	-0.5596	-1.90	11.32		
911	400 Shell-Thick	INVSLE	-0.7123	0.9323	-1.61	11.32		
911	400 Shell-Thick	INVSLE	-0.4971	0.9107	-1.61	10.78		
911	400 Shell-Thick	INVSLE	-0.7960	-0.5683	-1.90	10.78		
911	400 Shell-Thick	INVSLE	-1.9288	-0.8382	-3.99	4.86		
911	400 Shell-Thick	INVSLE	-1.2637	-0.1958	-3.36	4.86		
911	400 Shell-Thick	INVSLE	-0.8215	-0.1816	-3.36	4.61		
911	400 Shell-Thick	INVSLE	-1.5054	-0.8125	-3.99	4.61		
911	400 Shell-Thick	INVSLU	-1.3423	-0.2364	-2.56	18.81		
911	400 Shell-Thick	INVSLU	-0.9616	2.2405	-2.18	18.81		
911	400 Shell-Thick	INVSLU	-0.6711	2.1773	-2.18	17.92		
911	400 Shell-Thick	INVSLU	-1.0747	-0.2851	-2.56	17.92		
911	400 Shell-Thick	INVSLU	-3.0124	-1.1316	-6.41	6.56		
911	400 Shell-Thick	INVSLU	-1.9032	-0.2644	-5.39	6.56		
911	400 Shell-Thick	INVSLU	-1.1976	-0.2452	-5.39	6.22		
911	400 Shell-Thick	INVSLU	-2.3279	-1.0969	-6.41	6.22		
912	401 Shell-Thick	INVSLE	-0.9536	-0.6044	-2.25	10.80		
912	401 Shell-Thick	INVSLE	-0.7004	0.8110	-1.92	10.80		
912	401 Shell-Thick	INVSLE	-0.4460	0.8021	-1.92	10.17		
912	401 Shell-Thick	INVSLE	-0.7166	-0.6016	-2.25	10.17		
912	401 Shell-Thick	INVSLE	-1.7998	-0.8369	-4.70	4.62		
912	401 Shell-Thick	INVSLE	-1.2063	-0.2294	-3.98	4.62		
912	401 Shell-Thick	INVSLE	-0.6866	-0.2041	-3.98	4.33		
912	401 Shell-Thick	INVSLE	-1.2971	-0.7997	-4.70	4.33		
912	401 Shell-Thick	INVSLU	-1.2873	-0.3349	-3.04	17.97		
912	401 Shell-Thick	INVSLU	-0.9456	2.0174	-2.59	17.97		
912	401 Shell-Thick	INVSLU	-0.6021	1.9689	-2.59	16.94		
912	401 Shell-Thick	INVSLU	-0.9675	-0.3718	-3.04	16.94		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 184 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

912	401 Shell-Thick	INVSLU	-2.7812	-1.1298	-7.54	6.23		
912	401 Shell-Thick	INVSLU	-1.7929	-0.3096	-6.37	6.23		
912	401 Shell-Thick	INVSLU	-0.9657	-0.2755	-6.37	5.85		
912	401 Shell-Thick	INVSLU	-1.9703	-1.0796	-7.54	5.85		
913	402 Shell-Thick	INVSLE	-0.8963	-0.6398	-2.64	10.20		
913	402 Shell-Thick	INVSLE	-0.6736	0.6884	-2.26	10.20		
913	402 Shell-Thick	INVSLE	-0.3759	0.7013	-2.26	9.48		
913	402 Shell-Thick	INVSLE	-0.6166	-0.6163	-2.64	9.48		
913	402 Shell-Thick	INVSLE	-1.6327	-0.8264	-5.47	4.34		
913	402 Shell-Thick	INVSLE	-1.1106	-0.2588	-4.65	4.34		
913	402 Shell-Thick	INVSLE	-0.5068	-0.2177	-4.65	4.01		
913	402 Shell-Thick	INVSLE	-1.0440	-0.7732	-5.47	4.01		
913	402 Shell-Thick	INVSLU	-1.2101	-0.4233	-3.56	16.99		
913	402 Shell-Thick	INVSLU	-0.9093	1.7868	-3.06	16.99		
913	402 Shell-Thick	INVSLU	-0.5075	1.7671	-3.06	15.82		
913	402 Shell-Thick	INVSLU	-0.8324	-0.4343	-3.56	15.82		
913	402 Shell-Thick	INVSLU	-2.4866	-1.1157	-8.76	5.86		
913	402 Shell-Thick	INVSLU	-1.6175	-0.3493	-7.42	5.86		
913	402 Shell-Thick	INVSLU	-0.7038	-0.2939	-7.42	5.42		
913	402 Shell-Thick	INVSLU	-1.5396	-1.0438	-8.76	5.42		
914	403 Shell-Thick	INVSLE	-0.8122	-0.6549	-3.07	9.51		
914	403 Shell-Thick	INVSLE	-0.6309	0.5734	-2.65	9.51		
914	403 Shell-Thick	INVSLE	-0.2857	0.6118	-2.65	8.71		
914	403 Shell-Thick	INVSLE	-0.4839	-0.6097	-3.07	8.71		
914	403 Shell-Thick	INVSLE	-1.4024	-0.8016	-6.32	4.02		
914	403 Shell-Thick	INVSLE	-0.9807	-0.2794	-5.39	4.02		
914	403 Shell-Thick	INVSLE	-0.2863	-0.2200	-5.39	3.66		
914	403 Shell-Thick	INVSLE	-0.7175	-0.7306	-6.32	3.66		
914	403 Shell-Thick	INVSLU	-1.0964	-0.4847	-4.14	15.88		
914	403 Shell-Thick	INVSLU	-0.8517	1.5624	-3.58	15.88		
914	403 Shell-Thick	INVSLU	-0.2869	1.5763	-3.58	14.56		
914	403 Shell-Thick	INVSLU	-0.6533	-0.4694	-4.14	14.56		
914	403 Shell-Thick	INVSLU	-2.0868	-1.0822	-10.08	5.43		
914	403 Shell-Thick	INVSLU	-1.3863	-0.3772	-8.58	5.43		
914	403 Shell-Thick	INVSLU	-0.3865	-0.2970	-8.58	4.94		
914	403 Shell-Thick	INVSLU	-1.0036	-0.9864	-10.08	4.94		
915	404 Shell-Thick	INVSLE	-0.6985	-0.6477	-3.55	8.75		
915	404 Shell-Thick	INVSLE	-0.5617	0.4699	-3.09	8.75		
915	404 Shell-Thick	INVSLE	0.0034	0.5468	-3.09	7.85		
915	404 Shell-Thick	INVSLE	-0.3154	-0.5675	-3.55	7.85		
915	404 Shell-Thick	INVSLE	-1.1114	-0.7602	-7.25	3.67		
915	404 Shell-Thick	INVSLE	-0.7917	-0.2886	-6.22	3.67		
915	404 Shell-Thick	INVSLE	-0.1629	-0.2044	-6.22	3.26		
915	404 Shell-Thick	INVSLE	-0.3205	-0.6653	-7.25	3.26		
915	404 Shell-Thick	INVSLU	-0.9430	-0.5172	-4.79	14.64		
915	404 Shell-Thick	INVSLU	-0.7583	1.3493	-4.17	14.64		
915	404 Shell-Thick	INVSLU	0.1963	1.4178	-4.17	13.17		
915	404 Shell-Thick	INVSLU	-0.3264	-0.4540	-4.79	13.17		
915	404 Shell-Thick	INVSLU	-1.5902	-1.0263	-11.53	4.96		
915	404 Shell-Thick	INVSLU	-1.1033	-0.3895	-9.85	4.96		
915	404 Shell-Thick	INVSLU	-0.2200	-0.2760	-9.85	4.41		
915	404 Shell-Thick	INVSLU	-0.4334	-0.8982	-11.53	4.41		
916	405 Shell-Thick	INVSLE	-0.5405	-0.6029	-4.10	7.90		
916	405 Shell-Thick	INVSLE	-0.4619	0.3910	-3.59	7.90		
916	405 Shell-Thick	INVSLE	0.3610	0.5066	-3.59	6.91		
916	405 Shell-Thick	INVSLE	0.1831	-0.4908	-4.10	6.91		
916	405 Shell-Thick	INVSLE	-0.7282	-0.6950	-8.28	3.28		
916	405 Shell-Thick	INVSLE	-0.5444	-0.2795	-7.15	3.28		
916	405 Shell-Thick	INVSLE	-0.0029	-0.1695	-7.15	2.84		
916	405 Shell-Thick	INVSLE	-0.0941	-0.5764	-8.28	2.84		
916	405 Shell-Thick	INVSLU	-0.7297	-0.4959	-5.53	13.25		
916	405 Shell-Thick	INVSLU	-0.6235	1.1686	-4.85	13.25		
916	405 Shell-Thick	INVSLU	0.7830	1.2906	-4.85	11.64		
916	405 Shell-Thick	INVSLU	0.5046	-0.3915	-5.53	11.64		
916	405 Shell-Thick	INVSLU	-1.0113	-0.9383	-13.12	4.43		
916	405 Shell-Thick	INVSLU	-0.7473	-0.3773	-11.28	4.43		
916	405 Shell-Thick	INVSLU	-0.0039	-0.2288	-11.28	3.83		
916	405 Shell-Thick	INVSLU	-0.1271	-0.7781	-13.12	3.83		
917	406 Shell-Thick	INVSLE	-0.2516	-0.5226	-4.72	6.97		
917	406 Shell-Thick	INVSLE	-0.2086	0.3375	-4.17	6.97		
917	406 Shell-Thick	INVSLE	0.8220	0.5097	-4.17	5.90		
917	406 Shell-Thick	INVSLE	0.7945	-0.3601	-4.72	5.90		
917	406 Shell-Thick	INVSLE	-0.3312	-0.6055	-9.43	2.85		
917	406 Shell-Thick	INVSLE	-0.3160	-0.2504	-8.20	2.85		
917	406 Shell-Thick	INVSLE	0.2124	-0.1071	-8.20	2.38		
917	406 Shell-Thick	INVSLE	0.1878	-0.4556	-9.43	2.38		
917	406 Shell-Thick	INVSLU	-0.1593	-0.4264	-6.37	11.74		
917	406 Shell-Thick	INVSLU	-0.0842	1.0193	-5.64	11.74		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 185 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

917	406 Shell-Thick	INVSLU	1.5288	1.2251	-5.64		9.98	
917	406 Shell-Thick	INVSLU	1.4981	-0.2493	-6.37		9.98	
917	406 Shell-Thick	INVSLU	-0.4472	-0.8174	-14.89		3.85	
917	406 Shell-Thick	INVSLU	-0.4266	-0.3381	-12.88		3.85	
917	406 Shell-Thick	INVSLU	0.2868	-0.1446	-12.88		3.21	
917	406 Shell-Thick	INVSLU	0.2535	-0.6151	-14.89		3.21	
918	407 Shell-Thick	INVSLE	0.3552	-0.3863	-5.43		5.96	
918	407 Shell-Thick	INVSLE	0.2217	0.3280	-4.86		5.96	
918	407 Shell-Thick	INVSLE	1.3920	0.5508	-4.86		4.81	
918	407 Shell-Thick	INVSLE	1.5564	-0.1837	-5.43		4.81	
918	407 Shell-Thick	INVSLE	-0.0503	-0.4828	-10.72		2.40	
918	407 Shell-Thick	INVSLE	-0.1134	-0.1928	-9.41		2.40	
918	407 Shell-Thick	INVSLE	0.4945	-0.0186	-9.41		1.89	
918	407 Shell-Thick	INVSLE	0.5537	-0.3058	-10.72		1.89	
918	407 Shell-Thick	INVSLU	0.8256	-0.2745	-7.33		10.09	
918	407 Shell-Thick	INVSLU	0.6104	0.9320	-6.56		10.09	
918	407 Shell-Thick	INVSLU	2.4329	1.2111	-6.56		8.20	
918	407 Shell-Thick	INVSLU	2.7192	-0.0421	-7.33		8.20	
918	407 Shell-Thick	INVSLU	-0.0680	-0.6517	-16.86		3.24	
918	407 Shell-Thick	INVSLU	-0.1531	-0.2602	-14.69		3.24	
918	407 Shell-Thick	INVSLU	0.6675	-0.0252	-14.69		2.56	
918	407 Shell-Thick	INVSLU	0.7475	-0.4128	-16.86		2.56	
919	408 Shell-Thick	INVSLE	1.1028	-0.2036	-6.26		4.89	
919	408 Shell-Thick	INVSLE	0.7796	0.3575	-5.66		4.89	
919	408 Shell-Thick	INVSLE	2.1111	0.6535	-5.66		3.68	
919	408 Shell-Thick	INVSLE	2.4797	0.0626	-6.26		3.68	
919	408 Shell-Thick	INVSLE	0.3175	-0.3298	-12.19		1.92	
919	408 Shell-Thick	INVSLE	0.1672	-0.1073	-10.81		1.92	
919	408 Shell-Thick	INVSLE	0.8681	0.1049	-10.81		1.40	
919	408 Shell-Thick	INVSLE	1.0204	-0.1186	-12.19		1.40	
919	408 Shell-Thick	INVSLU	2.0134	-0.0573	-8.45		8.33	
919	408 Shell-Thick	INVSLU	1.4899	0.8965	-7.65		8.33	
919	408 Shell-Thick	INVSLU	3.5525	1.2897	-7.65		6.32	
919	408 Shell-Thick	INVSLU	4.1720	0.2728	-8.45		6.32	
919	408 Shell-Thick	INVSLU	0.4287	-0.4453	-19.07		2.59	
919	408 Shell-Thick	INVSLU	0.2257	-0.1449	-16.77		2.59	
919	408 Shell-Thick	INVSLU	1.1720	0.1416	-16.77		1.89	
919	408 Shell-Thick	INVSLU	1.3775	-0.1601	-19.07		1.89	
920	409 Shell-Thick	INVSLE	5.9981	1.0056	17.54	-8.857E-02		
920	409 Shell-Thick	INVSLE	4.6237	1.1187	15.76	-8.857E-02		
920	409 Shell-Thick	INVSLE	2.7169	0.6902	15.76		1.35	
920	409 Shell-Thick	INVSLE	3.9827	0.6490	17.54		1.35	
920	409 Shell-Thick	INVSLE	3.2010	0.5554	9.73		-0.20	
920	409 Shell-Thick	INVSLE	2.5603	0.5968	8.99		-0.20	
920	409 Shell-Thick	INVSLE	1.4730	0.3478	8.99		0.56	
920	409 Shell-Thick	INVSLE	2.0833	0.3265	9.73		0.56	
920	409 Shell-Thick	INVSLU	9.2416	1.5277	26.59		-0.12	
920	409 Shell-Thick	INVSLU	7.0163	1.7239	23.61		-0.12	
920	409 Shell-Thick	INVSLU	4.1594	1.0871	23.61		2.27	
920	409 Shell-Thick	INVSLU	6.1854	1.0230	26.59		2.27	
920	409 Shell-Thick	INVSLU	4.3214	0.7499	13.13		-0.34	
920	409 Shell-Thick	INVSLU	3.4565	0.8057	12.14		-0.34	
920	409 Shell-Thick	INVSLU	1.9886	0.4695	12.14		0.75	
920	409 Shell-Thick	INVSLU	2.8124	0.4407	13.13		0.75	
921	410 Shell-Thick	INVSLE	4.4850	0.6481	15.23		1.24	
921	410 Shell-Thick	INVSLE	3.5083	0.9497	13.41		1.24	
921	410 Shell-Thick	INVSLE	1.8628	0.6082	13.41		2.84	
921	410 Shell-Thick	INVSLE	2.7575	0.3606	15.23		2.84	
921	410 Shell-Thick	INVSLE	2.2507	0.3254	8.31		0.52	
921	410 Shell-Thick	INVSLE	1.8044	0.4486	7.50		0.52	
921	410 Shell-Thick	INVSLE	0.8819	0.2216	7.50		1.23	
921	410 Shell-Thick	INVSLE	1.3104	0.1099	8.31		1.23	
921	410 Shell-Thick	INVSLU	7.0758	1.0224	23.26		2.08	
921	410 Shell-Thick	INVSLU	5.4842	1.5308	20.25		2.08	
921	410 Shell-Thick	INVSLU	3.0003	1.0566	20.25		4.72	
921	410 Shell-Thick	INVSLU	4.4356	0.6513	23.26		4.72	
921	410 Shell-Thick	INVSLU	3.0385	0.4393	11.22		0.70	
921	410 Shell-Thick	INVSLU	2.4360	0.6056	10.13		0.70	
921	410 Shell-Thick	INVSLU	1.1905	0.2992	10.13		1.66	
921	410 Shell-Thick	INVSLU	1.7690	0.1484	11.22		1.66	
922	411 Shell-Thick	INVSLE	3.2671	0.3644	13.24		2.74	
922	411 Shell-Thick	INVSLE	2.6167	0.8571	11.43		2.74	
922	411 Shell-Thick	INVSLE	1.1915	0.5973	11.43		4.32	
922	411 Shell-Thick	INVSLE	1.7863	0.1410	13.24		4.32	
922	411 Shell-Thick	INVSLE	1.5268	0.1179	7.11		1.19	
922	411 Shell-Thick	INVSLE	1.2416	0.3289	6.28		1.19	
922	411 Shell-Thick	INVSLE	0.4566	0.1342	6.28		1.92	
922	411 Shell-Thick	INVSLE	0.7355	-0.0732	7.11		1.92	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 186 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

922	411 Shell-Thick	INVSLU	5.2852	0.6504	20.35		4.53	
922	411 Shell-Thick	INVSLU	4.2114	1.4697	17.42		4.53	
922	411 Shell-Thick	INVSLU	2.0438	1.1344	17.42		7.10	
922	411 Shell-Thick	INVSLU	3.0048	0.3893	20.35		7.10	
922	411 Shell-Thick	INVSLU	2.0611	0.1591	9.60		1.61	
922	411 Shell-Thick	INVSLU	1.6761	0.4441	8.47		1.61	
922	411 Shell-Thick	INVSLU	0.6163	0.1811	8.47		2.59	
922	411 Shell-Thick	INVSLU	0.9929	-0.0988	9.60		2.59	
923	412 Shell-Thick	INVSLE	2.2889	0.1499	11.52		4.22	
923	412 Shell-Thick	INVSLE	1.9025	0.8311	9.79		4.22	
923	412 Shell-Thick	INVSLE	0.6658	0.6651	9.79		5.73	
923	412 Shell-Thick	INVSLE	1.0156	0.0075	11.52		5.73	
923	412 Shell-Thick	INVSLE	0.9762	-0.0589	6.08		1.88	
923	412 Shell-Thick	INVSLE	0.8226	0.2413	5.27		1.88	
923	412 Shell-Thick	INVSLE	0.1526	0.0913	5.27		2.59	
923	412 Shell-Thick	INVSLE	0.3085	-0.2108	6.08		2.59	
923	412 Shell-Thick	INVSLU	3.8110	0.3920	17.82		6.93	
923	412 Shell-Thick	INVSLU	3.1548	1.5152	15.03		6.93	
923	412 Shell-Thick	INVSLU	1.2609	1.3305	15.03		9.38	
923	412 Shell-Thick	INVSLU	1.8356	0.2606	17.82		9.38	
923	412 Shell-Thick	INVSLU	1.3179	-0.0795	8.21		2.54	
923	412 Shell-Thick	INVSLU	1.1105	0.3257	7.12		2.54	
923	412 Shell-Thick	INVSLU	0.2061	0.1233	7.12		3.50	
923	412 Shell-Thick	INVSLU	0.4165	-0.2845	8.21		3.50	
924	413 Shell-Thick	INVSLE	1.4977	0.0225	10.04		5.65	
924	413 Shell-Thick	INVSLE	1.3449	0.8823	8.42		5.65	
924	413 Shell-Thick	INVSLE	0.2663	0.7855	8.42		7.06	
924	413 Shell-Thick	INVSLE	0.4021	-0.0637	10.04		7.06	
924	413 Shell-Thick	INVSLE	0.5572	-0.1917	5.22		2.56	
924	413 Shell-Thick	INVSLE	0.5146	0.1944	4.46		2.56	
924	413 Shell-Thick	INVSLE	-0.0602	0.0825	4.46		3.23	
924	413 Shell-Thick	INVSLE	-0.0075	-0.3107	5.22		3.23	
924	413 Shell-Thick	INVSLU	2.5884	0.2708	15.62		9.23	
924	413 Shell-Thick	INVSLU	2.3077	1.6801	13.02		9.23	
924	413 Shell-Thick	INVSLU	0.6449	1.6008	13.02		11.50	
924	413 Shell-Thick	INVSLU	0.8771	0.2228	15.62		11.50	
924	413 Shell-Thick	INVSLU	0.7522	-0.2588	7.05		3.46	
924	413 Shell-Thick	INVSLU	0.6947	0.2624	6.01		3.46	
924	413 Shell-Thick	INVSLU	-0.0813	0.1114	6.01		4.36	
924	413 Shell-Thick	INVSLU	-0.0101	-0.4194	7.05		4.36	
925	414 Shell-Thick	INVSLE	0.8727	-0.0417	8.75		6.99	
925	414 Shell-Thick	INVSLE	0.9081	0.9860	7.27		6.99	
925	414 Shell-Thick	INVSLE	-0.0335	0.9595	7.27		8.29	
925	414 Shell-Thick	INVSLE	-0.0729	-0.0663	8.75		8.29	
925	414 Shell-Thick	INVSLE	0.2426	-0.2877	4.49		3.20	
925	414 Shell-Thick	INVSLE	0.2893	0.1794	3.78		3.20	
925	414 Shell-Thick	INVSLE	-0.2053	0.1069	3.78		3.82	
925	414 Shell-Thick	INVSLE	-0.2366	-0.3708	4.49		3.82	
925	414 Shell-Thick	INVSLU	1.6034	0.2436	13.70		11.37	
925	414 Shell-Thick	INVSLU	1.6258	1.9213	11.32		11.37	
925	414 Shell-Thick	INVSLU	0.1656	1.9481	11.32		13.46	
925	414 Shell-Thick	INVSLU	0.1170	0.2868	13.70		13.46	
925	414 Shell-Thick	INVSLU	0.3276	-0.3883	6.06		4.33	
925	414 Shell-Thick	INVSLU	0.3905	0.2422	5.11		4.33	
925	414 Shell-Thick	INVSLU	-0.2771	0.1443	5.11		5.16	
925	414 Shell-Thick	INVSLU	-0.3194	-0.5006	6.06		5.16	
926	415 Shell-Thick	INVSLE	0.3706	-0.0383	7.64		8.22	
926	415 Shell-Thick	INVSLE	0.5815	1.1432	6.29		8.22	
926	415 Shell-Thick	INVSLE	-0.2434	1.1665	6.29		9.40	
926	415 Shell-Thick	INVSLE	-0.4024	-0.0220	7.64		9.40	
926	415 Shell-Thick	INVSLE	0.0047	-0.3452	3.86		3.80	
926	415 Shell-Thick	INVSLE	0.1292	0.1965	3.22		3.80	
926	415 Shell-Thick	INVSLE	-0.2979	0.1550	3.22		4.36	
926	415 Shell-Thick	INVSLE	-0.4447	-0.4004	3.86		4.36	
926	415 Shell-Thick	INVSLU	0.7949	0.3176	12.02		13.35	
926	415 Shell-Thick	INVSLU	1.1059	2.2410	9.85		13.35	
926	415 Shell-Thick	INVSLU	-0.1801	2.3396	9.85		15.25	
926	415 Shell-Thick	INVSLU	-0.4938	0.4169	12.02		15.25	
926	415 Shell-Thick	INVSLU	0.0064	-0.4660	5.21		5.13	
926	415 Shell-Thick	INVSLU	0.1745	0.2652	4.35		5.13	
926	415 Shell-Thick	INVSLU	-0.4022	0.2092	4.35		5.89	
926	415 Shell-Thick	INVSLU	-0.6067	-0.5406	5.21		5.89	
927	416 Shell-Thick	INVSLE	-0.0163	0.0111	6.66		9.35	
927	416 Shell-Thick	INVSLE	0.3283	1.3335	5.44		9.35	
927	416 Shell-Thick	INVSLE	-0.3555	1.4035	5.44		10.41	
927	416 Shell-Thick	INVSLE	-0.5168	0.0688	6.66		10.41	
927	416 Shell-Thick	INVSLE	-0.1703	-0.3733	3.33		4.34	
927	416 Shell-Thick	INVSLE	0.0135	0.2366	2.75		4.34	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 187 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

927	416 Shell-Thick	INVSLE	-0.3929	0.2235	2.75	4.85		
927	416 Shell-Thick	INVSLE	-0.7199	-0.4018	3.33	4.85		
927	416 Shell-Thick	INVSLE	0.1623	0.4568	10.52	15.16		
927	416 Shell-Thick	INVSLE	0.6933	2.6056	8.56	15.16		
927	416 Shell-Thick	INVSLE	-0.4361	2.7718	8.56	16.87		
927	416 Shell-Thick	INVSLE	-0.6976	0.6144	10.52	16.87		
927	416 Shell-Thick	INVSLE	-0.2298	-0.5040	4.49	5.86		
927	416 Shell-Thick	INVSLE	0.0182	0.3194	3.71	5.86		
927	416 Shell-Thick	INVSLE	-0.5360	0.3018	3.71	6.54		
927	416 Shell-Thick	INVSLE	-1.0024	-0.5424	4.49	6.54		
928	417 Shell-Thick	INVSLE	-0.3021	0.1048	5.79	10.37		
928	417 Shell-Thick	INVSLE	0.1459	1.5541	4.70	10.37		
928	417 Shell-Thick	INVSLE	-0.3848	1.6539	4.70	11.32		
928	417 Shell-Thick	INVSLE	-0.5965	0.1871	5.79	11.32		
928	417 Shell-Thick	INVSLE	-0.3256	-0.3743	2.86	4.83		
928	417 Shell-Thick	INVSLE	-0.0658	0.2970	2.35	4.83		
928	417 Shell-Thick	INVSLE	-0.4845	0.3044	2.35	5.28		
928	417 Shell-Thick	INVSLE	-0.9306	-0.3836	2.86	5.28		
928	417 Shell-Thick	INVSLE	-0.3528	0.6604	9.18	16.79		
928	417 Shell-Thick	INVSLE	0.3913	3.0119	7.43	16.79		
928	417 Shell-Thick	INVSLE	-0.5194	3.2187	7.43	18.32		
928	417 Shell-Thick	INVSLE	-0.8052	0.8488	9.18	18.32		
928	417 Shell-Thick	INVSLE	-0.4431	-0.5053	3.86	6.52		
928	417 Shell-Thick	INVSLE	-0.0888	0.4009	3.17	6.52		
928	417 Shell-Thick	INVSLE	-0.6690	0.4109	3.17	7.13		
928	417 Shell-Thick	INVSLE	-1.3181	-0.5179	3.86	7.13		
929	418 Shell-Thick	INVSLE	-0.3970	0.2248	5.01	11.28		
929	418 Shell-Thick	INVSLE	0.0044	1.7884	4.05	11.28		
929	418 Shell-Thick	INVSLE	-0.3974	1.9115	4.05	12.12		
929	418 Shell-Thick	INVSLE	-0.6467	0.3282	5.01	12.12		
929	418 Shell-Thick	INVSLE	-0.5582	-0.3567	2.45	5.27		
929	418 Shell-Thick	INVSLE	-0.1229	0.3697	2.00	5.27		
929	418 Shell-Thick	INVSLE	-0.5433	0.3936	2.00	5.66		
929	418 Shell-Thick	INVSLE	-1.0771	-0.3497	2.45	5.66		
929	418 Shell-Thick	INVSLE	-0.5360	0.8991	7.97	18.26		
929	418 Shell-Thick	INVSLE	0.1520	3.4335	6.42	18.26		
929	418 Shell-Thick	INVSLE	-0.5365	3.6718	6.42	19.61		
929	418 Shell-Thick	INVSLE	-0.8730	1.1144	7.97	19.61		
929	418 Shell-Thick	INVSLE	-0.7777	-0.4815	3.31	7.11		
929	418 Shell-Thick	INVSLE	-0.1659	0.4991	2.70	7.11		
929	418 Shell-Thick	INVSLE	-0.7553	0.5313	2.70	7.65		
929	418 Shell-Thick	INVSLE	-1.5762	-0.4722	3.31	7.65		
930	419 Shell-Thick	INVSLE	-0.4686	0.3659	4.30	12.09		
930	419 Shell-Thick	INVSLE	-0.0933	2.0305	3.46	12.09		
930	419 Shell-Thick	INVSLE	-0.3954	2.1643	3.46	12.83		
930	419 Shell-Thick	INVSLE	-0.6791	0.4779	4.30	12.83		
930	419 Shell-Thick	INVSLE	-0.7441	-0.3241	2.09	5.65		
930	419 Shell-Thick	INVSLE	-0.1602	0.4510	1.69	5.65		
930	419 Shell-Thick	INVSLE	-0.5667	0.4849	1.69	6.00		
930	419 Shell-Thick	INVSLE	-1.1856	-0.3070	2.09	6.00		
930	419 Shell-Thick	INVSLE	-0.6327	1.1660	6.87	19.56		
930	419 Shell-Thick	INVSLE	-0.0157	3.8621	5.52	19.56		
930	419 Shell-Thick	INVSLE	-0.5338	4.1118	5.52	20.75		
930	419 Shell-Thick	INVSLE	-0.9168	1.3882	6.87	20.75		
930	419 Shell-Thick	INVSLE	-1.0634	-0.4375	2.82	7.63		
930	419 Shell-Thick	INVSLE	-0.2162	0.6088	2.29	7.63		
930	419 Shell-Thick	INVSLE	-0.7907	0.6546	2.29	8.10		
930	419 Shell-Thick	INVSLE	-1.7729	-0.4145	2.82	8.10		
931	420 Shell-Thick	INVSLE	-0.5190	0.5144	3.66	12.80		
931	420 Shell-Thick	INVSLE	-0.1704	2.2681	2.94	12.80		
931	420 Shell-Thick	INVSLE	-0.3869	2.4057	2.94	13.44		
931	420 Shell-Thick	INVSLE	-0.6952	0.6305	3.66	13.44		
931	420 Shell-Thick	INVSLE	-0.8805	-0.2832	1.76	5.99		
931	420 Shell-Thick	INVSLE	-0.1874	0.5347	1.42	5.99		
931	420 Shell-Thick	INVSLE	-0.5746	0.5747	1.42	6.29		
931	420 Shell-Thick	INVSLE	-1.2531	-0.2590	1.76	6.29		
931	420 Shell-Thick	INVSLE	-0.7007	1.4394	5.86	20.70		
931	420 Shell-Thick	INVSLE	-0.1507	4.2782	4.69	20.70		
931	420 Shell-Thick	INVSLE	-0.5223	4.5289	4.69	21.73		
931	420 Shell-Thick	INVSLE	-0.9385	1.6620	5.86	21.73		
931	420 Shell-Thick	INVSLE	-1.2996	-0.3823	2.38	8.09		
931	420 Shell-Thick	INVSLE	-0.2530	0.7218	1.92	8.09		
931	420 Shell-Thick	INVSLE	-0.8039	0.7758	1.92	8.49		
931	420 Shell-Thick	INVSLE	-1.9002	-0.3496	2.38	8.49		
932	421 Shell-Thick	INVSLE	-0.5576	0.6644	3.07	13.42		
932	421 Shell-Thick	INVSLE	-0.2044	2.4949	2.45	13.42		
932	421 Shell-Thick	INVSLE	-0.3714	2.6274	2.45	13.96		
932	421 Shell-Thick	INVSLE	-0.7030	0.7759	3.07	13.96		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 188 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

932	421	Shell-Thick	INVSLE	-0.9904	-0.2375	1.47	6.28	
932	421	Shell-Thick	INVSLE	-0.2217	0.6172	1.18	6.28	
932	421	Shell-Thick	INVSLE	-0.5622	0.6589	1.18	6.54	
932	421	Shell-Thick	INVSLE	-1.3000	-0.2105	1.47	6.54	
932	421	Shell-Thick	INVSLE	-0.7528	1.7103	4.92	21.70	
932	421	Shell-Thick	INVSLE	-0.2417	4.6723	3.93	21.70	
932	421	Shell-Thick	INVSLE	-0.5014	4.9101	3.93	22.57	
932	421	Shell-Thick	INVSLE	-0.9490	1.9197	4.92	22.57	
932	421	Shell-Thick	INVSLE	-1.4922	-0.3206	1.98	8.48	
932	421	Shell-Thick	INVSLE	-0.3019	0.8332	1.60	8.48	
932	421	Shell-Thick	INVSLE	-0.7877	0.8895	1.60	8.83	
932	421	Shell-Thick	INVSLE	-1.9923	-0.2842	1.98	8.83	
933	422	Shell-Thick	INVSLE	-0.5845	0.8065	2.52	13.95	
933	422	Shell-Thick	INVSLE	-0.2180	2.7024	2.01	13.95	
933	422	Shell-Thick	INVSLE	-0.3547	2.8238	2.01	14.39	
933	422	Shell-Thick	INVSLE	-0.7022	0.9091	2.52	14.39	
933	422	Shell-Thick	INVSLE	-1.0694	-0.1916	1.20	6.53	
933	422	Shell-Thick	INVSLE	-0.2649	0.6944	0.96	6.53	
933	422	Shell-Thick	INVSLE	-0.5450	0.7346	0.96	6.74	
933	422	Shell-Thick	INVSLE	-1.3218	-0.1643	1.20	6.74	
933	422	Shell-Thick	INVSLE	-0.7891	1.9639	4.04	22.54	
933	422	Shell-Thick	INVSLE	-0.2943	5.0308	3.22	22.54	
933	422	Shell-Thick	INVSLE	-0.4789	5.2465	3.22	23.27	
933	422	Shell-Thick	INVSLE	-0.9480	2.1538	4.04	23.27	
933	422	Shell-Thick	INVSLE	-1.6318	-0.2587	1.62	8.82	
933	422	Shell-Thick	INVSLE	-0.3646	0.9374	1.30	8.82	
933	422	Shell-Thick	INVSLE	-0.7656	0.9917	1.30	9.10	
933	422	Shell-Thick	INVSLE	-2.0403	-0.2218	1.62	9.10	
934	423	Shell-Thick	INVSLE	-0.6061	0.9353	2.00	14.38	
934	423	Shell-Thick	INVSLE	-0.2270	2.8851	1.59	14.38	
934	423	Shell-Thick	INVSLE	-0.3355	2.9898	1.59	14.74	
934	423	Shell-Thick	INVSLE	-0.6985	1.0235	2.00	14.74	
934	423	Shell-Thick	INVSLE	-1.1349	-0.1484	0.95	6.74	
934	423	Shell-Thick	INVSLE	-0.2940	0.7634	0.76	6.74	
934	423	Shell-Thick	INVSLE	-0.5171	0.7992	0.76	6.91	
934	423	Shell-Thick	INVSLE	-1.3337	-0.1235	0.95	6.91	
934	423	Shell-Thick	INVSLE	-0.8183	2.1921	3.21	23.25	
934	423	Shell-Thick	INVSLE	-0.3065	5.3454	2.55	23.25	
934	423	Shell-Thick	INVSLE	-0.4529	5.5300	2.55	23.83	
934	423	Shell-Thick	INVSLE	-0.9429	2.3537	3.21	23.83	
934	423	Shell-Thick	INVSLE	-1.7481	-0.2004	1.28	9.10	
934	423	Shell-Thick	INVSLE	-0.4070	1.0306	1.02	9.10	
934	423	Shell-Thick	INVSLE	-0.7278	1.0789	1.02	9.32	
934	423	Shell-Thick	INVSLE	-2.0703	-0.1668	1.28	9.32	
935	424	Shell-Thick	INVSLE	-0.6216	1.0450	1.50	14.73	
935	424	Shell-Thick	INVSLE	-0.2364	3.0376	1.19	14.73	
935	424	Shell-Thick	INVSLE	-0.3178	3.1213	1.19	15.00	
935	424	Shell-Thick	INVSLE	-0.6905	1.1157	1.50	15.00	
935	424	Shell-Thick	INVSLE	-1.1817	-0.1108	0.71	6.90	
935	424	Shell-Thick	INVSLE	-0.3226	0.8216	0.57	6.90	
935	424	Shell-Thick	INVSLE	-0.4907	0.8509	0.57	7.03	
935	424	Shell-Thick	INVSLE	-1.3305	-0.0900	0.71	7.03	
935	424	Shell-Thick	INVSLE	-0.8392	2.3853	2.42	23.81	
935	424	Shell-Thick	INVSLE	-0.3191	5.6073	1.91	23.81	
935	424	Shell-Thick	INVSLE	-0.4290	5.7542	1.91	24.25	
935	424	Shell-Thick	INVSLE	-0.9321	2.5139	2.42	24.25	
935	424	Shell-Thick	INVSLE	-1.8312	-0.1496	0.96	9.32	
935	424	Shell-Thick	INVSLE	-0.4485	1.1092	0.76	9.32	
935	424	Shell-Thick	INVSLE	-0.6911	1.1487	0.76	9.49	
935	424	Shell-Thick	INVSLE	-2.0726	-0.1216	0.96	9.49	
936	425	Shell-Thick	INVSLE	-0.6357	1.1317	1.02	15.00	
936	425	Shell-Thick	INVSLE	-0.2443	3.1561	0.81	15.00	
936	425	Shell-Thick	INVSLE	-0.2998	3.2156	0.81	15.18	
936	425	Shell-Thick	INVSLE	-0.6822	1.1818	1.02	15.18	
936	425	Shell-Thick	INVSLE	-1.2228	-0.0806	0.48	7.03	
936	425	Shell-Thick	INVSLE	-0.3445	0.8671	0.38	7.03	
936	425	Shell-Thick	INVSLE	-0.4594	0.8882	0.38	7.11	
936	425	Shell-Thick	INVSLE	-1.3236	-0.0656	0.48	7.11	
936	425	Shell-Thick	INVSLE	-0.8582	2.5376	1.65	24.24	
936	425	Shell-Thick	INVSLE	-0.3298	5.8104	1.30	24.24	
936	425	Shell-Thick	INVSLE	-0.4048	5.9146	1.30	24.54	
936	425	Shell-Thick	INVSLE	-0.9210	2.6284	1.65	24.54	
936	425	Shell-Thick	INVSLE	-1.9035	-0.1088	0.65	9.49	
936	425	Shell-Thick	INVSLE	-0.4801	1.1706	0.52	9.49	
936	425	Shell-Thick	INVSLE	-0.6444	1.1991	0.52	9.60	
936	425	Shell-Thick	INVSLE	-2.0674	-0.0885	0.65	9.60	
937	426	Shell-Thick	INVSLE	-0.6467	1.1922	0.56	15.18	
937	426	Shell-Thick	INVSLE	-0.2546	3.2374	0.44	15.18	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 189 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

937	426 Shell-Thick	INVSLE	-0.2848	3.2705	0.44	15.28		
937	426 Shell-Thick	INVSLE	-0.6719	1.2200	0.56	15.28		
937	426 Shell-Thick	INVSLE	-1.2522	-0.0596	0.26	7.11		
937	426 Shell-Thick	INVSLE	-0.3701	0.8983	0.21	7.11		
937	426 Shell-Thick	INVSLE	-0.4328	0.9102	0.21	7.16		
937	426 Shell-Thick	INVSLE	-1.3070	-0.0511	0.26	7.16		
937	426 Shell-Thick	INVSLE	-0.8730	2.6438	0.90	24.53		
937	426 Shell-Thick	INVSLE	-0.3437	5.9498	0.71	24.53		
937	426 Shell-Thick	INVSLE	-0.3845	6.0076	0.71	24.70		
937	426 Shell-Thick	INVSLE	-0.9071	2.6940	0.90	24.70		
937	426 Shell-Thick	INVSLE	-1.9545	-0.0804	0.35	9.60		
937	426 Shell-Thick	INVSLE	-0.5170	1.2128	0.28	9.60		
937	426 Shell-Thick	INVSLE	-0.6065	1.2287	0.28	9.67		
937	426 Shell-Thick	INVSLE	-2.0436	-0.0690	0.35	9.67		
938	427 Shell-Thick	INVSLE	-0.6580	1.2244	9.785E-02	15.28		
938	427 Shell-Thick	INVSLE	-0.2650	3.2795	7.744E-02	15.28		
938	427 Shell-Thick	INVSLE	-0.2704	3.2851	7.744E-02	15.30		
938	427 Shell-Thick	INVSLE	-0.6624	1.2288	9.785E-02	15.30		
938	427 Shell-Thick	INVSLE	-1.2801	-0.0486	4.613E-02	7.16		
938	427 Shell-Thick	INVSLE	-0.3927	0.9144	3.667E-02	7.16		
938	427 Shell-Thick	INVSLE	-0.4039	0.9163	3.667E-02	7.17		
938	427 Shell-Thick	INVSLE	-1.2896	-0.0473	4.613E-02	7.17		
938	427 Shell-Thick	INVSLE	-0.8884	2.7006	0.16	24.70		
938	427 Shell-Thick	INVSLE	-0.3578	6.0223	0.12	24.70		
938	427 Shell-Thick	INVSLE	-0.3651	6.0319	0.12	24.72		
938	427 Shell-Thick	INVSLE	-0.8943	2.7086	0.16	24.72		
938	427 Shell-Thick	INVSLE	-2.0014	-0.0656	6.227E-02	9.67		
938	427 Shell-Thick	INVSLE	-0.5494	1.2344	4.950E-02	9.67		
938	427 Shell-Thick	INVSLE	-0.5653	1.2371	4.950E-02	9.68		
938	427 Shell-Thick	INVSLE	-2.0169	-0.0638	6.227E-02	9.68		
939	428 Shell-Thick	INVSLE	-0.6677	1.2272	-0.17	15.30		
939	428 Shell-Thick	INVSLE	-0.2787	3.2813	-0.13	15.30		
939	428 Shell-Thick	INVSLE	-0.2592	3.2591	-0.13	15.23		
939	428 Shell-Thick	INVSLE	-0.6513	1.2080	-0.17	15.23		
939	428 Shell-Thick	INVSLE	-1.2994	-0.0482	-0.36	7.17		
939	428 Shell-Thick	INVSLE	-0.4209	0.9146	-0.29	7.17		
939	428 Shell-Thick	INVSLE	-0.3807	0.9066	-0.29	7.14		
939	428 Shell-Thick	INVSLE	-1.2637	-0.0541	-0.36	7.14		
939	428 Shell-Thick	INVSLE	-0.9014	2.7062	-0.23	24.72		
939	428 Shell-Thick	INVSLE	-0.3762	6.0258	-0.18	24.72		
939	428 Shell-Thick	INVSLE	-0.3499	5.9870	-0.18	24.62		
939	428 Shell-Thick	INVSLE	-0.8792	2.6717	-0.23	24.62		
939	428 Shell-Thick	INVSLE	-2.0320	-0.0651	-0.58	9.68		
939	428 Shell-Thick	INVSLE	-0.5896	1.2347	-0.46	9.68		
939	428 Shell-Thick	INVSLE	-0.5321	1.2239	-0.46	9.64		
939	428 Shell-Thick	INVSLE	-1.9740	-0.0731	-0.58	9.64		
940	429 Shell-Thick	INVSLE	-0.6783	1.2004	-0.39	15.24		
940	429 Shell-Thick	INVSLE	-0.2929	3.2426	-0.31	15.24		
940	429 Shell-Thick	INVSLE	-0.2484	3.1933	-0.31	15.09		
940	429 Shell-Thick	INVSLE	-0.6408	1.1584	-0.39	15.09		
940	429 Shell-Thick	INVSLE	-1.3181	-0.0586	-0.82	7.14		
940	429 Shell-Thick	INVSLE	-0.4469	0.8990	-0.65	7.14		
940	429 Shell-Thick	INVSLE	-0.3548	0.8814	-0.65	7.07		
940	429 Shell-Thick	INVSLE	-1.2368	-0.0714	-0.82	7.07		
940	429 Shell-Thick	INVSLE	-0.9157	2.6604	-0.52	24.62		
940	429 Shell-Thick	INVSLE	-0.3955	5.9604	-0.42	24.62		
940	429 Shell-Thick	INVSLE	-0.3354	5.8743	-0.42	24.38		
940	429 Shell-Thick	INVSLE	-0.8651	2.5846	-0.52	24.38		
940	429 Shell-Thick	INVSLE	-2.0600	-0.0791	-1.32	9.64		
940	429 Shell-Thick	INVSLE	-0.6264	1.2136	-1.05	9.64		
940	429 Shell-Thick	INVSLE	-0.4949	1.1899	-1.05	9.54		
940	429 Shell-Thick	INVSLE	-1.9279	-0.0964	-1.32	9.54		
941	430 Shell-Thick	INVSLE	-0.6869	1.1450	-0.61	15.09		
941	430 Shell-Thick	INVSLE	-0.3103	3.1640	-0.49	15.09		
941	430 Shell-Thick	INVSLE	-0.2402	3.0895	-0.49	14.86		
941	430 Shell-Thick	INVSLE	-0.6276	1.0816	-0.61	14.86		
941	430 Shell-Thick	INVSLE	-1.3275	-0.0793	-1.29	7.07		
941	430 Shell-Thick	INVSLE	-0.4780	0.8677	-1.03	7.07		
941	430 Shell-Thick	INVSLE	-0.3333	0.8415	-1.03	6.96		
941	430 Shell-Thick	INVSLE	-1.1991	-0.0982	-1.29	6.96		
941	430 Shell-Thick	INVSLE	-0.9273	2.5647	-0.83	24.39		
941	430 Shell-Thick	INVSLE	-0.4189	5.8267	-0.66	24.39		
941	430 Shell-Thick	INVSLE	-0.3243	5.6963	-0.66	24.01		
941	430 Shell-Thick	INVSLE	-0.8473	2.4497	-0.83	24.01		
941	430 Shell-Thick	INVSLE	-2.0703	-0.1070	-2.08	9.54		
941	430 Shell-Thick	INVSLE	-0.6725	1.1715	-1.65	9.54		
941	430 Shell-Thick	INVSLE	-0.4639	1.1361	-1.65	9.40		
941	430 Shell-Thick	INVSLE	-1.8617	-0.1326	-2.08	9.40		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 190 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

942	431 Shell-Thick	INVSLE	-0.6957	1.0626	-0.84	14.86		
942	431 Shell-Thick	INVSLE	-0.3276	3.0472	-0.67	14.86		
942	431 Shell-Thick	INVSLE	-0.2310	2.9503	-0.67	14.54		
942	431 Shell-Thick	INVSLE	-0.6135	0.9804	-0.84	14.54		
942	431 Shell-Thick	INVSLE	-1.3342	-0.1095	-1.78	6.96		
942	431 Shell-Thick	INVSLE	-0.5050	0.8217	-1.41	6.96		
942	431 Shell-Thick	INVSLE	-0.3060	0.7883	-1.41	6.81		
942	431 Shell-Thick	INVSLE	-1.1569	-0.1332	-1.78	6.81		
942	431 Shell-Thick	INVSLE	-0.9392	2.4217	-1.14	24.03		
942	431 Shell-Thick	INVSLE	-0.4422	5.6278	-0.91	24.03		
942	431 Shell-Thick	INVSLE	-0.3119	5.4574	-0.91	23.51		
942	431 Shell-Thick	INVSLE	-0.8283	2.2718	-1.14	23.51		
942	431 Shell-Thick	INVSLE	-2.0746	-0.1478	-2.87	9.40		
942	431 Shell-Thick	INVSLE	-0.7106	1.1093	-2.27	9.40		
942	431 Shell-Thick	INVSLE	-0.4243	1.0642	-2.27	9.20		
942	431 Shell-Thick	INVSLE	-1.7869	-0.1798	-2.87	9.20		
943	432 Shell-Thick	INVSLE	-0.7008	0.9564	-1.09	14.55		
943	432 Shell-Thick	INVSLE	-0.3469	2.8946	-0.87	14.55		
943	432 Shell-Thick	INVSLE	-0.2227	2.7791	-0.87	14.15		
943	432 Shell-Thick	INVSLE	-0.5940	0.8582	-1.09	14.15		
943	432 Shell-Thick	INVSLE	-1.3270	-0.1476	-2.29	6.82		
943	432 Shell-Thick	INVSLE	-0.5343	0.7621	-1.82	6.82		
943	432 Shell-Thick	INVSLE	-0.2794	0.7233	-1.82	6.63		
943	432 Shell-Thick	INVSLE	-1.0976	-0.1747	-2.29	6.63		
943	432 Shell-Thick	INVSLE	-0.9461	2.2367	-1.47	23.53		
943	432 Shell-Thick	INVSLE	-0.4683	5.3675	-1.18	23.53		
943	432 Shell-Thick	INVSLE	-0.3006	5.1631	-1.18	22.87		
943	432 Shell-Thick	INVSLE	-0.8019	2.0559	-1.47	22.87		
943	432 Shell-Thick	INVSLE	-2.0532	-0.1993	-3.68	9.20		
943	432 Shell-Thick	INVSLE	-0.7515	1.0289	-2.93	9.20		
943	432 Shell-Thick	INVSLE	-0.3857	0.9765	-2.93	8.95		
943	432 Shell-Thick	INVSLE	-1.6816	-0.2358	-3.68	8.95		
944	433 Shell-Thick	INVSLE	-0.7037	0.8296	-1.35	14.16		
944	433 Shell-Thick	INVSLE	-0.3642	2.7099	-1.08	14.16		
944	433 Shell-Thick	INVSLE	-0.2106	2.5811	-1.08	13.66		
944	433 Shell-Thick	INVSLE	-0.5703	0.7206	-1.35	13.66		
944	433 Shell-Thick	INVSLE	-1.3117	-0.1922	-2.83	6.63		
944	433 Shell-Thick	INVSLE	-0.5543	0.6906	-2.26	6.63		
944	433 Shell-Thick	INVSLE	-0.2404	0.6492	-2.26	6.40		
944	433 Shell-Thick	INVSLE	-1.0269	-0.2199	-2.83	6.40		
944	433 Shell-Thick	INVSLE	-0.9499	2.0145	-1.82	22.89		
944	433 Shell-Thick	INVSLE	-0.4916	5.0515	-1.46	22.89		
944	433 Shell-Thick	INVSLE	-0.2750	4.8215	-1.46	22.08		
944	433 Shell-Thick	INVSLE	-0.7700	1.8112	-1.82	22.08		
944	433 Shell-Thick	INVSLE	-2.0169	-0.2594	-4.54	8.95		
944	433 Shell-Thick	INVSLE	-0.7768	0.9324	-3.62	8.95		
944	433 Shell-Thick	INVSLE	-0.3290	0.8764	-3.62	8.64		
944	433 Shell-Thick	INVSLE	-1.5564	-0.2968	-4.54	8.64		
945	434 Shell-Thick	INVSLE	-0.6990	0.6884	-1.63	13.68		
945	434 Shell-Thick	INVSLE	-0.3810	2.4979	-1.32	13.68		
945	434 Shell-Thick	INVSLE	-0.1953	2.3611	-1.32	13.08		
945	434 Shell-Thick	INVSLE	-0.5362	0.5723	-1.63	13.08		
945	434 Shell-Thick	INVSLE	-1.2736	-0.2401	-3.40	6.40		
945	434 Shell-Thick	INVSLE	-0.5711	0.6096	-2.72	6.40		
945	434 Shell-Thick	INVSLE	-0.1960	0.5683	-2.72	6.12		
945	434 Shell-Thick	INVSLE	-0.9281	-0.2664	-3.40	6.12		
945	434 Shell-Thick	INVSLE	-0.9436	1.7651	-2.21	22.11		
945	434 Shell-Thick	INVSLE	-0.5143	4.6875	-1.78	22.11		
945	434 Shell-Thick	INVSLE	-0.1945	4.4401	-1.78	21.15		
945	434 Shell-Thick	INVSLE	-0.7239	1.5448	-2.21	21.15		
945	434 Shell-Thick	INVSLE	-1.9400	-0.3242	-5.45	8.64		
945	434 Shell-Thick	INVSLE	-0.7995	0.8230	-4.35	8.64		
945	434 Shell-Thick	INVSLE	-0.2646	0.7672	-4.35	8.27		
945	434 Shell-Thick	INVSLE	-1.3825	-0.3596	-5.45	8.27		
946	435 Shell-Thick	INVSLE	-0.6874	0.5371	-1.95	13.11		
946	435 Shell-Thick	INVSLE	-0.3919	2.2635	-1.57	13.11		
946	435 Shell-Thick	INVSLE	-0.1271	2.1274	-1.57	12.41		
946	435 Shell-Thick	INVSLE	-0.4921	0.4223	-1.95	12.41		
946	435 Shell-Thick	INVSLE	-1.2176	-0.2891	-4.02	6.13		
946	435 Shell-Thick	INVSLE	-0.5698	0.5216	-3.23	6.13		
946	435 Shell-Thick	INVSLE	-0.1726	0.4848	-3.23	5.81		
946	435 Shell-Thick	INVSLE	-0.8061	-0.3097	-4.02	5.81		
946	435 Shell-Thick	INVSLE	-0.9280	1.4952	-2.63	21.19		
946	435 Shell-Thick	INVSLE	-0.5291	4.2834	-2.13	21.19		
946	435 Shell-Thick	INVSLE	-0.0743	4.0322	-2.13	20.08		
946	435 Shell-Thick	INVSLE	-0.6643	1.2711	-2.63	20.08		
946	435 Shell-Thick	INVSLE	-1.8323	-0.3903	-6.43	8.28		
946	435 Shell-Thick	INVSLE	-0.7959	0.7042	-5.15	8.28		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 191 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

946	435 Shell-Thick	INVSLU	-0.2331	0.6545	-5.15	7.84		
946	435 Shell-Thick	INVSLU	-1.1702	-0.4181	-6.43	7.84		
947	436 Shell-Thick	INVSLE	-0.6614	0.3855	-2.29	12.44		
947	436 Shell-Thick	INVSLE	-0.3977	2.0148	-1.86	12.44		
947	436 Shell-Thick	INVSLE	-0.0415	1.8856	-1.86	11.65		
947	436 Shell-Thick	INVSLE	-0.4290	0.2760	-2.29	11.65		
947	436 Shell-Thick	INVSLE	-1.1242	-0.3344	-4.70	5.81		
947	436 Shell-Thick	INVSLE	-0.5556	0.4306	-3.79	5.81		
947	436 Shell-Thick	INVSLE	-0.1409	0.4019	-3.79	5.44		
947	436 Shell-Thick	INVSLE	-0.6388	-0.3466	-4.70	5.44		
947	436 Shell-Thick	INVSLU	-0.8929	1.2204	-3.09	20.12		
947	436 Shell-Thick	INVSLU	-0.5369	3.8519	-2.52	20.12		
947	436 Shell-Thick	INVSLU	0.0738	3.6062	-2.52	18.84		
947	436 Shell-Thick	INVSLU	-0.5791	0.9980	-3.09	18.84		
947	436 Shell-Thick	INVSLU	-1.6609	-0.4514	-7.49	7.85		
947	436 Shell-Thick	INVSLU	-0.7738	0.5814	-6.02	7.85		
947	436 Shell-Thick	INVSLU	-0.1902	0.5425	-6.02	7.35		
947	436 Shell-Thick	INVSLU	-0.8939	-0.4679	-7.49	7.35		
948	437 Shell-Thick	INVSLE	-0.6200	0.2386	-2.68	11.68		
948	437 Shell-Thick	INVSLE	-0.3908	1.7577	-2.19	11.68		
948	437 Shell-Thick	INVSLE	0.0837	1.6480	-2.19	10.78		
948	437 Shell-Thick	INVSLE	-0.3455	0.1470	-2.68	10.78		
948	437 Shell-Thick	INVSLE	-0.9970	-0.3729	-5.44	5.45		
948	437 Shell-Thick	INVSLE	-0.5096	0.3399	-4.41	5.45		
948	437 Shell-Thick	INVSLE	-0.0918	0.3255	-4.41	5.03		
948	437 Shell-Thick	INVSLE	-0.4299	-0.3707	-5.44	5.03		
948	437 Shell-Thick	INVSLU	-0.8370	0.9478	-3.62	18.90		
948	437 Shell-Thick	INVSLU	-0.5275	3.4018	-2.96	18.90		
948	437 Shell-Thick	INVSLU	0.2872	3.1816	-2.96	17.45		
948	437 Shell-Thick	INVSLU	-0.4664	0.7473	-3.62	17.45		
948	437 Shell-Thick	INVSLU	-1.4342	-0.5034	-8.65	7.36		
948	437 Shell-Thick	INVSLU	-0.7058	0.4589	-6.99	7.36		
948	437 Shell-Thick	INVSLU	-0.1239	0.4394	-6.99	6.79		
948	437 Shell-Thick	INVSLU	-0.5930	-0.5004	-8.65	6.79		
949	438 Shell-Thick	INVSLE	-0.5524	0.1108	-3.12	10.82		
949	438 Shell-Thick	INVSLE	-0.3697	1.5042	-2.57	10.82		
949	438 Shell-Thick	INVSLE	0.2449	1.4198	-2.57	9.81		
949	438 Shell-Thick	INVSLE	-0.1505	0.0397	-3.12	9.81		
949	438 Shell-Thick	INVSLE	-0.8111	-0.3977	-6.27	5.04		
949	438 Shell-Thick	INVSLE	-0.4348	0.2555	-5.11	5.04		
949	438 Shell-Thick	INVSLE	-0.0235	0.2592	-5.11	4.56		
949	438 Shell-Thick	INVSLE	-0.2289	-0.3785	-6.27	4.56		
949	438 Shell-Thick	INVSLU	-0.7457	0.7004	-4.21	17.52		
949	438 Shell-Thick	INVSLU	-0.4991	2.9523	-3.47	17.52		
949	438 Shell-Thick	INVSLU	0.5561	2.7657	-3.47	15.89		
949	438 Shell-Thick	INVSLU	-0.0595	0.5247	-4.21	15.89		
949	438 Shell-Thick	INVSLU	-1.1338	-0.5369	-9.92	6.80		
949	438 Shell-Thick	INVSLU	-0.5968	0.3449	-8.06	6.80		
949	438 Shell-Thick	INVSLU	-0.0317	0.3499	-8.06	6.16		
949	438 Shell-Thick	INVSLU	-0.3091	-0.5110	-9.92	6.16		
950	439 Shell-Thick	INVSLE	-0.4542	0.0059	-3.62	9.86		
950	439 Shell-Thick	INVSLE	-0.3077	1.2598	-3.01	9.86		
950	439 Shell-Thick	INVSLE	0.4702	1.2178	-3.01	8.73		
950	439 Shell-Thick	INVSLE	0.1993	-0.0274	-3.62	8.73		
950	439 Shell-Thick	INVSLE	-0.5665	-0.4055	-7.20	4.58		
950	439 Shell-Thick	INVSLE	-0.3239	0.1810	-5.91	4.58		
950	439 Shell-Thick	INVSLE	0.0769	0.2110	-5.91	4.04		
950	439 Shell-Thick	INVSLE	-0.0741	-0.3614	-7.20	4.04		
950	439 Shell-Thick	INVSLU	-0.6132	0.4831	-4.89	15.98		
950	439 Shell-Thick	INVSLU	-0.2890	2.5108	-4.06	15.98		
950	439 Shell-Thick	INVSLU	0.9264	2.3854	-4.06	14.16		
950	439 Shell-Thick	INVSLU	0.5165	0.3601	-4.89	14.16		
950	439 Shell-Thick	INVSLU	-0.7817	-0.5475	-11.35	6.18		
950	439 Shell-Thick	INVSLU	-0.4373	0.2444	-9.27	6.18		
950	439 Shell-Thick	INVSLU	0.1038	0.2848	-9.27	5.46		
950	439 Shell-Thick	INVSLU	-0.1001	-0.4880	-11.35	5.46		
951	440 Shell-Thick	INVSLE	-0.2331	-0.0566	-4.21	8.79		
951	440 Shell-Thick	INVSLE	-0.1263	1.0413	-3.53	8.79		
951	440 Shell-Thick	INVSLE	0.7617	1.0446	-3.53	7.54		
951	440 Shell-Thick	INVSLE	0.6551	-0.0528	-4.21	7.54		
951	440 Shell-Thick	INVSLE	-0.3100	-0.3873	-8.25	4.06		
951	440 Shell-Thick	INVSLE	-0.2474	0.1248	-6.83	4.06		
951	440 Shell-Thick	INVSLE	0.2162	0.1835	-6.83	3.47		
951	440 Shell-Thick	INVSLE	0.1371	-0.3172	-8.25	3.47		
951	440 Shell-Thick	INVSLU	-0.1440	0.3269	-5.68	14.27		
951	440 Shell-Thick	INVSLU	0.0143	2.1040	-4.76	14.27		
951	440 Shell-Thick	INVSLU	1.3943	2.0430	-4.76	12.26		
951	440 Shell-Thick	INVSLU	1.2559	0.2537	-5.68	12.26		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 192 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

951	440	Shell-Thick	INVSLU	-0.4185	-0.5229	-12.95	5.48	
951	440	Shell-Thick	INVSLU	-0.3340	0.1685	-10.66	5.48	
951	440	Shell-Thick	INVSLU	0.2918	0.2478	-10.66	4.68	
951	440	Shell-Thick	INVSLU	0.1851	-0.4282	-12.95	4.68	
952	441	Shell-Thick	INVSLE	0.1956	-0.0764	-4.89	7.61	
952	441	Shell-Thick	INVSLE	0.1373	0.8513	-4.15	7.61	
952	441	Shell-Thick	INVSLE	1.1535	0.9208	-4.15	6.25	
952	441	Shell-Thick	INVSLE	1.2242	-0.0146	-4.89	6.25	
952	441	Shell-Thick	INVSLE	-0.1092	-0.3409	-9.46	3.50	
952	441	Shell-Thick	INVSLE	-0.1248	0.0897	-7.90	3.50	
952	441	Shell-Thick	INVSLE	0.4132	0.1862	-7.90	2.85	
952	441	Shell-Thick	INVSLE	0.4171	-0.2362	-9.46	2.85	
952	441	Shell-Thick	INVSLU	0.5489	0.2302	-6.60	12.38	
952	441	Shell-Thick	INVSLU	0.4412	1.7345	-5.60	12.38	
952	441	Shell-Thick	INVSLU	2.0119	1.7726	-5.60	10.19	
952	441	Shell-Thick	INVSLU	2.1602	0.2423	-6.60	10.19	
952	441	Shell-Thick	INVSLU	-0.1474	-0.4602	-14.76	4.72	
952	441	Shell-Thick	INVSLU	-0.1685	0.1212	-12.25	4.72	
952	441	Shell-Thick	INVSLU	0.5578	0.2513	-12.25	3.84	
952	441	Shell-Thick	INVSLU	0.5631	-0.3188	-14.76	3.84	
953	442	Shell-Thick	INVSLE	0.7522	-0.0311	-5.69	6.33	
953	442	Shell-Thick	INVSLE	0.4935	0.7109	-4.90	6.33	
953	442	Shell-Thick	INVSLE	1.6571	0.8451	-4.90	4.86	
953	442	Shell-Thick	INVSLE	1.9467	0.0833	-5.69	4.86	
953	442	Shell-Thick	INVSLE	0.1696	-0.2563	-10.85	2.88	
953	442	Shell-Thick	INVSLE	0.0583	0.0858	-9.17	2.88	
953	442	Shell-Thick	INVSLE	0.6843	0.2191	-9.17	2.18	
953	442	Shell-Thick	INVSLE	0.7910	-0.1195	-10.85	2.18	
953	442	Shell-Thick	INVSLU	1.4279	0.2300	-7.68	10.33	
953	442	Shell-Thick	INVSLU	0.9982	1.4357	-6.61	10.33	
953	442	Shell-Thick	INVSLU	2.7852	1.5710	-6.61	7.96	
953	442	Shell-Thick	INVSLU	3.2869	0.3184	-7.68	7.96	
953	442	Shell-Thick	INVSLU	0.2289	-0.3460	-16.83	3.89	
953	442	Shell-Thick	INVSLU	0.0786	0.1158	-14.12	3.89	
953	442	Shell-Thick	INVSLU	0.9238	0.2958	-14.12	2.95	
953	442	Shell-Thick	INVSLU	1.0679	-0.1614	-16.83	2.95	
954	443	Shell-Thick	INVSLE	4.4848	0.6955	15.81	-0.10	
954	443	Shell-Thick	INVSLE	3.1705	0.8356	13.45	-0.10	
954	443	Shell-Thick	INVSLE	1.4927	0.5017	13.45	1.86	
954	443	Shell-Thick	INVSLE	2.7172	0.4207	15.81	1.86	
954	443	Shell-Thick	INVSLE	2.4873	0.4012	9.02	-0.21	
954	443	Shell-Thick	INVSLE	1.8300	0.4623	7.89	-0.21	
954	443	Shell-Thick	INVSLE	0.8460	0.2574	7.89	0.89	
954	443	Shell-Thick	INVSLE	1.4797	0.2117	9.02	0.89	
954	443	Shell-Thick	INVSLU	6.8012	1.0368	23.67	-0.14	
954	443	Shell-Thick	INVSLU	4.7250	1.2684	19.90	-0.14	
954	443	Shell-Thick	INVSLU	2.2425	0.7850	19.90	2.97	
954	443	Shell-Thick	INVSLU	4.1523	0.6630	23.67	2.97	
954	443	Shell-Thick	INVSLU	3.3579	0.5416	12.18	-0.34	
954	443	Shell-Thick	INVSLU	2.4705	0.6240	10.65	-0.34	
954	443	Shell-Thick	INVSLU	1.1422	0.3475	10.65	1.21	
954	443	Shell-Thick	INVSLU	1.9976	0.2858	12.18	1.21	
955	444	Shell-Thick	INVSLE	3.3366	0.4248	13.46	1.73	
955	444	Shell-Thick	INVSLE	2.4626	0.8154	11.10	1.73	
955	444	Shell-Thick	INVSLE	1.0460	0.6138	11.10	3.79	
955	444	Shell-Thick	INVSLE	1.8603	0.2620	13.46	3.79	
955	444	Shell-Thick	INVSLE	1.7148	0.2105	7.54	0.84	
955	444	Shell-Thick	INVSLE	1.2978	0.3959	6.36	0.84	
955	444	Shell-Thick	INVSLE	0.4836	0.2388	6.36	1.87	
955	444	Shell-Thick	INVSLE	0.8914	0.0590	7.54	1.87	
955	444	Shell-Thick	INVSLU	5.2173	0.6733	20.33	2.75	
955	444	Shell-Thick	INVSLU	3.8134	1.3019	16.59	2.75	
955	444	Shell-Thick	INVSLU	1.6982	1.0486	16.59	6.02	
955	444	Shell-Thick	INVSLU	2.9838	0.4974	20.33	6.02	
955	444	Shell-Thick	INVSLU	2.3149	0.2841	10.18	1.14	
955	444	Shell-Thick	INVSLU	1.7520	0.5345	8.59	1.14	
955	444	Shell-Thick	INVSLU	0.6528	0.3224	8.59	2.53	
955	444	Shell-Thick	INVSLU	1.2034	0.0796	10.18	2.53	
956	445	Shell-Thick	INVSLE	2.4258	0.2590	11.50	3.67	
956	445	Shell-Thick	INVSLE	1.8832	0.8974	9.24	3.67	
956	445	Shell-Thick	INVSLE	0.6806	0.8286	9.24	5.65	
956	445	Shell-Thick	INVSLE	1.1861	0.2140	11.50	5.65	
956	445	Shell-Thick	INVSLE	1.1432	0.0610	6.32	1.82	
956	445	Shell-Thick	INVSLE	0.9088	0.3722	5.18	1.82	
956	445	Shell-Thick	INVSLE	0.2310	0.2767	5.18	2.82	
956	445	Shell-Thick	INVSLE	0.4673	-0.0364	6.32	2.82	
956	445	Shell-Thick	INVSLU	3.9132	0.4886	17.50	5.82	
956	445	Shell-Thick	INVSLU	3.0132	1.5063	13.95	5.82	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 193 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

956	445	Shell-Thick	INVSLU	1.2020	1.4686	13.95	8.92	
956	445	Shell-Thick	INVSLU	2.0197	0.5043	17.50	8.92	
956	445	Shell-Thick	INVSLU	1.5433	0.0823	8.53	2.46	
956	445	Shell-Thick	INVSLU	1.2269	0.5025	6.99	2.46	
956	445	Shell-Thick	INVSLU	0.3118	0.3735	6.99	3.81	
956	445	Shell-Thick	INVSLU	0.6308	-0.0492	8.53	3.81	
957	446	Shell-Thick	INVSLE	1.7034	0.2121	9.86	5.54	
957	446	Shell-Thick	INVSLE	1.4303	1.0838	7.77	5.54	
957	446	Shell-Thick	INVSLE	0.3994	1.1128	7.77	7.37	
957	446	Shell-Thick	INVSLE	0.6580	0.2497	9.86	7.37	
957	446	Shell-Thick	INVSLE	0.7219	-0.0302	5.32	2.77	
957	446	Shell-Thick	INVSLE	0.6287	0.4009	4.26	2.77	
957	446	Shell-Thick	INVSLE	0.0589	0.3557	4.26	3.70	
957	446	Shell-Thick	INVSLE	0.1640	-0.0839	5.32	3.70	
957	446	Shell-Thick	INVSLU	2.8416	0.4930	15.13	8.74	
957	446	Shell-Thick	INVSLU	2.3599	1.8758	11.84	8.74	
957	446	Shell-Thick	INVSLU	0.7943	1.9907	11.84	11.62	
957	446	Shell-Thick	INVSLU	1.2309	0.6365	15.13	11.62	
957	446	Shell-Thick	INVSLU	0.9746	-0.0407	7.18	3.75	
957	446	Shell-Thick	INVSLU	0.8487	0.5412	5.75	3.75	
957	446	Shell-Thick	INVSLU	0.0795	0.4802	5.75	5.00	
957	446	Shell-Thick	INVSLU	0.2214	-0.1132	7.18	5.00	
958	447	Shell-Thick	INVSLE	1.1449	0.2552	8.49	7.27	
958	447	Shell-Thick	INVSLE	1.0929	1.3434	6.59	7.27	
958	447	Shell-Thick	INVSLE	0.2038	1.4596	6.59	8.93	
958	447	Shell-Thick	INVSLE	0.2576	0.3693	8.49	8.93	
958	447	Shell-Thick	INVSLE	0.4158	-0.0722	4.50	3.66	
958	447	Shell-Thick	INVSLE	0.4360	0.4698	3.54	3.66	
958	447	Shell-Thick	INVSLE	-0.0468	0.4715	3.54	4.50	
958	447	Shell-Thick	INVSLE	-0.0480	-0.0836	4.50	4.50	
958	447	Shell-Thick	INVSLU	1.9904	0.6348	13.12	11.46	
958	447	Shell-Thick	INVSLU	1.8548	2.3564	10.13	11.46	
958	447	Shell-Thick	INVSLU	0.4944	2.6054	10.13	14.07	
958	447	Shell-Thick	INVSLU	0.6119	0.8945	13.12	14.07	
958	447	Shell-Thick	INVSLU	0.5614	-0.0974	6.07	4.94	
958	447	Shell-Thick	INVSLU	0.5886	0.6342	4.78	4.94	
958	447	Shell-Thick	INVSLU	-0.0632	0.6365	4.78	6.07	
958	447	Shell-Thick	INVSLU	-0.0648	-0.1129	6.07	6.07	
959	448	Shell-Thick	INVSLE	0.7136	0.3836	7.34	8.85	
959	448	Shell-Thick	INVSLE	0.8599	1.6677	5.63	8.85	
959	448	Shell-Thick	INVSLE	0.0870	1.8482	5.63	10.34	
959	448	Shell-Thick	INVSLE	-0.0412	0.5512	7.34	10.34	
959	448	Shell-Thick	INVSLE	0.1958	-0.0670	3.82	4.47	
959	448	Shell-Thick	INVSLE	0.3099	0.5750	2.97	4.47	
959	448	Shell-Thick	INVSLE	-0.1028	0.6137	2.97	5.21	
959	448	Shell-Thick	INVSLE	-0.1916	-0.0457	3.82	5.21	
959	448	Shell-Thick	INVSLU	1.3142	0.9061	11.41	13.94	
959	448	Shell-Thick	INVSLU	1.4977	2.9348	8.72	13.94	
959	448	Shell-Thick	INVSLU	0.3071	3.2798	8.72	16.30	
959	448	Shell-Thick	INVSLU	0.1332	1.2433	11.41	16.30	
959	448	Shell-Thick	INVSLU	0.2643	-0.0905	5.16	6.03	
959	448	Shell-Thick	INVSLU	0.4183	0.7762	4.01	6.03	
959	448	Shell-Thick	INVSLU	-0.1388	0.8284	4.01	7.04	
959	448	Shell-Thick	INVSLU	-0.2586	-0.0617	5.16	7.04	
960	449	Shell-Thick	INVSLE	0.3967	0.5736	6.35	10.28	
960	449	Shell-Thick	INVSLE	0.6962	2.0352	4.83	10.28	
960	449	Shell-Thick	INVSLE	0.0232	2.2712	4.83	11.61	
960	449	Shell-Thick	INVSLE	-0.2479	0.7898	6.35	11.61	
960	449	Shell-Thick	INVSLE	0.0430	-0.0254	3.26	5.19	
960	449	Shell-Thick	INVSLE	0.2284	0.7065	2.51	5.19	
960	449	Shell-Thick	INVSLE	-0.1257	0.7768	2.51	5.85	
960	449	Shell-Thick	INVSLE	-0.2820	0.0250	3.26	5.85	
960	449	Shell-Thick	INVSLU	0.8069	1.2681	9.94	16.18	
960	449	Shell-Thick	INVSLU	1.2387	3.5760	7.53	16.18	
960	449	Shell-Thick	INVSLU	0.1960	4.0042	7.53	18.29	
960	449	Shell-Thick	INVSLU	-0.2082	1.6767	9.94	18.29	
960	449	Shell-Thick	INVSLU	0.0580	-0.0343	4.40	7.00	
960	449	Shell-Thick	INVSLU	0.3083	0.9538	3.38	7.00	
960	449	Shell-Thick	INVSLU	-0.1698	1.0486	3.38	7.89	
960	449	Shell-Thick	INVSLU	-0.3808	0.0338	4.40	7.89	
961	450	Shell-Thick	INVSLE	0.1569	0.8182	5.51	11.56	
961	450	Shell-Thick	INVSLE	0.5963	2.4384	4.15	11.56	
961	450	Shell-Thick	INVSLE	0.0082	2.7086	4.15	12.74	
961	450	Shell-Thick	INVSLE	-0.3371	1.0620	5.51	12.74	
961	450	Shell-Thick	INVSLE	-0.0640	0.0475	2.79	5.83	
961	450	Shell-Thick	INVSLE	0.1814	0.8593	2.12	5.83	
961	450	Shell-Thick	INVSLE	-0.1238	0.9508	2.12	6.41	
961	450	Shell-Thick	INVSLE	-0.3928	0.1171	2.79	6.41	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 194 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

