

ROAD PAVEMENTS FORUM COTO PROGRESS

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PROPOSED COTO SUITE OF DOCUMENTS

VOLUME 1	GENERAL CONDITIONS OF CONTRACT (FIDIC; GCC, ETC)
VOLUME 2	STANDARD SPECIFICATIONS FOR: 2.1 ROADS AND BRIDGE WORK 2.2 ROUTINE ROAD MAINTENANCE
VOLUME 3	CONTRACT DOCUMENT
VOLUME 4	ROADWORK DRAWINGS
VOLUME 5	STRUCTURES DRAWINGS
VOLUME 6	MATERIAL UTILIZATION
VOLUME 7	ENVIRONMENTAL MANAGEMENT PLAN

FORMAT OF REVISED COLTO STANDARD SPECIFICATIONS (VOLUME 2)

- CHAPTER 1: GENERAL
- CHAPTER 2: SERVICES
- CHAPTER 3: DRAINAGE
- CHAPTER 4: EARTH AND LAYER WORKS: MATERIALS
- CHAPTER 5: EARTH AND LAYER WORKS: CONSTRUCTION
- CHAPTER 6: CONCRETE LAYERS
- CHAPTER 7: REPAIR & REHABILITATION OF CONCRETE LAYERS
- **CHAPTER 8: SURFACE PRE-TREATMENT AND REPAIRS**
- CHAPTER 9: ASPHALT LAYERS
- CHAPTER 10: SURFACING
- CHAPTER 11: ANCILLARY ROAD WORKS
- CHAPTER 12: GEOTECHNICAL APPLICATIONS
- CHAPTER 13: STRUCTURES
- CHAPTER 14: REPAIR & REHABILITATION OF STRUCTURES
- CHAPTER 20: QUALITY ASSURANCE

FORMAT OF REVISED COLTO STANDARD SPECIFICATIONS (VOLUME 2)

EACH CHAPTER CONSISTS OF:

PART A: SPECIFICATIONS

Table of Contents:

- Scope
- Definitions
- General
- Design by Contractor/Performance Based Systems
- Materials
- Construction Equipment
- Execution of the Works
- Workmanship


PART B: LABOUR ENHANCED

PART C: MEASUREMENT AND PAYMENT

PART D: GUARANTEES AND COMPLIANCE CERTIFICATES

CHAPTER 4 & 5 EARTH AND LAYER WORKS: MATERIALS AND CONSTRUCTION

SERIES 3000 versus CHAPTER 4 & 5 LAYOUT

SERIES 3000			CHAPTER 4	
3100	BORROW MATERIALS		4.1	BORROW MATERIALS
3200	SELECTION, STOCKPILING AND BREAKING DOWN THE MATYERIAL FROM BORROWPITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING AND COMPACTING THE GRAVEL LAYERS		4.2	CUT MATERIALS
3300	MASS EARTHWORKS		4.3	EXISTING ROAD MATERIALS
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL		4.4	COMMERCIAL MATERIALS
3500	STABILIZATION		4.5	ALTERNATIVE MATERIALS
3600	CRUSHED-STONE BASE		CHAPTER 5	
3700	PLANT-MIXED PAVER-LAID PAVEMENT LAYERS		5.1	ROADBED
3800	BREAKING UP EXISTING PAVEMENT LAYERS		5.2	CONSTRUCTION OF FILL
3900	PATCHING AND REPAIRING EDGE BREAKS		5.3	ROAD PAVEMENT LAYERS
			5.4	STABILISATION
			5.5	REPAIR OF EXISTING ROADWORKS

