



**Washington State
Department of Transportation**

Construction Manual

M 41-01.46

February 2025

Multimodal Development & Delivery (M2D2)
State Construction Office

Foreword

This manual is provided for our construction engineering personnel as instruction for fulfilling the objectives, procedures, and methods for construction administration of Washington State transportation projects. This manual contains two kinds of instructions depending on the subject matter and the nature of the work. In one case, where the activity is the inspection of contract work that is critical from a structural or operational viewpoint, the instructions prescribe detailed methods and procedures, or detailed performance measures, designed to assure the objective of a safe and adequate finished product. In other cases, typically in the areas of documentation and payment, the instructions are limited to describing the necessary objectives of the work without specifying the methods or procedures. The *Construction Manual* is intended as a reference book that is consistent with the language and intent of the *Standard Specifications*. In order to use this reference effectively, it is essential that the user has a thorough understanding of the contract, contract plans, contract provisions, and the *Standard Specifications*, as well as this manual.

Where specific methods and procedures are not included, the intent of this manual is to provide the project staff with a statement of the outcomes required and to allow the Region Construction Management and the Project Engineer to devise procedures accordingly. This manual provides basic instruction for identifying policies or laws that affect the construction administration work, however, the manual generally does not interpret these policies or laws. Compliance with policies, laws, and regulations is the duty of the Project Engineer, who may call on others, especially those authorized to enforce laws and regulations, at any time for assistance. In order to respond to the many situations that may arise on different contracts with different types of work, the instruction provided by this manual is general in character and is not to be construed as replacing, modifying, or superseding any of the provisions of the contract, contract plans, contract provisions, or *Standard Specifications*.

Decisions to deviate from the instruction provided in this manual must be based on engineering judgment and supportable as representing the best interests of the public and are to be made by the individual with appropriate authority.

Comments about the manual are always welcome and will be considered in future updates.

Robert E. Christopher III, P.E.
Director of Construction Division
State Construction Engineer

Contents

Chapter 1	Administration	1-1
1-00	Agency Organization and Relations with Other Organizations	1-1
GEN 1-00.1	Purpose and Scope of Manual	1-1
GEN 1-00.2	Definition of Terms	1-1
GEN 1-00.3	WSDOT State Construction Office	1-1
GEN 1-00.4	Region Organization	1-5
GEN 1-00.5	Relationship with Other Agencies	1-7
GEN 1-00.6	Relating to the Public	1-9
GEN 1-00.7	Construction Contracts Information System - Overview	1-9
GEN 1-00.8	Emergency Contracts	1-9
GEN 1-00.9	Prime Contractors Performance Report	1-11
GEN 1-00.10	FHWA Stewardship	1-12
GEN 1-00.11	Bridge and Structures Office Support During Construction	1-15
GEN 1-00.12	Inspector Certification Program	1-16
GEN 1-00.13	Quality Assurance Program (Materials)	1-19
GEN 1-00.14	Work in Navigable Waterways	1-20
GEN 1-00.15	Construction In or Near Streams, Rivers, or Other Bodies of Water	1-20
GEN 1-00.16	Preconstruction Conference	1-21
GEN 1-00.17	Engagement of Surety	1-27
1-02	Bid Procedures and Conditions	1-27
SS 1-02.2	Plans and Specifications	1-27
SS 1-02.4	Examination of Plans, Specifications, and Site of Work	1-27
1-03	Award and Execution of Contract	1-29
SS 1-03.2	Award of Contract	1-29
SS 1-03.3	Execution of Contract	1-30
1-04	Scope of the Work	1-30
SS 1-04.3	Reference Information	1-30
SS 1-04.4	Changes	1-30
SS 1-04.5	Procedure, Protest and Dispute by the Contractor	1-30
SS 1-04.6	Variation in Estimated Quantities	1-32
SS 1-04.7	Differing Site Conditions (Changed Conditions)	1-36
1-05	Control of Work	1-37
SS 1-05.1	Authority of the Engineer	1-37
SS 1-05.3	Plans and Working Drawings	1-39
SS 1-05.4	Conformity with and Deviations from Plans and Stakes	1-46
SS 1-05.7	Nonconforming Work	1-47
SS 1-05.9	Equipment	1-49
SS 1-05.10	Guarantees	1-50
SS 1-05.14	Cooperation with Other Contractors	1-50

1-06	Control of Material	1-50
	SS 1-06.3 Manufacturer's Certificate of Compliance	1-50
	SS 1-06.6 Recycled Materials	1-52
1-07	Legal Relations and Responsibilities to the Public.	1-53
	SS 1-07.1 Laws to be Observed	1-53
	SS 1-07.3 Fire Prevention and Merchantable Timber Requirements	1-57
	SS 1-07.4 Sanitation	1-59
	SS 1-07.5 Environmental Regulations	1-60
	SS 1-07.9 Wages	1-68
	SS 1-07.11 Requirements for Nondiscrimination.	1-85
	SS 1-07.12 Federal Agency Inspection.	1-100
	SS 1-07.13 Contractor's Responsibility for Work.	1-103
	SS 1-07.14 Responsibility for Damage.	1-104
	SS 1-07.15 Temporary Water Pollution Prevention	1-105
	SS 1-07.16 Protection and Restoration of Property.	1-106
	SS 1-07.17 Utilities and Similar Facilities.	1-109
	SS 1-07.18 Public Liability and Property Damage Insurance	1-111
	SS 1-07.23 Public Convenience and Safety.	1-111
1-08	Prosecution and Progress	1-117
	SS 1-08.3 Progress Schedules	1-121
	SS 1-08.4 Prosecution of Work.	1-127
	SS 1-08.5 Time for Completion.	1-127
	SS 1-08.6 Suspension of Work	1-130
	SS 1-08.8 Extensions of Time	1-132
	SS 1-08.9 Liquidated Damages	1-133
	SS 1-08.10 Termination of Contract.	1-136
1-09	Measurement and Payment	1-137
	SS 1-09.4 Equitable Adjustment	1-137
	SS 1-09.6 Force Account	1-139
	SS 1-09.8 Payment for Material on Hand	1-148
	SS 1-09.9 Payments	1-149
	SS 1-09.12 Audits	1-164
1-10	Temporary Traffic Control	1-166
	SS 1-10.1 General	1-166
	SS 1-10.2 Traffic Control Management	1-169
	SS 1-10.3 Traffic Control Labor, Procedures, and Devices	1-173
	SS 1-10.4 Measurement.	1-176
	SS 1-10.5 Payment	1-177
Appendix 1-A	Change Orders	1-178

Chapter 2	Earthwork	2-1
2-01	Clearing, Grubbing, and Roadside Cleanup	2-1
	SS 2-01.3 Construction Requirements	2-1
	SS 2-01.4 Measurement	2-2
2-02	Removal of Structures and Obstructions	2-3
	GEN 2-02.3 General Instructions	2-3
	SS 2-02.3 Construction Requirements	2-3
2-03	Roadway Excavation and Embankment	2-4
	SS 2-03.1 Description	2-4
	SS 2-03.3 Construction Requirements	2-5
	GEN 2-03.4/5 Measurement and Payment	2-18
2-04	Haul	2-18
	SS 2-04.4 Measurement	2-18
2-06	Subgrade Preparation	2-19
	SS 2-06.3 Construction Requirements	2-19
2-07	Watering	2-19
	SS 2-7.3 Construction Requirements	2-19
2-09	Structure Excavation	2-20
	SS 2-09.3 Construction Requirements	2-20
2-10	Ditch and Channel Excavation	2-24
	SS 2-10.3 Construction Requirements	2-24
2-11	Trimming and Cleanup	2-24
	SS 2-11.3 Construction Requirements	2-24
2-12	Construction Geotextile	2-24
	SS 2-12.3 Construction Requirements	2-24

Chapter 3	Aggregate Production and Acceptance	3-1
3-01	Production From Quarry and Pit Sites	3-1
GEN 3-01.1	General Instructions	3-1
GEN 3-01.2	Outline of Inspector's Duties	3-2
SS 3-01.2	Material Sources, General Requirements	3-2
SS 3-01.3	State Furnished Material Sources	3-4
SS 3-01.4	Contractor Furnished Material Sources	3-5
SS 3-01.5	Measurement	3-6
3-02	Stockpiling Aggregates	3-6
SS 3-02.2	General Requirements	3-6
SS 3-02.4	Measurement	3-7
3-03	Site Reclamation	3-7
GEN 3-03.1	General	3-7
SS 3-03.2	General Requirements	3-8
SS 3-03.3	Reclamation Plans	3-8
Chapter 4	Bases	4-1
4-02	Gravel Base	4-1
GEN 4-02.1	General Instructions	4-1
SS 4-02.2	Construction Requirements	4-1
4-04	Ballast and Crushed Surfacing	4-1
GEN 4-04.1	General Instructions	4-1
GEN 4-04.2	Inspector's Checklist	4-2
SS 4-04.3	Construction Requirements	4-3
SS 4-04.4	Measurement	4-6

Chapter 5	Surface Treatments and Pavements	5-1
5-01	Cement Concrete Pavement Rehabilitation	5-1
SS 5-01.1	Description	5-1
SS 5-01.3	Construction Requirements	5-1
5-02	Bituminous Surface Treatment	5-6
GEN 5-02.1	General Instructions	5-6
GEN 5-02.3	Inspection and Sampling of Materials	5-6
GEN 5-02.4	Miscellaneous Inspection Duties	5-6
GEN 5-02.5	Reports and Records	5-7
SS 5-02.3	Construction Requirements	5-7
5-03	Crack and Joint Sealing	5-12
GEN 5-03.1	General Instructions	5-12
5-04	Hot Mix Asphalt	5-13
GEN 5-04.1	General Instructions	5-13
SS 5-04.2	Materials	5-16
GEN 5-04.2	Inspector Roles and Responsibilities	5-19
GEN 5-04.3	Street Inspection	5-20
GEN 5-04.4	How to...	5-24
SS 5-04.3	Construction Requirements	5-25
5-05	Cement Concrete Pavement	5-40
GEN 5-05.1	General Instructions	5-40
GEN 5-05.2	Testing Equipment/Reports	5-40
GEN 5-05.3	Checklists	5-41
SS 5-05.3	Construction Requirements	5-44
SS 5-05.5	Payment	5-52

Chapter 6	Structures	6-1
6-01	General Requirements for Structures	6-1
GEN 6-01.1	Bridge Construction De-Briefing Session	6-1
GEN 6-01.2	General Inspection Procedures	6-1
GEN 6-01.4	Safety Nets and Staging	6-2
SS 6-01.2	Foundations Data	6-2
SS 6-01.4	Appearance of Structures	6-2
SS 6-01.6	Load Restrictions on Bridges Under Construction	6-2
SS 6-01.9	Working Drawings	6-3
SS 6-01.12	Final Cleanup	6-4
SS 6-01.16	Repair of Defective Work	6-4
6-02	Concrete Structures	6-6
GEN 6-02.1	Use of Epoxy Resins	6-6
SS 6-02.3	Construction Requirements	6-7
6-03	Steel Structures	6-40
6-04	Timber Structures	6-49
6-05	Piling	6-50
GEN 6-05.1	Vibration Monitoring during Pile Driving	6-50
GEN 6-05.2	Pile Driving Records	6-50
SS 6-05.3	Construction Requirements	6-50
6-06	Bridge Railings	6-57
GEN 6-06.1	Railing Alignment	6-57
6-07	Painting	6-58
GEN 6-07.1	General	6-58
6-08	Bituminous Surfacing on Structure Decks	6-60
GEN 6-08.1	Description	6-60
SS 6-08.2	Materials	6-60
6-10	Concrete Barrier	6-64
SS 6-10.3	Construction Requirements	6-64
6-14	Geosynthetic Retaining Walls	6-66
GEN 6-14	Description	6-66
SS 6-14.3	Construction Requirements	6-66
SS 6-14.4	Measurement	6-67
6-19	Shafts	6-67
GEN 6-19	Shafts	6-67
6-20	Buried Structures	6-69
6-20.1	Construction Requirements	6-69

Chapter 7	Drainage Structures, Storm Sewers, Sanitary Sewers, Water Mains, and Conduits	7-1
7-01	Drains	7-1
	GEN 7-01.1 Roadway Subdrainage	7-1
7-02	Culverts	7-2
	GEN 7-02.1 General Instructions	7-2
	GEN 7-02.2 Roadway Surface Drainage	7-3
	GEN 7-02.3 Design of Culverts	7-3
	SS 7-02.5 Payment	7-7
7-03	Vacant	7-7
7-04	Storm Sewers	7-7
	GEN 7-04.1 General Instructions	7-7
	SS 7-04.3 Construction Requirements	7-7
	SS 7-04.5 Payment	7-7
Chapter 8	Miscellaneous Construction	8-1
8-01	Erosion Control and Water Pollution Control	8-1
	GEN 8-01.1 Introduction	8-1
	GEN 8-01.2 References	8-2
	GEN 8-01.3 Definitions	8-2
8-02	Roadside Restoration	8-10
	GEN 8-02.1 General	8-10
	GEN 8-02.2 Landscape Terminology	8-11
	GEN 8-02.3 Reference Reading	8-14
	SS 8-02.2 Materials	8-14
	SS 8-02.3 Construction Requirements	8-14
	SS 8-02.5 Payment	8-28
8-03	Irrigation System	8-28
	GEN 8-03.1 General	8-28
	GEN 8-03.2 Inspection	8-29
	SS 8-03.2 Materials	8-29
	SS 8-03.3 Construction Requirements	8-30
8-04	Curbs, Gutters, Spillways, and Inlets	8-32
	SS 8-04.3 Construction Requirements	8-32
8-11	Guardrail	8-33
	GEN 8-11.1 General Instructions	8-33
	SS 8-11.3 Construction Requirements	8-33
8-12	Chain Link Fence and Wire Fence	8-34
	SS 8-12.3 Construction Requirements	8-34
8-14	Cement Concrete Sidewalks	8-34
	SS 8-14.3 Construction Requirements	8-34

8-20	Illumination, Traffic Signal Systems, and Electrical	8-35
	GEN 8-20.1 General	8-35
	GEN 8-20.2 Inspection.....	8-35
	SS 8-20.2 Materials.....	8-36
	SS 8-20.3 Construction Requirements.....	8-38
	GEN 8-20.6B1 Conduit Plowing	8-43
	GEN 8-20.6D Wire and Cable	8-43
8-21	Permanent Signing	8-46
	GEN 8-21.1 General	8-46
	SS 8-21.2 Materials.....	8-46
	SS 8-21.3 Construction Requirements.....	8-46
8-30	Water Crossings	8-48
	GEN 8-30.1 General	8-48
	GEN 8-30.2 Inspection.....	8-48
	SS 8-30.2 Materials.....	8-49
	SS 8-30.3 Construction Requirements.....	8-49
	SS 8-30.5 Payment	8-52
8-31	Temporary Stream Diversions.....	8-52
	GEN 8-31.1 General	8-52
	SS 8-31.3(3) Fish Block Net Installation and Fish and Aquatic Species Exclusion.....	8-54
	SS 8-31.3(4) Dewatering Work Areas.....	8-54
	SS 8-31.3(5) Inspection and Maintenance.....	8-54
	SS 8-31.3(6) Channel Rewatering and Removal of TSD Components (Except Nets)	8-55
	SS 8-31.3(7) Removal of Fish Block Nets.....	8-55
8-32	Woody Material.....	8-55
	GEN 8-32.1 General	8-55
	SS 8-32.3 Construction Requirements.....	8-56

Chapter 9	Materials	9-1
9-1	General	9-1
9-1.1	PE Authority for Materials Approval and Acceptance	9-1
9-1.2	Control of Materials	9-8
9-1.3	Approval of Materials	9-15
9-1.4	Acceptance Methods for Materials	9-24
9-1.5	Field Verification of Materials	9-29
9-2	Materials Fabrication Inspection Office – Inspected Items Acceptance	9-30
9-2.1	General	9-30
9-2.2	Inspected Items, Stamps, and Tagging Identification	9-31
9-2.3	Permanent Sign Inspection	9-34
9-2.4	Pipe Acceptance Report	9-35
9-3	Guidelines for Job Site Control of Materials	9-36
9-3.1	General	9-36
9-3.2	Sample Types	9-37
9-3.3	Test Numbering	9-38
9-3.4	Point of Acceptance	9-38
9-3.5	Basis for Acceptance	9-38
9-3.6	Vacant	9-39
9-3.7	Acceptance Sampling and Testing Frequency Guide	9-40
9-4	Specific Requirements for Each Material	9-43
9-4.1	Portland Cement, Blended Hydraulic Cement, Rapid Hardening Hydraulic Cement, Fly Ash, and Other Cementitious Materials	9-45
9-4.2	Bituminous Materials	9-46
9-4.3	Pavement Marker Adhesive	9-47
9-4.4	Concrete Aggregates	9-47
9-4.5	Aggregates for Bituminous Surface Treatment, Ballast, Permeable Ballast, Crushed Surfacing Base and Top Course, Maintenance Rock, and Gravel Backfill for Foundations Class A	9-48
9-4.6	Aggregates for Hot Mix Asphalt (HMA)	9-49
9-4.7	Hot Mix Asphalt (HMA)	9-49
9-4.8	Mineral Filler	9-50
9-4.9	Aggregate Materials for Walls (Gravel Borrow for Structural Earth Walls)	9-50
9-4.10	Miscellaneous Aggregates: Gravel Base, Gravel Backfill for Foundation Class B, Gravel Backfill for Wall, Gravel Backfill for Pipe Zone Bedding, Gravel Backfill for Drains, Gravel Backfill for Drywells, Backfill for Sand Drains, Sand Drainage Blanket, Gravel Borrow, Select Borrow, Common Borrow, Native Materials for Trench Backfill, Foundation Material Class A, B, and C, and Bank Run Gravel for Trench Backfill	9-51
9-4.11	Recycled Materials	9-52
9-4.12	Premolded Joint Filler for Expansion Joints	9-54
9-4.13	Elastomeric Expansion Joint Seals	9-55
9-4.14	Poured Rubber Joint Sealer – Two Component	9-55
9-4.15	Hot Poured Joint Sealants	9-56
9-4.16	Concrete Drain, Perforated Underdrain, Culvert, and Storm Sewer Pipe	9-56

9-4.17	Corrugated Galvanized Steel, Aluminized Steel, Aluminum: Drain, Perforated Underdrain, Culvert Pipe Arch, and Storm Sewer Pipe	9-57
9-4.18	Polyvinyl Chloride (PVC) and Corrugated Polyethylene (PE) Drain, Perforated Underdrain, Culvert, and Storm Sewer Pipe	9-58
9-4.19	Structural Plate Pipes, Arches, and Boxes	9-59
9-4.20	Steel, Gray-Iron, and Ductile-Iron Castings: Manhole Rings and Covers; Metal Frame, Grate, and Solid Metal Cover for Catch Basins or Inlets; Cast Metal Inlets; Frame (Ring), Grate, and Cover for Drywells	9-59
9-4.21	Sanitary Sewers	9-60
9-4.22	Structural Steel for Bridges	9-61
9-4.23	Unfinished Bolts (Ordinary Machine Bolts), Nuts, and Washers	9-62
9-4.24	High Strength Bolts, Nuts, and Washers	9-62
9-4.25	Anchor Bolts, Rods, Nuts, and Washers	9-63
9-4.26	Reinforcing Bars for Concrete (Uncoated and Epoxy Coated Rebar)	9-64
9-4.27	Vacant	9-65
9-4.28	Mechanical Splices	9-66
9-4.29	Rebar Chairs, Mortar Blocks (Dobies), and Spacers	9-66
9-4.30	Dowels and Tie Bars for Concrete Pavement.	9-67
9-4.31	Welded Wire Reinforcement for Concrete	9-69
9-4.32	Bridge Approach Slab Anchors	9-69
9-4.33	Prestressing/Post Tensioning Reinforcement – Strand	9-70
9-4.34	Prestressing/Post Tensioning Reinforcement – Bar.	9-70
9-4.35	Painting, Paints, Coating, and Related Materials	9-71
9-4.36	Timber and Lumber.	9-72
9-4.37	Vacant	9-73
9-4.38	Piling – All Types	9-73
9-4.39	Vacant	9-75
9-4.40	Precast Concrete Manholes, Catch Basins, Inlets, and Drywells.	9-75
9-4.41	Adjustment Sections for Drainage Structures	9-76
9-4.42	Riprap, Rock for Erosion and Scour Protection, Quarry Spalls, Rock for Rock Wall and Chinking Material, Backfill for Rock Wall, and Stone for Gabions . .	9-77
9-4.43	Semi-Open Slope Protection.	9-77
9-4.44	Plant Material.	9-78
9-4.45	Topsoil.	9-79
9-4.46	Seed.	9-79
9-4.47	Fertilizer	9-80
9-4.48	Mulch	9-81
9-4.49	Irrigation System	9-83
9-4.50	Fencing and Gates.	9-84
9-4.51	Beam Guardrail, Guardrail Anchors, and Guardrail Terminals	9-86
9-4.52	Guardrail Posts and Blocks	9-87
9-4.53	Miscellaneous Precast Concrete Products (Block Traffic Curb, Precast Traffic Curb)	9-88
9-4.54	Prestressed Concrete Girders	9-88
9-4.55	Pavement Marking Materials.	9-89

9-4.56	Signing Materials, Mounting Hardware, Posts, Sign Supports and Digital Printing System – Reflective Sheeting with its Integrated Engineered Matched Component System: Ink, Clear Overlay Film and Digital Printer and Sign Fabricator	9-90
9-4.57	Liquid Concrete Curing Compound	9-92
9-4.58	Admixtures for Concrete	9-93
9-4.59	Plastic Waterstop	9-93
9-4.60	Epoxy Systems.	9-94
9-4.61	Resin Bonded Anchors	9-95
9-4.62	Gabion Cribbing, Hardware, and Stone	9-96
9-4.63	Steel Sign Structures – Cantilever, Sign Bridge, Bridge Mounted, Roadside . .	9-96
9-4.64	Conduit	9-97
9-4.65	Fiber Optic Cable, Electrical Conductors, and Cable.	9-98
9-4.66	Steel Poles – ITS, Pedestrian, Light, Signal Standards, and High Mast Light Poles	9-98
9-4.67	Vacant	9-100
9-4.68	Luminaires, Lamps, and Light Emitting Diodes (LED)	9-100
9-4.69	Water Distribution System	9-100
9-4.70	Elastomeric Pads	9-101
9-4.71	Bridge Bearings – Cylindrical, Disc, Fabric Pad, Pin, Spherical.	9-102
9-4.72	Precast Concrete Barrier	9-103
9-4.73	Vacant	9-104
9-4.74	Metal Bridge Rail	9-104
9-4.75	Construction Geosynthetics (Geotextiles and Geogrids)	9-105
9-4.76	Concrete	9-106
9-4.77	Water for Concrete	9-107
9-4.78	Expansion Joints	9-107
9-4.79	Traffic Signal Controller Assembly	9-108
9-4.80	Erosion Control Devices.	9-109
9-4.81	Concrete Patching Material, Grout and Mortar	9-110
9-4.82	Streambed Aggregates	9-112
9-4.83	Temporary Traffic Control Materials.	9-112
9-4.84	Modular Expansion Joint	9-114
9-4.85	Junction Boxes, Cable Vaults, and Pull Boxes.	9-114
9-4.86	Precast Bridge Deck Panels, Floor Panels, Marine Pier Deck Panels, Noise Barrier Walls, Pier Caps, Retaining Walls, Roof Panels, Structural Earth Walls, Wall Panels, and Wall Stem Panels.	9-116
9-4.87	Concrete Three Sided Structures, Box Culverts and Split Box Culverts. . . .	9-117
9-4.88	Precast Concrete Vaults (Utility, Drainage, etc.).	9-117
9-4.89	Fabricated/Welded Miscellaneous Metal Drainage Items: Grate Inlets and Drop Inlets	9-118
9-4.90	Miscellaneous Steel Structures (Cattle Guards, Handrail, Guardrail Posts with Welded Base Plate, Seismic Retrofit Earthquake Restrainers, Column Jackets).	9-119
9-4.91	Miscellaneous Welded Structural Steel	9-119

9-4.92	Wood Bridges	9-120
9-4.93	Electrical Service Cabinets.	9-120
9-4.94	Monument Case, Cover, and Riser	9-121
9-4.95	Steel Bollards	9-121
9-4.96	Metal Trash Racks, Debris Cages, and Safety Bars for Culvert Pipe and Other Drainage Items	9-122
9-4.97	Flow Restrictors and Oil Separators.	9-122
9-4.98	Concrete Blocks	9-123
9-4.99	Vacant	9-123
9-4.100	Intelligent Transportation Systems (ITS)/System Operations Management (SOM) Materials.	9-124
9-4.101	Media Filter Drain Mix	9-126
9-5	Quality Assurance Program	9-127
9-5.1	General	9-127
9-5.2	Quality Assurance Program Structure and Responsibilities	9-128
9-5.3	WSDOT Testing Technician Qualification Program (WTTQP)	9-131
9-5.5	Equipment Calibration/Standardization/Check and Maintenance Program .	9-132
9-5.6	Qualified Laboratories	9-133
9-5.7	Independent Assurance Program (IAP)	9-133
9-6	Radioactive Testing Devices	9-136
9-6.1	Administration and Safety	9-136
9-6.2	Radiation Administration Officer (Region Materials Engineer)	9-139
9-6.3	Radiation Safety Officer.	9-140
9-6.4	Authorized Operators.	9-140
9-6.5	Authorized Transporters.	9-141
9-7	Field Operating Procedures and other Related Test Methods.	9-141

Chapter 10	Documentation	10-1
10-1	General	10-1
10-1.1	Introduction	10-1
10-1.3	Source Documents and Field Notes	10-2
10-2	Measurement of Items of Work	10-2
10-2.1	General	10-2
10-2.2	Items Measured by Weight	10-6
10-2.3	Items Measured by Volume	10-6
10-2.4	Items Measured by Hour/Day	10-8
10-2.5	Items Measured by Lump Sum	10-9
10-2.6	Items Measured by Other Units	10-9
10-2.7	Items Bid at “No Charge”	10-10
10-3	Final Records for Projects Constructed by Contract	10-10
10-3.1	Final Records	10-10
10-3.2	Permanent Final Records	10-11
10-3.3	Temporary Final Records	10-16
10-3.4	Payment Source Documents	10-18
10-3.5	Documents Submitted Through PWIA	10-19
10-3.6	As-Built Plans and Shop Drawings	10-19
10-3.7	Final Record Field Notes	10-22
10-4	Project Ledger System	10-22
10-4.1	General	10-22
10-4.2	Payment Source Documents	10-23
10-4.3	Source Document Filing Systems	10-24
10-5	Region Project Documentation Reviews	10-25
10-5.1	General	10-25
10-5.2	Review Procedures for Final Estimates and Final Records	10-26

Chapter 11 Forms 11-1

11-1 Introduction 11-1

11-2 Definitions 11-1

11-3 General Instructions 11-1

 11-3A Numerical Listing of Forms 11-4

Chapter 1 Administration

1-00 Agency Organization and Relations with Other Organizations

GEN 1-00.1 Purpose and Scope of Manual

This manual, published by the State Construction Office, provides instruction for administering Washington State Department of Transportation (WSDOT) contracts advertised and executed under the authority of the State Construction Engineer. It also applies to emergency contracts to the extent required by the WSDOT [Emergency Funding Manual](#) M 3014. It describes accepted engineering practices, identifies desired results, establishes standardized requirements, and provides statewide uniformity in the administration and construction of those contracts.

Chapters 1 through 8 of the *Construction Manual* are organized with three types of content. General information that isn't tied to any specific Section of the *Standard Specifications* is prefaced by "GEN" in the Section number. Information that is intended to complement and expand on sections of the *Standard Specifications* is prefaced by "SS" in the section number. Information that is intended to complement and expand on a General Special Provision is prefaced by "GSP". Not all sections of the *Standard Specifications* are addressed in the *Construction Manual*. Construction engineering staff should be familiar with the guidance and instructions included in this manual.

Suggestions for corrections, additions, or improvements to this manual and to the *Standard Specifications* or [General Special Provisions](#) are welcomed and should be submitted to the State Construction Office in the form of a Word document in "track changes" format.

GEN 1-00.2 Definition of Terms

Definitions of words or terms are the same as "Definitions and Terms" in [Standard Specifications](#) Section 1-01. If a conflict occurs between the guidance or instructions offered by this manual and the *Standard Specifications* or Provisions identified in the Contract, the latter will always prevail. Unless exclusively stated in the Request for Proposal documents of a Design-Build Contract, any reference of the Project Engineer in this manual will mean the WSDOT Project Engineer.

GEN 1-00.3 WSDOT State Construction Office

The State Construction Office strives for consistent, cost-effective, quality construction through direct support of WSDOT's Regional construction program. The State Construction Office coordinates the development of policies and standards, provides training, guidance, oversight, technical expertise and advocacy, introduces innovation, and coordinates and shares information on construction issues.

GEN 1-00.3(1) State Construction Engineer

The Director of the Construction Division is the State Construction Engineer and reports to the Assistant Secretary Multimodal Development and Delivery. The State Construction Engineer is responsible for all WSDOT construction contracts, except those executed by the Director of Washington State Ferries Division. The State Construction Engineer is responsible for all matters pertaining to contract administration and represents the Principal Engineer in managing the performance of these contracts. In addition, the State Construction Engineer acts for the Principal Engineer in approving increases or decreases of Work, changes in the Work or in materials incorporated into the Work, authority to accomplish Work by force account, extensions of time, and the assessment of any liquidated damages. The State Construction Engineer is responsible for providing guidance and direction to the Regions and State Construction Office personnel who are investigating construction claims and is responsible for the approval of all claim settlements. The State Construction Engineer establishes WSDOT policy related to inspection and documentation and ensures uniform interpretation and enforcement of the *Standard Specifications* and Contract Provisions throughout the State. The State Construction Engineer is assisted by the Deputy State Construction Engineer, the Lead Construction Engineer - Projects, Administration, the Lead Construction Engineer - Administration, and the Assistant State Construction Engineers (ASCE).

GEN 1-00.3(1)A Deputy State Construction Engineer

The Deputy State Construction Engineer reports to the State Construction Engineer. The Deputy State Construction Engineer is delegated the authority to execute documents concerning the following:

- Advertising, award, and execution of Contracts
- Federal Aid project documentation
- Change orders as identified in Section 1-04.4 subsection 4.9
- Extensions of time
- Reduction in pre-qualification
- Claims on Contracts
- Final Acceptance

GEN 1-00.3(1)B Lead Construction Engineer - Projects

The Lead Construction Engineer - Projects represents the State Construction Engineer by formulating policy in the following areas:

- *Standard Specifications* – All Divisions except for Division 9
 - Projects is the lead within the State Construction Office for Environmental Coordination.
- *Construction Manual* – All Chapters except for Chapter 9

The Lead Construction Engineer - Projects is delegated authority to execute contract documents concerning:

- Force account markups and AGC-WSDOT Equipment Rental Agreement
- Interpretation of Contract Provisions
- Specification and Contract requirements
- Policy related to inspection and documentation
- Change orders identified in Section SS 1-04.4 subsection 4.9

GEN 1-00.3(1)C Lead Construction Engineer - Administration

The Lead Construction Engineer - Administration reports to the Deputy State Construction Engineer and represents the State Construction Engineer by formulating policy in the following areas:

- Force account markups and AGC-WSDOT Equipment Rental Agreement
- Design-Build Program
 - [Design-Build Manual](#) M 3126
 - Contract Templates
- eConstruction
- Contract Advertisement and Award
- Organizational Conflicts of Interest

The Lead Construction Engineer - Administration is delegated authority to execute contract documents concerning:

- Force account rates
- Interpretation of Contract Provisions
- Specification and Contract requirements
- Policy related to inspection and documentation
- Change orders as identified in Section SS 1-04.4 subsection 4.9

The Lead Construction Engineer - Administration, is assisted by:

- **Documentation Engineer** – Provides guidance for Contract documentation and payments, as well as providing support to Region Documentation Engineers. The Documentation Engineer resolves issues of material documentation deficiencies for all Federal aid projects, is responsible to assist with prevailing wage issues, and evaluating Contracts for Final Acceptance. The Documentation Engineer may assist the State Materials Laboratory with Quality Audits on administrative documentation as well as audits performed by FHWA and the State Auditor's Office.
- **e-Construction Specialist** - The technical expert for statewide implementation and management of the e-Construction systems used in the administration of WSDOT construction contracts. E-Construction is the collection, review, approval, and distribution of highway construction contract documents in a paperless environment. This includes e-ticketing, Unifier, electronic signatures, and the Enterprise Content Management System (ECM). Provides support to the Regions for field users, training, and development of Headquarters and Regional subject matter experts.
- **Construction Administration Specialist** – The Construction Contract Information System (CCIS) Manager/Administrator and acts as the State Construction Office liaison for various internal and external Management Information Systems (MIS). Provides support to the Regions and Project Offices in the use of CCIS, C30P, the Force Account Program, and L&Is Prevailing Wage, Intents and Affidavits system (PWIA). This position oversees the maintenance of C30P, CCIS, and the Force Account Program. This position also coordinates revisions to the *Construction Manual* working with subject matter experts and communications for publication, and coordinates Equipment Watch subscriptions.
- **Specification Engineer** – Responsible for updates to the *Standard Specifications* and General Special Provisions.

GEN 1-00.3(1)D Assistant State Construction Engineers

Assistant State Construction Engineers (ASCE) report to the Lead Construction Engineers or the Deputy State Construction Engineer and are assigned as the State Construction Office point of contact for specific Project Offices or Programs. ASCEs also assist the Lead Construction Engineers in the development of policy and are assigned responsibility for specific sections of the [Standard Specifications](#) and the *Construction Manual*.

Assistant State Construction Engineers are delegated the authority to execute:

- Change orders as identified in Section SS 1-04.4 subsection 4.9

GEN 1-00.3(2) State Materials Laboratory**GEN 1-00.3(2)A State Materials Engineer**

The State Materials Engineer reports to the State Construction Engineer and represents them by developing and implementing materials quality assurance program policies. These policies are implemented primarily through [Chapter 9](#) of the *Construction Manual*, the [Materials Manual](#), and Division 9 of the *Standard Specifications* but can also be through updates to other documents such as General Special Provisions, and Design Build Request for Proposals typically in Sections 2.25 and 2.28. The State Materials Engineer or their representative develop, review, and approve the following documents:

- Reports issued on soils and test results
- Documents approving material sources for highway projects
- Documents approving materials for the Qualified Products List and New Products List
- Documents establishing policy for the materials approval and acceptance program and the quality assurance program
- Documents establishing policy related to construction inspection and documentation on highway improvement contracts
- Documents concerning interpretation and meaning of Contract Provisions
- *Standard Specifications* - Division 9
- *Construction Manual* - Chapter 9
- [Materials Manual](#)

The State Materials Engineer and their representatives provide materials quality assurance program expertise and support to the Regions and the State Construction Office.

GEN 1-00.3(2)B State Pavements Engineer

The State Pavements Engineer reports to the State Construction Engineer by directing the pavement design and pavement management sections. The State Pavement Engineer establishes statewide pavement policy and provides technical support for pavement design and construction. The State Pavement Engineer approves design changes and material substitutions for pavement design related change orders.

The State Pavement Engineer is assisted by a staff of professional engineers, administrative personnel engineers and technicians.

GEN 1-00.3(2)C State Geotechnical Engineer

The State Geotechnical Engineer reports to the State Construction Engineer by formulating and implementing geotechnical design and construction policy, primarily through the [Geotechnical Design Manual](#), but also through Standard Plans, General Special Provisions, and portions of the *Standard Specifications*. The State Geotechnical Engineer or their representatives, develop, and/or review and approve, the following types of documents:

- Summary of Geotechnical Conditions
- Boring logs and associated geotechnical test data
- Blasting plan submittals
- Geotechnical aspects of shoring and excavation submittals
- Other geotechnical construction submittals
- For design-build projects, portions of the RFP (primarily Technical Requirement 2.06), geotechnical base-line reports, geotechnical data reports, and related geotechnical reports

The State Geotechnical Engineer, or their representatives, develops and/or approves geotechnical reports that provide the design basis for construction projects statewide. The State Geotechnical Engineer, or their representatives, provides geotechnical expertise and support for evaluation of construction and changed condition claims to Region Construction Managers and the State Construction Office staff.

GEN 1-00.4 Region Organization

GEN 1-00.4(1) Regional Administrator

The Regional Administrator (RA), or those delegated Regional Administrator authority, represents the Assistant Secretary in a geographic area, organizes and supervises a staff that performs administrative duties and supervise planning, design, construction administration, and maintenance of the transportation system within the region.

The RA is delegated the authority to:

- Execute change orders as identified in Section SS 1-04.4 subsection 4.9
- For emergencies, as provided in the [Emergency Funding Manual](#) M 3014: declare certain emergencies; procure contractors using Type 1 or Type 2 procedures; and execute Contracts procured using Type 1 or Type 2 procedures

GEN 1-00.4(2) Assistant Regional Administrator for Construction

In supervision of construction, the Regional Administrator is assisted by an Assistant Regional Administrator (ARA) for Construction. The ARA for Construction or those delegated ARA for Construction authority assigns Project Engineers with appropriate supporting personnel and provides training and guidance to the Project Engineers. It is the responsibility of the ARA for Construction to ensure that sufficient qualified personnel are provided on all projects to ensure adequate inspection, documentation, materials testing and quality assurance program controls.

The ARA for Construction is delegated the authority to execute change orders as identified in Section SS 1-04.4 subsection 4.9.

GEN 1-00.4(3) Project Engineer**General**

The Region will appoint a Project Engineer to act as the authorized representative of the State Construction Engineer for each contracted project.

After the Contract is executed, the Project Engineer is responsible for:

- Enforcement of the Contract
- Ensuring that all Work is completed according to the Plans and *Standard Specifications*
- Supervising the work of WSDOT personnel assigned to the project and ensuring they perform their work in accordance with the Plans, Specifications and all applicable WSDOT policies
- Keeping complete and accurate records of all construction data and Work progress
- Change orders
- Preparing progress and final estimates
- Preparing other records necessary for complete documentation of the project
- Performing interim and final Prime Contractor Performance Reports

Project Engineer Coordination with Regional Maintenance

The Project Engineer should review the project on a regular basis with Regional Maintenance personnel so they have an opportunity to present any maintenance concerns that may arise.

Project Engineer Responsibility as a Public Official

The Project Engineer is responsible for a project that is affected by Federal, State, Tribal, and local laws, ordinances, and regulations. While no one could be familiar with every requirement, the Project Engineer will seek to understand as much as possible. Beyond that, Project Engineers will look for guidance and seek information related to whatever current issue is at hand. Legal requirements could affect State employees, those employed by the Contractor in performing the Work, the materials to be incorporated, the equipment that is used on the project, or could otherwise affect the conduct of Work.

If the Project Engineer discovers any Contract Provisions, Plans, or Specifications that appear to be inconsistent with a law, ordinance, or regulation, the inconsistency should be investigated and, if appropriate, referred to the ARA for Construction. The Project Engineer will, at all times, strive to comply with all laws, ordinances, and regulations.

Project Engineer Relationship with the Contractor

The Project Engineer must be familiar with the conditions of the Contract, Special Provisions, and *Standard Specifications* for the Work. The Project Engineer must be familiar with the general assignments of risk and responsibility established in the Contract. The Project Engineer must attend to any reasonable request of the Contractor, i.e., furnishing grades, stakes, plans, whenever necessary and within reason. In general, the Project Engineer should do all things necessary to enable the Contractor to work to advantage and without delay while being aware and careful to avoid taking on any work scope or risk assigned to the Contractor. The Project Engineer should not set any stakes or furnish to the Contractor any plans which are the responsibility of the Contractor to set or provide. The Project Engineer must ensure that the Contractor performs the Work in accordance with the Contract Provisions, Plans, and *Standard Specifications*.

Integrity on the part of all employees is essential. The attitude of the Project Engineer and staff toward the Contractor and the Contractor's personnel should be one of cooperation and collaborative issue resolution, consistent with the requirements of the *Standard Specifications*. It should be recognized that both the State and the Contractor have explicit rights under the Contract and that both parties must respect those rights. The Contractor is generally trying to complete the Contract as required. Errors or difficulties are usually due to a lack of information or misunderstandings. If conflict should occur, the Project Engineer will make every effort to determine the cause of the conflict and make appropriate corrections. The Contractor also has the responsibility, under [Section 1-05.1\(2\)](#) Requests for Information, to notify the Contracting Agency of ambiguities that exist in the Contract and should be encouraged to do so.

GEN 1-00.5 Relationship with Other Agencies

GEN 1-00.5(1) Federal Highway Administration

The federal government provides transportation funding to Washington State through the Federal Highway Administration (FHWA), a division of the U.S. Department of Transportation. These funds are subject to applicable Federal law, Executive Orders, regulations, and agreements.

The WSDOT contact with FHWA for Construction Administration matters is the State Construction Office. In preparing and approving *Standard Specifications*, General Special Provisions, and this manual, the State Construction Office seeks the review and approval of FHWA. Use of approved provisions and meeting the required outcomes described in the manual become the basis of federal reimbursement.

FHWA provides oversight of WSDOT work on some projects and has delegated that responsibility to WSDOT on others. A full discussion of WSDOT responsibilities under FHWA Stewardship is included in Section GEN 1-00.10.

GEN 1-00.5(2) U.S. Forest Service

WSDOT has entered into a Memorandum of Understanding with the United States Forest Service (USFS), Highways Over National Forest Lands. The Project Engineer is required to do the following when performing Work on National Forest Lands:

1. Represent WSDOT in all matters pertaining to the project
2. Confirm that the USFS has been notified of the project advertisement and award
3. Notify and obtain approval from the USFS for any changes in the project that will affect National Forest Lands, beyond that of the original Contract
4. Notify the USFS when the project nears completion, at which time the USFS will indicate if they choose to participate in the final review of the project
5. Follow the Inadvertent Discovery Plan in Appendix 6 of Highways Over National Forest Lands

GEN 1-00.5(3) Local Agencies

Cities, counties, and other municipalities within the State may also perform work funded with federal dollars. Funds are passed through WSDOT, and we will have entered into agreements with the local agencies to provide services. For example, WSDOT will allow the use of WSDOT's testing facilities by a local agency.

GEN 1-00.5(3)A Project Engineer Administering Local Agency Project

Occasionally, a WSDOT Project Engineer may be assigned to provide engineering and inspection services on a local agency project. The duties of the Project Engineer will be determined by the Contract Provisions and by any specific agreement made between the Region Administration and the local agency. The provisions of this manual may or may not apply, depending on the situation.

GEN 1-00.5(3)B Local Agency Administering Its Project on State Right of Way

In some cases, WSDOT may grant approval for a local agency to construct a facility on State Right of Way using local agency staff and contractors. (For example, a city funded overpass of an interstate). When this happens, a Project Engineer will be assigned to provide oversight of the local agency work. The Project Engineer is expected to assure that the local agency provides the same level of engineering and inspection that State employees would accomplish. While the Local Agency may have different administrative provisions with respect to risk-sharing and submittal requirements, all of the technical aspects of the *Standard Specifications* and this manual must be met.

GEN 1-00.5(4) Other Federal, State, and Local Agencies

The design and construction of transportation improvements often incorporates locations and features that fall within the jurisdiction of other agencies. It is the policy of WSDOT to cooperate with all agencies as partners in the completion of each project, recognizing and complying with each agency's legal requirements. The Project Engineer will cooperate with local authorities to help ensure that the Contractor complies with local laws, ordinances, and regulations. However, unless specifically allowed in the statutes or the Contract documents, WSDOT employees will not engage in any kind of enforcement of laws, rules, regulations, or ordinances which are the responsibility of other agencies. WSDOT needs to maintain the confidence and build trust with resource agencies and the public, so it is critical that we take the proper actions when we are aware of an issue. When WSDOT employees observe something which is questionable or appears to not be in compliance with local laws, ordinances, and regulations, it must be brought to the Project Engineer's attention. The Project Engineer is responsible for bringing it to the Contractor's attention for proper action. Rely on Regional and Headquarters guidance and the appropriate agencies when dealing with complex issues.

Other agencies responsible for such things as flood control, land development, resource protection, stream navigation, or pollution may be affected by the work. The Project Engineer must ensure that the Contractor follows the Contract pertaining to these and other related issues. The Project Engineer is encouraged to obtain a copy of commitments from the project design file or other sources, like the Commitment Tracking System. This should be available from a Region or Project Design Office. This file contains environmental permits/agreements, real estate commitments, utility commitments, design deviations, and other important information. When the Contractor is specifically required by the Contract to obtain an approval document from other agencies, the

Project Engineer must confirm that the document was received. Other approvals required of the Contractor, but not mentioned in the Contract documents should be confirmed to the extent that the requirements are known and the confirmation is possible. If a representative of an agency visits the project, the Project Engineer or an inspector will make every effort to accompany the representative.

GEN 1-00.6 *Relating to the Public*

Public confidence is enhanced by WSDOT personnel being responsive to reasonable requests for information, providing timely advanced notice of possible impacts, and reducing inconvenience to traffic while maintaining worker safety. When possible, the Project Engineer should rely on resources such as Regional Public Information Officers and the State Office of Communications and Public Involvement. If there is concern or reason to question the confidentiality or sensitivity of the information requested, consult with your supervisor or seek the advice of the Attorney General's office.

GEN 1-00.7 *Construction Contracts Information System - Overview*

Construction Contracts Information System (CCIS) is a mainframe database used to track contract information, generate Weekly Statement of Working Days, and change orders for the following WSDOT administered construction contracts that are advertised by Contract Ad & Award: bid-build, design-build, progressive design-build, and emergency contracts procured using Type 2 or Type 3 procurement as described in [Emergency Funding Manual](#) section 2-6.3.

Contracts are added to CCIS by the State Construction Office after award, and Project Office staff cannot enter data until the project information has been loaded from CAPS. Access to contracts in CCIS is limited to assigned organization codes and users must be assigned access the same organization code as the Contract. After the Contract is available for entry in CCIS, the Project Office must enter the majority of the Contract information into the CCIS system.

Refer to the CCIS User's Guide for detailed information regarding responsible groups for entering information in CCIS.

Only Contracts that were advertised through Contract Ad & Award are entered into CCIS by the State Construction Office.

GEN 1-00.8 *Emergency Contracts*

Emergency contracting procedures are outlined in the WSDOT [Emergency Funding Manual](#) M 3014. The following discussion provides a general overview of emergency contracting procedures; however, the Project Engineer must refer to the [Emergency Funding Manual](#) for detailed information on what events constitute an emergency, who has the authority to declare an emergency, and what documentation is required.

A written contract is always required when utilizing a Contractor for emergency Work. While it is technically possible to add emergency Work to an existing contract via change order (under the Type 1 emergency procurement process), doing so is highly discouraged because (1) if the emergency Work is ever federally funded it would require the entire contract to which it is attached to become federally funded, and (2) failure to fastidiously separate payments for the emergency Work from the regular Contract Work and comply with Type 1 emergency contract requirements could jeopardize all emergency funding

under an audit. Therefore, it is considered best practice to execute a separate contract utilizing the Emergency Work Contract (WSDOT Form 350-007 or 350-008). This best practice applies even in cases where a Contractor is already working in close proximity to the emergent situation and has personnel and equipment available to respond rapidly.

There are three types of Contract procurement that may be utilized during an emergency:

1. Negotiated, single Contractor, no bids:
 - a. Cannot exceed 30 working days. These Contracts cannot be extended. If, at the end of the 30 working days the Work will not be completed, a new Contract is required. New Contracts shall not be a Type 1. Start one of the appropriate processes defined for Type 2 or Type 3 below. It is recommended to confer with the Region Project Development Office if this is necessary.
 - b. Bid documents are not required, but the Emergency Work Contract form (DOT 350-008) must include a description of Work to be performed. Specifications, quantities, and plan sheets may be developed after execution and provided to the Contractor.
 - c. Generally, Type 1 emergency Work Contracts are paid under a force account basis. Work may be negotiated but cannot exceed force account amounts.
 - d. The Region will be responsible for solicitation, execution, closeout, and records retention.
2. Type 2 - Solicited bids:
 - a. A minimum of three bids is required.
 - b. The Contract duration may be greater than 30 days if necessary.
 - c. Requires bid documents - description of Work, Specifications, quantities, and plan sheets (if needed).
 - d. Regions may complete the advertisement, award, and execution themselves. Contract Ad & Award shall be consulted on the advertisement and award procedures.
3. Type 3 - Conventional published call for bids:
 - a. Plan preparation
 - b. Review process
 - c. For highway construction and repairs, these Contracts require Contract Ad & Award advertisement in accordance with the *Ad and Award Manual*
 - d. Policy inclusions for Type 2 and Type 3 Contracts
 - i. Project Goals (Disadvantaged Business Enterprise/Small Business Enterprise/On the Job training) will not be considered for 30-day or less emergency projects done by force account to temporarily restore travel. However, Regions are encouraged to use Small, Minority, Veteran and Women-owned businesses, when available. Projects other than 30-day force account projects to temporarily restore travel should be considered for goals. Please contact the Office of Equity and Civil Rights (OECR) to request goals or if you have a question about whether goals should apply to your Contract.
 - e. Standard Bid items and Required Bid Items shall be used.

Type 2 and Type 3 Contracts may be used for Contracts in excess of 30-days. Type 2 and 3 Contracts may be used in lieu of Type 1 for projects with less than a 30-working day duration. For Type 2 and Type 3 Contracts, work orders must be assigned by the Contract Administration and Payment System (CAPS) unit of the Accountability and Financial Services Office (AFS). For highway construction and repairs, CAPS and CCIS are required to track items and subcontractor activity.

Unless the Project Engineer is specifically told otherwise, assume that federal funds may be utilized on emergency projects at a later time and thus include the federal provisions. Exceptions are when it is a small localized emergency that will clearly not trigger the ability to get federal reimbursement.

For Emergency Contracts that are measured and paid by Force Account, it is appropriate for the Engineer to consider payment for mobilization of equipment to the site of the emergency, including all staff time employed to procure and coordinate the mobilization. It may also be appropriate to include the labor payment for a dedicated superintendent and foreman employed solely to oversee the emergency work. On emergency contracts the markups may not be enough to cover the cost of performance bonds; the Project Engineer may consider payment for performance bond costs when making payment under emergency force account contracts.

GEN 1-00.9 Prime Contractors Performance Report

The procedures for completing and submitting the Prime Contractors Performance Report are included with DOT Form 421-010 and in the [Prime Contractors Performance Report Manual](#) M 41-40. The requirement for this report and other direction can also be found in [WAC 468-16-150](#) and [WAC 468-16-160](#). Notify the ARA for Construction for assistance and advice if the Contractor's performance on a project becomes below standard. Note that, in addition to the final report, the following are required periodically under the circumstances described.

Interim Report prepared as follows:

- a. Annually on the anniversary of the Work starting date for all projects exceeding one year's duration.
- b. When the current Project Engineer will no longer be involved with the project, providing the project has been in progress for 25 percent of the assigned working days. Include all Contract working days either from the starting date of the project, or from the date of the last interim report to the beginning of a subsequent interim report, or to the project Completion Date.
- c. When a Contractor's total, overall Work has become less-than-standard and conditional qualification is being considered.
- d. At 60-calendar day intervals, for two consecutive 60-day periods, after a Contractor has been placed in conditional qualification status; after written notification to the Contractor of below standard performance by the Region Administrator.

Special Report prepared as follows:

Prepared when a nonscheduled report is needed to facilitate a counseling session, or at the request of the Contractor. Special reports will not be referenced in the final report.

Under no circumstances will copies of any reports be filed in the ECM before having been reviewed at the State Construction Office and stamped "Filed in Office of the Secretary", dated and initialed by the Prequalification Analyst.

GEN 1-00.10 FHWA Stewardship

The Washington Division of FHWA has delegated a portion of its stewardship responsibility (and the corresponding authority) to WSDOT Stewardship and Oversight Agreement, signed August 20, 2024.

This Section describes further agreement between FHWA and WSDOT concerning the details of the part of the Stewardship Agreement and Construction Monitoring Plan that applies to construction. The subject matter of this subagreement is monitoring of construction performed on behalf of WSDOT by independent contractors.

Scope of Construction Monitoring Plan – Outlines expectations for federally-financed construction projects performed under Contract with WSDOT and administered through the WSDOT State Construction Office. It is not intended to be all-encompassing and does not include: WSDOT Ferries Division Contracts for construction of vessels and facilities; Contracts administered through Local Programs; Utility Agreements; and Emergency Relief work administered by WSDOT Maintenance.

Project Responsibility – FHWA Washington Division has delegated to WSDOT (and through the WSDOT delegation of authority to the State Construction Office) stewardship responsibility and authority for all federally-funded construction unless a project specific action (1) requires FHWA approval as defined in Attachment A of the Stewardship and Oversight Agreement or (2) the FHWA Division has retained approval as documented in a project-specific stewardship and oversight plan.

The State Construction Office has further delegated the stewardship reporting responsibility for projects with 251 or more working days, as defined in the Contract Provisions to the various WSDOT Regions. The delegation of stewardship authority from the State Construction Office to the Regions is through the *Construction Manual*.

FHWA has also delegated to WSDOT the authority to accept projects unless FHWA has retained this action as documented in an executed project-specific stewardship and oversight plan.

FHWA Review/Approval Actions and Related Processes – With the pre-approval of specifications and processes and the extensive delegation of stewardship authority, there are relatively few approval actions needed from FHWA during construction.

The following processes will apply:

FHWA may retain the oversight role of interim, or project inspections and acceptance, and the approval of certain high-value change orders for projects with project-specific stewardship and oversight plans. All Projects of Division Interest (PoDI) will be governed by a separate project-specific stewardship and oversight plan that specifies FHWA and WSDOT's responsibilities for the project. Refer to Section SS 1-04.4 regarding details of FHWA involvement in approving change orders.

The FHWA Area Engineer may choose to accompany WSDOT during the review of any federal-aid project. Such participation will be random and will be initiated by the Area Engineer. This participation by the FHWA will not change any delegation of oversight responsibility or authority in any way. When the Area Engineer has participated in a review, a copy of the summary report will be provided directly to the Area Engineer.

Stewardship Summary Reports – It is important to note the difference between a steward and a stewardship reviewer/reporter. Stewardship on WSDOT federal-aid projects is provided by a wide cross-section of employees who make stewardship decisions according to the requirements of the *Construction Manual* and their own delegated responsibilities and authorities. From the Project Inspector who observes Contract Work and prepares pay instructions, to the Project Engineer who reviews and approves a monthly progress payment, to the Region Construction Manager who executes a change order, to the State Construction Engineer who negotiates and approves a claim settlement, all are acting as stewards in their own job descriptions and assignments.

The stewardship reviewer/reporter, on the other hand, is acting as an overseer, observing and collecting information about all of the stewardship activities, evaluating that information, making recommendations concerning the qualification of the covered Work for federal funding and preparing reports to summarize the activities. Reviewers may be FHWA Area Engineers, State Construction Engineers, Region Managers or subordinate region specialists in documentation or contract administration. For the reports that it prepares, WSDOT may assign any person of the classification of Transportation Engineer 3 or above to this duty. The reviewer must not have been involved in the project-level administration and the report must be signed by someone with supervisory authority over the Project Engineer or management responsibility over the Contract itself.

Interim Reports:

At least once per year, the State Construction Office will create a list of all open, federally funded projects that will be divided to assign responsibility for stewardship reporting by Region. Projects identified as requiring stewardship reporting will be required to complete an interim report. The State Construction Office delegates authority of stewardship reporting responsibility to the WSDOT Regions.

Interim Reports are required on projects with 251 or more working days, as specified in the Contract Provisions. Interim Reports will be completed when a project is at 30 – 50% of working days completed. Interim Reports may be required at a greater frequency, on shorter-duration projects, or for a special purpose at the discretion of the State Construction Office.

Copies of Interim Reports will be sent to State Construction Office and forwarded to FHWA.

Content of Reports

Interim Reports provide immediate summaries of uncompleted projects, communicating details in a concise and comprehensive manner. The report should clearly identify project progress, conditions that make the project unique, difficulties encountered and their resolutions.

Job Description – A description of the major elements of the Work. Include a narrative about the job. Include the Contractor's name, the award date, amount of the bid and the working days specified in the Contract Provisions.

Time and Damages – Discuss the present status of time and its relationship to the completion status. If behind, describe what is being done to catch up. Describe any suspensions or time extensions.

Change Orders – Choose one executed change order to confirm that the change was approved according to the checklist before the Work started and that a cost verification is on file. Include a detailed description of high impact change orders (e.g., scope change, claim settlements, major impacts to cost and schedule).

Buy America and Build America/Buy America (BABA)

Steel and Iron - Choose one applicable bid item and verify that a completed and signed Certificate of Materials Origin (CMO) was submitted to the Project Engineer prior to incorporation into permanent Work. Discuss how the office is tracking foreign material used to ensure the amount does not exceed one-tenth of one percent of the total contract cost or \$2,500.00.

Construction Materials - Review processed progress estimates to ensure that a signed Certificate of Materials Origin - required for acceptance of construction materials - was submitted to the Project Engineer for each paid estimate. Include information if a CMO was received that showed foreign construction materials were placed and the resolution.

Materials - Review a process in progress by checking for submittals and approvals of RAMs, any drawing or catalog submittals, the testing method and frequency, adjustments to the ROM, observe field tests and include a summary report. Comment on the overall status of materials testing, documentation and adequacy.

Disputes, Claims - Note all claims or major disputes for the project and discuss resolution, if applicable.

Traffic Control - Comment on the adequacy of the traffic control plans and unusual events during the project. Discuss the project's use of flagging, devices, pilot cars, etc.

Training and Apprenticeship - Verify that a plan has been submitted and approved, the current percentage attained, and efforts to recover if behind.

Subcontracting - Discuss the level and nature of subcontracted Work. Note any Disadvantaged Business Enterprise (DBE) requirements and any change orders modifying these requirements by deleting, adding or substituting DBE commitments. Make reference to any Condition of Award requirements. Review on-site reports for any DBE firm utilized, whether or not its utilization was mandatory.

Other - Talk to the Project Engineer. Look for special notes. If there was an experimental specification or process, discuss how it is working on the project. If there was an unusual event or happenstance, discuss the circumstances that caused the event. Describe the overall impression of the contractual relationship. Describe any evidence of successful collaboration between the parties. Include any other information of interest.

Note: As a significant part of any review, the reviewer must visit the jobsite and confirm that a project of approximately the nature and magnitude of that shown on the plans actually does exist. This is true for all stewardship reporting.

Communication - Much of the day-to-day communication between WSDOT and FHWA is informal in nature. Verbal discussions, telephone consultations and email notices (including digital photos when needed for clarity) are used extensively. Except where formal written notices are specifically required, staff from both agencies will attempt to utilize the simplest form of communication that accomplishes the needed communication in the least time. All reports and correspondence related to a project shall bear both the WSDOT contract number and the FHWA project number as identifiers.

GEN 1-00.11 Bridge and Structures Office Support During Construction

The Bridge and Structures Office supports Project Offices, Regions and the State Construction Office on design-bid-build projects when the Contract Work involves bridges and structures. Support is provided in two primary areas - review and processing Working Drawings, Shop Plans and technical support.

When changes to structural engineered drawings occur, licensed professionals shall follow the requirements in Section SS 1-04.4 subsection 4.8.11.

GEN 1-00.11(1) Review and Processing Working Drawings

The Bridge and Structures Office has two groups that take the lead in processing working drawings - the Construction Support group and the Bridge Technical Advisors. Refer to Section SS 1-05.3 for details.

GEN 1-00.11(2) Technical Support

For Contracts including bridges or structures, the Bridge and Structures Office will identify a primary and secondary Bridge Technical Advisor (BTA) who will support the project during pre-bid questions and through construction. BTA assignments will be made for all Contracts with bridges or structures that were designed in-house as well as projects that were consultant-designed. Depending on the complexity of the project and the needs of the Region, some consultant-designed projects may use a consultant to provide primary BTA construction support. On these projects, a representative of the Bridge and Structures Office will provide secondary BTA support.

BTA assignments will be available for viewing by all WSDOT employees on MS Teams. To request a BTA for a project that does not have one identified, send an email to bridgeconstructionsupport@wsdot.wa.gov

The BTA coordinates structural support from the Bridge and Structures Office for the Project Engineer during the Contract. BTA's may be consulted for questions relating to structural design, inconsistencies or clarifications of structural plans, and for recommendations on structural issues that are identified during construction.

The Assistant State Construction Engineer (ASCE) must be included in correspondence on contract administration issues when:

- Work or recommendations of the BTA or others may result in a change order or are considered the practice of engineering in accordance with Section SS 1-04.4 subsection 4.8.11.
- Work of the BTA or others will result in a change order; approval for this change order must come from the State Construction Office.

The Project Engineer is encouraged to engage the ASCE early in the process prior to inclusion in a BTA response.

BTAs and others must comply with the following guidelines when supporting projects:

- Follow procedures in accordance with Section SS 1-04.4 subsection 4.8.11.
- Develop the most economical recommendations while considering the Contractor's means and methods.
- Provide recommendations and support documentation to the Project Engineer and the ASCE in writing. Include a change order cost estimate.

- Keep all correspondence, activities and recommendations.
- Defer contract administration issues or questions to the Project Engineer and the ASCE.
- Conform to the field safety requirements of the Region and the Contractor.
- Give the project priority but be prudent in the use of time and expense charges.
- Avoid direct communications with the Contractor without coordinating through the Project Engineer.
- Avoid directing the Contractor's Work.

Once a project is underway, the Project Engineer must set up a meeting between the Project Office, ASCE and primary BTA to discuss project roles, responsibilities, and communication protocols.

GEN 1-00.12 Inspector Certification Program

Goal – The purpose of the Inspector Certification Program (ICP) is to provide (1) training and resources for Project Inspectors and (2) examinations to confirm their knowledge. This will ensure consistent administration of highway construction contracts. The monitoring of construction activities by Certified Inspectors will help to ensure that only quality materials and workmanship are employed on WSDOT construction projects.

There is a parallel certification program for Design Build Quality Assurance General Engineering Consultant (GEC) Inspectors through the AGC Education Foundation for individuals performing inspections on WSDOT projects. A list of Inspectors certified by this process can be found in the AGC Education Foundation website:

www.constructionfoundation.org

Definitions

Region Inspector Certification Manager (RICM) – Individual designated by the State Construction Engineer to coordinate all construction training and Inspector Certification in that Region.

Region Inspector Certification Official (RICO) – Appointing authority for Construction Project Engineers or an individual delegated this responsibility by the appointing authority.

Department – Washington State Department of Transportation.

There are three levels of inspectors: (1) Interim Inspector, (2) General Inspector, and (3) Divisional Inspector. To be recognized as any of these types of inspector, one must register with the ICP through the Washington State Learning Center (LC). The employee's supervisor will contact their Region Trainer who will assign the certification training and tests via the LC.

GEN 1-00.12(1) Interim Inspectors

An Interim Inspector works under the supervision of a General Inspector or Divisional Inspector. There are no prerequisites, training, or tests required to perform the duties of an Interim Inspector. This person may be a temporary employee, seasonal employee, or permanent employee within the Department. Interim Inspectors at the Transportation Technician 3 In-Training level and above may serve as Interim Inspectors for not more than six months before being required to obtain certification as a General Inspector. It is recommended, therefore, that anyone assigned the duties of Interim Inspector should, at the same time, be assigned the training and testing required to be certified as a General Inspector.

GEN 1-00.12(2) General Inspectors

General Inspector Certification establishes a broad foundation upon which to build expertise through experience and training. A person certified as a General Inspector is authorized to independently inspect any construction activity (unless otherwise required) and to oversee the activities of an Interim Inspector.

There are no prerequisites to registering with the Learning Center to initiate the training and testing needed to become a General Inspector. General Inspector Certification is earned by achieving a passing score of 75 percent on each open book examination for all the following subjects:

- Technical Mathematics
- Contract Plans Reading
- Basic Surveying
- Composing an Inspector's Daily Report
- Force Account Documentation and Payment
- Materials Documentation
- Inspector's Role for Change Order Work
- Inspector Safety
- Utilizing Resources
- Environmental
- Work Zone Traffic Control

Candidates for General Inspector may either take the courses first and then take the examination or take the examination without taking the course. If the candidate does not achieve a passing score on an examination, they may retake that examination after waiting three days. If they fail an examination a second time, the candidate will be required to successfully complete training before attempting another examination for that subject matter. Certification as a General Inspector does not expire. The General Inspector may be required to successfully complete additional courses to maintain their General Inspector Certification should the Department change its work methods or standards pertaining to the subject matter covered in the General Inspector Certification.

GEN 1-00.12(3) Divisional Inspectors

The next level of certification is as a Divisional Inspector. To be eligible to pursue certification as a Divisional Inspector, the inspector must first achieve certification as a General Inspector. Certification as a Divisional Inspector in a specialty area is not a precondition to performing inspection of work in that specialty area, but it is encouraged.

Divisional Inspector certification is available in eight specialty areas as shown in the table below. An inspector can achieve Divisional Inspector Certification in one, some, or all the specialty areas. Attaining Divisional Inspector Certification in a specialty area indicates the inspector has successfully completed the highest level of WSDOT inspector training in that specialty area.

Divisional Certification Specialty Area
Division 2 - Earthwork
Division 5 - Hot Mix Asphalt
Division 6 - Structures, Cast-In-Place Concrete, Foundations, and Concrete Bridges
Division 7 - Drainage
Division 8 - Guardrail
Division 8 - Signing
Division 8 - Illumination, Signals, Electrical, and ITS

Note: Each year, the Construction Project Engineer will ensure that Inspectors assigned to them are afforded the opportunity to take additional courses to broaden their knowledge and certifications.

Each Divisional Certification specialty area includes its own module of training and exam. A score of 80 percent or higher on the examination for a specialty area is required for certification in that specialty area. After successfully completing these requirements, the individual will be granted the title of Certified Divisional Inspector in that specialty area. At this level, the Inspector is expected to operate independently with limited supervision in that specialty area.

Divisional Inspection Certification in a given specialty area may be attained by either successful completion of the required training course and then passing the examination, or the examination may be taken without completing the training course. If an exam is failed, the RICM will notify the Project Engineer. The Inspector must take an on-line or instructor led course for the specialty area prior to re-taking the exam. The exam may be retaken with a minimum of a three-day waiting period from the date the original test was failed.

If an exam is failed a second time, the RICM will notify the Project Engineer and RICO. The Project Engineer and RICO will develop an action plan for training and mentoring in the specialty area. A period of 30 days minimum is required for the action plan to be completed, and then the Project Engineer will notify the RICM the Inspector is ready to retake the examination.

An Inspector's Division Certification in a specialty area will be valid for a period of 4 years from the date of certification, after which they will be required to complete a recertification examination.

GEN 1-00.12(4) Revocation Based on Lack of Proficiency

If it is determined that a General or Divisional Certified Inspector has demonstrated a lack of proficiency, the RICO will work with the Inspector's Project Engineer to develop an action plan to correct the lack of proficiency. The action plan will include successfully completing course work identified and achieving a passing score on course examinations. If the Inspector fails to successfully complete the action plan, the RICO will revoke the Inspector's Certification and inform the Region Administrator.

The RICM will maintain a database of all Certified Inspectors, in what areas they are certified, and any who have had their certification revoked.

The RICO will initiate notification that a certification has been revoked. Notification must be in writing and is emailed ("read receipt requested") to the affected Inspector. A copy of the notification shall be sent to the employee's supervisor.

Prior to having the certification reinstated, the Inspector must meet all requirements stated in their revocation letter and pass any applicable proficiency examination(s).

GEN 1-00.12(5) Reporting

Once each year the RICM will report actions taken under the Inspector Certification Program. The report must include as a minimum the number of Certified Inspectors, the Inspector's names, what certifications they hold, and any certification revocations taken under the Inspector Certification Program. The report will be due to the State Construction Office by the last working day in January.

GEN 1-00.13 Quality Assurance Program (Materials)

Refer to Section 9-5 for details on the Quality Assurance Program (QAP), Materials.

Each ARA for Construction is responsible for overall management of the Region Quality Assurance Program. The Region QAP includes the following:

- WAQTC Testing Technician Qualification Program
- Method Qualified Tester Program
- Testing Equipment Calibration/Standardization/Check and Maintenance Program
- Qualified Laboratory Program
- Independent Assurance (IA) Program

GEN 1-00.13(1) Quality Assurance Program Reporting

The ARA for Construction will submit a Region annual Independent Assurance (IA) report to the State Construction Office with an electronic copy sent to the State Materials Engineer. The Region IA report will be submitted to the State Construction Office by the last working day in January. The Region IA report will summarize the results of the previous calendar year and contain the following:

1. Number and percent of materials testers audited
2. The testers name, list of the tester certifications, date each tester was audited
3. If applicable, the reason the annual tester audit was not completed on a tester or testers; see Section 9-5.7 Independent Assurance Program.

4. Any tester certification revocations
5. What, if any, problems occurred and why
6. A general statement as to how any problems that were reported were resolved

The State Materials Laboratory Quality Systems Section will compile the Region IA report information and submit the information to the FHWA per the requirements in Section 9-5.7C.

GEN 1-00.14 Work in Navigable Waterways

Construction Work performed in or over navigable waterways may require a US Coast Guard bridge "Permit" and/or US Coast Guard "Construction Plan Concurrence".

The following link opens the bridge "Permit" application process (uscg.mil).

See USCG "Construction Plan Concurrence" document.

One of the requirements of the "Construction Plan Concurrence" is the submission of a Bridge Construction Progress Report (USCG Bridge Completion Report Form 499). The Project Engineer will prepare the "Construction Plan Concurrence" sufficiently in advance of the first working day of the month and send it to the Bridge Office Coast Guard Liaison. When a Coast Guard bridge "Permit" or "Construction Plan Concurrence" modification is proposed (by the Contractor or WSDOT), it must be submitted to the Bridge Office Coast Guard Liaison for processing through the Coast Guard. The time required for approval/disapproval of the proposed "Permit" or "Construction Plan Concurrence" modification is variable and depends on the nature and significance of the modification. Up to six months may be required, or more for modification requests to an existing bridge "Permit".

When all construction obstructions to navigation have been removed, the Project Engineer must report that fact immediately to the Bridge Office Coast Guard Liaison indicating the date removal was completed. Upon completion of all permitted bridge Work, a final Bridge Construction Progress Report (USCG Bridge Completion Report Form 4599) indicating the date of completion and certifying that the bridge has been constructed in compliance with the Coast Guard bridge "Permit" must be submitted by the Project Engineer to the Bridge Office Coast Guard Liaison.

GEN 1-00.15 Construction In or Near Streams, Rivers, or Other Bodies of Water

Construction work in or near streams, rivers, or other bodies of water may require a permit from state and federal agencies, including but not limited to the State Department of Fish and Wildlife, Washington State Department of Ecology, or the U.S. Army Corps of Engineers. The Project Engineer is encouraged to coordinate closely with these (and other) agencies during permit acquisition to ensure the permits do not contain conflicting conditions. Also, be sure to consult across agencies if one of these agencies request modifications to the project that may affect other permits.

The Project Engineer will ensure that the provisions of environmental permits are enforced. If the Contractor's method of operations, weather conditions, design changes, or other factors affect waters of the state in ways not anticipated or represented in the permit, the Project Engineer will work with the Region Environmental Office and the Contractor (if necessary) to modify the existing permit(s) or obtain a new or revised one(s) as appropriate.

GEN 1-00.16 Preconstruction Conference

The Project Engineer is required to communicate with the Contractor for the purpose of discussing the project and exchanging a variety of information. Depending upon the complexity of the project, this information can be exchanged in any combination of the following methods:

- Information packets provided to the Contractor
- Letters transmitting information
- Informal meetings
- A single multipurpose formal meeting
- Several formal meetings with different purposes

If the Project Engineer decides that a formal meeting is necessary to successfully begin Work on the project, a meeting should be arranged as soon as practical after the Contract is executed and the Contractor has organized the Work.

A Preconstruction Conference provides a valuable opportunity for the project teams to meet all the key participants involved in the successful delivery of the project, and each of their respective roles and responsibilities.

Document all information exchanged in the project records, by formal meeting minutes, or by file copies of letters.

The nature, amounts, and methods of communication with the Contractor are left to the Project Engineer. The following subject areas should be covered before Work begins to the extent they are relevant to the project:

Contractor WSDOT Relationships – The Project Engineer should begin to develop a positive and effective relationship with the Contractor as soon as the Contract is executed. Communication prior to contract execution should be limited as indicated in SS 1-03.2. This is also a good time to introduce the concept of “Partnering” if it has not already been introduced on the project. The Project Engineer should strive to create an environment that encourages a cooperative approach to completing the project. This can be helped by beginning the development of a team consisting of both the Contractor’s and WSDOT’s project people. The level of authority delegated to each member of the Project Engineer’s staff should be discussed with the Contractor. The level of authority of each member of the Contractor’s staff, in particular regarding change orders, should be discussed. In addition, the methods of establishing the Contractor’s Performance ratings can be reviewed (see Section GEN 1-00.9 for additional information). The Contractor should also be informed that there is an opportunity to evaluate the WSDOT construction process as well.

Contractor Surveying - On projects with Contractor surveying, it is strongly advised to invite the Region Survey Committee member or their representative to discuss the requirements for removing, disturbing, or re-establishing survey monuments.

Unifier – WSDOT utilizes Unifier as the document control system used to transmit Contract documentation. Unifier provides the ability for both WSDOT and the Contractor to review documents, track tasks and see comments based on permission level. There are several circumstances in the Contract which require the Contractor to use Unifier.

Environmental Commitments – The Revised Code of Washington ([RCW 47.01.300](#) and [47.85.030](#)) requires environmental considerations to be reviewed during the Preconstruction Conference held with the Contractor. The Memorandum of Agreement Concerning Implementation of Fish and Wildlife Hydraulic Code for Transportation Activities requires WSDOT to invite the Area Habitat Biologist for the Washington State Department of Fish and Wildlife to all environmental Preconstruction Meetings. More information about discussing environmental topics at the Preconstruction Conference is found in the Chapter 600 of the *Environmental Manual*. Verification of the Contractor's Certified Erosion and Sediment Control Lead (CESCL) is required when the project has obtained a NPDES Construction Stormwater General Permit. See the Department of Ecology CESCL Database to verify CESCL credentials.

Almost every project will have environmental commitments resulting from, but not limited to: 1) environmental processes like the National Environmental Policy Act or the Washington State Environmental Policy Act; 2) consultations with Federal agencies concerning endangered species; 3) obtaining Federal, State, and local permits; or 4) existing inter-agency agreements. WSDOT uses the Commitment Tracking System (CTS) to store project specific environmental commitments and to organize them by ownership; Contractor, WSDOT, or both.

It is WSDOT policy to incorporate all Contract-relevant environmental commitments into the Contract. As a result, the Special Provisions and the Plans should contain all the Contract-relevant environmental commitments not covered by the *Standard Specifications*. The Project Engineer is encouraged to review the Special Provisions and Plans with the Contractor at the Preconstruction Conference. The Project Engineer should consider using relevant information from the Environmental Compliance Binder (see *Environmental Manual* Chapter 600) during the Preconstruction Conference and throughout the project.

