

The logo for OCSC is displayed in a large, bold, blue font. Below it, the text 'O'CONNOR · SUTTON · CRONIN' and 'MULTIDISCIPLINARY CONSULTING ENGINEERS' is written in a smaller, blue, sans-serif font. The background of the top half of the page features a large, blue, curved architectural wireframe of a city street scene, showing buildings and a road.

OCSC

O'CONNOR · SUTTON · CRONIN
MULTIDISCIPLINARY CONSULTING ENGINEERS

D870: DINISH BRIDGE REFURBISHMENT

VOLUME C – PREAMBLES, AMENDMENTS TO THE METHOD OF MEASUREMENT & PRICING DOCUMENT

For
DEPARTMENT OF AGRICULTURE, FOOD AND THE MARINE

13 August 2026

NOTICE

This document has been produced by O'Connor Sutton Cronin & Associates for its client, DEPARTMENT OF AGRICULTURE, FOOD AND THE MARINE. It may not be used for any purpose other than that specified by any other person without the written permission of the authors.

DOCUMENT CONTROL & HISTORY

OCSC Job No: D870	Project Code	Originator	Zone Volume	Level	File Type	Role Type	Number	Status / Suitability Code	Revision
	D870	OCSC	XX	XX	CD	C	0004	S4	C01

Rev.	Status	Authors	Checked	Authorised	Issue Date
C01	S4	Shahul Hameed	Laurent Hadfield	Brian O'Rourke	13/08/2026

TABLE OF CONTENTS

1. PREAMBLES

2. AMENDMENTS TO THE MMRW

3. PRICING DOCUMENT

PREAMBLES TO THE METHOD OF MEASUREMENT



Bonneagar Iompair Éireann
Transport Infrastructure Ireland

TII Publications



Introduction to the Requirements for Measuring and Pricing

CC-RMP-00010
April 2022

About TII

Transport Infrastructure Ireland (TII) is responsible for managing and improving the country's national road and light rail networks.

About TII Publications

TII maintains an online suite of technical publications, which is managed through the TII Publications website. The contents of TII Publications is clearly split into 'Standards' and 'Technical' documentation. All documentation for implementation on TII schemes is collectively referred to as TII Publications (Standards), and all other documentation within the system is collectively referred to as TII Publications (Technical).

Document Attributes

Each document within TII Publications has a range of attributes associated with it, which allows for efficient access and retrieval of the document from the website. These attributes are also contained on the inside cover of each current document, for reference.

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>April 2022</i>
Document Number	<i>00010</i>		Historical Reference	-

TII Publications Website

This document is part of the TII publications system all of which is available free of charge at <http://www.tiipublications.ie>. For more information on the TII Publications system or to access further TII Publications documentation, please refer to the TII Publications website.

TII Authorisation and Contact Details

This document has been authorised by the Director of Professional Services, Transport Infrastructure Ireland. For any further guidance on the TII Publications system, please contact the following:

Contact: Standards and Research Section, Transport Infrastructure Ireland
Postal Address: Parkgate Business Centre, Parkgate Street, Dublin 8, D08 DK10
Telephone: +353 1 646 3600
Email: infoPUBS@tii.ie

TII Publications



Activity:	Construction & Commissioning (CC)
Stream:	Requirements for Measuring and Pricing (RMP)
TII Publication Title:	Introduction to the Requirements for Measuring and Pricing
TII Publication Number:	CC-RMP-00010
Publication Date:	April 2022
Set:	Standards

Contents

1.	Contents of the Requirements for Measuring and Pricing	1
2.	Definitions.....	8
3.	General Principles.....	9
4.	Preparation of Bill of Quantities.....	10
5.	References.....	25

**Updates to TII Publications resulting in changes to
Introduction to the Introduction to the Requirements for Measuring and Pricing CC-RMP-
00010**

Date: April 2022

Page No: 22

Section No: 2

Amendment Details:

Preambles to Bill of Quantities, General Directions, Section 2 - new sentence included in item (vii) that the provision of insurances and bonds are deemed to be general obligations.

