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Transport Infrastructure Ireland

TII Publications



Introduction to the Requirements for Measuring and Pricing

CC-RMP-00010

June 2016

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TII Publication Title	<i>Introduction to the Requirements for Measuring and Pricing</i>
TII Publication Number	<i>CC-RMP-00010</i>

Activity	<i>Construction & Commissioning (CC)</i>	Document Set	<i>Standards</i>
Stream	<i>Requirements for Measuring and Pricing (RMP)</i>	Publication Date	<i>June 2016</i>
Document Number	<i>00010</i>	Historical Reference	Series 000

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TII Publications



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1. Contents of the Requirements for Measuring and Pricing

- Series 100 Preliminaries**
- Definitions
 - Temporary Accommodation
 - Permanent Accommodation
 - Vehicles for the Employer's Personnel
 - Communication System for the Employer's Representative
 - Operatives for the Employer's Representative
 - Information Board
 - Traffic Safety and Management
 - Temporary Diversion for Traffic
 - Recovery Vehicles
 - Progress Photographs
 - Road Sweeping and Cleaning
 - Emergency Services
 - Facilities for Local Authority, Public or Private Utility Undertakers and Other Contractors
 - Property Condition Surveys
 - Project Supervisor for the Construction Stage
 - Safety File
 - As Built Records
 - Specialist Works
 - Standing Conciliator
- Series 200 Site Clearance**
- Site Clearance
 - Take Up or Down and Set Aside for Re-use or Remove to Store Off Site
- Series 300 Fencing and Environmental Noise Barriers**
- Fencing, Gates and Stiles
 - Remove from Store and Re-erect Fencing Gates and Stiles
 - Walls and Environmental Noise Barriers
- Series 400 Safety Barriers and Pedestrian Guardrails**
- Definition
 - Safety Barrier System
 - Transitions
 - Terminals
 - Delivery of Materials and Equipment for Maintenance Purposes
 - Temporary Safety Barriers

Vehicle Parapet Systems
Pedestrian Parapets, Pedestrian Guardrails and Handrails
Anti-Glare Screens

Series 500 Drainage and Service Ducts

Definitions
Drains, Sewers, Piped Culverts and Service Ducts (excluding Filter Drains, Narrow Filter Drains & Fin Drains)
Filter Drains
Fin Drains and Narrow Filter Drains
Connections
Chambers and Gullies
Headwalls and Outfall Works
Headwalls and Revetments
Soft Spots and Other Voids
Supports Left in Excavation
Drainage and Service Ducts in Structures (including Reinforced Earth Structures and Anchored Earth Structures)
Filling to Pipe Bays and Verges on Bridges
Renewal, Raising or Lowering Covers and Gratings on Existing Chambers and Gullies
Remove from Store and Reinstall Chamber Covers and Gully Gratings and Frames
Grouting up of Existing Drains, Sewers, Piped Culverts and Service Ducts
Excavation in Hard Material
Backdrop Chambers
Petrol/Oil Interceptors, Hydro Brake Manhole and Gate Valve Manhole

Series 600 Earthworks

Definitions and Measurement General
Excavation
Excavation in Hard Material
Processing of Unacceptable Material Class U1
Deposition of Fill
Disposal of Material
Imported Fill
Compaction of Fill
Soil Improvement
Geotextiles
Soft Spots and Other Voids
Disused Sewers, Drains, Cables, Ducts, Pipelines and the Like Occurring at Formation or Sub-formation Level; Disused Basements, Cellars and the Like and Gullies
Supports Left in Excavation
Topsoiling and Storage of Topsoil

