

PENINSULA CORRIDOR JOINT POWERS BOARD

CONTRACT DOCUMENTS PREPARATION MANUAL

Revision Date	Revision No.	Revision Summary History
1/2/2008	00	First Issue
2/18/08	01	Update Section 7 – 01010 Summary of Work
3/24/08	02	Incorporate Scarpino comments

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SECTION 1
INTRODUCTION

1.01 General:

This manual is a guide to ensure uniform format and content in the preparation of specifications for Design Bid Build (DBB) construction contracts for the Peninsula Corridor Joint Powers Board (PCJPB).

1.02 Organization:

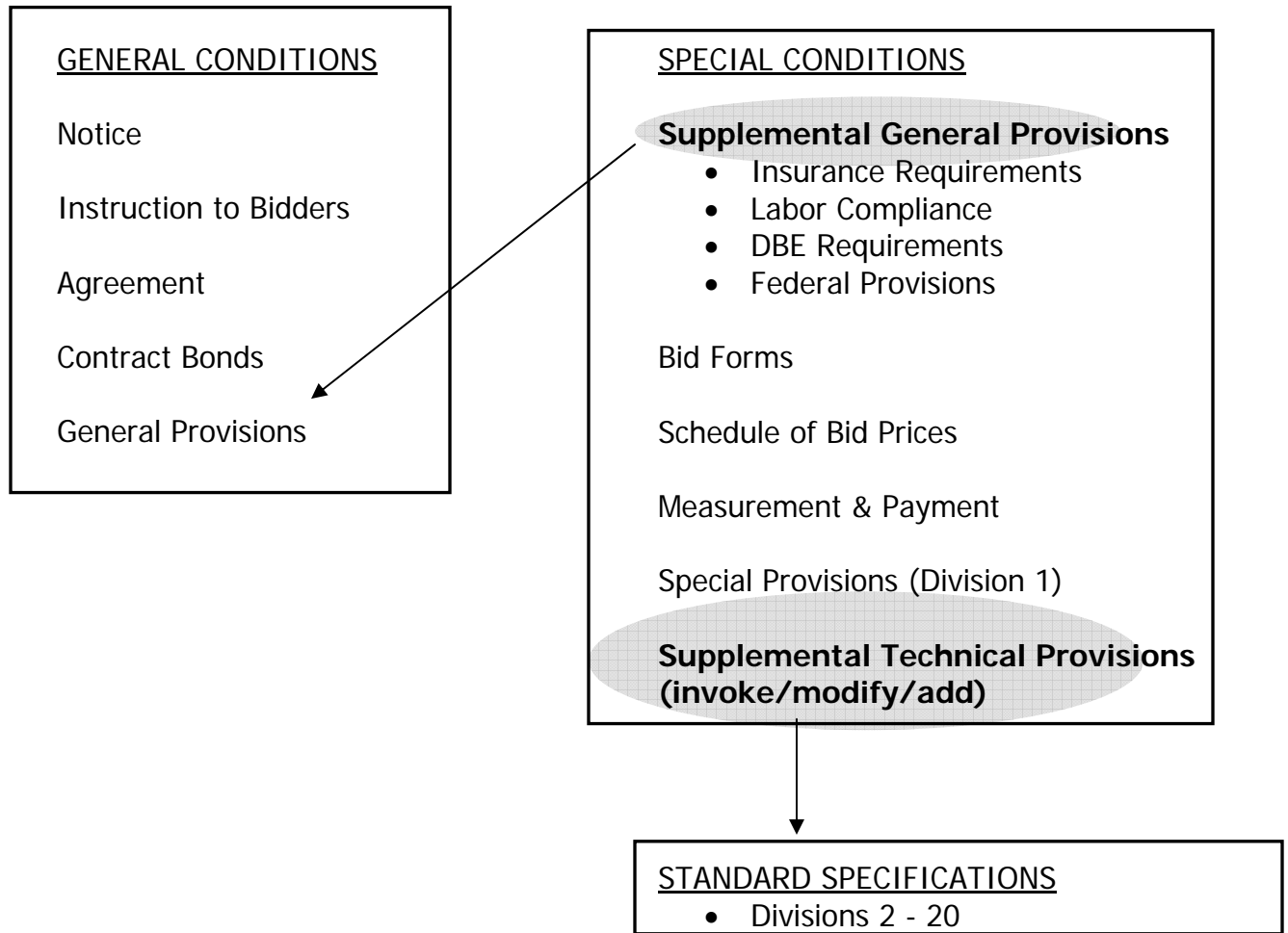
PCJPB DBB contract documents are organized and formatted generally in accordance with the Sixteen Division Format and Style of the Construction Specifications Institute, Inc. (CSI), plus two additional Divisions pertaining to railroad track and signal work. The specific instructions for format, organization, style, usage, and editing, are contained in this Contract Documents Preparation Manual.

1.03 Contract Document Structure:

The complete contract document package consists of: 1) General Conditions, which will include the Notice, Instruction to Bidders, Agreement, Contract Bonds, and General Provisions (GP), 2) Special Conditions, which will include Supplemental General Provisions, Bid Forms, Schedule of Bid Prices, Measurement and Payment, Special Provisions (Division 1), and Supplemental Technical Provisions (Divisions 2-20), with Standard Specifications incorporated by reference, and 3) Contract Drawings.

Exhibit 1.1 illustrates the structure of the Contract Documents and relationship of the various components.

Exhibit 1.1
Relationship of DBB Contract Documents



SECTION 2
CONTRACT DOCUMENTS

2.01 Elements of the Contract Documents:

The following describes the contents of each of the components of the Contract Documents.

A. Contract General Conditions:

1. Notice – The Notice is the Agency's formal invitation for bids. The date of the Notice is the date of formal advertisement of the contract.
2. Instruction to Bidders – Additional information provided to bidders with instructions for preparing and submitting bids.
3. Agreement – The actual legal format of the contract which becomes executed by the parties.
4. Contract Bonds – The Performance Bond and Payment Bond as required under California Public Contract Code are stipulated in GP2.1.
5. General Provisions – The general terms of the contract which are not project specific.

B. Contract Special Conditions:

1. Supplemental General Provisions – Includes additions or modifications to General Provisions as needed on a project specific basis. Includes standard supplemental language for federally funded contracts.
2. Bid Forms – The various forms which must be completed as part of the process for submitting a bid.
3. Schedule of Bid Prices – A bid form on which the bidder enters the bid prices, including unit and total prices.
4. Measurement and Payment – The section which describes the method of measurement and scope of payment for the work of the contract, organized by bid item.
5. Special Provisions – The specifications sections describing the conditions of the work and contract administration procedures.
6. Supplemental Technical Provisions – The specifications which invoke, modify, or supplement the Standard Specifications.

C. Contract Drawings:

1. Contract Drawings – The project specific drawings which describe and provide details of the scope of work.

D. Other Documents:

1. Standard Specifications – The PCJPB Standard Specifications describe the standard methods and requirements for performing certain types of work on PCJPB construction projects and incorporated into the contract via the Supplemental Technical Provisions.
2. Other PCJPB Standards – Other standards established by PCJPB, including safety, track construction and maintenance, and others, which are incorporated into the contract by reference.
3. External References – Standards developed by other agencies or entities in the construction industry or having jurisdiction over the work which are incorporated into the contract by reference.
4. Project-specific Information – Includes project specific studies or reports made available to bidders for information but are not part of the contract.

SECTION 3

SPECIFICATIONS PREPARATION AND SUBMITTAL

3.01 General:

The preparation of the Contract Documents for each construction contract will involve responsibilities on the part of the Project Manager and design team, Capital Contracts, and Contracts and Procurement staff, with each contributing certain elements or parts of elements to the total package. The basic responsibilities for the various elements of the Contract Documents are shown in Exhibit 3.1.

The fundamental requirement for all specifications is that they be contract specific. Specify only those provisions for submittals, materials, workmanship, and tests that apply to the work.

It is always best to specify the outcome and let the means and methods to the Contractor. In other words, whenever possible, avoid specifying the means and methods to be followed by the Contractor in the performance of an operation. If the specified means and methods result in unsatisfactory outcome, the Contractor cannot be held fully responsible if it can show that it reasonably followed the specifications. In this respect, if the means and methods have to be specified, expect that the actual outcome may be an issue that will result in some sort of resolution process with the Owner bearing some or much of the burden of responsibility.

3.02 Preparation:

The contract documents are to be viewed as a whole; changes to one section will have impacts on other sections of the documents. To ensure the integrity of the contract documents, the parties responsible for preparation should not deviate from the templates provided. If changes to templates are required, changes must be coordinated with Capital Contracts (Contract Planner).

The contract document templates are subject to version control. To ensure the current version of the contract document templates are used, download the templates from: <http://contracttemplates/index.aspx>. This site also contains the latest version of the Contract Document Preparation Manual. The Special Provisions are also available on CD from Capital Contracts.

A. Responsibilities:

Exhibit 3.1 identifies the responsibility of each of the parties involved in the preparation of the contract documents.

The Project Manager and design team are responsible for the preparation of the following sections: Schedule of Bid Prices, Measurement & Payment, Special Provisions, Supplemental Technical Provisions and the Contract Drawings. This manual covers preparation details and instructions for Schedule of Bid prices through Supplemental Technical Provisions. The Project Manager and design team are responsible for submitting Contract Drawings in PDF. The Project Manager is responsible for managing the contract document review process.

Contract Planner, in concert with the Project Manager is responsible for the preparation of the Supplemental General Provisions. The Contract Planner will also comment on contract drawings

and specifications at the 65% and 95% design phases. Capital Contracts will manage the review and concurrence of the contract documents with Risk Management, DBE and Labor Compliance.

Contracts and Procurement is responsible for preparing the General Conditions (the Notice Inviting Bids, the Instructions to Bidders, the Agreement, and Contract Bonds). The General Conditions also contain the General Provisions. Contracts and Procurement is also responsible for legal review of the contract documents prior to advertisement. The General Provisions are version controlled; the Director, Contracts & Procurement is responsible for managing version control. The General Provisions will not be updated more than once every two years. Contracts and Procurement is responsible for the management of the procurement (bid) process through issuance of Limited Notice to Proceed.

B. Contract Document Phases

65% Phase Activities:

At the 65% design phase, the following documents will be available for review and comment by Capital Contracts: Supplemental Technical Specifications, Measurement & Payment, and Special Provisions.

95% Phase Activities:

At the 95% design phase, Capital Contracts in concert with Project Manager will prepare the Supplemental General Provisions. The Project Manager is responsible for obtaining concurrence from Engineering (including Signal) and Operations. No new scope or changes to the contract documents, other than incorporating comments received can be made at this time; new scope of changes must be processed by addendum to the contract documents. The review process from 95% to 100% is estimated at two-weeks.

The Project Manager will submit the 100% design documents (the 95% review documents with comments incorporated) to Capital Contracts.

Capital Contracts will incorporate any comments received from Risk Management, DBE or Labor Compliance. The review process from 95% to 100% is estimated at two-weeks.

Capital Contracts will assemble a complete Special Condition section in both Word and PDF and forward a complete Special Condition package to Contracts & Procurement for bidding. This transmittal will also include the Contract Drawings in PDF format.

Contracts & Procurement will assemble the General Conditions section, incorporate the Special Conditions section and Contract Drawings and transmit the package to General Counsel for review. The preparation, legal review and advertisement process is estimated at one-month (two-weeks for both Contracts & Procurement and General Counsel review).

Addendum:

The addition of new scope or material changes to the contract documents is not permitted after the 95% design phase. All changes, other than the incorporation of comments resulting from the 95% design review, must be added to the contract documents by Addendum.

**Exhibit 3.1
Design Bid Build Contract Language
Responsibility Matrix**

This matrix shows the responsibility, by department, for the preparation of Design Bid Build construction contract documents.

The term “owns” identifies custodian of the standard document or language, responsible for managing version control, change control process for periodic updating, and distribution of the standard document.

The term “prepares” identifies the department or individual responsible for preparing the project-specific document or language, utilizing the standard document or language.

Refer to specific procedures for transmittal of documents between entities.

	Engineering ¹	Project Manager and Designer	Capital Contracts ²	Contracts & Procurement ³
General Conditions				
• Notice				Owns, Prepares
• Instructions to Bidders				Owns, Prepares
• Agreement				Owns, Prepares
• Contract Bond				Owns, Prepares
• General Provisions				Owns
Special Conditions				
• Supplemental General Provisions			Prepares	Owns
• Bid Forms				Owns, Prepares
• Schedule of Bid Prices		Prepares	Owns	
• Measurement and Payment		Prepares	Owns	
• Special Provisions		Prepares	Owns	
• Supplemental Technical Provisions		Prepares	Owns	
• Contract Drawings		Owns, Prepares		
Standard Specifications	Owns			
Standard Plans	Owns			

¹ Deputy Director, Engineering Services is the designated Owner

² Program Manager, Capital Contracts is the designated Owner

³ Director, Contracts & Procurement is the designated Owner

SECTION 4

STYLE AND USAGE

4.01 General:

As stated in Section 1, the specifications format adopted for use by the PCJPB follows the Construction Specifications Institute, Inc. (CSI) format. Style and usage follow the rules of correct English grammar. This Section therefore should not be looked upon as a definitive source for specification preparation. The rules and examples contained herein are provided to ensure uniformity and consistency among the PCJPB Standard Specifications and the Special Provisions prepared by numerous project development teams. The Project Resource Manual, CSI Manual of Practice can be referenced for additional guidance beyond this PCJPB manual where not in conflict.

The specifications will be written based on CSI's 3 part Section Format; Part 1 General; Part 2 Products; Part 3 Execution. Not all Parts are appropriate for each section. If a Part is not used, the words "Not Used" are to be written under the Part Heading. Do not delete the Part and renumber the succeeding Parts.

It is only necessary to specify what is. Do not specify what is not, although negative specifying is a proper technique. For instance, "the door shall not be constructed from softwoods." If a needed element is not specified, it may be arguable that it is not part of the Contract, and at the very least the Owner only owns the minimum available in the industry, which is not a good position to be in. Exclusions would only be specified when it is necessary to identify a specific portion of work that would normally and customarily be considered included. Identifying those excluded elements that are normally and customarily included may result in savings to the Owner and should be delineated overtly.

Written Specifications are qualitative and technical requirements for products, materials, and workmanship upon which the contract is based. They do not locate items, count, or duplicate the drawings.

Written specifications and drawings are complementary documents and not redundant documents.