961	450	Shell-Thick	INVS LU	0.4130	1.7118	8.66	18.20	
961	450	Shell-Thick	INVS LU	1.0774	4.2696	6.51	18.20	
961	450	Shell-Thick	INVS LU	0.1613	4.7471	6.51	20.08	
961	450	Shell-Thick	INVS LU	-0.4550	2.1578	8.66	20.08	
961	450	Shell-Thick	INVS LU	-0.0865	0.0642	3.76	7.87	
961	450	Shell-Thick	INVS LU	0.2449	1.1600	2.86	7.87	
961	450	Shell-Thick	INVS LU	-0.1671	1.2835	2.86	8.65	
961	450	Shell-Thick	INVS LU	-0.5386	0.1581	3.76	8.65	
962	451	Shell-Thick	INVS LE	-0.0102	1.0947	4.76	12.70	
962	451	Shell-Thick	INVS LE	0.5310	2.8571	3.57	12.70	
962	451	Shell-Thick	INVS LE	0.0187	3.1509	3.57	13.74	
962	451	Shell-Thick	INVS LE	-0.3637	1.3590	4.76	13.74	
962	451	Shell-Thick	INVS LE	-0.1340	0.1407	2.38	6.39	
962	451	Shell-Thick	INVS LE	0.1546	1.0235	1.80	6.39	
962	451	Shell-Thick	INVS LE	-0.1082	1.1300	1.80	6.90	
962	451	Shell-Thick	INVS LE	-0.4793	0.2248	2.38	6.90	
962	451	Shell-Thick	INVS LU	0.1334	2.2009	7.52	20.00	
962	451	Shell-Thick	INVS LU	0.9674	4.9834	5.62	20.00	
962	451	Shell-Thick	INVS LU	0.1658	5.4945	5.62	21.66	
962	451	Shell-Thick	INVS LU	-0.4910	2.6742	7.52	21.66	
962	451	Shell-Thick	INVS LU	-0.1809	0.1900	3.22	8.63	
962	451	Shell-Thick	INVS LU	0.2088	1.3817	2.43	8.63	
962	451	Shell-Thick	INVS LU	-0.1460	1.5255	2.43	9.32	
962	451	Shell-Thick	INVS LU	-0.6644	0.3034	3.22	9.32	
963	452	Shell-Thick	INVS LE	-0.1348	1.3937	4.11	13.71	
963	452	Shell-Thick	INVS LE	0.5020	3.2818	3.06	13.71	
963	452	Shell-Thick	INVS LE	0.0563	3.5824	3.06	14.62	
963	452	Shell-Thick	INVS LE	-0.3741	1.6619	4.11	14.62	
963	452	Shell-Thick	INVS LE	-0.1814	0.2483	2.03	6.89	
963	452	Shell-Thick	INVS LE	0.1449	1.1935	1.52	6.89	
963	452	Shell-Thick	INVS LE	-0.0812	1.3069	1.52	7.34	
963	452	Shell-Thick	INVS LE	-0.5330	0.3390	2.03	7.34	
963	452	Shell-Thick	INVS LU	-0.0807	2.7218	6.51	21.61	
963	452	Shell-Thick	INVS LU	0.9162	5.7035	4.84	21.61	
963	452	Shell-Thick	INVS LU	0.2159	6.2211	4.84	23.07	
963	452	Shell-Thick	INVS LU	-0.5050	3.1959	6.51	23.07	
963	452	Shell-Thick	INVS LU	-0.2449	0.3352	2.74	9.30	
963	452	Shell-Thick	INVS LU	0.1956	1.6113	2.06	9.30	
963	452	Shell-Thick	INVS LU	-0.1097	1.7643	2.06	9.90	
963	452	Shell-Thick	INVS LU	-0.7433	0.4576	2.74	9.90	
964	453	Shell-Thick	INVS LE	-0.2091	1.6972	3.52	14.59	
964	453	Shell-Thick	INVS LE	0.4868	3.6967	2.61	14.59	
964	453	Shell-Thick	INVS LE	0.1023	3.9940	2.61	15.39	
964	453	Shell-Thick	INVS LE	-0.3703	1.9622	3.52	15.39	
964	453	Shell-Thick	INVS LE	-0.2151	0.3618	1.72	7.33	
964	453	Shell-Thick	INVS LE	0.1427	1.3618	1.29	7.33	
964	453	Shell-Thick	INVS LE	-0.0507	1.4768	1.29	7.71	
964	453	Shell-Thick	INVS LE	-0.5520	0.4549	1.72	7.71	
964	453	Shell-Thick	INVS LU	-0.2220	3.2458	5.59	23.02	
964	453	Shell-Thick	INVS LU	0.8858	6.4042	4.14	23.02	
964	453	Shell-Thick	INVS LU	0.2797	6.9130	4.14	24.29	
964	453	Shell-Thick	INVS LU	-0.4999	3.7100	5.59	24.29	
964	453	Shell-Thick	INVS LU	-0.2913	0.4884	2.33	9.89	
964	453	Shell-Thick	INVS LU	0.1927	1.8385	1.74	9.89	
964	453	Shell-Thick	INVS LU	-0.0684	1.9937	1.74	10.41	
964	453	Shell-Thick	INVS LU	-0.7724	0.6141	2.33	10.41	
965	454	Shell-Thick	INVS LE	-0.2270	1.9965	2.98	15.37	
965	454	Shell-Thick	INVS LE	0.4906	4.0928	2.20	15.37	
965	454	Shell-Thick	INVS LE	0.1616	4.3749	2.20	16.05	
965	454	Shell-Thick	INVS LE	-0.3606	2.2466	2.98	16.05	
965	454	Shell-Thick	INVS LE	-0.2747	0.4762	1.45	7.70	
965	454	Shell-Thick	INVS LE	0.1481	1.5239	1.08	7.70	
965	454	Shell-Thick	INVS LE	-0.0161	1.6347	1.08	8.03	
965	454	Shell-Thick	INVS LE	-0.5565	0.5664	1.45	8.03	
965	454	Shell-Thick	INVS LU	-0.3064	3.7594	4.76	24.26	
965	454	Shell-Thick	INVS LU	0.8878	7.0718	3.51	24.26	
965	454	Shell-Thick	INVS LU	0.3676	7.5525	3.51	25.35	
965	454	Shell-Thick	INVS LU	-0.4869	4.1949	4.76	25.35	
965	454	Shell-Thick	INVS LU	-0.3779	0.6429	1.96	10.40	
965	454	Shell-Thick	INVS LU	0.1999	2.0572	1.45	10.40	
965	454	Shell-Thick	INVS LU	-0.0217	2.2068	1.45	10.84	
965	454	Shell-Thick	INVS LU	-0.7836	0.7647	1.96	10.84	
966	455	Shell-Thick	INVS LE	-0.2351	2.2789	2.49	16.03	
966	455	Shell-Thick	INVS LE	0.4958	4.4590	1.84	16.03	
966	455	Shell-Thick	INVS LE	0.2190	4.7179	1.84	16.61	
966	455	Shell-Thick	INVS LE	-0.3448	2.5083	2.49	16.61	
966	455	Shell-Thick	INVS LE	-0.3089	0.5859	1.21	8.03	
966	455	Shell-Thick	INVS LE	0.1543	1.6744	0.89	8.03	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 195 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

966	455 Shell-Thick	INVSLE	0.0170	1.7772	0.89	8.30		
966	455 Shell-Thick	INVSLE	-0.5421	0.6701	1.21	8.30		
966	455 Shell-Thick	INVSLE	-0.3173	4.2421	3.99	25.32		
966	455 Shell-Thick	INVSLE	0.8918	7.6880	2.93	25.32		
966	455 Shell-Thick	INVSLE	0.4532	8.1280	2.93	26.25		
966	455 Shell-Thick	INVSLE	-0.4654	4.6399	3.99	26.25		
966	455 Shell-Thick	INVSLE	-0.4281	0.7909	1.63	10.84		
966	455 Shell-Thick	INVSLE	0.2082	2.2605	1.20	10.84		
966	455 Shell-Thick	INVSLE	0.0230	2.3993	1.20	11.21		
966	455 Shell-Thick	INVSLE	-0.7709	0.9046	1.63	11.21		
967	456 Shell-Thick	INVSLE	-0.2403	2.5373	2.04	16.60		
967	456 Shell-Thick	INVSLE	0.5089	4.7881	1.50	16.60		
967	456 Shell-Thick	INVSLE	0.2808	5.0160	1.50	17.08		
967	456 Shell-Thick	INVSLE	-0.3285	2.7385	2.04	17.08		
967	456 Shell-Thick	INVSLE	-0.3356	0.6872	0.98	8.30		
967	456 Shell-Thick	INVSLE	0.1627	1.8102	0.72	8.30		
967	456 Shell-Thick	INVSLE	0.0502	1.9013	0.72	8.53		
967	456 Shell-Thick	INVSLE	-0.5243	0.7619	0.98	8.53		
967	456 Shell-Thick	INVSLE	-0.3244	4.6828	3.27	26.23		
967	456 Shell-Thick	INVSLE	0.9104	8.2414	2.40	26.23		
967	456 Shell-Thick	INVSLE	0.5481	8.6280	2.40	26.99		
967	456 Shell-Thick	INVSLE	-0.4434	5.0306	3.27	26.99		
967	456 Shell-Thick	INVSLE	-0.4674	0.9277	1.32	11.20		
967	456 Shell-Thick	INVSLE	0.2196	2.4437	0.98	11.20		
967	456 Shell-Thick	INVSLE	0.0678	2.5668	0.98	11.51		
967	456 Shell-Thick	INVSLE	-0.7514	1.0285	1.32	11.51		
968	457 Shell-Thick	INVSLE	-0.2415	2.7637	1.62	17.07		
968	457 Shell-Thick	INVSLE	0.5162	5.0730	1.18	17.07		
968	457 Shell-Thick	INVSLE	0.3348	5.2642	1.18	17.45		
968	457 Shell-Thick	INVSLE	-0.3104	2.9324	1.62	17.45		
968	457 Shell-Thick	INVSLE	-0.3493	0.7764	0.77	8.52		
968	457 Shell-Thick	INVSLE	0.1684	1.9278	0.57	8.52		
968	457 Shell-Thick	INVSLE	0.0793	2.0047	0.57	8.70		
968	457 Shell-Thick	INVSLE	-0.4976	0.8396	0.77	8.70		
968	457 Shell-Thick	INVSLE	-0.3260	5.0681	2.59	26.98		
968	457 Shell-Thick	INVSLE	0.9196	8.7201	1.90	26.98		
968	457 Shell-Thick	INVSLE	0.6310	9.0440	1.90	27.59		
968	457 Shell-Thick	INVSLE	-0.4190	5.3593	2.59	27.59		
968	457 Shell-Thick	INVSLE	-0.4878	1.0481	1.04	11.51		
968	457 Shell-Thick	INVSLE	0.2274	2.6026	0.77	11.51		
968	457 Shell-Thick	INVSLE	0.1071	2.7063	0.77	11.75		
968	457 Shell-Thick	INVSLE	-0.7146	1.1334	1.04	11.75		
969	458 Shell-Thick	INVSLE	-0.2436	2.9529	1.21	17.44		
969	458 Shell-Thick	INVSLE	0.5245	5.3085	0.89	17.44		
969	458 Shell-Thick	INVSLE	0.3876	5.4584	0.89	17.73		
969	458 Shell-Thick	INVSLE	-0.2947	3.0847	1.21	17.73		
969	458 Shell-Thick	INVSLE	-0.3636	0.8512	0.58	8.70		
969	458 Shell-Thick	INVSLE	0.1733	2.0252	0.42	8.70		
969	458 Shell-Thick	INVSLE	0.1064	2.0856	0.42	8.84		
969	458 Shell-Thick	INVSLE	-0.4740	0.9009	0.58	8.84		
969	458 Shell-Thick	INVSLE	-0.3288	5.3900	1.95	27.58		
969	458 Shell-Thick	INVSLE	0.9318	9.1159	1.42	27.58		
969	458 Shell-Thick	INVSLE	0.7137	9.3695	1.42	28.04		
969	458 Shell-Thick	INVSLE	-0.3978	5.6171	1.95	28.04		
969	458 Shell-Thick	INVSLE	-0.5089	1.1491	0.78	11.75		
969	458 Shell-Thick	INVSLE	0.2340	2.7340	0.57	11.75		
969	458 Shell-Thick	INVSLE	0.1436	2.8156	0.57	11.93		
969	458 Shell-Thick	INVSLE	-0.6819	1.2162	0.78	11.93		
970	459 Shell-Thick	INVSLE	-0.2450	3.1001	0.83	17.73		
970	459 Shell-Thick	INVSLE	0.5228	5.4903	0.60	17.73		
970	459 Shell-Thick	INVSLE	0.4293	5.5954	0.60	17.92		
970	459 Shell-Thick	INVSLE	-0.2795	3.1925	0.83	17.92		
970	459 Shell-Thick	INVSLE	-0.3725	0.9095	0.39	8.84		
970	459 Shell-Thick	INVSLE	0.1737	2.1004	0.29	8.84		
970	459 Shell-Thick	INVSLE	0.1280	2.1428	0.29	8.93		
970	459 Shell-Thick	INVSLE	-0.4472	0.9445	0.39	8.93		
970	459 Shell-Thick	INVSLE	-0.3307	5.6403	1.33	28.03		
970	459 Shell-Thick	INVSLE	0.9278	9.4214	0.97	28.03		
970	459 Shell-Thick	INVSLE	0.7787	9.5991	0.97	28.35		
970	459 Shell-Thick	INVSLE	-0.3773	5.7994	1.33	28.35		
970	459 Shell-Thick	INVSLE	-0.5220	1.2279	0.53	11.93		
970	459 Shell-Thick	INVSLE	0.2344	2.8355	0.39	11.93		
970	459 Shell-Thick	INVSLE	0.1728	2.8928	0.39	12.06		
970	459 Shell-Thick	INVSLE	-0.6418	1.2750	0.53	12.06		
971	460 Shell-Thick	INVSLE	-0.2493	3.2024	0.45	17.92		
971	460 Shell-Thick	INVSLE	0.5181	5.6154	0.33	17.92		
971	460 Shell-Thick	INVSLE	0.4669	5.6734	0.33	18.03		
971	460 Shell-Thick	INVSLE	-0.2679	3.2532	0.45	18.03		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 196 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

971	460	Shell-Thick	INVSLE	-0.3865	0.9500	0.21	8.93	
971	460	Shell-Thick	INVSLE	0.1715	2.1520	0.16	8.93	
971	460	Shell-Thick	INVSLE	0.1466	2.1755	0.16	8.98	
971	460	Shell-Thick	INVSLE	-0.4269	0.9692	0.21	8.98	
971	460	Shell-Thick	INVSLE	-0.3365	5.8143	0.72	28.34	
971	460	Shell-Thick	INVSLE	0.9199	9.6317	0.53	28.34	
971	460	Shell-Thick	INVSLE	0.8384	9.7298	0.53	28.52	
971	460	Shell-Thick	INVSLE	-0.3617	5.9017	0.72	28.52	
971	460	Shell-Thick	INVSLE	-0.5455	1.2825	0.29	12.06	
971	460	Shell-Thick	INVSLE	0.2315	2.9052	0.21	12.06	
971	460	Shell-Thick	INVSLE	0.1979	2.9369	0.21	12.12	
971	460	Shell-Thick	INVSLE	-0.6113	1.3084	0.29	12.12	
972	461	Shell-Thick	INVSLE	-0.2546	3.2574	7.919E-02	18.03	
972	461	Shell-Thick	INVSLE	0.5012	5.6817	5.761E-02	18.03	
972	461	Shell-Thick	INVSLE	0.4921	5.6914	5.761E-02	18.04	
972	461	Shell-Thick	INVSLE	-0.2578	3.2657	7.919E-02	18.04	
972	461	Shell-Thick	INVSLE	-0.3990	0.9715	3.759E-02	8.98	
972	461	Shell-Thick	INVSLE	0.1638	2.1793	2.743E-02	8.98	
972	461	Shell-Thick	INVSLE	0.1594	2.1832	2.743E-02	8.99	
972	461	Shell-Thick	INVSLE	-0.4060	0.9747	3.759E-02	8.99	
972	461	Shell-Thick	INVSLE	-0.3437	5.9081	0.13	28.51	
972	461	Shell-Thick	INVSLE	0.8925	9.7431	9.260E-02	28.51	
972	461	Shell-Thick	INVSLE	0.8779	9.7595	9.260E-02	28.54	
972	461	Shell-Thick	INVSLE	-0.3480	5.9224	0.13	28.54	
972	461	Shell-Thick	INVSLE	-0.5665	1.3116	5.075E-02	12.12	
972	461	Shell-Thick	INVSLE	0.2211	2.9420	3.703E-02	12.12	
972	461	Shell-Thick	INVSLE	0.2151	2.9473	3.703E-02	12.14	
972	461	Shell-Thick	INVSLE	-0.5778	1.3158	5.075E-02	12.14	
973	462	Shell-Thick	INVSLE	-0.2637	3.2640	-0.14	18.04	
973	462	Shell-Thick	INVSLE	0.4796	5.6879	-0.10	18.04	
973	462	Shell-Thick	INVSLE	0.5124	5.6492	-0.10	17.98	
973	462	Shell-Thick	INVSLE	-0.2516	3.2296	-0.14	17.98	
973	462	Shell-Thick	INVSLE	-0.4186	0.9738	-0.29	8.99	
973	462	Shell-Thick	INVSLE	0.1529	2.1816	-0.21	8.99	
973	462	Shell-Thick	INVSLE	0.1688	2.1659	-0.21	8.96	
973	462	Shell-Thick	INVSLE	-0.3923	0.9607	-0.29	8.96	
973	462	Shell-Thick	INVSLE	-0.3560	5.9199	-0.19	28.55	
973	462	Shell-Thick	INVSLE	0.8584	9.7540	-0.14	28.55	
973	462	Shell-Thick	INVSLE	0.9107	9.6884	-0.14	28.43	
973	462	Shell-Thick	INVSLE	-0.3396	5.8607	-0.19	28.43	
973	462	Shell-Thick	INVSLE	-0.5983	1.3146	-0.47	12.14	
973	462	Shell-Thick	INVSLE	0.2064	2.9452	-0.34	12.14	
973	462	Shell-Thick	INVSLE	0.2279	2.9240	-0.34	12.09	
973	462	Shell-Thick	INVSLE	-0.5555	1.2969	-0.47	12.09	
974	463	Shell-Thick	INVSLE	-0.2742	3.2223	-0.32	17.98	
974	463	Shell-Thick	INVSLE	0.4454	5.6340	-0.23	17.98	
974	463	Shell-Thick	INVSLE	0.5203	5.5475	-0.23	17.82	
974	463	Shell-Thick	INVSLE	-0.2464	3.1457	-0.32	17.82	
974	463	Shell-Thick	INVSLE	-0.4378	0.9566	-0.66	8.96	
974	463	Shell-Thick	INVSLE	0.1361	2.1589	-0.48	8.96	
974	463	Shell-Thick	INVSLE	0.1727	2.1240	-0.48	8.88	
974	463	Shell-Thick	INVSLE	-0.3775	0.9276	-0.66	8.88	
974	463	Shell-Thick	INVSLE	-0.3702	5.8497	-0.43	28.44	
974	463	Shell-Thick	INVSLE	0.8040	9.6637	-0.31	28.44	
974	463	Shell-Thick	INVSLE	0.9234	9.5174	-0.31	28.18	
974	463	Shell-Thick	INVSLE	-0.3327	5.7180	-0.43	28.18	
974	463	Shell-Thick	INVSLE	-0.6275	1.2914	-1.07	12.09	
974	463	Shell-Thick	INVSLE	0.1838	2.9146	-0.78	12.09	
974	463	Shell-Thick	INVSLE	0.2331	2.8674	-0.78	11.99	
974	463	Shell-Thick	INVSLE	-0.5295	1.2522	-1.07	11.99	
975	464	Shell-Thick	INVSLE	-0.2885	3.1328	-0.50	17.82	
975	464	Shell-Thick	INVSLE	0.4068	5.5205	-0.36	17.82	
975	464	Shell-Thick	INVSLE	0.5247	5.3882	-0.36	17.58	
975	464	Shell-Thick	INVSLE	-0.2445	3.0159	-0.50	17.58	
975	464	Shell-Thick	INVSLE	-0.4637	0.9203	-1.05	8.88	
975	464	Shell-Thick	INVSLE	0.1162	2.1115	-0.76	8.88	
975	464	Shell-Thick	INVSLE	0.1738	2.0582	-0.76	8.77	
975	464	Shell-Thick	INVSLE	-0.3686	0.8761	-1.05	8.77	
975	464	Shell-Thick	INVSLE	-0.3895	5.6985	-0.67	28.19	
975	464	Shell-Thick	INVSLE	0.7438	9.4735	-0.49	28.19	
975	464	Shell-Thick	INVSLE	0.9316	9.2497	-0.49	27.79	
975	464	Shell-Thick	INVSLE	-0.3301	5.4972	-0.67	27.79	
975	464	Shell-Thick	INVSLE	-0.6669	1.2424	-1.68	11.99	
975	464	Shell-Thick	INVSLE	0.1568	2.8506	-1.23	11.99	
975	464	Shell-Thick	INVSLE	0.2346	2.7785	-1.23	11.84	
975	464	Shell-Thick	INVSLE	-0.5162	1.1828	-1.68	11.84	
976	465	Shell-Thick	INVSLE	-0.3036	2.9978	-0.69	17.58	
976	465	Shell-Thick	INVSLE	0.3567	5.3490	-0.51	17.58	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 197 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

976	465	Shell-Thick	INVSLE	0.5185	5.1737	-0.51	17.24
976	465	Shell-Thick	INVSLE	-0.2423	2.8426	-0.69	17.24
976	465	Shell-Thick	INVSLE	-0.4872	0.8658	-1.44	8.77
976	465	Shell-Thick	INVSLE	0.0907	2.0400	-1.05	8.77
976	465	Shell-Thick	INVSLE	0.1701	1.9695	-1.05	8.61
976	465	Shell-Thick	INVSLE	-0.3551	0.8075	-1.44	8.61
976	465	Shell-Thick	INVSLE	-0.4099	5.4700	-0.93	27.80
976	465	Shell-Thick	INVSLE	0.6650	9.1861	-0.68	27.80
976	465	Shell-Thick	INVSLE	0.9225	8.8894	-0.68	27.25
976	465	Shell-Thick	INVSLE	-0.3272	5.2026	-0.93	27.25
976	465	Shell-Thick	INVSLE	-0.7001	1.1689	-2.31	11.84
976	465	Shell-Thick	INVSLE	0.1225	2.7540	-1.69	11.84
976	465	Shell-Thick	INVSLE	0.2296	2.6589	-1.69	11.62
976	465	Shell-Thick	INVSLE	-0.4964	1.0901	-2.31	11.62
977	466	Shell-Thick	INVSLE	-0.3214	2.8196	-0.89	17.25
977	466	Shell-Thick	INVSLE	0.3047	5.1221	-0.65	17.25
977	466	Shell-Thick	INVSLE	0.5122	4.9082	-0.65	16.82
977	466	Shell-Thick	INVSLE	-0.2416	2.6303	-0.89	16.82
977	466	Shell-Thick	INVSLE	-0.5148	0.7943	-1.86	8.61
977	466	Shell-Thick	INVSLE	0.0630	1.9455	-1.36	8.61
977	466	Shell-Thick	INVSLE	0.1651	1.8598	-1.36	8.40
977	466	Shell-Thick	INVSLE	-0.3436	0.7237	-1.86	8.40
977	466	Shell-Thick	INVSLE	-0.4340	5.1682	-1.20	27.27
977	466	Shell-Thick	INVSLE	0.5850	8.8057	-0.88	27.27
977	466	Shell-Thick	INVSLE	0.9148	8.4433	-0.88	26.57
977	466	Shell-Thick	INVSLE	-0.3262	4.8414	-1.20	26.57
977	466	Shell-Thick	INVSLE	-0.7390	1.0723	-2.98	11.62
977	466	Shell-Thick	INVSLE	0.0850	2.6264	-2.18	11.62
977	466	Shell-Thick	INVSLE	0.2229	2.5108	-2.18	11.34
977	466	Shell-Thick	INVSLE	-0.4792	0.9769	-2.98	11.34
978	467	Shell-Thick	INVSLE	-0.3381	2.6031	-1.11	16.83
978	467	Shell-Thick	INVSLE	0.2440	4.8435	-0.82	16.83
978	467	Shell-Thick	INVSLE	0.4990	4.5960	-0.82	16.29
978	467	Shell-Thick	INVSLE	-0.2377	2.3834	-1.11	16.29
978	467	Shell-Thick	INVSLE	-0.5348	0.7078	-2.30	8.41
978	467	Shell-Thick	INVSLE	0.0307	1.8296	-1.69	8.41
978	467	Shell-Thick	INVSLE	0.1569	1.7310	-1.69	8.15
978	467	Shell-Thick	INVSLE	-0.3207	0.6266	-2.30	8.15
978	467	Shell-Thick	INVSLE	-0.4564	4.8011	-1.49	26.59
978	467	Shell-Thick	INVSLE	0.4913	8.3386	-1.10	26.59
978	467	Shell-Thick	INVSLE	0.8957	7.9185	-1.10	25.73
978	467	Shell-Thick	INVSLE	-0.3209	4.4206	-1.49	25.73
978	467	Shell-Thick	INVSLE	-0.7630	0.9555	-3.67	11.35
978	467	Shell-Thick	INVSLE	0.0415	2.4699	-2.70	11.35
978	467	Shell-Thick	INVSLE	0.2118	2.3368	-2.70	11.00
978	467	Shell-Thick	INVSLE	-0.4455	0.8459	-3.67	11.00
979	468	Shell-Thick	INVSLE	-0.3551	2.3526	-1.34	16.31
979	468	Shell-Thick	INVSLE	0.1864	4.5178	-0.99	16.31
979	468	Shell-Thick	INVSLE	0.4922	4.2441	-0.99	15.67
979	468	Shell-Thick	INVSLE	-0.2319	2.1095	-1.34	15.67
979	468	Shell-Thick	INVSLE	-0.5532	0.6082	-2.77	8.16
979	468	Shell-Thick	INVSLE	-0.0019	1.6941	-2.04	8.16
979	468	Shell-Thick	INVSLE	0.1502	1.5861	-2.04	7.85
979	468	Shell-Thick	INVSLE	-0.2926	0.5198	-2.77	7.85
979	468	Shell-Thick	INVSLE	-0.4793	4.3755	-1.81	25.76
979	468	Shell-Thick	INVSLE	0.4048	7.7922	-1.34	25.76
979	468	Shell-Thick	INVSLE	0.8887	7.3264	-1.34	24.74
979	468	Shell-Thick	INVSLE	-0.3131	3.9531	-1.81	24.74
979	468	Shell-Thick	INVSLE	-0.7830	0.8211	-4.42	11.01
979	468	Shell-Thick	INVSLE	-0.0026	2.2871	-3.26	11.01
979	468	Shell-Thick	INVSLE	0.2028	2.1412	-3.26	10.60
979	468	Shell-Thick	INVSLE	-0.4040	0.7017	-4.42	10.60
980	469	Shell-Thick	INVSLE	-0.3669	2.0764	-1.60	15.69
980	469	Shell-Thick	INVSLE	0.1254	4.1515	-1.19	15.69
980	469	Shell-Thick	INVSLE	0.4848	3.8587	-1.19	14.94
980	469	Shell-Thick	INVSLE	-0.2178	1.8150	-1.60	14.94
980	469	Shell-Thick	INVSLE	-0.5550	0.4994	-3.28	7.86
980	469	Shell-Thick	INVSLE	-0.0368	1.5421	-2.43	7.86
980	469	Shell-Thick	INVSLE	0.1434	1.4281	-2.43	7.50
980	469	Shell-Thick	INVSLE	-0.2419	0.4063	-3.28	7.50
980	469	Shell-Thick	INVSLE	-0.4954	3.9051	-2.16	24.77
980	469	Shell-Thick	INVSLE	0.3136	7.1774	-1.61	24.77
980	469	Shell-Thick	INVSLE	0.8807	6.6773	-1.61	23.58
980	469	Shell-Thick	INVSLE	-0.2698	3.4486	-2.16	23.58
980	469	Shell-Thick	INVSLE	-0.7774	0.6742	-5.23	10.61
980	469	Shell-Thick	INVSLE	-0.0496	2.0818	-3.86	10.61
980	469	Shell-Thick	INVSLE	0.1936	1.9279	-3.86	10.12
980	469	Shell-Thick	INVSLE	-0.3301	0.5486	-5.23	10.12

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 198 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

981	470	Shell-Thick	INVSLE	-0.3743	1.7803	-1.89	14.97
981	470	Shell-Thick	INVSLE	0.0757	3.7510	-1.42	14.97
981	470	Shell-Thick	INVSLE	0.4939	3.4507	-1.42	14.11
981	470	Shell-Thick	INVSLE	-0.1737	1.5120	-1.89	14.11
981	470	Shell-Thick	INVSLE	-0.5450	0.3842	-3.84	7.51
981	470	Shell-Thick	INVSLE	-0.0686	1.3764	-2.86	7.51
981	470	Shell-Thick	INVSLE	0.1428	1.2619	-2.86	7.09
981	470	Shell-Thick	INVSLE	-0.1956	0.2918	-3.84	7.09
981	470	Shell-Thick	INVSLE	-0.5053	3.3992	-2.56	23.62
981	470	Shell-Thick	INVSLE	0.2430	6.5045	-1.91	23.62
981	470	Shell-Thick	INVSLE	0.9010	5.9889	-1.91	22.24
981	470	Shell-Thick	INVSLE	-0.1484	2.9269	-2.56	22.24
981	470	Shell-Thick	INVSLE	-0.7613	0.5187	-6.10	10.13
981	470	Shell-Thick	INVSLE	-0.0926	1.8582	-4.53	10.13
981	470	Shell-Thick	INVSLE	0.1928	1.7035	-4.53	9.57
981	470	Shell-Thick	INVSLE	-0.2640	0.3939	-6.10	9.57
982	471	Shell-Thick	INVSLE	-0.3696	1.4774	-2.23	14.14
982	471	Shell-Thick	INVSLE	0.0318	3.3268	-1.68	14.14
982	471	Shell-Thick	INVSLE	0.5136	3.0279	-1.68	13.15
982	471	Shell-Thick	INVSLE	-0.0659	1.2083	-2.23	13.15
982	471	Shell-Thick	INVSLE	-0.5041	0.2687	-4.47	7.10
982	471	Shell-Thick	INVSLE	-0.0980	1.2020	-3.34	7.10
982	471	Shell-Thick	INVSLE	0.1480	1.0916	-3.34	6.62
982	471	Shell-Thick	INVSLE	-0.1562	0.1805	-4.47	6.62
982	471	Shell-Thick	INVSLE	-0.4989	2.8790	-3.00	22.30
982	471	Shell-Thick	INVSLE	0.1823	5.7907	-2.26	22.30
982	471	Shell-Thick	INVSLE	0.9376	5.2734	-2.26	20.73
982	471	Shell-Thick	INVSLE	0.0389	2.4001	-3.00	20.73
982	471	Shell-Thick	INVSLE	-0.7007	0.3628	-7.07	9.58
982	471	Shell-Thick	INVSLE	-0.1323	1.6227	-5.28	9.58
982	471	Shell-Thick	INVSLE	0.1999	1.4737	-5.28	8.93
982	471	Shell-Thick	INVSLE	-0.2109	0.2437	-7.07	8.93
983	472	Shell-Thick	INVSLE	-0.3511	1.1751	-2.60	13.19
983	472	Shell-Thick	INVSLE	0.0117	2.8870	-1.98	13.19
983	472	Shell-Thick	INVSLE	0.5654	2.6063	-1.98	12.07
983	472	Shell-Thick	INVSLE	0.0793	0.9216	-2.60	12.07
983	472	Shell-Thick	INVSLE	-0.4347	0.1571	-5.17	6.63
983	472	Shell-Thick	INVSLE	-0.1181	1.0229	-3.89	6.63
983	472	Shell-Thick	INVSLE	0.1678	0.9247	-3.89	6.08
983	472	Shell-Thick	INVSLE	-0.0975	0.0808	-5.17	6.08
983	472	Shell-Thick	INVSLE	-0.4740	2.3556	-3.52	20.80
983	472	Shell-Thick	INVSLE	0.1621	5.0487	-2.67	20.80
983	472	Shell-Thick	INVSLE	1.0265	4.5563	-2.67	19.01
983	472	Shell-Thick	INVSLE	0.2843	1.8966	-3.52	19.01
983	472	Shell-Thick	INVSLE	-0.5994	0.2121	-8.15	8.95
983	472	Shell-Thick	INVSLE	-0.1594	1.3809	-6.12	8.95
983	472	Shell-Thick	INVSLE	0.2265	1.2483	-6.12	8.21
983	472	Shell-Thick	INVSLE	-0.1316	0.1091	-8.15	8.21
984	473	Shell-Thick	INVSLE	-0.3080	0.8920	-3.05	12.12
984	473	Shell-Thick	INVSLE	0.0131	2.4471	-2.33	12.12
984	473	Shell-Thick	INVSLE	0.6468	2.1943	-2.33	10.85
984	473	Shell-Thick	INVSLE	0.2902	0.6605	-3.05	10.85
984	473	Shell-Thick	INVSLE	-0.3127	0.0580	-5.97	6.10
984	473	Shell-Thick	INVSLE	-0.1269	0.8464	-4.53	6.10
984	473	Shell-Thick	INVSLE	0.2046	0.7661	-4.53	5.47
984	473	Shell-Thick	INVSLE	-0.0062	-0.0020	-5.97	5.47
984	473	Shell-Thick	INVSLE	-0.3182	1.8590	-4.11	19.10
984	473	Shell-Thick	INVSLE	0.1756	4.3033	-3.15	19.10
984	473	Shell-Thick	INVSLE	1.1597	3.8504	-3.15	17.09
984	473	Shell-Thick	INVSLE	0.6339	1.4288	-4.11	17.09
984	473	Shell-Thick	INVSLE	-0.4229	0.0784	-9.37	8.24
984	473	Shell-Thick	INVSLE	-0.1714	1.1426	-7.07	8.24
984	473	Shell-Thick	INVSLE	0.2762	1.0343	-7.07	7.39
984	473	Shell-Thick	INVSLE	-0.0083	-0.0027	-9.37	7.39
985	474	Shell-Thick	INVSLE	-0.1353	0.6361	-3.57	10.92
985	474	Shell-Thick	INVSLE	0.0578	2.0158	-2.76	10.92
985	474	Shell-Thick	INVSLE	0.7848	1.8124	-2.76	9.49
985	474	Shell-Thick	INVSLE	0.5703	0.4479	-3.57	9.49
985	474	Shell-Thick	INVSLE	-0.2341	-0.0230	-6.89	5.50
985	474	Shell-Thick	INVSLE	-0.1146	0.6778	-5.27	5.50
985	474	Shell-Thick	INVSLE	0.2711	0.6259	-5.27	4.79
985	474	Shell-Thick	INVSLE	0.1252	-0.0567	-6.89	4.79
985	474	Shell-Thick	INVSLE	-0.0207	1.4004	-4.82	17.20
985	474	Shell-Thick	INVSLE	0.2576	3.5674	-3.72	17.20
985	474	Shell-Thick	INVSLE	1.3806	3.1884	-3.72	14.95
985	474	Shell-Thick	INVSLE	1.0865	1.0332	-4.82	14.95
985	474	Shell-Thick	INVSLE	-0.3160	-0.0310	-10.75	7.42
985	474	Shell-Thick	INVSLE	-0.1547	0.9150	-8.18	7.42

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 199 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

985	474	Shell-Thick	INVSLU	0.3660	0.8449	-8.18	6.47	
985	474	Shell-Thick	INVSLU	0.1690	-0.0766	-10.75	6.47	
986	475	Shell-Thick	INVSLE	0.1261	0.4311	-4.19	9.57	
986	475	Shell-Thick	INVSLE	0.1496	1.6134	-3.28	9.57	
986	475	Shell-Thick	INVSLE	0.9845	1.4681	-3.28	7.98	
986	475	Shell-Thick	INVSLE	0.9546	0.2909	-4.19	7.98	
986	475	Shell-Thick	INVSLE	-0.1134	-0.0746	-7.97	4.82	
986	475	Shell-Thick	INVSLE	-0.0739	0.5270	-6.15	4.82	
986	475	Shell-Thick	INVSLE	0.3762	0.5090	-6.15	4.02	
986	475	Shell-Thick	INVSLE	0.3160	-0.0783	-7.97	4.02	
986	475	Shell-Thick	INVSLU	0.4038	1.0175	-5.66	15.07	
986	475	Shell-Thick	INVSLU	0.4089	2.8732	-4.43	15.07	
986	475	Shell-Thick	INVSLU	1.6898	2.5803	-4.43	12.57	
986	475	Shell-Thick	INVSLU	1.6951	0.7189	-5.66	12.57	
986	475	Shell-Thick	INVSLU	-0.1531	-0.1007	-12.35	6.51	
986	475	Shell-Thick	INVSLU	-0.0998	0.7114	-9.49	6.51	
986	475	Shell-Thick	INVSLU	0.5079	0.6871	-9.49	5.43	
986	475	Shell-Thick	INVSLU	0.4266	-0.1056	-12.35	5.43	
987	476	Shell-Thick	INVSLE	0.4822	0.2830	-4.94	8.07	
987	476	Shell-Thick	INVSLE	0.3134	1.2473	-3.93	8.07	
987	476	Shell-Thick	INVSLE	1.2786	1.1826	-3.93	6.31	
987	476	Shell-Thick	INVSLE	1.4564	0.2132	-4.94	6.31	
987	476	Shell-Thick	INVSLE	0.0685	-0.0915	-9.24	4.06	
987	476	Shell-Thick	INVSLE	0.0101	0.3995	-7.23	4.06	
987	476	Shell-Thick	INVSLE	0.5394	0.4256	-7.23	3.17	
987	476	Shell-Thick	INVSLE	0.5837	-0.0554	-9.24	3.17	
987	476	Shell-Thick	INVSLU	0.9620	0.7172	-6.67	12.72	
987	476	Shell-Thick	INVSLU	0.6652	2.2305	-5.30	12.72	
987	476	Shell-Thick	INVSLU	2.1358	2.0604	-5.30	9.95	
987	476	Shell-Thick	INVSLU	2.4684	0.5246	-6.67	9.95	
987	476	Shell-Thick	INVSLU	0.0925	-0.1235	-14.22	5.48	
987	476	Shell-Thick	INVSLU	0.0136	0.5393	-11.06	5.48	
987	476	Shell-Thick	INVSLU	0.7282	0.5745	-11.06	4.28	
987	476	Shell-Thick	INVSLU	0.7880	-0.0747	-14.22	4.28	
988	477	Shell-Thick	INVSLE	2.9794	0.3943	13.54	-0.11	
988	477	Shell-Thick	INVSLE	1.8482	0.5712	10.39	-0.11	
988	477	Shell-Thick	INVSLE	0.4700	0.3609	10.39	2.55	
988	477	Shell-Thick	INVSLE	1.5399	0.2236	13.54	2.55	
988	477	Shell-Thick	INVSLE	1.7219	0.2395	7.94	-0.21	
988	477	Shell-Thick	INVSLE	1.1142	0.3277	6.26	-0.21	
988	477	Shell-Thick	INVSLE	0.2839	0.1874	6.26	1.37	
988	477	Shell-Thick	INVSLE	0.8794	0.1066	7.94	1.37	
988	477	Shell-Thick	INVSLU	4.4377	0.5738	20.02	-0.15	
988	477	Shell-Thick	INVSLU	2.6993	0.8536	15.17	-0.15	
988	477	Shell-Thick	INVSLU	0.6858	0.5620	15.17	3.92	
988	477	Shell-Thick	INVSLU	2.3058	0.3593	20.02	3.92	
988	477	Shell-Thick	INVSLU	2.3246	0.3234	10.72	-0.33	
988	477	Shell-Thick	INVSLU	1.5042	0.4424	8.45	-0.33	
988	477	Shell-Thick	INVSLU	0.3833	0.2530	8.45	1.84	
988	477	Shell-Thick	INVSLU	1.1872	0.1439	10.72	1.84	
989	478	Shell-Thick	INVSLE	2.2367	0.2134	11.19	2.39	
989	478	Shell-Thick	INVSLE	1.5429	0.7250	8.15	2.39	
989	478	Shell-Thick	INVSLE	0.4216	0.7401	8.15	5.05	
989	478	Shell-Thick	INVSLE	1.0790	0.2513	11.19	5.05	
989	478	Shell-Thick	INVSLE	1.1721	0.0963	6.42	1.29	
989	478	Shell-Thick	INVSLE	0.8345	0.3663	4.78	1.29	
989	478	Shell-Thick	INVSLE	0.1741	0.3302	4.78	2.74	
989	478	Shell-Thick	INVSLE	0.5133	0.0584	6.42	2.74	
989	478	Shell-Thick	INVSLU	3.4712	0.3491	16.73	3.66	
989	478	Shell-Thick	INVSLU	2.3643	1.1410	12.07	3.66	
989	478	Shell-Thick	INVSLU	0.7086	1.2154	12.07	7.74	
989	478	Shell-Thick	INVSLU	1.7351	0.4750	16.73	7.74	
989	478	Shell-Thick	INVSLU	1.5823	0.1300	8.67	1.75	
989	478	Shell-Thick	INVSLU	1.1265	0.4945	6.45	1.75	
989	478	Shell-Thick	INVSLU	0.2351	0.4458	6.45	3.69	
989	478	Shell-Thick	INVSLU	0.6929	0.0789	8.67	3.69	
990	479	Shell-Thick	INVSLE	1.6420	0.2219	9.34	4.90	
990	479	Shell-Thick	INVSLE	1.2514	1.0481	6.55	4.90	
990	479	Shell-Thick	INVSLE	0.3215	1.2186	6.55	7.34	
990	479	Shell-Thick	INVSLE	0.7008	0.3986	9.34	7.34	
990	479	Shell-Thick	INVSLE	0.7778	0.0442	5.24	2.67	
990	479	Shell-Thick	INVSLE	0.6195	0.4863	3.73	2.67	
990	479	Shell-Thick	INVSLE	0.0845	0.5278	3.73	3.98	
990	479	Shell-Thick	INVSLE	0.2563	0.0758	5.24	3.98	
990	479	Shell-Thick	INVSLU	2.6442	0.4278	14.09	7.50	
990	479	Shell-Thick	INVSLU	1.9841	1.6994	9.82	7.50	
990	479	Shell-Thick	INVSLU	0.5963	2.0196	9.82	11.23	
990	479	Shell-Thick	INVSLU	1.2162	0.7729	14.09	11.23	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 200 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

990	479	Shell-Thick	INVSLU	1.0500	0.0597	7.07	3.60	
990	479	Shell-Thick	INVSLU	0.8363	0.6566	5.04	3.60	
990	479	Shell-Thick	INVSLU	0.1140	0.7125	5.04	5.38	
990	479	Shell-Thick	INVSLU	0.3460	0.1024	7.07	5.38	
991	480	Shell-Thick	INVSLE	1.1865	0.3741	7.86	7.21	
991	480	Shell-Thick	INVSLE	1.0509	1.4861	5.39	7.21	
991	480	Shell-Thick	INVSLE	0.2664	1.7747	5.39	9.38	
991	480	Shell-Thick	INVSLE	0.4100	0.6561	7.86	9.38	
991	480	Shell-Thick	INVSLE	0.5000	0.0676	4.32	3.92	
991	480	Shell-Thick	INVSLE	0.4859	0.6650	3.00	3.92	
991	480	Shell-Thick	INVSLE	0.0438	0.7680	3.00	5.08	
991	480	Shell-Thick	INVSLE	0.0807	0.1547	4.32	5.08	
991	480	Shell-Thick	INVSLU	1.9825	0.7294	11.97	11.03	
991	480	Shell-Thick	INVSLU	1.7062	2.4383	8.17	11.03	
991	480	Shell-Thick	INVSLU	0.5244	2.9422	8.17	14.36	
991	480	Shell-Thick	INVSLU	0.7917	1.2375	11.97	14.36	
991	480	Shell-Thick	INVSLU	0.6749	0.0913	5.83	5.30	
991	480	Shell-Thick	INVSLU	0.6559	0.8977	4.05	5.30	
991	480	Shell-Thick	INVSLU	0.0591	1.0367	4.05	6.86	
991	480	Shell-Thick	INVSLU	0.1090	0.2088	5.83	6.86	
992	481	Shell-Thick	INVSLE	0.8558	0.6452	6.68	9.27	
992	481	Shell-Thick	INVSLE	0.9435	2.0102	4.51	9.27	
992	481	Shell-Thick	INVSLE	0.2705	2.3909	4.51	11.18	
992	481	Shell-Thick	INVSLE	0.2106	1.0062	6.68	11.18	
992	481	Shell-Thick	INVSLE	0.3147	0.1552	3.60	5.03	
992	481	Shell-Thick	INVSLE	0.4150	0.8885	2.45	5.03	
992	481	Shell-Thick	INVSLE	0.0433	1.0402	2.45	6.03	
992	481	Shell-Thick	INVSLE	-0.0257	0.2854	3.60	6.03	
992	481	Shell-Thick	INVSLU	1.4833	1.2135	10.26	14.19	
992	481	Shell-Thick	INVSLU	1.5563	3.3110	6.90	14.19	
992	481	Shell-Thick	INVSLU	0.5339	3.9572	6.90	17.14	
992	481	Shell-Thick	INVSLU	0.4847	1.8422	10.26	17.14	
992	481	Shell-Thick	INVSLU	0.4249	0.2095	4.85	6.79	
992	481	Shell-Thick	INVSLU	0.5602	1.1995	3.31	6.79	
992	481	Shell-Thick	INVSLU	0.0585	1.4042	3.31	8.15	
992	481	Shell-Thick	INVSLU	-0.0347	0.3853	4.85	8.15	
993	482	Shell-Thick	INVSLE	0.6364	1.0090	5.72	11.09	
993	482	Shell-Thick	INVSLE	0.8963	2.5984	3.81	11.09	
993	482	Shell-Thick	INVSLE	0.3146	3.0518	3.81	12.76	
993	482	Shell-Thick	INVSLE	0.0958	1.4338	5.72	12.76	
993	482	Shell-Thick	INVSLE	0.1992	0.2933	3.02	6.00	
993	482	Shell-Thick	INVSLE	0.3847	1.1456	2.03	6.00	
993	482	Shell-Thick	INVSLE	0.0690	1.3345	2.03	6.87	
993	482	Shell-Thick	INVSLE	-0.0798	0.4572	3.02	6.87	
993	482	Shell-Thick	INVSLU	1.1433	1.8390	8.85	17.00	
993	482	Shell-Thick	INVSLU	1.4895	4.2832	5.88	17.00	
993	482	Shell-Thick	INVSLU	0.5993	5.0431	5.88	19.60	
993	482	Shell-Thick	INVSLU	0.2996	2.5663	8.85	19.60	
993	482	Shell-Thick	INVSLU	0.2690	0.3959	4.08	8.10	
993	482	Shell-Thick	INVSLU	0.5193	1.5465	2.74	8.10	
993	482	Shell-Thick	INVSLU	0.0931	1.8016	2.74	9.27	
993	482	Shell-Thick	INVSLU	-0.1078	0.6172	4.08	9.27	
994	483	Shell-Thick	INVSLE	0.4913	1.4475	4.91	12.70	
994	483	Shell-Thick	INVSLE	0.9021	3.2347	3.24	12.70	
994	483	Shell-Thick	INVSLE	0.3949	3.7326	3.24	14.16	
994	483	Shell-Thick	INVSLE	0.0380	1.9085	4.91	14.16	
994	483	Shell-Thick	INVSLE	0.1303	0.4704	2.55	6.84	
994	483	Shell-Thick	INVSLE	0.3837	1.4263	1.70	6.84	
994	483	Shell-Thick	INVSLE	0.1129	1.6382	1.70	7.59	
994	483	Shell-Thick	INVSLE	-0.0994	0.6544	2.55	7.59	
994	483	Shell-Thick	INVSLU	0.9100	2.5806	7.65	19.49	
994	483	Shell-Thick	INVSLU	1.5033	5.3317	5.03	19.49	
994	483	Shell-Thick	INVSLU	0.7218	6.1614	5.03	21.78	
994	483	Shell-Thick	INVSLU	0.1974	3.3628	7.65	21.78	
994	483	Shell-Thick	INVSLU	0.1759	0.6350	3.45	9.23	
994	483	Shell-Thick	INVSLU	0.5179	1.9255	2.29	9.23	
994	483	Shell-Thick	INVSLU	0.1525	2.2116	2.29	10.24	
994	483	Shell-Thick	INVSLU	-0.1342	0.8834	3.45	10.24	
995	484	Shell-Thick	INVSLE	0.4128	1.9305	4.23	14.11	
995	484	Shell-Thick	INVSLE	0.9333	3.8932	2.77	14.11	
995	484	Shell-Thick	INVSLE	0.4908	4.4173	2.77	15.39	
995	484	Shell-Thick	INVSLE	0.0311	2.4131	4.23	15.39	
995	484	Shell-Thick	INVSLE	0.0966	0.6711	2.17	7.57	
995	484	Shell-Thick	INVSLE	0.3984	1.7178	1.42	7.57	
995	484	Shell-Thick	INVSLE	0.1655	1.9427	1.42	8.22	
995	484	Shell-Thick	INVSLE	-0.0934	0.8668	2.17	8.22	
995	484	Shell-Thick	INVSLU	0.7794	3.3909	6.63	21.70	
995	484	Shell-Thick	INVSLU	1.5535	6.4159	4.32	21.70	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 201 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