Grass Seeding and Turfing
Completion of Formation and Sub-formation
Lining of Watercourses
Clearing of Existing Ditches
Ground Improvement – Establishment of Dynamic Compaction Plant
Ground Improvement – Dynamic Compaction
Gabion Walling and Mattresses
Crib Walling
Filling and Caps to Mine Working, Well, Swallow Hole and the Like
Ground Anchorages & Soil Nails – Ground Anchorage & Soil Nail Plant
Ground Anchorages – Waterproofing Anchorage Boreholes
Instrumentation and Monitoring – Boring Plant
Instrumentation and Monitoring – Boring Holes
Instrumentation and Monitoring – Instrumentation
Instrumentation and Monitoring – Instrument Hut or Cabinet
Instrumentation and Monitoring – Monitoring Equipment
Ground Water Lowering
Trial Pits
Breaking Up and Perforation of Redundant Pavement
Perforation of Redundant Slabs, Basements and the Like

Series 700

Pavements

Sub-base
Pavement
Regulating Course
Surface Treatment
Bond Coat
Cold Milling
Repave Recycle Process
Reinstatement of Paved Areas
Repairs to Existing Concrete Carriageway
Geotextiles and Geotextile-related products
Repair Systems

Series 800

Not taken up

Series 900

Not taken up

Series 1000

Not taken up

Series 1100

Kerbs, Footways and Paved Areas

Kerbs, Channels, Edgings, Combined Drainage and Kerb Blocks and Linear Drainage
Channel Systems

Additional Concrete for Kerbs, Channels, Edgings, Combined Drainage and Kerb Blocks and Linear Drainage Channel Systems

Remove from Store and Relay Kerbs, Channels, Edgings and Combined Drainage and Kerb Blocks

Footways and Paved Areas

Remove from Store and Relay Paving Flags and Blocks

Steps

Remove from Store and Re-erect Street Furniture

Series 1200 Traffic Signs and Road Markings

Traffic Signs

Remove from Store and Re-erect Traffic Signs

Road Markings

Retroreflecting Road Studs

Remove from Store and Re-install Retroreflecting Road Studs

Traffic Signal Poles

Traffic Signal Heads

Traffic Signal Pole Box

Push Button Unit

Remove from Store and Re-erect Traffic Signal Head

Pedestrian Crossings

Delineators

Permanent Bollards

Nosing Markers

Retroreflective Markers

Series 1300 Road Lighting Columns and Brackets

Road Lighting Columns, Brackets and Wall Mountings

Remove from Store and Re-erect Road Lighting Columns, Brackets and Wall Mountings

Series 1400 Electrical Work for Road Lighting and Traffic Signs

Locating Buried Road Lighting and Traffic Signs Cable

Cabling

Cable Joints and Terminations

Feeder Pillars

Earth Electrodes

Series 1500 Motorway Communications

Locating Buried Communications Cable

Communications Cabling and Trench for Communication Cable

Communications Cable Joints and Terminations

Communications Equipment

Remove from Store and Re-install Communications Cabling and Equipment

Loop Detector Installations
Site Records
Stage 2 Commissioning of Cable

Series 1600 Piling and Embedded Retaining Walls

Piling Plant
Precast Concrete Piles
Cast-in-place Piles
Reinforcement for Cast-in-place Piles
Steel Bearing Piles
Proof Loading of Piles
Steel Sheet Piles
Embedded Retaining Wall Plant
Diaphragm Walls
Secant Pile Walls
Contiguous Bored Pile Walls
Reinforcement for Embedded Retaining Walls
King Post Wall Plant
King Posts
Reinforcement for King Post Piles
King Post Walling

Series 1700 Structural Concrete

In Situ Concrete
Precast Concrete
Surface Finish of Concrete – Formwork
Surface Finish of Concrete – Patterned Profile Formwork
Steel Reinforcement for Structures
Reinforcement for Reinforced and Anchored Earth Structures
In Situ Post-tensioned Prestressing for Structures

Series 1800 Steelwork for Structures

Fabrication and Erection of Steelwork
Fabrication of Steelwork
Erection of Steelwork
Miscellaneous Metalwork
Corrugated Steel Buried Structures
Metal Facing Units for Reinforced Earth Structures