The Contractor's responsibility to obtain any local agency permits should also be discussed. For example if a rock crusher is required for a project, the State Department of Ecology registration requirements should be discussed ([WAC 173-400](#)). In addition, a written record of this discussion should be sent to the Regional Office of the State Department of Ecology so that they are aware of the timing and location of the rock crushing operation.

Order of Work and Time Schedules - The Project Engineer needs to know the Contractor's schedule of Work in order to set up the crews, arrange for any special inspections, or provide timely reviews of submittals. The Contract requirements for progress schedule or time for completion in accordance with [Standard Specifications](#) Section 1-08.5, or as amended by the Special Provisions, can also be discussed.

When shown in the Plans, the first order of Work shall be the installation of high visibility fencing to delineate all areas for protection or restoration. The Project Engineer should review the Plans at the Preconstruction Conference to ensure these resources are not disturbed during clearing and grading activities. See the Temporary Erosion and Sediment Control Plan template located on the Stormwater & Water Quality page for the Project Engineer to ensure the clearing limits are properly marked in the field to protect sensitive areas.

Subcontractors and Lower-Tier Subcontractors – In accordance with [Standard Specifications](#) Section 1-08.1, the Project Engineer needs to know the Contractor's plan to delegate portions of the work to subcontractors. These plans must conform to the Condition of Award (COA), if any, related to Disadvantaged Business Enterprise (DBE)

participation. The Project Engineer should explain the requirements and process involved for subcontractor and lower-tier subcontractor approval, including the prevailing wage rate requirements outlined in the Contract documents (see [Section SS 1-07.9\(1\)](#)), the requirement to verify that each subcontractor meets the responsibility criteria outline in 39.04 RCW, possesses any license required by [19.28 RCW](#) or [70.87 RCW](#), and the requirement that all subcontracts (of all tiers) on Federal aid Contracts must include FHWA-1273 and Amendments to FHWA-1273. WSDOT/Contractor/subcontractor relationships should also be discussed, with a reminder to the Contractor that there is no contractual relationship between WSDOT and the subcontractors. All subcontractor correspondence with WSDOT should pass through the Contractor for submittal to WSDOT or vice versa. Contractor representation should also be discussed. It will be necessary for the Contractor to be represented at the job site at all times, even when there is only subcontractor Work in progress.

Utilities - Projects that include utility adjustments, relocation, replacement or construction by a utility company, or their contractor, during the performance of the Contract, the Project Engineer will facilitate a mandatory utility Preconstruction Meeting with the Contractor, all affected utility owners and their contractors prior to any on-site Work. The Project Engineer should request assistance from the Region Utilities Engineer for help in getting utility companies to attend this meeting. This meeting should include a discussion of all utility work schedules to enable the utility companies and the Contractor to coordinate their work, resolve schedule conflicts, and eliminate delays. Reference the underground locator services and the requirements to utilize them (see [RCW 19.122](#)). If WSDOT has agreed to notification time limits, these should be communicated to the Contractor.

Tribes - On a project that includes Work on or near a reservation, the Project Engineer should notify the appropriate Tribe of the Preconstruction Conference and invite them to attend.

Public Transportation Agencies - If public transportation agencies will be impacted, the Project Engineer will consistently supply information to WSDOT's Construction Traffic Management team throughout the life of the project. Keep in mind that public transportation is not just fixed routes, but includes services for people with special needs, vanpools, park and ride lots, and other ride-sharing services. Traffic hot spots and other traffic information is accessible at: www.wsdot.wa.gov/construction/planning

Other Third Parties - If the project affects or is affected by third party organizations, the Project Engineer must advise the Contractor about the relationships with the third parties and the expectations they hold regarding the actions of both WSDOT and the Contractor. The Project Engineer may wish to arrange meetings with representatives of affected third parties. If special insurance is required by any agreements with third parties, then these requirements should be pointed out to the Contractor.

Turnback Agreements - If the project includes a turnback agreement with a Local Agency, the Project Engineer will arrange a Preconstruction Meeting with the Local Agency to discuss the turnback agreement, scope of Work involved, Local Agency specific materials or requirements, and requirements for the Local Agency to jointly inspect any of the Work. Emphasis should be placed on establishing a process to discuss and obtain concurrence with any changes to Work within the turnback area with the Local Agency prior to Work being performed (see *Design Manual* Chapter 300 for additional guidance on turnback agreement communication protocols). Recurring meetings with the Local

Agency should be established to discuss progress schedules, traffic impacts, and potential changes to Work in the turnback area.

Safety and Traffic Control – The Contractor’s safety program should be discussed as outlined in Section SS 1-07.1. WSDOT has an interest in safe operations on the job and the Project Engineer should make clear that this interest will be protected. As part of a discussion of specific safety requirements of the particular Work, safety considerations for workers and WSDOT personnel, such as safety zone requirements, vehicle intrusion protection, fall prevention, closed spaces, hazardous materials, work around heavy equipment, etc., should be addressed. The need for control of speed on all construction equipment should be emphasized.

The Project Engineer should describe WSDOT’s traffic requirements. The Contractor’s Traffic Control Manager (TCM), Traffic Control Supervisor (TCS) and WSDOT’s traffic control contact person should be identified and their responsibilities and authorities clearly stated. Any traffic control requirements that are unique or restrictive should be emphasized and addressed by the Contractor with respect to construction operations. Unacceptable delays to traffic should also be discussed.

The *Manual on Uniform Traffic Control Devices* (MUTCD), as adopted by WSDOT, is the legal standard for all signing, traffic control devices and traffic control plan requirements on the project. These standards have been incorporated into the project Traffic Control Plans (TCPs.) If the Contractor chooses to use these TCPs, they must be formally adopted in writing as required in [Standard Specifications](#) Section 1-10.2(2). If the Contractor wishes to use some other traffic control scheme, then that plan must be submitted and approved in advance.

Flaggers and their intended locations must be included in the Plans. When Flaggers are utilized, they must have a current flagging card and shall be equipped with hard hats, vests, and standard stop/slow paddles as required in [Standard Specifications](#) Section 1-07.8 and 1-10.3. Overuse of flaggers is not appropriate as “catch all” traffic control and should be discouraged. Safety of flaggers, through use of physical protection devices where practical, proper flagging methods, and formulating an emergency escape plan, should be emphasized.

The Contractor and the Project Engineer should establish communication with the Washington State Patrol (WSP) and local law enforcement agencies. Law enforcement advice about traffic control should be considered. Arrangements for all law enforcement agencies to notify the Project Office about accidents near, or in the construction area should be established, if possible. When WSP traffic control assistance is to be used, include a general discussion of strategy and responsibilities.

Off-site hauling can pose a safety hazard to the public. WSDOT will cooperate with law enforcement agencies in the enforcement of legal load limit requirements and the covered load regulations. The Project Engineer should discuss this with the Contractor before any hauling begins.

The Contractor should be reminded of [Standard Specifications](#) Section 1-07.1, requiring the Contractor to comply with all Federal, State, tribal or local laws, ordinances, and regulation that affect Work under the Contract.

Particular mention should be made of observance of Industrial Fire Precaution Levels (IFPL) when performing Work on or adjacent to forest land under the purview of the Department of Natural Resources (DNR). The Contractor is required to comply with all

fire regulations including, but not limited to, fire shutdowns, fire fighting tools required, notifications, etc. Information regarding IFPLs may be found on the DNR webpage listed: <https://www.dnr.wa.gov/ifpl>

Control of Materials – The Contractor should be reminded of *Standard Specifications* Section 1-06.1, requiring the Project Engineer’s approval of all materials prior to their use. In order to expedite these approvals, encourage the Contractor to make these requests as early as possible. The Project Engineer should provide the Contractor with a current copy of the Record of Materials (ROM) for the project.

The Project Engineer should discuss the ROM with the Contractor, covering the various requirements for sampling, catalog cuts, shop drawings, certification requirements, etc., which may be needed for approval of materials prior to their use. If the project includes federal funds, the Project Engineer should discuss Build America/Buy America (BABA) requirements and the need to submit DOT Form 350-109, and Certification of Materials Origin (Steel and Iron) and DOT Form 350-110 - Certification of Materials Origin - Required for Acceptance of Construction Materials. The requirements of *Standard Specifications* Section 1-06.2 for ongoing acceptance of approved materials prior to incorporation, should also be discussed.

The Project Engineer should discuss how the Contractor will access the Statistical Acceptance of Material (SAM) program. If fabricated items will be needed, the inspection process for fabricated materials, including shop drawing approvals and notification requirements for Fabrication Inspectors, should also be outlined. The requirements of *Standard Specifications* Section 1-06.3 that require manufacturer certifications prior to use of the materials should also be reviewed.

The Contractor should be reminded that, in order to avoid deferred progress payments for portions of work not completed, all necessary documentation for approval of materials and required certifications must be received and accepted prior to their use. A method of notification of intent to defer payment should be discussed with the Contractor, and an agreed upon method documented in the project files.

Other Submittals – Discuss any other submittals that may be needed during the course of the Contract. This may include Falsework and Forming Plans, Traffic Control Plans, Temporary Erosion and Sediment Control Plans, Spill Prevention Control and Countermeasures Plans, Schedules, Installation or Operating Procedures, Temporary Stream Diversion Plans, Painting Plans, or other Contractor initiated items requiring WSDOT review and/or approval. There are requirements for a number of submittals which, if not satisfied in a timely manner, could delay the initial progress payment. These include the Statement of Intent to Pay Prevailing Wages, the Progress Schedule, and the Training Plan. There may be others depending on the Work to be done and as required by the Contract Provisions. The Project Engineer should identify and remind the Contractor of these requirements and the potential for deferred payments.

DBE Participation/Requirements for Nondiscrimination/Training – The Project Engineer should briefly discuss and answer any questions the Contractor may have with regard to the efforts, reports, and monitoring necessary to ensure successful performance for DBE Participation, and Training. Section *SS 1-07.11(2)* provides a breakdown of these various programs and the general requirements each contains. The specific requirements and Contractor performance information are included in the *Standard Specifications* and Special Provisions titled Requirements for Nondiscrimination. If additional assistance or information is necessary, the Project Engineer could also request assistance from the

Region Equal Employment Opportunity Officer, the State Office of Equity and Civil Rights (OECR), or the State Construction Office.

Wage Rate Administration – Advise the Contractor of the requirement to pay prevailing wage rates as identified in the Contract. Advise the Contractor that it is their responsibility to work directly with Washington State Department of Labor and Industries (LNI) for approval of the Statement of Intent to Pay Prevailing Wages (SOI) and Affidavit of Wages Paid (AWP) and that:

- The SOI and AWP will be on forms provided by LNI.
- The forms will be filed electronically using LNI's online system – Prevailing Wage, Intents and Affidavits (PWIA).
- The Contractors, subcontractors, lower-tier subcontractors, suppliers, manufacturers, and fabricators that are required to submit SOIs and AWP's will pay the approval fee directly to LNI.
- The Contractor will submit a copy of the approved forms (SOI, before any payment can be made for Work performed and all AWP's before the Contract can be accepted) to the Project Engineer through PWIA.
- Establish certified payroll submittal deadlines in accordance with *Standard Specifications* Section 1-07.9(5) and describe the wage rate interview process required for Federally funded projects.
- Describe the required and/or recommended job site posters and provide them to the Contractor (see Section *SS 1-07.9(2)*).
- On all Federal-aid Contracts, the Project Engineer must remind the Contractor that the Work falls under Davis-Bacon and Related Acts and the Contract Work Hours and Safety Standards Acts. As indicated in Section *SS 1-07.9(1)*, the U.S. Department of Labor may conduct investigations to ensure compliance with these Acts.

Forms – The Project Engineer should provide the Contractor a description of all required forms, providing guidance on where the Contractor can find each - www.wsdot.wa.gov/forms/pdfForms.html. Remind the Contractor that all form submittals, including those of subcontractors, lower-tier subcontractors, and suppliers, should be routed through the Contractor for submittal to WSDOT.

Request for Information – The Project Engineer should discuss the Request for Information (RFI) process as provided for in *Standard Specification* 1-05.1(2) and 1-05.7(1) to discuss the Contractor's responsibility in this process. The RFI process is a tool for documentation and communication between the Contractor and the Project Engineer but should not take the place of building a working relationship with the Contractor.

The Contractor is required to submit an RFI if they believe there is information missing or a clarification of the Contract is needed. At a minimum, the Project Engineer will communicate with the Contractor on a weekly basis the status of RFIs.

Summary – While these issues are to be discussed with the Contractor in some manner at the beginning of each Contract, the Project Engineer is free to select the most effective method of doing so. A formal Preconstruction Conference may or may not be the best solution. Perhaps a single meeting is adequate or several meetings may be required. The entire preconstruction communication may also be covered in a short meeting between the Project Engineer and the Contractor. The Project Engineer is responsible to address these subjects, inform the Contractor in some manner, and maintain a written summary of the Preconstruction Meetings or discussions for the contract files.

The Contractor and Project Engineer may be knowledgeable about those normal requirements listed above. In this situation, some items need only be listed in a mailing as a convenience to the Contractor's staff. Unique features, constructability, and third party coordination should be focused on with as many of the interested parties as can be assembled.

The key is effective communication, getting the right message to the necessary people. Additional meetings may be required as people change, as new facets of the Work become imminent, or as the project goes into a second or third season.

GEN 1-00.17 Engagement of Surety

During the performance of the Work, if there are ongoing concerns about the Contractor's behavior regarding timely completion, payment to subcontractors or suppliers, possible significant delay to milestone dates or other significant performance concerns, there may be a need to inform the surety. The surety is obligated to ensure complete and proper performance of the Work by the Contractor (the Contract Performance and Payment Bonds), so they may need to be informed if WSDOT is concerned that may not happen. Consult with the Region Construction Engineer and ASCE to discuss if contacting the surety is appropriate.

For guidance regarding surety involvement in the change order process, see Section 1-04.4 subsection 5.11.

1-02 Bid Procedures and Conditions

SS 1-02.2 Plans and Specifications

When the design phase of a project is completed and funding has been secured, the public is then notified that WSDOT is ready to accept bids for completion of the Work involved. This notice is accomplished by publishing an advertisement for the project, along with an invitation to bid the Work, in the "Seattle Daily Journal of Commerce." The advertisement includes a specific date and time for the opening of bids along with the necessary information for obtaining Plans, Specifications, and bid documents. Once advertised, these Plans and Specifications are then made available to all Contractors. Contract proposal forms or bid documents are also furnished, but only to those prospective Contractors who have been prequalified to bid on the types and quantities of Work involved. Once bids have been opened, an announcement in the "Seattle Daily Journal of Commerce" will also be made identifying the "Apparent Low Bidder." Specific information regarding the advertisement phase and bidding procedures can be found in the [Advertisement and Award Manual](#) M 27-02.

SS 1-02.4 Examination of Plans, Specifications, and Site of Work

GEN 1-0.4(1) Posting the Project Limits

If the Project Engineer determines that prospective bidders may have difficulty locating the project or determining the project limits, the Project Engineer may choose to post the project limits in the field.

GEN 1-0.4(2) Pre-Bid Questions and Answers

For Design-Build, refer to Chapter 5 of the *Design-Build Manual* and the WSDOT *Advertisement and Award Manual*. For Bid-Build, refer to the WSDOT [Advertisement and Award Manual](#) M 27-02 for further discussion of this topic, and the following.

While the Contract is being advertised, *Standard Specification* Section 1-02.4 requires prospective bidders to request explanation or interpretation of the Contract documents in writing. These written questions are submitted to the Project Engineer listed in the “Notice to All Planholders” in the Contract Provisions.

WSDOT’s response will be provided to all prospective bidders in writing. The Project Engineer will coordinate the effort to answer the question. The goal is to provide answers that are helpful yet uphold the integrity of the bidding process and the Contract. The answer must be one of the following unless approval to do otherwise is obtained from the ARA for Construction. The Project Engineer must send the response to: ContractAd&Award@wsdot.wa.gov for posting to the web page.

- a. “Your question shall be addressed by addendum.”

This is the only acceptable response when the answer involves interpreting, clarifying, or changing the Contract. Do not answer these questions directly in the Q&A response because these answers are not part of the Contract. This response must always be followed by issuing an addendum that interprets, clarifies, or changes the Contract as soon as possible.

- b. “Refer to the Contract Documents - page/sheet xxx.”

This is the response when the answer is already provided in the Contract documents. Identify all locations the answer is provided, especially when the answer is presented differently in some locations. It is acceptable to condition the response by adding “and other locations in the Contract documents” when the Contract provides a consistent answer with too many locations to cite individually. When the answer requires the contractor to consider multiple aspects of the Contract, consider using answer (c) or an addendum.

- c. “Bid in accordance with the Contract - refer to the Contract documents page/sheet xxx.”

This is the least desirable response because it provides little information. The Project Engineer must use this response only as a last resort. It may be appropriate to use this response when:

- The pre-bid question asks if the Contractor can use a material or Work method different from what is required by the Contract. We might or might not want to entertain such an idea, but during pre-bid the appropriate response is “Bid in accordance with the Contract”. The likelihood of change orders is not an appropriate subject prior to execution of the Contract.
- The answer requires an addendum but (1) it is too late in the procurement process to develop the addendum without delaying the bid opening and (2) we don’t want to delay the bid opening. This is an undesirable situation and will likely require a change order to address the question after execution of the Contract.
- The question is so broad and/or the Specifications are nuanced and/or interwoven and/or scattered throughout the Contract in a way there is risk in telling the contractor to limit where to look.

The Project Engineer must ensure that staff resist the urge to provide answers orally. Answers to pre-bid questions should not be provided orally because doing so has had the following undesirable results:

- Oral answers do not provide all prospective bidders the same opportunity to access what was said.
- Oral answers can generate disputes on what was said.
- Despite *Standard Specifications* Section 1-02.4 stating that oral explanations will not be binding on the Contracting Agency, Contractors have made claims that oral answers were relied upon.

This policy is not intended to limit dialogue. When a pre-bid question cannot be answered by one of the standard answers provided in the *Advertisement and Award Manual*, it is likely that an addendum is needed or Region Construction should be consulted.

To avoid Contract claims, the Region and Project Engineer must not negotiate Contract items with the Contractor until the Contract has been executed by WSDOT (see Section SS 1-03.3). Prior to execution, the Region and Project Engineer must keep communication with the Contractor to non-contractual items such as congratulations, general introductions, or directing them to the CAPS Unit for execution questions.

GEN 1-0.4(3) Pre-bid Questions Regarding Transfer of Coverage (TOC)

When questions arise regarding the Transfer of Coverage (TOC) for the Construction Stormwater General Permit, the Project Engineer should go to the Stormwater & Water Quality link at <https://wsdot.wa.gov/engineering-standards/environmental-guidance/stormwater-water-quality> for guidance.

1-03 Award and Execution of Contract

SS 1-03.2 Award of Contract

Bids for Contracts are opened at a public meeting where each prospective bidder's proposal is read and the Apparent Low Bidder is announced:

- Within 45 calendar days of bid opening, the proposals will be closely reviewed and the Contract will be awarded to the lowest bidder deemed responsible and responsive.
- The successful bidder must return the required documentation in *Standard Specification* 1-03 within 20 calendar days. Only after all required documentation has been submitted can the Contract be executed by WSDOT.
- The Contract Administration and Payment System (CAPS) Unit of Accountability and Financial Services (AFS) sends the awarded Contract to the Contractor for execution within three days of award using digital signature software.

Once bids for the Contract have been opened, all communication with bidders must be directed through the Contract Ad and Award Office and/or CAPS. This moratorium on communication with bidders, including the Apparent Low Bidder, remains in effect until execution of the Contract.

SS 1-03.3 Execution of Contract

After the documents required in *Standard Specification 1-03* are returned to WSDOT, the Contract is ready to be executed by WSDOT. Proposals submitted by Contractors are not binding to WSDOT prior to execution of the Contract. No bid item Work can be performed within the project limits or WSDOT furnished sites prior to the execution of the Contract by WSDOT. Any Work that is performed by the Contractor outside of these areas, or any material that is ordered prior to WSDOT execution, is done so at the sole risk of the Contractor.

Once the Contract is executed by WSDOT, a copy is sent to the Contractor and the Project Engineer automatically through the digital signature software. Copies of the full Contract are available on the WSDOT ftp site.

1-04 Scope of the Work

SS 1-04.3 Reference Information

“Reference Information” is defined in the *Standard Specifications* as “Information provided to the Contractor by the Contracting Agency that is not part of the Contract”. Reference Information often includes design files, CAD files, engineering calculations, survey information, geotechnical reports, bridge condition reports, etc. Because the Reference Information is not part of the Contract, any construction requirements described will need to be captured in the Contract documents (for example, the Plans or Special Provisions).

Reference Information for most WSDOT projects should be linked through the Contract Ad and Award web site – “View Project Information” - under the Reference Information Section of the specific project page.

SS 1-04.4 Changes

Refer to *Construction Manual Appendix 1-A* for guidance on change orders and minor changes.

SS 1-04.5 Procedure, Protest and Dispute by the Contractor

During the course of a Contract, differences of opinion may arise over decisions and Contract interpretations. WSDOT pursues resolution of these differences at the earliest possible time, fully recognizing the contractual rights of the Contractor and WSDOT during the resolution process. These differences of opinion can become contentious and distracting for both WSDOT and Contractor staff. The Project Engineer will maintain professionalism and collaboration between the parties while seeking timely resolution of these disagreements. In all circumstances, the Contractor must continue to proceed with the Work under the Contract.

Disagreements, disputes, and protests are the responsibility of the Project Engineer and Region until a Certified Claim is filed in accordance with *Standard Specifications* Section 1-09.11. The Project Engineer may employ a variety of techniques and procedures to pursue resolution of these issues. With the high potential for cost impact and delay, it is strongly recommended that all disagreements be identified, tracked, and communicated with the Region Construction Manager as they become apparent.

Refer to the [Change, Protest, Dispute, and Claim Process chart](#) for an overview of the various processes regarding changes to the Contract.

Protested Work

When the Contractor disagrees with the requirements of a change order or a Project Engineer's Written Determination or decision, a written notice of protest must be submitted according to procedures of *Standard Specification* Section 1-04.5.

While the Project Engineer may acknowledge a Contractor's verbal protest, the Contractor should be advised that it must follow the procedures of Section 1-04.5 to pursue an adjustment of the payment or Contract time, and to avoid waiving its right to pursue a claim for protested Work. While these provisions require the Contractor to keep accurate records for completing the protested Work, it is not advisable for the Project Engineer to rely on these records to determine what may have taken place when trying to verify costs for protested Work many months later. In order to help document the Contractor's Work, the form Report of Protested Work DOT Form 422-007 was developed as a tool for the Project Engineer's use.

The Project Engineer has the authority to allow the Contractor one opportunity to correct or amend their supplemental information if they believe the Contractor has not supplied sufficient information to evaluate the protest. Corrections or amendments of the supplemental information must be furnished within 14 days of the Project Engineer's notice.

Only protests and supplemental information that follow the procedures set forth in *Standard Specifications* Section 1-04.5 will be evaluated by the Project Engineer, with a Written Determination of merit provided to the Contractor within 21 days. If the Project Engineer determines that the protest has merit, then an adjustment of the payment or contract time will be made in accordance with *Standard Specifications* Section 1-09.4.

If the Project Engineer determines that the protest does not have merit the Contractor may continue to pursue the protest by following the dispute procedures outlined in *Standard Specifications* Section 1-04.5(1). Regardless of the Contractor's decision to continue the dispute, the Project Engineer must ensure the Contractor continues Work.

1-04.5(1) Disputes

The Contractor must exhaust the procedures for protest before pursuing the matter as a dispute. The Contractor is required to notify the Project Engineer within 14 days after receiving the Project Engineer's Written Determination of merit of their protest. The Project Engineer should remind the Contractor of its obligation to furnish this notice if it wishes to pursue the dispute. The Contractor must exhaust the procedures in this section, including the use of a Disputes Review Board when the Contract provides for a Board, before they may submit a Certified Claim under *Standard Specifications* Section 1-09.11.

Disputes Review Boards

On Contracts with the bid item Disputes Review Board, unless modified by Special Provision, unresolved protests may be referred to the Disputes Review Board (DRB) by either the Contractor or WSDOT; agreement by the other party is not required to do so on such Contracts. However, on Contracts that do not include a bid item for the DRB, the DRB bid item can be added by change order; doing so can only be done by mutual agreement of the parties. Remember, that a change order which adds a DRB simply by creating a bid item for the DRB means that either party can refer a dispute to the DRB without agreement by the other party. If that is not the desired outcome, be sure the change order includes language that limits use of the DRB to only those issues which WSDOT and the Contractor mutually agree.

Not all matters are eligible to be heard by the DRB. Typically, they are best suited to provide recommendations on matters of Contract interpretation or entitlement to additional compensation and time. Interpretations of the law, quantum, and matters concerning the fairness of Contract terms are usually not appropriate for consideration by the DRB. In all cases, the Project Engineer must contact the State Construction Office for concurrence before presenting any matter to a DRB.

The Project Engineer and Contractor are responsible for selecting the board members. Given the significance of this decision, the Project Engineer will consult with Region and the State Construction Office before selecting board members. The Project Engineer may select board members from the Statewide Prequalified Candidate Roster, but it is not required.

Once established, regular meetings should be held to discuss the status of the project with the board. These regular project briefings to the DRB provide valuable project progress and issue status information to keep the board members current and best prepared to respond if an issue is presented to them. These meetings also provide a platform for the board members (who are typically experienced senior construction professionals) to ask insightful questions of the Project Engineer and Contractor that help lead to issue resolution and claim avoidance. The DRB's primary purpose in regular board meetings is claim avoidance. By monitoring key project indicators and facilitating communications between project participants, the DRB can be quite effective in helping the project avoid claims.

The board may also assist with claim resolution by issuing written recommendations regarding a specific dispute that is referred to them. When the DRB issues a recommendation concerning a dispute, the Contractor and Project Engineer must respond and either accept the DRB's recommendation, request a clarification or reconsideration from the DRB, or notify the other party that the dispute is unresolved. Although the DRB recommendations are not binding on either party, they should be weighed carefully and will be admissible in subsequent proceedings such as arbitration or litigation. The Project Engineer will consult with their ASCE if they are not in agreement with the DRB's recommendations prior to responding in writing to the DRB and the Contractor.

SS 1-04.6 Variation in Estimated Quantities

Contracts are set up with estimated quantities. Contractors provide unit bid prices. Actual measured quantities are paid using those unit bid prices. [Standard Specifications](#) Section 1-04.6 require that variations of less than 25 percent of the original plan quantity be performed without changes in the bid price, but that variations greater than 25 percent may qualify for a payment adjustment of the bid price. This allocation of risk is a policy of WSDOT and is also a Federal requirement for any project with Federal funds.

Section 1-04.6 is intended to address variations in quantity that occur when field conditions require a different quantity for the actual Work than was envisioned by WSDOT when developing the Plans. Other variations may occur when Work is added or deleted by change order and original Contract unit items are included as the method of pricing the change order.

Quantity variations also occur when Work is added, deleted, or revised without a formal change order (constructive change) and units with unit prices are the only measure of the revision. The Work represented by a constructive change is Work not anticipated at the time the Contract was bid and executed, and as such would be outside of the

requirements of *Standard Specifications* Section 1-04.6. The Project Engineer cannot deny a payment adjustment based for the added Work portion based solely on the fact that the accepted quantity of a bid item is within 25 percent of the original proposal quantity. Added Work, even though it might make use of existing bid items and be within the 25 percent quantity threshold, can be eligible for an equitable adjustment of the bid price because it was not contemplated in the original Contract scope.

As discussed below, quantities included in formal change orders are excluded from consideration of quantity variations. The Project Engineer who allows constructive changes without formal documentation may find an additional negotiation waiting when final adjusted quantities are calculated and compared with the original proposal quantity.

A unit bid price consists of four different parts. First, and most obvious, are the costs of labor, equipment, materials and services needed to accomplish the Work. These are the “direct costs” involved and they vary directly with the amount of Work. Second are the variable overhead costs, such as field supervision and field support items (phones, computer rental, payroll clerks, portable restroom, etc.) whose amounts will vary along with the direct costs. Third, and more difficult to assess, are unavoidable, distributed, fixed overhead costs. These are typically long term and exist whether the quantity varies or not. They include things like home office costs, field trailer setup, long term equipment rentals and other fixed costs. These are typically distributed to the project by allocating them to the plan quantity. Fourth, and finally, the unit price will include some amount for profit.

- A. *Standard Specifications* Section 1-04.6 requires calculation of an adjusted final quantity. This is the method of revising the final measured quantity to allow for proposal item quantities included in agreed change orders. Unit prices as originally bid will be utilized if the adjusted final quantity is more than 75 percent of the original proposal quantity and not more than 25 percent greater than the original proposal quantity.

If the final adjusted quantity is outside these limits, then either party to the Contract may initiate a renegotiation. If neither party does so, the bid prices will apply to the entire measured quantity of the item. Neither of these actions would be a change to the Contract, as the *Standard Specifications* already allow a price change. A formal change order would document the agreement and is the appropriate mechanism to create new prices.

If a negotiation is initiated, the *Standard Specifications* require a new price for the quantity in excess of the 25 percent overrun or a contract price adjustment to compensate for costs and losses associated with an excessive underrun. The renegotiated price for the overrun portion is not an equitable adjustment and this is an important distinction. The new price is based upon actual costs experienced and is completely unrelated to the old bid price. The typical discussion about “what’s different from the bid work and what number should be used to modify the bid price?” does not apply in this type of negotiation. The underrun compensation is an equitable adjustment, however, and much of the negotiation is related to the bid price and discussions of the actual work costs as opposed to the planned costs.

The *Standard Specifications* exclude some situations from being eligible to renegotiate variations in estimated quantities. Some examples are:

- When an amount has been entered into the proposal form solely to provide a common proposal for all bidders, which is sometimes the case when payment is by force account.
- Consequential damages and lost profits are specifically excluded.
- The effect of any unbalanced allocation of overhead costs is also excluded from compensation.

Force account and calculated quantities are already taking actual costs into account for overruns. Because of the nature of these items, Contractors are unable to allocate unavoidable fixed costs to them except as a share of the allowed markup. The Contractor is aware of this provision at the time of bid and knows that this item will not be eligible for renegotiation in the case of an underrun.

Consequential damages are those which are separated from the project and which might be presented as part of a negotiation. “Because of your overrun, I was unable to start work on my other project and had to do that other work in the wintertime.” Compensation for consequential damages is specifically prohibited by the Contract. Similarly, the loss of anticipated profit that the Contractor might have made on some other work but for the need to perform the extra work in an overrun is also not compensable.

Unbalanced bid prices are evidenced by a few bid prices that appear artificially higher or lower than normal, meaning too much or too little overhead or other costs were allocated to these bid items. A problem arises if an unbalanced bid item is involved in an excessive underrun. This provision allows the Project Engineer to evaluate this possibility during an underrun negotiation (remember that the overrun pricing takes care of the problem automatically by assessing cost and ignoring the bid price.)

Contract time may be affected by the first unit of overrun or underrun. It may be appropriate to add or delete working days; depending on how the quantity variation affects critical activities, as shown on the Contractor’s approved progress schedule.

B. Negotiation Guidelines

1. **Calculate the Adjusted Final Quantity** - Start with the final measured quantity, the number of units paid that is included in the final estimate for the bid item. Review all change orders that have been approved and have been accepted by the Contractor (see *Standard Specifications* Section 1-04.4 for a definition of Contractor acceptance of change orders.) Identify change order increases in the item and subtract these from the final measured quantity. Identify change order decreases for the bid item and add these to the result of the previous subtraction. The result of these calculations is defined as the Adjusted Final Quantity.

Compare the Adjusted Final Quantity to the original proposal quantity. If the Adjusted Final Quantity is greater than 1.25 times the original proposal quantity, then the item is eligible for an overrun renegotiation. If the Adjusted Final Quantity is less than 0.75 times the original proposal quantity, then the item is eligible for negotiation of an equitable adjustment due to underrun.

2. **Renegotiation for Overruns** – The first analysis should be to determine, if possible, where and when the overrun took place. This is not necessarily the Work done after the quantity of 1.25 times proposal was reached. In many cases, a review of the Work will disclose which part of the project actually experienced the low estimate and the resulting extra quantity. This is more common in physical items that are visible and can be measured by weight or physical dimensions (Roadway Excavation, Culvert Pipe, Select Borrow, etc.) These are often detailed in the Plans to the extent that actual Work can be compared with the relevant portion of the proposal quantity. When actual overrun Work can be identified and records exist showing the resources utilized for that Work, then those records can form the basis for the revised payment amount. In other cases, the item is a support function, often measured by time, where the plan segments cannot be separated for analysis. This is common when the Contract contains unit bid prices (other than Lump Sum) for Work related to traffic control or erosion control and water pollution control. To analyze these, a best practice to look at the actual Work that occurred after the threshold was reached and price it. A third method with adequate documentation, is to evaluate the actual costs for the entire item, and apply those only to the overrun units.

Regardless of method of determining direct cost, markups will be allowed. A good place to start would be the force account percentages described in [Standard Specifications](#) Section 1-09.6. If the Contractor is providing other records for overhead and profit, these can be used, if they are reasonable. Any overhead items that are unavoidable or, distributed fixed costs should be excluded. Remember that the Contractor has already been compensated for these costs 1.25 times over the original bid item price.

The revised price will apply only to the units measured in excess of 1.25 times the original proposal quantity. The overrun units between the proposal quantity and the threshold will be paid, according to the terms of the contract, at the bid price.

3. **Equitable Adjustment for Underruns** – The adjustment for an underrun is limited by the Contract terms to:
 - An adjustment for increases or decreases in direct costs that result solely from the reduction in quantity. The most common example of this type of cost is the learning curve. “By the time the crew learned how to do this work at this site with these specifications, the work was complete. They should have been able to apply these skills to an additional 30, 40, or 50 percent of the plan quantity. I experienced the least efficient units and missed out on the most efficient.” During negotiation, this might be demonstrated by production rates, Inspectors’ reports the agreed judgment of the negotiators. If such a condition did exist, then an agreed amount for inefficiency during the learning curve could be included in the adjustment.
 - The nature of the work actually performed, when compared with the work shown in the Plans. “The easiest units were deleted leaving the most difficult,” or “Added units that were much more difficult than those shown in the Plan.” Compensable, if true. Logic dictates that, if all of the work shown in the Plans was performed and, if no work was added except by formal change order, then this factor can have no value. The work that was performed was what was shown in the Plans and was what the Contractor bid. If, on the other hand, the Project Engineer has allowed constructive changes without formal documentation, then this factor could well come into play.

- Reallocation of undistributed unavoidable fixed overhead costs. The Contractor has allocated these to 100 percent of the proposal amount. The bid price is firm as long as 75 percent of the units are measured and paid. If the final adjusted quantity is less than 75 percent, then the anticipated contribution of the units not performed (up to 75 percent) can be identified, negotiated and included in the equitable adjustment.

One Final Aspect of Underruns – There is a reality that, if more units were paid up to the 75 percent threshold, then there would be no eligibility for negotiation. Because of this, there is a limit to the equitable adjustment. The total paid for the bid item, including units actually performed and the equitable adjustment, cannot exceed 75 percent of the original proposal quantity multiplied by the unit bid price.

SS 1-04.7 Differing Site Conditions (Changed Conditions)

Standard Specifications 1-04.7 describes the circumstances under which a differing site condition could generate the need for a change order.

There are two types of changed conditions. The first (Type I) is a hidden condition that is different from that indicated by the Contract (the borings do not show this rock). The second (Type II) is a hidden condition that is not shown differently in the Contract but is unusual and different from what a reasonably prudent Contractor would expect (i.e., “I’ve never seen this before and nobody else has ever seen it, either”). In either case, to qualify for renegotiation, the condition must have a “material” effect on the Work, there must be a definable difference in the way the Work will now be performed and that difference must be significant.

For the Project Engineer and Region to evaluate a differing site condition, the following questions must be answered. The State Construction Office will not be able to provide approval without the following:

1. What does the Contract require regarding differing site conditions? In other words, are there any GSP or Special Provisions that modify the *Standard Specifications*?
2. Sequence of events, including the dates of Contractor’s notice.
3. A detailed description of what the Contract characterizes the existing conditions to be.
4. A detailed description of the existing conditions in the field. If these are anything other than simple and straightforward, the State Construction Office will expect the Project Engineer to provide the perspective of the appropriate State Geotechnical Engineer.
5. What dollar amount does the Contract assign differing site condition risk to the Contractor, if any?
6. What are the differences between item 3 and 4, and how do these establish entitlement?
7. What is the net effect on cost and time asserted by the Contractor, and estimates of these by the Region?
8. The Project Engineer’s recommendation, along with Region concurrence of that recommendation.

The contractual rules included in *Standard Specifications* Section 1-04.7 are related to notice and giving the State an opportunity to examine the condition and, perhaps, order a different approach to the Work. If the Contractor takes away this opportunity, then there may be grounds for denying compensation for the different approach to the Work. In some cases, the changed situation is not recognized until much or all of the Work has been done. In that case, the determining factor for notice is the time when the Contractor knew or should have known of the condition. Whenever notice is served, it must be written.

Contractors work on tight schedules with one activity interdependent on others and it is not in the public interest to stop work while a changed condition discussion takes place. As soon as possible, to the extent possible, and in any manner which accomplishes the intent, the Project Engineer is expected to consult with the Region Construction Manager and the State Construction Office to obtain the approval before agreeing that a changed condition exists or before entering negotiations for price adjustments.

WSDOT's response to a Contractor's assertion of changed conditions, whether agreement or denial, must be written. The Project Engineer must keep accurate time and material records whether the response was negative or positive.

1-05 Control of Work

SS 1-05.1 Authority of the Engineer

The Project Engineer is designated as the Contracting Agency's representative who directly supervises the engineering and administration of the Contract. This provides considerable authority to enforce the provisions of the Contract under *Standard Specifications* Section 1-05.1. This authority is tempered by WSDOT's policies and delegation of authority from the State Construction Engineer to the Project Engineer. Accordingly, considerable care and professional judgment must be exercised by the Project Engineer to avoid exceeding the authority as delegated and to avoid decisions or actions that may be contrary to WSDOT policy. Questions regarding the limits of authority will be discussed with the Assistant Region Administrator for Construction.

In many cases the courts have held that where the Project Engineer has exceeded their delegated authority their actions are binding upon Contracting Agency. Because of this, it is important that the Project Engineer make no instructions, verbally or by written memoranda, that are outside of their authority.

Written Determination

The term Written Determination is defined in *Standard Specification*. It is important for the Project Engineer to understand that the Written Determination initiates most of the contractual timelines related to protests, disputes, delays, and Contract changes. It signals to the Contractor that they have limited time to protect their contractual rights by either accepting the Project Engineer's position, or by initiating a dispute or demand for additional compensation. A Written Determination must be transmitted to the Contractor by a letter or electronic mail, and it must be clearly identified as a "Written Determination".

SS 1-05.1(1) Oral Orders

The Project Engineer may occasionally need to issue oral directions, instructions, interpretations and determinations in order to protect the traveling public or to avoid unnecessary delay to critical Work. While these circumstances are unavoidable, the Project Engineer should avoid giving oral orders, opting for other verifiable communication methods using a mobile electronic device or other means. If an oral order is given, the Project Engineer must send the Contractor a Written Determination within 3 days, documenting the order and specifying whether it constitutes a change to the Contract. Oral orders can be misunderstood or misinterpreted, making it crucial that the Project Engineer provide the order in writing so the Contractor may understand its rights and obligations under the Contract.

During the course of the project the Contractor may believe it has been given an oral order that changes the Work. *Standard Specification* Section 1-05.1(1) requires the Contractor to notify the Project Engineer within 3 days of receiving an oral order. Upon receiving this notification from a Contractor, the Project Engineer will provide a Written Determination within 14 days. Having notified the Project Engineer of an oral order in accordance with this section, the Contractor has preserved its rights to pursue a protest and dispute until the Project Engineer issues a Written Determination. The purpose of this procedure is to avoid misunderstanding between the parties, and to identify disagreements as early as possible.

If the Contractor disagrees with any Written Determination, it must follow the procedure for protest in Section 1-04.5.

SS 1-05.1(2) Requests for Information

The Request for Information (RFI) is the procedure by which the Contractor may officially request an explanation or interpretation of the Contract. The Contractor is expected to notify the Project Engineer of ambiguities in the Contract as soon as they are discovered. Failure to do so may result in denial of any resulting claims. RFIs must not be used as a means of providing notice of protest or notice of a differing site condition. RFIs should also not be used to request time extensions. However, the Contractor may submit an RFI for any of the reasons listed in the *Standard Specifications*.

The Project Engineer has a responsibility for resolving ambiguities in a timely manner. Therefore, they must respond to an RFI within the timeframe provided in the Contract. If more than 14 calendar days are needed, because of the complexity of the RFI, they should notify the Contractor. Responses to RFIs are considered Written Determinations and any disagreement from the Contractor should follow the procedure for protest. Rejection or non-approval of an RFI that requests a change to the Contract is not subject to protest.

RFIs that require input from the State Bridge and Structures Office should be sent directly to the Bridge Technical Advisor (BTA) and not routed to Bridge Construction Support.

SS 1-05.3 Plans and Working Drawings

Working Drawings submitted by the Contractor must be reviewed and checked for conformance to Contract requirements by the Project Office. Submittals that are incomplete, not legible, or not in conformance with Contract requirements must be rejected and must not be distributed for review outside the Project Office. If the Contract submittal requirements require modification, the submittal cannot be submitted and reviewed until after a change order is processed revising the submittal requirements. A change order is required for any deviation from Contract requirements. Any conflicts with the Plans that have been detected or revisions that may be desired by the Project Engineer should be noted on the copy being forwarded to reviewers. Pending or completed change orders covering deviations from the Plans should also be noted, and copies of the change orders must be provided to the reviewers.

Figure 1-1 is a list of the most common Working Drawings and includes references to the *Standard Specifications* that require them and the section of this manual that covers the procedures for processing them. The WSDOT Review Groups column identifies the groups within WSDOT that need to review the various Working Drawings. All review by State groups (Bridge Technical Advisor (BTA), Bridge Construction Support, Bridge and Structures Architect, Geotechnical Engineer, State Materials Laboratory and Assistant State Construction Engineer) identified in Figure 1-1 is coordinated by the BTA or Bridge Construction Support. Submittals are coordinated by the Bridge Technical Advisor if they are listed as a review group in Figure 1-1, and all other submittals are coordinated by Bridge Construction Support. BTA and Bridge Construction Support assignments and can be found here: [BTA List](#).

The Project Engineer will use DOT Form 410-025 to transmit the Working Drawings with State review requirements to the Bridge and Structures Office. Contracts utilizing Unifier will send Working Drawings to the group titled 'HQ Bridge Coordinator'. For Contracts that do not use Unifier, such as design-build contracts, Working Drawings should be emailed to BridgeConstructionSupport@wsdot.wa.gov. Bridge Construction Support will then distribute Working Drawings to the appropriate State review groups or the BTA, as stated above. The BTA or Bridge Construction Support will then send a response back to the Project Engineer that incorporates comments from all State review groups.

The Project Engineer should maintain a log of all shop plans or other drawings received for each Contract. Shop plans for items that conform to the Plans or a standard plan, except those listed in Figure 1-1, will be reviewed by the Project Engineer.

Type 1 Working Drawings are generally informational in nature and are often used to provide the Project Engineer a description of Work to be completed and allow the Project Engineer an opportunity to prepare for the inspection of this Work. Type 1 Working Drawings do not require a response to the Contractor unless the Project Engineer determines the Work proposed by the Contractor does not comply with the Contract.

Type 2 and 2E Working Drawings are required for Work that is more complex or specialized than what would be required for a Type 1 Working Drawing. Type 2 Working Drawings are submitted to the Project Engineer for review and comment and will often be reviewed by support offices that specialize in the type of work. The Project Engineer is allowed up to 20 calendar days for review and the Contractor is not allowed to begin Work until the Project Engineer has provided review comments and all comments are resolved to the satisfaction of the Project Engineer. It is important that the Project Engineer complete the review and return comments, even if the plan is acceptable, to prevent a delay to the Contractor.

Type 3 and 3E Working Drawings require WSDOT's approval prior to the Contractor beginning Work. The Project Engineer is allowed 30 calendar days to complete their review and to reply to the Contractor. It is important that the Project Engineer complete the review and reply to the Contractor within the allowed 30 calendar days, failure to do so may entitle the Contractor to compensation for impacts due to the delay.

The Project Engineer should review the Contract to confirm the proper Working Drawing requirements are being followed.

Comments on Working Drawings should be related only to conformance of the Working Drawing to the contractual requirements. Possible responses to Working Drawings include:

- Approved (only use for Working Drawings that require WSDOT approval)
- No exceptions taken
- Make corrections noted
- Revise and resubmit
- Rejected

Working Drawings that conform to the Contract requirements will generally be returned as approved for Type 3 or no exceptions taken for Type 2. Working Drawings that do not comply with the Contract will be returned with one of the other responses depending on the nature and severity of the contractual compliance issues. Make Corrections Noted does not require resubmittal.

Figure 1-1 Working Drawings, Shop Plans or Submittal Type

Working Drawing, Shop Plan, or Submittal Type	Construction Manual Reference	Standard Spec. or Other References	WSDOT Review Groups	PE Distribution of Drawings	Notes
Working Drawings (Shop Plans for Contract or Standard Plan Item)	SS 1-05.3	1-01.3	Project Engineer	Contractor Fabrication Inspection	
Calculations for Overload of Structure	None	1-07.7(2) 6-01.6	Project Engineer Bridge Construction Support	Contractor	PE stamp is required
Mfg. Specification for Portable Temporary Traffic Control Signal	None	1-10.3(3)K	Project Engineer	Contractor	
Prefabricated Vertical Drainage Wick Submittals	None	2-03.3(14)H	Project Engineer	Contractor	
Calculation for Backfilling Abutment Prior to Superstructure Placement	None	2-03.3(14)I	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	PE stamp is required
Blasting Plan	None	2-03.3(2)	Project Engineer	Contractor	
Excavation Slope Working Drawings and Calculations	None	2-09.3(3)B	Project Engineer Geotechnical Engineer	Contractor	PE stamp is required for Temporary Slopes Greater than 20 ft in Height
Shoring and Cofferdams	SS 6-01.9	2-09.3(3)D	Project Engineer Bridge Construction Support Geotechnical Engineer	Contractor Region Construction	PE stamp is required
Trech Boxes	None	2-09.3(4)	Project Engineer Bridge Construction Support Geotechnical Engineer	Contractor Region Construction	PE stamp is required
Falsework and Formwork	SS 6-01.9	6-02.3(16)	Project Engineer Bridge Construction Support	Contractor Region Construction	PE stamp is required
Contractor Supplied Design Buried Structure Plans, Specifications and Calculations	None	6-20.3(2)A	Project Engineer Bridge Construction Support Geotechnical Engineer	Contractor Fabrication Inspection	PE stamp is required
Contractor Supplied Design Buried Structure Load Rating Report	None	6-20.3(2)B	Project Engineer Bridge Construction Support	None	PE stamp is required
Buried Structure Fabrication Shop Drawings	None	6-20.3(2)A	Project Engineer Bridge Construction Support Geotechnical Engineer	Contractor Fabrication Inspection	

Figure 1-1 Working Drawings, Shop Plans or Submittal Type

Working Drawing, Shop Plan, or Submittal Type	Construction Manual Reference	Standard Spec. or Other References	WSDOT Review Groups	PE Distribution of Drawings	Notes
Buried Structure Dewatering Plan	None	6-20.3(2)C 6-20.3(5)A	Project Engineer Geotechnical Engineer	Contractor	
Buried Structure Installation Plan	None	6-20.3(2)E	Project Engineer Bridge Construction Support	Contractor	PE stamp is required
Project Specific Powder Coating Plan and Materials Submittals	None	6-07.3(11)B	Project Engineer State Materials Engineer (Fabrication Inspection) Bridge Technical Advisor	Contractor Fabrication Inspection	
Bridge Demolition Plans	None	2-02.3(2)A	Project Engineer Bridge Construction Support Assistant State Construction Engineer	Contractor Region Construction	PE stamp is required
Shaft Installation Plan and Construction Experience for Bridges and Permanent Signing Structures	None	6-19.3(2)A 6-19.3(2)B	Project Engineer Bridge Construction Support Bridge Technical Advisor Geotechnical Engineer Assistant State Construction Engineer	Contractor	
Precast Vaults	None	See Special Provisions	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor Fabrication Inspection	PE stamp is required
Pipe Jacking Plans	None	See Special Provisions	Project Engineer Bridge Construction Support Geotechnical Engineer	Contractor	
Soil Nail Walls	None	6-15.3(3)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	Include State Const. Engr. if shotcrete facing is permanent (6-18.3(1)) Experience criteria to be verified by Project Engineer

Figure 1-1 Working Drawings, Shop Plans or Submittal Type

Working Drawing, Shop Plan, or Submittal Type	Construction Manual Reference	Standard Spec. or Other References	WSDOT Review Groups	PE Distribution of Drawings	Notes
Soldier Pile Walls	None	6-16.3(2)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	PE stamp is required for concrete fascia panel forming plans only.
Permanent Ground Anchor Submittals	None	6-17.3(3)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	
Roadside Plant/Weed and Pest Control Plan	None	8-02.3(2)	Project Engineer	Contractor Region Construction	Signed by Licensed Chemical Pest Control Consultant
Shop Plans for Light Standard and Traffic Signal Standards	8-20.2(1)	8-20.2(1)	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection Maintenance	Shop drawings are required for all signal standards and for those light standards without pre-reviewed plans. (per Std. Spec)
Shop Plans for Sign Structures	8-21.3(9)A	8-21.3(9) A refers to Section 6-03.	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection	
Column Jacket Shop Drawings and Installation Plans	None	GSP 6-02.3.OPT8(C). GB6 and 6-02.3.OPT8(D). GB6	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor Fabrication Inspection Maintenance	PE stamp is required on column jacket installation plan
Form Liners (Various patterns per GSP)	None	6-02.3(9)E 6-02.3(14)D	Project Engineer Bridge and Structures Architect	Region Construction Contractor	Include 2ft × 2ft sample with drawing to Bridge and Struct. Architect
Welding Steel Piling	6-05.3(6)	6-03.3(25) 6-05.3(6)	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection	Weld splices of steel casing for cast-in-place conc. Piles shall be the Contractor's responsibility

Figure 1-1 Working Drawings, Shop Plans or Submittal Type

Working Drawing, Shop Plan, or Submittal Type	Construction Manual Reference	Standard Spec. or Other References	WSDOT Review Groups	PE Distribution of Drawings	Notes
Pile Driving Equipment Adequacy Submittals		6-05.3(9)	Project Engineer Bridge Construction Support Geotechnical Engineer Assistant State Construction Engineer	Contractor	PE stamp is required on wave equation analysis
Painting Plan – Shop Application Powder Coating Plan – Shop Application	None	6-07.3(2) 6-07.3(11)B1	Project Engineer Bridge Technical Advisor Assistant State Construction Engineer State Materials Engineer (Fabrication Inspection)	Contractor	
Painting Plan – Field Application	None	6-07.3(2)	Project Engineer Bridge Technical Advisor Assistant State Construction Engineer	Contractor	
Modified Concrete Overlays and Polyester Concrete Overlays (Mix Design, Equipment Specifications and Procedures)	None	6-21 6-22 GSP 6-23	Project Engineer Assistant State Construction Engineer	Contractor	
Shaft Installation Plan for Noise Walls, Soldier Pile Walls, Signal Standard Foundations, and Luminaire Bases	6-2.3E	6-12.3(1) 6-16.3(2)	Project Engineer Bridge Construction Support Bridge Technical Advisor Geotechnical Engineer Assistant State Construction Engineer	Contractor	
Structural Earth Wall Submittals	None	6-13.3(2)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	PE stamp is required
Geosynthetic Retaining Wall Plans (Includes Std. Plan Type 1-6 Walls)	None	6-14.3(2)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	

Figure 1-1 Working Drawings, Shop Plans or Submittal Type

Working Drawing, Shop Plan, or Submittal Type	Construction Manual Reference	Standard Spec. or Other References	WSDOT Review Groups	PE Distribution of Drawings	Notes
Girder Erection Plans (Including falsework and stress calculations)	None	6-02.3(16) 6-02.3(25)L5 6-03.3(7)A	Project Engineer Bridge Construction Support	Contractor Region Construction	PE stamp is required
Welding Reinforcing Steel	6-02.3(24)E	6-02.3(24)E	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection	
Shop Drawings of Prestressed Concrete Girders, Prestressed Structures, Prestressed and Precast Conc Piles	6-02.3(25)A	6-02.3(25)A None for Piles	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection	6-02.3(16) B is for the formwork plans for preapproval
Post-Tension Shop Drawings	6-02.3(26)	6-02.3(26)C	Project Engineer Bridge Technical Advisor Assistant State Construction Engineer	State Construction Engineer Contractor Region Construction	PE stamp required
Precast Concrete Panels	None	6-02.3(9) 6-12.3(1)	Project Engineer Bridge Technical Advisor	State Construction Engineer Contractor Fabrication Inspection	
Welding Structural Steel (Submitted with Shop Drawings)	6-03.3(25)	6-03.3(25)	Project Engineer Bridge Technical Advisor	Region Construction State Materials Lab Contractor	
Bird Protection Plan	None	GSP 1-07.5(4)	Project Engineer WSDOT Project Biologist	Project Engineer Project Inspector	Contact your Environmental Coordinator to provide a contact name for your WSDOT Project Biologist if needed

SS 1-05.4 Conformity with and Deviations from Plans and Stakes

Permanent Monuments

Most permanent monuments which are in the construction zone are relocated by the establishing agency. Normally these monuments are relocated prior to beginning of construction, but if monuments are found within the construction zone, they must be preserved until they can be moved. If the urgency of construction does not allow time for the relocation of the monument, it must be properly referenced so it may be reset or relocated later. When a monument is found within the construction area, the proper agency will be notified promptly and requested to relocate the monument.

Property Corner Monuments and Markers

Land plats and property corners must be preserved. The Survey Recording Act, [RCW 58.09](#) provides a method for preserving evidence of land surveys by establishing standards and procedures for monuments and for recording surveys as a public record. When a general land office corner, plat survey corner, or property line corner exists in the construction zone, it is necessary to properly reference it and reset it after the construction work has been done. [RCW 58.09.040](#) requires that, for all monuments that are set or reset, a record of the monument be filed on a Monumentation Map with the County Engineer in the county in which the corner exists and the original sent to the State Right of Way Plans Branch, who will forward a copy to DNR for their records.

Alignment Monumentation

During construction, alignment monumentation may be altered to fit field conditions. Such changes may include:

- Normally all PCs and PTs are to be monumented. Additional point on tangent (POT) monuments are necessary where line of sight is, or may in the future be obstructed by the horizontal or vertical alignment, buildings, or other barriers.
- When the right of way and the construction alignment do not coincide, the monumentation shall be such that the exact right of way as acquired can be positioned in the field. This will generally require, as a minimum, that the right of way alignment be monumented.
- When safety of the survey crew or survival of the monuments is an issue, monuments may be offset from the true alignment. An extra effort in accuracy must be made when setting offset monuments to ensure an accurate reestablishment of the true alignment. The monumentation, including monument locations, reference distances, stations, and bearings, is to be shown on the as built plans.

Surveying Provided by the State

Unless the Contract states otherwise, the Project Engineer is responsible for providing all surveying needed to locate and define the Contract Work. The staking done in construction surveying must assure that the Work will conform to the Plans and must also conform to the Contractor's approach to the Work. There are numerous survey techniques that will accomplish these objectives. Prior to each phase of the Work, the Project Engineer must reach agreement with the Contractor concerning the method, location, and timing of construction staking. Once this agreement is reached, it must be shared with all WSDOT, Contractor, and subcontractor personnel who place or use construction stakes.

Contractor Surveying

If the Contract requires the Contractor to provide some or all of the construction surveying, the Project Engineer is required to provide only the primary control points staked, marked, and verified in the field and the coordinate information for the main alignment points in the Plans. The plan alignment and the field control points must be referenced to the same grid coordinate system.

The provisions for contractor surveying are intended to provide the stakes needed to inspect the Work, as well as the primary function of locating and defining the Work. If the survey stakes required by the Contract do not provide the reference data needed for inspection, then the Project Engineer will have to provide additional survey work that is needed. As an alternative, a change order could be negotiated with the Contractor to perform the added Work.

The Contractor's survey work is a Contract item, just like all other Contract items. It must be inspected for adequacy and conformance with the Contract. Once it is performed and inspected, it must be paid for.

The wise Project Engineer will inspect the survey efforts and check as much of the Contractor's work as is practical. Any errors should be brought to the Contractor's attention for corrective action. The inclusion of contractor surveying in a project transfers the risk of survey errors to the Contractor. The Project Engineer must assure that the survey work of the Contracting Agency does not relieve the Contractor of that risk.

SS 1-05.7 *Nonconforming Work*

Contract Final Acceptance for all Work completed on a project is made solely by the Secretary of Transportation acting through the State Construction Engineer. However, the Engineer relies heavily on the actions and professional opinions of others, involved throughout the course of Work, in determining acceptability. Because of this, it is expected that the Project Engineer, working with the assistance of the Regional Construction Manager, as well as making full use of the many resources available at both the Region and State level, particularly the office of the State Construction Engineer, will ensure that sufficient inspection is conducted in order to determine that the Work performed or the materials utilized to construct the project comply with the requirements included in the Contract Plans and Specifications. When inspections or tests are performed that indicate substandard work or materials, the Project Engineer should immediately notify the Contractor, rejecting the unsatisfactory work or material.

Standard Specifications Section 1-05.7 defines nonconforming Work and outlines the steps the Contractor must take to remediate nonconforming Work.

The Contractor is responsible for notifying the Project Engineer of any nonconforming Work they discover. If the Project Engineer becomes aware of nonconforming Work, they should first notify the Contractor. The Contractor should be notified as quickly as possible so that changes in materials or Work methods can be made to avoid materials or Work being rejected.

Until all issues of material acceptance and conformity to the Contract Plans and Specifications can be resolved, nonconforming Work will not be paid for by WSDOT.

Once the nonconforming Work has been discovered or the Contractor has been notified, the Contractor must immediately correct the deficiency. Section 1-05.7(1) explains when the Contractor is required to use the Nonconformance Report business process in Unifier

to propose a repair procedure or method for correcting a deficiency. The Project Engineer should ensure the Contractor has provided all the information needed to respond to the Nonconformance Report and will discuss it with the Contractor prior to providing a final response. Any engineering necessary to evaluate the acceptability and adequacy of the repair should be done by the Contractor and submitted to the Project Engineer in Unifier.

In correcting nonconforming Work, the Contractor will be responsible to bear all costs to comply with the Engineer's order.

For additional guidance, see [Standard Specifications](#) Section 1-05.7. If the Contractor fails or refuses to carry out the orders of the Project Engineer or to perform Work in accordance with the Contract requirements, the Project Engineer should immediately notify the Regional Construction Manager of the facts in the matter, seek assistance and advice.

Defective Materials

The Contract Plans and Specifications for construction of a project require that specific materials and/or work practices be utilized in completing the Work. The Project Engineer may reject any materials not conforming to the requirements of the Specifications. The rejected materials, whether in place or not, are to be immediately removed from the site of the Work unless the following guidelines for acceptance of non-specification materials are followed:

Material Not in Place

There may be situations where WSDOT determines the use of nonconforming materials is acceptable. This requires prior approval of the State Construction Engineer and a change order modifying the project specifications.

When the Contractor proposes a materials substitution that is not associated to remediating nonconforming Work, the Contractor is required to submit an RFI as provided for in [Standard Specifications](#) 1-05.1(1). The Project Engineer will discuss the request with the Contractor prior to providing a final response to the RFI. If this is not done prior to incorporating into the project, the material should be treated as nonconforming Work.

Material in Place

1. Price adjustments have been developed and are referenced in the Contract for acceptance of certain materials whose properties cannot be determined until they are in place. Items this policy applies to include: concrete compressive strength, Portland cement concrete pavement thickness, hot mix asphalt mixture and density, and pavement smoothness.
2. Material incorporated into the Work that is subsequently found to be in nonconformance with the Specifications and for which price adjustments for acceptance are not included in the Contract, may be reviewed to determine acceptability. The determination of acceptability should be made only when, in the Project Engineer's judgment, there is a possible service or benefit to be obtained from its use. If it is determined that no benefit or service is obtained from the material's use, the Project Engineer should direct that the material be immediately removed and replaced at no cost to WSDOT.

The Project Engineer may consult the State Construction Office, State Materials Laboratory, the State Bridge and Structures Office, or other design organizations for assistance in determining the usefulness of the nonconforming material. If consulted, these offices will offer technical advice to the extent that information is available. It is not intended to enter into extensive research to assess material which could be removed and replaced under the Contract terms.

If the material is acceptable for continued use, a determination shall be made by the Project Engineer of the possible reduced service life caused by the material substitution and the resulting credit assessed by change order.

This determination of acceptability and the resulting credit must meet with the Region Construction Manager's approval for execution of the change order. In addition, prior review and approval must be obtained from the State Construction Engineer with a recommendation from the State Materials Engineer for the intended application of the material. With this determination for acceptance of non-specification material, discussions should be initiated with the Contractor and a change order completed.

If it is determined that the Specification violation will not compromise the performance of the material and the nature of the violation is more of a technical infraction of the Specification, the material may be accepted with a change order, possibly including a price reduction. If there is sufficient data and if the nature of the material makes analysis feasible, a pay factor may be determined using QC/QA methods similar to those described in [Standard Specifications](#) Section 1-06.2(2). If QC/QA cannot be applied, the Project Engineer may determine an adjustment subjectively, using whatever information is available. This assessment or price adjustment is typically based on the unit bid price and may vary from no price adjustment up to the total contract unit bid price for the item involved. If it is determined that the violation is serious enough that the material cannot be accepted for use on the project, the Project Engineer may direct its complete removal and replacement at no cost to WSDOT.

All change orders for acceptance of nonconforming materials are Contractor proposed and WSDOT is under no obligation to accept or approve any of them.

SS 1-05.9 Equipment

The Contractor is required to furnish adequate equipment for the intended use. The Contractor's equipment must also be maintained in good working condition. Prior to the start of Work, the Project Engineer should ensure, by inspection, that the Contractor's plant, equipment, and tools comply with the Specifications.

Whenever the Specifications contain specific equipment requirements, the Project Engineer should verify that the equipment provided meets these Specifications. This should be documented in project records such as the Inspector's Daily Report. The Contractor is required to furnish, upon request, any manuals, data, or specialized tools necessary to check the equipment.

It is most important that the operation of automatically controlled equipment be checked carefully and that the Contractor be advised immediately whenever the equipment is not performing properly.

The Contractor's supervisory personnel must be experienced, and able to properly execute the Work at hand. If, in the Project Engineer's opinion, the Contractor's supervisory personnel are not fully competent, the Project Engineer should immediately

notify the Regional Construction Manager of the facts in the matter, seeking assistance and advice.

It is expected that, consistent with WSDOT's policies and delegated authority, the Project Engineer will assist the Contractor in every way possible to accomplish the Work under the Contract. However, the Project Engineer must not undertake, in any way, to direct the method or manner of performing the Work. Contrary to popular legend, this statement is true of force account Work as well. Should the Contractor select a method of operation that results in substandard quality of Work, non-specification results, a rate of progress insufficient to meet the Contract schedule, or that otherwise violates the Contract Specifications or provisions, the Contractor should be ordered to discontinue that method or make changes to comply with the Contract requirements. Where cooperation cannot be achieved, the Project Engineer should notify the Regional Construction Manager of the facts in the matter, seeking assistance and advice.

SS 1-05.10 Guarantees

Standard Specifications Section 1-05.10 and 1-06.5 specifies the Contractor shall provide to the Project Engineer all guarantees, warranties, or manuals furnished as a customary trade practice, for material or equipment incorporated into the project. The Project Engineer should transmit the originals of any such guarantees/warranties or manuals to the organization that will be maintaining the items covered by the guarantee/warranty or manuals. The Project Office should maintain a copy of the guarantee/warranty, and a letter of transmittal for manuals, with the materials documentation file for the project.

SS 1-05.14 Cooperation with Other Contractors

When two or more Contractors, including any utility or their contractor, are working in the same area, *Standard Specifications* Section 1-05.14 will apply. The Contractor shall not cause any unnecessary delay or hindrance to the other contractors on the work, but shall cooperate with other contractors to the fullest extent. Progress schedules and plans for all contractors involved should be reviewed by the Project Engineer to detect possible conflicts which might be resolved before a delay of work is experienced or extra costs are incurred as a result. If an adjacent project requiring coordination is known prior to holding a preconstruction conference, it would be beneficial to invite principals from that project to the meeting.

1-06 Control of Material

SS 1-06.3 Manufacturer's Certificate of Compliance

All material is to be accepted for use on the project based on satisfactory test results that demonstrate compliance with the Contract Plans and Specifications. All Work demonstrating compliance is to be completed prior to the material's incorporation into the Work. In many cases, this testing has already been completed in advance by the manufacturer. A Manufacturer's Certificate of Compliance provides a means to utilize this testing in lieu of job testing performed prior to each use of the product. This provides for a timely use of the material upon arrival to the job site without a delay in waiting for the return of test results. The Project Office is required to complete and file a Manufacturer's Certificate of Compliance Check List (DOT Form 350-572). This must be done in a timely manner and is necessary to ensure that the material meets all the requirements of the contract.

Standard Specifications Section 1-06.3 describes the procedures for acceptance of materials based upon the Manufacturer's Certificate of Compliance. *Standard Specifications* Division 9 describes those materials that may be accepted on the basis of these certificates. Since a certificate is a substitute for prior testing, it is intended that all certificates be furnished to the Project Engineer prior to use or installation of the material.

However, there are some circumstances where the Contractor may request, in writing, the Project Engineer's approval to install materials prior to receipt and submittal of the required certificate. The Project Engineer's approval of this request must be conditioned upon withholding payment for the entire item of Work until an acceptable Manufacturer's Certificate of Compliance is received. Examples of materials that must not be approved by the Project Engineer for installation prior to the Contractor's submittal of an acceptable certificate are: materials encased in concrete (i.e., rebar, bridge drains); materials under succeeding items where the later Work cannot be reasonably removed (i.e., culvert under a ramp to be opened to traffic); etc. The Project Engineer's approval or denial must be in writing to the Contractor, stating the circumstances that determined the decision. If the requirements of this provision are followed, including the written request by the Contractor and the written approval by the Project Engineer, then the remedy for failure to provide the Certificate is the withholding of 100 percent of the cost of the material and the cost of the Work associated with the installation of the material.

At the conclusion of the Contract, there may still be some items that are lacking the required certificates. These items must be assessed as to their usefulness for the installation, prior to payment of the Final Estimate and subsequent Materials Certification of the Contract. The review of these items may include:

- Comparison with the suitability of other shipments to the project or other current projects.
- If possible, sampling and testing of the items involved or residual material from the particular lot or shipment.
- Independent inspection on site of the completed installation.

If it is determined that the uncertified material is not usable or is inappropriate for the completed Work that incorporates the material, the Contractor should be directed to immediately remove the material, replacing it with other certified materials. If the material is found to be usable and is not detrimental to the installation it was incorporated into, it may be left in place but, if the provisions of *Standard Specifications* Section 1-06.3 were followed, with a reduction to no pay. The reduction in pay will be the entire cost of the Work (i.e., unit contract price, portion of lump sum) rather than only the material cost. The Contractor should continue to have the option of removing and replacing the uncertified material in order to regain contract payment for the installation. If the provisions of *Standard Specifications* Section 1-06.3 were not followed, then there can be no withholding beyond the value of the missing Work itself (the preparation and submittal of the Certificate.)

SS 1-06.6 Recycled Materials

SS 1-06.6(1) Recycling of Construction Aggregate and Concrete Materials

RCW 70A.205.700 requires the use of recycled concrete aggregate in the amount of 25 percent on all WSDOT projects, and to report annual usage to the legislature. However, this requirement only applies to materials included in the Contract that are listed in *Standard Specifications* 9-03.21(1)F and that allow the use of recycled concrete aggregate.

Recycled concrete is hardened concrete that is crushed and may contain coarse and fine mineral aggregate with Portland cement. The *Standard Specifications* encourage the use of recycled materials and requires that recycled concrete aggregates be incorporated into the Work by the Contractor.

Because it is important that the Contractor have a plan for using the required percentage of recycled concrete aggregates, the *Standard Specifications* require the Contractor to submit a utilization plan. The Contractor's Recycled Concrete Aggregate Utilization Plan is to be submitted on DOT Form 350-075A – Recycled Concrete Aggregate Reporting - within 30 calendar days of Contract execution, preferably at the preconstruction conference.

The recycled concrete aggregate utilization plan details how the Contractor will meet the 25 percent requirement. Each bid item that includes eligible material will be listed on the utilization plan and will include the percentage of anticipated recycled concrete aggregate that will be used. If the plan shows the Contractor will not meet the minimum 25 percent requirement, a cost estimate meeting the requirements of *Standard Specifications* 1-06.6(1)A must be attached. The details of the plan are not required to be static as the Contractor should be actively managing their use of recycled concrete aggregate throughout the Contract. Therefore, the Contractor may alter the utilization plan at their discretion without submitting a new one. Should the Contractor alter their plan, the Project Engineer may choose to review it.

Within 30 days after physical completion, the Contractor is required to re-submit the Recycled Concrete Aggregate Reporting form (DOT Form 350-075A) to include the actual amounts of recycled concrete aggregate and virgin material used on the project. If the final tally of recycled concrete aggregate does not meet the 25 percent requirement, the Contractor is required to attach a cost estimate meeting the requirements of *Standard Specifications* 1-06.6(1)A. The Project Engineer should review the cost estimate for reasonableness; an independent verification of detailed costs is not required as the Contractor certifies the accuracy of the information.

The Project Engineer must submit the Recycled Concrete Aggregate Reporting form to the Region Documentation Engineer for their review and approval prior to a copy of the form being sent to the Documentation Engineer at the State Construction Office. These reports will be used by the State Construction Office in the annual report submitted to the legislature.

1-07 Legal Relations and Responsibilities to the Public

SS 1-07.1 Laws to be Observed

Safety

Safety is not optional in WSDOT. No employee will be permitted to disregard applicable safety and health standards of the State Department of Labor and Industries (LNI) or other regulatory agencies.

The Secretary of Transportation's Executive Order E 1033 provides direction to all WSDOT employees to adhere to the following basic safety provisions in every work activity:

- Participate in your work group safety plan (or Safety Management System for WSDOT Ferries Division employees).
- Look for ways to prevent accidents.
- Immediately identify hazards and safety concerns.
- Always use personal protective equipment.
- Promptly report all injuries.

The Order also states that all employees at WSDOT Ferries Division are already covered and must continue to be covered by the existing Ferries Division Safety Management System. Therefore:

- All Ferries Division employees will refresh their knowledge of existing Safety Management System procedures and shall follow them accordingly.
- A concerted effort will be made to address existing and new Safety Management System safety reports in a timely manner.
- All Ferries Division employees must address issues of concern with existing safety procedures using the existing Safety Management System reporting program.

All other WSDOT employees are covered and continue to be covered by the policies and procedures in the [Safety Procedures and Guidelines Manual M 75-01](#), and other related policy documents. Therefore, a pre-activity safety plan is required prior to performing any new field work. Office staff will conduct a hazard assessment and mitigation plan for all office environments.

Since WSDOT employees on transportation construction projects are routinely exposed to a variety of hazards, they must take adequate safety precautions at all times. The following items represent common activities that workers or work crews may encounter, and should be addressed in pre-activity safety plans as needed.

- The employee must ensure that an area is safe before entering it for the purpose of inspection. For example, a deep trench must be adequately shored and braced before entering it.
- Aggregate production and material processing plants should be inspected for safety hazards. Corrective measures should be called to the attention of the Contractor or producer. Corrections must be completed before WSDOT personnel will be permitted to proceed with entry or work upon the premises.

- The employee must, at all times, watch for backing trucks and not depend upon hearing alone for warning. The noise of plants and other equipment often make it impossible to hear trucks approaching and the truck driver's vision area is restricted when backing a truck.
- Parking WSDOT vehicles too close to the path of construction equipment, behind standing equipment, or in other hazardous locations is not permitted.
- Where traffic is maintained in work zones, care must be taken to avoid approaching traffic when it is necessary for Inspectors and others to step onto or cross the traveled portion of the roadway. Whenever possible, work activities, ingress and egress, should be conducted within the relative safety of the work zone.
- WSDOT employees working on foot in the highway right of way and other areas exposed to vehicular traffic must comply with the high visibility clothing requirements of the WSDOT [Safety Procedures and Guidelines Manual](#) M 75-01 Section 4.2, Chapter 3.
- Where the engineering crew is working adjacent to traffic, without positive barriers, the work area should be marked with proper signs and traffic control devices as shown on the appropriate Traffic Control Plan (TCP). The crew may be protected by a certified flagger as needed.
- When the engineering crew is working under the protection of the Contractor's flaggers and signs, other signs may not be needed, but a "STOP"/"SLOW" paddle should be available for use in special situations. Good communication with the Contractor and Flagger is needed to ensure that they are aware of crew activities within the work zone.
- A survey crew is typically exposed to traffic hazards and should conduct survey work under approved TCPs from the *Work Zone Traffic Control Guidelines* M 54-44. The Region Traffic Office will assist survey crews with TCPs for situations not covered in this publication.
- During blasting operations, employees are instructed to seek cover at least 500 ft from the location of the blasting.

In addition to the above requirements for workers and work crews, supervisors also have the following responsibilities:

- Each supervisory employee is charged with the responsibility of providing safety leadership and safety enforcement when necessary.
- Supervisors must give thorough instructions to employees under their jurisdiction on the safe use of tools, materials, and equipment and the safe prosecution of work on construction projects.
- The Division of Occupational Safety and Health requires that every foreman, supervisor, or other person in charge of a crew have a valid first aid card.
- When employees are injured on the job to the extent that the services of a doctor are required, the Regional Safety Officer must be notified immediately.
- When traffic control measures are necessary, approved Traffic Control Plans (TCPs) should be used in conformance with the *Manual on Uniform Traffic Control Devices* (MUTCD), as adopted by WSDOT. Supervisors should ensure that the appropriate TCP is used and that the necessary signs, devices and equipment are available. Contact Region Traffic Office for assistance.

Responsibility for Enforcement of Safety and Health Requirements

All contractors doing work for WSDOT must provide safety controls for the protection of life and health of the contractor's employees and other persons, for the prevention of property damage, and for the avoidance of interruptions in the performance of the Work under the Contract. As the owner, WSDOT has the responsibility for enforcement of the Contract, however, provisions and regulations which are by law the fundamental responsibility of other agencies, both from the standpoint of interpretation and enforcement, should be monitored by WSDOT, but with full recognition as to the responsibilities and authorities of those agencies. The Project Engineer will cooperate fully with the responsible agency.

Any violations noticed by the Project Engineer will be brought to the attention of the Contractor for correction. The Project Engineer will also notify the responsible agency (if that action is deemed necessary by the Region Construction Manager) and utilize such sanctions as are consistent with Contract terms in assisting the responsible agency in enforcing laws, rules, and regulations.

