

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
OFFICE ENGINEER



Specification Style Guide

2010

Updated April 2012



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CHANGE DIGEST

Changes to the *Specification Style Guide* are summarized in the following table. Digest entries will be deleted after 6 months.

Version	Section	Change
June 2011	2	Added exception for index entries.
	9 and 10	Moved deduction clause from section 10 to section 9
	11	Clarified the use of the clause that specifies that a section must comply with another section.
	29	Added a note to point out the context of the example.
	32-1	Added "No TOC" to references to Headings 1–3.
	Appendix 2	Replaced template guide.
	Appendix 3	Deleted styles deleted from template.
November 2011	Title page	Change title to <i>Specification Style Guide</i> .
	1	Added guidance on building-construction specifications.
	8	Expounded upon use of "as ordered by the Engineer."
	9	Deleted "any" from clause for shop drawings signed by a register civil engineer.
	12	Deleted Web site for the <i>Universal Citation Guide</i> .
	30	Added guidance on tables in instructions.
	31	Changed combined examples to add a Normal space between revisions. Added a canceled-SSP example. Revised Nssp guidance to eliminate the ".50" numbering.
	33	Moved Format from appendix 3 to section 33. Added new styles.
	Appendix 2	Added a template guide for a level-2 SSP
	Appendix 3	Converted previous appendix 2 to a template guide for a level-2 RSS.
	Appendix 4	Moved 3-column conversion to appendix 5. Changed appendix 4 to guidance for building-construction specifications.
	Appendix 5	Created appendix for 2010 background. 3-column conversion and minimum SSP requirements are in this appendix.
January 2012	31	Added guidance for a revision to a RSS. Deleted the space above the table in the RSS example.
	Appendix 2	Added a space above the introduction in the specification template guide.
April 2012	33	Corrected location of template guides. Added guidance for use of the RSS template guide. Added document saving view, size, and styles shown.
	Appendix 4	Corrected name of macro.

1 GENERAL

This guide provides instructions for specification writers contributing to the Department of Transportation's construction specifications.

Section 1 of this guide applies to all specification sections. Sections 2 through 33 and appendixes 1, 2, 3, and 5 of this guide apply to all specification sections except section 99. Appendix 4 applies to section 99 specifications.

This guide is based on information from several sources, including the *Federal Register's* writing guidelines, *The Chicago Manual of Style* (CMOS), Construction Specifications Institute (CSI), *AASHTO Guide Specifications for Highway Construction*, and the highway construction specifications of other states. These sources may be shown in parenthesis for your information.

The examples in this guide are models for style, not actual specifications.

Interpret each rule as if followed by *unless context and common sense dictate otherwise*. Do not follow a rule if clarity is reduced.

2 REFERENCE FOR GRAMMAR, USAGE, CAPITALIZATION, AND PUNCTUATION

For guidance not covered in this guide, follow the guidance provided in the 15th edition of CMOS for grammar, usage, capitalization, and punctuation. CMOS's Web site has answers to many grammar, usage, capitalization, and punctuation questions. The *Specification Style Guide* provides rules:

1. From CMOS that are not used in everyday writing.
2. Not covered in CMOS.
3. Contrary to the rules in CMOS (only a few of these). For the contrary rules, follow the rules in this guide.

Where the CMOS allows optional styles, choose the traditional style.

Exception: For index entries, use the format of the 2006 *Standard Specifications*.

3 FEDERAL REGISTER'S WRITING GUIDE

Follow the principles in the *Federal Register's* Principles of Clear Writing, duplicated in part in this section. For additional explanations, go to:

<http://www.archives.gov/federal-register/write/legal-docs/clear-writing.html>

Bracketed text is text not in the *Federal Register's* Principles of Clear Writing. The following rule numbers correspond with the rule numbers in the *Federal Register's* guide.

1. Write in the active voice.

The passive voice is appropriate when the actor is unknown, unimportant, or obvious.

2. Use action verbs.

Don't say	Say
is applicable to	applies to
make payment	pay
give recognition to	recognize
is concerned with	concerns

3. Use *must* instead of *shall*.

shall	imposes an obligation to act, but may be confused with prediction of future action
will	predicts future action
must	imposes obligation, indicates a necessity to act
should	infers obligation, but not absolute necessity
may	indicates discretion to act

4. Be direct.

Talk directly to your readers. [In the Department's specifications, talk to the Contractor.] Use the imperative mood. [Also, use *you* and *your*.]

This style results in [specifications] that are shorter, crisper, and easier to understand.

5. Use the present tense.

A [specification] speaks as of the time you apply it, not as of the time you draft it.

6. Write positively.

If you can accurately express an idea either positively or negatively, express it positively. It's better to express even a negative in positive form.

Don't say		Say
did not comply with	failed to comply with	violated

[Example: If you violate Pub Cont Code § 4100 et seq., the Department may exercise the remedies provided under Pub Cont Code § 4110.]

7. Avoid use of exceptions.

If possible, state a rule or category directly rather than describing that rule or category by stating its exceptions.

Don't say	Say
All persons except those 18 years or older must . . .	Each person under 18 years of age must . . .

[Use *section <section no.> applies to <x>* or *<Requirement description> applies to <x>* or introduce a requirement with *For <x>*.]

However, you may use an exception if it avoids a long and cumbersome list or elaborate description.

[If a specification has exceptions, do not use general phrases such as *except as otherwise specified* or *except as otherwise shown*. Instead, specify the particular items to which the specification does not apply.]

8. Avoid split infinitives.

The split infinitive offends many readers, so avoid it if you can.

Don't say	Say
Be sure to promptly reply to the invitation.	Be sure to reply promptly to the invitation. or Be sure to reply to the invitation promptly .

9. Use the singular noun rather than the plural noun.

To the extent your meaning allows, use a singular noun instead of a plural noun. You will avoid the problem of whether the rule applies separately to each member of a class or jointly to the class as a whole.

Don't say	Say
The guard will issue security badges to the employees who work in Building D and Building E.	The guard will issue a security badge to each employee who works in Building D and each employee who works in Building E.

[Exceptions:

1. Use plural nouns for headings and titles except existing ones.
2. If an existing bid item description is plural, use the plural form.]

10. Be consistent.

Don't use different words to denote the same thing. Don't use the same word to denote different things.

Don't say	Say
Each motor vehicle owner must register his or her car with the Automobile Division of the Metropolitan Police Department.	Each automobile owner must register his or her automobile with the Automobile Division of the Metropolitan Police Department.
The tank had a 200-gallon tank for fuel.	The tank had a 200-gallon fuel container.

11. Use parallel structure.

Arrange sentences so that parallel ideas look parallel. This is important when you use a list.

[The following example is from the *Federal Register's* writing guide except that the format of the lists has been changed to comply with the format described in this guide.]

Nonparallel construction:

The duties of the Executive Secretary of the Administrative Committee are:

1. To take minutes of all the meetings
2. The Executive Secretary answers all the correspondence
3. Writing of monthly reports

Parallel construction:

The duties of the Executive Secretary of the Administrative Committee are to:

1. Take minutes of all the meetings
2. Answer all the correspondence
3. Write the monthly reports

12. Prefer simple words.

[See "Preferred Expressions" of this guide and plain language Web sites such as www.plainlanguage.gov and www.plainlanguagenetwork.org.]

13. Omit needless words.

Don't say	Say
because of the fact that	because
for the period of	for
[highway right-of-way]	[highway]
[including, but not limited to]	[including]

14. Avoid redundancies.

Don't use word pairs, if the words have the same effect or where the meaning of one included the other.

Examples: Word pairs to avoid

any and all	full and complete
authorize and direct	order and direct
cease and desist	means and includes
each and every	necessary and desirable

15. Use concrete words.

Abstract words can be vague and open to different interpretations. [Use] simple, concrete words. [Be specific.]

Don't say	If you mean
vehicles	automobiles
firearms	rifles
aircraft	helicopters

16. Don't use words that antagonize.

[Not applicable to specification writing.]

17. Avoid noun sandwiches.

Administrative writing uses too many noun clusters — groups of nouns "sandwiched" together. Avoid these confusing constructions by using more prepositions.

Don't say	Say	[Or]
Underground mine worker safety protection procedures development	Development of underground procedures for the protection of the safety of mine workers	[Development of safety procedures for protecting workers underground.]

Which meaning is intended becomes clearer when this four-word sandwich is broken up.

18. Don't use gender-specific terminology.

[Exception: You may use gender-specific terminology if required to match industry-standard terminology or the law.]

19. Write short sentences.

20. Make lists clear and logical in structure.

[List by work sequence or most important to least important. If no logic, list alphabetically. Display a list of ±3 items in a vertical list.]

21. Use short paragraphs.

A writer may improve the clarity of a [specification] by using short, compact paragraphs. Each paragraph should deal with a single, unified topic. Lengthy, complex, or technical discussions should be presented in a series of related paragraphs.

4 BREVITY

Be as brief as possible without reducing clarity.

Avoid prepositions. But do not eliminate prepositions if noun sandwiches or nonparallel clauses or phrases are created as a result.

Don't say	Say
authority of the Engineer	Engineer's authority
drawings for falsework	falsework drawings

Use elliptical clauses.

Don't say	Say
For excusable delays that are not caused by weather, the Department pays your added costs.	For excusable delays not caused by weather, the Department pays your added costs.
If the Engineer determines that a claim is without merit, you may pursue the administrative claim procedure . . .	If the Engineer determines a claim is without merit, you may pursue the administrative claim procedure . . .

Avoid unnecessary qualifiers. Examples:

- actual
- all (except to differentiate between partial and whole quantities)
- any (except to specify a choice)
- existing (with remove, reconstruct, salvage, abandon, or obliterate)

Avoid *respective* and *respectively*.

Don't say	Say
Forms are listed under the names of their respective sections.	Forms are listed under the names of their corresponding sections.
The hat and the scarf must be blue and green, respectively.	The hat must be blue. The scarf must be green.

5 INDUSTRY STANDARD

Use terms in prevalent use by other states and the construction industry. Do not use terms unique to the Department. Use of a unique term requires concurrence by the specification owner, Construction, and Legal.

Use the following preferred expressions for consistency:

Preferred Expressions

Use	Do not use synonyms
adjacent	next ^b
after ^a	subsequent to
after June 30 ^a	on or after July 1
before ^a	prior to
before July 1 ^a	no later than June 30
change	alter modify revise
complete	finish
end	terminate
enough ^a	adequate number of sufficient number of
except	excluding
for ^a	in the interest of with reference to
how ^a	the manner in which
if (except use <i>when</i> in reference to time and <i>where</i> in reference to location)	when in case ^a where in the event that ^a subject to
instead of ^a	in lieu of
is	considers (meaning <i>deems</i>) deems
limits	parameters
on	upon (except use <i>upon</i> to introduce an event or condition)
possible	feasible
to	in order to
use ^a	utilize employ
way ^a	manner
when ^a	at the time
while ^a	during such time as

^aFrom Appendix B -- Preferred Expressions of the *Federal Register's* Drafting Legal Documents

^bReduced variation over simpler word

If choosing a word not in this list, balance the following:

1. Use the most basic word.
2. If the most basic word has many definitions and if those definitions can cause confusion (i.e., definition is not obvious by context), use a more precise word.
3. Use industry-standard words.
4. If a law is referenced, use the words in the law (only the core words, not the legalese).

