

00 Using The Construction Task Catalog®	1
01 General Requirements	1
01 20 Price and Payment Procedures	1
01 22 Unit Prices	1
01 40 Quality Requirements	37
01 41 Regulatory Requirements	37
01 42 References	37
01 45 Quality Control	37
01 50 Temporary Facilities and Controls	39
01 51 Temporary Utilities	39
01 52 Construction Facilities	40
01 53 Temporary Construction	42
01 54 Construction Aids	42
01 55 Vehicular Access and Parking	44
01 56 Temporary Barriers and Enclosures	50
01 57 Temporary Controls	59
01 58 Project Identification	59
01 60 Product Requirements	60
01 66 Product Storage and Handling Requirements	60
01 70 Execution and Closeout Requirements	60
01 71 Examination and Preparation	60
01 74 Cleaning and Waste Management	62
02 Existing Conditions	1
02 20 Assessment	1
02 25 Existing Material Assessment	1
02 30 Subsurface Investigation	1
02 32 Geotechnical Investigations	1
02 40 Demolition and Structure Moving	2
02 41 Demolition	2
02 43 Structure Moving	15
02 60 Contaminated Site Material Removal	15
02 61 Removal and Disposal of Contaminated Soils	15
02 65 Underground Storage Tank Removal	16
02 80 Facility Remediation	19
02 81 Transportation and Disposal of Hazardous Materials	19
02 82 Asbestos Remediation	19
02 83 Lead Remediation	23
02 86 Hazardous Waste Drum Handling	26
02 87 Bio-Hazard Material Remediation	27
02 89 Hazmat Ancillary Tasks and Support	29
03 Concrete	1
03 01 Maintenance of Concrete	1
03 01 30 Maintenance of Cast-In-Place Concrete	1
03 05 Common Work Results For Concrete	3
03 05 13 Concrete Admixtures	3
03 10 Concrete Forming and Accessories	3
03 11 Concrete Forming	3
03 15 Concrete Accessories	7
03 20 Concrete Reinforcing	16
03 21 Reinforcement Bars	16
03 22 Fabric and Grid Reinforcing	45
03 30 Cast-In-Place Concrete	46
03 30 53 Miscellaneous Cast-in-Place Concrete	46
03 31 Structural Concrete	47
03 35 Concrete Finishing	62
03 37 Specialty Placed Concrete	65
03 39 Concrete Curing	66
03 40 Precast Concrete	66
03 41 Precast Structural Concrete	66
03 48 Precast Concrete Specialties	75

Table of Contents

03 50 Cast Decks and Underlayment	78
03 53 Concrete Topping	78
03 54 Cast Underlayment	79
03 60 Grouting	79
03 61 Cementitious Grouting	79
03 62 Non-Shrink Grouting	79
03 63 Epoxy Grouting	80
03 64 Injection Grouting	80
03 80 Concrete Cutting and Boring	80
03 81 Concrete Cutting	80
03 82 Concrete Boring	81
05 Metals	1
05 05 Common Work Results for Metals	1
05 05 19 Post-Installed Concrete Anchors	1
05 05 21 Fastening Methods for Metal	12
05 05 23 Metal Fastenings	13
05 10 Structural Metal Framing	78
05 12 Structural Steel Framing	78
05 14 Structural Aluminum Framing	140
05 15 Wire Rope Assemblies	141
05 40 Cold-Formed Metal Framing	147
05 41 Structural Metal Stud Framing	147
05 42 Cold-Formed Metal Joist Framing	148
05 43 Slotted Channel Framing	149
05 45 Metal Support Assemblies	150
05 50 Metal Fabrications	150
05 51 Metal Stairs	150
05 52 Metal Railings	152
05 53 Metal Gratings	161
05 54 Metal Floor Plates	169
05 55 Metal Stair Treads and Nosings	169
05 56 Metal Castings	171
05 58 Formed Metal Fabrications	171
05 59 Metal Specialties	172
09 Finishes	1
09 01 Maintenance of Finishes	1
09 01 90 Maintenance of Painting and Coating	1
09 90 Painting and Coating	5
09 91 Painting	5
09 96 High-Performance Coatings	50
09 97 Special Coatings	53
10 Specialties	1
10 10 Information Specialties	1
10 14 Signage	1
11 Equipment	1
11 60 Entertainment and Recreation Equipment	1
11 68 Play Field Equipment and Structures	1
11 80 Facility Maintenance and Operation Equipment	4
11 82 Facility Solid Waste Handling Equipment	4
13 Special Construction	1
13 40 Integrated Construction	1
13 47 Facility Protection	1
22 Plumbing	1
22 05 Common Work Results for Plumbing	1
22 05 23 General-Duty Valves for Plumbing Piping	1
22 05 76 Facility Drainage Piping Cleanouts	3
22 07 Plumbing Insulation	6