Contents Table

1.	Contents of the Requirements for Measuring and Pricing	1
2.	Definitions.....	8
3.	General Principles.....	9
4.	Preparation of Bill of Quantities.....	10
5.	References.....	25

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 (The provision of insurances and bonds are deemed to be general obligations).
 - (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;
 - (xv) Complying with all Legal Requirements and ensure that the Contractor’s Personnel comply with all Legal Requirements, including but not limited to those environmental, archaeological and health and safety requirements as set out in the Works Requirements and Contract Conditions.

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 Reserved Sums and Contract Sums for Specialists will be provided by the Contracting Authority. 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 CC-RMP-02500, 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(h)(i) and (ii): (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.]

5. References

Refer to Chapter 1.



Ionad Ghnó Gheata na Páirce,
Stráid Gheata na Páirce,
Baile Átha Cliath 8, D08 DK10, Éire



www.tii.ie



+353 (01) 646 3600



Parkgate Business Centre,
Parkgate Street,
Dublin 8, D08 DK10, Ireland



info@tii.ie



+353 (01) 646 3601

AMENDMENT TO METHOD OF MEASUREMENT

**Bill of Quantities Additional and Substitute Items
Contents**

Series	Items	Type
5500	1-4 Structural Concrete Repair Temporary Works Establishment	A
5500	5-8 Structural Concrete Repair	A

Note: A = Additional Items S = Substitute Items

Structural Concrete Repair Temporary Works Establishment

Site and Temporary Works Establishment

Units	1	The unit of measurement shall be: (i) site and temporary works establishment Item.																																												
Measurement	2	The measurement shall be made for each site and temporary works establishment, maintenance, and removal required by the Contract. (a) Repair locations are separate or require independent establishment arrangements; (b) Different access systems are required; (c) Different temporary support or restraint systems are required; (d) Different containment systems are required; (e) Works are undertaken adjacent to different operational constraints; (f) Separate mobilisation and remobilisation phases are required by the Contract;																																												
Itemisation	3	Separate items shall be provided for site and temporary works establishment in accordance with Section 3 of CC-RMP-00010 paragraphs 3 and 4 and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Site and temporary works establishment</td></tr><tr><td>II</td><td>1 Deck</td></tr><tr><td>II</td><td>2 Soffit</td></tr><tr><td>II</td><td>3 Pier</td></tr><tr><td>II</td><td>4 Abutment</td></tr><tr><td>II</td><td>5 Retaining wall</td></tr><tr><td>II</td><td>6 Culvert</td></tr><tr><td>II</td><td>7 Parapet</td></tr><tr><td>II</td><td>8 Wingwall</td></tr><tr><td>III</td><td>6 Temporary working platform</td></tr><tr><td>IV</td><td>1 Temporary propping</td></tr><tr><td>IV</td><td>2 Jacking systems</td></tr><tr><td>V</td><td>1 Local debris containment</td></tr><tr><td>V</td><td>2 Water-jetting enclosure</td></tr><tr><td>V</td><td>3 Grit-blasting enclosure</td></tr><tr><td>V</td><td>5 Runoff capture and treatment</td></tr><tr><td>VI</td><td>1 Works adjacent to live carriageway</td></tr><tr><td>VI</td><td>2 Works adjacent to railway</td></tr><tr><td>VI</td><td>3 Works adjacent to watercourse</td></tr><tr><td>VI</td><td>4 Works adjacent to occupied property</td></tr><tr><td>VII</td><td>1 Temporary services</td></tr></table>	Group	Feature	I	1 Site and temporary works establishment	II	1 Deck	II	2 Soffit	II	3 Pier	II	4 Abutment	II	5 Retaining wall	II	6 Culvert	II	7 Parapet	II	8 Wingwall	III	6 Temporary working platform	IV	1 Temporary propping	IV	2 Jacking systems	V	1 Local debris containment	V	2 Water-jetting enclosure	V	3 Grit-blasting enclosure	V	5 Runoff capture and treatment	VI	1 Works adjacent to live carriageway	VI	2 Works adjacent to railway	VI	3 Works adjacent to watercourse	VI	4 Works adjacent to occupied property	VII	1 Temporary services
Group	Feature																																													
I	1 Site and temporary works establishment																																													
II	1 Deck																																													
II	2 Soffit																																													
II	3 Pier																																													
II	4 Abutment																																													
II	5 Retaining wall																																													
II	6 Culvert																																													
II	7 Parapet																																													
II	8 Wingwall																																													
III	6 Temporary working platform																																													
IV	1 Temporary propping																																													
IV	2 Jacking systems																																													
V	1 Local debris containment																																													
V	2 Water-jetting enclosure																																													
V	3 Grit-blasting enclosure																																													
V	5 Runoff capture and treatment																																													
VI	1 Works adjacent to live carriageway																																													
VI	2 Works adjacent to railway																																													
VI	3 Works adjacent to watercourse																																													
VI	4 Works adjacent to occupied property																																													
VII	1 Temporary services																																													
Site and Temporary Works Establishment	4	The items for site and temporary works establishment shall include for:																																												
Item Coverage		(a) Review of repair drawings, sequencing requirements and construction constraints; (b) Preparation and implementation of construction programmes, method statements, risk assessments and temporary works documentation; (c) Temporary works design, independent checks, certification and approvals; (d) Site mobilisation, establishment, maintenance and demobilisation;																																												

