



## 2. Supply of Coronous Gravel Material

### 2.1 Scope

This specification covers the production and supply of material construction of gravel wearing coarse and shoulders of coronous material.

### 2.1 Compliance Measures

Material for gravel wearing coarse and shoulders shall be selected from an approved material source or presented to the Engineer for approval prior to use and shall be free of vegetable matter, balls of clay, topsoil, overburden and any other deleterious material. The method of selection and processing shall be approved by the Engineer before full scale processing of material.

Shoulders will either be constructed from the same material as the base course or imported gravel. Imported gravel for shoulders shall conform with the requirements for wearing coarse gravels as follows:

Maximum size	63 mm
Maximum percentage retained on 37.5 mm sieve	10
Maximum Percentage passing in 0.075 mm sieve	30
Minimum 4-day soaked CBR at 55% MDD AS1289.5.2.1 over a moisture content range of at least 5%	60

The particle size distribution of the material determined in accordance with AS1289.3.6.1 shall conform to the following requirements:

$$5 < C_u (\text{Mod}) < 50$$

$$0.5 < C_c (\text{Mod}) < 3$$

where:

$$C_u (\text{Mod}) = \frac{D_{60}}{D_{30}}$$

$$C_c (\text{Mod}) = \frac{D_{30}^2}{D_{10} D_{60}}$$

and:



D80 = Particle size for which 80% by mass of the sample is finer  
D50 = Particle size for which 50% by mass of the sample is finer  
D30 = Particle size for which 30% by mass of the sample is finer

The material shall not contain more than 30% by weight passing the 75 micron sieve.

The Plasticity Modulus (Linear Shrinkage multiplied by percentage of material passing the 425 micron sieve) shall not exceed 800 and shall not be less than 100.

The Shrinkage Modulus (Linear Shrinkage multiplied by percentage of material passing the 425 micron sieve) shall not exceed 250.

The Plasticity Index shall be determined in accordance with AS1289 C3.1 (AS1289.3.3.1)

The Linear Shrinkage shall be determined in accordance with AS1289 C4.1 (AS1289.3.4.1)

## 2.2 Measurement and Payment

Payment for this item shall be at the scheduled rate for the volume in loose cubic meter of stockpiled road base material conforming with the above material requirements.

## 3 CORONOUS SPOT GRAVELLING

### 3.1 Description

The pavement layer of coronous material to be constructed under this contract is 4m width and 100mm randomly in different locations as instructed by the Construction Supervisor.

Pavement material shall be hauled, placed, spread, watered and compacted.

The standard of work is to be the same for all categories of roads. For pavement layer, the finished surface shall:

- be true to shape being 5% on straight sections and either maintain existing superelevation on curves or change the superelevation as directed;
- Immediately prior to compaction, pavement surface shall be watered with a water truck to optimum moisture content;
- Minimum compaction requirement is defined with at least 8 passes of a minimum 10 tonne steel drum roller over the full carriageway width, until a sound tight surface is obtained or until there is no visible movement under compaction equipment (compaction 'til refusal').

### 3.2 Routine Inspection

Construction Supervisor will undertake routine inspections jointly with the Contractor and do routine tests in order to determine the quality of works.

Such inspections may include excavation of pits to establish the depth of a layer or other forms of what may represent localized damage to the layer in order to establish some of the required properties. Such tests can be undertaken at any time and location at the Construction Supervisor's choice.

Contractor is required to rectify such localized damage immediately after conclusion of the inspection.

### 3.4 Measurement and Payment

The unit of measurement shall be in linear kilometre of compacted pavement layer of 100mm and 4m width.

The tendered rates shall include full compensation for transportation of coronous material from the specified locality, spreading, watering and compaction works.

## 1.3 Demobilisation

### Measurement and payment

The unit of measurement shall be a lump sum and will be certified when the demobilization of the construction supervisor



[Please submit with the quotation].

Item	Description of Work	Quarter 1			Quarter 2			Quarter 3			Quarter 4		
		M1	M2	M3	W1	W2	W3	W4	W1	W2	W3	W4	
1.													
2.													
3.													
4.													
5.													

Signed:  
 Name:  
 Title/Position:  
 Authorised for and on behalf of:  
 Contractor:  
 Address:  
 Date:



**SECTION D: SCHEDULE OF RATES AND PRICES (For Contracts where Payment is to be based on Quantities of Work actually performed at the unit rates quoted)**

ITEM	DESCRIPTION	UNIT	CONTRACT QUANTITIES		RATE	(VUV)
			INITIAL		CURRENT	INITIAL
<b>Preliminary and General</b>						
1.1	Mobilisation to the site and establishment	LS	1			
1.2	Demobilisation from site	LS	1			
<b>Total Preliminary and General</b>						
<b>Pavement Works</b>						
C.3.2	Spreading, Watering and Compaction of 5m width of Road	Km	12			
C.3.3	Supply and Delivery of Road base Material	M3	7000			
<b>TOTAL ORDERED WORKS ALL BILLS:</b>						*
<b>VAT:</b>		15.0%				*
<b>TOTAL (UPDATED) CONTRACT SUM:</b>						*

**Inclusive of VAT and duties**

Signed:

Name:

Title/Position:

Authorised for and on behalf of:

Contractor:

Address:

Date:





## SECTION F: GENERAL CONDITIONS OF CONTRACT (GCC)

### GENERAL PROVISIONS

1. The Documents listed in the Contract represent the entire and integrated Contract between the Employer and the Contractor. The Contract is governed by and shall be construed in accordance with the Laws of the Republic of Vanuatu, and the ruling language of the Contract is English.
2. All prior negotiations, representations and agreements, both oral and written, are superseded by the Contract. All correspondence and documents relating to the Contract between the parties and their representatives shall be in English.
3. Neither the Employer nor the Contractor shall assign, in whole or in part, their obligations under the Contract, except with the prior written consent of the other party.
4. In these Conditions of Contract, unless the context otherwise requires:  
**Construction Supervisor** means the person, appointed by the Employer, who supervises the Construction and certifies the completion, or partial completion, of the Works;  
**Contract** means the signed Contract Agreement, and the documentation specified therein, as entered into between the Employer and the Contractor for the provision of the Works;  
**Contract Cost** means the total cost stated in the Contract Agreement both in words and figures;  
**Contractor** means the person or organization stated in the Contract Agreement whose Quotation to provide the Works has been accepted by the Employer;  
**Days** mean calendar days;  
**Defects Liability Certificate** is the certificate issued by the Construction Supervisor upon verification of the completion of notified defects;  
**Defects Liability Period** means the period stated in the SCC following the issuance of the Practical Completion ("Taking Over") Certificate, during which the Contractor shall rectify any defects arising as a result of the performance of the Works;  
**Drawings** include calculations and other information provided or approved by the Construction Supervisor for the execution of the Contract;  
**Employer** means the Government of Vanuatu procuring entity stated in the Contract Agreement;  
**Force Majeure** means an event or situation beyond the control of either party that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of either party. Such events may include, but not be limited to, wars or revolutions, natural disasters (such as earthquakes, tsunamis, fires, floods etc.), epidemics, quarantine restrictions, and freight embargo;  
**In writing** means communicated in written form (e.g. by letter, e-mail or fax);  
**Months** mean calendar months;  
**Site Manager** means the person named in the Contract Agreement, who manages the implementation of the Contract on behalf of the Contractor;  
**Subcontractor** means any person or organization that supplies goods, materials, works or services to the Contractor;