22 07 19 Plumbing Piping Insulation	6
22 10 Plumbing Piping	35
22 11 Facility Water Distribution	35
22 12 Facility Potable-Water Storage Tanks	97
22 13 Facility Sanitary Sewerage	98
22 60 Gas and Vacuum Systems for Laboratory and Healthcare Facilities	144
22 66 Chemical-Waste Systems for Laboratory and Healthcare Facilities	144
23 Heating, Ventilating, and Air-Conditioning (HVAC)	1
23 05 Common Work Results for HVAC	1
23 05 23 General-Duty Valves For HVAC Piping	1
26 Electrical	1
26 01 Operation and Maintenance of Electrical Systems	1
26 01 10 Operation and Maintenance of Medium-Voltage Electrical Distribution	1
26 01 20 Operation and Maintenance of Low-Voltage Electrical Distribution	2
26 01 30 Operation and Maintenance of Facility Electrical Power Generating and Storing Equipment	2
26 01 50 Operation and Maintenance of Lighting	2
26 05 Common Work Results for Electrical	11
26 05 13 Medium-Voltage Cables	11
26 05 19 Low-Voltage Electrical Power Conductors and Cables	16
26 05 23 Control-Voltage Electrical Power Cables	31
26 05 26 Grounding and Bonding for Electrical Systems	31
26 05 29 Hangers and Supports for Electrical Systems	36
26 05 33 Raceway and Boxes for Electrical Systems	57
26 05 43 Underground Ducts and Raceways for Electrical Systems	273
26 05 46 Utility Poles for Electrical Systems	275
26 05 53 Identification for Electrical Systems	279
26 05 83 Wiring Connections	280
26 09 Instrumentation and Control for Electrical Systems	283
26 09 23 Lighting Control Devices	283
26 10 Medium-Voltage Electrical Distribution	306
26 11 Substations	306
26 12 Medium-Voltage Transformers	313
26 13 Medium-Voltage Switchgear	317
26 18 Medium-Voltage Circuit Protection Devices	320
26 19 High-Voltage Circuit Protection	320
26 20 Low-Voltage Electrical Distribution	323
26 21 Low-Voltage Electrical Service Entrance	323
26 22 Low-Voltage Transformers	324
26 24 Switchboards and Panelboards	331
26 25 Enclosed Bus Assemblies	376
26 27 Low-Voltage Distribution Equipment	380
26 28 Low-Voltage Circuit Protective Devices	397
26 29 Low-Voltage Controllers	427
26 30 Facility Electrical Power Generating and Storing Equipment	442
26 31 Photovoltaic Collectors	442
26 32 Packaged Generator Assemblies	445
26 33 Battery Equipment	450
26 35 Power Filters and Conditioners	453
26 36 Transfer Switches	454
26 40 Electrical And Cathodic Protection	457
26 43 Surge Protective Devices	457
26 50 Lighting	460
26 52 Safety Lighting	460
26 55 Special Purpose Lighting	465
26 56 Exterior Lighting	477
27 Communications	1
27 05 Common Work Results for Communications	1
27 05 26 Grounding and Bonding for Communications Systems	1
27 05 29 Hangers and Supports for Communications Systems	1
27 05 33 Conduits and Backboxes for Communications Systems	4
27 05 39 Surface Raceways for Communications Systems	4
27 05 43 Underground Ducts and Raceways for Communications Systems	4
27 05 46 Utility Poles for Communications Systems	4

Table of Contents

27 05 53 Identification for Communications Systems	4
27 10 Structured Cabling	4
27 11 Communications Equipment Room Fittings	4
27 13 Communications Backbone Cabling	11
27 15 Communications Horizontal Cabling	13
27 16 Communications Connecting Cords, Devices, and Adapters.....	51
27 20 Data Communications.....	53
27 21 Data Communications Network Equipment.....	53
27 22 Data Communications Hardware	57
27 24 Data Communications Peripheral Data Equipment.....	57
27 30 Voice Communications	57
27 31 Voice Communications Switching and Routing Equipment.....	57
27 32 Voice Communications Terminal Equipment	58
27 40 Audio-Video Communications.....	59
27 41 Audio-Video Systems.....	59

28 Electronic Safety and Security 1

28 40 Life Safety	1
28 42 Gas Detection and Alarm	1
28 43 Fuel Oil Detection and Alarm	1

31 Earthwork 1

31 01 Maintenance of Earthwork	1
31 01 20 Maintenance of Earth Moving.....	1
31 05 Common Work Results for Earthwork.....	1
31 05 13 Soils for Earthwork	1
31 05 16 Aggregates for Earthwork.....	2
31 05 36 Equipment Delivery, Pickup, Mobilization and Demobilization.....	4
31 10 Site Clearing	4
31 11 Clearing and Grubbing	4
31 13 Selective Tree and Shrub Removal and Trimming.....	4
31 20 Earth Moving.....	6
31 23 Excavation and Fill	6
31 24 Embankments	13
31 25 Erosion and Sedimentation Controls.....	14
31 30 Earthwork Methods	18
31 31 Soil Treatment.....	18
31 32 Soil Stabilization	19
31 35 Slope Protection	29
31 36 Gabions	29
31 37 Riprap	29
31 40 Shoring and Underpinning	29
31 41 Shoring	29
31 43 Concrete Raising.....	30
31 45 Vibroflotation and Densification.....	30
31 60 Special Foundations and Load-bearing Elements	30
31 62 Driven Piles	30
31 63 Bored Piles.....	34