The Contractor is obligated by law to comply with both State and Federal safety regulations. State regulations are administered by LNI under the Washington Industrial Safety and Health Act (WISHA). Federal regulations are administered by the Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration (MSHA) of the U.S. Department of Labor, which has jurisdiction over federal safety requirements for pit and quarry operations up to the point where materials leave the quarry area or go into a batch plant. Inspectors from any or all of these agencies may review the Contractor's operations at any time. (See [Standard Specifications](#) Section 1-07.1.) In order to fulfill WSDOT obligations to monitor contract operations in accordance with the above, the following procedures should be followed on both Federal-aid and non Federal-aid contracts.

Precontract Preparation

- The Project Engineer must obtain the WISHA manuals, particularly Safety Standards for Construction Work [WAC 296-155](#), General Safety and Health Standards [WAC 296-24](#), and General Occupational Health Standards [WAC 296-62](#), and will review them with the key field WSDOT Inspectors to ensure reasonable familiarity to the extent that they can recognize important requirements.
- The Contract Plans and Contract Provisions should be reviewed to identify those aspects of the Work meriting special attention from the standpoint of potentially dangerous types of work and hazard elimination.
- The project site should be reviewed to identify those aspects of the location that present hazards such as limited sight distance, confined spaces, difficult terrain, extreme temperatures, illegal encampments, or exposure to biological and physical hazards associated with animals or humans.

Preconstruction Duties

As part of the Preconstruction Conference, Meetings and Discussions (see Section [SS 1-05.1](#)), the Contractor's safety program should be discussed. Some of the things that the Project Engineer may want to consider are:

- The contractual obligation of the Contractor for complying with State and Federal construction safety standards (see [Standard Specifications](#) Section 1-07.1).
- The availability of the safety standards that apply to the Contract.
- The accident prevention program of the Contractor – organization, staff, names of responsible individuals, meetings, training, reports, etc. A review of specific areas for which plans are required (especially those also affecting WSDOT personnel). These might include Fall Protection, Confined Spaces, Respirators, Hearing, and Hazardous Materials plans. Implementing a mechanism for employees to report “near misses” and/or work zone accidents.
- The Contractor's responsibility for seeing that subcontractors comply with safety regulations.
- The Contractor's plans for meeting specific safety requirements and for eliminating potentially critical hazards on the project for all Contractor employees, Contracting Agency employees, and the public.
- The Contractor's responsibility to meet the requirements of [WAC 296-800](#), which requires employers to provide a safe workplace. Particular mention must be made to [WAC 296-800-11025](#), which prohibits alcohol and narcotics from the workplace.

The Project Engineer's Role in Safety on the Project

It is difficult to generalize about safety. It's a judgment call which is dependent on risk, knowledge, authority to direct corrections, etc. As people, professionals and representatives of the State, Project Engineers have an obligation to act if they become aware of a situation that presents an immediate threat. Project Engineers should advise their employees on what the lines of communication are and what the procedures are for alerting the responsible agencies regarding serious safety hazards.

Employees should be made aware that the Contractor is obligated to make the work-site safe, to their satisfaction, for inspection activities. Anyone who is uncomfortable with access for inspection should inform their supervisor of the situation and expect resolution. Project personnel should also be made aware of project specific hazards and be trained in specific areas as the project warrants. For example: fall protection, confined space requirements, respirator training, lead paint hazards, hazardous material training, and exposure to medical waste (sharps). It is suggested that the expertise of the Regional Safety Officers or Headquarters Safety Office be utilized as appropriate.

Be aware that the construction Contract requires the Contractor to perform any measures or actions the Project Engineer may deem necessary to protect the public, and that the Project Engineer may suspend Work if the Contractor fails to correct unsafe conditions. Project staff should continuously monitor the Contractors' work activities for potential violations of legal safety requirements, and for any condition that poses an immediate threat to the health of any person. Immediately notify the Contractor upon becoming aware of any such condition.

Additional information, such as safety regulations and LNI contacts are available on the internet at www.wa.gov/lmi. Keep in mind that many WSDOT employees are not trained to interpret and apply safety regulations; however, employees need to have a reasonable understanding of what hazards may be encountered on a project. Many, but not all, of the requirements are listed under [WAC 296-155](#) Safety standards for construction work under the various “Parts a through V.”

State LNI offers consultation service (advice is given) and enforcement (assessment of a violation would result in a citation being issued). A listing of the various L&I field offices is as follows:

- **Region 1**

Bellingham Field Services Location	360-647-7300
Everett Field Services Location	425-290-1300
Mount Vernon Field Services Location	360-416-3000
- **Region 2**

Bellevue Field Services Location	425-990-1400
Seattle Field Services Location	206-515-2800
Tukwila Field Services Location	206-835-1000
- **Region 3**

Bremerton Field Services Location	360-415-4000
Port Angeles Field Services Location	360-417-2700
Tacoma Field Services Location	253-596-3800
- **Region 4**

Aberdeen Field Services Location	360-533-8200
Kelso Field Services Location	360-575-6900
Tumwater Field Services Location	360-902-5799
Vancouver Field Services Location	360-896-2300
- **Region 5**

East Wenatchee Field Services Location	509-886-6500
Kennewick Field Services Location	509-735-0100
Moses Lake Field Services Location	509-764-6900
Yakima Field Services Location	509-454-3700
- **Region 6**

Pullman Field Services Location	509-334-5296
Spokane Field Services Location	509-324-2600

SS 1-07.3 Fire Prevention and Merchantable Timber Requirements

SS 1-07.3(1) Fire Prevention Control and Countermeasures Plan

A Fire Prevention Control and Countermeasures Plan (FPCC) Plan is required on every project, regardless of proximity to forestland. The plan is required to be submitted as a Type 2 Working Drawing no later than the date of the preconstruction conference. The Project Engineer will review the FPCC plan for completeness as outlined in *Standard Specifications* 1-07.3(1)A1. The required elements listed in the plan must be periodically verified by Project Inspectors. An updated FPCC plan is due annually on multiple year Contracts, and a revised FPCC plan is required as site conditions change.

Most of Washington State is covered under the Industrial Fire Protection Level (IFPL) system which, by law, is managed by the Department of Natural Resources (DNR). The

IFPL system was established to identify fire risk levels and accordingly prohibit certain high risk work activities during periods of dry weather. The risk level for a given area is regularly assessed and can change daily. In certain areas, jurisdiction is transferred to the United States Forest Service (USFS) or to the local fire authority.

The Project Engineer is encouraged to establish a working relationship with the local agency responsible for fire protection (DNR, USFS, Tribe, or the local fire district) early in the project. It is important for the Project Office to know and understand the different laws of the jurisdiction governing the work site. The Project Office should also check the [IFPL website](#) daily during the closed season (April 15 – October 15) to verify the fire threat level for the project site. It is recommended that fire protection be discussed at the weekly safety meeting, or more frequently if levels warrant further discussion.

In the event the IFPL requires either a partial or general shutdown of Work, the Contractor may obtain a waiver to continue certain work activities. The Project Office will verify that the Contractor has received a waiver from DNR before allowing continuation with prohibited Work. If the IFPL requirements prohibit the Contractor from performing Work, the Contractor may be eligible for an unworkable day in accordance with *Standard Specifications* Section 1-08.5.

When it is in WSDOT's interest to pursue a waiver, and after receiving ASCE approval, the Project Engineer will lead the effort to obtain the waiver while working closely with the Contractor and the agency responsible for fire protection. The Project Engineer must discuss pursuing a waiver with the ASCE, as the Department bears additional risk and cost when WSDOT is the initiating party. The potential need for a waiver should be discussed with the regulatory fire agency prior to or early in the fire season. Factors such as work activities, location, and shortened work windows are some examples of risks to consider at the beginning of the project. Requesting the waiver in the middle of the fire season, or at the last minute, is not advisable.

If the project is contained within the paved roadway surface or is an emergency operation, the Project Engineer can allow work to continue during restrictions, however, all effort should be made to follow the IFPL restrictions.

[WAC 332-24-405](#) requires the Contractor and WSDOT Inspectors to have certain equipment available and in working order. The requirements are:

Contractor	WSDOT Inspector
1. Fire extinguisher of at least a 5 B C rating	1. Fire extinguisher of at least a 5 B C rating
2. Approved exhaust system	2. Approved exhaust system
3. Shovel (mounted on all vehicles/equipment)	3. Shovel
4. Two serviceable five gallon backpack pumps filled with water	
5. Firewatch (with portable power saw operation)	

The purpose of the equipment is to extinguish fire when initially started while it can be controlled or extinguished by portable fire extinguishers or small hose systems without the need for protective clothing or breathing apparatus. Project Inspectors are not required to compromise their personal safety in fighting fires.

If a waiver is issued to the Contractor to continue work during a shutdown, the Contractor must have all the required tools noted above in addition to the specific mitigation measures in place listed in the approved waiver.

SS 1-07.3(1)A2 Forest Fire Prevention

When the project limits are next to or extend into a State or Federal forest, the Contract may contain an appendix with additional USDA Forest Service requirements that need to be included in the FPCC plan and the Contractor must take extra steps for fire prevention. When approving the FPCC Plan in these areas, the Project Engineer may elect to contact the local forest supervisor or regional manager to ensure the Contractor has obtained the information required in *Standard Specification 1-07.3(1)A2*.

SS 1-07.4 Sanitation**SS 1-07.4(2) Health Hazards**

Site Cleanup – Some Contracts contain specifications for site cleanup. This may include the removal of illegal encampments, unauthorized pedestrians, personal property, refuse, and other biological and physical hazards from the work area. The Contractor is required to perform all necessary Work, and to take precautions to maintain the health and safety of all workers and the public, who may be in the work area. It is the responsibility of the Project Engineer to inspect the Contractor's work and ensure compliance with the Contract requirements and with all applicable laws. Each Project Engineer should appoint a contact for encampment removal issues.

The Contractor is required to have a Health and Safety Plan, and to submit the plan to the Project Engineer prior to commencing any cleanup work. The Project Engineer should ensure that the plan is prepared in accordance with Contract Provisions.

The Contractor will furnish and install "No Trespassing" signs in all areas where pedestrians may be encountered, except where pedestrians are legally allowed. "No Trespassing" signs must be posted no less than 72 hours prior to beginning site cleanup work or any other potentially hazardous work. If the site contains encampments, the signs should be posted at each encampment. The Project Engineer should conduct a site visit in order to verify that the signs are posted correctly and meet the requirements of the Contract.

At the time the signs are posted the Contractor should provide written notification to the Project Engineer and local jurisdictions. When the Work includes removal of encampments the Contractor should also notify local advocacy groups that site cleanup and removal is scheduled.

After the initial removal of encampments, the Contractor should revisit the area at regular intervals, and if encampments persist, permanently post the area with "No Trespassing" signs and proceed with removal activities.

Immediately prior to commencing cleanup and removal, brush clearing, or other potentially hazardous work, and periodically throughout the day, the Contractor should visually inspect the area to ensure that no unauthorized pedestrians are present. The Project Engineer should verify that the site is cleared of pedestrians and that periodic area checks are being done. Special attention should be given to areas hidden from view, such as in dumpsters or equipment, or under blankets. The Project Engineer may consider the use of non-invasive detection aids, such as infrared detectors, to ensure that no unauthorized persons are present.

Removal, Storage, and Return of Personal Property – The Contractor will remove personal property that is not refuse. Items will be placed in large transparent plastic bags, labeled, and stored for return to the property owner. The Project Engineer should ensure that personal property is handled and stored in accordance with the requirements of the contract and all applicable laws.

Further WSDOT policy information and guidance is available on the State Construction Office webpage at: www.wsdot.wa.gov/Business/Construction/TechnicalGuidance.htm

SS 1-07.5 Environmental Regulations

RCW 47.85.030(3)(a) and RCW 47.85.040(4) require that WSDOT employees, and consultant staff hired directly by WSDOT, report environmental non-compliance. The following policy pertains to WSDOT personnel on all WSDOT contracts and contains duties and activities by persons other than the project staff, but all of which are related to construction contracts and affect the Project Engineer to one degree or another. The Project Engineer and Assistant Project Engineer must stay aware of this policy and follow the procedure as written.

Environmental Compliance Assurance Policy

Environmental commitments are made during the scoping, design, and construction phases of WSDOT projects. WSDOT has a policy of continuous environmental commitment management throughout the life of a project (Agency Policy 1018). The Environmental Compliance Assurance Policy (ECAP) serves a multifaceted purpose. The primary purpose is to help WSDOT quickly recognize and correct environmental non-compliance work during all phases of the project development and delivery process, including the construction phase on WSDOT highway and modal projects, and to ensure prompt notification to WSDOT management and regulatory agencies (see *Design Manual* Section 225.01(5) for Design ECAP). This policy applies to Design Bid Build and all methods of Design Build projects. The secondary purpose of ECAP is to help WSDOT learn from our collective experiences and continuously improve our environmental compliance performance agency wide. By doing so, WSDOT may share lessons learned throughout the agency to prevent reoccurrence and proactively promote environmental compliance to improve project development and delivery. For purposes of this policy, non-compliant work is defined as actions that violate environmental permits or authorizations, verbal or written agreements, laws, or regulations.

When non-compliance is suspected or known, it is the discoverer's responsibility to initiate the Notification and Resolution Process by promptly notifying the Project Engineer or Assistant Project Engineer ([RCW 47.85.030\(3\)\(a\)](#)). This means that the discoverer does not have to wait for confirmed evidence of non-compliance, but rather should take action as soon as they believe or have knowledge of potential non-compliance. The Regional/Modal/Megaprograms Environmental Manager or designee will serve as a resource to the Project Engineer or Assistant Project Engineer and give priority to addressing the non-compliance events. The Project Engineer or Assistant Project Engineer and Environmental Manager or designee will work together on an appropriate response to avoid or minimize environmental damage.

Notification and Resolution Process

When a non-compliance event is suspected or known, the following steps must be taken:

1. The person who discovers an event must immediately notify the Project Engineer or Assistant Project Engineer.

2. The Project Engineer or Assistant Project Engineer must:

Step A – Immediately notify the Contractor of the situation and suspend all Work that is causing known non-compliance ([RCW 47.85.030\(4\)](#)). In situations of suspected non-compliance, suspend all Work that is causing suspected non-compliance at the Project Engineer or Assistant Project Engineer’s discretion.

Step B – Immediately contact the Environmental Manager or designee, who is responsible for confirming whether or not the event is non-compliant. For Design Build projects, the WSDOT Environmental Manager or designee will retain decision making responsibility for confirming non-compliance. If the event is compliant, stop the notification process and resume work activity. If not compliant, collaborate with the Environmental Manager or designee to determine the regulatory agencies with jurisdiction. The Environmental Manager or designee must notify all regulatory agencies with jurisdiction ([RCW 47.85.030\(3\)\(b\)](#)). When necessary, the Project Engineer or Assistant Project Engineer and Environmental Manager or designee may consult relevant subject matter experts, Regional/Modal or Environmental Services Office, to help determine non-compliance.

Step C – Consult with the Environmental Manager or designee regarding response actions taken so far and any additional remediation actions that may be necessary.

Step D.1 – Highway Projects: Notify the appropriate Assistant Region Administrator or Megaprograms Engineering Manager for Construction and the assigned Headquarters liaison (i.e. Assistant State Construction Engineer). If resolving the non-compliance event requires any design decision, notify the appropriate Assistant State Design Engineer.

Step D.2 – WSF Projects: Notify the Terminal Engineering Construction Engineering Manager, the Terminal Engineering Design Engineering Manager, and the assigned Headquarters liaison (i.e. Assistant State Construction Engineer).

Step E – Additional notifications from the Project Engineer or Assistant Project Engineer may be necessary. It is the responsibility of the Environmental Manager or designee to determine when the non-compliance event requires additional notifications. Additional notifications are required when the non-compliance event results in, but not limited to:

- A formal written/verbal enforcement action from a regulatory agency (may include but not limited to a notice of violation, monetary penalty, or warning letter indicating failure to correct non-compliance may result in further penalties);
- Presents risk to public health or the environment; or
- Creates a public controversy.

Step E.1 – Region Highway Projects: Notify the Region Administrator and the State Construction Engineer.

Step E.2 – Mega Projects Highway Projects: Notify the Megaprograms’ Program Administrator.

Step E.3 – WSF Projects: Notify the Terminal Engineering Director.

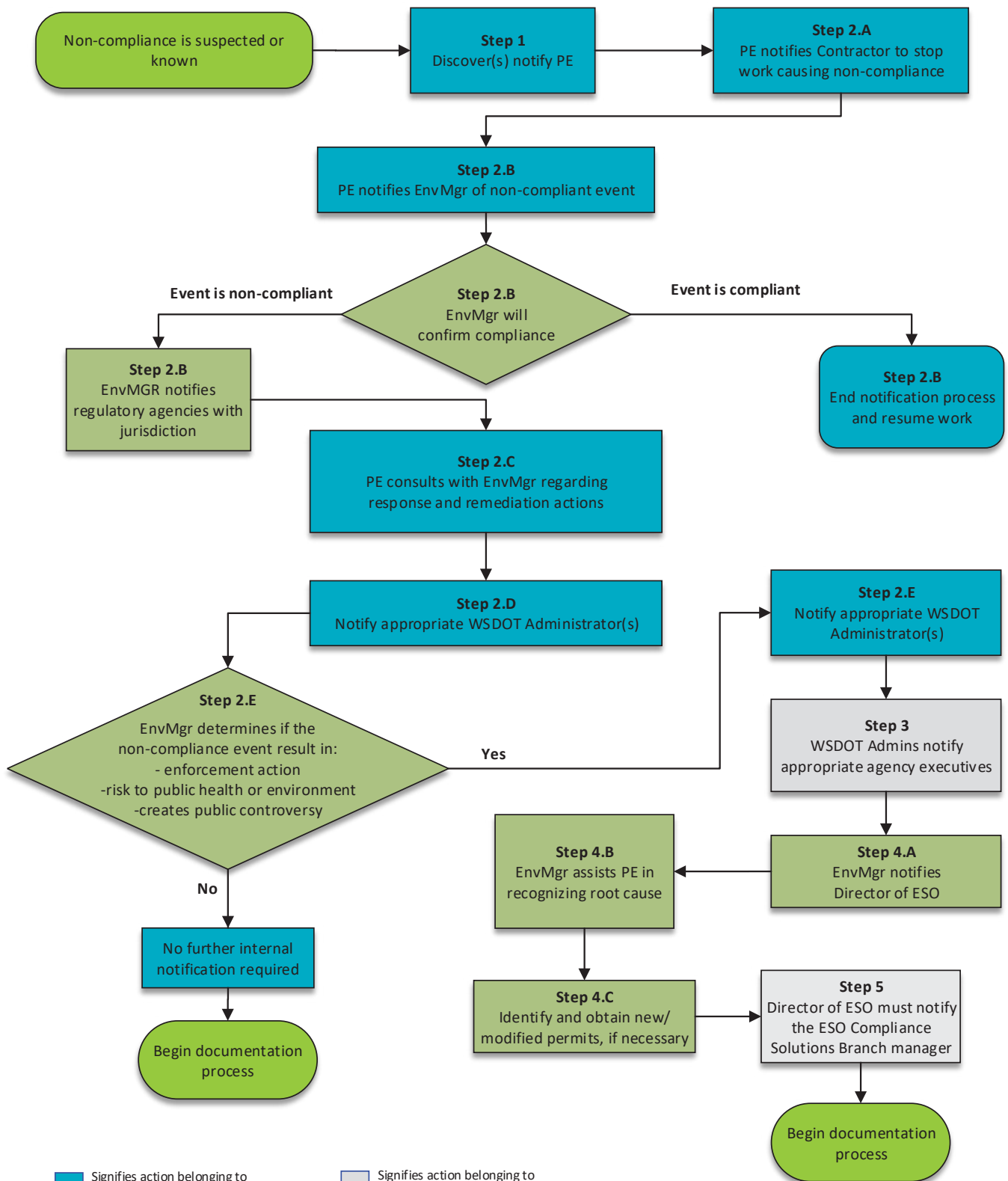
3. The Region Administrator, State Construction Engineer, Megaprograms' Program Administrator, and/or Terminal Engineering Director must notify the appropriate agency executives as warranted by the situation.
4. The Environmental Manager or designee must:
 - Step A** – Notify the Director of Environmental Services Office (ESO) when the non-compliance event:
 - Results in a formal written/verbal enforcement action from a regulatory agency;
 - Presents risk to public health or the environment; or
 - Creates a public controversy.
 - Step B** – Assist the Project Engineer or Assistant Project Engineer by determining if the event is non-compliant, determining the regulatory agencies with jurisdiction, notify all regulatory agencies with jurisdictions, recognizing the underlying cause that resulted in the non-compliance event, and determine how to prevent a reoccurrence of the event. When necessary, consult relevant subject matter experts, Regional/Modal or ESO, to help determine non-compliance.
 - Step C** – In consultation with the Project Engineer or Assistant Project Engineer, identify and obtain new or modified permits, approvals, or agreements as needed to rectify the non-compliance event.
5. The Director of ESO must notify the ESO Compliance Solutions Branch Manager.

Documentation

1. The Project Engineer or Assistant Project Engineer and the Environmental Manager or designee will coordinate and prepare the appropriate responses to all regulatory agencies with jurisdiction. The responses shall include documentation about the non-compliance event and how it was recognized and rectified.
2. The Environmental Manager or designee, with assistance from the Project Engineer or Assistant Project Engineer, will record the details of the non-compliance event in the WSDOT Commitment Tracking System (CTS) (per [RCW 47.85.040](#)), including but not limited to:
 - Project Name and location, plus the name of Project Engineer and Contractor (if involved).
 - Date of event.
 - Location(s) on the project where the non-compliance event occurred.
 - The type of work and the underlying root cause(s) that resulted in the non-compliance event.
 - The environmental, permit(s), agreement(s), law(s), or regulation(s) for which the environmental commitments were not met.
 - Description of how the non-compliance event was recognized, rectified, the lessons learned, and how the event could have been prevented.
 - Which regulatory agencies and staff were notified, including dates of notification and any tracking numbers provided.

- Whether or not regulatory agency staff conducted a site review in response to the notification and issued an inspection report.
 - Whether or not regulatory agency(s) issued enforcement actions (may include but not limited to a notice of violation, monetary penalty, or warning letter indicating failure to correct non-compliance may result in further penalties) in response to the non-compliance event.
3. The ESO in coordination with the Regional/Modal/Megaprograms Environmental Managers will produce a yearly report of all written enforcement actions (may include but not limited to a notice of violation, monetary penalty, or warning letter) received from regulatory agencies to the Washington State Legislature (per [RCW 47.85.040](#)).

Figure 1-2 ECAP Notification and Resolution Process



Signifies action belonging to Project Engineer (or Assistant PE)
 Signifies action belonging to Environmental Manager (or designee)

Signifies action belonging to WSDOT Administrators
 Signifies action belonging to Director of ESO

PE – Project Engineer
 EnvMgr – Environmental Manager

SS 1-07.5(3) Working in Water

When working in water, the Project Engineer must ensure the Contractor complies with the environmental and navigation provisions of the Contract. If the Contract requires the Contractor to obtain special permits, the permits shall be obtained before the Work covered by them has begun. Project Work occurring in water must meet state water quality standards. Monitoring is required to verify the Work achieves compliance with state water quality standards. WSDOT is required by law to report non-compliance with water quality standards to the Department of Ecology. Please follow the Environmental Compliance Assurance Procedures if standards are not achieved (see Section [SS 1-07.5](#)).

(I) Monitoring Water Quality

WSDOT is responsible for monitoring water quality during the Contractor's work in the water. Information is available that helps the Project Engineer successfully apply WSDOT's Monitoring Guidance for In-Water Work and collect a representative sample.

The Project Engineer may need to prepare a Water Quality Monitoring and Protection Plan (WQMPP) if required as a condition of a permit. Check the permits early and prepare the plan in advance to prevent delays in the Contractor conducting the Work. A procedure exists (PRO610-e) that helps the Project Engineer develop the WQMPP. To help the Project Engineer develop the WQMPP, a template can be found on the Stormwater & Water Quality page under the tools, templates, and links tab.

Note that water quality monitoring of work occurring in water is different than monitoring construction stormwater discharging from a construction site. Refer to [Standard Specifications](#) Section 8-01.3 for information about monitoring stormwater discharges from construction sites.

(II) Work Area Isolation/Stream Diversions

A meeting including the Contractor, Project Engineer, and WSDOT Hydraulics Office is required no less than 7 days prior to the start of the fish block net installation and the Contractor is required to notify the Project Engineer 14 calendar days before the meeting. The Project Engineer should include WSDOT Headquarter Hydraulics staff, Project Inspectors, and other stakeholders and permitting agencies to the meeting.

The Contractor will be required to submit a Temporary Stream Diversion (TSD) Plan for WSDOT to review and provide comments. Make sure to include your Region Environmental Permit Coordinator and Biology staff in reviewing the submittal. A TSD reviewer's checklist is available on the WSDOT SharePoint site. Do not allow any TSD Work until all comments on the Contractor's plan are addressed.

(III) Fish Moving Protocols and Standards

The Project Engineer should check project permits to determine whether WSDOT is required to isolate and remove fish from the work area in advance of the Contractor's work. The Project Engineer must coordinate these activities with the WSDOT biologist. Refer to the WSDOT Fish Exclusion Protocols and Standards to learn about the roles and responsibilities for these activities.

(IV) Reporting Monitoring Data

The Project Engineer is responsible for ensuring any monitoring data is submitted to the Washington State Department of Ecology's Federal Permit Coordinator. The Project Engineer should coordinate with Region Environmental Staff to ensure that reporting is done correctly.

(V) Reporting Spills to Water

Work resulting in a spill to water generates multiple reporting obligations. At a minimum, the Project Engineer must follow the Environmental Compliance Assurance Procedure (see Section [SS 1-07.5](#)) to start WSDOT's internal spill response. Also, the Project Engineer must ensure the Contractor enacts the spill response section of their Spill Prevention, Control, and Countermeasures Plan.

Infiltration of Slurry

In accordance with [Standard Specifications](#) Section 8-01.3(1)C, some classifications of shaft drilling slurry wastewater may be disposed of on-site by using upland infiltration. If the Contractor plans to infiltrate these types of slurry wastewater on-site, they must submit a Shaft Drilling Slurry Wastewater Management and Infiltration plan in accordance with Section 8-01.3(1)C. Project specific site conditions, such as a high water table or contaminated soil, may exclude the use of on-site infiltration as a slurry disposal option. The Project Engineer shall review and accept the plan prior to any on-site slurry wastewater infiltration.

Guidelines for reviewing and accepting Contractor plans are as follows:

1. The classification of slurry wastewater to be infiltrated and the Contractor's Shaft Drilling Slurry Wastewater and Infiltration plan both meet the specified requirements in [Standard Specifications](#) Section 8-01.3(1)C.
2. The proposed best management practices (BMPs), controls, or other methods included in the plan are adequate to prevent surface wastewater runoff from leaving the infiltration location. What is "adequate" is site specific and dependent on how much water is being infiltrated and where, some examples may include:
 - The basis for the selection of an infiltration location (e.g., subsurface conditions, soil type, estimated infiltration rate, location of surface water)
 - Barrier BMPs (e.g., sandbags, berms, water bladders, silt fence) used to prevent surface wastewater runoff from leaving the infiltration area.
 - Interceptor BMPs (e.g., trenches, traps, pipe drain to containment area) used to capture wastewater surface runoff before it leaves the infiltration area.
 - A metering device that can be adjusted to discharge water to the ground at a rate that will prevent surface runoff from developing.
 - Digging a temporary infiltration containment area to hold a specific volume of wastewater. Keep in mind that digging will diminish the layer of unsaturated soil (prior to infiltration occurring, there must be a minimum of 5 feet of unsaturated soil between the soil surface where the infiltration will occur and the saturated soil). In addition, using heavy equipment to dig the infiltration containment area may cause soil compaction at the location, thereby lowering the effective infiltration rate.

3. The Contractor's plan includes an adequate level of detail to demonstrate that the planned controls and methods will prevent potential impacts to receiving waters of the State, including groundwater, for example:
 - Containment strategy for wastewater prior to infiltration.
 - Strategy for managing wastewater pH neutralization prior to infiltration.
 - Monitoring strategy to ensure infiltration activity is in compliance.
4. The Contractor's plan identifies a contingency plan that will be implemented immediately if it becomes evident that the controls and methods in place are not adequate to meet the requirements in *Standard Specifications* Section 8-01.3(1)C. Contingency plans must be capable of being implemented immediately, such as:
 - Identifying procedures for rectifying plan deficiencies.
 - Having additional BMP materials on hand.
 - Eliminating the discharge to the ground (stopping infiltration activity).

Responsibility for Environmental Considerations

During the precontract period, the Project Engineer must obtain copies of the final environmental documents and permits related to the project. The Project Engineer must review all Contract commitments in the WSDOT Commitment Files and participate in any Environmental Commitment Meetings. It is important that all key personnel become familiar with the environmental decisions considered during the design process. The Contract documents should include any necessary provisions for protection of the environment and cultural resources, including requirements that the Contractor secure all permits as required by the Contract and abide by regulations of appropriate Federal, State, and local agencies. Any changes in Contract Work that may become necessary must also be reviewed to ensure conformance with the requirements, and commitments established during the environmental design of the project. For more information on Environmental Commitment Meetings please reference the *Environmental Manual* Chapter 590 – Incorporating Environmental Commitments Into Contracts.

SS 1-07.5(6) U.S. Fish and Wildlife Service and National Marine Fisheries Service

Bird Protection Plan

The Project Engineer needs to work closely with the WSDOT biologist on:

- The need to complete monitoring while the Contractor drafts and finalizes the plan
- Notifications and actions by the Contractor as stated in the plan
- Prior removal of any nest

SS 1-07.9 Wages

SS 1-07.9(1) General

The payment of predetermined minimum wages on Federal-aid Contracts is derived from the Davis-Bacon Act of 1931 and is prescribed by 23 USC 113. The payment of predetermined minimum wages on State funded Contracts is partly modeled after the federal Davis-Bacon Act and is prescribed in RCW 39.12. Both acts are intended to protect employees who are performing work on public works contracts from substandard earnings and to preserve local wage standards.

This guidance is intended to assist Project Offices administering construction Contracts understand the laws, regulations and contractual obligations regarding prevailed wages. It is not meant to be a substitute for reading and understanding Federal and State laws and it is not intended to be legal advice. If a labor issue arises that cannot be resolved at the Project Office level, it must be elevated to the Region Construction Office and if necessary, the State Construction Office.

Complaints

Any complaints regarding violations of prevailing wage requirements that are referred to the Project Engineer by employees of the Contractor or subcontractors of any tier will be treated as confidential.

All issues of non-compliance involving either the Contractor or subcontractors must be addressed through the Contractor for resolution and elevated to the regulatory agency if necessary. If no violation is found, the employee making the complaint will be notified by WSDOT staff, however the hiring contractor does not need to be informed.

Federally Funded Contracts

All complaints brought to WSDOT staff by a worker employed on the project must be promptly investigated by the Project Engineer using the Employee Interview Report, DOT Form 424-003. Follow the guidance provided below in the section titled Employee Interviews.

If the Project Engineer finds an apparent violation of prevailing wages, the Contractor must be informed and prompt corrective action must be made. If the hiring firm does not take prompt corrective action, contact the Region Construction Office and if necessary, the State Construction Office.

State Funded Contracts

All complaints brought to WSDOT staff by a worker employed on the project must be promptly investigated by the Project Engineer using certified payrolls that have been submitted through LNI's Prevailing Wage Intents and Affidavits (PWIA) system.

If the Project Engineer finds an apparent violation of prevailing wages, the Contractor must be informed and prompt corrective action must be made. If the hiring firm does not take prompt corrective action, contact the Region Construction Office and if necessary, the State Construction Office. WSDOT staff will also refer the individual to the Worker's Rights section of LNI's website.

Federal Prevailing Wage

Enforcement of Federal Prevailing Wage Provisions

In addition to the requirements of *Standard Specifications* 1-07.9, all Contracts with Federal funding includes the Required Contract Provisions for Federal-aid Construction Contracts (FHWA-1273). These provisions include several requirements, including federal prevailing wages. The Federal prevailing wage requirements included in these provisions are commonly referred to as Davis Bacon and Related Acts (DBRA). It is the Project Engineer's responsibility to monitor and enforce these provisions to the degree necessary to ensure full compliance. To comply with these requirements, the Contractor must:

- Submit weekly certified payrolls to the Project Engineer through LNI's Prevailing Wage Intents and Affidavits (PWIA) system.
- Ensure each subcontractor submits weekly certified payrolls to the Project Engineer through PWIA.
- Post wage rate posters.
- Post the Federal Wage Determination included in the Contract Provisions.
- Allow interviews of employees during working hours by authorized representatives of WSDOT, the Federal Highway Administration, and the U.S. Department of Labor (USDOL).

The Contractor is ultimately responsible for prevailing wage compliance of all subcontractors.

When the Contract is subject to both State and Federal prevailing wage requirements, the Contractor is required to pay the higher of the two rates unless specifically preempted by Federal law. The wage must be verified using the wage listings included in the Contract Provisions.

Federal Prevailing Wage Violations

In the event the Project Engineer identifies an error during an inspection of Federal certified payroll regarding:

- Improper application or nonpayment of Federal prevailing wages
- Improper application of overtime pay
- Other requirements noted in the FHWA-1273s

The Project Engineer will immediately notify the Contractor requesting an explanation or prompt corrective action within a mutually agreed time frame.

If the Project Engineer finds the Contractor has failed to make the corrections or provide an explanation within the time period determined, the matter must be elevated to the Region Construction Office and if necessary, the State Construction Office.

Employee Interviews

The Project Engineer will conduct periodic employee interviews using Employee Interview Report, DOT Form 424-003. The purpose of the interview is to determine, with reasonable certainty, compliance with:

- Federal prevailing wage minimum wage requirements
- Worker classifications
 - The occupation description provided must be included in the Federal Wage Determination included in the Contract Provisions.
- Journeyman to apprentice ratios

If an employee refuses to reveal their rate of pay, make a note in the remarks column. Many employees do not know or may guess the rate. If possible, try to determine the accuracy of the stated rate and note if the employee was uncertain of their rate of pay in the remarks column to reduce the need for follow up interviews.

If either the stated rate (from the employee) or the record rate (from the certified payroll) is below the minimum Federal or State prevailed rate, an investigation by the Project Engineer must be conducted. The investigation may be as simple as a follow up interview with the employee, or a more in depth investigation may result in a requirement for a supplemental payroll. In any event, the matter must be resolved so that the employee interview report describes what corrective action was taken to ensure that the employee has been paid the minimum prevailing wage rate. The corrective action is reported under remarks on the form or by an attached memo if more space is needed. All discrepancies found must be resolved.

The frequency and extent of these interviews will be sufficient to ensure a representative sampling has been made for all classes of workers employed on the Contract. A minimum sampling includes employees of the Contractor and a random sampling of 10% of all subcontractors. The interviews should be made with such frequency as may be necessary to ensure compliance.

Department of Labor Investigation

USDOL may investigate compliance with the DBRA and the Contract Work Hours and Safety Standard Act (CWHSSA) when conducting investigations relative to compliance with the Fair Labor Standards Act or other Acts under its enforcement authority. Investigative action taken by the USDOL with respect to DBRA and CWHSSA do not, in any way, change the degree of authority or responsibility of WSDOT for enforcement of these Acts. Any actions taken by USDOL should be considered a service we may use to assist in our enforcement activities but does not relieve WSDOT of our responsibility to fully investigate all potential violations and to apply such sanctions that are deemed applicable under our enforcement authority to ensure compliance.

Request for Authorization of Additional Classification and Rate

USDOL issues Wage Determinations under the Davis-Bacon Act (DBA) using available statistical data on prevailing wages and benefits paid in a specific locality. On occasion, the data does not contain sufficient information to issue rates for a particular classification of worker needed in the performance of the Contract. Because of this, DBA provisions contain a conformance procedure for the purpose of establishing an enforceable wage and benefit rate for missing classifications ([Standard Specifications](#) Section 1-07.9(1) and FHWA-1273).

Contractors are responsible for determining the appropriate staffing necessary to perform Contract Work. Contractors are also responsible for complying with the minimum wage and benefits requirements for each classification performing work on the Contract. If a classification considered necessary by the Contractor for performance of the work is not listed on the applicable Wage Determination, the Contractor must initiate a request for approval of an additional classification along with the proposed wage and benefit rates for that classification.

The Contractor initiates the request by preparing form SF1444, Request for Authorization of Additional Classification and Rate, at the time of employment of the unlisted classification. (Reference FAR 22.406-3 and 52.222-6(b), and [Title 29 CFR Part 5](#), Section 5.5(a)). The Contractor completes blocks 2 through 15 on the form. Standard Form 1444 is readily available via the internet and is accessible by going to www.gsa.gov/portal/forms/type/sf, and searching by the form number.

The Contractor submits the request to the State Construction Office through the Project Office. The Project Office will review the request and if applicable, provide backup data showing that the requested classification(s) have been prevailed in other counties within the state. The Project Office will also need to describe the work being performed and verify that the duties performed, as described in the request, are not covered by any other classification(s). This documentation, along with the request, will be forwarded from the Project Office, through the Region Construction Office, to the State Construction Office.

The State Construction Office reviews the request for completeness and signs the form designating the Contracting Agency's concurrence or disagreement with the Contractor's proposal. If the Project Engineer or the State Construction Office indicates disagreement with the Contractor's proposal, a statement must be attached supporting a recommendation for different rates. The State Construction Office then submits the proposal with all attachments to USDOL for approval. The Contractor is obligated to pay the proposed wage and benefit rates during the request for determination and pending a formal response from USDOL.

When a determination has been received from USDOL, the Contractor is obligated to pay that determined wage and benefits. If the Contractor has underpaid the employee(s), they are required to make back payment and re-submit corrected certified payrolls.

State Prevailing Wage

Enforcement of State Prevailing Wage Provisions

Except as noted for missing Statements of Intent, routine monthly progress payments made to the Contractor for work completed should not be deferred for enforcement of State prevailing wage laws.

State Prevailing Wage Violations

The State Construction Office will refer matters to LNI for further investigation that may be appropriate. If LNI chooses to investigate, they will establish the amount of unpaid wages due to employees.

In order to recover these wages for employees, LNI may choose to file a claim against the Contractor's retainage by requesting that the Project Engineer withhold funds from monthly progress estimates for work completed by the Contractor.

Refer to section SS 1-09.9, Withholding of Payments, for more information.

Owner-Operators of Trucks and Other Hauling Equipment

The FHWA neither defines the term “owner-operator” nor uses it in regulation. The FHWA regulates “employers” and “drivers.” An owner-operator may act as both an employer and a driver at certain times or as a driver for another employer at other times depending on contractual arrangements and operational structure (Federal Register/Vol. 62, No. 65/Friday, April 4, 1997/Rules and Regulations).

Bona fide owner-operators of trucks and similar construction hauling equipment, who are independent Contractors, are not subject to enforcement of Contract labor standard provisions of the Davis Bacon Act and/or [RCW 39.12](#). Owner-operators of other non-hauling type equipment (dozers, scrapers, backhoes, etc.) are considered subcontractors. If they are an employee of the Contractor or a subcontractor, they must appear on that Contractor’s payroll as an employee, not as an owner operator.

A ruling by USDOL states in effect that:

Because owner-operators usually work under payment arrangements based on a unit price (e.g., so much per cubic yard hauled) rather than on an actual truck or equipment rental rate plus the driver’s (or operator’s) rate, and, because of difficulties that have arisen with respect to securing adequate data on rental arrangements in order to determine whether Contract minimum rates are being paid, therefore, as a matter of administrative policy, the provisions of Davis-Bacon and related acts will not be applied to bona fide owner-operators of trucks or other similar construction equipment used exclusively for hauling and who are independent Contractors.

Certified payrolls for owner-operators shall be in accordance with the FHWA-1273. The certified payroll only needs to show the owner-operator’s name, the week ending date, and if any work was performed. This does not apply to owner-operators of other equipment such as bulldozers, backhoes, cranes, welding machines, etc. These other owner-operators are considered to be operators and subject to labor standard provisions.

If the owner-operator employs additional drivers, all such employees shall be listed on the payroll with a complete breakdown of hours worked, hourly rate paid, and all other required information according to the FHWA-1273.

Though owner-operators who drive their own trucks may not be subject to prevailed wages as defined in the Davis Bacon Act and [RCW 39.12](#), they are required under State statute to submit Statement of Intents, Affidavit of Wages Paid, and certified payrolls. The Statement of Intent will identify if the company filed as an owner-operator. There is no exception to this requirement.

SS 1-07.9(2) Posting Notices

Jobsite posters are required on all Contracts administered by WSDOT. Funding on each of these jobs will determine which posters are required. Each poster must be visible and readily accessible to employees. See *Standard Specifications 1-07.9(2) Posting Notices* for each poster that is required.

In addition to the required job site posters, the following publications will be made available and readily accessible to employees:

- A copy of the approved Statement of Intent to Pay Prevailing Wages for the Contractor and each subcontractor and lower-tier subcontractor is required in accordance with [RCW 39.12.020](#)
- A copy of the Contractor's company EEO policy. In addition, Federally funded Contracts requires a copy of each subcontractor's and lower-tier subcontractor's EEO policy.
- A copy of prevailing wage rates from the Contract Provisions
- Emergency phone numbers for Safety and EEO officers for the Contractor and each Subcontractor and lower-tier contractor.

Fraud Notice Poster

Fraud Notice, FHWA-1022, Title 18 USC 1020, must be displayed on all Federally funded projects during the course of the work. This notice points out the consequences of any impropriety on the part of any Contractor or WSDOT employee working on the project.

Federal Prevailing Wage Rates

The Contractor must post the Federal Wage Determination, consisting of the wage listing included in the Contract Provisions, in a prominent place where it can easily be seen by workers. Standard posters (form WH 1321) are also to be posted and are available to the Region from the Support Services Supervisor, FHWA, Olympia, Washington.

SS 1-07.9(3) Apprentice Utilization

Apprentice Participation Special Provision – General

The purpose of the state apprenticeship program is to promote trade careers and create a workforce that will continue to build and maintain our infrastructure. Contracts with an engineer's estimate of \$2 million or more require that 15.0% or more of project labor hours be performed by apprentices, regardless of the award amount, delivery method or funding source.

Only Apprentices enrolled in an apprenticeship program approved by the Washington State Apprenticeship Council may be counted towards the 15% Contract requirement. Apprentice registration can be verified through Labor and Industries (LNI) Apprentice Registration and Tracking System (ARTS) and is verified when reporting apprentices on submitted certified payrolls in LNI's Prevailing Wage Intents and Affidavits (PWIA) system.

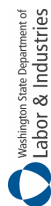
Note: An Apprenticeship Reciprocal Agreement Between Washington, Oregon, and Montana allows for apprentices from these states to be recognized and counted towards the Apprentice Utilization Requirement. Only Washington State registered apprentices are validated through ARTS when entered on certified payrolls.

The responsibility to meet the Apprentice Utilization Requirement ultimately falls on the Contractor, however, all firms who perform work subject to prevailing wage laws are required to submit certified payrolls and the hours will be counted towards the total project labor hours. Firms that may be exempt from subcontracting based on exceptions listed in 1-08.1 are still required to submit certified payrolls if they are performing work covered under prevailing wage laws, therefore, their hours will count towards total project labor hours. For example, a ready-mix concrete truck delivering material to the project would not be considered a subcontractor by Contract definitions, however since the work is determined by LNI to be covered under prevailing wage laws, the concrete supplier is required to submit certified payrolls in PWIA for work performed on the project and those labor hours will be included in the Apprentice Utilization calculation.

The Project Engineer must verify if the Contractor has had disciplinary action taken against them prior to the Preconstruction Conference by reviewing the Strike Letters Tracking Sheet found on the Construction Office SharePoint site. The Apprentice Utilization Requirement must be an agenda item at the Preconstruction Conference and any concerns regarding past performance should be addressed. Discuss Apprentice Utilization during weekly meetings if it appears the Contractor is likely to fall short of meeting the requirement.

PWIA does not allow the user – Contractor nor Awarding Agency - to exclude any hours submitted on certified payrolls from the Apprentice Utilization calculation. If a firm has supervisors, foremen or superintendents performing work covered under prevailing wage laws as defined in [WAC 296-127-015](#), those hours must be reported on certified payroll and will be counted towards the total project labor hours. Determinations as to whether workers are covered under prevailing wage laws are based on the scope of work actually performed on the project rather than the individuals' title. Foreman/supervisors are only exempt from prevailing wage laws if they are truly supervising and not performing laborious work – see Labor Hours Defined for Apprentice Utilization in Figure 1-2.

Figure 1-3 Labor Hours Defined for Apprentices Utilization



LABOR HOURS DEFINED FOR APPRENTICE UTILIZATION

APPRENTICE UTILIZATION	PREVAILING WAGE
<p>RCW 39.04.310 – DEFINITION OF LABOR HOURS</p> <p>The total hours of workers receiving an hourly wage who are directly employed upon the public works project. "Labor hours" includes hours performed by workers employed by the contractor and all subcontractors working on the project. "Labor hours" does not include hours worked by foremen, superintendents, owners, and workers who are not subject to prevailing wage requirements.</p>	<p>WAC 296-127-015 - SUPERVISORS</p> <p>Determinations as to whether individuals are workers, laborers, or mechanics are based on the scope of work actually performed by the individuals, rather than the title of their occupations.</p> <p>(1) Where additional supervisory duties are required of workers, laborers, or mechanics by statute or regulation, the industrial statistician shall establish a rate of pay for a work classification to be called "journey level in charge." These rates shall be published in the semiannual prevailing wage publication.</p> <p>(2) Supervisors (e.g., foremen, general foremen, superintendents, etc.,) are entitled to receive at least the journey level prevailing rate of wage for performing manual or physical labor:</p> <p>(a) For each hour spent in the performance of manual or physical labor if it is for more than twenty percent but less than fifty percent of their hours worked on a public works project during any given week.</p> <p>(b) For all hours worked in any given week if they perform manual or physical labor for fifty percent or more of their hours worked on a public works project during such week.</p> <p>(3) If supervisors subject to the journey level prevailing wage rate are paid a salary, the compensation (salary divided by number of hours worked) must be equal to or greater than the prevailing wage rate for the type of work performed.</p>
<p>RCW 39.04.310 – DEFINITION OF LABOR HOURS</p> <p>The total hours of workers receiving an hourly wage who are directly employed upon the public works project. "Labor hours" includes hours performed by workers employed by the contractor and all subcontractors working on the project. "Labor hours" does not include hours worked by foremen, superintendents, owners, and workers who are not subject to prevailing wage requirements.</p>	<p>WAC 296-127-026 – OWNERS</p> <p>The prevailing wage requirements of chapter 39.12 RCW do not apply to:</p> <p>(1) Sole owners and their spouses.</p> <p>(2) Any partner who owns at least thirty percent of a partnership.</p> <p>(3) The president, vice president and treasurer of a corporation if each one owns at least thirty percent of the corporation.</p> <p>(4) Workers regularly employed on monthly or per diem salary by the state or any political subdivision created by its laws.</p>
<p>RCW 39.04.310 – DEFINITION OF LABOR HOURS</p> <p>The total hours of workers receiving an hourly wage who are directly employed upon the public works project. "Labor hours" includes hours performed by workers employed by the contractor and all subcontractors working on the project. "Labor hours" does not include hours worked by foremen, superintendents, owners, and workers who are not subject to prevailing wage requirements.</p>	<p>SYNOPSIS FOR SUPERVISORS</p> <p>A supervisor (e.g., foremen, general foremen, superintendents, etc.) is subject to the prevailing wage requirements when they perform more than 20% of their week performing manual/physical labor on the project.</p> <p>If the supervisor performs trades work between 20% and 50% of their time on public works projects during the week, they must be paid prevailing wages for each hour worked performing trades work.</p> <p>These hours must be reported to L&I and also be included in the total labor hours considered for apprentice utilization.</p> <p>If more than 50% of the supervisor's time is spent performing trades work on public works projects during the week, all the supervisor's hours for the week must be paid prevailing wages.</p> <p>These hours must be reported to L&I and also be included in the total labor hours considered for apprentice utilization.</p>
<p>RCW 39.04.310 – DEFINITION OF LABOR HOURS</p> <p>The total hours of workers receiving an hourly wage who are directly employed upon the public works project. "Labor hours" includes hours performed by workers employed by the contractor and all subcontractors working on the project. "Labor hours" does not include hours worked by foremen, superintendents, owners, and workers who are not subject to prevailing wage requirements.</p>	<p>SYNOPSIS FOR OWNERS</p> <p>An owner/operator that owns less than 30% of the business is subject to the prevailing wage requirements.</p> <p>These hours must be reported to L&I and also be included in the total labor hours considered for apprentice utilization.</p> <p style="text-align: center;">Example</p> <p>A corporation shares ownership between 4 individuals:</p> <ul style="list-style-type: none"> • President (CEO) 30% • Vice President (COO) 30% • Treasurer (CFO) 30% • Managing Director 10% <p>The company begins working on a public works project and needs the Managing Director to join the project to provide additional labor help.</p> <p>The Managing Director is treated as another worker for prevailing wage requirements. All of the Managing Director's hours must be reported to L&I and also be included in the total labor hours considered for apprentice utilization.</p>

State Apprenticeship and Federal Training Requirements

The state apprenticeship requirement is separate from the Federal training requirement, and both could be required on a project if:

- It is federally funded, and
- Training goals are assigned by OECR (Federal training goals are assigned as an hourly requirement).

If both requirements are included in the Contract, Apprentices that have been approved to count towards the Federal training requirement may also be counted towards the state apprenticeship requirement if the Apprentice is registered in a program that is approved through the Washington State Apprenticeship Council. An Apprentice that is registered in an approved program by the Washington State Apprenticeship Council does not guarantee approval for the Federal trainee requirement. See CM 1-07.11 for information regarding the Federal trainee requirements.

Apprentice Utilization Plan

Within 30 days of Contract execution, the Contractor must submit an Apprentice Utilization Plan (DOT Form 424-004) to the Project Engineer using PWIA. Review the plan to determine if it aligns with the project Work and includes firms that are expected to perform work on the project. The intent is to make sure all labor hours are accounted for in the plan and the requisite apprentice hours will be provided. The Apprentice Utilization Plan is an estimate and the Project Engineer must monitor Apprentice Utilization throughout the life of the project to ensure the Contractor is on track to meet the Contract requirement. If at any time it appears that the Apprentice Utilization Plan differs from actual Work that is performed, the Project Engineer may require the Contractor to update their Apprentice Utilization Plan and resubmit to PWIA. If Work changes significantly during the project, or the attainment is trending towards not meeting the requirement, request an updated plan to include the new scope of work, additional subcontractors, and how the Contractor intends to meet the 15.0% requirement.

If the Apprentice Utilization Plan indicates the Contractor will not meet the utilization requirements, a Good Faith Effort (GFE) must be submitted with the plan in PWIA. The GFE must meet the requirements of the Contract indicating the reasons why the Contractor believes they will not meet the utilization requirement. The GFE will be reviewed by the Project Engineer noting any concerns with the GFE to-date.

Submittal of a GFE with the Apprentice Utilization Plan does not relieve the Contractor of the responsibility to solicit Apprentices or make other good faith efforts during the life of the project. The Contractor must submit an updated and final GFE at the end of the project showing good faith efforts were made throughout the project.

Apprenticeship Reporting

Apprentice reporting occurs through LNIs PWIA system via certified payrolls and affidavits of wages paid.

Certified payroll submission is a requirement of [RCW 39.12.120](#) and must be submitted each week by the Contractor and all firms working on the project who are subject to prevailing wage laws. Contracts with an Apprentice Utilization Requirement will be marked as such in PWIA by the State Construction Office when it is set up.

The Project Engineer must verify certified payrolls are submitted per SS 1-07.9(5) and monitor Apprentice utilization at least monthly. If during monthly monitoring the Apprentice Utilization on the project falls below 15.0%, communicate with the Contractor the need for documentation demonstrating the efforts made to solicit Apprentices as part of the GFE.

After all "Affidavit of Prevailing Wages Paid" have been provided in accordance with SS 1-07.9(5)B, the Apprentice Utilization needs to be checked based on the affidavits.

Compliance

There are two ways the Contractor can meet the Apprentice Utilization Requirement:

- Through project labor hours alone, or
- Approval of a submitted GFE in combination with project labor hours.

Apprentice Utilization is calculated automatically in PWIA. Utilization is calculated as a percentage of the total hours worked by Apprentices when compared to the total project labor hours (both Apprentices and journey level workers). Project labor hours are recorded on certified payrolls and must include all labor hours that are covered under state prevailing wage laws. The Contractor must meet the Apprentice Utilization Requirement as shown in PWIA using both certified payrolls and affidavits of wages paid calculations. The labor hours reported via certified payrolls should match those listed on the affidavits, but there may be occasions where they are different. Both should be checked for compliance and if the Apprentice Utilization Requirement is not met for either the Contractor must submit a GFE.

Good Faith Effort (GFE)

If the Contractor does not meet the Apprentice Utilization Requirement through labor hours alone based on certified payrolls, they are required to submit a GFE to the Project Engineer using PWIA. The Project Engineer will review the GFE for compliance with the Contract requirements and either accept or reject it. GFEs must be submitted after Substantial Completion, and no later than 30 days after Physical Completion. If the Contractor does not submit a first draft of their GFE within 30 days of physical completion, the Project Engineer must consider the Contractor non-compliant.

If the Contractor does not meet the Apprentice Utilization Requirement based on the affidavit of wages paid, and the utilization based on affidavits is less than that of the utilization based on certified payrolls, they are required to submit a GFE to the Project Engineer using PWIA for the lower Apprentice Utilization.

All correspondence regarding Apprentice utilization must be uploaded into PWIA.

The Contractor must document why they did not meet the apprenticeship requirement in their GFE and must provide backup documentation to include:

- Correspondence between labor organizations or Apprentice training centers and the Contractor or subcontractor seeking Apprentices at least quarterly. The correspondence must include requests for Apprentices and the responses received from the organization that was contacted.

The Project Engineer may approve a GFE without quarterly correspondence if monthly monitoring consistently showed the Contractor was meeting the requirement, but unforeseen changes towards the end of the project caused the utilization to fall under the required 15.0%.

And at least one of the following:

- Documentation and verification of impacts of DBE, Special Training or TERO goals had on the project.
- Documentation of efforts the Contractor made to solicit Apprentices and verification the expectations were communicated to subcontractors and lower tier subcontractors.
- Any other documentation and verification of other obstacles the Contractor may have faced to hinder their success to achieve the apprenticeship requirement.

The Project Engineer is responsible for reviewing and either approving or rejecting the GFE as they are engaged with the Contractor and have the information to determine if a good faith effort to meet the goal through labor hours was made. The Project Engineer may allow revisions to the submitted GFE by the Contractor.

Questions to consider when reviewing GFEs:

- Did the Contractor solicit Apprentices through multiple Apprentice programs and labor organizations?
- Did the Contractor begin looking for Apprentices during beginning stages of work and continue throughout the project duration?
- Did the Contractor follow up with Apprentice programs and labor organizations?
- Were there extenuating circumstances that you believe caused the shortfall?

The Project Engineer must submit all correspondence into PWIA for review by the State Construction Office and LNI. If the Contractor does not submit a GFE or the Project Engineer rejects the submitted GFE, the Contractor will be subject to disciplinary actions as allowed under [WAC 468-16-180](#).

If the GFE is rejected or if it is known the Contractor will not be submitting a GFE, notify the Assistant State Construction Engineer (ASCE) and the Construction Administration Specialist at the State Construction Office.

The rejection notification needs to include a copy of the Contractor's GFE and the reason for not approving it. Notification of either acceptance or rejection must be in letter format and uploaded into PWIA.

Joint Venture (JV) Contractors are comprised of two or more firms that act as a single Contractor. Each partner in a JV will receive a strike letter of non-compliance in the event apprentice labor hours are not met and a submitted GFE is not approved or received.

Disciplinary Measures for Non-Compliance

WSDOT follows a three-strike disciplinary program for Contractors that fail to meet the Apprentice Utilization Requirement. A tracking sheet of Contractors with active letters on file can be found on the Construction Office SharePoint site.

The first and second offense in not meeting the Apprenticeship Utilization Requirement requires that a letter be sent to the Contractor informing them that they failed to meet the requirement of the Contract Specifications for apprenticeship. The letter will be sent digitally from the State Construction Office to the Contractor, with a copy of the letter to the Project Engineer and the Contract Ad and Award Office.

The letter will contain the following information at a minimum:

- Contractor name
- Contact person
- Contract number
- Contract title
- Percentage of Apprentice labor hours required
- Actual percentage of labor hours performed by Apprentices
- Reason for the rejected GFE or statement that GFE documentation was not submitted
- Notification that the Project Engineer will note the missed requirement in the Prime Contractors Performance Report

If second offense, the letter will provide the date the first letter was sent and inform the Contractor of the second offense in not meeting the Apprenticeship Utilization Requirements on a Contract.

Notification that other active Contracts with WSDOT at the time of offense will require the Contractor to submit a Plan to the State Construction Office within 30 days of receipt of the letter. Failure to comply will lead to actions taken under [WAC 468-16-180\(3\)](#) and (4). The Plan will include the following at a minimum:

- Each active contract where the firm is the Contractor and Apprenticeship is a requirement of the contract.
- The percentage of Apprentice labor hours achieved at time of plan submittal
- Provide the dates the Contracts were awarded and provide the substantial, or physical dates if those dates have been received
- Provide, in Contractors best judgment at the time of plan submittal if they will meet the percentage of Apprentice labor hours required in the Contract
- If they do not plan to meet Apprentice labor hours, what course of action will they pursue (such as GFE submittal) to meet apprenticeship attainment requirements
- Notice that future letters of non-compliance may result in action being taken as allowed under [WAC 468-16-180\(3\)](#) and (4)

Inform the Contractor that this first offense will stay in effect until the Contractor has either:

- Met Apprentice attainment requirements on three consecutive completed Contracts, or
- Two calendar years have passed

If after the second letter to the Contractor, they fail to meet apprenticeship requirements before they have successfully completed three Contracts meeting the Apprenticeship Utilization Requirement, a third letter will be sent to the Contractor.

The letter will contain the following information at a minimum:

- Contractor name
- Contact person
- Contract number
- Contract title
- Percentage of Apprentice labor hours required
- Actual percentage of labor hours performed by Apprentices

- Reason for a rejected GFE or failure of a GFE to be submitted
- Notification that the Project Engineer will note the missed requirement in the Prime Contractors Performance Report
- Notification that this is the third offense letter on not meeting the Apprenticeship Utilization Requirements (provide the dates the first and second offense letter were sent)

Should the Contractor have other active Contracts with WSDOT at the time of the third offense letter, then the letter will require the Contractor submit a Plan to the State Construction Office, within 30 days of receipt of the letter. Failure to comply will lead to further actions taken under [WAC 468-16-180\(3\)\(e\)](#). The requirements of the Plan submittal are the same as those listed in the first offense letter.

Notification that the Contractor is suspended of qualifications for a period of six months as allowed under [WAC 468-16-180\(3\)\(f\)](#) and (4)(b) starting on date established by the State Construction Office. After the suspension period, the next offense will be a first offense. Inform that a third offense within two years of previous suspension, prequalification may be revoked as allowed under [WAC 468-16-190](#) Revocation of qualifications.

Notification that if additional non-compliance occurs during the suspension period, the State Construction Office will determine further warranted action.

SS 1-07.9(5) Required Documents

The requirements for the Contractor's compliance with prevailing wages are included in [Standard Specifications](#) Section 1-07.9.

State prevailing wage rates are included in the Contract Provisions and are verified through the PWIA system. Effective January 1, 2020, all certified payrolls, Statement of Intent to Pay Prevailing Wages (Intents) and Affidavits of Wages Paid (Affidavits) are required to be submitted to the Project Engineer through LNI's PWIA system.

The State Construction Office will enter each Contract into PWIA after award and before execution. The funding source and apprenticeship requirements will be selected at the time the Contract is established in PWIA.

Joint Venture (JV) partnerships are made of two or more firms to create a Contractor, holding a singular contract with WSDOT. These firms may still operate their accounting independently and therefore file their required documentation in PWIA separately. The PWIA structure of contractors and firms does not determine the relationship between these firms in the Contract.

Statement of Intent

Every Contractor and subcontractor performing Work on a public works contract must submit a Statement of Intent to pay prevailing wages to LNI for approval. Separate Intents are required for each Request to Sublet submitted on the project. Hiring contractors are required to file an Intent if they hire a lower-tier subcontractor subject to prevailing wages (even if the hiring contractor is not subjected to prevailing wages).

The Project Office will verify Intents are filed and approved by LNI using PWIA.

Payments cannot be made to the Contractor for work completed by the Contractor, or for portions of work completed by subcontractors, fabricators or suppliers, whom LNI have determined are covered by State prevailing wage laws, prior to the Project Engineer's verification of the approved Intent for the entity performing the work.

Fabricators or suppliers of material whom LNI has determined as being covered by State prevailing wage laws will require an Intent, certified payrolls, and Affidavit.

LNI approves submitted Intents, certifying that each firm meet the requirements of State laws. Submittal and approval dates of the Intents are housed and visible in PWIA.

There may be instances where the Contractor or subcontractors of any tier may be performing a scope of work they believe is not covered under prevailing wage laws. LNI is the determining regulatory agency in these issues and must be consulted if there are questions regarding scope of work and prevailing wage laws. If a question arises regarding whether a scope of work is prevailed work, the Contractor must email LNI at PW1@lni.wa.gov.

If LNI determines the work is not a covered scope of work the firm would not be required to file an Intent, certified payrolls, or Affidavit, unless the firm has hired a lower-tier firm that is performing a scope of work that is covered under prevailing wage laws. The response from LNI must be attached to the RTS for the firm performing the work.

Affidavit of Wages Paid

Prior to Contract Completion, the Contractor and all subcontractors must submit an Affidavit of Wages Paid to the Project Engineer using PWIA. The form may be submitted earlier by a subcontractor of any tier if that firm's work is completed prior to completion of the Contract. All Affidavits must be approved by LNI prior to Contract Completion.

In the event a first-tier or lower-tier subcontractor cannot or will not provide a completed Affidavit, the Contractor should consult with LNI to seek assistance in filing an Affidavit "On Behalf Of" these subcontractors. Failure to provide all required Affidavits for all contractors who worked on the project will result in the withholding of Contract Completion, the Notice of Completion and the release of retainage or bond. PWIA will display those Contractors who have not submitted their Affidavit.

Affidavits are required for each fabricator or supplier who was also covered by State prevailing wages and are required for every firm that submitted an Intent in order for LNI to approve the Notice of Completion allowing release of retainage or retainage bond.

Certified Payroll

Certified payroll must be submitted to the Project Engineer through PWIA for the Contractor, and all subcontractors performing work on the project, regardless of funding source or delivery method.

Certified payrolls are required from the time each firm begins performing Work until the time the Affidavit is visible in PWIA, or until each contractor has identified their last certified payroll has been submitted. PWIA will indicate if each affidavit has been approved by LNI. The last working day is included on the Affidavit, and the Project Office should compare this date to the last certified payroll submitted.

A tracking sheet is required to document when Project Office staff verify that certified payrolls are received through PWIA. The frequency of verification depends on the funding source of the project. Weekly verification is required for federally funded projects, while monthly verification is required for state funded contracts. Notifications for missing payrolls are required:

- State funded contracts - Once each month after firm begins work
- Federally funded contracts - Within 60 days for each week work was performed

The tracking sheet will indicate that all active Contracts have been checked for late or missing certified payrolls. A tracking sheet is available on the Construction Office SharePoint site for use. Other tracking sheets may be used, provided they contain the same information. Verification of federal wages paid can be recorded on the same tracking sheet or may be tracked separately.

Project Offices can use any method to notify the Contractor of missing certified payrolls including (but not limited to):

- Notification tool in PWIA
- Sent emails
- Notifications during weekly meetings (include this action in the meeting minutes)
- Other methods as allowed by the Project Engineer

Request for missing certified payrolls made outside of PWIA should be kept in a single location for easy retrieval.

Project Office staff must ensure payrolls are not printed and stored on computers or as paper copies due to privacy laws.

State funded projects require a minimum of monthly submittals, however, each week must be reported.

State certified payroll requirements:

- Monthly submittals
- Affirmation Statement is electronically signed by the Contractor
- LNI will verify the wage rate based on the prevailed wage at time of bid opening for design bid build contracts or on the date the Contract was awarded for design build contracts. LNI will, however, allow the Contractor to enter a rate lower than the minimum. For additional information on Design-Build prevailing wages, see Construction Bulletin #2024-01, State Prevailing Wage Effective Date for WSDOT Design-Build Projects.
- Required for every week, including weeks that no work was performed

Contracts with Federal funds require weekly submittals. Further review of the payroll will be required to ensure the Federal prevailed wage rate is met using the Wage Determination included in the Contract Special Provisions.

Federally certified payroll requirements:

- Weekly submittals
- No leniency on late submittals
- Statement of Compliance meeting CFR requirement is electronically signed by the Contractor
- PWIA will redact employee addresses and display the last four digits of the employees SSN
- Wages must be verified using the Wage Determination included in the Contract Provisions (PWIA will not verify)
- Required for every week work was performed
- Enforcement of all Federal requirements will remain WSDOT responsibility

The Project Engineer will consider certified payrolls received within 45 days timely for each week work was performed. Untimely submittals are subject to possible sanctions as further discussed below in this section.

Certified Payroll Inspection – Federal Funded Projects

The FHWA-1273 requires the Contractor, subcontractors, agents or lower-tier subcontractors to submit certified payrolls for each week in which any Contract work is performed on the project for projects funded with any amount of federal dollars. These payrolls are to be checked by the Project Engineer to ensure that the required information has been included, is correct, and employees have been paid correctly. The Project Engineer should accomplish this by making a complete check of the first payroll submitted on the project by each Contractor, subcontractor, and lower-tier subcontractors. Once satisfied the first payrolls are correctly prepared, subsequent payrolls may be accepted by a random spot checking of approximately 10 percent of the payrolls submitted.

If errors are found during any spot-checking of the payrolls, a more complete or thorough check should occur until the Project Engineer is satisfied that the Contractor is in compliance. Monitoring can then be returned to approximately 10 percent of certified payrolls submitted. The FHWA-1273 identifies the required items to be included in certified payrolls.

The first complete check of payroll submitted should confirm that the following items are present:

- The Contract number, title, and payroll period
- The name of the employer, identifying the Contractor, subcontractor, or lower-tier subcontractor, must be shown.
- A specific minimum wage rate is to be identified for each worker. The *Standard Specifications* require the Contractor to use work descriptions for the labor classifications that are included in the Contract Provisions identifying federal wage rates, and are to be used on all payrolls. [Standard Specifications](#) Section 1-07.9 permits the Contractor to use an alternative method to identify or correlate the labor descriptions used, if approved by the Project Engineer, in order that they may be compared to the Contract Provisions.

- Each employee's unique identification number (i.e., last four digits of the employee's Social Security Number). The payroll shall not include the full Social Security Number or home address of the employee; however, the Contractor or subcontractor shall maintain this information on file and provide this information upon request by the Agency.
- Payroll deductions must conform to Section IV of the FHWA-1273. If payroll deductions are questionable, contact the State Construction Office for assistance.
- Every laborer or mechanic working on the Contract must be classified for the proper minimum prevailing wage in accordance with the designated Wage Determination. If a classification of worker is used that does not appear in the Contract Special Provisions, *Standard Specifications* Section 1-07.9 requires the Contractor to contact the USDOL (through the Project Engineer) for a determination of the proper wage rate. The FHWA-1273 provides a method for resolving this.
- Each payroll submitted shall be accompanied by a Statement of Compliance, signed electronically by the Contractor or subcontractor or their agent who pays or supervises the payment of the persons employed under the Contract, certifying the requirements listed in item (2), under part 3 of the FHWA-1273.

It is the Contractors responsibility to ensure all subcontractors and lower-tier subcontractors complete and submit their certified payrolls to the Project Engineer using PWIA. Any payrolls which do not comply fully with the requirements outlined above must be corrected by a supplemental payroll. This is done by amending the original payroll through PWIA.

Federally funded projects require weekly submittal of certified payrolls for weeks work was performed. If the Contractor is unable to submit their payroll electronically using PWIA, they must submit the certified payrolls directly to the Project Office. When accepting these payrolls, the Project Office should request the Contractor use a unique employee identification number that is not the last four digits of the SSN. In addition, the Contractor must still submit the certified payrolls to PWIA to remain compliant with State law.

Non-compliance or non-submittal could result in the Project Engineer withholding an appropriate portion of payment (see section SS 1-09.9). The Project Engineer will evaluate untimely submittals to determine if withholding a portion of payment is appropriate for habitually late submittals (see Section SS 1-09.9). Certified payrolls received in excess of 90 days past due will require withholding or documentation showing the reason payments were not withheld.

Other Requirements

A Contractor or subcontractor may enter into an agreement with their employees to work 10 hours per day without having to pay overtime. This is provided that no employee works more than 4 calendar days a week. The 4-10 agreement must be uploaded into PWIA and will be verified by LNI. When working on Force Account copies of the 4-10 agreements will need to be verified by the Project Office if working 10 hour days to ensure proper payment. This can be done by either sending the agreements directly to the Project Office or uploading them in the FILES tab in PWIA.

LNI has also defined “Contractor” to include some fabricators or manufacturers who produce Non-Standard Items specifically for use on the public works project. Additionally, some companies who may contract with the Contractor, subcontractors, or lower-tier subcontractors for the production and/or delivery of gravel, concrete, asphalt, or similar materials may perform activities that cause employees of these firms to be covered by State prevailing wage laws.

Specific circumstances that may cause employees of these firms to be covered by State prevailing wage laws are described in LNI publications. These publications are included in the Provisions of each Contract adjacent to the State Prevailing Wage listings. Where these firms are covered by State prevailing wage laws, an approved Intent and Affidavit must be submitted to the Project Engineer into PWIA.

If a lower-tier subcontractor submits an Intent through PWIA, the Hiring Contractor must also submit an Intent. This is monitored through PWIA. If the Hiring Contractor does not submit an Intent, the lower-tier subcontractor will appear as an “orphan” Contractor in PWIA.

PWIA will verify that certified payrolls meet or exceed the State prevailed wage rate, however, it is the Project Office’s responsibility to verify the Federal prevailed wage rate has been met. The higher of the two rates (State prevailed wage and Federal prevailed wage) takes precedent.

References, but not limited to:

- Required Contract Provisions FHWA-1273
- [RCW 39.04](#)
- [RCW 39.12](#)
- U.S. Department of Labor Davis-Bacon Resource Book 11/2002
- Davis-Bacon Manual on Labor Standards for Federal and Federally Assisted Construction, Copyright © August 1993 by The Associated General Contractors of America

SS 1-07.11 Requirements for Nondiscrimination

SS 1-07.11(1) General Application

DBE, MSVWBE, and Training

Every Contract administered is funded either with State, Federal funds, or a combination of both. As a result, individual Contracts may have different guiding requirements depending on what laws were in place at the time the Contract was executed and how the Contract is funded. The Special Provisions, *Standard Specifications*, and Amendments specify the specific requirements for each Contract.

SS 1-07.11(2) Contractual Requirements

The type of funding used for each Contract will determine whether mandatory or voluntary goals are included. Contracts over \$100,000 with any amount of Federal funding may include DBE mandatory Contract goals, of not less than two percent as part of a Condition of Award (COA), or a mandatory Federal Small Business Enterprise (FSBE) goal if no COA is established. FSBE goals are not a Condition of Award. Contracts funded with only State funds have voluntary MWBE goals and enforceable SVBE COA.

All payments made towards MSVWBE and DBE subcontractors shall be reported by the Contractor using the application available at: <https://wsdot.diversitycompliance.com>. Payments made to MSVWBE and DBE subcontractors will only be counted towards Contract goals if the noted subcontractor is determined to be performing a Commercially Useful Function (CUF) and a type of Work for which they are certified through Washington State Office of Minority and Women's Business Enterprises (OMWBE) or Washington's Electronic Business Solution (WEBS) as applicable.

The Department includes MSVWBE, DBE or FSBE goals to promote diversity in support of inclusion in each Contract, therefore, it is important that the Project Office diligently tracks and monitors the accomplishments of all programs. The State MSVWBE and Federal DBE program contribute to the Agency's inclusion goal as specified in the strategic plan. Contractors are encouraged to achieve voluntary goals and required to meet mandatory Contract goals. The Office of Equity and Civil Rights (OECR) and the Region OECR Compliance Specialist should be contacted for Program questions and the State Construction Office should be consulted for Contract administration matters.

Minority, Small, Veteran and Women Owned Business Enterprise (MSVWBE) - State Funded Only Contracts

MBE, SBE, VOB or WBE are the designations for holding State certification as a minority, small, veteran or women owned business enterprise. OMWBE certifies businesses as either a minority owned business (MBE), a women owned business (WBE), or a combination of both minority and women owned business (M/WBE). The Department of Veteran Affairs certifies a business as a veteran owned business (VOB), and small businesses (SBE) are registered in Washington's Electronic Business Solution (WEBS).

Contracts Funded by State Funds Only

Contracting Entity	Where to look to see if they are certified	Goals Are
MBE	OMWBE website	Voluntary
WBE	OMWBE website	Voluntary
M/WBE	OMWBE website	Voluntary
VOB	WEBS	Enforceable
SBE	WEBS	Enforceable

When the Project Office receives the Contractor's MWBE Participation Plan, it will be reviewed for completeness. Incomplete plans will be returned for correction and resubmittal. The Project Office will transmit reviewed plans to their Region OECR Compliance Specialist who will review and either accept the plan as submitted, with or without comments, or return the plan if incomplete or inadequate.

Disadvantaged Business Enterprise (DBE) - Federally Funded Contracts

As a condition of receiving Federal funding, WSDOT has given assurance to FHWA that it will comply with [Title 49 CFR Part 26](#). For Contracts under the authority of the Regions and State Construction Office, all compliance matters relating to the DBE program will be elevated through OECR. The OECR DBE Liaison Officer (DBELO) has the authority for the following:

- Regular Dealer determination
- Pre Award and Post Execution Contract specific approval
- Review and Approval of Pre Award, End of Contract and Termination/Substitution Good Faith Efforts (GFE)
- Pre Award clearing of DBE commitments
- Approval of changes to COA DBE commitments
- Commercially Useful Function reviews
- Applicable Sanctions
- Joint Check Agreements

Any contractual DBE issues, including those listed above must be elevated through the State Construction Office who will seek the approval of OECR, including concurrence from the DBELO.

OMWBE certifies DBEs and maintains the certified DBE directory. Each DBE is certified in a North American Industry Classification System (NAICS) code that most closely represents the type of work that the DBE is said to perform. It should be noted that the NAICS code doesn't always represent the specific types of work in which the DBE owner has the ability to control, thus, the need for a more specific breakdown, as shown in the Description of Work section of the DBE's profile (in the DBE Directory). The NAICS codes listed on the certification directory are primarily used to determine whether the firm meets the size standards for a small business and may also aid in evaluating the degree of control exercised by the owners of the DBE firm.