7 TERMS FOR ALTERATION AND REPAIR OF HIGHWAY FACILITIES

To	Write
Remove and dispose of	Remove
Render unserviceable, in place, by doing some kind of work	Abandon
Remove, clean, and haul to a specified location.	Salvage
Remove and install or place at same station location. May be moved laterally only. No alteration required.	Reset
Remove and install or place in a new location. No alteration required.	Relocate
Remove and disassemble and construct again at an existing or new location. New parts or alteration may or may not be required.	Reconstruct
Raise or lower a facility to match a new grade line. Generally associated with raising frames and grates or frames and covers of facilities on resurfacing projects. May require some removal. Includes raising or lowering of frames and covers or frames and grates of concrete or brick manholes or circular precast concrete pipe structures by adding or subtracting raising devices only. Any changes to taper of manhole or steps is "remodel."	Adjust
A change that does not affect the basic framework or structure with only an addition or subtraction to an appurtenant part. May require some removal. Includes raising or lowering frame and covers or frame and grate of drainage inlets by removing concrete or adding concrete.	Modify
Rebuild facility in same location. May require some removal.	Remodel
Remove and lay in an existing or new location. Generally used for pipes or culverts and appurtenances.	Relay

NOTE: The terms and definitions in this table are from the *RTL Guide*.

8 SPECIFICATION DUPLICATION

Do not include specifications covered by other specifications. Examples:

No need for	Reason
as shown on the plans; as specified in the special provisions at the option of the Contractor	These are part of the Contract. From the <i>Standard Specifications</i> : "Where the means and methods to complete the work are not described in the Contract, choose the means and methods to complete the work." (If you specify a minimum or maximum value, it is the Contractor's choice to use anything greater or less. The addition of <i>as authorized by the Engineer</i> creates an ambiguous specification.)
Authorization of the <item needing authorization> is contingent on the <item needing authorization> being satisfactory to the railroad company involved.	The contract is between the Department and the Contractor. Third-party contingencies are irrelevant to the Contract.
by the Engineer (for orders, authorizations, and requests to the Contractor)	Section 1 of the <i>Standard Specifications</i> specifies that orders, authorizations, and requests to the Contractor are by the Engineer
to the Engineer (for submittals and requests from the Contractor)	Section 1 of the <i>Standard Specifications</i> tells the Contractor to submit documents and direct questions to the Engineer.
in writing (for Department approvals, authorizations, decisions, notifications, orders, and responses and for Contractor assignments, notifications, proposals, reports, requests, subcontracts, and test results)	Section 1 of the <i>Standard Specifications</i> specifies that these items are in writing.
Driving equipment that damages piling shall not be used; provided driving does not injure the posts; and similar "do not use methods or equipment that damage the work" clauses.	covered by Maintenance and Protection and Payment Scope in sections 5 and 9 of the <i>Standard Specifications</i>

Prior to closing a roadway to traffic to accommodate bridge removal operations, the Contractor shall have all necessary workers, materials, and equipment at the site as needed to proceed with the removal work in an expeditious manner. While the roadway is closed to public traffic, work shall be pursued promptly and without interruption until the roadway is reopened to public traffic.	covered by Public Convenience in Section 7 of the <i>Standard Specifications</i>
satisfactory to the Engineer, as determined by the Engineer, and similar phrases and clauses	covered by Engineer's Authority in section 5 of the <i>Standard Specifications</i>
specifying what happens if the Department fails to do something within a specified time	covered by delay definitions and delay specifications in sections 1 and 8 of the <i>Standard Specifications</i>
unless otherwise permitted by the Engineer ^a on approval of the Engineer ^b if authorized by the Engineer ^c as ordered by the Engineer ^d as directed by the Engineer ^e	Ambiguous. Section 4 of the <i>Standard Specifications</i> covers how changes are made.
The Department's review and approval shall not waive any contract requirements and shall not relieve the Contractor from complying with federal, State and local laws, regulations, and requirements.	Section 5 of the <i>Standard Specifications</i> : "The Department's authorization of a submittal does not void any Contract part."
<Work description> includes furnishing materials.	Section 5 of the <i>Standard Specifications</i> : "Furnish the resources, except Department-furnished materials, required to complete the work under the Contract."

^{a-e}Avoid these altogether. They are ambiguous. Contractors will include the risk in the cost. Also see *by the Engineer* above.

^aSee *allow* vs. *permit* in section 6. If you use a similar phrase, be specific in what is otherwise allowed.

^bSee *authorize* vs. *approve* in section 6.

^cIf you use *if authorized*, be specific in what is authorized.

^dUse this only for change order work because *as is* is too ambiguous to bid. A bidder does not know how the Engineer may order him to do something. For situations such as color or location determinations or other factors not involving costs to the Contractor, say, "The Engineer determines the exact color," or "The Engineer determines the exact location," or similar.

^eSee *order* vs. *direct* in section 6. Also see note d above.

9 COMMON CLAUSES AND PHRASES

Use these common clauses and phrases.

To	Write
describe work to be paid for by force account or agreed price ^a	<Work description> is change order work.
say the Department does not pay for something (Do not use for optional use of materials or equipment or for samples. See Payment Scope of the <i>Standard Specifications</i> for what the Department pays for.)	The Department does not pay for < >. The Department does not adjust payment for < >. [Do not use <i>at no additional cost to the Department</i> or <i>at the Contractor's expense</i> .]
charge the Contractor for something	<These charges; the cost of this work; the cost of <modifier> work> is deducted.
say one specification does not relieve the Contractor of the responsibilities in another specification	< > does not void < >.
direct the Contractor to dispose of materials	Dispose of <the material>.
direct the Contractor to submit a certificate of compliance	Submit a certificate of compliance for <material>.

submit documents to someone other than the Engineer	Submit <document> to <location>. Notify the Engineer of the submittal. Include in the notification the date and contents of the submittal.
submit an informational submittal not specified as an informational submittal in section 5	Submit <document> as an informational submittal.
submit shop drawings to OSD, Documents Unit ^b	Submit shop drawings to OSD, Documents Unit. Notify the Engineer of the submittal. Include in the notification the date and contents of the submittal.
submit shop drawings to the Engineer signed by a registered civil engineer ^b	Shop drawings and supplemental calculations must be sealed and signed by an engineer who is registered as a civil engineer in the State.
submit shop drawings signed by a registered mechanical or electrical engineer to the Engineer ^b	Submit shop drawings sealed and signed by an engineer registered as a(n) < > engineer in the State.
submit shop drawings signed by a registered mechanical or electrical to someone other than the Engineer ^b	Submit shop drawings sealed and signed by an engineer registered as a[n] < > engineer in the State to <location>. Notify the Engineer of the submittal. Include in the notification the date and contents of the submittal.

^aFrom *Means Illustrated Construction Dictionary*.

extra work: Any work, desired or performed, but not included in the original contract.

force account: Work ordered on a construction project without an existing agreement on its cost, and performed with the understanding that the contractor will bill the owner according to the cost of labor, materials, and equipment, plus a certain percentage for overhead and profit.

^bCombine and modify as necessary.

10 PAYMENT CLAUSES

Section 9 of the *Standard Specifications* refers to the Bid Item List for bid items and measurement units.

Sections 1–9

To	Write
describe measurement for payment	The Engineer measures <how the Engineer measures>.
describe payment	The Department pays for <what the Department pays for>.
charge the Contractor for something	The Department deducts <these charges; the cost of this work; the cost of <modifier> work>.

Sections other than Sections 1–9

To	Write
describe measurement for payment	<Bid item> is measured <description of measuring basis (e.g., from end to end, along the centerline)>.
describe measurement for one item in the same manner as another	<Bid item> is measured as specified for <item mimicked>.
pay for one item as another (aka transfer pay clause)	<Item> is paid for as <bid item>.
include payment for one item in another (aka full payment clause) ^a	Payment for <item to be included> is included in the payment for <bid item>.
specify that the unit price will not be adjusted for a quantity increase or decrease	The Department does not adjust the unit price for an increase or decrease in the <bid item> quantity.

NOTE: Passive voice is appropriate because section 9 defines who measures and pays.

^aRarely used.

Use the bid item term in payment clauses. (In headings and clauses other than payment clauses, use standard English for the placement of modifiers—i.e., modifiers before the noun.)

11 REFERENCES

To specify	Use	Example
A section must comply with a another section	Comply with section <section no.>. ^a	Comply with section 52.
An item must comply with a specification	<Item> must comply with <section <section no.>, ASTM, etc.>. ^b	High-strength bolted connections must comply with section 55-3.14. Calcium chloride must comply with ASTM D 98.
An item must comply with a specific part of a specification	<Item> must comply with the <material> specifications <for <referenced item>> in<section no., ASTM, etc.>. ^b	Anchorage devices must comply with the specifications for concrete anchorage devices in section 75-1.03. Corrugated aluminum pipe inlets must comply with the material specifications in section 70-1.02A.
Work must be performed following a specification or a law	<Furnish, handle, place, test> under <section <section no.>, ASTM, law, etc.>. ^b	Handle rock core samples under ASTM D 5079.
A reference to a Web site	For <Item>, go to: <Web address> Submit <item> with <form name>. For the form, go to: <Web address> For <item>, go to <Web site owner> Web site. (Do not add <i>Electronic copies of</i> to the name of the item. Except in sections 1–9, do not specify Web site addresses in the <i>Standard Specifications</i> . Use Indent 1 Hanging for the address line. Do not add a space before or after the address. Provide only base addresses.)	For a current list of debarred contractors, go to: http://www.dir.ca.gov Submit your request on a <i>Request for Contractor Staking</i> form. For the form, go to: http://cef.dot.ca.gov For a detailed map, go to the Department's Pavement Web site.

^aDo not use as the 1st clause of a section. If a reference such as this is needed as the 1st clause, add "For <topic>," "<Topic> must" or similar to the beginning of the clause

^bIf the referenced specification is a particular section of a specification incorporated by reference, add the section title: <section <section no.>, chapter <chapter no.>, etc.>, "<title of section, chapter, etc.>."

Do not use *attention is directed to* or similar phrases; use direct references for required references.

Do not use *in this section, specified herein*, or similar phrases. Be specific and provide section number.

Use spacing as specified by the referenced organization. For an AASHTO reference, add a space between the letter designation and the number. For an ASTM reference, you may add a space between the letter designation and the number. For a federal or military specification, do not add the letter or number-letter combination that indicates the version. Examples:

AASHTO M 314

MIL-P-236

FED-STD-595

ASTM A 706/A 706M or ASTM A706/A706M

Federal Specification TT-S-230

For referencing the use categories and commodity specifications in AWPA U1 use the following format:

AWPA U1, Use Category UC4B, Commodity Specification A

Use commas to separate types, classes, grades, and similar descriptions specified after referenced standards (CSI). Examples:

Comply with ASTM A 276, Type 316, for a project in a freeze-thaw region.

Double extra strong steel pipe must comply with ASTM A 53/A 53M, Grade B.

Use standard English for descriptions specified before the standard. Example:

The finish coat must match color no. 26373 of FED-STD-595.

Refer to forms by form names. Do not include form numbers.

12 LAW CITATION

Include a law if the law:

1. States that it must be stipulated in the Contract.
2. Provides options and the Department has chosen to specify one of the options.
3. Provides rules but does not designate the responsibilities of each party.
4. Designates responsibilities to the Department, and the Department requires the Contractor to act such that the Department is in compliance with the law.
5. Is not widely known in the construction industry. Provide only enough information to alert the bidders to the basic requirements to be met. (Do not cite laws that may be imposed on contractors by other agencies for the purpose of running a business, having employees, owning vehicles, and protecting the public. Contractors are expected to know these laws.)
6. Involves a penalty collected by the Department.

If a references is not required and is added only as an aid, make it parenthetical. Example: The Contractor must be properly licensed at the time the contract is awarded (Pub Cont Code § 10164).