Series 1900 Protection of Steelwork Against Corrosion

Protective System
Surface Preparation and Protective System

-
- Series 2000 Waterproofing for Structures**
Waterproofing
Surface Impregnation and Coatings of Concrete
Removal of Existing Waterproofing
- Series 2100 Bridge Bearings**
Bearings
- Series 2200 Parapets**
Series not used
- Series 2300 Bridge Expansion Joints and Sealing of Gaps**
Bridge Deck Expansion Joints
Sealing of Gaps
- Series 2400 Brickwork, Blockwork and Stonework**
Brickwork
Blockwork and Stonework
Remove from Store and Relay Brickwork, Blockwork and Stonework
Masonry Repointing
- Series 2500 Special Structures**
Special Structures
- Series 2600 Not taken up**
- Series 2700 Watermains, Utilities and Accommodation Works**
Watermains
Connections
Pipe Fittings
Valves and Penstocks
Chambers
Thrust Blocks
Utilities (other than Watermains) and Accommodation Works
- Series 2800 Trenchless Installation of Road Drainage & Service Ducts**
Scope
Definitions
Establishment and Removal of Plant
Drain and Service Ducts
Lateral Connections to Pipes to be Replaced by On-line Replacement
- Series 2900 CCTV Survey of Road Drainage Systems**
Scope
CCTV Survey of Highway Drainage Systems

2. Definitions

The Requirements for Measuring and Pricing (RMP) in TII Publications (Standards) is published as a collective group of documents under the Construction and Commissioning activity within the TII Publications system. Unless the context otherwise requires within the RMP, the following words and expressions shall have the meanings hereby respectively assigned to them, that is to say:

- (a) “Conditions of Contract” means the Conditions included in the Contract;
- (b) words and expressions to which meanings are assigned in the Conditions of Contract have the same meanings in the RMP;
- (c) words and expressions to which meanings are assigned in the Specification and Drawings referred to in the Conditions of Contract have the same meanings in the RMP;
- (d) “Bill of Quantities” means a list of items giving brief identifying descriptions and estimated quantities of work comprised in the execution of the works to be performed;
- (e) “Preliminary Item” means an item in respect of works, general obligations and risks antecedent to or involved in the execution of the Contract and which is set out in a “Preliminaries” section of the Bill of Quantities;
- (f) “Finishings” means the miscellaneous surfacings, furniture and ancillary features that are added to any part of a structure;
- (g) “Existing Ground Level” means the level of the ground before any work under the Contract is carried out;
- (h) “Hard Material” means one or both of the following:
 - (i) material so designated in the Preambles to Bill of Quantities;
 - (ii) material which requires the use of blasting, breakers or splitters for its removal but excluding individual masses less than 0.20 cubic metres
- (i) “Culvert” means an enclosed channel or pipe designated as a culvert in the Contract;
- (j) “Type of Pavement” means one of the following designs of pavement
 - (i) flexible;
 - (ii) flexible composite;
 - (iii) rigid;
- (k) “Designated Outline” means the designated outline shown on the Drawings;
- (l) “Drawings” means “drawings in the Contract”.

Note: A Designated Outline is shown as enclosing each structure to be designed by the Contractor and each structure for which a choice of designs is offered. The Designated Outline delineates the limits of measurement of work to be included for each structure (with the exception of those works scheduled as not to be included).