32 Exterior Improvements 1

32 01 Operation and Maintenance of Exterior Improvements	1
32 01 11 Paving Cleaning	1
32 01 13 Flexible Paving Surface Treatment	1
32 01 16 Flexible Paving Rehabilitation	3
32 01 17 Flexible Paving Repair	5
32 01 26 Rigid Paving Rehabilitation	6
32 01 29 Rigid Paving Repair.....	7
32 01 90 Operation and Maintenance of Planting	7
32 05 Common Work Results for Exterior Improvements.....	11
32 05 33 Common Work Results for Planting	11
32 10 Bases, Ballasts, and Paving	11
32 11 Base Courses	11
32 12 Flexible Paving.....	12
32 13 Rigid Paving	19
32 14 Unit Paving.....	22
32 15 Aggregate Surfacing.....	26

32 16 Curbs, Gutters, Sidewalks, and Driveways.....	26
32 17 Paving Specialties.....	33
32 30 Site Improvements.....	45
32 31 Fences and Gates.....	45
32 32 Retaining Walls.....	126
32 35 Screening Devices.....	132
32 39 Manufactured Site Specialties.....	133
32 80 Irrigation.....	135
32 84 Planting Irrigation.....	135
32 90 Planting.....	151
32 91 Planting Preparation.....	152
32 92 Turf and Grasses.....	155
32 93 Plants.....	160
32 94 Planting Accessories.....	190
32 96 Transplanting.....	192

33 Utilities

1

33 01 Operation and Maintenance of Utilities.....	1
33 01 10 Operation and Maintenance of Water Utilities.....	1
33 01 30 Operation and Maintenance of Sewer Utilities.....	4
33 01 70 Operation and Maintenance of Electrical Utilities.....	71
33 05 Common Work Results for Utilities.....	73
33 05 07 Trenchless Installation of Utility Piping.....	73
33 05 09 Piping Specials for Utilities.....	75
33 05 16 Cast-Iron Utility Pipe.....	75
33 05 17 Copper Utility Pipe and Tubing.....	75
33 05 19 Ductile-Iron Utility Pipe.....	75
33 05 24 Steel Utility Pipe.....	75
33 05 27 Corrugated Metal Utility Pipe.....	76
33 05 31 Thermoplastic Utility Pipe.....	76
33 05 33 Polyethylene Utility Pipe.....	76
33 05 39 Concrete Pipe.....	77
33 05 41 Vitrified Clay Utility Pipe.....	77
33 05 61 Concrete Manholes.....	77
33 05 63 Concrete Vaults and Chambers.....	78
33 05 81 Metallic Castings for Utility Structures.....	87
33 05 83 Non-Metallic Accessories for Utility Structures.....	88
33 05 84 Accessories for Utility Structures.....	88
33 05 97 Identification and Signage for Utilities.....	91
33 10 Water Utilities.....	92
33 11 Groundwater Sources.....	92
33 14 Water Utility Transmission and Distribution.....	101
33 19 Water Utility Metering Equipment.....	187
33 30 Sanitary Sewerage Utilities.....	188
33 31 Sanitary Sewerage Piping.....	188
33 32 Sanitary Sewerage Equipment.....	194
33 40 Stormwater Utilities.....	195
33 41 Subdrainage.....	195
33 42 Stormwater Conveyance.....	198
33 44 Storm Utility Water Drains.....	257
33 46 Stormwater Management.....	259
33 50 Hydrocarbon Utilities.....	260
33 52 Hydrocarbon Transmission and Distribution.....	260
33 70 Electrical Utilities.....	260
33 71 Electrical Utility Transmission and Distribution.....	260

34 Transportation

1

34 01 Operation and Maintenance of Transportation.....	1
34 01 23 Operation and Maintenance of Railways.....	1
34 01 43 Operation and Maintenance of Bridges.....	1
34 05 Common Work Results for Transportation.....	1
34 05 43 Common Work Results for Bridges.....	1
34 40 Transportation Signaling and Control Equipment.....	19
34 41 Roadway Signaling and Control Equipment.....	19
34 70 Transportation Construction and Equipment.....	28
34 71 Roadway Construction.....	28
34 80 Bridges.....	35

Table of Contents

34 82 Bridge Specialties.....	35
50 Custom Standards And Assemblies	1
50 89 CALTRANS Custom Standards And Assemblies.....	1
50 89 80 CALTRANS Construction Performance Requirements.....	1