4.02 Invocation of Standard Specifications:

Because of the broad scope of the Standard Specifications, a blanket invocation of that document would imply applicability of all Sections contained therein. Although this is true with the PCJPB's General Provisions, (all the Sections of this document generally do apply to every construction contract), the applicable Sections of the Standard Specifications must be individually invoked, and made applicable for each construction contract. Most of the Standard Specifications Sections contain requirements to be supported by information supplied elsewhere (either in the Special Provisions or on the Contract Drawings). This information consists of requirements unique to a particular contract such as time of completion, concrete class (strength), or the type of pipe to be used.

4.03 Modifications to Standard Specifications:

The intent of the Standard Specifications is to provide a standardized selection of construction requirements and materials for accomplishment of the specified work. Where, in a given area,

the choice is restricted, it is done so for reasons of proven performance or aesthetics and to conform to the existing system design criteria. Additions to or deletions from the Standard Specifications, therefore, should reflect requirements peculiar to a given construction contract.

4.04 New Sections:

The Standard Specifications do not cover all conditions that may be required for each project. New sections will be required to augment the Standard Specifications for classifications of work not covered therein.

4.05 Referenced Standards:

Specify material and equipment by the use of reference standards or by generic names, basic criteria requirements, or performance specifications. Specify workmanship by reference standards, the recommendations of the manufacturer, or the required end-result.

Wherever possible, use established standards and test methods such as those prepared by organizations such as ASTM, AASHTO, AREMA, ANSI, NEMA, and Federal Military Specifications and Standards to establish type and quality of materials and workmanship. Where specification standards are referenced, indicate all options and alternatives such as size, type, rating, class, quality, grade, and finish that are allowed by the standard, unless the choice is to be left to the Contractor.

Do not repeat language from the reference standard. If, for example, a cited test method contains information necessary to perform the test, no further elaboration is necessary. However, if additional requirements are necessary, or if the referenced standard permits options, specify them without repeating the text of the cited test method.

4.06 Non-proprietary Specifications:

Avoid use of trade names except when no established reference standard is available, or when the reference standard does not specify all of the desired characteristics. In that event, list two or more trade names to identify the product. Thoroughly identify each trade name with the name of the manufacturer, model number, model name, type, size, finish, and other classifications that are applicable; do not merely indicate "ABC Company or equal". When the manufacturer is not nationally known, include its address or the name and address of a local distributor in the reference.

Where trade names must be employed, include the words "or equal" after listing. The words "or approved equal" are not necessary as the requirements regarding approval are specified in the General Provisions. As products may be similar but are rarely equal, indicate the characteristics required for the project such as size, finish, chemical composition, appearance, function, and performance in addition to trade names and other data. Do not specify proprietary materials, systems, and processes that will give the desired results.

4.07 Performance Specifications:

When a performance specification is written, it should be complete in defining quality, function, durability and other requirements, as well as listing options, if any, that are to be allowed. Describe each part of the product as clearly and briefly as possible. The use of a performance specification may require samples, tests, certifications, and other evidence in order to ascertain

compliance. Avoid specifying requirements for both means of fabrication or installation and expected results.

4.08 References:

In general, references to other sections should be minimized.

Include references to "Related Sections" in Article 1.02 of Divisions 2 through 20 in the Standard Specifications and Supplemental Technical Provisions when there is information in the referenced section that applies to work in the current section. References to other sections may also be included within the text body when there is a direct relation to the work of that article or paragraph.

Do not include references to "Related Sections" within the Special Provisions. All sections of Division 1 are related as a whole so there is no need to list individual related sections. References to other Division 1 sections may be included within the text of the current Division 1 section when there is a direct relation to the work of that section, article or paragraph.

Do not make reference to specific articles or paragraphs elsewhere in the same section. Simply indicate "as specified elsewhere in this Section".

Do not make reference to General Provisions in sections of Divisions 2 through 20 of the Standard Specifications or the Supplemental Technical Provisions. References to General Provisions should be contained only in sections of Division 1 or other provisions which modify or provide additional detail to General Provisions.

Do not truncate section numbers when referencing other sections (e.g.: 01040 is correct, 1040 is not). References to other sections should be formatted as "Refer to Section #####, Title, for additional information." Example: "Refer to Section 01003, Incentives, for additional information."

4.09 Style:

- A. Since Contract Specifications are a legal document, fewer words generally will minimize legal problems. Simple, short sentences are better than long, complex sentences. An excess of words frequently results in confusion and discourages careful reading. At the other extreme, incomplete sentences lead to misinterpretation. A good rule to follow is to mention everything that is necessary to avoid ambiguity but say it in the fewest words consistent with that purpose.
- B. Specifications shall be written in the indicative mood and imperative mood as appropriate. (The indicative and imperative grammatical moods of sentences are defined in CSI's Manual of Practice.) Imperative language is directed to the Contractor. "Streamlining" may be employed where appropriate, primarily in Part 2, Products. (Streamlining is the use of the colon (:)) for the words: shall be, shall have, shall conform with, shall comply with, or shall meet the requirements of. Example: "A. Portland Cement: ASTM C150, Type II, low alkali."): Sentences should be structured to place the "action" first (i.e., "Install conduits and pull boxes prior to track removal" instead of "All conduit and pull boxes must be installed prior to track removal").
- C. Exercise care in the selection of words. Avoid unfamiliar terminology, jargon, and words having more than one meaning. Do not use polysyllabic, high-sounding words when simpler words or phrases are sufficient. Define all unfamiliar terminology when its use is unavoidable.

- D. When it is necessary, distinguish between "Owner will", or "Engineer will". "May" is permissive and should be used only for acts which the Contractor may or may not perform, at its option, without concurrence of the Engineer. However, the Specifications must state "use x or y" where the selection from two or more specified materials or methods is optional.
- E. There are only two parties to the Contract: The PCJPB, as represented by the Engineer, and the Contractor. Generally, all references in the Special Provisions should be made only to the PCJPB, Engineer, and the Contractor. References to the Bidder are applicable when referring to activities before award of the Contract. References to "Others" are applicable when referring to work to be performed by contractors or agencies not a party to the Contract. Wherever "Others" is mentioned, the identity of such should be identified only if it is important for the Contractor to know.
- F. Do not address subcontractors or material suppliers. Do not assign work to a subcontractor or a trade. This is the responsibility that belongs solely to the contractor in accordance with the Owner/Contractor Agreement.
- G. Do not refer to a subcontractor as a contractor or make reference to (specific or general) trades performing the work. These terms are legally defined by the general conditions and legal precedence. The work is divided and assigned only by the Contractor.
- H. "As approved by the Engineer", "subject to the approval of the Engineer", and "as required by the Engineer", are vague statements and are generally used when the writer is uncertain how or to what level a portion of the work is to be performed. Utilize these statements only when necessary for clarity as all work on the project is subject to the acceptance of the Engineer. Standards, tests, or submittals applicable to the Engineer's decision regarding an alternative should be stated. The Specifications should not state that submittals "will be approved" by the Engineer as non-conforming submittals will be rejected or may be conditionally accepted, subject to correction and re-submittal by the Contractor.
- I. The Engineer should not be authorized to direct any of the Contractor's operations. Avoid expressions such as "in accordance with the Engineer's instructions" or "as directed by the Engineer".
- J. Always use the plural, "these Specifications", instead of "this Specification". The phrase "in accordance with these Specifications" is generally not necessary; all work must be in accordance with the Specifications.
- K. Workmanship should be "in accordance with" and materials should "conform to" referenced specifications.
- L. Do not state "at no cost to the Owner, or "at the Contractor's expense", unless there is a definite possibility of misunderstanding, such as who pays for testing. The use of these phrases may imply that the other work specified is not at the Contractor's expense.
- M. Use "choice" in lieu of "option" when the intention is specifically to grant the Contractor a choice. Use "alternative" where the Engineer or the PCJPB retains control of the decision, and where separate prices or Bids are called for. Do not use "alternate" for either of these cases; it has a completely different meaning.

The word "option" is usually reserved for those elements of work that may or may not be selected by the Owner. For example, the base contract calls for one primer coat and one finish coat of paint. The option is for a second coat of paint. If the bids come in lower than expected, or if additional funds are obtained, then the Owner may elect the additional coat of paint and pay the option price to the Contractor.

- N. Do not use "and/or". It has no definite meaning and is subject to misinterpretation.
- O. "Includes" and "consists of" are not interchangeable. Use "consist" when a fixed quantity or list of requirements is needed (i.e., "The data submitted shall consist of..."). However, use "include" when a list of major items or minimum requirements, with a clear understanding that additional elements or requirements exist or may be provided (i.e., "the work includes..." or "the submittal shall include at least the following..."). The proper use of these terms either to restrict ("consists") or not restrict ("include"), will preclude the need to use the phrase "but not necessarily limited to".
- P. Do not use indefinite words such as "good workmanship", "inadequate", "reasonable", "satisfactory", "generally", "workmanlike", "best commercial quality", and "standard practice", when a more exact word can be substituted or when a standard should be specified. Avoid descriptive adjectives (i.e., "early," "long," "substantial," etc.) Use language that minimizes subjective interpretation instead.
- Q. The words "provide" or "provided" and "indicated" are defined in the General Provisions. Use them in that context wherever possible.
- R. Use consistent nomenclature and terminology within the Specification sections and between the various Contract Documents.

4.10 Punctuation and Capitalization:

Use Standard English punctuation to convey the specification requirements clearly and to ensure uniform interpretation by all persons reading the specifications. Omit punctuation if it does not clarify the text. Use standard capitalization for the first word of a sentence; proper nouns; entities and agencies; titles; names and trademarks; and names of days, months, and holidays.

Capitalize the following words and phrases when used in the Contract Documents:

Addendum	Engineer
Addenda	General Conditions
Article (of the Specifications)	General Provisions
Bid (a specific Bid or Bids)	Government (U.S.)
Bidder (not prospective bidder)	Limited Notice to Proceed
Bid Form(s)	Notice of Award
Bid Item	Notice to Proceed
Bid Price	Owner
Caltrain	Payment Bond
Change Order	Performance Bond
Contract (referring to PCJPB Contract)	PCJPB
Contract Bonds	Section (of the Specifications)
Contract Documents	Special Conditions
Contractor (a party to the Contract)	Special Provisions
Contract Drawings	Standard Drawings
Contract Specifications	Standard Specifications

Specifications
State (of California)
Subcontractor

Supplemental General Provisions
Supplemental Technical Provisions

Capitalize abbreviations for agencies and entities as specified in the General Provisions (GP1.2).

Capitalize names and titles of Sections, Articles, Exhibits, and Appendices within the Contract Book.

4.11 Spelling:

Use standard spelling: do not use "thru" (for "through"), for example, or other shortcut spelling.

4.12 Abbreviations:

The General Provisions (GP1.2) list standard abbreviations to be used. Use lower case letters for words that are not proper nouns. Other abbreviations may be used in the Special Provisions if they are clearly defined.

Identify abbreviations used in only one section either at the beginning of that section or at the first in-text mention in the section where they are used. If an abbreviation is to be used only once or twice, or at widely spaced intervals, spell it out. Avoid the use of abbreviations which may have two or more meanings, such as "pf", for "power factor", "point of frog", "perfect", "preferred", and "pico farad". Do not include abbreviations which are used only on the Contract Drawings.

Do not use "et cetera" or "etc." This term conveys no meaning and has no precise definition in specifications. Where an indefinite listing is required, state "...including such items as nuts, bolts, and lock washers" rather than "... nuts, bolts, etc."

Avoid the use of abbreviations that provide little saving in typing, such as "in." in lieu of "inch" or "inches", and "ft." in lieu of "foot" or "feet".

4.13 Numbers:

Spell out numbers one through nine. Indicate the figure in parentheses following numbers one through nine for visual clarity (i.e.: eight (8)). Express number 10 and above in figures only. When numbers are in sequence, use one form for all, such as "eight, nine, and ten", or "9, 11, 13, and 14".

Do not use typewriter characters for fractions. The character $\frac{1}{4}$, for example, is illegible on a bad copy and there is no way to make it consistent with fractions not on special keys, such as $\frac{3}{8}$. Write out all fractions with full number and a virgule (/). "Three and one-half inches" should be written "3-1/2 inches". "Three one-half inch" holes should be written "three 1/2 inch".

A zero should be used in front of the decimal for figures less than one; for example "0.13".

4.14 Symbols:

Do not use symbols such as ', ", %, °, & and # in specifications. Their use causes errors that may not be caught in proofreading. Write out "feet", "inches", "percent", "degrees", "and", and "pounds". The word "number" may be abbreviated "No." but not "#". An ampersand may be

used where it appears in the name or corporate identification of a firm or agency, such as "Pacific Gas & Electric Company (PG&E)". Do not use a hyphen for "minus", "to", or "through" in data where it is also used as a spacing or separating device or where any question as to the exact meaning may arise.

4.15 Emphasis:

Except for Section or Article headings and titles, do not use capital letters, quotation marks, and underlining in the body of the Special Provisions to express emphasis. For sign or tag names (ON, OFF, AIR, for example), use all capital letters.

4.16 Definitions and Use of Terms:

Use terms defined in the General Provisions GP1.3 Definitions and Terms, or in the Standard Specifications. When terms are not defined in the General Provisions or Standard Specifications, they shall be defined within the Special Provisions section in which they are used.

The following definitions and use of terms should be applied consistently in the preparation of Special Provisions, measurement and payment clauses, and titles of bid items:

Abandon: Render unserviceable, in place, by doing some kind of work.

Use when an existing facility or item is to be abandoned in place rather than removed. Describe the details of work required to effect abandonment.

Adjust: Raise or lower a facility to match a new grade. May require some removal.

Use when an existing facility or item is to be adjusted to a new grade. Generally applied to raising or lowering frames, grates, or covers. Adjustment work may include some removal (i.e.: in the case of lowering a facility). Additions are typically limited to adding raising devices such as collars, or adjustment of leveling screws, etc. Work that requires addition of concrete or other components would be defined as a modification.

Furnish: To supply and deliver to the work site, ready for installation.

Use when Contractor is required to procure and deliver material or equipment for a project but not install it.

Install: To place in position for service or use, including completely assembling, erecting, or connecting materials, parts, components, supplies, and related equipment specified or required for the completion of the Work.

Use when Contractor is required to install owner furnished equipment or equipment furnished by others.

Modify: A change to a facility or item which does not affect the basic framework or structure with only an addition or subtraction to an appurtenant part. May require some removal or addition.

Use when an existing facility or item is to be modified in place. Modifying is more extensive and of a different nature than adjusting.

Provide: Furnish and install, complete and in place, ready for intended use.

Use when Contractor is required to procure and install material or equipment.

Reconstruct: Remove, disassemble, and construct again at an existing or new location. New parts or alteration may or may not be required.

Use when an existing facility or item requires this action. Describe in the Special Provisions the location of reconstruction and whether alterations are required.