3. General Principles

- | | | |
|-----------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Requirements for Measuring and Pricing (RMP) | 1 | <ul style="list-style-type: none">a) The Requirements for Measuring and Pricing (RMP) is intended for use for road contracts based on the Public Works Contract for Civil Engineering Works Designed by the Employer or the Public Works Contract for Minor Building and Civil Engineering Works Designed by the Employerb) The RMP is based on the SPW and the SCDs within TII Publications and on the principle that full details of construction requirements are provided in the Contract. Additions or amendments to the SPW or the SCDs which are not adequately covered by the RMP may necessitate appropriate amendment to suit, which shall only be allowed under an Approved Departure from Standards. Provision is made in Section 4 of this document, under Preambles to Bill of Quantities, “Amendments to the Requirements for Measuring and Pricing (RMP)” to accommodate such amendments.c) The omission or amendment of any applicable requirement within the RMP shall only be allowed under an Approved Departure from Standards. |
| Bill of Quantities | 2 | <p>In the Bill of Quantities the sub-headings and item descriptions identify the work covered by the respective items read in conjunction with the matters listed against the relevant marginal headings “Item coverage” in the different parts of the RMP, in Section 4 of this document, under Preambles to Bill of Quantities and amendments. The nature and extent of the work to be performed is to be ascertained by reference to the Works Requirements and Contract Conditions.</p> |
| Itemisation – Groups and Features | 3 | <p>Each item description is to be consistent with and be compounded from one or more of the Groups listed under the marginal headings “Itemisation” within the different parts of the RMP incorporating amendments introduced in the Preambles to the Bill of Quantities. An item description may contain Features from as many Groups as necessary to identify the work required, but may include only one Feature from any one Group.</p> |
| Items in the Bill of Quantities | 4 | <p>The Bill of Quantities, unless expressly stated otherwise in the Contract is to contain all those items compounded in accordance with the foregoing paragraph 3 required to comprise the Works.</p> |

4. Preparation of Bill of Quantities

Subdivision of Bill of Quantities **1** The Bill of Quantities is to be divided as appropriate into separate levels of identification, in the sequence set down in Table 1.

Note: The use of Table 1, level 4 sub-heading is optional dependent on the chosen method of billing described in Paragraph 2(c) of Section 3 of this document, General Principles.

Quantities **2** Quantities shall be expressed in whole numbers except for units of measurement of tonnes and hectares in which case the quantities shall be to three decimal places.

Units of Measurement **3** The following abbreviations shall be used for the units of measurement

Unit	Abbreviation	Unit	Abbreviation
Millimeter	mm	sum	sum
metre	m	number	no
square millimetre	mm ²	hour	h
square metre	m ²	week	wk
hectare	ha	item	item
cubic metre	m ³	vehicle week	v/wk
kilogramme	kg	man hour	m/hr
tonne	t	day	day

Items in the Bill of Quantities The Bill of Quantities, unless expressly stated otherwise in the Contract is to contain all those items compounded in accordance with the foregoing paragraph 3 required to comprise the Works

Special Preliminary Items **4** Provision is made in Table 1 for the inclusion of “Special Preliminary” items in the Bill of Quantities.

“Special Preliminary” items are not included in the different parts of the RMP as their use is intended to be restricted and particular to a given Contract.

“Special Preliminary” items shall not be used for temporary works, cofferdams, accesses, advance operations and the like unless the work or operation is unusual in relation to the Works, and:

- a) the magnitude of such work, not separately measured, is such as to be disproportionately high in cost in relation to the measured work with which it is associated; or
- b) an operation, not separately measured, is required to be executed far in advance or after the main measured operation to which it relates.

The inclusion of “Special Preliminary” items in a Contract shall be entirely at the discretion of the Employer. Whether a “Special Preliminary” item is included in the Bill of Quantities or not shall in no way relieve the Contractor of his obligations under the Contract.

Alternative Types of Pavement **5** Where the Contract provides for Alternative Types of Pavement a separate Bill of Quantities is to be provided within Series 600: Earthworks, of the Roadworks General Bill; and Series 700: Pavements, of the Main Carriageway, Interchanges and Side Roads

