

TABLE OF CONTENTS

TABLE OF CONTENTS	1-1
GETTING STARTED	
<i>A Path to Success . . . Getting Started</i>	2-1
BEHAVIORAL/ATTITUDINAL CHARACTERISTICS	
<i>Behavioral /Attitudinal Characteristics & Indicators</i>	3-1
VDOT's Values	3-4
COURSE & CERTIFICATION COMPLETION CHARTS	
<i>Legend of Terms for Course & Certification Completion Charts</i>	4-1
<i>Required Technical and Personal Development Courses</i>	4-2
<i>Required Certification Courses</i>	4-7
ON-THE-JOB ELEMENTS SETS	
<i>Legend of Terms for Required Technical "On-The Job" Element Sets</i>	5-1
<i>Chart for Required Technical "On-the-Job" Element Sets</i>	5-3
GLOSSARY: ACTION VERBS	
<i>Glossary of Action Verbs</i>	6-1
100 SERIES, GENERAL PROVISIONS	

<i>Control of Work (Project Procedures)</i>	7-1
<i>Control of Work (Construction Stakes, Lines and Grades: Slope Staking & Bridge Stakeouts)</i>	7-4
<i>Control of Material (Materials Entry Data)</i>	7-7
<i>Control of Materials (Disposal Areas)</i>	7-10
<i>Environmental Protection (Permits, Certificates, Licenses & Stipulations)</i>	7-13
<i>Prosecution and Progress of Work (Progress Reports)</i>	7-16
<i>Measurement and Payment (Computerized Monthly Estimates)</i>	7-19
200 SERIES, MATERIALS	8-1
300 SERIES, ROADWAY CONSTRUCTION	
<i>Clearing and Grubbing</i>	9-1
<i>Drainage Structure (Pipe and Box Culverts)</i>	9-4
<i>Earthwork (Borrow Materials: Borrow Excavation and Select Borrow)</i>	9-9
<i>Earthwork (Excavation and Embankments)</i>	9-15
<i>Earthwork (Undercut Excavation and Backfill)</i>	9-22
<i>Subgrade and Shoulders</i>	9-24
<i>Soils Compaction Tests</i>	9-27
<i>Nuclear Compaction</i>	9-30
<i>Hydraulic Cement Stabilization (Soil Cement) or Lime Stabilization</i>	9-32
<i>Hydraulic Cement Stabilization (Cement-Stabilized Subbase/Aggregate)</i>	9-36
<i>Subbase Course (& Aggregate Base Course)</i>	9-40

<i>Liquid Bituminous Material (Tack, Prime and Seal Coats, Asphalt Surface Treatment; and Penetration Surface Courses)</i>	9-42
<i>Asphalt Concrete Pavement</i>	9-47
<i>Concrete Testing</i>	9-52

400 SERIES, BRIDGES AND STRUCTURES

<i>Structure Excavation (and Foundations)</i>	10-1
<i>Pile Driving (Sheet Piles and Bearing Piles)</i>	10-5
<i>Form Checking – Structures</i>	10-8
<i>Hydraulic Cement Concrete Operations (Concrete Placing – Structures)</i>	10-11
<i>Bridge Deck Construction (Placing and Finishing Bridge Decks)</i>	10-16
<i>Construction Joints, Preformed Elastomeric Joint Sealer, & Elastomeric Expansion Dams (Expansion and Construction Joints)</i>	10-19
<i>Reinforcing Steel</i>	10-23
<i>Steel Structures (Structural Steel) or Prestressed Concrete Beams</i>	10-27
<i>Dismantling & Removing Existing Structures or Removing Portions of Existing Structures</i>	10-33
<i>Riprap</i>	10-37
<i>Concrete Slope Protection</i>	10-43
<i>Damp-Proofing</i>	10-46

500 SERIES, INCIDENTAL CONSTRUCTION

<i>Underdrains</i>	11-1
<i>Incidental Concrete Construction</i>	11-4
<i>Sidewalks, Steps and Handrails</i>	11-9
<i>Guardrail and Steel Median Barriers</i>	11-12
<i>Retaining Walls</i>	11-16
<i>Fences (Fencing)</i>	11-18
<i>Demolition of Pavement & Obscuring Roadway</i>	11-21
<i>Patching Hydraulic Cement Concrete Pavement</i>	11-24
<i>Relocating or Modifying Existing Miscellaneous Items</i>	11-27
<i>Allaying Dust</i>	11-29
<i>Maintenance of Traffic (Maintaining Traffic)</i>	11-31
<i>Mobilization</i>	11-37
<i>Field Office</i>	11-39
<i>Planning Pavement</i>	11-41
<i>Demolition of Buildings & Clearing of Parcels</i>	11-43
<i>Contractor Construction Surveying</i>	11-46
<i>Trainees on Construction Projects</i>	11-49
<i>Sound Barrier Walls</i>	11-51
<i>Utility Coordinator and Water & Sanitary Sewer Facilities (Utilities Inspection)</i>	11-53
<i>Mailbox Post</i>	11-57

600 SERIES, ROADSIDE DEVELOPMENT

*Topsoiling and Seeding
(Topsoil, Seeding and Mulching)* 12-1

700 SERIES, TRAFFIC CONTROL DEVICES

General 13-1

Traffic Signs 13-4

Traffic Signals (Traffic Signalization) 13-7

Pavement Marking and Markers 13-12

Lighting Systems (Electrical Work & Conduit) 13-17

SERIES - N/A, MISCELLANEOUS

Basic Plan Reading 14-1

*Surveying Checklist for Transportation Construction
Inspector Trainees* 14-3

Level Care & Use 14-8

Transport Care & Use 14-10

Project Preparation 14-12

Project Finalization 14-14