- (e) Ensuring no debris from any works do not enter water courses;
- (g) Design, erection, maintenance, inspection and removal of scaffolding, access platforms, MEWPs, underbridge units, crash deck, en-capsulation, walkways and other access systems;
- (h) Rescue arrangements and emergency access provisions;
- (i) Temporary propping, shoring, bracing, jacking, restraint systems and other structural stability measures;
- (j) Protection of existing structures, utilities, carriageways, watercourses and adjacent property;
- (k) Containment systems, debris screens, encapsulation, dust suppression and pollution control measures;
- (l) Collection, treatment and disposal of water arising from repair operations;
- (m) Temporary plant, compressors, generators, pumps, mixers, spray equipment and associated facilities;
- (n) Traffic interface measures, protection of third-party assets and liaison with stakeholders;
- (o) Pre-works condition surveys, monitoring systems, inspections and records;
- (p) Photographic records before, during and after the works;
- (q) Removal of temporary works, reinstatement of disturbed areas and making good;
- (r) Cleaning of the Site and disposal of temporary materials and waste;
- (s) All labour, supervision, plant, materials, consumables and temporary works necessary to complete the Works.

Structural Concrete Repair

In Situ Concrete Repair

Units	5	The unit of measurement shall be: (i) in situ concrete repair.....square metre.																		
Measurement	6	The measurement shall be the superficial area of concrete repair required by the Contract (a) local defects not exceeding stated dimensions; (b) reinforcement exposed within the repair area; (c) chamfers, rebates, grooves and similar features within the repair area; (d) fixing aids associated with the repair system;																		
Itemisation	7	Separate items shall be provided for in situ concrete repair in accordance with Section 3 of CC-RMP-00010 paragraphs 3 and 4 and the following: <table><tr><th>Group</th><th>Feature</th></tr><tr><td>I</td><td>1 Concrete repair</td></tr><tr><td>II</td><td>1 Breakout and removal of defective concrete</td></tr><tr><td>II</td><td>2 Different repair mortar/concrete classes</td></tr><tr><td>II</td><td>3 Corrosion protection to reinforcement</td></tr><tr><td>II</td><td>4 Sprayed repair concrete or mortar thickness and type</td></tr><tr><td>II</td><td>5 Crack injection</td></tr><tr><td>III</td><td>1 Surface finishing</td></tr><tr><td>III</td><td>2 Protective paint system</td></tr></table>	Group	Feature	I	1 Concrete repair	II	1 Breakout and removal of defective concrete	II	2 Different repair mortar/concrete classes	II	3 Corrosion protection to reinforcement	II	4 Sprayed repair concrete or mortar thickness and type	II	5 Crack injection	III	1 Surface finishing	III	2 Protective paint system
Group	Feature																			
I	1 Concrete repair																			
II	1 Breakout and removal of defective concrete																			
II	2 Different repair mortar/concrete classes																			
II	3 Corrosion protection to reinforcement																			
II	4 Sprayed repair concrete or mortar thickness and type																			
II	5 Crack injection																			
III	1 Surface finishing																			
III	2 Protective paint system																			
In Situ Concrete Repair	8	The items for concrete repair shall include for:																		
Item Coverage		(a) Identification and marking of defective concrete; (b) Saw cutting of repair boundaries; (c) Breakout and disposal of defective concrete; (d) Cleaning and preparation of substrate; (e) Cleaning and preparation of reinforcement; (f) Corrosion protection treatment to reinforcement; (g) Bonding primers and bonding agents; (h) Supply and placement of repair mortar/concrete; (i) Compaction, finishing and curing; (j) Temporary protection of completed repairs; (k) Testing and quality control; (l) All labour, materials, plant and access required to complete the																		

