

Department of Contracts  
Notre Dame Ravelin  
Floriana

30th December 2004

To Heads of Department  
and Parastatal Bodies

**READY MIXED CONCRETE FOR GENERAL/MARITIME USE - MALTA 2005**

1. Heads of Department and Accounting Officers are requested to note that the contract for the supply and delivery of Ready Mixed Concrete for General and Maritime Use has been placed with the contractors shown below at the prices indicated on the attached Schedules 'A', 'B', 'C' and 'D'. Prices, are inclusive of all charges and all taxes, including 18% VAT and delivery costs.

**A** Schembri & Sons Ltd  
Hal Far Road  
B'Bugia BBG 07

Tel: 21658152/6  
VAT No. 1004 - 6433

This contractor is responsible for the South Region, that is, B'Kara, Penbroke, St. Julians, Sliema, Gzira, San Gwann, Manoel Island, Ta' Xbiex, Msida, Pieta, Marsa, Hamrun, Qormi, Zebbug, Siggiewi, Qrendi, Luqa, M'Xlokk, Paola, Gudja, Ghaxaq, B'Bugia, Zejtun, Zabbar, Cottonera, Valletta and Floriana including all confines of their respective towns and villages.

**B** Vassallo Concrete Supplies Ltd.  
Concrete Supplies Ltd.  
Wied il-Ghasel  
Burmarrad SPB 08

Tel: 21430774 / 21577399  
VAT No. 1228 7323

This contractor is responsible for the North Region, that is, Mellicha, St. Paul's Bay, Mgarr, Mtarfa, Naxxar, Mdina, Burmarrad, Bugibba, Mosta, Magtab, Rabat, Dingli, Lija, Balzan, Attard including all confines of their respective towns and villages.

2. Payments to the above contractors are not to be made until further notice.
3. This contract shall run from the 1<sup>st</sup> January 2005 up to the 31<sup>st</sup> December 2005.
4. The Specifications and Conditions regulating this contract are attached.
5. This contract is governed by the attached 'General Conditions of Contract for the Supply of Goods and Materials under a Running Period Contract.'

E.Zarb  
Director General (Contracts)

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Schembri & Sons Ltd. (South Region)

**STRUCTURAL CONCRETE MIX SCHEDULE 'A'**

MIX DESCRIPTION			Item 1	Item 2	Item 3	Item 4	Item 5
			REINFORCED CONCRETE				
Type of Mix			Designed	Designed	Designed	Designed	Designed
Type of Cement		To B.S.	12 (OP)	12 (OP)	12 (OP)	12 (OP)	12 (OP)
Type of Aggregate	Coarse	To B.S.	882, 1201	882, 1201	882, 1201	882, 1201	882, 1201
	Fine	To B.S.	882, 1201	882, 1201	882, 1201	882, 1201	882, 1201
Nominal Maximum Aggregate Size (mm)			20	20	20	20	20
Concrete Grade			C20	C25	C30	C35	C40
Minimum Cement Content		kg/m <sup>3</sup>	240	260	275	300	325
Sampling Rate		#/m <sup>3</sup>	20	20	20	20	20
Workability	Slump	mm	40-70	40-70	40-70	40-70	40-70
	Flow	mm					
Maximum Free Water / Cement Ratio			0.8	0.7	0.65	0.6	0.55
Admixtures	Prohibited		Yes	Yes	Yes	Yes	Yes
	Specified						
Density of Concrete	Minimum	kg/m <sup>3</sup>	2250	2250	2250	2250	2250

Mix Cement Content	kg/m <sup>3</sup>	262	314	373	430	450
Mix Fine Aggregate	kg/m <sup>3</sup>	800	686	583	483	477
Mix Coarse Aggregate	kg/m <sup>3</sup>	978	1030	1084	1127	1113
Water Content	l/m <sup>3</sup>	210	220	210	210	210
Admixtures	l/m <sup>3</sup>	n/a	n/a	n/a	n/a	n/a
Rate*	Lm/m <sup>3</sup>	15.65	16.38	17.40	18.42	19.50

# Four cubes per sample: 2 tested at 7 days and 2 tested at 28 days  
 N/A Not Applicable

- (a) Superplasticiser
- (b) Accelerating
- (c) Retarding
- (d) Water-Reducing
- (e) Air-entraining

\* Rate quoted should be per cubic metre delivered inclusive of VAT, and other charges as applicable

Schembri & Sons Ltd. (South Region)