Contracts Funded with Any Federal Funds

Contracting Entity	Where to look to see if they are certified	Goals Are
DBE	OMWBE website	Mandatory

Payments made to DBE subcontractors will be counted toward DBE participation goals if the subcontractor is determined to be performing a commercially useful function for Work in which they are certified to perform (per the Description of Work section as shown in their profile in the DBE Directory). COA DBE participation will only be counted towards Contract specific and Department goals if the DBE firm being listed as a Condition of Award and is certified in the type of work involved prior to the due date for bids on a prime Contract. Payments reported to non COA DBE firms for certified Work will count toward the Department goal as race neutral participation. In situations where subcontract opportunities arise subsequent to execution of a prime Contract, a DBE must be certified prior to execution of the subcontract in order to count as DBE participation.

Federal Small Business Enterprise (FSBE) - Federally Funded Contracts

The Federal Small Business Enterprise (FSBE) program is an added element of the DBE program, requiring the same level of monitoring, reporting, and verification. FSBE goals are mandatory and assigned as a percentage of the final Contract amount, but are not a Condition of Award. It is important to remember that if the Contract increases in dollar value, the amount required to fulfill the FSBE goal will increase concurrently.

The FSBE goals are not attached to specific subcontractors at the time of award, and can be met through utilization of any firm designated as a DBE, or SBE in the OMWBE certified directory.

Contracts Funded with Any Federal Funds

Contracting Entity	Where to look to see if they are certified	Goals Are
FSBE	Any firm designated as a DBE or SBE in the OMWBE website	Voluntary

Good Faith Effort documentation meeting the requirements of the Contract will be required if the FSBE goal is not met. If at any time during the Contract it appears that the FSBE goal will not be met, work with the ASCE and Region OECR Compliance Specialist to determine appropriate actions.

For purposes of tracking and reporting, a Federal Small Business will be designated as FSBE on the Request to Sublet and in CCIS.

Disadvantaged Business Enterprise (DBE) Condition of Award Participation – Federally Funded Contracts

When a COA goal is specified, the Contractor shall be held to its DBE Contract commitments, unless otherwise established through a Change Order. The Contractor shall submit the DBE Utilization Certification Form (DOT Form 272-056) with the Bid. The DBE Utilization Certification Form identifies the Contractors' monetary commitment amount and the general scope of certified work the DBE is to perform.

Once the Bid is submitted, the Bidder has 48 hours to submit the following documents:

- DBE Written Confirmation Document (DOT Form 422-031)
- DBE Bid Item Breakdown (DOT Form 272-054)
- Good Faith Effort Documentation (required if the bidder did not certify adequate participation to meet the goal)

The DBE Bid Item Breakdown is the initial submittal for the Contractor's DBE Utilization Plan and is used to identify the bid items and dollar amounts specific to the scope of certified work being committed to the DBE. The information is verified and entered into CCIS by HQ OECR.

Subcontracts – Applies to DBE and FSBE

Prior to a DBE or FSBE performing Work on the Contract, the Contractor is required to submit a copy of the executed subcontract between the firm and the Contractor that hired them to the appropriate email address identified in the Contract. The Region OECR Compliance Specialist will review submitted subcontracts and if no comments for non-compliance are issued, no further action is required by the Project Office.

If the Region OECR Compliance Specialist contacts the Project Engineer due to non-submittal or non-compliance of subcontracts, language will be provided by the Region OECR Compliance Specialist to be used to inform the Contractor of non-compliance or non-submittal.

Trucking – Applies to DBE and FSBE

Each trucking firm performing only trucking or hauling Work, certified as DBE or FSBE must submit a Primary Truck Unit Listing Log, including all applicable rental/lease agreements. The form will identify all trucks that will be used on the Project by the trucking firm, and must be designated as Primary.

If additional trucks will be added to the Primary Truck Unit Listing Log, a new form will be required and identified as the Updated Primary.

The same form will also be utilized as a daily trucking report, required to be submitted for each day the trucking firm is on-site, listing not only the truck information but also the driver name(s) and hours worked, and marked as the Daily.

- **Primary Truck Unit Listing Log – DOT Form 350-077**
 - Initial Submittal due prior to trucking firm performing work
 - Updated and resubmitted as necessary (identified as Updated Primary)
 - Drivers names and hours worked are not required
 - Lease/rental agreements must be attached
 - Submitted to the Project Engineer
 - Project Office uploads into DMCS
 - Requires field verification with the CUF On-Site Review

Forms received with incomplete or missing supporting documentation must be returned to the Contractor for correction.

- **Daily Truck Unit Listing Log**
 - Daily reporting
 - Weekly submittal
 - Driver names and hours are required to be reported
 - Submitted to OECR Region mailbox
 - Region OECR Compliance Specialist verifies a minimum of 10% of the Daily Truck Unit Listing Logs
 - Region OECR Compliance Specialist uploads into DMCS

If the Region OECR Compliance Specialist contacts the Project Engineer due to forms received with incomplete or missing information, language will be provided by the Region OECR Compliance Specialist to inform the Contractor of non-compliance.

Primary – Prior to any trucking services being performed on the Contract, a Primary Truck Unit Listing Log must be submitted. The Project Office will review and upload the Primary Truck Unit Listing Log to DMCS. When reviewing the Primary DBE Truck Unit Listing Log verify:

- The trucking firm has signed each lease agreement
- The truck lease agreement is with DBE or FSBE trucking firms or commercial truck leasing companies
- The license plate numbers on each lease agreement match the Primary Truck Unit Listing Log
- The lease agreements are reasonable to perform the work

Updates to the Primary Truck Unit Listing Log must be resubmitted within 10 calendar days of the change. The Project Engineer will upload any Updated Primary Truck Unit Listing Logs into DMCS.

Daily –By the Friday of the week after Work was performed by the trucking firm, the Daily Truck Unit Listing Log is required to be submitted to the Region OECR mailbox. After the initial submittal, the Daily Truck Unit Listing Log will be required to be submitted on a weekly basis.

The Daily Truck Unit Listing Log will include the same list of trucks that was included on the Primary Truck Unit Listing Log, and will also include each driver's name and the hours worked for the specified day. In addition to CUF review(s), the Region OECR Compliance Specialist will verify a minimum of 10% of certified payrolls (listed truck drivers) against the daily logs throughout the life of the trucking firm's work on the project. The verification may require the use of supporting documentation such as:

- Inspector Daily Reports
- Delivery Tickets and Field Note Records– can be requested from the Project Office
- Dispatch Tickets – can be requested from the Contractor

If the Region OECR Compliance Specialist notices discrepancies during their review, the Project Engineer will be notified immediately. Additional field verification using the accepted Primary Truck Unit Listing Log may be required by the Project Inspector.

Field verification is required to ensure that trucks used on the Contract by the trucking firms are listed on the accepted Primary Truck Unit Listing Log. Verification records will be retained in the Contract files with the Project Offices' copy of the trucking firm's CUF On-Site Review, and it is recommended that the two activities occur at the same time. Use the accepted and most current Truck Unit Listing Log as the verification record.

If during the verification process a truck is found to be on-site that is not on the accepted Truck Unit Listing Log, the Project Engineer will immediately notify the Contractor of the following in writing:

- A trucking firm used trucks that were not included on the accepted Truck Unit Listing Log, therefore, cannot be counted as participation towards the commitment
- An Updated Primary Truck Unit Listing Log is required to be sent to the Project Engineer for acceptance within 10 days of when the truck started the work, in order to count its participation

Upon accepting the Updated Primary Truck Unit Listing Log, the Project Engineer will perform a field verification. A new on-site review is not required for every Truck Unit Listing Log verification. If the Contractor fails to provide an acceptable list within 10 days of the truck performing any work, contact the Region OECR Compliance Specialist for guidance, as the Contractor is at risk of a potential CUF infraction. Trucks not listed on the approved list cannot be counted towards the Contract goal, but are allowed to work on-site.

If the Project Inspector witnesses new trucks onsite at any time during the project, additional field verifications of the trucking inventory are required.

Changes to the Condition of Award (COA)

Any change to reduce the COA DBEs scope or commitment amount will be processed as a Change Order, requiring State Construction Office and HQ OECR approval, to terminate COA work and a substitution is required to fulfill the COA commitment amount. If approval is not granted prior to any termination and substitution, the Contractor will not be entitled to any payment for COA work not performed by the existing DBE. Substitution of a COA DBE cannot occur without termination. The Project Engineer will discuss the Contractor's plan for substitution as part of the termination approval process.

Quantity underruns that are the result of overestimated plan quantities follow the termination process.

Exceptions to the substitution requirement may be allowed in the following circumstances:

- WSDOT deletes the COA firm's intended work or,
- The work has progressed to the point where no other work remains to be acceptable subcontracted. The occurrence of this circumstance should be minimized through timely notification by the contractor to WSDOT of termination requests.

The State Construction Office will approve any substitution with concurrence from the Office of Equal Opportunity.

Condition of Award (COA) Change Orders

Note that the word "terminate", when used in reference to scope of work committed to a COA subcontractor, does not mean "terminate" in its ordinary contractual sense. In context of COA subcontractors, and only in that context, "terminate" means anything that causes a COA subcontractor to be paid less than the commitment dollar amount. This includes the following in addition to the ordinary contractual meaning: an ordinary underrun in units of work committed to a particular COA subcontractor; change orders initiated by the Contractor or the owner that reduce the quantity of work and/or dollar amount committed to a COA subcontractor.

Changes to COA subcontractors' scope or commitment amounts must be made through a Change Order executed by the State Construction Office. Refer to Section SS 1-04.4 subsection 4.5.3.8 for instruction on precisely how a change order must address changes to commitment amounts to COA subcontractors. Approval is granted by the assigned ASCE, with the concurrence of OECR. This approval must be obtained and documented prior to the changed work, and any related work, being performed. Types of COA Change Orders may include:

- **Substitution** – Contractor requests to terminate a COA subcontractor in whole or part for good cause and substitute with another COA subcontractor. The COA Change Order will include a DBE termination for the DBE subcontractor being replaced and assigning an equal or greater amount of COA work to another DBE subcontractor.
- **Using COA DBE for Type of Work Not Listed** – Contractor requests to use COA subcontractor for a type of work that is not listed on the DBE Utilization Certification. In order to be counted toward the COA Goal amount, a COA Change Order must add this work to the COA items for the COA DBE subcontractor. The COA DBE subcontractor must be OMWBE certified to perform this type of work prior to execution of its original subcontract on the Contract.
- **Contractor Initiated Change Order** – Contractor proposes a change order that deletes or reduces work to be performed by a COA subcontractor. This is a termination, and therefore must follow the requirements associated with terminating a DBE. The Contractor shall find substitute work to replace this COA work. If the Contractor cannot guarantee COA DBE participation the requested change order cannot be approved.
- **Owner Initiated Change Order** – Owner initiates a change order that deletes or reduces COA DBE work. This could have the same effect as termination, therefore, the ASCE should negotiate inclusion of additional COA DBE work (may include paying a premium) or require a GFE to be included in the change order.

The amounts shown in the COA Change Order should meet or exceed the credit necessary to accomplish the original Contract DBE commitment amount. The Request for Approval, Change Order and Change Order Submittal package will contain the following information:

- An explanation of why the change is necessary
- Identification of all deleted work and all added work
- Revised subtotals for all affected COA DBE firms. The change order only needs to address each affected DBE firm, not all COA DBE firms.
- Revised total attainment for DBE participation.

When submitting the Change Order to the Contractor for signature, the Project Engineer will send copies to the affected DBE firms as notification of the change order and will advise the Contractor that this has been done.

Termination of DBE Subcontracts

Prior to requesting termination of a DBE subcontractor, the Contractor shall submit, in writing, a letter to both the DBE subcontractor and Project Office explaining the reason for termination. The DBE subcontractor has five days to respond to the letter, either in support or objection to the termination. The Contractor must have good cause to terminate, as specified in the General Special Provision. The Project Office will work with the ASCE and HQ OECR for approval of the termination.

If termination of the DBE subcontractor is approved, the Contractor shall substitute for the DBE with another DBE subcontractor in an amount equal to the value remaining from the previous DBE's work. A revised Utilization Plan to achieve the DBE commitment amount shall be submitted to the Project Engineer within two days of the approval of termination or the Contract may be suspended until the plan is submitted.

Commercially Useful Function On-Site Reviews

The Project Engineer will assist WSDOT OECR in performing CUF On-Site Reviews on each MSVWBE, and DBE Contractor, subcontractor, Regular Dealer (Federal funds only), Supplier or Manufacturer performing work or supplying materials. The reviews are required whether the Contract is established with voluntary or mandatory goals, and regardless of COAs.

Contracts funded with only State funds will use the following forms, as applicable:

- DOT [Form 226-013](#), *MSVWBE On-Site Review for Construction Subcontractors/Supplier/Manufacturers*
- DOT [Form 226-014](#), *Project Office On-Site Review for Architect & Engineering and Professional Services Firms*

Contracts funded with Federal funds will use the following forms, as applicable:

- DOT [Form 272-052](#), *Commercially Useful Function On-Site Review for Construction Contractors/Subcontractors*
- DOT [Form 272-064](#), *Commercially Useful Function On-Site Review for Regular Dealer/Manufacturers*
- DOT [Form 272-051](#), *On-Site Review Form/Commercially Useful Function Architect & Engineering/Professional Services Firms*

While it is the responsibility of the Project Inspector to complete the entire MSVWBE On-Site Review Forms, the Commercially Useful Function On-Site Review forms for Federally Funded projects are to be completed by three separate entities: the Project Inspector, the Office Engineer, and the Region OECR Compliance Specialist. Once the On-Site Reviews are completed within the Project Office, enter the following information into CCIS:

- The date the review was completed by the Project Office Staff
- The name(s) of the individuals conducting the review

The CUF On-Site Review form is sent to the Region OECR Compliance Specialist for completion with a copy of the Inspectors' Daily Report (IDR). The Project Inspector should attach a copy of the CUF On-Site Review form to their IDR. Photographs capturing the work, equipment, and materials used should be attached to the CUF On-Site Review and the IDR.

If a Regular Dealer is utilized, the Region OECR Compliance Specialist will notify the Project Office. Coordination between the Project Office and the Region OECR Compliance Specialist may be necessary to conduct the CUF On-Site Review for Regular Dealers, due to their rarity and typical short duration on the project site.

All CUF On-Site Reviews will be conducted at the peak of the firms' on-site work and whenever a firm begins performing work under a different scope of work or Contract. An additional CUF On-Site Review will be completed each calendar year for multi-year Contracts.

A CUF On-Site Review is a “snapshot in time” and should record the personal observations, personnel interviews, and results of documentation reviews. It is the Project Inspectors’ responsibility to work with Contractor personnel to gather and report accurate data. If the interviewee is unsure of a question, this should be reflected in the answer. Instructions and clarifying statements are included in each of the forms. Once the review is complete and the date and initials of the interviewer have been entered into CCIS, the Project Office will send the original review to the Region OECR Compliance Specialist within 10 calendar days.

An accurate and thorough CUF On-Site Review is critical, as the review is used to help determine participation credit to both the Contract and Department goals, as well as prevent fraud. If the Project Inspector or Office Engineer are unclear of a question, they are encouraged to inquire to either their Project Engineer or their Region OECR Compliance Specialist for further clarification.

As previously mentioned, the CUF On-Site Review assists when determining participation, but if at any time the Project Inspector witnesses activities that could result in non-participation, notify the Project Engineer immediately.

Any issues regarding DBE compliance should be brought to the attention of the assigned ASCE, who will then coordinate with OECR to take appropriate actions.

On rare occasions, OECR may elect to perform a more in-depth investigation after the CUF On-Site Review is complete. OECR will contact the Project Office directly to inform them of the investigation, however, no further action will be needed by the Project Office.

Note:

- Practices that violate CUF criterion may not be excused by forfeiting credit for that portion of the work. Violation may result in none of a MSVWBE or DBE’s work being eligible for credit and will not count towards DBE goals.
- After the MSVWBE or DBE firm has met their obligation under their subcontract and total commitment, the Contractor may utilize the firm for additional work.

Brokering, Flagging, and Traffic Control Services

The CUF for traffic control work is specific to the type of work and credit allowed under the terms of the Contract. The following is guidance specific to brokering, flagging and traffic control services.

Brokering

A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the Contract; or, persons/companies who arrange or expedite transactions.

MSVWBE Participation Credit (State Funding)

When a MSVWBE participates as a broker, only the dollar value of the fee or commission charged, or 20 percent of the total dollar value of expenditures by the MSVWBE (whichever is greater) counts toward the MSVWBE Voluntary Goal if the firm performs a CUF.

DBE Participation Credit (Federal Funding)

When a DBE participates as a broker, credit may be allowed for the reasonable fees or commission charged by a DBE broker or a DBE behaving in the manner of a broker. To be considered reasonable, the fee must not be excessive as compared with fees customarily paid for similar services, and shall not exceed 5 percent of the value of the goods or services. If Brokering is identified as part of the commitment amount, the DBE Utilization Certification form (DOT [Form 272-056U](#)) is required.

The cost of materials and supplies provided by the prime Contractor cannot count towards any portion of the DBE goal, unless the prime Contractor is certified as DBE.

Flagging

When MSVWBE or DBE traffic control companies are listed in the MSVWBE Participation Plan or DBE Utilization Certification as providing “Flagging”:

- The MSVWBE or DBE shall be in control of its work inclusive of supervision
- The Traffic Control Supervisor (TCS) shall be employed by the MSVWBE or DBE firm and be responsible for managing and supervising the flagging operation and perform all duties required in *Standard Specification 1-10.2(1)B*
- All Flaggers shall be employed by the MSVWBE or DBE firm
- The MSVWBE or DBE firm shall provide all flagging equipment

Credit: when providing both flaggers and TCS, the value of the labor is eligible to be credited toward the goal.

If the DBE is acting as a broker, only their fee for service would be eligible towards the DBE goal.

Traffic Control Services

When MSVWBE or DBE traffic control companies provides “Traffic Control Services” as designated in the MSVWBE Participation Plan or DBE Utilization Certification:

- The MSVWBE or DBE shall be in control of its work inclusive of supervision
- The Traffic Control Supervisor (TCS) shall be employed by the MSVWBE or DBE firm and be responsible for managing and supervising the flagging operation and perform all duties required in *Standard Specification 1-10.2(1)B*
- The MSVWBE or DBE firm shall provide all traffic control items to perform the work under their subcontract
- The MSVWBE or DBE traffic control company shall not lease or use equipment supplied by the prime Contractor

The State Construction Office should be consulted if questions arise about required equipment.

Joint Checks

Prior to the use of a joint check by a MSVWBE or DBE, for the purchase of materials or supplies required for the project, the MSVWBE or DBE shall submit the DBE Joint Check Request Form (WSDOT [Form 272-053](#)) accompanied by a copy of the Joint Check Agreement between the parties to the Project Office. The Project Office will forward these documents to the Region OECR Compliance Specialist for review. If the Project Office and Region OECR Compliance Specialist are satisfied that the Joint Check request meets the requirements of the Contract, the documents will be forwarded to the ASCE for approval and concurrence from OECR.

Note: Joint checks for anything other than materials and/or supplies will not be accepted. The Joint Check Agreement must be specific to the current project, and include, among other things, a detailed description of the materials/supplies covered by the Agreement.

Escalation and Enforcement

The Department's SVBE/MWBE and DBE programs are managed by OECR. For day-to-day issues, the Project Engineer should communicate with the Region OECR Compliance Specialist and their assigned ASCE. Any questions received from the Contractor or subcontractor about SVBE/MWBE or DBE Provisions or enforcement should be answered only with full knowledge and at the direction of the State Construction Office and HQ OECR.

Project Inspectors working with MSVWBE or DBE Contractors must notify the Project Engineer immediately if violation of CUF or other unfavorable practices are suspected. Once the Project Engineer is aware of the situation, it is their responsibility to escalate the problem as outlined:

Upon confirmation of any infractions found by the Region OECR Compliance Specialist, the Project Engineer will issue a Notice of Non-Compliance letter to the Contractor. The Contractor will have 14 calendar days from receipt of the letter to respond with a corrective action plan. The letter must contain a detailed list of the infractions that occurred and a list of all applicable sanctions if the Contractor remains non-compliant or non-responsive. The Region OECR Compliance Specialist will be available to assist the Project Engineer with the Notice of Non-Compliance Letter.

If it is determined the Contractor remains non-compliant, sanctions may be applied in accordance with *Standard Specifications* 1-07.11(5).

On-the-Job Training (OJT) – Federally Funded Contracts

The Federal government requires Contracting Agencies to include these Training Provisions as a condition attached to the receipt of Federal Highway Funding. The training and upgrading of minorities and women is a primary objective of this Training Special Provision.

The amount of training hours are determined by HQ OECR. The requirements for trainee, training plan approval, and trainee payment are all specified in the Contract Special Provisions. On Design-Build Contracts, the Contractor does not submit a monthly invoice for payment. Refer to the Request for Proposal (RFP) for training requirements. The Contract Provisions allow the Contractor to accomplish required training hours as part of their work activities, or through the activities of their subcontractors or lower-tier subcontractors. However, the Contractor is designated as being solely responsible for the completion of the training requirements.

Payment for Training

The Contractor shall submit a certified invoice requesting payment for training. The invoice shall provide the following information for each trainee:

- The related weekly payroll number
- Name of trainee
- Total hours trained under the program
- Previously paid hours under the Contract
- Hours due for current estimate
- Dollar amount due for current updated estimate

Retroactive payment may be allowed provided:

- The Training Program was approved prior to the trainee beginning work on the project
- There are no outstanding issues or circumstances that would have prevented approval of the trainee

Increases in training hours are allowable and may be approved on a case by case basis by the Project Engineer in consultation with the Regional EEO Officer.

On-the-Job-Training Required Reports

- **DOT Form 272-049, Training Program**

This report shall be submitted to the Project Engineer for approval prior to commencing Contract work. The Project Office has the authority to approve Apprenticeship, Training, Employer and Labor Services (ATELS) or State Apprenticeship and Training Council (SATC) programs provided they meet the requirements specified in the Contract provisions. The Region OECR Compliance Specialist will review any non-ATELS/SATC training plans submitted under Section III of the form for compliance and submit the plan to HQ OECR for concurrence and submittal to FHWA for final approval.

- **DOT Form 272-050, Apprentice/Trainee Approval Request**

Approval of an individual trainee cannot be authorized until an approved Training Program is filed with the Region. This form shall be submitted by the Contractor for each trainee to be trained on the project. When an ATELS/SATC trainee is first enrolled, a copy of the trainee's certificate showing training registration shall accompany the Trainee Approval Request. Trainees are approved by the Project Office based on the criteria in the special provisions. If the Contractor submits a request for approval of a trainee who is neither female, nor a minority, the Contractor shall submit a GFE and the Project Office will obtain concurrence from the Regional EEO Officer and OECR prior to approval.

The form requires the Project Office to assign a Trainee Tracking Number for use when entering trainee information in CCIS. Only accept forms with a revision date 1/2022 or later.

- **DOT Form 226-012, Trainee Interview Questionnaire**

One trainee interview is to be conducted for each craft designated on an approved training program for Contracts which have 600 or more training hours or as designated by the Region EEO. The Region EEO shall designate additional Contracts on which trainee interviews are to be completed in conjunction with those that meet the criteria above to ensure that trainee interviews are conducted on at least one fourth of all the Contracts that have training hours established for any given construction season. The intent of these training interviews is to document that the trainees are working and receiving proper training consistent with their approved programs, that the trainee is being paid at the appropriate wage rate, and that discrimination/harassment is not occurring. Interviews are to be confidential and aside from the Contractor and subcontractors unless the Trainee states otherwise. The individual's identity should not be disclosed to the employer without employee's written permission.

Submit completed interviews to the Region EEO Office.

- **DOT Form 272-060, Federal-Aid Highway Construction Annual Project Training Report**

This report will be completed annually by the Project Engineer summarizing the training accomplished by the individual trainees during the reporting period beginning January 1 and ending December 31 of the calendar year. This report is due at the Regional EEO Office by December 20th of the same calendar year, for submission to FHWA

Requirements for Affirmative Action to Ensure Equal Employment Opportunity

EEO (State Funded Projects)

The Contractor shall comply with the EEO requirements detailed in [Standard Specifications](#) Section 1-07.11. The Project Engineer should be alerted and respond to any indications or accusations of discrimination. If the Project Engineer, or any other Project Office staff, becomes aware of any indications or accusations of discrimination, they will immediately notify the Region OECR Compliance Specialist, who will in turn immediately notify OECR. OECR will handle any investigation that is warranted.

EEO (Federally Funded Projects)

WSDOT has committed to FHWA to perform comprehensive construction compliance reviews, consistent with WSDOT's approved EEO Assurances Program document, to ensure compliance with the Federal non-discrimination requirements (ref. [Standard Specifications](#) Section 1-07.11 and the [FHWA 1273](#)). This review is performed by OECR on a select number of FHWA Funded Contracts and may take place at any time, including after Contract Completion. These reviews do not normally involve the Project Office other than notification of their occurrence and the resulting findings, however, OECR may elect to interview Project Office staff associated with the Contract as part of their review. OECR will contact the Region OECR Compliance Specialist or Project Office to facilitate the timing of the review.

SS 1-07.11(5) Sanctions

The Project Engineer shall take steps to stop any acts that are harassing in nature as described in the [Standard Specifications](#) Section 1-07.11(2). These steps may include removing a Contractor's employee pending outcome of an investigation. ASCE approval is required in the case where the Project Engineer determines that the conditions warrant removal of a Contractor's employee. It is important to note that this is not a request that the employee be terminated by the Contractor, just that they are removed from this Project. The ASCE will consult with the Region OECR and investigate the conditions prior to directing the removal. Care should be taken to ensure that all parties are treated with respect and in a nondiscriminatory manner. The facts should be established and everyone should be given a chance to be heard.

SS 1-07.11(10) Records and Reports

- **[FHWA-1391](#), *Federal-Aid Highway Construction Contractors Annual EEO Report***

FHWA Form 1391 is required from both the Contractor and each subcontractor on Federally funded Contracts that have construction activity during the month of July. These forms shall be submitted to the Project Engineer, and are due by August 25th of each year.

A Contractor who works on more than one Federally funded Contract in July is required to file a separate report for each of those Contracts. For multi-year projects, a report is required to be submitted each year work was performed for the duration of the Contract. A responsible official of the company must sign the completed report.

Upon receipt, the Project Engineer will review, sign and date, and forward the annual report to the Region EEO Officer by September 5th. The Region EEO staff at the direction of the OECR will compile and report the information noted on the forms.

- **[FHWA-1392](#), *Summary of Employment Data Report***

WSDOT is required to submit a summary of employment data to FHWA for each Federal fiscal year. This report is prepared using the data from FHWA-1391 (project specific annual reports) that have been submitted to the Region OECR Compliance Specialist by the Project Offices. The summary is prepared by the Region OECR Compliance Specialist or other Region designee for each federally assisted project. The report also includes Local Agency Projects administered through the Region's Highways and Local Programs Offices. The completed FHWA-1392 Report, including all FHWA-1391 reports, are then submitted by the Region EEO Officer to the WSDOT Office of Equal Opportunity by September 15th each year, for formal submission to FHWA.

- **[DOT Form 820-010](#), *Monthly Employment Utilization Report***

The information required by DOT [Form 820-010](#) may be accepted in an alternate format provided that format contains all of the data required by and is completed in accordance with the instructions for DOT Form 820-010. The Region EEO staff should be consulted regarding the acceptability of any alternate format proposed by the Contractor.

Instructions for completing the form can be found on the back of the form itself. This monthly report is to be maintained by the Contractor in the respective prime or subcontractor's records for a period of three years from Acceptance of the Contract, and available to WSDOT and/or Federal reviewers upon request.

- **DOT Form 272-055, Final DBE Utilization Plan Report**

The Final DBE Utilization Plan Report is required on all Contracts that include DBE requirements and must be accompanied by a report of the final amounts paid to DBE's, as verified from the final report generated through DMCS. The signed Final DBE Utilization Plan Report and the attached final amounts paid report become part of the three-year Temporary Final Records retained by the Region. The form may be signed by the Project Engineer, Region Construction Manager or the Region OECR Compliance Officer.

The Final DBE Utilization Plan Report represents a certification that contracting records associated with DBE work have been reviewed, on-site performance has been monitored, and it has been determined that work committed to DBEs was performed by the designated DBEs. Signing this report also testifies that all DBE On-Site Reviews are complete, on file, and can be retrieved as supporting documentation for the certification. This certification is a requirement of [49 CFR Part 26.37\(b\)](#).

SS 1-07.12 Federal Agency Inspection

Construction Work in International Boundary Strip

The International Boundary Commission of Washington, D.C., by treaty with Canada, has the exclusive jurisdiction of the 20-ft boundary strip, 10 ft on each side of the International Boundary. Any construction work within this strip must be with the exclusive permission of the International Boundary Commission (IBC). Boundary monuments are not to be moved or disturbed in any manner without the expressed approval of the IBC. It is expected that permission for all work within the boundary strip will be obtained from the IBC during the design stage of a project. However, it is the Project Engineer's responsibility to ascertain that permission has, in fact, been obtained from the IBC for all work performed within the boundary strip. The Region shall be immediately notified if, upon construction, it is found that permission has not been obtained to relocate boundary markers or perform construction work in the 20 ft boundary strip.

Responsibilities When Working on Tribal Lands

Indian Nations (tribes) have the political distinction of being sovereign. This is different from being designated as having protected group status based on racial classifications. Being sovereign, tribes have the ability to create and enforce tribal ordinances such as Tribal Employment Rights Ordinances (TERO). These are laws or rules pertaining to work within the boundaries of the reservation which are enforced by the respective tribes. When a contract, State or Federal, includes work on a reservation, the project should include General Special Provision GSP 1-07.12.OPT2.FR1 - Indian Preference and Tribal Ordinances that alerts the contractor to the possibility that TERO requirements may apply and provides a contact person for the tribe. The provision also reminds the contractor to bid any costs associated with TERO compliance into associated items of work. TERO requirements may take a variety of forms, some of which are listed in the noted provision. The provision also notes that complying with TERO requirements shall not be a violation of the contract equal employment opportunity requirements. The end result is that the contractor is expected to comply with TERO requirements as they would any other legal obligations. The underlying intent is to reduce Indian unemployment and most tribes are willing to work with contractors to best meet this goal. We want to avoid creating any contractual requirements that interfere with their ability to do so. Our role is to assist in communication but not become involved in determining or paying the tax. For Design-

Build projects, any TERO related costs, fees, or taxes are to be included in the Proposer's price.

Other Considerations Regarding TERO

- The Construction Project Engineer should expect to see the TERO GSP in the bid-build contract when the contract requires work on Tribal land. Note that the work must be on the Tribal land, not near. We cannot apply TERO on projects “near” a Tribal Land due to RCW 49.60.400. Federal regulations allow TERO to be applied when the Work is near Tribal land but does not mandate it. RCW 49.60.400 prohibits application of TERO on anything other than Work on Tribal land; therefore, the RCW controls.
- If the Contract requires Work that is on Tribal land but the TERO GSP is not in the Contract, the Construction Project Engineer should immediately ask the Design Project Engineer why not.
- For bid-build contracts, Work that is to occur on Tribal lands must be quantified in the Summary of Quantities and included in specific “groups” for payment and tracking of Tribal taxes and fees. If that is not the case, the Construction Project Engineer must find out why not.
- The TERO GSP is applicable to state-funds-only contracts as well as federally funded contracts (when there is Work on the Tribal lands).
- The TERO GSP can be used on bid-build contracts without modification, because it is written to fit into the structure of the bid-build contract (Division 2 of the *Standard Specifications*).
- For design-build contracts, the TERO GSP is not required as the design-build general provisions already contains a TERO specification section and Division 1 GSPs are not applicable to the general provisions.

Cargo Preference Act (CPA) 46 CFR Part 381

The Contract Provisions for federal-aid construction contracts (FHWA 1273) requires the implementation of the Cargo Preference Act (CPA) of 1954. The regulations for the Act are given in [46 CFR Part 381](#), and require that at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government, and are transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available. A listing of United States-flag commercial vessels is maintained by MARAD at: www.marad.dot.gov/wp-content/uploads/pdf/MAR620.US_Flag_Vessels.pdf

The Federal Highway Administration has stated that Part 381.7 (a)-(b), shown below, are the appropriate clauses for use in the Federal-aid highway program.

(a) *Agreement Clauses. “Use of United States-flag vessels:*

“(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

“(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a) (1) of this Section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.”

(b) *Contractor and Subcontractor Clauses. “Use of United States-flag vessels: The contractor agrees-*

“(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

“(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United State of cargo described in paragraph (b) (1) of this Section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590. tes, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment

The CPA requirements would be appropriate for oceanic shipments of materials or equipment that is intended for use on a specific Federal-aid project, such as a precast concrete structural members, fabricated structural steel, tunnel boring machines, or large-capacity cranes.

The CPA requirements are not applicable for goods or materials that come into inventories independent of an FHWA funded-contract. For example, the requirements would not apply to shipments of Portland cement, asphalt cement, or aggregates, as industry suppliers and contractors use these materials to replenish existing inventories. In general, most of the materials used for highway construction originate from existing inventories and are not acquired solely for a specific Federal-aid project.

A test for whether CPA requirements apply or do not apply to shipped goods or materials would be if the goods or materials are what one would consider to be common inventory supplies for highway construction contractor, then CPA would not apply. If the materials or goods are considered to be supplies one would consider to be not common supplies of a highway construction contractor then CPA would apply.

When the CPA requirements apply, the Contractor must furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo as described in [46 CFR Part 381.7\(b\)\(1\)](#). Copies shall be provided to the Contracting Agency (Engineer) by the Contractor (through the prime contractor in the case of subcontractor bills-of-lading), and also to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

SS 1-07.13 Contractor's Responsibility for Work

SS 1-07.13(1) General

Standard Specifications Section 1-07.13(1) specifically designates the Contractor as being solely responsible for the completed work or material until the entire improvement has been completed. All work and material, including change order work, is at the sole risk of the contractor and when damaged must be rebuilt, repaired, or restored. When these damages occur to either the permanent or temporary work, and have occurred prior to the contract Completion Date, the costs for these repairs shall be entirely at the Contractor's expense. However, the specification does provide the contractor exceptions for causes that are generally beyond the contractor's control.

While the Contractor is fully responsible for the work and materials, the Section does provide the contractor some options for relief. Relief is broken into 2 categories. The first category is relief of maintenance and protection for portions of works that have been completed. The second category is for relief of damage caused by the public when it is necessary that the public use the facility during construction. Both options for relief have specific criteria in order to exercise them. While a brief explanation of each option is provided, the Project Engineer should review the entire *Standard Specifications* Section 1-07.13 to ensure that the extent of responsibilities are understood and that any relief from responsibility is granted in accordance with those provisions.

SS 1-07.13(2) Relief of Responsibility for Completed Work

Standard Specifications Section 1-07.13(2) provides relief to the Contractor from maintaining and protecting specific portions of contract work as they are completed. The Contractor must submit a written request for relief to the Project Engineer. Before granting any relief, the Project Engineer will review the request to ensure that the items of work noted conform to the requirements and limitations outlined in *Standard Specifications* Section 1-07.13(2) and have been fully completed in all respects of the contract. The Regional Construction Manager or designee may approve these requests for relief. Relief may be granted for several specific items, for example: "Item 17, Beam Guardrail, Type I; Item 18, Beam Guardrail Anchor Type I; etc." Relief may also be granted for all work except certain items, for example: "All work except Item 38, Electrical." The approval of the Contractor's request must be in writing.

SS 1-07.13(3) Relief of Responsibility for Damage by Public Traffic

When it is necessary for public traffic to utilize a highway facility during construction, *Standard Specifications* Section 1-07.13(3) provides relief of responsibility to the Contractor for damage caused to the permanent work by the public traffic. When the conditions specified in this Section are met, the Contractor is automatically relieved of this responsibility. However, this Section may not provide relief for damage caused by vandalism or other causes. The Contractor will resume full responsibility for both temporary and permanent work if traffic is relocated to another Section of roadway. This responsibility will again continue until contract completion unless the Section is reopened to public traffic or the Contractor is granted relief under *Standard Specifications* Section 1-07.13(2).

The first paragraph of *Standard Specifications* Section 1-07.13(3) refers to damage to “permanent work.” This refers to work included in the contract that is being constructed in accordance with the requirements noted in the plans and specifications and is damaged. The intent is to exclude equipment, temporary facilities and temporary materials such as formwork and falsework and “Temporary Traffic Control Devices.”

SS 1-07.13(4) Repair of Damage

Section [SS 1-07.13\(4\)](#) details when WSDOT assumes responsibility and pays for third party damages. The WSDOT *Enterprise Risk Management Manual* M 72-01, provides detailed guidance on procedures, including lines of communication. Payment should be made under the item “Reimbursement for Third Party Damages.” This item is only intended to be used for costs that are the responsibility of the contracting agency. If this item was not included in the contract, it may be added by change order using a separate group for each Control Section (as shown in the Plans) in which an incident occurs.

Risk Management has created a form that is to be used to report each new occurrence of Third Party Damages, “DOT [Form 350-013](#)”. The form is available from Forms Management. Any supporting documents should be attached to the form and submitted as well. The form should be filled out and submitted per the routing listed on the bottom of the form. This routing includes:

- **AFS – Contract Payments**
- **Enterprise Risk Management**
 - For AFS and Risk Management use thirdpartydamage@wsdot.wa.gov
- **Region Construction Office**

Region Construction may need to send to Region Program Management and to Region Financial Services if additional funds are required. If this item was not included in the contract, it may be added by change order using a new group for the Control Section (as shown in the Plans) in which an incident occurred. Once the item has been added to the contract, use DOT Form 350-013 when establishing the group for the occurrence. This group will be used for only one occurrence. A new group will be required for each new occurrence.

If the item is included in the contract and a new occurrence of Third Party Damage occurs, use DOT [Form 350-013](#) to add a group for each new occurrence. You will need a group for each occurrence of Damage.

If additional information (responsible party, police reports, Field Notes, paynotes, etc.) becomes available after the initial report form has been submitted, you may send an updated form to the same routing. Be sure to indicate that this is a revised form by selecting the “Revised Report” radio button.

SS 1-07.14 Responsibility for Damage

Claims Against the Contractor – Damage

The Department has a claims office, now known as the WSDOT Risk Management Office (RMO). All receptionist job descriptions, all Region operations manuals, and all telephone training is set up to refer citizens with damage claims related to construction to the RMO and to provide the toll free number (1-800-737-0615). The RMO will react to the call, issuing claims forms, contacting the contractor, and following up on the actions taken.

The Project Engineer's role is to appropriately advise the RMO, if needed. There may be confusion about which contract is involved. Field office knowledge about the incident and the surrounding circumstances may be solicited. The contractor's insurance and the insurance provided by the Contractor for the State may be involved and information about the policy will, most likely, be requested.

If, in spite of the Department process, the claimant contacts the field office directly, the Project Engineer should refer the claimant to the State Risk Management Office (1-800-737-0615).

Claims Against the Contractor – Money

Claims received by the Region for money owed by the Contractor should be referred to the Contractor. A claimant should be advised of the legal right to file a lien against the retained percentage or performance bond for claims involving labor, equipment, or materials used on the project and be referred to the Accounting and Financial Services Division for obtaining the necessary lien forms.

Claims Against Officials and Employees

The statutes provide that claims may be filed against the State of Washington, State officers and employees, for damages resulting from their conduct and prescribes the manner in which the action must be taken. Whenever this occurs, the state will furnish the legal defense and pay any judgments if the act which caused the alleged damage was within the scope of the person's duties, was in good faith, and without negligence.

SS 1-07.15 Temporary Water Pollution Prevention

SS 1-07.15(1) Spill Prevention, Control, and Countermeasures Plan

Spill Prevention, Control, and Countermeasures (SPCC) Plans are written by the Contractor to prevent, respond to, and report hazardous material spills in a safe and effective manner. All WSDOT projects should have a project specific SPCC Plan and the plan must be submitted to the Project Engineer prior to starting any on-site work. The plan should be reviewed by the Project Office for compliance with the WSDOT [Temporary Erosion and Sediment Control Manual](#) M 3109. WSDOT personnel who review SPCC Plans are required to take the Spill Plan Reviewer and Preparedness Training class available through the Learning Management System (LMS).

SPCC Plans should include information regarding the project site and contractor activities as they relate to spill prevention, control, and response activities. Additionally, SPCC Plans should identify possible sources of hazardous materials, methods to prevent and control spills, and spill response procedures. SPCC Plans are written and maintained by the Contractor and are required on all WSDOT projects, regardless of the size or duration of construction activities.

SPCC Plans are applied to the life of a construction project and may need to be amended over time with changing conditions. Periodic inspections will ensure that the required preparation and preventative steps identified in the SPCC Plan have been taken to keep the site in compliance throughout the life of the project.

The [Standard Specifications](#) provide the complete list of required contents for the Contractors SPCC Plan in Section 1-07.15(1).

SS 1-07.16 Protection and Restoration of Property

SS 1-07.16(4) Archaeological and Historical Objects

It is both National and State policy to preserve historical or prehistorical objects and ruins. These objects and ruins may include sites, buildings, artifacts, fossils, or other objects of antiquity that may have particular significance from a historical, cultural, or scientific standpoint.

If provisions for archaeological and historical salvage have not been made in the contract and it appears that significant historic or prehistoric objects or ruins have been or are about to be encountered, the Project Engineer should immediately take steps to preserve and protect the objects or ruins. Once the objects or ruins have been sufficiently protected, the Project Engineer should immediately notify the Region Construction Manager, who will provide any necessary initial assistance to the Project Engineer. Where the Region determines appropriate, the Project Engineer will contact and inform through existing Region Environmental staff, the Cultural Resources Consultant, the State Historic Preservation Officer (SHPO), FHWA, and affected tribes of the discovery. The Project Engineer will also help facilitate any on-site meetings for the appropriate parties should either FHWA, SHPO, or the cultural resources consultant believe it necessary.

Cultural Resource Monitoring

When cultural resource monitoring is necessary for a project, the Project Engineer will invite the Cultural Resource Specialist to the Preconstruction Conference to review and explain project specific cultural monitoring requirements.

The Project Engineer will coordinate with the Contractor to ensure that notice is provided to the Region Environmental Office seven (7) calendar days prior to the beginning of any ground disturbing activities in any area designated as requiring monitoring.

The Project Engineer will coordinate with the Region Environmental Office to ensure that a monitor will be present on-site prior to the Contractor beginning any ground disturbing activities in any area designated as requiring monitoring.

On any project that has Cultural Resource Monitoring commitments, the Project Engineer will coordinate with the Region Environmental Office to ensure that a monitor is present and the appropriate notifications are made prior to the Contractor beginning any ground disturbing activities in any area designated as requiring monitoring.

Responsibilities Following Unanticipated Discovery of Cultural Resources

Given the wealth of historical and archeological resources found in Washington, the Project Engineer should be familiar with the requirements of the National Historic Preservation Act (NHPA), [Standard Specifications](#) Section 1-07.16(4), and any contract specifications regarding the discovery of cultural resources. The Project Engineer should discuss these requirements with the Contractor and WSDOT staff at the Pre-Construction Conference. These resources include, but are not limited to:

- Human skeletal remains
- Anthropogenic soil horizons (areas showing the influence of humans on nature), occupational surfaces (areas showing evidence of human activity or habitation), midden (refuse heap), etc.
- Areas of charcoal or charcoal-stained soil and stones.

- Stone tools or waste flakes (i.e., arrowheads or stone chips).
- Bones, burned rocks, or other food related materials in association with stone tools or flakes.
- Clusters of tin cans or bottles.
- Logging or agricultural equipment more than 50 years old.

The Project Engineer will include a project-specific unanticipated discovery plan (UDP) in the project provisions for use by the Contractor. The UDP outlines the notification process and provides guidance to the Contractor should archaeological or historic resources be encountered during project activities. The Regional or Modal Cultural Resources Specialist will assist with completing the plan. The UDP template is available at:

<https://wsdot.wa.gov/engineering-standards/environmental-guidance/cultural-resources-archaeology#FinalDesign>

Discovery of Human Skeletal Remains

The following guidance is given to assist the Project Engineer when construction activities cause disturbance to human skeletal remains. All human skeletal remains, which may be discovered, shall at all times be treated with dignity and respect.

Should any WSDOT employee, contractor, or subcontractor believe they have discovered human skeletal remains; the following steps shall be initiated:

1. Ensure that all work adjacent to the discovery has ceased. The area of work stoppage shall be adequate to provide for the total security and protection of the integrity of the human skeletal remains.
2. The Project Engineer shall:
 - a. Notify the Region Construction Manager.
 - b. Immediately notify the local coroner and the local sheriff, or other appropriate law enforcement official, requesting that a person who is competent and qualified to identify human skeletal remains be present. Do not call 911 or the media.
 - No persons other than the coroner or proper law enforcement personnel, WSDOT Cultural Resources staff, SHPO (State Historical Preservation Officer), and DAHP (Department of Archeological and Historic Preservation) staff will be authorized direct access to the discovery location. This access must comply with all safety and security procedures.
 - The coroner will make a determination as to whether the human skeletal remains are forensic (evidence of a possible crime) or non-forensic (historical). If the human skeletal remains are determined to be forensic, the coroner will retain control of the human skeletal remains and the discovery site will be treated as a crime scene. If the human skeletal remains are determined to be non-forensic, the coroner will notify DAHP.
 - The DAHP state physical anthropologist will make the initial determination as to whether the human skeletal remains are of Native American ancestry. If the human skeletal remains are determined to be of Native American ancestry, DAHP will notify the affected tribe(s).

- c. Notify the WSDOT Cultural Resource Manager at Environmental Services Office, who will notify:
 - FHWA Area Engineer or Environmental Program Manager.
 - State Historic Preservation Officer (SHPO).
 - WSDOT Tribal Liaison Office. The WSDOT Tribal Liaison Office will contact the affected tribe(s) and notify them of the unanticipated discovery.
 - Region Environmental Manager.
3. If the human skeletal remains are determined to be of Native American ancestry, tribal access will be allowed to the designated representative(s) of the affected tribe(s). WSDOT and FHWA will make a good faith effort to accommodate requests from affected tribe(s) to be present, prior to implementation of mitigation measures. The Project Engineer, WSDOT Cultural Resources, SHPO, and the affected tribe(s), in consultation, will determine what treatment is appropriate. If disinterment of Native American remains becomes necessary, FHWA, WSDOT, SHPO, and the affected tribe(s) will jointly determine the final custodian of the human skeletal remains for re-interment.

Discovery of Other Cultural Resources

The following guidance is given to assist the Project Engineer when construction activities cause the disturbance of cultural resources, other than human skeletal remains.

Should any WSDOT employee, contractor, or subcontractor believe they have uncovered a cultural resource, at any point in the project, the following steps should be initiated:

1. Ensure that all work adjacent to the discovery has ceased.
2. Immediately notify the Project Engineer. The Project Engineer shall immediately notify:
 - a. The Region Construction Manager
 - b. The WSDOT Cultural Resource Manager at the Environmental Services Office who will notify:
 - FHWA Area Engineer or Environmental Program Manager
 - State Historic Preservation Officer (SHPO)
 - WSDOT Tribal Liaison Office
 - Region Environmental Manager
3. Ensure that the area of work stoppage is adequate to provide total security and protection of the integrity of the resource. Vehicles, equipment and unauthorized personnel will not be permitted to traverse the site, nor will work resume, until treatment of the cultural resource is completed.
4. All archeological deposits discovered during construction are to be treated as if they are eligible for inclusion in the National Register of Historical Places (NRHP). Intentional disturbance of archeological sites without a permit from DAHP is prohibited by [RCW 27.53](#). Disturbance of Indian burials, cairns and glyphs is prohibited by [RCW 27.44](#).
5. If cultural resources are discovered, but additional project effects to the resource are not anticipated, project construction may resume, away from the site of the discovery, while documentation and assessment of the resource proceeds.

SS 1-07.17 Utilities and Similar Facilities

Utility Coordination

In some cases, utility adjustments will be completed prior to contract work. In other cases, adjustments are to be made concurrently with the work. The Project Engineer and the Contractor should meet with the impacted utility providers within the limits of the highway right of way and confirm the relationship, the terms of the relocation agreements, and the relocation work schedule. Where the feature will require adjustment during construction, notice should be provided far enough in advance to allow the utility to perform the adjustment without affecting the Contractor's work schedule.

Utilities should have been given preliminary plans, prior to awarding of the contract, showing grade lines and right of way to enable them to prepare plans and estimates for making the necessary changes to their facilities in as timely a manner as possible. The Project Engineer should determine that plans for the work have been made, that the relocated facilities will be clear of the construction, and that the utilities coordinate with the Contractor's operations to the fullest extent possible.

When utilities are known to exist within the limits of the project and are not planned for relocation but may be affected by the Contractor's construction activities, the Project Engineer and the Contractor should become familiar with the requirements of [RCW 19.122](#), Underground Utilities. The Project Engineer may wish to obtain copies of the RCW for review at Preconstruction Meetings.

The approximate locations of most existing underground utilities are shown on the contract plans. However, the existence of some underground utilities may not have been known or detected during design. If a one number locator service is available, the Contractor must utilize it in an attempt to locate all affected utility features. If no one number locator service is available, notice shall be provided individually to those owners of underground facilities known to have or suspected of having underground facilities within the area of proposed excavation. Even areas covered by a one number service may contain utilities not included in the service. If the Contractor discovers underground facilities which are not identified, the Contractor shall cease excavating in the vicinity of the facility and immediately notify the owner or operator of such facilities, or the one number locator service.

State law prohibits WSDOT from expending any funds to mitigate a utility conflict unless the utility's facilities occupy the underlying right-of-way via a compensable, real property interest, such as an easement. WSDOT does not recognize local agency issued franchises, permits, ordinances, or other similar accommodation agreements issued by local agency as instruments that convey a compensable, real property interest to a utility.

Work Performed Under Utility Agreements

Utility agreement work associated with a contract exists in two categories. The first is work done for a utility by WSDOT that is included in the contract and performed by the WSDOT contractor. The second is work done, either by the utility or the utility's contractor, that is associated with and done near the WSDOT project.

If the utility work is included in the contract, the plans will show the work and will include pay items exactly as if the work was part of the transportation improvement. The responsibility of the Project Engineer is to treat this work the same way that "normal" work is handled. There will be a necessity for communication with the utility itself, inviting

comments and joint reviews and inspection of the work. In many cases, the utility will provide materials or equipment to be incorporated into the work. The utility will also provide certification that provided material meets the requirements of the contract. If problems arise and changes are considered, there are additional paperwork demands. The Project Engineer should consult with the Utility and the Region Utility Engineer.

If the work is associated with the project, or if unrelated work is being done nearby, and the utility or its contractor is performing the work, the Project Engineer should treat the neighboring work in the same manner that adjacent WSDOT work would be treated (see [Standard Specifications](#) Section 1-05.14).

Responsibility for Coordination of Railroad Agreements

When railroads are involved within the project limits, an agreement/permit covering the work involved is usually entered into between WSDOT and the Railroad Company. Upon identifying that the contract involves work or involvement by a railroad, the Project Engineer should immediately obtain a copy of the agreement/permit or contact HQ Design Office Railroad Liaison to determine the status of the agreement/permit and to make sure it contains all elements needed to accommodate the construction of the project. If an agreement has not been made with the railroad, the Project Engineer should coordinate and monitor the development and processing of the agreement through the Region Construction and HQ Design Office Railroad Liaison. Where notices are required, the Project Engineer should ensure that proper notice is provided to the railroad company and that such notice is acknowledged by them. The Project Engineer should work with the Region Construction Manager and HQ Design Office Railroad Liaison to resolve any conflicts with the Railroad Company and prevent delays to the Contractor's operations.

Work Performed Under Railroad Agreements

Railroad work associated with a contract exists in three categories. The first is work done for a railroad by WSDOT that is included in the contract and performed by the WSDOT contractor. The second is work done, either by the railroad or the railroad's contractor, that is associated with and done near the WSDOT project. The third category is railroad protective services. Protective services, such as flagging, are typically provided by the railroad or their consultants.

If the railroad work is included in the contract, the plans will show the work and will include pay items exactly as if the work was part of the transportation improvement. The responsibility of the Project Engineer is to treat this work the same way that "normal" work is handled. There will be a necessity for communication with the railroad itself, inviting comments and joint reviews and inspection of the work. In many cases, the railroad will provide materials or equipment to be incorporated into the work. The railroad will also provide certification that provided material meets the requirements of the contract. If problems arise and changes are considered, there are additional paperwork demands. The Project Engineer should consult with the Railroad Company and the HQ Design Office Railroad Liaison.

If the work is associated with the project, or if unrelated work is being done nearby, and the railroad or its contractor is performing the work, the Project Engineer should treat the neighboring work in the same manner that adjacent WSDOT work would be treated (see [Standard Specifications](#) Section 1-05.14 and Section [SS 1-07.17](#).)

Protective services may be called for when the Contractor is performing work on railroad facilities (first category above) or when the Contractor's work is conflicting or adjacent to a railroad facility that is not being changed. Typically, the railroad will determine the need for service, provide the protective services. The railroad may send the bill to WSDOT or directly to the Contractor. There may be an agreement in place, or the railroad's actions may be unilateral. On all projects including railroad flagging, the Project Engineer will notify the Railroad Company when all work involving the railroad is physically complete.

The addition or revision of agreements with the railroad can be lengthy processes. The Project Engineer should stay alert for possible changes and the need for revisions to the agreement. When these arise, the Railroad Company and the HQ Design Office Railroad Liaison should be contacted early and often.

Railroad Flagging

All dollar amounts actually incurred by the Railroad Company for railroad flagging, under the terms of the typical railroad agreement, may be paid by WSDOT or the Contractor with reimbursement from WSDOT. The Contractor will incur no costs for railroad flagging unless the flagging is for the Contractor's benefit and convenience or is due to actions taken by the Contractor that are not in compliance to the contract. In this case, the Project Engineer will deduct this cost on monthly progress estimates as a below the line item in the Contract Administration and Payment System.

SS 1-07.16(1) Private/Public Property

Standard Specifications Section 1-07.16(1) restricts the contractor from using Contracting Agency owned or controlled property (other than property directly affected by the contract work) without the approval of the Engineer. The Engineer has the authority to allow the use of Contracting Agency owned or controlled property within the project limits and any other property specifically listed for use in the contract. The use of any other Contracting Agency owned or controlled property would require a lease agreement as detailed in WSDOT *Right of Way Manual* M 26-01 Chapter 11.

SS 1-07.18 Public Liability and Property Damage Insurance

All requirements for the Contractor to provide property damage and liability insurance and other specific required policies will be established in the original contract. Proper and complete policy documents must be furnished by the Contractor and verified by the HQ CAPS group before the contract is executed.

SS 1-07.23 Public Convenience and Safety

SS 1-07.23(1) Construction Under Traffic

General

Under the many special conditions encountered where traffic must be moved through or around construction operations, serious problems of traffic control can occur. Most conditions are temporary and are, therefore, dangerous and difficult to deal with because they are unexpected and not in accordance with the normal pattern of highway traffic. *Standard Specifications* Section 1-07.23(1) requires the Contractor to conduct all operations with the least possible obstruction and inconvenience to the public and to provide adequate safeguards, safety devices, protective equipment, and any other needed

actions to protect the life, health, safety, and property of the public. The responsibility to comply with these requirements is the Contractor's. It is the Project Engineer's responsibility to ensure that the Contractor complies.

Any deviation from these requirements shall only be allowed if the Contractor has requested the deviation in writing and the Engineer has provided written approval. The Region Traffic Office should be contacted to help evaluate the deviation and determine if the requested deviation is approvable.

Speed Reductions

If speed reductions are considered, the Project Engineer shall follow Executive Order E 1060 and the guidance found in [Traffic Manual](#) Chapter 5-18.

Temporary Breaks in Limited Access for Construction

The Federal Highway Administration (FHWA) cannot delegate its approval authority to add access points to existing limited access controlled Interstate facilities through the WSDOT-FHWA Stewardship Agreement. The FHWA has granted approval to break limited access in order to gain access to the worksite from adjacent properties. This approval was granted through the FHWA approval of [Standard Specifications](#) Section 1-07.16. This approval does not extend to allowing the Contractor to use this access to merge construction vehicles and equipment with public traffic in the traveled way, auxiliary lanes, or shoulders. It is therefore necessary to seek approval from the FHWA when proposing to break limited access and merge construction vehicles with public traffic in the traveled way, auxiliary lanes, or shoulders.

[Standard Specifications](#) Section 1-07.16 allows the Contractor to access the worksite from adjacent properties but does not allow the Contractor to merge construction vehicles or equipment (including Contractor workforce vehicles of any type) from that access with public traffic. [Standard Specifications](#) Section 1-07.23 allows the Interstate highway system to be accessed through existing facilities or through access points allowed within the contract only. These access points allowed in the contract will either be in the form of site-specific traffic control plans or by contract provisions included in the contract documents.

If the Contractor proposes to merge construction vehicles with public traffic in the traveled way, auxiliary lanes or shoulders and the contract contains the General Special Provision (GSP) that allows this access, then the Contractor shall submit a site-specific plan for traffic control in accordance with the MUTCD Part VI. The Region Traffic Engineer should review this plan and it should be submitted to FHWA.

During construction on Interstate projects the Project Engineer will notify the appropriate Assistant State Construction Engineer (ASCE) who will forward the information to the FHWA Area Engineer and the WSDOT Access Manager by sending them a copy of the approved vicinity map showing the location of the access break and site-specific traffic control plan. FHWA approval of a PS&E containing this GSP constitutes approval of access from adjacent properties to the traveled way, auxiliary lanes or shoulders.

While some contracts may not contain provisions for breaking limited access for construction and for merging of construction vehicles with mainline and/or interchange ramp traffic, the Contractor may request one. If the Region agrees and the project is on limited access-controlled Interstate, the Project Engineer shall contact the appropriate ASCE who will forward the request to the FHWA Area Engineer for approval. The ASCE

will cc the Access Manager when forwarding the request to FHWA. The Contractor shall submit a vicinity map showing the location of the access break, a site-specific plan for traffic control in accordance with the MUTCD Part VI, and the duration for which the accesses will be in operation. On non-interstate limited access-controlled facilities, approval will be required by the Region. If approval is granted and the facility is a limited access facility, the GSP will be added to the contract by change order. On managed access roadways the Project Engineer, with Region concurrence, has approval authority to grant the Contractor temporary access, in accordance with the [Standard Specifications](#).

Public Information and Customer Focus

Most drivers still have the expectation of proceeding to their destination with little or no delay even though traffic conditions on many of our highways are deteriorating, primarily due to increased traffic volume. This increased volume may create congestion, delays, accidents, and aggressive driving during normal daily operation. Highway construction will usually require a more restricted roadway to accommodate work zones and can further reduce traffic mobility and safety. Even some of our lower volume rural highways can present a challenge due to factors such as drivers not expecting construction work and seasonal/recreational traffic increases. Construction and user delays present significant costs in addition to costs associated with crashes and worker safety. These delays and costs can be minimized by implementing a traffic control strategy based on traffic conditions and construction requirements, and which includes public information and customer focus considerations.

Our goal on every highway construction project should be to provide the best overall balance of work zone safety and traffic mobility while constructing quality highway projects. Much of our effort is directed at engineering responses to safety and mobility issues and is generally included in the contract requirements. Recent customer focused highway construction studies have shown that accurate and timely project information is a valuable element in an overall traffic control strategy. Advance planning and coordination between the project engineer and Contractor is necessary to ensure that there is an opportunity to provide public information for all phases of the project that impact traffic. Proper use of public information and customer focused techniques will provide safety and mobility benefits that would not otherwise be gained, as listed below:

- Alert drivers to potential delays by advance notice through project signing and the news media that would allow drivers to take alternate routes, adjust scheduled trips and have better awareness of traffic impacts and how to avoid them.
- Provide benefits to the Contractor from reduced traffic volume and better driver awareness through fewer crashes, less material delivery delay, better worker safety, fewer complaints, and overall public acceptance of the project.
- Achieve better driver acceptance, reduced aggressive driving and improved work zone credibility by minimizing delays and providing accurate and timely information.
- Consider innovative construction techniques and shorter-term intense work stages with more severe traffic restrictions, such as weekend closures, if possible.
- Closely monitor traffic conditions when traffic is restricted to determine the need for any traffic control or work hour adjustments that would improve traffic flow. Specified working hours and the accompanying traffic restrictions are critical elements of the project traffic control strategy and should not be adjusted without proper traffic analysis.

- Maintain ongoing communication during the life of the project with local law enforcement, emergency services, local agencies, transit groups, affected local businesses, etc.
- Continue use of innovative devices such as portable, changeable message signs, project information signs with information phone number and highway advisory radio systems.

The Regional Construction Manager, Traffic Engineer, and Public Information Officer should be involved in the project traffic control strategy and may be able to offer assistance.

Road/Ramp Closures and Use Restrictions

When it is necessary to close a road, street, or ramp, the Project Engineer shall submit a request that includes the appropriate closure/detour plan to the Region Traffic Engineer in advance of the need. Per [RCW 47.48.010](#), the Regional Administrator may close a road, street, or ramp.

With proper planning and implementation, road/ramp closures can be an effective and safe method of traffic control. As required by RCW, notice of the closure shall be published in one issue of a newspaper in the area in which the closure is to take place. Signs indicating dates and times of the closure shall be placed at each end of the Section to be closed on or before publishing the notice in the newspaper. Publishing the notice and placing of the signs shall be a minimum of three days in advance of the closure. Advance notice using local radio, portable changeable message signs or HAR may be effective in diverting traffic from the closed or impacted locations.

Coordinate with the Region Public Information Officer for assistance with public notification.

In cases of emergency, or closures of 12 hours or less, the road, street, or ramp may be closed without prior notice to the public. If possible, a notice should be posted one working day in advance of the closure.

When planning to close or restrict use for more than 12 hours on one or both directions of mainline on Interstate systems, system to system ramps or Federal-aid Primary Routes, FHWA must be notified as shown in the table below. Use restrictions are defined as any limitation on the vehicle type, load or function of the facility. These notification requirements apply even to projects with onsite or offsite detours in place. Federal-aid Primary Routes are US routes 2, 12, 97, 101, 395 and State Routes 16, 18, 99, 167, 520, 522. FHWA notification shall be made to the following email address: washington.fhwa@dot.gov

WORK Activity	WSDOT Action
Interstate full closures or use restrictions of 7 or more consecutive days	Send notification to FHWA 60 days in advance of potential closure and provide updates as available
Interstate full closures or use restrictions between 48 hours and 7 consecutive days	Send notification to FHWA 14 days in advance and provide updates as available
Interstate full closures or use restrictions between 12 hours and 48 consecutive hours	Send notification to FHWA 7 days in advance and provide updates as available
Federal-aid Primary Route full closures or use restrictions of 7 or more consecutive days	Send notification to FHWA 14 days in advance and provide updates as available

Pedestrian Safety

When the work area encroaches upon a sidewalk, crosswalk, or other areas that are near an area utilized by pedestrians or bicyclists, special consideration should be given to their accommodation and safety. Pedestrians are more susceptible to personal injury in work areas than are motorists. Visibility and recognition of hazards is an important requirement for the safety of pedestrians and bicyclists.

Protective barricades, fencing, handrails, and bridges, together with warning and guidance devices, should be used so that pathways for pedestrians, bicyclists, equestrians, and other non-motorists are safe and well defined. Where walks are closed by construction or maintenance, an alternate walkway should be provided where feasible. Where it is necessary to divert pedestrians into the parking lane of a street, barricades and delineation should be provided to separate the pedestrian walkway from the adjacent traffic lane. Pedestrians should not be diverted into a portion of the street used by vehicular traffic. At locations where adjacent alternate walkways cannot be provided, pedestrians can be diverted across the street by placing appropriate signs at the construction limits and at the nearest crosswalk or intersection. When hazardous work conditions exist overhead, it may be necessary to install a fixed pedestrian walkway of the fence or canopy type to protect and control pedestrians. In such cases, wood and chain link fencing can be used with warning lights and illumination to warn and guide both pedestrians and motorists. These accommodations for pedestrians and bicycles should be included in Traffic Control Plans.

Fences around a construction area are often necessary and may be a requirement of the local jurisdiction building code. They are often constructed in conjunction with a special pedestrian walkway or when there are deep excavations or when pedestrian access to the job site is not desirable. Installation of such fencing must consider relocation of existing control devices and facilities such as traffic signals, pedestrian signals, traffic signs, and parking meters. The use of chain link fencing which can be seen through may be needed at intersections to provide adequate sight distance.

Relocating a walkway without unreasonable inconvenience to pedestrians, residents, or commercial interest, is the safest practice of all. Remember, however, that pedestrians like to “see what’s going on.” Simply denying them access does not, of itself, prevent their encroachment onto the worksite. Sometimes it is advisable to design and construct a pedestrian observation area for this purpose.

SS 1-07.23(2) Construction and Maintenance of Detours

Construction zone detours will normally be detailed in the plans. When detours not shown in the plans are required, the design will likely be done by the Project Office under the direction of the Project Engineer and requirements of the MUTCD. If the detour is a full-fledged roadway, design and traffic reviewers should check the design. Short-term minor detours may be installed and operated without formal review, but the Project Engineer must be satisfied that the facility is suitable and safe for traffic use.

Existing pavement markings on asphalt pavement shall never be merely blacked out with oil or paint; this is not allowed by the MUTCD. Rather, the striped and adjacent areas should be hydroblasted, or ground in a pattern different from the original marking until the marking is no longer visible. This change in pattern minimizes the possibility that the original marking will still be visible to drivers, especially at night or in rainy weather when covered-over stripes tend to shine in contrast to the pavement. Black mask pavement

marking tape, either for temporary lane marking or masking of existing markings may offer another option and approved removable tapes are listed on the Qualified Products List (QPL). Existing conflicting markings should never be allowed to remain in place. When markings remain from an alignment shift or the marking goes under a device (like barrier), the existing marking must be removed to eliminate confusion to the motorist.

Temporary concrete barrier should be part of the plan design for positive protection of the work area. Barrier is not to be used as primary delineation to guide traffic. A combination of pavement markings and temporary channelization devices are to be used along with the barrier. Temporary barrier delineators must be maintained and kept clean. When delineators become covered with grime or are damaged, they become ineffective. The condition and positioning of these devices should be checked daily.

SS 1-07.23(3) Work Zone Clear Zones

When a project requires traffic control, a Work Zone Clear Zone (WZCZ) shall be established and will apply during both working and non-working hours. During non-working hours no equipment or materials shall be within the WZCZ, unless it is protected by permanent guardrail or temporary concrete barrier (location and installation to be approved by the Project Engineer). During working hours, unless protected as stated for non-working hours, only materials or equipment absolutely necessary to construction shall be allowed in the WZCZ or allowed to park on the shoulder of the roadway.

The minimum clear zone distance, measured from the edge of traveled way, shall be based on the posted speed as follows:

Posted Speed	Distance From Traveled Way
35 mph or less	10 ft
40 mph	15 ft
45 to 50 mph	20 ft
55 to 60 mph	30 ft
65 mph or greater	35 ft

SS 1-07.28(7) Railroad Insurance

Projects which include work on railroad right of way generally require special insurance protection. Pay particular attention to the Contract Special Provisions for project requirements because they vary from project to project. It is the responsibility of the Project Engineer to enforce the provisions. The required insurance documents are submitted to the railroad prior to the railroad issuing a right of entry agreement to the contractor. The Contractor should provide written notification of approval by the railroad company to the Project Engineer.

No work shall be started on railroad property until the necessary approvals have been obtained. The railroad insurance must be maintained until the date of physical completion of the project unless otherwise stated. However, the Contractor may make a written request to be relieved of the responsibility to continue all or part of the railroad protective liability insurance before the completion date under certain conditions. The details and conditions for this relief are specifically set forth in the special provisions of the Contract. If the Contractor should make a request for relief, the Project Engineer should contact the Region Construction Manager and HQ Design Office Railroad Liaison for guidance and assistance in coordinating this effort with the railroad.

1-08 Prosecution and Progress

SS 1-08.1(3) Subcontractor Approval

Requests by the Contractor to sublet Work are submitted on a Request to Sublet Work (RTS) DOT [Form 421-012](#) or via Unifier for approval by the Project Engineer or designee. The request will not be approved if the Contractor is debarred from bidding on or performing work on a public works Contract as described in section SS 1-08.1(5) (search Debarred Contractors on the Labor & Industries webpage). The request must be reviewed in order to ensure that the proposed subcontractor meets the requirements of *Standard Specifications* 1-08.1(9)B.

The request must be approved prior to the performance of any work on the Contract by either the subcontractor or a lower-tier subcontractor. If more than one subcontractor on a project wants to utilize the same firm as a lower-tier subcontractor, a separate RTS is required.

A copy of the Statement of Intent to Pay Prevailing Wages (SOI), approved by the Washington State Department of Labor & Industries (LNI), must be provided to the Project Engineer by the Contractor prior to payment for any work performed by that subcontractor or lower-tier subcontractor. An SOI will be required for each subcontract, even if the subcontractor has already submitted an SOI for work under another subcontract. An SOI is required for every subcontractor or lower-tier subcontractor unless documentation is provided from LNI stating that their work is not covered by prevailing wage laws.

In addition, for Federal-aid projects, a Certification for Federal-Aid Projects DOT [Form 420-004](#) must be submitted with the RTS prior to any subcontractor or lower-tier subcontractor beginning work. Non-submittal of the Certification for Federal-Aid Projects will result in rejection of the RTS.

Standard Specifications Section 1-08.1 defines what is considered subcontracting. Also, resources that are contractually provided by the Owner are not subcontractors; sometimes this is the case for Washington State Patrol, utility owner or its Contractor or consultant.

Do not be confused by the distinction between Professional Services and subcontractors in the markups for force account work described in *Standard Specifications* Section 1-09.6. Those provisions apply only to how the markup for overhead and profit is applied to force account work, and they have no relationship to the requirement for an RTS. If a Contractor is performing bid item work on the Contract, and they do not qualify for one of the two exceptions listed in *Standard Specifications* 1-08.1, an RTS is required.

Standard Specifications Section 1-08.1 outlines the requirements to approve the RTS and also establishes the minimum amount of work a first-tier subcontractor must self-perform, as well as DBE, SVBE, and MWBE when included in the Contract. The dollar value to be used for determining the amount of work that must be performed by the Prime Contractor is the total original Contract amount.

In order to ensure proper tracking and reporting of sublet information, the Project Office will enter data from each RTS into CCIS. When the Project Office is in a situation where CCIS is not utilized during the administration of a project (i.e., Emergency Contracts procured using Type 1 or Type 2 procurement as described in the *Emergency Funding Manual*, or State Aid Contracts) and requires the “hand calculation” of the percentage of

amount sublet, the percentage will be calculated for all items, using the amount shown on the RTS or the bid amount whichever is smaller.

On Federal-aid projects, the request may indicate that the subcontractor is a Disadvantaged Business Enterprise (DBE) or a Federal Small Business (FSBE).

When Condition of Award (COA) items are sublet, compare the RTS and the Utilization Plan with the information entered into DMCS to ensure accuracy. The RTS could include additional bid items and could have a sublet amount greater than the COA amount. The RTS cannot be approved if the sublet amount is less than the COA amounts shown in DMCS.

On projects funded wholly by the State, the request may indicate that the subcontractor is a Minority Business Enterprise (MBE), Small Business Enterprise (SBE), Veteran Business Enterprise (VOB) or a Women Business Enterprise (WBE).

Upon receipt of the request, the Project Office should verify that the subcontractor is certified by using the links at: <https://wsdot.diversitycompliance.com>.

Once the request has been verified and approved, enter the information into CCIS and verify the subcontractor has been added to DMCS to enable tracking and reporting. DOT Form 421-012 and Unifier allows the Contractor to indicate more than one type of certification for subcontractors, however, only one type may be entered into CCIS. Use the following order of precedence, highest on top, when determining the certification for CCIS:

Federal Funded	State Funded
DBE	MBE
FSBE	WBE
MBE	VOB
WBE	SBE
VOB	DBE
SBE	FSBE

SS 1-08.1(7)A Payment Reporting

Every Contractor is required to report all payments (to all subcontractors) in WSDOT's Diversity Management and Compliance System (DMCS) at: <https://wsdot.diversitycompliance.com/payments>. A Contractor withholding payment from a subcontractor must notify the subcontractor and the Contracting Agency identifying the reason for the withholding and providing remedy for the release of payment. If the Contractor fails to make the proper notifications, and the Project Office becomes aware of a withheld subcontractor payment, the Project Engineer must notify the Contractor in writing. If the issue is not resolved prior to the next progress estimate, the Project Engineer will withhold same amounts that were withheld from the subcontractor.

SS 1-08.1(7)B Prompt Payment

[RCW 39.76.011](#) requires WSDOT to process monthly progress payments in time for the State Treasurer's Office to process payment to the Contractor not later than 30 calendar days after the estimate cut-off. Figure 1-4 shows the activities required for this to happen. It also provides suggested durations for the Project Office to assume in planning when to run the pre-estimate and progress estimate.

Within 15 calendar days after the Contractor receives their monthly progress payment, a current copy of the Monthly Retainage Report (WSDOT Form 272-065) shall be emailed by the Prime Contractor to the appropriate Region email address as listed in the General Special Provision. The Monthly Retainage Report shall be submitted each month until every subcontractor and lower tier subcontractor's retainage has been released. The form shall be made available to the Contractor at the Pre-Construction Conference. No further action is needed by the Project Office, unless the Region OECR Compliance Specialist requests that the Project Engineer contacts the Contractor due to non-submittal. A letter of non-compliance will be issued, and payment may be withheld in the event of habitual non-compliance.

SS 1-08.1(7)D Contractor or Subcontractor Withholding

This section of the *Standard Specifications* reflects requirements of [RCW 39.76.011](#), sections (2)(e)(i)(A), (B), (C), and section (ii), which require the Contractor (or a subcontractor that is withholding from a lower-tier subcontractor) to do the following when withholding from a subcontractor:

1. Notify the subcontractor of the reason for the withholding;
2. Notify the subcontractor of the remedial actions that must be taken to be fully paid
3. Give the contracting officer of the public body a copy of the notice furnished to the subcontractor
4. Pay the subcontractor within 8 working days after the subcontractor satisfactorily completes the remedial action
5. Pay interest if the payment is late OR the notice does not meet the statutory requirements.

SS 1-08.1(7)E Contracting Agency Withholding Regarding Prompt Pay

This section of the *Standard Specifications* does not reflect WSDOT's duty stipulated in [RCW 39.76.011](#), section (2)(b), when withholding all or part of a progress payment from the Contractor. Nonetheless, the Project Engineer is required by that RCW to do the following when withholding any funds from a progress payment:

1. Provide the Contractor with written notice, within 8 working days of the estimate cutoff date, stating specifically why part or all of the payment is being withheld, and what remedial actions must be taken by the Contractor to receive the withheld amount.
2. If the notification by WSDOT does not comply with the notice timing and/or contents required, WSDOT shall pay interest on the withheld amount from the ninth working day after the estimate cutoff until the Contractor receives notice that does comply with the notice contents required.
3. If part or all of a payment is withheld as described above, WSDOT shall pay the withheld amount within thirty calendar days after the Contractor satisfactorily completes the remedial actions identified in the notice. If the withheld amount is not paid within the thirty calendar days, WSDOT shall pay interest from the thirty-first calendar day until the date paid.