995	484 Shell-Thick	INVS LU	0.8680	7.2870	4.32	23.71		
995	484 Shell-Thick	INVS LU	0.1754	4.2062	6.63	23.71		
995	484 Shell-Thick	INVS LU	0.1304	0.9060	2.93	10.22		
995	484 Shell-Thick	INVS LU	0.5378	2.3190	1.92	10.22		
995	484 Shell-Thick	INVS LU	0.2234	2.6226	1.92	11.09		
995	484 Shell-Thick	INVS LU	-0.1261	1.1702	2.93	11.09		
996	485 Shell-Thick	INVS LE	0.3705	2.4406	3.64	15.35		
996	485 Shell-Thick	INVS LE	0.9910	4.5578	2.36	15.35		
996	485 Shell-Thick	INVS LE	0.6040	5.0855	2.36	16.48		
996	485 Shell-Thick	INVS LE	0.0502	2.9229	3.64	16.48		
996	485 Shell-Thick	INVS LE	0.0833	0.8855	1.84	8.20		
996	485 Shell-Thick	INVS LE	0.4255	2.0113	1.20	8.20		
996	485 Shell-Thick	INVS LE	0.2244	2.2384	1.20	8.76		
996	485 Shell-Thick	INVS LE	-0.0738	1.0828	1.84	8.76		
996	485 Shell-Thick	INVS LU	0.7037	4.2438	5.73	23.65		
996	485 Shell-Thick	INVS LU	1.6468	7.5108	3.71	23.65		
996	485 Shell-Thick	INVS LU	1.0442	8.3870	3.71	25.42		
996	485 Shell-Thick	INVS LU	0.1940	5.0568	5.73	25.42		
996	485 Shell-Thick	INVS LU	0.1124	1.1955	2.49	11.07		
996	485 Shell-Thick	INVS LU	0.5744	2.7153	1.62	11.07		
996	485 Shell-Thick	INVS LU	0.3030	3.0218	1.62	11.83		
996	485 Shell-Thick	INVS LU	-0.0997	1.4618	2.49	11.83		
997	486 Shell-Thick	INVS LE	0.3651	2.9538	3.13	16.44		
997	486 Shell-Thick	INVS LE	1.0538	5.2076	2.01	16.44		
997	486 Shell-Thick	INVS LE	0.7172	5.7243	2.01	17.42		
997	486 Shell-Thick	INVS LE	0.0961	3.4246	3.13	17.42		
997	486 Shell-Thick	INVS LE	0.0866	1.1024	1.56	8.75		
997	486 Shell-Thick	INVS LE	0.4561	2.2973	1.01	8.75		
997	486 Shell-Thick	INVS LE	0.2831	2.5195	1.01	9.24		
997	486 Shell-Thick	INVS LE	-0.0434	1.2955	1.56	9.24		
997	486 Shell-Thick	INVS LU	0.6880	5.1007	4.94	25.36		
997	486 Shell-Thick	INVS LU	1.7469	8.5825	3.18	25.36		
997	486 Shell-Thick	INVS LU	1.2205	9.4407	3.18	26.91		
997	486 Shell-Thick	INVS LU	0.2580	5.8935	4.94	26.91		
997	486 Shell-Thick	INVS LU	0.1169	1.4882	2.11	11.82		
997	486 Shell-Thick	INVS LU	0.6157	3.1013	1.36	11.82		
997	486 Shell-Thick	INVS LU	0.3822	3.4013	1.36	12.47		
997	486 Shell-Thick	INVS LU	-0.0586	1.7489	2.11	12.47		
998	487 Shell-Thick	INVS LE	0.3733	3.4566	2.67	17.40		
998	487 Shell-Thick	INVS LE	1.1274	5.8298	1.71	17.40		
998	487 Shell-Thick	INVS LE	0.8356	6.3199	1.71	18.24		
998	487 Shell-Thick	INVS LE	0.1492	3.9008	2.67	18.24		
998	487 Shell-Thick	INVS LE	0.0969	1.3148	1.32	9.23		
998	487 Shell-Thick	INVS LE	0.4906	2.5697	0.85	9.23		
998	487 Shell-Thick	INVS LE	0.3421	2.7801	0.85	9.64		
998	487 Shell-Thick	INVS LE	-0.0102	1.4973	1.32	9.64		
998	487 Shell-Thick	INVS LU	0.6937	5.9402	4.24	26.87		
998	487 Shell-Thick	INVS LU	1.8658	9.6102	2.71	26.87		
998	487 Shell-Thick	INVS LU	1.4078	10.4246	2.71	28.21		
998	487 Shell-Thick	INVS LU	0.3340	6.6880	4.24	28.21		
998	487 Shell-Thick	INVS LU	0.1308	1.7750	1.78	12.46		
998	487 Shell-Thick	INVS LU	0.6623	3.4691	1.15	12.46		
998	487 Shell-Thick	INVS LU	0.4619	3.7532	1.15	13.02		
998	487 Shell-Thick	INVS LU	-0.0137	2.0214	1.78	13.02		
999	488 Shell-Thick	INVS LE	0.3997	3.9327	2.26	18.22		
999	488 Shell-Thick	INVS LE	1.1946	6.4100	1.44	18.22		
999	488 Shell-Thick	INVS LE	0.9449	6.8629	1.44	18.94		
999	488 Shell-Thick	INVS LE	0.2139	4.3423	2.26	18.94		
999	488 Shell-Thick	INVS LE	0.1140	1.5158	1.11	9.64		
999	488 Shell-Thick	INVS LE	0.5226	2.8226	0.71	9.64		
999	488 Shell-Thick	INVS LE	0.3966	3.0165	0.71	9.99		
999	488 Shell-Thick	INVS LE	0.0262	1.6839	1.11	9.99		
999	488 Shell-Thick	INVS LU	0.7310	6.7353	3.59	28.18		
999	488 Shell-Thick	INVS LU	1.9739	10.5700	2.28	28.18		
999	488 Shell-Thick	INVS LU	1.5808	11.3232	2.28	29.33		
999	488 Shell-Thick	INVS LU	0.4316	7.4251	3.59	29.33		
999	488 Shell-Thick	INVS LU	0.1539	2.0463	1.50	13.01		
999	488 Shell-Thick	INVS LU	0.7055	3.8105	0.95	13.01		
999	488 Shell-Thick	INVS LU	0.5354	4.0723	0.95	13.49		
999	488 Shell-Thick	INVS LU	0.0354	2.2733	1.50	13.49		
1000	489 Shell-Thick	INVS LE	0.4265	4.3724	1.89	18.93		
1000	489 Shell-Thick	INVS LE	1.2629	6.9389	1.19	18.93		
1000	489 Shell-Thick	INVS LE	1.0519	7.3446	1.19	19.54		
1000	489 Shell-Thick	INVS LE	0.2749	4.7378	1.89	19.54		
1000	489 Shell-Thick	INVS LE	0.1312	1.7010	0.92	9.99		
1000	489 Shell-Thick	INVS LE	0.5539	3.0520	0.58	9.99		
1000	489 Shell-Thick	INVS LE	0.4482	3.2252	0.58	10.28		
1000	489 Shell-Thick	INVS LE	0.0601	1.8508	0.92	10.28		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 202 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1000	489	Shell-Thick	INVS LU	0.7690	7.4702	3.01	29.31	
1000	489	Shell-Thick	INVS LU	2.0851	11.4464	1.90	29.31	
1000	489	Shell-Thick	INVS LU	1.7519	12.1215	1.90	30.28	
1000	489	Shell-Thick	INVS LU	0.5240	8.0857	3.01	30.28	
1000	489	Shell-Thick	INVS LU	0.1771	2.2963	1.24	13.48	
1000	489	Shell-Thick	INVS LU	0.7478	4.1201	0.79	13.48	
1000	489	Shell-Thick	INVS LU	0.6051	4.3540	0.79	13.88	
1000	489	Shell-Thick	INVS LU	0.0812	2.4986	1.24	13.88	
1001	490	Shell-Thick	INVS LE	0.4600	4.7653	1.54	19.53	
1001	490	Shell-Thick	INVS LE	1.3185	7.4075	0.97	19.53	
1001	490	Shell-Thick	INVS LE	1.1445	7.7586	0.97	20.03	
1001	490	Shell-Thick	INVS LE	0.3382	5.0812	1.54	20.03	
1001	490	Shell-Thick	INVS LE	0.1498	1.8660	0.75	10.28	
1001	490	Shell-Thick	INVS LE	0.5798	3.2542	0.47	10.28	
1001	490	Shell-Thick	INVS LE	0.4931	3.4038	0.47	10.52	
1001	490	Shell-Thick	INVS LE	0.0931	1.9953	0.75	10.52	
1001	490	Shell-Thick	INVS LU	0.8197	8.1274	2.46	30.26	
1001	490	Shell-Thick	INVS LU	2.1752	12.2236	1.55	30.26	
1001	490	Shell-Thick	INVS LU	1.9000	12.8085	1.55	31.06	
1001	490	Shell-Thick	INVS LU	0.6223	8.6596	2.46	31.06	
1001	490	Shell-Thick	INVS LU	0.2022	2.5191	1.01	13.88	
1001	490	Shell-Thick	INVS LU	0.7827	4.3932	0.64	13.88	
1001	490	Shell-Thick	INVS LU	0.6656	4.5951	0.64	14.20	
1001	490	Shell-Thick	INVS LU	0.1257	2.6937	1.01	14.20	
1002	491	Shell-Thick	INVS LE	0.4862	5.1049	1.22	20.03	
1002	491	Shell-Thick	INVS LE	1.3690	7.8094	0.77	20.03	
1002	491	Shell-Thick	INVS LE	1.2300	8.0998	0.77	20.42	
1002	491	Shell-Thick	INVS LE	0.3915	5.3655	1.22	20.42	
1002	491	Shell-Thick	INVS LE	0.1648	2.0082	0.59	10.52	
1002	491	Shell-Thick	INVS LE	0.6023	3.4271	0.37	10.52	
1002	491	Shell-Thick	INVS LE	0.5334	3.5505	0.37	10.71	
1002	491	Shell-Thick	INVS LE	0.1210	2.1148	0.59	10.71	
1002	491	Shell-Thick	INVS LU	0.8588	8.6959	1.95	31.05	
1002	491	Shell-Thick	INVS LU	2.2580	12.8912	1.22	31.05	
1002	491	Shell-Thick	INVS LU	2.0378	13.3753	1.22	31.68	
1002	491	Shell-Thick	INVS LU	0.7051	9.1351	1.95	31.68	
1002	491	Shell-Thick	INVS LU	0.2225	2.7111	0.79	14.20	
1002	491	Shell-Thick	INVS LU	0.8131	4.6265	0.50	14.20	
1002	491	Shell-Thick	INVS LU	0.7201	4.7932	0.50	14.46	
1002	491	Shell-Thick	INVS LU	0.1634	2.8549	0.79	14.46	
1003	492	Shell-Thick	INVS LE	0.5117	5.3850	0.91	20.42	
1003	492	Shell-Thick	INVS LE	1.4032	8.1390	0.57	20.42	
1003	492	Shell-Thick	INVS LE	1.2984	8.3643	0.57	20.72	
1003	492	Shell-Thick	INVS LE	0.4415	5.5870	0.91	20.72	
1003	492	Shell-Thick	INVS LE	0.1782	2.1252	0.44	10.71	
1003	492	Shell-Thick	INVS LE	0.6178	3.5684	0.28	10.71	
1003	492	Shell-Thick	INVS LE	0.5661	3.6640	0.28	10.85	
1003	492	Shell-Thick	INVS LE	0.1459	2.2077	0.44	10.85	
1003	492	Shell-Thick	INVS LU	0.8983	9.1651	1.46	31.68	
1003	492	Shell-Thick	INVS LU	2.3139	13.4392	0.92	31.68	
1003	492	Shell-Thick	INVS LU	2.1476	13.8150	0.92	32.16	
1003	492	Shell-Thick	INVS LU	0.7842	9.5057	1.46	32.16	
1003	492	Shell-Thick	INVS LU	0.2406	2.8691	0.59	14.46	
1003	492	Shell-Thick	INVS LU	0.8341	4.8173	0.37	14.46	
1003	492	Shell-Thick	INVS LU	0.7642	4.9463	0.37	14.65	
1003	492	Shell-Thick	INVS LU	0.1970	2.9804	0.59	14.65	
1004	493	Shell-Thick	INVS LE	0.5254	5.6016	0.62	20.72	
1004	493	Shell-Thick	INVS LE	1.4285	8.3926	0.39	20.72	
1004	493	Shell-Thick	INVS LE	1.3567	8.5495	0.39	20.92	
1004	493	Shell-Thick	INVS LE	0.4783	5.7419	0.62	20.92	
1004	493	Shell-Thick	INVS LE	0.1862	2.2155	0.30	10.85	
1004	493	Shell-Thick	INVS LE	0.6287	3.6767	0.19	10.85	
1004	493	Shell-Thick	INVS LE	0.5933	3.7432	0.19	10.95	
1004	493	Shell-Thick	INVS LE	0.1645	2.2727	0.30	10.95	
1004	493	Shell-Thick	INVS LU	0.9189	9.5282	1.00	32.15	
1004	493	Shell-Thick	INVS LU	2.3560	13.8612	0.62	32.15	
1004	493	Shell-Thick	INVS LU	2.2420	14.1230	0.62	32.48	
1004	493	Shell-Thick	INVS LU	0.8421	9.7648	1.00	32.48	
1004	493	Shell-Thick	INVS LU	0.2513	2.9909	0.40	14.65	
1004	493	Shell-Thick	INVS LU	0.8487	4.9636	0.25	14.65	
1004	493	Shell-Thick	INVS LU	0.8009	5.0533	0.25	14.78	
1004	493	Shell-Thick	INVS LU	0.2221	3.0681	0.40	14.78	
1005	494	Shell-Thick	INVS LE	0.5343	5.7513	0.34	20.92	
1005	494	Shell-Thick	INVS LE	1.4357	8.5670	0.21	20.92	
1005	494	Shell-Thick	INVS LE	1.3965	8.6533	0.21	21.03	
1005	494	Shell-Thick	INVS LE	0.5088	5.8283	0.34	21.03	
1005	494	Shell-Thick	INVS LE	0.1908	2.2777	0.16	10.95	
1005	494	Shell-Thick	INVS LE	0.6317	3.7512	0.10	10.95	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 203 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1005	494	Shell-Thick	INVSLE	0.6124	3.7877	0.10	11.00	
1005	494	Shell-Thick	INVSLE	0.1791	2.3091	0.16	11.00	
1005	494	Shell-Thick	INVSLE	0.9327	9.7794	0.54	32.48	
1005	494	Shell-Thick	INVSLE	2.3681	14.1517	0.34	32.48	
1005	494	Shell-Thick	INVSLE	2.3058	14.2956	0.34	32.66	
1005	494	Shell-Thick	INVSLE	0.8911	9.9093	0.54	32.66	
1005	494	Shell-Thick	INVSLE	0.2576	3.0749	0.22	14.78	
1005	494	Shell-Thick	INVSLE	0.8528	5.0641	0.14	14.78	
1005	494	Shell-Thick	INVSLE	0.8267	5.1133	0.14	14.86	
1005	494	Shell-Thick	INVSLE	0.2418	3.1172	0.22	14.86	
1006	495	Shell-Thick	INVSLE	0.5293	5.8323	5.962E-02	21.03	
1006	495	Shell-Thick	INVSLE	1.4321	8.6606	3.719E-02	21.03	
1006	495	Shell-Thick	INVSLE	1.4251	8.6750	3.719E-02	21.05	
1006	495	Shell-Thick	INVSLE	0.5249	5.8449	5.962E-02	21.05	
1006	495	Shell-Thick	INVSLE	0.1891	2.3112	2.849E-02	11.00	
1006	495	Shell-Thick	INVSLE	0.6292	3.7909	1.781E-02	11.00	
1006	495	Shell-Thick	INVSLE	0.6258	3.7971	1.781E-02	11.01	
1006	495	Shell-Thick	INVSLE	0.1871	2.3163	2.849E-02	11.01	
1006	495	Shell-Thick	INVSLE	0.9237	9.9155	9.573E-02	32.66	
1006	495	Shell-Thick	INVSLE	2.3631	14.3075	5.968E-02	32.66	
1006	495	Shell-Thick	INVSLE	2.3519	14.3316	5.968E-02	32.69	
1006	495	Shell-Thick	INVSLE	0.9166	9.9368	9.573E-02	32.69	
1006	495	Shell-Thick	INVSLE	0.2553	3.1201	3.846E-02	14.86	
1006	495	Shell-Thick	INVSLE	0.8494	5.1178	2.404E-02	14.86	
1006	495	Shell-Thick	INVSLE	0.8448	5.1260	2.404E-02	14.87	
1006	495	Shell-Thick	INVSLE	0.2525	3.1270	3.846E-02	14.87	
1007	496	Shell-Thick	INVSLE	0.5174	5.8434	-0.10	21.05	
1007	496	Shell-Thick	INVSLE	1.4096	8.6719	-6.525E-02	21.05	
1007	496	Shell-Thick	INVSLE	1.4347	8.6144	-6.525E-02	20.98	
1007	496	Shell-Thick	INVSLE	0.5341	5.7915	-0.10	20.98	
1007	496	Shell-Thick	INVSLE	0.1833	2.3155	-0.22	11.01	
1007	496	Shell-Thick	INVSLE	0.6186	3.7957	-0.14	11.01	
1007	496	Shell-Thick	INVSLE	0.6310	3.7713	-0.14	10.98	
1007	496	Shell-Thick	INVSLE	0.1909	2.2943	-0.22	10.98	
1007	496	Shell-Thick	INVSLE	0.9049	9.9345	-0.14	32.69	
1007	496	Shell-Thick	INVSLE	2.3269	14.3266	-8.809E-02	32.69	
1007	496	Shell-Thick	INVSLE	2.3667	14.2305	-8.809E-02	32.57	
1007	496	Shell-Thick	INVSLE	0.9321	9.8470	-0.14	32.57	
1007	496	Shell-Thick	INVSLE	0.2474	3.1259	-0.35	14.87	
1007	496	Shell-Thick	INVSLE	0.8351	5.1242	-0.22	14.87	
1007	496	Shell-Thick	INVSLE	0.8518	5.0913	-0.22	14.82	
1007	496	Shell-Thick	INVSLE	0.2577	3.0974	-0.35	14.82	
1008	497	Shell-Thick	INVSLE	0.4910	5.7845	-0.24	20.98	
1008	497	Shell-Thick	INVSLE	1.3758	8.6010	-0.15	20.98	
1008	497	Shell-Thick	INVSLE	1.4333	8.4722	-0.15	20.82	
1008	497	Shell-Thick	INVSLE	0.5290	5.6688	-0.24	20.82	
1008	497	Shell-Thick	INVSLE	0.1708	2.2906	-0.50	10.98	
1008	497	Shell-Thick	INVSLE	0.6023	3.7653	-0.31	10.98	
1008	497	Shell-Thick	INVSLE	0.6306	3.7108	-0.31	10.90	
1008	497	Shell-Thick	INVSLE	0.1882	2.2434	-0.50	10.90	
1008	497	Shell-Thick	INVSLE	0.8624	9.8361	-0.32	32.58	
1008	497	Shell-Thick	INVSLE	2.2728	14.2087	-0.20	32.58	
1008	497	Shell-Thick	INVSLE	2.3641	13.9938	-0.20	32.31	
1008	497	Shell-Thick	INVSLE	0.9243	9.6410	-0.32	32.31	
1008	497	Shell-Thick	INVSLE	0.2306	3.0923	-0.80	14.82	
1008	497	Shell-Thick	INVSLE	0.8131	5.0832	-0.50	14.82	
1008	497	Shell-Thick	INVSLE	0.8514	5.0095	-0.50	14.72	
1008	497	Shell-Thick	INVSLE	0.2541	3.0286	-0.80	14.72	
1009	498	Shell-Thick	INVSLE	0.4581	5.6565	-0.38	20.82	
1009	498	Shell-Thick	INVSLE	1.3233	8.4484	-0.24	20.82	
1009	498	Shell-Thick	INVSLE	1.4135	8.2501	-0.24	20.56	
1009	498	Shell-Thick	INVSLE	0.5186	5.4783	-0.38	20.56	
1009	498	Shell-Thick	INVSLE	0.1542	2.2369	-0.79	10.90	
1009	498	Shell-Thick	INVSLE	0.5778	3.7000	-0.49	10.90	
1009	498	Shell-Thick	INVSLE	0.6224	3.6159	-0.49	10.78	
1009	498	Shell-Thick	INVSLE	0.1820	2.1641	-0.79	10.78	
1009	498	Shell-Thick	INVSLE	0.8105	9.6221	-0.51	32.32	
1009	498	Shell-Thick	INVSLE	2.1878	13.9547	-0.32	32.32	
1009	498	Shell-Thick	INVSLE	2.3310	13.6240	-0.32	31.90	
1009	498	Shell-Thick	INVSLE	0.9089	9.3216	-0.51	31.90	
1009	498	Shell-Thick	INVSLE	0.2082	3.0198	-1.26	14.72	
1009	498	Shell-Thick	INVSLE	0.7801	4.9950	-0.79	14.72	
1009	498	Shell-Thick	INVSLE	0.8402	4.8815	-0.79	14.55	
1009	498	Shell-Thick	INVSLE	0.2457	2.9216	-1.26	14.55	
1010	499	Shell-Thick	INVSLE	0.4116	5.4610	-0.52	20.56	
1010	499	Shell-Thick	INVSLE	1.2605	8.2155	-0.33	20.56	
1010	499	Shell-Thick	INVSLE	1.3844	7.9506	-0.33	20.21	
1010	499	Shell-Thick	INVSLE	0.4958	5.2230	-0.52	20.21	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 204 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1010	499 Shell-Thick	INVSLE	0.1313	2.1548	-1.09	10.78		
1010	499 Shell-Thick	INVSLE	0.5479	3.6002	-0.68	10.78		
1010	499 Shell-Thick	INVSLE	0.6092	3.4877	-0.68	10.61		
1010	499 Shell-Thick	INVSLE	0.1701	2.0575	-1.09	10.61		
1010	499 Shell-Thick	INVSLE	0.7367	9.2949	-0.70	31.91		
1010	499 Shell-Thick	INVSLE	2.0869	13.5674	-0.44	31.91		
1010	499 Shell-Thick	INVSLE	2.2833	13.1259	-0.44	31.34		
1010	499 Shell-Thick	INVSLE	0.8734	8.8937	-0.70	31.34		
1010	499 Shell-Thick	INVSLE	0.1772	2.9090	-1.74	14.55		
1010	499 Shell-Thick	INVSLE	0.7396	4.8602	-1.09	14.55		
1010	499 Shell-Thick	INVSLE	0.8225	4.7084	-1.09	14.32		
1010	499 Shell-Thick	INVSLE	0.2296	2.7777	-1.74	14.32		
1011	500 Shell-Thick	INVSLE	0.3610	5.2011	-0.68	20.21		
1011	500 Shell-Thick	INVSLE	1.1802	7.9046	-0.43	20.21		
1011	500 Shell-Thick	INVSLE	1.3385	7.5771	-0.43	19.76		
1011	500 Shell-Thick	INVSLE	0.4713	4.9061	-0.68	19.76		
1011	500 Shell-Thick	INVSLE	0.1050	2.0457	-1.40	10.61		
1011	500 Shell-Thick	INVSLE	0.5101	3.4667	-0.88	10.61		
1011	500 Shell-Thick	INVSLE	0.5888	3.3273	-0.88	10.39		
1011	500 Shell-Thick	INVSLE	0.1561	1.9249	-1.40	10.39		
1011	500 Shell-Thick	INVSLE	0.6579	8.8603	-0.91	31.35		
1011	500 Shell-Thick	INVSLE	1.9572	13.0510	-0.58	31.35		
1011	500 Shell-Thick	INVSLE	2.2078	12.5053	-0.58	30.62		
1011	500 Shell-Thick	INVSLE	0.8368	8.3631	-0.91	30.62		
1011	500 Shell-Thick	INVSLE	0.1418	2.7617	-2.24	14.32		
1011	500 Shell-Thick	INVSLE	0.6886	4.6801	-1.41	14.32		
1011	500 Shell-Thick	INVSLE	0.7949	4.4919	-1.41	14.03		
1011	500 Shell-Thick	INVSLE	0.2108	2.5987	-2.24	14.03		
1012	501 Shell-Thick	INVSLE	0.2996	4.8803	-0.84	19.77		
1012	501 Shell-Thick	INVSLE	1.0920	7.5193	-0.53	19.77		
1012	501 Shell-Thick	INVSLE	1.2865	7.1348	-0.53	19.21		
1012	501 Shell-Thick	INVSLE	0.4383	4.5335	-0.84	19.21		
1012	501 Shell-Thick	INVSLE	0.0733	1.9107	-1.73	10.39		
1012	501 Shell-Thick	INVSLE	0.4675	3.3007	-1.10	10.39		
1012	501 Shell-Thick	INVSLE	0.5648	3.1367	-1.10	10.12		
1012	501 Shell-Thick	INVSLE	0.1381	1.7686	-1.73	10.12		
1012	501 Shell-Thick	INVSLE	0.5620	8.3238	-1.14	30.64		
1012	501 Shell-Thick	INVSLE	1.8161	12.4113	-0.72	30.64		
1012	501 Shell-Thick	INVSLE	2.1235	11.7711	-0.72	29.74		
1012	501 Shell-Thick	INVSLE	0.7864	7.7398	-1.14	29.74		
1012	501 Shell-Thick	INVSLE	0.0990	2.5795	-2.77	14.03		
1012	501 Shell-Thick	INVSLE	0.6312	4.4560	-1.75	14.03		
1012	501 Shell-Thick	INVSLE	0.7624	4.2345	-1.75	13.66		
1012	501 Shell-Thick	INVSLE	0.1864	2.3876	-2.77	13.66		
1013	502 Shell-Thick	INVSLE	0.2391	4.5047	-1.02	19.22		
1013	502 Shell-Thick	INVSLE	0.9887	7.0642	-0.65	19.22		
1013	502 Shell-Thick	INVSLE	1.2209	6.6290	-0.65	18.55		
1013	502 Shell-Thick	INVSLE	0.4102	4.1108	-1.02	18.55		
1013	502 Shell-Thick	INVSLE	0.0402	1.7524	-2.09	10.12		
1013	502 Shell-Thick	INVSLE	0.4180	3.1039	-1.33	10.12		
1013	502 Shell-Thick	INVSLE	0.5348	2.9178	-1.33	9.80		
1013	502 Shell-Thick	INVSLE	0.1207	1.5908	-2.09	9.80		
1013	502 Shell-Thick	INVSLE	0.4698	7.6963	-1.38	29.76		
1013	502 Shell-Thick	INVSLE	1.6506	11.6566	-0.88	29.76		
1013	502 Shell-Thick	INVSLE	2.0165	10.9327	-0.88	28.69		
1013	502 Shell-Thick	INVSLE	0.7459	7.0332	-1.38	28.69		
1013	502 Shell-Thick	INVSLE	0.0542	2.3658	-3.34	13.67		
1013	502 Shell-Thick	INVSLE	0.5643	4.1903	-2.12	13.67		
1013	502 Shell-Thick	INVSLE	0.7220	3.9390	-2.12	13.23		
1013	502 Shell-Thick	INVSLE	0.1630	2.1476	-3.34	13.23		
1014	503 Shell-Thick	INVSLE	0.1732	4.0798	-1.23	18.56		
1014	503 Shell-Thick	INVSLE	0.8820	6.5448	-0.79	18.56		
1014	503 Shell-Thick	INVSLE	1.1549	6.0685	-0.79	17.77		
1014	503 Shell-Thick	INVSLE	0.3805	3.6480	-1.23	17.77		
1014	503 Shell-Thick	INVSLE	0.0039	1.5729	-2.49	9.80		
1014	503 Shell-Thick	INVSLE	0.3652	2.8783	-1.59	9.80		
1014	503 Shell-Thick	INVSLE	0.5035	2.6740	-1.59	9.41		
1014	503 Shell-Thick	INVSLE	0.1024	1.3955	-2.49	9.41		
1014	503 Shell-Thick	INVSLE	0.3697	6.9869	-1.66	28.72		
1014	503 Shell-Thick	INVSLE	1.4813	10.7966	-1.06	28.72		
1014	503 Shell-Thick	INVSLE	1.9102	10.0049	-1.06	27.47		
1014	503 Shell-Thick	INVSLE	0.7031	6.2599	-1.66	27.47		
1014	503 Shell-Thick	INVSLE	0.0052	2.1235	-3.95	13.23		
1014	503 Shell-Thick	INVSLE	0.4930	3.8857	-2.52	13.23		
1014	503 Shell-Thick	INVSLE	0.6798	3.6099	-2.52	12.71		
1014	503 Shell-Thick	INVSLE	0.1383	1.8839	-3.95	12.71		
1015	504 Shell-Thick	INVSLE	0.1168	3.6162	-1.45	17.79		
1015	504 Shell-Thick	INVSLE	0.7649	5.9695	-0.94	17.79		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 205 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1015	504 Shell-Thick	INVSLE	1.0809	5.4615	-0.94	16.88		
1015	504 Shell-Thick	INVSLE	0.3664	3.1533	-1.45	16.88		
1015	504 Shell-Thick	INVSLE	-0.0304	1.3766	-2.92	9.42		
1015	504 Shell-Thick	INVSLE	0.3072	2.6271	-1.88	9.42		
1015	504 Shell-Thick	INVSLE	0.4690	2.4087	-1.88	8.97		
1015	504 Shell-Thick	INVSLE	0.0896	1.1865	-2.92	8.97		
1015	504 Shell-Thick	INVSLE	0.2875	6.2133	-1.96	27.50		
1015	504 Shell-Thick	INVSLE	1.2956	9.8455	-1.27	27.50		
1015	504 Shell-Thick	INVSLE	1.7905	9.0016	-1.27	26.05		
1015	504 Shell-Thick	INVSLE	0.6873	5.4340	-1.96	26.05		
1015	504 Shell-Thick	INVSLE	-0.0410	1.8584	-4.63	12.72		
1015	504 Shell-Thick	INVSLE	0.4148	3.5465	-2.97	12.72		
1015	504 Shell-Thick	INVSLE	0.6331	3.2518	-2.97	12.11		
1015	504 Shell-Thick	INVSLE	0.1209	1.6018	-4.63	12.11		
1016	505 Shell-Thick	INVSLE	0.0649	3.1221	-1.72	16.90		
1016	505 Shell-Thick	INVSLE	0.6512	5.3465	-1.11	16.90		
1016	505 Shell-Thick	INVSLE	1.0153	4.8216	-1.11	15.85		
1016	505 Shell-Thick	INVSLE	0.3625	2.6424	-1.72	15.85		
1016	505 Shell-Thick	INVSLE	-0.0631	1.1671	-3.41	8.98		
1016	505 Shell-Thick	INVSLE	0.2488	2.3535	-2.21	8.98		
1016	505 Shell-Thick	INVSLE	0.4371	2.1276	-2.21	8.45		
1016	505 Shell-Thick	INVSLE	0.0819	0.9705	-3.41	8.45		
1016	505 Shell-Thick	INVSLE	0.2133	5.3891	-2.32	26.09		
1016	505 Shell-Thick	INVSLE	1.1177	8.8172	-1.50	26.09		
1016	505 Shell-Thick	INVSLE	1.6858	7.9457	-1.50	24.42		
1016	505 Shell-Thick	INVSLE	0.6879	4.5812	-2.32	24.42		
1016	505 Shell-Thick	INVSLE	-0.0852	1.5756	-5.38	12.12		
1016	505 Shell-Thick	INVSLE	0.3359	3.1773	-3.47	12.12		
1016	505 Shell-Thick	INVSLE	0.5900	2.8723	-3.47	11.41		
1016	505 Shell-Thick	INVSLE	0.1106	1.3101	-5.38	11.41		
1017	506 Shell-Thick	INVSLE	0.0358	2.6138	-2.02	15.88		
1017	506 Shell-Thick	INVSLE	0.5354	4.6889	-1.32	15.88		
1017	506 Shell-Thick	INVSLE	0.9520	4.1605	-1.32	14.67		
1017	506 Shell-Thick	INVSLE	0.3908	2.1274	-2.02	14.67		
1017	506 Shell-Thick	INVSLE	-0.0871	0.9515	-3.97	8.46		
1017	506 Shell-Thick	INVSLE	0.1891	2.0631	-2.58	8.46		
1017	506 Shell-Thick	INVSLE	0.4072	1.8360	-2.58	7.85		
1017	506 Shell-Thick	INVSLE	0.0883	0.7533	-3.97	7.85		
1017	506 Shell-Thick	INVSLE	0.1784	4.5414	-2.73	24.48		
1017	506 Shell-Thick	INVSLE	0.9370	7.7339	-1.78	24.48		
1017	506 Shell-Thick	INVSLE	1.5838	6.8561	-1.78	22.58		
1017	506 Shell-Thick	INVSLE	0.7416	3.7208	-2.73	22.58		
1017	506 Shell-Thick	INVSLE	-0.1176	1.2845	-6.23	11.43		
1017	506 Shell-Thick	INVSLE	0.2552	2.7852	-4.05	11.43		
1017	506 Shell-Thick	INVSLE	0.5497	2.4786	-4.05	10.60		
1017	506 Shell-Thick	INVSLE	0.1192	1.0170	-6.23	10.60		
1018	507 Shell-Thick	INVSLE	0.0286	2.1033	-2.38	14.72		
1018	507 Shell-Thick	INVSLE	0.4336	4.0085	-1.57	14.72		
1018	507 Shell-Thick	INVSLE	0.9110	3.4982	-1.57	13.34		
1018	507 Shell-Thick	INVSLE	0.4500	1.6312	-2.38	13.34		
1018	507 Shell-Thick	INVSLE	-0.1002	0.7359	-4.61	7.87		
1018	507 Shell-Thick	INVSLE	0.1340	1.7612	-3.03	7.87		
1018	507 Shell-Thick	INVSLE	0.3873	1.5429	-3.03	7.17		
1018	507 Shell-Thick	INVSLE	0.1116	0.5458	-4.61	7.17		
1018	507 Shell-Thick	INVSLE	0.1779	3.6890	-3.21	22.66		
1018	507 Shell-Thick	INVSLE	0.7811	6.6146	-2.12	22.66		
1018	507 Shell-Thick	INVSLE	1.5184	5.7655	-2.12	20.49		
1018	507 Shell-Thick	INVSLE	0.8424	2.8899	-3.21	20.49		
1018	507 Shell-Thick	INVSLE	-0.1353	0.9934	-7.19	10.63		
1018	507 Shell-Thick	INVSLE	0.1809	2.3776	-4.71	10.63		
1018	507 Shell-Thick	INVSLE	0.5228	2.0830	-4.71	9.68		
1018	507 Shell-Thick	INVSLE	0.1507	0.7368	-7.19	9.68		
1019	508 Shell-Thick	INVSLE	0.0659	1.6144	-2.81	13.40		
1019	508 Shell-Thick	INVSLE	0.3442	3.3248	-1.88	13.40		
1019	508 Shell-Thick	INVSLE	0.8907	2.8498	-1.88	11.82		
1019	508 Shell-Thick	INVSLE	0.5679	1.1701	-2.81	11.82		
1019	508 Shell-Thick	INVSLE	-0.0918	0.5312	-5.35	7.19		
1019	508 Shell-Thick	INVSLE	0.0855	1.4565	-3.55	7.19		
1019	508 Shell-Thick	INVSLE	0.3800	1.2564	-3.55	6.38		
1019	508 Shell-Thick	INVSLE	0.1651	0.3568	-5.35	6.38		
1019	508 Shell-Thick	INVSLE	0.2488	2.8704	-3.79	20.59		
1019	508 Shell-Thick	INVSLE	0.6443	5.4914	-2.53	20.59		
1019	508 Shell-Thick	INVSLE	1.4830	4.6976	-2.53	18.13		
1019	508 Shell-Thick	INVSLE	1.0350	2.1131	-3.79	18.13		
1019	508 Shell-Thick	INVSLE	-0.1239	0.7171	-8.30	9.71		
1019	508 Shell-Thick	INVSLE	0.1154	1.9662	-5.49	9.71		
1019	508 Shell-Thick	INVSLE	0.5130	1.6961	-5.49	8.61		
1019	508 Shell-Thick	INVSLE	0.2229	0.4817	-8.30	8.61		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 206 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1020	509 Shell-Thick	INVSLE	0.1536	1.1631	-3.33	11.89		
1020	509 Shell-Thick	INVSLE	0.2858	2.6529	-2.25	11.89		
1020	509 Shell-Thick	INVSLE	0.9160	2.2412	-2.25	10.10		
1020	509 Shell-Thick	INVSLE	0.7516	0.7740	-3.33	10.10		
1020	509 Shell-Thick	INVSLE	-0.0538	0.3468	-6.24	6.41		
1020	509 Shell-Thick	INVSLE	0.0518	1.1569	-4.19	6.41		
1020	509 Shell-Thick	INVSLE	0.3971	0.9890	-4.19	5.47		
1020	509 Shell-Thick	INVSLE	0.2586	0.2015	-6.24	5.47		
1020	509 Shell-Thick	INVSLE	0.3942	2.1097	-4.50	18.25		
1020	509 Shell-Thick	INVSLE	0.5572	4.3877	-3.04	18.25		
1020	509 Shell-Thick	INVSLE	1.5178	3.6932	-3.04	15.46		
1020	509 Shell-Thick	INVSLE	1.3233	1.4379	-4.50	15.46		
1020	509 Shell-Thick	INVSLE	-0.0727	0.4682	-9.62	8.66		
1020	509 Shell-Thick	INVSLE	0.0699	1.5618	-6.43	8.66		
1020	509 Shell-Thick	INVSLE	0.5361	1.3351	-6.43	7.38		
1020	509 Shell-Thick	INVSLE	0.3491	0.2720	-9.62	7.38		
1021	510 Shell-Thick	INVSLE	0.3185	0.7800	-3.98	10.19		
1021	510 Shell-Thick	INVSLE	0.2623	2.0178	-2.74	10.19		
1021	510 Shell-Thick	INVSLE	0.9934	1.6891	-2.74	8.14		
1021	510 Shell-Thick	INVSLE	1.0359	0.4616	-3.98	8.14		
1021	510 Shell-Thick	INVSLE	0.0296	0.1982	-7.32	5.51		
1021	510 Shell-Thick	INVSLE	0.0399	0.8751	-4.98	5.51		
1021	510 Shell-Thick	INVSLE	0.4484	0.7509	-4.98	4.42		
1021	510 Shell-Thick	INVSLE	0.4129	0.0916	-7.32	4.42		
1021	510 Shell-Thick	INVSLE	0.6535	1.4547	-5.38	15.62		
1021	510 Shell-Thick	INVSLE	0.5203	3.3430	-3.70	15.62		
1021	510 Shell-Thick	INVSLE	1.6254	2.7770	-3.70	12.46		
1021	510 Shell-Thick	INVSLE	1.7584	0.8907	-5.38	12.46		
1021	510 Shell-Thick	INVSLE	0.0400	0.2676	-11.19	7.44		
1021	510 Shell-Thick	INVSLE	0.0539	1.1813	-7.58	7.44		
1021	510 Shell-Thick	INVSLE	0.6053	1.0138	-7.58	5.97		
1021	510 Shell-Thick	INVSLE	0.5574	0.1237	-11.19	5.97		
1022	511 Shell-Thick	INVSLE	1.5914	0.1242	10.54	-0.11		
1022	511 Shell-Thick	INVSLE	0.8343	0.3610	6.22	-0.11		
1022	511 Shell-Thick	INVSLE	-0.0803	0.3372	6.22	3.58		
1022	511 Shell-Thick	INVSLE	0.5891	0.1194	10.54	3.58		
1022	511 Shell-Thick	INVSLE	0.9609	0.0829	6.35	-0.20		
1022	511 Shell-Thick	INVSLE	0.5219	0.2136	3.85	-0.20		
1022	511 Shell-Thick	INVSLE	-0.1364	0.1854	3.85	2.08		
1022	511 Shell-Thick	INVSLE	0.3611	0.0518	6.35	2.08		
1022	511 Shell-Thick	INVSLE	2.3225	0.1738	15.39	-0.15		
1022	511 Shell-Thick	INVSLE	1.1965	0.5318	8.96	-0.15		
1022	511 Shell-Thick	INVSLE	-0.1084	0.5132	8.96	5.33		
1022	511 Shell-Thick	INVSLE	0.8534	0.1978	15.39	5.33		
1022	511 Shell-Thick	INVSLE	1.2972	0.1120	8.58	-0.30		
1022	511 Shell-Thick	INVSLE	0.7046	0.2884	5.20	-0.30		
1022	511 Shell-Thick	INVSLE	-0.2016	0.2502	5.20	2.81		
1022	511 Shell-Thick	INVSLE	0.4875	0.0700	8.58	2.81		
1023	512 Shell-Thick	INVSLE	1.2471	0.0438	8.30	3.37		
1023	512 Shell-Thick	INVSLE	0.7944	0.7305	4.35	3.37		
1023	512 Shell-Thick	INVSLE	0.0534	1.0095	4.35	6.82		
1023	512 Shell-Thick	INVSLE	0.4983	0.3260	8.30	6.82		
1023	512 Shell-Thick	INVSLE	0.6630	0.0048	4.87	1.97		
1023	512 Shell-Thick	INVSLE	0.4453	0.3978	2.59	1.97		
1023	512 Shell-Thick	INVSLE	-0.0014	0.5251	2.59	3.96		
1023	512 Shell-Thick	INVSLE	0.2314	0.1208	4.87	3.96		
1023	512 Shell-Thick	INVSLE	1.9244	0.0890	12.28	4.99		
1023	512 Shell-Thick	INVSLE	1.1991	1.1163	6.39	4.99		
1023	512 Shell-Thick	INVSLE	0.1169	1.5712	6.39	10.14		
1023	512 Shell-Thick	INVSLE	0.8078	0.5640	12.28	10.14		
1023	512 Shell-Thick	INVSLE	0.8950	0.0065	6.57	2.66		
1023	512 Shell-Thick	INVSLE	0.6012	0.5371	3.50	2.66		
1023	512 Shell-Thick	INVSLE	-0.0019	0.7089	3.50	5.35		
1023	512 Shell-Thick	INVSLE	0.3124	0.1631	6.57	5.35		
1024	513 Shell-Thick	INVSLE	0.9459	0.2421	6.68	6.64		
1024	513 Shell-Thick	INVSLE	0.7663	1.3255	3.36	6.64		
1024	513 Shell-Thick	INVSLE	0.1680	1.7917	3.36	9.55		
1024	513 Shell-Thick	INVSLE	0.3615	0.6973	6.68	9.55		
1024	513 Shell-Thick	INVSLE	0.4489	0.0747	3.81	3.87		
1024	513 Shell-Thick	INVSLE	0.4063	0.6963	1.94	3.87		
1024	513 Shell-Thick	INVSLE	0.0544	0.9225	1.94	5.51		
1024	513 Shell-Thick	INVSLE	0.1236	0.2822	3.81	5.51		
1024	513 Shell-Thick	INVSLE	1.5222	0.4362	10.01	9.86		
1024	513 Shell-Thick	INVSLE	1.1838	2.0552	5.01	9.86		
1024	513 Shell-Thick	INVSLE	0.2997	2.7996	5.01	14.24		
1024	513 Shell-Thick	INVSLE	0.6374	1.1786	10.01	14.24		
1024	513 Shell-Thick	INVSLE	0.6061	0.1009	5.15	5.22		
1024	513 Shell-Thick	INVSLE	0.5485	0.9400	2.61	5.22		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 207 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1024	513	Shell-Thick	INVSLU	0.0734	1.2454	2.61	7.45
1024	513	Shell-Thick	INVSLU	0.1668	0.3810	5.15	7.45
1025	514	Shell-Thick	INVSLE	0.7522	0.6394	5.51	9.41
1025	514	Shell-Thick	INVSLE	0.8157	2.0573	2.70	9.41
1025	514	Shell-Thick	INVSLE	0.3133	2.6776	2.70	11.87
1025	514	Shell-Thick	INVSLE	0.2875	1.2331	5.51	11.87
1025	514	Shell-Thick	INVSLE	0.3256	0.2536	3.07	5.44
1025	514	Shell-Thick	INVSLE	0.4186	1.0644	1.51	5.44
1025	514	Shell-Thick	INVSLE	0.1300	1.3679	1.51	6.81
1025	514	Shell-Thick	INVSLE	0.0744	0.5312	3.07	6.81
1025	514	Shell-Thick	INVSLU	1.2468	1.0868	8.34	14.02
1025	514	Shell-Thick	INVSLU	1.2761	3.2087	4.08	14.02
1025	514	Shell-Thick	INVSLU	0.5258	4.1965	4.08	17.75
1025	514	Shell-Thick	INVSLU	0.5345	2.0470	8.34	17.75
1025	514	Shell-Thick	INVSLU	0.4396	0.3424	4.14	7.35
1025	514	Shell-Thick	INVSLU	0.5651	1.4369	2.04	7.35
1025	514	Shell-Thick	INVSLU	0.1755	1.8466	2.04	9.19
1025	514	Shell-Thick	INVSLU	0.1005	0.7171	4.14	9.19
1026	515	Shell-Thick	INVSLE	0.6637	1.2005	4.62	11.77
1026	515	Shell-Thick	INVSLE	0.9099	2.9048	2.22	11.77
1026	515	Shell-Thick	INVSLE	0.4796	3.6355	2.22	13.87
1026	515	Shell-Thick	INVSLE	0.2887	1.8931	4.62	13.87
1026	515	Shell-Thick	INVSLE	0.2707	0.5175	2.52	6.75
1026	515	Shell-Thick	INVSLE	0.4603	1.4869	1.21	6.75
1026	515	Shell-Thick	INVSLE	0.2181	1.8409	1.21	7.89
1026	515	Shell-Thick	INVSLE	0.0736	0.8407	2.52	7.89
1026	515	Shell-Thick	INVSLU	1.1195	1.9926	7.06	17.58
1026	515	Shell-Thick	INVSLU	1.4312	4.5489	3.38	17.58
1026	515	Shell-Thick	INVSLU	0.7829	5.7164	3.38	20.79
1026	515	Shell-Thick	INVSLU	0.5382	3.1134	7.06	20.79
1026	515	Shell-Thick	INVSLU	0.3654	0.6986	3.40	9.12
1026	515	Shell-Thick	INVSLU	0.6214	2.0073	1.64	9.12
1026	515	Shell-Thick	INVSLU	0.2944	2.4853	1.64	10.66
1026	515	Shell-Thick	INVSLU	0.0993	1.1349	3.40	10.66
1027	516	Shell-Thick	INVSLE	0.6430	1.8807	3.91	13.78
1027	516	Shell-Thick	INVSLE	1.0425	3.8312	1.85	13.78
1027	516	Shell-Thick	INVSLE	0.6674	4.6283	1.85	15.59
1027	516	Shell-Thick	INVSLE	0.3397	2.6287	3.91	15.59
1027	516	Shell-Thick	INVSLE	0.2588	0.8379	2.09	7.86
1027	516	Shell-Thick	INVSLE	0.5216	1.9414	0.99	7.86
1027	516	Shell-Thick	INVSLE	0.3146	2.3223	0.99	8.82
1027	516	Shell-Thick	INVSLE	0.1032	1.1838	2.09	8.82
1027	516	Shell-Thick	INVSLU	1.0885	3.0900	6.03	20.66
1027	516	Shell-Thick	INVSLU	1.6465	6.0227	2.84	20.66
1027	516	Shell-Thick	INVSLU	1.0766	7.3024	2.84	23.45
1027	516	Shell-Thick	INVSLU	0.6140	4.3042	6.03	23.45
1027	516	Shell-Thick	INVSLU	0.3494	1.1312	2.82	10.60
1027	516	Shell-Thick	INVSLU	0.7042	2.6209	1.34	10.60
1027	516	Shell-Thick	INVSLU	0.4247	3.1351	1.34	11.90
1027	516	Shell-Thick	INVSLU	0.1393	1.5981	2.82	11.90
1028	517	Shell-Thick	INVSLE	0.6790	2.6318	3.34	15.53
1028	517	Shell-Thick	INVSLE	1.1887	4.7973	1.55	15.53
1028	517	Shell-Thick	INVSLE	0.8601	5.6269	1.55	17.09
1028	517	Shell-Thick	INVSLE	0.4320	3.4058	3.34	17.09
1028	517	Shell-Thick	INVSLE	0.2769	1.1888	1.75	8.79
1028	517	Shell-Thick	INVSLE	0.5910	2.4073	0.82	8.79
1028	517	Shell-Thick	INVSLE	0.4125	2.7975	0.82	9.61
1028	517	Shell-Thick	INVSLE	0.1530	1.5420	1.75	9.61
1028	517	Shell-Thick	INVSLU	1.1454	4.3051	5.18	23.34
1028	517	Shell-Thick	INVSLU	1.8818	7.5689	2.40	23.34
1028	517	Shell-Thick	INVSLU	1.3792	8.9079	2.40	25.77
1028	517	Shell-Thick	INVSLU	0.7555	5.5671	5.18	25.77
1028	517	Shell-Thick	INVSLU	0.3738	1.6049	2.36	11.87
1028	517	Shell-Thick	INVSLU	0.7979	3.2498	1.10	11.87
1028	517	Shell-Thick	INVSLU	0.5569	3.7767	1.10	12.97
1028	517	Shell-Thick	INVSLU	0.2065	2.0818	2.36	12.97
1029	518	Shell-Thick	INVSLE	0.7421	3.4198	2.86	17.05
1029	518	Shell-Thick	INVSLE	1.3494	5.7728	1.31	17.05
1029	518	Shell-Thick	INVSLE	1.0592	6.6037	1.31	18.40
1029	518	Shell-Thick	INVSLE	0.5417	4.1898	2.86	18.40
1029	518	Shell-Thick	INVSLE	0.3103	1.5522	1.48	9.59
1029	518	Shell-Thick	INVSLE	0.6657	2.8695	0.68	9.59
1029	518	Shell-Thick	INVSLE	0.5105	3.2547	0.68	10.29
1029	518	Shell-Thick	INVSLE	0.2117	1.8992	1.48	10.29
1029	518	Shell-Thick	INVSLU	1.2429	5.5855	4.46	25.70
1029	518	Shell-Thick	INVSLU	2.1423	9.1396	2.04	25.70
1029	518	Shell-Thick	INVSLU	1.6955	10.4873	2.04	27.81
1029	518	Shell-Thick	INVSLU	0.9244	6.8460	4.46	27.81

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 208 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1029	518 Shell-Thick	INVSLU	0.4189	2.0955	1.99	12.95		
1029	518 Shell-Thick	INVSLU	0.8986	3.8738	0.91	12.95		
1029	518 Shell-Thick	INVSLU	0.6892	4.3939	0.91	13.89		
1029	518 Shell-Thick	INVSLU	0.2858	2.5639	1.99	13.89		
1030	519 Shell-Thick	INVSLE	0.8318	4.2114	2.45	18.37		
1030	519 Shell-Thick	INVSLE	1.5055	6.7294	1.11	18.37		
1030	519 Shell-Thick	INVSLE	1.2501	7.5394	1.11	19.55		
1030	519 Shell-Thick	INVSLE	0.6686	4.9591	2.45	19.55		
1030	519 Shell-Thick	INVSLE	0.3551	1.9126	1.25	10.28		
1030	519 Shell-Thick	INVSLE	0.7384	3.3155	0.56	10.28		
1030	519 Shell-Thick	INVSLE	0.6036	3.6861	0.56	10.87		
1030	519 Shell-Thick	INVSLE	0.2764	2.2452	1.25	10.87		
1030	519 Shell-Thick	INVSLU	1.3846	6.8771	3.84	27.76		
1030	519 Shell-Thick	INVSLU	2.3950	10.6881	1.73	27.76		
1030	519 Shell-Thick	INVSLU	1.9999	12.0079	1.73	29.60		
1030	519 Shell-Thick	INVSLU	1.1234	8.1061	3.84	29.60		
1030	519 Shell-Thick	INVSLU	0.4794	2.5820	1.68	13.87		
1030	519 Shell-Thick	INVSLU	0.9968	4.4760	0.76	13.87		
1030	519 Shell-Thick	INVSLU	0.8148	4.9762	0.76	14.68		
1030	519 Shell-Thick	INVSLU	0.3731	3.0310	1.68	14.68		
1031	520 Shell-Thick	INVSLE	0.9258	4.9852	2.09	19.52		
1031	520 Shell-Thick	INVSLE	1.6626	7.6472	0.93	19.52		
1031	520 Shell-Thick	INVSLE	1.4377	8.4166	0.93	20.54		
1031	520 Shell-Thick	INVSLE	0.7941	5.6916	2.09	20.54		
1031	520 Shell-Thick	INVSLE	0.4024	2.2604	1.05	10.87		
1031	520 Shell-Thick	INVSLE	0.8098	3.7373	0.47	10.87		
1031	520 Shell-Thick	INVSLE	0.6926	4.0850	0.47	11.38		
1031	520 Shell-Thick	INVSLE	0.3398	2.5712	1.05	11.38		
1031	520 Shell-Thick	INVSLU	1.5329	8.1450	3.30	29.56		
1031	520 Shell-Thick	INVSLU	2.6515	12.1812	1.47	29.56		
1031	520 Shell-Thick	INVSLU	2.3017	13.4396	1.47	31.16		
1031	520 Shell-Thick	INVSLU	1.3209	9.3102	3.30	31.16		
1031	520 Shell-Thick	INVSLU	0.5432	3.0515	1.42	14.67		
1031	520 Shell-Thick	INVSLU	1.0932	5.0454	0.64	14.67		
1031	520 Shell-Thick	INVSLU	0.9350	5.5148	0.64	15.36		
1031	520 Shell-Thick	INVSLU	0.4587	3.4711	1.42	15.36		
1032	521 Shell-Thick	INVSLE	1.0292	5.7203	1.78	20.52		
1032	521 Shell-Thick	INVSLE	1.8052	8.5085	0.79	20.52		
1032	521 Shell-Thick	INVSLE	1.6092	9.2232	0.79	21.40		
1032	521 Shell-Thick	INVSLE	0.9228	6.3745	1.78	21.40		
1032	521 Shell-Thick	INVSLE	0.4521	2.5871	0.89	11.37		
1032	521 Shell-Thick	INVSLE	0.8746	4.1280	0.39	11.37		
1032	521 Shell-Thick	INVSLE	0.7735	4.4476	0.39	11.81		
1032	521 Shell-Thick	INVSLE	0.4024	2.8719	0.89	11.81		
1032	521 Shell-Thick	INVSLU	1.6984	9.3537	2.82	31.14		
1032	521 Shell-Thick	INVSLU	2.8842	13.5881	1.24	31.14		
1032	521 Shell-Thick	INVSLU	2.5783	14.7611	1.24	32.52		
1032	521 Shell-Thick	INVSLU	1.5262	10.4363	2.82	32.52		
1032	521 Shell-Thick	INVSLU	0.6104	3.4925	1.20	15.35		
1032	521 Shell-Thick	INVSLU	1.1808	5.5728	0.53	15.35		
1032	521 Shell-Thick	INVSLU	1.0442	6.0043	0.53	15.94		
1032	521 Shell-Thick	INVSLU	0.5433	3.8771	1.20	15.94		
1033	522 Shell-Thick	INVSLE	1.1247	6.4036	1.50	21.39		
1033	522 Shell-Thick	INVSLE	1.9408	9.3009	0.66	21.39		
1033	522 Shell-Thick	INVSLE	1.7712	9.9488	0.66	22.13		
1033	522 Shell-Thick	INVSLE	1.0399	6.9942	1.50	22.13		
1033	522 Shell-Thick	INVSLE	0.4983	2.8876	0.74	11.81		
1033	522 Shell-Thick	INVSLE	0.9349	4.4835	0.33	11.81		
1033	522 Shell-Thick	INVSLE	0.8482	4.7706	0.33	12.17		
1033	522 Shell-Thick	INVSLE	0.4591	3.1425	0.74	12.17		
1033	522 Shell-Thick	INVSLU	1.8511	10.4808	2.39	32.50		
1033	522 Shell-Thick	INVSLU	3.1072	14.8873	1.04	32.50		
1033	522 Shell-Thick	INVSLU	2.8414	15.9536	1.04	33.68		
1033	522 Shell-Thick	INVSLU	1.7133	11.4607	2.39	33.68		
1033	522 Shell-Thick	INVSLU	0.6726	3.8982	1.00	15.94		
1033	522 Shell-Thick	INVSLU	1.2621	6.0527	0.44	15.94		
1033	522 Shell-Thick	INVSLU	1.1451	6.4402	0.44	16.43		
1033	522 Shell-Thick	INVSLU	0.6198	4.2424	1.00	16.43		
1034	523 Shell-Thick	INVSLE	1.2192	7.0224	1.25	22.13		
1034	523 Shell-Thick	INVSLE	2.0566	10.0136	0.54	22.13		
1034	523 Shell-Thick	INVSLE	1.9127	10.5859	0.54	22.75		
1034	523 Shell-Thick	INVSLE	1.1519	7.5430	1.25	22.75		
1034	523 Shell-Thick	INVSLE	0.5424	3.1573	0.61	12.17		
1034	523 Shell-Thick	INVSLE	0.9865	4.8001	0.27	12.17		
1034	523 Shell-Thick	INVSLE	0.9134	5.0517	0.27	12.48		
1034	523 Shell-Thick	INVSLE	0.5118	3.3803	0.61	12.48		
1034	523 Shell-Thick	INVSLU	2.0041	11.5044	1.99	33.67		
1034	523 Shell-Thick	INVSLU	3.2976	16.0593	0.86	33.67		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 209 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1034	523	Shell-Thick	INVSLE	3.0715	17.0035	0.86	34.66	
1034	523	Shell-Thick	INVSLE	1.8942	12.3701	1.99	34.66	
1034	523	Shell-Thick	INVSLE	0.7323	4.2623	0.83	16.43	
1034	523	Shell-Thick	INVSLE	1.3318	6.4802	0.36	16.43	
1034	523	Shell-Thick	INVSLE	1.2331	6.8199	0.36	16.84	
1034	523	Shell-Thick	INVSLE	0.6909	4.5634	0.83	16.84	
1035	524	Shell-Thick	INVSLE	1.2991	7.5687	1.02	22.75	
1035	524	Shell-Thick	INVSLE	2.1606	10.6392	0.44	22.75	
1035	524	Shell-Thick	INVSLE	2.0409	11.1286	0.44	23.26	
1035	524	Shell-Thick	INVSLE	1.2470	8.0126	1.02	23.26	
1035	524	Shell-Thick	INVSLE	0.5800	3.3936	0.50	12.48	
1035	524	Shell-Thick	INVSLE	1.0318	5.0758	0.21	12.48	
1035	524	Shell-Thick	INVSLE	0.9714	5.2896	0.21	12.73	
1035	524	Shell-Thick	INVSLE	0.5565	3.5826	0.50	12.73	
1035	524	Shell-Thick	INVSLE	2.1330	12.4103	1.63	34.66	
1035	524	Shell-Thick	INVSLE	3.4696	17.0907	0.70	34.66	
1035	524	Shell-Thick	INVSLE	3.2810	17.8997	0.70	35.47	
1035	524	Shell-Thick	INVSLE	2.0477	13.1497	1.63	35.47	
1035	524	Shell-Thick	INVSLE	0.7830	4.5814	0.67	16.85	
1035	524	Shell-Thick	INVSLE	1.3929	6.8523	0.29	16.85	
1035	524	Shell-Thick	INVSLE	1.3114	7.1409	0.29	17.18	
1035	524	Shell-Thick	INVSLE	0.7512	4.8365	0.67	17.18	
1036	525	Shell-Thick	INVSLE	1.3718	8.0352	0.81	23.26	
1036	525	Shell-Thick	INVSLE	2.2421	11.1712	0.34	23.26	
1036	525	Shell-Thick	INVSLE	2.1463	11.5726	0.34	23.67	
1036	525	Shell-Thick	INVSLE	1.3322	8.3987	0.81	23.67	
1036	525	Shell-Thick	INVSLE	0.6132	3.5941	0.39	12.73	
1036	525	Shell-Thick	INVSLE	1.0674	5.3086	0.17	12.73	
1036	525	Shell-Thick	INVSLE	1.0193	5.4831	0.17	12.93	
1036	525	Shell-Thick	INVSLE	0.5955	3.7481	0.39	12.93	
1036	525	Shell-Thick	INVSLE	2.2515	13.1853	1.29	35.47	
1036	525	Shell-Thick	INVSLE	3.6043	17.9696	0.55	35.47	
1036	525	Shell-Thick	INVSLE	3.4531	18.6341	0.55	36.12	
1036	525	Shell-Thick	INVSLE	2.1864	13.7917	1.29	36.12	
1036	525	Shell-Thick	INVSLE	0.8278	4.8521	0.53	17.18	
1036	525	Shell-Thick	INVSLE	1.4410	7.1666	0.23	17.18	
1036	525	Shell-Thick	INVSLE	1.3761	7.4021	0.23	17.45	
1036	525	Shell-Thick	INVSLE	0.8039	5.0599	0.53	17.45	
1037	526	Shell-Thick	INVSLE	1.4261	8.4173	0.60	23.67	
1037	526	Shell-Thick	INVSLE	2.3086	11.6053	0.26	23.67	
1037	526	Shell-Thick	INVSLE	2.2358	11.9145	0.26	23.97	
1037	526	Shell-Thick	INVSLE	1.3976	8.6967	0.60	23.97	
1037	526	Shell-Thick	INVSLE	0.6383	3.7574	0.29	12.93	
1037	526	Shell-Thick	INVSLE	1.0958	5.4976	0.12	12.93	
1037	526	Shell-Thick	INVSLE	1.0594	5.6315	0.12	13.07	
1037	526	Shell-Thick	INVSLE	0.6257	3.8753	0.29	13.07	
1037	526	Shell-Thick	INVSLE	2.3396	13.8209	0.97	36.12	
1037	526	Shell-Thick	INVSLE	3.7151	18.6880	0.41	36.12	
1037	526	Shell-Thick	INVSLE	3.6000	19.2006	0.41	36.61	
1037	526	Shell-Thick	INVSLE	2.2927	14.2876	0.97	36.61	
1037	526	Shell-Thick	INVSLE	0.8617	5.0725	0.39	17.45	
1037	526	Shell-Thick	INVSLE	1.4794	7.4217	0.17	17.45	
1037	526	Shell-Thick	INVSLE	1.4302	7.6025	0.17	17.65	
1037	526	Shell-Thick	INVSLE	0.8447	5.2317	0.39	17.65	
1038	527	Shell-Thick	INVSLE	1.4693	8.7107	0.41	23.97	
1038	527	Shell-Thick	INVSLE	2.3514	11.9379	0.17	23.97	
1038	527	Shell-Thick	INVSLE	2.3015	12.1522	0.17	24.18	
1038	527	Shell-Thick	INVSLE	1.4504	8.9042	0.41	24.18	
1038	527	Shell-Thick	INVSLE	0.6578	3.8824	0.20	13.08	
1038	527	Shell-Thick	INVSLE	1.1141	5.6418	8.378E-02	13.08	
1038	527	Shell-Thick	INVSLE	1.0893	5.7343	8.378E-02	13.18	
1038	527	Shell-Thick	INVSLE	0.6494	3.9637	0.20	13.18	
1038	527	Shell-Thick	INVSLE	2.4105	14.3098	0.66	36.61	
1038	527	Shell-Thick	INVSLE	3.7862	19.2391	0.28	36.61	
1038	527	Shell-Thick	INVSLE	3.7073	19.5947	0.28	36.95	
1038	527	Shell-Thick	INVSLE	2.3793	14.6332	0.66	36.95	
1038	527	Shell-Thick	INVSLE	0.8880	5.2412	0.27	17.65	
1038	527	Shell-Thick	INVSLE	1.5041	7.6164	0.11	17.65	
1038	527	Shell-Thick	INVSLE	1.4705	7.7413	0.11	17.79	
1038	527	Shell-Thick	INVSLE	0.8767	5.3511	0.27	17.79	
1039	528	Shell-Thick	INVSLE	1.4923	8.9132	0.22	24.18	
1039	528	Shell-Thick	INVSLE	2.3774	12.1668	9.407E-02	24.18	
1039	528	Shell-Thick	INVSLE	2.3500	12.2843	9.407E-02	24.30	
1039	528	Shell-Thick	INVSLE	1.4823	9.0189	0.22	24.30	
1039	528	Shell-Thick	INVSLE	0.6684	3.9682	0.11	13.18	
1039	528	Shell-Thick	INVSLE	1.1247	5.7407	4.540E-02	13.18	
1039	528	Shell-Thick	INVSLE	1.1110	5.7913	4.540E-02	13.23	
1039	528	Shell-Thick	INVSLE	0.6640	4.0127	0.11	13.23	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 210 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1039	528	Shell-Thick	INVS LU	2.4477	14.6474	0.36	36.95	
1039	528	Shell-Thick	INVS LU	3.8302	19.6187	0.15	36.95	
1039	528	Shell-Thick	INVS LU	3.7868	19.8137	0.15	37.13	
1039	528	Shell-Thick	INVS LU	2.4311	14.8243	0.36	37.13	
1039	528	Shell-Thick	INVS LU	0.9024	5.3571	0.15	17.79	
1039	528	Shell-Thick	INVS LU	1.5183	7.7499	6.129E-02	17.79	
1039	528	Shell-Thick	INVS LU	1.4999	7.8183	6.129E-02	17.86	
1039	528	Shell-Thick	INVS LU	0.8964	5.4171	0.15	17.86	
1040	529	Shell-Thick	INVS LE	1.5022	9.0228	3.951E-02	24.30	
1040	529	Shell-Thick	INVS LE	2.3791	12.2902	1.660E-02	24.30	
1040	529	Shell-Thick	INVS LE	2.3742	12.3099	1.660E-02	24.32	
1040	529	Shell-Thick	INVS LE	1.5005	9.0403	3.951E-02	24.32	
1040	529	Shell-Thick	INVS LE	0.6727	4.0146	1.901E-02	13.23	
1040	529	Shell-Thick	INVS LE	1.1249	5.7939	8.010E-03	13.23	
1040	529	Shell-Thick	INVS LE	1.1225	5.8024	8.010E-03	13.24	
1040	529	Shell-Thick	INVS LE	0.6720	4.0219	1.901E-02	13.24	
1040	529	Shell-Thick	INVS LU	2.4640	14.8304	6.328E-02	37.13	
1040	529	Shell-Thick	INVS LU	3.8336	19.8235	2.657E-02	37.13	
1040	529	Shell-Thick	INVS LU	3.8257	19.8561	2.657E-02	37.16	
1040	529	Shell-Thick	INVS LU	2.4613	14.8597	6.328E-02	37.16	
1040	529	Shell-Thick	INVS LU	0.9082	5.4197	2.566E-02	17.86	
1040	529	Shell-Thick	INVS LU	1.5186	7.8218	1.081E-02	17.86	
1040	529	Shell-Thick	INVS LU	1.5153	7.8332	1.081E-02	17.88	
1040	529	Shell-Thick	INVS LU	0.9072	5.4296	2.566E-02	17.88	
1041	530	Shell-Thick	INVS LE	1.4909	9.0387	-6.933E-02	24.32	
1041	530	Shell-Thick	INVS LE	2.3634	12.3073	-2.921E-02	24.32	
1041	530	Shell-Thick	INVS LE	2.3809	12.2291	-2.921E-02	24.25	
1041	530	Shell-Thick	INVS LE	1.4975	8.9677	-6.933E-02	24.25	
1041	530	Shell-Thick	INVS LE	0.6679	4.0211	-0.14	13.24	
1041	530	Shell-Thick	INVS LE	1.1172	5.8013	-6.056E-02	13.24	
1041	530	Shell-Thick	INVS LE	1.1259	5.7676	-6.056E-02	13.21	
1041	530	Shell-Thick	INVS LE	0.6708	3.9913	-0.14	13.21	
1041	530	Shell-Thick	INVS LU	2.4452	14.8572	-9.360E-02	37.16	
1041	530	Shell-Thick	INVS LU	3.8086	19.8520	-3.943E-02	37.16	
1041	530	Shell-Thick	INVS LU	3.8362	19.7220	-3.943E-02	37.05	
1041	530	Shell-Thick	INVS LU	2.4561	14.7385	-9.360E-02	37.05	
1041	530	Shell-Thick	INVS LU	0.9017	5.4285	-0.23	17.88	
1041	530	Shell-Thick	INVS LU	1.5082	7.8317	-9.691E-02	17.88	
1041	530	Shell-Thick	INVS LU	1.5199	7.7862	-9.691E-02	17.83	
1041	530	Shell-Thick	INVS LU	0.9056	5.3883	-0.23	17.83	
1042	531	Shell-Thick	INVS LE	1.4659	8.9610	-0.16	24.24	
1042	531	Shell-Thick	INVS LE	2.3232	12.2180	-6.706E-02	24.24	
1042	531	Shell-Thick	INVS LE	2.3632	12.0424	-6.706E-02	24.08	
1042	531	Shell-Thick	INVS LE	1.4812	8.8020	-0.16	24.08	
1042	531	Shell-Thick	INVS LE	0.6564	3.9880	-0.33	13.21	
1042	531	Shell-Thick	INVS LE	1.0991	5.7627	-0.14	13.21	
1042	531	Shell-Thick	INVS LE	1.1190	5.6870	-0.14	13.13	
1042	531	Shell-Thick	INVS LE	0.6631	3.9211	-0.33	13.13	
1042	531	Shell-Thick	INVS LU	2.4046	14.7279	-0.21	37.04	
1042	531	Shell-Thick	INVS LU	3.7428	19.7037	-9.053E-02	37.04	
1042	531	Shell-Thick	INVS LU	3.8059	19.4122	-9.053E-02	36.78	
1042	531	Shell-Thick	INVS LU	2.4298	14.4620	-0.21	36.78	
1042	531	Shell-Thick	INVS LU	0.8862	5.3837	-0.53	17.83	
1042	531	Shell-Thick	INVS LU	1.4838	7.7796	-0.22	17.83	
1042	531	Shell-Thick	INVS LU	1.5106	7.6774	-0.22	17.72	
1042	531	Shell-Thick	INVS LU	0.8952	5.2935	-0.53	17.72	
1043	532	Shell-Thick	INVS LE	1.4198	8.7901	-0.25	24.08	
1043	532	Shell-Thick	INVS LE	2.2658	12.0226	-0.11	24.08	
1043	532	Shell-Thick	INVS LE	2.3285	11.7511	-0.11	23.81	
1043	532	Shell-Thick	INVS LE	1.4443	8.5444	-0.25	23.81	
1043	532	Shell-Thick	INVS LE	0.6358	3.9151	-0.52	13.12	
1043	532	Shell-Thick	INVS LE	1.0730	5.6782	-0.22	13.12	
1043	532	Shell-Thick	INVS LE	1.1043	5.5609	-0.22	13.00	
1043	532	Shell-Thick	INVS LE	0.6466	3.8116	-0.52	13.00	
1043	532	Shell-Thick	INVS LU	2.3290	14.4431	-0.34	36.78	
1043	532	Shell-Thick	INVS LU	3.6491	19.3796	-0.14	36.78	
1043	532	Shell-Thick	INVS LU	3.7482	18.9295	-0.14	36.35	
1043	532	Shell-Thick	INVS LU	2.3693	14.0327	-0.34	36.35	
1043	532	Shell-Thick	INVS LU	0.8583	5.2854	-0.83	17.72	
1043	532	Shell-Thick	INVS LU	1.4485	7.6656	-0.35	17.72	
1043	532	Shell-Thick	INVS LU	1.4908	7.5072	-0.35	17.55	
1043	532	Shell-Thick	INVS LU	0.8729	5.1457	-0.83	17.55	
1044	533	Shell-Thick	INVS LE	1.3609	8.5278	-0.35	23.81	
1044	533	Shell-Thick	INVS LE	2.1844	11.7222	-0.15	23.81	
1044	533	Shell-Thick	INVS LE	2.2699	11.3574	-0.15	23.45	
1044	533	Shell-Thick	INVS LE	1.3958	8.1971	-0.35	23.45	
1044	533	Shell-Thick	INVS LE	0.6087	3.8032	-0.72	13.00	
1044	533	Shell-Thick	INVS LE	1.0365	5.5481	-0.31	13.00	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 211 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1044	533	Shell-Thick	INVSLE	1.0794	5.3898	-0.31	12.82	
1044	533	Shell-Thick	INVSLE	0.6242	3.6634	-0.72	12.82	
1044	533	Shell-Thick	INVSLE	2.2331	14.0066	-0.47	36.35	
1044	533	Shell-Thick	INVSLE	3.5155	18.8819	-0.20	36.35	
1044	533	Shell-Thick	INVSLE	3.6504	18.2775	-0.20	35.77	
1044	533	Shell-Thick	INVSLE	2.2907	13.4544	-0.47	35.77	
1044	533	Shell-Thick	INVSLE	0.8217	5.1344	-1.15	17.54	
1044	533	Shell-Thick	INVSLE	1.3993	7.4900	-0.49	17.54	
1044	533	Shell-Thick	INVSLE	1.4572	7.2763	-0.49	17.31	
1044	533	Shell-Thick	INVSLE	0.8427	4.9456	-1.15	17.31	
1045	534	Shell-Thick	INVSLE	1.2817	8.1761	-0.45	23.45	
1045	534	Shell-Thick	INVSLE	2.0868	11.3189	-0.19	23.45	
1045	534	Shell-Thick	INVSLE	2.1959	10.8642	-0.19	22.98	
1045	534	Shell-Thick	INVSLE	1.3285	7.7635	-0.45	22.98	
1045	534	Shell-Thick	INVSLE	0.5726	3.6528	-0.93	12.82	
1045	534	Shell-Thick	INVSLE	0.9922	5.3727	-0.40	12.82	
1045	534	Shell-Thick	INVSLE	1.0472	5.1745	-0.40	12.59	
1045	534	Shell-Thick	INVSLE	0.5935	3.4775	-0.93	12.59	
1045	534	Shell-Thick	INVSLE	2.1041	13.4215	-0.61	35.78	
1045	534	Shell-Thick	INVSLE	3.3560	18.2142	-0.26	35.78	
1045	534	Shell-Thick	INVSLE	3.5280	17.4622	-0.26	35.03	
1045	534	Shell-Thick	INVSLE	2.1807	12.7338	-0.61	35.03	
1045	534	Shell-Thick	INVSLE	0.7730	4.9312	-1.48	17.31	
1045	534	Shell-Thick	INVSLE	1.3395	7.2531	-0.63	17.31	
1045	534	Shell-Thick	INVSLE	1.4137	6.9856	-0.63	17.00	
1045	534	Shell-Thick	INVSLE	0.8013	4.6946	-1.48	17.00	
1046	535	Shell-Thick	INVSLE	1.1921	7.7392	-0.56	22.98	
1046	535	Shell-Thick	INVSLE	1.9661	10.8154	-0.24	22.98	
1046	535	Shell-Thick	INVSLE	2.0990	10.2755	-0.24	22.41	
1046	535	Shell-Thick	INVSLE	1.2530	7.2479	-0.56	22.41	
1046	535	Shell-Thick	INVSLE	0.5306	3.4649	-1.15	12.59	
1046	535	Shell-Thick	INVSLE	0.9378	5.1526	-0.50	12.59	
1046	535	Shell-Thick	INVSLE	1.0051	4.9158	-0.50	12.31	
1046	535	Shell-Thick	INVSLE	0.5582	3.2550	-1.15	12.31	
1046	535	Shell-Thick	INVSLE	1.9591	12.6957	-0.76	35.04	
1046	535	Shell-Thick	INVSLE	3.1586	17.3821	-0.33	35.04	
1046	535	Shell-Thick	INVSLE	3.3675	16.4908	-0.33	34.12	
1046	535	Shell-Thick	INVSLE	2.0587	11.8781	-0.76	34.12	
1046	535	Shell-Thick	INVSLE	0.7163	4.6776	-1.83	17.00	
1046	535	Shell-Thick	INVSLE	1.2660	6.9560	-0.79	17.00	
1046	535	Shell-Thick	INVSLE	1.3569	6.6364	-0.79	16.62	
1046	535	Shell-Thick	INVSLE	0.7536	4.3942	-1.83	16.62	
1047	536	Shell-Thick	INVSLE	1.0847	7.2207	-0.69	22.41	
1047	536	Shell-Thick	INVSLE	1.8314	10.2155	-0.30	22.41	
1047	536	Shell-Thick	INVSLE	1.9895	9.5970	-0.30	21.72	
1047	536	Shell-Thick	INVSLE	1.1619	6.6569	-0.69	21.72	
1047	536	Shell-Thick	INVSLE	0.4804	3.2408	-1.39	12.31	
1047	536	Shell-Thick	INVSLE	0.8760	4.8886	-0.61	12.31	
1047	536	Shell-Thick	INVSLE	0.9566	4.6155	-0.61	11.97	
1047	536	Shell-Thick	INVSLE	0.5158	2.9982	-1.39	11.97	
1047	536	Shell-Thick	INVSLE	1.7853	11.8359	-0.93	34.13	
1047	536	Shell-Thick	INVSLE	2.9394	16.3927	-0.40	34.13	
1047	536	Shell-Thick	INVSLE	3.1874	15.3738	-0.40	33.03	
1047	536	Shell-Thick	INVSLE	1.9110	10.8996	-0.93	33.03	
1047	536	Shell-Thick	INVSLE	0.6486	4.3751	-2.21	16.62	
1047	536	Shell-Thick	INVSLE	1.1825	6.5996	-0.96	16.62	
1047	536	Shell-Thick	INVSLE	1.2913	6.2309	-0.96	16.16	
1047	536	Shell-Thick	INVSLE	0.6964	4.0475	-2.21	16.16	
1048	537	Shell-Thick	INVSLE	0.9710	6.6283	-0.82	21.73	
1048	537	Shell-Thick	INVSLE	1.6758	9.5247	-0.36	21.73	
1048	537	Shell-Thick	INVSLE	1.8596	8.8354	-0.36	20.92	
1048	537	Shell-Thick	INVSLE	1.0683	5.9974	-0.82	20.92	
1048	537	Shell-Thick	INVSLE	0.4258	2.9829	-1.66	11.97	
1048	537	Shell-Thick	INVSLE	0.8045	4.5823	-0.73	11.97	
1048	537	Shell-Thick	INVSLE	0.8990	4.2752	-0.73	11.57	
1048	537	Shell-Thick	INVSLE	0.4709	2.7092	-1.66	11.57	
1048	537	Shell-Thick	INVSLE	1.6033	10.8555	-1.11	33.05	
1048	537	Shell-Thick	INVSLE	2.6862	15.2561	-0.49	33.05	
1048	537	Shell-Thick	INVSLE	2.9734	14.1235	-0.49	31.76	
1048	537	Shell-Thick	INVSLE	1.7611	9.8105	-1.11	31.76	
1048	537	Shell-Thick	INVSLE	0.5748	4.0269	-2.63	16.16	
1048	537	Shell-Thick	INVSLE	1.0860	6.1861	-1.15	16.16	
1048	537	Shell-Thick	INVSLE	1.2137	5.7716	-1.15	15.62	
1048	537	Shell-Thick	INVSLE	0.6357	3.6574	-2.63	15.62	
1049	538	Shell-Thick	INVSLE	0.8445	5.9686	-0.98	20.93	
1049	538	Shell-Thick	INVSLE	1.5096	8.7495	-0.44	20.93	
1049	538	Shell-Thick	INVSLE	1.7214	8.0006	-0.44	19.98	
1049	538	Shell-Thick	INVSLE	0.9651	5.2812	-0.98	19.98	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 212 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1049	538	Shell-Thick	INVSLE	0.3647	2.6934	-1.95	11.57	
1049	538	Shell-Thick	INVSLE	0.7265	4.2353	-0.87	11.57	
1049	538	Shell-Thick	INVSLE	0.8365	3.8983	-0.87	11.10	
1049	538	Shell-Thick	INVSLE	0.4215	2.3922	-1.95	11.10	
1049	538	Shell-Thick	INVSLE	1.4009	9.7665	-1.32	31.78	
1049	538	Shell-Thick	INVSLE	2.4177	13.9843	-0.59	31.78	
1049	538	Shell-Thick	INVSLE	2.7476	12.7577	-0.59	30.28	
1049	538	Shell-Thick	INVSLE	1.5955	8.6313	-1.32	30.28	
1049	538	Shell-Thick	INVSLE	0.4923	3.6361	-3.08	15.62	
1049	538	Shell-Thick	INVSLE	0.9808	5.7176	-1.37	15.62	
1049	538	Shell-Thick	INVSLE	1.1292	5.2626	-1.37	14.98	
1049	538	Shell-Thick	INVSLE	0.5691	3.2295	-3.08	14.98	
1050	539	Shell-Thick	INVSLE	0.7189	5.2541	-1.16	20.00	
1050	539	Shell-Thick	INVSLE	1.3265	7.8995	-0.52	20.00	
1050	539	Shell-Thick	INVSLE	1.5675	7.1034	-0.52	18.89	
1050	539	Shell-Thick	INVSLE	0.8687	4.5198	-1.16	18.89	
1050	539	Shell-Thick	INVSLE	0.3018	2.3768	-2.29	11.10	
1050	539	Shell-Thick	INVSLE	0.6402	3.8505	-1.03	11.10	
1050	539	Shell-Thick	INVSLE	0.7668	3.4882	-1.03	10.54	
1050	539	Shell-Thick	INVSLE	0.3735	2.0516	-2.29	10.54	
1050	539	Shell-Thick	INVSLE	1.2026	8.5907	-1.57	30.31	
1050	539	Shell-Thick	INVSLE	2.1223	12.5947	-0.71	30.31	
1050	539	Shell-Thick	INVSLE	2.4960	11.2957	-0.71	28.57	
1050	539	Shell-Thick	INVSLE	1.4429	7.3820	-1.57	28.57	
1050	539	Shell-Thick	INVSLE	0.4075	3.2086	-3.60	14.99	
1050	539	Shell-Thick	INVSLE	0.8642	5.1982	-1.62	14.99	
1050	539	Shell-Thick	INVSLE	1.0352	4.7091	-1.62	14.23	
1050	539	Shell-Thick	INVSLE	0.5042	2.7696	-3.60	14.23	
1051	540	Shell-Thick	INVSLE	0.5896	4.4962	-1.37	18.92	
1051	540	Shell-Thick	INVSLE	1.1383	6.9853	-0.63	18.92	
1051	540	Shell-Thick	INVSLE	1.4124	6.1604	-0.63	17.65	
1051	540	Shell-Thick	INVSLE	0.7736	3.7324	-1.37	17.65	
1051	540	Shell-Thick	INVSLE	0.2366	2.0374	-2.67	10.55	
1051	540	Shell-Thick	INVSLE	0.5492	3.4315	-1.22	10.55	
1051	540	Shell-Thick	INVSLE	0.6949	3.0511	-1.22	9.90	
1051	540	Shell-Thick	INVSLE	0.3263	1.6948	-2.67	9.90	
1051	540	Shell-Thick	INVSLE	0.9990	7.3476	-1.85	28.62	
1051	540	Shell-Thick	INVSLE	1.8216	11.1064	-0.85	28.62	
1051	540	Shell-Thick	INVSLE	2.2445	9.7661	-0.85	26.63	
1051	540	Shell-Thick	INVSLE	1.2923	6.0952	-1.85	26.63	
1051	540	Shell-Thick	INVSLE	0.3194	2.7504	-4.18	14.25	
1051	540	Shell-Thick	INVSLE	0.7414	4.6326	-1.90	14.25	
1051	540	Shell-Thick	INVSLE	0.9381	4.1190	-1.90	13.37	
1051	540	Shell-Thick	INVSLE	0.4405	2.2880	-4.18	13.37	
1052	541	Shell-Thick	INVSLE	0.4736	3.7153	-1.63	17.69	
1052	541	Shell-Thick	INVSLE	0.9404	6.0231	-0.75	17.69	
1052	541	Shell-Thick	INVSLE	1.2505	5.1893	-0.75	16.22	
1052	541	Shell-Thick	INVSLE	0.7004	2.9381	-1.63	16.22	
1052	541	Shell-Thick	INVSLE	0.1753	1.6833	-3.12	9.92	
1052	541	Shell-Thick	INVSLE	0.4525	2.9840	-1.44	9.92	
1052	541	Shell-Thick	INVSLE	0.6199	2.5940	-1.44	9.15	
1052	541	Shell-Thick	INVSLE	0.2879	1.3304	-3.12	9.15	
1052	541	Shell-Thick	INVSLE	0.8195	6.0716	-2.19	26.70	
1052	541	Shell-Thick	INVSLE	1.5061	9.5474	-1.02	26.70	
1052	541	Shell-Thick	INVSLE	1.9817	8.1989	-1.02	24.41	
1052	541	Shell-Thick	INVSLE	1.1788	4.8024	-2.19	24.41	
1052	541	Shell-Thick	INVSLE	0.2366	2.2724	-4.85	13.39	
1052	541	Shell-Thick	INVSLE	0.6108	4.0284	-2.24	13.39	
1052	541	Shell-Thick	INVSLE	0.8368	3.5019	-2.24	12.36	
1052	541	Shell-Thick	INVSLE	0.3887	1.7960	-4.85	12.36	
1053	542	Shell-Thick	INVSLE	0.3707	2.9304	-1.93	16.28	
1053	542	Shell-Thick	INVSLE	0.7461	5.0302	-0.91	16.28	
1053	542	Shell-Thick	INVSLE	1.0991	4.2163	-0.91	14.58	
1053	542	Shell-Thick	INVSLE	0.6489	2.1676	-1.93	14.58	
1053	542	Shell-Thick	INVSLE	0.1203	1.3231	-3.65	9.18	
1053	542	Shell-Thick	INVSLE	0.3546	2.5147	-1.71	9.18	
1053	542	Shell-Thick	INVSLE	0.5482	2.1280	-1.71	8.28	
1053	542	Shell-Thick	INVSLE	0.2616	0.9719	-3.65	8.28	
1053	542	Shell-Thick	INVSLE	0.6611	4.7942	-2.61	24.50	
1053	542	Shell-Thick	INVSLE	1.2000	7.9473	-1.23	24.50	
1053	542	Shell-Thick	INVSLE	1.7380	6.6379	-1.23	21.88	
1053	542	Shell-Thick	INVSLE	1.0980	3.5540	-2.61	21.88	
1053	542	Shell-Thick	INVSLE	0.1624	1.7862	-5.64	12.39	
1053	542	Shell-Thick	INVSLE	0.4787	3.3948	-2.64	12.39	
1053	542	Shell-Thick	INVSLE	0.7400	2.8728	-2.64	11.18	
1053	542	Shell-Thick	INVSLE	0.3532	1.3121	-5.64	11.18	
1054	543	Shell-Thick	INVSLE	0.3025	2.1735	-2.32	14.65	
1054	543	Shell-Thick	INVSLE	0.5541	4.0321	-1.11	14.65	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 213 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1054	543	Shell-Thick	INVSLE	0.9572	3.2691	-1.11	12.69	
1054	543	Shell-Thick	INVSLE	0.6457	1.4517	-2.32	12.69	
1054	543	Shell-Thick	INVSLE	0.0814	0.9713	-4.29	8.32	
1054	543	Shell-Thick	INVSLE	0.2568	2.0343	-2.04	8.32	
1054	543	Shell-Thick	INVSLE	0.4820	1.6665	-2.04	7.26	
1054	543	Shell-Thick	INVSLE	0.2597	0.6355	-4.29	7.26	
1054	543	Shell-Thick	INVSLE	0.5588	3.5675	-3.13	22.00	
1054	543	Shell-Thick	INVSLE	0.8989	6.3487	-1.50	22.00	
1054	543	Shell-Thick	INVSLE	1.5083	5.1276	-1.50	18.98	
1054	543	Shell-Thick	INVSLE	1.0932	2.3983	-3.13	18.98	
1054	543	Shell-Thick	INVSLE	0.1099	1.3113	-6.58	11.23	
1054	543	Shell-Thick	INVSLE	0.3467	2.7463	-3.13	11.23	
1054	543	Shell-Thick	INVSLE	0.6506	2.2498	-3.13	9.80	
1054	543	Shell-Thick	INVSLE	0.3506	0.8579	-6.58	9.80	
1055	544	Shell-Thick	INVSLE	0.2767	1.4758	-2.81	12.78	
1055	544	Shell-Thick	INVSLE	0.3793	3.0557	-1.37	12.78	
1055	544	Shell-Thick	INVSLE	0.8463	2.3862	-1.37	10.49	
1055	544	Shell-Thick	INVSLE	0.7002	0.8369	-2.81	10.49	
1055	544	Shell-Thick	INVSLE	0.0675	0.6444	-5.09	7.30	
1055	544	Shell-Thick	INVSLE	0.1649	1.5556	-2.47	7.30	
1055	544	Shell-Thick	INVSLE	0.4308	1.2288	-2.47	6.04	
1055	544	Shell-Thick	INVSLE	0.2935	0.3451	-5.09	6.04	
1055	544	Shell-Thick	INVSLE	0.5193	2.4399	-3.79	19.14	
1055	544	Shell-Thick	INVSLE	0.6279	4.7951	-1.85	19.14	
1055	544	Shell-Thick	INVSLE	1.3281	3.7285	-1.85	15.64	
1055	544	Shell-Thick	INVSLE	1.1718	1.4072	-3.79	15.64	
1055	544	Shell-Thick	INVSLE	0.0911	0.8700	-7.74	9.86	
1055	544	Shell-Thick	INVSLE	0.2226	2.1001	-3.74	9.86	
1055	544	Shell-Thick	INVSLE	0.5816	1.6589	-3.74	8.16	
1055	544	Shell-Thick	INVSLE	0.3962	0.4658	-7.74	8.16	
1056	545	Shell-Thick	INVSLE	0.4574	-0.0653	6.47	-0.13	
1056	545	Shell-Thick	INVSLE	0.2485	0.2522	-0.12	-0.13	
1056	545	Shell-Thick	INVSLE	-0.0786	0.3929	-0.12	5.61	
1056	545	Shell-Thick	INVSLE	0.0845	0.0297	6.47	5.61	
1056	545	Shell-Thick	INVSLE	0.2866	-0.1110	4.01	-0.21	
1056	545	Shell-Thick	INVSLE	0.1591	0.1544	-0.18	-0.21	
1056	545	Shell-Thick	INVSLE	-0.1195	0.2480	-0.18	3.49	
1056	545	Shell-Thick	INVSLE	0.0652	0.0154	4.01	3.49	
1056	545	Shell-Thick	INVSLE	0.6555	-0.0881	9.32	-0.17	
1056	545	Shell-Thick	INVSLE	0.3522	0.3656	-0.16	-0.17	
1056	545	Shell-Thick	INVSLE	-0.1061	0.5609	-0.16	8.07	
1056	545	Shell-Thick	INVSLE	0.1170	0.0463	9.32	8.07	
1056	545	Shell-Thick	INVSLE	0.3870	-0.1641	5.42	-0.31	
1056	545	Shell-Thick	INVSLE	0.2147	0.2085	-0.25	-0.31	
1056	545	Shell-Thick	INVSLE	-0.1674	0.3348	-0.25	4.71	
1056	545	Shell-Thick	INVSLE	0.0880	0.0208	5.42	4.71	
1057	546	Shell-Thick	INVSLE	0.3895	-0.1257	4.55	5.31	
1057	546	Shell-Thick	INVSLE	0.3459	0.7809	-0.11	5.31	
1057	546	Shell-Thick	INVSLE	0.0802	1.3496	-0.11	9.44	
1057	546	Shell-Thick	INVSLE	0.1397	0.3517	4.55	9.44	
1057	546	Shell-Thick	INVSLE	0.2066	-0.2041	2.71	3.32	
1057	546	Shell-Thick	INVSLE	0.2137	0.4759	-0.17	3.32	
1057	546	Shell-Thick	INVSLE	0.0460	0.8228	-0.17	5.79	
1057	546	Shell-Thick	INVSLE	0.0677	0.2006	2.71	5.79	
1057	546	Shell-Thick	INVSLE	0.6015	-0.1697	6.68	7.62	
1057	546	Shell-Thick	INVSLE	0.4991	1.1345	-0.15	7.62	
1057	546	Shell-Thick	INVSLE	0.1199	1.9606	-0.15	13.68	
1057	546	Shell-Thick	INVSLE	0.2233	0.5269	6.68	13.68	
1057	546	Shell-Thick	INVSLE	0.2790	-0.2951	3.66	4.48	
1057	546	Shell-Thick	INVSLE	0.2885	0.6425	-0.25	4.48	
1057	546	Shell-Thick	INVSLE	0.0621	1.1108	-0.25	7.81	
1057	546	Shell-Thick	INVSLE	0.0914	0.2708	3.66	7.81	
1058	547	Shell-Thick	INVSLE	0.3676	0.1965	3.52	9.23	
1058	547	Shell-Thick	INVSLE	0.5267	1.6397	-0.11	9.23	
1058	547	Shell-Thick	INVSLE	0.3076	2.5317	-0.11	12.47	
1058	547	Shell-Thick	INVSLE	0.1938	1.0563	3.52	12.47	
1058	547	Shell-Thick	INVSLE	0.1847	0.1135	2.03	5.67	
1058	547	Shell-Thick	INVSLE	0.3156	0.9873	-0.18	5.67	
1058	547	Shell-Thick	INVSLE	0.1807	1.4942	-0.18	7.55	
1058	547	Shell-Thick	INVSLE	0.0930	0.5904	2.03	7.55	
1058	547	Shell-Thick	INVSLE	0.5797	0.2927	5.24	13.36	
1058	547	Shell-Thick	INVSLE	0.7715	2.3963	-0.15	13.36	
1058	547	Shell-Thick	INVSLE	0.4547	3.7349	-0.15	18.18	
1058	547	Shell-Thick	INVSLE	0.3107	1.5965	5.24	18.18	
1058	547	Shell-Thick	INVSLE	0.2494	0.1532	2.74	7.66	
1058	547	Shell-Thick	INVSLE	0.4261	1.3328	-0.27	7.66	
1058	547	Shell-Thick	INVSLE	0.2439	2.0172	-0.27	10.19	
1058	547	Shell-Thick	INVSLE	0.1255	0.7971	2.74	10.19	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 214 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1059	548	Shell-Thick	INVSLE	0.4477	0.9590	2.84	12.32	
1059	548	Shell-Thick	INVSLE	0.7582	2.7700	-0.11	12.32	
1059	548	Shell-Thick	INVSLE	0.5676	3.8592	-0.11	14.97	
1059	548	Shell-Thick	INVSLE	0.3261	2.0005	2.84	14.97	
1059	548	Shell-Thick	INVSLE	0.2242	0.5385	1.60	7.47	
1059	548	Shell-Thick	INVSLE	0.4412	1.6245	-0.19	7.47	
1059	548	Shell-Thick	INVSLE	0.3263	2.2129	-0.19	8.96	
1059	548	Shell-Thick	INVSLE	0.1636	1.0898	1.60	8.96	
1059	548	Shell-Thick	INVSLE	0.7069	1.4465	4.28	17.95	
1059	548	Shell-Thick	INVSLE	1.1258	4.0983	-0.14	17.95	
1059	548	Shell-Thick	INVSLE	0.8475	5.7683	-0.14	21.94	
1059	548	Shell-Thick	INVSLE	0.5146	3.0566	4.28	21.94	
1059	548	Shell-Thick	INVSLE	0.3026	0.7270	2.16	10.08	
1059	548	Shell-Thick	INVSLE	0.5956	2.1930	-0.28	10.08	
1059	548	Shell-Thick	INVSLE	0.4405	2.9874	-0.28	12.10	
1059	548	Shell-Thick	INVSLE	0.2208	1.4712	2.16	12.10	
1060	549	Shell-Thick	INVSLE	0.5833	1.9425	2.34	14.86	
1060	549	Shell-Thick	INVSLE	1.0175	4.0586	-0.10	14.86	
1060	549	Shell-Thick	INVSLE	0.8452	5.2549	-0.10	17.08	
1060	549	Shell-Thick	INVSLE	0.5020	3.0766	2.34	17.08	
1060	549	Shell-Thick	INVSLE	0.2954	1.0606	1.29	8.91	
1060	549	Shell-Thick	INVSLE	0.5765	2.3185	-0.19	8.91	
1060	549	Shell-Thick	INVSLE	0.4751	2.9394	-0.19	10.13	
1060	549	Shell-Thick	INVSLE	0.2572	1.6384	1.29	10.13	
1060	549	Shell-Thick	INVSLE	0.9172	2.9653	3.57	21.77	
1060	549	Shell-Thick	INVSLE	1.5290	6.0765	-0.14	21.77	
1060	549	Shell-Thick	INVSLE	1.2743	7.9401	-0.14	25.14	
1060	549	Shell-Thick	INVSLE	0.7858	4.7444	3.57	25.14	
1060	549	Shell-Thick	INVSLE	0.3988	1.4318	1.74	12.02	
1060	549	Shell-Thick	INVSLE	0.7782	3.1300	-0.29	12.02	
1060	549	Shell-Thick	INVSLE	0.6414	3.9682	-0.29	13.67	
1060	549	Shell-Thick	INVSLE	0.3473	2.2118	1.74	13.67	
1061	550	Shell-Thick	INVSLE	0.7613	3.0477	1.96	17.00	
1061	550	Shell-Thick	INVSLE	1.2874	5.4241	-9.942E-02	17.00	
1061	550	Shell-Thick	INVSLE	1.1301	6.6632	-9.942E-02	18.88	
1061	550	Shell-Thick	INVSLE	0.7092	4.2152	1.96	18.88	
1061	550	Shell-Thick	INVSLE	0.3854	1.6248	1.06	10.09	
1061	550	Shell-Thick	INVSLE	0.7128	3.0262	-0.19	10.09	
1061	550	Shell-Thick	INVSLE	0.6221	3.6483	-0.19	11.10	
1061	550	Shell-Thick	INVSLE	0.3631	2.2006	1.06	11.10	
1061	550	Shell-Thick	INVSLE	1.1972	4.6978	3.01	25.01	
1061	550	Shell-Thick	INVSLE	1.9537	8.2049	-0.13	25.01	
1061	550	Shell-Thick	INVSLE	1.7192	10.1593	-0.13	27.90	
1061	550	Shell-Thick	INVSLE	1.1107	6.5514	3.01	27.90	
1061	550	Shell-Thick	INVSLE	0.5203	2.1934	1.43	13.62	
1061	550	Shell-Thick	INVSLE	0.9623	4.0853	-0.29	13.62	
1061	550	Shell-Thick	INVSLE	0.8399	4.9252	-0.29	14.99	
1061	550	Shell-Thick	INVSLE	0.4902	2.9708	1.43	14.99	
1062	551	Shell-Thick	INVSLE	0.9533	4.2062	1.66	18.83	
1062	551	Shell-Thick	INVSLE	1.5577	6.8065	-9.393E-02	18.83	
1062	551	Shell-Thick	INVSLE	1.4121	8.0423	-9.393E-02	20.44	
1062	551	Shell-Thick	INVSLE	0.9245	5.3627	1.66	20.44	
1062	551	Shell-Thick	INVSLE	0.4815	2.1973	0.88	11.08	
1062	551	Shell-Thick	INVSLE	0.8454	3.7199	-0.18	11.08	
1062	551	Shell-Thick	INVSLE	0.7633	4.3234	-0.18	11.93	
1062	551	Shell-Thick	INVSLE	0.4710	2.7524	0.88	11.93	
1062	551	Shell-Thick	INVSLE	1.5003	6.5357	2.57	27.81	
1062	551	Shell-Thick	INVSLE	2.3837	10.3858	-0.13	27.81	
1062	551	Shell-Thick	INVSLE	2.1644	12.3548	-0.13	30.31	
1062	551	Shell-Thick	INVSLE	1.4504	8.3898	2.57	30.31	
1062	551	Shell-Thick	INVSLE	0.6500	2.9664	1.19	14.95	
1062	551	Shell-Thick	INVSLE	1.1413	5.0219	-0.28	14.95	
1062	551	Shell-Thick	INVSLE	1.0304	5.8366	-0.28	16.11	
1062	551	Shell-Thick	INVSLE	0.6358	3.7157	1.19	16.11	
1063	552	Shell-Thick	INVSLE	1.1583	5.3688	1.41	20.40	
1063	552	Shell-Thick	INVSLE	1.8198	8.1646	-8.749E-02	20.40	
1063	552	Shell-Thick	INVSLE	1.6859	9.3639	-8.749E-02	21.79	
1063	552	Shell-Thick	INVSLE	1.1460	6.4859	1.41	21.79	
1063	552	Shell-Thick	INVSLE	0.5805	2.7564	0.74	11.92	
1063	552	Shell-Thick	INVSLE	0.9709	4.3828	-0.17	11.92	
1063	552	Shell-Thick	INVSLE	0.8967	4.9549	-0.17	12.64	
1063	552	Shell-Thick	INVSLE	0.5781	3.2799	0.74	12.64	
1063	552	Shell-Thick	INVSLE	1.8284	8.3982	2.20	30.25	
1063	552	Shell-Thick	INVSLE	2.8041	12.5500	-0.12	30.25	
1063	552	Shell-Thick	INVSLE	2.6012	14.4766	-0.12	32.41	
1063	552	Shell-Thick	INVSLE	1.8045	10.2035	2.20	32.41	
1063	552	Shell-Thick	INVSLE	0.7837	3.7212	1.00	16.09	
1063	552	Shell-Thick	INVSLE	1.3107	5.9168	-0.27	16.09	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 215 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1063	552 Shell-Thick	INVSLU	1.2105	6.6892	-0.27		17.06	
1063	552 Shell-Thick	INVSLU	0.7805	4.4279	1.00		17.06	
1064	553 Shell-Thick	INVSLE	1.3563	6.5012	1.21		21.77	
1064	553 Shell-Thick	INVSLE	2.0690	9.4672	-8.068E-02		21.77	
1064	553 Shell-Thick	INVSLE	1.9456	10.6056	-8.068E-02		22.97	
1064	553 Shell-Thick	INVSLE	1.3569	7.5559	1.21		22.97	
1064	553 Shell-Thick	INVSLE	0.6751	3.2885	0.62		12.63	
1064	553 Shell-Thick	INVSLE	1.0877	5.0040	-0.16		12.63	
1064	553 Shell-Thick	INVSLE	1.0204	5.5364	-0.16		13.24	
1064	553 Shell-Thick	INVSLE	0.6788	3.7730	0.62		13.24	
1064	553 Shell-Thick	INVSLU	2.1462	10.2269	1.88		32.37	
1064	553 Shell-Thick	INVSLU	3.2070	14.6427	-0.11		32.37	
1064	553 Shell-Thick	INVSLU	3.0184	16.4841	-0.11		34.25	
1064	553 Shell-Thick	INVSLU	2.1434	11.9427	1.88		34.25	
1064	553 Shell-Thick	INVSLU	0.9114	4.4394	0.84		17.05	
1064	553 Shell-Thick	INVSLU	1.4683	6.7554	-0.26		17.05	
1064	553 Shell-Thick	INVSLU	1.3776	7.4741	-0.26		17.88	
1064	553 Shell-Thick	INVSLU	0.9163	5.0935	0.84		17.88	
1065	554 Shell-Thick	INVSLE	1.5527	7.5783	1.03		22.96	
1065	554 Shell-Thick	INVSLE	2.3007	10.6935	-7.334E-02		22.96	
1065	554 Shell-Thick	INVSLE	2.1886	11.7531	-7.334E-02		23.99	
1065	554 Shell-Thick	INVSLE	1.5616	8.5562	1.03		23.99	
1065	554 Shell-Thick	INVSLE	0.7663	3.7845	0.52		13.24	
1065	554 Shell-Thick	INVSLE	1.1943	5.5771	-0.15		13.24	
1065	554 Shell-Thick	INVSLE	1.1340	6.0643	-0.15		13.76	
1065	554 Shell-Thick	INVSLE	0.7737	4.2260	0.52		13.76	
1065	554 Shell-Thick	INVSLU	2.4647	11.9776	1.61		34.22	
1065	554 Shell-Thick	INVSLU	3.5838	16.6265	-9.900E-02		34.22	
1065	554 Shell-Thick	INVSLU	3.4115	18.3499	-9.900E-02		35.84	
1065	554 Shell-Thick	INVSLU	2.4754	13.5775	1.61		35.84	
1065	554 Shell-Thick	INVSLU	1.0345	5.1091	0.71		17.87	
1065	554 Shell-Thick	INVSLU	1.6123	7.5291	-0.24		17.87	
1065	554 Shell-Thick	INVSLU	1.5309	8.1868	-0.24		18.58	
1065	554 Shell-Thick	INVSLU	1.0445	5.7052	0.71		18.58	
1066	555 Shell-Thick	INVSLE	1.7317	8.5816	0.87		23.98	
1066	555 Shell-Thick	INVSLE	2.5128	11.8265	-6.585E-02		23.98	
1066	555 Shell-Thick	INVSLE	2.4113	12.7940	-6.585E-02		24.87	
1066	555 Shell-Thick	INVSLE	1.7467	9.4706	0.87		24.87	
1066	555 Shell-Thick	INVSLE	0.8489	4.2389	0.44		13.76	
1066	555 Shell-Thick	INVSLE	1.2903	6.0978	-0.14		13.76	
1066	555 Shell-Thick	INVSLE	1.2365	6.5363	-0.14		14.21	
1066	555 Shell-Thick	INVSLE	0.8587	4.6345	0.44		14.21	
1066	555 Shell-Thick	INVSLU	2.7555	13.6175	1.37		35.83	
1066	555 Shell-Thick	INVSLU	3.9304	18.4697	-8.890E-02		35.83	
1066	555 Shell-Thick	INVSLU	3.7737	20.0506	-8.890E-02		37.23	
1066	555 Shell-Thick	INVSLU	2.7764	15.0786	1.37		37.23	
1066	555 Shell-Thick	INVSLU	1.1460	5.7225	0.59		18.58	
1066	555 Shell-Thick	INVSLU	1.7419	8.2320	-0.22		18.58	
1066	555 Shell-Thick	INVSLU	1.6693	8.8240	-0.22		19.18	
1066	555 Shell-Thick	INVSLU	1.1593	6.2566	0.59		19.18	
1067	556 Shell-Thick	INVSLE	1.9010	9.4979	0.73		24.87	
1067	556 Shell-Thick	INVSLE	2.7025	12.8557	-5.805E-02		24.87	
1067	556 Shell-Thick	INVSLE	2.6128	13.7210	-5.805E-02		25.62	
1067	556 Shell-Thick	INVSLE	1.9187	10.2907	0.73		25.62	
1067	556 Shell-Thick	INVSLE	0.9252	4.6479	0.37		14.21	
1067	556 Shell-Thick	INVSLE	1.3751	6.5639	-0.12		14.21	
1067	556 Shell-Thick	INVSLE	1.3280	6.9514	-0.12		14.58	
1067	556 Shell-Thick	INVSLE	0.9360	4.9964	0.37		14.58	
1067	556 Shell-Thick	INVSLU	3.0325	15.1221	1.16		37.23	
1067	556 Shell-Thick	INVSLU	4.2419	20.1519	-7.837E-02		37.23	
1067	556 Shell-Thick	INVSLU	4.1027	21.5712	-7.837E-02		38.41	
1067	556 Shell-Thick	INVSLU	3.0584	16.4301	1.16		38.41	
1067	556 Shell-Thick	INVSLU	1.2490	6.2747	0.49		19.18	
1067	556 Shell-Thick	INVSLU	1.8563	8.8612	-0.20		19.18	
1067	556 Shell-Thick	INVSLU	1.7928	9.3844	-0.20		19.68	
1067	556 Shell-Thick	INVSLU	1.2636	6.7452	0.49		19.68	
1068	557 Shell-Thick	INVSLE	2.0476	10.3172	0.61		25.62	
1068	557 Shell-Thick	INVSLE	2.8690	13.7716	-5.022E-02		25.62	
1068	557 Shell-Thick	INVSLE	2.7907	14.5273	-5.022E-02		26.25	
1068	557 Shell-Thick	INVSLE	2.0667	11.0073	0.61		26.25	
1068	557 Shell-Thick	INVSLE	0.9912	5.0093	0.30		14.58	
1068	557 Shell-Thick	INVSLE	1.4486	6.9737	-0.11		14.58	
1068	557 Shell-Thick	INVSLE	1.4079	7.3088	-0.11		14.89	
1068	557 Shell-Thick	INVSLE	1.0022	5.3097	0.30		14.89	
1068	557 Shell-Thick	INVSLU	3.2727	16.4723	0.96		38.42	
1068	557 Shell-Thick	INVSLU	4.5162	21.6546	-6.780E-02		38.42	
1068	557 Shell-Thick	INVSLU	4.3943	22.8981	-6.780E-02		39.42	
1068	557 Shell-Thick	INVSLU	3.3013	17.6144	0.96		39.42	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 216 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1068	557	Shell-Thick	INVSLE	1.3381	6.7626	0.41	19.69
1068	557	Shell-Thick	INVSLE	1.9556	9.4145	-0.17	19.69
1068	557	Shell-Thick	INVSLE	1.9007	9.8669	-0.17	20.11
1068	557	Shell-Thick	INVSLE	1.3529	7.1680	0.41	20.11
1069	558	Shell-Thick	INVSLE	2.1797	11.0324	0.50	26.25
1069	558	Shell-Thick	INVSLE	3.0109	14.5688	-4.220E-02	26.25
1069	558	Shell-Thick	INVSLE	2.9448	15.2095	-4.220E-02	26.77
1069	558	Shell-Thick	INVSLE	2.1980	11.6163	0.50	26.77
1069	558	Shell-Thick	INVSLE	1.0495	5.3217	0.24	14.90
1069	558	Shell-Thick	INVSLE	1.5106	7.3268	-9.033E-02	14.90
1069	558	Shell-Thick	INVSLE	1.4765	7.6086	-9.033E-02	15.15
1069	558	Shell-Thick	INVSLE	1.0597	5.5737	0.24	15.15
1069	558	Shell-Thick	INVSLE	3.4903	17.6548	0.79	39.42
1069	558	Shell-Thick	INVSLE	4.7506	22.9668	-5.698E-02	39.42
1069	558	Shell-Thick	INVSLE	4.6475	24.0236	-5.698E-02	40.24
1069	558	Shell-Thick	INVSLE	3.5179	18.6235	0.79	40.24
1069	558	Shell-Thick	INVSLE	1.4168	7.1843	0.33	20.11
1069	558	Shell-Thick	INVSLE	2.0393	9.8912	-0.15	20.11
1069	558	Shell-Thick	INVSLE	1.9933	10.2716	-0.15	20.45
1069	558	Shell-Thick	INVSLE	1.4306	7.5244	0.33	20.45
1070	559	Shell-Thick	INVSLE	2.2866	11.6381	0.39	26.78
1070	559	Shell-Thick	INVSLE	3.1275	15.2420	-3.419E-02	26.78
1070	559	Shell-Thick	INVSLE	3.0736	15.7637	-3.419E-02	27.18
1070	559	Shell-Thick	INVSLE	2.3031	12.1123	0.39	27.18
1070	559	Shell-Thick	INVSLE	1.0968	5.5840	0.19	15.15
1070	559	Shell-Thick	INVSLE	1.5611	7.6226	-7.368E-02	15.15
1070	559	Shell-Thick	INVSLE	1.5335	7.8506	-7.368E-02	15.35
1070	559	Shell-Thick	INVSLE	1.1059	5.7874	0.19	15.35
1070	559	Shell-Thick	INVSLE	3.6662	18.6585	0.62	40.25
1070	559	Shell-Thick	INVSLE	4.9440	24.0776	-4.616E-02	40.25
1070	559	Shell-Thick	INVSLE	4.8595	24.9399	-4.616E-02	40.90
1070	559	Shell-Thick	INVSLE	3.6915	19.4469	0.62	40.90
1070	559	Shell-Thick	INVSLE	1.4807	7.5384	0.26	20.46
1070	559	Shell-Thick	INVSLE	2.1075	10.2905	-0.12	20.46
1070	559	Shell-Thick	INVSLE	2.0702	10.5984	-0.12	20.72
1070	559	Shell-Thick	INVSLE	1.4929	7.8130	0.26	20.72
1071	560	Shell-Thick	INVSLE	2.3760	12.1308	0.29	27.19
1071	560	Shell-Thick	INVSLE	3.2184	15.7888	-2.608E-02	27.19
1071	560	Shell-Thick	INVSLE	3.1771	16.1886	-2.608E-02	27.50
1071	560	Shell-Thick	INVSLE	2.3894	12.4937	0.29	27.50
1071	560	Shell-Thick	INVSLE	1.1358	5.7961	0.14	15.36
1071	560	Shell-Thick	INVSLE	1.6002	7.8613	-5.646E-02	15.36
1071	560	Shell-Thick	INVSLE	1.5791	8.0352	-5.646E-02	15.50
1071	560	Shell-Thick	INVSLE	1.1431	5.9509	0.14	15.50
1071	560	Shell-Thick	INVSLE	3.8141	19.4766	0.47	40.91
1071	560	Shell-Thick	INVSLE	5.0949	24.9817	-3.521E-02	40.91
1071	560	Shell-Thick	INVSLE	5.0302	25.6436	-3.521E-02	41.40
1071	560	Shell-Thick	INVSLE	3.8348	20.0809	0.47	41.40
1071	560	Shell-Thick	INVSLE	1.5333	7.8247	0.19	20.73
1071	560	Shell-Thick	INVSLE	2.1602	10.6127	-9.168E-02	20.73
1071	560	Shell-Thick	INVSLE	2.1318	10.8475	-9.168E-02	20.93
1071	560	Shell-Thick	INVSLE	1.5431	8.0337	0.19	20.93
1072	561	Shell-Thick	INVSLE	2.4390	12.5073	0.20	27.50
1072	561	Shell-Thick	INVSLE	3.2832	16.2062	-1.798E-02	27.50
1072	561	Shell-Thick	INVSLE	3.2545	16.4823	-1.798E-02	27.71
1072	561	Shell-Thick	INVSLE	2.4488	12.7574	0.20	27.71
1072	561	Shell-Thick	INVSLE	1.1636	5.9573	9.714E-02	15.51
1072	561	Shell-Thick	INVSLE	1.6278	8.0426	-3.907E-02	15.51
1072	561	Shell-Thick	INVSLE	1.6132	8.1623	-3.907E-02	15.61
1072	561	Shell-Thick	INVSLE	1.1688	6.0636	9.714E-02	15.61
1072	561	Shell-Thick	INVSLE	3.9180	20.1028	0.32	41.41
1072	561	Shell-Thick	INVSLE	5.2028	25.6729	-2.428E-02	41.41
1072	561	Shell-Thick	INVSLE	5.1578	26.1303	-2.428E-02	41.74
1072	561	Shell-Thick	INVSLE	3.9332	20.5197	0.32	41.74
1072	561	Shell-Thick	INVSLE	1.5708	8.0424	0.13	20.94
1072	561	Shell-Thick	INVSLE	2.1975	10.8575	-6.353E-02	20.94
1072	561	Shell-Thick	INVSLE	2.1778	11.0191	-6.353E-02	21.07
1072	561	Shell-Thick	INVSLE	1.5779	8.1859	0.13	21.07
1073	562	Shell-Thick	INVSLE	2.4828	12.7665	0.11	27.71
1073	562	Shell-Thick	INVSLE	3.3217	16.4934	-9.841E-03	27.71
1073	562	Shell-Thick	INVSLE	3.3059	16.6444	-9.841E-03	27.83
1073	562	Shell-Thick	INVSLE	2.4884	12.9032	0.11	27.83
1073	562	Shell-Thick	INVSLE	1.1825	6.0679	5.277E-02	15.61
1073	562	Shell-Thick	INVSLE	1.6439	8.1669	-2.142E-02	15.61
1073	562	Shell-Thick	INVSLE	1.6359	8.2322	-2.142E-02	15.67
1073	562	Shell-Thick	INVSLE	1.1855	6.1258	5.277E-02	15.67
1073	562	Shell-Thick	INVSLE	3.9907	20.5345	0.17	41.75
1073	562	Shell-Thick	INVSLE	5.2672	26.1489	-1.328E-02	41.75