**STRUCTURAL CONCRETE MIX SCHEDULE 'B'**

MIX DESCRIPTION			Item 1	Item 2	Item 3
Type of Mix			Designed	Designed	Designed
Type of Cement		To B.S.	12 (OP)	12 (OP)	12 (OP)
Type of Aggregate	Coarse	To B.S.	882, 1201	882, 1201	882, 1201
	Fine	To B.S.	882, 1201	882, 1201	882, 1201
Nominal Maximum Aggregate Size (mm)			20	20	20
Concrete Grade			C30	C35	C40
Minimum Cement Content		kg/m <sup>3</sup>	275	300	325
Sampling Rate		#/m <sup>3</sup>	20	20	20
Workability	Slump	mm			
	Flow	mm	510-620	510-620	510-620
Maximum Free Water / Cement Ratio			0.65	0.6	0.5
Admixtures	Prohibited		No	No	No
	Specified		(a)	(a)	(a)
Density of Concrete	Minimum	kg/m <sup>3</sup>	2250	2250	2250
Mix Cement Content			373	430	450
Mix Fine Aggregate			587	567	560
Mix Coarse Aggregate			1090	1053	1040
Water Content			200	200	200
Admixtures			3.7	4.3	4.5
Rate*			17.40	18.42	19.45

- # Four cubes per sample: 2 tested at 7 days and 2 tested at 28 days  
 N/A Not Applicable
- (a) Superplasticiser  
 (b) Accelerating  
 (c) Retarding  
 (d) Water-Reducing  
 (e) Air-entraining

\* Rate quoted should be per cubic metre delivered inclusive of VAT, and other charges as applicable

**STRUCTURAL CONCRETE MIX SCHEDULE 'C'**

MIX DESCRIPTION			Item 1	Item 2	Item 3
			MASS CONCRETE		
Type of Mix			Designed	Designed	Designed
Type of Cement		To B.S.	12 (OP)	12 (OP)	12 (OP)
Type of Aggregate	Coarse	To B.S.	882, 1201	882, 1201	882, 1201
	Fine	To B.S.	882, 1201	882, 1201	882, 1201
Nominal Maximum Aggregate Size (mm)			40	20	40
Concrete Grade			C15	C20	C20
Minimum Cement Content		kg/m <sup>3</sup>	175	180	150
Sampling Rate		#/m <sup>3</sup>	100	100	100
Workability	Slump	mm	40-70	40-70	40-70
Maximum Free Water / Cement Ratio			0.7	0.6	0.6
Admixtures		Prohibited	Yes	Yes	Yes
		Specified			
Density of Concrete	Minimum	kg/m <sup>3</sup>	2200	2200	2200

Mix Cement Content	kg/m <sup>3</sup>	200	262	240
Mix Fine Aggregate	kg/m <sup>3</sup>	1116	890	726
Mix Coarse Aggregate	kg/m <sup>3</sup>	744	890	1090
Water Content	l/m <sup>3</sup>	140	157	144
Admixtures	l/m <sup>3</sup>	n/a	n/a	n/a
Rate*	Lm/m <sup>3</sup>	12.70	12.95	12.70

# Four cubes per sample: 2 tested at 7 days and 2 tested at 28 days  
 N/A Not Applicable

- (a) Superplasticiser
- (b) Accelerating
- (c) Retarding
- (d) Water-Reducing
- (e) Air-entraining

\* Rate quoted should be per cubic metre delivered inclusive of VAT, and other charges as applicable

Schembri & Sons Ltd. (South Region)

**STRUCTURAL CONCRETE MIX SCHEDULE 'D'**

MIX DESCRIPTION			Item 1	Item 2	Item 3
			UNDERWATER CONCRETE		
Type of Mix			Designed	Designed	Designed
Type of Cement		To B.S.	12 (OP)	12 (OP)	12 (OP)
Type of Aggregate	Coarse	To B.S.	882, 1201	882, 1201	882, 1201
	Fine	To B.S.	882, 1201	882, 1201	882, 1201
Nominal Maximum Aggregate Size (mm)			40	40	20
Concrete Grade			C20	C20	C25
Minimum Cement Content		kg/m <sup>3</sup>	350	350	350
Sampling Rate		#/m <sup>3</sup>	100	100	100
Workability	Slump	mm	125	125	
	Flow	mm			510-620
Maximum Free Water / Cement Ratio					
Admixtures	Prohibited		Yes	Yes	No
	Specified				(d)
Density of Concrete	Minimum	kg/m <sup>3</sup>	2300	2300	2300