PRICING DOCUMENT

Dinish Bridge Refurbishment

Part 1 - Preliminaries

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 100 - Preliminaries</u>				
	<u>Temporary Accommodation</u>				
A	Erection of stores and workshops for the Contractor	1.00	item		
B	Erection of offices and messes for the Contractor	1.00	item		
C	Servicing of stores and workshops for the Contractor	1.00	item		
D	Servicing of offices and messes for the Contractor	1.00	item		
E	Dismantling of stores and workshops for the contractor	1.00	item		
F	Dismantling of offices and messes for the Contractor	1.00	item		
	<u>Traffic Safety and Management</u>				
G	Traffic safety and management	1.00	item		
H	Taking measures for or construction, maintenance, removal of contraflow arrangements in accordance with Appendix 1/17	1.00	item		
I	Removing from store and installing temporary vertical safety barriers in accordance with Appendix 1/17	1.00	item		
J	Taking up or down and removing from site temporary vertical safety barriers in accordance with Appendix 1/17	1.00	item		
	<u>Progress Photographs</u>				
K	Set of progress photographs taken weekly for the duration of the works, at project start and at project completion, to be provided in digital format (a minimum of 10 megapixels) to Employers Representative within five working days after being carried out on the first working day of each month and at weekly intervals until completion, in accordance with Appendix 1/22 of the Works Requirements	20.00	nr		
L	Additional aerial progress photographs taken weekly for the duration of the works, at project start and at project completion, to be provided in digital format (a minimum of 10 megapixels) to Employers Representative within five working days after being carried out on the first working day of each month and at weekly intervals until completion, in accordance with Appendix 1/22 of the Works Requirements	20.00	nr		
	<u>Road Sweeping and Cleaning</u>				
M	Road sweeping and cleaning, to provided for the duration of the works until Substantial Completion	1.00	item		
	<u>Emergency Services</u>				
N	Provide for Emergency Services	1.00	item		
D870	Page: 1 / 1			To Collection	0.00

Dinish Bridge Refurbishment

Part 1 - Preliminaries

Ref	Description	Qty	Unit	Rate	Amount
	<u>Facilities for Local Authority, Public or Private Utility Undertakers and Other Contractors</u>				
A	Facilities for Local Authority, Public or Private Utility Undertakers and other Contractor, Department of Agriculture, Food and the Marine	1.00	item		
B	Facilities for Local Authority, Public or Private Utility Undertakers and other Contractor, ESB	1.00	item		
C	Facilities for Local Authority, Public or Private Utility Undertakers and other Contractor, Network Gas	1.00	item		
D	Facilities for Local Authority, Public or Private Utility Undertakers and other Contractor, Irish Water	1.00	item		
E	Facilities for Local Authority, Public or Private Utility Undertakers and other Contractor, Eir	1.00	item		
F	Facilities for all other Local Authority, Public or Private Utility Undertakers and other Contractors not listed	1.00	item		
	<u>Property Condition Surveys</u>				
G	Property condition surveys at locations indicated by red boundary line in accordance with drawings D870-OCSC-01-XX-DR-C-00001- and Appendix 1/7	1.00	item		
	<u>Project Supervisor for the Construction Stage</u>				
H	Acceptance of the appointment as Project Supervisor for the Construction Stage	1.00	item		
	<u>Safety File</u>				
I	Safety File	1.00	item		
	<u>As Built Records</u>				
J	As Built Records	1.00	item		
D870	Page: 1 / 2 To Collection				0.00