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 217 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1073	562	Shell-Thick	INVSLE	5.2424	26.3992	-1.328E-02		41.93
1073	562	Shell-Thick	INVSLE	3.9993	20.7623	0.17		41.93
1073	562	Shell-Thick	INVSLE	1.5964	8.1916	7.124E-02		21.07
1073	562	Shell-Thick	INVSLE	2.2193	11.0254	-3.485E-02		21.07
1073	562	Shell-Thick	INVSLE	2.2085	11.1135	-3.485E-02		21.15
1073	562	Shell-Thick	INVSLE	1.6004	8.2699	7.124E-02		21.15
1074	563	Shell-Thick	INVSLE	2.4997	12.9067	1.924E-02		27.83
1074	563	Shell-Thick	INVSLE	3.3337	16.6486	-1.702E-03		27.83
1074	563	Shell-Thick	INVSLE	3.3308	16.6739	-1.702E-03		27.85
1074	563	Shell-Thick	INVSLE	2.5008	12.9293	1.924E-02		27.85
1074	563	Shell-Thick	INVSLE	1.1903	6.1275	9.362E-03		15.67
1074	563	Shell-Thick	INVSLE	1.6486	8.2341	-3.707E-03		15.67
1074	563	Shell-Thick	INVSLE	1.6472	8.2450	-3.707E-03		15.68
1074	563	Shell-Thick	INVSLE	1.1908	6.1371	9.362E-03		15.68
1074	563	Shell-Thick	INVSLE	4.0183	20.7681	3.070E-02		41.93
1074	563	Shell-Thick	INVSLE	5.2877	26.4064	-2.297E-03		41.93
1074	563	Shell-Thick	INVSLE	5.2832	26.4483	-2.297E-03		41.96
1074	563	Shell-Thick	INVSLE	4.0199	20.8058	3.070E-02		41.96
1074	563	Shell-Thick	INVSLE	1.6069	8.2721	1.264E-02		21.15
1074	563	Shell-Thick	INVSLE	2.2256	11.1160	-6.033E-03		21.15
1074	563	Shell-Thick	INVSLE	2.2237	11.1307	-6.033E-03		21.16
1074	563	Shell-Thick	INVSLE	1.6076	8.2851	1.264E-02		21.16
1075	564	Shell-Thick	INVSLE	2.4967	12.9280	-3.388E-02		27.85
1075	564	Shell-Thick	INVSLE	3.3194	16.6721	1.402E-02		27.85
1075	564	Shell-Thick	INVSLE	3.3294	16.5716	1.402E-02		27.77
1075	564	Shell-Thick	INVSLE	2.4932	12.8366	-3.388E-02		27.77
1075	564	Shell-Thick	INVSLE	1.1890	6.1364	-6.951E-02		15.68
1075	564	Shell-Thick	INVSLE	1.6420	8.2442	6.437E-03		15.68
1075	564	Shell-Thick	INVSLE	1.6470	8.2008	6.437E-03		15.64
1075	564	Shell-Thick	INVSLE	1.1871	6.0977	-6.951E-02		15.64
1075	564	Shell-Thick	INVSLE	4.0132	20.8037	-4.574E-02		41.96
1075	564	Shell-Thick	INVSLE	5.2645	26.4453	2.281E-02		41.96
1075	564	Shell-Thick	INVSLE	5.2803	26.2786	2.281E-02		41.85
1075	564	Shell-Thick	INVSLE	4.0078	20.6512	-4.574E-02		41.85
1075	564	Shell-Thick	INVSLE	1.6051	8.2842	-0.11		21.16
1075	564	Shell-Thick	INVSLE	2.2166	11.1297	8.690E-03		21.16
1075	564	Shell-Thick	INVSLE	2.2235	11.0710	8.690E-03		21.11
1075	564	Shell-Thick	INVSLE	1.6026	8.2319	-0.11		21.11
1076	565	Shell-Thick	INVSLE	2.4665	12.8296	-7.773E-02		27.77
1076	565	Shell-Thick	INVSLE	3.2785	16.5631	3.172E-02		27.77
1076	565	Shell-Thick	INVSLE	3.3015	16.3371	3.172E-02		27.60
1076	565	Shell-Thick	INVSLE	2.4586	12.6245	-7.773E-02		27.60
1076	565	Shell-Thick	INVSLE	1.1764	6.0944	-0.16		15.64
1076	565	Shell-Thick	INVSLE	1.6238	8.1972	1.458E-02		15.64
1076	565	Shell-Thick	INVSLE	1.6355	8.0994	1.458E-02		15.56
1076	565	Shell-Thick	INVSLE	1.1721	6.0073	-0.16		15.56
1076	565	Shell-Thick	INVSLE	3.9626	20.6399	-0.10		41.84
1076	565	Shell-Thick	INVSLE	5.1974	26.2643	5.159E-02		41.84
1076	565	Shell-Thick	INVSLE	5.2334	25.8898	5.159E-02		41.57
1076	565	Shell-Thick	INVSLE	3.9505	20.2979	-0.10		41.57
1076	565	Shell-Thick	INVSLE	1.5881	8.2275	-0.25		21.11
1076	565	Shell-Thick	INVSLE	2.1922	11.0662	1.969E-02		21.11
1076	565	Shell-Thick	INVSLE	2.2079	10.9342	1.969E-02		21.00
1076	565	Shell-Thick	INVSLE	1.5824	8.1099	-0.25		21.00
1077	566	Shell-Thick	INVSLE	2.4164	12.6129	-0.12		27.60
1077	566	Shell-Thick	INVSLE	3.2116	16.3223	4.918E-02		27.60
1077	566	Shell-Thick	INVSLE	3.2472	15.9720	4.918E-02		27.34
1077	566	Shell-Thick	INVSLE	2.4047	12.2945	-0.12		27.34
1077	566	Shell-Thick	INVSLE	1.1547	6.0019	-0.25		15.56
1077	566	Shell-Thick	INVSLE	1.5943	8.0931	2.269E-02		15.56
1077	566	Shell-Thick	INVSLE	1.6125	7.9410	2.269E-02		15.43
1077	566	Shell-Thick	INVSLE	1.1483	5.8662	-0.25		15.43
1077	566	Shell-Thick	INVSLE	3.8796	20.2792	-0.17		41.57
1077	566	Shell-Thick	INVSLE	5.0871	25.8650	7.991E-02		41.57
1077	566	Shell-Thick	INVSLE	5.1429	25.2849	7.991E-02		41.15
1077	566	Shell-Thick	INVSLE	3.8615	19.7488	-0.17		41.15
1077	566	Shell-Thick	INVSLE	1.5588	8.1025	-0.40		21.00
1077	566	Shell-Thick	INVSLE	2.1523	10.9257	3.063E-02		21.00
1077	566	Shell-Thick	INVSLE	2.1769	10.7204	3.063E-02		20.83
1077	566	Shell-Thick	INVSLE	1.5503	7.9194	-0.40		20.83
1078	567	Shell-Thick	INVSLE	2.3393	12.2779	-0.17		27.33
1078	567	Shell-Thick	INVSLE	3.1185	15.9498	6.652E-02		27.33
1078	567	Shell-Thick	INVSLE	3.1668	15.4767	6.652E-02		26.97
1078	567	Shell-Thick	INVSLE	2.3241	11.8476	-0.17		26.97
1078	567	Shell-Thick	INVSLE	1.1216	5.8584	-0.35		15.42
1078	567	Shell-Thick	INVSLE	1.5533	7.9316	3.080E-02		15.42
1078	567	Shell-Thick	INVSLE	1.5781	7.7253	3.080E-02		15.25
1078	567	Shell-Thick	INVSLE	1.1133	5.6743	-0.35		15.25

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 218 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1078	567	Shell-Thick	INVS LU	3.7514	19.7220	-0.23	41.14
1078	567	Shell-Thick	INVS LU	4.9335	25.2478	0.11	41.14
1078	567	Shell-Thick	INVS LU	5.0092	24.4654	0.11	40.56
1078	567	Shell-Thick	INVS LU	3.7282	19.0062	-0.23	40.56
1078	567	Shell-Thick	INVS LU	1.5141	7.9089	-0.55	20.82
1078	567	Shell-Thick	INVS LU	2.0970	10.7077	4.159E-02	20.82
1078	567	Shell-Thick	INVS LU	2.1304	10.4292	4.159E-02	20.58
1078	567	Shell-Thick	INVS LU	1.5030	7.6604	-0.55	20.58
1079	568	Shell-Thick	INVS LE	2.2431	11.8273	-0.22	26.96
1079	568	Shell-Thick	INVS LE	2.9999	15.4474	8.333E-02	26.96
1079	568	Shell-Thick	INVS LE	3.0604	14.8541	8.333E-02	26.49
1079	568	Shell-Thick	INVS LE	2.2257	11.2865	-0.22	26.49
1079	568	Shell-Thick	INVS LE	1.0795	5.6647	-0.45	15.24
1079	568	Shell-Thick	INVS LE	1.5009	7.7127	3.883E-02	15.24
1079	568	Shell-Thick	INVS LE	1.5321	7.4525	3.883E-02	15.02
1079	568	Shell-Thick	INVS LE	1.0698	5.4320	-0.45	15.02
1079	568	Shell-Thick	INVS LU	3.5924	18.9737	-0.30	40.55
1079	568	Shell-Thick	INVS LU	4.7381	24.4166	0.13	40.55
1079	568	Shell-Thick	INVS LU	4.8326	23.4371	0.13	39.80
1079	568	Shell-Thick	INVS LU	3.5661	18.0756	-0.30	39.80
1079	568	Shell-Thick	INVS LU	1.4573	7.6474	-0.71	20.58
1079	568	Shell-Thick	INVS LU	2.0263	10.4122	5.242E-02	20.58
1079	568	Shell-Thick	INVS LU	2.0683	10.0609	5.242E-02	20.27
1079	568	Shell-Thick	INVS LU	1.4442	7.3331	-0.71	20.27
1080	569	Shell-Thick	INVS LE	2.1205	11.2625	-0.28	26.49
1080	569	Shell-Thick	INVS LE	2.8558	14.8161	9.988E-02	26.49
1080	569	Shell-Thick	INVS LE	2.9286	14.1060	9.988E-02	25.91
1080	569	Shell-Thick	INVS LE	2.1017	10.6141	-0.28	25.91
1080	569	Shell-Thick	INVS LE	1.0259	5.4205	-0.56	15.01
1080	569	Shell-Thick	INVS LE	1.4370	7.4361	4.686E-02	15.01
1080	569	Shell-Thick	INVS LE	1.4747	7.1223	4.686E-02	14.73
1080	569	Shell-Thick	INVS LE	1.0153	5.1393	-0.56	14.73
1080	569	Shell-Thick	INVS LU	3.3898	18.0370	-0.37	39.80
1080	569	Shell-Thick	INVS LU	4.5011	23.3741	0.16	39.80
1080	569	Shell-Thick	INVS LU	4.6146	22.2044	0.16	38.88
1080	569	Shell-Thick	INVS LU	3.3617	16.9628	-0.37	38.88
1080	569	Shell-Thick	INVS LU	1.3850	7.3177	-0.89	20.26
1080	569	Shell-Thick	INVS LU	1.9399	10.0387	6.326E-02	20.26
1080	569	Shell-Thick	INVS LU	1.9908	9.6151	6.326E-02	19.88
1080	569	Shell-Thick	INVS LU	1.3706	6.9381	-0.89	19.88
1081	570	Shell-Thick	INVS LE	1.9806	10.5883	-0.34	25.90
1081	570	Shell-Thick	INVS LE	2.6875	14.0593	0.12	25.90
1081	570	Shell-Thick	INVS LE	2.7718	13.2373	0.12	25.21
1081	570	Shell-Thick	INVS LE	1.9625	9.8353	-0.34	25.21
1081	570	Shell-Thick	INVS LE	0.9636	5.1268	-0.68	14.72
1081	570	Shell-Thick	INVS LE	1.3617	7.1019	5.473E-02	14.72
1081	570	Shell-Thick	INVS LE	1.4058	6.7353	5.473E-02	14.38
1081	570	Shell-Thick	INVS LE	0.9529	4.7972	-0.68	14.38
1081	570	Shell-Thick	INVS LU	3.1600	16.9216	-0.46	38.87
1081	570	Shell-Thick	INVS LU	4.2250	22.1273	0.19	38.87
1081	570	Shell-Thick	INVS LU	4.3559	20.7772	0.19	37.77
1081	570	Shell-Thick	INVS LU	3.1334	15.6777	-0.46	37.77
1081	570	Shell-Thick	INVS LU	1.3009	6.9212	-1.07	19.88
1081	570	Shell-Thick	INVS LU	1.8382	9.5875	7.388E-02	19.88
1081	570	Shell-Thick	INVS LU	1.8978	9.0926	7.388E-02	19.41
1081	570	Shell-Thick	INVS LU	1.2864	6.4763	-1.07	19.41
1082	571	Shell-Thick	INVS LE	1.8162	9.8081	-0.41	25.21
1082	571	Shell-Thick	INVS LE	2.4952	13.1800	0.13	25.21
1082	571	Shell-Thick	INVS LE	2.5913	12.2525	0.13	24.38
1082	571	Shell-Thick	INVS LE	1.8000	8.9563	-0.41	24.38
1082	571	Shell-Thick	INVS LE	0.8902	4.7839	-0.81	14.38
1082	571	Shell-Thick	INVS LE	1.2748	6.7098	6.257E-02	14.38
1082	571	Shell-Thick	INVS LE	1.3255	6.2916	6.257E-02	13.97
1082	571	Shell-Thick	INVS LE	0.8799	4.4068	-0.81	13.97
1082	571	Shell-Thick	INVS LU	2.8900	15.6342	-0.55	37.77
1082	571	Shell-Thick	INVS LU	3.9105	20.6829	0.21	37.77
1082	571	Shell-Thick	INVS LU	4.0591	19.1649	0.21	36.47
1082	571	Shell-Thick	INVS LU	2.8669	14.2320	-0.55	36.47
1082	571	Shell-Thick	INVS LU	1.2017	6.4583	-1.28	19.41
1082	571	Shell-Thick	INVS LU	1.7210	9.0583	8.447E-02	19.41
1082	571	Shell-Thick	INVS LU	1.7894	8.4937	8.447E-02	18.85
1082	571	Shell-Thick	INVS LU	1.1879	5.9491	-1.28	18.85
1083	572	Shell-Thick	INVS LE	1.6377	8.9302	-0.48	24.39
1083	572	Shell-Thick	INVS LE	2.2810	12.1841	0.14	24.39
1083	572	Shell-Thick	INVS LE	2.3878	11.1601	0.14	23.42
1083	572	Shell-Thick	INVS LE	1.6265	7.9858	-0.48	23.42
1083	572	Shell-Thick	INVS LE	0.8087	4.3937	-0.96	13.96
1083	572	Shell-Thick	INVS LE	1.1768	6.2607	7.012E-02	13.96



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 219 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1083	572 Shell-Thick	INVSLE	1.2339	5.7927	7.012E-02		13.48	
1083	572 Shell-Thick	INVSLE	0.8003	3.9699	-0.96		13.48	
1083	572 Shell-Thick	INVSLE	2.5991	14.1908	-0.65		36.47	
1083	572 Shell-Thick	INVSLE	3.5616	19.0531	0.23		36.47	
1083	572 Shell-Thick	INVSLE	3.7259	17.3843	0.23		34.95	
1083	572 Shell-Thick	INVSLE	2.5846	12.6428	-0.65		34.95	
1083	572 Shell-Thick	INVSLE	1.0917	5.9315	-1.50		18.85	
1083	572 Shell-Thick	INVSLE	1.5886	8.4519	9.467E-02		18.85	
1083	572 Shell-Thick	INVSLE	1.6658	7.8201	9.467E-02		18.19	
1083	572 Shell-Thick	INVSLE	1.0805	5.3593	-1.50		18.19	
1084	573 Shell-Thick	INVSLE	1.4385	7.9618	-0.58		23.43	
1084	573 Shell-Thick	INVSLE	2.0457	11.0781	0.16		23.43	
1084	573 Shell-Thick	INVSLE	2.1638	9.9694	0.16		22.31	
1084	573 Shell-Thick	INVSLE	1.4343	6.9357	-0.58		22.31	
1084	573 Shell-Thick	INVSLE	0.7170	3.9576	-1.12		13.48	
1084	573 Shell-Thick	INVSLE	1.0675	5.7550	7.757E-02		13.48	
1084	573 Shell-Thick	INVSLE	1.1315	5.2402	7.757E-02		12.91	
1084	573 Shell-Thick	INVSLE	0.7117	3.4896	-1.12		12.91	
1084	573 Shell-Thick	INVSLE	2.2753	12.6051	-0.78		34.97	
1084	573 Shell-Thick	INVSLE	3.1800	17.2509	0.25		34.97	
1084	573 Shell-Thick	INVSLE	3.3609	15.4535	0.25		33.21	
1084	573 Shell-Thick	INVSLE	2.2723	10.9318	-0.78		33.21	
1084	573 Shell-Thick	INVSLE	0.9679	5.3428	-1.76		18.20	
1084	573 Shell-Thick	INVSLE	1.4412	7.7692	0.10		18.20	
1084	573 Shell-Thick	INVSLE	1.5275	7.0742	0.10		17.42	
1084	573 Shell-Thick	INVSLE	0.9608	4.7109	-1.76		17.42	
1085	574 Shell-Thick	INVSLE	1.2311	6.9174	-0.68		22.33	
1085	574 Shell-Thick	INVSLE	1.7926	9.8728	0.17		22.33	
1085	574 Shell-Thick	INVSLE	1.9210	8.6953	0.17		21.02	
1085	574 Shell-Thick	INVSLE	1.2383	5.8219	-0.68		21.02	
1085	574 Shell-Thick	INVSLE	0.6188	3.4797	-1.32		12.91	
1085	574 Shell-Thick	INVSLE	0.9479	5.1947	8.452E-02		12.91	
1085	574 Shell-Thick	INVSLE	1.0186	4.6377	8.452E-02		12.24	
1085	574 Shell-Thick	INVSLE	0.6187	2.9706	-1.32		12.24	
1085	574 Shell-Thick	INVSLE	1.9412	10.9038	-0.92		33.24	
1085	574 Shell-Thick	INVSLE	2.7723	15.2976	0.27		33.24	
1085	574 Shell-Thick	INVSLE	2.9674	13.4006	0.27		31.21	
1085	574 Shell-Thick	INVSLE	1.9568	9.1283	-0.92		31.21	
1085	574 Shell-Thick	INVSLE	0.8354	4.6976	-2.05		17.43	
1085	574 Shell-Thick	INVSLE	1.2796	7.0129	0.11		17.43	
1085	574 Shell-Thick	INVSLE	1.3751	6.2609	0.11		16.52	
1085	574 Shell-Thick	INVSLE	0.8353	4.0103	-2.05		16.52	
1086	575 Shell-Thick	INVSLE	1.0112	5.8114	-0.81		21.05	
1086	575 Shell-Thick	INVSLE	1.5238	8.5809	0.18		21.05	
1086	575 Shell-Thick	INVSLE	1.6636	7.3562	0.18		19.54	
1086	575 Shell-Thick	INVSLE	1.0328	4.6667	-0.81		19.54	
1086	575 Shell-Thick	INVSLE	0.5134	2.9644	-1.55		12.25	
1086	575 Shell-Thick	INVSLE	0.8182	4.5827	9.116E-02		12.25	
1086	575 Shell-Thick	INVSLE	0.8964	3.9903	9.116E-02		11.46	
1086	575 Shell-Thick	INVSLE	0.5203	2.4204	-1.55		11.46	
1086	575 Shell-Thick	INVSLE	1.5884	9.1129	-1.10		31.26	
1086	575 Shell-Thick	INVSLE	2.3421	13.2173	0.28		31.26	
1086	575 Shell-Thick	INVSLE	2.5532	11.2592	0.28		28.92	
1086	575 Shell-Thick	INVSLE	1.6271	7.2716	-1.10		28.92	
1086	575 Shell-Thick	INVSLE	0.6931	4.0020	-2.40		16.54	
1086	575 Shell-Thick	INVSLE	1.1045	6.1866	0.12		16.54	
1086	575 Shell-Thick	INVSLE	1.2102	5.3870	0.12		15.47	
1086	575 Shell-Thick	INVSLE	0.7024	3.2675	-2.40		15.47	
1087	576 Shell-Thick	INVSLE	0.7936	4.6693	-0.98		19.59	
1087	576 Shell-Thick	INVSLE	1.2448	7.2220	0.18		19.59	
1087	576 Shell-Thick	INVSLE	1.3955	5.9792	0.18		17.83	
1087	576 Shell-Thick	INVSLE	0.8361	3.5000	-0.98		17.83	
1087	576 Shell-Thick	INVSLE	0.4055	2.4203	-1.82		11.48	
1087	576 Shell-Thick	INVSLE	0.6800	3.9241	9.695E-02		11.48	
1087	576 Shell-Thick	INVSLE	0.7662	3.3072	9.695E-02		10.54	
1087	576 Shell-Thick	INVSLE	0.4228	1.8501	-1.82		10.54	
1087	576 Shell-Thick	INVSLE	1.2437	7.2772	-1.32		29.00	
1087	576 Shell-Thick	INVSLE	1.8997	11.0463	0.29		29.00	
1087	576 Shell-Thick	INVSLE	2.1251	9.0778	0.29		26.29	
1087	576 Shell-Thick	INVSLE	1.3154	5.4132	-1.32		26.29	
1087	576 Shell-Thick	INVSLE	0.5474	3.2674	-2.81		15.50	
1087	576 Shell-Thick	INVSLE	0.9180	5.2976	0.13		15.50	
1087	576 Shell-Thick	INVSLE	1.0344	4.4647	0.13		14.23	
1087	576 Shell-Thick	INVSLE	0.5708	2.4977	-2.81		14.23	
1088	577 Shell-Thick	INVSLE	0.5797	3.5198	-1.18		17.90	
1088	577 Shell-Thick	INVSLE	0.9600	5.8210	0.19		17.90	
1088	577 Shell-Thick	INVSLE	1.1243	4.6004	0.19		15.84	
1088	577 Shell-Thick	INVSLE	0.6482	2.3645	-1.18		15.84	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 220 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1088	577	Shell-Thick	INVSLE	0.2974	1.8589	-2.17	10.57	
1088	577	Shell-Thick	INVSLE	0.5350	3.2271	0.10	10.57	
1088	577	Shell-Thick	INVSLE	0.6309	2.6021	0.10	9.45	
1088	577	Shell-Thick	INVSLE	0.3285	1.2780	-2.17	9.45	
1088	577	Shell-Thick	INVSLE	0.9071	5.4457	-1.59	26.40	
1088	577	Shell-Thick	INVSLE	1.4528	8.8291	0.29	26.40	
1088	577	Shell-Thick	INVSLE	1.6966	6.9177	0.29	23.25	
1088	577	Shell-Thick	INVSLE	1.0190	3.6245	-1.59	23.25	
1088	577	Shell-Thick	INVSLE	0.4015	2.5095	-3.31	14.27	
1088	577	Shell-Thick	INVSLE	0.7222	4.3565	0.14	14.27	
1088	577	Shell-Thick	INVSLE	0.8517	3.5128	0.14	12.76	
1088	577	Shell-Thick	INVSLE	0.4435	1.7253	-3.31	12.76	
1089	578	Shell-Thick	INVSLE	0.3893	2.4094	-1.45	15.94	
1089	578	Shell-Thick	INVSLE	0.6787	4.4146	0.19	15.94	
1089	578	Shell-Thick	INVSLE	0.8585	3.2714	0.19	13.50	
1089	578	Shell-Thick	INVSLE	0.4934	1.3184	-1.45	13.50	
1089	578	Shell-Thick	INVSLE	0.1973	1.2999	-2.60	9.50	
1089	578	Shell-Thick	INVSLE	0.3865	2.5050	0.11	9.50	
1089	578	Shell-Thick	INVSLE	0.4940	1.8976	0.11	8.14	
1089	578	Shell-Thick	INVSLE	0.2478	0.7314	-2.60	8.14	
1089	578	Shell-Thick	INVSLE	0.6120	3.6961	-1.95	23.41	
1089	578	Shell-Thick	INVSLE	1.0175	6.6289	0.28	23.41	
1089	578	Shell-Thick	INVSLE	1.2812	4.8646	0.28	19.72	
1089	578	Shell-Thick	INVSLE	0.7783	1.9991	-1.95	19.72	
1089	578	Shell-Thick	INVSLE	0.2663	1.7549	-3.93	12.82	
1089	578	Shell-Thick	INVSLE	0.5218	3.3818	0.14	12.82	
1089	578	Shell-Thick	INVSLE	0.6669	2.5617	0.14	10.99	
1089	578	Shell-Thick	INVSLE	0.3345	0.9874	-3.93	10.99	
1263	579	Shell-Thick	INVSLE	8.3512	0.5571	-7.11	-0.15	
1263	579	Shell-Thick	INVSLE	7.7089	0.5223	-7.17	-0.15	
1263	579	Shell-Thick	INVSLE	10.0853	0.5355	-7.17	-0.12	
1263	579	Shell-Thick	INVSLE	10.7705	0.5401	-7.11	-0.12	
1263	579	Shell-Thick	INVSLE	3.1837	0.2076	-17.95	-0.23	
1263	579	Shell-Thick	INVSLE	2.9477	0.1743	-17.98	-0.23	
1263	579	Shell-Thick	INVSLE	3.8968	0.1984	-17.98	-0.18	
1263	579	Shell-Thick	INVSLE	4.1416	0.2255	-17.95	-0.18	
1263	579	Shell-Thick	INVSLE	14.3434	0.9625	-9.60	-5.617E-02	
1263	579	Shell-Thick	INVSLE	13.2300	0.9259	-9.68	-5.617E-02	
1263	579	Shell-Thick	INVSLE	17.2615	0.9263	-9.68	-4.535E-02	
1263	579	Shell-Thick	INVSLE	18.4575	0.9049	-9.60	-4.535E-02	
1263	579	Shell-Thick	INVSLE	4.2981	0.2802	-30.51	-0.31	
1263	579	Shell-Thick	INVSLE	3.9794	0.2353	-30.52	-0.31	
1263	579	Shell-Thick	INVSLE	5.2607	0.2679	-30.52	-0.24	
1263	579	Shell-Thick	INVSLE	5.5911	0.3045	-30.51	-0.24	
1264	580	Shell-Thick	INVSLE	12.1387	0.7277	-7.53	-0.21	
1264	580	Shell-Thick	INVSLE	10.3788	0.6802	-7.57	-0.21	
1264	580	Shell-Thick	INVSLE	12.9569	1.6141	-7.57	-0.17	
1264	580	Shell-Thick	INVSLE	14.7544	1.6352	-7.53	-0.17	
1264	580	Shell-Thick	INVSLE	4.4546	0.2543	-19.47	-0.21	
1264	580	Shell-Thick	INVSLE	3.8509	0.2231	-19.44	-0.21	
1264	580	Shell-Thick	INVSLE	4.8554	0.5938	-19.44	-0.24	
1264	580	Shell-Thick	INVSLE	5.4651	0.6208	-19.47	-0.24	
1264	580	Shell-Thick	INVSLE	21.0493	1.2767	-10.16	-0.21	
1264	580	Shell-Thick	INVSLE	17.9487	1.2103	-10.22	-0.21	
1264	580	Shell-Thick	INVSLE	22.3517	2.7972	-10.22	-0.24	
1264	580	Shell-Thick	INVSLE	25.5266	2.8114	-10.16	-0.24	
1264	580	Shell-Thick	INVSLE	6.0137	0.3434	-33.33	-0.29	
1264	580	Shell-Thick	INVSLE	5.1988	0.3011	-33.20	-0.29	
1264	580	Shell-Thick	INVSLE	6.5548	0.8016	-33.20	-0.34	
1264	580	Shell-Thick	INVSLE	7.3779	0.8381	-33.33	-0.34	
1265	581	Shell-Thick	INVSLE	14.7325	1.8111	-7.76	-3.555E-02	
1265	581	Shell-Thick	INVSLE	14.8761	1.8175	-7.90	-3.555E-02	
1265	581	Shell-Thick	INVSLE	17.6745	3.5144	-7.90	4.139E-02	
1265	581	Shell-Thick	INVSLE	17.5103	3.5225	-7.76	4.139E-02	
1265	581	Shell-Thick	INVSLE	5.0378	0.6104	-20.86	-8.805E-02	
1265	581	Shell-Thick	INVSLE	5.3267	0.6130	-20.92	-8.805E-02	
1265	581	Shell-Thick	INVSLE	6.3803	1.2407	-20.92	2.423E-02	
1265	581	Shell-Thick	INVSLE	6.0741	1.2502	-20.86	2.423E-02	
1265	581	Shell-Thick	INVSLE	25.9747	3.2035	-10.47	2.532E-02	
1265	581	Shell-Thick	INVSLE	25.9498	3.2144	-10.67	2.532E-02	
1265	581	Shell-Thick	INVSLE	30.7716	6.1511	-10.67	5.587E-02	
1265	581	Shell-Thick	INVSLE	30.7719	6.1576	-10.47	5.587E-02	
1265	581	Shell-Thick	INVSLE	6.8010	0.8241	-36.05	-0.12	
1265	581	Shell-Thick	INVSLE	7.1910	0.8275	-36.02	-0.12	
1265	581	Shell-Thick	INVSLE	8.6134	1.6749	-36.02	4.345E-03	
1265	581	Shell-Thick	INVSLE	8.2001	1.6878	-36.05	4.345E-03	
1266	582	Shell-Thick	INVSLE	7.8620	1.1166	-7.18	-0.35	
1266	582	Shell-Thick	INVSLE	7.1552	1.0397	-7.27	-0.35	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 221 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1266	582 Shell-Thick	INVSLE	9.5294	1.6967	-7.27		-0.41	
1266	582 Shell-Thick	INVSLE	10.2884	1.7226	-7.18		-0.41	
1266	582 Shell-Thick	INVSLE	3.0108	0.4339	-18.02		-0.57	
1266	582 Shell-Thick	INVSLE	2.7548	0.3585	-17.96		-0.57	
1266	582 Shell-Thick	INVSLE	3.7141	0.6071	-17.96		-0.48	
1266	582 Shell-Thick	INVSLE	3.9805	0.6722	-18.02		-0.48	
1266	582 Shell-Thick	INVSLE	13.4876	1.9082	-9.70		-0.11	
1266	582 Shell-Thick	INVSLE	12.2580	1.8295	-9.82		-0.11	
1266	582 Shell-Thick	INVSLE	16.2731	2.9602	-9.82		-0.33	
1266	582 Shell-Thick	INVSLE	17.6033	2.9407	-9.70		-0.33	
1266	582 Shell-Thick	INVSLE	4.0645	0.5858	-30.58		-0.76	
1266	582 Shell-Thick	INVSLE	3.7190	0.4840	-30.35		-0.76	
1266	582 Shell-Thick	INVSLE	5.0140	0.8196	-30.35		-0.65	
1266	582 Shell-Thick	INVSLE	5.3737	0.9075	-30.58		-0.65	
1267	583 Shell-Thick	INVSLE	10.5928	1.8567	-7.56		-0.33	
1267	583 Shell-Thick	INVSLE	10.4092	1.7995	-7.75		-0.33	
1267	583 Shell-Thick	INVSLE	12.9871	2.7409	-7.75		-0.25	
1267	583 Shell-Thick	INVSLE	13.2078	2.7617	-7.56		-0.25	
1267	583 Shell-Thick	INVSLE	3.9323	0.6806	-19.41		-0.46	
1267	583 Shell-Thick	INVSLE	3.9165	0.6296	-19.50		-0.46	
1267	583 Shell-Thick	INVSLE	4.9361	0.9940	-19.50		-0.27	
1267	583 Shell-Thick	INVSLE	4.9551	1.0418	-19.41		-0.27	
1267	583 Shell-Thick	INVSLE	18.3165	3.2205	-10.21		-0.18	
1267	583 Shell-Thick	INVSLE	17.9384	3.1561	-10.46		-0.18	
1267	583 Shell-Thick	INVSLE	22.3231	4.7665	-10.46		-0.22	
1267	583 Shell-Thick	INVSLE	22.7778	4.7561	-10.21		-0.22	
1267	583 Shell-Thick	INVSLE	5.3086	0.9188	-33.16		-0.62	
1267	583 Shell-Thick	INVSLE	5.2873	0.8500	-33.13		-0.62	
1267	583 Shell-Thick	INVSLE	6.6638	1.3420	-33.13		-0.37	
1267	583 Shell-Thick	INVSLE	6.6894	1.4064	-33.16		-0.37	
1268	584 Shell-Thick	INVSLE	14.9842	3.0631	-7.85		-0.30	
1268	584 Shell-Thick	INVSLE	14.0228	3.0019	-8.14		-0.30	
1268	584 Shell-Thick	INVSLE	16.7738	3.4606	-8.14	-1.119E-02		
1268	584 Shell-Thick	INVSLE	17.8036	3.4549	-7.85	-1.119E-02		
1268	584 Shell-Thick	INVSLE	5.3698	1.0986	-20.78		-0.30	
1268	584 Shell-Thick	INVSLE	5.1970	1.0723	-20.97		-0.30	
1268	584 Shell-Thick	INVSLE	6.2583	1.2621	-20.97		-0.11	
1268	584 Shell-Thick	INVSLE	6.4417	1.2779	-20.78		-0.11	
1268	584 Shell-Thick	INVSLE	26.1333	5.3412	-10.59		-0.30	
1268	584 Shell-Thick	INVSLE	24.2575	5.2394	-10.99		-0.30	
1268	584 Shell-Thick	INVSLE	28.9679	6.0100	-10.99	-1.511E-02		
1268	584 Shell-Thick	INVSLE	30.9792	5.9794	-10.59	-1.511E-02		
1268	584 Shell-Thick	INVSLE	7.2492	1.4832	-35.77		-0.41	
1268	584 Shell-Thick	INVSLE	7.0160	1.4476	-35.84		-0.41	
1268	584 Shell-Thick	INVSLE	8.4487	1.7039	-35.84		-0.23	
1268	584 Shell-Thick	INVSLE	8.6963	1.7251	-35.77		-0.23	
1269	585 Shell-Thick	INVSLE	7.1964	1.3911	-7.26		-0.40	
1269	585 Shell-Thick	INVSLE	6.9130	1.3097	-7.42		-0.40	
1269	585 Shell-Thick	INVSLE	9.2775	1.9517	-7.42		-0.41	
1269	585 Shell-Thick	INVSLE	9.6151	1.9800	-7.26		-0.41	
1269	585 Shell-Thick	INVSLE	2.7798	0.5453	-17.93		-0.76	
1269	585 Shell-Thick	INVSLE	2.6773	0.4492	-17.92		-0.76	
1269	585 Shell-Thick	INVSLE	3.6518	0.7061	-17.92		-0.60	
1269	585 Shell-Thick	INVSLE	3.7636	0.7931	-17.93		-0.60	
1269	585 Shell-Thick	INVSLE	12.3180	2.3719	-9.80	7.101E-03		
1269	585 Shell-Thick	INVSLE	11.8248	2.3076	-10.01	7.101E-03		
1269	585 Shell-Thick	INVSLE	15.8012	3.3960	-10.01		-0.19	
1269	585 Shell-Thick	INVSLE	16.4008	3.3564	-9.80		-0.19	
1269	585 Shell-Thick	INVSLE	3.7528	0.7361	-30.30		-1.02	
1269	585 Shell-Thick	INVSLE	3.6144	0.6064	-30.10		-1.02	
1269	585 Shell-Thick	INVSLE	4.9299	0.9533	-30.10		-0.81	
1269	585 Shell-Thick	INVSLE	5.0808	1.0707	-30.30		-0.81	
1270	586 Shell-Thick	INVSLE	10.3909	2.1354	-7.71		-0.41	
1270	586 Shell-Thick	INVSLE	9.7769	2.0513	-7.96		-0.41	
1270	586 Shell-Thick	INVSLE	12.3366	2.4824	-7.96		-0.31	
1270	586 Shell-Thick	INVSLE	13.0235	2.4953	-7.71		-0.31	
1270	586 Shell-Thick	INVSLE	3.9175	0.8122	-19.41		-0.61	
1270	586 Shell-Thick	INVSLE	3.7622	0.7400	-19.50		-0.61	
1270	586 Shell-Thick	INVSLE	4.8012	0.9259	-19.50		-0.36	
1270	586 Shell-Thick	INVSLE	4.9698	0.9850	-19.41		-0.36	
1270	586 Shell-Thick	INVSLE	17.8977	3.6699	-10.41		-0.17	
1270	586 Shell-Thick	INVSLE	16.7517	3.5720	-10.75		-0.17	
1270	586 Shell-Thick	INVSLE	21.0749	4.2873	-10.75		-0.26	
1270	586 Shell-Thick	INVSLE	22.3627	4.2467	-10.41		-0.26	
1270	586 Shell-Thick	INVSLE	5.2886	1.0964	-32.97		-0.83	
1270	586 Shell-Thick	INVSLE	5.0790	0.9989	-32.88		-0.83	
1270	586 Shell-Thick	INVSLE	6.4816	1.2500	-32.88		-0.49	
1270	586 Shell-Thick	INVSLE	6.7092	1.3297	-32.97		-0.49	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 222 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1271	587 Shell-Thick	INVSLE	13.9242	2.6827	-8.12	-0.30		
1271	587 Shell-Thick	INVSLE	13.0549	2.6188	-8.49	-0.30		
1271	587 Shell-Thick	INVSLE	15.8232	3.2637	-8.49	-8.187E-03		
1271	587 Shell-Thick	INVSLE	16.7674	3.2544	-8.12	-8.187E-03		
1271	587 Shell-Thick	INVSLE	5.1633	1.0101	-20.93	-0.38		
1271	587 Shell-Thick	INVSLE	4.9973	0.9788	-21.12	-0.38		
1271	587 Shell-Thick	INVSLE	6.0995	1.2275	-21.12	-0.10		
1271	587 Shell-Thick	INVSLE	6.2766	1.2478	-20.93	-0.10		
1271	587 Shell-Thick	INVSLE	24.0835	4.6224	-10.96	-0.22		
1271	587 Shell-Thick	INVSLE	22.3987	4.5205	-11.46	-0.22		
1271	587 Shell-Thick	INVSLE	27.0991	5.6249	-11.46	-1.105E-02		
1271	587 Shell-Thick	INVSLE	28.9327	5.5814	-10.96	-1.105E-02		
1271	587 Shell-Thick	INVSLE	6.9705	1.3636	-35.78	-0.51		
1271	587 Shell-Thick	INVSLE	6.7463	1.3213	-35.78	-0.51		
1271	587 Shell-Thick	INVSLE	8.2344	1.6571	-35.78	-0.22		
1271	587 Shell-Thick	INVSLE	8.4735	1.6845	-35.78	-0.22		
1272	588 Shell-Thick	INVSLE	6.8803	1.3835	-7.39	-0.36		
1272	588 Shell-Thick	INVSLE	6.3907	1.2970	-7.58	-0.36		
1272	588 Shell-Thick	INVSLE	8.7363	1.7983	-7.58	-0.40		
1272	588 Shell-Thick	INVSLE	9.2975	1.8148	-7.39	-0.40		
1272	588 Shell-Thick	INVSLE	2.6757	0.5456	-17.87	-0.86		
1272	588 Shell-Thick	INVSLE	2.5033	0.4352	-17.82	-0.86		
1272	588 Shell-Thick	INVSLE	3.4951	0.6541	-17.82	-0.68		
1272	588 Shell-Thick	INVSLE	3.6816	0.7507	-17.87	-0.68		
1272	588 Shell-Thick	INVSLE	11.7561	2.3551	-9.98	0.21		
1272	588 Shell-Thick	INVSLE	10.8987	2.2963	-10.23	0.21		
1272	588 Shell-Thick	INVSLE	14.8140	3.1251	-10.23	-8.312E-02		
1272	588 Shell-Thick	INVSLE	15.8100	3.0488	-9.98	-8.312E-02		
1272	588 Shell-Thick	INVSLE	3.6123	0.7366	-30.01	-1.16		
1272	588 Shell-Thick	INVSLE	3.3794	0.5876	-29.71	-1.16		
1272	588 Shell-Thick	INVSLE	4.7184	0.8830	-29.71	-0.92		
1272	588 Shell-Thick	INVSLE	4.9701	1.0134	-30.01	-0.92		
1273	589 Shell-Thick	INVSLE	9.7242	1.9307	-7.94	-0.37		
1273	589 Shell-Thick	INVSLE	9.1360	1.8477	-8.22	-0.37		
1273	589 Shell-Thick	INVSLE	11.6994	2.4606	-8.22	-0.32		
1273	589 Shell-Thick	INVSLE	12.3628	2.4701	-7.94	-0.32		
1273	589 Shell-Thick	INVSLE	3.7484	0.7589	-19.47	-0.68		
1273	589 Shell-Thick	INVSLE	3.5951	0.6792	-19.51	-0.68		
1273	589 Shell-Thick	INVSLE	4.6674	0.9325	-19.51	-0.41		
1273	589 Shell-Thick	INVSLE	4.8336	0.9994	-19.47	-0.41		
1273	589 Shell-Thick	INVSLE	16.6539	3.2895	-10.72	1.911E-04		
1273	589 Shell-Thick	INVSLE	15.5613	3.2027	-11.10	1.911E-04		
1273	589 Shell-Thick	INVSLE	19.8539	4.2326	-11.10	-0.22		
1273	589 Shell-Thick	INVSLE	21.0938	4.1756	-10.72	-0.22		
1273	589 Shell-Thick	INVSLE	5.0603	1.0245	-32.83	-0.92		
1273	589 Shell-Thick	INVSLE	4.8534	0.9170	-32.61	-0.92		
1273	589 Shell-Thick	INVSLE	6.3010	1.2589	-32.61	-0.55		
1273	589 Shell-Thick	INVSLE	6.5253	1.3492	-32.83	-0.55		
1274	590 Shell-Thick	INVSLE	12.9831	2.6103	-8.45	-0.30		
1274	590 Shell-Thick	INVSLE	12.1487	2.5343	-8.86	-0.30		
1274	590 Shell-Thick	INVSLE	14.9205	3.0879	-8.86	-9.362E-03		
1274	590 Shell-Thick	INVSLE	15.8540	3.0670	-8.45	-9.362E-03		
1274	590 Shell-Thick	INVSLE	4.9686	1.0120	-21.05	-0.42		
1274	590 Shell-Thick	INVSLE	4.8029	0.9741	-21.24	-0.42		
1274	590 Shell-Thick	INVSLE	5.9489	1.1983	-21.24	-0.11		
1274	590 Shell-Thick	INVSLE	6.1329	1.2181	-21.05	-0.11		
1274	590 Shell-Thick	INVSLE	22.2768	4.4638	-11.41	-0.16		
1274	590 Shell-Thick	INVSLE	20.6671	4.3436	-11.97	-0.16		
1274	590 Shell-Thick	INVSLE	25.3242	5.2792	-11.97	-1.264E-02		
1274	590 Shell-Thick	INVSLE	27.1268	5.2110	-11.41	-1.264E-02		
1274	590 Shell-Thick	INVSLE	6.7077	1.3662	-35.66	-0.57		
1274	590 Shell-Thick	INVSLE	6.4839	1.3150	-35.59	-0.57		
1274	590 Shell-Thick	INVSLE	8.0310	1.6177	-35.59	-0.23		
1274	590 Shell-Thick	INVSLE	8.2794	1.6444	-35.66	-0.23		
1275	591 Shell-Thick	INVSLE	6.3414	1.1798	-7.56	-0.21		
1275	591 Shell-Thick	INVSLE	5.8757	1.1095	-7.74	-0.21		
1275	591 Shell-Thick	INVSLE	8.2069	1.7090	-7.74	-0.32		
1275	591 Shell-Thick	INVSLE	8.7444	1.7092	-7.56	-0.32		
1275	591 Shell-Thick	INVSLE	2.4946	0.4631	-17.79	-0.87		
1275	591 Shell-Thick	INVSLE	2.3246	0.3515	-17.68	-0.87		
1275	591 Shell-Thick	INVSLE	3.3386	0.6186	-17.68	-0.69		
1275	591 Shell-Thick	INVSLE	3.5219	0.7170	-17.79	-0.69		
1275	591 Shell-Thick	INVSLE	10.8021	2.0109	-10.21	0.56		
1275	591 Shell-Thick	INVSLE	9.9937	1.9885	-10.44	0.56		
1275	591 Shell-Thick	INVSLE	13.8523	2.9735	-10.44	0.12		
1275	591 Shell-Thick	INVSLE	14.8004	2.8597	-10.21	0.12		
1275	591 Shell-Thick	INVSLE	3.3677	0.6252	-29.66	-1.17		
1275	591 Shell-Thick	INVSLE	3.1382	0.4745	-29.22	-1.17		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 223 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1275	591 Shell-Thick	INVS LU	4.5071	0.8350	-29.22		-0.94	
1275	591 Shell-Thick	INVS LU	4.7546	0.9680	-29.66		-0.94	
1276	592 Shell-Thick	INVS LE	9.0708	1.8026	-8.19		-0.28	
1276	592 Shell-Thick	INVS LE	8.4025	1.7201	-8.48		-0.28	
1276	592 Shell-Thick	INVS LE	10.9527	2.2474	-8.48		-0.29	
1276	592 Shell-Thick	INVS LE	11.7117	2.2413	-8.19		-0.29	
1276	592 Shell-Thick	INVS LE	3.5752	0.7197	-19.45		-0.70	
1276	592 Shell-Thick	INVS LE	3.3852	0.6358	-19.45		-0.70	
1276	592 Shell-Thick	INVS LE	4.4888	0.8717	-19.45		-0.42	
1276	592 Shell-Thick	INVS LE	4.6965	0.9381	-19.45		-0.42	
1276	592 Shell-Thick	INVS LU	15.4437	3.0583	-11.06		0.20	
1276	592 Shell-Thick	INVS LU	14.2207	2.9773	-11.45		0.20	
1276	592 Shell-Thick	INVS LU	18.4484	3.8427	-11.45		-0.13	
1276	592 Shell-Thick	INVS LU	19.8467	3.7526	-11.06		-0.13	
1276	592 Shell-Thick	INVS LU	4.8265	0.9716	-32.51		-0.95	
1276	592 Shell-Thick	INVS LU	4.5700	0.8584	-32.17		-0.95	
1276	592 Shell-Thick	INVS LU	6.0599	1.1767	-32.17		-0.56	
1276	592 Shell-Thick	INVS LU	6.3403	1.2665	-32.51		-0.56	
1277	593 Shell-Thick	INVS LE	12.0533	2.3453	-8.83		-0.24	
1277	593 Shell-Thick	INVS LE	11.2581	2.2728	-9.25		-0.24	
1277	593 Shell-Thick	INVS LE	14.0424	2.9106	-9.25	-8.889E-03		
1277	593 Shell-Thick	INVS LE	14.9376	2.8854	-8.83	-8.889E-03		
1277	593 Shell-Thick	INVS LE	4.7640	0.9419	-21.17		-0.43	
1277	593 Shell-Thick	INVS LE	4.6003	0.9037	-21.31		-0.43	
1277	593 Shell-Thick	INVS LE	5.7974	1.1675	-21.31		-0.11	
1277	593 Shell-Thick	INVS LE	5.9793	1.1878	-21.17		-0.11	
1277	593 Shell-Thick	INVS LU	20.5062	3.9727	-11.92	-2.968E-02		
1277	593 Shell-Thick	INVS LU	18.9787	3.8605	-12.49	-2.968E-02		
1277	593 Shell-Thick	INVS LU	23.6035	4.9319	-12.49	-1.200E-02		
1277	593 Shell-Thick	INVS LU	25.3258	4.8539	-11.92	-1.200E-02		
1277	593 Shell-Thick	INVS LU	6.4314	1.2716	-35.48		-0.58	
1277	593 Shell-Thick	INVS LU	6.2104	1.2199	-35.29		-0.58	
1277	593 Shell-Thick	INVS LU	7.8266	1.5762	-35.29		-0.22	
1277	593 Shell-Thick	INVS LU	8.0720	1.6035	-35.48		-0.22	
1278	594 Shell-Thick	INVS LE	5.8176	1.0003	-7.72	2.678E-02		
1278	594 Shell-Thick	INVS LE	5.2691	0.9514	-7.87	2.678E-02		
1278	594 Shell-Thick	INVS LE	7.5696	1.5170	-7.87		-0.17	
1278	594 Shell-Thick	INVS LE	8.1988	1.4873	-7.72		-0.17	
1278	594 Shell-Thick	INVS LE	2.3120	0.3785	-17.64		-0.80	
1278	594 Shell-Thick	INVS LE	2.1056	0.2727	-17.44		-0.80	
1278	594 Shell-Thick	INVS LE	3.1374	0.5448	-17.44		-0.65	
1278	594 Shell-Thick	INVS LE	3.3599	0.6349	-17.64		-0.65	
1278	594 Shell-Thick	INVS LU	9.8828	1.7213	-10.42		0.99	
1278	594 Shell-Thick	INVS LU	8.9376	1.7383	-10.62		0.99	
1278	594 Shell-Thick	INVS LU	12.7093	2.6444	-10.62		0.39	
1278	594 Shell-Thick	INVS LU	13.8102	2.4757	-10.42		0.39	
1278	594 Shell-Thick	INVS LU	3.1212	0.5110	-29.15		-1.08	
1278	594 Shell-Thick	INVS LU	2.8425	0.3682	-28.55		-1.08	
1278	594 Shell-Thick	INVS LU	4.2355	0.7355	-28.55		-0.88	
1278	594 Shell-Thick	INVS LU	4.5358	0.8572	-29.15		-0.88	
1279	595 Shell-Thick	INVS LE	8.3332	1.5574	-8.46		-0.12	
1279	595 Shell-Thick	INVS LE	7.6549	1.4908	-8.71		-0.12	
1279	595 Shell-Thick	INVS LE	10.1928	2.1290	-8.71		-0.22	
1279	595 Shell-Thick	INVS LE	10.9615	2.1074	-8.46		-0.22	
1279	595 Shell-Thick	INVS LE	3.3627	0.6319	-19.41		-0.66	
1279	595 Shell-Thick	INVS LE	3.1567	0.5522	-19.31		-0.66	
1279	595 Shell-Thick	INVS LE	4.2936	0.8417	-19.31		-0.40	
1279	595 Shell-Thick	INVS LE	4.5170	0.9042	-19.41		-0.40	
1279	595 Shell-Thick	INVS LU	14.0972	2.6307	-11.42		0.50	
1279	595 Shell-Thick	INVS LU	12.8711	2.5792	-11.76		0.50	
1279	595 Shell-Thick	INVS LU	17.0337	3.6217	-11.76	-1.635E-03		
1279	595 Shell-Thick	INVS LU	18.4347	3.5027	-11.42	-1.635E-03		
1279	595 Shell-Thick	INVS LU	4.5396	0.8531	-32.10		-0.89	
1279	595 Shell-Thick	INVS LU	4.2615	0.7455	-31.59		-0.89	
1279	595 Shell-Thick	INVS LU	5.7964	1.1363	-31.59		-0.54	
1279	595 Shell-Thick	INVS LU	6.0980	1.2206	-32.10		-0.54	
1280	596 Shell-Thick	INVS LE	11.1757	2.1943	-9.21		-0.16	
1280	596 Shell-Thick	INVS LE	10.3726	2.1209	-9.61		-0.16	
1280	596 Shell-Thick	INVS LE	13.1533	2.7399	-9.61	-1.289E-02		
1280	596 Shell-Thick	INVS LE	14.0679	2.7043	-9.21	-1.289E-02		
1280	596 Shell-Thick	INVS LE	4.5644	0.9062	-21.23		-0.41	
1280	596 Shell-Thick	INVS LE	4.3827	0.8670	-21.28		-0.41	
1280	596 Shell-Thick	INVS LE	5.6272	1.1372	-21.28		-0.12	
1280	596 Shell-Thick	INVS LE	5.8312	1.1545	-21.23		-0.12	
1280	596 Shell-Thick	INVS LU	18.8423	3.6879	-12.43		0.12	
1280	596 Shell-Thick	INVS LU	17.3187	3.5750	-12.97		0.12	
1280	596 Shell-Thick	INVS LU	21.8807	4.5984	-12.97	-1.740E-02		
1280	596 Shell-Thick	INVS LU	23.6193	4.5016	-12.43	-1.740E-02		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 224 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1280	596 Shell-Thick	INVS LU	6.1620	1.2234	-35.17		-0.55	
1280	596 Shell-Thick	INVS LU	5.9166	1.1704	-34.81		-0.55	
1280	596 Shell-Thick	INVS LU	7.5967	1.5352	-34.81		-0.24	
1280	596 Shell-Thick	INVS LU	7.8721	1.5585	-35.17		-0.24	
1281	597 Shell-Thick	INVS LE	5.2096	0.7606	-7.85		0.36	
1281	597 Shell-Thick	INVS LE	4.6531	0.7498	-7.95		0.36	
1281	597 Shell-Thick	INVS LE	6.9165	1.3859	-7.95	4.551E-02		
1281	597 Shell-Thick	INVS LE	7.5516	1.3201	-7.85	4.551E-02		
1281	597 Shell-Thick	INVS LE	2.0918	0.2659	-17.42		-0.66	
1281	597 Shell-Thick	INVS LE	1.8730	0.1765	-17.10		-0.66	
1281	597 Shell-Thick	INVS LE	2.9198	0.4910	-17.10		-0.56	
1281	597 Shell-Thick	INVS LE	3.1539	0.5653	-17.42		-0.56	
1281	597 Shell-Thick	INVS LU	8.8250	1.3344	-10.60		1.55	
1281	597 Shell-Thick	INVS LU	7.8770	1.4146	-10.73		1.55	
1281	597 Shell-Thick	INVS LU	11.5512	2.4237	-10.73		0.75	
1281	597 Shell-Thick	INVS LU	12.6513	2.1955	-10.60		0.75	
1281	597 Shell-Thick	INVS LU	2.8239	0.3589	-28.50		-0.89	
1281	597 Shell-Thick	INVS LU	2.5285	0.2383	-27.70		-0.89	
1281	597 Shell-Thick	INVS LU	3.9417	0.6628	-27.70		-0.76	
1281	597 Shell-Thick	INVS LU	4.2578	0.7632	-28.50		-0.76	
1282	598 Shell-Thick	INVS LE	7.5866	1.3753	-8.69		0.10	
1282	598 Shell-Thick	INVS LE	6.8615	1.3268	-8.89		0.10	
1282	598 Shell-Thick	INVS LE	9.3680	1.9395	-8.89		-0.11	
1282	598 Shell-Thick	INVS LE	10.1907	1.8926	-8.69		-0.11	
1282	598 Shell-Thick	INVS LE	3.1338	0.5597	-19.26		-0.56	
1282	598 Shell-Thick	INVS LE	2.8961	0.4879	-19.04		-0.56	
1282	598 Shell-Thick	INVS LE	4.0590	0.7852	-19.04		-0.36	
1282	598 Shell-Thick	INVS LE	4.3170	0.8370	-19.26		-0.36	
1282	598 Shell-Thick	INVS LU	12.7502	2.3211	-11.73		0.87	
1282	598 Shell-Thick	INVS LU	11.4599	2.2996	-12.01		0.87	
1282	598 Shell-Thick	INVS LU	15.5244	3.2780	-12.01		0.17	
1282	598 Shell-Thick	INVS LU	17.0021	3.1168	-11.73		0.17	
1282	598 Shell-Thick	INVS LU	4.2306	0.7555	-31.51		-0.76	
1282	598 Shell-Thick	INVS LU	3.9097	0.6587	-30.81		-0.76	
1282	598 Shell-Thick	INVS LU	5.4797	1.0600	-30.81		-0.48	
1282	598 Shell-Thick	INVS LU	5.8280	1.1299	-31.51		-0.48	
1283	599 Shell-Thick	INVS LE	10.2845	1.9661	-9.57	-4.957E-02		
1283	599 Shell-Thick	INVS LE	9.4450	1.9001	-9.92	-4.957E-02		
1283	599 Shell-Thick	INVS LE	12.2151	2.5594	-9.92	-1.816E-02		
1283	599 Shell-Thick	INVS LE	13.1659	2.5168	-9.57	-1.816E-02		
1283	599 Shell-Thick	INVS LE	4.3440	0.8391	-21.21		-0.36	
1283	599 Shell-Thick	INVS LE	4.1283	0.8023	-21.14		-0.36	
1283	599 Shell-Thick	INVS LE	5.4171	1.1003	-21.14		-0.12	
1283	599 Shell-Thick	INVS LE	5.6558	1.1143	-21.21		-0.12	
1283	599 Shell-Thick	INVS LU	17.1732	3.2731	-12.92		0.31	
1283	599 Shell-Thick	INVS LU	15.6104	3.1732	-13.39		0.31	
1283	599 Shell-Thick	INVS LU	20.0983	4.2515	-13.39	-2.452E-02		
1283	599 Shell-Thick	INVS LU	21.8748	4.1431	-12.92	-2.452E-02		
1283	599 Shell-Thick	INVS LU	5.8643	1.1327	-34.71		-0.49	
1283	599 Shell-Thick	INVS LU	5.5731	1.0832	-34.15		-0.49	
1283	599 Shell-Thick	INVS LU	7.3131	1.4854	-34.15		-0.25	
1283	599 Shell-Thick	INVS LU	7.6353	1.5043	-34.71		-0.25	
1284	600 Shell-Thick	INVS LE	4.5951	0.5708	-7.94		0.79	
1284	600 Shell-Thick	INVS LE	3.9990	0.6064	-7.96		0.79	
1284	600 Shell-Thick	INVS LE	6.2046	1.2194	-7.96		0.33	
1284	600 Shell-Thick	INVS LE	6.8824	1.1043	-7.94		0.33	
1284	600 Shell-Thick	INVS LE	1.8592	0.1661	-17.07		-0.43	
1284	600 Shell-Thick	INVS LE	1.6166	0.1011	-16.60		-0.43	
1284	600 Shell-Thick	INVS LE	2.6686	0.4245	-16.60		-0.41	
1284	600 Shell-Thick	INVS LE	2.9279	0.4733	-17.07		-0.41	
1284	600 Shell-Thick	INVS LU	7.7677	1.0401	-10.71		2.21	
1284	600 Shell-Thick	INVS LU	6.7618	1.1923	-10.74		2.21	
1284	600 Shell-Thick	INVS LU	10.3051	2.1411	-10.74		1.19	
1284	600 Shell-Thick	INVS LU	11.4681	1.8360	-10.71		1.19	
1284	600 Shell-Thick	INVS LU	2.5100	0.2242	-27.66		-0.58	
1284	600 Shell-Thick	INVS LU	2.1824	0.1365	-26.63		-0.58	
1284	600 Shell-Thick	INVS LU	3.6026	0.5731	-26.63		-0.56	
1284	600 Shell-Thick	INVS LU	3.9527	0.6390	-27.66		-0.56	
1285	601 Shell-Thick	INVS LE	6.7951	1.1455	-8.87		0.39	
1285	601 Shell-Thick	INVS LE	6.0360	1.1271	-9.00		0.39	
1285	601 Shell-Thick	INVS LE	8.4993	1.7929	-9.00	2.386E-02		
1285	601 Shell-Thick	INVS LE	9.3539	1.7182	-8.87	2.386E-02		
1285	601 Shell-Thick	INVS LE	2.8734	0.4655	-19.00		-0.41	
1285	601 Shell-Thick	INVS LE	2.6050	0.4087	-18.63		-0.41	
1285	601 Shell-Thick	INVS LE	3.7873	0.7411	-18.63		-0.29	
1285	601 Shell-Thick	INVS LE	4.0759	0.7780	-19.00		-0.29	
1285	601 Shell-Thick	INVS LU	11.3428	1.9339	-11.98		1.33	
1285	601 Shell-Thick	INVS LU	10.0146	1.9601	-12.15		1.33	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 225 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1285	601 Shell-Thick	INVS LU	13.9636	3.0125	-12.15	0.38		
1285	601 Shell-Thick	INVS LU	15.4745	2.8085	-11.98	0.38		
1285	601 Shell-Thick	INVS LU	3.8790	0.6285	-30.75	-0.55		
1285	601 Shell-Thick	INVS LU	3.5168	0.5518	-29.80	-0.55		
1285	601 Shell-Thick	INVS LU	5.1128	1.0005	-29.80	-0.39		
1285	601 Shell-Thick	INVS LU	5.5024	1.0504	-30.75	-0.39		
1286	602 Shell-Thick	INVS LE	9.3663	1.7833	-9.88	9.523E-02		
1286	602 Shell-Thick	INVS LE	8.4636	1.7232	-10.14	9.523E-02		
1286	602 Shell-Thick	INVS LE	11.2015	2.3695	-10.14	-2.693E-02		
1286	602 Shell-Thick	INVS LE	12.2216	2.3151	-9.88	-2.693E-02		
1286	602 Shell-Thick	INVS LE	4.0923	0.7821	-21.07	-0.29		
1286	602 Shell-Thick	INVS LE	3.8266	0.7482	-20.84	-0.29		
1286	602 Shell-Thick	INVS LE	5.1495	1.0551	-20.84	-0.14		
1286	602 Shell-Thick	INVS LE	5.4416	1.0631	-21.07	-0.14		
1286	602 Shell-Thick	INVS LU	15.4821	2.9442	-13.34	0.54		
1286	602 Shell-Thick	INVS LU	13.8408	2.8538	-13.69	0.54		
1286	602 Shell-Thick	INVS LU	18.2196	3.8938	-13.69	-3.636E-02		
1286	602 Shell-Thick	INVS LU	20.0838	3.7669	-13.34	-3.636E-02		
1286	602 Shell-Thick	INVS LU	5.5246	1.0559	-34.05	-0.39		
1286	602 Shell-Thick	INVS LU	5.1659	1.0100	-33.24	-0.39		
1286	602 Shell-Thick	INVS LU	6.9518	1.4244	-33.24	-0.27		
1286	602 Shell-Thick	INVS LU	7.3462	1.4352	-34.05	-0.27		
1287	603 Shell-Thick	INVS LE	3.9445	0.3690	-7.95	1.33		
1287	603 Shell-Thick	INVS LE	3.3409	0.4673	-7.86	1.33		
1287	603 Shell-Thick	INVS LE	5.4726	1.0988	-7.86	0.69		
1287	603 Shell-Thick	INVS LE	6.1530	0.9257	-7.95	0.69		
1287	603 Shell-Thick	INVS LE	1.6037	0.0599	-16.59	-0.12		
1287	603 Shell-Thick	INVS LE	1.3481	0.0302	-15.94	-0.12		
1287	603 Shell-Thick	INVS LE	2.3953	0.3750	-15.94	-0.21		
1287	603 Shell-Thick	INVS LE	2.6663	0.3898	-16.59	-0.21		
1287	603 Shell-Thick	INVS LU	6.6589	0.7273	-10.73	3.02		
1287	603 Shell-Thick	INVS LU	5.6518	0.9743	-10.61	3.02		
1287	603 Shell-Thick	INVS LU	9.0410	1.9381	-10.61	1.72		
1287	603 Shell-Thick	INVS LU	10.1962	1.5473	-10.73	1.72		
1287	603 Shell-Thick	INVS LU	2.1650	0.0809	-26.61	-0.16		
1287	603 Shell-Thick	INVS LU	1.8199	0.0407	-25.30	-0.16		
1287	603 Shell-Thick	INVS LU	3.2337	0.5062	-25.30	-0.28		
1287	603 Shell-Thick	INVS LU	3.5995	0.5262	-26.61	-0.28		
1288	604 Shell-Thick	INVS LE	5.9745	0.9557	-8.98	0.76		
1288	604 Shell-Thick	INVS LE	5.1695	0.9726	-8.99	0.76		
1288	604 Shell-Thick	INVS LE	7.5647	1.6084	-8.99	0.20		
1288	604 Shell-Thick	INVS LE	8.4673	1.4966	-8.98	0.20		
1288	604 Shell-Thick	INVS LE	2.5839	0.3809	-18.60	-0.20		
1288	604 Shell-Thick	INVS LE	2.2781	0.3440	-18.03	-0.20		
1288	604 Shell-Thick	INVS LE	3.4661	0.6807	-18.03	-0.19		
1288	604 Shell-Thick	INVS LE	3.7939	0.6962	-18.60	-0.19		
1288	604 Shell-Thick	INVS LU	9.9065	1.6222	-12.12	1.87		
1288	604 Shell-Thick	INVS LU	8.5224	1.7015	-12.14	1.87		
1288	604 Shell-Thick	INVS LU	12.3175	2.6843	-12.14	0.65		
1288	604 Shell-Thick	INVS LU	13.8867	2.4249	-12.12	0.65		
1288	604 Shell-Thick	INVS LU	3.4882	0.5142	-29.75	-0.27		
1288	604 Shell-Thick	INVS LU	3.0754	0.4643	-28.52	-0.27		
1288	604 Shell-Thick	INVS LU	4.6793	0.9189	-28.52	-0.26		
1288	604 Shell-Thick	INVS LU	5.1217	0.9398	-29.75	-0.26		
1289	605 Shell-Thick	INVS LE	8.3866	1.5521	-10.11	0.28		
1289	605 Shell-Thick	INVS LE	7.4028	1.5044	-10.26	0.28		
1289	605 Shell-Thick	INVS LE	10.0902	2.1604	-10.26	-3.716E-02		
1289	605 Shell-Thick	INVS LE	11.1896	2.0955	-10.11	-3.716E-02		
1289	605 Shell-Thick	INVS LE	3.7911	0.7018	-20.79	-0.18		
1289	605 Shell-Thick	INVS LE	3.4624	0.6737	-20.35	-0.18		
1289	605 Shell-Thick	INVS LE	4.8080	0.9966	-20.35	-0.15		
1289	605 Shell-Thick	INVS LE	5.1642	0.9978	-20.79	-0.15		
1289	605 Shell-Thick	INVS LU	13.7155	2.5382	-13.65	0.81		
1289	605 Shell-Thick	INVS LU	11.9722	2.4677	-13.85	0.81		
1289	605 Shell-Thick	INVS LU	16.2156	3.5100	-13.85	-5.016E-02		
1289	605 Shell-Thick	INVS LU	18.1767	3.3684	-13.65	-5.016E-02		
1289	605 Shell-Thick	INVS LU	5.1180	0.9475	-33.17	-0.24		
1289	605 Shell-Thick	INVS LU	4.6742	0.9095	-32.06	-0.24		
1289	605 Shell-Thick	INVS LU	6.4907	1.3454	-32.06	-0.28		
1289	605 Shell-Thick	INVS LU	6.9717	1.3470	-33.17	-0.28		
1290	606 Shell-Thick	INVS LE	3.2925	0.2225	-7.86	1.99		
1290	606 Shell-Thick	INVS LE	2.6775	0.3961	-7.64	1.99		
1290	606 Shell-Thick	INVS LE	4.7081	0.9736	-7.64	1.13		
1290	606 Shell-Thick	INVS LE	5.3978	0.7276	-7.86	1.13		
1290	606 Shell-Thick	INVS LE	1.3373	-0.0261	-15.93	0.28		
1290	606 Shell-Thick	INVS LE	1.0688	-0.0105	-15.06	0.28		
1290	606 Shell-Thick	INVS LE	2.0954	0.3256	-15.06	5.951E-02		
1290	606 Shell-Thick	INVS LE	2.3790	0.2955	-15.93	5.951E-02		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 226 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1290	606 Shell-Thick	INVS LU	5.5598	0.5107	-10.61		3.98	
1290	606 Shell-Thick	INVS LU	4.5430	0.8676	-10.31		3.98	
1290	606 Shell-Thick	INVS LU	7.7378	1.7249	-10.31		2.37	
1290	606 Shell-Thick	INVS LU	8.8984	1.2287	-10.61		2.37	
1290	606 Shell-Thick	INVS LU	1.8054	-0.0352	-25.29		0.38	
1290	606 Shell-Thick	INVS LU	1.4429	-0.0142	-23.67		0.38	
1290	606 Shell-Thick	INVS LU	2.8288	0.4396	-23.67	8.033E-02		
1290	606 Shell-Thick	INVS LU	3.2116	0.3989	-25.29	8.033E-02		
1291	607 Shell-Thick	INVS LE	5.1144	0.7464	-8.98		1.21	
1291	607 Shell-Thick	INVS LE	4.2731	0.8111	-8.85		1.21	
1291	607 Shell-Thick	INVS LE	6.5777	1.4461	-8.85		0.42	
1291	607 Shell-Thick	INVS LE	7.5112	1.2919	-8.98		0.42	
1291	607 Shell-Thick	INVS LE	2.2594	0.2854	-18.02	7.495E-02		
1291	607 Shell-Thick	INVS LE	1.9177	0.2762	-17.21	7.495E-02		
1291	607 Shell-Thick	INVS LE	3.0968	0.6248	-17.21	-5.807E-02		
1291	607 Shell-Thick	INVS LE	3.4597	0.6133	-18.02	-5.807E-02		
1291	607 Shell-Thick	INVS LU	8.4253	1.2810	-12.13		2.53	
1291	607 Shell-Thick	INVS LU	7.0045	1.4313	-11.95		2.53	
1291	607 Shell-Thick	INVS LU	10.6142	2.3985	-11.95		0.97	
1291	607 Shell-Thick	INVS LU	12.2094	2.0789	-12.13		0.97	
1291	607 Shell-Thick	INVS LU	3.0501	0.3853	-28.49		0.10	
1291	607 Shell-Thick	INVS LU	2.5888	0.3729	-26.92		0.10	
1291	607 Shell-Thick	INVS LU	4.1807	0.8434	-26.92	-7.840E-02		
1291	607 Shell-Thick	INVS LU	4.6706	0.8280	-28.49	-7.840E-02		
1292	608 Shell-Thick	INVS LE	7.3371	1.3374	-10.24		0.51	
1292	608 Shell-Thick	INVS LE	6.2652	1.3033	-10.23		0.51	
1292	608 Shell-Thick	INVS LE	8.8724	1.9331	-10.23	-4.979E-02		
1292	608 Shell-Thick	INVS LE	10.0611	1.8536	-10.24	-4.979E-02		
1292	608 Shell-Thick	INVS LE	3.4314	0.6201	-20.31	-4.366E-02		
1292	608 Shell-Thick	INVS LE	3.0311	0.5992	-19.64	-4.366E-02		
1292	608 Shell-Thick	INVS LE	4.3818	0.9235	-19.64		-0.17	
1292	608 Shell-Thick	INVS LE	4.8119	0.9152	-20.31		-0.17	
1292	608 Shell-Thick	INVS LU	11.8663	2.1693	-13.82		1.14	
1292	608 Shell-Thick	INVS LU	10.0156	2.1198	-13.81		1.14	
1292	608 Shell-Thick	INVS LU	14.0799	3.1039	-13.81	-6.721E-02		
1292	608 Shell-Thick	INVS LU	16.1482	2.9418	-13.82	-6.721E-02		
1292	608 Shell-Thick	INVS LU	4.6324	0.8371	-32.00	-5.894E-02		
1292	608 Shell-Thick	INVS LU	4.0920	0.8090	-30.54	-5.894E-02		
1292	608 Shell-Thick	INVS LU	5.9154	1.2467	-30.54		-0.31	
1292	608 Shell-Thick	INVS LU	6.4961	1.2356	-32.00		-0.31	
1293	609 Shell-Thick	INVS LE	2.6375	0.0995	-7.65		2.80	
1293	609 Shell-Thick	INVS LE	2.0367	0.3682	-7.26		2.80	
1293	609 Shell-Thick	INVS LE	3.9402	0.8954	-7.26		1.67	
1293	609 Shell-Thick	INVS LE	4.6067	0.5633	-7.65		1.67	
1293	609 Shell-Thick	INVS LE	1.0614	-0.1000	-15.08		0.79	
1293	609 Shell-Thick	INVS LE	0.7913	-0.0256	-13.94		0.79	
1293	609 Shell-Thick	INVS LE	1.7798	0.2971	-13.94		0.40	
1293	609 Shell-Thick	INVS LE	2.0621	0.2110	-15.08		0.40	
1293	609 Shell-Thick	INVS LU	4.4653	0.3309	-10.32		5.12	
1293	609 Shell-Thick	INVS LU	3.4809	0.8247	-9.80		5.12	
1293	609 Shell-Thick	INVS LU	6.4455	1.5891	-9.80		3.14	
1293	609 Shell-Thick	INVS LU	7.5576	0.9719	-10.32		3.14	
1293	609 Shell-Thick	INVS LU	1.4328	-0.1350	-23.69		1.07	
1293	609 Shell-Thick	INVS LU	1.0682	-0.0345	-21.70		1.07	
1293	609 Shell-Thick	INVS LU	2.4027	0.4011	-21.70		0.54	
1293	609 Shell-Thick	INVS LU	2.7838	0.2849	-23.69		0.54	
1294	610 Shell-Thick	INVS LE	4.2284	0.5725	-8.85		1.76	
1294	610 Shell-Thick	INVS LE	3.3601	0.6945	-8.53		1.76	
1294	610 Shell-Thick	INVS LE	5.5404	1.2652	-8.53		0.69	
1294	610 Shell-Thick	INVS LE	6.4970	1.0577	-8.85		0.69	
1294	610 Shell-Thick	INVS LE	1.9034	0.2001	-17.21		0.43	
1294	610 Shell-Thick	INVS LE	1.5292	0.2262	-16.13		0.43	
1294	610 Shell-Thick	INVS LE	2.6784	0.5588	-16.13		0.11	
1294	610 Shell-Thick	INVS LE	3.0734	0.5126	-17.21		0.11	
1294	610 Shell-Thick	INVS LU	6.9245	1.0043	-11.94		3.32	
1294	610 Shell-Thick	INVS LU	5.4833	1.2376	-11.52		3.32	
1294	610 Shell-Thick	INVS LU	8.8593	2.0845	-11.52		1.35	
1294	610 Shell-Thick	INVS LU	10.4670	1.6898	-11.94		1.35	
1294	610 Shell-Thick	INVS LU	2.5696	0.2702	-26.91		0.58	
1294	610 Shell-Thick	INVS LU	2.0644	0.3054	-24.93		0.58	
1294	610 Shell-Thick	INVS LU	3.6158	0.7543	-24.93		0.15	
1294	610 Shell-Thick	INVS LU	4.1491	0.6920	-26.91		0.15	
1295	611 Shell-Thick	INVS LE	6.2093	1.0905	-10.22		0.79	
1295	611 Shell-Thick	INVS LE	5.0520	1.0772	-10.02		0.79	
1295	611 Shell-Thick	INVS LE	7.5489	1.6838	-10.02	-6.324E-02		
1295	611 Shell-Thick	INVS LE	8.8171	1.5894	-10.22	-6.324E-02		
1295	611 Shell-Thick	INVS LE	3.0049	0.5188	-19.61		0.13	
1295	611 Shell-Thick	INVS LE	2.5294	0.5091	-18.64		0.13	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 227 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1295	611 Shell-Thick	INVSLE	3.8648	0.8331	-18.64	-0.18		
1295	611 Shell-Thick	INVSLE	4.3700	0.8139	-19.61	-0.18		
1295	611 Shell-Thick	INVSLE	9.9253	1.7535	-13.79	1.54		
1295	611 Shell-Thick	INVSLE	7.9774	1.7361	-13.53	1.54		
1295	611 Shell-Thick	INVSLE	11.8211	2.6703	-13.53	-8.538E-02		
1295	611 Shell-Thick	INVSLE	13.9739	2.4888	-13.79	-8.538E-02		
1295	611 Shell-Thick	INVSLE	4.0566	0.7003	-30.51	0.18		
1295	611 Shell-Thick	INVSLE	3.4146	0.6872	-28.63	0.18		
1295	611 Shell-Thick	INVSLE	5.2175	1.1247	-28.63	-0.32		
1295	611 Shell-Thick	INVSLE	5.8995	1.0987	-30.51	-0.32		
1296	612 Shell-Thick	INVSLE	2.0090	0.0521	-7.28	3.77		
1296	612 Shell-Thick	INVSLE	1.4379	0.4353	-6.69	3.77		
1296	612 Shell-Thick	INVSLE	3.1784	0.8439	-6.69	2.34		
1296	612 Shell-Thick	INVSLE	3.8067	0.4058	-7.28	2.34		
1296	612 Shell-Thick	INVSLE	0.7893	-0.1380	-13.98	1.43		
1296	612 Shell-Thick	INVSLE	0.5281	0.0101	-12.54	1.43		
1296	612 Shell-Thick	INVSLE	1.4552	0.2850	-12.54	0.84		
1296	612 Shell-Thick	INVSLE	1.7256	0.1284	-13.98	0.84		
1296	612 Shell-Thick	INVSLE	3.4235	0.2725	-9.83	6.48		
1296	612 Shell-Thick	INVSLE	2.4929	0.9284	-9.03	6.48		
1296	612 Shell-Thick	INVSLE	5.1766	1.4921	-9.03	4.08		
1296	612 Shell-Thick	INVSLE	6.2201	0.7274	-9.83	4.08		
1296	612 Shell-Thick	INVSLE	1.0655	-0.1863	-21.74	1.93		
1296	612 Shell-Thick	INVSLE	0.7129	0.0136	-19.32	1.93		
1296	612 Shell-Thick	INVSLE	1.9646	0.3848	-19.32	1.13		
1296	612 Shell-Thick	INVSLE	2.3295	0.1734	-21.74	1.13		
1297	613 Shell-Thick	INVSLE	3.3294	0.4073	-8.54	2.44		
1297	613 Shell-Thick	INVSLE	2.4592	0.6031	-8.00	2.44		
1297	613 Shell-Thick	INVSLE	4.4799	1.1056	-8.00	1.02		
1297	613 Shell-Thick	INVSLE	5.4277	0.8349	-8.54	1.02		
1297	613 Shell-Thick	INVSLE	1.5216	0.1173	-16.15	0.87		
1297	613 Shell-Thick	INVSLE	1.1260	0.1895	-14.72	0.87		
1297	613 Shell-Thick	INVSLE	2.2210	0.4983	-14.72	0.33		
1297	613 Shell-Thick	INVSLE	2.6343	0.4091	-16.15	0.33		
1297	613 Shell-Thick	INVSLE	5.4258	0.7436	-11.54	4.27		
1297	613 Shell-Thick	INVSLE	4.0052	1.0828	-10.80	4.27		
1297	613 Shell-Thick	INVSLE	7.0995	1.8098	-10.80	1.83		
1297	613 Shell-Thick	INVSLE	8.6669	1.3287	-11.54	1.83		
1297	613 Shell-Thick	INVSLE	2.0541	0.1584	-24.97	1.17		
1297	613 Shell-Thick	INVSLE	1.5201	0.2558	-22.51	1.17		
1297	613 Shell-Thick	INVSLE	2.9983	0.6727	-22.51	0.44		
1297	613 Shell-Thick	INVSLE	3.5563	0.5523	-24.97	0.44		
1298	614 Shell-Thick	INVSLE	5.0152	0.8543	-10.02	1.14		
1298	614 Shell-Thick	INVSLE	3.7929	0.8664	-9.58	1.14		
1298	614 Shell-Thick	INVSLE	6.1379	1.4172	-9.58	-7.770E-02		
1298	614 Shell-Thick	INVSLE	7.4651	1.3034	-10.02	-7.770E-02		
1298	614 Shell-Thick	INVSLE	2.5124	0.4137	-18.64	0.36		
1298	614 Shell-Thick	INVSLE	1.9668	0.4185	-17.29	0.36		
1298	614 Shell-Thick	INVSLE	3.2598	0.7260	-17.29	-0.20		
1298	614 Shell-Thick	INVSLE	3.8346	0.6929	-18.64	-0.20		
1298	614 Shell-Thick	INVSLE	7.9175	1.3652	-13.53	2.03		
1298	614 Shell-Thick	INVSLE	5.9105	1.3857	-12.93	2.03		
1298	614 Shell-Thick	INVSLE	9.4755	2.2186	-12.93	-0.10		
1298	614 Shell-Thick	INVSLE	11.6750	2.0115	-13.53	-0.10		
1298	614 Shell-Thick	INVSLE	3.3917	0.5584	-28.63	0.49		
1298	614 Shell-Thick	INVSLE	2.6552	0.5650	-26.24	0.49		
1298	614 Shell-Thick	INVSLE	4.4007	0.9801	-26.24	-0.34		
1298	614 Shell-Thick	INVSLE	5.1768	0.9353	-28.63	-0.34		
1299	615 Shell-Thick	INVSLE	1.4264	0.0749	-6.72	4.96		
1299	615 Shell-Thick	INVSLE	0.9164	0.6012	-5.88	4.96		
1299	615 Shell-Thick	INVSLE	2.4558	0.8627	-5.88	3.17		
1299	615 Shell-Thick	INVSLE	3.0082	0.2962	-6.72	3.17		
1299	615 Shell-Thick	INVSLE	0.5339	-0.1352	-12.60	2.22		
1299	615 Shell-Thick	INVSLE	0.2990	0.1063	-10.79	2.22		
1299	615 Shell-Thick	INVSLE	1.1383	0.3111	-10.79	1.39		
1299	615 Shell-Thick	INVSLE	1.3767	0.0668	-12.60	1.39		
1299	615 Shell-Thick	INVSLE	2.4614	0.3186	-9.07	8.13		
1299	615 Shell-Thick	INVSLE	1.6323	1.1752	-7.94	8.13		
1299	615 Shell-Thick	INVSLE	3.9835	1.5024	-7.94	5.23		
1299	615 Shell-Thick	INVSLE	4.9001	0.5621	-9.07	5.23		
1299	615 Shell-Thick	INVSLE	0.7208	-0.1825	-19.41	3.00		
1299	615 Shell-Thick	INVSLE	0.4036	0.1435	-16.48	3.00		
1299	615 Shell-Thick	INVSLE	1.5368	0.4199	-16.48	1.88		
1299	615 Shell-Thick	INVSLE	1.8585	0.0902	-19.41	1.88		
1300	616 Shell-Thick	INVSLE	2.4485	0.2957	-8.03	3.29		
1300	616 Shell-Thick	INVSLE	1.6129	0.5826	-7.20	3.29		
1300	616 Shell-Thick	INVSLE	3.4268	0.9522	-7.20	1.45		
1300	616 Shell-Thick	INVSLE	4.3285	0.6020	-8.03	1.45		