Mix Cement Content	kg/m <sup>3</sup>	350	350	400
Mix Fine Aggregate	kg/m <sup>3</sup>	870	870	760
Mix Coarse Aggregate	kg/m <sup>3</sup>	870	870	930
Water Content	l/m <sup>3</sup>	210	210	210
Admixtures	l/m <sup>3</sup>	n/a	n/a	4.0
Rate*	Lm/m <sup>3</sup>	18.25	18.25	19.00

# Four cubes per sample: 2 tested at 7 days and 2 tested at 28 days  
 N/A Not Applicable

- (a) Superplasticiser
- (b) Accelerating
- (c) Retarding
- (d) Water-Reducing
- (e) Air-entraining

\* Rate quoted should be per cubic metre delivered inclusive of VAT, and other charges as applicable

Vassallo Concrete Supplies Ltd. (North Region)

**STRUCTURAL CONCRETE MIX SCHEDULE 'A'**

MIX DESCRIPTION			Item 1	Item 2	Item 3	Item 4	Item 5
			REINFORCED CONCRETE				
Type of Mix			Designed	Designed	Designed	Designed	Designed
Type of Cement		To B.S.	12 (OP)	12 (OP)	12 (OP)	12 (OP)	12 (OP)
Type of Aggregate	Coarse	To B.S.	882, 1201	882, 1201	882, 1201	882, 1201	882, 1201
	Fine	To B.S.	882, 1201	882, 1201	882, 1201	882, 1201	882, 1201
Nominal Maximum Aggregate Size (mm)			20	20	20	20	20
Concrete Grade			C20	C25	C30	C35	C40
Minimum Cement Content		kg/m <sup>3</sup>	240	260	275	300	325
Sampling Rate		#/m <sup>3</sup>	20	20	20	20	20
Workability	Slump	mm	40-70	40-70	40-70	40-70	40-70
	Flow	mm					
Maximum Free Water / Cement Ratio			0.8	0.7	0.65	0.6	0.55
Admixtures	Prohibited		Yes	Yes	Yes	Yes	Yes
	Specified						
Density of Concrete	Minimum	kg/m <sup>3</sup>	2250	2250	2250	2250	2250

Mix Cement Content	kg/m <sup>3</sup>	240	260	275	300	325
Mix Fine Aggregate	kg/m <sup>3</sup>	600	600	680	560	550
Mix Coarse Aggregate	kg/m <sup>3</sup>	1240	1220	1200	1210	1200
Water Content	l/m <sup>3</sup>	170	170	175	180	180
Admixtures	l/m <sup>3</sup>	nil	nil	Nil	nil	nil
Rate*	Lm/m <sup>3</sup>	15.65	16.38	17.40	18.42	19.50

# Four cubes per sample: 2 tested at 7 days and 2 tested at 28 days  
 N/A Not Applicable

- (a) Superplasticiser
- (b) Accelerating
- (c) Retarding
- (d) Water-Reducing
- (e) Air-entraining

\* Rate quoted should be per cubic metre delivered inclusive of VAT, and other charges as applicable

Vassallo Concrete Supplies Ltd. (North Region)

**STRUCTURAL CONCRETE MIX SCHEDULE 'B'**

Item 1      Item 2      Item 3

MIX DESCRIPTION					
Type of Mix			Designed	Designed	Designed
Type of Cement		To B.S.	12 (OP)	12 (OP)	12 (OP)
Type of Aggregate	Coarse	To B.S.	882, 1201	882, 1201	882, 1201
	Fine	To B.S.	882, 1201	882, 1201	882, 1201
Nominal Maximum Aggregate Size (mm)			20	20	20
Concrete Grade			C30	C35	C40
Minimum Cement Content		kg/m <sup>3</sup>	275	300	325
Sampling Rate		#/m <sup>3</sup>	20	20	20
Workability	Slump	mm			
	Flow	mm	510-620	510-620	510-620
Maximum Free Water / Cement Ratio			0.65	0.6	0.5
Admixtures	Prohibited		No	No	No
	Specified		(a)	(a)	(a)
Density of Concrete	Minimum	kg/m <sup>3</sup>	2250	2250	2250