This section of the *Standard Specifications* also addresses the situation in which WSDOT has overpaid the Contractor when the overpayment arises from WSDOT making a progress payment without any withholding, and subsequently the Contractor or subcontractor at any tier withholds some or all of a payment. The remedy for this required by *Standard Specifications* Section 1-08.1(7)E if the withholding is not resolved by the next progress estimate, is for WSDOT to withhold an amount equal to Contractor's withholding on the next progress estimate. The intent of WSDOT withholding is: (1) to eliminate WSDOT's overpayment, and (2) to encourage the Contractor to notify WSDOT of their intent to withhold part of a progress payment so that WSDOT can withhold an equal amount from the progress estimate, thereby eliminating the overpayment in the first place.

SS 1-08.1(7)F Subcontract Disputes Resolution Process

This Section of the *Standard Specifications* requires the Contractor, or subcontractor at any tier, to immediately initiate the disputes resolution process in the subcontract if the withholding is not resolved by the time stipulated in the *Standard Specifications* Section 1-08.1(7)F. The Project Engineer is expected to follow up with the Contractor to determine if this is happening as required.

SS 1-08.3 Progress Schedules

SS 1-08.3(1) General Requirements

The requirements for progress schedules are specified in *Standard Specifications* Section 1-08.3. A copy of the specified reference, Construction Planning and Scheduling, Second Edition, published by the Associated General Contractors of America, was sent to each Project Office and each Region Construction Office. Regions and Project Offices may order additional copies from: <http://store.agc.org/ePubs/ePubs/3502EB>. One of three progress schedules will be specified in the Contract. Two types of progress schedules are identified in the *Standard Specifications*, Type A and Type B. A third type may be inserted in the contract as a General Special Provision specifying a Type C Progress Schedule. The three types of progress schedules represent levels of job complexity. Type A being the simplest and easiest to produce and Type C being the most complex. Application is such that the complexity of the project (whether it be timing, coordination, or the work itself) will be reflected in the complexity of the schedule.

In addition, a preliminary schedule is required on contracts requiring Type B or C Progress Schedules. Preliminary progress schedules show the work to be accomplished within the first 60 working days. As always, the Contract Provisions may contain requirements that add to, or supersede, all or parts of *Standard Specifications* Section 1-08.3 to allow for special circumstances.

There are four basic reasons that we ask for a schedule:

- To better understand the Contractor's plan to deliver the project within the time allowed
- To plan our work force and other resource requirements
- To advise the public and executive staff of major milestones
- And to enable us to actively manage impacts to the contract

Progress schedules should have sufficient detail such that the progress of the work can be evaluated accurately at any time during the performance of the contract. The owner is obligated by contract to return the schedule for correction or approve it within 15 calendar days of receipt. Approval requires that the schedule complies not only with [Standard Specifications](#) Section 1-08.3 but it demonstrates compliance with other contract requirements such as interim completions, staged work, order of work, etc. Periodically, as warranted by progress, delays, or changes, the Project Engineer should review the schedule for accuracy and progress of work. If it is determined that the current schedule does not provide the required information or is no longer accurate, a schedule update may be requested from the Contractor. Monthly updates are required when Type C progress schedules are specified, and the cost of the updates is included in the Lump Sum price of the Bid item.

The cost of Type B schedule updates is not included in the Lump Sum price of the bid item. When work is added to the project or the work method is changed at the request of the contracting agency, the respective cost to update the Type B progress schedule should be included in the change order. Type B schedule updates driven by the Contractor's actions shall be provided to the Contracting Agency and are considered incidental to other work. No payment is made for Type A Progress Schedules or Type A schedule updates. Type B and C Progress Schedules are paid as a lump sum. Eighty percent of the lump sum payment is paid upon approval of the initial schedule. The remaining portion is paid when eighty percent of the original work is completed, provided updates have been provided as requested. Weekly look-ahead schedules are considered incidental to other items of work in the contract and therefore are not paid for separately.

When the Contractor has failed to provide a required schedule, the Engineer may:

- Withhold payment for the Type B or Type C schedule if it is not received (but not for other conforming work).
- Withhold all progress payments for failure to comply with the terms of the contract as specified in [Standard Specifications](#) Section 1-09.9 (this should be a rare event).
- Suspend work and continue to charge each day as workable (this should only be implemented when the Agency is harmed by lack of knowledge of the contractor's intended approach to the work).

In extreme cases, the Agency may determine that the Contractor is in breach of contract according to [Standard Specifications](#) Section 1-08.10 (usually accompanied by other serious breaches).

When lacking a progress schedule, the Engineer must base progress on the information available and their best judgment. According to [Standard Specifications](#) Section 1-08.5, the Contractor may protest working day charges, but must support the protest in sufficient detail to enable the Engineer to ascertain the basis and amount of time disputed by following the protest procedures in Section 1-04.5.

Review and Approval of Progress Schedules

It is the responsibility of the Project Engineer to ensure that the Contractor submits a correct and complete progress schedule in the time specified. Progress schedules must meet the general as well as type-specific criteria. Once it is determined that the progress schedule submitted is of the type specified by the contract, the Project Engineer should evaluate the schedule to determine if it meets the requirements of *Standard Specifications* Section 1-08.3, the Special Provisions and the Contract.

- The progress schedule must include all activities necessary to physically complete the project. By definition, activities consume time and usually consume resources. Activities like concrete curing time and slope staking earthwork may be rolled-up into the overall duration of the activity.
- The progress schedule must show the planned order of work in logical sequence, and in compliance with any requirements of the contract. The reviewer should remember that some work is sequenced by factors inherent in the work, but the Contractor may sequence the work by their preference as long as the project is completed within the authorized time and in conformance to the contract.
- The progress schedule must show durations of work activities in working days. Except for defining nonworking days, the calendar has no relationship to administering contract time. An activity may be stalled by unsuitable weather for days or weeks and remain “on schedule.”
- The progress schedule must show activities in durations that are reasonable for the intended work. Since durations of work are a function of resource allocation, the Project Engineer may be required to estimate production rates using estimating manuals, experience or other resources, or to ask the Contractor to explain their planned resource allocation to support the duration.
- The progress schedule must define activities in sufficient detail that progress of individual activities may be evaluated daily. The reviewer should keep in mind that the level of detail required in a progress schedule is driven by the amount of precision required to perform and monitor the work. For example, a single activity that represents several miles of grading may not provide adequate detail and may need to be subdivided into smaller activities described by station limits.
- The progress schedule must show the physical completion of all contract work within the authorized contract time.

WSDOT may accept a Progress Schedule indicating an early physical completion date but cannot guarantee that WSDOT’s resources will be available to meet an accelerated schedule.

If the progress schedule does not provide the required information, it should be returned to the Contractor for correction and resubmittal. Because the *Standard Specifications* do not specify timelines for resubmittal, the Engineer should provide a reasonable amount of time for the Contractor to revise and resubmit the schedule, and advise the Contractor of the expected date of resubmittal.

SS 1-08.3(2) Progress Schedule Types

Type C Progress Schedule

Type C Progress Schedules are required for all projects that include the bid item for Type C Progress Schedule. The Contractor is to submit a preliminary Type C Progress Schedule to the Engineer no later than the first working day (as defined in [Standard Specifications](#) Section 1-08.5). The preliminary schedule must meet all requirements of a Type C Progress Schedule and of [Standard Specifications](#) Section 1-08.3(1) except that it may be limited to activities occurring within the first 60 working days.

The Contractor is required to submit a Type C Progress Schedule no later than 60 calendar days after the contract is executed.

Each time that a preliminary schedule, Progress Schedule, or Schedule Update is submitted, the Contractor is required to provide the Engineer with an electronic copy of that schedule, in Primavera Project Manager Enterprise Version, P6.

Type C Progress Schedules must contain all of the information required of a Type B schedule, and the following additional information:

- A timed scale logic diagram.
- Activities for traffic detours and closures.
- Milestones for required delivery of State furnished materials (if any)
- Activities for State furnished traffic control resources (if any).
- Activities for fabrication of materials with longer than 90 calendar days lead time.
- Fixed constraints shall be identified on the activity listing and be supplemented with a written narrative describing why the constraint exists.
- Milestones for interim or stage completion dates.
- Activities for scheduled outages on illumination systems, ITS systems, traffic signal systems and other electrical service outages.
- Nighttime activities shall be so coded.
- Activities for all submittals requiring State review, including the allowable review duration.

If requested by the Engineer, the Contractor shall provide a written narrative describing assumed production rates and planned resource allocation to support activity durations.

SS 1-08.3(2)A Type A Progress Schedule

Type A Progress Schedules are required for any projects that do not include the bid item for Type B Progress Schedule or Type C Progress Schedule. The Contractor is required to submit the Type A Progress Schedules to the Engineer no later than 10 days after the date the contract is executed, or some other mutually agreed upon submittal time. This may be a critical path method (CPM) schedule, a bar chart, or other standard schedule format, such as fenced bar charts, linear schedules, PERT networks and others. These scheduling methods are described in detail in the benchmark document “Construction Planning and Scheduling, Second Edition.” The Contractor is required to identify the critical path of the project, because a bar chart schedule does not rely on network calculations to determine the critical path.

The Engineer will evaluate this schedule and approve or return it for correction within 15 calendar days of receiving the submittal.

SS 1-08.3(2)B Type B Progress Schedule

Type B Progress Schedules are required for all projects containing the bid item for Type B Progress Schedule.

The Contractor is required to submit a preliminary schedule to the Engineer no later than five calendar days after the date the contract is executed. Preliminary schedules must meet all requirements of a Type B Progress Schedule except that they may be limited to activities occurring in the first 60 days of the project.

The Contractor is required to submit a copy of the Type B Progress Schedule to the Engineer no later than 30 calendar days from the date that the Contract is executed. This schedule must be a critical path method (CPM) schedule developed by the Precedence Diagramming Method and may employ restrains provided the restrains do not alter the network logic or critical path. As a minimum the Type B Progress Schedule must show:

- The Contract Number and Title
- Construction Start Date
- Critical Path
- Activity Description
- Milestone Description
- Activity Duration
- Predecessor Activities
- Successors Activities
- Early Start and Early Finish for each activity
- Late Start and Late Finish for each activity
- Total Float and Free Float for each activity
- Physical Completion Date
- Data Date

(Many of these terms are defined in “Construction Planning and Scheduling.”)

The reviewer should watch for fixed date constraints that override network logic and force activities to become critical. Specific work windows or “open to traffic” milestones may legitimately influence sequence and duration of related activities. Fixed completion milestones for work that is susceptible to unsuitable weather are inappropriate because completion may be extended by the determination of unworkable days.

It is not unusual to see dual critical paths on a CPM schedule, nor is it prohibited. Multiple critical paths are generally very short in duration. Lengthy occurrences of parallel critical activities should be cause for scrutiny of activity durations and sequencing.

The Engineer will evaluate this schedule to ensure that all required information is included in the schedule, check the network calculations, and approve or return it for correction within 15 calendar days of receiving the submittal.

SS 1-08.3(2)D Weekly Look-Ahead Schedule

Weekly Look-Ahead Schedules are required for all projects. The Contractor is required to submit a Weekly Look-Ahead Schedule, for each week that work is to be performed on the project, showing Contractor and all subcontractor activities for the next two weeks. The Weekly Look-Ahead Schedule must show:

- Description of the work.
- Duration of the work.
- Sequence of the work.
- Planned hours of work.

The specification requires that Look-Ahead Schedules show the contractor's planned hours of work. This information is necessary to evaluate the results of unsuitable weather on the critical path and to assess working days charges correctly.

This schedule is to be submitted by mid-week of the week preceding the scheduled work, or other mutually agreed upon submittal time.

SS 1-08.3(3) Schedule Updates

Schedule Updates are required for all projects. The Engineer may request schedule updates when any of the following events occur:

- A change order that affects the critical path.
- The sequence of work is changed from that in the approved schedule.
- The project is significantly delayed (10 days or 10 percent of the original contract time, whichever is greater).
- An extension of contract time is requested.

It is important to note that schedule updates are only required when they are requested by the Project Engineer, when a contractor submits a request for a time extension, or monthly in the case of a Type C Progress Schedule. The Project Engineer may request an update when any of the triggers occurs but may choose to forego the update if the impacts to the schedule are readily evident.

The Contractor is required to submit a copy of the Schedule Update for approval within 15 calendar days of a written request, or when an update is required by Contract Provisions.

In addition to all other requirements, a Schedule Update must show:

- Actual duration and sequence of as-constructed work activities, including changed work.
- Approved time extensions.
- Construction delays or other conditions that affect the progress of work.
- Modifications to sequence or duration of remaining work.
- Physical completion of all remaining work within the remaining time authorized.

It is important to know the difference between an as-planned schedule and an as-constructed schedule. All updates must show the as-constructed sequence and actual durations of all activities prior to the status date.

When the need for a schedule update is triggered by an event that is the contractor's doing, they are responsible for the cost. When WSDOT causes an event or requests an update for their need, payment will be made as part of an equitable adjustment. When WSDOT is adding work or time by means of a change order, the price of the schedule update can be included as part of the work.

Any unresolved request for time extension must be shown by assuming that no time extension will be granted, and by showing the effects to follow-on activities necessary to physically complete the project within the currently authorized time for completion.

SS 1-08.4 Prosecution of Work

The Work will start as established in accordance with *Standard Specifications* Section 1-08.4 or such other date as prescribed by the contract provisions. *Standard Specifications* Section 1-08.4 indicates that Work may start at a time different from that specified if "otherwise approved in writing." Such other approval is intended only for very unusual circumstances, usually associated with mishandling of contract documents. It will only be granted in consultation with the State Construction Office.

SS 1-08.5 Time for Completion

Time associated with each phase of work established in the contract is to be shown on the Weekly Statement of Working Days. The Project Engineer is to furnish a weekly statement advising the Contractor of the current status of working day charges against the contract. Weekly Statements are generated by CCIS and must be issued in accordance with *Standard Specifications* Section 1-08.5. **The weekly statement must be provided to the Contractor by 5:00 PM the following Thursday.** The purpose of this statement is to advise the Contractor about the Project Engineer's decision for each passing day. The questions to be answered when determining if a day is chargeable are:

- Is it a nonworking day (holiday or a day the contract does not allow critical work to advance)?
- Was it a chargeable working day (critical work progressed uninhibited)? or
- Was it an unworkable day (critical work delayed by weather or conditions caused by the weather)?

When evaluating each day, the Project Engineer should take into consideration the following conditions:

1. The effect of inclement weather on critical activities.
2. The effect of conditions caused by inclement weather on critical activities.
3. Critical work restrictions imposed by the contract or the Project Engineer.

If any of the above conditions prevent work or reduce the Contractor's efficiency on critical activities on the project, working day charges shall be adjusted accordingly. If the Contractor can continue Work on critical activities but the efficiency is significantly reduced, a half day may be charged. When determining unworkable days the Project Engineer shall take into consideration the prolonged effects of weather events. If the Contractor is required to divert resources from working on critical path activities due to the lasting effects of a weather event the Project Engineer may determine a half day, the whole day or several days as unworkable.

If the contract does not specifically define a working day, a working day will be considered a 24 hour period. The contractor establishes the hours of work in the Weekly-Look Ahead Schedule and the start of the day should be by mutual agreement. The contractor shall be charged for one day during the defined 24 hour period regardless of how many shifts are worked.

The Project Engineer will complete Weekly Statements of Working Days throughout the course of the project, showing workable, nonworking and unworkable days as they occur. Statements will continue to be completed until the project has reached Substantial Completion and the Working Days assigned to the Contract have been exhausted. Following are the three possible scenarios:

- The working days are exhausted prior to reaching Substantial Completion. Weekly Statements of Working Days continue until Substantial Completion.
- The working days are exhausted on the day Substantial Completion is achieved. Weekly Statements of Working Days cease upon Substantial Completion.
- The working days are not exhausted upon reaching Substantial Completion. Weekly Statements of Working Days continue until the working days are exhausted or until physical completion.

Weekly Statements of Working Days are considered Written Determinations by the Engineer. If the Contractor does not agree with the Weekly Statements of Working Days, they are required to follow the procedures identified in *Standard Specification 1-04.5*.

Upon Substantial Completion the Project Engineer will ensure that the date is entered into CCIS and is noted in the remaining Weekly Statements of Working Days. After Weekly Statements have stopped, comments concerning weather and other events beyond the Contractor's control should be documented, and the effect of these conditions on remaining Work and on the scheduled completion should also be noted.

The contract duration specified for physically completing the contract is stated in the contract provisions under the general special provision "Time For Completion." Although there are exceptions, the guidance in this chapter pertains to contracts in which time is accounted for in terms of working days.

The Contractor may begin work as soon as the contract is executed and shall prosecute the work diligently until physical completion has been reached.

Between the execution of the contract and the acceptance by the State Construction Engineer, the Project Engineer will likely encounter time-related issues. These will be documented through Weekly Statements of Working Days (*Standard Specifications* Section 1-08.5), Suspensions of Work (*Standard Specifications* Section 1-08.6), Protested Work (*Standard Specifications* Section 1-04.5), and Time Extensions (*Standard Specifications* Section 1-08.8).

Contract Completion Milestones – There are two milestones that establish the end of contract time. They are defined in *Standard Specifications* Section 1-01.3 as Substantial Completion Date and Physical Completion Date. These two milestones are discussed in greater detail later in this chapter.

Substantial Completion

Substantial Completion may be granted when only minor, incidental items of work, replacement of temporary facilities or correction remain in order to physically complete the contract. In determining Substantial Completion, the Project Engineer should consider whether:

- The public has full use and benefit of the facility.
- Major safety features are installed and functional, including guardrail, striping, and delineation.
- Illumination, if required, is installed or a temporary system with equal functional capabilities is operating.
- Signals, if required, are installed or a temporary system with equal functional capabilities is operating.
- The need for temporary traffic control on a regular basis has ceased. Only minor traffic restrictions will be needed for the remaining work.
- The traffic is operating in its permanent configuration.

The Project Engineer is responsible for determining the Substantial Completion date. When this has been done, the Contractor will be notified by letter, specifically noting the date on which Substantial Completion was achieved. Per *Standard Specifications* Section 1-07.18, Substantial Completion is tied to the contract insurance requirements and the Contract Administration and Payment System (CAPS) Unit of Accountability and Financial Service (AFS) must also be notified of the substantial completion date (email to caps@wsdot.wa.gov). In order to be in concurrence, the project engineer will also provide notification of Substantial Completion to the State Materials Laboratory Materials Quality Assurance Section (email to mlrom@wsdot.wa.gov) and to the State Construction Office (email to DOTconstruction@wsdot.wa.gov).

Physical Completion

The date on which the Project Engineer determines that all physical work has been completed is noted and then established as the date of Physical Completion. The Project Engineer will immediately notify the Contractor by letter of the date determined for Physical Completion. The letter will include a statement asking the Contractor to complete and return the Contractor's Construction Process Evaluation (DOT Form 410-029), and will provide a copy of the form as an attachment. Copies of the letter will be sent to:

- The Railroad companies, if applicable.
- The Contract Administration and Payment System (CAPS) Unit of Accountability and Financial Services (AFS) by means of a copy of the letter sent by email to caps@wsdot.wa.gov.
- The Regional Local Programs Engineer on all city and county projects.
- The GIS and Roadway Data Office (GRDO) Roadway Geometrics Office (email to roadway@wsdot.wa.gov).
- The State Construction Office, (email to DOTconstruction@wsdot.wa.gov).
- State Materials Laboratory, (email to mlrom@wsdot.wa.gov)
- Any other distribution that the Region deems appropriate.

Actions the Project Engineer should consider taking once Physical Completion has occurred include:

- Identify any unresolved disputes and initiate discussions.
- Initiate a full review of item quantities, seeking contractor concurrence.
- Initiate a final review of materials documentation.
- On Federal-aid projects, initiate a Stewardship Final Inspection and Acceptance.
- Compile a list of all approved subcontractors performing work on the project and transmit to Contractor, who will review the list for completeness and return the list annotated with each subcontractor Universal Business Identifier (UBI).

Assembly of Delinquent Records

Immediately after the Physical Completion date has been established, the Project Engineer is to notify the Contractor of all outstanding documents that are required to establish a project Completion Date. Once all the obligations of the Contract have been performed by the Contractor, the Project Engineer will provide the Contractor written notice of project completion, identifying the Completion Date established for the contract.

For the project Completion Date to be established, all the physical work on the project must be completed, and the Contractor must have furnished all documentation required by the contract. This includes all approved Affidavits of Wages Paid, and the signed Final Contract Voucher Certification. (**Note:** Establish the Completion Date as soon as the last item of paperwork is received.) The notice to the Contractor should be prepared and mailed on the same day that is designated as the completion date. A copy of the completion letter, with attached completed *Contractor UBI and AWP Identification Number List* (LIST) must be emailed to caps@wsdot.wa.gov (CAPS) on the day the letter is written and sent. The LIST must include the UBI number and the Affidavit of Wages Paid (AWP) identification number for the Prime Contractor, subcontractors, applicable suppliers and manufacturers, delivery firms, and other firms that have filed an AWP with the Department of Labor and Industries (LNI). The LIST must be accurate and legible as errors will cause delays when requesting the release from LNI. To assure accuracy, it is recommended that offices compare their LIST against LNIs Prevailing Wage Intents and Affidavits system before issuing Contract Completion.

If the Contractor refuses, or is unable to return, a signed FCVC or any of the required documents, the Project Engineer, the Region and the State Construction Office can work together to move the project towards closure by establishing a unilateral completion date allowing WSDOT Acceptance of the contract. See section [SS 1-09.9](#) for Unilateral Acceptance procedures.

SS 1-08.6 Suspension of Work

The Project Engineer may order suspension of all or part of the Work if:

1. Inclement weather, or conditions caused by inclement weather, make it impracticable to achieve satisfactory results on a critical item of work,
2. The Contractor does not comply with the Contract, or
3. When, in the judgment of the Project Engineer, it is in the best interest of the public

If possible, suspensions for weather should be made with the concurrence of the Contractor. If the Contractor does not agree to a weather suspension, the Project Engineer should consult with the Region Construction Manager before issuing a unilateral suspension.

During suspensions of long duration, for example a winter shutdown, the publication of Weekly Statements may be suspended. Notices to suspend or resume work should be written. DOT Forms 421-006 and 421-007 have been developed for this purpose. A letter may accomplish the same purpose. If it is determined that some items of noncritical work on the project could be continued unaffected by weather conditions, those items may be excluded from the order to suspend work. The prime consideration for unworkable days or suspensions is always the ability to work on critical items.

The Project Engineer must decide if the Contractor made sufficient efforts to pursue Work before the suspension of work. If it is determined that the Contractor worked diligently before the suspension, WSDOT will maintain the temporary roadway, which includes:

1. The Traveled Way, Auxiliary Lanes, Shoulders, and detour surface
2. Roadway drainage along and under the traveled Roadway or detour
3. All barricades, signs, and lights needed for directing traffic through the temporary Roadway or detour in the construction area

All costs of roadway maintenance in this instance will be the responsibility of the Contracting Agency. The Project Engineer should coordinate these efforts with the area maintenance superintendent before any maintenance work takes place. If the Project Engineer deems the Contractor did not make sufficient efforts prior to the suspension of work, the maintenance described above will be the responsibility of the Contractor, along with the expense.

In either scenario, the Contractor is responsible for protection and maintenance of all other work areas not used by traffic during the suspension.

The suspensions described above as related to weather apply only to critical work items and, therefore, always result in a determination of an unworkable day. If the Engineer and the Contractor agree to stop working on a noncritical item for one of these causes but to continue critical work, then the agreement should be noted in the records and weekly statements should be issued in the normal fashion.

The contract also gives the Engineer the right to suspend work on any part of the project when the Contractor is not complying with the contract's terms or the orders of the Engineer. This would be a significant action and, except in an emergency situation, should not be undertaken without the full and informed consent of the Region Construction Manager and the State Construction Office. If work is suspended under this contract provision, then weekly statements and the charging of workable days will continue in the normal fashion.

Suspending the Work because it is in the public interest is a serious action and should be taken with great care. Unless there is imminent danger, the Project Engineer should consult with the Region Construction Manager and State Construction Office before suspending for public interest. Reasons for suspending for public interest may include natural disaster or emergency that necessitates the Work being halted.

Suspension of the Work may increase the cost or time necessary to perform the Work and gives the Contractor the right to protest when they believe the Work has been suspended, interrupted, or delayed by the Contracting Agency for an unreasonable amount of time. If the Contractor believes this has happened, they must submit their protest within 14 calendar days of the start of the suspension or delay. The Contractor is not entitled to an adjustment for any costs incurred more than 14 calendar days prior to the notice they provide. Additionally, the Contractor is not entitled to an adjustment if performance would have been delayed by any other cause including the fault of the Contractor or if an adjustment is excluded under another provision of the Contract.

SS 1-08.8 Extensions of Time

In general time extensions are appropriate whenever the critical work is delayed due to an action or inaction of the Contracting Agency, or by a cause that is not the responsibility of the Contractor. [Standard Specifications](#) Section 1-08.8 includes a list of reasons that entitle the Contractor to a time extension, and a list of reasons for which no time extension will be granted. In all cases, the change or delay must delay critical work or an extension is not appropriate.

The Contract requires the Contractor to identify a delay within 14 days of recognizing that one exists. If a delay is readily identifiable, the Project Engineer should enforce this provision. If the delay is not immediately apparent the time extension discussion should take place as soon as the delay is recognized. Before discussing a potential delay for which adequate notice was not given, the Project Engineer should discuss the situation with the Region Construction Manager to seek guidance. The Contractor should be encouraged to identify delays and bring them to the State's attention at the earliest opportunity. This allows the Contracting Agency to mitigate the delay by adding time, modifying the work or recovering the schedule. In the interest of actively managing a delay the project engineer may act unilaterally to address time if the contractor avoids the discussion. In any case, the Contractor is not entitled to a time extension for any Contract time that was incurred more than 14 days prior to the date the Project Engineer receives their request of time extension.

All time associated with Work added by change order should be addressed as part of the change order. If the Project Engineer is unable to come to agreement on the number of working days to add, the Region Construction Manager should be consulted concerning the need to unilaterally add time to the Contract. Deferring the discussion of time in a change order to a later date should be a last resort, and should be by mutual agreement between the parties, with a specific time when the discussion will resume. This mutual agreement must be documented in the Change Order.

If the Contractor is not granted time for Work added by a change order, they are still required to complete the Contract in the number of working days that remain. This situation may cause the Contractor to accelerate their efforts, by adding additional crews, equipment or working longer hours or extra days. If these actions are taken as a result of the Contracting Agency not granting a time extension for which the Contractor is entitled, the Contracting Agency may be responsible for the additional cost of these efforts. This is known as constructive acceleration. If the Project Engineer determines that the Contractor is entitled to time, but an agreement cannot be reached, the Project Engineer should consider unilaterally executing a change order to add the justified amount of time to the Contract. The Contractor can then pursue the matter under the procedure for protest as outlined in [Standard Specifications](#) Section 1-04.5.

The State has a responsibility to inform the Contractor's surety whenever increased time is being considered and the current extension, combined with previous extensions, would exceed 20 percent of the original allotted time in the contract. This information could be represented by the Surety's signature on the change order that adds time, by a separate letter from the Surety, or by a notice letter direct to the Surety office. Such notice and surety consent is a legal requirement and will help maintain the State's rights to be protected by the performance bond.

Standard Specifications Section 1-08.6 provides under what circumstances the Contractor may be entitled to compensation. Anytime a project is delayed for any cause, the Project Engineer and the Contractor must consider methods of mitigating the delay damage. A common approach is to pursue schedule recovery by allocating additional resources to the work to get the project back on schedule. When the Project Engineer suspects that the State may be responsible for the delay, then compensation for the mitigation efforts may be proposed as necessary.

The Project Engineer must respond to the Contractor with a Written Determination within 21 calendar days of receiving the time extension request or supplemental information. Any time extension will be documented in a change order with approval levels defined in section [SS 1-04.4](#).

SS 1-08.9 Liquidated Damages

Liquidated Damages and Direct Engineering, or other related charges, are to be addressed as described in the contract specifications, *Standard Specifications* Section 1-08.9.

Direct Engineering charges are a form of Liquidated Damages and must be listed on the monthly progress estimates on the line for Liquidated Damages. Traffic related damages as described in section [SS 1-08.9](#) are to be listed under Miscellaneous Deductions. The Project Engineer must evaluate potential Liquidated Damages that have accrued as a result of the expiration of contract time before the damages are withheld from moneys due the Contractor. The work and circumstances that have occurred over the course of the project should be reviewed to determine if there is potential entitlement for granting additional contract time. Liquidated Damages that have accrued should be adjusted for this evaluation. Liquidated Damages deemed chargeable should then be withheld from moneys due the Contractor each monthly progress estimate as Liquidated Damages accrue. While the Project Engineer takes the action to withhold damages as the work progresses, only the State Construction Office may actually assess those damages.

Liquidated Damages must be resolved before the final estimate can be completed and processed. Guidance for assessing Liquidated Damages can be found in *Standard Specifications* Section 1-08, and in some cases in the contract provisions.

Any withholding or assessment made against the Contractor's payments, is to be preceded by a written communication to the contractor. For those issues that could be remedied with actions taken or initiated by the Contractor, this notice should also include a reasonable period of time that will allow the contractor to take action to mitigate or completely avoid the withholding or assessment.

The term "withhold" refers to a temporary deduction shown on a progress estimate. The term "assess" refers to a permanent deduction that could be shown on a progress estimate, but will be shown on the final estimate. Liquidated damages fall into two categories – one deals with contract time and the other deals with miscellaneous provisions such as ramp or lane closures. These two categories are described below.

Contract Time Liquidated Damages

Standard Specifications Section 1-08.9 establishes the amount of Liquidated Damages to be assessed if the Contractor overruns contract time. These assessments are either: (1) included in the Contract Provisions or (2) in the form of direct engineering and related costs.

The State Construction Engineer has not subdelegated to the Region the authority to assess time related damages on progress estimates or the final estimate. However, the authority to withhold below the line “Liquidated Damages” on progress estimates has been subdelegated to the Regions and may be further subdelegated to the Project Engineer. Liquidated Damages should be addressed whenever it is apparent that the number of working days provided in the contract will be used before Substantial Completion. It is emphasized once again that notice and communication is necessary as a legal requirement.

In some cases, there are legitimate reasons for time extensions which would preclude withholding liquidated damages on progress estimates. If the Project Engineer is aware of or anticipates a possible time extension that would preclude withholding liquidated damages on progress estimates, the Region and/or the State Construction Office should be consulted for guidance. If the Project Engineer determines that withholding of liquidated damages on progress estimates would not be appropriate, the reasons for not withholding are to be documented by a memorandum to the files. The following describes the procedures for addressing contract time related liquidated damages in the various stages or phases of the project:

- **Phases (Interim Physical Completion Dates)** – Liquidated damages for phases will be shown in the special provisions. When the contract includes additional phases, and the time for physical completion of a phase has overrun, the overrun should be resolved as it occurs. This involves the Contractor either being granted an extension of time or being assessed liquidated damages by the State Construction Office.
- **After Substantial Completion Date of the Contract** – If substantial completion is granted after the expiration of contract time the amount in the Contract Provision for liquidated damages will be assessed for that period of time between the expiration of contract time and the substantial completion date. Liquidated damages assessed after the date of substantial completion will be only those costs identified as Direct Engineering and related costs that have been incurred by WSDOT. The direct engineering and related costs are defined as field engineering and inspection time charges plus any vehicle, travel pay, per diem, or other charges connected with the delayed contract physical completion. Engineering costs such as computing grades, quantities, etc. which would have been incurred by WSDOT under normal conditions should not be included in the determination of direct engineering and related costs. If substantial completion is granted on or prior to the expiration of contract time, direct engineering costs will only be assessed for that period of time between the date contract time expired and the physical completion date.
- **Before Physical Completion** – If Substantial Completion has not been established, the amount in the Contract Provisions for Liquidated Damages, will be assessed for that period of time between the expiration of contract time and the Physical Completion date.

Working days added to the contract by time extensions when time has overrun shall only apply to the days on which Liquidated Damages or Direct Engineering have been charged, such as:

- If Substantial Completion has been granted prior to all of the authorized working days being used, then the number of days in the time extension will eliminate an equal number of days on which Direct Engineering charges have accrued.
- If the Substantial completion date is established after all of the authorized working days have been used, then the number of days in the time extension will eliminate an equal number of days on which Liquidated Damages or Direct Engineering charges have accrued.

Miscellaneous Liquidated Damages

The contract provisions may provide for assessment of other liquidated damages not connected to contract working days. These liquidated damages are recorded in CAPS as miscellaneous deductions. Miscellaneous liquidated damages may include, but are not limited to, failure to open traffic lanes or ramps within the prescribed time, fabrication inspection costs, or the cost of challenge tests that do not show a passing result. The State Construction Office has subdelegated the authority to the Regions to withhold and assess these types of liquidated damages on progress estimates and the final estimate. The Project Engineer shall notify the Contractor in writing when these types of liquidated damages are to be assessed. The Project Engineer shall include an explanation of miscellaneous liquidated damages with the Final Estimate package when it is submitted to the State Construction Office.

Processing Liquidated Damages

Both categories of liquidated damages affect project expenditures differently and must be entered correctly in CAPS.

- **Liquidated Damages** – Amounts withheld due to contract time overruns and direct engineering costs. All temporary withholding or final assessment of these damages are to be shown as a below the line “Liquidated Damages” deduction on progress estimates and the final estimate. Withholding liquidated damages reduces the contract construction engineering (CE) expenditures; and releasing them will increase the contract CE for the same amount. The Project Engineer should be aware of the potential charges to the project CE cost prior to over spending or releasing the surplus CE expenditure prior to the Contract Completion.
- **Miscellaneous Liquidated Damages** – Amounts withheld for activities not connected to contract working days, such as failure to open traffic, fabrication costs or challenging test results. All temporary withholding or final assessment for these liquidated damages shall be shown as a below the line “miscellaneous” deduction on progress estimates and final estimate. Miscellaneous liquidated damages do not affect work order expenditures and are released back to the funding source when the contract is complete.

SS 1-08.10 Termination of Contract

Contract termination is divided into two major categories, termination for default and termination for public convenience. *Standard Specifications* Section 1-08.10(1) defines the situations when a contract may be terminated for default (doesn't happen very often.) *Standard Specifications* Section 1-08.10(2) defines the situations when a contract may be terminated for public convenience.

Keep in mind that the conditions of the termination may be negotiated in the event that the termination is in the best interest of both parties. An example would be if a major change is beyond the abilities of the contractor. Negotiations with regard to conditions of the termination may include pricing partially completed items, mobilization payment, or the State taking possession of fabricated/purchased materials.

In both categories, if federal funds are involved, FHWA needs to be notified and informed of the situation early in the process. Specifically, Federal participation eligibility should be discussed prior to making a decision on termination. Formal notification and discussion should use normal channels through the Region to the State Construction Office. Authority to terminate a contract rests with the same position that had authority to execute the contract.

SS 1-08.10(2) Termination for Public Convenience

- A. **Authority to Terminate** – As provided in *Standard Specifications* Section 1-08.10(2), WSDOT may cancel all or portions of the Work included in a contract. If the project is to be terminated in whole and contains Federal funds, FHWA must be notified and a discussion of Federal participation eligibility should take place prior to the decision to terminate is finalized. The authority to terminate a contract resides in the same position that is authorized to execute the project. Change order approvals, per the Change Order Checklist, are required for termination change orders.
- B. **Cost Associated With Deleted Work** – The Contractor must submit a request for payment of costs associated with termination of the contract no later than 90-calendar days from the effective date of the termination. There are some limitations to payment that should be noted under *Standard Specifications* Section 1-09.5. When Work is deleted by the termination of a contract by the contracting agency, payment will only be for the costs actually associated with the termination. No profit will be allowed for Work that was not completed. Consequential damages are also not allowed. Consequential damages may include such things as loss of credit, loss of bonding capacity, loss of other jobs, loss of business reputation, loss of job opportunities, etc.
- C. **Payment for Materials** – Refer to section 1-04.4, subsection 5.9.
- D. **Deletion of Contract Items** – Since a termination change order is deleting work from the contract, uncompleted and unused contract items, if they are to remain uncompleted, must be deleted from the contract by the change order. “Zeroing out” these items assists in releasing funding from the project. When terminating a contract that contains work that is condition of award (COA), be sure to delete that work from the COA requirements by completing the condition of award portion of the change order in CCIS. Due to limited character space in CCIS, it may be necessary to create more than one change order to complete the termination change order. Be sure these multiple change orders are concurrent.

- E. **Physical Completion** – If the Contractor is not required to complete any contract Work after execution of the change order, the execution date of the change order should be established by the Project Engineer, and entered into CCIS, as the Physical Completion date for the contract. If the Contractor must complete some items of the Work, Physical Completion will be granted by the Project Engineer upon satisfactory completion of the Work (*Standard Specifications* Division 1-03). This date assists the CAPS unit of AFS to know if insurance must be maintained on the project.
- F. **Time** – The change order should contain a time statement, just like any other change order.
- G. **Waiver** – The change order should contain waiver language similar to that found in section [SS 1-04.4](#).

1-09 Measurement and Payment

SS 1-09.4 Equitable Adjustment

Pricing

Standard Specifications Section 1-04.4 specifies that an equitable adjustment (EA) in accordance with *Standard Specifications* Section 1-09.4 will be made when change orders cause an increase or decrease in the cost of performing work on the contract. The basic theory of an EA is to leave the parties to the contract in the same position cost wise and profit wise as they would have been without the change order, preserving to each as nearly as possible the advantages and disadvantages of their agreement. Although the contractor is entitled to profit on the changed work, the profit (or loss) on the unchanged work should remain unaffected by the equitable adjustment.

- This is an important point, for unchanged work, the contractor is entitled to the profit bid or a windfall, if the work turns out to be easier than expected.
- On the other hand, for unchanged work, the contracting agency is not obligated to make the contractor well for an underrun bid item.

Consequential damages are never allowed as part of a negotiated equitable adjustment. Consequential damages may include such things as: loss of credit, loss of bonding capacity, loss of other jobs, loss of business reputation, loss of job opportunities, impacts to another project, etc.

- A. **Unit Prices** – An appropriate price may be established using average unit bid prices, citing similar unit bid prices, a determination of market value, by estimating the cost to perform the work, or a combination of these methods. Unit bid price is one indication of an equitable price; however, the contracting agency should be prepared to support the price by other means.
- B. **Force Account** – When added work is paid by force account, a change order shall be prepared detailing the added work to be performed and the estimated cost. Standard Item Number 7715 is to be used for all force account items that do not have an assigned standard item number. Force account should be a last resort used only if the work can't be clearly defined.

C. **Overhead** – There are two basic types of overhead as follows:

- **Distributed Fixed Costs** – Offsite “home office overhead” is the cost of running a company. These costs are assumed to be distributed among all the projects performed by the company. Onsite overhead is incurred as a function of time needed to accomplish the project. Onsite costs are assumed to be evenly distributed among contract items. This category of overhead is eligible under an equitable adjustment if working days are added to the contract as part of the adjustment.
- **Variable Fixed Costs** – these costs are directly associated with performing an item of work on the project and therefore vary with the quantity, the contractor is entitled to recover these costs as a part of an equitable adjustment.

Forward Pricing and Risk

The first and best option for an equitable adjustment is agreement in advance between the contractor and WSDOT on the increased or decreased cost and time for performance of the changed work. The Project Engineer should expend every effort possible to obtain a satisfactory negotiated equitable adjustment prior to submitting the change order to the contractor for endorsement. The Project Engineer must remember that the contractor is a full participant in the contract and retains all the rights and privileges during a negotiation. When bidding a job, the contractor must be optimistic and take appropriate risks. When negotiating, it is understandable and acceptable for the contractor to be pessimistic and avoid risk, unless compensated. Some key points to remember are:

- A negotiated price will likely be higher than a competitive bid price.
- A proposal which assigns extensive risk to the contractor will likely be more costly yet.
- The contractor may be willing to take on this risk if the price is a bit higher
- The significant advantage of reaching a price agreement before the work is started (forward pricing) is that the contractor assumes the risk of the accuracy of the pricing assumptions and predicted duration for performing the work.
- (when forward pricing) the Project Engineer may utilize the high end of the estimating range in justification.
- (when forward pricing) an audited overhead rate may be substituted for the markups described in [Standard Specifications](#) Section 1-09.6. Contractors can usually provide an estimated home office overhead rate which may be checked by an annual audit, if warranted.

Pricing After Fact

When establishing prices after the work has been performed, actual costs should be used to the extent they are available. The following are key points to keep in mind:

- Costs for equipment cannot exceed the rates established by the AGC/WSDOT Equipment Rental Agreement for an equitable adjustment.
- When pricing after the fact, the markups described in [Standard Specifications](#) Section 1-09.6 are appropriate for measuring time and materials because there is no risk involved in after the fact pricing.

Unilateral Pricing

In the interest of being timely, the change order should be a tool to document agreement and not a negotiation tool back and forth. Ideally we will have agreement with the contractor when pricing the work. On occasion, however, due to time constraints and difference of opinion, we can't always come to agreement. The difference of opinion may be for only a small portion of the work. [Standard Specifications](#) Section 1-09.4(2) provides, "If the parties cannot agree, the price will be determined by the Engineer using unit prices, or other means to establish costs." This is not to say that the contractor is obligated to honor unit bid prices for work that qualifies for an equitable adjustment. This allows us to proceed with changed work prior to reaching an agreement on the price. In the interest of being timely, and provided the Project Engineer is comfortable that the included price can be supported, there's nothing wrong with issuing a change order to the contractor unilaterally. This orders the work to proceed, establishes the State's position on cost, and puts the decision to continue negotiations in the contractor's hands as detailed under [Standard Specifications](#) Section 1-04.5. The contractor is obligated to endorse or protest as described in the specification and a timeline is provided for these actions.

Time

The completed equitable adjustment should include provisions for any increases or decreases in contract time based on impacts to overall contract duration. The decision on time should be supported by an analysis of the project schedule. Analyzing time in advance encourages communication between the parties allowing the contracting agency to make an informed decision on the true costs. It also enables the contracting agency to mitigate time impacts if that is in the agency's best interest.

SS 1-09.6 Force Account

General

When it is difficult to provide adequate measurement or to estimate the cost to complete items of work, force account may be used to pay the Contractor. Force account bid items can be set up in the Contract or may be used for payment of some change orders. [Standard Specifications](#) Section 1-09.6 describes the boundaries for payment of work performed by the force account method.

The purpose of force account is to fully reimburse the Contractor for costs incurred to complete the work. This can include indirect costs such as travel, per diem, safety training, industrial safety measures, overhead, profit and other hidden costs. The objective is to minimize the inclusion of any "contingencies" included in the Contract bid in anticipation of costs that may be incurred during force account work and not reimbursed.

When work is added to the contract and is to be paid by force account, a change order will have been prepared describing the added work to be performed. The change order package will also contain an independent estimate of the cost to perform the added work. All non-standard force account items are assigned the Standard Item Number 7715.

Force account payments are typically not authorized for employees engaged in management or general supervisory work. The cost for this type of activity is presumed to be included in the Contractor's markups for overhead and profit. However, a foreman or, in some cases, a dedicated superintendent devoting full time to the force account work may be eligible for payment as direct labor if approved by the Project Engineer. The

superintendent must be on the Contractor's submitted and approved labor list with an hourly rate of pay, even if the superintendent is a salary employee.

Contract items that were bid or negotiated with a unit price or lump sum agreement will not be converted to force account unless a change (as defined in *Standard Specification 1-04.4*) has occurred and a change order is processed. Conversely, remaining work or portions of work still progressing on force account bid items will not be converted to unit prices or a lump sum at any time unless agreed by both WSDOT and the Contractor and is documented with a change order.

When work is added to the Contract for payment by force account, a change order is necessary to describe the added Work. All non-standard force account items are assigned the Standard item Number 7715.

If the Contractor's workforce includes apprentices or trainees, they may be utilized in force account work.

The Project Engineer will direct force account work with the same degree of caution that would be applied to directing any other work on the Contract, allowing the Contractor to schedule the work, determine what equipment is required, and to propose the method/approach to best complete the Work. If the Project Engineer agrees with the Contractor's proposal, communicate concurrence or suggest modifications.

Before force account Work is performed by the Contractor the Project Engineer must review and agree with the Contractor on:

1. **Labor** – The classification and approximate number of workers to be used, the wage rate to be paid those workers, whether or not travel allowance and subsistence is applicable to those workers, and what foreman, if any, will be paid for by force account.
2. **Materials** – The material to be used, including the cost and any freight charges whether the material is purchased specifically for the project or comes from the Contractor's own supply. For materials representing a significant cost, or where the industry experiences fluctuations in price, the Contract allows for shopping, requiring the Contractor to obtain price quotes.
3. **Equipment** – The equipment to be used including the size, rating, capacity, or any other information requested by the Project Engineer. Whether the equipment is owned by the Contractor or rented. In the case of rented equipment, the Project Engineer may ask for competitive quotes, provided the request is made in advance and there is time to obtain them.

Payment for force account work is made on the same timely basis as any other item of work. When money is being withheld from a progress estimate, the criteria for withholding should apply equally to all items of work, not just to force account work, because of its method of payment.

The procedure for record keeping and payment of force account work on change orders is the same as contract bid items to be paid by force account. Separate records are kept for each force account payment whether it is an original Contract bid item or established as a result of a change order.

Payment Procedures for Force Account Work

1. **Labor** – The specifications require the Contractor to prepare and submit a “Labor List” in advance of performing force account work. Once approved by the Project Engineer, this list provides the hourly rate for force account calculations until a new list is approved. New lists will not be approved retroactively and calculations previously made from an approved list will not be changed when a new list is approved. If the Contractor fails to submit a list before the first force account calculations are made, then the Project Engineer will determine the rates from the best data available (certified payrolls on this project or other projects, prevailing wage requirements, union information, etc). Labor list rates will include all the pieces of wage expense – base rates, benefits, assessments, travel, with allocations shown where necessary. Labor List Example:

Sally Laborer (Straight Time)		Sally Laborer (Overtime)	
Basic Wage/hr	\$46.00	Basic OT Wage/hr	\$69.00
FICA (7.65%)	\$3.52	FICA (7.65%)	\$5.29
FUTA (0.60%)	\$0.28	FUTA (0.60%)	\$0.41
SUTA (6.02%)	\$2.77	SUTA (6.02%)	\$4.16
Indust Ins \$1.01/hr	\$1.01	Indust Ins \$1.01/hr	\$1.01
Benefits/Hr	\$5.45	Benefits/Hr	\$8.00
WA State FMLA (27.24% of 0.8%)	\$0.10	WA State FMLA (27.24% of 0.8%)	\$0.15
Total	\$59.03/hr	Total	\$85.62

Do not approve labor lists with WA Care Premiums included as the entire premium is paid by the employee.

FICA/FUTA/SUTA have different wage limits set for when each tax will no longer need to be paid. If it is believed that workers might have exceeded the wage limit, but the labor list includes FICA/FUTA/SUTA rates, the Project Engineer has the authority to request an updated labor list.

Standard Specification 1-09.6 allows for payment of all hours that are a contractual obligation or are customary payments made to all employees. For example, if a labor contract calls for 4 hours of pay for any call out, then that is a contractual obligation and the 4 hours would be eligible for reimbursement. (As always, the Contractor is expected to reassign the employees, if possible, to avoid the penalty.) Or, if a non-Union contractor has a documented history of making call out payments, they would be eligible to receive payment for those hours traditionally paid to their employees.

Per Diem and Subsistence – The Project Engineer must agree to pay per diem and subsistence rates in advance of force account work.

A daily subsistence for expense can only be included on a labor list if it is required in a labor contract or a company policy. If included on a labor list, request a copy of the labor contract/company policy detailing the requirement to pay.

Per Diem costs will be paid on an actual cost (invoiced and receipted) basis incurred as the direct result of the force account work. The Project Engineer must agree to the lodging amount before the cost is incurred and verify that the amount is within the allowable State laws.

2. **Materials** – The Project Inspector must record materials used for force account work daily and provide it to the Contractor for concurrence at the end of each shift. Invoices or affidavits provided by the Contractor are required to support payment for the materials installed.

Payment for material delivered to the project for use in force account work is typically paid by estimating the amount consumed during each progress estimate cutoff, but may also be paid in full. When deciding if materials should be paid in full or as it is consumed consider the following:

- Amount of material delivered,
- Nature and cost of the material delivered and
- Security of the stockpile

For example, payment for a stockpile of galvanized conduit should be paid for as it is consumed, but small amounts of material that is needed on a time sensitive basis could be paid in full. Copies of the original invoice may be used to document price when material is paid for incrementally. If the Contractor restocks unused material, restocking fees can be reimbursed if the original order was reasonable for the work planned and an invoice is provided to show the cost.

If the Contractor does not have an invoice, as in the case of stockpiles or some warehouse stock, then an affidavit certifying the actual cost is required. Review the affidavit and, if it is an unreasonable price that cannot be supported, the Project Engineer may substitute another price, utilizing the best data available. The reasonableness of the price must consider the circumstances of the purchase and all costs associated with obtaining material from another source.

The *Standard Specifications* allow the Project Engineer to require competitive quotes, if requested before the Work begins and sufficient time is available. If the Contractor has to divert an employee to obtain the quotes, then that employee may be included in the labor reimbursement for the force account.

3. **Equipment** – The requirements governing payment for equipment as outlined in the most current AGC/WSDOT Equipment Rental Agreement. This agreement is a supplement of the *Standard Specifications*.

Equipment is categorized as:

- **Owned** - Contractor owns, controls and operates the equipment. A long-term lease arrangement would be the same as ownership. Owned equipment is priced according to the Blue Book rate in Equipment Watch. For equipment not listed by Equipment Watch, a rental rate may be requested using the Equipment Watch rate request tool. A current subscription to Equipment Watch is required.
- **Rented to Operate** - Contractor has obtained a piece of equipment through a short-term rental and will operate that equipment with its own employees. Rented to Operate equipment is priced according to the invoice from the rental agency.

The Equipment Watch Blue Book ownership cost covers normal wear and tear on equipment and any major overhauls, defined as the periodic rebuilding of the engine, transmission, undercarriage, and other major equipment components. The operating rates include the cost of daily servicing of the equipment, including the replacement of small components such as pumps, carburetors, injectors, filters, belts, gaskets and worn lines. The operating rates also include the cost of expendables such as fuel, lubricants, filters, tires, and ground engaging components, such as pads, blades bucket teeth, etc.

The costs of extraordinary operating expendables are not covered in the operating rates due to their highly variable wear patterns. These extraordinary operating expendables may include certain ground engaging components, such as hammer and drill bits, drill steel, augers, saw blades, and tooth-bits. The cost for these items will be reimbursed based on invoice cost.

The Project Engineer may approve reimbursement for damage waivers when requested by the Contractor. Upon request, the Contractor must demonstrate that the purchase of the damage waiver is consistent with their standard business practice. Consideration can also be given to the potential risk of damage to the equipment versus the cost of paying for the damage waiver. The damage waiver does not cover damage caused by operator negligence, nor should the Project Engineer reimburse the Contractor for repair of any damage caused by operator negligence.

Repair of damage is considered a risk of providing equipment. The cost of this risk is assumed to be in the markup for overhead and profit. Costs for repair of damage should not be included in the force account direct charges.

The Project Engineer may require competitive bids for equipment rentals. Normally, this requirement must be made in advance before the work is started.

Small Tools

Contractor-owned equipment listed with a Blue Book with a monthly rate of less than \$100 and any other equipment with a purchase price of between \$100 and \$500 are considered small tools (except for rentals). Small tools may include specialty safety equipment required for the force account work, like respirators, entry/retrieval gear for confined space and hand tools. Safety equipment that is used day in and day out and/or consumable is not included.

Equipment purchased for force account work that falls under the definition of small tools will be evaluated to determine if WSDOT will take ownership after the force account work is complete.

Small tools should be paid for by a lump sum agreement, or other means as agreed to by the parties, that may be paid monthly or after the force account work is completed. The Contractor needs to provide supporting invoices or affidavit of purchase costs. The negotiations should consider discussions of shared use with other work and residual value.

4. **Services** – Services will be compensated using the invoice received from the firm providing the service. *Standard Specification* 1-09.6 outlines the activities that will be considered a service for force account work.

The Project Engineer may require competitive bids for invoiced services. This requirement must be made in advance, before the work is started.

Payment of force account work through an invoice does not excuse the Contractor from other requirements of the Contract. Wage rate rules, subcontractor approvals and other provision requirements must still be enforced. Such enforcement, however, is independent of the administration of force account work and would not ordinarily be used to withhold payments to aid in the enforcement. Note that the statutes associated with some provision requirements do involve the withholding of payment for associated work.

5. **Mobilization** – Mobilization and demobilization are reimbursable expenses for assembling equipment, materials, supplies and tools for any force account item and then returning those items to the previous location when the work is finished. Demobilization can include restocking costs for materials not utilized. Force account mobilization applies to original bid item force accounts as well as force accounts added through change orders. The standard bid item “Mobilization” is assumed to not include mobilization activities for force account work.

Mobilization may occur within the project limits if special efforts are required to assemble needed items to the force account location. For example, if a lowboy is required to move a bulldozer from one end of a project to the other, then that mobilization effort would be reimbursed.

If off site preparation work is needed, the Contractor must notify the Engineer in a timely enough manner that the work can be observed, if desired. Without such notice, that preparation work will not be reimbursed.

The AGC Rental Agreement allows for pro-rating mobilization costs for equipment that will be used in both force account and bid item work. This will be done by negotiation and agreement. For example, if the Project Engineer and Superintendent agree that a mobilized backhoe will be used three hours on regular work for each hour on force account, then 25 percent of the mobilization costs would be paid on the force account.

All mobilization activities can be categorized as Labor, Equipment, Materials, or Services and will be listed under those categories for payment.

6. **Other Payments**

- **Permits or Fees** – When a force account requires the Contractor to pay for permits or fees (hazardous waste dumping, etc.) that would fall outside the scope of overhead, these costs are reimbursable and may be included in the “Services” Section of the force account payment.
- **Retail Sales and Use Tax** – How retail sales tax and use tax is handled on the overall project depends on the ownership of the property upon which it rests. The retail sales tax consequences related to construction projects and land owned by the state of Washington or privately is addressed by [WAC 458-20-170](#) (“Rule 170”), while the retail sales tax consequences related to construction projects and land owned by a municipal corporation, political subdivision of the state of Washington, or by the United States is addressed by [WAC 458-20-171](#) (“Rule 171”).

With respect to Rule 171, ownership refers to ownership for the street, place, road, highway, easement, right of way, etc. being constructed and not the underlying real property. See [RCW 82.04.050\(10\)](#); Rule 170; and Rule 171. Thus, for instance if WSDOT has an easement with respect to a road subject to a construction project, then Rule 171 treatment will not apply even if the underlying real property were owned by the United States, Indian tribe, or municipal entity.

The Contractor's books may be audited by the Department of Revenue upon completion of each project to ensure compliance.

- **State and Local Tax: WAC 458-20-170 – Retail Sales and Use Tax** – Item quantities listed in the summary of quantities under *Standard Specifications* Section 1-07.2(2) require retail sales tax on the item to be paid by the Contracting Agency; therefore; Contractor would not include the tax in their bids. The Contracting Agency provides this tax payment to the Contractor on the total cost summation of the bid items listed under Section 1-07.2(2). Contractor remits this retail sales tax through to Department of Revenue. Under state tax law project Work requires remittance of retail sales tax on the full contract price.
 - **Resale Items** – Materials purchased for incorporation into the permanent project.
 - **Use of Reseller Permits** – Generally, purchases of tangible personal property by persons without a valid reseller permit are subject to retail sales tax. See [WAC 458-20-102](#). For example, a Contractor's purchases of materials incorporated permanently into the structure being built or improved as part of the project Work (including but not limited to cement concrete, lumber, finished hardware, asphalt concrete pavement) are treated as a retail sale at the point of purchase unless the contractor has a valid reseller permit. If the contractor has a valid reseller permit, the Contractor can provide it to their vendors to purchase these materials permanently incorporated into a structure being built or improved under a project without paying retail sales tax. These materials if purchased with a reseller permit are considered to be purchased for "resale".
 - **Tax Paid at Sourced Deduction** – If the contractor does not have a valid reseller permit when purchasing materials permanently incorporated into a structure being built or improved as a part of the project Work, the contractor must pay retail sales tax at point of purchase and then may take the appropriate deduction (tax paid at source) when filing its Washington state excise tax return. The Contracting Agency pays retail sales tax to the Contractor when the material is incorporated into the permanent work of the project.
 - **Consumables Items** – There may be items that the contractor is required to pay retail sales tax on at the point of purchase because they are consumed by the Contractor rather than resold ("consumables"). For example, tools, machinery and equipment, and supplies consumed (including but not limited to concrete forms, fuel or tools, equipment purchased or rented) during the performance of the project work are "consumables", which are a part of the overall cost of doing business for the Contractor. The Contractor is required to pay retail sales tax at the point of purchase/rental for these items or use tax if retail sales tax is not paid. These costs are bid as a part of the associated bid items.

The contractor is considered the “consumer” when renting equipment for use in Washington State and must pay sales tax on the total charge. This is no different than purchasing a tool the contractor must have in order to perform its services and passing the cost on to the customer. The sales tax paid by the contractor to the rental company is a cost of doing business and, if it is passed on to the customer, it is considered to be part of the gross contract price that is subject to sales tax.

When calculating or estimating the cost of force account or change order work, retail sales tax will always be applied and paid by the Contracting Agency on the whole summation of daily force account cost including labor, equipment and material costs, which can in the case of “consumable” items include paying retail tax on a tax.

- **State and Local Tax: WAC 458-20-171 – Retail Sales and Use Tax –**
For item quantities listed in the summary of quantities under [Standard Specifications](#) Section 1-07.2(1) retail sales tax is not required on the item.

However, the Contractor is required to pay retail sales tax on all of its own retail sales taxable purchases regardless of use (“consumable” or not) or use tax if retail sales tax is not paid. For contract work, this expense is incidental and therefore included in the individual contract items as a part of the bid amount.

- **Ownership By Covered Persons** – Rule 171 applies where the operative public road construction is owned by a municipal corporation, political subdivision of the state of Washington, the United States, or an Indian or Indian tribe in Indian country. [RCW 82.04.050\(10\)](#); Rule 171, and [WAC 458-20-192](#).
- **WSDOT Not A Covered Person** – WSDOT is not a municipal corporation, political subdivision of the state of Washington, the United States, or an Indian or Indian tribe. Therefore, where the operative public road construction is owned by WSDOT, the construction is subject to retail sales tax consistent with Rule 170 above.
- **WSDOT Easements** – Washington Excise Tax Advisory (ETA) 3068.2009 explains that where “title to the land upon which the highway, street, place, or road is being constructed vests in the state of Washington, the construction contract is a retail sale.” ETA 3068.2009 further makes clear that this vesting provision refers to the street, place, road, highway, easement, right of way, etc. being constructed and not the underlying real property. Thus, for instance if WSDOT has an easement with respect to a road subject to a construction project, then Rule 171 treatment will not apply regardless of whether the underlying real property is owned by another party.

When calculating or estimating the cost of force account or change order work, sales tax should be included on all invoices. As stated previously, the fact that taxes are shown or not shown on invoices is not a reliable indication of what the contractor is obligated to pay. The contractor may receive reimbursement later or be required to pay additional taxes when the contract is complete.

- **Exceptions** – Consistent with Rule 171, construction of the following facilities has been specifically exempted. Work on these facilities falls under Rule 170 even if they are on non state owned land:
 - Water mains.
 - Telephone, telegraph, electrical power, or other conduits or lines in or above streets and roads, unless such power lines become a part of a street or road lighting system.
 - Construction of sewage disposal facilities.
 - The installing of sewer pipes for sanitation, unless the installation thereof is within, and a part of, a street or road drainage system.

- **Conclusion** – Most of the time, retail sales tax on invoices is required. In turn, we need to reimburse the contractor for the tax (paid or deferred) on force account invoices and include the costs when estimating the value of change order work.

The one exception is “resale” items if the contract falls under Department of Revenue rule 170 where retail tax sales need not be paid at the point of purchase.

These rules should be adhered to regardless of whether retail sales tax is shown on the invoice.

- **Contractor Markup on Subcontractor’s Work** – Work performed by approved subcontractors will receive an additional supplemental markup. If more than one subcontractor performs work on the same force account item, the supplemental markup is applied separately to each subcontractor’s computed cost for their work. Additional markups will not be applied to force account work performed by lower-tier subcontractors.

The supplemental markup is a graduated step down rate, which gets smaller as the amount of payment to a given subcontractor for that force account item increases. The supplemental markup rate is determined by the accumulated value of work that a specific Subcontractor has performed on each specific force account item.

For example, if a subcontractor performed force account work on the same force account bid item in the amount of \$250,000, the markup would be calculated at 12% for the first \$50,000, 10% the next \$150,000, and 7% on the remaining \$50,000 and all subsequent payments for this bid item work.

The amounts paid will be tracked separately for each subcontractor on each force account item to determine the correct markup rate as Work is performed. If two subcontractors work on the same force account item, then the accumulated total will be tracked for each, and markup for work done by each will be according to the respective total. If a single subcontractor works on two force account items, then there will be a running total of work done by that subcontractor on each force account item and could result in different markup rates for the same subcontractor on the two different bid items.

Records and Source Documents

Accurate daily time records should always be kept when performing force account work. A Daily Report of Force Account Worked DOT Form 422-008A is provided for the Project Engineer's use to help facilitate timely, accurate, and complete records of daily force account activities. Whatever method of record keeping is used, it is recommended that the document be signed by both the Inspector and a representative of the Contractor agreeing on the materials used and the hours noted for labor and equipment. A copy of the daily report must be provided to the Contractor. When the work is performed by a subcontractor, a copy should also be provided to the subcontractor.

The costs for force account work should be determined and entered into the CAPS system in as timely a manner as possible.

All calculations for determining force account costs are checked, initialed, and dated. A copy of the final calculations for each force account sheet is furnished to the Contractor.

Summary

To summarize, the purpose of force account is to fully reimburse the Contractor for costs incurred on the work. The objective of force account administration is to minimize the inclusion of any "contingencies" included in the contract bid in anticipation of costs that may be incurred during force account work and not reimbursed.

Items which are bid or negotiated with a unit price or a lump sum agreement will not be converted to force account unless a change (as defined in [Standard Specifications](#) Section 1-04.4) has occurred. On the other hand, any work to be done or the remaining portion of work underway on a force account basis may be converted to unit prices or a lump sum at any time the parties can reach an agreement. Such a conversion is highly desirable and should always be a goal of the Project Engineer.

SS 1-09.8 Payment for Material on Hand

Payment for material on hand (MOH) may be considered for materials intended to be incorporated into the permanent work. The requirements for payment of MOH are noted in [Standard Specifications](#) Section 1-09.8. Payments for MOH are made under the 900 series of item numbers as ledger entries and need to be backed out as material is utilized such that 900 series entries are zeroed at close out of the Contract. Payment for MOH must not exceed the value of the corresponding bid item. It is the responsibility of the Project Engineer to devise procedures that assure this is done correctly.

Payments may be made provided the Contractor submits documentation verifying the amounts requested, the materials meet the requirements of the contract and the materials are delivered to a specified storage site or stored at the suppliers/fabricators as approved by the Project Engineer. Payment cannot be made until the material has been inspected, approved, and stamped or tagged (as required). Materials shall be segregated, identified and reserved for use on a specific Contract or project. Payments commensurate with the percentage of completion may be paid for partially fabricated items.

Prestressed Concrete Girders qualify for MOH prior to an approved for shipment stamp if all requirements for MOH in [Standard Specification](#) 1-09.8 and 6-02.3(25)J are met.

Materials shall be segregated, identified and reserved for use on a specific Contract or project. Payments commensurate with the percentage of completion may be paid for partially fabricated items.

All materials paid for as MOH must be readily available for inspection by the owner. Steel materials must be available for inspection but this availability need not be immediate. Reasonable notice should be given to allow the Contractor to locate and make the material available for inspection. The Project Engineer may accept a higher level of risk that steel material may not be reserved for our use. The Contractor's obligation to perform the work and the surety's guarantee of this obligation serve to offset the risk that reserved materials are diverted to other projects.

When materials paid for as MOH are stored in areas outside the general area the region shall make arrangements for inspection as deemed necessary prior to making payment. The region may utilize other regions or the State Materials Laboratory in doing so.

When contracts are estimated to cost more than \$2 million and require more than 120 working days to complete, a General Special Provision (GSP) will be included in the contract provisions, requiring documentation from the contractor as the basis for MOH payments and deductions. When this GSP is included in the contract provisions, the following procedure is used to determine how much of the MOH payment should be deducted from an estimate:

- Each month, no later than the estimate due date, the contractor will submit a document and the necessary backup to the Project Engineer that clearly states:
 - The dollar amount previously paid for MOH,
 - The dollar amount of the previously paid MOH incorporated into the various work items during the month, and
 - The dollar amount that should continue to be retained in MOH items.

If work is performed on the items and the contractor does not submit a document, all previous associated MOH payments may be deducted on the next progress estimate.

SS 1-09.9 Payments

General

Payment for work performed by the Contractor and for materials on hand must be made in accordance with [Standard Specifications](#) Section 1-09. To facilitate payments to the Contractor and ensure proper documentation, WSDOT utilizes an automated computer system to record project progress in terms of bid item quantity accomplishment. This is then used to pay the Contractor for actual work performed during each designated pay period or for materials on hand. The automated system that completes this task is called the Contract Administration and Payment System (CAPS). CAPS utilizes an electronic tie between each Project Office's computer system and the mainframe computer. This system provides access to a large volume of corporate data and facilitates the maintenance of this data by different groups in different locations. Some of these different activities include:

- **Contract Initiation** – A Headquarters action whereby new contracts are created and stored in a computer file. The information consists of the names of the Contractor and the Project Engineer, project descriptive data, accounting identifier numbers, preliminary estimate, proposal date, bid opening date, award date, execution date, accounting groups and distributions, and an electronic ledger.
- **Project Ledger** – An updating process by the Project Office which keeps track of work performed on the contract as it is completed.

- **Estimate Payments** – A Project Office action whereby progress estimates and Regional final estimates are processed directly from the Project Office. The Headquarters Final Estimate process activates the Region Final when all the required paperwork is in place. Supplemental final estimates are processed by Headquarters only. Complete instructions for use of the CAPS computer system are included in WSDOT Contract Administration and Payment System M 13-01.

Progress Estimates

Refer to section SS 1-08.1(7)B for a discussion on prompt payment and a graphic explaining why it is desirable for the Project Engineer to process the progress estimate by the 15th day after the estimate cutoff.

Progress estimates are normally processed with a cut-off date on the 5th of the month for odd numbered contracts and on the 20th of the month for even numbered contracts. When the Project Engineer and Contractor mutually agree, the estimate cutoff date can be changed to any date of the month as long as it generally remains the same throughout the life of the project. Supplemental progress estimates can be run at any time.

Estimates may also be run on other dates if the progress estimate or parts of the progress estimate were withheld to encourage compliance with some provision of the contract and the Contractor resolves the issue that caused the withholding. These estimates should be paid immediately upon resolution by the Contractor, but not later than required by prompt pay law.

Within the CAPS system, the basis for making any estimate payment is information from the project ledger. Every entry in the ledger is marked by the computer as paid, deferred, or eligible for payment. Before an estimate can be paid, a Ledger Pre-Estimate Report (RAKD300C-PE) must be produced. In constructing this report, the CAPS system gathers all the ledger entries that are identified as eligible for payment, prints them on the report summarized by item, and shows the total amount completed to date for that item but not yet paid for by progress estimate. The report also shows any deferred entries or exceptions if they exist and includes a signature block for the Project Engineer's approval.

If there are errors or omissions in this report, the ledger must be changed to reflect the correct data. After corrections are made, the Ledger Pre-Estimate Report must be run again to get the corrections into the report and made available for payment by progress estimate. Once the Ledger Pre-Estimate Report is correct, an actual estimate can be paid. The report containing the Project Engineer's signature should be retained in the project files.

The estimate process is then accomplished with a few keystrokes in option 2, estimate payments, in the CAPS main menu. At this point, the CAPS system will automatically calculate mobilization, retainage (on projects containing no Federal funds), and the sales tax. The warrant will be produced, signed, and sent to the Contractor along with the Contract Estimate Payment Advice Report and two different sales tax summary reports. Copies of these reports will also be sent to the Project Office. When the Project Office receives their copy of the Contract Estimate Payment Advice Report, the total amount paid for contract items should be checked against the Pre-Estimate Report. This helps to verify that the amount paid was what the Project Engineer intended to pay. In addition, the ledger records that produced the estimate will now be marked by the CAPS system as being paid.

Once the estimate is paid, the Project Engineer should ensure that estimate payment information is available to all subcontractors and any other interested parties who request the information. This may be accomplished by posting to a project specific webpage, a Region Construction webpage, email, or other means as determined by the Project Engineer and the Region Construction Office.

Up to the point of producing the warrant the entire process for making a progress estimate payment is initiated and controlled by the Project Office.

Particular attention should be given to the comparison of the plan quantities and the estimate quantities for the various groups on the project as shown on the Ledger Pre-Estimate Report. Overpayments on intermediate progress estimates are sometimes difficult to resolve with the Contractor at the conclusion of the project.

New groups which do not change the termini of the original contract or changes in groups should be accomplished by memorandum from the Region to the Accounting and Financial Services Division.

An additional estimate may be prepared if considerable work has been done between the date of the last progress estimate and the date of physical completion when the Engineer anticipates delays in preparing the final estimate. Should this circumstance occur, the additional estimate should show the work done to date no later than the day before the date of physical completion.

Payment for Lump Sum Items

The Contractor is required to submit a detailed Lump Sum price breakdown for those items specified as Lump Sum for which there is no specified payment described in the payment clause of the applicable specification. Estimate payments for items specified as Lump Sum will be a percentage of the price in the Proposal, based on the Project Engineer's determination of the amount of work performed. Consideration will be given to, but payment will not be based solely on, the Contractor's Lump Sum breakdown. The Project Engineer should verify that the price breakdown is based upon a reasonable proportioning of the work, and detailed enough to allow a determination of the work performed on a monthly basis.

Payment of the first 80 percent of the Lump Sum price for Type B Progress Schedules will be made on the next progress estimate following the submittal and approval of the Type B Progress Schedule. The payment will be increased to 100 percent of the Lump Sum price when the Contractor has attained 80 percent of the Original Contract Award amount, as shown on the CAPS Pre-Estimate Report (inclusive of payments made for Material on Hand).

On WSDOT contracts for which payment is made through CAPS (Contract Administration and Payment System), payment for mobilization is calculated and paid automatically by the system. On contracts that do not use CAPS, the Project Office must calculate, and make payment for, the Contract item "Mobilization." Payment will be made in accordance with [Standard Specifications](#) Section 1-09.7. Based on the lump sum Contract price for "Mobilization," partial payment will be made as follows:

1. When 5 percent of the original Contract amount has been earned from other Contract items, excluding any amounts paid for materials on hand, the Contractor is also entitled to a partial payment of the Bid item "Mobilization." This payment, which is in addition to payment for contract work performed, will be calculated as 50-percent of the amount bid for "Mobilization" or 5 percent of the original Contract amount, whichever is the least.
2. When 10 percent of the original Contract amount has been earned from other Contract items, excluding any amounts paid for materials on hand, the Contractor will be paid 100 percent of the amount bid for "Mobilization" or 10 percent of the original Contract amount, whichever is the least. This payment is in addition to payment for contract work performed.
3. When the Substantial Completion date has been established for the project, payment of any remaining portion of the lump sum item "Mobilization" will be made.

Payment for Falsework

On those projects which include a lump sum item for bridge superstructure, payment may be made on request by the Contractor for falsework as a prorated percentage of the lump sum item as the work is accomplished. The Project Engineer may require the Contractor to furnish a breakdown of the costs to substantiate falsework costs. For any given payment request, the Contractor may be required to furnish invoices for materials used and substantiation for equipment and labor costs.

Payment for Shoring or Extra Excavation

When Shoring or Extra Excavation Class A is included as a bid item, payment must be made as the work under the bid item is accomplished, the same as for any other lump sum bid item. When Shoring or Extra Excavation Class B is included as a bid item, measurement and payment shall be made in accordance with [Standard Specifications](#) Section 2-09.4 and 2-09.5. [RCW 39.04](#) provides that the costs of trench safety systems shall not be considered as incidental to any other contract item, and any attempt to include the trench safety systems as an incidental cost is prohibited. Accordingly, when no bid item is provided for either Shoring or Extra Excavation Class A or Shoring or Extra Excavation Class B and the Engineer deems that work to be necessary, payment will be made in accordance with [Standard Specifications](#) Section 1-04.4.

Payment for Asphalt, CRS-2P, Steel, and Fuel Cost Adjustment

Some projects may include the specifications for Asphalt Cost Adjustment, CRS-2P Cost Adjustment, Steel Cost Adjustment, or Fuel Cost Adjustment (one or more) as a General Special Provision. Not all projects will contain these provisions, since their use depends on the type of work, the duration of the contract, and Region preference. For those contracts containing one or more of the cost adjustment bid items, an adjustment (payment or credit) will be calculated monthly for qualifying changes in the index price of the commodity. No adjustment (payment or credit) shall be made if the 'Current Reference Cost' is within the percentage of the 'Base Cost' specified in the contract, and only those items that are included in the provision are eligible for adjustment. Worksheets are available, in the "Shared Documents" folder of the State Construction Office SharePoint site at: <http://sharedot/eng/cn/hqconstr/Shared%20Documents/Forms/AllItems.aspx>, to assist the Project Office in computing these price adjustments, and on the State Construction Office web page ([Construction - Escalation Clauses | WSDOT \(wa.gov\)](#)) to assist the Contractor and local agencies.

It is important to understand that the adjustments provided by these provisions are not a guarantee of full compensation for changes in the contractors cost, and that they are intended only to absorb some of the risk of severe cost escalation during contract performance. Because of this, the method of computing the adjustment has been simplified to eliminate tedious considerations that would otherwise be required to provide precise reimbursement of actual costs.

The Reference Cost is posted twice each month on the external website at:

<http://www.wsdot.wa.gov/Business/Construction/EscalationClauses.htm>

Payment for “Asphalt Cost Price Adjustment”, “CRS-2P Cost Adjustment” and “Fuel Cost Adjustment” is based on quantities of the eligible material(s) incorporated during the period covered, as demonstrated by pay notes for those items. Regardless of the Contract estimate cutoff date – the 5th or 20th of the month – adjustments will be calculated once per month using the Current Reference Cost, as defined in the Contract, for the total quantity of each eligible item for which we have tickets. If an unusual number of late tickets are received, work with your ASCE to determine the appropriate calculation.

The Current Reference Cost will be selected from the website using the “Date Effective” that immediately precedes the current month’s progress estimate end date.

Payment for “Steel Cost Adjustment” is based on the quantity of eligible steel items incorporated or paid as Materials on Hand for the period covered. The Contractor is required to provide documentation of the quantities and the date shipped from the producing mill to the manufacturer.

If the Contractor fails to provide the required documentation, any adjustment credit will be unilaterally computed by the Project Office using a shipment date determined by the Engineer. If the Contractor wishes to protest this adjustment, it must be done in accordance with [Standard Specifications](#) Section 1-04.5.