Part 1 - Preliminaries

	Description	Amount
	Series 100 - Preliminaries	0.00
D870	Page: 1 / 3To Summary	0.00

Dinish Bridge Refurbishment

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 200 Site Clearance</u>				
	<u>Site Clearance</u>				
A	General site clearance	0.40	ha		
	<u>Take Up or Down and Set Aside for Reuse or Remove to Store or Tip off Site</u>				
B	Take up or down and remove to tip off site "Vehicle Bridge parapet 1.2metre high"	400.00	m		
C	Take up or down and remove to tip off site "Public Lighting Columns 9 metre high"	7.00	nr		
D	Take up or down and tip off site "Vehicle Restraint System"	25.00	m		
E	Take up or down and tip off site "Stop Sign"	1.00	nr		
F	Take up or down and set aside for reuse Pair of Steel gates 9metre width including posts, fixtures, fittings and all associated works.	1.00	nr		
D870	Page: 2 / 1 To Collection				0.00

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
A	<u>Series 300 Fencing and Environmental Noise Barriers</u>				
	<u>Remove from Store and Re-erect Fencing, Gates and Stiles</u>				
A	Remove from store and re-erect steel double gates, 9 m wide, including posts, fixtures, fittings and all associated works.	1.00	nr		
D870	Page: 2 / 2 To Collection				0.00

Dinish Bridge Refurbishment

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 400 Road Restraint Systems (Vehicle and Pedestrian)</u>				
	<u>Safety Barrier System</u>				
A	Safety barrier, containment N2 Working width class W2 level bridge parapet, 1.250 m high, straight or curved exceeding 120 metre radius, to be installed as per drawing D870-OCSC-XX-XX-DR-C-0102	375.00	m		
B	Safety barrier, containment N2 Working width class W2, straight or curved exceeding 120 metres radius, to be installed as per drawing D870-OCSC-XX-XX-DR-C-0102	25.00	m		
	<u>Transitions</u>				
C	Transitions between safety barriers N2W2 and parapet, 8 metre length, straight or curved exceeding 120 metres radius, to be installed as per drawing D870-OCSC-XX-XX-DR-C-0102	2.00	nr		
	<u>Terminals</u>				
D	Terminal, 7metre in length, class T110, to be installed as per drawings D870-OCSC-XX-XX-DR-C-0102	2.00	nr		
D870	Page: 2 / 3 To Collection				0.00

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 500 Drainage and Service Ducts</u>				
	<u>Drains, Sewers, Piped Culverts and Service Ducts</u> <u>(Excluding Filter Drains, Narrow Filter Drains & Fin Drains)</u>				
A	75mm internal diameter uPVC road gully connection pipe in trench to bridge deck	8.00	m		
B	2 x 110mm internal diameter service duct (Public Lighting), depths to invert not exceeding 2 metres average, depth to invert 1 metre in trench under Non-Trafficked Areas in accordance with drawing D870-OCSC-XX-XX-DR-C-0104	14.00	m		
	<u>Connections</u>				
C	Connection from 75mm uPVC Pipe to existing road gully	4.00	nr		
D	Connection to existing PL ducting 100mm internal diameter Depth not exceeding 2 metres	7.00	nr		
D870	Page: 2 / 4 To Collection				0.00