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 228 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1300	616 Shell-Thick	INVSLE	1.1286	0.0579	-14.77		1.43	
1300	616 Shell-Thick	INVSLE	0.7312	0.1889	-12.91		1.43	
1300	616 Shell-Thick	INVSLE	1.7403	0.4391	-12.91		0.61	
1300	616 Shell-Thick	INVSLE	2.1515	0.2952	-14.77		0.61	
1300	616 Shell-Thick	INVSLE	3.9790	0.5715	-10.84		5.44	
1300	616 Shell-Thick	INVSLE	2.6353	1.0392	-9.72		5.44	
1300	616 Shell-Thick	INVSLE	5.3825	1.5473	-9.72		2.43	
1300	616 Shell-Thick	INVSLE	6.8529	0.9577	-10.84		2.43	
1300	616 Shell-Thick	INVSLE	1.5236	0.0782	-22.58		1.93	
1300	616 Shell-Thick	INVSLE	0.9871	0.2550	-19.54		1.93	
1300	616 Shell-Thick	INVSLE	2.3494	0.5928	-19.54		0.82	
1300	616 Shell-Thick	INVSLE	2.9045	0.3986	-22.58		0.82	
1301	617 Shell-Thick	INVSLE	3.7793	0.6088	-9.60		1.58	
1301	617 Shell-Thick	INVSLE	2.5310	0.6564	-8.85		1.58	
1301	617 Shell-Thick	INVSLE	4.6770	1.1373	-8.85	-9.162E-02		
1301	617 Shell-Thick	INVSLE	6.0169	1.0015	-9.60	-9.162E-02		
1301	617 Shell-Thick	INVSLE	1.9623	0.2977	-17.33		0.65	
1301	617 Shell-Thick	INVSLE	1.3624	0.3232	-15.52		0.65	
1301	617 Shell-Thick	INVSLE	2.5800	0.6036	-15.52		-0.21	
1301	617 Shell-Thick	INVSLE	3.2056	0.5535	-17.33		-0.21	
1301	617 Shell-Thick	INVSLE	5.8864	0.9695	-12.96		2.65	
1301	617 Shell-Thick	INVSLE	3.8861	1.0428	-11.94		2.65	
1301	617 Shell-Thick	INVSLE	7.1088	1.7562	-11.94		-0.12	
1301	617 Shell-Thick	INVSLE	9.2769	1.5209	-12.96		-0.12	
1301	617 Shell-Thick	INVSLE	2.6491	0.4019	-26.29		0.88	
1301	617 Shell-Thick	INVSLE	1.8392	0.4363	-23.27		0.88	
1301	617 Shell-Thick	INVSLE	3.4831	0.8149	-23.27		-0.35	
1301	617 Shell-Thick	INVSLE	4.3276	0.7473	-26.29		-0.35	
1302	618 Shell-Thick	INVSLE	0.9258	0.2161	-5.94		6.43	
1302	618 Shell-Thick	INVSLE	0.5079	0.9194	-4.81		6.43	
1302	618 Shell-Thick	INVSLE	1.7978	0.9572	-4.81		4.22	
1302	618 Shell-Thick	INVSLE	2.2426	0.2292	-5.94		4.22	
1302	618 Shell-Thick	INVSLE	0.3159	-0.0626	-10.88		3.22	
1302	618 Shell-Thick	INVSLE	0.1284	0.2970	-8.65		3.22	
1302	618 Shell-Thick	INVSLE	0.8473	0.3846	-8.65		2.10	
1302	618 Shell-Thick	INVSLE	1.0312	0.0291	-10.88		2.10	
1302	618 Shell-Thick	INVSLE	1.6331	0.5393	-8.01		10.15	
1302	618 Shell-Thick	INVSLE	0.9479	1.6411	-6.49		10.15	
1302	618 Shell-Thick	INVSLE	2.9001	1.6213	-6.49		6.67	
1302	618 Shell-Thick	INVSLE	3.6473	0.4613	-8.01		6.67	
1302	618 Shell-Thick	INVSLE	0.4265	-0.0845	-16.61		4.34	
1302	618 Shell-Thick	INVSLE	0.1734	0.4010	-13.11		4.34	
1302	618 Shell-Thick	INVSLE	1.1438	0.5192	-13.11		2.84	
1302	618 Shell-Thick	INVSLE	1.3922	0.0393	-16.61		2.84	
1303	619 Shell-Thick	INVSLE	1.6290	0.2376	-7.25		4.36	
1303	619 Shell-Thick	INVSLE	0.8792	0.6425	-6.06		4.36	
1303	619 Shell-Thick	INVSLE	2.4317	0.8417	-6.06		2.00	
1303	619 Shell-Thick	INVSLE	3.2295	0.3915	-7.25		2.00	
1303	619 Shell-Thick	INVSLE	0.7485	0.0276	-13.00		2.16	
1303	619 Shell-Thick	INVSLE	0.3782	0.2357	-10.63		2.16	
1303	619 Shell-Thick	INVSLE	1.2631	0.4002	-10.63		0.98	
1303	619 Shell-Thick	INVSLE	1.6402	0.1863	-13.00		0.98	
1303	619 Shell-Thick	INVSLE	2.6501	0.4811	-9.79		6.90	
1303	619 Shell-Thick	INVSLE	1.4602	1.1141	-8.19		6.90	
1303	619 Shell-Thick	INVSLE	3.7868	1.3538	-8.19		3.19	
1303	619 Shell-Thick	INVSLE	5.0726	0.6296	-9.79		3.19	
1303	619 Shell-Thick	INVSLE	1.0105	0.0372	-19.67		2.91	
1303	619 Shell-Thick	INVSLE	0.5105	0.3182	-15.92		2.91	
1303	619 Shell-Thick	INVSLE	1.7052	0.5402	-15.92		1.32	
1303	619 Shell-Thick	INVSLE	2.2142	0.2514	-19.67		1.32	
1304	620 Shell-Thick	INVSLE	2.5535	0.3942	-8.89		2.15	
1304	620 Shell-Thick	INVSLE	1.3507	0.4877	-7.73		2.15	
1304	620 Shell-Thick	INVSLE	3.2346	0.8577	-7.73		-0.10	
1304	620 Shell-Thick	INVSLE	4.5130	0.6918	-8.89		-0.10	
1304	620 Shell-Thick	INVSLE	1.3779	0.1898	-15.60		1.04	
1304	620 Shell-Thick	INVSLE	0.7583	0.2432	-13.21		1.04	
1304	620 Shell-Thick	INVSLE	1.8573	0.4716	-13.21		-0.22	
1304	620 Shell-Thick	INVSLE	2.4970	0.3993	-15.60		-0.22	
1304	620 Shell-Thick	INVSLE	3.9166	0.6312	-12.00		3.44	
1304	620 Shell-Thick	INVSLE	2.0376	0.7712	-10.44		3.44	
1304	620 Shell-Thick	INVSLE	4.8317	1.3054	-10.44		-0.14	
1304	620 Shell-Thick	INVSLE	6.8509	1.0311	-12.00		-0.14	
1304	620 Shell-Thick	INVSLE	1.8602	0.2562	-23.37		1.40	
1304	620 Shell-Thick	INVSLE	1.0237	0.3284	-19.55		1.40	
1304	620 Shell-Thick	INVSLE	2.5073	0.6367	-19.55		-0.36	
1304	620 Shell-Thick	INVSLE	3.3709	0.5390	-23.37		-0.36	
1305	621 Shell-Thick	INVSLE	0.5411	0.4862	-4.88		8.27	
1305	621 Shell-Thick	INVSLE	0.2467	1.4162	-3.43		8.27	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 229 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1305	621 Shell-Thick	INVSLE	1.2346	1.1745	-3.43	5.59		
1305	621 Shell-Thick	INVSLE	1.5346	0.2408	-4.88	5.59		
1305	621 Shell-Thick	INVSLE	0.1595	0.0985	-8.78	4.48		
1305	621 Shell-Thick	INVSLE	0.0381	0.6113	-6.07	4.48		
1305	621 Shell-Thick	INVSLE	0.5993	0.5388	-6.07	3.04		
1305	621 Shell-Thick	INVSLE	0.7076	0.0399	-8.78	3.04		
1305	621 Shell-Thick	INVSLE	0.9837	0.9358	-6.59	12.66		
1305	621 Shell-Thick	INVSLE	0.4886	2.3497	-4.63	12.66		
1305	621 Shell-Thick	INVSLE	1.9712	1.9117	-4.63	8.54		
1305	621 Shell-Thick	INVSLE	2.4937	0.4737	-6.59	8.54		
1305	621 Shell-Thick	INVSLE	0.2153	0.1330	-13.29	6.05		
1305	621 Shell-Thick	INVSLE	0.0514	0.8253	-9.14	6.05		
1305	621 Shell-Thick	INVSLE	0.8091	0.7274	-9.14	4.10		
1305	621 Shell-Thick	INVSLE	0.9552	0.0538	-13.29	4.10		
1306	622 Shell-Thick	INVSLE	0.9307	0.2779	-6.14	5.75		
1306	622 Shell-Thick	INVSLE	0.3351	0.8367	-4.50	5.75		
1306	622 Shell-Thick	INVSLE	1.5541	0.7813	-4.50	2.75		
1306	622 Shell-Thick	INVSLE	2.1783	0.1966	-6.14	2.75		
1306	622 Shell-Thick	INVSLE	0.4163	0.0562	-10.75	3.12		
1306	622 Shell-Thick	INVSLE	0.1164	0.3676	-7.73	3.12		
1306	622 Shell-Thick	INVSLE	0.8276	0.3890	-7.73	1.49		
1306	622 Shell-Thick	INVSLE	1.1252	0.0809	-10.75	1.49		
1306	622 Shell-Thick	INVSLE	1.5272	0.5349	-8.29	8.81		
1306	622 Shell-Thick	INVSLE	0.5887	1.3806	-6.08	8.81		
1306	622 Shell-Thick	INVSLE	2.3966	1.2362	-6.08	4.21		
1306	622 Shell-Thick	INVSLE	3.3994	0.3308	-8.29	4.21		
1306	622 Shell-Thick	INVSLE	0.5620	0.0759	-16.11	4.21		
1306	622 Shell-Thick	INVSLE	0.1572	0.4963	-11.47	4.21		
1306	622 Shell-Thick	INVSLE	1.1172	0.5252	-11.47	2.01		
1306	622 Shell-Thick	INVSLE	1.5191	0.1092	-16.11	2.01		
1307	623 Shell-Thick	INVSLE	1.4222	0.2168	-7.81	2.93		
1307	623 Shell-Thick	INVSLE	0.3768	0.3744	-6.11	2.93		
1307	623 Shell-Thick	INVSLE	1.9175	0.5966	-6.11	-0.11		
1307	623 Shell-Thick	INVSLE	3.0154	0.3899	-7.81	-0.11		
1307	623 Shell-Thick	INVSLE	0.8026	0.0957	-13.33	1.57		
1307	623 Shell-Thick	INVSLE	0.2243	0.1891	-10.15	1.57		
1307	623 Shell-Thick	INVSLE	1.1476	0.3398	-10.15	-0.22		
1307	623 Shell-Thick	INVSLE	1.7365	0.2371	-13.33	-0.22		
1307	623 Shell-Thick	INVSLE	2.1406	0.3573	-10.54	4.51		
1307	623 Shell-Thick	INVSLE	0.5535	0.5892	-8.25	4.51		
1307	623 Shell-Thick	INVSLE	2.8104	0.8945	-8.25	-0.15		
1307	623 Shell-Thick	INVSLE	4.4983	0.5672	-10.54	-0.15		
1307	623 Shell-Thick	INVSLE	1.0835	0.1291	-19.74	2.12		
1307	623 Shell-Thick	INVSLE	0.3028	0.2553	-14.84	2.12		
1307	623 Shell-Thick	INVSLE	1.5493	0.4587	-14.84	-0.35		
1307	623 Shell-Thick	INVSLE	2.3443	0.3200	-19.74	-0.35		
1308	624 Shell-Thick	INVSLE	0.2964	0.8914	-3.52	10.63		
1308	624 Shell-Thick	INVSLE	0.1825	2.1182	-1.75	10.63		
1308	624 Shell-Thick	INVSLE	0.8108	1.5287	-1.75	7.49		
1308	624 Shell-Thick	INVSLE	0.9089	0.3195	-3.52	7.49		
1308	624 Shell-Thick	INVSLE	0.0816	0.3707	-6.23	6.11		
1308	624 Shell-Thick	INVSLE	0.0608	1.0868	-3.07	6.11		
1308	624 Shell-Thick	INVSLE	0.4248	0.7985	-3.07	4.35		
1308	624 Shell-Thick	INVSLE	0.4214	0.1072	-6.23	4.35		
1308	624 Shell-Thick	INVSLE	0.5456	1.4953	-4.76	15.86		
1308	624 Shell-Thick	INVSLE	0.3235	3.3142	-2.36	15.86		
1308	624 Shell-Thick	INVSLE	1.2584	2.3754	-2.36	11.12		
1308	624 Shell-Thick	INVSLE	1.4742	0.5657	-4.76	11.12		
1308	624 Shell-Thick	INVSLE	0.1102	0.5004	-9.37	8.25		
1308	624 Shell-Thick	INVSLE	0.0821	1.4672	-4.60	8.25		
1308	624 Shell-Thick	INVSLE	0.5735	1.0779	-4.60	5.88		
1308	624 Shell-Thick	INVSLE	0.5688	0.1447	-9.37	5.88		
1309	625 Shell-Thick	INVSLE	0.4279	0.4115	-4.61	7.68		
1309	625 Shell-Thick	INVSLE	0.0371	1.1857	-2.39	7.68		
1309	625 Shell-Thick	INVSLE	0.8326	0.8192	-2.39	3.85		
1309	625 Shell-Thick	INVSLE	1.2286	0.0425	-4.61	3.85		
1309	625 Shell-Thick	INVSLE	0.1815	0.1561	-7.91	4.45		
1309	625 Shell-Thick	INVSLE	-0.0135	0.6140	-4.05	4.45		
1309	625 Shell-Thick	INVSLE	0.4607	0.4428	-4.05	2.25		
1309	625 Shell-Thick	INVSLE	0.6423	-4.907E-04	-7.91	2.25		
1309	625 Shell-Thick	INVSLE	0.7135	0.7077	-6.23	11.43		
1309	625 Shell-Thick	INVSLE	0.0958	1.8487	-3.23	11.43		
1309	625 Shell-Thick	INVSLE	1.2640	1.2557	-3.23	5.71		
1309	625 Shell-Thick	INVSLE	1.9084	0.0924	-6.23	5.71		
1309	625 Shell-Thick	INVSLE	0.2451	0.2107	-11.74	6.01		
1309	625 Shell-Thick	INVSLE	-0.0183	0.8289	-5.97	6.01		
1309	625 Shell-Thick	INVSLE	0.6219	0.5978	-5.97	3.04		
1309	625 Shell-Thick	INVSLE	0.8671	-6.625E-04	-11.74	3.04		



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 230 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1310	626 Shell-Thick	INVSLE	0.5225	0.1343	-6.23	4.09	
1310	626 Shell-Thick	INVSLE	-0.1112	0.3827	-3.71	4.09	
1310	626 Shell-Thick	INVSLE	0.8926	0.3883	-3.71	-0.12	
1310	626 Shell-Thick	INVSLE	1.6276	0.1157	-6.23	-0.12	
1310	626 Shell-Thick	INVSLE	0.3150	0.0547	-10.35	2.37	
1310	626 Shell-Thick	INVSLE	-0.1849	0.2077	-6.01	2.37	
1310	626 Shell-Thick	INVSLE	0.5530	0.2280	-6.01	-0.22	
1310	626 Shell-Thick	INVSLE	0.9777	0.0781	-10.35	-0.22	
1310	626 Shell-Thick	INVSLE	0.7631	0.2265	-8.41	6.09	
1310	626 Shell-Thick	INVSLE	-0.1501	0.5856	-5.01	6.09	
1310	626 Shell-Thick	INVSLE	1.2865	0.5742	-5.01	-0.16	
1310	626 Shell-Thick	INVSLE	2.3813	0.1619	-8.41	-0.16	
1310	626 Shell-Thick	INVSLE	0.4253	0.0739	-15.13	3.21	
1310	626 Shell-Thick	INVSLE	-0.2704	0.2804	-8.66	3.21	
1310	626 Shell-Thick	INVSLE	0.7465	0.3078	-8.66	-0.33	
1310	626 Shell-Thick	INVSLE	1.3199	0.1054	-15.13	-0.33	
1311	627 Shell-Thick	INVSLE	0.2179	1.4075	-1.86	13.65	
1311	627 Shell-Thick	INVSLE	0.3850	3.0325	0.23	13.65	
1311	627 Shell-Thick	INVSLE	0.6082	1.9334	0.23	10.19	
1311	627 Shell-Thick	INVSLE	0.3981	0.3527	-1.86	10.19	
1311	627 Shell-Thick	INVSLE	0.1043	0.7778	-3.25	8.21	
1311	627 Shell-Thick	INVSLE	0.2251	1.7688	0.13	8.21	
1311	627 Shell-Thick	INVSLE	0.3596	1.1544	0.13	6.23	
1311	627 Shell-Thick	INVSLE	0.2003	0.2024	-3.25	6.23	
1311	627 Shell-Thick	INVSLE	0.3495	2.1378	-2.51	19.95	
1311	627 Shell-Thick	INVSLE	0.5704	4.4980	0.34	19.95	
1311	627 Shell-Thick	INVSLE	0.8965	2.8366	0.34	14.78	
1311	627 Shell-Thick	INVSLE	0.6274	0.5269	-2.51	14.78	
1311	627 Shell-Thick	INVSLE	0.1409	1.0500	-4.87	11.09	
1311	627 Shell-Thick	INVSLE	0.3039	2.3878	0.18	11.09	
1311	627 Shell-Thick	INVSLE	0.4854	1.5585	0.18	8.42	
1311	627 Shell-Thick	INVSLE	0.2704	0.2733	-4.87	8.42	
1312	628 Shell-Thick	INVSLE	0.1345	0.5129	-2.54	10.41	
1312	628 Shell-Thick	INVSLE	0.1123	1.6212	0.22	10.41	
1312	628 Shell-Thick	INVSLE	0.3916	0.8981	0.22	5.94	
1312	628 Shell-Thick	INVSLE	0.3984	-0.1182	-2.54	5.94	
1312	628 Shell-Thick	INVSLE	0.0612	0.2905	-4.29	6.35	
1312	628 Shell-Thick	INVSLE	0.0660	0.9798	0.13	6.35	
1312	628 Shell-Thick	INVSLE	0.2389	0.5447	0.13	3.70	
1312	628 Shell-Thick	INVSLE	0.2090	-0.1922	-4.29	3.70	
1312	628 Shell-Thick	INVSLE	0.2194	0.7708	-3.43	15.12	
1312	628 Shell-Thick	INVSLE	0.1660	2.3650	0.32	15.12	
1312	628 Shell-Thick	INVSLE	0.5686	1.3079	0.32	8.53	
1312	628 Shell-Thick	INVSLE	0.6180	-0.1596	-3.43	8.53	
1312	628 Shell-Thick	INVSLE	0.0827	0.3922	-6.32	8.58	
1312	628 Shell-Thick	INVSLE	0.0891	1.3227	0.18	8.58	
1312	628 Shell-Thick	INVSLE	0.3225	0.7353	0.18	5.00	
1312	628 Shell-Thick	INVSLE	0.2822	-0.2780	-6.32	5.00	
1313	629 Shell-Thick	INVSLE	0.0655	0.0650	-3.92	6.27	
1313	629 Shell-Thick	INVSLE	-0.0825	0.4706	0.23	6.27	
1313	629 Shell-Thick	INVSLE	0.2770	0.2786	0.23	-0.14	
1313	629 Shell-Thick	INVSLE	0.4754	-0.0752	-3.92	-0.14	
1313	629 Shell-Thick	INVSLE	0.0508	0.0353	-6.33	3.89	
1313	629 Shell-Thick	INVSLE	-0.1272	0.2953	0.15	3.89	
1313	629 Shell-Thick	INVSLE	0.1755	0.1695	0.15	-0.23	
1313	629 Shell-Thick	INVSLE	0.2959	-0.1282	-6.33	-0.23	
1313	629 Shell-Thick	INVSLE	0.0907	0.0994	-5.29	9.03	
1313	629 Shell-Thick	INVSLE	-0.1114	0.6740	0.32	9.03	
1313	629 Shell-Thick	INVSLE	0.3948	0.4052	0.32	-0.19	
1313	629 Shell-Thick	INVSLE	0.6835	-0.1015	-5.29	-0.19	
1313	629 Shell-Thick	INVSLE	0.0686	0.0476	-9.12	5.25	
1313	629 Shell-Thick	INVSLE	-0.1790	0.3986	0.20	5.25	
1313	629 Shell-Thick	INVSLE	0.2369	0.2288	0.20	-0.34	
1313	629 Shell-Thick	INVSLE	0.3994	-0.1896	-9.12	-0.34	

Table: Joint Coordinates, Part 1 of 2

Joint	CoordSys	CoordType	XorR m	Y m	Z m	SpecialJt	GlobalX m
1	GLOBAL	Cartesian	0.00000	0.00000	0.00000	No	0.00000
2	GLOBAL	Cartesian	4.40000	0.00000	0.00000	No	4.40000
18	GLOBAL	Cartesian	4.40000	0.00000	2.30000	No	4.40000
19	GLOBAL	Cartesian	4.40000	0.00000	2.15002	No	4.40000
20	GLOBAL	Cartesian	4.40000	0.00000	2.01565	No	4.40000
21	GLOBAL	Cartesian	4.40000	0.00000	1.88127	No	4.40000
22	GLOBAL	Cartesian	4.40000	0.00000	1.74689	No	4.40000

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 231 di 296
23	GLOBAL	Cartesian	4.40000	0.00000	1.61252	No	4.40000	
24	GLOBAL	Cartesian	4.40000	0.00000	1.47814	No	4.40000	
25	GLOBAL	Cartesian	4.40000	0.00000	1.34376	No	4.40000	
26	GLOBAL	Cartesian	4.40000	0.00000	1.20939	No	4.40000	
27	GLOBAL	Cartesian	4.40000	0.00000	1.07501	No	4.40000	
28	GLOBAL	Cartesian	4.40000	0.00000	0.94064	No	4.40000	
29	GLOBAL	Cartesian	4.40000	0.00000	0.80626	No	4.40000	
30	GLOBAL	Cartesian	4.40000	0.00000	0.67188	No	4.40000	
31	GLOBAL	Cartesian	4.40000	0.00000	0.53751	No	4.40000	
32	GLOBAL	Cartesian	4.40000	0.00000	0.40313	No	4.40000	
33	GLOBAL	Cartesian	4.40000	0.00000	0.26875	No	4.40000	
34	GLOBAL	Cartesian	4.40000	0.00000	0.13438	No	4.40000	
193	GLOBAL	Cartesian	4.13333	0.00000	2.30000	No	4.13333	
194	GLOBAL	Cartesian	4.26667	0.00000	2.30000	No	4.26667	
195	GLOBAL	Cartesian	4.13333	0.00000	2.15002	No	4.13333	
196	GLOBAL	Cartesian	4.26667	0.00000	2.15002	No	4.26667	
197	GLOBAL	Cartesian	4.13333	0.00000	2.01565	No	4.13333	
198	GLOBAL	Cartesian	4.26667	0.00000	2.01565	No	4.26667	
199	GLOBAL	Cartesian	4.13333	0.00000	1.88127	No	4.13333	
200	GLOBAL	Cartesian	4.26667	0.00000	1.88127	No	4.26667	
201	GLOBAL	Cartesian	4.13333	0.00000	1.74689	No	4.13333	
202	GLOBAL	Cartesian	4.26667	0.00000	1.74689	No	4.26667	
203	GLOBAL	Cartesian	4.13333	0.00000	1.61252	No	4.13333	
204	GLOBAL	Cartesian	4.26667	0.00000	1.61252	No	4.26667	
205	GLOBAL	Cartesian	4.13333	0.00000	1.47814	No	4.13333	
206	GLOBAL	Cartesian	4.26667	0.00000	1.47814	No	4.26667	
207	GLOBAL	Cartesian	4.13333	0.00000	1.34376	No	4.13333	
208	GLOBAL	Cartesian	4.26667	0.00000	1.34376	No	4.26667	
209	GLOBAL	Cartesian	4.13333	0.00000	1.20939	No	4.13333	
210	GLOBAL	Cartesian	4.26667	0.00000	1.20939	No	4.26667	
211	GLOBAL	Cartesian	4.13333	0.00000	1.07501	No	4.13333	
212	GLOBAL	Cartesian	4.26667	0.00000	1.07501	No	4.26667	
213	GLOBAL	Cartesian	4.13333	0.00000	0.94064	No	4.13333	
214	GLOBAL	Cartesian	4.26667	0.00000	0.94064	No	4.26667	
215	GLOBAL	Cartesian	4.13333	0.00000	0.80626	No	4.13333	
216	GLOBAL	Cartesian	4.26667	0.00000	0.80626	No	4.26667	
217	GLOBAL	Cartesian	4.13333	0.00000	0.67188	No	4.13333	
218	GLOBAL	Cartesian	4.26667	0.00000	0.67188	No	4.26667	
219	GLOBAL	Cartesian	4.13333	0.00000	0.53751	No	4.13333	
220	GLOBAL	Cartesian	4.26667	0.00000	0.53751	No	4.26667	
221	GLOBAL	Cartesian	4.13333	0.00000	0.40313	No	4.13333	
222	GLOBAL	Cartesian	4.26667	0.00000	0.40313	No	4.26667	
223	GLOBAL	Cartesian	4.13333	0.00000	0.26875	No	4.13333	
224	GLOBAL	Cartesian	4.26667	0.00000	0.26875	No	4.26667	
225	GLOBAL	Cartesian	4.13333	0.00000	0.13438	No	4.13333	
226	GLOBAL	Cartesian	4.26667	0.00000	0.13438	No	4.26667	
227	GLOBAL	Cartesian	4.13333	0.00000	0.00000	No	4.13333	
228	GLOBAL	Cartesian	4.26667	0.00000	0.00000	No	4.26667	
443	GLOBAL	Cartesian	4.00000	0.00000	0.00000	No	4.00000	
1015	GLOBAL	Cartesian	0.00000	0.00000	2.30000	No	0.00000	
1016	GLOBAL	Cartesian	0.11765	0.00000	2.30000	No	0.11765	
1017	GLOBAL	Cartesian	0.23529	0.00000	2.30000	No	0.23529	
1018	GLOBAL	Cartesian	0.35294	0.00000	2.30000	No	0.35294	
1019	GLOBAL	Cartesian	0.47059	0.00000	2.30000	No	0.47059	
1020	GLOBAL	Cartesian	0.58824	0.00000	2.30000	No	0.58824	
1021	GLOBAL	Cartesian	0.70588	0.00000	2.30000	No	0.70588	
1022	GLOBAL	Cartesian	0.82353	0.00000	2.30000	No	0.82353	
1023	GLOBAL	Cartesian	0.94118	0.00000	2.30000	No	0.94118	
1024	GLOBAL	Cartesian	1.05882	0.00000	2.30000	No	1.05882	
1025	GLOBAL	Cartesian	1.17647	0.00000	2.30000	No	1.17647	
1026	GLOBAL	Cartesian	1.29412	0.00000	2.30000	No	1.29412	
1027	GLOBAL	Cartesian	1.41176	0.00000	2.30000	No	1.41176	
1028	GLOBAL	Cartesian	1.52941	0.00000	2.30000	No	1.52941	
1029	GLOBAL	Cartesian	1.64706	0.00000	2.30000	No	1.64706	
1030	GLOBAL	Cartesian	1.76471	0.00000	2.30000	No	1.76471	
1031	GLOBAL	Cartesian	1.88235	0.00000	2.30000	No	1.88235	
1032	GLOBAL	Cartesian	2.00000	0.00000	2.30000	No	2.00000	
1033	GLOBAL	Cartesian	2.11765	0.00000	2.30000	No	2.11765	
1034	GLOBAL	Cartesian	2.23529	0.00000	2.30000	No	2.23529	
1035	GLOBAL	Cartesian	2.35294	0.00000	2.30000	No	2.35294	
1036	GLOBAL	Cartesian	2.47059	0.00000	2.30000	No	2.47059	
1037	GLOBAL	Cartesian	2.58824	0.00000	2.30000	No	2.58824	
1038	GLOBAL	Cartesian	2.70588	0.00000	2.30000	No	2.70588	
1039	GLOBAL	Cartesian	2.82353	0.00000	2.30000	No	2.82353	
1040	GLOBAL	Cartesian	2.94118	0.00000	2.30000	No	2.94118	
1041	GLOBAL	Cartesian	3.05882	0.00000	2.30000	No	3.05882	
1042	GLOBAL	Cartesian	3.17647	0.00000	2.30000	No	3.17647	
1043	GLOBAL	Cartesian	3.29412	0.00000	2.30000	No	3.29412	

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 232 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1044	GLOBAL	Cartesian	3.41176	0.00000	2.30000	No	3.41176
1045	GLOBAL	Cartesian	3.52941	0.00000	2.30000	No	3.52941
1046	GLOBAL	Cartesian	3.64706	0.00000	2.30000	No	3.64706
1047	GLOBAL	Cartesian	3.76471	0.00000	2.30000	No	3.76471
1048	GLOBAL	Cartesian	3.88235	0.00000	2.30000	No	3.88235
1049	GLOBAL	Cartesian	4.00000	0.00000	2.30000	No	4.00000
1050	GLOBAL	Cartesian	0.00000	0.00000	2.15002	No	0.00000
1051	GLOBAL	Cartesian	0.11765	0.00000	2.15002	No	0.11765
1052	GLOBAL	Cartesian	0.23529	0.00000	2.15002	No	0.23529
1053	GLOBAL	Cartesian	0.35294	0.00000	2.15002	No	0.35294
1054	GLOBAL	Cartesian	0.47059	0.00000	2.15002	No	0.47059
1055	GLOBAL	Cartesian	0.58824	0.00000	2.15002	No	0.58824
1056	GLOBAL	Cartesian	0.70588	0.00000	2.15002	No	0.70588
1057	GLOBAL	Cartesian	0.82353	0.00000	2.15002	No	0.82353
1058	GLOBAL	Cartesian	0.94118	0.00000	2.15002	No	0.94118
1059	GLOBAL	Cartesian	1.05882	0.00000	2.15002	No	1.05882
1060	GLOBAL	Cartesian	1.17647	0.00000	2.15002	No	1.17647
1061	GLOBAL	Cartesian	1.29412	0.00000	2.15002	No	1.29412
1062	GLOBAL	Cartesian	1.41176	0.00000	2.15002	No	1.41176
1063	GLOBAL	Cartesian	1.52941	0.00000	2.15002	No	1.52941
1064	GLOBAL	Cartesian	1.64706	0.00000	2.15002	No	1.64706
1065	GLOBAL	Cartesian	1.76471	0.00000	2.15002	No	1.76471
1066	GLOBAL	Cartesian	1.88235	0.00000	2.15002	No	1.88235
1067	GLOBAL	Cartesian	2.00000	0.00000	2.15002	No	2.00000
1068	GLOBAL	Cartesian	2.11765	0.00000	2.15002	No	2.11765
1069	GLOBAL	Cartesian	2.23529	0.00000	2.15002	No	2.23529
1070	GLOBAL	Cartesian	2.35294	0.00000	2.15002	No	2.35294
1071	GLOBAL	Cartesian	2.47059	0.00000	2.15002	No	2.47059
1072	GLOBAL	Cartesian	2.58824	0.00000	2.15002	No	2.58824
1073	GLOBAL	Cartesian	2.70588	0.00000	2.15002	No	2.70588
1074	GLOBAL	Cartesian	2.82353	0.00000	2.15002	No	2.82353
1075	GLOBAL	Cartesian	2.94118	0.00000	2.15002	No	2.94118
1076	GLOBAL	Cartesian	3.05882	0.00000	2.15002	No	3.05882
1077	GLOBAL	Cartesian	3.17647	0.00000	2.15002	No	3.17647
1078	GLOBAL	Cartesian	3.29412	0.00000	2.15002	No	3.29412
1079	GLOBAL	Cartesian	3.41176	0.00000	2.15002	No	3.41176
1080	GLOBAL	Cartesian	3.52941	0.00000	2.15002	No	3.52941
1081	GLOBAL	Cartesian	3.64706	0.00000	2.15002	No	3.64706
1082	GLOBAL	Cartesian	3.76471	0.00000	2.15002	No	3.76471
1083	GLOBAL	Cartesian	3.88235	0.00000	2.15002	No	3.88235
1084	GLOBAL	Cartesian	4.00000	0.00000	2.15002	No	4.00000
1085	GLOBAL	Cartesian	0.00000	0.00000	2.01565	No	0.00000
1086	GLOBAL	Cartesian	0.11765	0.00000	2.01565	No	0.11765
1087	GLOBAL	Cartesian	0.23529	0.00000	2.01565	No	0.23529
1088	GLOBAL	Cartesian	0.35294	0.00000	2.01565	No	0.35294
1089	GLOBAL	Cartesian	0.47059	0.00000	2.01565	No	0.47059
1090	GLOBAL	Cartesian	0.58824	0.00000	2.01565	No	0.58824
1091	GLOBAL	Cartesian	0.70588	0.00000	2.01565	No	0.70588
1092	GLOBAL	Cartesian	0.82353	0.00000	2.01565	No	0.82353
1093	GLOBAL	Cartesian	0.94118	0.00000	2.01565	No	0.94118
1094	GLOBAL	Cartesian	1.05882	0.00000	2.01565	No	1.05882
1095	GLOBAL	Cartesian	1.17647	0.00000	2.01565	No	1.17647
1096	GLOBAL	Cartesian	1.29412	0.00000	2.01565	No	1.29412
1097	GLOBAL	Cartesian	1.41176	0.00000	2.01565	No	1.41176
1098	GLOBAL	Cartesian	1.52941	0.00000	2.01565	No	1.52941
1099	GLOBAL	Cartesian	1.64706	0.00000	2.01565	No	1.64706
1100	GLOBAL	Cartesian	1.76471	0.00000	2.01565	No	1.76471
1101	GLOBAL	Cartesian	1.88235	0.00000	2.01565	No	1.88235
1102	GLOBAL	Cartesian	2.00000	0.00000	2.01565	No	2.00000
1103	GLOBAL	Cartesian	2.11765	0.00000	2.01565	No	2.11765
1104	GLOBAL	Cartesian	2.23529	0.00000	2.01565	No	2.23529
1105	GLOBAL	Cartesian	2.35294	0.00000	2.01565	No	2.35294
1106	GLOBAL	Cartesian	2.47059	0.00000	2.01565	No	2.47059
1107	GLOBAL	Cartesian	2.58824	0.00000	2.01565	No	2.58824
1108	GLOBAL	Cartesian	2.70588	0.00000	2.01565	No	2.70588
1109	GLOBAL	Cartesian	2.82353	0.00000	2.01565	No	2.82353
1110	GLOBAL	Cartesian	2.94118	0.00000	2.01565	No	2.94118
1111	GLOBAL	Cartesian	3.05882	0.00000	2.01565	No	3.05882
1112	GLOBAL	Cartesian	3.17647	0.00000	2.01565	No	3.17647
1113	GLOBAL	Cartesian	3.29412	0.00000	2.01565	No	3.29412
1114	GLOBAL	Cartesian	3.41176	0.00000	2.01565	No	3.41176
1115	GLOBAL	Cartesian	3.52941	0.00000	2.01565	No	3.52941
1116	GLOBAL	Cartesian	3.64706	0.00000	2.01565	No	3.64706
1117	GLOBAL	Cartesian	3.76471	0.00000	2.01565	No	3.76471
1118	GLOBAL	Cartesian	3.88235	0.00000	2.01565	No	3.88235
1119	GLOBAL	Cartesian	4.00000	0.00000	2.01565	No	4.00000
1120	GLOBAL	Cartesian	0.00000	0.00000	1.88127	No	0.00000
1121	GLOBAL	Cartesian	0.11765	0.00000	1.88127	No	0.11765

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 233 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1122	GLOBAL	Cartesian	0.23529	0.00000	1.88127	No	0.23529
1123	GLOBAL	Cartesian	0.35294	0.00000	1.88127	No	0.35294
1124	GLOBAL	Cartesian	0.47059	0.00000	1.88127	No	0.47059
1125	GLOBAL	Cartesian	0.58824	0.00000	1.88127	No	0.58824
1126	GLOBAL	Cartesian	0.70588	0.00000	1.88127	No	0.70588
1127	GLOBAL	Cartesian	0.82353	0.00000	1.88127	No	0.82353
1128	GLOBAL	Cartesian	0.94118	0.00000	1.88127	No	0.94118
1129	GLOBAL	Cartesian	1.05882	0.00000	1.88127	No	1.05882
1130	GLOBAL	Cartesian	1.17647	0.00000	1.88127	No	1.17647
1131	GLOBAL	Cartesian	1.29412	0.00000	1.88127	No	1.29412
1132	GLOBAL	Cartesian	1.41176	0.00000	1.88127	No	1.41176
1133	GLOBAL	Cartesian	1.52941	0.00000	1.88127	No	1.52941
1134	GLOBAL	Cartesian	1.64706	0.00000	1.88127	No	1.64706
1135	GLOBAL	Cartesian	1.76471	0.00000	1.88127	No	1.76471
1136	GLOBAL	Cartesian	1.88235	0.00000	1.88127	No	1.88235
1137	GLOBAL	Cartesian	2.00000	0.00000	1.88127	No	2.00000
1138	GLOBAL	Cartesian	2.11765	0.00000	1.88127	No	2.11765
1139	GLOBAL	Cartesian	2.23529	0.00000	1.88127	No	2.23529
1140	GLOBAL	Cartesian	2.35294	0.00000	1.88127	No	2.35294
1141	GLOBAL	Cartesian	2.47059	0.00000	1.88127	No	2.47059
1142	GLOBAL	Cartesian	2.58824	0.00000	1.88127	No	2.58824
1143	GLOBAL	Cartesian	2.70588	0.00000	1.88127	No	2.70588
1144	GLOBAL	Cartesian	2.82353	0.00000	1.88127	No	2.82353
1145	GLOBAL	Cartesian	2.94118	0.00000	1.88127	No	2.94118
1146	GLOBAL	Cartesian	3.05882	0.00000	1.88127	No	3.05882
1147	GLOBAL	Cartesian	3.17647	0.00000	1.88127	No	3.17647
1148	GLOBAL	Cartesian	3.29412	0.00000	1.88127	No	3.29412
1149	GLOBAL	Cartesian	3.41176	0.00000	1.88127	No	3.41176
1150	GLOBAL	Cartesian	3.52941	0.00000	1.88127	No	3.52941
1151	GLOBAL	Cartesian	3.64706	0.00000	1.88127	No	3.64706
1152	GLOBAL	Cartesian	3.76471	0.00000	1.88127	No	3.76471
1153	GLOBAL	Cartesian	3.88235	0.00000	1.88127	No	3.88235
1154	GLOBAL	Cartesian	4.00000	0.00000	1.88127	No	4.00000
1155	GLOBAL	Cartesian	0.00000	0.00000	1.74689	No	0.00000
1156	GLOBAL	Cartesian	0.11765	0.00000	1.74689	No	0.11765
1157	GLOBAL	Cartesian	0.23529	0.00000	1.74689	No	0.23529
1158	GLOBAL	Cartesian	0.35294	0.00000	1.74689	No	0.35294
1159	GLOBAL	Cartesian	0.47059	0.00000	1.74689	No	0.47059
1160	GLOBAL	Cartesian	0.58824	0.00000	1.74689	No	0.58824
1161	GLOBAL	Cartesian	0.70588	0.00000	1.74689	No	0.70588
1162	GLOBAL	Cartesian	0.82353	0.00000	1.74689	No	0.82353
1163	GLOBAL	Cartesian	0.94118	0.00000	1.74689	No	0.94118
1164	GLOBAL	Cartesian	1.05882	0.00000	1.74689	No	1.05882
1165	GLOBAL	Cartesian	1.17647	0.00000	1.74689	No	1.17647
1166	GLOBAL	Cartesian	1.29412	0.00000	1.74689	No	1.29412
1167	GLOBAL	Cartesian	1.41176	0.00000	1.74689	No	1.41176
1168	GLOBAL	Cartesian	1.52941	0.00000	1.74689	No	1.52941
1169	GLOBAL	Cartesian	1.64706	0.00000	1.74689	No	1.64706
1170	GLOBAL	Cartesian	1.76471	0.00000	1.74689	No	1.76471
1171	GLOBAL	Cartesian	1.88235	0.00000	1.74689	No	1.88235
1172	GLOBAL	Cartesian	2.00000	0.00000	1.74689	No	2.00000
1173	GLOBAL	Cartesian	2.11765	0.00000	1.74689	No	2.11765
1174	GLOBAL	Cartesian	2.23529	0.00000	1.74689	No	2.23529
1175	GLOBAL	Cartesian	2.35294	0.00000	1.74689	No	2.35294
1176	GLOBAL	Cartesian	2.47059	0.00000	1.74689	No	2.47059
1177	GLOBAL	Cartesian	2.58824	0.00000	1.74689	No	2.58824
1178	GLOBAL	Cartesian	2.70588	0.00000	1.74689	No	2.70588
1179	GLOBAL	Cartesian	2.82353	0.00000	1.74689	No	2.82353
1180	GLOBAL	Cartesian	2.94118	0.00000	1.74689	No	2.94118
1181	GLOBAL	Cartesian	3.05882	0.00000	1.74689	No	3.05882
1182	GLOBAL	Cartesian	3.17647	0.00000	1.74689	No	3.17647
1183	GLOBAL	Cartesian	3.29412	0.00000	1.74689	No	3.29412
1184	GLOBAL	Cartesian	3.41176	0.00000	1.74689	No	3.41176
1185	GLOBAL	Cartesian	3.52941	0.00000	1.74689	No	3.52941
1186	GLOBAL	Cartesian	3.64706	0.00000	1.74689	No	3.64706
1187	GLOBAL	Cartesian	3.76471	0.00000	1.74689	No	3.76471
1188	GLOBAL	Cartesian	3.88235	0.00000	1.74689	No	3.88235
1189	GLOBAL	Cartesian	4.00000	0.00000	1.74689	No	4.00000
1190	GLOBAL	Cartesian	0.00000	0.00000	1.61252	No	0.00000
1191	GLOBAL	Cartesian	0.11765	0.00000	1.61252	No	0.11765
1192	GLOBAL	Cartesian	0.23529	0.00000	1.61252	No	0.23529
1193	GLOBAL	Cartesian	0.35294	0.00000	1.61252	No	0.35294
1194	GLOBAL	Cartesian	0.47059	0.00000	1.61252	No	0.47059
1195	GLOBAL	Cartesian	0.58824	0.00000	1.61252	No	0.58824
1196	GLOBAL	Cartesian	0.70588	0.00000	1.61252	No	0.70588
1197	GLOBAL	Cartesian	0.82353	0.00000	1.61252	No	0.82353
1198	GLOBAL	Cartesian	0.94118	0.00000	1.61252	No	0.94118
1199	GLOBAL	Cartesian	1.05882	0.00000	1.61252	No	1.05882



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 234 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1200	GLOBAL	Cartesian	1.17647	0.00000	1.61252	No	1.17647
1201	GLOBAL	Cartesian	1.29412	0.00000	1.61252	No	1.29412
1202	GLOBAL	Cartesian	1.41176	0.00000	1.61252	No	1.41176
1203	GLOBAL	Cartesian	1.52941	0.00000	1.61252	No	1.52941
1204	GLOBAL	Cartesian	1.64706	0.00000	1.61252	No	1.64706
1205	GLOBAL	Cartesian	1.76471	0.00000	1.61252	No	1.76471
1206	GLOBAL	Cartesian	1.88235	0.00000	1.61252	No	1.88235
1207	GLOBAL	Cartesian	2.00000	0.00000	1.61252	No	2.00000
1208	GLOBAL	Cartesian	2.11765	0.00000	1.61252	No	2.11765
1209	GLOBAL	Cartesian	2.23529	0.00000	1.61252	No	2.23529
1210	GLOBAL	Cartesian	2.35294	0.00000	1.61252	No	2.35294
1211	GLOBAL	Cartesian	2.47059	0.00000	1.61252	No	2.47059
1212	GLOBAL	Cartesian	2.58824	0.00000	1.61252	No	2.58824
1213	GLOBAL	Cartesian	2.70588	0.00000	1.61252	No	2.70588
1214	GLOBAL	Cartesian	2.82353	0.00000	1.61252	No	2.82353
1215	GLOBAL	Cartesian	2.94118	0.00000	1.61252	No	2.94118
1216	GLOBAL	Cartesian	3.05882	0.00000	1.61252	No	3.05882
1217	GLOBAL	Cartesian	3.17647	0.00000	1.61252	No	3.17647
1218	GLOBAL	Cartesian	3.29412	0.00000	1.61252	No	3.29412
1219	GLOBAL	Cartesian	3.41176	0.00000	1.61252	No	3.41176
1220	GLOBAL	Cartesian	3.52941	0.00000	1.61252	No	3.52941
1221	GLOBAL	Cartesian	3.64706	0.00000	1.61252	No	3.64706
1222	GLOBAL	Cartesian	3.76471	0.00000	1.61252	No	3.76471
1223	GLOBAL	Cartesian	3.88235	0.00000	1.61252	No	3.88235
1224	GLOBAL	Cartesian	4.00000	0.00000	1.61252	No	4.00000
1225	GLOBAL	Cartesian	0.00000	0.00000	1.47814	No	0.00000
1226	GLOBAL	Cartesian	0.11765	0.00000	1.47814	No	0.11765
1227	GLOBAL	Cartesian	0.23529	0.00000	1.47814	No	0.23529
1228	GLOBAL	Cartesian	0.35294	0.00000	1.47814	No	0.35294
1229	GLOBAL	Cartesian	0.47059	0.00000	1.47814	No	0.47059
1230	GLOBAL	Cartesian	0.58824	0.00000	1.47814	No	0.58824
1231	GLOBAL	Cartesian	0.70588	0.00000	1.47814	No	0.70588
1232	GLOBAL	Cartesian	0.82353	0.00000	1.47814	No	0.82353
1233	GLOBAL	Cartesian	0.94118	0.00000	1.47814	No	0.94118
1234	GLOBAL	Cartesian	1.05882	0.00000	1.47814	No	1.05882
1235	GLOBAL	Cartesian	1.17647	0.00000	1.47814	No	1.17647
1236	GLOBAL	Cartesian	1.29412	0.00000	1.47814	No	1.29412
1237	GLOBAL	Cartesian	1.41176	0.00000	1.47814	No	1.41176
1238	GLOBAL	Cartesian	1.52941	0.00000	1.47814	No	1.52941
1239	GLOBAL	Cartesian	1.64706	0.00000	1.47814	No	1.64706
1240	GLOBAL	Cartesian	1.76471	0.00000	1.47814	No	1.76471
1241	GLOBAL	Cartesian	1.88235	0.00000	1.47814	No	1.88235
1242	GLOBAL	Cartesian	2.00000	0.00000	1.47814	No	2.00000
1243	GLOBAL	Cartesian	2.11765	0.00000	1.47814	No	2.11765
1244	GLOBAL	Cartesian	2.23529	0.00000	1.47814	No	2.23529
1245	GLOBAL	Cartesian	2.35294	0.00000	1.47814	No	2.35294
1246	GLOBAL	Cartesian	2.47059	0.00000	1.47814	No	2.47059
1247	GLOBAL	Cartesian	2.58824	0.00000	1.47814	No	2.58824
1248	GLOBAL	Cartesian	2.70588	0.00000	1.47814	No	2.70588
1249	GLOBAL	Cartesian	2.82353	0.00000	1.47814	No	2.82353
1250	GLOBAL	Cartesian	2.94118	0.00000	1.47814	No	2.94118
1251	GLOBAL	Cartesian	3.05882	0.00000	1.47814	No	3.05882
1252	GLOBAL	Cartesian	3.17647	0.00000	1.47814	No	3.17647
1253	GLOBAL	Cartesian	3.29412	0.00000	1.47814	No	3.29412
1254	GLOBAL	Cartesian	3.41176	0.00000	1.47814	No	3.41176
1255	GLOBAL	Cartesian	3.52941	0.00000	1.47814	No	3.52941
1256	GLOBAL	Cartesian	3.64706	0.00000	1.47814	No	3.64706
1257	GLOBAL	Cartesian	3.76471	0.00000	1.47814	No	3.76471
1258	GLOBAL	Cartesian	3.88235	0.00000	1.47814	No	3.88235
1259	GLOBAL	Cartesian	4.00000	0.00000	1.47814	No	4.00000
1260	GLOBAL	Cartesian	0.00000	0.00000	1.34376	No	0.00000
1261	GLOBAL	Cartesian	0.11765	0.00000	1.34376	No	0.11765
1262	GLOBAL	Cartesian	0.23529	0.00000	1.34376	No	0.23529
1263	GLOBAL	Cartesian	0.35294	0.00000	1.34376	No	0.35294
1264	GLOBAL	Cartesian	0.47059	0.00000	1.34376	No	0.47059
1265	GLOBAL	Cartesian	0.58824	0.00000	1.34376	No	0.58824
1266	GLOBAL	Cartesian	0.70588	0.00000	1.34376	No	0.70588
1267	GLOBAL	Cartesian	0.82353	0.00000	1.34376	No	0.82353
1268	GLOBAL	Cartesian	0.94118	0.00000	1.34376	No	0.94118
1269	GLOBAL	Cartesian	1.05882	0.00000	1.34376	No	1.05882
1270	GLOBAL	Cartesian	1.17647	0.00000	1.34376	No	1.17647
1271	GLOBAL	Cartesian	1.29412	0.00000	1.34376	No	1.29412
1272	GLOBAL	Cartesian	1.41176	0.00000	1.34376	No	1.41176
1273	GLOBAL	Cartesian	1.52941	0.00000	1.34376	No	1.52941
1274	GLOBAL	Cartesian	1.64706	0.00000	1.34376	No	1.64706
1275	GLOBAL	Cartesian	1.76471	0.00000	1.34376	No	1.76471
1276	GLOBAL	Cartesian	1.88235	0.00000	1.34376	No	1.88235
1277	GLOBAL	Cartesian	2.00000	0.00000	1.34376	No	2.00000