When a portion of the payment for an eligible item is deferred, a similar portion of the price adjustment for that item should be deferred.

The provisions for these cost adjustments are silent regarding changed work because there are other Contract clauses that address how the Department will pay for changed work. Should changes occur in bid items that are eligible for adjustment, equitable adjustments should adhere to the guidance provided in section [SS 1-04.4](#). Under no circumstances should eligible items that were not included in the specifications at the time of bid be added by change order after award and execution of the contract. Likewise, these provisions should not be added by change order. FHWA will not participate in the cost of retroactive price adjustments.

Credits

Dollar amounts may be deducted as a “Below the Line Miscellaneous Deduction” from progress or final estimates when WSDOT is due a credit from the Contractor. Routine credits from the Contractor to WSDOT include, but are not limited to, the following items:

- Engineering labor costs when due to Contractor error or negligence, additional engineering time is required to correct a problem. This includes the costs of any necessary replacement of stakes and marks which are carelessly or willfully destroyed or damaged by the Contractor’s operation.
- Lost and/or damaged construction signs furnished to the Contractor by WSDOT. The Contractor should be given the opportunity to return the signs or replace them in kind prior to making the deductions.

- Assessment to WSDOT from a third party that is the result of the Contractor's operations causing damage to a third party, for example, damage to a city fire plug. Actual costs will be deducted from the estimate.
- Other work by WSDOT forces or WSDOT materials when the Contractor cannot or will not repair damages that are the responsibility of the Contractor under the contract.
- Liquidated damages not associated with contract time, i.e., ramp closures, lane closures (see section [SS 1-10](#)).
- As provided for in the specifications, specific costs or credits owed WSDOT for unsuccessful contractor challenged samples and testing.

The authority to withhold and assess routine "Below the Line Miscellaneous Deduction" on progress and final estimates has been delegated to the Regional Construction Manager, and may be further subdelegated to the Project Engineer. The Project Engineer must give written documentation to the Contractor describing the deduction and provide sufficient notice of the impending assessment.

Credit items which are specifically provided for by the *Standard Specifications* or contract provisions, such as non-specification density, non-specification materials, etc. may be taken through the contract items established for those purposes. A change order is required for credit items which are not specifically provided for by the contract provisions.

Occasionally a Contractor will send a check directly to a Project Office for payment of money due WSDOT. (The Project Office should not request payment.) Whenever a Project Office or WSDOT employee receives a check or cash directly from a Contractor, it is very important that the guidance found in the WSDOT [Accounting Policy Manual](#) M 13-82, Section 2-1, Control of Cash Receipts, be followed.

Withholding of Payments

Withholding payments for work the Contractor has performed and completed in accordance with the contract should not be done casually. There must be clear contract language supporting the action. The authority to withhold progress payments is subdelegated to the Regions. Further delegation to the Project Engineers is at the discretion of each Region.

There are very few occasions when it would be appropriate to withhold the total amount of a payment for completed work. If a minor amount of cleanup remains, if a portion of the associated paperwork has not been submitted, or if minor corrective measures are needed, then the correct action is to pay for the work and defer an amount commensurate with the needed remaining effort.

The concept of "allowing the Contractor to proceed at their own risk" and then withholding payment is not often supported by the contract. There is a contractual obligation to finish the work correctly, there would certainly be a "moral obligation" on the part of the Contractor to live up to the bargain, but there is no contract language that allows such an action. Specific exceptions to this rule are listed below.

Once a decision to withhold any part of the monthly payment has been reached, then it is imperative that the Contractor receive notice of this action. The method of this notice can be negotiated with the Contractor and could be a listing at the time of estimate cutoff, a copy of the pre-estimate report or other mechanism. Once notice has been provided, then it is also necessary to allow a reasonable time for corrections to be made.

No Payment for the Work – *Standard Specifications* Section 1-06.3 is unique in that this is a situation, specified as part of the contract, where the contractor may request permission to assume the risk for no certificate and end up never being paid for the related work.

Progress Payment Deferral – In the following situations, the contract specifies that the contracting agency has the authority to defer the entire progress payment:

- The contracting agency may not make any payments for work performed by a Prime/subcontractor until the contractor performing the work has submitted a Statement of Intent to Pay Prevailing Wages approved by Labor and Industries ([RCW 39.12.040](#)).
- Failure to submit the “required reports” by their due dates (*Standard Specifications* Section 1-07.11(10)B).

Wage Administration in General – The administration of wages and payment for the work are separate issues. Holding a force account payment for certified payrolls is not appropriate. Withholding payments on the contract is suggested as a method to achieve compliance under *Standard Specifications* Section 1-07.9(1) pertaining to wages. This remedy should not be used without approval of the State Construction Office. Routine enforcement of wage requirements should be done on their own merits utilizing the sanctions specified as follows:

State Wage Administration – Labor and Industries is the enforcement agency for state prevailing wage administration. The State (WSDOT) is protected under the contract from wage claims by reserving 5 percent of the moneys earned as retained percentage. This 5 percent is made available for unpaid or underpaid wages liens among other claims. Contract payments should not be deferred due to a contractor’s failure to pay the State minimum prevailing wage.

Federal Wage Administration – FHWA-1273 specifies that the State Highway Administration (SHA) is in the enforcement role for federal prevailing wage administration. Under Section IV “Payment of Predetermined Minimum Wage” subsection 6., “Withholding,” the State Highway Administration (contracting agency) is authorized to withhold an amount deemed necessary to make up any shortfalls in meeting Davis Bacon prevailing wage requirements. It goes on to authorize the deferral of all payments, under certain conditions, until such violations have ceased. This is only for federal wage requirements and the amount “deemed necessary” must be based on the amount of the underpayment.

Application of the Standard Specifications – *Standard Specifications* Section 1-05.1 reads in part as follows: “If the Contractor fails to respond promptly to the requirements of the contract or orders from the Engineer: 2. The Contracting Agency will not be obligated to pay the Contractor, and”

Standard Specifications Section 1-09.9 reads in part as follows: “Failure to perform any of the obligations under the contract by the Contractor may be decreed by the Contracting Agency to be adequate reason for withholding any payments until compliance is achieved.”

Sounds good and we can do so, but withholding of payments owed the contractor must not be done on an arbitrary basis. Other than the previously noted exceptions, money is normally withheld because work/work methods are not in accordance with contract specifications. Also, the amount withheld must have a logical basis. We cannot penalize the contractor by withholding more than the out of compliance work is worth.

Withholding payments should not be used routinely as a tool for forcing compliance on general contract administration requirements. The State is protected against nonperformance by requiring a performance bond. In the event that lack of contract compliance puts the State at substantial risk monetarily or safety wise, it may be appropriate to inform the contractor of the compliance problem and suspend work under [Standard Specifications](#) Section 1-05.1 until corrections are made.

When withholding money, remember that delaying the contractor's cash flow may damage the contractor's ability to perform work. Before doing so, the State should be able to demonstrate:

- Specifically what was not in accordance with the contract and where the requirement is specified in the documents.
- That the amount withheld is commensurate with the amount of the unauthorized, uncompleted, defective, or nonconforming work.
- That the contractor was notified in a timely manner (within eight days per prompt pay laws) and given a chance to make corrections.
- That the State has worked with the contractor to mitigate corrections to non-specification work in order to minimize the cost.

The State is required to pay the contractor in a prompt manner within 30 days after receipt of the work or after recognition of entitlement to additional compensation. The Project Engineer must keep an eye on the calendar when scheduling monthly estimate payments.

Regions are not authorized to withhold amounts that are greater than the estimated cost of the missing or incorrect portion of the work. Any such excess withholding must be approved by the State Construction Office.

Delinquent Contractor Submittals

Missing submittals is a principal source of delays in closing out the project and processing the final estimate. As the project proceeds toward completion, the Project Engineer and the Contractor should attempt to obtain all submittals as the need arises. These might include such things as materials certificates, certified payrolls, extension of time requests, or any other item or document that might delay processing the final estimate. Attention is needed to assure the receipt of these items from subcontractors as they complete their work.

Final Estimates

The final estimate for a Contract is processed in CAPS by selecting the "Final" option when running the estimate. The final estimate is a two part process that begins with the Region running the Region Final and is completed when the Accounting and Financial Services (AFS) Division runs the Headquarters Final.

Running the Region Final in CAPS will not generate a warrant for the Contractor, but instead will generate the following reports:

- Final Comparison of Quantities
- Contract Estimate Payment Advice
- Contract Estimate Payment Total and
- Sales Tax Summary

The Work Done to Date entry on a final estimate is the Physical Completion Date. CAPS cannot process estimates if the Work Done to Date entered is after the Physical Completion Date.

Review the reports generated for accuracy, verifying quantities posted and costs accumulated during the life of the Contract. Corrections can be made to the project ledger in CAPS and the Region Final can be rerun as needed to ensure it is correct.

Region Finals showing an overpayment to the Contractor will be processed in the same manner. If this occurs, the Contract Estimate Payment Totals report will show a negative amount due to the Contractor. When AFS receives the accepted final estimate package, they will request reimbursement from the Contractor for the amount owed. The Project Engineer should not request reimbursement from the Contractor.

Once the Project Engineer has validated the amounts, forward the following documentation to the Contractor using the approved electronic software:

- Contract Estimate Payment Totals Report - CAPS report RAKC300F-EA – Informational only, Contractor signature not required
- Final Contract Voucher Certification (FCVC) DOT Form 134-146 - Requires Contractor signature

The person signing the Final Contract Voucher Certification must be authorized to do so. Authorized signatures are submitted by the Contractor at the beginning of each Contract.

Submit the documentation noted above to the Contractor for electronic signature as soon as reasonably possible, but within six months of Physical Completion.

Once the Contractor and PE signatures are obtained, the FCVC will automatically be sent to Region by the electronic signature software. Region cannot proceed with signatures and approvals until all outstanding documentation has been received and the Project Office sends the final estimate package for review.

After Contract Completion has been granted and the Region has reviewed and approved the FCVC, submit the final estimate package to the State Construction Office. Project Offices must submit documentation to the region for region executed contracts. Include recommendations for assessment of liquidated damages associated with Contract time if not submitted previously. The State Construction Office must resolve all issues of liquidated damages before the final estimate package can be accepted and submitted to the AFS and Financial Services Division.

Final Estimate Package

The final estimate package consists of the following:

- **Project Status Report will include:**
 - Contract time and documentation for liquidated damages formally assessed related to contract time.
 - Amount of railroad flagging used if any.
 - Identify Miscellaneous Deductions by including backup documentation equal to the amount deducted
 - Explanation of any Monies Due WSDOT as indicated in the Contract Estimate Payment Totals.
 - Identification of overruns/underruns in Contract quantities and a brief explanation of resolution.

- In addition, indicate whether or not all Affidavits of Wages Paid have been received for the Contractor, and all subcontractors, agents or lower-tier subcontractors. List all Contractors, subcontractors, etc. for whom an Affidavit has not been received.
- Federally funded projects advertised after October 17, 2022 - Confirmation that all Build America/Buy America (BABA) CMO forms are on file and resolutions are documented. Include the Buy America Foreign Steel Tracking Log available on the Construction Office SharePoint site to verify the amount of foreign material is under the allowable thresholds.
- **Final Contract Voucher Certification** – DOT Form 134-146, original only.
- If an assessment of liquidated damages has been made previously, include a copy of the letter from the State Construction Engineer to the Contractor assessing these.
- If an assessment of miscellaneous damages or liquidated damages resulting from causes other than time, include copies of letters from the Region to the Contractor to document assessments.
- **Contract Estimate Payment Totals** – RAKC300F-EA.

The final estimate package for contracts executed by the Region will be reviewed by Region Construction and the Final Contract Voucher Certificate will be signed by the Region Administrator (as Designee) accepting the Contract. The date on which the Region Administrator signs the Final Contract Voucher Certificate becomes the final acceptance date for the Contract. The final estimate package is retained with the permanent final records.

When the final estimate package is reviewed by the State Construction Office for acceptance of the Contract, the date the State Construction Engineer signs the Final Contract Voucher Certification becomes the final acceptance date for the Contract. The final estimate package is then submitted to AFS.

Final Estimate Claim Reservations

Should the Contractor indicate a claim reservation on the Final Contract Voucher Certification, it must be accompanied by all the requirements of [Standard Specifications](#) Section 1-09.11(2) (provided these have not been met in a previous claim submittal). The Project Engineer must assure that the requirements have been met prior to submitting the final estimate package to the State Construction Office. If the claim package is incomplete, return the FCVC to the Contractor with notice of the missing parts.

Unilateral Acceptance

The Project Engineer cannot establish Contract Completion if the Contractor is unwilling or unable to submit one or more of the required documents noted in [Standard Specifications](#) Section 1-08.5. However, the Region can request that the State Construction Engineer accept the Contract by signing the Final Contract Voucher Certification (FCVC) in spite of the missing documents.

If the Contractor has not signed the FCVC, the Region can request that the State Construction Engineer accept the Contract without the Contractor's signature. The Region is responsible for notifying the Contractor before such a request is made. The State Construction Office will send the email and delivery confirmation required in [Standard Specifications](#) Section 1-09.9. The date the State Construction Engineers signs the FCVC becomes both the final acceptance date and the Contract Completion date for the Contract, both established unilaterally.

Formal Claim Settlements After Acceptance

Formal claim settlements are negotiated and approved by the Assistant State Construction Engineer, and may require payment adjustments after the Final Contract Voucher Certification (FCVC) is signed. To process a payment or take a credit after a project is accepted by the State Construction Engineer, the Project Engineer should complete, assemble and route the following items.

1. Send the formal claim settlement (which has been approved by the Assistant State Construction Engineer) and a letter to the Contractor that includes the following information:
 - A claim decision has been determined
 - The formal claim settlement documentation
 - The amount of the claim settlement
 - Who made the decision and what process was utilized
 - Timeframe for paying the settlement
 - Request the Contractor sign and return the attached formal claim settlement
 - Include the statement: "This Claim Settlement Statement is issued in connection with the settlement of a claim, as evidenced by the attached settlement agreement. The execution of this Statement does not change the established Completion Date and Final Acceptance Date of the contract or cause the need for a new final contract voucher."
2. Contact region program management to determine if work order needs to be reopened in TRAINS. If a separate group will be used to track settlement payments, request the new group and provide a copy of the letter.
3. Send the original, contractor signed, settlement agreement, a copy of the letter and payment information (group/control section to be used) to the State Construction Office. The State Construction Engineer or the Deputy State Construction Engineer will sign the settlement agreement, and forward received documentation to CAPS. A copy of the agreement will be returned to the Project Office for inclusion in the contract Permanent Final Records. CAPS will inform the Project Office of the new item number created in CAPS.
4. Prepare a Field Note Record to document the payment, and post as an entry for the new item number using the appropriate group(s). Taxes will be assigned based on the group(s).

Once complete, the Project Engineer runs a Supplemental Final Estimate and contacts HQ CAPS for further instructions.

Supplemental Final Estimates

A Supplemental Final Estimate is a payment adjustment made to a contract after the Final Estimate has been processed and the project has been accepted by the State Construction Engineer. A Supplemental Final Estimate may be necessary to correct an inadvertent under payment or where a claim settlement may require additional payment be made to the Contractor. In order to complete a Supplemental Final Estimate, the Project Engineer should complete and assemble the following items, routing them through the Region to the State Construction Office for review and further processing:

1. Complete any corrections or additional postings necessary in CAPS, including any postings to change order items added to CAPS for the settlement of a claim. (Please note, where additional CAPS postings are necessary after the Physical Completion date has been established, the "Work Done To" date in CAPS must be entered as the Physical Completion date or prior.)
2. Complete a Pre-Estimate report including the Project Engineer's recommendation for payment.
3. Assemble the backup information supporting the necessity and substantiating the cost of the changes to be made.
4. Send 2 and 3 above via email or campus mail to the State Construction Office.

After review, the Pre-Estimate report will be signed by the State Construction Engineer authorizing payment to proceed.

While postings and corrections to CAPS may continue, once the Completion date has been established for a contract, CAPS will no longer allow the Project Engineer or the Region to process further payments to the Contractor. As a result, payment of the Supplemental Final Estimate will need to be completed for the Project Engineer by the Accounting and Financial Services Division.

If this process requires a more timely response, the above documentation may be scanned and emailed to the State Construction Office and CAPS; and the contract payments section can be requested to print out the pre-estimate report to be taken to the State Construction Engineer for signature prior to processing the supplemental final estimate. Once the supplemental payment is completed, the signed and executed Pre-Estimate report will be returned to the Project Engineer where it can be maintained as a part of the project payment files and made a part of the Region Temporary Final Records.

The above process will also be used when there has been an inadvertent over payment to the Contractor, the Final Estimate has been processed, and the project has been accepted by the State Construction Engineer. In this case, the Project Engineer must work with the Region, the Contract Payments section of the Accounting and Financial Services Division and the State Construction Office to make the correction.

If the Accounting and Financial Services Division requires a supplemental Final Contract Voucher to reflect the new cost of the contract due to the supplemental estimate, the new voucher will not be signed by the Project Engineer as that would reestablish the final acceptance date and restart the 30 day period to file claims against the bond ([RCW 39.08.030](#)) and restart the 180 day period for Contractor to file suit (*Standard Specifications* Section 1-09.11(3)). The original acceptance dates will not change from the dates the Secretary of Transportation or their delegatee signed the original Final Contract Voucher Certificate.

SS 1-09.9(1) Retainage

Retained percentage withholding is based upon [RCW 60.28](#), which provides that:

- A sum not to exceed 5 percent of the money earned by the Contractor on estimates for projects containing no Federal funds is to be retained by the Contracting Agency.
- The Contractor may submit a bond for all or any portion of the amount of funds retained by WSDOT.

When a Contract is awarded, the Division of Accountability and Financial Services (AFS)/Contract Administration and Payments System (CAPS) unit or the Region Plans Office sends a package of contract documents to the Contractor.

This package of Contract documents also includes the necessary instructions for the Contractor to make application for a bond to replace all or any portion of the retainage. The bond form will be processed by AFS/CAPS without involvement from Project Engineer's Office, although the payment system will not allow them to process a payment until some form of retainage is in place.

The Contractor, at any time during the life of the contract, may make a request to the Project Engineer for the release of all or any portion of the amount of funds retained. This request does not need consent of surety since the retainage bond form, for this purpose, requires their consent. The Region must forward this request by transmittal letter to AFS/CAPS, which will furnish the appropriate bond form to the Contractor for execution. The Contractor may return the executed bond form directly to AFS/CAPS for final approval and signature by WSDOT.

- Effective July 27, 2011, for projects containing no Federal funds that include landscaping work the Contractor may request that, 30 days after completion of all contract work other than landscaping work, WSDOT release and pay in full the amount of funds retained during the life of the contract for all work except landscaping. In order to initiate this release of funds, DOT Form 421-009 should be completed by the Contractor and submitted to the Project Engineer. In signing the request, the Project Engineer will confirm that all work, except landscaping work, is in fact physically completed. For any landscaping work that may have been completed, the Project Engineer will designate the amount of landscaping moneys, if any, that have been earned to date by the contractor. In the space designated for remarks the Project Engineer will identify the landscaping or plant establishment work that remains to be completed and its approximate value. Except for landscaping work, the Project Engineer will determine if all Statements of Intent and Affidavit of Wages Paid have been received for the work that has been physically completed. The Project Engineer will transmit to the Contractor a list of all subcontractors, including UBI numbers, believed to have performed work on the project. The Contractor will verify which subcontractors did work on the project and that the UBI number listed is correct for each subcontractor. DOT Form 421-009 will not be transmitted to AFS/CAPS until the Contractor has verified the subcontractors and UBI numbers. WSDOT will continue to withhold a 5 percent retainage of any moneys earned for landscaping work that may have been completed to date and will continue to retain 5 percent of the moneys that are to be earned for landscaping that is yet to be completed. A bond is not required.

The completed request along with the Project Engineer's cover memo confirming receipt of Statement of Intent and Affidavit of Wages Paid for the Contractor, subcontractor, and any lower-tier subcontractors, who were involved in the completed work, is then forwarded to the State Construction Office, through the Region Construction Office, for approval. Once approved, the Construction office will submit the request to AFS/CAPS for further processing. If there are no claims against the retainage still in place and releases have been received from Revenue and Employment Security within the designated 60 day period, AFS/CAPS will release the appropriate portion of retainage to the Contractor.

SS 1-09.11(2) Claims

Claims by the Contractor

The *Standard Specifications* contains specific requirements in Section 1-04.5 which, if not followed, may result in the Contractor waiving their rights to submit a Certified Claim. The Project Engineer should monitor whether the Contractor has met these requirements. If all the requirements have been met, the Project Engineer must evaluate the merits of the Certified Claim.

If the Contractor has pursued and exhausted all the means provided in *Standard Specifications* Section 1-04.5 to resolve a dispute, the Contractor may file a Certified Claim. A Certified Claim, filed in accordance with *Standard Specifications* Section 1-09.11(2), is a much more structured device and demands the Contractor to comply with a high level of conformance with the contract requirements. The objective is to utilize the rights that WSDOT has under the contract to get the Contractor to (1) identify the issue(s) in a way that WSDOT clearly understands, (2) provide information in detail that is sufficient for WSDOT to evaluate entitlement and quantum, and (3) limit the discussion to a defined subject matter. To accomplish this, and to maintain the Department's rights in a situation that may lead to court action and expensive lawsuits, the Project Engineer must insist on rigid conformance with the requirements of the *Standard Specifications* Section 1-09.11. In fact, the first evaluation must not be of the claim's merit, but rather of the claim's structure, content, and conformance with the *Standard Specification* requirements. If the package fails the specification requirements in any way, it should be returned to the Contractor immediately with a written explanation of where it is deficient. If the package meets the contract requirements, then the Project Engineer must comply with the demands for WSDOT actions that are included in the same specification.

The notarized statement that is required to accompany the Certified Claim states that it is a "true statement of the actual costs incurred and time sought and is fully documented and supported under the Contract between the parties." The Contractor is acknowledging that they have expended the cost and time that they are seeking. Therefore, a Certified Claim may only be submitted after the costs have been realized. If the Project Engineer receives a Certified Claim for costs that have not been realized by the Contractor they should contact the State Construction Office.

The existence of a Certified Claim does not diminish the responsibility of the Project Engineer to pursue resolution. The only difference is that State Construction Office final approval of a proposed settlement is required. The change order settling a formal claim must include waiver language similar to the following:

"The Contractor, (company name), by the signing of this change order agrees and certifies that:

Upon payment of this change order in the amount of \$_____, any and all claims set forth in the letter(s) to the Department of Transportation, dated _____ and signed by _____ of (company name) in the approximate amount of \$_____, have been satisfied in full and the State of Washington is released and discharged from any such claims or extra compensation."

If the settlement is intended to close out all dispute discussions for the contract, use waiver language similar to:

"The Contractor, (company name), by the signing of this change order agrees and certifies that:

Upon payment of this change order in the amount of \$_____, any and all claims in any manner arising out of, or pertaining to, Contract No. _____, (including but not limited to those certain claims set forth in the letter(s) to the Department of Transportation, dated _____ and signed by _____ of (company name) in the approximate amount of \$_____, have been satisfied in full and the State of Washington is released and discharged from any such claims or extra compensation in any manner arising out of Contract No. _____.”

Contractor Claims that Have Proceeded to a Legal Filing

Once the Contractor has submitted a Certified Claim in acceptable form and the State has either denied the claim or failed to respond in the time allowed, the Contractor is free to seek judicial action by filing a lawsuit or, in some cases, demanding binding arbitration. Note that the Contractor must fully comply with the provisions of *Standard Specifications* Section 1-09.11 before it can seek judicial relief. Once any legal action has been started, the Project Engineer may only continue with settlement efforts if the Attorney General’s office has given specific permission to do so. Such permission may be sought through the State Construction Office. Settlements of claims which have resulted in a judicial filing need review and approval by the Attorney General’s office and different waiver language similar to the following:

“The Contractor, (company name), by the signing of this change order agrees and certifies that:


Upon payment of this change order in the amount of \$_____, any and all claims in any manner arising out of, or pertaining to, Contract No. _____, (including but not limited to those certain claims set forth in the complaint filed under Thurston County Cause No. _____ (Contractor’s name) vs. State of Washington), have been satisfied in full and the State of Washington is released and discharged from any such claims or extra compensation in any manner arising out of Contract No. _____.”

Any documents pertaining to a settled claim which has resulted in a judicial finding must be kept for a period of six (6) years following the date of the court order dismissing the lawsuit.

Claims and the Final Contract Voucher Certification

The Final Contract Voucher Certification requires the Contractor to acknowledge and certify that the final estimate is a correct statement showing all monies due from the State. The dollar amount shown in the Final Amount section of the form is shown on CAPS report RAKC300F-EA. Use the dollar amount shown in the Total of Contract Items in the column titled TOTAL TO DATE:

HWY-RAKC300F-EA	STATE OF WASHINGTON DEPARTMENT OF TRANSPORTATION CONTRACT ESTIMATE PAYMENT TOTALS		DATE: 05/05/22 TIME: 10:32:17 PAGE: 1
CONTRACT: [REDACTED]	ESTIMATE NUMBER: 9999	DIST. FINAL	
DISTRICT: 3	WORK DONE TO: 07-30-2021	JOURNAL VOUCHER NO.	VOUCHER NO.
WARRANT REGISTER NO.			
	<-TOTAL-TO-DATE-->	<-PREVIOUS AMOUNT-->	<-PRESENT AMOUNT-->
TOTAL OF CONTRACT ITEMS	5,847,638.50	5,847,638.50	
LESS: NO RETAINAGE			
31 RAILROAD FLAGGING			
12 LIQUIDATED DAMAGES			
34 MISC. DEDUCTIONS	250.00	250.00	
32 MONIES DUE WSDOT			
PLUS: SALES TAX			



The final amount reported on the FCVC will be the total paid for Contract Bid Items and does not include amounts paid in retail sales tax or miscellaneous liquidated damages.

The Final Contract Voucher Certificate releases the State from any claims arising from performance of the Contract. The Contractor must submit any Certified Claims with, or prior to, signing the FCVC and must note any Certified Claims as exceptions on the FCVC. If there is no exception above the Contractor's signature on the FCVC, the Contractor's right to submit a Certified Claim has been waived.

Once the project is physically complete, the Project Office will assemble the final estimate and send it to the Contractor with the FCVC for signature. If the Contractor does not sign and return the FCVC in a reasonable time, WSDOT may unilaterally set the completion date and process the final estimate without the Contractor's signature. The Project Engineer will send at least one reminder to the Contractor prior to pursuing unilateral final acceptance. Discuss proposals to unilaterally accept a Contract with Region managers before contacting the State Construction Office to request unilateral final acceptance. Include evidence of the initial transmittal of the FCVC and any reminders sent to the Contractor when sending requests to the State Construction Office for unilateral final acceptance. The Contractor must submit any Certified Claims prior to unilateral final acceptance or their rights to said claims shall have been waived.

Note: Contracts executed by the Region do not require acceptance by the State Construction Engineer. The final signature will be the Region Administrator, Area Administrator, or designee.

SS 1-09.12 Audits

The Project Engineer is responsible for preparing all necessary records to document the work performed on the Contract. Detailed instructions on the records required and methods of preparing them are covered in Chapter 10.

Construction Quality Audits

Construction Quality Audits will be performed by the Construction Division - State Materials Laboratory to document conformance of project records to DBE compliance, construction administration and materials certification standards.

The Construction Quality Audit consists of documentation review and may include a field review. The documentation review will normally be conducted at the Project Office unless arrangements are made for it to be conducted elsewhere.

The goal is to perform a Construction Quality Audit on at least one project per Project Office every three years. Construction Quality Audits may be conducted more frequently at the discretion of the Construction Division. Projects will be selected with consideration given to project size and complexity.

Audits are typically performed during the active life of the project; generally, 20 percent to 80 percent complete, but also may occur after substantial completion has occurred. Construction Quality Audits are performed to validate that construction inspection, contract administration, materials testing and documentation are completed in accordance with established requirements and standards.

Records reviewed will include those maintained and developed by the Project Engineer for DBE compliance, inspection requirements, approval, testing, acceptance and field verification of materials placed and paid for on the Contract.

In addition to general audit deficiencies found, the following are audit performance measures:

- Record of Materials (if used): Accuracy maintained with less than 10 percent errors
- Materials Approval: Accuracy maintained with less than 10 percent errors
- Materials Acceptance: Accuracy maintained with less than 10 percent errors
- Field Verification: Accuracy maintained with less than 10 percent errors
- Materials Testing Frequencies: Within 10 percent of minimum required frequencies

Audit areas with less than 10 percent deficiency are exit items, while audit areas that exceed 10 percent are audit findings.

Upon completion of the audit, the findings will be discussed with the Project Engineer and/or their representative. Audit exit items are areas for the Project Engineer to make improvements to processes and can require corrective action be taken to resolve the issue. General audit deficiencies and audit findings are more serious and require a corrective action plan to document the Project Office process improvements. The final audit report will be sent to the Project Engineer with copies sent to the Region Documentation Engineer, Region Construction Engineer, State Construction Office, Construction Materials Office, and the FHWA Division Office.

The Project Engineer will address any general audit deficiencies, exit items and audit findings found by the audit, documenting the correction, deviation or change that resolved the deficiency. Deficiencies not rectified or meeting the requirements of *Construction Manual Section 9-1.2F* shall be noted during the Materials Certification.

The Project Engineer is responsible for developing and implementing a corrective action plan to ensure audit deficiencies and audit findings are avoided on future audits and to review the corrective action plan with the Region Construction Engineer for their concurrence. This shall occur within 90-days of the final Construction Quality Audit report date. A copy of the corrective action plan must be sent to the Materials Quality Assurance section at the State Materials Lab and the Headquarters Construction Documentation Engineer.

All contract documentation shall be available for review by the Audit Team. The following items of documentation may be requested by the Audit Team:

1. Request to Sublet Work Form 421-012
2. DOT Form 420-004
3. DBE On-Site Review Form 272-052
4. Record of Materials, as revised and amended by the Project Office (see *Construction Manual Section 9-1.2C*)
5. Approval Documents
 - a. Request for Approval of Material (see *Construction Manual Section 9-1.3B*)
 - b. Qualified Products List pages (see *Construction Manual Section 9-1.3A*)

6. Acceptance Documents
 - a. Test Results
 - Acceptance Test Reports
 - Assurance Test Reports (where applicable)
 - Independent Assurance Test Reports (where applicable)
 - Verification Test Reports (Cement and Liquid Asphalt)
 - Toxicity Test Reports (Recycled Materials)
 - b. Manufacturer's Certificate of Compliance (see *Construction Manual* [Section 9-1.4D](#))
 - c. Miscellaneous Certificates of Compliance (see *Construction Manual* [Section 9-1.4E](#))
 - Lumber Grading Certificate
 - Certification of Cement Shipment
 - Notice of Asphalt Shipment or Certified Bill of Lading
 - Any other certificates required by the contract documents
 - d. WSDOT Fabrications Inspected Items (see *Construction Manual* [Section 9-1.4B](#))
 - e. Concrete Pipe Acceptance Report (see *Construction Manual* [Section 9-1.4B\(3\)](#))
 - f. Catalog Cuts (see *Construction Manual* [Section 9-1.4G](#))
 - g. Proprietary or Agency Supplied Items (see *Construction Manual* [Sections 9-1.3B\(1\)\(IV\)](#) and [9-1.3B\(1\)\(V\)](#))
 - h. Visual Acceptance Items (see *Construction Manual* [Section 9-1.4C](#))
 - i. Reduced Acceptance Criteria Checklist (see *Construction Manual* [Section 9-1.1](#))
7. Field Verification Documentation (see *Construction Manual* [Section 9-1.5](#))
8. Inspectors Daily Reports
9. Field Note Records
10. Comparison/Summary of Quantities
11. List of Change Orders
12. Project Office Signature/Initial List
13. List of all materials testers and their qualification records
14. Other documentation as requested by the Auditor.

1-10 Temporary Traffic Control

SS 1-10.1 General

Work Zone Traffic Control

The primary function of work zone traffic control is to move vehicles and pedestrians safely through or around work zones while protecting on-site workers and accommodating the Contractor's construction operations.

All work is to be performed by the Contractor under the Contractor's control and supervision. All resources are to be provided by the Contractor unless the Special Provisions of the Contract specifically states that the Department will provide some

resource(s), what those resources will be and how they are to be utilized. Such provided resources will be placed in the Contractor's control to be used in the Contractor's operation. Any additional resources provided to the Contractor during the project should be accompanied by a change order to the Contract and, where appropriate, a price reduction.

The "General" requirements for traffic control (*Standard Specifications* Section 1-10.1) address the responsibility to provide adequate traffic control measures at work zones as follows:

- No Work shall be done until all necessary signs and traffic control devices are in place and conflicting or confusing signs are covered.
- If the Contractor does not provide necessary traffic control, WSDOT may do it and deduct the cost from the Contractor's payments.
- The Contractor is responsible regardless of whether or not WSDOT orders, furnishes, or pays for necessary traffic control.

It is important for the Project Engineer to ensure that the Contractor has an accepted traffic control plan in place and implemented providing all necessary signs and other traffic control devices so that the traveling public is aware of all deviations from the normal traffic conditions and is furnished adequate direction and guidance to permit safe travel through the construction area.

Law Enforcement Traffic Control Assistance

Law Enforcement traffic control assistance is considered an enhancement to the required work zone traffic control and should be reserved for those work zones that have unusual hazards or a high degree of worker exposure to traffic, which cannot be addressed by traditional traffic control means.

The use of Law Enforcement Officers in work zones follows two scenarios. Each scenario differs in the duties, management, administration, and payment for the officers.

Uniformed Police Officer (UPO)

In the first case, a Contractor provided UPO may be included in the plans to participate in a Contractor's traffic control activity, perhaps for intersection flagging. The UPO is provided by the Contractor and their use will be defined in the Contract Provisions and traffic control plans. The Contractor shall direct the activities of the UPO and payment will be made in accordance with the Contract Provisions. It is important to note that Washington State Patrol (WSP) Troopers may be used in the roll of a UPO.

Washington State Patrol (WSP)

The second case, WSP Troopers are dispatched for active enforcement for speed control or roadway/ramp closures around an active work zone. In this case, WSP does not participate in the Contractor's traffic control work with the possible exception of a rolling slowdown on the interstate. The Contract Provisions will identify the number of hours and tasks that will be provided at no cost to the Contractor. Costs for hours beyond what is noted in the provisions will be split between the Department and the Contractor if the Project Engineer approves the need for additional hours. There shall be no entitlement to their services and no entitlement for any impacts for any reason as a result of WSP personnel.

It is important to establish and maintain communication through all phases of Work that include WSP, beginning at the pre-construction conference. Topics of discussion might include: WSP tasks, Trooper scheduling coordination, and communication strategies.

Daily communication is necessary between the Project Inspector and WSP Trooper(s) assigned to the project at the beginning their shifts so they understand their roles and ensure that the appropriate traffic control strategy is applied. On each shift of WSP traffic control assistance, DOT Form 421-045, WSP Field Check List, shall be filled out. WSDOT will fill out the top portion of the form and give it to the WSP Trooper on the project to complete. At the end of the Trooper's shift, the completed form shall be returned to WSDOT.

WSDOT has agreement GCB 3958 to reimburse the WSP for Trooper assistance on construction projects. Instructions for WSP assistance including contact information for the Districts and detachments are in the [Traffic Manual M 51-02 Chapter 5](#).

A mid-project decision to provide troopers would be a change order. Routine enforcement by WSP in our work zones is always welcome.

Records of Construction Signing, Collisions, and Surveillance

It is important that detailed documentation of temporary traffic control installations be maintained. The following are recommended procedures and methods of documentation:

- Use photos and video records.
- The Contractor's installation must adhere to the traffic control plan (TCP), and the records must confirm that the installation is checked against that plan. Involve the Regional Traffic Engineer for significant changes to the TCPs.
- Documentation of the Contractor's activity for traffic control, including signing, should be completed by the Contractor's Traffic Control Supervisor (TCS). In accordance with the *Standard Specifications*, the TCS must maintain a daily project traffic control diary. DOT Form 421-040A Contractor's Daily Report of Traffic Control – Summary, and 421-040B Contractor's Daily Report of Traffic Control – Traffic Control Log, are provided to the Contractor for this purpose.

The Summary report will typically contain a brief description of the daily activities of the TCS with expanded details of any important event such as traffic collisions, meetings, decisions, or rapidly deteriorating conditions of traffic or weather. The Summary report is usually sufficient to verify the location and status of Class A signs once they are installed.

- The Traffic Control Log report is used to specifically identify all details of each Class B work zone setup. This includes identification of specific signs used, location of the signs, location of Flaggers, location of the work zone, the time it was set up, and the time it was removed. Additional information includes cone layout, if used, comments about piloted traffic, and comments about the setup of an accepted TCP.

The Project Inspector must work with the Contractor to ensure the Project Office is informed when collisions occur. It is important that the Project Office be aware of all traffic collisions within the project area. Thorough records must be maintained about the collision, including site conditions, status of signing, other traffic control measures, and anything else that may have contributed to the incident.

When an incident is investigated by the WSP, do not move signs until released to do so by the Trooper. Attempt to make contact with the Trooper to obtain a copy of the incident report or a case number.

When inspections are made of the work zone, either by project or region personnel, document the inspection and maintain the reports in the project files along with responses to any action items that resulted from the inspection.

Work Zone Safety and Mobility

In keeping with the above recommendations, the Project Engineer should utilize the information obtained from traffic control reports, collision reports, and other field observation in order to better manage Work Zone impacts. This will allow the Project Engineer to implement any necessary changes to traffic control in order to increase safety and to enhance mobility through the work zone.

At the completion of each project, the Project Engineer should review the traffic control used on the project in order to identify trends, etc. that may be used to improve Work Zone practices or strategies. This information should be summarized and provided to the Region Traffic Office for inclusion in annual reports.

SS 1-10.2 Traffic Control Management

Standard Specifications Section 1-10.2 addresses the requirements and duties of the Contractor's management personnel responsible for traffic and the Traffic Control Supervisor (TCS). The Contractor has the responsibility for managing traffic control and providing safe traffic control measures that are appropriate for the type of work and consistent with the requirements of the contract plans and specifications. The Contractor's traffic control work is a contract activity. Just like other contract activities, it is associated with pay items. The activity must be inspected for adequacy and conformance with the contract. Once it is performed and inspected, associated contract items must be measured and paid. Traffic management actions affect not only the Contractor's work operations, but also those of subcontractors. The process for coordinating and approving those actions must be well defined and consistent with the contract requirements.

Contractor management and the TCS work together with the Project Engineer and WSDOT's traffic control contact person to address traffic control issues as the work progresses. Planning and coordination of the Contractor's work efforts with appropriate traffic control measures are the primary responsibilities of contractor management. It is also the responsibility of management to ensure that any adopted State-provided or accepted Contractor-proposed Traffic Control Plans (TCPs) needed to implement the contract work operations are provided to the TCS and that any necessary resources to implement the TCP are available.

SS 1-10.2(1) General

SS 1-10.2(1)B Traffic Control Supervisor

The Traffic Control Supervisor (TCS) ensures that the traffic control measures shown on the accepted traffic control plans (TCPs) are properly implemented, operating, and documented on the project. The Contractor's TCS may not be required full time on the project, but is required to perform all the duties required by the Specifications. When the

Contractor is working multiple shifts, it may be necessary to have more than one person assigned to the role.

In addition to the Contractor's responsibility to designate a Traffic Control Supervisor, WSDOT may designate a DOT employee who is qualified, but not necessarily certified, to serve as the State's traffic control contact. It is intended to have qualified, trained representatives from both the Contractor and WSDOT work together to achieve safe traffic control operations on the project.

Among the duties of the Project Engineer in the area of Traffic Control are the following:

- **Communication** – About the planned work, traffic control needed and adjustments to the accepted Traffic Control Plan. During the work, to stay aware of changes, events and issues.
- **Monitoring** – The activities of the Contractor TCS and traffic control workers. The status of signs and control devices. Conformance with specifications and requirements.
- **Documentation** – Obtaining and reviewing daily reports. Handling Traffic Control Plans and their approvals.
- **Coordination** – With adjacent projects, with DOT Traffic offices, notices to the media.

The Project Engineer may assign these duties in any manner. It would make sense to include the State's traffic representative in these activities.

When reference is made to the Traffic Control Supervisor (TCS) in these provisions or in the *Standard Specifications*, it shall mean the Contractor's Traffic Control Supervisor unless stated otherwise.

Verify the Traffic Control Supervisor is certified by one of the firms listed in the Special Provisions by recording their full name, TCS card number, and card expiration date in the Inspectors Daily Report. Do not take a copy of the TCS certification card.

SS 1-10.2(2) Traffic Control Plans

Standard Specifications Section 1-10.2(2) addresses the requirements of Traffic Control Plans (TCPs). The Contractor must either adopt the TCPs appearing in the contract or propose modified TCPs to be used for the project. The Contractor must submit proposed modifications to plan TCPs or alternate plans as a Type 2 Working Drawing. The Project Engineer's comments to these plans shall be addressed before the work can begin.

The possibility of alternate plans is covered by the contract. No change order will be needed because of that reason. However, if a price adjustment is needed then a change order will be necessary to accomplish that. We would allow additional payment, either through added units or revised lump sums, only if the original contract TCP was shown to be inadequate or in the case of traffic control needed for another change in the work. If the proposal is only for Contractor convenience or preference, then a discussion of no pay for added traffic control or a credit for less traffic control would be appropriate. If the Contractor should balk at this, the response could be "build according to plan."

Minor modifications to the TCP may be made by the Traffic Control Supervisor to accommodate site conditions. Modifications or adjustments to the plan must maintain the original intent of the plan. When there is a change in the intent and/or substantial revisions are needed, a revised TCP shall be submitted for approval through the TCM to

the Project Engineer. The Regional Traffic Office should be consulted when this situation occurs. Again, changes may call for a formal change order.

TCPs should not only address all work zones, standard devices and signs but should also address issues such as:

- Conflicting or temporary pavement markings.
- Maintaining existing operational signs and covering conflicting signs.
- Staging requirements.
- Temporary vertical or lateral clearance restrictions.
- Temporary work zone illumination.
- Consistency with any existing work hour restrictions.
- Position of positive barriers for traffic hazards or worker protection.
- Vertical drop-offs.
- Work zone access.
- Intersections or access control (traffic signals, road approaches).
- Pedestrians and bicycles.
- Work zone capacity and related mobility impacts.

If the Contractor's method of operation or the work area conditions require other than minor modification of the specific TCP appearing in the contract or any of the TCP's previously designated and adopted by the Contractor, the Contractor shall submit a proposed modification of the TCP for approval. If the Contractor's proposed modifications comply with the MUTCD requirements and are consistent with contract requirements as well as State and Region policy, the Project Engineer may approve these proposed modifications (perhaps utilizing a change order, if appropriate.) If the Contractor's proposed modifications do not comply with the MUTCD requirements, the Project Engineer should consult with the Region Traffic Engineer.

Any Contractor proposed TCP or modifications to an existing TCP should be evaluated for their effects on work zone safety and mobility. The Project Engineer should refer to the guidance in the [Design Manual M 22-01 Chapter 1010](#) when evaluating how the new TCP works within the projects overall Transportation Management Plan (TMP).

On heavily used freight routes (I-5, I-205, I-405, I-90, I-82, I-182, SR 18, SR 167, and US 395-Tri-cities to Spokane), the contract may require that the Contractor provide the Engineer 30 calendar days of notice before implementing a TCP that reduces the travelled way to a single lane with a clear width of less than 16 feet for more than 4 calendar days. The request from the Contractor will include a schedule showing the dates of the width reduction, details of the limits and amount of the width reduction, description of available detour routes and a plan to provide unrestricted travel windows through the work zone when possible. The Engineer must provide 21 days of advance notice to Commercial Vehicle Services (CVS) at CVSPermits@wsdot.wa.gov. The Engineer should provide details of the width reduction to CVS and provide updates if there are any changes or adjustments in the schedule for the width reduction.

If there is any doubt that the proposed TCP complies with the MUTCD or provides for the safe movement of traffic, the Project Engineer shall consult with the Region Traffic Engineer or the Region Construction Manager.

SS 1-10.2(3) Conformance to Established Standards

Standard Specifications Section 1-10.2(3) addresses the requirements for standards and condition of signs and all other traffic control devices. In addition to standards established in the latest adopted edition of the MUTCD and/or as specified in the Contract Plans, all traffic control devices shall meet the crashworthiness standards of the “National Cooperative Highway Research Project, 350 (NCHRP 350) or the AASHTO Manual for Assessing Safety Hardware (MASH). There are four categories of traffic control devices.

Devices manufactured after 12/31/19 must meet standards of the MUTCD, and MASH 16 for devices made after 12/31/19 EXCEPT:

If a device is not available with a manufacture date of 12/31/19 or later, then the Contractor may use a device that is compliant with either NCHRP 350 or MASH 09 with approval from the engineer.

If the device was made prior to 12/31/19 and it was tested by NCHRP report 350 or MASH 09 it can be used through normal service life.

Small devices – channelizing and delineating including cones, tubular markers, flexible delineator posts, plastic drums with no attachments can meet either NCHRP 350, MASH 09, or MASH 16 as determined by device manufacturer.

Determination of crashworthiness is not required for trailer mounted devices like arrow displays, temporary traffic signals, area lighting supports and PCMSs.

Resources for Traffic Control and Work Zone Safety

The following information may provide additional guidance and more specific detail. Also, this list includes the staff, reference documents, and manuals mentioned throughout section [SS 1-10.2\(3\)](#).

- *Traffic Manual* M 51-02 Chapter 5
- MUTCD Part VI
- Quality Guidelines for Temporary Traffic Control Devices (ATSSA)
- Work Zone Traffic Control Supervisor’s Coursebook
- Executive Order E 1060 Speed Limit Reductions in Work Zones
- *Traffic Manual* M 51-02 Appendix 5A Work Zone Traffic Control
- Traffic Control Supervisor Evaluation – Final Report
- Region Construction or Traffic Office (Traffic Engineer or Work Zone Traffic Control Specialist) and Public Information Officer
- State Traffic Office (State Work Zone Engineer)

SS 1-10.3 Traffic Control Labor, Procedures, and Devices

SS 1-10.3(1) Traffic Control Labor

All traffic control labor must be trained to ensure safety in the work zone. Flaggers have additional requirements concerning flagging cards and apparel.

All flaggers working on WSDOT construction projects must have a valid State of Washington flagging card or a flagging card issued by the states of Oregon, Montana, or Idaho. Document verification of the card by recording the flaggers full name, card number and card expiration date in the Inspectors Daily Report. Do not take a copy of the flaggers card. Flaggers and all other personnel performing the Work described in [Standard Specifications](#) Section 1-10, are required to wear high visibility apparel as specified in [Standard Specifications](#) Section 1-07.8. Other workers may certainly use this type of clothing, but doing so is not a contract requirement, unless they are performing work on foot within the work zone of a Federal-Aid highway.

SS 1-10.3(1)A Flaggers

Typically, flaggers have the highest exposure to traffic hazards than other workers, so flaggers should only be used when all other forms of traffic control are inadequate. When flaggers are used, flagging stations must be shown on the TCP along with warning signs and other devices. Flagger stations shall be illuminated at night and should be protected with a positive barrier, if possible. The flagger must also have in mind an “escape plan” to avoid errant vehicles. Flaggers are not allowed on freeways and the use of flaggers to exclusively display the “SLOW” message is also not allowed. The provisions call for a flagger with intermittent responsibilities to direct traffic to step back from the flagging station between tasks. Additional guidance on the use of flaggers is located in Part 6 of the MUTCD and [WAC 296-155-305](#).

SS 1-10.3(1)B Other Traffic Control Labor

For some projects, labor in addition to the assigned Flaggers is needed for a variety of traffic-related tasks. Some of these tasks are listed in the provisions. Hours for this item are measured only for work on certain defined tasks (see [Standard Specifications](#) Section 1-10.4(2)).

SS 1-10.3(2) Traffic Control Procedures

SS 1-10.3(2)A One-Way Traffic Control

The major points to note in [Standard Specifications](#) Section 1-10.3(2)A are:

- The provision does not limit one-way traffic control to treated bases, surface treatments, and pavements. This type of configuration can be used in other operations, such as grading, when appropriate.
- Line of sight is important in coordination of side roads and approaches with the limits of the one-way operation.

- When the contract does not stipulate a pilot car operation, it may be established by change order if the Engineer deems that method of traffic control to be most appropriate; and
 - Contractor vehicles and equipment may utilize the closed lane in any manner. The one-way controlled open lane is for public traffic and, should the Contractor use that lane, all rules and procedures applicable to public traffic will apply to the Contractor. There will be no “wrong-way” travel in the open lane, no heavy equipment will join the public traffic and any additional traffic control will be performed according to accepted plans only.
 - The Contractor is required to plan and conduct operations so that the roadway can be reopened to two-way traffic at the end of the shift. If the nature of the work prevents this or if the work area is left in a condition unsafe for public two-way traffic, then the Contractor must continue the one-way operation throughout the off-shift hours.

SS 1-10.3(2)B Rolling Slowdown

This can be a useful method of creating gaps in traffic for specific, very short-term non-repetitive activities such as sign bridge removal or utility wire crossing. Rolling slowdown traffic control operations are not to be used for routine work that can be addressed by standard lane or shoulder closure traffic control. The Contractor may implement a rolling slowdown on a multilane roadway, as part of an accepted traffic control plan per [Standard Specifications](#) Section 1-10.3(2)B. The key is planning and communication so the work can be completed without stopping traffic. If the work is not completed the Contractor must undertake the most expeditious method of opening the roadway. If demobilizing and pulling off is faster than finishing the task, then it shall be done without regard to cost, efficiency, or schedule.

SS 1-10.3(2)C Lane Closure Setup/Takedown

The use of truck-mounted attenuators (TMA) with arrow boards is required by the provisions. This combination is to be used during the transition from open lane to closed lane. Once a lane is closed, the TMA may be removed, leaving the arrow board alone.

SS 1-10.3(2)D Mobile Operations

The key to this operation is to provide advance warning to the motorists and positive protection for the work vehicles and workers by keeping the traffic control equipment effectively close to the work and moving to match the work operations such as pavement marking or sweeping.

SS 1-10.3(2)E Patrol and Maintain Traffic Control Measures

This activity is to observe, repair and maintain traffic control devices and layout. The provisions require an hourly visit to each device and layout. No matter how many people are involved in this activity, measure only one hour for each hour that each approved route is operated. Depending on the extent of the control measures, more than one patroller may be required.

SS 1-10.3(3) Traffic Control Devices

SS 1-10.3(3)A Construction Signs

The Contractor provides all signs, posts and supports. All signs shall be constructed from either aluminum or aluminum composite materials.

“Do Not Pass” and “Pass With Care” signs are the responsibility of the Contractor. The provisions explain how to determine the number of these and that determination is to be made by the Contractor as well.

Construction Signs ([Standard Specifications](#) Section 1-10.3(3)A) divides construction signs into two categories, Class A and Class B, and lists the work required for the Contractor.

At no time should signs be left in traffic control position during periods when they are not necessary to traffic safety. Indiscriminate use of traffic control signs soon destroys public confidence and respect for the signs. Unnecessary traffic restriction and inconvenience tends to reduce the effectiveness of all signing and causes difficulty in enforcement by authorities. The Project Engineer should ensure that signs are removed or completely covered per [Standard Specifications](#) Section 8-21.3(3) during the hours they are not needed, either before or after working hours and on nonworking holidays or nonworking weekends. Tripod-mounted signs in place more than 7-days in any one location, unless approved by the Project Engineer, shall be required to be post mounted to improve visibility, and to keep useable shoulders clear.

Signing for nighttime traffic is more difficult than that required for daylight hours. A review of the project signing should be made and recorded during the hours of darkness.

Signs and other traffic control devices should be shown on the traffic control plan (either State-provided or Contractor-submitted), approved and in use, and should be installed with adjustments for work zone and traffic conditions. The Contractor and WSDOT should ensure proper use and placement of signs and devices. For situations not addressed by the TCPs, the Project Engineer will determine who is responsible for preparing a revised TCP. Refer to the [Work zone typical traffic control plans](#) library, the MUTCD, or seek assistance from the Region Traffic Engineer for appropriate TCP revisions. A modified or new TCP may be needed if adjustments to signs and devices do not adequately address existing hazards or resolve observed traffic problems or accidents.

Judgment will be required when a traffic control plan is changed. The project engineer must determine if the change has arisen because of a flaw in the original plans or because of the Contractor’s activities or preferences. In the first case, a change order, perhaps with compensation, may well be needed.

The remaining devices listed in the provisions are the following:

- Sequential Arrow Signs
- Portable Changeable Message Sign
- Barricades
- Traffic Safety Drums
- Traffic Cones and 42-Inch Tall Channelizing Devices
- Tubular Markers
- Transportable Attenuator
- Portable Temporary Traffic Control Signal
- Temporary Pedestrian Curb Ramps
- Pedestrian Channelizing Devices
- Warning Lights and Flashers

The specifications for these devices should be sufficient to explain their use and requirements.

SS 1-10.4 Measurement

Measurement is the key element of the new provisions, which now contain lump sum bid items. The provisions will define one of several pay item strategies, which will determine the measurements to be made.

First, the “normal” project with these provisions will contain items. The items are different from previous contracts and are non-standard, although several have very similar item names. Each of these is described below.

Instead of items, the project may be designated as a “Total Project Lump Sum.” This will be the case if the item “Project Temporary Traffic Control, Lump Sum” is included in the proposal. If this is the strategy of the project, then all measurement and payment provisions for all other pay items are deleted from the contract. When this occurs, then all temporary traffic control costs of whatever nature (everything defined in [Section 1-10](#)) are included in the lump sum.

The project may be a lump sum hybrid. In this case, the Total Project Lump Sum item will be present, but the provisions will reinstate one or more of the deleted standard items. If that happens, the measurement and payment of the reinstated item(s) will be separate from and not included in the lump sum.

These are the items and a discussion of the features of the measurement spec for each:

- **Traffic Control Supervisor (Lump Sum)** – Previously paid by the hour, this item is now a fixed cost. Overtime is not considered, a second TCS for a night shift makes no difference. This lump sum status will likely cause TCS to become a part of change order negotiations. If the change does, in fact, require additional TCS work, then there would be entitlement. This will also apply to extended contract duration, as the TCS can be considered part of on-site over-head.
- **Flaggers (Per Hour)** – This contract activity is separated from other kinds of traffic control labor. It is measured according to the hours that an approved flagging station is manned. We will not count minutes and seconds; time will be rounded up to the half hour as specified in [Standard Specifications](#) Section 1-09.1. If a station is manned, but full-time presence of the flagger is not necessary (trucks entering roadway, equipment crossing) then the flagger is expected to step back out of harm’s way until the next event. No deduction will be made for this stepping back, provided the flagger cannot be assigned to other duties while waiting. In measuring flagging, disregard overtime, split shifts, union rules for show-up time, the trade classification of the flagger and any other payroll issues. The flagging is a service that is provided and paid by the hour. It is only peripherally related to the flagger’s paycheck.
- **Other Traffic Control Labor (Per Hour)** – There are other duties for traffic control labor besides flagging. Some of them are included in this item for separate measurement. If one of the activities listed in the provision is provided, then measurement of that activity is appropriate. Only the hours that the activity is performed will be measured. Again, this is not a payroll measurement.

Do not succumb to pressures to add other hours to this item. As the payment spec for “Other Temporary Traffic Control” states, all costs not compensated by other items are covered there.

Construction Signs, Class A (per sq ft) to qualify for payment under this item, the sign must be designated as Class A on an accepted TCP or be directed installed by the Engineer and designated as Class A at the time of direction. After-the-fact re-designations of signs that have been originally thought to be Class B should not be considered.

- **Other Unit Price Items** – The traffic control provisions limit unit items to major devices. These include Sequential Arrows, Changeable Message Signs, Portable Signal and Transportable Attenuators. The measurement and payment requirements for these are similar or identical to those which have been in use for some time and are relatively straightforward.

One point to make is with the force account item for Repair Transportable Attenuator. Because this is a temporary installation and not a part of the permanent work, the Third Party Damage item does not apply and that is why a separate force account is established. If the damage was caused by a third party, the department may well be able to recover the costs paid to the Contractor under this item. The Project Engineer should take steps to protect the department's interest and involve the Maintenance, the Accounting and Financial Services Division, and Risk Management offices to initiate the efforts to recover costs.

SS 1-10.5 Payment

The payment provisions of the new specifications are intended to provide a mechanism that accounts for all of the Contractor's costs for temporary traffic control. The total project lump sum item is self-explanatory. There is no additional payment unless there is a change order.

If the job contains items, the pay definition for each describes the limited portion of the Contractor's costs that are covered by each item. The summary lump sum item (Other Temporary Traffic Control) is written to be a catchall cleanup that lets nothing escape for "additional compensation" discussions.

Watch out for change orders. A principal concern over lump sum items is that work will be added that is not required by the original contract and no mechanism exists to increase traffic control payment. This can be straightforward in identified changes, merely becoming an additional aspect of the negotiation. More troubling are constructive changes, which are not written, but which do end up in negotiation. An "overrun" of asphalt pavement to add a few driveways may be a convenient way to do field decisions, but may also create a dispute over the related traffic control costs (not to mention the dispute about the changed nature of the paving).

Appendix 1-A Change Orders

Contents

SS 1-04.4	Changes	1-A-4
1	Introduction	1-A-4
1.1	Approve versus Execute	1-A-4
2	Project Engineer Responsibilities.	1-A-4
2.1	Understand the Project Engineer’s Change Order Responsibility and Authority	1-A-4
2.2	Know the Contract	1-A-5
2.2.1	Contract Documents	1-A-5
2.2.2	Case Law	1-A-7
2.3	Know the Context Outside the Contract	1-A-8
3	Contractor Responsibilities Regarding Change Orders	1-A-8
4	Change Order Process.	1-A-8
4.1	Evaluate the Need to Modify the Contract	1-A-10
4.1.1	Owner-Initiated Change Orders.	1-A-10
4.1.2	Contractor-Proposed Change Orders	1-A-10
4.2	Evaluate Entitlement	1-A-11
4.3	Evaluate Options.	1-A-12
4.4	Substantiate the Decision to Issue a Change Order	1-A-12
4.5	Information for Preparing a Draft Change Order	1-A-13
4.5.1	Overview of using the Construction Contracts Information System (CCIS) for Change Orders	1-A-13
4.5.2	Change Orders Conditionally Required by the Contract	1-A-15
4.5.3	Change Order Text Generated by the Author	1-A-15
4.5.4	Prepare Plans.	1-A-21
4.5.5	General.	1-A-21
4.5.6	Other Considerations.	1-A-22
4.6	Evaluate Cost.	1-A-22
4.6.1	Unit Bid Analysis.	1-A-22
4.6.2	Time and Materials Cost Estimating	1-A-22
4.6.3	Delay and Impact Costs.	1-A-25
4.7	Evaluate Impacts on Time	1-A-25
4.8	Obtain Required Approvals	1-A-25
4.8.1	General.	1-A-25
4.8.2	Basis for Providing Approvals.	1-A-26
4.8.3	Project Engineer and Region.	1-A-26
4.8.4	This Section Not Used.	1-A-26
4.8.5	State Construction Office	1-A-26
4.8.6	State Materials Laboratory	1-A-27
4.8.7	Federal Highway Administration (FHWA).	1-A-27

4.8.8	Local Agency Projects	1-A-27
4.8.9	Funding	1-A-27
4.8.10	Office of Equity and Civil Rights (OECR)	1-A-27
4.8.11	Engineer of Record	1-A-28
4.9	Identify the Executing Authority	1-A-31
4.9.1	Limits to Execution Authority for Change Orders	1-A-32
4.10	Transmit a Draft Change Order to the Contractor	1-A-32
4.11	Request Cost Proposal and Time Impact Analysis from Contractor	1-A-32
4.12	Negotiate with the Contractor	1-A-33
4.12.1	Objectives of Negotiation	1-A-34
4.12.2	Negotiation Prior to Beginning Change Order Work	1-A-34
4.12.3	Negotiation After Change Order Work Begins	1-A-35
4.13	The Change Order Submittal Package	1-A-35
4.13.1	Change Record, DOT Form 422-002	1-A-36
4.13.2	Change Order Checklist, DOT Form 422-003 and 422-005	1-A-38
4.13.3	Supporting Documentation	1-A-39
4.13.4	Assemble the Change Order Submittal Package	1-A-39
4.14	Obtain Change Order Signatures	1-A-39
4.14.1	Preliminaries	1-A-39
4.14.2	Obtain Electronic Signature	1-A-40
4.15	Change Order Execution and Authorization to Proceed	1-A-43
4.15.1	Authorization to Proceed Before the Change Order is Executed	1-A-44
4.15.2	Distribution of Executed Change Orders	1-A-44
4.16	Processing the Change Order Submittal Package in ECM	1-A-45
4.17	Project Engineer Responsibilities after Execution	1-A-46
4.18	Backup Documentation	1-A-46
4.19	Change Orders and Final Records, ECM storage, and As-Builts	1-A-46
5	Miscellaneous Change Order Considerations	1-A-46
5.1	Cardinal Changes	1-A-46
5.2	Unilateral Change Orders	1-A-47
5.3	Interim Change Orders to Comply with Prompt Payment	1-A-47
5.4	Variation in Estimated Quantities	1-A-48
5.5	Differing Site Conditions (Changed Conditions)	1-A-48
5.6	Addressing Traffic Control	1-A-48
5.7	Claims Settlement	1-A-48
5.8	State Construction Office Change Order Review	1-A-49
5.9	Deleted Work	1-A-49
5.10	Conversion Factors	1-A-50
5.11	Consent of Surety	1-A-50
5.12	Credits for Non-Specification Material/Work	1-A-50
5.13	Lump Sum Items	1-A-51

5.14	Approve versus Execute	1-A-51
5.15	Disposal of Surplus Materials	1-A-51
5.16	Tracking Change Order Status	1-A-52
5.17	Mutual Agreement to Add a Disputes Review Board (DRB)	1-A-52
5.18	Contractor Notice Requirements	1-A-52
5.19	RCW 39.30.060 Changing Mechanical or Electrical Subcontractors	1-A-52
5.20	RCW 39.04.120 When Environmental Protection Laws Change	1-A-52
5.21	Reporting Engineering Errors in Excess of \$500,000	1-A-52
5.21.1	Identifying and Quantifying an Error	1-A-53
5.21.2	Basic Procedures	1-A-53
5.21.3	Contents of Engineering Error Report	1-A-56
5.22	Change Orders Over \$500K	1-A-57
5.23	Constructive Changes	1-A-57
5.24	HMA Mix Design Substitutions	1-A-57
5.25	Equal or Better Product Substitutions	1-A-58
6	Change Order Problems to Avoid	1-A-58
6.1	Unjustified or Inadequately Described Need	1-A-58
6.2	No Prior Approval to Proceed	1-A-58
6.3	Failure to Follow Through	1-A-58
6.4	Change Type Incorrectly Marked	1-A-58
6.5	Insufficient Cost Justification	1-A-59
6.6	Inadequate Description of Work	1-A-59
6.7	Entitlement not Clearly Established	1-A-59
6.8	No Approval	1-A-59
6.9	Inappropriate Approval	1-A-59
6.10	Time Not Addressed	1-A-59
6.11	Incidental Work	1-A-59
6.12	Change Order Quantities Differ from Approved Quantities	1-A-60
6.13	Structural Change	1-A-60
6.14	Incorrect Item or Group	1-A-60
6.15	Condition of Award Not Coded	1-A-60
SS 1-04.4(1)	Minor Changes	1-A-61
SS 1-04.4(2)	Value Engineering Change Proposal (VECP)	1-A-64
Appendices		1-A-65
Appendix 1-A.1	C3OP Change Order Text How-To	1-A-66
Appendix 1-A.2	Change Order Code Selections and Definitions	1-A-67
Appendix 1-A.3	Draft Engineering Error Memorandum and Cover Sheet	1-A-68
Appendix 1-A.3	Cover Sheet for Engineering Error Report	1-A-69
Appendix 1-A.4	Example Change Order Documents	1-A-70

SS 1-04.4 Changes

1 Introduction

The *Standard Specifications* give the Project Engineer the right to change the Contract (with or without the Contractor's agreement), and in some cases creates a duty for the Project Engineer to change the Contract. This right to change the Contract does not include the right to make cardinal changes. See [Section 5.1](#) Cardinal Changes.

The *Standard Specifications* mention three instruments for modifying the Contract: (1) Supplemental Agreement, (2) Change Order, and (3) Minor Change.

A Supplemental Agreement is a legal instrument used to settle disputes, usually after Final Acceptance. It is the result of either a negotiated settlement or an adjudicated ruling, is developed with support from the attorneys for the parties, does not use the change order process, and is outside the scope of the *Construction Manual*.

Change Order is the name of the process WSDOT routinely uses to make modifications to the Contract.

Minor Changes are an expedited process used for those contract modifications that meet the criteria for a Minor Change, at the discretion of the Project Engineer. Refer to section SS 1-04.4(1).

Standard Specifications Section 1-04.4 sets out the parameters for dealing with modifications to the Contract. It addresses WSDOT's rights to make changes, each party's obligation to implement changes, each party's rights and obligations when they disagree with a change proposed by the other party, and the basis by which a change is officially made part of the Contract.

1.1 Approve versus Execute

Refer to [Section 5.14](#) for a discussion of the difference between these concepts.

2 Project Engineer Responsibilities

2.1 Understand the Project Engineer's Change Order Responsibility and Authority

Authority and responsibility are not the same concept.

The Project Engineer is responsible for:

1. Ensuring that all change orders needed to successfully deliver the project are identified, developed, finalized, and implemented. This includes those within and outside the Project Engineer's authority to approve or execute.
2. Ensuring that change orders unambiguously identify what is changed and what it is changed to.
3. Ensuring that the requirements for change orders described in the Contract and *Construction Manual* are followed or obtain written approval from Region and the State Construction Office to deviate from those requirements.
4. Ensuring that all change order modifications to cost or time are substantiated by an Independent Engineer's Estimate (IEE) and Time Impact Analysis (TIA) developed by persons with proper training and expertise.

5. Ensuring that all adjustments (increases and decreases) to cost or time required by the contract are addressed by change order or as otherwise required.
6. Ensuring that all required approvals are obtained before a change order is executed or before the Contractor is directed to proceed prior to execution.
7. Executing those change orders that are within their execution authority.
8. Ensuring that change orders are executed in a timely manner.
9. Ensuring that, in compliance with *Standard Specifications* section 1-08.1(7)B, RCW 39.04.250, and RCW 39.76.011, prompt payment is made to the Contractor once the Contractor has been given notice to proceed and begins the change order work, without regard to whether the change order has been executed or not. In the event of a dispute with the Contractor over entitlement, the Project Engineer must make prompt payment for the dollar amount agreed on. See [Section 5.3](#).
10. Ensure that all change orders comply with the Design Documentation Package or obtain approval to deviate from those standards prior to initiating the change order. See [Section 4.17](#).

The Project Engineer's authority to approve some elements of a change order is limited by criteria discussed herein, which include the standard of care for a licensed professional engineer to act within their area of knowledge, expertise, and experience. For issues not within the Project Engineer's approving or executing authority, the Project Engineer is expected to obtain timely approval from others having such authority.

The Project Engineer's authority (as well as WSDOT's authority) to make certain modifications to the Contract is also limited by what is known as a cardinal change. The details of this, along with the legislative relief provided in [RCW 47.28.050](#) allowing for certain very limited Cardinal Changes, is discussed in [Section 5.1](#).

2.2 Know the Contract

2.2.1 Contract Documents

To effectively manage the change order process, the Project Engineer must understand many contract elements beyond *Standard Specifications* section 1-04.4. These other elements explicitly or implicitly require a change order. Some place restrictions on payment. A partial list of specifications which, depending on circumstances, could require a change order is as follows:

2.2.1.1 All Contracts, without regard to Federal or State Funding

1. Environmental Permits
2. Environmental Commitments
3. Section 1-04.1(2) Bid Items Not Included in the Proposal
4. Section 1-04.4(2) Value Engineering Change Proposal (VECP)
5. Section 1-04.5 Procedure, Protest, and Dispute by the Contractor
6. Section 1-04.5(1) Disputes (to create DRB when not in original contract)
7. Section 1-04.6 Variation in Estimated Quantities
8. Section 1-04.7 Differing Site Conditions (Changed Conditions)
9. Section 1-05.1(1) Oral Orders

10. Section 1-05.1(2)	Requests for Information (RFI)
11. Section 1-07.1(5)A	Changes to Laws to be Observed
12. Section 1-07.16(4)	Archaeological and Historical Objects
13. Section 1-07.16(4)A	Inadvertent Discovery of Human Skeletal Remains
14. Section 1-07.17(1)	Utility Construction, Removal, Relocation by Contractor
15. Section 1-07.17(2)	Utility Construction, Removal, Relocation by Others
16. Section 1-07.28(7)	Railroad Insurance
17. Section 1-08.6	Suspension of Work
18. Section 1-08.8	Extensions of Time
19. Section 1-09.4	Equitable Adjustment
20. Section 1-09.5	Deleted or Terminated Work
21. Section 1-09.11(2)	Claims
22. Section 2-03.3(1)	Widening of Cuts
23. Section 2-03.3(2)	Rock Cuts
24. Section 2-03.3(14)E	Unsuitable Foundation Excavation
25. Section 2-06.5(2)	Subgrade Not Constructed Under Same Contract
26. Section 2-09.3(1)D	Disposal of Excavated Material
27. Section 2-09.3(1)E	Backfilling
28. Section 3-01.3(5)	Moving Plant
29. Section 3-02.2(3)	Stockpiling Aggregates for Future Use
30. Section 5-04.3(3)D	Material Transfer Device or Material Transfer Vehicle
31. Section 8-20.3(4)	Foundations
32. Section 8-20.3(5)E3	Boring
33. Section 8-20.3(14)D	Test for Induction Loops and Lead-In Cable
34. Section 8-21.3(9)F	Foundations

2.2.1.2 Federally funded projects

35. GSPs related to DBE participation

2.2.1.3 State-funded (100%) projects

36. GSPs related to SVBE and MWBE participation

2.2.2 Case Law

Beyond what the Contract defines as the contract documents, the Contract includes “case law”. Case law is the large body of legal principles established by judicial precedent, i.e., judicial rulings.

This guidance is not intended as a legal primer. It is intended to expose the Project Engineer to principles of case law that are relevant in the day-to-day administration of a construction contract.

2.2.2.1 The Duty to Act in Good Faith

The duty to act in good faith is short for “the implied covenant of good faith and fair dealing”. It means that “neither party shall do anything which will have the effect of destroying or injuring the right of the other party to receive the fruits of the contract.” (lexisnexis.com)

2.2.2.2 Principles of Contract Interpretation

The following are some of the principles of contract interpretation from case law.

1. Ambiguous means capable of being understood in either of two or more possible senses.
2. One party asserting the contract to be ambiguous does not necessarily make it so.
3. As aids in discovering whether a contract is ambiguous, “rules of construction” are sometimes used by the courts:
 - a. The best evidence of the intent of the parties is the documents which comprise the contract.
 - b. Extrinsic evidence (i.e., evidence from sources other than the contract documents) may not be used to create ambiguity.
 - c. Absent ambiguity, interpret the contract as written.
 - d. Interpret the contract as a whole.
 - e. Words are given their plain meaning.
 - f. The specific governs over the general.
4. If an ambiguity is determined to exist, as aids in resolving the ambiguity but not as ends in themselves, other rules of construction are sometimes used:
 - a. Intent of the parties
 - b. Objective of the contract
 - c. Surrounding circumstances
 - d. Reasonable over unreasonable
 - e. Conduct of the parties
 - f. As a last resort, if the ambiguity cannot be resolved by the above, against the drafter.

2.3 Know the Context Outside the Contract

When evaluating whether a change order is needed or what the change order should accomplish, it is frequently necessary to consider issues that are outside but related to the Contract. The following is a partial list:

- Impacts to the travelling public including pedestrians and bicyclists
- Impacts to businesses
- Lane width, height, and load restrictions
- Other contracts
- Environmental and other commitments
- State and Federal laws
- Utilities
- Right Of Way (ROW)

3 Contractor Responsibilities Regarding Change Orders

The Contractor is responsible for the following:

- Participate in good faith in the change order process.
- Proceed promptly with change order work after receiving authorization to do so as provided in the Contract.
- Comply with contract requirements for providing notice and protest.

4 Change Order Process

The following flow chart is an idealized sequence of actions for processing a change order. It is idealized in the sense that it assumes plenty of time is available to execute the change order before the Work needs to begin without delaying the Contractor.

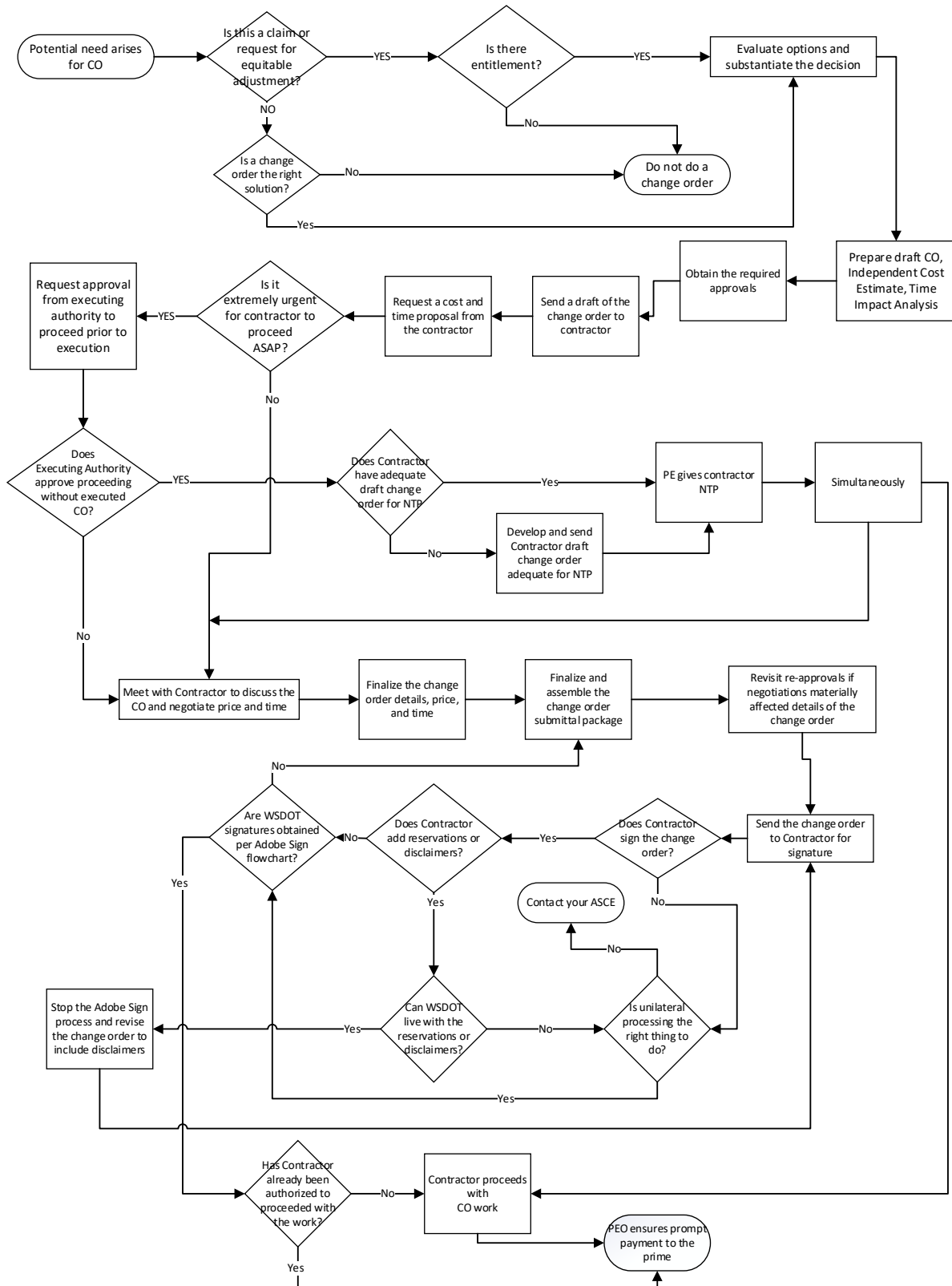
The Project Engineer must always manage the process to account for the urgency and complexity of the issue at hand in a manner that avoids or minimizes delay to the Contractor's progress. To that end, the sequence is not mandatory except for the following items:

1. All required approvals must be obtained before (a) the change order is executed, or (b) notice to proceed is issued in accordance with Section 4.15.1.
2. Changes to text, drawings, or price which materially differ from the understanding upon which a prior approval was made must be reviewed for approval again. The Project Engineer must ensure that the end product change order is consistent with the understanding of prior approvers.