		<p>Bills as appropriate, for each Type of Pavement permitted by the Contract.</p> <p>Immediately preceding the separate sets of alternative Bills in Series 600: Earthworks and Series 700: Pavements respectively an Index (Table 2) is to be provided of the Alternative Types of Pavement.</p> <p>Provision is to be made for each Bill of Quantities in Series 600 of the Roadworks General Bill and in Series 700 of the Main Carriageway, Interchanges and Side Roads Bills to be priced and included as appropriate in the Tender.</p>
Alternative Types of Safety Fence	6	Not used
Structures where a choice of design is offered	7	<p>Where the Contract provides for a structure designed by the Contractor to be constructed as an alternative to the structure which has been designed by the Employer, a separate Bill of Quantities is to be provided for each of the two construction procedures permitted by the Contract.</p> <p>Each of the two individual Bills of Quantities is to be provided in accordance with the various parts of the RMP for all the works contained within the Designated Outline (with the exception of those works scheduled as not to be included). For the structure designed by the Contractor the Bill of Quantities is to comprise a single item in accordance with Series 2500. The Bill for the structure designed by the Employer is to be compiled in accordance with the appropriate part of the RMP. Those works scheduled as not to be included in either of these alternative Bills of Quantities shall be included by the Employer in other Bills compiled in accordance with the appropriate Series.</p> <p>Provision is to be made for only the one Bill of Quantities which relates to the form of construction elected to be constructed by the Contractor to be priced and included in the initial Contract Sum.</p> <p>Immediately preceding the separate alternative Bills of Quantities an Index (Table 4) is to be provided for the alternative forms of construction permitted by the Contract.</p>
Structures designed by the Contractor	8	<p>Where the Contract provides only for a structure designed by the Contractor to be constructed a Bill of Quantities comprising a single item for all the works within the Designated Outline (with the exception of those works scheduled as not to be included) is to be provided in accordance with Series 2500. Those works scheduled as not to be included in this single item are to be included by the Employer in other Bills compiled in accordance with the appropriate Series.</p> <p>Earthworks within the Designated Outlines shall not be included by the Employer in the Earthworks Schedules.</p>
Preambles to the Bill of Quantities	9	<p>The matters set out under the heading "Preambles to Bill of Quantities" (1-17) hereafter are always to be included as a preamble to the Bill of Quantities. Additional numbered preambles may be included as necessary.</p>

TABLE 1

Level 1 Division	Level 2 Construction Heading	Level 3 RMP Series Headings		Level 4 Sub-Headings	Notes
(i) Preliminaries	Preliminaries	100	Preliminaries		Special Preliminaries should be inserted under level 3
(ii) Roadworks	Roadworks General	200	Site Clearance		Hedgebanks and the like should be inserted under level 3 Series 600
		300	Fencing		
		400	Safety Barriers and Pedestrian Guardrails		
		600	Earthworks		Cycle tracks and the like should be inserted under level 3 Series 1100
	Main Carriageway	500	Drainage and Service Ducts		
		700	Pavements		
		1100	Kerbs, Footways and Paved Areas		Cycle tracks and the like should be inserted under level 3 Series 1100
	Interchanges	500	Drainage and Service Ducts		
		700	Pavements		
		1100	Kerbs, Footways and Paved Areas		Cycle tracks and the like should be inserted under level 3 Series 1100
	Side Roads	500	Drainage and Service Ducts		
		700	Pavements		

Level 1 Division	Level 2 Construction Heading	Level 3 RMP Series Headings		Level 4 Sub-Headings	Notes
		1100	Kerbs, Footways and Paved Areas		
	Signs, Motorway Communications and Lighting	1200	Traffic Signs and Road Markings		
		1300	Road Lighting Columns and Brackets		
		1400	Electrical Work for Road Lighting and Traffic Signs		
		1500	Motorway Communications		

Level 1 Division		Level 2 Construction Heading	Level 3 RMP Series Headings		Level 4 Sub-Headings	Notes
Division	Sub-Division					
(iii) Structures	Structure in form of Bridge or Viaduct; Name or Reference	Special Preliminaries				Special Preliminaries should be inserted as a separate construction heading under level 2
		Piling	1600	Piling and Diaphragm Walling		
		Substructure-End Supports	500	Drainage and Service Ducts		To include wingwalls and paved areas beneath structures
			600	Earthworks		
			1100	Kerbs, Footways and Paved Areas		
			1700	Structural Concrete		
			1800	Structural Steelwork		
			1900	Protection of Steelwork Against Corrosion		
			2300	Bridge Expansion Joints and Sealing of Gaps		
2400	Brickwork, Blockwork and Stonework					
	Substructure - Intermediate Supports	As for End Supports	As for End Supports	To include piers and columns		