If a law must be included in the Contract, use exact words only if required by the law.

Use the citation format described in the *Universal Citation Guide*.

Exceptions to *Universal Citation Guide* format:

1. Do not include the name of the act unless it is needed for clarity.
2. Do not include *CA* because the *Standard Specifications* specifies that a referenced law is a CA law unless specified as a federal law (exception: CA Code of Regs).
3. Do not italicize.
4. Do not include the date.

General Law Citation Abbreviations

Amendment	Amend
Article	Art
Chapter	Ch
Clause	Cl
Paragraph	Para
Part	Pt
Section	§
Volume	Vol

Federal Law Abbreviations

United States Code	USC
Code of Federal Regulations	CFR

CA Statute and Regulation Abbreviations

Business and Professions	Bus & Prof Code
Civil	Civ Code
Civil Procedure	Civ Pro Code
Commercial Corporations	Com Code
Financial	Corp Code
Fish and game	Fin Code
Food and Agricultural Government	Fish & Game Code
Harbors and Navigation	Food & Agri Code
Health and Safety	Govt Code
Insurance	Harb & Nav Code
Labor	Health & Safety Code
	Ins Code
	Labor Code
Military and Veterans	Mil & Vet Code
Public Contract	Pub Cont Code
Public Resources	Pub Res Code
Public Utilities	Pub Util Code
Streets and Highways	St & Hwy Code
Vehicle	Veh Code
CA Code of Regulations	CA Code of Regs

Other abbreviations can be found in appendix C of the *Universal Citation Guide*.

For a CFR, do not include the section symbol.

Examples:

Reference	Citation meaning
The purpose of this form is to collect data required under 49 CFR 26.	Title 49 of the Code of Federal Regulations, Part 26
Under 49 CFR 26.13(b)	Title 49 of the Code of Federal Regulations, Section 26.13(b)
29 USC § 201 et seq. applies to this Contract.	Title 29 of the United States Code, Section 201 and the following
The Department makes the partial payments under Pub Cont Code § 10264.	California Public Contract Code, Section 10264

13 PUNCTUATION AND TYPOGRAPHY

13-1 CAPITALIZATION

Capitalize the following terms where used as defined in the *Standard Specifications*:

Bid Item List	Contractor	Information Handout
California Test	Department	State
Certified Industrial Hygienist	Director	Structure Design
Contract	Engineer	

Capitalize the following terms:

Authorized Facility Audit List	Authorized Material Source List
Authorized Laboratory List	State Specification
Authorized Material List	

Capitalize *the Bidder*. Do not capitalize *a bidder*.

Capitalize the following terms where used with a number or letter:

Type	Class	Grade
------	-------	-------

Capitalize each main word of a form name.

Capitalize *District* where used with a number.

Use ALL CAPS for 1st- and 2nd-level headings.

13-2 COMMAS

Use the serial comma (CMOS 6.19).

Use only technically necessary commas; do not use a comma just to indicate a pause.

13-3 EMPHASIS

Use bold type only for table titles, headings, and definitions.

Do not use bold, caps, underlining, quotation marks, or italics for emphasis.

13-4 FONT

Use Arial 10 point.

For a punctuation mark between roman and italic text, use the font of the main or surrounding text (CMOS 6.3).

13-5 HYPHENS

Do not use nonbreaking hyphens. (This rule simplifies term searches.)

13-6 PARENTHESES

Use parentheses for only:

1. Law citation references
2. Abbreviations

Do not enclose in parentheses information essential to the specification. For example, do not use parentheses as shown in the following sentence:

Training is allowed in lower-level-management positions (such as office engineers, estimators, and timekeepers) if the training is oriented toward construction applications.

13-7 QUOTATION MARKS

Use straight quotation marks (because they are built into the Normal template).

Where a word or term is not used functionally but is referred to as the word or term itself, enclose it in quotation marks.

13-8 SPACES

Use 1 space after each period and colon (CMOS 2.12).

Use 2 spaces between a heading number and name.

Do not use nonbreaking spaces. (This rule simplifies term searches.)

14 ABBREVIATIONS

Use an abbreviation if it is either of the following:

1. Shown in either of the following:
 - 1.1. Section 1 of the *Standard Specifications*
 - 1.2. Collegiate dictionary
2. More familiar to the reader than its spelled-out form

Exceptions:

1. Do not use an abbreviation with a superscript.
2. Do not use *min* except in tables
3. If in doubt about the familiarity of the abbreviation to the reader, define the abbreviation.

Except as previously provided, avoid abbreviations (CSI); however, you may use an abbreviation if the abbreviation is in a referenced standard.

You may use a Department-unique abbreviation only if it is used 3 or more times; but do not use an abbreviation if only a few letters are eliminated. For example, QC is defined, and only 6 letters are eliminated by using QCM instead of QC manager; therefore, do not use QCM.

Avoid using an abbreviation in a heading.

Use abbreviations in tables where practical.

In the *Standard Specifications*, define Department-unique abbreviations in section 1.

In a special provision, define an abbreviation at its 1st occurrence (CMOS 15.2).

15 DEFINITIONS

Define a term:

1. Not industry standard

19 EQUATIONS

Introduce an equation as you would a list.

Use the letter *x* for a multiplication sign.

Use a slash for a division sign.

Use a space before and a space after a mathematical sign except a division sign.

Avoid the use of sub- and superscript fonts.

You may use a simple equation within text. You may use words to write a simple equation. Use sum, difference, product, and quotient instead of using mathematical operators.

Display more complicated equations on a separate line clear of text.

Italicize variables.

Introduce the variables with *where* followed by a colon.

Define the variables.

Use Indent 1 Hanging style.

Example:

Use the following equation to calculate the air-dry weight:

$$W = (A \times 62.3)/(B - C)$$

where:

W = air-dry weight, lb/cu ft

A = 90-day weight of the cylinder as dried, lb

B = saturated, surface-dry weight of cylinder, lb

C = suspended-immersed weight of cylinder, lb

Avoid using Microsoft Word's Equation Editor. If you must use Equation Editor, perform the command *Unlink Fields* to convert the equation into text format.

20 CHEMICALS

Use chemical names; avoid using chemical formulas.

21 FRACTIONS

Do not use super- and subscript fonts (1-1/2, not 1^{1/2}) (CSI).

22 MEASUREMENTS

Use an abbreviation instead of a word where used with a number. Exceptions (CSI):

1. Spell out *feet* where *inches* are not used (8 feet).
2. Spell out *inches* where *feet* are not used (8 inches).
3. Where *feet* and *inches* are both used, use symbols (8'-8" or 8'-2-1/2").
4. Spell out time measurements (year, hour).

Exception: You may use ft for foot or feet and in for inch or inches in nonheading table cells.

Use a space between a number and an abbreviation (CMOS 7.90).

Use a hyphen between a number and an unabbreviated measurement unit if the unit is an adjective before a noun. Use a space if the unit is after a noun.

Use a hyphen between combination measurements (8'-2") (CSI).

Don't say	Say
80 degrees F to 90 degrees F	from 80 to 90 degrees F

In tables, indicate a range by using an en dash.

27 SLOPES

Show slopes like this: 2:1 (horizontal:vertical)

28 TOLERANCES

For tolerances, add a space on each side of \pm (CMOS 14.58).

Example: 4.2 \pm 0.1 inches

29 LISTS

Avoid using *the following* in the introduction to an inclusive list.

Example:

Don't say	Say
Miscellaneous metal consists of the following:	Miscellaneous metal consists of:

Capitalize the first word of each item in a list.

Use a period at the end of each item in a list if an item is a complete sentence.

All items in a list apply unless the items are specified as choices (section 1 of the *Standard Specifications*); therefore, if the list is not inclusive add *one of the following*, *either of the following*, *any of the following*, or other phrase that specifies how the items apply.

Avoid beginning items in a list with articles; avoid ending the introduction to a list with an article. Although they may be needed to make a grammatically correct statement, *a*, *an*, and *the* are often not needed in lists. Lists with or without the articles provide the same information, but the lists are crisper without the articles.

Don't say		Say	
Bring:	Bring a:	Bring:	
1. A pen	1. Pen	1. Pen	
2. A pencil	2. Pencil	2. Pencil	
3. A calculator	3. Calculator	3. Calculator	

NOTE: This example is only an example of the use of articles in lists, not an example of how to introduce a list. Do not use a short introduction such as the introduction in this example.

Space and number lists as shown in the following example:

Specification writing requires:

1. Familiarity with:
 - 1.1. Material properties
 - 1.2. Construction procedures
2. Knowledge of contract law
3. Proficiency in English because using words incorrectly:
 - 3.1. Creates confusion
 - 3.2. Costs time and money
 - 3.3. Reflects poorly on the Department
4. Mastery of punctuation

Add a line space after the list.

30 TABLES

Display tabular work as shown the table titled "Table Parts." If you are referring to a table from somewhere other than the introduction, refer to it by its title; e.g., shown in the table titled "Table Parts."

Table Parts^a

Column heading	Column heading	Column heading	
		Column subheading	Column subheading
Row heading ^b Subheading	This entry is an overrun entry.		
Row heading			--

NOTE: A general note applies to the table as a whole.

^aOptional. Use *Table (Centered) + Bold*. Add a table number to the table title if it clarifies references and refer to the table number instead of the title: Table 1 Table Parts.

^bUse alphabetic superscripts to reference notes to specific table elements.

Use 1/2 point gridlines between cells.

Make the table no wider than the paragraph width. Horizontally center the table on the page.

Center 2 hyphens in a cell with no data.

Add a line space before and after the table. If the style of the text before the table is *Normal*, do not add a space because a space after the paragraph is built into the style *Normal*.

Do not use the style *Instructions* for tables in instructions. Instead, use table styles, then change the text to bold and hidden, then shade to Clear (Gray-15%).

31 RSSs AND SSPs

For the file name of an SSP, begin with the section number of the section of the *Standard Specifications* being revised and add an underscore, a letter category (A for approved; D for draft; T for tentative; C for canceled), and a date (3-1.04_A12-31-10). Use the same naming convention for an RSS except add *RSS_* before the section number (RSS_3-1.04_A12-31-10).

An RSS coordinator combines RSSs in the "Revised Standard Specifications." An RSS is placed under a heading matching the title of the section of the *Standard Specifications* being revised and such that the section numbers are in numerical order.

SSPs have 2 formats, combined and individual, depending on the number, length, and complexity of the SSPs revising a main section of the *Standard Specifications*. An individual SSP is an SSP with 1 introduction (add/replace/delete) to 1 section. A combined SSP is an SSP with multiple introductions. For a combined SSP, use the base section number. For example, if the SSP includes revisions to sections 26-1.02A, 26-2.02B, 26-1.02C, use 26-1.02 for the SSP number.

An SSP assembler places individual SSPs in a special provision template that contains all of the main section headings.

An SSP looks the same as an RSS except that the SSP includes instructions. The SSP instructions are highlighted in gray. The final contract documents include any text not highlighted and not in the header. In a final contract document, the special provisions looks the same as the revised standard specifications.

Start an SSP with instructions for the SSP. Begin the instructions with *Section <section no.>*, a period, and a space. Include instructions that indicate when the SSP is to be used. Do not include design guidance. Do not use *for a project* or similar wording. For example, say "Use for a bridge deck drainage system," not "Use for a project with a bridge deck drainage system." Add an instruction for a range of paragraphs or an instruction for the 1st paragraph if either is needed. Add one of the introductions shown in the following table. Follow the examples for the placement of these items. Add the revision. Precede a paragraph with a paragraph instruction if needed. If paragraph instructions are included, number the paragraphs as shown in the examples.