Relocate: Remove and install or place in a new location. No alteration is required.

Use when an existing facility or item is to be removed and reinstalled on the project. Contract plans should indicate the existing and new locations of the facility or item.

Relay: Remove and lay in an existing or new location. Generally used for rail or pipes.

Use when an existing facility or item requires this action. Specify the relay location.

Remove: Remove and dispose of.

Use when an existing facility or item is to be removed and disposed of by the Contractor. It is not necessary to add "and dispose of" after the term removal.

Salvage: Remove, clean, package or bundle, and haul to designated location.

Use when an existing facility or item is to be removed and saved. Describe the salvage location in the Special Provisions. It is not necessary to add "Remove and" prior to the term salvage.

SECTION 5

INSTRUCTIONS FOR PREPARING BID PRICE FORMS

5.01 General

The Schedule of Bid Prices form is required for all unit price contracts. A separate form, the Bid Price Lump Sum form is used for lump sum contracts. These forms provide the instructions and format for Bidders to submit their bids. Templates are not provided for these forms because they must be customized to meet the unique bid requirements of each contract. Consult with Capital Contracts for sample forms that can be used as a guide to prepare bid forms for specific contracts.

5.02 Unit Price Contracts

The Schedule of Bid Prices form must be customized depending on the project, and the complexity of the form will differ depending on the number and type of the bid items for the project.

5.03 Lump Sum Contracts

Lump sum contracts can be structured to have a single firm fixed price for all work or have separate lump sum prices for distinct elements of work. An example where separate lump sum bid items may be appropriate is when the project involves work in multiple locations and the Bidders are requested to provide firm fixed prices for each location.

5.04 Contract Options

Contract Options for possible future work will be included as bid items on the Schedule of Bid Prices form. The total contract price will include the Option prices.

As with the Schedule of Bid Prices form, Contract Options for possible future work will be included as separate items on the Bid Price Lump Sum form. The total contract price will include the Option prices.

5.04 Allowances

Contract Allowance is an allocated contingency to be used only under the specified condition. The most common usage of a contract allowance is for Partnering. A contract allowance can be used as a tool to share risk with the Contractor, i.e. acknowledge a unique condition for which the owner will assume risk. Contact Capital Contracts for guidance when utilizing Contract Allowances.

Contract allowances are used on both Unit Price and Lump Sum contracts. The allowances are listed as separate items on both the Schedule of Bid Prices and Bid Price Lump Sum forms. The Grand Total Bid Price will include the allowance.

Provisions for typical contract allowances for Unit Price contracts are shown in the Measurement and Payment section.

SECTION 6

INSTRUCTIONS FOR PREPARING MEASUREMENT AND PAYMENT SECTION

6.01 General:

The Measurement and Payment section applies to all Unit Price contracts. For Lump Sum contracts, the Measurement and Payment section is not used. In the case of allowances on lump sum contracts, measurement and payment language will be incorporated into the Supplemental General Provisions, contact Capital Contracts for guidance.

The Measurement and Payment section includes general requirements for measurement of quantities of work performed and describes the scope of payment for individual contract bid items.

A method of measurement and payment must be provided for all work required by the Contract Documents.

6.02 Measurement:

The purpose of the measurement clause is to clearly describe how the quantity of work to be paid for will be measured.

In some cases the measurement may be a calculation, in other cases it may be a direct measurement of work in place in the field, in some cases there will be no separate measurement for payment as in the case of lump sum.

The method of measurement (i.e.: weight, length, etc.) will follow the standard requirements as stated in Measurement and Payment, but the Contract Bid Items article will describe the specific requirements for each contract bid item. For example, Article MP-8 Measurement By Volume covers basic requirements for measurement by volume, but the Contract Bid Items article would specify the unit of measurement (i.e.: cubic yard or cubic foot), and whether measured based on actual volume in place, calculated volume based on plans, whether there are deductions for embedded items, etc.

The wording of measurement clauses is flexible and will be specific to the particular contract bid item, however the following example clauses are provided and should be used to the extent possible for consistency. In all cases, titles and units should match exactly with the Schedule of Bid Prices:

Example clause for items paid by unit of measure:

#@# (1) will be measured by the **#@# (2)**. The quantity of **#@# (1)** to be paid for will be **#@# (3)**.

(1) Insert the exact title of the contract bid item as listed in the Schedule of Bid Prices. The title of the bid item should be capitalized. Example: "Furnish and Install Bench", "Ballast – Type 4A", "Shift and Raise Track".

(2) Insert the unit of measure from the Schedule of Bid Prices. Example: "lineal foot" or "cubic yard". If paid by "each", insert "unit". Do not use this clause for items paid by lump sum.

(3) Describe the method of measurement or calculation. Example: "the volume calculated based on dimensions and limits shown on the plans.", "the actual volume in place, calculated based on field measurement of dimensions.", "determined by actual count.", "calculated based on neat

lines or pay lines, section profiles, finish grades, and dimensions indicated on the Contract Drawings", " measured by weight, in accordance with MP-7 Measurement by Weight."

Variations of example clauses for items paid by unit of measure:

Quantities of $\#\@\#$ (1) to be paid for will be determined by the $\#\@\#$ (2) from actual measurement in the field along the line of the completed $\#\@\#$ (1), deducting the width of openings (or not deducting the width of openings). (i.e.: use this clause for fence)

The quantity of $\#\@\#$ (1) will be measured as units determined by actual count, regardless of size.

$\#\@\#$ (1) shall be measured by the square yard calculated on the basis of actual surface dimensions measured in the field.

Quantities of $\#\@\#$ (1) to be paid for by the cubic yard will be calculated on the basis of the limits and dimensions shown on the plans adjusted by the amount of any change ordered by the Engineer.

$\#\@\#$ (1) will be measured for payment by the $\#\@\#$ (2), and quantities will be (measured/computed) based on...."

Example clause for items paid by lump sum:

$\#\@\#$ (1) will not be measured for payment. $\#\@\#$ (1) shall be paid by lump sum.

This clause is typically used in conjunction with a contract item pay clause.

Example clause for items paid by allowance:

$\#\@\#$ (1) will not be measured for payment. $\#\@\#$ (1) shall be paid by allowance.

When this clause is used, the payment clause will describe the scope of payment and calculation method, using references to standard language where appropriate.

Supplemental measurement clauses may be developed and used as necessary to clearly describe the measurement method, in conjunction with a standard measurement clause. Supplemental measurement clauses will be unique to the item being measured and should be used selectively and with judgment. Supplemental measurement clauses should not restate information already covered by the standard clause.

Examples of supplemental measurement clauses:

Example 1: For bar reinforcing steel measured by calculated weight based on dimensions on the plans: "The exercise of the splicing options by the Contractor as provided in Section XX will not be considered as a change in the dimensions of the work. No allowance will be made for bar overlaps."

Example 2: For cast-in-place concrete paid per a calculated volume: "No deduction will be made for the volume occupied by bar reinforcing steel in the concrete."

Notes on Measurement:

The General Provisions and Measurement and Payment Section address no payment for various conditions or circumstances such as wasted or rejected material therefore it is not necessary to restate those conditions in the individual measurement or payment clauses.

Remember that the method of measurement of quantities for payment purposes is an established contractual requirement and the results of the method may not necessarily reflect the actual amount of work performed. This is addressed in General Provisions GP9.1 Scope of Payment.

When specifying a measurement method, consider the practicality and accuracy of the method. For example, it is convenient to calculate a volume of earthwork based on dimensions and cross sections shown on the Contract Drawings but it may not accurately reflect actual work performed due to construction tolerances.

Consider whether the measurement method encourages accurate construction of the work. For example, calculating pay quantities based on plan dimensions discourages the Contractor from placing excessive material because there will be no additional payment for it, but may result in a temptation to place less material than required. Consider impacts to inspection requirements.

Consider compatibility of measurement methods for adjacent or related work. For example, measurement of aggregate base for subballast versus measurement of ballast. Consider how the measurement method of one affects the measurement of the other.

6.03 Payment:

The General Provisions address payment for work required by the General Conditions or Special Conditions which is not specifically covered under a separate contract bid item. Typically no separate payment is made for such work and compensation for the work is considered included in the prices paid for the various contract bid items. Exceptions may include separate payment under a contract bid item for project schedule, mobilization, permits, demobilization, partnering, etc. as specified in the Special Provisions, or for work paid by "Allowance".

For each contract bid item choose the pay clause that best fits the payment conditions based on the rules for usage described in this section.

Standard clauses for describing scope of payment for contract bid items are as follows:

Contract Item Pay Clause

The contract item pay clause is the most common method used to cover payment for a contract bid item of work and is worded as follows:

The contract **### (1)** price paid per **### (2)** for **### (3)** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in **### (4)**, complete in place, including **### (5)** as shown on the plans, and specified in the Contract Documents.

(1) Insert "lump sum" if item is paid by lump sum. Insert "unit" if item is paid by a unit of "each". No entry (leave blank) for other units of measure such as lineal foot or cubic yard.

(2) Insert the unit of measure from the Schedule of Bid Prices. Example: lineal foot or cubic yard. No entry (leave blank) if paid by lump sum or each, and delete the word "per".

(3) Insert the exact title of the contract bid item as listed in the Schedule of Bid Prices. The title of the bid item should be capitalized. Example: "Furnish and Install Bench", "Ballast – Type 4A", "Shift and Raise Track".

(4) Insert description of work (contract bid item title/description is usually sufficient). In some cases the phrase "complete in place" may not apply, as in the case of a removal item, and can be omitted.

(5) Insert special or unusual work or work that is normally paid for separately but is to be included in this contract item. (Note also used to exclude work.) If no entry, delete the word "including".

Example completed clauses:

"The contract price paid per cubic yard for Structure Excavation shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in structure excavation, including dewatering as shown on the plans, and specified in the Contract Documents."

"The contract price paid per cubic yard for Earthwork shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in earthwork, complete in place, as shown on the plans, and specified in the Contract Documents."

"The contract unit price paid for Furnish and Install Benches shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in furnishing and installing benches, complete in place, as shown on the plans, and specified in the Contract Documents."

"The contract lump sum prices paid for Railroad Signal Systems at the locations specified shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in railroad signal systems, including any necessary conduits, cabling, excavation and backfill, foundations, equipment, making all required connections, and performing all required tests, complete in place, as shown on the plans, and specified in the Contract Documents."

Full Compensation Pay Clause

Use the full compensation pay clause to include compensation for work in another contract item instead of making a separate contract item. The correct wording for the full compensation clause is:

Full compensation for ## (1) shall be considered as included in the contract ## (2) price paid per ## (3) for ## (4) and no ## (5) therefore.

(1) Insert description of the work which is not to be paid for separately.

(2) Insert "Lump sum" if item is paid by lump sum. Insert "Unit" if item is paid by a unit of "each". No entry (leave blank) for other units of measure such as lineal foot or cubic yard.

(3) Insert the unit of measure from the Schedule of Bid Prices. Example: lineal foot or cubic yard. No entry (leave blank) if paid by lump sum or each, and delete the word "per".

(4) Exact title of the contract bid item which is to include compensation for work listed in (1). The title of the bid item should be capitalized. Should be a related contract bid item or the "items of work involved" when the work is not necessarily tied to one item.

(5) Insert the phrase, "separate payment will be made" if the work listed in (1) could reasonably be a separate contract bid item. Use the phrase "additional compensation will be allowed" when (5) does not apply.

Example completed clauses:

"Full compensation for structural steel repair shall be considered as included in the contract lump sum price paid for Taylor Street Underpass Waterproofing and no separate payment will be made."

"Full compensation for hauling salvaged rail to designated storage locations shall be considered as included in the contract price paid per track foot for Remove Track and no additional compensation will be allowed."

Payment by Allowance

Payment by Allowance is used when the scope of work of the contract bid item has been identified but not fully detailed in the specifications. In the case of payment by allowance, the Contractor does not provide a bid price, but rather the Owner establishes the allowance amount and incorporates it into the Contract Price. The Contractor is reimbursed for the actual cost of performing the work covered by the contract item, and the allowance represents the maximum amount that will be paid to the Contractor for such work unless increased by the Engineer by Contract Change Order. At the end of the contract, the Engineer will process a change order to reconcile the actual amount paid the Contractor against the original allowance amount, whether greater or lesser than that amount.

Payment by Allowance should be used sparingly and is not an alternative to properly defining the scope of known work to be performed. It should be used only when there is no way to fully determine or quantify the scope of work or details of work in advance of contract advertisement such as in the case of providing office furnishings for Owner's Field Office or fees paid for obtaining permits required by contract.

In the standard case, in accordance with MP12.5, payment for work by allowance is calculated in the same manner as Time and Materials work as described in GP9.3 Time and Materials Payment. The payment clause for work to be paid by allowance should identify any work specifically not included in the contract item or not to be paid for on a time and materials basis. For example, payment for permits includes only the permit fees as charged by the permitting agency. It does not include markups on permit fees or payment for Contractor's staff time to obtain the permits.

Notes on Payment:

Payment is "made" and compensation is "allowed". "Allowing payment" or "making compensation" is not acceptable terminology.

"No separate payment" applies in the clear case of combining two potentially separate items of work into one. "No additional compensation" applies in the more subtle case of clarifying payment for a requirement of the work which is considered to be compensated in one or more contract items.

Although the full compensation clause can be used to clarify details of work to be included in payment for one or more contract bid items, this approach should be used sparingly so as not to conflict with the inclusive intent of the contract item pay clause.

The full compensation pay clause should include compensation for the work in one contract bid item if practical. If this is not appropriate, include compensation in the various contract bid items of work which are involved.

Don't use the full compensation clause to cover minor or incidental work. Minor or incidental work is already covered by the contract price clause.

Don't use a full compensation clause to hide major work in another item. Don't include an item of work that has a higher estimated value in an item of lesser value. (Example: Don't full compensate a \$1000 item in a \$500 item).

Full compensation pay clauses are useful in eliminating nuisance items (items which have a small value), but should be used with judgment.

In most cases, avoid using a full compensation clause and a contract price clause together. The contract price clause should cover the requirements of the intended full compensation clause.

Examples of modified or exception full compensation clauses:

Example 1: Work of a technical specifications section is paid under the same contract bid item as work described in another section, as in the case of concrete finishing work in Section 03300 included in contract bid item payment for cast-in-place concrete: "Full compensation for complying with the requirements of Section 03300 shall be considered as included in the contract price paid for Cast-in-place Concrete and no separate payment will be made.

Example 2: Work of a Division 1 Special Provisions section is considered included in payment for various contract bid items, as in the case of coordination work in Section 01045: "Full compensation for complying with the requirements of Section 01045 shall be considered as included in the contract prices paid for the various contract bid items of work requiring coordination and no additional compensation will be allowed."