To the ends above:

1. Some change orders may not need all steps.
2. Some change orders may require additional steps.
3. Some change orders will require some events to be repeated.
4. Some change orders may require steps to proceed in parallel rather than in series.

Change Order Process



4.1 Evaluate the Need to Modify the Contract

The Project Engineer's first duty in the change order process is to evaluate whether there really is a need for a change order. Questions like: Why? What if we don't do a change order? What does the Contract say? Does Region, HQ, and FHWA concur with the need? Is sufficient funding available? Does it make more sense to do this in a different or future contract?

4.1.1 Owner-Initiated Change Orders

The types of change orders that can be initiated by the Owner are addressed in the first two paragraphs of *Standard Specifications* section 1-04.4. These could originate from Project Office staff, design Project Engineer, Region Construction, State Construction Office, HQ Bridge, HQ Materials, other WSDOT support groups such as Environmental, and local agencies. The Project Engineer should not assume a change order is the right thing to do simply because it originated from one of these sources.

For example, sometimes changes in Materials, Work Method, or Work Sequence may not be a change to the Contract. The determining factor is if the contemplated change order modifies a specific contract requirement. If the scope of work for a contract bid item includes language such as "recommends," "suggested," or "approved equal", or allows the Project Engineer to approve changes, then a change order may not be required. In essence, this would not be a deviation from the Contract and, therefore, does not require a change order.

4.1.2 Contractor-Proposed Change Orders

In evaluating contractor-proposed change orders, the Project Engineer must determine if a change order is really needed and appropriate. A common situation where a change order may not be required is when the contractor proposes a change to a submitted manufacturer's recommendation, drawing or plan such as a falsework drawing or erection plan. Changes to those drawings/plans may be made by the same authority that approved them the first time.

Another situation a change order would not be required is when the Project Engineer determines there is "no entitlement". However, a contractor-proposed change that WSDOT finds acceptable as a "no-cost" change (such as superior material substitution), for which technically there would be "no entitlement", would still require a change order for the materials substitution (see below).

The most common Contractor proposed changes are:

1. Repair procedures
 - a. If a repair requires modification to the Plans or specifications (i.e. rebar placement, moving a joint, etc.) a change order is required to document the change to the contract plans.
2. Material substitution
 - a. The Contractor may propose to use a different material than what is specified in the contract. If the material is deemed to be satisfactory for the purpose, the Materials Laboratory may recommend acceptance of the change. These types of changes often include a credit to WSDOT. When the product is deemed by WSDOT to be superior, it may be accepted as a no-cost change.

3. Work method change
 - a. If the Contractor proposes to alter the work method specified in the contract, a change order will be necessary. This type of change may include a reduction in working days. WSDOT may be entitled to a credit.
4. Value Engineering Change Proposal (VECP)
 - a. When a Contractor proposes a VECP change order there are strict requirements to be met. These requirements are well-described in the *Standard Specifications* section 1-04.4(2). See also section SS 1-04 .4(2).

4.2 Evaluate Entitlement

To “evaluate entitlement” means to answer the following question:

“Does the Contract give either party the right to an increase or decrease in the cost or time to perform the work?”

This question must be answered using the relevant sections of the Contract to determine whether it provides for additional money, time, or both, based on the specific facts and circumstances of the potential change order. In its simplest form, evaluating entitlement identifies the exact part of the contract that warrants the change in payments or contract time, plus an explanation of why the specific circumstances trigger that section of the contract.

For the case of a change order in which WSDOT has elected to add work, the answer is almost certainly yes, there is entitlement. The deletion of work by WSDOT usually results in money due to the Contracting Agency and may reduce time, but it may have the opposite effect and result in entitlement for additional money or time due the Contractor. Eliminating work with associated distributed costs that have been included is an example when this could occur. Additive and deductive changes issued by WSDOT must be carefully evaluated by the Project Engineer for entitlement.

The answer to this question in the case of a contractor requesting a change order for additional compensation must be evaluated by the Project Engineer. If the Project Engineer concludes the answer is no, there is no entitlement.

For purposes of evaluating entitlement, payments shall be considered “changing” when any of the following occur:

- The change order changes the cost of the contract (up or down), or
- A new pay item(s) is created (debits and/or credits), or
- Contractor payments (debit and/or credit) are changed by any mechanism other than a new pay item, or
- The contractual division of cost responsibility among or between the contractor, WSDOT, and/or a third party is modified, or
- When the change order contains language to the effect that “it is a no cost change order”, that means there are elements that tend to increase cost and those that tend to decrease it, but the net effect is zero, the increases and decreases must be documented and justified separately.

For purposes of evaluating entitlement, contract time shall be considered “changing” when any of the following occur:

- The change order increases or decreases working days or changes the time allowed, or dates required, to perform the work.
- When the net sum of any change to working days is zero (sometimes called “a wash”), the increases and decreases must be documented and justified separately.
- When the change order contains language to the effect that it “does not affect contract time”, and that means there are elements that tend to increase time and those that tend to decrease it, but the net effect is zero, the increases and decreases must be documented and justified separately.

Note that entitlement is about ‘why’ dollars or time are changing and not about ‘how many’ dollars are changing or how much time is affected. Refer to section 4.6 for discussion on addressing how many dollars.

While most changes to the contract provide an increase in the contract amount, changes sometimes decrease the contract amount. Changes that increase the contract amount require the Project Engineer to demonstrate and document in the Change Record that the contractor is entitled to an increase. Decreases generally require the Project Engineer to demonstrate and document the Owner’s entitlement to a decrease. When disputes occur over entitlement to increases in the contract amount, the burden is on the Contractor to demonstrate the contract provides entitlement. For decreases, the burden is on the Project Engineer to demonstrate to the Contractor that the contract provides for the decrease. In either case, the Project Engineer has a duty to evaluate whether the contract provides entitlement. When the conclusion is yes, the Project Engineer must document the contractual basis for the entitlement.

4.3 Evaluate Options

Once it has been determined that a change order must occur, the Project Engineer should ensure that reasonable alternate solutions are evaluated, and the best solution is selected. This may involve soliciting input from Region and the State Construction Office, support groups that helped develop the PS&E, and the Contractor. While the Project Engineer is not expected to be an expert in all disciplines, they are expected to ensure that proper subject matter experts are consulted and their input is considered. Changes to the design may require reevaluation of environmental processes (NEPA/SEPA), as well as permit modifications. The Project Engineer must contact the Region Project Development staff and Environmental Permit Coordinators to obtain guidance on answering those questions. In the end, however, it is the Project Engineer who must be satisfied that the option selected is, all things considered, the most efficient, effective, and in the best interest of the State.

4.4 Substantiate the Decision to Issue a Change Order

This step is taking the time to develop a written summary of the conclusions and decisions from previous steps 4.1, 4.2, and 4.3. It will be needed later in obtaining approvals and developing the Change Record.

4.5 Information for Preparing a Draft Change Order

4.5.1 Overview of using the Construction Contracts Information System (CCIS) for Change Orders

This section provides a general overview of using CCIS to set up, revise, approve, digitally print, and execute a change order. All these activities are done using submenu D1, “Pending Change Orders” function of CCIS. For a detailed explanation, refer to the CCIS User’s Guide.

All change orders must be entered into CCIS including Minor Changes. CCIS automatically assigns sequential numbers for change orders created during each project. Change Order information in CCIS must be kept current and accurate.

CCIS assigns temporary item numbers to new pay items created by change order. CCIS starts with 1000 as the first temporary item number and increases by one for each additional temporary item number required on the project. Region assigns a new permanent pay item number to replace the temporary pay item assigned in CCIS when they enter the information into the CAPS system after the change order is executed in CCIS.

4.5.1.1 Change Order Printed Pages

The table below shows the CCIS input screens used to create the pages of the printed change order.

Change Order Printed Page(s)	CCIS input screen(s) ^{Note 1} that generates data for the printed page
SIGNATURE PAGE	D1-1.1 page 1/6 and D1-1.1 Page 3/6
TEXT PAGE(s)	D1-1.2 page 6 of 7 ^{Note 2}
ITEM PAGE(s)	D1-2.1 page 1/1 and D1-2.2 page 1/1
COA PAGE(s)	D1-3 DO NOT USE ^{Note 3}
Other pages (Plan sheets, COA form, etc)	None

Note 1: CCIS User Manual screen references

Note 2: Use C3OP to upload text into this CCIS screen

Note 3: Do not use CCIS screen D1-3 to make COA commitment changes. Use COA Commitment Change form instead.

The Signature Page

The Signature Page includes header and financial information, approval and execution signatures and Contractor endorsements (and surety, when applicable).

Text Page(s)

The change order Text Page(s) contains all the terms and requirements of the change, with references to drawings and other documents which are part of the change order. Use [C3OP](#) to upload text into CCIS screen D1-1.2 shown as input screen “page 6 of 7”. C3OP is a web-based text program that can be found on the State Construction SharePoint Site. Once loaded, the text cannot be altered in CCIS. If the text must be modified, it must be revised in C3OP and uploaded again to CCIS.

It is recommended that the draft change order text be created as a Word file in a shared location before uploading to allow others with file access to make changes and upload again if necessary. The shared location must be on a secure WSDOT server or drive and not available to the public or Contractor. Only the person who uploads text into C3OP can make changes directly in the program. Instructions on using C3OP are found at *Construction Manual Appendix 1-A.1*.

Items Page(s)

The Items Page lists all the added, deleted, or modified pay/bid/ items affected by the change order, the unit price of each, the quantity of each, the extended dollar amount of each, and the total dollar amount for the change order. It also breaks the quantities into groups, similar to the summary of quantities included in the Plans.

Note: the term “bid item” refers to an item that was “bid” in the Contractor’s proposal. “Pay item” is the term used to refer to all items in the change order other than bid items. The term “item” by itself refers to either pay or bid items. For example, it is proper to say “Bid item XXX is deleted and replaced by a new pay item...”, or “This change order creates a new item...”. It is incorrect to say “This change order creates a new bid item...”.

COA Page(s)

CCIS is no longer being used to track changes to COA commitment amounts. Therefore, users will no longer use CCIS submenu D1-3 to update CCIS when change orders modify commitment amounts. Furthermore, because one of the functions of input to submenu D1-3 was to update submenu A3, submenu A3 will no longer be a reliable source of up-to-date COA commitments. The Project Engineer must continue to track COA commitment amounts when they change throughout the contract, but this must now be done on a spreadsheet that is part of the change order. To facilitate uniformity of what is recorded in the change order, use the following form(s) as a page of the change order:

	FORM NAME
Projects with federal funds	“Changes to DBE COA”
Projects with state-funds-only	Changes to VOB COA Changes to SBE COA

Each change order that modifies the COA must address all COA commitments. In essence, Utilization Certification or SVBE Plan. Refer to section 4.5.3.6 for instruction on how to use these forms.

Supplemental Pages: Plan Sheets and COA Commitment Change form

Pages that are part of the change order but not addressed above will not be processed in CCIS but are nonetheless an official part of the change order. Examples include plan sheets and the COA Commitment Change form. These supplemental pages must accompany the change order when being distributed for signature, execution, and ultimately storage within the Contract records and ECM.

When printing a change order in CCIS, it will prompt the user to enter the total page count. Include all supplemental pages when determining the total page count.

4.5.2 Change Orders Conditionally Required by the Contract

The contract provides many mechanisms outside of *Standard Specifications* section 1-04.4 that require or affect change orders under certain conditions. The most common are *Standard Specifications* Section 1-04.6 Variations in Estimated Quantities, and Section 1-04.7 Differing Site Conditions. However, there are many others and some of these are listed in section 2.2.1.1. What many of these have in common are two conditions: (1) The Contractor must provide the required timely notice, and (2) the Project Engineer must agree that the Contract provides entitlement.

4.5.3 Change Order Text Generated by the Author

4.5.3.1 Writing Methods

There are two methods of writing change order text.

1. The “Specific Location” method

- a. **Description** – With this method, the change order is written as instructions to the reader on exactly how and where any and all contract text should be added, deleted, or revised. If a reader was to re-read the contract as if these edits were actually made, the contract would read as if the desired changes were part of the original contract.

Note 1 – Referencing page number and line number is the preferred way to identify the specific location but is not an option in contract documents which do not have line numbers. When not an option, the best choice is usually to identify the change location by document, section, paragraph, and sentence.

Note 2 - When the change order modifies a prior change order, reference the prior change order’s page number, section, paragraph, and sentence and make the changes at that location.

Note 3 - When the change order modifies part of the contract that has been modified by addendum, reference the addendum’s page number, line number, item number, and item name.

Note 4 – When the change order modifies part of the contract that has not been modified by change order or addendum, reference the original, as-advertised contract specific location.

Note 5 – It is WSDOT policy that a “conformed document” shall not be considered the original contract. Therefore, when creating a change order using the “specific location” method, never reference a conformed document. – always reference the original contract document.

- b. **Example** - For a change order not affecting addenda or a prior change order: ‘In the Special Provisions, page 39, line 27, delete the phrase “400 psi” and replace it with the phrase “f’c = 4000 psi”’, or as an alternative ‘In the Special Provisions, page 39 line 27 is revised to read as follows: “shall be made with f’c = 4000 psi concrete.”’

- c. **Pros** – This method lends itself well to using modern word processing software to continually update the contract to reflect all change orders (and addenda), known as creating a “conformed document”. A conformed document can be particularly useful on a contract with many addenda and change orders as a quick reference to determine the current contract requirements, and to see which prior change orders or addenda need to be modified when writing a new change order.
 - d. **Cons** – Creating a change order using this method can, in some cases, require dozens of changes to text and/or drawings to accomplish one simple change. Failure to make these changes in all places needing change could inadvertently create ambiguity in the contract. Remember, the contract includes Addenda, Proposal Form, Special Provisions, Plans, *Standard Specifications*, and Standard Plans. Also, this method can make it difficult to understand the actual meaning of a change order without reading it in the context of the surrounding unchanged sentences.
2. The “Simplified” method
- a. **Description** – The simplified method of writing change orders makes no effort to identify specific locations in the contract that will be changing. Instead, it relies on the ability of a change order to modify many parts of the contract with one statement. This method frequently requires an overarching phrase such as “in all instances” or “all references in the Contract to...”
 - b. **Example** - “All instances in the Contract which call for 4000 psi concrete shall be understood to require $f'c = 4000$ psi.”
 - c. **Pros** – (1) This method can be quicker to draft than the specific location method. (2) This method usually enables the reader to better understand what is being changed than the specific location method because it provides better context and complete sentences. (3) This method eliminates the possibility of missing any of the locations that need to be changed.
 - d. **Cons** – (1) This method requires the writer to be certain it does not inadvertently create unintended changes. (2) It is not ideal for creating a conformed document.

Refer to section 4.5.1.1 for instructions on how to upload the text into CCIS using the C3OP program.

Plan sheets and any other documents that are part of the official change order must be referenced in the change order text. For example: “The required work is shown on pages 5, 6, and 7 of this change order.” (These pages would be plan sheets or the forms used to modify COA commitments.)

The following areas may need to be addressed in any change order. Some may apply and some may not, depending on the nature of the change. The person preparing the change order should consider each of these areas and apply judgment as to whether it should be included, and if included, how it should be expressed. Do not use headings that are not applicable.

OUTLINE OF CHANGE ORDER TEXT

CHANGE ORDER SUBJECT HEADING	WHEN USED
I. This Contract is revised as follows:	Always Required
II. Measurement	Always Required ^{Note 1}
III. Payment	Always Required
IV. Contract Time	Always Required
V. Changes to Condition of Award	When Applicable
VI. Waivers	When Applicable
VII. Qualifying Statements	When Applicable
VIII. Professional Engineer's Seal or Evaluation	When Applicable

Note 1: Not required for "No Cost" change orders.

4.5.3.2 "This Contract is revised as follows:"

CCIS includes boilerplate text on printed change orders, including this heading and "All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved".

This part of the change order is used to address all changes to the contract except Measurement, Payment, Contract Time, Changes to COA, Waivers, and Qualifying Statements. No subheadings are required for this section unless the Project Engineer believes subheadings will provide clarity for complex and/or lengthy change orders.

If the change order adds, deletes, or modifies Work, this section should tell, clearly and concisely but with as much detail as required, exactly what work the Contractor is to perform in accomplishing this change. When applicable, this section should address the location of the work, construction requirements, and materials requirements. State the acceptance methods for materials if it is different than described in the boilerplate at the top of the change order.

Construction requirements describe additional or changed requirements in the way work is to be accomplished by the Contractor. They define the specific requirements that the Contractor shall meet during the performance of the work. This section tells the Contractor specifically what they need to accomplish. Avoid directing means and methods for accomplishing the work. There are times when this is necessary, but in general the Contractor is responsible to determine how to do the work. Changes rarely state what actions WSDOT will take. There may be times WSDOT will need to commit to certain actions, but generally, change orders are intended to communicate the change to the Contractor, not the Project Engineer, and should be written with that in mind.

Not all changes have material requirements, but when the change does affect materials, the change must describe the materials involved. Define any physical properties that must be met or that are modified by the change, and the methods for acceptance of any added materials. For contracts that contain Buy America and Build America Buy America requirements, material requirements in the change must also comply with Federal regulations.

Note that if the change is affecting work that occurs on Tribal Land, Tribal Employment Rights Ordinances (TERO) may need to be included with the change's construction requirements. See section SS 1-07.12, under the subheading Responsibilities When Working on Tribal Lands.

This section should not include a broad, general description of the work such as “This work consists of repairing the expansion joint at...” or “This work involves making corrections to the sign mounting brackets at...” because (1) these are vague, and (2) the text automatically provided by CCIS serves the purpose of introductory language. Such general language might be appropriate for the Change Record, DOT Form 422-002, but not the change order. It would be better to say: “Repair the expansion joint at... as follows.” or “Make corrections to the sign mounting brackets at ... as follows.”

This is not the place to justify “why”. There is no need to explain the why’s. Keep it simple and straightforward. Answer the question, “What does this change require the Contractor to do?”

4.5.3.3 Measurement

All change orders (except no cost change orders) require the Measurement heading (or the “Measurement and Payment” heading) and a measurement statement. It will identify the contractual (change order) limits for the payment if relevant. If there is no unit of measurement (force account or lump sum), a statement to that effect should be included. This may also include a description of what is not included as a part of the item.

A well-written measurement statement will identify the pay item name, the unit of measurement, and the details of measurement as needed for a complete understanding of what is and is not measured.

4.5.3.4 Payment

Payment shall be understood to mean positive and/or negative dollar amounts.

All change orders *must* include the Payment heading (or the “Measurement and Payment” heading) and a payment statement(s) that address each pay item for which payment will be made or changed related to the change order, without regard to whether it is an existing pay item, a new Standard Item, or a new non-Standard Item. If there is no payment to be made, or if payment is considered incidental to other pay items in the contract, a statement must be made to that effect. When drafting payment statements, consider Standard Specifications 1-04.1(2) in the context of writing a change order – all work required by the change order must be associated with a pay item identified in the change order.

The phrase “This change order adds compensation for...” should only be used when the change order is adding no work, just payment, in response to Standard Specification 1-04.1(2) Bid Items Not Included in the Proposal.

A well-written payment statement will identify the pay item name, unit of measurement, the agreed unit price or a reference to the agreed unit price on the “Items Page” of the change order, and scope of work which is covered by the pay item. It is sometimes helpful to define what is not included to make the payment statement clearer.

Example - *Payment will be made for each of the following pay items, at the agreed unit price shown on the items page of this change order.*

“CO#27 HMA Cl. 3/8 PG 64-28”, per ton. The unit price per ton for “CO 27 - HMA Cl. ½” PG 64-28” shall be full compensation for all costs, including anti-stripping additive, incurred to complete the HMA as shown on change order sheet 5, in accordance with the requirements of Standard Specifications section 5-04.

Payment under the new pay item “CO #27Curb Ramps”, lump sum, shall be full compensation for all materials, mobilization, labor, tools, equipment, traffic control and other costs necessary to perform the work described in this change order.

New pay item “CO#26 Roadway Pinch Point Correction”, per lump sum, shall be full pay to the Contractor for all costs, including labor, equipment, tools, and materials as required to complete the work as mentioned above.

The following is an alternative for LS items:

Payment for the new item “CO#27 Sewer Line Coating”, in the Lump Sum amount of \$12,540.00, shall be full compensation for all materials, labor, tools, and equipment, required to complete the sewer line Work as specified.

Additionally, all items for which payment will be made must be tabulated on the Items Page of the change order.

4.5.3.5 Contract Time

All change orders *must* include a statement addressing time. If the change includes a revision in contract time, either for the entire contract or any portion of it that has a minimum or maximum duration (which could be the case with a milestone or phase), a statement of the time change must be included. It is preferred that time be negotiated and included as a part of the change order. However, if this is not possible, a statement providing for future determination of time must be included.

If contract time is not affected by the change, a statement that there will be no adjustment in contract time must be included. The preferred language is “This change order does not affect contract time.”

4.5.3.6 Changes to Condition of Award

The Project Engineer must consider whether a proposed change order has an effect on Condition of Award (COA) work. When a change order impacts (adds to, deletes, modifies, reduces, creates new) work that is part of the DBE Utilization Certification (DOT Form 272-056) or the SVBE Plan (DOT form 226-018), a revision to the COA/commitment must be addressed in a change order. This is done by including the appropriate form as a page of the change order. Do not use the CCIS page “Change COA Items” menu (submenu D1-3).

For federally funded Contracts:

WSDOT Form 271-025, “ Changes to DBE COA”

For state-funds-only contracts:

WSDOT Form 271-026, “Changes to SVBE Commitments, or

The instructions on how to use the forms is on the back of each form.

If the intent of the change order is to make up for an underruns by substituting for an overrun by another DBE COA subcontractor, yet leave the overall commitment unchanged, the total in column 6 (Current Commitment Amount) will equal the total in column 10 (Revised Commitment Amount).

If the total in column 10 is less than the total in column 6, unless the intent is to reduce the COA commitment, a GFE would be required and should be so stated in the change order; otherwise, we would be agreeing to a reduction in the commitment amount. When the PE deletes or otherwise modifies existing items of work, they should consider the effect on the COA commitments and document those changes accordingly.

If the intent of the change order is to increase the commitment amount, the total in column 10 would be greater than the total in column 6. This would be the case for an added work change order on which the Contractor has agreed to an “added commitment”. In such a case, it will not suffice for the added commitment to be addressed by the Contractor promising to increase the commitment by “race neutral” means.

4.5.3.7 Waivers

Waivers are used in change orders that settle disputes. Waiver language must be included when the change order formalizes an agreement to resolve a dispute settled in accordance with procedures in *Standard Specifications* section 1-04.5, or a claim settled in accordance with procedures in *Standard Specifications* section 1-09.11. Waivers can indicate that all claims on the project are settled (a “clear-all”). A “clear some” waiver indicates settlement of either a finite list of disputes or all claims up to (or after) a certain date. Use the suggested waiver language in SS 1-09.11(2), editing only as necessary for the specific issue and agreement. If it is possible to identify unresolved issues not covered by the agreement, the change order and waiver have even more value. Refer to SS 1-09.11(2) Claims for further discussion. Note that waivers indicating settlement up to a specified date are particularly challenging to write. These waivers must identify:

- Whether disputed items that have been paid will remain paid, and
- Whether payments that are in progress will continue, or not continue, to be paid.

4.5.3.8 Qualifying Statements Requested by the Contractor

Occasionally, the contractor will request that a qualifying statement be added to the change order. The following types of statements are included in the category of “qualifying statements”:

- Disclaimers
- Exceptions
- Reservation of rights

If the Contractor’s agreement with the change order is qualified in any way, the Project Engineer will get concurrence from Region and the State Construction Office on what to do. Qualifying statements which precisely define what is or is not addressed in the change order can be helpful to both parties’ understanding of the change order. If WSDOT consensus is to accept the Contractor’s qualifying statement, negotiate language to be included in the text of the change order that leaves no ambiguity. If WSDOT consensus is not to accept the Contractor’s proposed qualification, or if we cannot reach agreement with the Contractor of the phrasing of the qualifying statement, the change order may have to be processed unilaterally, requiring concurrence from Region and the State Construction Office; this is because the gravity of unilateral processing can mean the Contractor has not agreed to anything. That outcome must be considered before accepting a reservation that WSDOT has concerns about.

4.5.3.9 Professional Engineer's Seal or Evaluation

If, in the judgment of the Project Engineer, the change order text contains changes considered to be the practice of engineering, that portion of the change order must have an email from a licensed profession indicating they approve the change. Refer to section 4.8.11 for guidance on when a PE seal or review is required. The State Construction Office may be consulted to help determine if a proposed change is considered the practice of engineering and if a seal is required.

4.5.3.10 What Not to Include in a Change Order

Before closing the discussion of what must be in a change order, it may be prudent to discuss what should not be in a change order. Do not include discussion of why the change is being made. Stating reasons why is just another way of stating intent, which only creates ambiguity in the change order. Also, do not discuss justification for the change or payment. Once the change order is executed, the change exists, whether justified or not. There is no place in the change order for a discussion of the history of negotiations. Such discussions have no meaning once the final agreement is reached and the change order is written. All of the above belong only in the accompanying Change Record, DOT Form 422-002.

4.5.4 Prepare Plans

In addition to a complete written description of the change, illustrative plans may be required to provide supplemental details to clearly explain, illustrate, or delineate the changed work. This might be a sketch of a detail, a plan sheet from the original contract modified to show the change order work, or a new plan sheet that provides the details of the work. For changing or adding plan sheets by change order, follow the instructions in the *Plans Preparation Manual* for using the Revision Block and *Plans Preparation Manual* Appendix 5 for issuing addenda.

4.5.4.1 Page Numbering Plan Sheets and Other Supplemental Pages

CCIS will automatically generate page numbers for the pages it prints. All pages of the complete change order that are not printed by CCIS, such as plan sheets or the COA Commitments Change form, must be numbered using the following format, sequentially following the last page number generated by CCIS. Such pages should not be referred to as "attachments".

Contract Number
Change Order Number (including Rev number if applicable)
Page X of Y

4.5.5 General

A draft of the change order (text and possibly drawings) will be needed early in the process to obtain required approvals and initiate discussion with the Contractor.

The change order must stand on its own, clearly and unambiguously defining a change to the contract. During preparation of a change order, always assume that the document may appear in a court of law. At that time, there will be no opportunity to explain any missing or conflicting provisions. The intent of the parties will be meaningless when compared to a literal reading of the change order.

4.5.6 Other Considerations

When making changes to the contract, remember that all the following documents are part of the contract; ensure that a change made in one does not create an unexpected conflict with another:

- Addenda
- Proposal Form
- Special Provisions
- Contract Plans
- *Standard Specifications*
- Standard Plans

4.6 Evaluate Cost

An important step of the change order process is preparing the independent engineer's estimate (IEE). This must be a truly independent estimate - not just a reiteration of the Contractor's estimate. The Project Engineer will estimate the quantities for each of the items (modified or deleted contract items and new items), the unit price or lump sum for each, and compute the total cost of the change order. The IEE will be created prior to negotiating price with the Contractor.

Unit prices or lump sums for new items are usually estimated in one of two ways:

- Unit bid analysis
- Time and materials estimating

4.6.1 Unit Bid Analysis

Using unit bid prices from recent contracts requires every effort to ensure the type and quantity of work used is recent enough for prices to be valid, and truly similar to the type and quantity of work to be performed as change order work. It may also be appropriate to take geographic location into account because prices for similar work may vary greatly from one area to the next. If the prices are not recent, the work is not similar, or the quantities vary too much, the price may not be reflective of the actual change order work and will result in an inaccurate estimate.

Keep in mind that unit bid prices from recent contracts include overhead and profit. Because of that, it is not appropriate to add overhead and profit on top of these unit bid prices. See section [4.6.2.3](#).

4.6.2 Time and Materials Cost Estimating

Another means to evaluate cost is by estimating labor, material, equipment, overhead, and profit. This is commonly called "time and materials" (T&M) estimating.

4.6.2.1 Objective Factors in T&M Estimating

When forward pricing a T&M estimate, some of the pricing factors can be established with certainty. These are called "objective" factors. Examples of objective factors are hourly labor and equipment rates using the prevailing wages in the contract, and the rental rate blue book.

Materials prices can be obtained from quotes solicited from suppliers.

Labor rates are available in the Contract.

Equipment rates are available in the rental rate blue book (Equipment Watch), rental companies, and service companies.

4.6.2.2 Subjective Factors in T&M Estimating

Factors which are difficult to establish with certainty when forward pricing the change order work are called “subjective” factors. Examples of subjective factors crew size, equipment spread, and production rates. These can be estimated by using (1) field experience or (2) commercially available software such as R.S. Means. WSDOT does not currently provide training in the use of R.S. Means, but information on its use as well as other methods may be found on the internet.

An estimating method that falls somewhere between objective and subjective is called “the measured mile” method. The measured mile method determines an average unit cost of similar work which has already been performed. This average unit cost is then multiplied by the estimated number of units involved in the change order. The cost of the work is determined over a period of time that lends itself to calculating a representative average unit cost, measuring crew makeup, equipment spread, and the rate of production.

The Design Office provides training in cost estimating for designers, and this training may be beneficial to those writing change orders. Further guidance on cost estimating may also be found in the *Plans Preparation Manual* and the PS & E training course.

4.6.2.3 Markups

Markups are typically used to price costs of the work which are proportional to the Contractor’s direct cost to perform the work. Examples are described below. The Contractor is entitled to a profit on change orders, unless prohibited or limited in the Contract.

The use of Force Account markups for overhead and profit on time and material estimates is frequently an acceptable practice but should not be automatic. That is because Force Account markups could be too high or too low. For example, Force Account markups include an allowance for jobsite overhead, which is a time-related expense, not a revenue-related expense. A time-related (sometimes referred to as duration-based) expense is one that is incurred based on the length of time that the project or the activity takes to complete. A revenue-related (sometimes referred to as revenue-based) expense is one that is incurred based on the amount of income or revenue the Contractor generates.

Business and Occupation (B&O) Tax

Contractors are subject to the B&O tax for public road construction. The current B&O tax rate can be looked up on the Department of Revenue website.

Performance and Payment Bond Premiums

Bond premium rates vary from Contractor to Contractor. They are typically paid based on the total contract amount, including change orders. Bond premiums are an actual cost the Contractor will have to pay, and the bonding company charges it as a percentage of the total cost of the work. It is appropriate to ask the Contractor for their bond rate but expect it to be from 0.8% to 3.0%.

Liability Insurance

Markups are also used to cover liability insurance that can be approximated as a percentage of the cost of the work. This markup is for the premiums on the various forms of liability insurance the Contractor is required to carry. Larger, more complex projects often require several different types of liability policies beyond the typical Commercial General Liability and Excess Liability (often called an Umbrella policy). Policies for Builders Risk, Environmental Liability, Marine operations, Railroad Protective Liability and Aircraft are some possibilities. Each carries a premium that is usually based on the total cost (or a portion affecting the other property owner, as in the case of railroad protective insurance) of the project and would be included in a change order estimate. Typical rates for CGL insurance range from 1-3 percent of cost. For estimating purposes, it is recommended to use 2 percent.

Medical Insurance

Medical insurance benefits paid to the employees, such as medical and State Industrial Coverage, are included in the labor rate calculation; therefore, they are inappropriate to be included here. Be aware that construction work performed on or adjacent to water may be subject to Longshoremen's and Harbor Worker's Compensation Act in place of the more common State Industrial Coverage. See *Standard Specification 1-07.10*.

Home Office Overhead

Home office overhead is typically billed by the Contractor's corporate office to the project as a percentage of the revenue that each project brings in. Typically, every project for a particular Contractor is billed at the same rate for home office overhead. Home office overhead is calculated based on the prior year's home office overhead costs divided by the total revenue for the year. Home office overhead varies based on the size of the Contractor's home office staff and the services they provide. It would be appropriate to ask the Contractor for their audited home office overhead rate when negotiating markups for change order work. Typical home office overhead rates range from 5-10 percent. Some very large corporations may have multiple home office overhead rates, one for a regional office and one for their corporate office. Allowance for multiple home offices can be made with adequate justification when these situations arise. Consult with your ASCE for advice on appropriate use of markup for home office overhead.

Profit

Profit is typically expressed as a percentage of revenue and is added on after all other costs have been calculated. Highway construction can be quite risky, and some Contractors will apply profit according to the risk the project presents. This is tempered by the need to get work and put assets to good use. So, profit is commonly looked at as a percentage of cost with risk (contingency) and without. The profit with risk is the amount the Contractor can expect to earn if everything goes perfectly, and no risks are realized. The amount of profit without considering risk (contingency) is a good starting point for negotiating profit for change orders. That way, the change order compensates the Contractor similarly to the way they bid the project and individual risk items can be left to be quantified as part of the negotiation of the work. Typical profit margins vary from 6-10 percent, but on average using 8 percent would be acceptable.

4.6.3 Delay and Impact Costs

4.6.3.1 Delay Costs

Delay costs include things like idle labor and idle equipment. They may also include jobsite overhead for support personnel and facilities that are not assigned to any one operation or activity but are necessary to support overall project functions. The Contractor must demonstrate that a delay has occurred and explain the impact of the delay on the project. In the case of a critical path delay, it is likely that the Contractor is entitled to job site overhead and reimbursement for equipment on standby that would have otherwise been working during the delay. However, if the Contractor was able to keep working on other activities, only the activities that were affected by the delay would be eligible for inclusion in the equitable adjustment. The Project Engineer should contact Region Construction and their ASCE for further guidance if they believe the Contractor is entitled to delay costs.

4.6.3.2 Impact Costs

Impact costs commonly refer to costs that are incurred because a change order has affected other unchanged work in such a way that (1) impacts the time it takes to do it, or (2) the way it must be performed, or (3) the order that it must be done, or (4) the cost for doing it such as material or labor price escalation. The Contractor should be able to explain the nature of the impacts, but in the case of resequencing or schedule recovery, they should be able to show the impacts through the schedule. The Project Engineer should contact Region Construction and their ASCE for further guidance on including impact costs in the equitable adjustment.

4.7 Evaluate Impacts on Time

While the *Standard Specifications* require the Contractor to abide by Construction Planning and Scheduling, Second Edition, published by the Associated General Contractors of America, that publication provides limited guidance related to evaluating delays. The Project Engineer will conduct an independent Time Impact Analysis (TIA) to determine the effect of a change order on the project schedule. TIA's will generally be conducted prospectively (before the schedule impact is realized); however, there are delay analysis methods that allow a TIA to be conducted retrospectively (after the schedule impact is realized). The State Construction Office offers training specifically outlining delay analysis methodologies. The Project Engineer should contact their ASCE for support if they are not familiar with these methodologies.

4.8 Obtain Required Approvals

4.8.1 General

The Change Order Checklist, DOT Form 422-003 (and 422-005 for DB) is the tool for identifying which approvals are required. It is not for documenting the approvals obtained. Summarize the approvals obtained in the Change Record, (form 422-002), and provide an email or other form of written confirmation of the approval in the Supporting Documents in the change order submittal package. It is the responsibility of the Project Engineer to (a) identify all approvals needed and (b) obtain all required approvals. The following is a high-level summary of approvals that a required:

For change orders that will be executed before the Contractor is given notice to proceed:

1. All approvals required by the change order checklist.
2. Approvals required by project-specific stewardship and oversight plans with FHWA (if any).
3. Other approvals that are required by Region or HQ (if any).
4. Other approvals needed from third parties such as local agencies, property owners, surety etc., if any.

For change orders that will be executed after the contractor is given notice to proceed, in addition to the above:

1. Approval from the executing authority.

4.8.2 Basis for Providing Approvals

The Project Engineer must provide enough complete and accurate information to each person from whom approval is requested for them to truly understand what is being changed and why their approval is needed. Ideally, all approvers would be sent a final draft of the change order to facilitate this decision. On complex and/or urgent change orders it is frequently not possible to develop the change order to that level of completion before seeking approvals. Be prepared to develop draft change order text and drawings to the level needed for the approver(s) to clearly understand the issue so they can make an informed evaluation and decision. When change orders evolve to the point where they are materially different from what initial approvals were based on, the Project Engineer must request re-evaluation by the affected approvers.

Some approvers, such as Region Construction and the State Construction Office, may want to know why the change order is necessary as a condition for approval. In these cases, it will be necessary to provide them with the kind of information that will ultimately be documented in the Change Record, DOT Form 422-002.

To definitively determine the list of all approvals required for a change order, read on. Note, however, that Region may use its discretion to require approvals in addition to those described below.

4.8.3 Project Engineer and Region

Region Construction is expected to disapprove, approve, or recommend for approval, all change orders except those for which Region Construction has delegated executing authority to the Project Engineer.

The Project Engineer is expected to approve, or recommend for approval, all change orders. Those the Project Engineer does not are expected to be voided.

4.8.4 This Section Not Used.

4.8.5 State Construction Office

Use the Change Order Checklist (DOT Form 422-003) to determine if approval is required by the State Construction Office. If any box in the right column for items 1 through 12 is marked "yes", approval from the State Construction Office is required. If none of the boxes are marked "yes", the State Construction Office approval is not required.

4.8.6 State Materials Laboratory

When the Contractor proposes a material different than what is required by the contract, which may be to use a different material altogether or out-of-specification material, the Project Engineer must seek a recommendation on suitability of the material from the HQ Materials Lab and approval from the State Construction Office. The State Construction Office makes the final approval based on application of the material, maintenance concerns, etc., as to whether an alternate material is acceptable.

4.8.7 Federal Highway Administration (FHWA)

In accordance with the WSDOT/FHWA Stewardship Agreement, on Projects of Division Interest (PoDI) written FHWA approval, or other less formal prior approval if the public interest is served by the more timely action, is required prior to beginning change order work on those change orders meeting the threshold outlined in the project specific PoDI project-specific stewardship and oversight plan. The Region will formally submit this type of change order to FHWA for approval if it is within Region or Headquarters approval authority.

4.8.8 Local Agency Projects

When the project being administered includes local agency participation, the Project Engineer should coordinate with the Regional Local Programs Engineer and the local agency to establish a change order approval process acceptable to all the parties. Any funding constraints and timelines for reviews and approvals should be established by an agreement and specified in the contract, if appropriate. Absent an agreement, changes that affect permanent work incorporated within WSDOT right of way with use of local agency funds (regardless of which agency is administering the contract) will require the WSDOT approval process and execution authorities to be followed. Refer also to the *Local Agency Guidelines Manual*.

4.8.9 Funding

Funding approval is needed in the change order supporting documentation only when required by Region policy. However, in all cases the Project Engineer is strongly encouraged to verify that funds are available before the change order is executed.

4.8.10 Office of Equity and Civil Rights (OECR)

If the change reduces or deletes COA work, or transfers COA work from one subcontractor to another, the change order must have written concurrence from the Office of Equity and Civil Rights (OECR) and approval from the State Construction Office. Also, written concurrence or acknowledgment from the affected COA subcontractors (email to the prime contractor is acceptable) will be required by OECR in order to obtain their concurrence.

4.8.11 Engineer of Record

During construction, changes to engineered drawings are often required to address field conditions, plan errors, Contractor errors, repairs, differing site conditions, etc. The following policy defines the responsibilities of licensed professional engineers for changes to engineered drawings for bridges and structures after Contract award and execution.

4.8.11.1 Practice of Engineering

The practice of engineering is defined in [RCW 18.43.020\(5\)\(a\)](#):

“Practice of engineering” means any professional service or creative work requiring engineering education, training, and experience and the application of special knowledge of the mathematical, physical, and engineering sciences to such professional services or creative work as consultation, investigation, evaluation, planning, design, and supervision of construction for the purpose of assuring compliance with specifications and design, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works, or projects.

4.8.11.2 Structural Engineering

Structural engineering is recognized as a specialized branch of professional engineering. See [Bridge Design Manual](#) Section 1.3.2.D for guidelines on providing structural engineering services for significant structures.

4.8.11.3 Area of Competency

The licensee shall be registered in the applicable technical field and qualified by education or experience as defined in the Revised Code of Washington (RCW) and Washington Administrative Code (WAC). The licensee shall be competent in the technology and knowledgeable of the applicable codes and regulations (see [WAC 196-27A-020\(2\)](#)).

4.8.11.4 Evaluation of Change Orders for Practice of Engineering

All proposed changes from what is shown in the engineered drawings shall be evaluated by the Project Engineer to determine whether they are considered the practice of engineering. When the change is outside the area of expertise of the Project Engineer, they shall consult the ASCE and a licensed professional acting within the area of competency needed to make this determination. Some examples of changes to engineered drawings that may be considered the practice of engineering include:

- Changes to engineered drawing details
- Material substitutions not allowed in the Contract documents, and possibly material substitutions when the Contract allows “approved equal” replacements
- Material properties outside of contract tolerances, even when the contract provides a method for acceptance such as for deficient strength concrete
- Changes in geometry or location of a component outside of contract tolerances when the capacity or function of the element or system is affected
- Changes to mandatory, prescriptive construction sequences shown in engineered drawings (e.g. including but not limited to sequencing and temporary work)

- Repairs that impact the capacity or function of the element. For example:
 - Modifications to structural steel elements
 - Concrete repairs that involve modifications (splicing, coupling, doweling) to reinforcing steel
 - Repairs to structural elements that are already loaded by actions such as prestressing, release of falsework, subsequent material placement, etc.
- Modification to a concrete construction joint in a bridge column, bridge crossbeam, bridge deck, prestressed element, etc. (see *Standard Specifications* 6-02.3(12)A)
- Modification of a concrete reinforcement splice (see *Standard Specifications* Section 6-02.3(24)D)
- Modification of form tie strength, form tie spacing, or concrete placement rates.

Some examples of changes to engineered drawings that may not be considered practice of engineering include:

- Editorial changes (such as corrections of spelling or grammar) with no effect on engineering performance
- Changes to quantities with no effect on engineering performance
- Corrections to sheet and detail references with no effect on engineering performance
- Addition of typical construction aids. For instance, in concrete construction, the addition of concrete embedments used to facilitate construction including inserts, reinforcement ties and chairs, reinforcement braces, form ties and hangers, strand deviators, CSL tubes, thermocouples, etc.
- Notation of which alternate or option was chosen when engineered drawings identify acceptable alternates or options for portions of the Work
- Application of pre-approved repair procedures

4.8.11.5 Documentation and Notification Requirements

After determining whether a proposed change is the practice of engineering, the Project Engineer shall then ensure the requirements listed in the table below are met:

	Change to the Contract	Not a Change to the Contract
Practice of Engineering	A licensed professional engineer who is working within their area of competency is required to make these changes. The changes shall be prepared and sealed by a licensed professional engineer acting within their area of expertise. Notify the original Engineer-of-Record of change if possible Document change in change order and in as-built *	Change shall be evaluated by a licensed professional acting within their area of expertise Notify the original Engineer-of-Record of change if possible Document change in as-built *
Not the Practice of Engineering	Change need not be prepared and sealed by a licensed professional Document change in change order and in as-built *	Document change in as-built *

Note * Refer to *Construction Manual* Section 10-3.11 for as-built plans process.

For proposed changes considered to be the practice of engineering, the Project Engineer shall require sealed engineering calculations and/or other documentation to show that the change complies with all design criteria or is otherwise structurally acceptable. If WSDOT prepares or evaluates the change, the calculations or other documentation will be generated and archived by the support group preparing the change as appropriate and need not be provided to the Project Engineer. Any sealed engineering calculations and/or other documentation for structures that is not prepared by WSDOT shall be provided to the WSDOT Bridge & Structures Office who will archive it if appropriate in accordance with [Bridge Design Manual](#) Sections 1.3.3.C.4 and 1.3.8.

The licensed professional engineer shall be a licensed structural engineer when providing structural engineering services for significant structures.

Licensed professional engineers who sealed the current documents shall be notified of changes to their work (including Contract-allowed “approved equal” material substitutions) that are considered practice of engineering and shall be given an opportunity to review and comment, if possible. Licensed professional engineers who are no longer WSDOT employees or who are not available through a consultant services agreement need not be notified of changes to their work (see [WAC 196-27A-030\(9\)](#)).

4.8.11.6 General Requirements for Changes to Engineering Drawings

The location, extent and details of all physical changes to the Work shall be contained in the changed engineering drawings. If changes to engineered drawings are part of a Contract change order, the drawings shall identify the associated change order by number.

4.8.11.7 Changes to Engineered Drawings Prepared and Sealed or Evaluated by a Licensed Professional

It is preferred that changes to engineered drawings be made by the original Engineer of Record. If the Engineer of Record is not available or costs to reengage the Engineer of Record are not within the budget of the project, changes may be prepared and sealed or evaluated by a licensed professional engineer who is working within the area of competency required to make these changes. As a way to limit costs, it is recommended to have the engineering done by the person or party who may complete the Work most efficiently. Some general guidelines to consider include:

- When WSDOT is the Engineer of Record, it is usually most efficient to have WSDOT prepare the changes to engineered drawings
- When there is a consultant as the Engineer of Record, and a consultant services agreement exists with them, they should prepare changes to the engineered drawings. Otherwise, changes to engineered drawings could be handled by a different consultant or by WSDOT
- When WSDOT has contractual responsibility for the change, the engineering should be performed by WSDOT or by a consultant working for WSDOT

- When the Contractor has the contractual responsibility for the change, the engineering may be performed by WSDOT, a consultant working for WSDOT, or an engineer working for the Contractor
 - The Contractor may hire an engineer to make the changes to the engineered drawings. The modified drawings will require WSDOT review and concurrence
 - It may be more efficient for the Engineer of Record (WSDOT or a WSDOT consultant) to perform the engineering; we own the design so there is less start-up effort needed to evaluate a change to an engineered drawing
 - WSDOT can require the Contractor to perform any needed engineering
 - For significant changes, WSDOT should consider reimbursement for our engineering costs through a credit change order

Changes to engineered drawings shall be prepared on the most recent version of the existing drawings, on substitute drawings or on additional drawings. For revisions to existing engineered drawings, the licensee shall note the extent of their change and responsibility (see [WAC 196-23-020\(3\)\(a\)](#) and [WAC 196-27A-030\(9\)](#)). When revisions to existing, engineered drawings will make the drawings difficult to read or interpret, the details and changes should be consolidated onto substitute drawings. Substitute drawings shall meet the detailing requirements of *Bridge Design Manual Chapter 11* and *Plans Preparation Manual Chapter 4*. Preexisting seals of licensed professional engineers shall be preserved when revising existing engineered drawings but need not be preserved for substitute drawings.

Provided a licensee is acting within the guidelines of their profession, during an emergency it is acceptable to certify documents after the emergent need is stabilized (see Secretary's Executive Order E 1010.01 III.B).

4.9 Identify the Executing Authority

Two steps must be followed in sequence to determine who in WSDOT has the authority to execute a change order.

The first step is to determine whether the executing authority resides in the Region or the State Construction Office. This is done by reviewing the check boxes on items #1 through #4 of the Change Order Checklist for bid-build contracts (DOT Form 422-003), or (DOT Form 422-005) for design-build contracts. If any of these are marked yes, the State Construction Office must execute the change order. Otherwise the Region Administrator (or delegee) may execute the change order.

After determining whether Region or HQ has execution authority, the second step is to determine exactly who at Region or HQ has that authority. This is based on the magnitude of the change order in both dollars and time, as shown in the following table. Note that changes requiring execution by the Deputy State Const Engineer or State Construction Engineer must first go through the ASCE for approval.

When a change order is to be executed at Region, the proper execution level is governed by the specific delegation of that authority by the Region or Region Administrator. These levels of authority delegation are usually an internal memo identifying the dollar value and contract time authority limits granted to the delegates of the Region Administrator. They are separate for each Region and they can vary between regions and programs.

4.9.1 Limits to Execution Authority for Change Orders

Executing Authority	When Change Order Checklist Provides for Execution Authority at...	Dollar Limit	Time Limit
State Construction Engineer	Headquarters	No Limit	No Limit
Deputy State Construction Engineer	Headquarters	Not to exceed \$2,000,000	Not to exceed 60 days
Lead Construction Engineer, Projects	Headquarters	Not to exceed \$1,000,000	Not to exceed 60 days
Lead Construction Engineer, Administration	Headquarters	Not to exceed \$1,000,000	Not to exceed 60 days
Assistant State Construction Engineers	Headquarters	Not to exceed \$1,000,000	Not to exceed 60 days
Region Administrator (and those designated Regional Administrator authority) or Designee	Region	Not to exceed \$500,000	Not to exceed 30 days

Note: The Regional Administrator's authority to execute change orders may be delegated to the Assistant Regional Administrator for Construction and further to the Project Engineer. The dollar amount can vary by Regional preference. Each delegation should be in writing.

4.10 Transmit a Draft Change Order to the Contractor

A draft change order should be transmitted to the contractor as soon as it is complete. This should be followed shortly thereafter with a meeting with the contractor to discuss the proposed change order to make sure there is a common understanding of the scope and value of the change. When execution of the change order is urgent, the level of completeness of the draft change order must be at least sufficient for the contractor to develop a meaningful proposal. At a minimum the draft change order should include a complete description of the work. This should include plans and specifications, as well as any other documentation required to fully explain the change order work, describe the materials that are required, and detail how the work will be measured and paid. When time is critical, it is especially important to meet with the contractor to discuss the proposed change to ensure a common understanding of the work. If the Project Engineer takes the time to present the contractor with a thorough explanation of the change order, the chances of misunderstandings will be greatly reduced. If, on the other hand, the Project Engineer requests a price proposal before they can fully define and describe the work, it is very possible that there will be a dispute over some aspect of the change order or a cost proposal from the Contractor that includes a higher price for risk and uncertainty.

4.11 Request Cost Proposal and Time Impact Analysis from Contractor

The Project Engineer must always request the contractor to provide a written, detailed cost proposal, and a time impact analysis (TIA) if the contractor requests a time extension. After studying the draft change order (describing, at a minimum, the scope of work), the Contractor can provide feedback that identifies changes that could be made to increase the likelihood of success. These may require the Project Engineer to make revisions. After the Project Engineer gives consideration and feedback for these suggestions, the contractor will finalize and provide their cost proposal and TIA if needed.

4.12 Negotiate with the Contractor

The Project Engineer will then compare the Contractor's cost estimate to the independent engineer's estimate. If there is a large difference in price, the basis for each estimate must be discussed. The Project Engineer may want to present the Contractor with WSDOT's IEE and TIA at this point. If unit contract bid prices from recent contracts were used for the independent engineer's estimate, the Project Engineer should compare the change order work to the work represented by the unit bid prices. Sometimes the work or quantity is not truly similar. Dissimilarities can be caused by location, local site conditions, different equipment requirements, site access, traffic restrictions, recent changes in material or labor prices, or variations in haul distance. Negotiations should also include a discussion of risk. How might the work production rates vary? How might the weather affect the work? If it takes too long, will the Contractor need to work more hours at an increased cost? (overtime). What other risk elements should be included in the price? When agreement cannot be reached using an estimate based on unit bid prices – adjusted for specific change order conditions – the Project Engineer should prepare a cost estimate based on time and materials.

A time and materials cost estimate is composed of estimates of the labor, materials, and equipment used to complete each item of change order work. When the parties have differences in price, breaking the cost down in this manner will make it much easier to identify where discrepancies exist. Since this type of estimate places on the estimator the burden of establishing the amount of time it will take to do the work (production rates), as well as what types of equipment are required, this is usually where differences surface. The Project Engineer may revise their independent engineer's estimate to correct for new information provided by the Contractor or incorrect assumptions identified during negotiations.

It is important to remember that when negotiating for added work, the Contractor is entitled to quote prices that reflect the cost of work today, which may not be the same as the cost at bid time. If market conditions have changed since the award and execution of the contract, the prices or rates used by the Contractor in their estimate may have changed, compared to the original bid. The Contractor's quote will likely reflect the use of personnel and equipment that are available on site at the time of the work. If the work might exceed the limitations of the available on-site resources, additional mobilization costs may need to be considered.

Usually, agreement can be reached on the type of equipment, equipment rates, duration of use, etc., so that the change order work may be forward priced before any change order work is performed. If the change order work or duration cannot be clearly defined or adequately quantified, and agreement cannot be reached to forward price the work, the Project Engineer may use the Force Account method, per *Standard Specifications* section 1-09.6 Force Account, to make payment for the change order work.

The Project Engineer may also consider establishing the cost and duration unilaterally, based on the independent engineer's estimate. If the Project Engineer is confident their price and changes to contract time for the change order work can be supported, there is nothing wrong with issuing a change order to the Contractor unilaterally if that is what is needed to move forward with the change order and comply with prompt payment requirements.

Another aspect of the negotiation that should always be considered is contract time. Any change that impacts an activity on the critical path of the Contractor's approved progress schedule, or that causes another item to become a critical item, will need to be evaluated for an adjustment of working days. This evaluation will be based only on the approved Contractor's progress schedule, updated to show progress to the point the change began, using a time impact analysis. During negotiation, agreement should be reached on how long it will take the Contractor to have the appropriate equipment available, how long it will take to obtain any required materials, and how long it will take to accomplish the actual change order work. The appropriate amount of time should then be included in the change order so that the entire issue is resolved. (Decreasing the number of working days is appropriate if the change order saves time).

Sometimes the Contractor will be unwilling to commit to a stated number of working days. If there is an entitlement for additional time, it may be appropriate to include working days based on the independent engineer's estimate, even if the Contractor does not agree. The issue of time may be considered after the change order work is completed; however, resolving the issue of time with the change order is the preferred method. A statement in the change order, indicating that time will be considered at a later date or by separate change order, is required when time is not resolved with the change order. When doing this, prior approval from the Region and HQ is required. A time statement must be included in all change orders.

4.12.1 Objectives of Negotiation

When the change order process has reached the point of negotiation, the Project Engineer must keep the following objectives in mind:

1. The Project Engineer must negotiate to obtain an agreement that is in the best interest of the state, price and all other factors being considered.
2. The price agreed upon must be fair and reasonable for the changed work. The State should not attempt to underprice the work.
3. The negotiation must result in an agreement that is in accord with the terms and conditions of the contract.

Many contract provisions require an equitable adjustment. Some limit payment to only the amount that exceeds a predetermined amount. Some prohibit profit, and some prohibit payment at all, e.g., instances of no entitlement.

4.12.2 Negotiation Prior to Beginning Change Order Work

It is always preferable to complete the negotiation and execute the change order before any change order work is performed. This lessens the chance of problems because both the Project Engineer and the Contractor know what is being changed and how compensation will be made. It is important to note that this is the point in negotiations where the State is in the best bargaining position. This is the point when the Contractor is most motivated to agree and be optimistic. WSDOT has not committed to do the work and the Contractor may be eager to take advantage of an opportunity to earn extra revenue.

4.12.3 Negotiation After Change Order Work Begins

There are times when it might be necessary to proceed with the change order work prior to agreement on prices or time. This may happen when it is difficult to estimate the amount of work required. When this happens, there are several alternatives for establishing the cost of the change order after the work begins:

1. Agree to use Force Account to measure and pay for the change order work.
2. Use the “measured mile” method. Using the measured mile method to estimate the cost after the contractor is given notice to proceed means measuring crew makeup, equipment spread, and the rate of production of the actual change order work. It is applicable when the change order work takes place over several weeks or months and changes little over that time. The measured mile, in this case, is a time interval selected to be representative of the average work. It is measured early, say when approximately 20% of the change order work is complete, but after the effects of the inefficiencies of learning curve have worn off. That average production cost is converted to a cost per unit (say, per linear foot or per day) and then multiplied by the total units of work to be done. To receive the benefits of the measured mile in this situation, the measured mile must be measured and converted to an estimated overall cost early enough to be used to make progress payments as the remainder of the change order work proceeds.
3. Proceed with a unilateral change order. Adjustments to the amount of compensation may be made later if the Contractor makes a timely protest and cost records justify such an adjustment.

It is important to note that several things begin to change as work progresses and negotiations are uncompleted:

- Work is being performed that the State is now legally obligated to pay for. We have agreed with the Contractor that the work should be done. Now we have to pay for it.
- The Contractor now knows they will be performing the work, so the strength of our bargaining position is less.
- As work progresses toward completion, the amount of risk is decreasing. Consequently, the total price of the work, after the fact, should not include any pricing for risk associated with performance of the work, quantities or unknowns, since everything is known and done.

4.13 The Change Order Submittal Package

Ideally, draft copies of all the change order submittal package documents will have already been circulated to all approving authorities and especially those who will be signing the change order. It is important to ensure that all the proper approvals or concurrences have been obtained and documented from the various Subject Matter Experts (SMEs), the explanation in the change record meets the approval of the reviewers and signers, the checklist is complete and correct with proper coding. Ideally, the change order submittal package should be completed not later than when routing the change order for signatures through Adobe Sign. This is because it may need to be reviewed by Region and HQ in order to facilitate their signatures. Do not send the change order submittal package to the Contractor.

The change order submittal package is composed of the following documents assembled into two electronic files. They are submitted by uploading each file to ECM. (See section [SS 1-04.4\(1\)](#) for the Minor Change Submittal Package).

First Electronic File

1. The executed change order with all pages and all signatures including the history sheet(s).

Second electronic file, combined into a single document

1. Change Record, DOT Form 422-002
2. Change Order Checklist, DOT Form 422-003
3. Written approvals
4. Supporting Documentation

4.13.1 Change Record, DOT Form 422-002

The Change Record is a formal engineering report. By its quality it should reflect the professionalism of the Project Engineer. This report serves three main purposes. First, it must describe and explain the change to the contract. Second, it must convince the reader that the decision to issue the change order was appropriate and that any included payment or time extension is warranted and substantiated. Third, it must demonstrate that all appropriate checks, consultations, and approvals/concurrences have been obtained.

Like the change order document, this report must stand on its own merits. The writer may assume the reader has fundamental engineering knowledge, transportation construction skills, and contract administration abilities, but must not assume the reader has knowledge of issue-specific information that is not included in the Change Record. When preparing the Change Record, remember that the person reviewing it may have limited knowledge of the project, and their ability to review and/or approve the change order is closely related to the explanation provided in the Change Record and supporting documentation.

The following is a list of items to include in the Change Record. The questions are items to consider and need to be addressed only if they are relevant to your change order.

4.13.1.1 Brief Description of the Change

A one or two sentence description of what the change order does or how it changes the contract.

4.13.1.2 Why is this Change Order Necessary?

- Why is this change order being created?
- What do the plans, provisions and *Standard Specifications* require without the change order?
- Why won't that work?
- What does the change accomplish and how does it solve the problem?
- Are there any issues related to this change order that remain unresolved when this change order is executed, such as qualifying statements? What are they? Are they specifically addressed in the change order as unresolved? Why were they not addressed in the change order? What effect will it have on the future administration of the contract?

4.13.1.3 Evolution of the Change Order

This is applicable when there is value to the reader in understanding how the Engineer arrived at this particular solution to the problem. This is valuable information, and should answer the following questions:

- Who was consulted about the problem?
- If appropriate, what alternatives were evaluated and why was this particular solution chosen?
- Was design approval needed, and if so, was it obtained?
- Was the effect on environmental permits (existing or new) assessed, and were necessary environmental approvals obtained?
- Was the Contractor included in the development to advise on constructability issues?
- What engineering elements are included in the affected work? (Structures, Geotech, ITS, Permits, etc.) Were the appropriate authorities in each of those groups consulted and was their approval/concurrence obtained and documented? Include all affected groups.

4.13.1.4 Basis for Entitlement

Refer to section 4.2

4.13.1.5 Effect on Condition of Award (COA)

- Does the change affect COA? If so, how is this being addressed?
- If the change order is not a COA Change Order, but involves a change to COA work, this must also be mentioned
- Address that concurrence was received from OECR

4.13.1.6 Basis of Changes to Contract Costs

- Why is the price being paid considered appropriate?
- If using unit prices, is the work of similar magnitude and nature to that from which the unit price is obtained?
- If there is a new price, how was it negotiated?
- If independent quotes were obtained, what were they and where were they obtained?
- Was an Independent Engineer's estimate prepared by the project office to substantiate the price? (don't just use the Contractor's estimate)
- If payment is to be made by force account, an independent engineer's estimate is required to be part of the change order submittal package.

4.13.1.7 Basis of Changes to Contract Time

- Is there a time extension associated with the change order, and if so, is it linked to the entitlement area described above?
- How does this time extension fit in with the reasons for time extensions listed in the Standard Specification?
- How was any change in working days established?
- Does the change impact the critical path?
- Is a time impact analysis (TIA) included?
- Is the duration of the extension reasonable for the work being done and substantiated by the TIA?

4.13.1.8 Prior Approvals

- A “prior approval” is one obtained before the Contractor is given notice to proceed with the change order.
- Provide a list of all prior approvals obtained, by the approver’s first and last name, position, and date. If NTP with the change order was granted prior to change order execution, identify the name of the executing authority and whether they granted approval to give NTP prior to change order execution.
- Was the change order executed by the appropriate WSDOT authority prior to proceeding with the Work?
- If not, prior approval by whom and when?
- Is FHWA approval required?

4.13.1.9 List Attachments

- Change Order Checklist
- Written confirmation of approvals obtained
- Any other supporting documentation needed for understanding

Attachment must be complete, readable, and clearly referenced in the Change Record.

4.13.1.10 Closing Thought

Prepare and assemble the Change Record and attachments with the mission of convincing the reader that the Project Engineer correctly initiated the change order and did the job well. Remember, that reader will be someone without the intimate knowledge of the project and could even be an interested third party through a Public Disclosure Request. The Change Record, along with the checklist and the change order itself stand as documentation for the future reader to confirm that WSDOT has correctly followed the internal processes we established for ourselves. These processes, and our adherence to them, are the basis against which we are audited by both State and Federal authorities and confirm our good stewardship of taxpayer funds.

4.13.2 Change Order Checklist, DOT Form 422-003 and 422-005

On Design-Bid-Build projects, the Change Order Checklist (DOT form 422-003) is required for all change orders, including Minor Changes. DOT form 422-005 is the equivalent form for Design-Build projects. The Change Order Checklist is the mechanism for determining who must give approval for the change (refer to section 4.8), as well as who is the executing authority for the change (refer to section 4.9). It is not used to document what approvals were obtained; use the Change Record for that purpose.

4.13.3 Supporting Documentation

Supporting Documentation is information needed to understand the Change Record. When warranted, it could include the following:

Supporting Documentation	When Required?
Written documentation of all required approvals/concurrences	Always
Time Impact Analysis (TIA)	When the change impacts the project critical path, or when the Contractor has submitted a time extension request as per Standard Specifications section 1-08.8.
Independent Engineer's Estimate (IEE)	Anytime cost is involved, even if there is no net increase or decrease in contract cost
DBE confirmation of changes to COA	Only when the change affects a COA subcontractor.
Contractor Notice of Protest	Only when needed if issues are unresolved
Other documents when warranted	As needed

4.13.4 Assemble the Change Order Submittal Package

When all of the above are complete, the Project Engineer will assemble all documents in the Change Order Submittal Package into a single document.

4.14 Obtain Change Order Signatures

4.14.1 Preliminaries

4.14.1.1 Determine Who Has Execution Authority

4.14.1.2 Update CCIS

Once all required information is entered in CCIS, has been revised to reflect final negotiations with the Contractor, and checked for accuracy and completeness, be sure all of the following has been addressed:

- (D1 screen, Option 1)
 - Reduction or addition of contract time
- (D1 screen, Option 2)
 - modifications have been made to existing bid items
 - new items with temporary item numbers have been created
 - new groups with temporary group numbers have been created

CCIS field "Sent To Contr": Enter the date the change order is sent to the Contractor via Adobe Sign. Entering a date in this field locks the financial information. Refer to Region guidance if additional review is required as noted below in 4.14.1.3.

CCIS field "Date Executed": Entering this date locks the change in CCIS and prevents further modification.

4.14.1.3 Informal Region/HQ Review Before Obtaining Contractor's Signature

Some Regions prefer that Region Construction be given a chance to review the change order and its submittal package before the Project Engineer routes the change order for electronic signatures. Regions do this to make sure all documents meet the requirement of the *Construction Manual* and to minimize the need to return anything to the Project Engineer for correction. It is important for the Project Engineer to allow sufficient time for this review, as well as for the State Construction Office review when requested. These reviews allow for any concerns to be addressed before the change order is electronically routed to either party and any deficiencies in the Change Order Submittal Package may be corrected or additional information requested and provided.

4.14.2 Obtain Electronic Signature

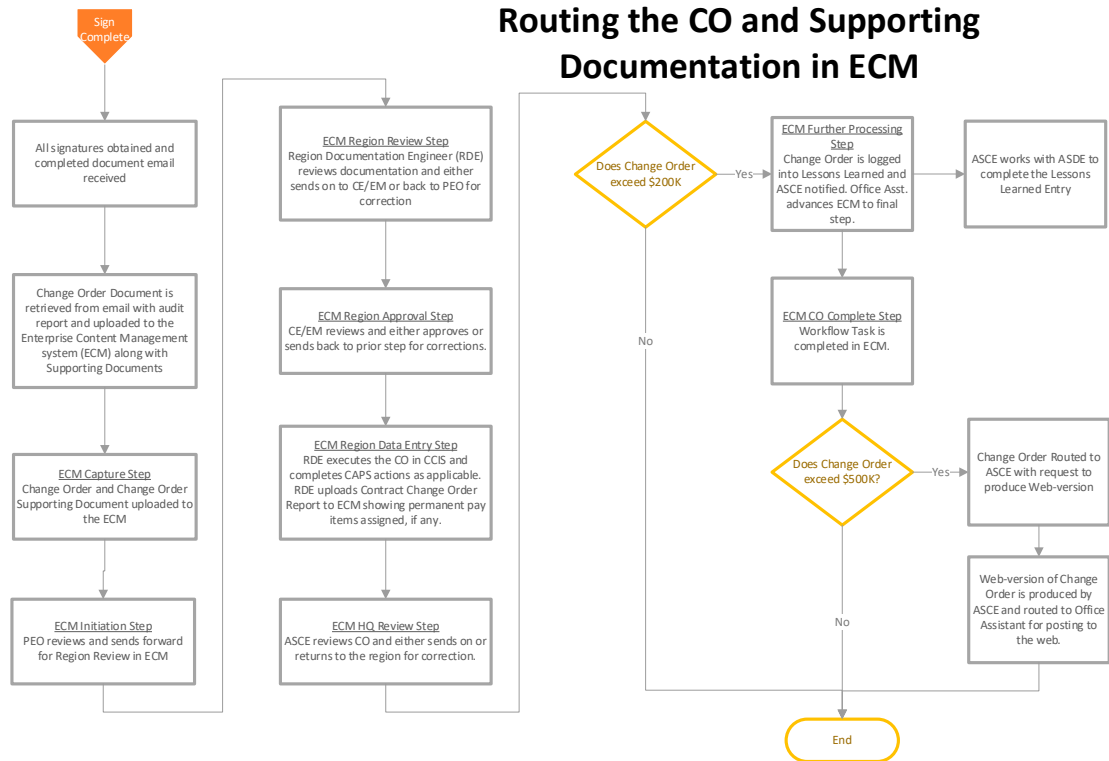
WSDOT requires electronic signatures as the means of endorsing a change order. WSDOT currently requires Adobe Sign for this purpose. After preliminaries in [section 4.14.1](#) are complete, upload the change order to Adobe Sign and assign approvers, signers, and cc's. When FHWA approval is required, that should be obtained by email before the change order is sent to the Contractor, rather than using Adobe Sign.

Refer to the flow chart below for details of the process for using Adobe Sign for obtaining electronic signatures on change orders.

Note: To "print" the change order to a .pdf from CCIS in preparation for loading it into Adobe Sign, one must first enter a date in the "Sent to Contr" field; otherwise, the dollar amounts on the first page of the change order will show as \$0.00. If, for some reason, the change order is not sent to the contractor on the date entered, this field must be revised later to show the correct date.

After all signatures are obtained, upload the change order to ECM. Also, as a separate file, upload the change record and Supporting Documentation. The process is described in the flow chart below.

Routing the CO and Supporting Documentation in ECM



4.14.2.1 Contractor's Signature

In order to facilitate timely processing, the *Standard Specifications* require the Contractor to endorse or respond to a change order within 14 calendar days of delivery from WSDOT. The Contractor must electronically sign using Adobe Sign.

The *Standard Specifications* provides authority for the Project Engineer to have the change order unilaterally executed by the executing authority when the Contractor fails to respond within the time specified or refuses to sign a change order. When the executing authority is the Project Engineer, the Project Engineer will notify the Region Construction PE who reviews with the intention of proceeding with unilateral execution of the change order. Processing the change order unilaterally will ensure that all parties affected by the change are promptly paid.

To document a unilaterally executed change order using the electronic signature program (Adobe Sign), the Project Engineer will send it for signature following typical protocol. If the Contractor has not signed the change order within the allowed 14 calendar days:

- Cancel the document
- Set it up again for signature without including the Contractor as a signer
- Attach the original audit report showing that the Contractor was given 14 calendar days to sign it but chose not to.

Contractor requests for more than 14 calendar days to sign a change order may be granted with sound justification from the Contractor. Items to consider for granting such requests are size, risk, and complexity of the change, whether terms have been agreed to prior to sending the change order for signature, prompt payment and surety consent

if required. The Project Office should consult the Region Construction Engineer prior to approving more than 14 calendar days for the Contractor to sign a change order.

4.14.2.2 Project Engineer, Region, and State Construction Office Signatures

After the Contractor electronically signs the change order, Adobe Sign will continue routing the change order for WSDOT signatures and distribution as it was instructed by the Project Engineer when initially uploaded to Adobe Sign. This is described in the flow chart in section 4.14.2.

In order to provide an informed endorsement of a change order, Region and the State Construction Office will first need to review the Change Order Submittal Package (section 4.13 Change Order Submittal Package) before they electronically sign the change order. Currently, the easiest way to accomplish this is for the Project Engineer to email the of the change order submittal package to Region and HQ no later than receiving notification from Adobe Sign that the Contractor has electronically signed the change order.

When required, after review at the State Construction Office, the change order will be approved/executed, or more information may be requested prior to approval, or the change order may be deemed not to be approvable. On these occasions, the change order will be returned to the Region with documentation outlining the concerns and reasons for return. This step may require an e-mail or phone call.

After receiving all the required signatures, a copy is automatically sent to the Contractor through the electronic signature software. If the change order is processed unilaterally, be sure the Contractor is sent a copy of the executed change order.

4.15 Change Order Execution and Authorization to Proceed

The change order will contractually be deemed executed on the date the Contractor is notified that it has been executed by WSDOT. When that occurs, the *Standard Specifications* stipulate that the Contractor is then authorized to proceed with the change order work.

For both bilateral and unilateral change orders, this should occur when Adobe Sign Notifies the Contractor that all signatures have been made. Because of the contractual importance of this, the Project Engineer must ensure that:

1. The Adobe Sign distribution takes place on the same day the executing authority electronically signs in Adobe Sign and
2. The Contractor is included in the Adobe Sign distribution of the executed change order.

4.15.1 Authorization to Proceed Before the Change Order is Executed

All change orders must be executed prior to the work being performed unless otherwise approved as an exception by the executing authority. If it is determined to be necessary to proceed with the change order work prior to execution of the change order, this exception requires approvals per the Change Order Checklist (plus approval from the person with executing authority) prior to giving the contractor NTP. Such an approval to proceed might be warranted if it will provide a cost or time benefit to WSDOT or minimize a cost or time disadvantage to the Contractor.

If approval is granted to give the contractor notice to proceed with the change order prior to executing the change order, the Project Engineer must process a change order prior to payment becoming due to the Contractor to comply with laws regarding prompt pay. (See section SS 1-08.1(7)B and 5.3.) For complex changes, this may involve issuing multiple change orders and paying for the initial Work on a unilateral lump sum or Force Account basis until agreement on an overall equitable adjustment can be reached.

4.15.2 Distribution of Executed Change Orders

Distribution of bilateral and unilateral executed change orders is done by Adobe Sign as follows. Note that distribution to the contractor does not include the change order submittal package.

Region (and PE) executed

- Contractor
- State Construction Office
- State Accounting and Financial Services (AFS) Office

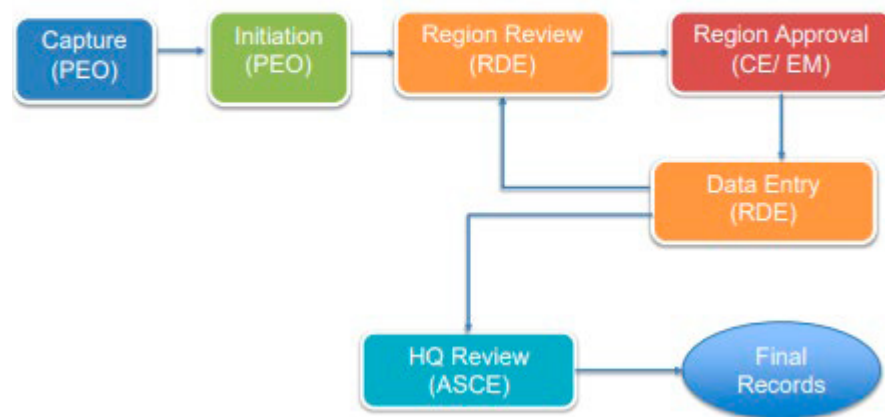
Headquarters executed

- Contractor
- Region
- State Accounting and Financial Services (AFS)
- HQ Bridge Office – if appropriate
- Design – if appropriate
- Materials Lab – if appropriate

4.16 Processing the Change Order Submittal Package in ECM

When Adobe Sign notifies the Project Engineer that the change order has all required signatures and the Contractor notified, (and it has therefore been executed), the Project Engineer will separately upload (1) the change order and (2) the change order Submittal Package (see section 4.13) to ECM. The Project Office initiates the process through the Electronic Change Order Routing Workflow:

Electronic CO Routing Workflow



- **Capture** – The Project Office uploads the change order and change order Submittal Package (see section 4.13) using ILINX Capture.
- **Initiation** - The Project Office starts the change order/Submittal Package routing workflow in the ECM.
- **Region Review** – Region Documentation Engineer reviews the Submittal Package and either sends it to the ARA for Construction or Engineering Manager for approval or sends it back to the Project Office for corrections.
- **Region Approval** – ARA for Construction or Engineering Manager reviews the Submittal Package and either sends to Region Documentation Engineer for data entry or back to the Region Documentation Engineer for corrections.
- **Data Entry** – Region Documentation Engineer executes the change order in CCIS and completes any CAPS actions as applicable. The Region Documentation Engineer uploads the Contract Change Order Report to the ECM showing the permanent pay items assigned to replace the temporary pay items and adjusting any existing item quantities.
- **HQ Review** – Assistant State Construction Engineer (ASCE) reviews the change order Submittal Package and either sends it to the ECM for final record storage or returns to the Region Documentation Engineer for correction. If the change order exceeds the threshold to post the change order on the external website or for lessons learned tracking, the ECM will mark it as such for further processing at HQ.
- **Final Records** – Moving the change order and its Submittal Package to this step completes the process and moves the change order and its Submittal Package to the final records in the ECM.