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 235 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1278	GLOBAL	Cartesian	2.11765	0.00000	1.34376	No	2.11765
1279	GLOBAL	Cartesian	2.23529	0.00000	1.34376	No	2.23529
1280	GLOBAL	Cartesian	2.35294	0.00000	1.34376	No	2.35294
1281	GLOBAL	Cartesian	2.47059	0.00000	1.34376	No	2.47059
1282	GLOBAL	Cartesian	2.58824	0.00000	1.34376	No	2.58824
1283	GLOBAL	Cartesian	2.70588	0.00000	1.34376	No	2.70588
1284	GLOBAL	Cartesian	2.82353	0.00000	1.34376	No	2.82353
1285	GLOBAL	Cartesian	2.94118	0.00000	1.34376	No	2.94118
1286	GLOBAL	Cartesian	3.05882	0.00000	1.34376	No	3.05882
1287	GLOBAL	Cartesian	3.17647	0.00000	1.34376	No	3.17647
1288	GLOBAL	Cartesian	3.29412	0.00000	1.34376	No	3.29412
1289	GLOBAL	Cartesian	3.41176	0.00000	1.34376	No	3.41176
1290	GLOBAL	Cartesian	3.52941	0.00000	1.34376	No	3.52941
1291	GLOBAL	Cartesian	3.64706	0.00000	1.34376	No	3.64706
1292	GLOBAL	Cartesian	3.76471	0.00000	1.34376	No	3.76471
1293	GLOBAL	Cartesian	3.88235	0.00000	1.34376	No	3.88235
1294	GLOBAL	Cartesian	4.00000	0.00000	1.34376	No	4.00000
1295	GLOBAL	Cartesian	0.00000	0.00000	1.20939	No	0.00000
1296	GLOBAL	Cartesian	0.11765	0.00000	1.20939	No	0.11765
1297	GLOBAL	Cartesian	0.23529	0.00000	1.20939	No	0.23529
1298	GLOBAL	Cartesian	0.35294	0.00000	1.20939	No	0.35294
1299	GLOBAL	Cartesian	0.47059	0.00000	1.20939	No	0.47059
1300	GLOBAL	Cartesian	0.58824	0.00000	1.20939	No	0.58824
1301	GLOBAL	Cartesian	0.70588	0.00000	1.20939	No	0.70588
1302	GLOBAL	Cartesian	0.82353	0.00000	1.20939	No	0.82353
1303	GLOBAL	Cartesian	0.94118	0.00000	1.20939	No	0.94118
1304	GLOBAL	Cartesian	1.05882	0.00000	1.20939	No	1.05882
1305	GLOBAL	Cartesian	1.17647	0.00000	1.20939	No	1.17647
1306	GLOBAL	Cartesian	1.29412	0.00000	1.20939	No	1.29412
1307	GLOBAL	Cartesian	1.41176	0.00000	1.20939	No	1.41176
1308	GLOBAL	Cartesian	1.52941	0.00000	1.20939	No	1.52941
1309	GLOBAL	Cartesian	1.64706	0.00000	1.20939	No	1.64706
1310	GLOBAL	Cartesian	1.76471	0.00000	1.20939	No	1.76471
1311	GLOBAL	Cartesian	1.88235	0.00000	1.20939	No	1.88235
1312	GLOBAL	Cartesian	2.00000	0.00000	1.20939	No	2.00000
1313	GLOBAL	Cartesian	2.11765	0.00000	1.20939	No	2.11765
1314	GLOBAL	Cartesian	2.23529	0.00000	1.20939	No	2.23529
1315	GLOBAL	Cartesian	2.35294	0.00000	1.20939	No	2.35294
1316	GLOBAL	Cartesian	2.47059	0.00000	1.20939	No	2.47059
1317	GLOBAL	Cartesian	2.58824	0.00000	1.20939	No	2.58824
1318	GLOBAL	Cartesian	2.70588	0.00000	1.20939	No	2.70588
1319	GLOBAL	Cartesian	2.82353	0.00000	1.20939	No	2.82353
1320	GLOBAL	Cartesian	2.94118	0.00000	1.20939	No	2.94118
1321	GLOBAL	Cartesian	3.05882	0.00000	1.20939	No	3.05882
1322	GLOBAL	Cartesian	3.17647	0.00000	1.20939	No	3.17647
1323	GLOBAL	Cartesian	3.29412	0.00000	1.20939	No	3.29412
1324	GLOBAL	Cartesian	3.41176	0.00000	1.20939	No	3.41176
1325	GLOBAL	Cartesian	3.52941	0.00000	1.20939	No	3.52941
1326	GLOBAL	Cartesian	3.64706	0.00000	1.20939	No	3.64706
1327	GLOBAL	Cartesian	3.76471	0.00000	1.20939	No	3.76471
1328	GLOBAL	Cartesian	3.88235	0.00000	1.20939	No	3.88235
1329	GLOBAL	Cartesian	4.00000	0.00000	1.20939	No	4.00000
1330	GLOBAL	Cartesian	0.00000	0.00000	1.07501	No	0.00000
1331	GLOBAL	Cartesian	0.11765	0.00000	1.07501	No	0.11765
1332	GLOBAL	Cartesian	0.23529	0.00000	1.07501	No	0.23529
1333	GLOBAL	Cartesian	0.35294	0.00000	1.07501	No	0.35294
1334	GLOBAL	Cartesian	0.47059	0.00000	1.07501	No	0.47059
1335	GLOBAL	Cartesian	0.58824	0.00000	1.07501	No	0.58824
1336	GLOBAL	Cartesian	0.70588	0.00000	1.07501	No	0.70588
1337	GLOBAL	Cartesian	0.82353	0.00000	1.07501	No	0.82353
1338	GLOBAL	Cartesian	0.94118	0.00000	1.07501	No	0.94118
1339	GLOBAL	Cartesian	1.05882	0.00000	1.07501	No	1.05882
1340	GLOBAL	Cartesian	1.17647	0.00000	1.07501	No	1.17647
1341	GLOBAL	Cartesian	1.29412	0.00000	1.07501	No	1.29412
1342	GLOBAL	Cartesian	1.41176	0.00000	1.07501	No	1.41176
1343	GLOBAL	Cartesian	1.52941	0.00000	1.07501	No	1.52941
1344	GLOBAL	Cartesian	1.64706	0.00000	1.07501	No	1.64706
1345	GLOBAL	Cartesian	1.76471	0.00000	1.07501	No	1.76471
1346	GLOBAL	Cartesian	1.88235	0.00000	1.07501	No	1.88235
1347	GLOBAL	Cartesian	2.00000	0.00000	1.07501	No	2.00000
1348	GLOBAL	Cartesian	2.11765	0.00000	1.07501	No	2.11765
1349	GLOBAL	Cartesian	2.23529	0.00000	1.07501	No	2.23529
1350	GLOBAL	Cartesian	2.35294	0.00000	1.07501	No	2.35294
1351	GLOBAL	Cartesian	2.47059	0.00000	1.07501	No	2.47059
1352	GLOBAL	Cartesian	2.58824	0.00000	1.07501	No	2.58824
1353	GLOBAL	Cartesian	2.70588	0.00000	1.07501	No	2.70588
1354	GLOBAL	Cartesian	2.82353	0.00000	1.07501	No	2.82353
1355	GLOBAL	Cartesian	2.94118	0.00000	1.07501	No	2.94118

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 236 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1356	GLOBAL	Cartesian	3.05882	0.00000	1.07501	No	3.05882	
1357	GLOBAL	Cartesian	3.17647	0.00000	1.07501	No	3.17647	
1358	GLOBAL	Cartesian	3.29412	0.00000	1.07501	No	3.29412	
1359	GLOBAL	Cartesian	3.41176	0.00000	1.07501	No	3.41176	
1360	GLOBAL	Cartesian	3.52941	0.00000	1.07501	No	3.52941	
1361	GLOBAL	Cartesian	3.64706	0.00000	1.07501	No	3.64706	
1362	GLOBAL	Cartesian	3.76471	0.00000	1.07501	No	3.76471	
1363	GLOBAL	Cartesian	3.88235	0.00000	1.07501	No	3.88235	
1364	GLOBAL	Cartesian	4.00000	0.00000	1.07501	No	4.00000	
1365	GLOBAL	Cartesian	0.00000	0.00000	0.94064	No	0.00000	
1366	GLOBAL	Cartesian	0.11765	0.00000	0.94064	No	0.11765	
1367	GLOBAL	Cartesian	0.23529	0.00000	0.94064	No	0.23529	
1368	GLOBAL	Cartesian	0.35294	0.00000	0.94064	No	0.35294	
1369	GLOBAL	Cartesian	0.47059	0.00000	0.94064	No	0.47059	
1370	GLOBAL	Cartesian	0.58824	0.00000	0.94064	No	0.58824	
1371	GLOBAL	Cartesian	0.70588	0.00000	0.94064	No	0.70588	
1372	GLOBAL	Cartesian	0.82353	0.00000	0.94064	No	0.82353	
1373	GLOBAL	Cartesian	0.94118	0.00000	0.94064	No	0.94118	
1374	GLOBAL	Cartesian	1.05882	0.00000	0.94064	No	1.05882	
1375	GLOBAL	Cartesian	1.17647	0.00000	0.94064	No	1.17647	
1376	GLOBAL	Cartesian	1.29412	0.00000	0.94064	No	1.29412	
1377	GLOBAL	Cartesian	1.41176	0.00000	0.94064	No	1.41176	
1378	GLOBAL	Cartesian	1.52941	0.00000	0.94064	No	1.52941	
1379	GLOBAL	Cartesian	1.64706	0.00000	0.94064	No	1.64706	
1380	GLOBAL	Cartesian	1.76471	0.00000	0.94064	No	1.76471	
1381	GLOBAL	Cartesian	1.88235	0.00000	0.94064	No	1.88235	
1382	GLOBAL	Cartesian	2.00000	0.00000	0.94064	No	2.00000	
1383	GLOBAL	Cartesian	2.11765	0.00000	0.94064	No	2.11765	
1384	GLOBAL	Cartesian	2.23529	0.00000	0.94064	No	2.23529	
1385	GLOBAL	Cartesian	2.35294	0.00000	0.94064	No	2.35294	
1386	GLOBAL	Cartesian	2.47059	0.00000	0.94064	No	2.47059	
1387	GLOBAL	Cartesian	2.58824	0.00000	0.94064	No	2.58824	
1388	GLOBAL	Cartesian	2.70588	0.00000	0.94064	No	2.70588	
1389	GLOBAL	Cartesian	2.82353	0.00000	0.94064	No	2.82353	
1390	GLOBAL	Cartesian	2.94118	0.00000	0.94064	No	2.94118	
1391	GLOBAL	Cartesian	3.05882	0.00000	0.94064	No	3.05882	
1392	GLOBAL	Cartesian	3.17647	0.00000	0.94064	No	3.17647	
1393	GLOBAL	Cartesian	3.29412	0.00000	0.94064	No	3.29412	
1394	GLOBAL	Cartesian	3.41176	0.00000	0.94064	No	3.41176	
1395	GLOBAL	Cartesian	3.52941	0.00000	0.94064	No	3.52941	
1396	GLOBAL	Cartesian	3.64706	0.00000	0.94064	No	3.64706	
1397	GLOBAL	Cartesian	3.76471	0.00000	0.94064	No	3.76471	
1398	GLOBAL	Cartesian	3.88235	0.00000	0.94064	No	3.88235	
1399	GLOBAL	Cartesian	4.00000	0.00000	0.94064	No	4.00000	
1400	GLOBAL	Cartesian	0.00000	0.00000	0.80626	No	0.00000	
1401	GLOBAL	Cartesian	0.11765	0.00000	0.80626	No	0.11765	
1402	GLOBAL	Cartesian	0.23529	0.00000	0.80626	No	0.23529	
1403	GLOBAL	Cartesian	0.35294	0.00000	0.80626	No	0.35294	
1404	GLOBAL	Cartesian	0.47059	0.00000	0.80626	No	0.47059	
1405	GLOBAL	Cartesian	0.58824	0.00000	0.80626	No	0.58824	
1406	GLOBAL	Cartesian	0.70588	0.00000	0.80626	No	0.70588	
1407	GLOBAL	Cartesian	0.82353	0.00000	0.80626	No	0.82353	
1408	GLOBAL	Cartesian	0.94118	0.00000	0.80626	No	0.94118	
1409	GLOBAL	Cartesian	1.05882	0.00000	0.80626	No	1.05882	
1410	GLOBAL	Cartesian	1.17647	0.00000	0.80626	No	1.17647	
1411	GLOBAL	Cartesian	1.29412	0.00000	0.80626	No	1.29412	
1412	GLOBAL	Cartesian	1.41176	0.00000	0.80626	No	1.41176	
1413	GLOBAL	Cartesian	1.52941	0.00000	0.80626	No	1.52941	
1414	GLOBAL	Cartesian	1.64706	0.00000	0.80626	No	1.64706	
1415	GLOBAL	Cartesian	1.76471	0.00000	0.80626	No	1.76471	
1416	GLOBAL	Cartesian	1.88235	0.00000	0.80626	No	1.88235	
1417	GLOBAL	Cartesian	2.00000	0.00000	0.80626	No	2.00000	
1418	GLOBAL	Cartesian	2.11765	0.00000	0.80626	No	2.11765	
1419	GLOBAL	Cartesian	2.23529	0.00000	0.80626	No	2.23529	
1420	GLOBAL	Cartesian	2.35294	0.00000	0.80626	No	2.35294	
1421	GLOBAL	Cartesian	2.47059	0.00000	0.80626	No	2.47059	
1422	GLOBAL	Cartesian	2.58824	0.00000	0.80626	No	2.58824	
1423	GLOBAL	Cartesian	2.70588	0.00000	0.80626	No	2.70588	
1424	GLOBAL	Cartesian	2.82353	0.00000	0.80626	No	2.82353	
1425	GLOBAL	Cartesian	2.94118	0.00000	0.80626	No	2.94118	
1426	GLOBAL	Cartesian	3.05882	0.00000	0.80626	No	3.05882	
1427	GLOBAL	Cartesian	3.17647	0.00000	0.80626	No	3.17647	
1428	GLOBAL	Cartesian	3.29412	0.00000	0.80626	No	3.29412	
1429	GLOBAL	Cartesian	3.41176	0.00000	0.80626	No	3.41176	
1430	GLOBAL	Cartesian	3.52941	0.00000	0.80626	No	3.52941	
1431	GLOBAL	Cartesian	3.64706	0.00000	0.80626	No	3.64706	
1432	GLOBAL	Cartesian	3.76471	0.00000	0.80626	No	3.76471	
1433	GLOBAL	Cartesian	3.88235	0.00000	0.80626	No	3.88235	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 237 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1434	GLOBAL	Cartesian	4.00000	0.00000	0.80626	No	4.00000
1435	GLOBAL	Cartesian	0.00000	0.00000	0.67188	No	0.00000
1436	GLOBAL	Cartesian	0.11765	0.00000	0.67188	No	0.11765
1437	GLOBAL	Cartesian	0.23529	0.00000	0.67188	No	0.23529
1438	GLOBAL	Cartesian	0.35294	0.00000	0.67188	No	0.35294
1439	GLOBAL	Cartesian	0.47059	0.00000	0.67188	No	0.47059
1440	GLOBAL	Cartesian	0.58824	0.00000	0.67188	No	0.58824
1441	GLOBAL	Cartesian	0.70588	0.00000	0.67188	No	0.70588
1442	GLOBAL	Cartesian	0.82353	0.00000	0.67188	No	0.82353
1443	GLOBAL	Cartesian	0.94118	0.00000	0.67188	No	0.94118
1444	GLOBAL	Cartesian	1.05882	0.00000	0.67188	No	1.05882
1445	GLOBAL	Cartesian	1.17647	0.00000	0.67188	No	1.17647
1446	GLOBAL	Cartesian	1.29412	0.00000	0.67188	No	1.29412
1447	GLOBAL	Cartesian	1.41176	0.00000	0.67188	No	1.41176
1448	GLOBAL	Cartesian	1.52941	0.00000	0.67188	No	1.52941
1449	GLOBAL	Cartesian	1.64706	0.00000	0.67188	No	1.64706
1450	GLOBAL	Cartesian	1.76471	0.00000	0.67188	No	1.76471
1451	GLOBAL	Cartesian	1.88235	0.00000	0.67188	No	1.88235
1452	GLOBAL	Cartesian	2.00000	0.00000	0.67188	No	2.00000
1453	GLOBAL	Cartesian	2.11765	0.00000	0.67188	No	2.11765
1454	GLOBAL	Cartesian	2.23529	0.00000	0.67188	No	2.23529
1455	GLOBAL	Cartesian	2.35294	0.00000	0.67188	No	2.35294
1456	GLOBAL	Cartesian	2.47059	0.00000	0.67188	No	2.47059
1457	GLOBAL	Cartesian	2.58824	0.00000	0.67188	No	2.58824
1458	GLOBAL	Cartesian	2.70588	0.00000	0.67188	No	2.70588
1459	GLOBAL	Cartesian	2.82353	0.00000	0.67188	No	2.82353
1460	GLOBAL	Cartesian	2.94118	0.00000	0.67188	No	2.94118
1461	GLOBAL	Cartesian	3.05882	0.00000	0.67188	No	3.05882
1462	GLOBAL	Cartesian	3.17647	0.00000	0.67188	No	3.17647
1463	GLOBAL	Cartesian	3.29412	0.00000	0.67188	No	3.29412
1464	GLOBAL	Cartesian	3.41176	0.00000	0.67188	No	3.41176
1465	GLOBAL	Cartesian	3.52941	0.00000	0.67188	No	3.52941
1466	GLOBAL	Cartesian	3.64706	0.00000	0.67188	No	3.64706
1467	GLOBAL	Cartesian	3.76471	0.00000	0.67188	No	3.76471
1468	GLOBAL	Cartesian	3.88235	0.00000	0.67188	No	3.88235
1469	GLOBAL	Cartesian	4.00000	0.00000	0.67188	No	4.00000
1470	GLOBAL	Cartesian	0.00000	0.00000	0.53751	No	0.00000
1471	GLOBAL	Cartesian	0.11765	0.00000	0.53751	No	0.11765
1472	GLOBAL	Cartesian	0.23529	0.00000	0.53751	No	0.23529
1473	GLOBAL	Cartesian	0.35294	0.00000	0.53751	No	0.35294
1474	GLOBAL	Cartesian	0.47059	0.00000	0.53751	No	0.47059
1475	GLOBAL	Cartesian	0.58824	0.00000	0.53751	No	0.58824
1476	GLOBAL	Cartesian	0.70588	0.00000	0.53751	No	0.70588
1477	GLOBAL	Cartesian	0.82353	0.00000	0.53751	No	0.82353
1478	GLOBAL	Cartesian	0.94118	0.00000	0.53751	No	0.94118
1479	GLOBAL	Cartesian	1.05882	0.00000	0.53751	No	1.05882
1480	GLOBAL	Cartesian	1.17647	0.00000	0.53751	No	1.17647
1481	GLOBAL	Cartesian	1.29412	0.00000	0.53751	No	1.29412
1482	GLOBAL	Cartesian	1.41176	0.00000	0.53751	No	1.41176
1483	GLOBAL	Cartesian	1.52941	0.00000	0.53751	No	1.52941
1484	GLOBAL	Cartesian	1.64706	0.00000	0.53751	No	1.64706
1485	GLOBAL	Cartesian	1.76471	0.00000	0.53751	No	1.76471
1486	GLOBAL	Cartesian	1.88235	0.00000	0.53751	No	1.88235
1487	GLOBAL	Cartesian	2.00000	0.00000	0.53751	No	2.00000
1488	GLOBAL	Cartesian	2.11765	0.00000	0.53751	No	2.11765
1489	GLOBAL	Cartesian	2.23529	0.00000	0.53751	No	2.23529
1490	GLOBAL	Cartesian	2.35294	0.00000	0.53751	No	2.35294
1491	GLOBAL	Cartesian	2.47059	0.00000	0.53751	No	2.47059
1492	GLOBAL	Cartesian	2.58824	0.00000	0.53751	No	2.58824
1493	GLOBAL	Cartesian	2.70588	0.00000	0.53751	No	2.70588
1494	GLOBAL	Cartesian	2.82353	0.00000	0.53751	No	2.82353
1495	GLOBAL	Cartesian	2.94118	0.00000	0.53751	No	2.94118
1496	GLOBAL	Cartesian	3.05882	0.00000	0.53751	No	3.05882
1497	GLOBAL	Cartesian	3.17647	0.00000	0.53751	No	3.17647
1498	GLOBAL	Cartesian	3.29412	0.00000	0.53751	No	3.29412
1499	GLOBAL	Cartesian	3.41176	0.00000	0.53751	No	3.41176
1500	GLOBAL	Cartesian	3.52941	0.00000	0.53751	No	3.52941
1501	GLOBAL	Cartesian	3.64706	0.00000	0.53751	No	3.64706
1502	GLOBAL	Cartesian	3.76471	0.00000	0.53751	No	3.76471
1503	GLOBAL	Cartesian	3.88235	0.00000	0.53751	No	3.88235
1504	GLOBAL	Cartesian	4.00000	0.00000	0.53751	No	4.00000
1505	GLOBAL	Cartesian	0.00000	0.00000	0.40313	No	0.00000
1506	GLOBAL	Cartesian	0.11765	0.00000	0.40313	No	0.11765
1507	GLOBAL	Cartesian	0.23529	0.00000	0.40313	No	0.23529
1508	GLOBAL	Cartesian	0.35294	0.00000	0.40313	No	0.35294
1509	GLOBAL	Cartesian	0.47059	0.00000	0.40313	No	0.47059
1510	GLOBAL	Cartesian	0.58824	0.00000	0.40313	No	0.58824
1511	GLOBAL	Cartesian	0.70588	0.00000	0.40313	No	0.70588

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 238 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1512	GLOBAL	Cartesian	0.82353	0.00000	0.40313	No	0.82353	
1513	GLOBAL	Cartesian	0.94118	0.00000	0.40313	No	0.94118	
1514	GLOBAL	Cartesian	1.05882	0.00000	0.40313	No	1.05882	
1515	GLOBAL	Cartesian	1.17647	0.00000	0.40313	No	1.17647	
1516	GLOBAL	Cartesian	1.29412	0.00000	0.40313	No	1.29412	
1517	GLOBAL	Cartesian	1.41176	0.00000	0.40313	No	1.41176	
1518	GLOBAL	Cartesian	1.52941	0.00000	0.40313	No	1.52941	
1519	GLOBAL	Cartesian	1.64706	0.00000	0.40313	No	1.64706	
1520	GLOBAL	Cartesian	1.76471	0.00000	0.40313	No	1.76471	
1521	GLOBAL	Cartesian	1.88235	0.00000	0.40313	No	1.88235	
1522	GLOBAL	Cartesian	2.00000	0.00000	0.40313	No	2.00000	
1523	GLOBAL	Cartesian	2.11765	0.00000	0.40313	No	2.11765	
1524	GLOBAL	Cartesian	2.23529	0.00000	0.40313	No	2.23529	
1525	GLOBAL	Cartesian	2.35294	0.00000	0.40313	No	2.35294	
1526	GLOBAL	Cartesian	2.47059	0.00000	0.40313	No	2.47059	
1527	GLOBAL	Cartesian	2.58824	0.00000	0.40313	No	2.58824	
1528	GLOBAL	Cartesian	2.70588	0.00000	0.40313	No	2.70588	
1529	GLOBAL	Cartesian	2.82353	0.00000	0.40313	No	2.82353	
1530	GLOBAL	Cartesian	2.94118	0.00000	0.40313	No	2.94118	
1531	GLOBAL	Cartesian	3.05882	0.00000	0.40313	No	3.05882	
1532	GLOBAL	Cartesian	3.17647	0.00000	0.40313	No	3.17647	
1533	GLOBAL	Cartesian	3.29412	0.00000	0.40313	No	3.29412	
1534	GLOBAL	Cartesian	3.41176	0.00000	0.40313	No	3.41176	
1535	GLOBAL	Cartesian	3.52941	0.00000	0.40313	No	3.52941	
1536	GLOBAL	Cartesian	3.64706	0.00000	0.40313	No	3.64706	
1537	GLOBAL	Cartesian	3.76471	0.00000	0.40313	No	3.76471	
1538	GLOBAL	Cartesian	3.88235	0.00000	0.40313	No	3.88235	
1539	GLOBAL	Cartesian	4.00000	0.00000	0.40313	No	4.00000	
1540	GLOBAL	Cartesian	0.00000	0.00000	0.26875	No	0.00000	
1541	GLOBAL	Cartesian	0.11765	0.00000	0.26875	No	0.11765	
1542	GLOBAL	Cartesian	0.23529	0.00000	0.26875	No	0.23529	
1543	GLOBAL	Cartesian	0.35294	0.00000	0.26875	No	0.35294	
1544	GLOBAL	Cartesian	0.47059	0.00000	0.26875	No	0.47059	
1545	GLOBAL	Cartesian	0.58824	0.00000	0.26875	No	0.58824	
1546	GLOBAL	Cartesian	0.70588	0.00000	0.26875	No	0.70588	
1547	GLOBAL	Cartesian	0.82353	0.00000	0.26875	No	0.82353	
1548	GLOBAL	Cartesian	0.94118	0.00000	0.26875	No	0.94118	
1549	GLOBAL	Cartesian	1.05882	0.00000	0.26875	No	1.05882	
1550	GLOBAL	Cartesian	1.17647	0.00000	0.26875	No	1.17647	
1551	GLOBAL	Cartesian	1.29412	0.00000	0.26875	No	1.29412	
1552	GLOBAL	Cartesian	1.41176	0.00000	0.26875	No	1.41176	
1553	GLOBAL	Cartesian	1.52941	0.00000	0.26875	No	1.52941	
1554	GLOBAL	Cartesian	1.64706	0.00000	0.26875	No	1.64706	
1555	GLOBAL	Cartesian	1.76471	0.00000	0.26875	No	1.76471	
1556	GLOBAL	Cartesian	1.88235	0.00000	0.26875	No	1.88235	
1557	GLOBAL	Cartesian	2.00000	0.00000	0.26875	No	2.00000	
1558	GLOBAL	Cartesian	2.11765	0.00000	0.26875	No	2.11765	
1559	GLOBAL	Cartesian	2.23529	0.00000	0.26875	No	2.23529	
1560	GLOBAL	Cartesian	2.35294	0.00000	0.26875	No	2.35294	
1561	GLOBAL	Cartesian	2.47059	0.00000	0.26875	No	2.47059	
1562	GLOBAL	Cartesian	2.58824	0.00000	0.26875	No	2.58824	
1563	GLOBAL	Cartesian	2.70588	0.00000	0.26875	No	2.70588	
1564	GLOBAL	Cartesian	2.82353	0.00000	0.26875	No	2.82353	
1565	GLOBAL	Cartesian	2.94118	0.00000	0.26875	No	2.94118	
1566	GLOBAL	Cartesian	3.05882	0.00000	0.26875	No	3.05882	
1567	GLOBAL	Cartesian	3.17647	0.00000	0.26875	No	3.17647	
1568	GLOBAL	Cartesian	3.29412	0.00000	0.26875	No	3.29412	
1569	GLOBAL	Cartesian	3.41176	0.00000	0.26875	No	3.41176	
1570	GLOBAL	Cartesian	3.52941	0.00000	0.26875	No	3.52941	
1571	GLOBAL	Cartesian	3.64706	0.00000	0.26875	No	3.64706	
1572	GLOBAL	Cartesian	3.76471	0.00000	0.26875	No	3.76471	
1573	GLOBAL	Cartesian	3.88235	0.00000	0.26875	No	3.88235	
1574	GLOBAL	Cartesian	4.00000	0.00000	0.26875	No	4.00000	
1575	GLOBAL	Cartesian	0.00000	0.00000	0.13438	No	0.00000	
1576	GLOBAL	Cartesian	0.11765	0.00000	0.13438	No	0.11765	
1577	GLOBAL	Cartesian	0.23529	0.00000	0.13438	No	0.23529	
1578	GLOBAL	Cartesian	0.35294	0.00000	0.13438	No	0.35294	
1579	GLOBAL	Cartesian	0.47059	0.00000	0.13438	No	0.47059	
1580	GLOBAL	Cartesian	0.58824	0.00000	0.13438	No	0.58824	
1581	GLOBAL	Cartesian	0.70588	0.00000	0.13438	No	0.70588	
1582	GLOBAL	Cartesian	0.82353	0.00000	0.13438	No	0.82353	
1583	GLOBAL	Cartesian	0.94118	0.00000	0.13438	No	0.94118	
1584	GLOBAL	Cartesian	1.05882	0.00000	0.13438	No	1.05882	
1585	GLOBAL	Cartesian	1.17647	0.00000	0.13438	No	1.17647	
1586	GLOBAL	Cartesian	1.29412	0.00000	0.13438	No	1.29412	
1587	GLOBAL	Cartesian	1.41176	0.00000	0.13438	No	1.41176	
1588	GLOBAL	Cartesian	1.52941	0.00000	0.13438	No	1.52941	
1589	GLOBAL	Cartesian	1.64706	0.00000	0.13438	No	1.64706	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 239 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1590	GLOBAL	Cartesian	1.76471	0.00000	0.13438	No	1.76471
1591	GLOBAL	Cartesian	1.88235	0.00000	0.13438	No	1.88235
1592	GLOBAL	Cartesian	2.00000	0.00000	0.13438	No	2.00000
1593	GLOBAL	Cartesian	2.11765	0.00000	0.13438	No	2.11765
1594	GLOBAL	Cartesian	2.23529	0.00000	0.13438	No	2.23529
1595	GLOBAL	Cartesian	2.35294	0.00000	0.13438	No	2.35294
1596	GLOBAL	Cartesian	2.47059	0.00000	0.13438	No	2.47059
1597	GLOBAL	Cartesian	2.58824	0.00000	0.13438	No	2.58824
1598	GLOBAL	Cartesian	2.70588	0.00000	0.13438	No	2.70588
1599	GLOBAL	Cartesian	2.82353	0.00000	0.13438	No	2.82353
1600	GLOBAL	Cartesian	2.94118	0.00000	0.13438	No	2.94118
1601	GLOBAL	Cartesian	3.05882	0.00000	0.13438	No	3.05882
1602	GLOBAL	Cartesian	3.17647	0.00000	0.13438	No	3.17647
1603	GLOBAL	Cartesian	3.29412	0.00000	0.13438	No	3.29412
1604	GLOBAL	Cartesian	3.41176	0.00000	0.13438	No	3.41176
1605	GLOBAL	Cartesian	3.52941	0.00000	0.13438	No	3.52941
1606	GLOBAL	Cartesian	3.64706	0.00000	0.13438	No	3.64706
1607	GLOBAL	Cartesian	3.76471	0.00000	0.13438	No	3.76471
1608	GLOBAL	Cartesian	3.88235	0.00000	0.13438	No	3.88235
1609	GLOBAL	Cartesian	4.00000	0.00000	0.13438	No	4.00000
1610	GLOBAL	Cartesian	0.11765	0.00000	0.00000	No	0.11765
1611	GLOBAL	Cartesian	0.23529	0.00000	0.00000	No	0.23529
1612	GLOBAL	Cartesian	0.35294	0.00000	0.00000	No	0.35294
1613	GLOBAL	Cartesian	0.47059	0.00000	0.00000	No	0.47059
1614	GLOBAL	Cartesian	0.58824	0.00000	0.00000	No	0.58824
1615	GLOBAL	Cartesian	0.70588	0.00000	0.00000	No	0.70588
1616	GLOBAL	Cartesian	0.82353	0.00000	0.00000	No	0.82353
1617	GLOBAL	Cartesian	0.94118	0.00000	0.00000	No	0.94118
1618	GLOBAL	Cartesian	1.05882	0.00000	0.00000	No	1.05882
1619	GLOBAL	Cartesian	1.17647	0.00000	0.00000	No	1.17647
1620	GLOBAL	Cartesian	1.29412	0.00000	0.00000	No	1.29412
1621	GLOBAL	Cartesian	1.41176	0.00000	0.00000	No	1.41176
1622	GLOBAL	Cartesian	1.52941	0.00000	0.00000	No	1.52941
1623	GLOBAL	Cartesian	1.64706	0.00000	0.00000	No	1.64706
1624	GLOBAL	Cartesian	1.76471	0.00000	0.00000	No	1.76471
1625	GLOBAL	Cartesian	1.88235	0.00000	0.00000	No	1.88235
1626	GLOBAL	Cartesian	2.00000	0.00000	0.00000	No	2.00000
1627	GLOBAL	Cartesian	2.11765	0.00000	0.00000	No	2.11765
1628	GLOBAL	Cartesian	2.23529	0.00000	0.00000	No	2.23529
1629	GLOBAL	Cartesian	2.35294	0.00000	0.00000	No	2.35294
1630	GLOBAL	Cartesian	2.47059	0.00000	0.00000	No	2.47059
1631	GLOBAL	Cartesian	2.58824	0.00000	0.00000	No	2.58824
1632	GLOBAL	Cartesian	2.70588	0.00000	0.00000	No	2.70588
1633	GLOBAL	Cartesian	2.82353	0.00000	0.00000	No	2.82353
1634	GLOBAL	Cartesian	2.94118	0.00000	0.00000	No	2.94118
1635	GLOBAL	Cartesian	3.05882	0.00000	0.00000	No	3.05882
1636	GLOBAL	Cartesian	3.17647	0.00000	0.00000	No	3.17647
1637	GLOBAL	Cartesian	3.29412	0.00000	0.00000	No	3.29412
1638	GLOBAL	Cartesian	3.41176	0.00000	0.00000	No	3.41176
1639	GLOBAL	Cartesian	3.52941	0.00000	0.00000	No	3.52941
1640	GLOBAL	Cartesian	3.64706	0.00000	0.00000	No	3.64706
1641	GLOBAL	Cartesian	3.76471	0.00000	0.00000	No	3.76471
1642	GLOBAL	Cartesian	3.88235	0.00000	0.00000	No	3.88235

Table: Joint Coordinates, Part 2 of 2

Joint	GlobalY m	GlobalZ m	GUID
1	0.00000	0.00000	
2	0.00000	0.00000	
18	0.00000	2.30000	
19	0.00000	2.15002	
20	0.00000	2.01565	
21	0.00000	1.88127	
22	0.00000	1.74689	
23	0.00000	1.61252	
24	0.00000	1.47814	
25	0.00000	1.34376	
26	0.00000	1.20939	
27	0.00000	1.07501	
28	0.00000	0.94064	
29	0.00000	0.80626	
30	0.00000	0.67188	
31	0.00000	0.53751	
32	0.00000	0.40313	
33	0.00000	0.26875	



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 240 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

34	0.00000	0.13438
193	0.00000	2.30000
194	0.00000	2.30000
195	0.00000	2.15002
196	0.00000	2.15002
197	0.00000	2.01565
198	0.00000	2.01565
199	0.00000	1.88127
200	0.00000	1.88127
201	0.00000	1.74689
202	0.00000	1.74689
203	0.00000	1.61252
204	0.00000	1.61252
205	0.00000	1.47814
206	0.00000	1.47814
207	0.00000	1.34376
208	0.00000	1.34376
209	0.00000	1.20939
210	0.00000	1.20939
211	0.00000	1.07501
212	0.00000	1.07501
213	0.00000	0.94064
214	0.00000	0.94064
215	0.00000	0.80626
216	0.00000	0.80626
217	0.00000	0.67188
218	0.00000	0.67188
219	0.00000	0.53751
220	0.00000	0.53751
221	0.00000	0.40313
222	0.00000	0.40313
223	0.00000	0.26875
224	0.00000	0.26875
225	0.00000	0.13438
226	0.00000	0.13438
227	0.00000	0.00000
228	0.00000	0.00000
443	0.00000	0.00000
1015	0.00000	2.30000
1016	0.00000	2.30000
1017	0.00000	2.30000
1018	0.00000	2.30000
1019	0.00000	2.30000
1020	0.00000	2.30000
1021	0.00000	2.30000
1022	0.00000	2.30000
1023	0.00000	2.30000
1024	0.00000	2.30000
1025	0.00000	2.30000
1026	0.00000	2.30000
1027	0.00000	2.30000
1028	0.00000	2.30000
1029	0.00000	2.30000
1030	0.00000	2.30000
1031	0.00000	2.30000
1032	0.00000	2.30000
1033	0.00000	2.30000
1034	0.00000	2.30000
1035	0.00000	2.30000
1036	0.00000	2.30000
1037	0.00000	2.30000
1038	0.00000	2.30000
1039	0.00000	2.30000
1040	0.00000	2.30000
1041	0.00000	2.30000
1042	0.00000	2.30000
1043	0.00000	2.30000
1044	0.00000	2.30000
1045	0.00000	2.30000
1046	0.00000	2.30000
1047	0.00000	2.30000
1048	0.00000	2.30000
1049	0.00000	2.30000
1050	0.00000	2.15002
1051	0.00000	2.15002
1052	0.00000	2.15002
1053	0.00000	2.15002
1054	0.00000	2.15002



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 241 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1055	0.00000	2.15002
1056	0.00000	2.15002
1057	0.00000	2.15002
1058	0.00000	2.15002
1059	0.00000	2.15002
1060	0.00000	2.15002
1061	0.00000	2.15002
1062	0.00000	2.15002
1063	0.00000	2.15002
1064	0.00000	2.15002
1065	0.00000	2.15002
1066	0.00000	2.15002
1067	0.00000	2.15002
1068	0.00000	2.15002
1069	0.00000	2.15002
1070	0.00000	2.15002
1071	0.00000	2.15002
1072	0.00000	2.15002
1073	0.00000	2.15002
1074	0.00000	2.15002
1075	0.00000	2.15002
1076	0.00000	2.15002
1077	0.00000	2.15002
1078	0.00000	2.15002
1079	0.00000	2.15002
1080	0.00000	2.15002
1081	0.00000	2.15002
1082	0.00000	2.15002
1083	0.00000	2.15002
1084	0.00000	2.15002
1085	0.00000	2.01565
1086	0.00000	2.01565
1087	0.00000	2.01565
1088	0.00000	2.01565
1089	0.00000	2.01565
1090	0.00000	2.01565
1091	0.00000	2.01565
1092	0.00000	2.01565
1093	0.00000	2.01565
1094	0.00000	2.01565
1095	0.00000	2.01565
1096	0.00000	2.01565
1097	0.00000	2.01565
1098	0.00000	2.01565
1099	0.00000	2.01565
1100	0.00000	2.01565
1101	0.00000	2.01565
1102	0.00000	2.01565
1103	0.00000	2.01565
1104	0.00000	2.01565
1105	0.00000	2.01565
1106	0.00000	2.01565
1107	0.00000	2.01565
1108	0.00000	2.01565
1109	0.00000	2.01565
1110	0.00000	2.01565
1111	0.00000	2.01565
1112	0.00000	2.01565
1113	0.00000	2.01565
1114	0.00000	2.01565
1115	0.00000	2.01565
1116	0.00000	2.01565
1117	0.00000	2.01565
1118	0.00000	2.01565
1119	0.00000	2.01565
1120	0.00000	1.88127
1121	0.00000	1.88127
1122	0.00000	1.88127
1123	0.00000	1.88127
1124	0.00000	1.88127
1125	0.00000	1.88127
1126	0.00000	1.88127
1127	0.00000	1.88127
1128	0.00000	1.88127
1129	0.00000	1.88127
1130	0.00000	1.88127
1131	0.00000	1.88127
1132	0.00000	1.88127



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 242 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1133	0.00000	1.88127
1134	0.00000	1.88127
1135	0.00000	1.88127
1136	0.00000	1.88127
1137	0.00000	1.88127
1138	0.00000	1.88127
1139	0.00000	1.88127
1140	0.00000	1.88127
1141	0.00000	1.88127
1142	0.00000	1.88127
1143	0.00000	1.88127
1144	0.00000	1.88127
1145	0.00000	1.88127
1146	0.00000	1.88127
1147	0.00000	1.88127
1148	0.00000	1.88127
1149	0.00000	1.88127
1150	0.00000	1.88127
1151	0.00000	1.88127
1152	0.00000	1.88127
1153	0.00000	1.88127
1154	0.00000	1.88127
1155	0.00000	1.74689
1156	0.00000	1.74689
1157	0.00000	1.74689
1158	0.00000	1.74689
1159	0.00000	1.74689
1160	0.00000	1.74689
1161	0.00000	1.74689
1162	0.00000	1.74689
1163	0.00000	1.74689
1164	0.00000	1.74689
1165	0.00000	1.74689
1166	0.00000	1.74689
1167	0.00000	1.74689
1168	0.00000	1.74689
1169	0.00000	1.74689
1170	0.00000	1.74689
1171	0.00000	1.74689
1172	0.00000	1.74689
1173	0.00000	1.74689
1174	0.00000	1.74689
1175	0.00000	1.74689
1176	0.00000	1.74689
1177	0.00000	1.74689
1178	0.00000	1.74689
1179	0.00000	1.74689
1180	0.00000	1.74689
1181	0.00000	1.74689
1182	0.00000	1.74689
1183	0.00000	1.74689
1184	0.00000	1.74689
1185	0.00000	1.74689
1186	0.00000	1.74689
1187	0.00000	1.74689
1188	0.00000	1.74689
1189	0.00000	1.74689
1190	0.00000	1.61252
1191	0.00000	1.61252
1192	0.00000	1.61252
1193	0.00000	1.61252
1194	0.00000	1.61252
1195	0.00000	1.61252
1196	0.00000	1.61252
1197	0.00000	1.61252
1198	0.00000	1.61252
1199	0.00000	1.61252
1200	0.00000	1.61252
1201	0.00000	1.61252
1202	0.00000	1.61252
1203	0.00000	1.61252
1204	0.00000	1.61252
1205	0.00000	1.61252
1206	0.00000	1.61252
1207	0.00000	1.61252
1208	0.00000	1.61252
1209	0.00000	1.61252
1210	0.00000	1.61252



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 243 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1211	0.00000	1.61252
1212	0.00000	1.61252
1213	0.00000	1.61252
1214	0.00000	1.61252
1215	0.00000	1.61252
1216	0.00000	1.61252
1217	0.00000	1.61252
1218	0.00000	1.61252
1219	0.00000	1.61252
1220	0.00000	1.61252
1221	0.00000	1.61252
1222	0.00000	1.61252
1223	0.00000	1.61252
1224	0.00000	1.61252
1225	0.00000	1.47814
1226	0.00000	1.47814
1227	0.00000	1.47814
1228	0.00000	1.47814
1229	0.00000	1.47814
1230	0.00000	1.47814
1231	0.00000	1.47814
1232	0.00000	1.47814
1233	0.00000	1.47814
1234	0.00000	1.47814
1235	0.00000	1.47814
1236	0.00000	1.47814
1237	0.00000	1.47814
1238	0.00000	1.47814
1239	0.00000	1.47814
1240	0.00000	1.47814
1241	0.00000	1.47814
1242	0.00000	1.47814
1243	0.00000	1.47814
1244	0.00000	1.47814
1245	0.00000	1.47814
1246	0.00000	1.47814
1247	0.00000	1.47814
1248	0.00000	1.47814
1249	0.00000	1.47814
1250	0.00000	1.47814
1251	0.00000	1.47814
1252	0.00000	1.47814
1253	0.00000	1.47814
1254	0.00000	1.47814
1255	0.00000	1.47814
1256	0.00000	1.47814
1257	0.00000	1.47814
1258	0.00000	1.47814
1259	0.00000	1.47814
1260	0.00000	1.34376
1261	0.00000	1.34376
1262	0.00000	1.34376
1263	0.00000	1.34376
1264	0.00000	1.34376
1265	0.00000	1.34376
1266	0.00000	1.34376
1267	0.00000	1.34376
1268	0.00000	1.34376
1269	0.00000	1.34376
1270	0.00000	1.34376
1271	0.00000	1.34376
1272	0.00000	1.34376
1273	0.00000	1.34376
1274	0.00000	1.34376
1275	0.00000	1.34376
1276	0.00000	1.34376
1277	0.00000	1.34376
1278	0.00000	1.34376
1279	0.00000	1.34376
1280	0.00000	1.34376
1281	0.00000	1.34376
1282	0.00000	1.34376
1283	0.00000	1.34376
1284	0.00000	1.34376
1285	0.00000	1.34376
1286	0.00000	1.34376
1287	0.00000	1.34376
1288	0.00000	1.34376



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 244 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1289	0.00000	1.34376
1290	0.00000	1.34376
1291	0.00000	1.34376
1292	0.00000	1.34376
1293	0.00000	1.34376
1294	0.00000	1.34376
1295	0.00000	1.20939
1296	0.00000	1.20939
1297	0.00000	1.20939
1298	0.00000	1.20939
1299	0.00000	1.20939
1300	0.00000	1.20939
1301	0.00000	1.20939
1302	0.00000	1.20939
1303	0.00000	1.20939
1304	0.00000	1.20939
1305	0.00000	1.20939
1306	0.00000	1.20939
1307	0.00000	1.20939
1308	0.00000	1.20939
1309	0.00000	1.20939
1310	0.00000	1.20939
1311	0.00000	1.20939
1312	0.00000	1.20939
1313	0.00000	1.20939
1314	0.00000	1.20939
1315	0.00000	1.20939
1316	0.00000	1.20939
1317	0.00000	1.20939
1318	0.00000	1.20939
1319	0.00000	1.20939
1320	0.00000	1.20939
1321	0.00000	1.20939
1322	0.00000	1.20939
1323	0.00000	1.20939
1324	0.00000	1.20939
1325	0.00000	1.20939
1326	0.00000	1.20939
1327	0.00000	1.20939
1328	0.00000	1.20939
1329	0.00000	1.20939
1330	0.00000	1.07501
1331	0.00000	1.07501
1332	0.00000	1.07501
1333	0.00000	1.07501
1334	0.00000	1.07501
1335	0.00000	1.07501
1336	0.00000	1.07501
1337	0.00000	1.07501
1338	0.00000	1.07501
1339	0.00000	1.07501
1340	0.00000	1.07501
1341	0.00000	1.07501
1342	0.00000	1.07501
1343	0.00000	1.07501
1344	0.00000	1.07501
1345	0.00000	1.07501
1346	0.00000	1.07501
1347	0.00000	1.07501
1348	0.00000	1.07501
1349	0.00000	1.07501
1350	0.00000	1.07501
1351	0.00000	1.07501
1352	0.00000	1.07501
1353	0.00000	1.07501
1354	0.00000	1.07501
1355	0.00000	1.07501
1356	0.00000	1.07501
1357	0.00000	1.07501
1358	0.00000	1.07501
1359	0.00000	1.07501
1360	0.00000	1.07501
1361	0.00000	1.07501
1362	0.00000	1.07501
1363	0.00000	1.07501
1364	0.00000	1.07501
1365	0.00000	0.94064
1366	0.00000	0.94064



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 245 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1367	0.00000	0.94064
1368	0.00000	0.94064
1369	0.00000	0.94064
1370	0.00000	0.94064
1371	0.00000	0.94064
1372	0.00000	0.94064
1373	0.00000	0.94064
1374	0.00000	0.94064
1375	0.00000	0.94064
1376	0.00000	0.94064
1377	0.00000	0.94064
1378	0.00000	0.94064
1379	0.00000	0.94064
1380	0.00000	0.94064
1381	0.00000	0.94064
1382	0.00000	0.94064
1383	0.00000	0.94064
1384	0.00000	0.94064
1385	0.00000	0.94064
1386	0.00000	0.94064
1387	0.00000	0.94064
1388	0.00000	0.94064
1389	0.00000	0.94064
1390	0.00000	0.94064
1391	0.00000	0.94064
1392	0.00000	0.94064
1393	0.00000	0.94064
1394	0.00000	0.94064
1395	0.00000	0.94064
1396	0.00000	0.94064
1397	0.00000	0.94064
1398	0.00000	0.94064
1399	0.00000	0.94064
1400	0.00000	0.80626
1401	0.00000	0.80626
1402	0.00000	0.80626
1403	0.00000	0.80626
1404	0.00000	0.80626
1405	0.00000	0.80626
1406	0.00000	0.80626
1407	0.00000	0.80626
1408	0.00000	0.80626
1409	0.00000	0.80626
1410	0.00000	0.80626
1411	0.00000	0.80626
1412	0.00000	0.80626
1413	0.00000	0.80626
1414	0.00000	0.80626
1415	0.00000	0.80626
1416	0.00000	0.80626
1417	0.00000	0.80626
1418	0.00000	0.80626
1419	0.00000	0.80626
1420	0.00000	0.80626
1421	0.00000	0.80626
1422	0.00000	0.80626
1423	0.00000	0.80626
1424	0.00000	0.80626
1425	0.00000	0.80626
1426	0.00000	0.80626
1427	0.00000	0.80626
1428	0.00000	0.80626
1429	0.00000	0.80626
1430	0.00000	0.80626
1431	0.00000	0.80626
1432	0.00000	0.80626
1433	0.00000	0.80626
1434	0.00000	0.80626
1435	0.00000	0.67188
1436	0.00000	0.67188
1437	0.00000	0.67188
1438	0.00000	0.67188
1439	0.00000	0.67188
1440	0.00000	0.67188
1441	0.00000	0.67188
1442	0.00000	0.67188
1443	0.00000	0.67188
1444	0.00000	0.67188



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 246 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1445	0.00000	0.67188
1446	0.00000	0.67188
1447	0.00000	0.67188
1448	0.00000	0.67188
1449	0.00000	0.67188
1450	0.00000	0.67188
1451	0.00000	0.67188
1452	0.00000	0.67188
1453	0.00000	0.67188
1454	0.00000	0.67188
1455	0.00000	0.67188
1456	0.00000	0.67188
1457	0.00000	0.67188
1458	0.00000	0.67188
1459	0.00000	0.67188
1460	0.00000	0.67188
1461	0.00000	0.67188
1462	0.00000	0.67188
1463	0.00000	0.67188
1464	0.00000	0.67188
1465	0.00000	0.67188
1466	0.00000	0.67188
1467	0.00000	0.67188
1468	0.00000	0.67188
1469	0.00000	0.67188
1470	0.00000	0.53751
1471	0.00000	0.53751
1472	0.00000	0.53751
1473	0.00000	0.53751
1474	0.00000	0.53751
1475	0.00000	0.53751
1476	0.00000	0.53751
1477	0.00000	0.53751
1478	0.00000	0.53751
1479	0.00000	0.53751
1480	0.00000	0.53751
1481	0.00000	0.53751
1482	0.00000	0.53751
1483	0.00000	0.53751
1484	0.00000	0.53751
1485	0.00000	0.53751
1486	0.00000	0.53751
1487	0.00000	0.53751
1488	0.00000	0.53751
1489	0.00000	0.53751
1490	0.00000	0.53751
1491	0.00000	0.53751
1492	0.00000	0.53751
1493	0.00000	0.53751
1494	0.00000	0.53751
1495	0.00000	0.53751
1496	0.00000	0.53751
1497	0.00000	0.53751
1498	0.00000	0.53751
1499	0.00000	0.53751
1500	0.00000	0.53751
1501	0.00000	0.53751
1502	0.00000	0.53751
1503	0.00000	0.53751
1504	0.00000	0.53751
1505	0.00000	0.40313
1506	0.00000	0.40313
1507	0.00000	0.40313
1508	0.00000	0.40313
1509	0.00000	0.40313
1510	0.00000	0.40313
1511	0.00000	0.40313
1512	0.00000	0.40313
1513	0.00000	0.40313
1514	0.00000	0.40313
1515	0.00000	0.40313
1516	0.00000	0.40313
1517	0.00000	0.40313
1518	0.00000	0.40313
1519	0.00000	0.40313
1520	0.00000	0.40313
1521	0.00000	0.40313
1522	0.00000	0.40313



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc.	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	247 di 296

1523	0.00000	0.40313
1524	0.00000	0.40313
1525	0.00000	0.40313
1526	0.00000	0.40313
1527	0.00000	0.40313
1528	0.00000	0.40313
1529	0.00000	0.40313
1530	0.00000	0.40313
1531	0.00000	0.40313
1532	0.00000	0.40313
1533	0.00000	0.40313
1534	0.00000	0.40313
1535	0.00000	0.40313
1536	0.00000	0.40313
1537	0.00000	0.40313
1538	0.00000	0.40313
1539	0.00000	0.40313
1540	0.00000	0.26875
1541	0.00000	0.26875
1542	0.00000	0.26875
1543	0.00000	0.26875
1544	0.00000	0.26875
1545	0.00000	0.26875
1546	0.00000	0.26875
1547	0.00000	0.26875
1548	0.00000	0.26875
1549	0.00000	0.26875
1550	0.00000	0.26875
1551	0.00000	0.26875
1552	0.00000	0.26875
1553	0.00000	0.26875
1554	0.00000	0.26875
1555	0.00000	0.26875
1556	0.00000	0.26875
1557	0.00000	0.26875
1558	0.00000	0.26875
1559	0.00000	0.26875
1560	0.00000	0.26875
1561	0.00000	0.26875
1562	0.00000	0.26875
1563	0.00000	0.26875
1564	0.00000	0.26875
1565	0.00000	0.26875
1566	0.00000	0.26875
1567	0.00000	0.26875
1568	0.00000	0.26875
1569	0.00000	0.26875
1570	0.00000	0.26875
1571	0.00000	0.26875
1572	0.00000	0.26875
1573	0.00000	0.26875
1574	0.00000	0.26875
1575	0.00000	0.13438
1576	0.00000	0.13438
1577	0.00000	0.13438
1578	0.00000	0.13438
1579	0.00000	0.13438
1580	0.00000	0.13438
1581	0.00000	0.13438
1582	0.00000	0.13438
1583	0.00000	0.13438
1584	0.00000	0.13438
1585	0.00000	0.13438
1586	0.00000	0.13438
1587	0.00000	0.13438
1588	0.00000	0.13438
1589	0.00000	0.13438
1590	0.00000	0.13438
1591	0.00000	0.13438
1592	0.00000	0.13438
1593	0.00000	0.13438
1594	0.00000	0.13438
1595	0.00000	0.13438
1596	0.00000	0.13438
1597	0.00000	0.13438
1598	0.00000	0.13438
1599	0.00000	0.13438
1600	0.00000	0.13438



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 248 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1601	0.00000	0.13438
1602	0.00000	0.13438
1603	0.00000	0.13438
1604	0.00000	0.13438
1605	0.00000	0.13438
1606	0.00000	0.13438
1607	0.00000	0.13438
1608	0.00000	0.13438
1609	0.00000	0.13438
1610	0.00000	0.00000
1611	0.00000	0.00000
1612	0.00000	0.00000
1613	0.00000	0.00000
1614	0.00000	0.00000
1615	0.00000	0.00000
1616	0.00000	0.00000
1617	0.00000	0.00000
1618	0.00000	0.00000
1619	0.00000	0.00000
1620	0.00000	0.00000
1621	0.00000	0.00000
1622	0.00000	0.00000
1623	0.00000	0.00000
1624	0.00000	0.00000
1625	0.00000	0.00000
1626	0.00000	0.00000
1627	0.00000	0.00000
1628	0.00000	0.00000
1629	0.00000	0.00000
1630	0.00000	0.00000
1631	0.00000	0.00000
1632	0.00000	0.00000
1633	0.00000	0.00000
1634	0.00000	0.00000
1635	0.00000	0.00000
1636	0.00000	0.00000
1637	0.00000	0.00000
1638	0.00000	0.00000
1639	0.00000	0.00000
1640	0.00000	0.00000
1641	0.00000	0.00000
1642	0.00000	0.00000

Table: Joint Pattern Assignments

Joint	Pattern	Value
1	STATICA	19.600000
1	SISMICA	41.470000
443	STATICA	19.600000
1015	STATICA	0.004004
1015	SISMICA	19.439063
1016	STATICA	0.004004
1016	SISMICA	18.867325
1017	STATICA	0.004004
1017	SISMICA	18.295588
1018	STATICA	0.004004
1018	SISMICA	17.723851
1019	STATICA	0.004004
1019	SISMICA	17.152114
1020	STATICA	0.004004
1020	SISMICA	16.580377
1021	STATICA	0.004004
1021	SISMICA	16.008640
1022	STATICA	0.004004
1022	SISMICA	15.436903
1023	STATICA	0.004004
1023	SISMICA	14.865165
1024	STATICA	0.004004
1024	SISMICA	14.293428
1025	STATICA	0.004004
1025	SISMICA	13.721691
1026	STATICA	0.004004
1026	SISMICA	13.149954
1027	STATICA	0.004004
1027	SISMICA	12.578217



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 249 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1028	STATICA	0.004004
1028	SISMICA	12.006480
1029	STATICA	0.004004
1029	SISMICA	11.434743
1030	STATICA	0.004004
1030	SISMICA	10.863006
1031	STATICA	0.004004
1031	SISMICA	10.291268
1032	STATICA	0.004004
1032	SISMICA	9.719531
1033	STATICA	0.004004
1033	SISMICA	9.147794
1034	STATICA	0.004004
1034	SISMICA	8.576057
1035	STATICA	0.004004
1035	SISMICA	8.004320
1036	STATICA	0.004004
1036	SISMICA	7.432583
1037	STATICA	0.004004
1037	SISMICA	6.860846
1038	STATICA	0.004004
1038	SISMICA	6.289108
1039	STATICA	0.004004
1039	SISMICA	5.717371
1040	STATICA	0.004004
1040	SISMICA	5.145634
1041	STATICA	0.004004
1041	SISMICA	4.573897
1042	STATICA	0.004004
1042	SISMICA	4.002160
1043	STATICA	0.004004
1043	SISMICA	3.430423
1044	STATICA	0.004004
1044	SISMICA	2.858686
1045	STATICA	0.004004
1045	SISMICA	2.286949
1046	STATICA	0.004004
1046	SISMICA	1.715211
1047	STATICA	0.004004
1047	SISMICA	1.143474
1048	STATICA	0.004004
1048	SISMICA	0.571737
1049	STATICA	0.004004
1050	STATICA	1.281803
1050	SISMICA	20.735000
1051	STATICA	1.281803
1051	SISMICA	20.125147
1052	STATICA	1.281803
1052	SISMICA	19.515294
1053	STATICA	1.281803
1053	SISMICA	18.905441
1054	STATICA	1.281803
1054	SISMICA	18.295588
1055	STATICA	1.281803
1055	SISMICA	17.685735
1056	STATICA	1.281803
1056	SISMICA	17.075882
1057	STATICA	1.281803
1057	SISMICA	16.466029
1058	STATICA	1.281803
1058	SISMICA	15.856176
1059	STATICA	1.281803
1059	SISMICA	15.246324
1060	STATICA	1.281803
1060	SISMICA	14.636471
1061	STATICA	1.281803
1061	SISMICA	14.026618
1062	STATICA	1.281803
1062	SISMICA	13.416765
1063	STATICA	1.281803
1063	SISMICA	12.806912
1064	STATICA	1.281803
1064	SISMICA	12.197059
1065	STATICA	1.281803
1065	SISMICA	11.587206
1066	STATICA	1.281803
1066	SISMICA	10.977353
1067	STATICA	1.281803

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	250 di 296

1067	SISMICA	10.367500
1068	STATICA	1.281803
1068	SISMICA	9.757647
1069	STATICA	1.281803
1069	SISMICA	9.147794
1070	STATICA	1.281803
1070	SISMICA	8.537941
1071	STATICA	1.281803
1071	SISMICA	7.928088
1072	STATICA	1.281803
1072	SISMICA	7.318235
1073	STATICA	1.281803
1073	SISMICA	6.708382
1074	STATICA	1.281803
1074	SISMICA	6.098529
1075	STATICA	1.281803
1075	SISMICA	5.488676
1076	STATICA	1.281803
1076	SISMICA	4.878824
1077	STATICA	1.281803
1077	SISMICA	4.268971
1078	STATICA	1.281803
1078	SISMICA	3.659118
1079	STATICA	1.281803
1079	SISMICA	3.049265
1080	STATICA	1.281803
1080	SISMICA	2.439412
1081	STATICA	1.281803
1081	SISMICA	1.829559
1082	STATICA	1.281803
1082	SISMICA	1.219706
1083	STATICA	1.281803
1083	SISMICA	0.609853
1084	STATICA	1.281803
1085	STATICA	2.426691
1085	SISMICA	22.030938
1086	STATICA	2.426691
1086	SISMICA	21.382969
1087	STATICA	2.426691
1087	SISMICA	20.735000
1088	STATICA	2.426691
1088	SISMICA	20.087031
1089	STATICA	2.426691
1089	SISMICA	19.439063
1090	STATICA	2.426691
1090	SISMICA	18.791094
1091	STATICA	2.426691
1091	SISMICA	18.143125
1092	STATICA	2.426691
1092	SISMICA	17.495156
1093	STATICA	2.426691
1093	SISMICA	16.847188
1094	STATICA	2.426691
1094	SISMICA	16.199219
1095	STATICA	2.426691
1095	SISMICA	15.551250
1096	STATICA	2.426691
1096	SISMICA	14.903281
1097	STATICA	2.426691
1097	SISMICA	14.255313
1098	STATICA	2.426691
1098	SISMICA	13.607344
1099	STATICA	2.426691
1099	SISMICA	12.959375
1100	STATICA	2.426691
1100	SISMICA	12.311406
1101	STATICA	2.426691
1101	SISMICA	11.663438
1102	STATICA	2.426691
1102	SISMICA	11.015469
1103	STATICA	2.426691
1103	SISMICA	10.367500
1104	STATICA	2.426691
1104	SISMICA	9.719531
1105	STATICA	2.426691
1105	SISMICA	9.071563
1106	STATICA	2.426691
1106	SISMICA	8.423594



QUADRILATERO
Marche Umbria S.p.A.