Example 3: Exception case for combining a contract pay clause with a full compensation clause: "The contract lump sum price paid for building work shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the building work, complete in place, as shown on the plans, and specified in the Contract Documents.

Full compensation for any materials and labor, not shown on the plans or specified, which are necessary to complete the buildings and appurtenances shall be considered as included in the contract lump sum price paid for building work and no additional compensation will be allowed."

Example 4: Modified case of work compensated under multiple contract bid items: "Full compensation for hauling salvaged rail to designated storage locations shall be considered as included in the contract prices paid per track foot for Remove Track of the types indicated in the Schedule of Bid Prices and no additional compensation will be allowed."

6.04 Standard Measurement and Payment (M&P) Clauses for Specific Contract Bid Items:

Standard and Optional measurement and payment clauses for specific Contract bid items are included in the Measurement and Payment template. Instruction for use of clauses is described in this section.

Standard measurement and payment clauses are clauses that are to be used on all contracts because the work they cover is included in all contracts. In some cases there may be multiple versions to address different project and contractual conditions. If so, choose and insert an optional standard clause based on instructions herein.

Optional measurement and payment clauses are clauses that may be used on certain contracts depending on the scope of work and contractual conditions. Use optional clauses based on instructions herein.

Compensation for complying with requirements of and performing work described in the Special Provisions is included in payments made for all bid items, as stated in the General Provisions GP9.1, unless specifically identified as included in the payment for a contract bid item. If there is no standard or optional M&P clause for the work of a particular Special Provisions Section, DO NOT create a new contract bid item or M&P clause except as described in this section. On an exception basis only, Capital Contracts may approve use of new contract bid items for Special Provisions work. Consult with Capital Contracts if you have a compelling reason for considering new contract bid items for work of the Special Provisions.

The following Special Provisions Sections include optional clauses which, if used, may require the establishment of additional contract bid items and new or revised measurement and payment clauses not already shown as optional clauses in the M&P template. Consult with Capital Contracts for assistance in developing new contract bid items for work of the following sections:

- Section 01100 - Optional articles Pre-Construction Condition Survey and project specific requirements for environmental conditions (i.e.: endangered species management and protection, historical structure protection, etc.)
- Section 01120 - Optional project specific requirements for MAJOR contamination scenario
- Section 01520 - Optional articles for temporary construction

Instructions for Use of Standard Clauses:

Item Number 01310-01 : PROJECT SCHEDULE

Use the standard clause on all contracts. It applies to all versions of Section 01310. Always include a bid item for Project Schedule.

Item Number 01505-01: MOBILIZATION

Use the standard clause on all contracts. Always include a bid item for Mobilization. In cases of very large contracts, the 8% cap on the amount bid for Mobilization may be modified downward to 4%. Modification of the 8% cap requires approval of Capital Contracts.

Item Number 01570-01: OWNER'S FIELD FACILITIES

On contracts for which the work of Owner's Field Facilities will only be the standard work of project identification signing, use the standard payment clause. When additional work is included in Owner's Field Facilities, refer to the optional payment clause for Owner's Field Facilities and edit accordingly.

Item Number 01700-01: DEMOBILIZATION

Use the standard clause on all contracts. Always include a bid item for Demobilization with a minimum of 1% or 2% based on the size of the Contract.

Instructions for Use of Optional Clauses:

Item Number 01012-01: PARTNERING

Use the optional clause and include a contract bid item payable by lump sum whenever Section 01012 Partnering is included in a contract.

Item Number 01120-01: HAZARDOUS MATERIALS SITE-SPECIFIC HEALTH AND SAFETY PLAN (HMSSHASP)

Use the optional clause and include a contract bid item payable by lump sum when the amount of effort required to develop the HMSSHASP is substantial and not merely incidental to the work, as in the case of a Moderate or Major contamination scenario when the plan must be stamped by a CIH (Certified Industrial Hygienist).

Item Number 01520-01: TEMPORARY CONSTRUCTION FENCING

Use the optional clause and include a contract bid item payable by lineal foot only when temporary construction fencing is specifically shown on contract drawings with limits of installation identified.

Item Number 01520-02: TEMPORARY CHAIN LINK FENCING

Use the optional clause and include a contract bid item payable by lineal foot only when temporary chain link fencing is specifically shown on contract drawings with limits of installation identified.

Item Number 01570-01: TRAFFIC CONTROL

Use the optional clause and include a contract bid item payable by lump sum when the amount of effort required to perform the work of traffic control is substantial and not merely incidental to the work, or if specific elements of traffic control are shown on the contract drawings, such as a specific installation of traffic control devices for a detour.

Item Number 01590-02: OWNER'S FIELD FACILITIES

Use the optional clause instead of the standard clause when the Owner's Field Facilities includes other work in addition to just the project identification signs. Edit the first paragraph of the payment clause to list the basic components of work included in Owner's Field Facilities. Coordinate the use of the second and third optional paragraphs with the articles in the Special Provisions Section 01590.

Item Number 01590-03: OWNER'S FIELD FACILITIES – FURNISHINGS AND EQUIPMENT

Use the optional clause and bid item when the optional article for Owner's Field Facilities – Furnishings and Equipment is used in Special Provisions Section 01590.

Item Number 01590-04: OWNER'S FIELD FACILITIES – SERVICES AND SERVICE CONTRACTS

Use the optional clause and bid item when the optional article for Owner's Field Facilities – Services and Service Contracts is used in Special Provisions Section 01590. Edit the payment clause to include communication devices for Owner if the optional article for Owner's Field Facilities – Communication Devices for Owner is used in Special Provisions Section 01590.

Item Number 01590-05: OWNER'S FIELD FACILITIES – OFFICE SUPPLIES

Use the optional clause and bid item when the optional article for Owner's Field Facilities – Office Supplies is used in Special Provisions Section 01590.

6.05 Instructions for Editing Measurement and Payment Section:

Do not edit this section except as follows:

- Article MP-13 Materials On Hand - Insert a list of materials and equipment eligible for partial payment in accordance with General Provisions GP9.4.1 Materials On Hand. Example: "136# Rail", "Structural Steel", "Wheel Truing Machine". If no materials or equipment will be eligible for partial payment, indicate "None".

Note payment for Materials On Hand should be used sparingly. Circumstances which may warrant payment for Materials On Hand include custom fabricated or high value materials or equipment which are anticipated to be purchased by the Contractor well before incorporating the materials or equipment into the work. Payment for Materials On Hand encourages the Contractor to obtain custom materials and equipment early in the life of the Contract to ensure they are at the site when needed, and permits the Contractor to recover the use of its working capital within a shorter time frame. Payment for Materials On Hand should be considered only on contracts with at least 6 months duration and a total contract cost of at least \$1,000,000. The cost of materials or equipment eligible for payment for materials on hand should be at least \$50,000.

- Article MP-14 Contract Bid Items - Insert a list of all contract bid items, including a description of the measurement method and scope of payment for each. Follow the template as shown and do not change the formatting. Repeat the process for every item on the Schedule of Bid Prices.

Edit the template as follows:

Item Number: Insert the item number exactly as shown on the Schedule of Bid Prices. List all contract bid items sequentially in the exact order shown on the Schedule of Bid Prices. Do not change standard bid item numbering. Refer to Section 6 of this manual for additional information on numbering of contract bid items.

Contract Bid Item Description: Following the Item Number, positioned two spaces to the right of the colon, insert the contract bid item description or "title" exactly as shown on the Schedule of Bid Prices.

Measurement: Insert the appropriate standard or optional measurement clause(s) in accordance with 7.02 and 7.04 above. Edit as necessary for the specific contract bid item. Describe any specific requirements for measurement not covered by or in addition to standard methods above.

Payment: Insert the appropriate standard or optional payment clause(s) in accordance with 7.03 and 7.04 above. Edit as necessary for the specific contract bid item. Describe any specific requirements for payment not covered by or in addition to standard methods above.

Examples:

Item Number 05672-01: THERMITE FIELD WELDS

Measurement: Thermite field welds will be measured by the unit. The quantity of thermite field welds to be paid for will be determined by actual count in place.

Payment: The contract unit price paid for Thermite Field Welds shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in thermite field welds, complete in place, as shown on the plans, and specified in the Contract Documents.

Item Number 01570-01: TRAFFIC CONTROL

Measurement: Traffic Control will not be measured for payment. Traffic Control shall be paid by lump sum.

Payment: The contract lump sum price paid for traffic control shall include full compensation for furnishing all labor (including flagging costs), materials (including signs), tools, equipment, and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components used for traffic control, as shown on the plans, and specified in the Contract Documents.

The adjustment provisions in GP4.2, Changes, shall not apply to the item of traffic control.

Adjustments in compensation for traffic control will be made only for increased or decreased traffic control required by changes ordered by the Engineer and will be made on the basis of the cost of the increased or decreased traffic control necessary as determined in accordance with GP9.3, Time and Materials Payment.

SECTION 7

EDITING INSTRUCTIONS FOR SPECIAL PROVISIONS

7.01 General:

The Special Provisions are a series of templates for creating the various Sections of the Special Provisions (Division 1). They include standardized language applicable to all JPB construction contracts and serve as a starting point for preparing project specific documents. The following articles provide guidelines and instructions for preparing and editing Special Provisions.

7.02 Formatting:

All Sections of the Special Provisions must follow the same formatting rules to ensure uniform appearance of contract documents. The standardized format is simple and does not utilize many of the automated functions in Microsoft Word software for the expressed purposes of accommodating users with minimal word processing skills and reducing errors when converting to PDF file format.

The standard formatting has been applied to all Special Provisions. Users are to comply with the standard formatting as established and described below.

Formatting Feature	Standard Format
Paper Size	Letter (8-1/2 x 11 inches)
Font	Tahoma standard font type for all text, headers and footers
Font Size	Tahoma 12 Capital BOLD for Section Title, centered, with one line space between first and second lines of title Tahoma 10 for text body Tahoma 10 Capital BOLD for Article Headings Tahoma 8 BOLD for Headers and Footers
Margins	Use 1" margins left and right, top and bottom, with mirror margins and 0.5" gutter. (Provides 1.5" of binding space)
Sheets	Use double sided sheets
Columns	Use single column text
Line Spacing	Single
Paragraph Break Across Page	Allow paragraphs to break across the bottom of the page
Numbering Style	DO NOT use Auto-numbering feature in Word. Instead use direct formatting as follows: 1.XX, A., 1., a. - if any further outline detail than this - a new paragraph should be started
Indentation	Use 1/2 inch indentation increments
Justified	Use justified text, but not centered because of margins
Headers	Contract Number in right hand corner, right justified. No other info in header.
Footers	Left corner, left justified = Title of Submittal (i.e.: 100%, IFB, Conformed, etc.). Center, centered, Section # - Page # (i.e.: 01050-1) on first line, Section title (i.e.: Field Engineering) on second line.

Formatting Feature	Standard Format
END OF SECTION	Use end of section indicator. Use "This Page Intentionally Left Blank" where needed so next section starts on right side of binding (odd page).
Use of "Not Used"	Use term "Not Used" when appropriate - do not delete the Part Heading
File Structure	Use an individual document file for each Specification Section. (This maintains version control and document stability)

7.03 Article Headings and Usage:

Article headings included in the Special Provisions shall not be modified unless provided for in the editing instructions. Articles shall be used as described in this section and in accordance with editing instructions for the individual Special Provisions Sections.

Description vs. General

The first article of each Section will be "Description". It will briefly describe the scope of work covered by the Section. An article "General" may be used to provide additional information or requirements that do not fit in "Description" or other articles.

Related Sections

A "Related Sections" article is not to be used in Special Provisions (Division 1) Sections. All sections of the Special Provisions are related as a whole so there is no need to list individual related sections. A "Related Sections" article may be used in Supplemental Technical Provisions Sections 2 through 20 to call attention to other Technical Specification Sections containing information pertaining to the work of the current section. Occasionally the standard language may include references to specific sections within the body of the text. Do not edit these references.

Submittals and Deliverables

For all sections of the Special Provisions, consider whether there are any submittals or deliverables required for the work of the Section and include an article(s) titled "Submittals" or "Deliverables" as needed, insert the article(s) toward the beginning of the Section, and renumber other articles as necessary. Include a summary list of all submittals or deliverables required under the Section in the appropriate article. Details of the submittals or deliverables should be described elsewhere in the Section. If no submittals or deliverables are required, omit the article.

7.04 Section Descriptions and Editing Instructions:

Instructions for editing the Special Provisions template are embedded within the template and supplemented by additional instructions and explanations within this article. Within each Special Provisions section, the string of symbols "#@#" demarcates the beginning of an embedded instruction. Instructions or optional clauses will follow, in italic text underlined and enclosed by parentheses. Example: #@# (*Insert date*).

To make the edit, delete the demarcation symbols and replace the instructions with either the optional clause or other desired text, if any. Reformat any inserted text to be consistent with the standard formatting of the template. The finished version should be devoid of demarcation symbols and instructions, and should conform to all formatting standards in 5.02 above.

When an article is optional and does not apply to the contract, the article shall be omitted in its entirety and the following articles renumbered accordingly.

DO NOT edit, modify or delete any text which is part of the standard template unless instructed to do so in the editing instructions.

The following articles provide detailed instructions and explanations for editing each Special Provisions section:

Section 01001 Contract Time and Order of Work

The purpose of this Section is to define the number of days for contract completion, describe any restrictions applicable to contract time or order of work, define any interim contract milestones, specify any work elements for which relief of maintenance may be granted prior to substantial completion of the entire Work, describe any restrictions for order of work not already shown on the plans, and describe the Administrative Planning Period and requirements for obtaining Notice to Proceed.

Note, since the term "day" is defined as "calendar day" in the General Provisions, there is no need to specify "calendar" day in the Special Provisions; "day" is sufficient and has consistent meaning throughout.