Start an RSS with one of the following introductions:

RSS and SSP Introductions

To	Write
Add text to an existing section	Add to section <section no>:
Delete a section	Delete section <section no.>.
Delete a paragraph	Delete the <ordinal number of paragraph> paragraph of section <section no.>.
Replace standard specification section	Replace section <section no.> with:
Replace a paragraph within a section	Replace <ordinal number of paragraph> paragraph of section <section no.> with:

NOTES:

Use the style *Heading 1 No TOC* for the introduction.

Interpolate guidance to cover your revision.

These introductions are needed to avoid discrepancies. From section 5 of the *Standard Specifications*: "A component in one Contract document applies as if appearing in each." Do not rely on governing ranking of contract parts to sort out conflicting clauses.

Minimize revisions. If 1 sentence in a multiple-sentence paragraph is being revised, revise only the 1 sentence. If multiple sentences are being revised, revise either the individual sentences or the whole paragraph depending on the number of revisions and sentence and paragraph structure.

For an SSP that revises a section to which paragraphs were added by either an addition RSS or replacement RSS, refer to the paragraph number in the RSS. Example:

Replace the 3rd sentence in the 2nd paragraph of the RSS for section 98-1.05 with:

RSS Example

¶

-
-
-
-
-

XE:"RSS_3-1.04_A01-09-11" ¶
Page:1 of 1 ¶

¶
¶

Replace the 2nd paragraph of section 3-1.04 with:

If the Department awards the contract, the award is made to the lowest responsible bidder within the number of days shown in the following table. ¶

Contract Award Period	
Days	Project estimated cost shown on the <i>Notice to Bidders</i>
30	< \$250 million
60	≥ \$250 million

¶

NOTE: The header shown will not be included in the combined RSS. It is for routing and submittal purposes only.

Individual-SSP Examples

Normal

¶

Header

-

XE:"3-1.04_D12-09-09" ¶
Page:1 of 1 ¶

Header

-

Header

-

Header

-

Instructions

-

Section 3-1.04. Use for (1) a contract less than \$200 million with a 60-day award period, (2) an informal bid contract, or (3) a same-day award contract. ¶

Instructions

-

¶

Heading 1 No TOC

-

Replace the 2nd paragraph of section 3-1.04 with:

Instructions

-

1. Use for a contract less than \$200 million with a 60-day award period. ¶

Normal

If the Department awards the Contract, the award is made to the lowest responsible bidder within 60 days. ¶

Instructions

-

2. Use for an informal bid contract. ¶

Normal

If the Department awards the Contract, the award is made to the lowest responsible bidder within 10 days. ¶

Instructions

-

Pars. 3-5. Use for a same-day award contract. ¶

Instructions

-

3 ¶

Normal

If the Department awards the Contract, the award is made to the lowest responsible bidder the same day as bid opening. ¶

Instructions

-

4 ¶

Normal

Have a representative available the day and location of the bid opening to accept the awarded contract. ¶

Instructions

-

5 ¶

Normal

If the lowest responsible bidder does not have a representative available to accept the contract award, the Department may award the contract to the next lowest responsible bidder who has a representative available to accept the contract award. ¶

Combined-SSP Example

Normal	¶																			
Header	▪	XE:"25-1.02_D12-09-09"¶																		
Header	▪	Page:1 of:2¶																		
Header	▪																			
Header	▪																			
Instructions	▪	Section:25-1.02:Use for Classes:1-4 aggregate subbases.¶																		
Instructions	▪	¶																		
Instructions	▪	1:Use for Classes:1-4 aggregate subbases: A Construction Evaluated Work Plan (CEWP) is required.¶																		
Heading 1 No TOC	▪	Add to section 25-1.02A:¶																		
Normal		Aggregate may include processed glass. Place AS with glass only where the subbase will be permanently covered.¶																		
Normal	¶																			
Instructions	▪	Pars.:2-7:Use for Class:4 aggregate subbase.¶																		
Heading 1 No TOC	▪	Add to section 25-1.02C:¶																		
Instructions	▪	2: Add grading requirements.¶																		
Normal		When tested under California Test 202, aggregate for Class 4 AS must comply with the grading requirements for the sieve sizes shown in the following table.¶																		
	▪	Aggregate Grading (Percentage Passing)¶																		
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Sieve size¶</th> <th style="width: 33%;">Operating range¶</th> <th style="width: 33%;">Contract compliance¶</th> </tr> </thead> <tbody> <tr> <td>¶</td> <td>¶</td> <td>¶</td> </tr> <tr> <td>¶</td> <td>¶</td> <td>¶</td> </tr> <tr> <td>¶</td> <td>¶</td> <td>¶</td> </tr> <tr> <td>No. 4¶</td> <td>¶</td> <td>¶</td> </tr> <tr> <td>No. 200¶</td> <td>¶</td> <td>¶</td> </tr> </tbody> </table>	Sieve size¶	Operating range¶	Contract compliance¶	¶	¶	¶	¶	¶	¶	¶	¶	¶	No. 4¶	¶	¶	No. 200¶	¶	¶
Sieve size¶	Operating range¶	Contract compliance¶																		
¶	¶	¶																		
¶	¶	¶																		
¶	¶	¶																		
No. 4¶	¶	¶																		
No. 200¶	¶	¶																		
Normal	¶																			
Instructions	▪	3: Add quality requirements.¶																		
Normal		Aggregate must comply with the quality requirements and tests shown in the following table.¶																		
	▪	Aggregate Quality¶																		
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Test method¶</th> <th style="width: 16%;">CT test:</th> <th style="width: 16%;">Operating range¶</th> <th style="width: 33%;">Contract compliance¶</th> </tr> </thead> <tbody> <tr> <td>Sand equivalent (min)¶</td> <td>217¶</td> <td>¶</td> <td>¶</td> </tr> <tr> <td>Resistance (R-value)(min)¶</td> <td>229¶</td> <td>--¶</td> <td>¶</td> </tr> </tbody> </table>	Test method¶	CT test:	Operating range¶	Contract compliance¶	Sand equivalent (min)¶	217¶	¶	¶	Resistance (R-value)(min)¶	229¶	--¶	¶						
Test method¶	CT test:	Operating range¶	Contract compliance¶																	
Sand equivalent (min)¶	217¶	¶	¶																	
Resistance (R-value)(min)¶	229¶	--¶	¶																	
Normal	¶																			
Instructions	▪	4:¶																		
Normal		If the aggregate grading or the sand equivalent test or both comply with contract compliance requirements but not operating range requirements, you may continue placing AS for the remainder of the work day. Do not place additional AS until you demonstrate to the Engineer the AS complies with the operating range requirements.¶																		
Instructions	▪	5:¶																		
Normal		If the aggregate grading, sand equivalent tests, or both do not comply with contract compliance requirements, remove the AS or request a payment deduction. If your request is authorized, \$2.25/cu-yd is deducted.¶																		
Instructions	▪	6:¶																		
Normal		An aggregate grading and a sand equivalent test represents (1) 500 cu-yd or (2) 1 day's production if less than 500 cu-yd.¶																		
Instructions	▪	7: Add Class:1,2, or 3.¶																		
Normal		Instead of Class 4 AS, you may place Class ___ AS under the aggregate grading and quality requirements in section 25-1.02A. If you place Class ___ AS, do not use Class 4 AS without authorization.¶																		

Canceled-SSP Example

Normal	¶	
Header	▪	XE:"7-1.11D_Cmm-dd-yy"¶
Header	▪	Page:1 of:1¶
Header	▪	¶
Header	▪	¶
Instructions	▪	Canceled ¶
Instructions	▪	Number of trainees or apprentices moved to the NTB. ¶

For an NSSP, follow the guidance for an SSP (delete, replace, or add to a standard specification section). If the NSSP does not delete, replace, or add to a section, add the NSSP after the last number in a section and use the section number one level higher than the added section for the NSSP introduction. Use the same naming convention as for an SSP except use the letter category N for nonstandard. For additional guidance, see *NSSP Guidance for the 2010 Standards* at <http://oe.dot.ca.gov>.

NSSP Example

Normal	¶	
Header	▪	XE:"80-4_N09-28-11"¶
Header	▪	Page:1 of:1¶
Header	▪	NEW::GMT**¶
Header	▪	¶
Heading 1 No TOC	▪	<u>Replace section 80-4 with:</u> ¶
Heading 1	▪	<u>80-4::ALUMINUM FENCE</u> ¶
Heading 2	▪	80-4.01::GENERAL ¶
Normal		<u>Section 80-4 includes specifications for constructing aluminum fence.</u> ¶
Normal		<u>A corner is a change in a line where the angle of deflection exceeds 25 degrees.</u> ¶
Heading 2	▪	80-4.02::MATERIALS ¶
Normal		<u>Fence must be constructed of 1-5/8-by-1-5/8 inch rails, 1-by-1-inch pickets, and 4-by-4-inch posts.</u> ¶
Heading 2	▪	80-4.03::CONSTRUCTION ¶
Normal		<u>Excavate high points that interfere with placing fence to the clearance shown.</u> ¶
Heading 2	▪	80-4.04::PAYMENT ¶
Normal		<u>Not Used</u> ¶
	—	

32 ORGANIZATION

32-1 ORGANIZATION—GENERAL

Set up your section similar to an existing section of the same type.

Use general sections in order to execute the following general provisions:

1. A reference to a section includes the general specifications for the section.
2. The bid item descriptions set forth the specifications that apply.

Begin your section with a general section. Include general and common specifications in the general section. These specifications need not apply to all sections of the section; the more specific sections will govern over the specifications in the general section.

The following are terms used for section organization:

main section: Base section (for example: 15, 52).

1st-level section: 1st section level of a main section; uses Heading 1 No TOC style; examples: 15-1, 15-2.

2nd-level section: 1st section level under a 1st-level section or 1st section level under a main section if no 1st-level section exists; uses Heading 2 No TOC style; for example: 15-1.01, 75-1.03.

- 3rd-level section:** 1st section level under a 2nd-level section; uses Heading 3 No TOC style; examples: 15-2.02A, 83-1.02I.
- 4th-level section:** 1st section level under a 3rd-level section; uses Heading 4 style; examples: 51-1.12F(3), 83-1.02G(2).
- 5th-level section:** 1st section level under a 4th-level section; uses Heading 5 style; examples: 52-1.08C(2)(a), 83-2.02D(3)(b).
- 6th-level section:** 1st section level under a 5th-level section; uses Heading 6 style; examples: 52-1.01C(3)(d)(ii), 83-2.02D(3)(b)(i).

To allow for expansion of a main section (with either SSPs or RSSs), add a 1st-level section heading if you plan on adding new sections that do not fit clearly in the existing sections of the main section.

In order to have unique SSP numbers, add reserved sections where you anticipate growth. Examples:

5-1.17–5-1.18 RESERVED

75-1.02B Reserved

32-2 ORGANIZATION—SECTION HEADINGS

Sections 32-2 applies to new relatively stand-alone sections of the *Standard Specifications* and SSPs. For other specifications, match the format of the existing or surrounding sections. Do not use for general provisions. For division II, use the general provision format for general-provision type sections and the outline below for more technical specifications.

Use the following outline. The heading level depends on where the specification fits into the section. The headings may be at a lower level than those shown. The organization at the lower levels will be similar.