The Region Documentation Engineer will enter change order information in CAPS if a new pay item is created or an existing bid item is adjusted if existing groups are used. For new groups, Accounting and Financial Services (AFS) has to create the new group in TRAINS through the Work Order Authorization (WOA) process first before the group can be created in CAPS. Project Office or Region should work with their Region Program

Management to have the new group created through the WOA process. Once that is complete, the Region Documentation Engineer or CAPS can complete entering the change order information into CAPS.

Additional resources regarding the change order signature and password requirements are available on the [Construction SharePoint site](#).

4.17 Project Engineer Responsibilities after Execution

Prompt Pay

The Project Engineer must ensure WSDOT complies with laws regarding prompt payment. See section SS 1-08.1(7)B.

Design Documentation Package

The Project Engineer must stay aware of the design implications of actions taken during construction. Change orders and undocumented field adjustments can affect the design standards utilized. If change orders or field adjustments affect the project design criteria, the changes must be documented, approved, and incorporated into the Design Documentation Package. The Project Engineer shall contact the Region Project Development staff for guidance in documenting these design criteria changes. The Project Engineer should also consult with Region Environmental Permit Coordinators and Environmental Subject Matter Experts to make sure proposed design changes comply with environmental requirements.

4.18 Backup Documentation

Backup documentation, not to be confused with “Supporting Documentation” described in [section 4.13.3](#), is documentation beyond the Supporting Documentation but relevant to the change order. It includes all correspondence to and from the Contractor regarding the change order, and other relevant material not included in the change order submittal package. This should be stored in the electronic file for the change order.

4.19 Change Orders and Final Records, ECM storage, and As-Builts

Refer to *Construction Manual* Chapter 10 Documentation for requirements for including change orders in final records, ECM, and as-builts.

5 Miscellaneous Change Order Considerations

5.1 Cardinal Changes

Cardinal changes are not allowed. As used by WSDOT, “cardinal change” means a change order that, if implemented, would meet the following criteria:

1. Limit on Spending Appropriated Funds – A change order that is outside the scope, intent, or termini, in any amount over \$7,500, is considered a cardinal change. This stems from (a) WSDOT’s duty to spend money for the purpose intended by the source of funding, and (2) the requirement for competitive bidding in RCW 47.28.050 unless the change order is less than \$7,500 (which includes the cost of construction, materials, supplies, engineering, and equipment). Change orders that meet this criterion for a cardinal change are prohibited.

5.2 Unilateral Change Orders

Unilateral change orders are a valuable tool for the Project Engineer when used in appropriate circumstances. With proper communication in those circumstances, the contractor will appreciate their value as well.

Their value is realized when the Contractor is unwilling or unable to sign a change order – they provide the Contractor (1) clear and timely direction on how the contract is changed, and (2) a mechanism for timely payment.

If the parties cannot agree on a price and Force Account is not appropriate, the contract allows the Project Engineer to determine the equitable adjustment in the Contractor's payment - (*Standard Specifications* section 1-04.4 Changes). If the Project Engineer determines the adjustment without the Contractor's agreement, then the equitable adjustment is unilateral. This type of action should not be avoided when it is called for. It is simply an available action under the contract and as such, it is no different from other allowed actions, such as a contractor's notice of changed condition or the Project Engineer's determination of workable days. Regardless of how the decision is made, the Project Engineer has an obligation to advise the Contractor that work is being ordered and how payment will be made. Contractors have the right to protest unilateral changes and follow up with price demands and other arguments that protect their rights (*Standard Specifications* section 1-04.5 Procedure and Protest by the Contractor). In the meantime, however, the work is proceeding, delays are avoided and WSDOT has paid the Contractor the amount, in their judgement, that is equitable.

5.3 Interim Change Orders to Comply with Prompt Payment

When notice to proceed with change order work is issued and the Contractor subsequently begins that work, the requirements for the Project Engineer to make prompt payment begin without regard to whether the change order has been executed or not. Therefore, when there is a possibility the change order will not be bilaterally executed in time to process timely payment, some mechanism must be established to make timely payment. Refer to section SS 1-08.1(7)B for discussion on what constitutes timely payment. There are two strategies that can be employed.

Strategy 1:

The Project Engineer issues the change order unilaterally, with prices based on the Engineer's estimate of an equitable adjustment. The Contract gives the Engineer discretion to do so in *Standard Specifications* 1-04.4, 1-05.1, and 1-09.4. This strategy fits best when the scope of the change order work is finalized in writing, but the holdup is agreement on dollars and/or time. This is expected to be a friendly unilateral change order; the Project Engineer should explain to the Contractor the purpose for unilateral execution is to meet the requirements for prompt payment to the extent the parties agree on price and time. The Contractor would then have to pursue additional cost or time through the friendly application of *Standard Specifications* section 1-04.5.

Strategy 2: This strategy assumes the Contractor has been directed to proceed before a change order has been executed.

1. First, execute an "interim" change order that creates pay items and little else. The intent is to temporarily pay up to, but not more than, 100% of the Contractor's costs plus profit for which WSDOT agrees there is entitlement, on every progress estimate as the work occurs. We want to ensure that we do not overpay for the work at this

point. Some pay items may be at agreed prices, some may have unilateral prices established by the Project Engineer. This interim change order will most likely be unilateral. A companion change order will be required, if for no other reason than to officially add the scope of work, but also to establish final payment amounts. Sample language for such an interim change order is as follows:

*In order to facilitate prompt payment to the extent WSDOT agrees for the Work described in serial letter 27 dated March 3, 2024, regarding DSC at Wall #6-3, for which notice to proceed was issued *****INSERTDATE*****, new pay items are created as shown on page X of Y of this change order.*

Contract time is adjusted by increasing/decreasing Working Days by ___.

The Work can be described by either referring to a previous email or letter which directed the Contractor to proceed, or by including in this change order a written description and plans that are developed to the extent needed to get the work started. Either way, the interim change order must include some semblance of a description of work for which payment is being made.

2. Second, execute the companion change order when prices have been agreed. It will include all the provisions of a typical change order. The companion change order will reconcile final costs of the Work, including payments made on interim change orders. Consult with your ASCE, as necessary, to ensure the companion change order adequately describes the amount of the final payment and agreement between the parties that the issue is resolved. For the pay items established in the interim change order with which the parties agree on the unit price and description of work, use these same pay items.
3. For the pay items established in the interim change order with which the parties disagree on the unit price and/or description of work, zero out the pay item established in the interim change order and replace it with a new one that has agreed unit price and scope.

5.4 Variation in Estimated Quantities

Standard Specifications section 1-04.6 requires the Contractor and WSDOT to abide by the Contractor's bid price for variations in quantity up to 25% above or below plan quantities. If the final quantity varies from plan quantity by more than that, limited renegotiation of price is available to either party. Refer to section SS 1-04.6.

5.5 Differing Site Conditions (Changed Conditions)

Prior to making any commitment to the Contractor that a differing site condition exists or that additional compensation will be made, the Project Engineer must first obtain approval from Region Construction, and then the Region must obtain approval from the State Construction Office. Refer to section SS 1-04.7.

5.6 Addressing Traffic Control

Do not forget to address any increases or decreases in the cost of traffic control.

5.7 Claims Settlement

Refer to section SS 1-09.11(2).

5.8 State Construction Office Change Order Review

The State Construction Office reviews all change orders on WSDOT projects in order to comply with the WSDOT obligations set forth in the Stewardship and Oversight Agreement, and in keeping with WSDOT delegation of authority. Much of the State Construction Office authority to approve changes has been delegated to the Regions through the change order checklist. However, the State Construction Office retains review and oversight responsibilities to assure adherence to WSDOT policies and principles, and to State and Federal statutes. The State Construction Office seeks to achieve statewide consistency, while allowing for appropriate local variations, and to assist those who initiate change orders in the successful completion of an effective and enforceable order. This review applies to all change orders, not just those few submitted for approval or execution by the State Construction Office, but also to those executed by the Region or Project Engineer and submitted for review.

5.9 Deleted Work

1. **Authority to Delete** – As provided in *Standard Specifications* section 1-04.4 and 1-08.10(2), WSDOT may cancel all or portions of Work included in a Contract.
2. **Payment for Deleted Work** – *Standard Specifications* section 1-09.5 provides limitations on payment for deleted work and work that is partially completed at the time of termination. When work is decreased or deleted by the contracting agency, payment for the portion of the work that was completed will only be for the costs actually incurred; profit may be allowed if provided by the Contract. No profit will be allowed for work that was not completed. Consequential damages are also not allowed. Consequential damages may include such things as: loss of credit, loss of bonding capacity, loss of other jobs, loss of business reputation, loss of job opportunities, etc. In the case of a portion of a lump sum item or partially completed unit items, the value of this work will need to be determined. It may also be necessary to negotiate a price adjustment for the work that was performed and paid using a contract unit price if there is a material difference in the nature of the accomplished work when compared to the nature of the overall planned work. Under certain circumstances when the contractor says, “you eliminated all the easy work and left the difficult,” there may be entitlement to an adjustment.

In the event that the deletion impacts the critical path for the project, an adjustment in working days may also be appropriate.

3. **Condition of Award** - The Project Engineer should also check if the deleted work is part of the Condition of Award. If so, the change order may move forward but must address the change to the Condition of Award. Refer to section SS 1-07.11 and [section 4.5.3.3](#) for information on change orders that delete Work affecting COA requirements.
4. **Payment for Materials** – When work is deleted from the project and the contractor has already ordered acceptable materials for such work, *Standard Specifications* section 1-09.5 controls. Verify if the Contractor has ordered or taken delivery of any materials or equipment required for these items.
 - a. **Contractor Restocks** – The first and best method for disposing of the materials is to request that the contractor attempt to return the materials to the supplier at cost or subject to a reasonable restocking charge. If the materials are restocked

then, in accordance with *Standard Specifications* section 1-09, the contractor's actual costs incurred in handling the materials may be paid.

- b. **Contractor Purchases** – If WSDOT cannot utilize the materials, the contractor may elect to retain them for other work. Once again, in accordance with *Standard Specifications* section 1-09, the contractor's actual costs incurred to handle the materials may be paid.
- c. **State Purchases and Disposes** – As a last resort, if the materials cannot be disposed of at a reasonable cost to WSDOT, the Department may choose to purchase the materials from the contractor. There are some limitations that come with the use of federal funds that may require that the materials be purchased with state funds depending on the situation. Refer to <https://www.fhwa.dot.gov/preservation/memos/160225.cfm> for FHWA policy on purchasing items for maintenance. The State Construction Office may be contacted for advice. If possible, such materials may be provided to a future contractor (work with Design) or to Maintenance (work with the Regional Maintenance Office). If the materials cannot be used, they shall be disposed of as described in the WSDOT *Disposal of Personal Property Manual* M 72-91. Once again, in accordance with *Standard Specifications* section 1-09, the contractor's actual costs incurred in handling the materials may be paid.

5.10 Conversion Factors

Change orders that involve a conversion factor usually are of the type that converts from one unit of measure to another unit of measure for payment. This requires a change order or letter of agreement to be on file to allow the conversion, and that no credit is pursued for the lack of a scale. If a conversion is desired for anything but a minor quantity, a conversion factor is determined specifically for the material in question and a scale credit may be included as part of the change order.

5.11 Consent of Surety

The Project Engineer is obligated to require the Contractor to obtain written consent from the Surety for a change order that does any of the following:

1. **Increases contract time by more than 20% of the original contract time.**
2. **Significantly expands the scope of the contract.**
3. **Is a cardinal change to the contract. See [Section 5.1](#) Cardinal Changes.**

The Project Engineer is encouraged to obtain written consent from the Surety on any change order of large value or large risk. If consent of surety is requested, make sure that the appropriate signature and date fields are completed on the change order document in CCIS and in Adobe Sign.

5.12 Credits for Non-Specification Material/Work

Use of non-specification material is often discovered after the fact, when testing the material shows that it failed to meet specified requirements. The use of non-specification material requires a recommendation from the HQ Materials Laboratory and the State Construction Office approval. The pricing of a credit may be based on savings (delete this and replace with that), on the loss of product value to WSDOT (service life, increased maintenance costs, etc.), or on a statistical evaluation of the material.

5.13 Lump Sum Items

When a change order proposes to increase or decrease the dollar amount of a lump sum bid item, the best way to proceed is with a change order deleting the entire original lump sum bid item (and any payments made under this item) and creating a new lump sum pay item to compensate the Contractor for work completed.

5.14 Approve versus Execute

The following terms are used in the Change Orders Appendix to the *Construction Manual*, the changes section of the Contract Provisions, and the change order forms.

- Recommend Execution – A person recommending approval is saying, based on their area of authority and responsibility related to the CO, they see no problems with the CO and recommend that it be executed.
- Approve – Based on one’s authority, responsibility, and expertise related to the CO, they find the CO acceptable.
- Execute – Depending on the context, means either
 - A CO that has been officially incorporated into the contract by virtue of having been signed by a WSDOT employee who has authority to execute that particular CO, and subsequently conveyed to the Contractor.
 - A CO that has been entered into CCIS and identified as executed by virtue of a date being filled in the “Exe Date” field. This meaning will be most often identified in this Appendix by the phrase “executed in CCIS” or “execute the change order in CCIS”. This can occur only after having been signed by a WSDOT employee who has authority to execute that particular CO.

5.15 Disposal of Surplus Materials

Surplus materials, meaning material the contractor ends up with that are not needed for the contract, can occur for a number of reasons. The Standard Specifications provides various remedies for dealing with these surplus materials, depending on either what caused the surplus or the nature of the material, as follows:

1-04.6 Ordinary underrun in plan quantity. Does not include underruns caused by change orders that delete or terminate work.

1-09.10 Surplus Processed Material (Material produced by the contractor, in a quarry or gravel pit, which meets specifications). Reference section SS 1-09.10 and SS 3-01.3 for guidance.

2-03.3(7) Disposal of surplus excavation.

3-01.3(4) For surplus screenings (unneeded waste screenings that meet no particular spec) produced from State-owned material.

3-01.4(2) For surplus screenings (unneeded waste screenings that meet no particular spec) produced from contractor-owned material.

7-05.3(2) Manhole rings and covers removed and salvaged on the contract

Surplus material can also be created when work is deleted in whole or part by change order in accordance with *Standard Specifications* section 1-04.4, or when the contract is terminated in whole or in part accordance with section 1-08.10. Refer to section [5.9 Deleted Work](#) for a discussion on materials that have become surplus because of a work deletion change order.

5.16 Tracking Change Order Status

It is recommended that a change order log outside of CCIS be used to track the detailed status of change orders to ensure that the change order is processed expeditiously and that the change order is executed. If warranted, track approval from the executing authority to begin the work prior to Execution of the change order. A suggested tracking template using Excel has been developed and can be found on the [State Construction Office SharePoint](#) site. Cognos also has a standard report that can be used for tracking under “Individual Contract Analysis”.

5.17 Mutual Agreement to Add a Disputes Review Board (DRB)

Refer to section SS 1-04.5(1) Disputes

5.18 Contractor Notice Requirements

A Contractor’s failure to provide timely notice can be the basis for the Project Engineer denying a contractor’s request for a change order. When the Project Engineer is considering doing so, approval from Region Construction is required in advance.

5.19 RCW 39.30.060 Changing Mechanical or Electrical Subcontractors

This RCW limits the Contractor’s ability to change mechanical and electrical subcontractors from those listed in the proposal.

5.20 RCW 39.04.120 When Environmental Protection Laws Change

This RCW addresses entitlement to change orders when environmental protection requirements change.

5.21 Reporting Engineering Errors in Excess of \$500,000

The public expects and deserves a return on the investment they have made in our transportation system. WSDOT will continue to be transparent and accountable by reporting on the results of the services it provides. The reporting of engineering errors provides this transparency and accountability to the legislature from project launch through completion. Additionally, it provides the opportunity for WSDOT to improve our business model by taking these lessons learned and identifying opportunities to avoid these errors in the future.

RCW 47.01.490 requires WSDOT to report engineering errors on construction projects resulting in cost increases in excess of \$500,000, and identifies the information required in the report. The following is WSDOT’s policy for complying with the RCW.

5.21.1 Identifying and Quantifying an Error

All change orders in excess of \$500,000 shall be evaluated, first to determine if an engineering error contributed to the cost, and second, to determine if the error directly increased the cost in excess of \$500,000.

The cost of the engineering error is defined as the increase in the change order cost attributed specifically to the error. For example, leaving work out of the contract would result in an impact of the difference in price for negotiating the price through change order instead of competitively bidding the Work.

At the time that change approval is requested from the Assistant State Construction Engineer, the requester should be prepared to discuss what error codes they believe are appropriate and whether they believe an engineering error contributed to the change. Typically, the following error codes suggest an engineering error.

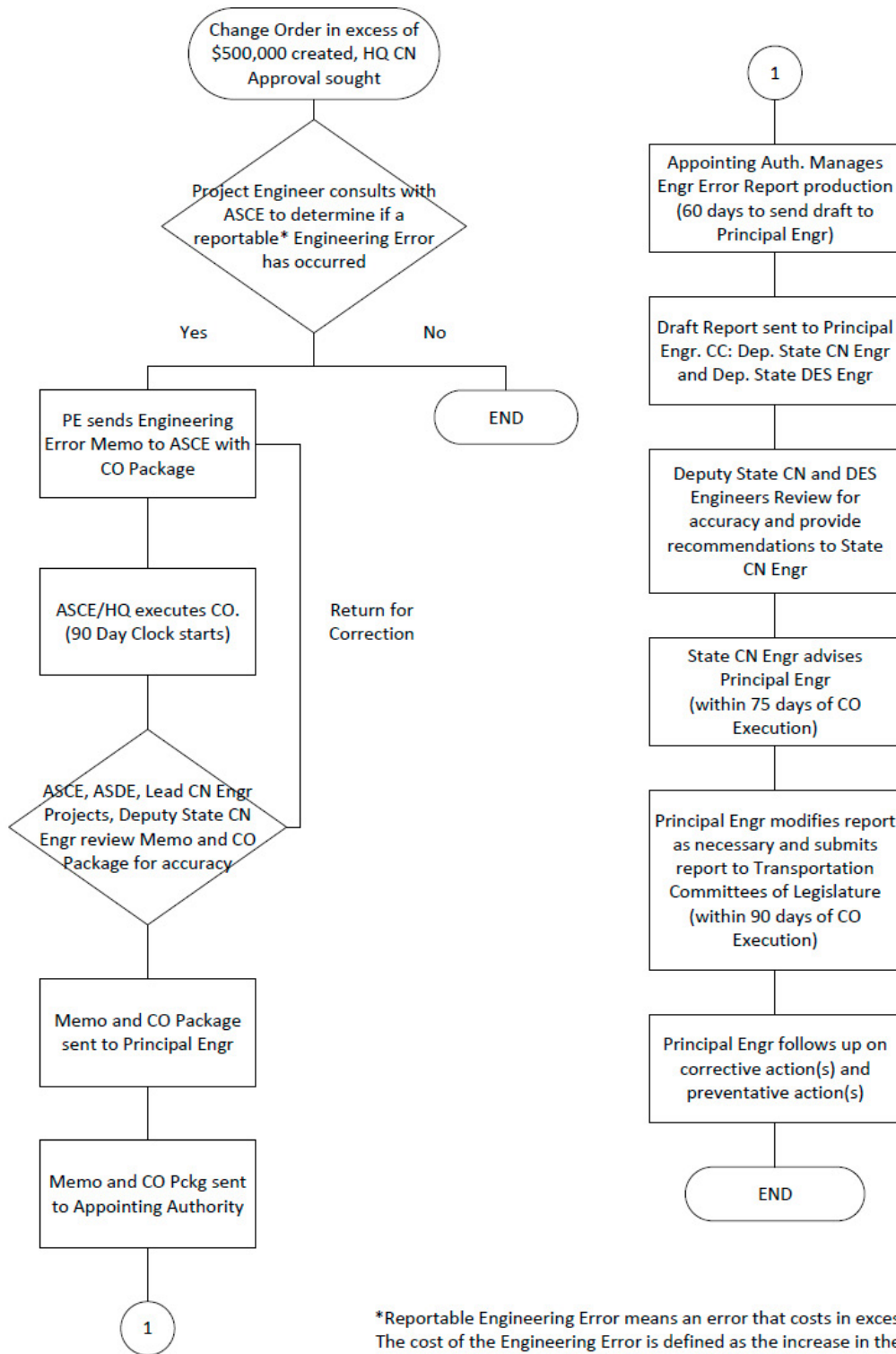
- **EE - CONSTRUCTION ENGINEER ERROR** - A state employee made a mistake that created a need for repair, modification or cost adjustment
- **PI - PLAN ERROR – INFO** - Plans contain a mistake that resulted from the designer working with insufficient information
- **PM - PLAN ERROR MISTAKE** - Plans contain a mistake that given the information available to the designer should not have been made
- **SU - DESIGN SURVEY OR BASE MAP ERROR** - Initiated to pay extra costs resulting from contracting agency survey or base map error
- **UP - UTILITY PLAN ERRORS** - Initiated to correct omission or conflict on plans related to utilities

5.21.2 Basic Procedures

1. Before the change order is sent to the State Construction Office, a determination is made by the Project Engineer office in consultation with Region Construction and the Assistant State Construction Engineer (ASCE) that the cost of a change order increased the cost of the project in excess of \$500,000 due to an engineering error as defined section [5.21.1 Identifying and Quantifying an Error](#).
2. This determination triggers the requirement for an Engineering Error report.
3. The Project Engineer office shall draft and send an Engineering Error Memorandum with the change order submittal package to the ASCE. Fill in the blanks in [Appendix 1-A.3, "Draft Engineering Error Memorandum and Cover Sheet"](#).
4. The ASCE shall proceed with execution of the change order as appropriate.
5. The ASCE and Assistant State Design Engineer (ASDE) shall review and discuss the change order submittal package, as it relates to RCW 47.01.490 and the Draft Engineering Error Memorandum, with the Lead Construction Engineer - Projects and Deputy State Construction Engineer. The parties shall approve the content of the Draft Engineering Error Memorandum as complete and accurate or return it for corrections.
6. The Draft Engineering Error Memorandum is sent by the ASCE to the Principal Engineer for signature and routing to the appointing authority.

7. The appointing authority shall manage the effort to produce the Engineering Error Report, addressing the items identified in section 5.21.3, sign the report and cover page ([Appendix 1-A.3](#)) and submit the report and cover page to the Principal Engineer with a copy to the Deputy State Construction Engineer and the Deputy State Design Engineer within sixty days of execution of the change order.
8. The Deputy State Construction Engineer and the Deputy State Design Engineer shall review the Engineering Error Report and provide a recommendation to the State Construction Engineer regarding the accuracy and content of the report.
9. The State Construction Engineer in turn forwards the Engineering Error Report and cover page to the Principal Engineer, and advises the Principal Engineer based on the recommendation from the Deputy State Construction Engineer and Deputy State Design Engineer, within seventy-five days of execution of the change order.
10. The Principal Engineer shall submit the cover page and report to the Transportation Committees of the Legislature within ninety days of execution of the change order.
11. The Principal Engineer shall follow up on; “(c) *What corrective action was taken?*” and “(f) *What action the secretary has recommended to avoid similar engineering errors in the future?*” as they are described in the report.

Engineering Error Process - Dayton Version



*Reportable Engineering Error means an error that costs in excess of \$500,000. The cost of the Engineering Error is defined as the increase in the change order cost attributed specifically to the error.

5.21.3 Contents of Engineering Error Report

The department's full report must be submitted within ninety days of execution of the change order and include an assessment and review of:

1. How the engineering error occurred.
 - a. Provide a full account of the error including the genesis, evolution and resolution of the change order.
 - b. Identify if the error was the result of a failure to follow WSDOT policy and procedures in the development or during administration of the contract.
 - c. Describe extenuating circumstances, if any.
 - d. Describe the applicability of the quality control process and whether it was followed.
2. Identify the department of the employee or employees responsible for the engineering error, without disclosing the name of the employee or employees.
 - a. Disclose the department or consultant firm that is directly responsible for the error and whether additional offices played a role.
 - i. The "department" may be the Project Office, the State Construction Office, any of the support offices or consultant firms that assisted in the administration of the contract or the development of the design.
 - b. If consultants are involved, is it appropriate to claim damages against the errors and omissions insurance? If not, why not?
3. What corrective action(s) was/were taken?
 - a. Is corrective action appropriate for each of the parties involved? If not, why not?
 - b. For each department and consultant firm listed a corrective action must be considered. There must be at least one corrective action implemented.
4. Provide the value of the cost increase caused by the engineering error and how the department minimized that cost.
 - a. The cost of the engineering error is defined as the increase in the change order cost attributed specifically to the error. For example, leaving work out of the contract would result in an impact of the difference in price for negotiating the price through change order instead of competitively bidding the Work.
 - b. Errors typically increase costs through time delays, rework or necessary changes in work methods.
 - c. Describe how the cost of the error was minimized.
5. Indicate whether the cost of the engineering error will impact the overall project financial plan.
 - a. How was the financial plan modified?
6. Describe what actions have been taken to avoid similar engineering errors in the future.

This would be a lesson learned exercise. Actions may include training, policy changes, procedural changes, adding checks and balances or similar.

Provide a brief implementation timeline and plan for the changes.

5.22 Change Orders Over \$500K

The State Construction Office will:

1. Identify all HQ executed change orders that exceed \$500,000 and post them on the WSDOT web site for a duration of six to twelve months at: <https://wsdot.wa.gov/business-wsdot/contracts/about-public-works-contracts/payments-reporting/change-orders-over-500000>
2. Identify all change orders in excess of \$200,000 and add them to the Lessons Learned log.

5.23 Constructive Changes

A constructive change is an owner-caused compensable change that is not followed by a compensable change order. This usually occurs when the owner and contractor disagree on entitlement which is later determined in the contractor's favor. The following sequence of events is a generic example.

The owner issues a good faith order or contract interpretation with which the contractor disagrees.

The contractor puts the owner on notice that, in good faith, it believes the owner's order or interpretation is a change to the contract, will cause the contractor additional cost/ time, and requests an equitable adjustment.

The owner denies the contractor's request for a change order or equitable adjustment based on the owner's good faith belief that the order or interpretation is not a change to the contract.

The contractor proceeds as ordered or as interpreted by the owner, under protest.

At some time later in the contract, the owner's order or interpretation is determined to be a compensable change to the contract. Such a reversal in the owner's position could be caused by WSDOT's further review and better understanding of the situation, the recommendation from a Disputes Review Board, or the decision of an arbitrator or court.

Constructive changes can also arise from faulty plans, untimely granting of time extensions (constructive acceleration), or failure by the owner to act within the time limits in the contract (constructive delay). In all cases, two elements must always be present for the contractor to be paid under the theory of constructive change:

The contractor must comply with the notice and protest requirements of Standard Spec 1-04.5.

It is later determined that the owner changed the contract in a way that entitles the contractor to a change order and additional compensation and/or time.

Determination of a constructive change always requires concurrence from the State Construction Office.

5.24 HMA Mix Design Substitutions

Refer to the table in section SS 5-04.2(2) for guidance on change orders for making substitutions in HMA mix design requirements.

5.25 Equal or Better Product Substitutions

Generally, when the contractor proposes a material or product substitution, which is deemed by WSDOT in our sole discretion to be superior (better) than required by the contract, that substitution may be accepted as a no cost change. Substitutions deemed “equal” are often accepted with a credit.

In determining equal or better, consider the following:

1. Functionality
2. Structural adequacy
3. Safety
4. Comparison of life cycle costs including repair and maintenance
5. Aesthetics

6 Change Order Problems to Avoid

6.1 Unjustified or Inadequately Described Need

Failure to clearly justify the need for a change is cause for non-approval. The change must be explained in such a way that those unfamiliar with the details of the project can understand and agree with the need for the change.

6.2 No Prior Approval to Proceed

A change order *must* be executed in writing, or granted prior approval by the executing authority before any of the change order work is performed. The prior approval by the executing authority must be documented and included with the change order submittal package submitted to Region and the State Construction Office.

6.3 Failure to Follow Through

Obtaining approval to proceed prior to execution of the change order, without promptly following with the change order creates credibility and prompt pay problems. When these prior approvals are given, it is with the understanding that the need is immediate and that the change order will follow as soon as possible.

6.4 Change Type Incorrectly Marked

The change type (Proposed By) check boxes have nothing to do with, nor do they have any effect on which party owns the risk associated with the change order. Therefore, if the change order intends to allocate risk differently than the original contract, it must be stated in the text of the change order.

If the contractor proposed the change, which is most commonly pursuant to an RFI or VECP, check the box “Change Proposed by Contractor/Design-Builder”. Otherwise, check the box “Ordered by the Engineer under the terms of *Standard Specifications* section 1-04.4 or the Design-Build General Provisions”.

Also, the change order/minor change form and Change Record, DOT Form 422-002 only shows two options (Ordered by the Engineer and Change Proposed by Contractor). In CCIS, there are 4 options: (E-Engineer, C-Contracting, B-Both, or O-Outside Agency). Select either E or C. Never select B or O.

6.5 *Insufficient Cost Justification*

The justification for the cost must be clear and understandable to non-engineers (auditors, etc.). If the cost justification is not clear, much time may be spent later trying to convince a reviewer of its merits. This often happens at a much later date, when the Project Engineer may have forgotten the facts surrounding the change order or is no longer available.

6.6 *Inadequate Description of Work*

The same rules that apply to writing special provisions apply to writing a change order. The change order work must be adequately described in the text.

6.7 *Entitlement not Clearly Established*

When a change order grants a Contractor additional money or time, entitlement must be logically explained and established. This must be done in the Change Record in sufficient detail, with sources documented, so that an auditor will be satisfied.

6.8 *No Approval*

When the Project Engineer agrees to a change order with the contractor before obtaining the required approvals, the Project Engineer must consider the possibility the change order may ultimately be disapproved. The Project Engineer loses all credibility with the Contractor when having to renege on a change order.

6.9 *Inappropriate Approval*

Occasionally, change orders come to the State Construction Office with approvals, just not the proper ones. They may be change orders marked "Approved by the Region", that are structural changes, etc., that do not have approval from the State Construction Office. Once again, this causes major problems if the change order must be rescinded.

6.10 *Time Not Addressed*

It is a mistake for a change order not to include a statement on contract time. When the Project Engineer cannot reach agreement with the contractor on the effect on contract time, the change order can be processed unilaterally, including the amount of time the Project Engineer believes is proper. When this occurs, the unresolved time should be addressed as soon as the change order work is complete and its overall impact can be resolved.

6.11 *Incidental Work*

Change orders that pay for work the contract stipulates is incidental to other items of work. This is caused by overlooking special provisions, *Standard Specifications*, or addenda during the change order process; and may result in double payment if approved. Double payments are not allowed.

6.12 Change Order Quantities Differ from Approved Quantities

If quantities of additional work used to request approval to proceed prior to execution of the change order do not agree with the quantities in the prepared change order, this may negate the prior approval. The prior approval may be for a specific type and quantity of work, and if these types or quantities change during the change order process, new approval may be warranted.

6.13 Structural Change

When a change is made on a structure, it should be evaluated to determine if it is a structural change. Even changes that appear to be minor may in fact be structural in nature. If there is any doubt about whether a change is structural in nature, contact the State Construction Office for a determination. If a change is structural in nature, it will require approval from the State Construction Office.

6.14 Incorrect Item or Group

Often change orders are received at Region or the State Construction Office that have incorrect contract item numbers or incorrect group numbers. The Project Office must proofread the change orders to ensure that items and groups affected by the change order are represented correctly in the change order.

6.15 Condition of Award Not Coded

Any change order that revises Condition of Award work as described in section [4.5.3.3](#) must be executed by the State Construction Office, with concurrence of the Office of Equity and Civil Rights, and coded "CO" in CCIS.

SS 1-04.4(1) Minor Changes

To expedite processing the simplest change orders, the *Standard Specifications* provide “Minor Changes” for streamlining change orders that meet the criteria below:

1. The value of the change order (credit or debit) is \$25,000 or less.
2. The Region and Project Engineer, at their discretion, agrees to use the minor change process.

In addition to the above, the following WSDOT policy criteria must be met for the Minor Change process to be used:

1. The Change Order Checklist allows for Region execution.
2. The change in Contract Time does not exceed ten Working Days.
3. The Change Description fully describing and explaining the change order on the Minor Change form is limited to what fits in the Narrative field (D1-1.1, page 2 of 6) in CCIS. Using a font less than 10 point on the Minor Change form in an effort to fit the text onto 1 page is discouraged – use a conventional change order instead.
4. The maximum number of new and/or revised plan sheets is three.
5. Payments and credits shall be measured by lump sum and paid by lump sum under the Bid item, “Minor Change”.

Those change orders that meet all seven of the criteria above may be processed using the Minor Change process.

Project Engineer Responsibilities

Same as section 2.0.

Contractor Responsibilities

Same as section 3.0.

Minor Change Process

Same as section 4.0 except as modified below.

Prepare a Draft Change Order

When utilizing the Minor Change process, the Minor Change Form (form 421-005A) replaces the conventional, CCIS-generated, change order document (and the Change Record).

Measurement and Payment

Measurement and payment shall be by lump sum, paid under the contract item “Minor Change”. All contracts will have a standard item for “Minor Change.” This item will be established in every group as a lump sum. Credits, debits, changes in working days and no cost change orders may all be processed under the Minor Change method subject to the criteria in items 1 through 7 above. The practice of measuring by force account, or calling the lump sum a “calculated item” is prohibited. If anything other than a lump sum (negotiated before the work is performed) is needed, the conventional long form change order process must be used.

CCIS Input Include MC – denoting Minor Change - in the change order title.

Minor Changes must be entered into CCIS; however, the required input is slightly abbreviated. Since the Minor Change document is generated on DOT Form 421-005A and is independent from CCIS, the Work Description section in CCIS (submenu D1-1.1 Page 2 of 7) may be an abbreviated description of the work, as long as it provides enough detail to identify what the change is about. The “Items Page” is also not required. All other information requested by CCIS, including changes to Working Days, is required.

The lump sum dollar amounts for each Minor Change must be reported in CCIS.

The use of the Minor Change must be noted on CCIS Page 1.

Evaluate Cost

Same as section 4.6.

Evaluate Impacts on Time

Same as section 4.7.

Obtain Required Approvals

Minor Changes require the same approvals required by the Change Order Checklist as conventional change orders. Provide a list of approvals received in the Minor Change form. Provide copies of emails or other written confirmation of approvals in the Supporting Documentation. See section 4.8.

Identify the Executing Authority

The executing authority is determined the same way as section 4.9. If the executing authority is determined to be the State Construction Office, the Minor Change process will not be used.

Transmit the Minor Change to the Contractor and Negotiate the LS Price

Same as section 4.10, 4.11, and 4.12. The measurement and payment must be by lump sum. The negotiation of prices for payment under the item Minor Change is intended to be the same as for conventional change orders. The focus, as always, should be forward pricing such that the Contractor controls the work and assumes the risk. However, situations occur where it makes sense to measure portions of the work in a variety of ways such as units, or force account. These situations do not lend themselves to the use of the Minor Change and a conventional change order should be prepared. Measurement and Payment for Minor Changes will only be by lump sum, under the bid item “Minor Changes.”

Contractor Endorsement

The Region has authority to determine how the Contractor's concurrence for a Minor Change is documented, and responsibility to make that decision based on WSDOT's best interest.

It is recommended that the Contractor's signature be required on the Minor Change form in the following circumstances:

1. Contractor proposed changes.
2. When there is any possibility of the Contractor not fully understanding all aspects of the Minor Change.

When items 1 or 2 above are not the case, the Region has the following options for documenting Contractor endorsement of a Minor Change, listed from desirable to less desirable. (The Contractor's willingness to do these may be a good discussion item at the preconstruction conference.)

1. An email from the Contractor's representative authorized to execute change orders, acknowledging they agree with the proposed Minor Change.
2. An oral exchange between the Project Engineer and the Contractor's authorized representative, wherein the Contractor's representative provides their concurrence with the Minor Change. This conversation should be documented in the Minor Change file by the Project Engineer
3. No oral or written concurrence from the Contractor for the Minor Change. This means sending the Minor Change to the Contractor with the Project Engineer's signature and directing the Contractor to proceed immediately. This is considered a unilateral change order.

In any case, a copy of page 1 of DOT Form 421-005A must be sent to the Contractor. If the Contractor does not agree with the terms or conditions of the Minor Change, then the Contractor is required to follow the procedure outlined in *Standard Specifications* section 1-04.5. This orders the Work to proceed and puts the decision to continue negotiations in the Contractor's hands as detailed in that section. The Contractor is obligated to endorse or protest as described in the Specification, and a timeline is provided for these actions.

Obtain WSDOT Approval Signatures

Due to the criteria required for using the Minor Change process, the approval signatures needed for a Minor Change are those required for Region execution of the change order, or as delegated to the Project Engineer by the Region.

Execution

Due to the criteria required for using the Minor Change process, the Region (or the Project Engineer if so delegated by the Region) has the authority to execute Minor Changes, but only after obtaining all approvals required by the change order checklist.

Authorization to Proceed Before the Change Order is Executed

Same as section 4.15.1.

The Minor Change Submittal Package

The Minor Change submittal package is composed of the following two electronic files (.pdf). They are considered “submitted” when they are uploaded into ECM.

First electronic file, all pages combined into one document.

- a. Minor Change page 1 of DOT Form 421-005A and plan sheets, if any.

Second electronic file, all pages combined into one document:

- a. Minor Change page 2 of DOT form 421-005A
- b. Change Order Checklist
- c. Supporting Documentation
 - i. Independent Engineer’s Estimate
 - ii. Time Impact Analysis Written documentation of Approvals

The Minor Change may include up to 3 plan sheets.

Page two of the Minor Change form is required. It takes the place of the Change Record. Therefore, the text on the form must fully explain and justify the change, as well as any cost or time. (Page 2 of the Minor Change form is not sent to the Contractor).

Payment

The Minor Change item is a lump sum item. The Minor Change item in the original contract must be used to make payment, whether paying the Contractor for work performed or taking a credit. The Minor Change is not appropriate for changes that affect any other contract item.

CAPS Entry

The Minor Change is not entered into the CAPS system as a change order. The Minor Change form acts as a source document (similar to a Field Note Record) to record the amount entered into CAPS.

Prompt Pay

The requirements for prompt payment for Work performed under a Minor Change are the same for conventional change orders.

SS 1-04.4(2) Value Engineering Change Proposal (VECP)

It is the policy of WSDOT to encourage our contractors to be innovative in planning and performing the work when a cost and/or time savings can be realized. When a contractor identifies such a savings and provides a significant portion of the efforts needed to develop the proposal, WSDOT will share the resulting savings with the contractor. This policy is carried out through change orders containing Value Engineering Incentive Payments. The Project Engineer should encourage VECPs and seriously consider the mutual benefits of these proposals brought forth by the contractor as a partner in the contract.

A VECP must meet all the requirements enumerated in *Standard Specifications* section 1-04.4(2)A, General.

Appendices

- [Appendix 1-A.1](#) C3OP Change Order Text How-To
- [Appendix 1-A.2](#) Change Order Code Selections and Definitions
- [Appendix 1-A.3](#) Example Change Order Documents
 - COA Change Order
 - Change Record
 - Minor Change

Appendix 1-A.1 C3OP Change Order Text How-To

Washington State Department of Transportation

Friday, August 19, 2016
C3OP: Construction Contract Change Order Program
Version 1.1.6

Home New Change Order

User Files

Last Update	BV	Contract	Change Order	RAINRZ User	RAINRZ Account
7/19/2016 10:00:45 AM	gasched	006416	017	huj	SCREG005 ✓
7/19/2016 9:56:51 AM	gasched	008150	027	huj	SWREG004 ✓
8/1/2013 7:43:01 AM	gasched	008150	029	HUJ	SWREG004 ✓

Username: GASCHED Name: Danny Gasche Role:
Please send comments to: C3OP.Support
Copyright WSDOT © 2016

All change orders will still need to be created first in CCIS. This tool is for uploading the change order text only. It replaces the Microsoft Word Macro that was formerly used.

1. Log in to CCIS and proceed to create a new change order.
2. Open Internet Explorer.
3. Click on the below link to access the web-based change order text application.
4. This will show your home page with all the change orders you have created. You can only modify text for change orders you have created.
5. Click on "New Change Order" to begin creating new change order text to upload.

<http://entirex.wsdot.wa.gov/construction/contract/changeorder/text/>

Friday, August 19, 2016
Version 1.1.6
C3OP: Construction Contract Change Order Program

Washington State
Department of Transportation

Home New Change Order

Contract and User Information


Change Order: Contract: UserId: Account: Printer:

Enter Change Order Text below...

Save

This is the screen on which you will begin the process of uploading the change order text.

Username: GASCHED Name: Danny Gasche Role:
Please send comments to: [C3OP_Support](#)
Copyright WSDOT © 2016



**Washington State
Department of Transportation**

Friday, August 19, 2016
C3OP: Construction Contract Change Order Program
Version 1.1.6

Home [New Change Order](#)

Contract and User Information

Change Order:

Userid:

Account:

Printer:

Enter Change Order Text below...

This is where you enter the change order text.
You can type the text directly into the program or cut and paste from a Word document.

Username: GASCHED Name: Danny Gasche Role:
Please send comments to: [C3OP_Support](#)
Copyright WSDOT © 2016

To begin:

1. Enter the Contract number (6 characters – XE must be capitalized), Change Order number (three-digit format), your mainframe (CCIS) user ID, your account number (i.e. NWREGN01) and your mainframe printer ID number.
2. Type the text of the change order directly into the “Change Order Text” box or cut and paste the text from a Word document.
3. Click on “Save” to create the change order in the C3OP Program.

Priority: August 15, 2016
Version 1.1.6

C3OP: Construction Contract Change Order Program

Washington State Department of Transportation

Home New Change Order

The files were successfully created.

Contract and User Information


Contract:	Change Order:	UserId:	Account:	Printer:
<input type="text"/>	<input type="text"/>	<input type="text" value="huj"/>	<input type="text"/>	<input type="text"/>

Enter Change Order Text below:

You will see this message when you have correctly created and saved your change order text file.

Once the file has been saved click on "Cancel" to return to the "Home" screen.

Username: GASCHED Name: Danny Gasche Role: Please send comments to: C3OP.Support
Copyright WSDOT © 2016



**Washington State
Department of Transportation**

Friday, August 19, 2016
C3OP: Construction Contract Change Order Program
Version 1.1.6

Home
New Change Order

User Files						
Last Update	BX	Contract	Change Order	MainFr User	MainFr Account	
7/19/2016 10:00:45 AM	gasched	006416	017	huj	SCREGN05	✔
7/19/2016 9:56:51 AM	gasched	008130	027	huj	SWREGN04	✔
8/1/2013 7:43:01 AM	gasched	008130	029	HUJ	SWREGN04	✔

Username: GASCHED Name: Danny Gasche Role:
Please send comments to: C3OP_Support

Copyright WSDOT © 2016

CCIS does not allow changes to the change order text to be made in CCIS. Changes may only be made in the C3OP program.

To begin making edits to the change order text, click on the Checkmark to open the correct file.

Priority: August 15, 2016
 Version 1.1.6
C3OP: Construction Contract Change Order Program

Washington State Department of Transportation

Home New Change Order Contract and User Information

Contract: Change Order: UserID: Password: Account: Printer:

Enter Change Order Text below...

This is where you enter the change order text.
 You can type the text directly into the program or cut and paste from a Word document.
 You can only edit/change the text of the change order here. You cannot make any changes to the text in CCIS.

Once the correct file has been opened:
 1. Make any necessary edits and click "Update".
 2. This will make the changes and save the modified file.

Update Submit Delete Cancel

Username: GASCHED Name: Danny Gasche Role:
 Please send comments to: C3OP-Support
 Copyright WSDOT © 2016

Washington State Department of Transportation

Friday, August 19, 2016

C3OP: Construction Contract Change Order Program
Version 1.1.6

Home New Change Order

The files were successfully updated.

Contract and User Information

Contract:	Change Order:	UserId:	Password:	Account:	Printer:
		huj			

Enter Change Order Text below...

Update Submit Delete Cancel

Username: GASCHED Name: Danny Gasche Role:
Please send comments to: C3OP.Support

Copyright: WSDOT © 2016

You will see this message when the update was done correctly.

To upload the text to CCIS click on the "Cancel" button and return to the "Home" screen.

Friday, August 19, 2016
C3OP: Construction Contract Change Order Program
 Version 1.1.6

Washington State
 Department of Transportation


Home New Change Order

User Files

Last Update	Bx	Contract	Change Order	MainFr>User	MainFr Account
7/19/2016 10:00:45 AM	gasched	006416	017	huj	SCREGH05
7/19/2016 9:56:31 AM	gasched	006130	027	huj	SWREGH04
8/1/2013 7:43:01 AM	gasched	006130	029	HUJ	SWREGH04

To begin the text upload, click on the correct file and re-open it.

Username: GASCHED Name: Danny Gasche Role:
 Please send comments to: [C3OP Support](#)
 Copyright WSDOT © 2016



**Washington State
Department of Transportation**

Friday, August 19, 2016
C3OP: Construction Contract Change Order Program
Version 1.1.6

Home New Change Order

Contract and User Information

Enter Change Order Text below...

Username: GASCHED Name: Danny Gasche Role:
Please send comments to: C3OP.Support
Copyright WSDOT © 2016

Contract: 006416 Change Order: 017 User ID: huj Password: SOREGM Account: U1889 Printer:

Once you have verified that this is the correct file and that the text is correct, enter your mainframe (CCIS) password and click on the "Submit" button to upload the text to CCIS.

DESCRIPTION
This change order compensates the Contractor for additional costs incurred to grind a portion of the south approach slab for Bridge 5/5622 on northbound side of the Arroyo Street on ramp. In addition, this change also includes widening of the southbound approach to approximately 115 feet, approximately 70 feet north and 65 feet south of Bridge 5/5622.

MATERIALS
All materials shall meet the requirements of the contract plans, standard specifications and contract special provisions on page 101, line 1 through page 134, line 10.

CONSTRUCTION REQUIREMENTS
The Contractor shall grind the existing raised section of the south approach to the southbound side of the bridge, as shown on page 4 of this change order.

MEASUREMENT
This change order shall be measured with section 1-09.1 of the Standard Specifications, no specific unit of measurement will apply to the lump sum item "004 Additional Grinding".


PAYMENT
Payment will be made under new lump sum item "004 Additional Grinding" in the amount of \$94,611.38. This will be full payment for all engineering, labor, materials and equipment necessary to complete the work specified in this change order.

This text will be automatically added to the contract as a result of this change order.

Update Submit Delete Cancel

Friday, August 15, 2016
Version 1.1.6

C3OP: Construction Contract Change Order Program



**Washington State
Department of Transportation**

Homepage: [New Change Order](#)

Message: CHANGE ORDER SUCCESSFULLY UPLOADED & REPORT SUBMITTED
Contract and User Information

Contract	Change Order	User Id	Password	Account	Printer
006522	027	huj		SWREGN	U1869

Enter Change Order Text below...

This is where you enter the change order text.
You can type the text directly into the program or cut and paste from a Word document.
You can only edit/change the text of the change order here. You cannot make any changes to the text in CCIS.

When the text is correctly uploaded you will see this message.

The program will automatically send a copy of the change order to your mainframe printer.

It is prudent to verify that the text is correct.

Update Submit Delete Cancel

Username: GASCHED Name: Danny Gasche Role:
Please send comments to: C3OP.Support
Copyright WSDOT © 2016

Appendix 1-A.2 Change Order Code Selections and Definitions

A complete code consists of the following:

Format: (Part 1 - Spec Section)/ (Part 2 - Cause of CO)/ (Part 3 - Purpose of CO)

Example: AH01/CC/AW,CO

Translation: "The need for a waterline realignment was caused by a differing site condition which consisted of added work and affected a COA subcontractor."

Part 1 - What Spec Section Changed?

AB GENERAL REQUIREMENTS (STD. SPECIFICATIONS DIVISION 1)

- 01 scope of work (std. spec section 1-04)
- 02 control of work (std. spec section 1-05)
- 03 control of material (std. spec section 1-06)
- 04 legal relations and responsibilities (section 1-07)
- 05 prosecution and progress (std. spec. section 1-08)
- 06 measurement and payment (std. spec. section 1-09)
- 07 temporary traffic control (std. spec section 1-10)

AC PREPARATION

- 01 clearing and grubbing
- 03 roadside cleanup
- 04 removing an item
- 05 production from quarry and pit site
- 06 stockpiling aggregates
- 07 site reclamation

AD GRADING/EARTHWORK

- 01 roadway excavation
- 02 roadway embankment
- 03 haul
- 04 subgrade preparation
- 05 watering
- 06 structure excavation
- 07 ditch excavation
- 08 trimming and cleanup
- 09 construction geotextile

- AE DRAINAGE**
 - 01 drains
 - 02 structural plate pipe
 - 03 pipe arch
 - 04 arch
 - 05 underpass
 - 06 drywells
 - 07 cleaning existing drainage structures
 - 08 general pipe installation requirements
 - 09 culverts

- AF STORM SEWERS**
 - 01 general pipe installation requirements
 - 02 manholes
 - 03 inlets
 - 04 catch basins

- AG SANITARY SEWERS**
 - 01 general pipe installation requirements
 - 02 side sewers
 - 03 sewer cleanouts
 - 04 manholes

- AH WATER LINES**
 - 01 water lines
 - 02 valves for water mains
 - 03 hydrants
 - 04 service connections

- AI STRUCTURES**
 - 01 pre-cast concrete girders
 - 02 pre-cast concrete panels
 - 03 steel girders
 - 04 drilled shaft
 - 05 bearings
 - 06 powder coating
 - 07 reinforcing bar
 - 08 post-tensioning
 - 09 concrete
 - 10 structural steel
 - 11 timber structures
 - 12 piling structures
 - 13 bridge railings
 - 14 expansion joints
 - 15 sign bridges

- 16 painting
- 17 waterproofing
- 18 modified concrete overlay
- 19 concrete barrier
- 20 noise barrier walls
- 21 structural earth walls
- 22 geosynthetic retaining walls
- 23 soil nail walls
- 24 soldier pile and soldier pile tieback walls
- 25 permanent ground anchors
- 26 shotcrete facing
- 27 luminaires
- 28 bridge electrical-mechanical
- 29 approach slabs

AJ BASES

- 01 gravel base
- 02 ballast
- 03 crushed surfacing base course
- 04 crushed surfacing top course
- 05 asphalt treated base

AK PORTLAND CEMENT CONCRETE PAVEMENT

- 01 grinding
- 02 dowel bars
- 03 tie bars
- 04 cement
- 05 aggregate
- 06 admixtures
- 07 water
- 08 placement
- 09 curing
- 10 panel repair

AL BITUMINOUS

- 01 liquid asphalt
- 02 tack coat
- 03 anti-stripping additive
- 04 test strip
- 05 placement
- 06 compaction
- 07 joints
- 08 pre-level
- 09 aggregates
- 10 planing and grinding

AM EROSION CONTROL AND PLANTING

- 01 erosion control
- 02 water pollution control
- 03 irrigation systems
- 04 roadside restoration
- 05 seeding
- 06 fertilizing
- 07 mulching

AN TRAFFIC

- 01 curbs gutters and spillways
- 02 cement concrete driveway entrances
- 03 pre-cast traffic curb and block traffic curb
- 04 rumble strips
- 05 raised pavement markers
- 06 guideposts
- 07 guardrail
- 08 impact attenuator systems
- 09 permanent signing
- 10 temporary pavement markings
- 11 glare screens
- 12 pavement markings

AO MISCELLANEOUS ITEMS

- 01 chain link fence and wire fence
- 02 monument cases
- 03 cement concrete sidewalks
- 04 riprap
- 05 concrete slope protection
- 06 mailbox support
- 07 rock walls
- 08 gravity block wall
- 09 gabion cribbing
- 10 wire mesh slope protection

AP ILLUMINATION SYSTEMS

- 01 foundations
- 02 conduit
- 03 junction boxes, cable vaults and pull boxes
- 04 wiring
- 05 grounding
- 06 light standards
- 07 luminaires
- 08 sign lighting
- 09 high mast light standards

AQ SIGNAL SYSTEMS

- 01 foundations
- 02 conduit
- 03 junction boxes, cable vaults and pull boxes
- 04 wiring
- 05 grounding
- 06 luminaires
- 07 sign lighting
- 08 signal controllers
- 09 signal heads
- 10 detector loops
- 11 signal standards

AR	ITS SYSTEMS
	01 foundations
	02 conduit
	03 cabinets
	04 junction boxes
	05 cable vaults
	06 pull boxes
	07 conductors, cable
	08 detector loops
	09 communication cable
	10 video detection cable
	11 grounding
FP	FACILITIES PROJECT
	01 facilities
MP	MARINE PROJECT
	01 marine project
	02 terminal construction
RR	RAILROAD PROJECT
	01 rail
	02 ballast
	03 bridge
	04 ties
	05 ditching
	06 culverts

Part 2 - What Created the Need or Caused the Change?

(Only one selection applies) Select the one that best describes what caused the change.

AP *ADMIN PROBLEM

There is a problem with administrative functions that does not relate to the physical work.

BC *BUDGET CONSTRAINTS

Deletion or modification was initiated because the cost of the project was exceeding authorized funding limits.

CC *CHANGED CONDITIONS

Site conditions (other than hazardous materials) differ from design expectations and section 1-04.7 applies.

CE *CONTRACTOR ERROR

Contractor made a mistake in performing the work or caused some damage that needs repair.

DB *DESIGN BUILDER INITIATED CHANGE (DBIC)

Only for use on design build projects – a change proposed by the design-builder that does not fall into another category such as “ms” or “pd”.

EE *CONST ENGR ERROR

A state employee made a mistake that created a need for a repair, modification or cost adjustment.

EV *ENVIRONMENTAL

Initiated to satisfy additional environmental requirements not already covered by the contract.

HZ *HAZARDOUS MATERIAL

A hazardous material encountered during the project not already covered by the contract.

IP VECP

Contractor's value engineering change proposal.

MS *MATERIAL SUBSTITUTION

Contractor proposed a material not already allowed for use in the contract.

NS *NON-SPEC MATERIAL

For Material That Is Out-Of-Spec But Still Acceptable – Usually Involves A Reduced Price Or Credit To WSDOT

PI *PLAN ERROR-INFO.

Plans contain a mistake that resulted from the designer working with insufficient information.

PM	*PLAN ERROR-MISTAKE Plans contain a mistake that, given the information available to the designer, should not have been made.
PD	*PRACTICAL DESIGN A Change Brought About As The Result Of A Practical Design Review Recommendation
SC	*SPEC CONFLICT/AMBIG There is a conflict or ambiguity between specs or between specs and plans.
TP	*THIRD PARTY REQUEST Initiated by any party other than WSDOT or the contractor for example, local or regulatory agencies, private parties.
UC	*UNANTICIPATED COND A situation, different from that assumed during design, but not qualifying under section 1-04.7.

Part 3 - What is the purpose of this Change Order?

(Up to two codes may apply)

AF	*ADMIN CHANGE Affects administrative functions of the contract that do not relate to the actual work. Prev wages, sales tax, insur, etc.
AW	*ADDED WORK For new items of work added within the original scope of the contract.
CO	*CONDITION OF AWARD Modifies the current DBE COA requirements.
CR	*CORRECTION/REPAIR Documents a procedure for correction or repair needed to restore or bring permanent work to contract requirements.
CS	*CLAIM SETTLEMENT Entitlement Was Found For The Contractor In A Claim Situation Per Section 1-09.11(2)
DO	*DELAY COMPENSATION Compensates The Contractor For Delay Damages
DR	*DRB Recommendation Entitlement was found for the contractor by disputes review board.
DS	*DESIGN CHANGE Changes or clarifies the physical design within the scope of the contract. Could be an addition or deletion.

DW	*DELETED WORK Use when deleting contract items of work.
EN	*ENVIRONMENTAL COMPLIANCE Planned method was changed to maintain compliance with existing permit requirements
MO	*QUANTITY VARIATION Changes the price for a contract item which has experienced a quantity variation in excess of 25%.
MR	*MAT'LS SPEC REVISION Changes a materials property specification, accepts non-spec material or allows a materials substitution.
NP	*FEDERAL NON- PARTICIPATION A determination has been made that we will not use federal funds on this item of work.
OC	*OMISSION IN CONTRACT PROVISIONS Initiated to correct an omission in the contract provision
OP	*OMISSION IN THE PLANS Initiated to correct an omission in the plans
OR	*OTHER SPEC REVISION Changes a provision other than materials
RG	*MODIFIES A REGION SPECIFICATION Modifies a region GSP or special provision
RS	*REVISED SCOPE Adds work to or deletes work from the original scope and/or intent of the contract.
SA	*SCHEDULE ADJUSTMENT Changes the duration for all or part of the contract.
SU	*DESIGN SURVEY OR BASE MAP ERROR Initiated to pay for extra costs resulting from contracting agency survey or base map error
UP	*UTILITY PLAN ERRORS Initiated to correct omission or conflict on plans related to utilities
VI	*RESOLVES A TITLE VI ISSUE A contract change required to address a title VI issue (equal employment opportunity, federal training, Americans with disabilities, etc.)
WM	*WORK METHOD CHANGE Changes a specific method required by the contract.

Appendix 1-A.4 Example Change Order Documents

- COA Change Order
 - Subcontractor Concurrence
 - OECR Concurrence
- Change Record
- Deletion Change Order
- Add DRB Change Order
- Minor Change



Change Record

Contract Number	Contract Title	Federal Aid Number
Change Order Number	Change Description Install Conc. Header	Date 02/29/2024
Region	Project Engineer	Phone Number
Prime Contractor / Design-Builder		
<input checked="" type="checkbox"/> Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications or the RFP <input type="checkbox"/> Change proposed by Contractor / Design-Builder		
<p>Brief description of the change order and explanation of why this change order is necessary. (Provide evolution and options considered only if it helps the reader understand why the final decisions were.)</p> <p>This change order directs the Contractor to install a new concrete header between the bridge deck and east bridge approach slab on Bridge 90/75N.</p> <p>Plan Sheet BR5 shows that the existing east approach slab to Bridge No. 90/75N is concrete and the bridge deck surface is concrete overlaid with HMA. The Plans also show that the bridge deck HMA and underlying concrete are flush with one another. While removing the existing approach slab, it was discovered that the bridge deck HMA was not flush with the underlying concrete by about 4". This required the Contractor to fill the 4" wide gap with temporary concrete until a more permanent solution was developed. On April 11, 2023 the Project Engineer contacted the WSDOT Bridge and Structures Office regarding this issue and they recommended removing the existing 4" wide temporary concrete fill and installing a new 10" wide concrete header between the bridge deck and east bridge approach slab on Bridge No. 90/75N. The new concrete header spans the entire width of the Roadway on WB I-90. A new Plan sheet for this Work is shown on Page 4 of this Change Order.</p>		

Contract Number	Contract Title	Change Order Number
<p>Basis for Entitlement to changes in cost and time. Provide (1) contract citation(s) that provides entitlement and (2) project circumstances that meet the requirements of the contract citation.</p> <p>This change order added work to rectify plan errors in both the design of the concrete header and the as-built elevation of the bridge deck HMA relative to the underlying concrete, between the bridge deck and east bridge approach slab. Standard Specifications Section 1-04.4 provides for an equitable adjustment for added work.</p>		
<p>Effect on Condition of Award</p> <p>This change order has no effect on condition of award.</p>		
<p>Basis of changes to cost and time.</p> <p>The lump sum increase in the contract was determined from the actual hours of labor and equipment, and quantities of materials used, as tracked on "Report of Protested Work" sheets/ Inspector Daily Reports. Costs were calculated in accordance with Section 1-09.6 Force Account of the <i>Standard Specifications</i>. See attached estimate for further details. No credit was taken for deleted work because, by installing the temporary concrete header, the Contractor performed as required by the original contract.</p> <p>A Time Impact Analysis indicated that this change did not impact the critical path of the Contractor's CPM schedule updated to the time the added work started.</p>		
<p>Prior Approvals:</p> <ul style="list-style-type: none"> • Peter Venkman, Project Engineer and executing authority for this change order, gave the Contractor approval to proceed with the Work prior to CO execution, on May 19, 2023. • Leo Marvin, Engineering Manager, gave his approval on August 19, 2024. • Joe Dir'te, Assistant State Construction Engineer, gave his approval on August 19, 2024. • Buck Russell, HQ Bridge and Structures Office gave his concurrence to the structural changes on May 23, 2023. 		
<p>List Attachments:</p> <p>Change Order Checklist Cost Estimate Approvals</p>		

Distribution By: **Project Office**
 Copy of Change Records & Change Order w/Backup - Project Engineer
 Copy of ONLY Change Order - Prime Contractor / Design-Builder
 Electronic Copy of Change Records & Change Order w/Backup - State Construction Office
 Original of Change Records & Change Order w/Backup - Region Construction Office

DOT Form 422-002 **Region**
 Revised 04/2023 Original of Change Records & Change Order w/Backup - State Construction Office

WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER

CONTRACT NO:CHANGE ORDER NO:

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The Contractor shall remove the temporary fill concrete between the bridge deck and east bridge approach slab on Bridge No. 90/75N and install a new concrete header at the same location as shown on Page 4 of this Change Order and as further described herein.

MATERIALS

Section 6-02.3(2) of the Standard Specifications is supplemented with the following:

Expansion Joint Header Concrete

Expansion joint header concrete shall have a minimum compressive strength of 4,000 psi at 28 days. Unless the Plans or Special Provisions specify a different strength, the concrete shall achieve minimum compressive strength of 2,500 psi based on early break cylinders prior to allowing traffic to pass across the expansion joint.

Type III cement conforming to Section 9-01.2(1) may be used. The nominal maximum size aggregate shall be 1-1/2 inch.

Section 6-02.3(3) notwithstanding, non-chloride accelerating admixtures conforming to the following specifications may be used: Accelerating Admixture meeting the requirements of Standard Specification Section 9-23.6(4), and Water Reducing/Accelerating Admixture meeting the requirements of Standard Specification Section 9-23.6(6)

MEASUREMENT AND PAYMENT

Measurement will be by lump sum. Payment will be made under the new item "CO#4 Install Conc. Header BR 90/75N", at the agreed lump sum amount of \$30,427.00. This shall be full payment to perform the Work as specified.

CONTRACT TIME

This change order does not affect contract time.



Change Record

Contract Number	Contract Title	Federal Aid Number
Change Order Number	Change Description Subcontractor D COA Substitution	Date April 29, 2024
Region	Project Engineer	Phone Number

Prime Contractor / Design-Builder

Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications or the RFP

Change proposed by Contractor / Design-Builder

Brief description of the change order and explanation of why this change order is necessary. (Provide evolution and options considered only if it helps the reader understand why the final decisions were made.)

This change order terminates Subcontractor D Inc as a DBE Condition of Award (COA) Subcontractor and allows the substitution of DBE Subcontractor B in lieu of D. Subcontractor B will be substituted for Subcontractor B with the same scope of work and commitment amount of \$50,640. The new DBE total commitment amount will remain unchanged, at \$346,940.

The Prime Contractor alerted WSDOT and OECR that Subcontractor D would not be able to perform their DBE participation of work due to a lack of communication with the prime contractor pertaining to required documentation and material approval as specified in the scope of work and the subcontractor agreement. On April 11, 2024, the Contractor sent a Notice of Intent to Terminate to Subcontractor D due to lack of responsiveness to contract requirements. On April 24, 2024, the Project Engineer received an email response from WSDOT Office of Equity and Civil Rights (OECR) concurring with this request. Concurring emails were also received from Subcontractor B and D.

Basis for Entitlement to changes in cost and time. Provide (1) contract citation(s) that provides entitlement and (2) project circumstances that meet the requirements of the contract citation.

This change order does not affect cost or time.

Effect on Condition of Award

The purpose of this change order is to change the Contractor's COA commitments.

Basis of changes to cost and time:

This change order does not affect cost or time.

Approvals

- Buck Russell, OECR, concurred on April 21, 2024
- Peter Venkman, Project Engineer, recommended execution April 22, 2024
- Leo Marvin, Engineering Manager, recommended execution April 23, 2024
- Joe Dir'te, Assistant State Construction Engineer and executing authority, approved April 24, 2024.

List Attachments:

Change Order Checklist
 Concurrence email from OECR
 Contractor email of notice to terminate Company D
 Contractor request to substitute Company B for D
 Concurrence email from Company B
 Concurrence email from Company D

Distribution By:

Project Office

Copy of Change Records & Change Order w/Backup - Project Engineer
 Copy of ONLY Change Order - Prime Contractor / Design-Builder
 Electronic Copy of Change Records & Change Order w/Backup - State Construction Office AND OECR
 Original of Change Records & Change Order w/Backup - Region Construction Office

Region

Original of Change Records & Change Order w/Backup - State Construction Office

WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER

DATE: 04/29/24
PAGE 2 of 3

CONTRACT NO:

CHANGE ORDER NO:

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The Contractor's obligation as listed in the Condition of Award is revised in accordance with page 3 of this change order.

MEASUREMENT AND PAYMENT

This is a no cost change order.

CONTRACT TIME

Contract time is not affected by this change.

CHANGES TO DBE COA									
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Name of DBE COA firm	Project Role	Percent Allocated To COA Goal	Description of Work	Current Subcontracted Amount	Current Commitment Amount	Change to Subcontracted Amount	Change to Commitment Amount	Revised Subcontracted Amount	Revised Commitment Amount
Firm D	Subcontractor	100%	Erosion Control and Roadside Planting	\$0.00	\$0.00	\$50,640.00	\$50,640.00	\$50,640.00	\$50,640.00
			Firm D Subtotal	\$0.00	\$0.00	\$50,640.00	\$50,640.00	\$50,640.00	\$50,640.00
Firm B	Subcontractor	100%	Erosion Control and Roadside Planting	\$50,640.00	\$50,640.00	-\$50,640.00	-\$50,640.00	\$0.00	\$0.00
			Firm B Subtotal	\$50,640.00	\$50,640.00	-\$50,640.00	-\$50,640.00	\$0.00	\$0.00
Total					\$50,640.00		\$0.00		\$50,640.00

Contract Number
Change Order Number
Change Order Page
3 of 3

DOT Form 271-025
 DBE COA Change
 November, 2024



Change Record

Contract Number		Contract Title	Federal Aid Number State Funds
Change Order Number 003		Change Description Firm J SBE Substitution	Date 7/09/2024
Region		Project Engineer	Phone Number
Prime Contractor / Design-Builder			
<input type="checkbox"/> Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications or the RFP <input checked="" type="checkbox"/> Change proposed by Contractor / Design-Builder			
<p>Brief description of the change order and explanation of why this change order is necessary. (Provide evolution and options considered only if it helps the reader understand why the final decisions were made.)</p> <p>This Change Order modifies the SVBE Plan by substituting SBE subcontractor D for SBE subcontractor J. The scope of work and dollar amount of the SBE commitment in the SVBE Plan are the same for Subcontractor D as they were for Subcontractor J.</p> <p>Upon the award letter received from WSDOT on 4/10/24, the Contractor began vetting, reviewing, and beginning the next phases of contracting the selected vendors and subcontractors. Starting with the written and apparent responsive SBE bidders, the Contractor met with SBE Subcontractor J to vet their work history and communicate project expectations. Upon reviewing the full scope and demands of this project, Subcontractor J decided to withdraw their bid on 4/12/24.</p>			
<p>Basis for Entitlement to changes in cost and time. Provide (1) contract citation(s) that provides entitlement and (2) project circumstances that meet the requirements of the contract citation.</p> <p>This change order does not affect cost or time.</p>			
<p>Effect on Condition of Award</p> <p>The purpose of this change order is to change the Contractor's SVBE Plan.</p>			
<p>Basis of changes to cost and time:</p> <p>This change order does not affect cost or time.</p>			
<p>Approvals</p> <p>Dana Barrett, of OECR, concurred with the DBE substitution on 5/2/24. Buck Russell, of HQ Construction, granted change approval on 5/15/24. Peter Venkman, of OR Construction granted change approval on 5/14/24. Leo Marvin, Project Engineer, granted change approval on 5/13/24.</p>			
<p>List Attachments:</p> <p>Change Order Checklist Attachment A - Approvals Attachment B - Contractor's Substitution Request Concurrence email from OECR Concurrence email from Firm J Concurrence email from Firm D</p>			

Distribution

Project Office

- Copy of Change Records & Change Order w/Backup - Project Engineer
- Copy of ONLY Change Order - Prime Contractor / Design-Builder
- Electronic Copy of Change Records & Change Order w/Backup - State Construction Office & OECR
- Original of Change Records & Change Order w/Backup - Region Construction Office

Region

- Original of Change Records & Change Order w/Backup - State Construction Office

DOT Form 422-002

Revised

WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER

DATE:05/08/24
PAGE 2 of 3

CONTRACT NO:	CHANGE ORDER NO: 003
--------------	----------------------

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

The Contractor's commitments in the SVBE Plan are revised as shown on page 3 of 3.

MEASUREMENT AND PAYMENT

This is a no cost change order.

CONTRACT TIME

Contract time is not affected by this change.

Column 0	SVBE COA Change						
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Firm Type	Name of SBE or VOB	Project Role	Bid Item(s)	Description of Work	Current Dollar Amount to be Applied to COA Goal	Change to Dollar Amount to be Applied to COA Goal	Revised Dollar Amount to be Applied to COA Goal
SBE	Firm J	Subcontractor	37, 38, 39	Electrical	\$873,294.00	-\$873,294.00	\$0.00
SBE	Firm J Total				\$873,294.00	-\$873,294.00	\$0.00
SBE	Firm D	Subcontractor	37, 38, 39	Electrical	0	\$873,294.00	\$873,294.00
SBE	Firm D Total				\$0.00	\$873,294.00	\$873,294.00
SBE TOTAL					\$873,294.00	\$0.00	\$873,294.00
VOB	Firm A	Manufacturer/Supplier		Lumber Supplier	\$200,000.00	\$0	\$200,000.00
VOB	Firm A Total				\$200,000.00	\$0	\$200,000.00
VOB TOTAL					\$200,000.00	\$0	\$200,000.00
							Contract xxx
							CO #27
							Page 3 of 3

DOT Form 271-026
 SVBE COA Change
 November, 2024



Change Order- Minor Change

Contract Number	Contract Title	Federal Aid Number
Change Order Number	Change Description	Date 2/09/2024
Region	Project Engineer	Phone Number
Prime Contractor / Design-Builder		

- Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications or the RFP
- Change proposed by Contractor / Design-Builder

The Contract is modified as follows:

The Contractor shall install left turn arrows and restripe the WB SR526 to Airport Rd off-ramp, as shown on sheet 2 of 2 of this change order. The Contractor shall perform all other work necessary to install these turn arrows and do this restriping, including but not limited to removal of existing channelization and traffic control.

Materials

This change order does not affect Contract material requirements.

Measurement

There is no specific unit of measurement for this work in this change order.

Payment

Payment shall be by lump sum in the agreed amount of \$12,000.00 under item 17, Minor Change. This lump sum payment shall be full compensation for all costs, including time-related costs, incurred by the Contractor related to this change order.

Contract Time

One (1) working day is added to Contract Time.

Original Contract Amount	Current Contract Amount	Est. Net Change This C.O. \$12,000.00	Est. Revised Contract Amount
--------------------------	-------------------------	--	------------------------------

Prime Contractor / Design-Builder
 Signature or Method of Concurrence: _____ Date 2/11/24

Project Engineer's Signature for Execution: _____ Date 2/11/24

Distribution: Copy of Change Order Page & Memorandum Page w/Backup - Project Engineer
 Copy of ONLY Change Order Page - Prime Contractor / Design-Builder
 Copy of Change Order Page & Memorandum Page w/o Backup - Region Construction Office
 Original of Change Order Page & Memorandum Page w/Checklist and Approval Documentation - State Construction Office

DOT Form 421-005A

Change Order - Minor Change

Contract Number	Contract Title	Change Order Number								
<p>Brief Description of Problem / Reason for Entitlement:</p> <p>After the crossbeam bolster on the east pier was installed, the WSDOT project inspector noticed that the newly constructed bolster extended close to the inside left-turn-lane of the off-ramp. Since trucks were observed to use this left-turn-lane, there was potential for a left-turning truck to hit the bolster, presenting a safety concern to the project and public.</p> <p>The WSDOT Project Office consulted the Region Traffic Office to evaluate this safety concern because the original contract did not call for any modification to the alignment of the ramp. The Region Traffic Office produced and approved the channelization plan included as part of this change order. After agreeing to the lump sum amount described below and execution of this change order, the Contractor proceeded with the work.</p> <p>Because all work in this change order is added work, the Contractor is entitled to compensation per section 1-04.4 of the <i>Standard Specifications</i>.</p> <p>Dana Barrett, Project Engineer, approved this change on 2/11/24. Louis Tulley, Region Traffic Office approved this change on 11/2/23.</p>										
<p>Justification of Cost and Time</p> <p>A forward-priced, independent engineer's estimate (attached), based on time and materials, came to \$12,000. That estimate includes removal of existing channelization, restriping, turn arrows, all traffic control, and all other costs to do the work. The Contractor agreed to this lump sum amount before the work was performed.</p> <p>The work required by this change order will take one working day to perform. When the Contractor's approved CPM schedule is updated for progress up to the day this work will be performed, it delays the critical path by one working day.</p>										
Calculated By		Date	Checked By		Date					
Inspector		Date	Work Started		Work Completed					
Item No.	Item	Group	Date	Unit	Quantity	RAM/QPL	Ledger no.	Post	Ckd	Est. No.
	Minor Change	1	4/2/24	LS	12,000.00	N/A				

Distribution: Copy of Change Order Page & Memorandum Page w/Backup - Project Engineer
 Copy of ONLY Change Order Page - Prime Contractor / Design-Builder
 Copy of Change Order Page & Memorandum Page w/o Backup - Region Construction Office
 Original of Change Order Page & Memorandum Page w/Checklist and Approval Documentation - State Construction Office