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto

2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 251 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1107	STATICA	2.426691
1107	SISMICA	7.775625
1108	STATICA	2.426691
1108	SISMICA	7.127656
1109	STATICA	2.426691
1109	SISMICA	6.479688
1110	STATICA	2.426691
1110	SISMICA	5.831719
1111	STATICA	2.426691
1111	SISMICA	5.183750
1112	STATICA	2.426691
1112	SISMICA	4.535781
1113	STATICA	2.426691
1113	SISMICA	3.887813
1114	STATICA	2.426691
1114	SISMICA	3.239844
1115	STATICA	2.426691
1115	SISMICA	2.591875
1116	STATICA	2.426691
1116	SISMICA	1.943906
1117	STATICA	2.426691
1117	SISMICA	1.295938
1118	STATICA	2.426691
1118	SISMICA	0.647969
1119	STATICA	2.426691
1120	STATICA	3.571578
1120	SISMICA	23.326875
1121	STATICA	3.571578
1121	SISMICA	22.640790
1122	STATICA	3.571578
1122	SISMICA	21.954706
1123	STATICA	3.571578
1123	SISMICA	21.268621
1124	STATICA	3.571578
1124	SISMICA	20.582537
1125	STATICA	3.571578
1125	SISMICA	19.896452
1126	STATICA	3.571578
1126	SISMICA	19.210368
1127	STATICA	3.571578
1127	SISMICA	18.524283
1128	STATICA	3.571578
1128	SISMICA	17.838199
1129	STATICA	3.571578
1129	SISMICA	17.152114
1130	STATICA	3.571578
1130	SISMICA	16.466029
1131	STATICA	3.571578
1131	SISMICA	15.779945
1132	STATICA	3.571578
1132	SISMICA	15.093860
1133	STATICA	3.571578
1133	SISMICA	14.407776
1134	STATICA	3.571578
1134	SISMICA	13.721691
1135	STATICA	3.571578
1135	SISMICA	13.035607
1136	STATICA	3.571578
1136	SISMICA	12.349522
1137	STATICA	3.571578
1137	SISMICA	11.663438
1138	STATICA	3.571578
1138	SISMICA	10.977353
1139	STATICA	3.571578
1139	SISMICA	10.291268
1140	STATICA	3.571578
1140	SISMICA	9.605184
1141	STATICA	3.571578
1141	SISMICA	8.919099
1142	STATICA	3.571578
1142	SISMICA	8.233015
1143	STATICA	3.571578
1143	SISMICA	7.546930
1144	STATICA	3.571578
1144	SISMICA	6.860846
1145	STATICA	3.571578
1145	SISMICA	6.174761
1146	STATICA	3.571578

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 252 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1146	SISMICA	5.488676
1147	STATICA	3.571578
1147	SISMICA	4.802592
1148	STATICA	3.571578
1148	SISMICA	4.116507
1149	STATICA	3.571578
1149	SISMICA	3.430423
1150	STATICA	3.571578
1150	SISMICA	2.744338
1151	STATICA	3.571578
1151	SISMICA	2.058254
1152	STATICA	3.571578
1152	SISMICA	1.372169
1153	STATICA	3.571578
1153	SISMICA	0.686085
1154	STATICA	3.571578
1155	STATICA	4.716465
1155	SISMICA	24.622813
1156	STATICA	4.716465
1156	SISMICA	23.898612
1157	STATICA	4.716465
1157	SISMICA	23.174412
1158	STATICA	4.716465
1158	SISMICA	22.450211
1159	STATICA	4.716465
1159	SISMICA	21.726011
1160	STATICA	4.716465
1160	SISMICA	21.001811
1161	STATICA	4.716465
1161	SISMICA	20.277610
1162	STATICA	4.716465
1162	SISMICA	19.553410
1163	STATICA	4.716465
1163	SISMICA	18.829210
1164	STATICA	4.716465
1164	SISMICA	18.105009
1165	STATICA	4.716465
1165	SISMICA	17.380809
1166	STATICA	4.716465
1166	SISMICA	16.656608
1167	STATICA	4.716465
1167	SISMICA	15.932408
1168	STATICA	4.716465
1168	SISMICA	15.208208
1169	STATICA	4.716465
1169	SISMICA	14.484007
1170	STATICA	4.716465
1170	SISMICA	13.759807
1171	STATICA	4.716465
1171	SISMICA	13.035607
1172	STATICA	4.716465
1172	SISMICA	12.311406
1173	STATICA	4.716465
1173	SISMICA	11.587206
1174	STATICA	4.716465
1174	SISMICA	10.863006
1175	STATICA	4.716465
1175	SISMICA	10.138805
1176	STATICA	4.716465
1176	SISMICA	9.414605
1177	STATICA	4.716465
1177	SISMICA	8.690404
1178	STATICA	4.716465
1178	SISMICA	7.966204
1179	STATICA	4.716465
1179	SISMICA	7.242004
1180	STATICA	4.716465
1180	SISMICA	6.517803
1181	STATICA	4.716465
1181	SISMICA	5.793603
1182	STATICA	4.716465
1182	SISMICA	5.069403
1183	STATICA	4.716465
1183	SISMICA	4.345202
1184	STATICA	4.716465
1184	SISMICA	3.621002
1185	STATICA	4.716465
1185	SISMICA	2.896801

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	253 di 296

1186	STATICA	4.716465
1186	SISMICA	2.172601
1187	STATICA	4.716465
1187	SISMICA	1.448401
1188	STATICA	4.716465
1188	SISMICA	0.724200
1189	STATICA	4.716465
1190	STATICA	5.861353
1190	SISMICA	25.918750
1191	STATICA	5.861353
1191	SISMICA	25.156434
1192	STATICA	5.861353
1192	SISMICA	24.394118
1193	STATICA	5.861353
1193	SISMICA	23.631801
1194	STATICA	5.861353
1194	SISMICA	22.869485
1195	STATICA	5.861353
1195	SISMICA	22.107169
1196	STATICA	5.861353
1196	SISMICA	21.344853
1197	STATICA	5.861353
1197	SISMICA	20.582537
1198	STATICA	5.861353
1198	SISMICA	19.820221
1199	STATICA	5.861353
1199	SISMICA	19.057904
1200	STATICA	5.861353
1200	SISMICA	18.295588
1201	STATICA	5.861353
1201	SISMICA	17.533272
1202	STATICA	5.861353
1202	SISMICA	16.770956
1203	STATICA	5.861353
1203	SISMICA	16.008640
1204	STATICA	5.861353
1204	SISMICA	15.246324
1205	STATICA	5.861353
1205	SISMICA	14.484007
1206	STATICA	5.861353
1206	SISMICA	13.721691
1207	STATICA	5.861353
1207	SISMICA	12.959375
1208	STATICA	5.861353
1208	SISMICA	12.197059
1209	STATICA	5.861353
1209	SISMICA	11.434743
1210	STATICA	5.861353
1210	SISMICA	10.672426
1211	STATICA	5.861353
1211	SISMICA	9.910110
1212	STATICA	5.861353
1212	SISMICA	9.147794
1213	STATICA	5.861353
1213	SISMICA	8.385478
1214	STATICA	5.861353
1214	SISMICA	7.623162
1215	STATICA	5.861353
1215	SISMICA	6.860846
1216	STATICA	5.861353
1216	SISMICA	6.098529
1217	STATICA	5.861353
1217	SISMICA	5.336213
1218	STATICA	5.861353
1218	SISMICA	4.573897
1219	STATICA	5.861353
1219	SISMICA	3.811581
1220	STATICA	5.861353
1220	SISMICA	3.049265
1221	STATICA	5.861353
1221	SISMICA	2.286949
1222	STATICA	5.861353
1222	SISMICA	1.524632
1223	STATICA	5.861353
1223	SISMICA	0.762316
1224	STATICA	5.861353
1225	STATICA	7.006240
1225	SISMICA	27.214688



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 254 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1226	STATICA	7.006240
1226	SISMICA	26.414256
1227	STATICA	7.006240
1227	SISMICA	25.613824
1228	STATICA	7.006240
1228	SISMICA	24.813392
1229	STATICA	7.006240
1229	SISMICA	24.012960
1230	STATICA	7.006240
1230	SISMICA	23.212528
1231	STATICA	7.006240
1231	SISMICA	22.412096
1232	STATICA	7.006240
1232	SISMICA	21.611664
1233	STATICA	7.006240
1233	SISMICA	20.811232
1234	STATICA	7.006240
1234	SISMICA	20.010800
1235	STATICA	7.006240
1235	SISMICA	19.210368
1236	STATICA	7.006240
1236	SISMICA	18.409936
1237	STATICA	7.006240
1237	SISMICA	17.609504
1238	STATICA	7.006240
1238	SISMICA	16.809072
1239	STATICA	7.006240
1239	SISMICA	16.008640
1240	STATICA	7.006240
1240	SISMICA	15.208208
1241	STATICA	7.006240
1241	SISMICA	14.407776
1242	STATICA	7.006240
1242	SISMICA	13.607344
1243	STATICA	7.006240
1243	SISMICA	12.806912
1244	STATICA	7.006240
1244	SISMICA	12.006480
1245	STATICA	7.006240
1245	SISMICA	11.206048
1246	STATICA	7.006240
1246	SISMICA	10.405616
1247	STATICA	7.006240
1247	SISMICA	9.605184
1248	STATICA	7.006240
1248	SISMICA	8.804752
1249	STATICA	7.006240
1249	SISMICA	8.004320
1250	STATICA	7.006240
1250	SISMICA	7.203888
1251	STATICA	7.006240
1251	SISMICA	6.403456
1252	STATICA	7.006240
1252	SISMICA	5.603024
1253	STATICA	7.006240
1253	SISMICA	4.802592
1254	STATICA	7.006240
1254	SISMICA	4.002160
1255	STATICA	7.006240
1255	SISMICA	3.201728
1256	STATICA	7.006240
1256	SISMICA	2.401296
1257	STATICA	7.006240
1257	SISMICA	1.600864
1258	STATICA	7.006240
1258	SISMICA	0.800432
1259	STATICA	7.006240
1260	STATICA	8.151127
1260	SISMICA	28.510625
1261	STATICA	8.151127
1261	SISMICA	27.672077
1262	STATICA	8.151127
1262	SISMICA	26.833529
1263	STATICA	8.151127
1263	SISMICA	25.994982
1264	STATICA	8.151127
1264	SISMICA	25.156434
1265	STATICA	8.151127



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	255 di 296

1265	SISMICA	24.317886
1266	STATICA	8.151127
1266	SISMICA	23.479338
1267	STATICA	8.151127
1267	SISMICA	22.640790
1268	STATICA	8.151127
1268	SISMICA	21.802243
1269	STATICA	8.151127
1269	SISMICA	20.963695
1270	STATICA	8.151127
1270	SISMICA	20.125147
1271	STATICA	8.151127
1271	SISMICA	19.286599
1272	STATICA	8.151127
1272	SISMICA	18.448051
1273	STATICA	8.151127
1273	SISMICA	17.609504
1274	STATICA	8.151127
1274	SISMICA	16.770956
1275	STATICA	8.151127
1275	SISMICA	15.932408
1276	STATICA	8.151127
1276	SISMICA	15.093860
1277	STATICA	8.151127
1277	SISMICA	14.255313
1278	STATICA	8.151127
1278	SISMICA	13.416765
1279	STATICA	8.151127
1279	SISMICA	12.578217
1280	STATICA	8.151127
1280	SISMICA	11.739669
1281	STATICA	8.151127
1281	SISMICA	10.901121
1282	STATICA	8.151127
1282	SISMICA	10.062574
1283	STATICA	8.151127
1283	SISMICA	9.224026
1284	STATICA	8.151127
1284	SISMICA	8.385478
1285	STATICA	8.151127
1285	SISMICA	7.546930
1286	STATICA	8.151127
1286	SISMICA	6.708382
1287	STATICA	8.151127
1287	SISMICA	5.869835
1288	STATICA	8.151127
1288	SISMICA	5.031287
1289	STATICA	8.151127
1289	SISMICA	4.192739
1290	STATICA	8.151127
1290	SISMICA	3.354191
1291	STATICA	8.151127
1291	SISMICA	2.515643
1292	STATICA	8.151127
1292	SISMICA	1.677096
1293	STATICA	8.151127
1293	SISMICA	0.838548
1294	STATICA	8.151127
1295	STATICA	9.296014
1295	SISMICA	29.806563
1296	STATICA	9.296014
1296	SISMICA	28.929899
1297	STATICA	9.296014
1297	SISMICA	28.053235
1298	STATICA	9.296014
1298	SISMICA	27.176572
1299	STATICA	9.296014
1299	SISMICA	26.299908
1300	STATICA	9.296014
1300	SISMICA	25.423244
1301	STATICA	9.296014
1301	SISMICA	24.546581
1302	STATICA	9.296014
1302	SISMICA	23.669917
1303	STATICA	9.296014
1303	SISMICA	22.793254
1304	STATICA	9.296014
1304	SISMICA	21.916590

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	256 di 296

1305	STATICA	9.296014
1305	SISMICA	21.039926
1306	STATICA	9.296014
1306	SISMICA	20.163263
1307	STATICA	9.296014
1307	SISMICA	19.286599
1308	STATICA	9.296014
1308	SISMICA	18.409936
1309	STATICA	9.296014
1309	SISMICA	17.533272
1310	STATICA	9.296014
1310	SISMICA	16.656608
1311	STATICA	9.296014
1311	SISMICA	15.779945
1312	STATICA	9.296014
1312	SISMICA	14.903281
1313	STATICA	9.296014
1313	SISMICA	14.026618
1314	STATICA	9.296014
1314	SISMICA	13.149954
1315	STATICA	9.296014
1315	SISMICA	12.273290
1316	STATICA	9.296014
1316	SISMICA	11.396627
1317	STATICA	9.296014
1317	SISMICA	10.519963
1318	STATICA	9.296014
1318	SISMICA	9.643300
1319	STATICA	9.296014
1319	SISMICA	8.766636
1320	STATICA	9.296014
1320	SISMICA	7.889972
1321	STATICA	9.296014
1321	SISMICA	7.013309
1322	STATICA	9.296014
1322	SISMICA	6.136645
1323	STATICA	9.296014
1323	SISMICA	5.259982
1324	STATICA	9.296014
1324	SISMICA	4.383318
1325	STATICA	9.296014
1325	SISMICA	3.506654
1326	STATICA	9.296014
1326	SISMICA	2.629991
1327	STATICA	9.296014
1327	SISMICA	1.753327
1328	STATICA	9.296014
1328	SISMICA	0.876664
1329	STATICA	9.296014
1330	STATICA	10.440902
1330	SISMICA	31.102500
1331	STATICA	10.440902
1331	SISMICA	30.187721
1332	STATICA	10.440902
1332	SISMICA	29.272941
1333	STATICA	10.440902
1333	SISMICA	28.358162
1334	STATICA	10.440902
1334	SISMICA	27.443382
1335	STATICA	10.440902
1335	SISMICA	26.528603
1336	STATICA	10.440902
1336	SISMICA	25.613824
1337	STATICA	10.440902
1337	SISMICA	24.699044
1338	STATICA	10.440902
1338	SISMICA	23.784265
1339	STATICA	10.440902
1339	SISMICA	22.869485
1340	STATICA	10.440902
1340	SISMICA	21.954706
1341	STATICA	10.440902
1341	SISMICA	21.039926
1342	STATICA	10.440902
1342	SISMICA	20.125147
1343	STATICA	10.440902
1343	SISMICA	19.210368
1344	STATICA	10.440902

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	257 di 296

1344	SISMICA	18.295588
1345	STATICA	10.440902
1345	SISMICA	17.380809
1346	STATICA	10.440902
1346	SISMICA	16.466029
1347	STATICA	10.440902
1347	SISMICA	15.551250
1348	STATICA	10.440902
1348	SISMICA	14.636471
1349	STATICA	10.440902
1349	SISMICA	13.721691
1350	STATICA	10.440902
1350	SISMICA	12.806912
1351	STATICA	10.440902
1351	SISMICA	11.892132
1352	STATICA	10.440902
1352	SISMICA	10.977353
1353	STATICA	10.440902
1353	SISMICA	10.062574
1354	STATICA	10.440902
1354	SISMICA	9.147794
1355	STATICA	10.440902
1355	SISMICA	8.233015
1356	STATICA	10.440902
1356	SISMICA	7.318235
1357	STATICA	10.440902
1357	SISMICA	6.403456
1358	STATICA	10.440902
1358	SISMICA	5.488676
1359	STATICA	10.440902
1359	SISMICA	4.573897
1360	STATICA	10.440902
1360	SISMICA	3.659118
1361	STATICA	10.440902
1361	SISMICA	2.744338
1362	STATICA	10.440902
1362	SISMICA	1.829559
1363	STATICA	10.440902
1363	SISMICA	0.914779
1364	STATICA	10.440902
1365	STATICA	11.585789
1365	SISMICA	32.398438
1366	STATICA	11.585789
1366	SISMICA	31.445542
1367	STATICA	11.585789
1367	SISMICA	30.492647
1368	STATICA	11.585789
1368	SISMICA	29.539752
1369	STATICA	11.585789
1369	SISMICA	28.586857
1370	STATICA	11.585789
1370	SISMICA	27.633961
1371	STATICA	11.585789
1371	SISMICA	26.681066
1372	STATICA	11.585789
1372	SISMICA	25.728171
1373	STATICA	11.585789
1373	SISMICA	24.775276
1374	STATICA	11.585789
1374	SISMICA	23.822381
1375	STATICA	11.585789
1375	SISMICA	22.869485
1376	STATICA	11.585789
1376	SISMICA	21.916590
1377	STATICA	11.585789
1377	SISMICA	20.963695
1378	STATICA	11.585789
1378	SISMICA	20.010800
1379	STATICA	11.585789
1379	SISMICA	19.057904
1380	STATICA	11.585789
1380	SISMICA	18.105009
1381	STATICA	11.585789
1381	SISMICA	17.152114
1382	STATICA	11.585789
1382	SISMICA	16.199219
1383	STATICA	11.585789
1383	SISMICA	15.246324

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	258 di 296

1384	STATICA	11.585789
1384	SISMICA	14.293428
1385	STATICA	11.585789
1385	SISMICA	13.340533
1386	STATICA	11.585789
1386	SISMICA	12.387638
1387	STATICA	11.585789
1387	SISMICA	11.434743
1388	STATICA	11.585789
1388	SISMICA	10.481847
1389	STATICA	11.585789
1389	SISMICA	9.528952
1390	STATICA	11.585789
1390	SISMICA	8.576057
1391	STATICA	11.585789
1391	SISMICA	7.623162
1392	STATICA	11.585789
1392	SISMICA	6.670267
1393	STATICA	11.585789
1393	SISMICA	5.717371
1394	STATICA	11.585789
1394	SISMICA	4.764476
1395	STATICA	11.585789
1395	SISMICA	3.811581
1396	STATICA	11.585789
1396	SISMICA	2.858686
1397	STATICA	11.585789
1397	SISMICA	1.905790
1398	STATICA	11.585789
1398	SISMICA	0.952895
1399	STATICA	11.585789
1400	STATICA	12.730676
1400	SISMICA	33.694375
1401	STATICA	12.730676
1401	SISMICA	32.703364
1402	STATICA	12.730676
1402	SISMICA	31.712353
1403	STATICA	12.730676
1403	SISMICA	30.721342
1404	STATICA	12.730676
1404	SISMICA	29.730331
1405	STATICA	12.730676
1405	SISMICA	28.739320
1406	STATICA	12.730676
1406	SISMICA	27.748309
1407	STATICA	12.730676
1407	SISMICA	26.757298
1408	STATICA	12.730676
1408	SISMICA	25.766287
1409	STATICA	12.730676
1409	SISMICA	24.775276
1410	STATICA	12.730676
1410	SISMICA	23.784265
1411	STATICA	12.730676
1411	SISMICA	22.793254
1412	STATICA	12.730676
1412	SISMICA	21.802243
1413	STATICA	12.730676
1413	SISMICA	20.811232
1414	STATICA	12.730676
1414	SISMICA	19.820221
1415	STATICA	12.730676
1415	SISMICA	18.829210
1416	STATICA	12.730676
1416	SISMICA	17.838199
1417	STATICA	12.730676
1417	SISMICA	16.847188
1418	STATICA	12.730676
1418	SISMICA	15.856176
1419	STATICA	12.730676
1419	SISMICA	14.865165
1420	STATICA	12.730676
1420	SISMICA	13.874154
1421	STATICA	12.730676
1421	SISMICA	12.883143
1422	STATICA	12.730676
1422	SISMICA	11.892132
1423	STATICA	12.730676

**2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto****2.1 Tratto Fabriano-Matelica Nord**

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	259 di 296

1423	SISMICA	10.901121
1424	STATICA	12.730676
1424	SISMICA	9.910110
1425	STATICA	12.730676
1425	SISMICA	8.919099
1426	STATICA	12.730676
1426	SISMICA	7.928088
1427	STATICA	12.730676
1427	SISMICA	6.937077
1428	STATICA	12.730676
1428	SISMICA	5.946066
1429	STATICA	12.730676
1429	SISMICA	4.955055
1430	STATICA	12.730676
1430	SISMICA	3.964044
1431	STATICA	12.730676
1431	SISMICA	2.973033
1432	STATICA	12.730676
1432	SISMICA	1.982022
1433	STATICA	12.730676
1433	SISMICA	0.991011
1434	STATICA	12.730676
1435	STATICA	13.875564
1435	SISMICA	34.990313
1436	STATICA	13.875564
1436	SISMICA	33.961186
1437	STATICA	13.875564
1437	SISMICA	32.932059
1438	STATICA	13.875564
1438	SISMICA	31.902932
1439	STATICA	13.875564
1439	SISMICA	30.873805
1440	STATICA	13.875564
1440	SISMICA	29.844678
1441	STATICA	13.875564
1441	SISMICA	28.815551
1442	STATICA	13.875564
1442	SISMICA	27.786425
1443	STATICA	13.875564
1443	SISMICA	26.757298
1444	STATICA	13.875564
1444	SISMICA	25.728171
1445	STATICA	13.875564
1445	SISMICA	24.699044
1446	STATICA	13.875564
1446	SISMICA	23.669917
1447	STATICA	13.875564
1447	SISMICA	22.640790
1448	STATICA	13.875564
1448	SISMICA	21.611664
1449	STATICA	13.875564
1449	SISMICA	20.582537
1450	STATICA	13.875564
1450	SISMICA	19.553410
1451	STATICA	13.875564
1451	SISMICA	18.524283
1452	STATICA	13.875564
1452	SISMICA	17.495156
1453	STATICA	13.875564
1453	SISMICA	16.466029
1454	STATICA	13.875564
1454	SISMICA	15.436903
1455	STATICA	13.875564
1455	SISMICA	14.407776
1456	STATICA	13.875564
1456	SISMICA	13.378649
1457	STATICA	13.875564
1457	SISMICA	12.349522
1458	STATICA	13.875564
1458	SISMICA	11.320395
1459	STATICA	13.875564
1459	SISMICA	10.291268
1460	STATICA	13.875564
1460	SISMICA	9.262142
1461	STATICA	13.875564
1461	SISMICA	8.233015
1462	STATICA	13.875564
1462	SISMICA	7.203888

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	260 di 296

1463	STATICA	13.875564
1463	SISMICA	6.174761
1464	STATICA	13.875564
1464	SISMICA	5.145634
1465	STATICA	13.875564
1465	SISMICA	4.116507
1466	STATICA	13.875564
1466	SISMICA	3.087381
1467	STATICA	13.875564
1467	SISMICA	2.058254
1468	STATICA	13.875564
1468	SISMICA	1.029127
1469	STATICA	13.875564
1470	STATICA	15.020451
1470	SISMICA	36.286250
1471	STATICA	15.020451
1471	SISMICA	35.219007
1472	STATICA	15.020451
1472	SISMICA	34.151765
1473	STATICA	15.020451
1473	SISMICA	33.084522
1474	STATICA	15.020451
1474	SISMICA	32.017279
1475	STATICA	15.020451
1475	SISMICA	30.950037
1476	STATICA	15.020451
1476	SISMICA	29.882794
1477	STATICA	15.020451
1477	SISMICA	28.815551
1478	STATICA	15.020451
1478	SISMICA	27.748309
1479	STATICA	15.020451
1479	SISMICA	26.681066
1480	STATICA	15.020451
1480	SISMICA	25.613824
1481	STATICA	15.020451
1481	SISMICA	24.546581
1482	STATICA	15.020451
1482	SISMICA	23.479338
1483	STATICA	15.020451
1483	SISMICA	22.412096
1484	STATICA	15.020451
1484	SISMICA	21.344853
1485	STATICA	15.020451
1485	SISMICA	20.277610
1486	STATICA	15.020451
1486	SISMICA	19.210368
1487	STATICA	15.020451
1487	SISMICA	18.143125
1488	STATICA	15.020451
1488	SISMICA	17.075882
1489	STATICA	15.020451
1489	SISMICA	16.008640
1490	STATICA	15.020451
1490	SISMICA	14.941397
1491	STATICA	15.020451
1491	SISMICA	13.874154
1492	STATICA	15.020451
1492	SISMICA	12.806912
1493	STATICA	15.020451
1493	SISMICA	11.739669
1494	STATICA	15.020451
1494	SISMICA	10.672426
1495	STATICA	15.020451
1495	SISMICA	9.605184
1496	STATICA	15.020451
1496	SISMICA	8.537941
1497	STATICA	15.020451
1497	SISMICA	7.470699
1498	STATICA	15.020451
1498	SISMICA	6.403456
1499	STATICA	15.020451
1499	SISMICA	5.336213
1500	STATICA	15.020451
1500	SISMICA	4.268971
1501	STATICA	15.020451
1501	SISMICA	3.201728
1502	STATICA	15.020451

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	261 di 296

1502	SISMICA	2.134485
1503	STATICA	15.020451
1503	SISMICA	1.067243
1504	STATICA	15.020451
1505	STATICA	16.165338
1505	SISMICA	37.582188
1506	STATICA	16.165338
1506	SISMICA	36.476829
1507	STATICA	16.165338
1507	SISMICA	35.371471
1508	STATICA	16.165338
1508	SISMICA	34.266112
1509	STATICA	16.165338
1509	SISMICA	33.160754
1510	STATICA	16.165338
1510	SISMICA	32.055395
1511	STATICA	16.165338
1511	SISMICA	30.950037
1512	STATICA	16.165338
1512	SISMICA	29.844678
1513	STATICA	16.165338
1513	SISMICA	28.739320
1514	STATICA	16.165338
1514	SISMICA	27.633961
1515	STATICA	16.165338
1515	SISMICA	26.528603
1516	STATICA	16.165338
1516	SISMICA	25.423244
1517	STATICA	16.165338
1517	SISMICA	24.317886
1518	STATICA	16.165338
1518	SISMICA	23.212528
1519	STATICA	16.165338
1519	SISMICA	22.107169
1520	STATICA	16.165338
1520	SISMICA	21.001811
1521	STATICA	16.165338
1521	SISMICA	19.896452
1522	STATICA	16.165338
1522	SISMICA	18.791094
1523	STATICA	16.165338
1523	SISMICA	17.685735
1524	STATICA	16.165338
1524	SISMICA	16.580377
1525	STATICA	16.165338
1525	SISMICA	15.475018
1526	STATICA	16.165338
1526	SISMICA	14.369660
1527	STATICA	16.165338
1527	SISMICA	13.264301
1528	STATICA	16.165338
1528	SISMICA	12.158943
1529	STATICA	16.165338
1529	SISMICA	11.053585
1530	STATICA	16.165338
1530	SISMICA	9.948226
1531	STATICA	16.165338
1531	SISMICA	8.842868
1532	STATICA	16.165338
1532	SISMICA	7.737509
1533	STATICA	16.165338
1533	SISMICA	6.632151
1534	STATICA	16.165338
1534	SISMICA	5.526792
1535	STATICA	16.165338
1535	SISMICA	4.421434
1536	STATICA	16.165338
1536	SISMICA	3.316075
1537	STATICA	16.165338
1537	SISMICA	2.210717
1538	STATICA	16.165338
1538	SISMICA	1.105358
1539	STATICA	16.165338
1540	STATICA	17.310225
1540	SISMICA	38.878125
1541	STATICA	17.310225
1541	SISMICA	37.734651
1542	STATICA	17.310225

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	262 di 296

1542	SISMICA	36.591176
1543	STATICA	17.310225
1543	SISMICA	35.447702
1544	STATICA	17.310225
1544	SISMICA	34.304228
1545	STATICA	17.310225
1545	SISMICA	33.160754
1546	STATICA	17.310225
1546	SISMICA	32.017279
1547	STATICA	17.310225
1547	SISMICA	30.873805
1548	STATICA	17.310225
1548	SISMICA	29.730331
1549	STATICA	17.310225
1549	SISMICA	28.586857
1550	STATICA	17.310225
1550	SISMICA	27.443382
1551	STATICA	17.310225
1551	SISMICA	26.299908
1552	STATICA	17.310225
1552	SISMICA	25.156434
1553	STATICA	17.310225
1553	SISMICA	24.012960
1554	STATICA	17.310225
1554	SISMICA	22.869485
1555	STATICA	17.310225
1555	SISMICA	21.726011
1556	STATICA	17.310225
1556	SISMICA	20.582537
1557	STATICA	17.310225
1557	SISMICA	19.439063
1558	STATICA	17.310225
1558	SISMICA	18.295588
1559	STATICA	17.310225
1559	SISMICA	17.152114
1560	STATICA	17.310225
1560	SISMICA	16.008640
1561	STATICA	17.310225
1561	SISMICA	14.865165
1562	STATICA	17.310225
1562	SISMICA	13.721691
1563	STATICA	17.310225
1563	SISMICA	12.578217
1564	STATICA	17.310225
1564	SISMICA	11.434743
1565	STATICA	17.310225
1565	SISMICA	10.291268
1566	STATICA	17.310225
1566	SISMICA	9.147794
1567	STATICA	17.310225
1567	SISMICA	8.004320
1568	STATICA	17.310225
1568	SISMICA	6.860846
1569	STATICA	17.310225
1569	SISMICA	5.717371
1570	STATICA	17.310225
1570	SISMICA	4.573897
1571	STATICA	17.310225
1571	SISMICA	3.430423
1572	STATICA	17.310225
1572	SISMICA	2.286949
1573	STATICA	17.310225
1573	SISMICA	1.143474
1574	STATICA	17.310225
1575	STATICA	18.455113
1575	SISMICA	40.174063
1576	STATICA	18.455113
1576	SISMICA	38.992472
1577	STATICA	18.455113
1577	SISMICA	37.810882
1578	STATICA	18.455113
1578	SISMICA	36.629292
1579	STATICA	18.455113
1579	SISMICA	35.447702
1580	STATICA	18.455113
1580	SISMICA	34.266112
1581	STATICA	18.455113
1581	SISMICA	33.084522

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	263 di 296

1582	STATICA	18.455113
1582	SISMICA	31.902932
1583	STATICA	18.455113
1583	SISMICA	30.721342
1584	STATICA	18.455113
1584	SISMICA	29.539752
1585	STATICA	18.455113
1585	SISMICA	28.358162
1586	STATICA	18.455113
1586	SISMICA	27.176572
1587	STATICA	18.455113
1587	SISMICA	25.994982
1588	STATICA	18.455113
1588	SISMICA	24.813392
1589	STATICA	18.455113
1589	SISMICA	23.631801
1590	STATICA	18.455113
1590	SISMICA	22.450211
1591	STATICA	18.455113
1591	SISMICA	21.268621
1592	STATICA	18.455113
1592	SISMICA	20.087031
1593	STATICA	18.455113
1593	SISMICA	18.905441
1594	STATICA	18.455113
1594	SISMICA	17.723851
1595	STATICA	18.455113
1595	SISMICA	16.542261
1596	STATICA	18.455113
1596	SISMICA	15.360671
1597	STATICA	18.455113
1597	SISMICA	14.179081
1598	STATICA	18.455113
1598	SISMICA	12.997491
1599	STATICA	18.455113
1599	SISMICA	11.815901
1600	STATICA	18.455113
1600	SISMICA	10.634311
1601	STATICA	18.455113
1601	SISMICA	9.452721
1602	STATICA	18.455113
1602	SISMICA	8.271131
1603	STATICA	18.455113
1603	SISMICA	7.089540
1604	STATICA	18.455113
1604	SISMICA	5.907950
1605	STATICA	18.455113
1605	SISMICA	4.726360
1606	STATICA	18.455113
1606	SISMICA	3.544770
1607	STATICA	18.455113
1607	SISMICA	2.363180
1608	STATICA	18.455113
1608	SISMICA	1.181590
1609	STATICA	18.455113
1610	STATICA	19.600000
1610	SISMICA	40.250294
1611	STATICA	19.600000
1611	SISMICA	39.030588
1612	STATICA	19.600000
1612	SISMICA	37.810882
1613	STATICA	19.600000
1613	SISMICA	36.591176
1614	STATICA	19.600000
1614	SISMICA	35.371471
1615	STATICA	19.600000
1615	SISMICA	34.151765
1616	STATICA	19.600000
1616	SISMICA	32.932059
1617	STATICA	19.600000
1617	SISMICA	31.712353
1618	STATICA	19.600000
1618	SISMICA	30.492647
1619	STATICA	19.600000
1619	SISMICA	29.272941
1620	STATICA	19.600000
1620	SISMICA	28.053235
1621	STATICA	19.600000

2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord

Opere d'arte minori: opere di attraversamento

Sistemazione viabilità interferita al km 5+641

Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 264 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

1621	SISMICA	26.833529
1622	STATICA	19.600000
1622	SISMICA	25.613824
1623	STATICA	19.600000
1623	SISMICA	24.394118
1624	STATICA	19.600000
1624	SISMICA	23.174412
1625	STATICA	19.600000
1625	SISMICA	21.954706
1626	STATICA	19.600000
1626	SISMICA	20.735000
1627	STATICA	19.600000
1627	SISMICA	19.515294
1628	STATICA	19.600000
1628	SISMICA	18.295588
1629	STATICA	19.600000
1629	SISMICA	17.075882
1630	STATICA	19.600000
1630	SISMICA	15.856176
1631	STATICA	19.600000
1631	SISMICA	14.636471
1632	STATICA	19.600000
1632	SISMICA	13.416765
1633	STATICA	19.600000
1633	SISMICA	12.197059
1634	STATICA	19.600000
1634	SISMICA	10.977353
1635	STATICA	19.600000
1635	SISMICA	9.757647
1636	STATICA	19.600000
1636	SISMICA	8.537941
1637	STATICA	19.600000
1637	SISMICA	7.318235
1638	STATICA	19.600000
1638	SISMICA	6.098529
1639	STATICA	19.600000
1639	SISMICA	4.878824
1640	STATICA	19.600000
1640	SISMICA	3.659118
1641	STATICA	19.600000
1641	SISMICA	2.439412
1642	STATICA	19.600000
1642	SISMICA	1.219706
2	STATICA	19.600000
18	STATICA	0.004004
19	STATICA	1.281803
20	STATICA	2.426691
21	STATICA	3.571578
22	STATICA	4.716465
23	STATICA	5.861353
24	STATICA	7.006240
25	STATICA	8.151127
26	STATICA	9.296014
27	STATICA	10.440902
28	STATICA	11.585789
29	STATICA	12.730676
30	STATICA	13.875564
31	STATICA	15.020451
32	STATICA	16.165338
33	STATICA	17.310225
34	STATICA	18.455113
193	STATICA	0.004004
194	STATICA	0.004004
195	STATICA	1.281803
196	STATICA	1.281803
197	STATICA	2.426691
198	STATICA	2.426691
199	STATICA	3.571578
200	STATICA	3.571578
201	STATICA	4.716465
202	STATICA	4.716465
203	STATICA	5.861353
204	STATICA	5.861353
205	STATICA	7.006240
206	STATICA	7.006240
207	STATICA	8.151127
208	STATICA	8.151127
209	STATICA	9.296014



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 265 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

210	STATICA	9.296014
211	STATICA	10.440902
212	STATICA	10.440902
213	STATICA	11.585789
214	STATICA	11.585789
215	STATICA	12.730676
216	STATICA	12.730676
217	STATICA	13.875564
218	STATICA	13.875564
219	STATICA	15.020451
220	STATICA	15.020451
221	STATICA	16.165338
222	STATICA	16.165338
223	STATICA	17.310225
224	STATICA	17.310225
225	STATICA	18.455113
226	STATICA	18.455113
227	STATICA	19.600000
228	STATICA	19.600000

Table: Joint Pattern Definitions

Pattern

DEFAULT
 STATICA
 SISMICA

Table: Joint Restraint Assignments

Joint	U1	U2	U3	R1	R2	R3
1	Yes	Yes	Yes	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
18	Yes	Yes	Yes	Yes	Yes	Yes
19	Yes	Yes	Yes	Yes	Yes	Yes
20	Yes	Yes	Yes	Yes	Yes	Yes
21	Yes	Yes	Yes	Yes	Yes	Yes
22	Yes	Yes	Yes	Yes	Yes	Yes
23	Yes	Yes	Yes	Yes	Yes	Yes
24	Yes	Yes	Yes	Yes	Yes	Yes
25	Yes	Yes	Yes	Yes	Yes	Yes
26	Yes	Yes	Yes	Yes	Yes	Yes
27	Yes	Yes	Yes	Yes	Yes	Yes
28	Yes	Yes	Yes	Yes	Yes	Yes
29	Yes	Yes	Yes	Yes	Yes	Yes
30	Yes	Yes	Yes	Yes	Yes	Yes
31	Yes	Yes	Yes	Yes	Yes	Yes
32	Yes	Yes	Yes	Yes	Yes	Yes
33	Yes	Yes	Yes	Yes	Yes	Yes
34	Yes	Yes	Yes	Yes	Yes	Yes
227	Yes	Yes	Yes	Yes	Yes	Yes
228	Yes	Yes	Yes	Yes	Yes	Yes
443	Yes	Yes	Yes	Yes	Yes	Yes
1015	Yes	Yes	Yes	Yes	Yes	Yes
1050	Yes	Yes	Yes	Yes	Yes	Yes
1085	Yes	Yes	Yes	Yes	Yes	Yes
1120	Yes	Yes	Yes	Yes	Yes	Yes
1155	Yes	Yes	Yes	Yes	Yes	Yes
1190	Yes	Yes	Yes	Yes	Yes	Yes
1225	Yes	Yes	Yes	Yes	Yes	Yes
1260	Yes	Yes	Yes	Yes	Yes	Yes
1295	Yes	Yes	Yes	Yes	Yes	Yes
1330	Yes	Yes	Yes	Yes	Yes	Yes
1365	Yes	Yes	Yes	Yes	Yes	Yes
1400	Yes	Yes	Yes	Yes	Yes	Yes
1435	Yes	Yes	Yes	Yes	Yes	Yes
1470	Yes	Yes	Yes	Yes	Yes	Yes
1505	Yes	Yes	Yes	Yes	Yes	Yes
1540	Yes	Yes	Yes	Yes	Yes	Yes
1575	Yes	Yes	Yes	Yes	Yes	Yes
1610	Yes	Yes	Yes	Yes	Yes	Yes
1611	Yes	Yes	Yes	Yes	Yes	Yes
1612	Yes	Yes	Yes	Yes	Yes	Yes



2.1.1 – PEDEMONTANA DELLE MARCHE – Lotto funzionale del Sub Lotto
2.1 Tratto Fabriano-Matelica Nord
 Opere d'arte minori: opere di attraversamento
Sistemazione viabilità interferita al km 5+641
 Tombino Ø 800 mm a Pr. 0+427,70 - Relazione di calcolo

Opera LO703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 266 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

1613	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1614	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1615	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1616	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1617	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1618	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1619	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1620	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1621	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1622	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1623	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1624	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1625	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1626	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1627	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1628	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1629	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1630	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1631	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1632	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1633	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1634	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1635	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1636	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1637	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1638	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1639	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1640	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1641	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1642	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table: Load Case Definitions, Part 1 of 2

Case	Type	InitialCond	ModalCase	BaseCase	DesTypeOpt	DesignType	AutoType
STATICA	LinStatic	Zero			Prog Det	DEAD	None
SISMICA	LinStatic	Zero			Prog Det	DEAD	None
LOAD	LinStatic	Zero			Prog Det	DEAD	None
SOVRAC	LinStatic	Zero			Prog Det	DEAD	None

Table: Load Case Definitions, Part 2 of 2

Case	RunCase	CaseStatus	GUID	Notes
STATICA	Yes	Finished		
SISMICA	Yes	Finished		
LOAD	Yes	Finished		
SOVRAC	Yes	Finished		

Table: Load Pattern Definitions

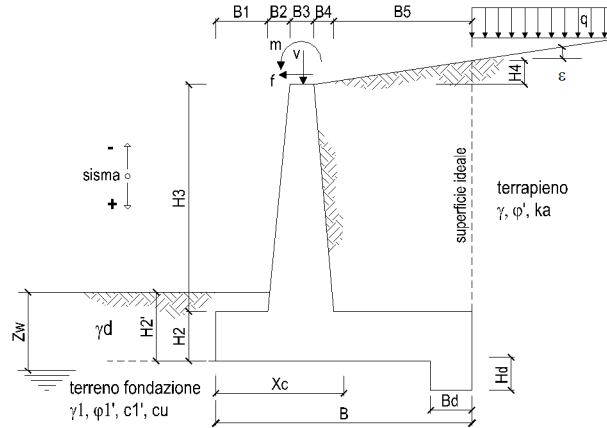
LoadPat	DesignType	SelfWtMult	AutoLoad	GUID	Notes
STATICA	DEAD	0.000000			
SISMICA	DEAD	0.000000			
LOAD	DEAD	1.000000			
SOVRAC	DEAD	0.000000			

Table: Material Properties 03b - Concrete Data

Material	Fc KN/m2	ItWtConc	SSCurveOpt	SSHysType	FAngle Degrees	DAngle Degrees
CONC	27579.00	No User Defined		Kinematic	0.000	0.000

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 267 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

ALLEGATO 2 : TABULATI DI CALCOLO DEL MURO DI SOSTEGNO SU FONDAZIONE DIRETTA



OPERA Hmuro = 1.90 m

DATI DI PROGETTO:

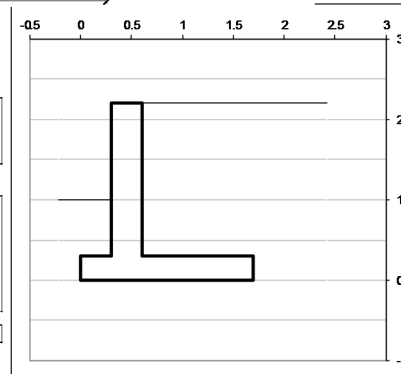
Geometria del Muro

Elevazione	H3 =	1.90 (m)
Aggetto Valle	B2 =	0.00 (m)
Spessore del Muro in Testa	B3 =	0.30 (m)
Aggetto monte	B4 =	0.00 (m)

Geometria della Fondazione

Larghezza Fondazione	B =	1.70 (m)
Spessore Fondazione	H2 =	0.30 (m)
Suola Lato Valle	B1 =	0.30 (m)
Suola Lato Monte	B5 =	1.10 (m)
Altezza dente	Hd =	0.00 (m)
Larghezza dente	Bd =	0.00 (m)
Mezzena Sezione	Xc =	0.85 (m)

Peso Specifico del Calcestruzzo	gamma_s =	25.00 (kN/m³)
---------------------------------	-----------	---------------



Dati Geotecnici

Dati Terrapieno	Angolo di attrito del terrapieno	phi' =	35.00 (°)	
	Peso Unità di Volume del terrapieno	gamma =	20.00 (kN/m³)	
	Angolo di Inclinazione Piano di Campagna	epsilon =	0.00 (°)	
	Angolo di attrito terreno-paramento	delta_muro =	17.50 (°)	
	Angolo di attrito terreno-superficie ideale	delta_sup_id =	17.50 (°)	
Dati Terreno Fondazione	Condizioni	<input checked="" type="radio"/> drenate <input type="radio"/> Non Drenate		
	Coesione Terreno di Fondazione	c1' =	10.00 (kPa)	
	Angolo di attrito del Terreno di Fondazione	phi1' =	24.50 (°)	
	Peso Unità di Volume del Terreno di Fondazione	gamma1 =	19.00 (kN/m³)	
	Peso Unità di Volume del Rinterro della Fondazione	gamma_d =	20.00 (kN/m³)	
	Profondità Piano di Posa della Fondazione	H2' =	1.00 (m)	
	Profondità Falda	Zw =	100.00 (m)	
	Profondità "Significativa" (n.b.: consigliata H = 2'B)	Hs =	3.40 (m)	
	Modulo di deformazione	E =	30000 (kN/m²)	
	Dati Sismici	Accelerazione sismica	a/g =	0.275 (-)
Coefficiente Categoria di Suolo		S =	1.25 (-)	
Il muro è libero di ruotare al piede? (si/no)		<input checked="" type="radio"/> si <input type="radio"/> no		
Il muro ammette spostamenti? (si/no)		<input checked="" type="radio"/> si <input type="radio"/> no		r = 2
Coefficienti di Spinta	coefficiente sismico orizzontale	kh =	0.1719 (-)	
	coefficiente sismico verticale	kv =	0.0859 (-)	
	Coeff. di Spinta Attiva sulla superficie ideale	ka =	0.25 (-)	0.246
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale sisma +	kas+ =	0.35 (-)	0.347
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale sisma -	kas- =	0.37 (-)	0.370
	Coeff. Di Spinta Passiva in Fondazione	kp =	2.42 (-)	2.417
	Coeff. Di Spinta Passiva Sismica in Fondazione sisma +	kps+ =	2.15 (-)	2.152
	Coeff. Di Spinta Passiva Sismica in Fondazione sisma -	kps- =	2.10 (-)	2.097

Carichi Agenti

Condizioni Statiche	Sovraccarico Accidentale in condizioni statiche	q =	28.00 (kN/m²)
	Forza Orizzontale in Testa in condizioni statiche	f =	0.00 (kN/m)
	Forza Verticale in Testa in condizioni statiche	v =	0.00 (kN/m)
	Momento in Testa in condizioni statiche	m =	0.00 (kNm/m)
Condizioni Sismiche	Sovraccarico Accidentale in condizioni sismiche	qs =	8.00 (kN/m²)
	Forza Orizzontale in Testa in condizioni sismiche	fs =	0.00 (kN/m)
	Forza Verticale in Testa in condizioni sismiche	vs =	0.00 (kN/m)
	Momento in Testa in condizioni sismiche	ms =	0.00 (kNm/m)

coefficienti parziali

SLU	caso	azioni		proprietà del terreno		
		permanenti sfavorevoli	temporane e variabili sfavorevoli	tan φ'	c'	c _u
●	caso A1+M1	1.40	1.50	1.00	1.00	1.00
○	caso A2+M2	1.00	1.30	1.25	1.25	1.40
SLD	—	1.00	1.00	1.25	1.25	1.40
def.	—	1.00	1.00	1.00	1.00	1.00

Dati Geotecnici (usati per verifiche di stabilità e SLU)

Dati	Descrizione	Simbolo	Valore	Unità	Valori di Normativa	
Dati Terrapieno	Angolo di attrito del terrapieno	φ'	=	35.00	(°)	
	Peso Unità di Volume del terrapieno	γ'	=	28.00	(kN/m ³)	
	Angolo di Inclinazione Piano di Campagna	ε	=	0.00	(°)	
	Angolo di attrito terreno-paramento	δ _{muro}	=	17.50	(°)	
	Angolo di attrito terreno-superficie ideale	δ _{sup id}	=	17.50	(°)	
Dati Terreno Fondazione	Coesione Terreno di Fondazione	c1'	=	10.00	(kN/m ²)	
	Angolo di attrito del Terreno di Fondazione	φ ₁ '	=	24.50	(°)	
	Peso Unità di Volume del Terreno di Fondazione	γ ₁	=	19.00	(kN/m ³)	
	Peso Unità di Volume del Rinterro della Fondazione	γ _d	=	20.00	(kN/m ³)	
	Profondità Piano di Posa della Fondazione	H2'	=	1.00	(m)	
	Profondità Falda	Zw	=	100.00	(m)	
Coefficienti di Spinta	Coeff. di Spinta Attiva sulla superficie ideale	ka	=	0.25	(-)	0.246
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale	kas+	=	0.35	(-)	0.347
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale	kas-	=	0.37	(-)	0.370
	Coeff. Di Spinta Passiva in Fondazione	kp	=	2.42	(-)	2.417
	Coeff. Di Spinta Passiva Sismica in Fondazione	kps+	=	2.15	(-)	2.152
	Coeff. Di Spinta Passiva Sismica in Fondazione	kps-	=	2.10	(-)	2.097

Carichi Agenti (usati per verifiche di stabilità e allo SLU)

Condizioni	Descrizione	Simbolo	Valore	Unità
Statiche	Sovraccarico Accidentale in condizioni statiche	q	=	42.00 (kN/m ²)
	Forza Orizzontale in Testa in condizioni statiche	f	=	0.00 (kN/m)
	Forza Verticale in Testa in condizioni statiche	v	=	0.00 (kN/m)
	Momento in Testa in condizioni statiche	m	=	0.00 (kNm/m)
Sismiche	Sovraccarico Accidentale in condizioni sismiche	qs	=	12.00 (kN/m ²)
	Forza Orizzontale in Testa in condizioni sismiche	fs	=	0.00 (kN/m)
	Forza Verticale in Testa in condizioni sismiche	vs	=	0.00 (kN/m)
	Momento in Testa in condizioni sismiche	ms	=	0.00 (kNm/m)

VERIFICHE GEOTECNICHE

FORZE VERTICALI

- Peso del Muro (Pm)

$$\begin{aligned}
 Pm1 &= (B2 \cdot H3 \cdot \gamma_{cls}) / 2 &= & 0.00 \text{ (kN/m)} \\
 Pm2 &= (B3 \cdot H3 \cdot \gamma_{cls}) &= & 14.25 \text{ (kN/m)} \\
 Pm3 &= (B4 \cdot H3 \cdot \gamma_{cls}) / 2 &= & 0.00 \text{ (kN/m)} \\
 Pm4 &= (B \cdot H2 \cdot \gamma_{cls}) &= & 12.75 \text{ (kN/m)} \\
 Pm5 &= (Bd \cdot Hd \cdot \gamma_{cls}) &= & 0.00 \text{ (kN/m)} \\
 Pm &= Pm1 + Pm2 + Pm3 + Pm4 + Pm5 &= & 27.00 \text{ (kN/m)}
 \end{aligned}$$

- Peso del terreno sulla scarpa di monte del muro (Pt)

$$\begin{aligned}
 Pt1 &= (B5 \cdot H3 \cdot \gamma) &= & 41.80 \text{ (kN/m)} \\
 Pt2 &= (0,5 \cdot (B4 + B5) \cdot H4 \cdot \gamma) &= & 0.00 \text{ (kN/m)} \\
 Pt3 &= (B4 \cdot H3 \cdot \gamma) / 2 &= & 0.00 \text{ (kN/m)} \\
 Pt &= Pt1 + Pt2 + Pt3 &= & 41.80 \text{ (kN/m)}
 \end{aligned}$$

MOMENTI DELLE FORZE VERT. RISPETTO AL PIEDE DI VALLE DEL MURO

- Muro (Mm)

$$\begin{aligned}
 Mm1 &= Pm1 \cdot (B1 + 2/3 \cdot B2) &= & 0.00 \text{ (kNm/m)} \\
 Mm2 &= Pm2 \cdot (B1 + B2 + 0,5 \cdot B3) &= & 6.41 \text{ (kNm/m)} \\
 Mm3 &= Pm3 \cdot (B1 + B2 + B3 + 1/3 \cdot B4) &= & 0.00 \text{ (kNm/m)} \\
 Mm4 &= Pm4 \cdot (B/2) &= & 10.84 \text{ (kNm/m)} \\
 Mm5 &= Pm5 \cdot (B - Bd/2) &= & 0.00 \text{ (kNm/m)} \\
 Mm &= Mm1 + Mm2 + Mm3 + Mm4 + Mm5 &= & 17.25 \text{ (kNm/m)}
 \end{aligned}$$

- Terrapieno a tergo del muro

$$\begin{aligned}
 Mt1 &= Pt1 \cdot (B1 + B2 + B3 + B4 + 0,5 \cdot B5) &= & 48.07 \text{ (kNm/m)} \\
 Mt2 &= Pt2 \cdot (B1 + B2 + B3 + 2/3 \cdot (B4 + B5)) &= & 0.00 \text{ (kNm/m)} \\
 Mt3 &= Pt3 \cdot (B1 + B2 + B3 + 2/3 \cdot B4) &= & 0.00 \text{ (kNm/m)} \\
 Mt &= Mt1 + Mt2 + Mt3 &= & 48.07 \text{ (kNm/m)}
 \end{aligned}$$

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	269 di 296

CONDIZIONE STATICA (SLU A1-M1)
SPINTE DEL TERRENO E DEL SOVRACCARICO

- Spinta totale condizione statica

$$St = 0,5 \cdot \gamma \cdot (H2+H3+H4+Hd)^2 \cdot ka = 16.68 \text{ (kN/m)}$$

$$Sq = q \cdot (H2+H3+H4+Hd) \cdot ka = 22.74 \text{ (kN/m)}$$

- Componente orizzontale condizione statica

$$Sth = St \cdot \cos \delta = 15.91 \text{ (kN/m)}$$

$$Sqh = Sq \cdot \cos \delta = 21.69 \text{ (kN/m)}$$

- Componente verticale condizione statica

$$Stv = St \cdot \sin \delta = 5.01 \text{ (kN/m)}$$

$$Sqv = Sq \cdot \sin \delta = 6.84 \text{ (kN/m)}$$

- Spinta passiva sul dente

$$Sp = \frac{1}{2} \cdot \gamma_1 \cdot Hd^2 \cdot kp + (2 \cdot c_1 \cdot kp^{0.5} + \gamma_1 \cdot kp \cdot H2) \cdot Hd = 0.00 \text{ (kN/m)}$$

MOMENTI DELLA SPINTA DEL TERRENO E DEL SOVRACCARICO

- Condizione statica

$$MSt1 = St \cdot h \cdot ((H2+H3+H4+Hd)/3 - Hd) = 11.66 \text{ (kNm)}$$

$$MSt2 = St \cdot v \cdot B = 8.53 \text{ (kNm)}$$

$$MSq1 = Sq \cdot h \cdot ((H2+H3+H4+Hd)/2 - Hd) = 23.86 \text{ (kNm)}$$

$$MSq2 = Sq \cdot v \cdot B = 11.63 \text{ (kNm)}$$

$$MSp = \gamma_1 \cdot Hd^3 \cdot kp / 3 + (2 \cdot c_1 \cdot kp \cdot 0.5 + \gamma_1 \cdot kp \cdot H2) \cdot Hd^2 / 2 = 0.00 \text{ (kNm)}$$

MOMENTI DOVUTI ALLE FORZE ESTERNE

$$Mfext1 = m = 0.00 \text{ (kNm/m)}$$

$$Mfext2 = f \cdot (H3 + H2) = 0.00 \text{ (kNm/m)}$$

$$Mfext3 = v \cdot (B1 + B2 + B3/2) = 0.00 \text{ (kNm/m)}$$

VERIFICA ALLO SCORRIMENTO

Risultante forze verticali (N)

$$N = Pm + Pt + v + Stv + Sqv = 80.65 \text{ (kN/m)}$$

Risultante forze orizzontali (T)

$$T = Sth + Sqh + f = 37.59 \text{ (kN/m)}$$

Coefficiente di attrito alla base (f)

$$f = \tan \phi_1' = 0.46 \text{ (-)}$$

$$Fs = (N \cdot f + c_1 \cdot B3 + Sp) / T = 1.43 \text{ (-)}$$

VERIFICA AL RIBALTAMENTO

Momento stabilizzante (Ms)

$$Ms = Mm + Mt + MSt2 + MSq2 + Mfext3 = 85.47 \text{ (kNm/m)}$$

Momento ribaltante (Mr)

$$Mr = MSt1 + MSq1 + Mfext1 + Mfext2 + MSp = 35.52 \text{ (kNm/m)}$$

$$Fr = Ms / Mr = 2.41 \text{ (-)}$$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 270 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

VERIFICA DELLA FONDAZIONE

Risultante forze verticali (N)			
$N = P_m + P_t + v + St_v + S_{q_v}$	=	80.65	(kN/m)
Risultante forze orizzontali (T)			
$T = S_{t_h} + S_{q_h} + f - S_p$	=	37.59	(kN/m)
Risultante dei momenti rispetto al piede di valle (MM)			
$MM = M_s - M_r$	=	49.95	(kNm/m)
Momento rispetto al baricentro della fondazione (M)			
$M = X_c * N - MM$	=	18.61	(kNm/m)

Formula Generale per il Calcolo del Carico Limite Unitario (Brinch-Hansen, 1970)

Fondazione Nastriforme

$$q_{lim} = c' * N_c * i_c + q_0 * N_q * i_q + 0,5 * \gamma_1 * B * N_\gamma * i_\gamma$$

$c' =$	coesione terreno di fondaz.	=	10.00	(kPa)
$\phi_1' =$	angolo di attrito terreno di fondaz.	=	24.50	(°)
$\gamma_1 =$	peso unità di volume terreno fondaz.	=	19.00	(kN/m ³)
$q_0 = \gamma * d * H_2'$	sovraccarico stabilizzante	=	20.00	(kN/m ²)
$e = M / N$	eccentricità	=	0.23	(m)
$B^* = B - 2e$	larghezza equivalente	=	1.24	(m)

I valori di N_c , N_q e N_γ sono stati valutati con le espressioni suggerite da Vesic (1975)

$N_q = \tan^2(45 + \phi/2) * e^{(\pi * \tan(\phi))}$	(1 in cond. nd)	=	10.12	(-)
$N_c = (N_q - 1) / \tan(\phi)$	($2 + \pi$ in cond. nd)	=	20.01	(-)
$N_\gamma = 2 * (N_q + 1) * \tan(\phi)$	(0 in cond. nd)	=	10.13	(-)

I valori di i_c , i_q e i_γ sono stati valutati con le espressioni suggerite da Vesic (1975)

$i_q = (1 - T / (N + B * c' * \cot(\phi)))^m$	(1 in cond. nd)	=	0.42	(-)
$i_c = i_q - (1 - i_q) / (N_q - 1)$		=	0.36	(-)
$i_\gamma = (1 - T / (N + B * c' * \cot(\phi)))^{m+1}$		=	0.28	(-)

(fondazione nastriforme $m = 2$)

q_{lim}	(carico limite unitario)	=	191.04	(kN/m ²)
$F = q_{lim} * B^* / N$		=	2.93	(-)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 271 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CALCOLI STATICI - Verifica allo Stato Limite Ultimo

CARATTERISTICHE DEI MATERIALI

Calcestruzzo

R_{ck} = 40 (MPa)
 $\gamma_c = 1.9$
 $f_{cd} = R_{ck} / \gamma_{m,c} = 21.05$ (MPa)

Copriferro

c = 5.60 (cm)

Acciaio

tipo di acciaio B450C
 $f_{yk} = 450$ (MPa)
 $\gamma_E = 1.00$
 $\gamma_S = 1.15$
 $f_{yd} = f_{yk} / \gamma_S / \gamma_E = 391.30$ (MPa)
 $E_s = 210000$ (MPa)
 $\epsilon_{ys} = 0.19\%$
 $\epsilon_{uk} = 3.000\%$
 $\epsilon_{ad} = 2.700\%$

CALCOLO SOLLECITAZIONI SOLETTA DI FONDAZIONE

Reazione del terreno

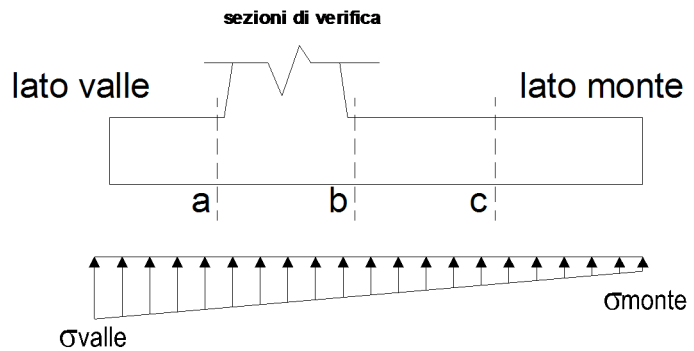
$\sigma_{valle} = N / A + M / W_{gg}$

$\sigma_{monte} = N / A - M / W_{gg}$

$A = 1.0 \cdot B = 1.70$ (m²)

$W_{gg} = 1.0 \cdot B^2 / 6 = 0.48$ (m³)

caso	N	M	σ_{valle}	σ_{monte}
	[kN]	[kNm]	[kN/m ²]	[kN/m ²]
statico	80.65	18.61	86.07	8.81

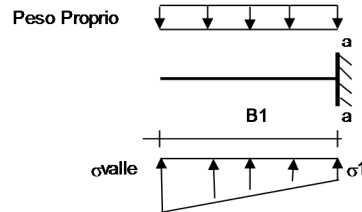


Mensola Lato Valle

Peso Proprio. PP = 7.50 (kN/m)

$M_a = \sigma_1 \cdot B^2 / 2 + (\sigma_{valle} - \sigma_1) \cdot B^2 / 3 - PP \cdot B^2 / 2 \cdot (1 \pm kv)$

caso	σ_{valle}	σ_1	M _a	T _a
	[kN/m ²]	[kN/m ²]	[kNm]	[kN]
statico	86.07	72.44	3.33	21.53



Mensola Lato Monte

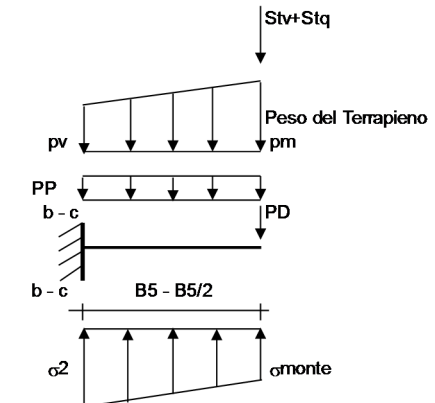
PP = 7.50 (kN/m²)
 PD = 0.00 (kN/m) peso proprio soletta fondazione
 peso proprio dente

p_m = 53.20 (kN/m²)
 p_{vb} = 53.20 (kN/m²)
 p_{vc} = 53.20 (kN/m²)

$M_b = (\sigma_{monte} - (p_{vb} + PP) \cdot (1 \pm kv)) \cdot B^2 / 2 + (\sigma_{2b} - \sigma_{monte}) \cdot B^2 / 6 - (p_m - p_{vb}) \cdot (1 \pm kv) \cdot B^2 / 3 + (St_v + Sq_v) \cdot B^2 \cdot PD \cdot (1 \pm kv) \cdot (B_5 - Bd / 2) - PD \cdot kh \cdot (H_d + H_2 / 2) + M_{sp} + Sp \cdot H_2 / 2$

$M_c = (\sigma_{monte} - (p_{vc} + PP) \cdot (1 \pm kv)) \cdot (B_5 / 2)^2 / 2 + (\sigma_{2c} - \sigma_{monte}) \cdot (B_5 / 2)^2 / 6 - (p_m - p_{vc}) \cdot (1 \pm kv) \cdot (B_5 / 2)^2 / 3 + (St_v + Sq_v) \cdot (B_5 / 2) \cdot PD \cdot (1 \pm kv) \cdot (B_5 / 2 - Bd / 2) - PD \cdot kh \cdot (H_d + H_2 / 2) + M_{sp} + Sp \cdot H_2 / 2$

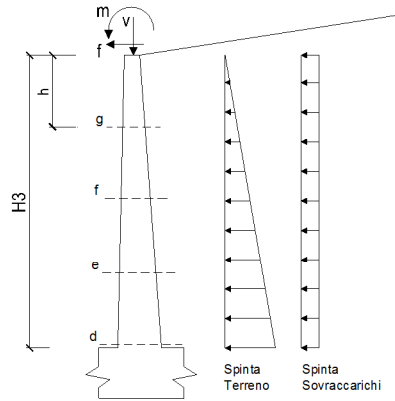
caso	σ_{monte}	σ_{2b}	M _b	σ_{2c}	M _c	T _b
	[kN/m ²]	[kN/m ²]	[kNm]	[kN/m ²]	[kNm]	[kN]
statico	8.81	58.80	-34.35	33.81	-13.11	-41.43



Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 272 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CALCOLO SOLLECITAZIONI PARAMENTO VERTICALE DEL MURO

Azioni sulla parete e Sezioni di Calcolo



Dati Sismici	Accelerazione sismica	a_y/g	=	0.28	(-)	
	Categoria di suolo	S	=	1.25	(-)	
	il muro ammette spostamenti? (si/no)		<input checked="" type="radio"/> si	<input type="radio"/> no	r = 2	
	coefficiente sismico orizzontale	kh	=	0.1719	(-)	
	coefficiente sismico verticale	kv	=	0.0859	(-)	
Coefficienti di Spinta	Coeff. di Spinta Attiva sulla parete	ka	=	0.25	(-)	0.246
	componente orizzontale	kah	=	0.235	(-)	
	componente verticale	kav	=	0.07	(-)	
	Coeff. Di Spinta Attiva Sismica sulla parete	kas+	=	0.35	(-)	0.347
	componente orizzontale	kash+	=	0.33	(-)	
	componente verticale	kasv+	=	0.10	(-)	
Coeff. Di Spinta Attiva Sismica sulla parete	kas-	=	0.37	(-)	0.370	
	componente orizzontale	kash-	=	0.35	(-)	
	componente verticale	kasv-	=	0.11	(-)	

$$M_t = \frac{1}{2} K_{a_{orizz.}} \cdot \gamma \cdot (1 \pm kv) \cdot h^2 \cdot h/3 \quad \text{o} \quad \frac{1}{2} K_{a_{orizz.}} \cdot \gamma \cdot (1 \pm kv) \cdot h^2 \cdot h/2 \quad (\text{con sisma})$$

$$M_q = \frac{1}{2} K_{a_{orizz.}} \cdot q \cdot h^2$$

$$M_{ext} = m \cdot h$$

$$M_{inerzia} = \sum P m_i \cdot b_i \cdot kh \quad (\text{solo con sisma})$$

condizione statica

$$N_t = \frac{1}{2} K_{a_{vert.}} \cdot \gamma \cdot (1 \pm kv) \cdot h^2$$

$$N_q = K_{a_{vert.}} \cdot q \cdot h$$

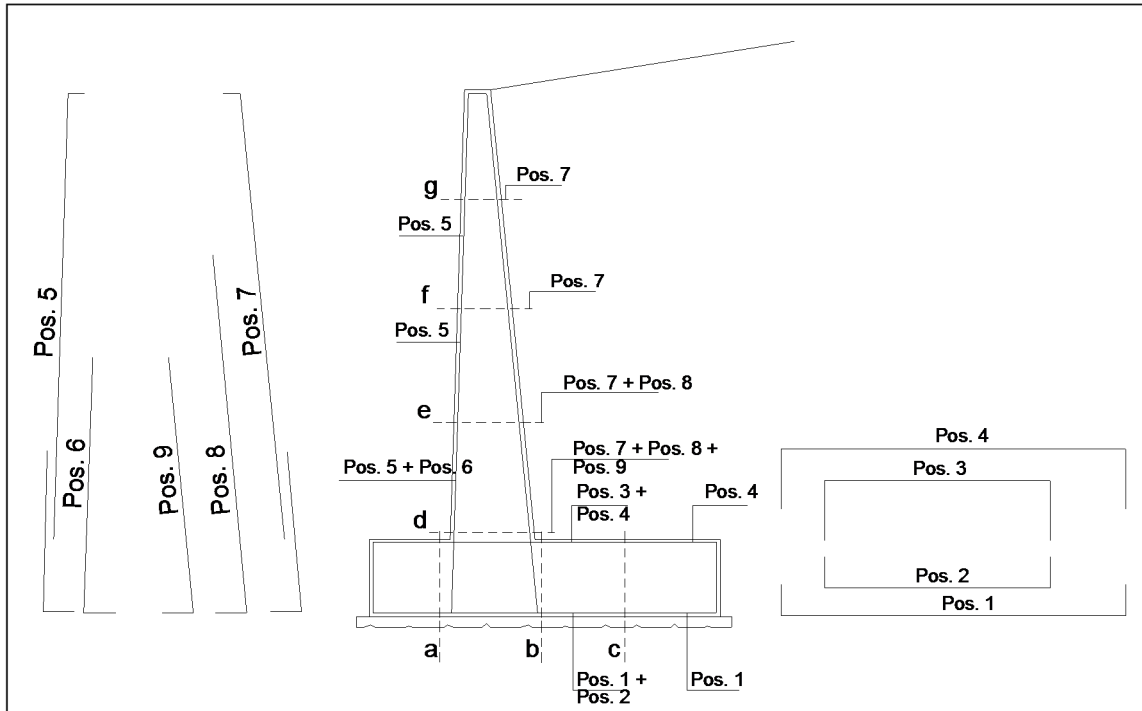
$$N_{ext} = v$$

$$N_{pp+inerzia} = \sum P m_i \cdot (1 \pm kv)$$

sezione	h	Tt	Tq	T _{ext}	T _{tot}
	[m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]
d-d	1.90	11.86	18.73	0.00	30.59
e-e	1.43	6.67	14.05	0.00	20.72
f-f	0.95	2.97	9.37	0.00	12.33
g-g	0.48	0.74	4.68	0.00	5.42

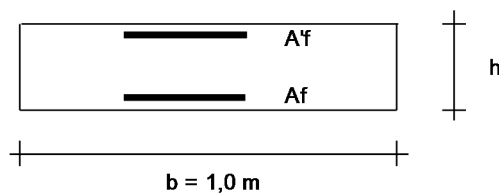
condizione statica

sezione	h	Mt	Mq	M _{ext}	M _{tot}	Nt	Nq	N _{ext}	N _{pp}	N _{tot}
	[m]	[kNm/m]	[kNm/m]	[kNm/m]	[kNm/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]
d-d	1.90	7.51	17.80	0.00	25.31	3.74	5.91	0.00	14.25	23.90
e-e	1.43	3.17	10.01	0.00	13.18	2.10	4.43	0.00	10.69	17.22
f-f	0.95	0.94	4.45	0.00	5.39	0.94	2.95	0.00	7.13	11.01
g-g	0.48	0.12	1.11	0.00	1.23	0.23	1.48	0.00	3.56	5.27

SCHEMA DELLE ARMATURE

ARMATURE

pos	n°/ml	φ	pos	n°/ml	φ
1	5.0	12	5	5.0	12
2	5.0	0	6	0.0	0
3	5.0	0	7	5.0	12
4	5.0	12	8	0.0	0
			9	5.0	0

Calcola

VERIFICHE


a-a pos 1-2-3-4
 b-b pos 1-2-3-4
 c-c pos 1-4
 d-d pos 5-6-7-8-9
 e-e pos 5-7-8
 f-f pos 5-7
 g-g pos 5-7

Sez.	M (kNm)	N (kN)	h (m)	Af (cm ²)	Af' (cm ²)	Mu (kNm)
(-)						
a - a	3.33	0.00	0.30	5.65	5.65	62.19
b - b	-34.35	0.00	0.30	5.65	5.65	62.19
c - c	-13.11	0.00	0.30	5.65	5.65	62.19
d - d	25.31	23.90	0.30	5.65	5.65	64.71
e - e	13.18	17.22	0.30	5.65	5.65	64.01
f - f	5.39	11.01	0.30	5.65	5.65	63.35
g - g	1.23	5.27	0.30	5.65	5.65	62.75

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 274 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

coefficienti parziali

	caso	azioni		proprietà del terreno			
		permanenti sfavorevoli	temporane e variabili sfavorevoli	tan ϕ'	c'	c _u	
SLU	○	caso A1+M1	1.40	1.50	1.00	1.00	1.00
	●	caso A2+M2	1.00	1.30	1.25	1.25	1.40
SLD	○	-	1.00	1.00	1.25	1.25	1.40
def.	○	-	1.00	1.00	1.00	1.00	1.00

Dati Geotecnici (usati per verifiche di stabilità e SLU)

Dati Terrapieno	Angolo di attrito del terrapieno	ϕ'	=	29.26	(°)	
	Peso Unità di Volume del terrapieno	γ'	=	20.00	(kN/m ³)	
	Angolo di Inclinazione Piano di Campagna	ε	=	0.00	(°)	
	Angolo di attrito terreno-paramento	δ_{muro}	=	14.63	(°)	
	Angolo di attrito terreno-superficie ideale	$\delta_{sup id}$	=	14.63	(°)	
Dati Terreno Fondazione	Coesione Terreno di Fondazione	c1'	=	8.00	(kN/m ²)	
	Angolo di attrito del Terreno di Fondazione	ϕ_1'	=	20.03	(°)	
	Peso Unità di Volume del Terreno di Fondazione	γ_1	=	19.00	(kN/m ³)	
	Peso Unità di Volume del Rinterro della Fondazione	γ_d	=	20.00	(kN/m ³)	
	Profondità Piano di Posa della Fondazione	H2'	=	1.00	(m)	
Profondità Falda	Zw	=	100.00	(m)		
Coefficienti di Spinta	Coeff. di Spinta Attiva sulla superficie ideale	ka	=	0.31	(-)	0.310
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale	kas+	=	0.43	(-)	0.425
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale	kas-	=	0.45	(-)	0.452
	Coeff. Di Spinta Passiva in Fondazione	kp	=	2.04	(-)	2.042
	Coeff. Di Spinta Passiva Sismica in Fondazione	kps+	=	1.79	(-)	1.792
	Coeff. Di Spinta Passiva Sismica in Fondazione	kps-	=	1.74	(-)	1.737

 Valori di
Normativa

Carichi Agenti (usati per verifiche di stabilità e allo SLU)

Condizioni Statiche	Sovraccarico Accidentale in condizioni statiche	q	=	36.40	(kN/m ²)
	Forza Orizzontale in Testa in condizioni statiche	f	=	0.00	(kN/m)
	Forza Verticale in Testa in condizioni statiche	v	=	0.00	(kN/m)
	Momento in Testa in condizioni statiche	m	=	0.00	(kNm/m)
Condizioni Sismiche	Sovraccarico Accidentale in condizioni sismiche	qs	=	10.40	(kN/m ²)
	Forza Orizzontale in Testa in condizioni sismiche	fs	=	0.00	(kN/m)
	Forza Verticale in Testa in condizioni sismiche	vs	=	0.00	(kN/m)
	Momento in Testa in condizioni sismiche	ms	=	0.00	(kNm/m)

VERIFICHE GEOTECNICHE
FORZE VERTICALI

- Peso del Muro (Pm)

$$\begin{aligned}
 Pm1 &= (B2 \cdot H3 \cdot \gamma_{cls})/2 &= & 0.00 \text{ (kN/m)} \\
 Pm2 &= (B3 \cdot H3 \cdot \gamma_{cls}) &= & 14.25 \text{ (kN/m)} \\
 Pm3 &= (B4 \cdot H3 \cdot \gamma_{cls})/2 &= & 0.00 \text{ (kN/m)} \\
 Pm4 &= (B \cdot H2 \cdot \gamma_{cls}) &= & 12.75 \text{ (kN/m)} \\
 Pm5 &= (Bd \cdot Hd \cdot \gamma_{cls}) &= & 0.00 \text{ (kN/m)} \\
 Pm &= Pm1 + Pm2 + Pm3 + Pm4 + Pm5 &= & 27.00 \text{ (kN/m)}
 \end{aligned}$$

- Peso del terreno sulla scarpa di monte del muro (Pt)

$$\begin{aligned}
 Pt1 &= (B5 \cdot H3 \cdot \gamma) &= & 41.80 \text{ (kN/m)} \\
 Pt2 &= (0,5 \cdot (B4 + B5) \cdot H4 \cdot \gamma) &= & 0.00 \text{ (kN/m)} \\
 Pt3 &= (B4 \cdot H3 \cdot \gamma)/2 &= & 0.00 \text{ (kN/m)} \\
 Pt &= Pt1 + Pt2 + Pt3 &= & 41.80 \text{ (kN/m)}
 \end{aligned}$$

MOMENTI DELLE FORZE VERT. RISPETTO AL PIEDE DI VALLE DEL MURO

- Muro (Mm)

$$\begin{aligned}
 Mm1 &= Pm1 \cdot (B1 + 2/3 B2) &= & 0.00 \text{ (kNm/m)} \\
 Mm2 &= Pm2 \cdot (B1 + B2 + 0,5 \cdot B3) &= & 6.41 \text{ (kNm/m)} \\
 Mm3 &= Pm3 \cdot (B1 + B2 + B3 + 1/3 B4) &= & 0.00 \text{ (kNm/m)} \\
 Mm4 &= Pm4 \cdot (B/2) &= & 10.84 \text{ (kNm/m)} \\
 Mm5 &= Pm5 \cdot (B - Bd/2) &= & 0.00 \text{ (kNm/m)} \\
 Mm &= Mm1 + Mm2 + Mm3 + Mm4 + Mm5 &= & 17.25 \text{ (kNm/m)}
 \end{aligned}$$

- Terrapieno a tergo del muro

$$\begin{aligned}
 Mt1 &= Pt1 \cdot (B1 + B2 + B3 + B4 + 0,5 \cdot B5) &= & 48.07 \text{ (kNm/m)} \\
 Mt2 &= Pt2 \cdot (B1 + B2 + B3 + 2/3 \cdot (B4 + B5)) &= & 0.00 \text{ (kNm/m)} \\
 Mt3 &= Pt3 \cdot (B1 + B2 + B3 + 2/3 \cdot B4) &= & 0.00 \text{ (kNm/m)} \\
 Mt &= Mt1 + Mt2 + Mt3 &= & 48.07 \text{ (kNm/m)}
 \end{aligned}$$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 275 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CONDIZIONE STATICA (SLU A2-M2)
SPINTE DEL TERRENO E DEL SOVRACCARICO

- Spinta totale condizione statica

$$St = 0,5 \cdot \gamma \cdot (H2+H3+H4+Hd)^2 \cdot ka = 15.03 \quad (\text{kN/m})$$

$$Sq = q \cdot (H2+H3+H4+Hd) \cdot ka = 24.86 \quad (\text{kN/m})$$

- Componente orizzontale condizione statica

$$Sth = St \cdot \cos \delta = 14.54 \quad (\text{kN/m})$$

$$Sqh = Sq \cdot \cos \delta = 24.06 \quad (\text{kN/m})$$

- Componente verticale condizione statica

$$Stv = St \cdot \sin \delta = 3.80 \quad (\text{kN/m})$$

$$Sqv = Sq \cdot \sin \delta = 6.28 \quad (\text{kN/m})$$

- Spinta passiva sul dente

$$Sp = \frac{1}{2} \cdot \gamma_1 \cdot Hd^2 \cdot kp + (2 \cdot c_1 \cdot kp^{0.5} + \gamma_1 \cdot kp \cdot H2) \cdot Hd = 0.00 \quad (\text{kN/m})$$

MOMENTI DELLA SPINTA DEL TERRENO E DEL SOVRACCARICO

- Condizione statica

$$MSt1 = Sth \cdot (H2+H3+H4+Hd) / 3 - Hd = 10.66 \quad (\text{kN/m})$$

$$MSt2 = Stv \cdot B = 6.45 \quad (\text{kN/m})$$

$$MSq1 = Sqh \cdot (H2+H3+H4+Hd) / 2 - Hd = 26.46 \quad (\text{kN/m})$$

$$MSq2 = Sqv \cdot B = 10.67 \quad (\text{kN/m})$$

$$MSp = \gamma_1 \cdot Hd^3 \cdot kp / 3 + (2 \cdot c_1 \cdot kp^{0.5} + \gamma_1 \cdot kp \cdot H2) \cdot Hd^2 / 2 = 0.00 \quad (\text{kN/m})$$

MOMENTI DOVUTI ALLE FORZE ESTERNE

$$Mfext1 = m = 0.00 \quad (\text{kNm/m})$$

$$Mfext2 = f \cdot (H3 + H2) = 0.00 \quad (\text{kNm/m})$$

$$Mfext3 = v \cdot (B1 + B2 + B3/2) = 0.00 \quad (\text{kNm/m})$$

VERIFICA ALLO SCORRIMENTO

Risultante forze verticali (N)

$$N = Pm + Pt + v + Stv + Sqv = 78.87 \quad (\text{kN/m})$$

Risultante forze orizzontali (T)

$$T = Sth + Sqh + f = 38.60 \quad (\text{kN/m})$$

Coefficiente di attrito alla base (f)

$$f = \tan \phi_1' = 0.36 \quad (-)$$

$$Fs = (N \cdot f + c_1 \cdot B3 + Sp) / T = 1.19 \quad (-)$$

VERIFICA AL RIBALTAMENTO

Momento stabilizzante (Ms)

$$Ms = Mm + Mt + MSt2 + MSq2 + Mfext3 = 82.45 \quad (\text{kNm/m})$$

Momento ribaltante (Mr)

$$Mr = MSt1 + MSq1 + Mfext1 + Mfext2 + MSp = 37.13 \quad (\text{kNm/m})$$

$$Fr = Ms / Mr = 2.22 \quad (-)$$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 276 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

VERIFICA DELLA FONDAZIONE

Risultante forze verticali (N)
 $N = P_m + P_t + v + St_v + S_{qv} = 78.87 \text{ (kN/m)}$

Risultante forze orizzontali (T)
 $T = S_{th} + S_{qh} + f - Sp = 38.60 \text{ (kN/m)}$

Risultante dei momenti rispetto al piede di valle (MM)
 $MM = M_s - M_r = 45.32 \text{ (kNm/m)}$

Momento rispetto al baricentro della fondazione (M)
 $M = X_c \cdot N - MM = 21.72 \text{ (kNm/m)}$

Formula Generale per il Calcolo del Carico Limite Unitario (Brinch-Hansen, 1970)

Fondazione Nastriforme

$$q_{lim} = c \cdot N_c \cdot i_c + q_0 \cdot N_q \cdot i_q + 0,5 \cdot \gamma_1 \cdot B \cdot N_\gamma \cdot i_\gamma$$

c_1'	coesione terreno di fondaz.	=	8.00	(kPa)
ϕ_1'	angolo di attrito terreno di fondaz.	=	20.03	(°)
γ_1	peso unità di volume terreno fondaz.	=	19.00	(kN/m ³)
$q_0 = \gamma \cdot d \cdot H_2'$	sovraccarico stabilizzante	=	20.00	(kN/m ²)
$e = M / N$	eccentricità	=	0.28	(m)
$B^* = B - 2e$	larghezza equivalente	=	1.15	(m)

 I valori di N_c , N_q e N_γ sono stati valutati con le espressioni suggerite da Vesic (1975)

$N_q = \text{tg}^2(45 + \phi/2) \cdot e^{(\pi \cdot \text{tg}(\phi))}$	(1 in cond. nd)	=	6.42	(-)
$N_c = (N_q - 1) / \text{tg}(\phi)$	(2+ π in cond. nd)	=	14.86	(-)
$N_\gamma = 2 \cdot (N_q + 1) \cdot \text{tg}(\phi)$	(0 in cond. nd)	=	5.41	(-)

 I valori di i_c , i_q e i_γ sono stati valutati con le espressioni suggerite da Vesic (1975)

$i_q = (1 - T / (N + B^* \cdot c \cdot \text{cotg}(\phi)))^m$	(1 in cond. nd)	=	0.40	(-)
$i_c = i_q - (1 - i_q) / (N_q - 1)$		=	0.28	(-)
$i_\gamma = (1 - T / (N + B^* \cdot c \cdot \text{cotg}(\phi)))^{m+1}$		=	0.25	(-)