Level 1 Division		Level 2 Construction Heading	Level 3 RMP Series Headings		Level 4 Sub-Headings	Notes
Division	Sub-Division					
		Substructure - Main Span				
		Substructure - Approach Spans				
		Superstructure - Main Span	500	Drainage and Service Ducts		
		Superstructure - Approach Spans	1700	Structural Concrete		
			1800	Structural Steelwork		
			1900	Protection of Steelwork Against Corrosion		
		Superstructure - Arch Ribs	2300	Bridge Expansion Joints and Sealing of Gaps		
			2400	Brickwork, Blockwork and Stonework		
		Finishings	400	Safety Barriers and Pedestrian Guardrails		Pavements, footways and the like to be included here if no Roadworks Bill of Quantities
			700	Pavements		
			1100	Kerbs, Footways and Paved Areas		
			2000	Waterproofing for Structures		
			2200	Parapets		

Level 1 Division		Level 2 Construction Heading	Level 3 RMP Series Headings		Level 4 Sub-Headings	Notes
Division	Sub-Division					
			2400	Brickwork, Blockwork and Stonework		
	Retaining Wall, Culvert, Subway, Gantry, Large Headwall, Gabion Wall, Diaphragm Wall, Pocket Type Reinforced Brickwork Retaining Wall and the Like; Name or Reference	Special Preliminaries				Special Preliminaries should be inserted as a separate construction heading under level 2
		Main Construction	500	Drainage and Service Ducts		
			600	Earthworks		
			1100	Kerbs, Footways and Paved Areas		
			1600	Piling and Diaphragm Walling		
			1700	Structural Concrete		
			1800	Structural Steelwork		

Level 1 Division		Level 2 Construction Heading	Level 3 RMP Series Headings		Level 4 Sub-Headings	Notes	
Division	Sub-Division						
			1900	Protection of Steelwork Against Corrosion			
			2300	Bridge Expansion Joints and Sealing of Gaps			
			2400	Brickwork, Blockwork and Stonework			
		Finishings	400	Safety Barriers and Pedestrian Guardrails		Pavements, footways and the like to be included here if no Roadworks Bill of Quantities	
			600	Earthworks			
			700	Pavements			
			1100	Kerbs, Footways and Paved Areas			
			2000	Waterproofing for Structures			
			2200	Parapets			
			2400	Brickwork, Blockwork and Stonework			
(iv) Structures Where a Choice of Designs is Offered	Structure Designed by the Employer; Name or Reference	To comply with the Principles set down above for Structures					To include works within Designated Outlines with the exception of works scheduled as not to be included. This division is not to be used where the Contract provides only for

Level 1 Division		Level 2 Construction Heading	Level 3 RMP Series Headings	Level 4 Sub-Headings	Notes
Division	Sub-Division				
					a structure designed by the Contractor
	Structure Designed by the Contractor; Name or Reference				
(v) Structures Designed by the Contractor	Structure; Name or Reference				To include works within Designated Outlines with the exception of works scheduled as not to be included.
(vi) Service Areas		Roadworks Structures	To comply with the Principles set down above for Roadworks and Structures	To comply with the Principles set down above for Roadworks and Structures	
(vii) Maintenance Compounds		Roadworks Structures			
(viii) Accommodation Works		Interests; Name or Reference			
(ix) Works for Statutory or Other bodies		Body; Name or Reference	To comply with the Principles set down above for Roadworks and Structures	To comply with the Principles set down above for Roadworks and Structures	

Table 2

(This Table 2 is an example of the introduction and index to be inserted as a separate page immediately preceding each set of the separate Bills of Quantities included within Series 600: Earthworks in the Roadworks General Bill and Series 700: Pavements in the Main Carriageway, Interchanges and Side Roads Bills, to cover the alternative Types of Pavement permitted in the Contract.)