Dinish Bridge Refurbishment

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 600 Earthworks</u>				
	<u>Excavation</u>				
A	Excavation of non-compliant material in cutting and other excavations 0 metres to 3 metres in depth. non-compliant material is classified as Category C (Soils suitable for disposal to a Non Hazardous Licenced Landfill) in accordance with Waste Acceptance Criteria (WAC) set out in Directive 1999/31/EC (The Landfill Directive) and the Council Decision of 19 December 2002, or such legislation as is current at award of Contract.	150.00	m3		
	<u>Excavation in Hard Material</u>				
B	Extra over excavation for excavation in hard material in cutting and other excavation	150.00	m3		
C	Deposition of Fill				
	<u>Disposal of Material</u>				
D	Disposal of non-compliant material	150.00	m3		
D870	Page: 2 / 5 To Collection				0.00

Dinish Bridge Refurbishment

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 700 Pavements</u>				
	<u>Pavement</u>				
A	AC20 DENSE BIN 40/60 DES binder course 50mm thick, in accordance with Work Requirements TII-CC-SPW-00900 CL 3.1.4	1,277.00	m2		
B	HRA 30/14F SURF 40/60 DES surface course 40mm thick in carriageway, hard shoulder and hard strip, in accordance with Works Requirements TII-CC-SPW-00900 CL. 4.1.3	1,650.00	m2		
C	HRA 30/14F SURF 40/60 DES surface course 40mm - 75mm max thick in carriageway, hard shoulder and hard strip, in accordance with Works Requirements TII-CC-SPW-00900 CL. 4.1.3	320.00	m2		
D	Flexible Asphalt material in carriageway expation joint 115mm thick, in accordance with Works Requirements TII-CC-SPW-00900 CL. 4.1.3 and drawing D870-OCSC-XX-XX-DR-C-0104	4.00	m2		
E	Protective layer 20mm, sand asphalt in accordance with I.S.E.N. 13108-4 In carriageway hard shoulder and hard strip	1,585.00	m2		
	<u>Regulating Course</u>				
F	AC20 DENSE BIN 40/60 DES TO IS EN regulating course 25mm-40mm thick in carriageway, hard shoulder and hard strip	136.00	t		
	<u>Surface Treatment</u>				
G	High friction surfacing dark gray, PSV not less than 65 thickness 6mm.	125.00	m2		
	<u>Bond Coat</u>				
H	Tack Coat	3,472.00	m2		
	<u>Cold Milling</u>				
I	Cold milling (Planing) of existing carriageway surface to a depth exceeding 50mm but not exceeding 100mm	1,970.00	m2		
D870	Page: 2 / 6 To Collection				0.00

Dinish Bridge Refurbishment

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 1200 Traffic Signs and Road Markings</u>				
	<u>Traffic Signs</u>				
A	Permanent retroreflective Stop Sign as RUS027 size 450mm of Traffic Signs Manual and 1200 series drawings on one 2.5m x 76mm high galvanised tubular steel pole	1.00	nr		
	<u>Road Markings</u>				
B	Intermittent warning centre line 100mm with 1m spacing, in white thermoplastic screed with applied glass beads 100mm as per RRM 002D of Traffic Signs Manual and 1200 series drawings	230.00	m		
D870	Page: 2 / 7 To Collection				0.00

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
A	<u>Series 1300 Road Lighting Columns and Brackets</u>	7.00	nr		
	<u>Road Lighting Columns, Brackets and Wall Mountings</u>				
A	Luminaire Type Philips BGP293 DX70 Lumistreet Gen2 Medium_14500_80LED_5.2S_CLO_L90_730.ies on aluminium road lighting column 6 metre high with 2 metre outreach , flange base plate chemically anchored in accordance with drawing D870-OCSC-XX-XX-DR-C-0104				
D870					0.00

Dinish Bridge Refurbishment

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 1400 Electrical Work for Road Lighting Traffic Signs</u>				
	<u>Cabling</u>				
A	Cable, public lighting cable, 6SQ 3 core PVC/SWA/PVC in carriageways, footways and bridge decks and paved areas	200.00	m		
	<u>Cable Joints and Terminations</u>				
B	Cable Joint, 6SQ, 3 core PVC/SWA/PVC	7.00	nr		
C	Cable terminations, 6SQ , 3 core PVC/SWA/PVC	7.00	nr		
	<u>Feeder Pillars</u>				
D	Micro-Pillar including vault,cover and frame to ESB requirements and standards	1.00	nr		
	<u>Earth Electrodes</u>				
E	Earth Electrodes	1.00	nr		
D870	Page: 2 / 9 To Collection				0.00