Mix Cement Content	kg/m <sup>3</sup>	275	300	325
Mix Fine Aggregate	kg/m <sup>3</sup>	580	560	550
Mix Coarse Aggregate	kg/m <sup>3</sup>	1220	1210	1215
Water Content	l/m <sup>3</sup>	175	180	165
Admixtures	l/m <sup>3</sup>	2.75	3.00	3.25
Rate*	Lm/m <sup>3</sup>	17.40	18.42	19.45

#            Four cubes per sample: 2 tested at 7 days and 2 tested at 28 days  
 N/A        Not Applicable

- (a)        Superplasticiser
- (b)        Accelerating
- (c)        Retarding
- (d)        Water-Reducing
- (e)        Air-entraining

\* Rate quoted should be per cubic metre delivered inclusive of VAT, and other charges as applicable



Vassallo Concrete Supplies Ltd. (North Region)

**STRUCTURAL CONCRETE MIX SCHEDULE 'C'**

MIX DESCRIPTION			Item 1	Item 2	Item 3
			MASS CONCRETE		
Type of Mix			Designed	Designed	Designed
Type of Cement		To B.S.	12 (OP)	12 (OP)	12 (OP)
Type of Aggregate	Coarse	To B.S.	882, 1201	882, 1201	882, 1201
	Fine	To B.S.	882, 1201	882, 1201	882, 1201
Nominal Maximum Aggregate Size (mm)			40	20	40
Concrete Grade			C15	C20	C20
Minimum Cement Content		kg/m <sup>3</sup>	175	180	150
Sampling Rate		#/m <sup>3</sup>	100	100	100
Workability	Slump	mm	40-70	40-70	40-70
Maximum Free Water / Cement Ratio			0.7	0.6	0.6
Admixtures		Prohibited	Yes	Yes	Yes
		Specified			
Density of Concrete	Minimum	kg/m <sup>3</sup>	2200	2200	2200

Mix Cement Content	kg/m <sup>3</sup>	175	180	150
Mix Fine Aggregate	kg/m <sup>3</sup>	700	700	760
Mix Coarse Aggregate	kg/m <sup>3</sup>	1200	1120	1200
Water Content	l/m <sup>3</sup>	125	108	90
Admixtures	l/m <sup>3</sup>	Nil	nil	nil
Rate*	Lm/m <sup>3</sup>	12.70	12.95	12.70

# Four cubes per sample: 2 tested at 7 days and 2 tested at 28 days  
 N/A Not Applicable

- (a) Superplasticiser
- (b) Accelerating
- (c) Retarding
- (d) Water-Reducing
- (e) Air-entraining

\* Rate quoted should be per cubic metre delivered inclusive of VAT, and other charges as applicable

Vassallo Concrete Supplies Ltd. (North Region)

**STRUCTURAL CONCRETE MIX SCHEDULE 'D'**

MIX DESCRIPTION			Item 1	Item 2	Item 3
			UNDERWATER CONCRETE		
Type of Mix			Designed	Designed	Designed
Type of Cement		To B.S.	12 (OP)	12 (OP)	12 (OP)
Type of Aggregate	Coarse	To B.S.	882, 1201	882, 1201	882, 1201
	Fine	To B.S.	882, 1201	882, 1201	882, 1201
Nominal Maximum Aggregate Size (mm)			40	40	20
Concrete Grade			C20	C20	C25
Minimum Cement Content		kg/m <sup>3</sup>	350	350	350
Sampling Rate		#/m <sup>3</sup>	100	100	100
Workability	Slump	mm	125	125	
	Flow	mm			510-620
Maximum Free Water / Cement Ratio					
Admixtures	Prohibited		Yes	Yes	No
	Specified				(d)
Density of Concrete	Minimum	kg/m <sup>3</sup>	2300	2300	2300

Mix Cement Content	kg/m <sup>3</sup>	350	350	350
Mix Fine Aggregate	kg/m <sup>3</sup>	570	570	580
Mix Coarse Aggregate	kg/m <sup>3</sup>	1170	1170	1200
Water Content	l/m <sup>3</sup>	210	210	170
Admixtures	l/m <sup>3</sup>	nil	Nil	3.50
Rate*	Lm/m <sup>3</sup>	18.25	18.25	19.00

# Four cubes per sample: 2 tested at 7 days and 2 tested at 28 days  
 N/A Not Applicable

- (a) Superplasticiser
- (b) Accelerating
- (c) Retarding
- (d) Water-Reducing
- (e) Air-entraining

\* Rate quoted should be per cubic metre delivered inclusive of VAT, and other charges as applicabl