Do not edit this section except as follows:

- Article 1.02 – Time For Completion - Insert the number of days for completing the contract.
- Article 1.03 – Restrictions – Paragraph A. 1. - List holidays or other designated non-work days on which the Contractor is restricted from working. For example, in the case of a negotiated non-work day with property owners or JPB Operations Department, or if JPB intends not to have staff available on a particular holiday and does not want the Contractor working unattended. If no restrictions apply, insert "None".
- Article 1.03 – Restrictions – Paragraph B. – List any restrictions affecting the start or progress of work. Example: "Bridge deck replacement work at MP25.75 shall not begin prior to April 15, 2006 in accordance with permit restrictions." "No work in waterway at MP32.15 shall be performed between October 15th and April 15th in accordance with permit restrictions." If there are no restrictions, omit the paragraph.
- Article 1.04 – Interim Milestones – Paragraph A. 1. - List each portion of work and its completion requirement. Provide a "title" for each interim milestone as an identifier. Examples: "Tunnel Systems: All systems that connect into or through the Tunnel shall be completed by May 1, 2006.", "Bridgework MP25.75: Bridge construction at MP 25.75 shall be completed within 120 days of NTP."
- Article 1.04 – Interim Milestones – Paragraph B. 1. - Specifically describe the scope of completion for each interim milestone using the same titles and numbering as in 1.03 A. Example: "Tunnel Systems: Completion of all systems that connect into or through the Tunnel shall include completion of tunnel structure underneath the Maintenance Building and completion of all

components of the electrical, communication, and mechanical systems between construction joint at west lobby and construction joint at east lobby.”

- Article 1.05 – Relief Of Maintenance - List any portions of work for which relief of maintenance may be granted prior to substantial completion of the entire contract work in accordance with the requirements of the General Provisions. Example: In the case of a multiple station project, “California Avenue Station: Entire passenger station including all facilities and systems. Trackwork between station 546+00 and 560+00 is excluded.”
- Article 1.06 – Order Of Work – Paragraph C. – Optional paragraph: To be used sparingly in cases when the order of work or construction staging is critical and JPB does not want to consider changes even for a reduced price. Consult with Capital Contracts before using this clause.
- Article 1.06 – Order Of Work – Paragraph D. - List any order of work restrictions such as general sequencing or logic not already shown on plans. Examples: “Culvert installation at MP 14.31 shall be completed prior to installation of crossover at CP Trousdale.”, “Yard track construction shall be completed prior to placement of final lift of asphalt concrete pavement.” If there are no restrictions, omit the paragraph.
- Article 1.07 – Administrative Planning Period – Paragraph B – Subparagraphs 1 through 14 are required on all contracts and are not to be edited or deleted. Select and insert optional clauses from the list provided in accordance with associated edits in the listed sections. The optional paragraphs should ideally be inserted within the list of 1-14 to occur in numeric order of the Sections referenced. Renumber the subparagraphs to paragraph B. accordingly.

- Optional clause 1: use on contracts which include Section 01012 Partnering.
- Optional clause 2: use on contracts which require a Utility Installation plan in accordance with Section 01047 Utilities and Systems Coordination.
- Optional clause 3: use on contracts which require a Pre-Construction Condition Survey in Section 01100 Environmental Mitigation Procedures.
- Optional clause 4: use on contracts which require the Contractor to establish the Owner’s field office in Section 01590 Construction Facilities.
- Optional clause 5: use on contracts which require the Contractor to establish a field office for itself on site in Section 01590 Construction Facilities.

Section 01002 Liquidated Damages

The purpose of this Section is to specify liquidated damage amounts for Substantial Completion and interim milestones. General Provisions GP8.4 for liquidated damages requires this information to be included in the Special Provision.

Do not edit this section except as follows:

- Article 1.02 – Liquidated Damages – Paragraph B. – Insert the dollar amount of liquidated damages to be assessed per day for failure to achieve Substantial Completion within the time specified. Note, the Contract Time (number of days) coincides with Final Completion, but LD’s are assessed for failure to achieve Substantial Completion. Do not change the standard language to say Final Completion as it will conflict with the General Provisions.

Calculation of Liquidated Damages: Refer to Appendix B for guidance in calculating liquidated damages. A copy of the liquidated damages calculation must accompany the submittal of the 100% Design package to Capital Contracts.

- Article 1.02 – Liquidated Damages – Paragraph C. - List each interim milestone, with the same titles and in the same order and numbering as in Section 01001, Article 1.03. Include the associated liquidated damage amount and unit of measure. Example: “Tunnel Systems: \$1,000 per day”, “Tunnel Systems: \$3,000 one time lump sum assessment”. A table can be used as an alternate format when there are several interim milestones.

Section 01003 Incentives

Contact Capital Contracts for guidance when utilizing Incentives

Section 01004 Owner Furnished Labor and Equipment

The purpose of this Section is to describe labor and equipment to be furnished by the Owner, including the functions to be performed by Owner Furnished Labor (OFL).

The basic premise is that the Owner will provide appropriate labor and equipment to reasonably support the types of work to be performed, during the work windows specified in the contract. There is no “allocation” of labor or equipment resources available to the Contractor to be used at will. The Owner is making the commitment to support the conditions that it specifies in the contract and will determine when and what kind of support is required and will be provided. The Contractor will be responsible for extra OFL or Owner Furnished Equipment (OFE) resulting directly from its operations, means and methods beyond what is specified.

There is no need to distinguish between work within or outside the Operating Envelope because all work will require submittal and approval of SSWP’s, and determination of support requirements will be through that process on a case by case basis.

Rates for OFL or OFE will be established and maintained by the Capital Contracts group. Do not edit these values without prior approval from Capital Contracts.

Closely coordinate the requirements of this section with those of Section 01040, Work Hours and Track Access.

Do not edit this section except as follows:

- Article 1.02 – Owner Furnished Labor – Paragraph C. 1. - Insert number of flagmen or watchmen to be provided per work window. Write out the number and follow with numeral in parentheses. Example: “one (1)”.

The number of OFL to be provided will be determined based on several factors including complexity and amount of work to be performed, number of work groups anticipated to perform work within given work windows, need for protection beyond the limits of work for site access or transport of materials and equipment, availability of OFL resources, etc. **Important:** the number of OFL listed is a contractual commitment from JPB to provide the labor without charge to the Contractor. Failure to provide these resources may result in claim(s). Coordinate with other departments and stakeholders as necessary to ensure that the number of OFL listed is appropriate and acceptable for the specific project. To ensure safety, and for budgeting purposes, the minimum number of flagmen/watchmen to be provided is ONE (1).

Note JPB’s management position is NOT to allow the Contractor to provide watchmen except in very limited and unique circumstances. Therefore, Contractor watchmen are not discussed in the standard special provisions. The standard condition is for protection to be provided by the

Owner via ORR (Operating Railroad of Record) staff. If the project conditions are such that there is no potential to foul tracks, discuss options with Capital Contracts for alternate means of providing protection.

- Article 1.02 – Owner Furnished Labor – Paragraph C. 2. - Insert number of signal personnel (signal maintainers or signal inspectors) to be provided per work window. Write out the number and follow with numeral in parentheses. Example: “one (1)”.

When determining the number of OFL to be provided, consider the complexity and amount of work to be performed, the potential of the work to impact the existing or proposed railroad signal system, number of work groups anticipated to perform work within given work windows, need for protection beyond the limits of work such as at grade crossings, availability of OFL resources, etc.

Important: the number of OFL listed is a contractual commitment from JPB to provide the labor without charge to the Contractor. Failure to provide these resources may result in claim(s). Coordinate with other departments and stakeholders as necessary to ensure that the number of OFL listed is appropriate and acceptable for the specific project. Note Owner furnished signal personnel (signal maintainers or signal inspectors) may still be required on projects with no railroad signal work if there is a potential for other work to impact the signal system.

- Article 1.03 – Owner Furnished Equipment – If no OFE is provided, delete paragraphs A. through L. in their entirety and replace with “A. No Owner Furnished Equipment is provided under this contract.” If OFE will be provided, edit this article as follows:
- Article 1.03 – Owner Furnished Equipment – Paragraph B. 1. a. – Optional paragraph. Use when a work train will be provided.
- Article 1.03 – Owner Furnished Equipment – Paragraph B. 1. b. – Optional paragraph. Use to list any other operated equipment to be provided by Owner. Example: “Tamper, Mark IV”. If no Operated equipment is to be provided, delete paragraph 1. in its entirety and renumber subsequent paragraphs accordingly.
- Article 1.03 – Owner Furnished Equipment – Paragraph B. 2. a. – Optional paragraph. Use to list any non-operated equipment to be provided by Owner. Example: “Flat cars”. If no Non-Operated equipment is to be provided, delete paragraph 2. in its entirety.
- Article 1.03 – Owner Furnished Equipment – Paragraph C. 1. – Insert the number and type of equipment to be provided for each work window. Repeat as necessary to provide one paragraph for each type of equipment listed under Paragraph B. Number new paragraphs accordingly.
- Article 1.03 – Owner Furnished Equipment – Paragraph H. – If no work train is provided, delete the first line of the table. Insert the requested data for each type of equipment provided. Obtain current rates from Capital Contracts group.
- Article 1.05 – Arrangements for Owner Furnished Equipment – If no OFE is provided, delete this article in its entirety.

Section 01005 Contractor’s Personnel and Equipment

The purpose of this Section is to describe training, testing, experience and qualification requirements for Contractor’s personnel performing specific duties or functions, and general requirements for Contractor’s railroad or on-track equipment. The intent is to provide function based qualification requirements rather

than specify specific positions and number of personnel. This allows flexibility for the Contractor to provide qualified personnel to perform specific functions without being limited to specific organizational restrictions which are often difficult to fulfill on the west coast. Detailed requirements for construction equipment are included in the technical specifications for the work to which they pertain.

Do not edit this section except as follows:

- Article 1.02 – Submittals – Paragraph B. 1. - Insert list of resumes to be submitted for personnel described in this Section. Do not duplicate submittal requirements covered in other Sections. For example, the requirements for submitting a resume for project scheduling is included in Section 01310 and should not be duplicated in this Section. In most cases the list of resumes will include only those functions for which qualification requirements are described in this Section 01005. Note that per article 1.03 D. the Engineer can request resumes for anyone at any time during the course of the contract so consider carefully which resumes are really needed prior to Limited Notice-to-Proceed (LNTP) before listing.
- Article 1.05 – Personnel - Specific (Project Manager) – Paragraph A. 1. - Insert experience and qualification requirements. Select and insert one of the standard optional clauses provided. Select Option 1 for large projects with significant trackwork, for example the North Terminal Improvements project. Select Option 2 for medium size multi-discipline projects which may include some trackwork, for example the various station outboard platform projects which include track reconstruction. Select Option 3 for small projects, typically with no trackwork, for example the Closed Circuit Television (CCTV) or Public Address (PA) System projects.
- Article 1.05 – Personnel - Specific (Project Manager) – Paragraph A. 2. - Insert training and testing requirements. Select and insert standard optional clauses as applicable to the project. If no testing is required, omit paragraph 2 in its entirety and renumber subsequent paragraphs accordingly. Select optional paragraphs to be consistent with the qualification requirements selected above and based on what type of proficiency is to be demonstrated by the person. Consider what type of field duties may be expected of the Project Manager. Larger projects with trackwork will likely require both optional clauses, while small simple projects may not require either. Flexibility is afforded in editing, however consistency is the goal.
- Article 1.05 – Personnel - Specific (Project Manager) – Paragraph A. 3. - Insert availability requirements. Select and insert one of the standard optional clauses as applicable to the project. Select Option 1 when the work will be performed during windows requiring multiple shifts covering generally more than 40 hours per week. Select Option 2 when the work will be performed within a 40 hour work week or possibly on limited shifts. The intent is to specify a level of effort required. Do not restrict the person from working on other projects or performing other duties. The intent of the specifications is to establish what is considered acceptable performance of a duty or function. The Contractor is responsible to fulfill the requirement, but is allowed flexibility in resourcing.
- Article 1.05 – Personnel - Specific (Safety Officer) – Paragraph B. 1. - Insert experience and qualification requirements. Select and insert one of the standard optional clauses provided. Select Option 1 for projects with trackwork or other work within the operating envelope, typical for most projects. Select Option 2 for small projects with no trackwork and only minimal work within the operating envelope, for example the CCTV or PA System projects.
- Article 1.05 – Personnel - Specific (Safety Officer) – Paragraph B. 2. - Insert training and testing requirements. Select and insert standard optional clauses as applicable to the project. Select optional paragraphs to be consistent with the qualification requirements selected above and based on what type of proficiency is to be demonstrated by the person. Consider what type of

field duties may be expected of the Safety Officer. Projects with trackwork will require both optional clauses. Since the Safety Officer would provide training to others, Advanced Roadway Worker Protection training is always required.

- Article 1.05 – Personnel - Specific (Safety Officer) – Paragraph B. 3. - Insert availability requirements. Select and insert one of the standard optional clauses as applicable to the project. Select Option 1 when the work will be performed during windows requiring multiple shifts covering generally more than 40 hours per week. Select Option 2 when the work will be performed within a 40 hour work week or possibly on limited shifts. The intent is to specify a level of effort required. Do not restrict the person from working on other projects or performing other duties. The intent of the specifications is to establish what is considered acceptable performance of a duty or function. The Contractor is responsible to fulfill the requirement, but is allowed flexibility in resourcing.
- Article 1.05 - Personnel - Specific – Project Scheduler – Paragraph C. – Include this paragraph when the “large” or “medium” versions of Section 01310 are used. Delete this paragraph when the “small” version of Section 01310 is used. Renumber subsequent paragraphs if needed.
- Article 1.05 - Personnel - Specific - Optional Paragraphs – Select and insert standard optional paragraphs as follows:
 - D. Railroad Trackwork Supervision – Use on projects with any amount of trackwork or track construction.
 - E. Railroad Machine Operators – Use on projects with trackwork which will require use of on-track or railroad equipment.
 - F. Railroad Track Welders – Use on projects with any amount of trackwork or track construction.
 - G. Railroad Signal Track Support – Use on projects with any amount of trackwork or track construction where damage to railroad signal system could occur, even if there is no signal system work as part of the contract. Ensure qualifications are included in Section 18200.
 - H. Railroad Signal Work – Use on projects with railroad signal system work. Ensure all requirements are included in Section 18200.
- Article 1.06 – Railroad Construction Equipment - Paragraph I – This paragraph is optional. Use on projects where a Contractor operated car-mover will be allowed or required. Insert “may” when use of a car-mover is allowed but optional. Insert “shall” when use of a car-mover is required.

Section 01010 Summary of Work

The purpose of this Section is to describe, in summary level terms, the typical items of work included in the Contract and work specifically excluded from the Contract. It is intended to be a quick reference for the general scope of work and is not intended to be a complete description of the Work or include extensive details. The technical specifications and contract drawings will provide the details of the Work.

Do not edit this section except as follows:

- Article 1.01 – Work Of This Contract - Insert a list of the general items of work on the contract. Examples: “Track construction on concrete ties, Excavation and backfill, Railroad signal controller installation and programming”.
- Article 1.02 – Work Not In This Contract - This article is optional. Insert a list of general items of work specifically excluded from the contract. This should only be used to highlight items that would typically be considered as included in the work based on common industry practice. Examples: “Procurement of rail” (in the case of Owner furnished material); “Interior wall painting” (in the case where tenant improvements will be performed after the contract is complete). This article is most likely to be used on an exception basis only. The purpose is to provide clarity, not extraneous information. When there are no items of work specifically excluded from the contract, omit the article and renumber following articles accordingly.