XX-X.01 GENERAL

XX-X.01A Summary

XX-X.01B Definitions

XX-X.01C Submittals

XX-X.01D Quality Control and Assurance

XX-X.02 MATERIALS

XX-X.03 CONSTRUCTION

XX-X.04 PAYMENT

XX-X.XXA General

XX-X.01A(1) Summary

XX-X.01A(2) Definitions

XX-X.01A(3) Submittals

XX-X.01A(4) Quality Control and Assurance

XX-X.01B Materials

XX-X.01C Construction

XX-X.01D Payment

Use "General," "Materials," "Construction," and "Payment" whether you have text for the section or not. If not used, write *Not Used*.

Use "Summary," "Definitions," "Submittals," and "Quality Control and Assurance" if you have text for the section or if you anticipate you may need it in the future (in which case use the heading and write *Reserved* under it).

Add other headings as required for clarity.

32-3 ORGANIZATION—SECTION CONTENTS

Sections 32-3 applies to new or completely reorganized sections of the *Standard Specifications* and SSPs. For other specifications, match the format of the existing or surrounding sections. See section 32-2. Use the following for contents of the sections. For additional details, see appendix 1.

XX-X.01 GENERAL

XX-X.01A Summary

Summary of section contents

Begin each summary section with:

Section <section no.> includes specifications for <description of work>.

Example:

Section xx includes specifications for removing, salvaging, abandoning, and obliterating highway facilities.

For sections that have related sections, add "general" before "specifications."

Example:

Section xx includes general specifications for constructing sound walls.

Legal references

General specifications that do not follow under the other headings

XX-X.01B Definitions

Definitions

XX-X.01C Submittals

Shop drawings

Product data

Samples

QC/QA submittals (design data, test reports, certificates, manufacturers' instructions, manufacturers' field reports, qualification statements)

Closeout submittals

XX-X.01D Quality Control and Assurance

Qualifications

Regulatory requirements

Certifications

Manufacturer's field services

Preinstallation meetings

Source quality control (tests, inspection, performance verification)

Field quality control (site tests, inspection, field samples)

Warranty

Mock-ups

XX-X.02 MATERIALS

Specifications for materials before they are delivered to the job site (fabrication, proportion, handling, delivery)

XX-X.03 CONSTRUCTION

Specifications for how the materials are used after they are delivered to the job site. Specify in the order the element is constructed during construction.

XX-X.04 PAYMENT

Payment clauses, including how bid items are measured for payment.

33 FORMAT

1. Use the 2010 specification template guides. For the template guides, go to:

http://www.dot.ca.gov/hq/esc/oe/specifications/tools/2010_temp.php

The standard styles for the 2010 specifications are:

Building Indent 1 Hanging	Hanging (definition)	Heading 2 No TOC	Indent 3 Hanging
Building Indent 2 Hanging	Header	Heading 3	Instructions
Building Indent 3 Hanging	Heading 1	Heading 3 No TOC	Normal
Building Indent 4 Hanging	Heading 1 (12 pt)	Heading 4	Normal (keep with next)
Building Indent 5 Hanging	Heading 1 (12 pt) No TOC	Heading 5	Table (Centered)
Building Normal	Heading 1 Modified 14	Heading 6	Table (Indent 1f)
Comments	Heading 1 Modified 14 No TOC	Heading 9	Table (Lt.)
Footer	Heading 1 No TOC	Indent 1 Hanging	Table (Rt.)
Hanging	Heading 2	Indent 2 Hanging	Title_Centered

If the 2010 RSS template guide is used, remove the section break and the 2nd section of the document.

2. Use **Automatic Color**

3. Do not use:

- 3.1. Tracked changes
- 3.2. Hyperlinks
- 3.3. Comments
- 3.4. Highlighted text (except in SSP instructions)
- 3.5. Fields unless associated with boilerplate automation. Headers are okay.
- 3.6. Embedded pictures in SSPs
- 3.7. Bullets

4. Check document formatting with hidden text on, and then check it with hidden text off.

5. After all edits have been made, run **Header Fix**. Do not update the header manually.

6. Save document with:

- 6.1. View set as Draft (Note: To reopen a document in Draft view, the Word option "Allow opening a document in Draft view" in the "General" section of the advanced Word options must be checked.)
- 6.2. Size set at 100%
- 6.3. Styles to show in the Style Pane Options set as "In current document."

BIBLIOGRAPHY

Construction Specifications Institute. *The Project Resource Manual: CSI Manual of Practice*, 5th ed. McGraw-Hill, 2005.

Federal Register, "Drafting Legal Documents," <http://www.archives.gov/federal-register/write/legal-docs/index.html>.

R.S. Means Company, Inc. *Means Illustrated Construction Dictionary*, 2nd ed. Kingston, MA: R.S. Means, 2003.

APPENDIX 1 SECTION CONTENTS FOR NEW OR COMPLETELY REORGANIZED SECTIONS OF THE STANDARD SPECIFICATIONS AND SSPS.

Bold text indicates headings for required sections. Nonbolded text indicate contents of the sections.

GENERAL	MATERIALS	CONSTRUCTION	PAYMENT
Summary Summary of section contents Products supplied but not installed under this section Products installed but not supplied under this section Legal references System description Design requirements Performance requirements Project conditions Project environmental requirements Existing conditions Sequencing Scheduling System Startup Department's Instructions Commissioning Maintenance Extra Materials Maintenance Service Definitions Submittals Shop drawings Product data Samples Quality control and assurance submittals design data, test reports, certificates, manufacturers' instructions, manufacturers' field reports, qualification statements Closeout submittals Quality Control and Assurance Qualifications Regulatory requirements Certifications Manufacturer's field services Preinstallation meetings Source QC, incl. tests, inspection, verification of performance Field QC, incl. site tests, inspection, field samples Warranty Mock-ups	Delivery, storage, and handling Packing, shipping, handling, and unloading Acceptance at job site Storage and protection Waste management and disposal Manufacturers Existing products Materials Manufactured units Equipment Components Accessories Mixes Fabrication Shop assembly-- Fabrication tolerances Finishes Shop priming, Shop finishing	Installers Examination Site verification of conditions Preparation Protection Surface preparation Erection Installation Application Construction Special techniques Interface with other work Sequences of operation Site tolerances Repair/Restoration Reinstallation Adjusting Cleaning Demonstration Protection Schedules	Payment clauses

APPENDIX 2 SPECIFICATION TEMPLATE GUIDE FOR A LEVEL-2 SSP

For this guide, go to <http://oe.dot.ca.gov>.

Normal	¶
Header	¶ XE:"<section: number>_Amm-dd-yy"¶
Header	¶ Page: 1 of X¶
Header	¶
Header	¶
Instructions	¶ Section:<section: number>.<Instructions for SSP use>¶
Instructions	¶ <Comply with the <i>Specification Style Guide</i> .>¶
Instructions	¶ <Use this format for new relatively stand-alone sections. For other specifications, match the format of the existing or surrounding sections.>¶
Instructions	¶ <This format is for a level-2 section. Adjust the section numbering for higher- or lower-level sections.>¶
Instructions	¶ ¶
Heading 1 No TOC	¶ <Introduction ("delete," "replace," or "add" statement)>¶
Heading 2 No TOC	¶ XX-X.XX ·<2nd-LEVEL SECTION-TITLE> (Note: If a section title already exists in the <i>Standard Specifications</i> , do not include a section title here.)¶
Heading 3 No TOC	¶ XX-X.XXA ·General (Note: If this section is not used, write <i>Not Used</i> underneath this heading and eliminate subsections.)¶
Heading 4	¶ XX-X.XXA(1) ·Summary¶
Instructions	¶ 1.<Instructions are highlighted in gray. Add necessary instructions. Do not include design guidance. Include paragraph numbers above each paragraph only if paragraph instructions are included for at least 1 paragraph.>¶
Normal	<text>¶
Heading 4	¶ XX-X.XXA(2) ·Definitions¶
Instructions	¶ 2.<Use <i>Hanging (definition)</i> style for definitions. The term is in bold text and with a case matching the case used in the specifications, followed by a bold colon. The definition of the term is in plain text. Maintain the "hanging" to emphasize the term.>¶
Instructions	¶ <Do not leave a carriage return between terms or after the last term.>¶
Hanging (definition)	term1: <definition of the term>¶
Hanging (definition)	term2: <definition of the term>¶
Heading 4	¶ XX-X.XXA(3) ·Submittals¶
Instructions	¶ 3¶
Normal	<text>¶
Heading 4	¶ XX-X.XXA(4) ·Quality Control and Assurance¶
Instructions	¶ 4¶
Normal	<text>¶
Heading 3 No TOC	¶ XX-X.XXB ·Materials (Note: If this section is not used, write <i>Not Used</i> underneath this heading and eliminate subsections. If this section is used and it has 2 or more subsections, do not add text directly underneath the section XX-X.XXB heading.)¶
Heading 4	¶ XX-X.XXB(1) ·General (Note: If section XX-X.XXB(1) is not used, delete the heading.)¶
Instructions	¶ Pars. 5–7.<Add instructions for multiple paragraphs above the 1st paragraph of the series.>¶
Instructions	¶ 5¶
Normal	<text>¶
Instructions	¶ 6¶
Normal	<text>¶

Instructions	<ul style="list-style-type: none"> 7 ¶
Normal	<text> ¶
Heading 4	<ul style="list-style-type: none"> XX-X.XXB(2) ¶ <4th-Level Section Title> ¶
Instructions	<ul style="list-style-type: none"> 8 ¶
Normal	<text> ¶
Instructions	<ul style="list-style-type: none"> 9. ¶ <If an item in the list requires editing, add instructions for the editing required, but (1) do not add instructions directly over the item and (2) do not assign a paragraph number to the item.> ¶
Normal	<Format a list as follows> ¶
Hanging	1. → <Start with Hanging style.> ¶
Hanging	2. → <Type the list item number and tab over to add the list item description.> ¶
Hanging	3. → <Do not use "automatic numbered lists."> ¶
Indent 1 Hanging	3.1. → <Use Indent 1 Hanging style.> ¶
Indent 1 Hanging	3.2. → <Next list item.> ¶
Indent 2 Hanging	3.2.1. → <Use Indent 2 Hanging style.> ¶
Indent 2 Hanging	3.2.2. → <Next list item.> ¶
Indent 3 Hanging	3.2.2.1. → <Use Indent 3 Hanging style.> ¶
Indent 3 Hanging	3.2.2.2. → <Next list item.> ¶
Indent 3 Hanging	3.2.2.3. → <After the last list item, leave a carriage return before the next line of text.> ¶
Indent 3 Hanging	¶
Instructions	<ul style="list-style-type: none"> 10 ¶
Normal	<text> ¶
Heading 4	<ul style="list-style-type: none"> XX-X.XXB(3) ¶ <4th-Level Section Title> ¶
Instructions	<ul style="list-style-type: none"> 11 ¶
Normal	<text> ¶
Instructions	<ul style="list-style-type: none"> 12 ¶
Normal	<text> ¶
Heading 3 No TOC	<ul style="list-style-type: none"> XX-X.XXC ¶ <Construction: (Note: If this section is not used, write Not Used underneath this heading and eliminate subsections.)> ¶
Heading 4	<ul style="list-style-type: none"> XX-X.XXC(1) ¶ <General> ¶
Instructions	<ul style="list-style-type: none"> 13 ¶
Normal	<text> ¶
Instructions	<ul style="list-style-type: none"> 14 ¶
Normal	<text> ¶
Heading 4	<ul style="list-style-type: none"> XX-X.XXC(2) ¶ <4th-Level Section Title> ¶
Heading 5	<ul style="list-style-type: none"> XX-X.XXC(2)(a) ¶ <General> ¶
Instructions	<ul style="list-style-type: none"> 15 ¶
Normal	<text> ¶
Instructions	<ul style="list-style-type: none"> 16 ¶
Normal	<text> ¶
Heading 5	<ul style="list-style-type: none"> XX-X.XXC(2)(b) ¶ <5th-Level Section Title> ¶
Heading 6	<ul style="list-style-type: none"> XX-X.XXC(2)(b)(i) ¶ <General> ¶
Instructions	<ul style="list-style-type: none"> 17 ¶
Normal	<text> ¶
Instructions	<ul style="list-style-type: none"> 18 ¶
Normal	<text> ¶
Heading 6	<ul style="list-style-type: none"> XX-X.XXC(2)(b)(ii) ¶ <6th-Level Section Title> ¶
Instructions	<ul style="list-style-type: none"> 19 ¶
Normal	<Add text here that ties to the table.> ¶