A separate Bill of Quantities is provided for each Alternative Type of Pavement permitted by the Contract. The tenderer shall price, extend and carry to the collection in the Bill of Quantities for each Type of Pavement permitted in the Contract.		
Index		
Type of Pavement	Bill No.*	Page(s)
Flexible	(6A) (7A)	
Flexible Composite	(6B) (7B)	
Rigid	(6C) (7C)	

**See Section 4 of this document, Item 5 "Alternative Types of Pavement"*

Table 3

Not Used

Table 4

(This Table 4 is an example of the introduction and index to be inserted as a separate page immediately preceding the separate Bills of Quantities included within the Bill for Structures Where a Choice of Designs is Offered (as defined under paragraph 7 of the Preparation of Bill of Quantities).)

Bill No. Structures Where a Choice of Designs is Offered A separate Bill of Quantities is provided for each of the two construction procedures permitted by the Contract. Notwithstanding the provisions of paragraph 4 of the Preambles to Bill of Quantities, the tenderer shall price, extend and carry to the collection of Bill No.... : Structures Where a Choice of Designs is Offered, only that Bill of Quantities appropriate to the form of construction he has elected to construct.		
Index		
Type of Structure	Structure No.	Bill No.
Structure Designed by the Employer	A
Structure Designed by the Contractor	B

(Repeat for each structure)

Preambles to Bill of Quantities

- General Directions**
- 1** The Requirements for Measuring and Pricing (RMP) in TII Publications (Standards) is published as a collective group of documents under the Construction and Commissioning activity within the TII Publications system. The Bill of Quantities has been prepared in accordance with the RMP.
- 2** In the Bill of Quantities the sub-headings and item descriptions identify the work covered by the respective items, read in conjunction with the matters listed against the relevant marginal headings “Item Coverage” in the different parts of the RMP, these Preambles and the amendments to the RMP immediately following these Preambles. The nature and extent of the work is to be ascertained by reference to the Works Requirements and Contract Conditions. The rates and prices entered in the Bill of Quantities shall be deemed to be the full inclusive value of the work covered by the several items including the following, unless expressly stated otherwise.
- (i) Labour and costs in connection therewith.
 - (ii) The supply of materials, goods, storage and costs in connection therewith including delivery to Site. Taking delivery of materials and goods supplied by others, unloading, storage, and costs in connection therewith.
 - (iii) Plant and costs in connection therewith.
 - (iv) Fixing, erecting and installing or placing of materials and goods in position.
 - (v) Temporary Works.
 - (vi) The effect on the phasing of the Works or any element of the Works to the extent set forth or reasonably implied in the documents on which the tender is based.
 - (vii) General obligations, liabilities and risks involved in the execution of the Works set forth or reasonably implied in the documents on which the tender is based.
 - (viii) Establishment charges, overheads and profit.
 - (ix) Waste.
 - (x) Attendance and transport for sampling and testing carried out by the Employer’s Representative, tests carried out by the Contractor in accordance with the particular requirements of Appendix 1/5, supplying results of tests carried out by the Contractor and providing test certificates.
 - (xi) Supply and delivery of samples to the Employers Representative in accordance with the particular requirements of Appendix 1/6.
 - (xii) Complying with Quality Assurance schemes and providing certificates of conformity.
 - (xiii) Preparation and supply of detailed working drawings.
 - (xiv) Awaiting approvals and or consents.
- Measurement**
- 3**
- (i) The measurement of work shall be computed net from the dimensions stated in the Contract unless otherwise stated in the RMP.
 - (ii) Where the tender documents provide for the Contractor to select the type of buried structure (where the structure is not within Designated Outlines) to be constructed then the measurement of all work in each area so affected shall be based upon the thinnest pavement construction and surfacing over structures permitted by the Contract