Section 01011 Work Planning

The purpose of this Section is to describe requirements for planning and performing the Work both within and outside of the railroad operating environment, including contractual requirements for obtaining approval to work. Administrative details for obtaining approval to work are not included in the contract documents to allow procedural flexibility.

Do not edit this section except as follows:

- Article 1.06 – Site Specific Work Plan (SSWP) – Optional paragraph D. – Use this clause when there are work activities or operations such as large, complicated track cutovers for which more than six weeks will be needed for JPB review. Insert a list of the work elements and the unique submittal time required. Example: “Stage 1, Redwood Creek Bridge Deck Replacement – 8 weeks”.
- Article 1.10 – Track Back in Service – Optional paragraph F. – Use this paragraph and subparagraphs when Amtrak will be performing track work to place track back in service instead of the Contractor or following certain work by the Contractor. Ensure that the description of work in subparagraph 3. is correct and coordinated with description of Amtrak work in Section 01010, Article 1.03. Coordinate also with work windows described in Section 01040.
- Article 1.13 – Work Impacting Union Pacific Railroad (UPRR) Operations – Since UPRR operates on the entire JPB railroad corridor, this condition may apply at any time on any contract. Therefore do not edit paragraph A. However, when there is work required on tracks owned or operated exclusively by UPRR, additional requirements will apply. In this case, insert optional paragraph B. and coordinate with use of optional Article 1.05 in Section 01045.

Section 01012 Partnering

The purpose of this Section is to describe terms and conditions for developing a partnering relationship. This Section is optional and should be considered for larger or more complicated projects, usually over \$10 Million in estimated construction cost.

Do not edit this section except as follows:

- Article 1.01 – insert the number of meetings anticipated and the timeframe in which they are expected to occur.

Section 01020 Location and Existing Site

The purpose of this Section is to describe the work location(s), define the limits of the Work, describe site access and areas available for Contractor's use, describe terms and conditions for use of the site, and describe existing conditions and uses of the site, including anticipated train traffic.

Do not edit this section except as follows:

- Article 1.02 – Work Location and Limits - Insert a description of the work location and limits. The description of the work location, or the site, should typically be only one sentence. Example: "The existing Caltrain Hillsdale Station on the JPB corridor in the City of San Mateo, California." The description of work limits should describe the boundaries of the work area in general terms. Exact limits of work should be delineated on the plans. Example: "The project limits extend from approximately 500 feet north of the existing platform to the south end of the existing platform, including existing station facilities and parking lots on the westerly side of the railroad tracks, new parking area on the easterly side of the railroad, and within Pacific Boulevard." Use multiple paragraphs if there are multiple discrete work locations, as in the case of multiple station, culvert or bridge locations.
- Article 1.04 – Site Access - Insert additional paragraphs as needed to describe terms and conditions for use of specific access paths or points shown on the plans or defined in the specifications, including any conditions for use of Temporary Construction Easements or other temporary access rights obtained in advance by JPB. Example: "Access via Gate A is available only during the hours of 7:00 am to 3:00 pm, Monday through Friday. Gate A will be locked and inaccessible at all other times."
- Article 1.05 – Areas for Contractor's Use - Select and insert one of the two standard optional clauses provided. Use Option 1 if construction staging areas have been identified or specified in advance. Use Option 2 if no specific areas have been identified in advance. Paragraph C. always applies under either option. If Option 2 is used, renumber paragraph C. to B. Example: "Area "S" as shown on the plans is available for use subject to five (5) days advance notice to the Engineer."

Note for 1.04 and 1.05: If the requirements for a Temporary Construction Easement (TCE) are extensive, list the contractual conditions or restrictions for use and include the actual TCE document as a reference document available for review (in accordance with, and with reference to Section 01090).

- Article 1.07 – Use of Tracks - Select and insert one of the two standard optional clauses provided, if applicable.

Use Option 1 if there is a potential need for on-track storage but no storage tracks have been identified or specified in advance. Use Option 2 if there is a pre-determined need for on-track storage and storage track locations have been identified in advance. Storage track locations should be shown on the plans and listed in this article.

If there is no potential need for on-track storage, for example a project with no track work and no materials which would be potentially delivered by rail, omit this article in its entirety and renumber following articles as needed.

- Article 1.09 – Train Traffic – In limited circumstances, where train traffic would have no bearing on the prosecution of the work, this article may be omitted in its entirety. Caution: do not omit this article unless there is absolutely no interface with train traffic or the operating envelope, such as a station project with exclusively interior work.

Section 01040 Work Hours and Track Access

The purpose of this Section is to describe the work week (for labor compliance purposes), the allowable work hours at the site (to address any local restrictions or public relations commitments), the designated work windows and allowable types of track access (for specific work activities), any restrictions associated with work hours or work windows, and availability of active track (to designate which tracks may be available for use).

Note: Work week, allowable work hours, and Work Windows are distinct and separate from each other. They may not always coincide, but should always be coordinated to provide sufficient time in which to construct the work.

Do not edit this section except as follows:

- Article 1.02 – Work Week – Insert the days of the week which will constitute the “normal” work week for purposes of labor compliance. Example: “Monday through Friday”, “Wednesday through Sunday”. The standard work week is Monday through Friday. If a shifted work week is being considered for the project, consult with Capital Contracts before incorporating. Shifted work weeks are not standard and should be used only under special circumstances.

Important – When a shifted work week is used, it must also be stated in the Notice to Bidders in order to make it legally effective. Coordinate editing of this article with Capital Contracts.

- Article 1.03 – Work Hours – Insert the start and end times of the allowable work hours and indicate the applicable days of the week, or “daily” if applicable 7 days per week. Example: “7:00 am and 7:00pm, daily”, “7:00am and 4:00pm, Monday through Friday”.

Note, allowable work hours are the permissible times during which construction activities, including delivery of materials and equipment to the site may occur. They are not necessarily the hours during which track access is available. Allowable work hours are typically established to conform with local ordinances or to limit work to times when JPB personnel will be available to inspect the work. An exception is included in the specifications for work that must be performed during Work Windows due to safety and operational factors.

- Article 1.05 – Restrictions – Insert paragraphs as needed to describe any restrictions for work hours or use of Work Windows not covered elsewhere. Optional Clause A.: Use on all contracts unless JPB Operations department specifically allows multiple windows simultaneously. If there are no restrictions, omit this article in its entirety and renumber subsequent articles as needed.
- Article 1.06 – Availability of Active Tracks – Insert additional paragraphs as needed to describe other conditions or restrictions for use of active tracks. If certain tracks will be made available to the Contractor during other than specified Work Windows, indicate such availability in this article. Do not repeat information included in Section 01020, Location and Existing Site, Article 1.06, Use of Tracks, regarding on-track storage locations.

Examples of additional paragraphs for Availability of Active Tracks:

“No rail transport of on-track equipment is allowed on mainline tracks. On track equipment shall be delivered to the site via highway truck or other method approved by the Engineer. The equipment shall be placed directly on the track under construction.”

"The Contractor will be allowed to set on-track construction equipment onto one of the following existing tracks upon delivery to the site: Coach Lead or Track (21). The equipment shall immediately be moved to the tracks in Area 2 wherein they shall remain until trackwork is complete. Removal of this equipment may also be from these tracks. The use of these tracks shall be coordinated with and as approved by the Engineer through the SSWP process."

Section 01045 Coordination - General

The purpose of this Section is to describe details for coordinating work activities with other parties. Editing of this Section must be coordinated with editing of Section 01090 to avoid duplication. Coordination requirements pertaining specifically to utilities are covered in Section 01047 Utilities and Systems Coordination. Coordination with the Operating Railroad of Record (ORR) is covered in this section, but scope of work to be performed by ORR is covered in Section 01010.

Do not edit this section except as follows:

- Article 1.02 – Insert a list of known JPB contracts or other work activities, either by JPB or other parties, in the vicinity of the Work. A very brief, summary level description of the work should be included. Do not describe the work activities in detail or describe how the work interfaces with the Contract. The reason for this is that the work of other contracts or by other parties may change and we do not want to misrepresent such work in the specifications. Listing the known work in the area alerts the Contractor, but preserves its responsibility for obtaining information about those activities and coordinating with the parties performing the work. Example: "Tunnel Avenue Overpass project, City of Brisbane, highway overpass construction near milepost 6.6". If there are no known contracts or work activities, insert "None".
- Article 1.04 – This article is optional and will likely not apply to most contracts. It should be used in cases where there are restrictions related to coordination of work with other parties which are not covered elsewhere in the Contract Documents. Insert a description of the restriction. If there are no restrictions, omit the article and renumber following articles accordingly.
- Article 1.06 – Coordination with Property Owners and Tenants - This article is optional. It should be used in cases where there are specific requirements for notifying or coordinating work with adjacent property owners or tenants, or specific restrictions on work to support agreements between JPB and owners/tenants. If there are no restrictions, omit the article and renumber following articles accordingly.

Example:

"A. The UPRR may have one or more tenants ("UPRR Tenant") occupying the Richmond Chase warehouse during the course of this construction contract. The Contractor shall conduct its work so as to allow the business operations of the UPRR Tenant to continue during construction.

B. The Contractor shall notify the UPRR Tenant five (5) business days prior to starting work in the vicinity of the Richmond Chase warehouse (from station 2414+00 to the Guadalupe River).

C. There are two existing vehicular access points to the Richmond Chase warehouse parcel: one at Lenzen Avenue, and one at the intersection of Cinnabar Street and N. Autumn Street. The Contractor shall conduct its work to allow at least one of these vehicular access points to be kept open and passable at all times between the hours of 7am to 7pm, Monday through Friday for the duration of the contract. The Contractor shall provide and maintain temporary surfacing at the access points as needed to accommodate passage of highway vehicles until the contract work and final paving in the vicinity of the warehouse is completed."

- Article 1.07 – Coordination with Union Pacific Railroad - This article is optional. It should be used in cases where there will be work on tracks which are owned, will be owned, or operated exclusively by UPRR. If there is no work on UPRR tracks or requiring coordination with UPRR, omit the article and renumber following articles accordingly.

In paragraph B. insert a list of any other applicable UPRR publications or standards. The contents of the list should be coordinated with and confirmed by UPRR on a project specific basis.

- Article 1.08 – Coordination with Outside Agencies - This article is optional. It should be used to identify outside agencies, having specific jurisdiction over the Work or portions thereof, with which the Contractor must coordinate his work. If there are no project specific agencies identified in addition to those already stated elsewhere in the General Provisions or other Specifications, omit the article and renumber following articles accordingly. The list of known agencies will typically be cities or counties having jurisdiction over the streets and property surrounding the project area. Example: "City of San Jose".

This article may also be used to identify any special notice requirements not covered elsewhere in the specifications. Add paragraphs as needed. Example: "Provide notice to City of Redwood City, Director of Public Works, five days in advance of starting work within City street right of way". To the extent possible, requirements should be included in the Section describing the work to which they pertain. Requirements should be stated in this article only if they are general in nature and do not fit appropriately in other specifications. For example, a requirement from a City to submit traffic handling plans for approval should be included in Section 01570, Vehicular and Pedestrian Traffic Control, whereas a requirement to provide notice prior to starting work in a city street belongs in this article because the work to which it pertains is covered in multiple specification sections.

- Article 1.09 – Permits and Approvals - Under paragraph B. 1., insert a list of permits which have been obtained by the Owner, if any. Example: "U.S. Army Corps of Engineers Nationwide Permit". If no permits are to be obtained by the Owner, indicate "None". Permits should be obtained prior to advertisement of contract. Do not list permits under this paragraph that have not yet been obtained as of the advertisement date.

When permits are required but are not obtained prior to advertisement, the bidders are not able to review the permit requirements affecting the work. This introduces increased risk to the bidders and may increase the bid prices. If a situation arises in which a permit cannot be obtained prior to advertisement, but the Owner will still retain responsibility for obtaining the permit, insert optional paragraph B. 2. and provide the list of permits which fall under this condition. Indicate the date the permit will be obtained. Providing the date establishes when the Contractor can expect the permit to be issued so he may start portions of work affected by the permit. The date should be as realistic as possible because it is a contractual commitment for which the Owner will have responsibility. Example: "Regional Water Quality Control Board, Water Quality Certification – May 1, 2006". If all permits have been obtained prior to advertisement, omit paragraph B. 2.

Note, there is no need to make available a copy of the actual permit as existing information because the applicable requirements should have been incorporated into the specifications in the various sections of the work to which they apply.

Paragraph C. is optional. Under paragraph C. 1. insert a list of any approvals obtained by the Owner from regulatory agencies or others that are not in the form of permits. The purpose of

including such approval in the specifications is to assure the Contractor that the Owner has authority to require him to perform certain work when such work is, or may potentially be, in conflict with other regulatory requirements.

For example, the specifications require the Contractor to comply with the requirements of the Department of Toxic Substances Control (DTSC). The Owner may obtain approval from the DTSC for a soil management plan which includes or requires activities that would normally not be allowed by the DTSC regulations. The Owner may incorporate the requirements of the plan into the project specifications for enforcement purposes. This establishes a potential conflict between two parts of the specifications and increase risk for the Contractor. Therefore, the purpose of this article is to clarify that the approval from DTSC is specific to the project and supersedes published regulations.

Note, there is no need to make available a copy of the actual approval document as existing information because the applicable requirements should have been incorporated into the specifications in the various sections of the work to which they apply.

Under paragraph D. 1. list any known permits that will be the responsibility of the Contractor to obtain. There is no need to list permits already identified in other parts of the Contract Documents. The sentence indicating this is not intended as a comprehensive list clarifies this. Example: "Encroachment permit from the City of San Jose Department of Public Works for the Seismic Retrofit bridge work in San Jose."

Paragraph D. 1. a. is a standard optional clause to be used when Regional Water Quality Control Board (RWQCB) criteria for filing the notice are met by project conditions, such as acreage of soil disturbance. Consult with environmental staff and consultants regarding current criteria and whether project conditions will require submittal of a Notice of Intent.

Because this paragraph ties in with the requirements of the Administrative Planning Period in Section 01001 it cannot be deleted in its entirety. If no permits have been identified by the Owner, insert a subparagraph "a. None identified".