Dinish Bridge Refurbishment

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 1700 Structural Concrete</u>				
	<u>In Situ Concrete</u>				
A	In situ concrete mix reference C40/50 in Corbel	2.00	m3		
B	In situ concrete removal of defective concrete to a min 25mm behind the reinforcement, as per Drawing D870-OCSC-XX-XX-DR-C-0104	1.00	m3		
	<u>Surface Finish of Concrete - Formwork</u>				
C	Formwork Class F2 vertical more than 300 mm wide, to corbel	13.00	m2		
D	Formwork Class F2 horizontal more than 300 mm wide, to corbel	6.00	m2		
	<u>Steel Reinforcement for Structures</u>				
E	Bar reinforcement stainless steel S10 nominal size 16mm and under not exceeding 12 metres in length in corbel	0.20	t		
F	Dowels, vertical stainless steel S10 bar reinforcement U-Bars drilled and fixed into existing parapet edge beam at 175mm C/C min embedment 250mm in accordance with drawing D870-OCSC-XX-XX-DR-C-0104	35.00	nr		
D870	Page: 2 / 10 To Collection				0.00

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 2000 Waterproofing for Structures</u>				
	<u>Waterproofing</u>				
A	Spray Applied waterproofing membrane (Road) to give a minimum dry film thickness of 2mm in accordance with manufacturer's specification, applied to buried concrete less than 300mm wide at any inclination more than 30° up to and including 90° to the horizontal as shown on drawing C1033-OCSC-XX-XX-DR-C-0712 and works specifications	57.00	m2		
B	Spray Applied waterproofing membrane (Road) to give a minimum dry film thickness of 2mm in accordance with manufacturer's specification, applied to buried concrete more than 300 mm wide horizontal or at any inclination up to and including 30 degrees to the horizontal as shown on drawing C1033-OCSC-XX-XX-DR-C-0712 and works specifications	1,570.00	m2		
C	1 coat waterproof membrane primer (Road) applied to buried concrete less than 300mm wide at any inclination more than 30° up to and including 90° to the horizontal as shown on drawing C1033-OCSC-XX-XX-DR-C-0712 and works specifications	57.00	m2		
D	1 coat waterproof membrane primer (Road) applied to buried concrete more than 300 mm wide horizontal or at any inclination up to and including 30 degrees to the horizontal as shown on drawing C1033-OCSC-XX-XX-DR-C-0712 and works specifications	1,570.00	m2		
E	Waterproofing with proprietary waterproofing system, more than 300 mm wide horizontal or at any inclination up to and including 30 degrees to the horizontal	1,824.00	m2		
F	Waterproofing with proprietary waterproofing system, more than 300 mm wide vertical or at any inclination up to and including 90 degrees to the vertical	357.00	m2		
D870	Page: 2 / 11 To Collection				0.00

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
A	<u>Series 2300 Bridge Expansion Joints and Sealing of Gaps</u>	10.00	m3		
	<u>Bridge Deck Expansion Joints</u>				
	Joint filler, type 2 asphaltic plug joint, 12 metres lenght, 0.02 metre gap width, 500mm wide x 115mm depth road width 7metres flexible asphaltic material with bridging plate in accordance with drawing D870-OCSC-XX-XX-DR-C-0104				
D870	Page: 2 / 12 To Collection				0.00

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	<u>Series 2500 Special Structures</u>				
	<u>Special Structures</u>				
A	Special structures designed by the Contractor, public lighting comprising 7 nr new 6 metres poles 2 metre outreach, in accordance with 100 series drawings	1.00	item		
B	Special structures designed by the Contractor, public lighting cabling comprising approximately 200m of 3x6SQ SWA	1.00	item		
C	Special structures designed by the Contractor, 110mm internal diameter ducting for public lighting (trafficked and non-trafficked)	1.00	item		
D870	Page: 2 / 13 To Collection				0.00