CHAPTER 4

EARTH AND LAYER WORKS: MATERIALS

4	EARTHWORKS AND LAYER WORKS: MATERIALS	
	DESCRIPTION	SCOPE
4.1	BORROW MATERIALS	Sourcing materials for earthworks and layer works from borrow pits and quarries for a specific road construction project or projects.
4.2	CUT MATERIALS	Sourcing materials that can be used for the construction of earthworks and layer works from: <ul style="list-style-type: none"> • New cuttings. • The widening of or altering the side slope of or cutting of benches into existing cuttings. • Box cuts for new roads and from box cuts for the widening of existing roads. • Designated excavations.
4.3	EXISTING ROAD MATERIALS	Sourcing of existing road construction materials that are: <ul style="list-style-type: none"> • Obtained from reclaiming or recycling existing road earthworks, layer works and asphalt materials (whether used as a pavement layer or used as the wearing course). • Used to reconstruct the same road they are obtained from or used on another road project.
4.4	COMMERCIAL MATERIALS	This section covers: <ul style="list-style-type: none"> • Sourcing materials for earthworks and layer works from commercial and other private sources. • The provision of commercial agents and additives that are added or worked into the available materials or layer to enhance, improve or alter its properties so that the materials then comply with the applicable quality and strength requirements.
4.5	ALTERNATIVE MATERIALS	Sourcing alternative materials for the construction of earthworks and layer works other than the sources under 4.1 to 4.4

CHAPTER 5

EARTH AND LAYER WORKS: CONSTRUCTION

5	EARTHWORKS AND LAYER WORKS: CONSTRUCTION	
	DESCRIPTION	SCOPE
5.1	ROADBED	<p>This section covers the following construction work:</p> <p>5.1.1.1 Clearing and grubbing</p> <p>5.1.1.2 Conservation of topsoil and vegetation</p> <p>5.1.1.3 Standard Roadbed treatment</p>
5.2	CONSTRUCTION OF FILL	<p>This section covers:</p> <ul style="list-style-type: none"> • Hauling of material from the place of excavation (borrow, cut or existing road materials) or from the stockpile, to the position of placement. In the case of commercial and alternative materials, the cost of the procurement of these materials includes all the haulage. • Off-loading the fill material and subsequent processing of the fill material in layers. • The control of the moisture content and all work in connection with the construction of fills
5.3	ROAD PAVEMENT LAYERS	<p>This section covers the loading at the point of supply, the hauling and off-loading at the point of use, the spreading, mixing, watering and levelling and the compaction and finishing of all the various pavement layer materials required for the construction of the road pavement layer works</p> <p>This section also covers plant-mixed, paver-laid (PMPL) pavement layer construction</p>
5.4	STABILISATION	<p>This section covers the following construction work:</p> <p>5.4.1.1 Material stabilisation</p> <p>5.4.1.2 Material modification</p> <p>5.4.1.3 Use of recycler plant for material modification and/or stabilisation</p> <p>5.4.1.4 Proprietary stabilisation agents</p>
5.5	REPAIR OF EXISTING ROADWORKS	<p>This section covers the following work.</p> <p>5.5.1.1 Patching</p> <p>5.5.1.2 Milling</p> <p>5.5.1.3 In-place recycling</p>

CHAPTER 8

SURFACE PRE-TREATMENT AND REPAIRS

PART A:

- 8.1 Scope
- 8.2 Definitions
- 8.3 Prime coats
- 8.4 Fog sprays and rejuvenation sprays
- 8.5 Texture treatment
- 8.6 Rut / depression treatment
- 8.7 Standard crack sealing
- 8.8 Geotextile crack sealing
- 8.9 Milling and planning
- 8.10 Patching and edgebreak repair
- 8.11 Repair of bleeding and stone loss

CHAPTER 9

ASPHALT LAYERS

PART A:

- 9.1 Scope
- 9.2 Definitions
- 9.3 Design by Contractor/Performance Based Systems
- 9.4 Tack coat
- 9.5 Asphalt base layers
- 9.6 Asphalt surfacing layers
- 9.7 Recycling
- 9.8 Asphalt mixes certified as fit for purpose

CHAPTER 10 SURFACINGS

PART A:

- 10.1 Scope
- 10.2 Definitions
- 10.3 Design by Contractor/Performance Based Systems
- 10.4 Sprayed seals (single and multiple)
- 10.5 Sprayed seals (graded)
- 10.6 Slurry seals
- 10.7 Micro surfacing
- 10.8 Cape seals
- 10.9 Maintenance