Normal
Instructions
Normal
Hanging
Hanging
Hanging
Hanging

▪ **<Table-Title>^a(optional)** ¶

		Column-heading ^a ¶	
Column-heading ^a ¶	Column-heading ^b ¶	Column-subheading ^a ¶	Column-subheading ^c ¶
¶	¶	¶	¶
¶	¶	.. ^c ¶	¶
¶	¶	¶	¶

▪ ^a<Optional. Use *Table (Centered)* style and apply bold text. Add a table number to the table title if it clarifies references and refer to the table number instead of the title.>¶

▪ ^b<Use alphabetic superscripts to reference notes to specific table elements.>¶

▪ ^c<Use *Table (Centered)* style and center 2 hyphens in a cell with no data.>¶

¶

20¶

<text>:¶

1. → <Item-1>¶
2. → <Item-2>¶
3. → <Add-text-here-that-ties-to-the-table>:¶

¶

▪ **<Table-Title>(optional)** ¶

Column-heading ^a ¶	Column-heading ^a ¶
¶	¶
¶	¶
¶	¶

▪ Note: <Add-note-that-applies-to-the-whole-table-here.>¶

¶

21¶

<Add-text-here-that-ties-to-the-table>:¶

Normal
Instructions
Normal

Normal
Instructions
Normal
Heading 3 No TOC
Instructions
Normal

▪ **<Table-Title>(optional)** ¶

Column-heading ^a ¶	Column-heading ^b ¶	Column-heading ^c ¶
¶	¶	¶
¶	¶	¶
¶	¶	¶

▪ ^a<Add-1st-note-here.>¶

▪ ^b<Add-2nd-note-here.>¶

▪ ^c<Add-3rd-note-here.>¶

¶

22¶

<If applicable, add more text here. If not, leave a carriage return between the table and the next heading style paragraph.>¶

- **XX-X.XXD** Payment (Note: If this section is not used, write *Not Used* underneath this heading.)¶

23¶

<Add-text-here. At the end of the specification, **DO NOT** leave a carriage return.>¶

APPENDIX 3 SPECIFICATION TEMPLATE GUIDE FOR A LEVEL-2 RSS

For this guide, go to <http://oe.dot.ca.gov>.

Normal	¶
Header	• <code>&#x2D;&#x2D;RSS_<section-number>_Amm-dd-yy"></code> ¶
Header	• <code>Page:1 of X</code> ¶
Header	• ¶
Header	• ¶
Normal	Notes:¶
Hanging	1.→ Comply with the <i>Specification Style Guide</i> .¶
Hanging	2.→ Use this format for new relatively stand-alone sections. For other specifications, match the format of the existing or surrounding sections.¶
Hanging	3.→ This format is for a level-2 section. Adjust the section numbering for higher- or lower-level sections.¶
Normal	¶
Heading 1 No TOC	• <Introduction ("delete," "replace," or "add" statement)> ¶
Heading 2 No TOC	• XX-X.XX-<2nd-LEVEL SECTION TITLE> (Note: If a section title already exists in the <i>Standard Specifications</i> , do not include a section title here.)¶
Heading 3 No TOC	• XX-X.XXA-<General> (Note: If this section is not used, write <i>Not Used</i> underneath this heading and eliminate subsections.)¶
Heading 4	• XX-X.XXA(1)-<Summary> ¶
Normal	<text>.¶
Heading 4	• XX-X.XXA(2)-<Definitions> ¶
Hanging (definition)	term1: <Use <i>Hanging (definition)</i> style for definitions. The term is in bold text and with a case matching the case used in the specifications, followed by a bold colon. The definition of the term is in plain text. Maintain the "hanging" to emphasize the term.>¶
Hanging (definition)	term2: <Do not leave a carriage return between terms or after the last term.>¶
Heading 4	• XX-X.XXA(3)-<Submittals> ¶
Normal	<text>.¶
Heading 4	• XX-X.XXA(4)-<Quality Control and Assurance> ¶
Normal	<text>.¶
Heading 3 No TOC	• XX-X.XXB-<Materials> (Note: If this section is not used, write <i>Not Used</i> underneath this heading and eliminate subsections. If this section is used and it has 2 or more subsections, do not add text directly underneath the section XX-X.XXB heading.)¶
Heading 4	• XX-X.XXB(1)-<General> (Note: If section XX-X.XXB(1) is not used, delete the heading.)¶
Normal	<text>.¶
Heading 4	• XX-X.XXB(2)-<4th-Level Section Title> ¶
Normal	<text>.¶
Normal	<Format a list as follows>:¶
Hanging	1.→ <Start with <i>Hanging</i> style.>¶
Hanging	2.→ <Type the list item number and tab over to add the list item description.>¶
Hanging	3.→ <Do not use "automatic numbered lists.">¶
Indent 1 Hanging	3.1.→ <Use <i>Indent 1 Hanging</i> style.>¶
Indent 1 Hanging	3.2.→ <Next list item.>¶
Indent 2 Hanging	3.2.1.→ <Use <i>Indent 2 Hanging</i> style.>¶
Indent 2 Hanging	3.2.2.→ <Next list item.>¶
Indent 3 Hanging	3.2.2.1.→ <Use <i>Indent 3 Hanging</i> style.>¶
Indent 3 Hanging	3.2.2.2.→ <Next list item.>¶
Indent 3 Hanging	3.2.2.3.→ <After the last list item, leave a carriage return before the next line of text.>¶
Indent 3 Hanging	¶
Normal	<text>.¶
Heading 4	• XX-X.XXB(3)-<4th-Level Section Title> ¶
Normal	<text>.¶
Heading 3 No TOC	• XX-X.XXC-<Construction> (Note: If this section is not used, write <i>Not Used</i> underneath this heading and eliminate subsections.)¶

Heading 4
Normal
Heading 4
Heading 5
Normal
Heading 5
Heading 6
Normal
Heading 6
Normal

- **XX-X.XXC(1)–General¶**
<text>:¶
- **XX-X.XXC(2)–<4th-Level-Section-Title>¶**
- **XX-X.XXC(2)(a)–General¶**
<text>:¶
- **XX-X.XXC(2)(b)–<5th-Level-Section-Title>¶**
- **XX-X.XXC(2)(b)(i)–General¶**
<text>:¶

- **XX-X.XXC(2)(b)(ii)–<6th-Level-Section-Title>¶**
<Add-text-here-that-ties-to-the-table>:¶

• **<Table-Title>^a–(optional)¶**

		Column-heading ^a	
Column-heading ^a	Column-heading ^b	Column-subheading ^a	Column-subheading ^c
¶	¶	¶	¶
¶	¶	– ^c ¶	¶
¶	¶	¶	¶

^a<Optional. Use *Table (Centered)* style and apply bold text. Add a table number to the table title if it clarifies references and refer to the table number instead of the title.>¶
^b<Use alphabetic superscripts to reference notes to specific table elements.>¶
^c<Use *Table (Centered)* style and center 2 hyphens in a cell with no data.>¶

Normal
Normal
Hanging
Hanging
Hanging
Hanging

- ¶
- <text>:¶
- 1.→ <Item-1>¶
 - 2.→ <Item-2>¶
 - 3.→ <Add-text-here-that-ties-to-the-table>:¶

• **<Table-Title>–(optional)¶**

Column-heading ^a	Column-heading ^a
¶	¶
¶	¶
¶	¶

¶ Note: <Add note that applies to the whole table here.>¶

Normal
Normal

¶

<Add-text-here-that-ties-to-the-table>:¶

• **<Table-Title>–(optional)¶**

Column-heading ^a	Column-heading ^b	Column-heading ^c
¶	¶	¶
¶	¶	¶
¶	¶	¶

^a<Add-1st-note-here.>¶
^b<Add-2nd-note-here.>¶
^c<Add-3rd-note-here.>¶

Normal
Normal
Heading 3 No TOC
Normal

- ¶
- <If applicable, add more text here. If not, leave a carriage return between the table and the next heading style paragraph.>¶
- **XX-X.XXD–Payment (Note: If this section is not used, write *Not Used* underneath this heading.)¶**
<Add-text-here. At the end of the specification, **DO NOT** leave a carriage return.>¶

Heading 2	• <u>Delete a paragraph</u>		
Normal	¶		
Header	•	¶ XE:"RSS_46-2.02B_Amm-dd-yy"	¶
Header	•		Page:1 of:1¶
Header	•		¶
Header	•		¶
Heading 1 No TOC	•	Delete the 2nd paragraph of section 46-2.02B.	¶
Normal	¶		
Heading 2	• <u>Delete a sentence</u>		
Normal	¶		
Header	•	¶ XE:"RSS_5-1.09A_Amm-dd-yy"	¶
Header	•		Page:1 of:1¶
Header	•		¶
Header	•		¶
Heading 1 No TOC	•	Delete the 2nd sentence in the 6th paragraph of section 5-1.09A.	¶
Normal	¶		
Heading 2	• <u>Delete a term</u>		
Normal	¶		
Header	•	¶ XE:"RSS_9-1.16E(2)_Amm-dd-yy"	¶
Header	•		Page:1 of:1¶
Header	•		¶
Header	•		¶
Heading 1 No TOC	•	Delete "revised Contract" in item 1 in the list in the 1st paragraph of section 9-1.16E(2).	¶
Normal	¶		
Heading 2	• <u>Delete a list item</u>		
Normal	¶		
Header	•	¶ XE:"RSS_46-2.01D(2)(b)_Amm-dd-yy"	¶
Header	•		Page:1 of:3¶
Header	•		¶
Header	•		¶
Heading 1 No TOC	•	Delete item 5 in the list in the 1st paragraph of section 46-2.01D(2)(b).	¶
Normal	¶		
Heading 2	• <u>Replace a reserved section</u>		
Normal	¶		
Header	•	¶ XE:"RSS_75-1.03H_Amm-dd-yy"	¶
Header	•		Page:1 of:1¶
Header	•		¶
Header	•		¶
Heading 1 No TOC	•	Replace section 75-1.03H with:	¶
Heading 3 No TOC	• 75-1.03H Isolation Casings		
Normal	Isolation casing consists of installing steel plate or corrugated steel pipe to isolate a support from the surrounding soil.		
Normal	Corrugated steel pipe must comply with section 66-1 and be made from zinc-coated steel sheet. Before cleaning and painting, slightly round sharp edges and edges that are marred, cut, or roughened in handling or installation. Clean edges of the pipe as specified for repairing damaged galvanized surfaces in section 75-1.05.		
Normal	Where shown, paint galvanized steel surfaces under section 59-3.		
Normal	Neoprene strips must comply with the specifications for strip waterstops in section 51-2.05 except that protective board is not required.		
Normal	Structure backfill must comply with section 19-3.02B. Compact structure backfill to a relative compaction of at least 90 percent.		
Normal	Place structure backfill under section 19-3.03E. Do not pond or jet the backfill.		
Normal	¶		