- Article 1.10 – Public Outreach - This article is optional. It should be used when there are specific requirements for public outreach activities to be performed by the Contractor. To the extent possible, the scope of work should be clearly defined, in which case there may be no need for a separate bid item for the work; payment for the work would be considered included in all items. If the scope of work is only generally defined, consider creating a bid item to be paid by allowance. Public outreach requirements may include special meetings or publishing and distribution of information to the public. Example: "Make arrangements to provide one public outreach meeting within two (2) months of Notice to Proceed, including a meeting site accommodating up to 300 people, associated printed materials for distribution, and a workshop host to present information verbally at the meeting. Such arrangements and scope of information to be provided at the meeting shall be mutually agreed upon in advance by the Contractor and the Engineer."

Section 01047 Utilities and Systems Coordination

The purpose of this Section is to describe details for coordinating work activities pertaining to utilities and other systems, including protection of such facilities. It provides details for fulfilling the requirements of General Provisions article GP4.8 Utilities and Non-Owner Owned Facilities with regard to notification, location, potholing, and protection of existing facilities. Note, temporary utilities are covered in the General Provisions. This Section pertains to new and existing utilities.

Do not edit this section except as follows:

- Article 1.03 – Submittals - This article is optional. Require submittal of a Utility Installation Plan on projects with complex utility layouts, known limited clearances between existing utilities and proposed facilities, or significant railroad signal system installations. Use optional clauses provided when applicable. If no Utility Plan is required, omit the article and renumber following articles accordingly.
- Article 1.05 – Notifications and Potholing For Existing Utilities – Edit table in paragraph F. to include known utility contact information for the project. This list should include, at a minimum, contacts for all known utilities shown on contract plans. If there are no applicable contacts, omit the article and table, and renumber following articles accordingly.
- Article 1.04 – Notifications and Potholing For Existing Utilities – Paragraph G. is optional. Include when there are special notification requirements which pertain only to this project and are not covered by other standard procedures. Example: “Notify City of San Mateo City Engineer, John Doe, at (555) 555-5555, five (5) business days prior to beginning relocation work for water line in 3rd Avenue.” If there are no special procedures, omit the article and renumber following articles accordingly.
- Article 1.05 – High Risk Facilities – This article is optional. It should be used when high risk utilities have been identified within the project limits. If no high risk utilities have been identified, omit the article and renumber following articles accordingly. In this case the General Provisions will apply. If the article is used, edit table in paragraph C. to list known high risk utility facilities which are shown on contract plans, and include corresponding contact information.
- Article 1.07 – Work By Utility Owners – Edit table in paragraph A. to list utilities to be relocated by the utility owners or their agents. This list should include any utilities shown on contract plans to be relocated by others. It should include utilities that are to be relocated prior to or during the contract. Include the utility company name, the location and a description of the facility, approximate work schedule, and corresponding contact information. Example: “PG&E, Station 45+00 to 45+20, Sewer Manhole, June 1, 2006 through June 30, 2006” If there are no utilities to be relocated by others, omit the article and table, and renumber following articles accordingly.

Section 01050 Field Engineering

The purpose of this Section is to describe the requirements for performing surveys for layout and performance, and measurement for payment.

- Make no edits to this Section.

The hourly rate for survey crews will be reviewed and updated periodically by Capital Contracts. No changes shall be made to these rates without approval of Capital Contracts.

Section 01120 Environmental Conditions and Procedures

- A. Case 1: Minimal or No Special Environmental Conditions
- B. Case 2: Moderate Special Environmental Conditions
- A. Case 3: Significant Special Environmental Conditions

Environmental specifications must be coordinated with the JPB corridor-wide Soil Management Plan (SMP) and any project specific SMP requirements.

Section 01090 References

The purpose of this Section is to identify general and project specific reference documents including standards, codes, regulations, and project specific reports and existing information applicable to the work. General and project specific regulatory agencies are also identified. The General Provisions place responsibility for knowledge of and compliance with all applicable laws, codes, regulations and industry standards with the Contractor. This Section supplements that requirement with known references, both general and project specific.

Do not edit this section except as follows:

- Article 1.03 – Referenced Standards – Paragraph C. 1. – This is intended to be a complete and static list of all JPB standards, however because JPB standards are still under development, consult with Capital Contracts to confirm accuracy of the list before making any edits. Ensure any referenced JPB standards are made available to the Contractor.

Paragraph C. 1. - Delete "PCJPB CADD Manual" if electronic as-builts are not required in Section 01720, Contract Record Documents. Renumber items as necessary.

- Article 1.03 – Referenced Standards – Paragraph C. 2. – Insert list of applicable standards from other agencies or entities. The list may include references to Utility companies, Union Pacific Railroad, Cities, Counties, etc. that are unique to this contract. The Contract plans or technical specifications should indicate the scope of work to which each standard pertains. Provide copies to bidders if the documents are not specifically available to the public. Example: "City of San Jose Standard Plans", "Sprint Standard Construction Drawings".

It is not necessary to list standards that are already referenced in individual technical specifications, i.e.: Caltrans Standard Specifications or AREMA, if the reference is to a particular section of such standard.

Permitting and notification requirements of local agencies such as cities and counties are included in Section 01045, Coordination – General. Temporary construction easement (TCE) and right of way requirements are included in Section 01020, Location and Existing Site. There is no need to duplicate that information in this Section 01090.

- Article 1.05 – Existing Information – Paragraph A. – Insert optional clauses as applicable. Insert list of project specific reports, studies or other information documents to be provided to bidders such as known environmental conditions reports or geotechnical reports, particularly if referenced in the specifications. Number items as necessary. Example: "Known Environmental Site Conditions, CEMOF Project, Lenzen Yard Site, San Jose, California, prepared by Environmental Resources Management dated January 17, 2003".

Use optional clauses as follows: Provide Track Chart on contracts with on-track storage areas or involving trackwork. List Conceptual Integrated Work Plan when one has been developed for the project and will be provided in accordance with Section 01011, Work Planning.

Documents should be made available to the bidders and Contractor as "existing information" if such documents could potentially impact the bid, however JPB is responsible for interpreting and incorporating any contractual requirements of such documents directly into the Contract

Documents. Therefore, do not include copies of permits or approvals obtained by the Owner as this may create duplication and possible conflicts.

Section 01100 Environmental Mitigation Procedures

This Section is optional. The purpose of this Section is to serve as a consistent location in the contract documents in which to include any project specific procedures or requirements not covered in other sections or shown as an option in other sections. In particular, this Section is intended to include measures or procedures identified in the EIR (or equivalent) to reduce or mitigate environmental impacts during construction of the project. Possible optional articles to include in this section are Archaeological Procedures, Pre-construction Condition Survey, Historic Building Covenants and Procedures, Endangered Species Procedures, Noise Impact Mitigation Requirements, and Visual Impact Mitigation Procedures.

- Article 1.01 – Description – Insert a description of the types of work covered. Example: “Archaeological procedures”.
- Other Articles – Select optional articles from the template, or create new articles as needed. Follow formatting and numbering guidelines.

Archaeological procedures would include site specific requirements and should be considered when the presence of archaeological artifacts are known or suspected to exist based on historic uses of the site. If any archaeological studies or reports are available, include them under Existing Information in Section 01090, References.

Pre-construction Condition Survey would include requirements for photos, videos, or other surveys of pre-construction conditions to be performed by the Contractor and submitted to the Engineer as a contract deliverable. This type of requirement should be considered on projects with pile driving or other work which could potentially cause damage to nearby structures or facilities.

Historic Building Covenants and Procedures would include any restrictions affecting working conditions, means and methods of construction, access during constructions, special procedures for material handling, etc. that are required by covenants or agreements pertaining to historic structures at Caltrain stations. This article would rarely be used as most historic covenants or other agreements do not address temporary conditions of construction, however if any such restriction applies include it here.

Section 01120 Hazardous Materials Conditions and Procedures

The purpose of this Section is to describe existing hazardous materials conditions at the site, describe requirements for preparation of a Hazardous Materials Site-Specific Health and Safety Plan (HMSSHASP), describe basic work practices and personal protective equipment (PPE) requirements.

Physical handling requirements such as trucking/off haul, stockpiling, storage, reuse procedures, etc. for contaminated soil, groundwater, or structural materials will be covered in the Standard Specifications or Supplemental Technical Provisions, not in this Section 01120.

The most commonly occurring condition on JPB property is minor soil and groundwater contamination. The Special Provisions template has been written to address this “standard” condition. Therefore, do not delete or “down scope” any standard requirements and do not edit this section except as specifically

described herein. The template should be modified on a project specific basis when conditions other than the "standard" exist.

There are three basic scenarios for hazardous materials. Each scenario describes the physical conditions and the associated specification options. Determine which scenario best fits the project and edit according to the instructions for that scenario:

MINOR – (Example: Station Outside Boarding Platforms, CCTV)

- Less than 500cy excavation
- Light contamination levels and shallow excavations

- Use "generic" disclosure language for existing site conditions (already in template), or if available, include project specific site data
- Require HMSSHASP without CIH stamp (already in template)
- Basic work practices and PPE apply (already in template)

MODERATE – (Example: CTX)

- Greater than 500cy excavation
- Moderate contamination levels, deeper excavations

- Provide project specific data or reports to describe existing site conditions
- Require HMSSHASP with CIH stamp (add optional clause for CIH stamp)
- Basic work practices and PPE apply (already in template)

MAJOR – (CEMOF, North Terminal Improvements)

- Greater than 500cy excavation
- Heavy contamination levels or unique conditions

- Provide project specific data or reports to describe existing site conditions
- Require HMSSHASP with CIH stamp (add optional clause for CIH stamp)
- Utilize an environmental consultant to determine project specific requirements
- Customize the specifications for work practices and PPE to the particular project conditions

Do not edit Section 01120 except as follows:

- Article 1.04 – Existing Site Conditions – Paragraph C. – Optional clause. Insert "and groundwater" if excavations are anticipated to extend into the groundwater table.

- Article 1.04 – Existing Site Conditions – Paragraph D. – Optional clause. Use for projects with building or other structures that have been investigated and hazardous materials found. Use paragraph E. in conjunction with paragraph D. and provide the accompanying site investigation report. If not applicable, omit this paragraph and renumber subsequent paragraphs accordingly.

- Article 1.04 – Existing Site Conditions – Paragraph E. - Optional clause. Use when project specific site data is provided. Reports referenced in this article should be provided as existing information in section 01090. If not applicable, omit this paragraph.

- Article 1.06 – Hazardous Materials Site-Specific Health and Safety Plan – Paragraph A. – Insert optional clause for Moderate or Major scenarios. Confirm correct application of this reference to project specific conditions with environmental consultant.

- Article 1.06 – Hazardous Materials Site-Specific Health and Safety Plan – Paragraph A. 1. c. – Optional paragraph. Insert optional clause when buildings or other structures are known to

contain hazardous materials. Insert the type of materials known to exist. Example: "asbestos containing material", "lead-based paint", "PCB containing material". If not applicable, omit this paragraph and renumber subsequent paragraphs accordingly.

- Article 1.06 – Hazardous Materials Site-Specific Health and Safety Plan – Paragraph A. 1. d. – Optional paragraph. Special Risk Management Plans (RMP) apply for work at the CEMOF facility in San Jose (Lenzen RMP), or San Francisco Yard (Mission Bay RMP). For projects with work in the vicinity of these locations, consult with environmental consultant to confirm limits of work to which the RMP will apply. Insert language describing the requirements of the RMP that must be addressed in the Contractor's plan. If not applicable, omit this paragraph and renumber subsequent paragraphs accordingly.
- Article 1.06 – Hazardous Materials Site-Specific Health and Safety Plan – Paragraph A. 1. e. – Optional paragraph. Insert provisions or specific requirements to address any unique project specific conditions. Consult with environmental consultant to confirm conditions and requirements. If not applicable, omit this paragraph and renumber subsequent paragraphs accordingly.
- Article 1.06 – Hazardous Materials Site-Specific Health and Safety Plan – Paragraph A. 2. – Optional paragraph. Insert optional clause for Moderate or Major scenarios when CIH stamp is required. If not applicable, omit this paragraph.

Section 01200 Project Meetings

The purpose of this Section is to describe the requirements for project meetings, both in general and for specific types of meetings. This Section does not endeavor to list or describe every possible type of meeting anticipated over the course of the contract. The first article establishes the Engineer's right to schedule meetings as determined necessary and thus covers any meetings not specifically listed.

- Make no edits to this Section

Section 01300 Submittals and Deliverables

The purpose of this Section is to describe the procedural requirements for Contractor submittals and deliverables, and provide a project specific summary of submittals and deliverables. The General Provisions include general statements regarding submittals and deliverables.

Submittals and Deliverables have been addressed separately in this Section 01300 to differentiate their purpose and the corresponding actions related to each. Submittals generally are documents which require acceptance or approval of the Engineer before work can proceed. Deliverables generally are documents which must be received and acknowledged, but do not restrict the progress of work. Submittals typically include items such as work plans, shop drawings, calculations, product data, samples, and test and inspection procedures. Deliverables typically include items such as test and inspection reports, photographs, record drawings, Material Safety Data Sheets (MSDS), and extra material.

This section includes two attachments which provide a summary list of submittals and deliverables required under the contract. This list is provided for convenience of the Contractor and is intended as a summary only – it does not relieve the Contractor of responsibility for items included in the specifications but not listed in the attachment. However, the project team should endeavor to make the list as complete and accurate as possible.

Do not edit this section except as follows:

- Attachment 01300-A, Submittals – Edit table to include project specific list of all submittals required in accordance with Divisions 1 through 20. Standard submittals required in accordance with Division 1 Sections are already listed in the table. They should not be edited unless the corresponding requirements in the Section are modified in accordance with instructions in this manual.
- Attachment 01300-B, Deliverables – Edit table to include project specific list of all deliverables required in accordance with Divisions 1 through 20. Standard deliverables required in accordance with Division 1 Sections are already listed in the table. They should not be edited unless the corresponding requirements in the Section are modified in accordance with instructions in this manual.
- Editing instructions for the Attachments –

Spec Title: This is the title of the specifications section in which the requirement for the item appears. The title should be stated exactly the same as in the specifications. For completeness, all specification sections should be listed except 01300 Submittals and Deliverables.

Spec Section: This is the number of the specifications section in which the requirement for the item appears. The number should be stated exactly the same as in the specifications. Note, although an item may be mentioned in more than one section, the section to be referenced in the table is the one that describes the specific requirements for that item. For example, the submittal requirement for the Baseline Schedule is mentioned in Section 01001 as part of the Administrative Planning Period requirements, but the details of the submittal are in Section 01310, therefore Section 01310 should be listed in the table.

Submittal/Deliverable Title: This is the specific title of the item, if a specific title exists, such as "Utility Installation Plan", or it may be a general description of the item or items, such as "Permits", in the case of untitled or potentially multiple items. If there is no requirement in the section, indicate "None".