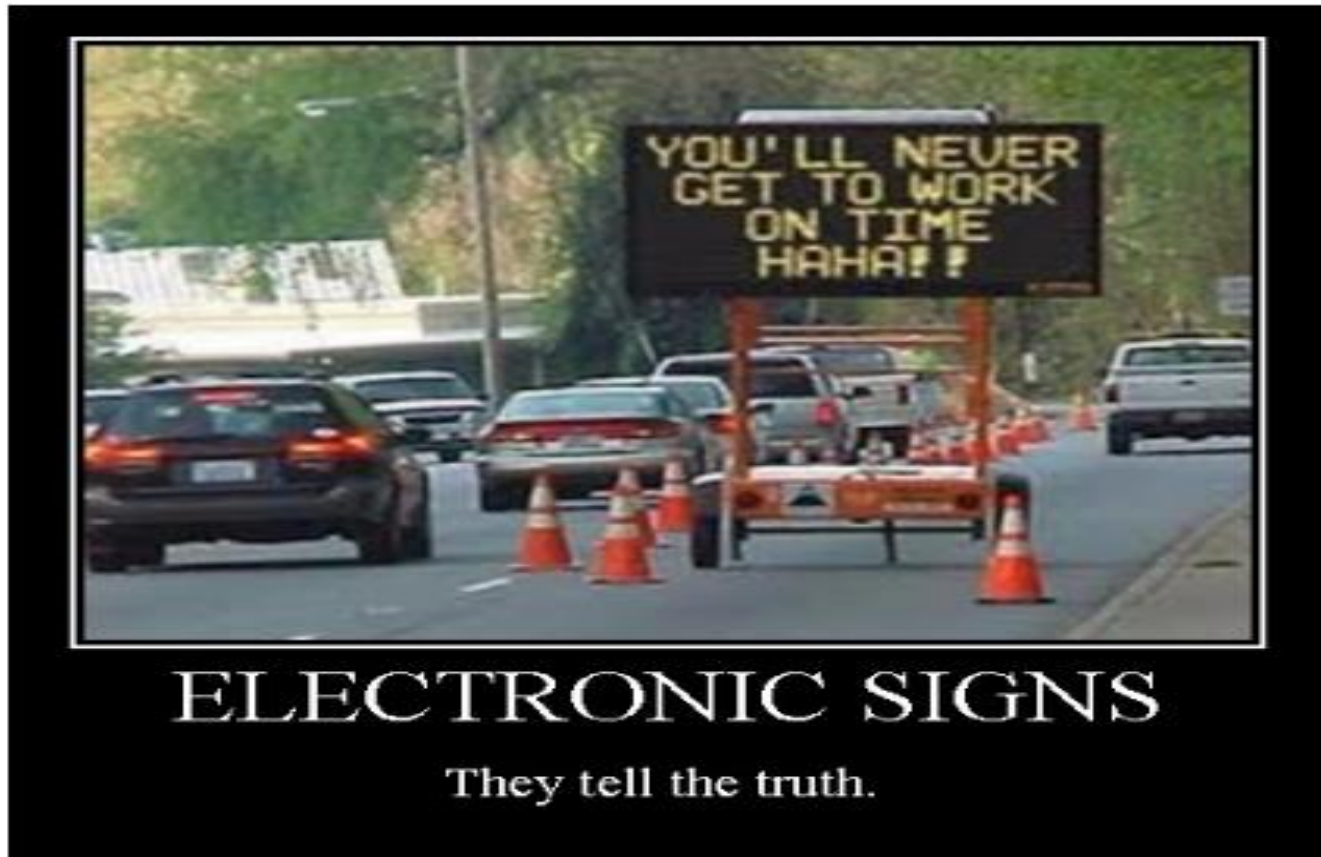
CHAPTER 12

GEOTECHNICAL APPLICATIONS

PART A:

- 12.1 Piling
- 12.2 Ground anchors
- 12.3 Ground improvement
- 12.4 Lateral support
- 12.5 Shotcrete
- 12.6 Mechanically stabilised earth walls (MSEW)
- 12.7 Pipe jacking, directional drilling, ramboring and micro-tunnelling
- 12.8 Ground drainage
- 12.9 Slope protection
- 12.10 Excavating in hard material by controlled blasting
- 12.11 Geosynthetics

THANK YOU FOR YOUR ATTENTION!



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