Heading 2	• <u>Replace "Reserved" with new section content</u>
Normal	¶
Header	• §:XE:"RSS_80-2.02A_Amm-dd-yy"§
Header	• Page:1 of:1¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Replace "Reserved" in section 80-2.02A with:
Normal	Posts must be metal.¶
Normal	¶
Heading 2	• <u>Replace a section, including section title, that is not a reserved section</u>
Normal	¶
Header	• §:XE:"RSS_12-7_Amm-dd-yy"§
Header	• Page:1 of:1¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Replace section 12-7 with:
Heading 1 No TOC	12-7-RESERVED¶
Normal	¶
Heading 2	• <u>Replace all section content but not the section title (change "paragraphs" to "paragraph" if the content consists of 1 paragraph)</u>
Normal	¶
Header	• §:XE:"RSS_9-1.16F_Amm-dd-yy"§
Header	• Page:1 of:1¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Replace the paragraphs in section 9-1.16F with:
Normal	Section 9-1.16F applies to a non-federal-aid contract.¶
Normal	The Department retains 10 percent of progress payments to ensure the Contractor fulfills the Contract except that after:¶
Normal	<rest of specification>¶
Normal	¶
Heading 2	• <u>Replace a section title only</u>
Normal	¶
Header	• §:XE:"RSS_20-2.03A(2)_Amm-dd-yy"§
Header	• Page:1 of:1¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Replace the heading of section 20-2.03A(2) with:
Heading 4	• <u>Transplanting Trees</u>
Normal	¶
Heading 2	• <u>Replace a paragraph</u>
Normal	¶
Header	• §:XE:"RSS_2-1.35_Amm-dd-yy"§
Header	• Page:1 of:1¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Replace the 1st paragraph of section 2-1.35 with:
Normal	Submit each required proof of SSPC-QP certification with your bid. Failure to do so results in a nonresponsive bid.¶
Normal	¶
Heading 2	• <u>Replace a last paragraph of a section with more than 3 paragraphs</u>
Normal	¶

Header	•	§:XE:"RSS_13-10.03A_Amm-dd-yy"§
Header	•	Page:1 of:1
Header	•	¶
Header	•	¶
Heading 1 No TOC	•	Replace the last paragraph of section 13-10.03A with:¶
Normal		Place any graveled-filled bags used within a shoulder area behind Type K temporary railing.¶
Normal		¶
Heading 2	•	<u>Replace a sentence</u> ¶
Normal		¶
Header	•	§:XE:"RSS_46-2.03A_Amm-dd-yy"§
Header	•	Page:1 of:1
Header	•	¶
Header	•	¶
Heading 1 No TOC	•	Replace the 1st sentence of the 9th paragraph of section 46-2.03A with:¶
Normal		The diameter of the drilled hole must be large enough to provide a minimum grout cover of 3/4 inch over the corrugated sheathing for the full length of the tendon.¶
Normal		¶
Heading 2	•	<u>Replace a word, phrase, or short dependent clause</u> ¶
Normal		¶
Header	•	§:XE:"RSS_7-1.04_Amm-dd-yy"§
Header	•	Page:1 of:1
Header	•	¶
Header	•	¶
Heading 1 No TOC	•	Replace "20 days" in the 14th paragraph of section 7-1.04 with:¶
Normal		25 days¶
Normal		¶
Header	•	§:XE:"RSS_8-1.10A_Amm-dd-yy"§
Header	•	Page:1 of:1
Header	•	¶
Header	•	¶
Heading 1 No TOC	•	Replace "8-1.08B and 8-1.08C" in the 1st paragraph of section 8-1.10A with:¶
Normal		8-1.10B and 8-1.10C¶
Normal		¶
Heading 2	•	<u>Replace a term throughout a section</u> ¶
Normal		¶
Header	•	§:XE:"RSS_39_Amm-dd-yy"§
Header	•	Page:1 of:1
Header	•	¶
Header	•	¶
Heading 1 No TOC	•	Replace "California Test 234" at each occurrence in section 39 with:¶
Normal		AASHTO T-304¶
Normal		¶
Heading 2	•	<u>Replace a term throughout a table</u> ¶
Normal		¶
Header	•	§:XE:"RSS_83-1.02G(2)_Amm-dd-yy"§
Header	•	Page:1 of:1
Header	•	¶
Header	•	¶
Heading 1 No TOC	•	Replace "A-36/A-36M" at each occurrence in the table in the 2nd paragraph of section 83-1.02G(2) with:¶
Normal		ASTM A-709/A-709M¶

Heading 2
Normal
Header
Header
Header
Header
Heading 1 No TOC

Normal
Heading 2
Normal
Header
Header
Header
Header
Heading 1 No TOC
Hanging
Hanging
Heading 2
Normal
Header
Header
Header
Header
Heading 1 No TOC
Normal
Normal
Heading 2
Normal
Header
Header
Header
Header
Heading 1 No TOC
Heading 5
Normal
Normal
Normal
Normal
Normal
Normal
Heading 2
Normal
Header
Header
Header
Header
Heading 1 No TOC
Normal
Normal

- **Replace a row in a table**
 - ¶
 - XE:"RSS_88-1.02B_Amm-dd.yy"¶
Page:1 of:1¶
 - ¶
 - ¶
 - **Replace the row for hydraulic bursting strength in the table in the 2nd paragraph of section 88-1.02B with:**

Puncture strength, lb min	ASTM D-6241	600
------------------------------	-------------	-----
 - ¶
- **Replace list items**
 - ¶
 - XE:"RSS_75-1.03D(2)_Amm-dd.yy"¶
Page:1 of:1¶
 - ¶
 - ¶
 - **Replace items 3 and 4 in the list in the 1st paragraph of section 75-1.03D(2) with:**
 - 3.→ Comply with ASTM A-276, Type 316
 - ¶
- **Replace a term in an item of a list**
 - ¶
 - XE:"RSS_48-2.01C(2)_Amm-dd.yy"¶
Page:1 of:1¶
 - ¶
 - ¶
 - **Replace "20 days" in item 2 in the list in the 7th paragraph of section 48-2.01C(2) with:**
 - the specified review time
 - ¶
- **Add a section to the end of a section 1 level above (assume no reserved sections and the subject fits)**
 - ¶
 - XE:"RSS_50-1.03B(2)_Amm-dd.yy"¶
Page:1 of:1¶
 - ¶
 - ¶
 - **Add to section 50-1.03B(2):**
 - **50-1.03B(2)(e) Debonding Prestressing Strands**
 - Where shown, debond prestressing strands by encasing the strands in plastic sheathing along the entire length shown and sealing the ends of the sheathing with waterproof tape.
 - Distribute the debonded strands symmetrically about the vertical centerline of the girder. The debonded lengths of pairs of strands must be equal.
 - Do not terminate debonding at any one cross section of the member for more than 40 percent of the debonded strands or 4 strands, whichever is greater.
 - Thoroughly seal the ends with waterproof tape to prevent the intrusion of water or cement paste before placing the concrete.
 - ¶
- **Add a paragraph**
 - ¶
 - XE:"RSS_51-1.03E(5)_Amm-dd.yy"¶
Page:1 of:1¶
 - ¶
 - ¶
 - ¶
 - **Add to section 51-1.03E(5):**
 - Drill the holes without damaging the adjacent concrete. If reinforcement is encountered during drilling before the specified depth is attained, notify the Engineer. Unless coring through the reinforcement is authorized, drill a new hole adjacent to the rejected hole to the depth shown.
 - ¶

Heading 2	• Add a paragraph to a specific spot in a section (e.g., between the 2nd and 3rd paragraphs)
Normal	¶
Header	• ¶
Header	• ¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Add between the 18th and 19th paragraphs of section 7-1.04:
Normal	Temporary facilities that could be a hazard to public safety if improperly designed must comply with design requirements described in the Contract for those facilities or, if none are described, with standard design criteria or codes appropriate for the facility involved. Submit shop drawings and design calculations for the temporary facilities and show the standard design criteria or codes used. Shop drawings and supplemental calculations must be sealed and signed by an engineer who is registered as a civil engineer in the State.
Normal	¶
Heading 2	• Add a sentence
Normal	¶
Header	• ¶
Header	• ¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Add to the 1st paragraph of section 39-1.03A:
Normal	If RAP is used, use Laboratory Procedure LP-9.
Normal	¶
Normal	¶
Header	• ¶
Header	• ¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Add between the 2nd and 3rd sentences in the 1st paragraph of section 51-2.02F(1)(c):
Normal	The test sample must be delivered in a sealed container labeled with the Contract number.
Normal	¶
Heading 2	• Add a term, phrase, or dependent clause
Normal	¶
Header	• ¶
Header	• ¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Add between "60" and "days" in the 4th paragraph of section 15-5.03B:
Normal	working
Heading 2	• Add a list item
Normal	¶
Header	• ¶
Header	• ¶
Header	• ¶
Header	• ¶
Heading 1 No TOC	• Add to the list in the 3rd paragraph of section 80-3.02E:
Hanging	3. → Be green
Normal	¶

APPENDIX 4 SECTION 99 SPECIFICATIONS

Section 99 specifications are MasterSpecs (1) with MS Word paragraph styles converted to the styles used by non-section 99 specifications and (2) revised to reflect the Department's technical standards.

To convert a MasterSpec to a section 99 specification:

1. Open a MasterSpec
2. Run Building macro
3. Delete "RELATED DOCUMENTS" (Section 99-1 covers this)
4. Delete metric units and references
5. Change "Architect" to "Engineer"
6. Change "approved by the Architect" to "authorized"
7. Add a space between any list and heading
8. Make any changes needed to meet Department standards
9. Run Headerfix

To edit a building-construction specification:

1. Follow specification editing instructions
2. After editing:
 - 2.1. Delete all square brackets and angle brackets
 - 2.2. Unbold bolded noninstruction text

Section 99 specifications are formatted as follows:

SECTION MASTERSPEC NO. - MASTERSPEC TITLE (Paragraph Style SCT to Heading 2 No TOC*)

MASTERSPEC instructions. Section instructions are below the section no. and title.

PART 1 - GENERAL (Paragraph Style PRT to Heading 3 No TOC*)

1.1 ARTICLE TITLE (Paragraph Style ART to Heading 4*)

MASTERSPEC instructions. Text instructions are right above the text to be edited.

- A. Paragraph (Paragraph Style PR1 to Building Indent 1 Hanging*)
 1. Subparagraph (Paragraph Style PR2 to Building Indent 2 Hanging*)
 - a. Subparagraph (Paragraph Style PR3 to Building Indent 3 Hanging*)

MASTERSPEC instructions. Text Instructions are not numbered.
 - b. Subparagraph (Paragraph Style PR3 to Building Indent 3 Hanging*)
 - 1) Subparagraph (Paragraph Style PR4 to Building Indent 4 Hanging*)
 - a) Subparagraph (Paragraph Style PR5 to Building Indent 5 Hanging*)
 2. Subparagraph (Paragraph Style PR2 to Building Indent 2 Hanging*)

1.2 ARTICLE TITLE (Paragraph Style ART to Heading 4*)

- A. Paragraph (Paragraph Style PR1 to Building Indent 1 Hanging*)
 1. Subparagraph (Paragraph Style PR2 to Building Indent 2 Hanging*)
 - a. Subparagraph (Paragraph Style PR3 to Building Indent 3 Hanging*)

PART 2 - PRODUCTS (Paragraph Style PRT to Heading 3 No TOC*)

2.1 ARTICLE TITLE (Paragraph Style ART to Heading 4*)

- A. Paragraph (Paragraph Style PR1 to Building Indent 1 Hanging*)

MASTERSPEC instructions. Options are words and phrases enclosed in square brackets ([]) and in boldface for easy identification. In some cases, only one option from those shown should be selected. In other cases, you may select one or more options. When deleting options, the text, bracket pair and the boldface must be removed.