		in that area for the particular type of buried structure the Contractor has elected to construct.
Pricing of Items	4	(i) Each individual item shall have a rate or price entered against it. Rates and prices shall be expressed to two decimal places (ii) Reserved Sums and Contract Sums for Specialists will be provided by the Contracting Authority. (iii) Prices entered for attendances and management of specialist works will remain as tendered, even after the Reserved Sums are replaced with actual sums following tendering of the specialist works. These prices may not be less than zero.
Alternative Specified Materials, Designs and Options Within Types of Pavement	5	Not used
Privately and Publicly owned Services or Supplies	6	The information in the Contract as to the whereabouts of existing services and mains is believed to be correct but the Contractor shall not be relieved thereby of his obligations under the Contract. The Contractor shall include in his rates and prices for locating and taking measures for the support and full protection of pipes, cables and other apparatus during the progress of the Works, obtaining the written consent of the appropriate authority to interrupt the service or supply and for keeping the Employer's Representative informed of all arrangements he makes with the owners of privately owned services or supplies, Statutory Undertakers and Public Authorities as appropriate.
Labours	7	Not used
Roadworks Overall Requirements	8	The Contractor shall allow in his rates and prices for complying with requirements in respect of pavement construction, horizontal alignments, surface levels and surface regularity of pavement courses, cold weather working, use of surfaces by traffic and construction plant, and general requirements for sub-bases and bases.
Work within and below any water condition	9	The Contractor shall allow in his prices for any items of structures designed by the Contractor provided under Series 2500, for taking measures required to execute work in any condition where there is a presence of any type of water.
Dealing with Flow	10	The Contractor shall allow in his rates and prices for taking measures to deal with the existing flow of water, sewage and the like.
	11	Not used
Site Limitations and Constraints	12	The Contractor shall allow in his rates and prices for complying with any limitations and constraints on the use of the Site.
Hard Material	13	For the purposes of the Contract the following are designated as Hard Material in accordance with Section 2 Definitions, paragraph 1(i)(i): (a)* strata; (b) those deposits designated by limits shown on the Drawings.

		(c) existing pavements, footways, paved areas (but excluding unbound materials) and foundations in masses in excess of 0.20 cubic metres.
Equivalent Products and Materials	14	(i) Where the Contractor offers an equivalent product or material in place of the one identified or specified, which is accepted for incorporation into the Works by the Employer's Representative, then the rates and prices in the Bill of Quantities shall be deemed to include for all the obligations and costs associated with the incorporation of the equivalent into the Works, including design, provision of data and drawings, certificates, awaiting approvals, resubmissions and modifications and amendments to the Works. (ii) Unless specifically stated to the contrary in the Contract the measurement of the Works affected by the incorporation of the equivalent products and materials shall be based on the Tender documents and not on the Works as amended and completed to incorporate the equivalent products and materials.
Permanent Works Designed by the Contractor	15	Where the Contract requires part(s) of the Works to be designed by the Contractor, the rates and prices in the Bill of Quantities shall include for all the obligations and costs associated with the incorporation of the Contractor's design into the Works, including design, provision of data and drawings, certificates, awaiting approvals, resubmissions and modifications and amendments to the Works.
Structures Designed by the Contractor	16	Earthworks within the Designated Outlines shall not be included by the Employer in the earthworks schedules.
Alterations for Road Authorities	17	Not Used
†Amendments to the Requirements for Measuring and Pricing	18	Amendments to the Requirements for Measuring and Pricing are not advisable and in any case are only acceptable under an Approved Departure from TII, as noted under Section 3 General Principles.

[Notes to compiler:

The Preambles to Bill of Quantities (duly completed) must be reproduced unaltered and bound in the Bill of Quantities.

*To be completed by compiler as appropriate.

† Where an Approved Departure has been obtained from TII to amend any part of the RMP in accordance with Section 3 General Principles of CC-RMP-00010 – Introduction to the Requirements for Measuring and Pricing this preamble should be the last numbered preamble and inserted immediately prior to the amendments.]



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