 (fondazione nastriforme $m = 2$)

$$q_{lim} \text{ (carico limite unitario)} = 99.34 \text{ (kN/m}^2\text{)}$$

$$F = q_{lim} \cdot B^* / N = 1.45 \text{ (-)}$$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 277 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CALCOLI STATICI - Verifica allo Stato Limite Ultimo

CARATTERISTICHE DEI MATERIALI

Calcestruzzo

R_{ck} = 40 (MPa)
 $\gamma_c = 1.9$
 $f_{cd} = R_{ck} / \gamma_{m,c} = 21.05$ (MPa)

Copriferro

c = 6.00 (cm)

Acciaio

tipo di acciaio B450C
 $f_{yk} = 450$ (MPa)
 $\gamma_E = 1.00$
 $\gamma_S = 1.15$
 $f_{yd} = f_{yk} / \gamma_S / \gamma_E = 391.30$ (MPa)
 $E_s = 210000$ (MPa)
 $\epsilon_{ys} = 0.19\%$
 $\epsilon_{uk} = 3.000\%$
 $\epsilon_{ad} = 2.700\%$

CALCOLO SOLLECITAZIONI SOLETTA DI FONDAZIONE

Reazione del terreno

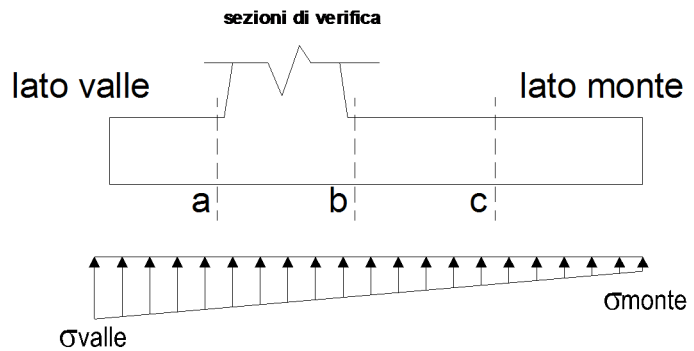
$\sigma_{valle} = N / A + M / W_{gg}$

$\sigma_{monte} = N / A - M / W_{gg}$

$A = 1.0 \cdot B = 1.70$ (m²)

$W_{gg} = 1.0 \cdot B^2 / 6 = 0.48$ (m³)

caso	N	M	σ_{valle}	σ_{monte}
	[kN]	[kNm]	[kN/m ²]	[kN/m ²]
statico	78.87	21.72	91.50	1.29

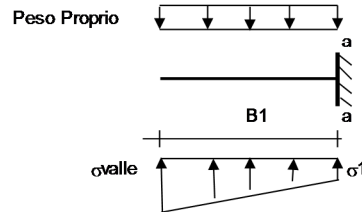


Mensola Lato Valle

Peso Proprio. PP = 7.50 (kN/m)

$M_a = \sigma_1 \cdot B^2 / 2 + (\sigma_{valle} - \sigma_1) \cdot B^2 / 3 - PP \cdot B^2 / 2 \cdot (1 \pm kv)$

caso	σ_{valle}	σ_1	M _a	T _a
	[kN/m ²]	[kN/m ²]	[kNm]	[kN]
statico	91.50	75.58	3.54	22.81



Mensola Lato Monte

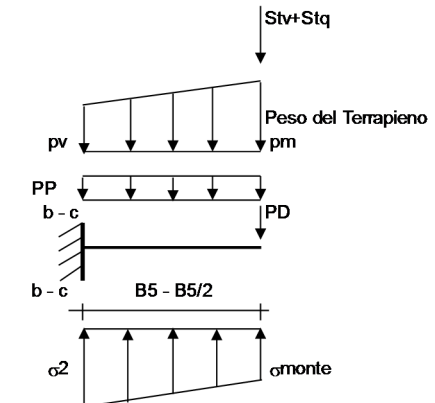
PP = 7.50 (kN/m²)
 PD = 0.00 (kN/m) peso proprio soletta fondazione
 peso proprio dente

p_m = 38.00 (kN/m²)
 p_{vb} = 38.00 (kN/m²)
 p_{vc} = 38.00 (kN/m²)

$M_b = (\sigma_{monte} - (p_{vb} + PP) \cdot (1 \pm kv)) \cdot B^2 / 2 + (\sigma_{2b} - \sigma_{monte}) \cdot B^2 / 6 - (p_m - p_{vb}) \cdot (1 \pm kv) \cdot B^2 / 3 + (S_{tv} + S_{qv}) \cdot B^2 \cdot PD \cdot (1 \pm kv) \cdot (B_5 - B_d / 2) - PD \cdot kh \cdot (H_d + H_2 / 2) + M_{sp} + Sp \cdot H_2 / 2$

$M_c = (\sigma_{monte} - (p_{vc} + PP) \cdot (1 \pm kv)) \cdot (B_5 / 2)^2 / 2 + (\sigma_{2c} - \sigma_{monte}) \cdot (B_5 / 2)^2 / 6 - (p_m - p_{vc}) \cdot (1 \pm kv) \cdot (B_5 / 2)^2 / 3 + (S_{tv} + S_{qv}) \cdot (B_5 / 2) \cdot PD \cdot (1 \pm kv) \cdot (B_5 / 2 - B_d / 2) - PD \cdot kh \cdot (H_d + H_2 / 2) + M_{sp} + Sp \cdot H_2 / 2$

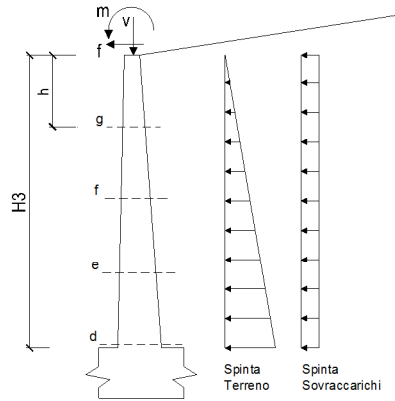
caso	σ_{monte}	σ_{2b}	M _b	σ_{2c}	M _c	T _b
	[kN/m ²]	[kN/m ²]	[kNm]	[kN/m ²]	[kNm]	[kN]
statico	1.29	59.66	-26.06	30.48	-10.76	-26.60



Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 278 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CALCOLO SOLLECITAZIONI PARAMENTO VERTICALE DEL MURO

Azioni sulla parete e Sezioni di Calcolo



Dati Sismici	Accelerazione sismica	a_g/g	=	0.28	(-)	
	Categoria di suolo	S	=	1.25	(-)	
	il muro ammette spostamenti? (si/no)	<input checked="" type="radio"/> si	<input type="radio"/> no	r = 2		
	coefficiente sismico orizzontale	kh	=	0.1719	(-)	
	coefficiente sismico verticale	kv	=	0.0859	(-)	
Coefficienti di Spinta	Coeff. di Spinta Attiva sulla parete	ka	=	0.31	(-)	0.310
	componente orizzontale	kah	=	0.300	(-)	
	componente verticale	kav	=	0.08	(-)	
	Coeff. Di Spinta Attiva Sismica sulla parete	kas+	=	0.43	(-)	0.425
	componente orizzontale	kash+	=	0.41	(-)	
	componente verticale	kasv+	=	0.11	(-)	
Coeff. Di Spinta Attiva Sismica sulla parete	kas-	=	0.45	(-)	0.452	
componente orizzontale	kash-	=	0.44	(-)		
	componente verticale	kasv-	=	0.11	(-)	

$$M_t = \frac{1}{2} K_{a_{orizz.}} \cdot \gamma \cdot (1 \pm kv) \cdot h^2 \cdot h/3 \quad \text{o} \quad \frac{1}{2} K_{a_{orizz.}} \cdot \gamma \cdot (1 \pm kv) \cdot h^2 \cdot h/2 \quad (\text{con sisma})$$

$$M_q = \frac{1}{2} K_{a_{orizz.}} \cdot q \cdot h^2$$

$$M_{ext} = m \cdot h$$

$$M_{inerzia} = \sum P m_i \cdot b_i \cdot kh \quad (\text{solo con sisma})$$

condizione statica

$$N_t = \frac{1}{2} K_{a_{vert.}} \cdot \gamma \cdot (1 \pm kv) \cdot h^2$$

$$N_q = K_{a_{vert.}} \cdot q \cdot h$$

$$N_{ext} = v$$

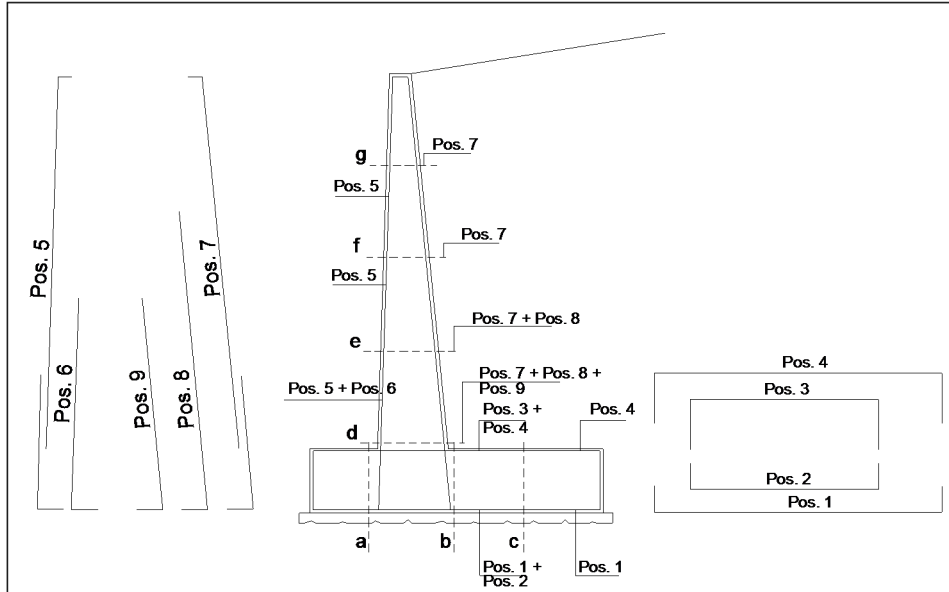
$$N_{pp+inerzia} = \sum P m_i \cdot (1 \pm kv)$$

sezione	h	Tt	Tq	T _{ext}	T _{tot}
	[m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]
d-d	1.90	10.85	20.78	0.00	31.62
e-e	1.43	6.10	15.58	0.00	21.68
f-f	0.95	2.71	10.39	0.00	13.10
g-g	0.48	0.68	5.19	0.00	5.87

condizione statica

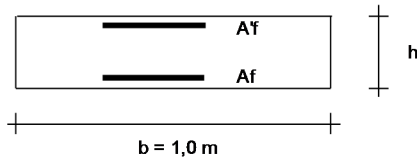
sezione	h	Mt	Mq	M _{ext}	M _{tot}	Nt	Nq	N _{ext}	N _{pp}	N _{tot}
	[m]	[kNm/m]	[kNm/m]	[kNm/m]	[kNm/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]
d-d	1.90	6.87	19.74	0.00	26.61	2.83	5.42	0.00	14.25	22.50
e-e	1.43	2.90	11.10	0.00	14.00	1.59	4.07	0.00	10.69	16.35
f-f	0.95	0.86	4.93	0.00	5.79	0.71	2.71	0.00	7.13	10.54
g-g	0.48	0.11	1.23	0.00	1.34	0.18	1.36	0.00	3.56	5.10

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 279 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

SCHEMA DELLE ARMATURE

ARMATURE

pos	n°/ml	φ	pos	n°/ml	φ
1	5.0	12	5	5.0	12
2	5.0	0	6	0.0	0
3	5.0	0	7	5.0	12
4	5.0	12	8	0.0	0
			9	5.0	0

Calcola

VERIFICHE


a-a	pos 1-2-3-4
b-b	pos 1-2-3-4
c-c	pos 1-4
d-d	pos 5-6-7-8-9
e-e	pos 5-7-8
f-f	pos 5-7
g-g	pos 5-7

Sez.	M	N	h	Af	A'f	Mu
(-)	(kNm)	(kN)	(m)	(cm ²)	(cm ²)	(kNm)
a - a	3.54	0.00	0.30	5.65	5.65	63.01
b - b	-26.06	0.00	0.30	5.65	5.65	63.01
c - c	-10.76	0.00	0.30	5.65	5.65	63.01
d - d	26.61	22.50	0.30	5.65	5.65	65.33
e - e	14.00	16.35	0.30	5.65	5.65	64.69
f - f	5.79	10.54	0.30	5.65	5.65	64.10
g - g	1.34	5.10	0.30	5.65	5.65	63.54

coefficienti parziali

SLU	Def.	caso	azioni		proprietà del terreno		
			permanenti sfavorevoli	temporane e variabili sfavorevoli	tan φ'	c'	c _u
○	○	caso A1+M1	1.40	1.50	1.00	1.00	1.00
○	○	caso A2+M2	1.00	1.30	1.25	1.25	1.40
SLD	●	Sismica	1.00	1.00	1.25	1.25	1.40
def.	○	–	1.00	1.00	1.00	1.00	1.00

Dati Geotecnici (usati per verifiche di stabilità e SLU)

Dati Terrapieno	Angolo di attrito del terrapieno	φ'	=	29.26	(°)	
	Peso Unità di Volume del terrapieno	γ'	=	20.00	(kN/m ³)	
	Angolo di Inclinazione Piano di Campagna	ε	=	0.00	(°)	
	Angolo di attrito terreno-paramento	δ _{muro}	=	14.63	(°)	
	Angolo di attrito terreno-superficie ideale	δ _{sup id}	=	14.63	(°)	
Dati Terreno Fondazione	Coesione Terreno di Fondazione	c1'	=	8.00	(kN/m ²)	
	Angolo di attrito del Terreno di Fondazione	φ ₁ '	=	20.03	(°)	
	Peso Unità di Volume del Terreno di Fondazione	γ ₁	=	19.00	(kN/m ³)	
	Peso Unità di Volume del Rinterro della Fondazione	γ _d	=	20.00	(kN/m ³)	
	Profondità Piano di Posa della Fondazione	H2'	=	1.00	(m)	
	Profondità Falda	Zw	=	100.00	(m)	
Coefficienti di Spinta	Coeff. di Spinta Attiva sulla superficie ideale	ka	=	0.31	(-)	0.310
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale	kas+	=	0.43	(-)	0.425
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale	kas-	=	0.45	(-)	0.452
	Coeff. Di Spinta Passiva in Fondazione	kp	=	2.04	(-)	2.042
	Coeff. Di Spinta Passiva Sismica in Fondazione	kps+	=	1.79	(-)	1.792
	Coeff. Di Spinta Passiva Sismica in Fondazione	kps-	=	1.74	(-)	1.737
						Valori di Normativa

Carichi Agenti (usati per verifiche di stabilità e allo SLU)

Condizioni Statiche	Sovraccarico Accidentale in condizioni statiche	q	=	28.00	(kN/m ²)
	Forza Orizzontale in Testa in condizioni statiche	r	=	0.00	(kN/m)
	Forza Verticale in Testa in condizioni statiche	v	=	0.00	(kN/m)
	Momento in Testa in condizioni statiche	m	=	0.00	(kNm/m)
Condizioni Sismiche	Sovraccarico Accidentale in condizioni sismiche	qs	=	8.00	(kN/m ²)
	Forza Orizzontale in Testa in condizioni sismiche	fs	=	0.00	(kN/m)
	Forza Verticale in Testa in condizioni sismiche	vs	=	0.00	(kN/m)
	Momento in Testa in condizioni sismiche	ms	=	0.00	(kNm/m)

VERIFICHE GEOTECNICHE

FORZE VERTICALI

- Peso del Muro (Pm)

Pm1 = (B2*H3*γ _{cls})/2	=	0.00	(kN/m)
Pm2 = (b3*H3*γ _{cls})	=	14.25	(kN/m)
Pm3 = (B4*H3*γ _{cls})/2	=	0.00	(kN/m)
Pm4 = (B*H2*γ _{cls})	=	12.75	(kN/m)
Pm5 = (Bd*Hd*γ _{cls})	=	0.00	(kN/m)
Pm = Pm1 + Pm2 + Pm3 + Pm4 + Pm5	=	27.00	(kN/m)

- Peso del terreno sulla scarpa di monte del muro (Pt)

Pt1 = (B5*H3*γ)	=	41.80	(kN/m)
Pt2 = (0,5*(B4+B5)*H4*γ)	=	0.00	(kN/m)
Pt3 = (B4*H3*γ)/2	=	0.00	(kN/m)
Pt = Pt1 + Pt2 + Pt3	=	41.80	(kN/m)

MOMENTI DELLE FORZE VERT. RISPETTO AL PIEDE DI VALLE DEL MURO

- Muro (Mm)

Mm1 = Pm1*(B1+2/3 B2)	=	0.00	(kNm/m)
Mm2 = Pm2*(B1+B2+0,5*B3)	=	6.41	(kNm/m)
Mm3 = Pm3*(B1+B2+B3+1/3 B4)	=	0.00	(kNm/m)
Mm4 = Pm4*(B/2)	=	10.84	(kNm/m)
Mm5 = Pm5*(B - Bd/2)	=	0.00	(kNm/m)
Mm = Mm1 + Mm2 + Mm3 + Mm4 + Mm5	=	17.25	(kNm/m)

- Terrapieno a tergo del muro

Mt1 = Pt1*(B1+B2+B3+B4+0,5*B5)	=	48.07	(kNm/m)
Mt2 = Pt2*(B1+B2+B3+2/3*(B4+B5))	=	0.00	(kNm/m)
Mt3 = Pt3*(B1+B2+B3+2/3*B4)	=	0.00	(kNm/m)
Mt = Mt1 + Mt2 + Mt3	=	48.07	(kNm/m)

Opera	Tratto	Settore	CEE	WBS	Id.doc	N. progr.	REV.	Pag. di Pag.
L0703	211	E	11	CS5007	REL	04	A	281 di 296

CONDIZIONE SISMICA +
SPINTE DEL TERRENO E DEL SOVRACCARICO

- Spinta totale condizione sismica +

$$Sst1 = 0,5 \cdot \gamma \cdot (1 + kv) \cdot (H2 + H3 + H4 + Hd) \cdot kas^+ = 22.36 \text{ (kN/m)}$$

$$Ssq1 = qs \cdot (H2 + H3 + H4 + Hd) \cdot kas^+ = 7.49 \text{ (kN/m)}$$

- Componente orizzontale condizione sismica +

$$Sst1h = Sst1 \cdot \cos \delta = 21.64 \text{ (kN/m)}$$

$$Ssq1h = Ssq1 \cdot \cos \delta = 7.25 \text{ (kN/m)}$$

- Componente verticale condizione sismica +

$$Sst1v = Sst1 \cdot \sin \delta = 5.65 \text{ (kN/m)}$$

$$Ssq1v = Ssq1 \cdot \sin \delta = 1.89 \text{ (kN/m)}$$

- Spinta passiva sul dente

$$Sp = \frac{1}{2} \cdot \gamma_1 \cdot (1 + kv) \cdot Hd^2 \cdot kps^+ + (2 \cdot c_1 \cdot kps^{+0.5} + \gamma_1 \cdot (1 + kv) \cdot kps^+ \cdot H2) \cdot Hd = 0.00 \text{ (kN/m)}$$

MOMENTI DELLA SPINTA DEL TERRENO E DEL SOVRACCARICO

- Condizione sismica +

$$MSst1 = Sst1h \cdot ((H2 + H3 + H4 + Hd) / 3 - Hd) = 15.87 \text{ (kNm)}$$

$$MSst2 = Sst1v \cdot B = 9.60 \text{ (kNm)}$$

$$MSsq1 = Ssq1h \cdot ((H2 + H3 + H4 + Hd) / 2 - Hd) = 7.97 \text{ (kNm)}$$

$$MSsq2 = Ssq1v \cdot B = 3.21 \text{ (kNm)}$$

$$MSP = \gamma_1 \cdot Hd^3 \cdot kps^+ / 3 + (2 \cdot c_1 \cdot kps^{+0.5} + \gamma_1 \cdot kps^+ \cdot H2) \cdot Hd^2 / 2 = 0.00 \text{ (kNm)}$$

INERZIA DEL MURO E DEL TERRAPIENO

- Inerzia del muro (Ps)

$$Ps = Pm \cdot kh = 4.64 \text{ (kN/m)}$$

- Inerzia orizzontale e verticale del terrapieno a tergo del muro (Pts)

$$Ptsh = Pt \cdot kh = 7.18 \text{ (kN/m)}$$

$$Ptshv = Pt \cdot kv = 3.59 \text{ (kN/m)}$$

- Incremento di momento dovuto all'inerzia del muro (MPs)

$$MPs1 = kh \cdot Pm1 \cdot (H2 + H3 / 3) = 0.00 \text{ (kNm/m)}$$

$$MPs2 = kh \cdot Pm2 \cdot (H2 + H3 / 2) = 3.06 \text{ (kNm/m)}$$

$$MPs3 = kh \cdot Pm3 \cdot (H2 + H3 / 3) = 0.00 \text{ (kNm/m)}$$

$$MPs4 = kh \cdot Pm4 \cdot (H2 / 2) = 0.33 \text{ (kNm/m)}$$

$$MPs5 = -kh \cdot Pm5 \cdot (Hd / 2) = 0.00 \text{ (kNm/m)}$$

$$MPs = MPs1 + MPs2 + MPs3 + MPs4 + MPs5 = 3.39 \text{ (kNm/m)}$$

- Incremento di momento dovuto all'inerzia del terrapieno (MPts)

$$MPts1 = kh \cdot Pt1 \cdot ((H2 + H3 / 2) - (B - B5 / 2) \cdot 0.5) = 4.85 \text{ (kNm/m)}$$

$$MPts2 = kh \cdot Pt2 \cdot ((H2 + H3 + H4 / 3) - (B - B5 / 3) \cdot 0.5) = 0.00 \text{ (kNm/m)}$$

$$MPts3 = kh \cdot Pt3 \cdot ((H2 + H3^2 / 3) - (B1 + B2 + B3 + 2 / 3 \cdot B4) \cdot 0.5) = 0.00 \text{ (kNm/m)}$$

$$MPts = MPts1 + MPts2 + MPts3 = 4.85 \text{ (kNm/m)}$$

MOMENTI DOVUTI ALLE FORZE ESTERNE

$$Mfext1 = ms = 0.00 \text{ (kNm/m)}$$

$$Mfext2 = fs \cdot (H3 + H2) = 0.00 \text{ (kNm/m)}$$

$$Mfext3 = vs \cdot (B1 + B2 + B3 / 2) = 0.00 \text{ (kNm/m)}$$

VERIFICA ALLO SCORRIMENTO

Risultante forze verticali (N)

$$N = Pm + Pt + vs + Sst1v + Ssq1v + Ptshv = 79.93 \text{ (kN/m)}$$

Risultante forze orizzontali (T)

$$T = Sst1h + Ssq1h + fs + Ps + Ptsh = 40.71 \text{ (kN/m)}$$

Coefficiente di attrito alla base (f)

$$f = \tan \phi_1' = 0.36 \text{ (-)}$$

$$Fs = (N \cdot f + c1 \cdot B3 + Sp) / T = 1.13 \text{ (-)}$$

VERIFICA AL RIBALTAMENTO

Momento stabilizzante (Ms)

$$Ms = Mm + Mt + MSst2 + MSsq2 + Mfext3 = 78.14 \text{ (kNm/m)}$$

Momento ribaltante (Mr)

$$Mr = MSst1 + MSsq1 + Mfext1 + Mfext2 + MSP + MPs + MPts = 32.08 \text{ (kNm/m)}$$

$$Fr = Ms / Mr = 2.44 \text{ (-)}$$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 282 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

VERIFICA DELLA FONDAZIONE

Risultante forze verticali (N)
 $N = P_m + P_t + v_s + S_{st1v} + S_{sq1v} + P_{tsv} = 79.93 \text{ (kN/m)}$

Risultante forze orizzontali (T)
 $T = S_{st1h} + S_{sq1h} + f_s + P_s + P_{tsh} - S_p = 40.71 \text{ (kN/m)}$

Risultante dei momenti rispetto al piede di valle (MM)
 $MM = M_s - M_r = 46.06 \text{ (kNm/m)}$

Momento rispetto al baricentro della fondazione (M)
 $M = X_c \cdot N - MM = 21.88 \text{ (kNm/m)}$

Formula Generale per il Calcolo del Carico Limite Unitario (Brinch-Hansen, 1970)

Fondazione Nastriforme

$$q_{lim} = c' \cdot N_c \cdot i_c + q_0 \cdot N_q \cdot i_q + 0,5 \cdot \gamma \cdot 1 \cdot B^* \cdot N_\gamma \cdot i_\gamma$$

$c' = 8.00 \text{ (kN/mq)}$ coesione terreno di fondaz.

$\varphi_1' = 20.03 \text{ (}^\circ\text{)}$ angolo di attrito terreno di fondaz.

$\gamma_1 = 19.00 \text{ (kN/m}^3\text{)}$ peso unità di volume terreno fondaz.

$q_0 = \gamma \cdot d \cdot H_2' = 20.00 \text{ (kN/m}^2\text{)}$ sovraccarico stabilizzante

$e = M / N = 0.27 \text{ (m)}$ eccentricità

$B^* = B - 2e = 1.15 \text{ (m)}$ larghezza equivalente

 I valori di N_c , N_q e N_γ sono stati valutati con le espressioni suggerite da Vesic (1975)

$N_q = \text{tg}^2(45 + \varphi/2) \cdot e^{(\pi \cdot \text{tg}(\varphi))}$ (1 in cond. nd) = 6.42 (-)

$N_c = (N_q - 1) / \text{tg}(\varphi')$ ($2 + \pi$ in cond. nd) = 14.86 (-)

$N_\gamma = 2 \cdot (N_q + 1) \cdot \text{tg}(\varphi')$ (0 in cond. nd) = 5.41 (-)

 I valori di i_c , i_q e i_γ sono stati valutati con le espressioni suggerite da Vesic (1975)

$i_q = (1 - T / (N + B^* \cdot c' \cdot \text{cotg}(\varphi)))^m$ (1 in cond. nd) = 0.38 (-)

$i_c = i_q - (1 - i_q) / (N_q - 1)$ = 0.26 (-)

$i_\gamma = (1 - T / (N + B^* \cdot c' \cdot \text{cotg}(\varphi)))^{m+1}$ = 0.23 (-)

 (fondazione nastriforme $m = 2$)

$q_{lim} \text{ (carico limite unitario)} = 92.92 \text{ (kN/m}^2\text{)}$

$F = q_{lim} \cdot B^* / N = 1.34 \text{ (-)}$

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	283 di 296

CONDIZIONE SISMICA -
SPINTE DEL TERRENO E DEL SOVRACCARICO

- Spinta totale condizione sismica -

$$Ss12 = 0,5 \cdot \gamma \cdot (1 - kv) \cdot (H2 + H3 + H4 + Hd)^2 \cdot kas = 20.02 \text{ (kN/m)}$$

$$Ssq2 = qs \cdot (H2 + H3 + H4 + Hd) \cdot kas = 7.96 \text{ (kN/m)}$$

- Componente orizzontale condizione sismica -

$$Sst2h = Sst2 \cdot \cos \delta = 19.37 \text{ (kN/m)}$$

$$Ssq2h = Ssq2 \cdot \cos \delta = 7.71 \text{ (kN/m)}$$

- Componente verticale condizione sismica -

$$Sst2v = Sst2 \cdot \sin \delta = 5.06 \text{ (kN/m)}$$

$$Ssq2v = Ssq2 \cdot \sin \delta = 2.01 \text{ (kN/m)}$$

- Spinta passiva sul dente

$$Sp = \frac{1}{2} \cdot \gamma_1 \cdot (1 - kv) \cdot Hd^2 \cdot kps \cdot (2 \cdot c_1 \cdot kps^{-0.5} + \gamma_1 \cdot (1 - kv) \cdot kps \cdot H2) \cdot Hd = 0.00 \text{ (kN/m)}$$

MOMENTI DELLA SPINTA DEL TERRENO E DEL SOVRACCARICO

- Condizione sismica -

$$MSst1 = Sst2h \cdot ((H2 + H3 + H4 + Hd) / 3 - Hd) = 14.20 \text{ (kN/m)}$$

$$MSst2 = Sst2v \cdot B = 8.59 \text{ (kN/m)}$$

$$MSsq1 = Ssq2h \cdot ((H2 + H3 + H4 + Hd) / 2 - Hd) = 8.48 \text{ (kN/m)}$$

$$MSsq2 = Ssq2v \cdot B = 3.42 \text{ (kN/m)}$$

$$MSP = \gamma_1 \cdot Hd^3 \cdot kps / 3 + (2 \cdot c_1 \cdot kps^{-0.5} + \gamma_1 \cdot (1 - kv) \cdot kps \cdot H2) \cdot Hd^2 / 2 = 0.00 \text{ (kN/m)}$$

INERZIA DEL MURO E DEL TERRAPIENO

- Inerzia del muro (Ps)

$$Ps = Pm \cdot kh = 4.64 \text{ (kN/m)}$$

- Inerzia orizzontale e verticale del terrapieno a tergo del muro (Pts)

$$Ptsh = Pt \cdot kh = 7.18 \text{ (kN/m)}$$

$$Ptsh = Pt \cdot kv = -3.59 \text{ (kN/m)}$$

- Incremento di momento dovuto all'inerzia del muro (MPs)

$$MPs1 = kh \cdot Pm1 \cdot (H2 + H3 / 3) = 0.00 \text{ (kNm/m)}$$

$$MPs2 = kh \cdot Pm2 \cdot (H2 + H3 / 2) = 3.06 \text{ (kNm/m)}$$

$$MPs3 = kh \cdot Pm3 \cdot (H2 + H3 / 3) = 0.00 \text{ (kNm/m)}$$

$$MPs4 = kh \cdot Pm4 \cdot (H2 / 2) = 0.33 \text{ (kNm/m)}$$

$$MPs5 = -kh \cdot Pm5 \cdot (Hd / 2) = 0.00 \text{ (kNm/m)}$$

$$MPs = MPs1 + MPs2 + MPs3 + MPs4 + MPs5 = 3.39 \text{ (kNm/m)}$$

- Incremento di momento dovuto all'inerzia del terrapieno (MPts)

$$MPts1 = kh \cdot Pt1 \cdot ((H2 + H3 / 2) + (B - B5 / 2) \cdot 0.5) = 13.11 \text{ (kNm/m)}$$

$$MPts2 = kh \cdot Pt2 \cdot ((H2 + H3 + H4 / 3) + (B - B5 / 3) \cdot 0.5) = 0.00 \text{ (kNm/m)}$$

$$MPts3 = kh \cdot Pt3 \cdot ((H2 + H3^2 / 3) + (B1 + B2 + B3 + 2 / 3 \cdot B4) \cdot 0.5) = 0.00 \text{ (kNm/m)}$$

$$MPts = MPts1 + MPts2 + MPts3 = 13.11 \text{ (kNm/m)}$$

MOMENTI DOVUTI ALLE FORZE ESTERNE

$$Mfext1 = ms = 0.00 \text{ (kNm/m)}$$

$$Mfext2 = fs \cdot (H3 + H2) = 0.00 \text{ (kNm/m)}$$

$$Mfext3 = vs \cdot (B1 + B2 + B3 / 2) = 0.00 \text{ (kNm/m)}$$

VERIFICA ALLO SCORRIMENTO

Risultante forze verticali (N)

$$N = Pm + Pt + vs + Sst1v + Ssq1v + Ptsh = 72.27 \text{ (kN/m)}$$

Risultante forze orizzontali (T)

$$T = Sst1h + Ssq1h + fs + Ps + Ptsh = 38.90 \text{ (kN/m)}$$

Coefficiente di attrito alla base (f)

$$f = \tan \phi_1' = 0.36 \text{ (-)}$$

$$Fs = (N \cdot f + c1 \cdot B3 + Sp) / T = 1.11 \text{ (-)}$$

VERIFICA AL RIBALTAMENTO

Momento stabilizzante (Ms)

$$Ms = Mm + Mt + MSst2 + MSsq2 + Mfext3 = 77.33 \text{ (kNm/m)}$$

Momento ribaltante (Mr)

$$Mr = MSst1 + MSsq1 + Mfext1 + Mfext2 + MSP + MPs + Mpts = 39.18 \text{ (kNm/m)}$$

$$Fr = Ms / Mr = 1.97 \text{ (-)}$$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 284 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

VERIFICA DELLA FONDAZIONE

Risultante forze verticali (N)			
$N = P_m + P_t + v_s + S_{st1v} + S_{sq1v} + P_{tsv}$	=	72.27	(kN/m)
Risultante forze orizzontali (T)			
$T = S_{st1h} + S_{sq1h} + f_s + P_s + P_{tsh} - S_p$	=	38.90	(kN/m)
Risultante dei momenti rispetto al piede di valle (MM)			
$MM = M_s - M_r$	=	38.15	(kNm/m)
Momento rispetto al baricentro della fondazione (M)			
$M = X_c \cdot N - MM$	=	23.28	(kNm/m)

Formula Generale per il Calcolo del Carico Limite Unitario (Brinch-Hansen, 1970)

Fondazione Nastriforme

$$q_{lim} = c \cdot N_c \cdot i_c + q_0 \cdot N_q \cdot i_q + 0,5 \cdot \gamma_1 \cdot B \cdot N_\gamma \cdot i_\gamma$$

c_1'	coesione terreno di fondaz.	=	8.00	(kN/mq)
ϕ_1'	angolo di attrito terreno di fondaz.	=	20.03	(°)
γ_1	peso unità di volume terreno fondaz.	=	19.00	(kN/m ³)
$q_0 = \gamma \cdot d \cdot H_2'$	sovraccarico stabilizzante	=	20.00	(kN/m ²)
$e = M / N$	eccentricità	=	0.32	(m)
$B^* = B - 2e$	larghezza equivalente	=	1.06	(m)

 I valori di N_c , N_q e N_γ sono stati valutati con le espressioni suggerite da Vesic (1975)

$N_q = \tan^2(45 + \phi/2) \cdot e^{(\pi \cdot \tan(\phi))}$	(1 in cond. nd)	=	6.42	(-)
$N_c = (N_q - 1) / \tan(\phi)$	($2 + \pi$ in cond. nd)	=	14.86	(-)
$N_\gamma = 2 \cdot (N_q + 1) \cdot \tan(\phi)$	(0 in cond. nd)	=	5.41	(-)

 I valori di i_c , i_q e i_γ sono stati valutati con le espressioni suggerite da Vesic (1975)

$i_q = (1 - T / (N + B \cdot c' \cdot \cot(\phi)))^m$	(1 in cond. nd)	=	0.35	(-)
$i_c = i_q - (1 - i_q) / (N_q - 1)$		=	0.23	(-)
$i_\gamma = (1 - T / (N + B \cdot c' \cdot \cot(\phi)))^{m+1}$		=	0.21	(-)

 (fondazione nastriforme $m = 2$)

q_{lim}	(carico limite unitario)	=	83.83	(kN/m ²)
$F = q_{lim} \cdot B^* / N$		=	1.22	(-)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 285 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CALCOLI STATICI - Verifica allo Stato Limite Ultimo

CARATTERISTICHE DEI MATERIALI

Calcestruzzo

Rck = 40 (MPa)
 $\gamma_c = 1.9$
 $f_{cd} = Rck / \gamma_{m,c} = 21.05$ (MPa)

Copriferro

c = 5.60 (cm)

Acciaio

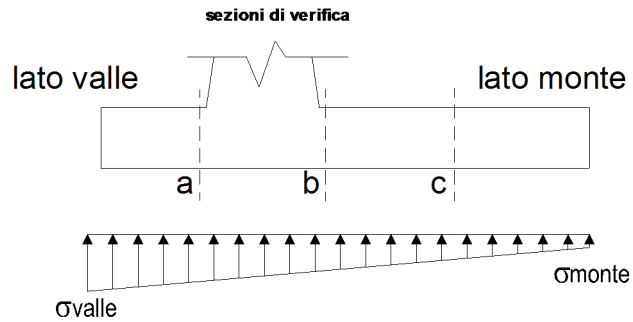
tipo di acciaio B450C
 $f_{yk} = 450$ (MPa)
 $\gamma_E = 1.00$
 $\gamma_S = 1.15$
 $f_{yd} = f_{yk} / \gamma_S / \gamma_E = 391.30$ (MPa)
 $E_s = 210000$ (MPa)
 $\epsilon_{ys} = 0.19\%$
 $\epsilon_{uk} = 3.000\%$
 $\epsilon_{ud} = 2.700\%$

CALCOLO SOLLECITAZIONI SOLETTA DI FONDAZIONE

Reazione del terreno

$\sigma_{valle} = N / A + M / W_{gg}$
 $\sigma_{monte} = N / A - M / W_{gg}$
 $A = 1.0 \cdot B = 1.70$ (m²)
 $W_{gg} = 1.0 \cdot B^2 / 6 = 0.48$ (m³)

caso	N	M	σ_{valle}	σ_{monte}
	[kN]	[kNm]	[kN/m ²]	[kN/m ²]
sisma+	79.93	21.88	92.45	1.59
sisma-	72.27	23.28	91.28	0.00

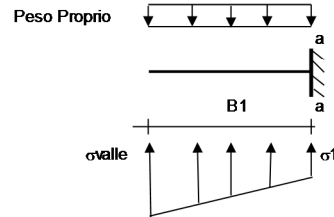


Mensola Lato Valle

Peso Proprio. PP = 7.50 (kN/m)

$M_a = \sigma_1 \cdot B^2 / 2 + (\sigma_{valle} - \sigma_1) \cdot B^2 / 3 - PP \cdot B^2 / 2 \cdot (1 \pm kv)$

caso	σ_{valle}	σ_1	M_a	T_a
	[kN/m ²]	[kN/m ²]	[kNm]	[kN]
sisma+	92.45	76.41	3.55	22.89
sisma-	91.28	73.99	3.54	21.87



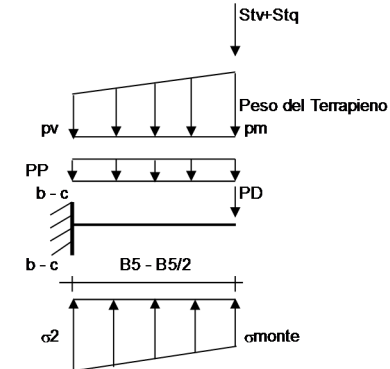
Mensola Lato Monte

PP = 7.50 (kN/m²)
 PD = 0.00 (kN/m)
 pm = 38.00 (kN/m²)
 pvb = 38.00 (kN/m²)
 pvc = 38.00 (kN/m²)
 peso proprio soletta fondazione
 peso proprio dente

$M_b = (\sigma_{monte} \cdot (pvb + PP) \cdot (1 \pm kv)) \cdot B^2 / 2 + (\sigma_2b - \sigma_{monte}) \cdot B^2 / 6 - (pm - pvb) \cdot (1 \pm kv) \cdot B^2 / 3 - (Stv + Sqv) \cdot B^2 \cdot PD \cdot (1 \pm kv) \cdot (B/2 - Bd/2) - PD \cdot kh \cdot (Hd + H2/2) + Msp + Sp \cdot H2/2$

$M_c = (\sigma_{monte} \cdot (pvc + PP) \cdot (1 \pm kv)) \cdot (B/2)^2 / 2 + (\sigma_2c - \sigma_{monte}) \cdot (B/2)^2 / 6 - (pm - pvc) \cdot (1 \pm kv) \cdot (B/2)^2 / 3 - (Stv + Sqv) \cdot (B/2) \cdot PD \cdot (1 \pm kv) \cdot (B/2 - Bd/2) - PD \cdot kh \cdot (Hd + H2/2) + Msp + Sp \cdot H2/2$

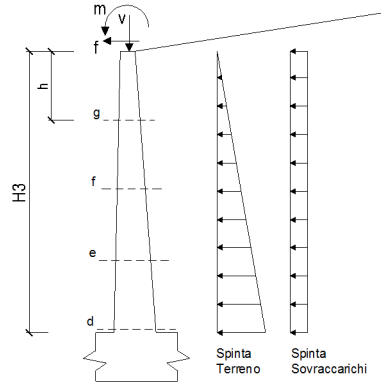
caso	σ_{monte}	σ_2b	M_b	σ_2c	M_c	T_b
	[kN/m ²]	[kN/m ²]	[kNm]	[kN/m ²]	[kNm]	[kN]
sisma+	1.59	60.38	-25.37	30.98	-9.90	-27.81
sisma-	0.00	56.69	-23.79	24.99	-9.39	-24.93



Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 286 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CALCOLO SOLLECITAZIONI PARAMENTO VERTICALE DEL MURO

Azioni sulla parete e Sezioni di Calcolo



Dati Sismici	Accelerazione sismica	a_g/g	=	0.28	(-)	
	Categoria di suolo	S	=	1.25	(-)	
	il muro ammette spostamenti? (si/no)			<input checked="" type="radio"/> si	<input type="radio"/> no	$r = 2$
Coefficienti di Spinta	coefficiente sismico orizzontale	kh	=	0.1719	(-)	
	coefficiente sismico verticale	kv	=	0.0859	(-)	
	Coeff. di Spinta Attiva sulla parete	ka	=	0.31	(-)	0.310
	componente orizzontale	kah	=	0.300	(-)	
	componente verticale	kav	=	0.08	(-)	
	Coeff. Di Spinta Attiva Sismica sulla parete	kas+	=	0.43	(-)	0.425
	componente orizzontale	kash+	=	0.41	(-)	
	componente verticale	kasv+	=	0.11	(-)	
	Coeff. Di Spinta Attiva Sismica sulla parete	kas-	=	0.45	(-)	0.452
componente orizzontale	kash-	=	0.44	(-)		
componente verticale	kasv-	=	0.11	(-)		

$$M_t = \frac{1}{2} K_{a,orizz.} \cdot \gamma \cdot (1 \pm kv) \cdot h^2 \cdot h/3 \quad \text{o} \quad \frac{1}{2} K_{a,orizz.} \cdot \gamma \cdot (1 \pm kv) \cdot h^2 \cdot h/2 \quad (\text{con sisma})$$

$$M_q = \frac{1}{2} K_{a,orizz.} \cdot q \cdot h^2$$

$$M_{ext} = m + f \cdot h$$

$$M_{inerzia} = \sum P m_i \cdot b_i \cdot kh \quad (\text{solo con sisma})$$

condizione sismica +

sezione	h	Tt	Tq	T _{ext}	T _{inerzia}	T _{tot}
	[m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]
d-d	1.90	16.14	3.13	0.00	2.45	21.72
e-e	1.43	9.08	2.35	0.00	1.84	13.26
f-f	0.95	4.03	1.56	0.00	1.22	6.82
g-g	0.48	1.01	0.78	0.00	0.61	2.40

$$N_t = \frac{1}{2} K_{a,vert.} \cdot \gamma \cdot (1 \pm kv) \cdot h^2$$

$$N_q = K_{a,vert.} \cdot q \cdot h$$

$$N_{ext} = v$$

$$N_{pp+inerzia} = \sum P m_i \cdot \gamma \cdot (1 \pm kv)$$

condizione sismica +

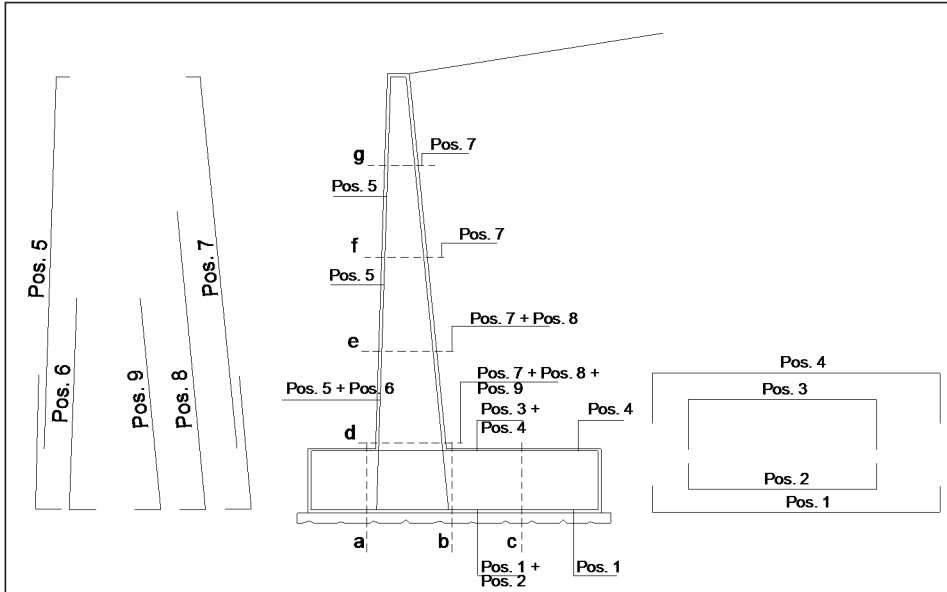
sezione	h	Mt	Mq	M _{ext}	M _{inerzia}	M _{tot}	Nt	Nq	N _{ext}	N _{pp+inerzia}	N _{tot}
	[m]	[kNm/m]	[kNm/m]	[kNm/m]	[kNm/m]	[kNm/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]
d-d	1.90	15.33	5.94	0.00	2.33	23.60	4.21	1.63	0.00	15.47	21.32
e-e	1.43	6.47	3.34	0.00	1.31	11.12	2.37	1.22	0.00	11.61	15.20
f-f	0.95	1.92	1.49	0.00	0.58	3.98	1.05	0.82	0.00	7.74	9.61
g-g	0.48	0.24	0.37	0.00	0.15	0.76	0.26	0.41	0.00	3.87	4.54

condizione sismica -

sezione	h	Mt	Mq	M _{ext}	M _{inerzia}	M _{tot}	Nt	Nq	N _{ext}	N _{pp+inerzia}	N _{tot}
	[m]	[kNm/m]	[kNm/m]	[kNm/m]	[kNm/m]	[kNm/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]
d-d	1.90	13.72	6.32	0.00	2.33	22.37	3.77	1.74	0.00	13.03	18.53
e-e	1.43	5.79	3.56	0.00	1.31	10.65	2.12	1.30	0.00	9.77	13.19
f-f	0.95	1.72	1.58	0.00	0.58	3.88	0.94	0.87	0.00	6.51	8.32
g-g	0.48	0.21	0.40	0.00	0.15	0.75	0.24	0.43	0.00	3.26	3.93

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 287 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

SCHEMA DELLE ARMATURE

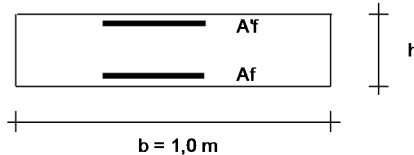


ARMATURE

pos	n°/ml	φ	pos	n°/ml	φ
1	5.0	12	5	5.0	12
2	5.0	0	6	0.0	0
3	5.0	0	7	5.0	12
4	5.0	12	8	0.0	0
			9	5.0	0

Calcola

VERIFICHE



- a-a pos 1-2-3-4
- b-b pos 1-2-3-4
- c-c pos 1-4
- d-d pos 5-6-7-8-9
- e-e pos 5-7-8
- f-f pos 5-7
- g-g pos 5-7

Sez.	M	N	h	Af	A'f	Mu
(-)	(kNm)	(kN)	(m)	(cm ²)	(cm ²)	(kNm)
a - a	3.55	0.00	0.30	5.65	5.65	62.19
b - b	-25.37	0.00	0.30	5.65	5.65	62.19
c - c	-9.90	0.00	0.30	5.65	5.65	62.19
d - d	23.60	21.32	0.30	5.65	5.65	64.44
e - e	11.12	15.20	0.30	5.65	5.65	63.79
f - f	3.98	9.61	0.30	5.65	5.65	63.20
g - g	0.76	4.54	0.30	5.65	5.65	62.67

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N. progr. 04	REV. A	Pag. di Pag. 288 di 296
----------------	---------------	--------------	-----------	---------------	---------------	-----------------	-----------	----------------------------

coefficienti parziali

SLU	Def.	caso	azioni		proprietà del terreno		
			permanenti sfavorevoli	temporane e variabili sfavorevoli	tan φ'	c'	c _u
	<input type="radio"/>	caso A1+M1	1.40	1.50	1.00	1.00	1.00
	<input type="radio"/>	caso A2+M2	1.00	1.30	1.25	1.25	1.40
	<input type="radio"/>	—	1.00	1.00	1.25	1.25	1.40
def.	<input checked="" type="radio"/>	SLE	1.00	1.00	1.00	1.00	1.00

Dati Geotecnici (usati per verifiche di stabilità e SLU)

Dati Terrapieno	Angolo di attrito del terrapieno	φ'	=	35.00	(°)	
	Peso Unità di Volume del terrapieno	γ'	=	20.00	(kN/m ³)	
	Angolo di Inclinazione Piano di Campagna	ε	=	0.00	(°)	
	Angolo di attrito terreno-paramento	δ_{muro}	=	17.50	(°)	
	Angolo di attrito terreno-superficie ideale	$\delta_{sup\ id}$	=	17.50	(°)	
Dati Terreno Fondazione	Coesione Terreno di Fondazione	c1'	=	10.00	(kN/m ²)	
	Angolo di attrito del Terreno di Fondazione	φ_1'	=	24.50	(°)	
	Peso Unità di Volume del Terreno di Fondazione	γ_1	=	19.00	(kN/m ³)	
	Peso Unità di Volume del Rinterro della Fondazione	γ^d	=	20.00	(kN/m ³)	
	Profondità Piano di Posa della Fondazione	H2'	=	1.00	(m)	
	Profondità Falda	Zw	=	100.00	(m)	
Coefficienti di Spinta	Coeff. di Spinta Attiva sulla superficie ideale	ka	=	0.25	(-)	0.246
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale	kas+	=	0.35	(-)	0.347
	Coeff. Di Spinta Attiva Sismica sulla superficie ideale	kas-	=	0.37	(-)	0.370
	Coeff. Di Spinta Passiva in Fondazione	kp	=	2.42	(-)	2.417
	Coeff. Di Spinta Passiva Sismica in Fondazione	kps+	=	2.15	(-)	2.152
	Coeff. Di Spinta Passiva Sismica in Fondazione	kps-	=	2.10	(-)	2.097

Carichi Agenti (usati per verifiche di stabilità e allo SLU)

Condizioni Statiche	Sovraccarico Accidentale in condizioni statiche	q	=	28.00	(kN/m ²)
	Forza Orizzontale in Testa in condizioni statiche	f	=	0.00	(kN/m)
	Forza Verticale in Testa in condizioni statiche	v	=	0.00	(kN/m)
	Momento in Testa in condizioni statiche	m	=	0.00	(kNm/m)
Condizioni Sismiche	Sovraccarico Accidentale in condizioni sismiche	qs	=	8.00	(kN/m ²)
	Forza Orizzontale in Testa in condizioni sismiche	fs	=	0.00	(kN/m)
	Forza Verticale in Testa in condizioni sismiche	vs	=	0.00	(kN/m)
	Momento in Testa in condizioni sismiche	ms	=	0.00	(kNm/m)

VERIFICHE GEOTECNICHE
FORZE VERTICALI

- Peso del Muro (Pm)

Pm1 = (B2*H3* γ_{cls})/2	=	0.00	(kN/m)
Pm2 = (b3*H3* γ_{cls})	=	14.25	(kN/m)
Pm3 = (B4*H3* γ_{cls})/2	=	0.00	(kN/m)
Pm4 = (B*H2* γ_{cls})	=	12.75	(kN/m)
Pm5 = (Bd*Hd* γ_{cls})	=	0.00	(kN/m)
Pm = Pm1 + Pm2 + Pm3 + Pm4 + Pm5	=	27.00	(kN/m)

- Peso del terreno sulla scarpa di monte del muro (Pt)

Pt1 = (B5*H3* γ)	=	41.80	(kN/m)
Pt2 = (0,5*(B4+B5)*H4* γ)	=	0.00	(kN/m)
Pt3 = (B4*H3* γ)/2	=	0.00	(kN/m)
Pt = Pt1 + Pt2 + Pt3	=	41.80	(kN/m)

MOMENTI DELLE FORZE VERT. RISPETTO AL PIEDE DI VALLE DEL MURO

- Muro (Mm)

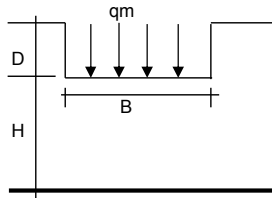
Mm1 = Pm1*(B1+2/3 B2)	=	0.00	(kNm/m)
Mm2 = Pm2*(B1+B2+0,5*B3)	=	6.41	(kNm/m)
Mm3 = Pm3*(B1+B2+B3+1/3 B4)	=	0.00	(kNm/m)
Mm4 = Pm4*(B/2)	=	10.84	(kNm/m)
Mm5 = Pm5*(B - Bd/2)	=	0.00	(kNm/m)
Mm = Mm1 + Mm2 + Mm3 + Mm4 + Mm5	=	17.25	(kNm/m)

- Terrapieno a tergo del muro

Mt1 = Pt1*(B1+B2+B3+B4+0,5*B5)	=	48.07	(kNm/m)
Mt2 = Pt2*(B1+B2+B3+2/3*(B4+B5))	=	0.00	(kNm/m)
Mt3 = Pt3*(B1+B2+B3+2/3*B4)	=	0.00	(kNm/m)
Mt = Mt1 + Mt2 + Mt3	=	48.07	(kNm/m)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 289 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CEDIMENTO DELLA FONDAZIONE



$$\delta = \mu_0 * \mu_1 * qm * B^* / E$$

(Christian e Carrier, 1976)

Profondità Piano di Posa della Fondazione	D =	1.00	(m)
	D/B* =	0.70	(m)
	H/B* =	2.38	(m)
Carico unitario medio (qm)	qm = N / (B - 2*e) = N / B* =	53.89	(kN/mq)
Coefficiente di forma $\mu_0 = f(D/B)$	$\mu_0 =$	0.930	(-)
Coefficiente di profondità $\mu_1 = f(H/B)$	$\mu_1 =$	0.74	(-)
Cedimento della fondazione	$\delta = \mu_0 * \mu_1 * qm * B^* / E =$	1.77	(mm)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 290 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

VERIFICA A FESSURAZIONE - CALCOLO SOLLECITAZIONI

FORZE VERTICALI

- Peso del Muro (Pm)

$$\begin{aligned}
 Pm1 &= (B2 \cdot H3 \cdot \gamma_{cls}) / 2 &= & 0.00 \quad (\text{kN/m}) \\
 Pm2 &= (B3 \cdot H3 \cdot \gamma_{cls}) &= & 14.25 \quad (\text{kN/m}) \\
 Pm3 &= (B4 \cdot H3 \cdot \gamma_{cls}) / 2 &= & 0.00 \quad (\text{kN/m}) \\
 Pm4 &= (B \cdot H2 \cdot \gamma_{cls}) &= & 12.75 \quad (\text{kN/m}) \\
 Pm5 &= (Bd \cdot Hd \cdot \gamma_{cls}) &= & 0.00 \quad (\text{kN/m}) \\
 Pm &= Pm1 + Pm2 + Pm3 + Pm4 + Pm5 &= & 27.00 \quad (\text{kN/m})
 \end{aligned}$$

- Peso del terreno sulla scarpa di monte del muro (Pt)

$$\begin{aligned}
 Pt1 &= (B5 \cdot H3 \cdot \gamma') &= & 41.80 \quad (\text{kN/m}) \\
 Pt2 &= (0,5 \cdot (B4 + B5) \cdot H4 \cdot \gamma') &= & 0.00 \quad (\text{kN/m}) \\
 Pt3 &= (B4 \cdot H3 \cdot \gamma') / 2 &= & 0.00 \quad (\text{kN/m}) \\
 Pt &= Pt1 + Pt2 + Pt3 &= & 41.80 \quad (\text{kN/m})
 \end{aligned}$$

MOMENTI DELLE FORZE VERT. RISPETTO AL PIEDE DI VALLE DEL MURO

- Muro (Mm)

$$\begin{aligned}
 Mm1 &= Pm1 \cdot (B1 + 2/3 B2) &= & 0.00 \quad (\text{kNm/m}) \\
 Mm2 &= Pm2 \cdot (B1 + B2 + 0,5 B3) &= & 6.41 \quad (\text{kNm/m}) \\
 Mm3 &= Pm3 \cdot (B1 + B2 + B3 + 1/3 B4) &= & 0.00 \quad (\text{kNm/m}) \\
 Mm4 &= Pm4 \cdot (B/2) &= & 10.84 \quad (\text{kNm/m}) \\
 Mm5 &= Pm5 \cdot (B - Bd/2) &= & 0.00 \quad (\text{kNm/m}) \\
 Mm &= Mm1 + Mm2 + Mm3 + Mm4 + Mm5 &= & 17.25 \quad (\text{kNm/m})
 \end{aligned}$$

- Terrapieno a tergo del muro

$$\begin{aligned}
 Mt1 &= Pt1 \cdot (B1 + B2 + B3 + B4 + 0,5 B5) &= & 48.07 \quad (\text{kNm/m}) \\
 Mt2 &= Pt2 \cdot (B1 + B2 + B3 + 2/3 (B4 + B5)) &= & 0.00 \quad (\text{kNm/m}) \\
 Mt3 &= Pt3 \cdot (B1 + B2 + B3 + 2/3 B4) &= & 0.00 \quad (\text{kNm/m}) \\
 Mt &= Mt1 + Mt2 + Mt3 &= & 48.07 \quad (\text{kNm/m})
 \end{aligned}$$

Opera	Tratto	Settore	CEE	WBS	Id.doc	N.progr.	REV.	Pag.di Pag.
L0703	211	E	11	CS5007	REL	04	A	291 di 296

CONDIZIONE STATICA (SLE e FESSURAZIONE)

SPINTE DEL TERRENO E DEL SOVRACCARICO

Spinta totale condizione statica

$$St = 0,5 \cdot \gamma \cdot (H2 + H3 + H4 + Hd)^2 \cdot ka = 11.91 \quad (\text{kN/m})$$

$$Sq = q \cdot (H2 + H3 + H4 + Hd) \cdot ka = 15.16 \quad (\text{kN/m})$$

componente orizzontale condizione statica

$$Sth = St \cdot \cos \delta = 11.36 \quad (\text{kN/m})$$

$$Sqh = Sq \cdot \cos \delta = 14.46 \quad (\text{kN/m})$$

componente verticale condizione statica

$$Stv = St \cdot \sin \delta = 3.58 \quad (\text{kN/m})$$

$$Sqv = Sq \cdot \sin \delta = 4.56 \quad (\text{kN/m})$$

Spinta passiva sul dente

$$Sp = \frac{1}{2} \cdot \gamma_1 \cdot Hd^2 \cdot kp + (2 \cdot c_1 \cdot kp^{0.5} + \gamma_1 \cdot kp \cdot H2) \cdot Hd = 0.00 \quad (\text{kN/m})$$

MOMENTI DELLA SPINTA DEL TERRENO E DEL SOVRACCARICO

condizione statica

$$MSt1 = Sth \cdot ((H2 + H3 + H4 + Hd) / 3 - Hd) = 8.33 \quad (\text{kN/m})$$

$$MSt2 = St \cdot B = 6.09 \quad (\text{kN/m})$$

$$MSq1 = Squ \cdot ((H2 + H3 + H4 + Hd) / 2 - Hd) = 15.91 \quad (\text{kN/m})$$

$$MSq2 = Sq \cdot B = 7.75 \quad (\text{kN/m})$$

$$MSp = \gamma_1 \cdot Hd^3 \cdot kp / 3 + (2 \cdot c_1 \cdot kp^{0.5} + \gamma_1 \cdot kp \cdot H2) \cdot Hd^2 / 2 = 0.00 \quad (\text{kN/m})$$

FORZE ESTERNE

Momento dovuto alle Forze Esterne (Mfext)

$$Mfext1 = m = 0.00 \quad (\text{kNm/m})$$

$$Mfext2 = f \cdot (H3 + H2) = 0.00 \quad (\text{kNm/m})$$

$$Mfext3 = v \cdot (B1 + B2 + B3 / 2) = 0.00 \quad (\text{kNm/m})$$

AZIONI TOTALI SULLA FONDAZIONE

Risultante forze verticali (N)

$$N = Pm + Pt + v + Stv + Sqv = 76.94 \quad (\text{kN/m})$$

Momento stabilizzante (Ms)

$$Ms = Mm + Mt + MSt2 + MSq2 + Mfext3 = 79.16 \quad (\text{kNm/m})$$

Momento ribaltante (Mr)

$$Mr = MSt1 + MSq1 + Mfext1 + Mfext2 + MSp = 24.24 \quad (\text{kNm/m})$$

Risultante dei momenti rispetto al piede di valle (MM)

$$MM = Ms - Mr = 54.92 \quad (\text{kNm/m})$$

Momento rispetto al baricentro della fondazione (M)

$$M = Xc \cdot N - MM = 10.48 \quad (\text{kNm/m})$$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 292 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CALCOLI STATICI

DATI DI PROGETTO:

Caratteristiche dei Materiali

Calcestruzzo

Rck = 40 (MPa)

fctm = 0.48*Rck^{1/2} = 3.04 (MPa)

coefficiente omogeneizzazione acciaio n = 15

Copriferro (distanza asse armatura-bordo)

c = 5.60 (cm)

Copriferro minimo di normativa (ricoprimento armatura)

c_{min} = 2.00 (cm)

Valore limite di apertura delle fessure

w₁ = 0.2 mm = Wk

Acciaio

tipo di acciaio B450C

f_{yk} = 450 (MPa)

Es = 210000 (MPa)

CALCOLO SOLLECITAZIONI SOLETTA DI FONDAZIONE

Reazione del terreno

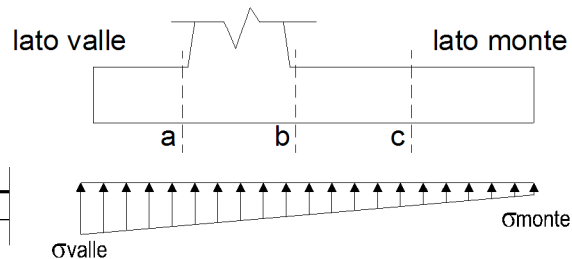
$\sigma_{valle} = N / A + M / W_{gg}$

$\sigma_{monte} = N / A - M / W_{gg}$

A = b*h = 1.70 (m²)

W_{gg} = b*h²/6 = 0.48 (m³)

caso	N	M	σ_{valle}	σ_{monte}
	[kN]	[kNm]	[kN/m ²]	[kN/m ²]
statico	76.94	10.48	67.01	23.51

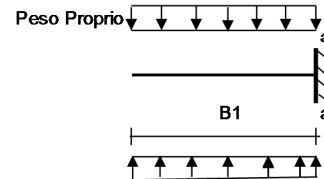


Mensola Lato Valle - Schema Statico

PP = 7.50 (kN/m) peso proprio soletta fondazione

$M_a = \sigma_1 * B^2 / 2 + (\sigma_{valle} - \sigma_1) * B^2 / 3 - PP * B^2 / 2 * (1 \pm kv)$

caso	σ_{valle}	σ_1	M _a
	[kN/m ²]	[kN/m ²]	[kNm]
statico	67.01	59.33	2.56



Mensola Lato Monte - Schema Statico

PP = 7.50 (kN/m²) peso proprio soletta fondazione

PD = 0.00 (kN/m) peso proprio dente

p_m = 38.00 (kN/m²)

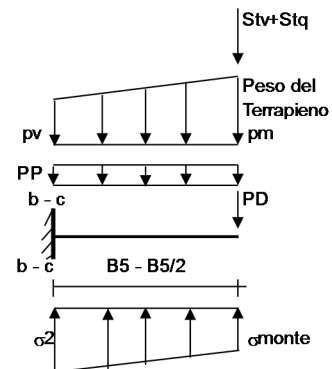
p_{vb} = 38.00 (kN/m²)

p_{vc} = 38.00 (kN/m²)

$M_b = (\sigma_{monte} - (p_{vb} + PP) * (1 \pm kv)) * B^2 / 2 + (\sigma_2b - \sigma_{monte}) * B^2 / 6 - (p_m - p_{vb}) * (1 \pm kv) * B^2 / 3 - (Stv + Sqv) * B^2 - PD * (1 \pm kv) * (B^2 - Bd/2) - PD * kh * (Hd + H2/2) + Msp + Sp * H2/2$

$M_c = (\sigma_{monte} - (p_{vc} + PP) * (1 \pm kv)) * (B5/2)^2 / 2 + (\sigma_2c - \sigma_{monte}) * (B5/2)^2 / 6 - (p_m - p_{vc}) * (1 \pm kv) * (B5/2)^2 / 3 - (Stv + Sqv) * (B5/2) - PD * (1 \pm kv) * (B5/2 - Bd/2) - PD * kh * (Hd + H2/2) + Msp + Sp * H2/2$

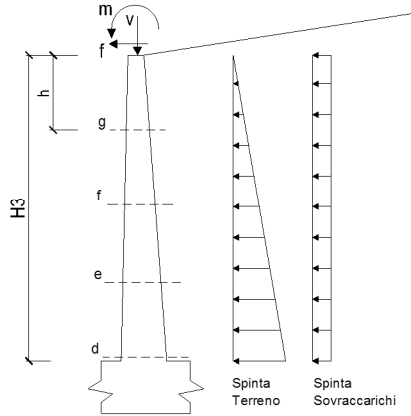
caso	σ_{monte}	σ_2b	M _b	σ_2c	M _c
	[kN/m ²]	[kN/m ²]	[kNm]	[kN/m ²]	[kNm]
statico	23.51	51.66	-16.58	37.58	-7.09



Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 293 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

CALCOLO SOLLECITAZIONI PARAMENTO VERTICALE DEL MURO

Azioni sulla parete e Sezioni di Calcolo

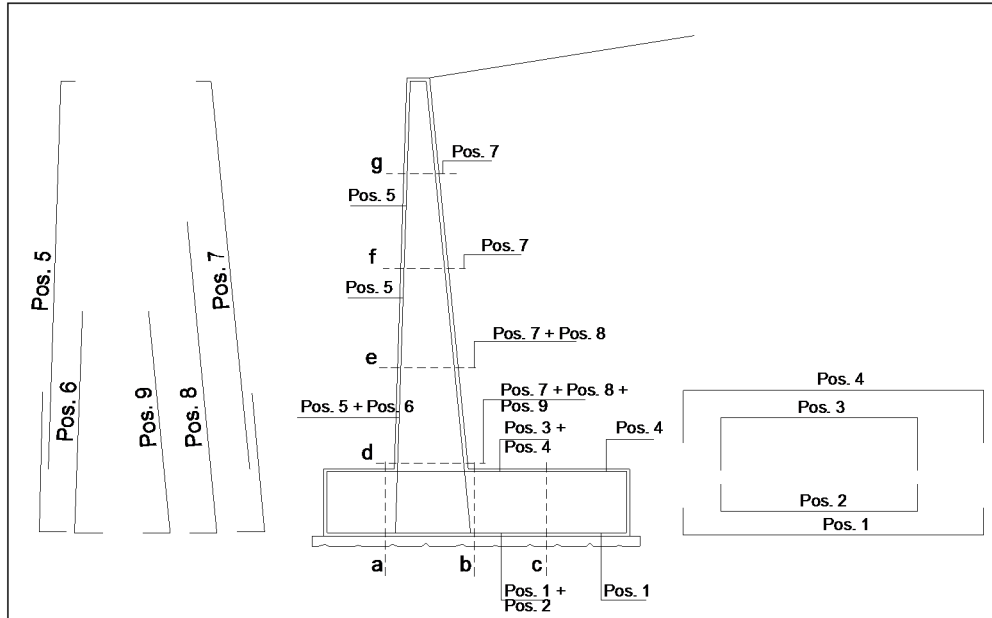


Dati Sismici	Accelerazione sismica	a_g/g	=	0.28	(-)	
	Categoria di suolo	S	=	1.25	(-)	
	il muro ammette spostamenti? (si/no)	<input checked="" type="radio"/> si <input type="radio"/> no				$r = 2$
	coefficiente sismico orizzontale	kh	=	0.1719	(-)	
	coefficiente sismico verticale	kv	=	0.0859	(-)	
Coefficienti di Spinta	Coeff. di Spinta Attiva sulla parete	ka	=	0.25	(-)	0.246
	componente orizzontale	kah	=	0.23	(-)	
	componente verticale	kav	=	0.07	(-)	
	Coeff. Di Spinta Attiva Sismica sulla parete	kas+	=	0.35	(-)	0.347
	componente orizzontale	kash+	=	0.33	(-)	
	componente verticale	kasv+	=	0.10	(-)	
	Coeff. Di Spinta Attiva Sismica sulla parete	kas-	=	0.37	(-)	0.370
	componente orizzontale	kash-	=	0.35	(-)	
	componente verticale	kasv-	=	0.11	(-)	

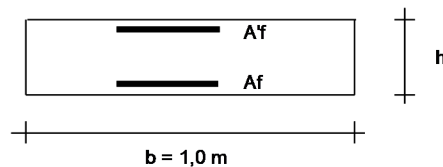
condizione statica

sezione	h	Mt	Mq	M _{ext}	M _{tot}	Nt	Nq	N _{ext}	N _{pp}	N _{tot}
	[m]	[kNm/m]	[kNm/m]	[kNm/m]	[kNm/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]
d-d	1.90	5.37	11.86	0.00	17.23	2.67	3.94	0.00	14.25	20.86
e-e	1.43	2.26	6.67	0.00	8.94	1.50	2.95	0.00	10.69	15.14
f-f	0.95	0.67	2.97	0.00	3.64	0.67	1.97	0.00	7.13	9.76
g-g	0.48	0.08	0.74	0.00	0.83	0.17	0.98	0.00	3.56	4.71

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 294 di
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	-----------------------

SCHEMA DELLE ARMATURE

ARMATURE

pos	n°/ml	φ	pos	n°/ml	φ
1	5.0	12	5	5.0	12
2	5.0	0	6	0.0	0
3	5.0	0	7	5.0	12
4	5.0	12	8	0.0	0
			9	5.0	0

VERIFICHE


a-a pos 1-2-3-4
 b-b pos 1-2-3-4
 c-c pos 1-4
 d-d pos 5-6-7-8-9
 e-e pos 5-7-8
 f-f pos 5-7
 g-g pos 5-7

Condizione Statica

Sez.	M	N	h	Af	A'f	σc	σf	wk	w _{amm}
(-)	(kNm)	(kN)	(m)	(cm ²)	(cm ²)	(N/mm ²)	(N/mm ²)	(mm)	(mm)
a - a	2.56	0.00	0.30	5.65	5.65	0.40	20.13	0.021	0.200
b - b	-16.58	0.00	0.30	5.65	5.65	2.61	130.26	0.139	0.200
c - c	-7.09	0.00	0.30	5.65	5.65	1.12	55.72	0.059	0.200
d - d	17.23	20.86	0.30	5.65	5.65	2.68	115.91	0.121	0.200
e - e	8.94	15.14	0.30	5.65	5.65	1.38	56.17	0.058	0.200
f - f	3.64	9.76	0.30	5.65	5.65	0.55	19.62	0.020	0.200
g - g	0.83	4.71	0.30	5.65	5.65	0.11	2.40	0.002	0.200

(n.b.: M+ tende le fibre di intradosso, M- tende le fibre di estradosso)

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 295 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

Verifica a taglio sezione b-b			
<i>Elementi senza armatura trasversale a taglio</i>			
<i>- Verifica del conglomerato</i>			
$VRd = [0,18 \cdot k \cdot (100 \cdot \rho \cdot 1 \cdot f_{ck})^{1/3} / \gamma_c + 0,15 \cdot \sigma_{cp}] \cdot bw \cdot d =$	107.36	kN	
VEd =	41.43	kN	ok
con:			
$K = 1 + (200/d)^{1/2} =$	1.933		≤ 2
$R_{ck} =$	40	N/mm ²	
$v_{min} = 0,035 \cdot k^{3/2} \cdot f_{ck}^{1/2} =$	0.542	N/mm ²	
$f_{ck} = 0,83 \cdot R_{ck} =$	33.2	N/mm ²	
$f_{cd} = \alpha_{cc} \cdot f_{ck} / \gamma_c =$	18.81	N/mm ²	
$\rho_1 = A_{sl} / (bw \cdot d) =$	0.00246		$\leq 0,02$
$d =$	230	mm	
$H =$	300	mm	
$bw =$	1000	mm	
$A_{sl} =$	565	mm ²	(1ϕ12/20)
$N_{Ed} =$	0.00	kN	
$\sigma_{cp} = N_{Ed} / A_c =$	0.000	N/mm ²	$\leq 0,2 \cdot f_{cd}$

Opera L0703	Tratto 211	Settore E	CEE 11	WBS CS5007	Id.doc REL	N.progr. 04	REV. A	Pag.di Pag. 296 di 296
----------------	---------------	--------------	-----------	---------------	---------------	----------------	-----------	---------------------------

Verifica a taglio sezione d-d			
<i>Elementi senza armatura trasversale a taglio</i>			
<i>- Verifica del conglomerato</i>			
$VRd = [0,18 \cdot k \cdot (100 \cdot \rho \cdot 1 \cdot f_{ck})^{1/3} / \gamma_c + 0,15 \cdot \sigma_{cp}] \cdot bw \cdot d =$	107.36	kN	
VEd =	31.62	kN	ok
con:			
$K = 1 + (200/d)^{1/2} =$	1.933		≤ 2
Rck =	40	N/mm ²	
$v_{min} = 0,035 \cdot k^{3/2} \cdot f_{ck}^{1/2} =$	0.542	N/mm ²	
fck = 0,83 · Rck =	33.2	N/mm ²	
$f_{cd} = \alpha_{cc} \cdot f_{ck} / \gamma_c =$	18.81	N/mm ²	
$\rho_1 = A_{sl} / (bw \cdot d) =$	0.00246		$\leq 0,02$
d =	230	mm	
H =	300	mm	
bw =	1000	mm	
A _{sl} =	565	mm ²	(1ϕ12/20)
N_{Ed} =	0.00	kN	
$\sigma_{cp} = N_{Ed} / A_c =$	0.000	N/mm ²	$\leq 0,2 \cdot f_{cd}$