1. Subparagraph (Paragraph Style PR2 to Building Indent 2 Hanging*)

- a. Subparagraph (Paragraph Style PR3 to Building Indent 3 Hanging*)
2. Subparagraph (Paragraph Style PR2 to Building Indent 2 Hanging*)

2.2 ARTICLE TITLE (Paragraph Style ART to Heading 4*)

- A. Paragraph (Paragraph Style PR1 to Building Indent 1 Hanging*)
 1. Subparagraph (Paragraph Style PR2 to Building Indent 2 Hanging*)
 - a. Subparagraph (Paragraph Style PR3 to Building Indent 3 Hanging*)

PART 3 - EXECUTION (Paragraph Style PRT to Heading 3 No TOC*)

3.1 ARTICLE TITLE (Paragraph Style ART to Heading 4*)

- A. Paragraph (Paragraph Style PR1 to Building Indent 1 Hanging*)

MASTERSPEC instructions. MASTERSPEC section text includes insert notes (notes) that are phrases enclosed in angle brackets (< >) and in boldface for easy identification. The phrases prompt you to fill in the appropriate information and may offer an example. In some cases, notes are included after options and prompt you to add a custom requirement to the listed requirements. For each project, notes can be replaced with appropriate text, deleted if inappropriate, or kept for later editing.

1. Subparagraph (Paragraph Style PR2 to Building Indent 2 Hanging*)
- B. Paragraph (Paragraph Style PR1 to Building Indent 1 Hanging*)

END OF SECTION MASTERSPEC NO. (Paragraph Style EOS to Heading 2 No TOC*)

*Converted by Building macro.

APPENDIX 5 2010 BACKGROUND

Appendix 5 includes background on the development of the 2010 *Standard Specifications* and SSPs. The text in these appendixes is the same as in the previous version.

APPENDIX 5-1 3-COLUMN CONVERSION [APPENDIX 4 OF PREVIOUS VERSIONS OF THE STYLE GUIDE]

Appendix 4 applies to the conversion of 2006 to 2010 specifications.

Incorporate into the *Standard Specifications*:

1. Amendments
2. SSP clauses not peculiar to a specific project. The following are examples of special provisions to be incorporated into the *Standard Specifications*.
 - 2.1. The *Standard Specifications* has a section on bridge removal. An SSP used for all projects involving bridge removal exists. Incorporate the clauses from this SSP into the *Standard Specifications* that are non-project-specific changes to bridge removal work. (I.e., they are not specifications peculiar to the project and, by the definition of *special provisions*, should have been amendments.)
 - 2.2. Incorporate specifications with conditional instructions by converting the instructions to conditional text. If a paragraph has more than 3 conditions, consider leaving the paragraph in the SSP.

2006 paragraph instruction: Use only when no membrane seal is shown on the plans.

2010 standard specification: Where membrane seal is not shown, <Style Guide version of the paragraph that followed the instructions>.

2006 SSP instruction: Use in all projects receiving Federal Aid.

2010 standard specification: Section <section no.> applies to a federal-aid contract.

2006 paragraph instruction: Use for all projects in District 7.

2010 standard specification: In District 7, <specification standard to District 7 projects>.

2006 SSP instruction: Use for all projects in District 7.

2010 standard specification: Section <section no.> applies to a District 7 project.

- 2.3. If an SSP is used with another SSP, specify that the one specification complies with the other.

2006 SSP Instruction: Use with SSP <SSP no.>.

2010 standard specification: Comply with <*Standard Specifications* section no. of converted SSP>.

- 2.4. Do not include paragraphs that must be filled in unless one requirement is used for most jobs; in which case, include the paragraph and fill in the blank with the typical requirement and create an SSP for other requirements.

2006 instructions: Fill in the minimum cementitious material content of concrete backfill. This is normally 505 pounds of cementitious material per cubic yard.

2006 special provision: Concrete backfill of the types listed in the engineer's estimate encasing the steel soldier piles below the lagging shall contain not less than _____ pounds of cementitious material per cubic yard and shall conform to the provisions in section 90, "Portland Cement Concrete," of the *Standard Specifications* and these special provisions.

2010 standard specification: For concrete backfill encasing steel soldier piles below the lagging, use concrete complying with section 90 and containing at least 505 pounds of cementitious material per cubic yard.

2010 SSP (part):

Section 19-3.xyz. Use if the designer requests concrete containing more than 505 pounds of cementitious material per cubic yard.

1. Edit for the minimum cementitious material content.

Replace the 13th paragraph of section 19-3.xyz with:

For concrete backfill encasing steel soldier piles below the lagging, use concrete complying with section 90 and containing at least _____ pounds of cementitious material per cubic yard.

2.5. If a paragraph has an instruction to edit under certain situations, add the paragraph to the *Standard Specifications* and create an SSP for the edit.

2006 instructions: Edit. Check with designer on bridges over 400 feet long.

2006 special provision: D. Only one piece of equipment may be on the bridge at one time.

2010 standard specification: 4. At most 1 piece of equipment may be on the bridge at one time.

2010 SSP:

Section 5-1.19B(3). Use if (1) a bridge with a material hauling equipment loading lane is over 400 feet long (2) if the designer allows more than 1 piece of equipment on the bridge at one time. Use value provided by designer.

1. Edit for number of pieces.

Replace item 4 of the 3rd paragraph of section 5-1.19B(3) with:

4. At most _____ pieces of equipment may be on the bridge at one time.

3. Specifications shown on standard plans.

Fill in the 3-column template as follows:

2010 <i>Standard Specifications</i>	2006 <i>Standard Specifications</i> with amendments	2006 SSPs and standard plan notes
	<p>Step 1: Copy and paste your 2006 <i>Standard Specifications</i> section with amendments, pasting only about 15 pages in each table cell. The amendments are from S1-020 dated 08-01-08.</p> <p>Select each table greater than 4.2 inches individually; go to "Table>Table Properties . . ." and convert table width to 4.2 inch maximum.</p> <p>If you move part of a section, use the heading in both locations and add "(part)" to the heading.</p>	<p>Step 4: Determine which 2006 SSPs to include in the 2010 <i>Standard Specifications</i>. Copy and paste those SSPs by matching up subject matter to Column 2.</p> <p>Select each table greater than 4.2 inches individually; go to "Table>Table Properties . . ." and convert table width to 4.2 inch maximum.</p> <p>[Tip: After the insertion of SSPs make sure each cell of the 3-column document has a maximum of 20 pages.]</p>
	<p>Step 2: Replace standard specifications and amendments with any amendments dated after 08-01-08. Italicize the updated amendments.</p> <p>Add "S1-020_<S1-020 date>"</p>	<p>Step 5: Analyze each paragraph of each SSP and determine which parts will be included in the 2010 <i>Standard Specifications</i>. Strike and hide the paragraphs that will not be included.</p>

	number next to the updated amendment. If no heading exists, add it above the amendment.	<p>Include instructions. (They may be converted to conditional specifications or used to fill in blanks.)</p> <p>If SSPs have similar clauses, use only one version of the clauses.</p> <p>Reduce variation. Clause x is for this situation and clause y is for that situation. Ask: Are the situations different enough that you need different clauses? If not, combine the clauses into one that covers both situations.</p>
	<p>Step 3: Delete (use red, strike and hide):</p> <ol style="list-style-type: none"> Specifications covered by other specifications Obsolete specifications <p>Add comments to explain the deletions.</p>	<p>Step 6: Delete (use red; strike and hide):</p> <ol style="list-style-type: none"> Specifications covered by other specifications Obsolete specifications <p>Add comments to explain the deletions.</p>
	<p>Step 7: Delete (use red; strike and hide) standard specifications and amendments overridden by SSP clauses that are not project specific.</p>	
		<p>Step 8: Determine which 2006 Standard Plan notes to include in the 2010 <i>Standard Specifications</i>. Move notes here.</p>
<p>Step 9: Rewrite in 2010 format. For 2010, section titles are not included where referencing a section. However, you will need them for cross-reference checks. Therefore, show section titles in green font as follows: space<section title>. [Tip: CTRL+Tab allows you to tab in table cells.]</p>		

Copy the specifications from the 1st column into a 1-column template.

Use the following naming convention:

Document type	File name	Section 75 example
3-column document	SS3_<section no.>_D<date>	SS3_75_D11-08-08.doc
1-column document	SS_<section no.>_D<date>	SS_75_D11-08-08_Vx ^a .doc
Final draft	SS_<section no.>_A<date>	SS_75_A11-08-08.doc

^a x=version no.

Rewrite the remaining SSPs as follows:

- Combine SSPs for similar work.
- Reduce variation as was done while rewriting of the 2010 *Standard Specifications*.
- If you filled in a blank while rewriting of the 2010 *Standard Specifications*, include a replacement paragraph in the SSP.

Cancel obsolete SSPs.

Parallel 2006 and 2010 specifications as follows:

You may make a significant technical change to the 2010 specifications only if you make the same change to the 2006 specifications. Significant technical changes are changes that affect the end product. The 2010 specifications and these changes to the 2006 specifications will be published concurrently. Do not revise 2006s to update obsolete specifications or references. Examples:

Polycarbonate and glass widgets are specified in the 2006 specifications. Industry no longer makes glass widgets, so the end result is the Contractor using polycarbonate widgets. Specify the polycarbonate widget in the 2010s but do not update the 2006s to match. The change would make no difference at the end.

Polycarbonate and glass widgets are specified in the 2006 specifications. Industry makes both polycarbonate and glass widgets, but the Department has decided to use only polycarbonate widgets. Specify the polycarbonate widget in the 2010s and update the 2006s to match.

Do not update 2006 specifications for only style purposes. Style includes language, formatting, and organization.

APPENDIX 5-2 MINIMUM SSP REQUIREMENTS TO MEET THE 2010 DEADLINE [APPENDIX 5 OF PREVIOUS VERSIONS OF THE STYLE GUIDE]

In order to complete the 2010 specifications by the scheduled date, (1) you do not have to incorporate SSPs as described in step 2 under "Incorporate into the *Standard Specifications*" in appendix 4, "3-Column Conversion," of the *Style Guide* and (2) for SSPs not incorporated, you do not have to follow the guidance in the *Style Guide* except:

1. Each SSP must be in the 2010 template.
2. No SSP may conflict with sections 1 through 15 of the 2010 *Standard Specifications*.
3. You must comply with section 31, "RSSs and SSPs," of the *Style Guide* (amendment style).
4. For an SSP with information that does not fit into an existing section, a reserved section must be created for any SSP not incorporated. The reserved section must be where the SSP would have been incorporated. Include the SSP heading as the heading in the *Standard Specifications*. If the reserved section is for growth, use "Reserved" as the heading in the *Standard Specifications*.

For a published SSP
"Widgets" will show up in the TOC if
you write this:
x-x.xx WIDGETS
Reserved

For growth
"Widgets" will not show up in the TOC
if you write this:
x-x.xx RESERVED

5. You must comply with section 2, "Reference for Grammar, Usage, Capitalization, and Punctuation."
6. You must comply with the guidance on mandatory expressions in section 6, "Expressions," of the *Style Guide*.
7. You must comply with section 7, "Terms for Alteration and Repair," of the *Style Guide*.
8. You must comply with section 9, "Common Clauses and Phrases," of the *Style Guide*.
9. You must comply with section 10, "Payment Clauses," of the *Style Guide*.
10. You must comply with the guidance on days in section 22, "Measurements," of the *Style Guide*.