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
	Series 5500 Structural Concrete Repair				
	Structural Concrete Repair Temporary Works Establishment				
A	Site and temporary works establishment to "Soffit", temporary works containment platform.	1.00	item		
B	Site and temporary works establishment to "Piers", temporary works containment platform.	1.00	item		
C	Site and temporary works establishment to "Parapets", temporary works containment platform.	1.00	item		
D	Site and temporary works establishment, debris containment area.	1.00	item		
E	Site and temporary works establishment, works adjacent to watercourse.	1.00	item		
	Structural Concrete Repair				
F	In situ concrete repair comprising 30mm thick sprayed gunite or similar approved spray applied structural waterproofing render in accordance with the manufacturer's specification, to reinforced concrete column base surfaces more than 300mm wide, vertical or at any inclination up to and including 90 degrees to the vertical, as shown on drawings and Works Specifications.	76.00	m2		
G	In situ concrete repair comprising 30mm thick sprayed gunite or similar approved spray applied structural waterproofing render in accordance with the manufacturer's specification, to reinforced concrete column top surfaces more than 300mm wide, vertical or at any inclination up to and including 90 degrees to the vertical, as shown on drawings and Works Specifications.	34.00	m2		
H	In situ concrete repair comprising 30mm thick sprayed gunite or similar approved spray applied structural waterproofing render in accordance with the manufacturer's specification, to reinforced concrete crosshead surfaces more than 300mm wide, vertical or at any inclination up to and including 90 degrees to the vertical, as shown on drawings and Works Specifications.	142.00	m2		
I	In situ concrete repair comprising 30mm thick sprayed gunite or similar approved spray applied structural waterproofing render in accordance with the manufacturer's specification, to reinforced concrete beam at base surfaces more than 300mm wide, vertical or at any inclination up to and including 90 degrees to the vertical, as shown on drawings and Works Specifications.	48.00	m2		
J	In situ concrete repair "Parapet" 50mm thick Class R4 repair mortar in accordance with drawing D870-OCSC-XX-XX-DR-C-0104	4.00	m2		
D870	Page: 2 / 14 To Collection				0.00

Part 2 - Roadworks General

Ref	Description	Qty	Unit	Rate	Amount
A	Structural Concrete Repair (Cont'd)				
	In situ concrete repair including application of protective paint system, primer 2–3 coat system, color RAL 7023 "Concrete Grey" in accordance with appendix 17/4	760.00	m2		
D870	Page: 2 / 15 To Collection				0.00

Dinish Bridge Refurbishment

Part 2 - Roadworks General

	Description	Amount
	Series 200 Site Clearance	0.00
	Series 300 Fencing and Environmental Noise Barriers	0.00
	Series 400 Road Restraint Systems (Vehicle and Pedestrian)	0.00
	Series 500 Drainage and Service Ducts	0.00
	Series 600 Earthworks	0.00
	Series 700 Pavements	0.00
	Series 1200 Traffic Signs and Road Markings	0.00
	Series 1300 Road Lighting Columns and Brackets	0.00
	Series 1400 Electrical Work for Road Lighting Traffic Signs	0.00
	Series 1700 Structural Concrete	0.00
	Series 2000 Waterproofing for Structures	0.00
	Series 2300 Bridge Expansion Joints and Sealing of Gaps	0.00
	Series 2500 Special Structures	0.00
	Series 5500 Structural Concrete Repair	0.00
D870	Page: 2 / 16 To Summary	0.00

Bill	Description	Amount
1	Part 1 - Preliminaries	0.00
2	Part 2 - Roadworks General	0.00
D870		0.00



O'CONNOR · SUTTON · CRONIN
MULTIDISCIPLINARY CONSULTING ENGINEERS

Head Office

9 Prussia Street
Dublin 7
Ireland
D07KT57

T: +353 (0)1 8682000

E: ocsc@ocsc.ie | W: www.ocsc.ie