Refer to Appendix A of this manual for working copies of the submittals and deliverables tables. The working copies provided are to be used by the design team to outline all submittals and deliverables for the project, including due date/frequency, requested action, review period, and other comments pertaining to each item. The working copy is a planning tool that is intended to be used as the basis for editing the Attachments in the specifications Section 01300. It will also serve as a quick reference guide for Construction Management staff.

The following columns are to be completed as part of the working copies but will NOT appear in the Contract Documents:

Due Date/Frequency: Enter the due date or a frequency only if a specific requirement is stated in the specifications. For example, "At pre-construction meeting", "Within 28 calendar days of LNTP", "Weekly". If there is no specific requirement, leave blank.

Requested Action: This is the action that will be performed by the Engineer upon receipt of the item. The action shall be the same as stated in the applicable specification section in which the item appears.

Review period: This is the time in which the Engineer will respond to the initial transmittal of the item. By default in accordance with Section 01300, Submittals and Deliverables, General Submittal Procedures, this is 14 days. In the case where an item will require a longer review period by the Engineer, edit the entry accordingly to indicate the contractual review period. If the longer review will also apply to re-submittals, state so in the Comments column.

Section 01310 Schedule

The purpose of this Section is to describe the project scheduling requirements.

Requirements will vary depending on the value, complexity, and duration of the project and on whether the Contract is unit price or lump sum. There are five Special Provisions templates depending on project specific conditions.

- Version 1 “Small” - To be used for unit price or lump sum contracts with a value of less than \$1 Million and less than 200 calendar day’s duration.
- Version 2 “Medium – Unit Price” - To be used for unit price contracts with a value of \$1 to \$10 Million or greater than 200 calendar days duration.
- Version 2 “Medium – Lump Sum” - To be used for lump sum contracts with a value of \$1 to \$10 Million or greater than 200 calendar days duration.
- Version 3 “Large – Unit Price” - To be used for unit price contracts with a value greater than \$10 Million and greater than 200 calendar days duration.
- Version 3 “Large – Lump Sum” - To be used for lump sum contracts with a value greater than \$10 Million and greater than 200 calendar days duration.

Make no edits to this Section in any version, except as follows:

- Edit the Section Number and Title at the top of the Section and in the footer to delete the version number and description. Example: “Schedules – Large Projects” should be edited to read “Schedules” in the final submittal.

Section 01400 Quality Control and Assurance

The purpose of this Section is to describe quality control and assurance requirements and responsibilities of the Contractor and the Owner. It also includes an optional article for requirements for Safety Certification of the Work.

Make no edits to this Section except as follows:

- Article 1.12 - Safety Certification – Consult with Capital Contracts regarding use of this article and language to be inserted. Coordinate Safety Certification requirements with Section 01700 Contract Closeout, Article 1.03 Deliverables. Safety Certification documents may be required with the request for inspection for Substantial Completion.

Section 01505 Mobilization

The purpose of this Section is to describe the scope of mobilization work.

- Make no edits to this Section

Section 01520 Temporary Construction

The purpose of this Section is to describe requirements for construction of temporary facilities and features including temporary railroad track, grade crossings, and fencing. It focuses on the difference in material requirements for temporary construction versus permanent construction and refers to the Standard Specifications where appropriate. The references to standard specifications are general and it is not necessary to separately invoke the referenced standards section in the Supplemental Technical Provisions.

This Section includes the most commonly constructed temporary facilities. Additional articles may be added on a project specific basis if other temporary construction is included which cannot be adequately described on the Contract Drawings.

Do not edit this Section except as follows:

- Article 1.09 – Titles to be determined – Insert any additional articles here and number accordingly. Consult with Capital Contracts regarding the need for additional articles on a project specific basis.

Section 01545 Work Site Safety and Security

The purpose of this Section is to describe construction work site safety and security requirements including Roadway Worker Protection (RWP) training.

Do not edit this Section except as follows:

- Article 1.04 – Regulations for Working Within Railroad Right of Way – Insert optional paragraph C. 3. when project includes work on or in the vicinity of tracks on which UPRR operates trains.

Section 01560 Temporary Controls

The purpose of this Section is to describe standard requirements for temporary controls related to environmental conditions such as prevention of storm water pollution, control of dust, light and noise, and routine cleaning. Special (project specific) requirements should be addressed in Section 01100.

- Make no edits to this Section

Section 01570 Vehicular and Pedestrian Traffic Control

The purpose of this Section is to describe requirements for temporary control of vehicular and pedestrian traffic, including bicycle traffic. Specific traffic detours to be constructed should be shown on the Contract Drawings.

Do not edit this Section except as follows:

- Article 2.01 – Materials – Standard Section 01570 as written does not include material requirements for temporary pavement delineation. If the contract plans show specific temporary pavement delineation to be installed, then the material requirements must be inserted in this

article using optional paragraph E. and editing accordingly. If there are no specific contractual requirements for placing temporary pavement delineation but the Contractor needs to install temporary pavement delineation for his own detours, then the requirements of the jurisdictional authority will apply in accordance with Articles 1.02A and 1.04A.

Section 01590 Construction Facilities

The purpose of this Section is to describe requirements for facilities to support construction activities, such as temporary utilities, project identification signage, field offices for Owner or Contractor, and communication devices for Owner or Contractor. The requirements will vary by project.

Do not edit this Section except as follows:

- Article 1.01 – Description – Insert optional paragraph B. when project includes requirements for construction facilities including field offices for Contractor’s or Owner’s staff.
- Article 1.01 – Description – Insert optional paragraph C. when project includes requirements for furnishings, equipment, or communication devices to be furnished by the Contractor for use by the Engineer.
- Article 1.03 – Submittals – Coordinate use of optional paragraphs B., C., and D. with use of optional Articles. Use optional paragraph B. with either optional Article 1.09 or 1.15. Use optional paragraph C. with optional Article 1.12. Use optional paragraph D. with either optional Article 1.09, 1.12, or 1.15.
- Article 1.04 – Deliverables – Coordinate use of optional paragraph A. with use of optional Article 1.13, and use of optional paragraph B. with use of optional Articles 1.08 and 1.11.
- Article 1.05 – Temporary Utilities – Insert optional paragraph C. when existing on-site utility sources have been identified that the Contractor will be allowed to use. Provide a description of each utility, the owner, and any conditions for use.
- Article 1.06 – Temporary Electrical Facilities – Insert optional paragraph B. when the project includes falsework which requires lighting. Coordinate with the Supplemental Technical Provisions and insert the correct section number.
- Article 1.06 – Temporary Electrical Facilities – Insert optional paragraph C. when applicable. This optional clause will likely only apply in the case of building or similar construction.
- Article 1.07 – Temporary Water – Insert optional paragraph D. when applicable. This optional clause will likely only apply in the case of building or similar construction.
- Article 1.08 – Contractor’s Field Office – The purpose of this article is to describe requirements or restrictions for a Contractor’s field office. For most projects there is no space available for a Contractor’s field office on site so standard paragraph A. will apply. In the case where space is available on site but the Contractor is not required to establish a field office, insert optional paragraph B. and B. 1., delete paragraph A. and renumber paragraphs as needed. Identified the available area(s) for Contractor’s use on the Contract Drawings.

In the rare case when the Contractor will be required to establish a field office on site, usually on a very large project, delete paragraph A. and insert project specific language as needed to describe the requirements for the Contractor’s field office, including location, size, features, and

any other details necessary. Incorporate paragraph B. 1. into the new language. Consult with Capital Contracts for examples and assistance with writing project specific language. Coordinate requirements with JPB Construction Department.

- Article 1.09 – Communication Devices for Contractor – Optional Article: For use on projects where radio communication between the Contractor’s staff and JPB or Amtrak staff is essential to safe prosecution of the work. Examples include projects with significant or difficult track work or track outages. Coordinate requirements with JPB Construction Department. Insert optional article 1.09 and renumber any articles as necessary. Paragraph B. reflects the current system in use by JPB. If this system is changed in the future, edit paragraph B. accordingly to describe the current system. In paragraph E. 1. insert the appropriate technical requirements, describing the minimum required features of the system and devices.
- Article 1.11 – Owner’s Field Facilities – Owner’s Field Office – Optional Article: The purpose of this article is to describe requirements for providing an Owner’s field office. Coordinate requirements with JPB Construction Department. For most projects the Owner will not require a field office on site so standard paragraph A. will apply. Insert the address of the Owner’s construction office in standard paragraph A.

In the rare case when the Contractor will be required to establish a field office for the Owner on site, usually on a very large project, delete standard paragraph A. and insert the optional paragraphs A. through G. In optional paragraph B., insert the dimensions of the trailer required for the Owner’s field office. In optional paragraph C., insert the legally required minimum number of handicapped parking spaces as determined by the design consultant. Always include at least one handicapped parking space. In optional paragraph E. 6., insert the spacing of wall receptacles. This should be coordinated with the trailer size and anticipated layout or number of occupants.

- Article 1.12 – Owner’s Field Facilities – Furnishings and Equipment – Optional Article: The purpose of this article is to describe requirements for furnishings and equipment, considered to be temporary assets, to be provided for the Owner’s field office. Use this optional article in conjunction with optional article 1.11 above. Coordinate requirements with JPB Construction Department. In paragraph A. insert the number of people anticipated to occupy the field office. Coordinate with the specified trailer size. In paragraph A. 1. insert a list and description of furnishings and equipment to be provided, including items like computers, software, fax, phone devices (if not provided by service provider), and copier. Use multiple paragraphs as needed for clarity.
- Article 1.13 – Owner’s Field Facilities – Services and Service Contracts – Optional Article: The purpose of this article is to describe requirements for providing services such as utility, maintenance, security, and janitorial services for the Owner’s Field Office, including electricity, telephone and data line, internet access (ISP), water, and sewer. Use this optional article in conjunction with optional article 1.11 above. Coordinate requirements with JPB Construction Department, and IT Department as needed. In paragraph A. 1. b., insert the number of phone lines, T1 data lines, and dedicated fax lines as appropriate. The standard language should cover all needs, but if additional needs are identified then edit accordingly.
- Article 1.14 – Owner’s Field Facilities – Office Supplies – Optional Article: The purpose of this article is to describe requirements for furnishing supplies (consumables) for the Owner’s field office. Use this optional article in conjunction with optional article 1.11 above. Coordinate requirements with JPB Construction Department. This article does not require editing.

Note, optional Articles 1.12, 1.13, and 1.14 are grouped based on accounting requirements for temporary assets, consumables, and services respectively. The specifications describe the general scope of work for each of these categories, but since all are to be paid on an allowance basis, the Engineer can easily modify the details of the scope of work for each item to accommodate the field conditions.

- Article 1.15 – Owner’s Field Facilities – Communication Devices for Owner – Optional article: For use when the Contractor will be required to provide communications devices for use by the Engineer and other Owner representatives. In most cases the JPB Construction staff will already have devices, however if procurement of new or additional devices is needed, use this article. Coordinate requirements with JPB Construction Department. In paragraph A. 1. insert a list and description of technical requirements for communication devices. Use multiple paragraphs as needed for clarity. Coordinate with optional Article 1.09 if used. Note, optional articles 1.09 and 1.15 may be used independent of each other.

Section 01600 Materials

The purpose of this Section is to describe general requirements for packaging, handling, delivery, and storage of materials, including procedures and responsibilities, and a listing of any Owner Furnished Materials to be provided. The General Provisions include general statements regarding source and storage of materials.

Do not edit this section except as follows:

- Article 1.02 - Deliverables – If Owner Furnished Materials will be provided, do not edit this article. If there are no Owner Furnished Materials, delete paragraphs B, C, and D.
- Article 1.08 – Owner Furnished Materials – General - If Owner Furnished Materials will be provided, do not edit this article. If there are no Owner Furnished Materials, delete paragraphs A, B, and C. Use optional paragraph A. “No Owner Furnished Materials for this contract.”
- Article 1.09 – Contractor’s Responsibilities for Owner Furnished Materials – If Owner Furnished Materials will be provided, do not edit this article. If there are no Owner Furnished Materials, delete this article in it’s entirety and renumber subsequent articles as necessary.
- Article 3.01 –Installation of Owner Furnished Materials – If Owner Furnished Materials will be provided, do not edit this article. If there are no Owner Furnished Materials, delete this article in it’s entirety and replace with the phrase “Not Used”.
- Attachment “A” - Owner Furnished Materials – If Owner Furnished Materials will be provided, edit the attachment as described below. If there are no Owner Furnished Materials, omit the attachment in it’s entirety.
- Editing instructions for the Attachment –

Material Description: Describe the materials to be furnished by the Owner. Be specific as to type, size, and purpose where applicable. List different types or sizes of materials separately. Indicate whether new or used if applicable. In some cases, such as rail or signs, it may be appropriate to list lengths or other dimensions. The table format and data entry can be modified if more information is needed, but this should be done selectively and with judgment. Provide enough information to identify the materials as

needed for bidding purposes but do not provide excessive details that do not affect bidding.

Quantity: List the quantity of materials to be provided. Include units. If the exact quantity is not known, indicate that the quantity is approximate but consider committing to a minimum or maximum quantity available. The intent is to provide enough information to quantify the materials as needed for bidding purposes.

Location: Per contract, unless otherwise stated this represents the location where the material will be stored and available for pickup by the Contractor. Provide an address, or description of the location within the JPB corridor. If different quantities of the same material are stored in different locations, list each quantity and location separately for clarity.

Additional Information: In the event that the Owner will deliver materials to the site, indicate "Owner will deliver material as follows:" and provide a description of the delivery location, method and any other information required for bidding purposes in this column. Consider the Contractor's contractual responsibilities and what information he will need to fulfill them. If there is any other additional information related to Owner Furnished Materials required for bidding purposes, include it in this column also. If there is no additional information, leave the column entry blank.

Examples of completed table entries:

Material Description	Quantity	Location	Additional Information
Ticket Vending Machine (TVM), used	1 unit	Samtrans North Base Facility 301 North Access Rd. South San Francisco, CA	
Ticket Vending Machine (TVM), new	1 unit	Samtrans North Base Facility 301 North Access Rd. South San Francisco, CA	
Precast concrete panels and handrails for mini-high platform	For 1 platform	On-site at Bay Meadows Station	
Timber ties for soldier pile wall	1,000 each	Redwood Junction, Milepost 26.2 PCJPB Corridor	For soldier pile wall only, not suitable for track construction
39' Track Panels	69 each	PCJPB right of way north of Bay Meadows Station	
39' Track Panels	10 each		Owner will deliver materials as follows: Track panels will be delivered to spur track off MT-2 at MP 19.8 via rail on flat bed cars. Date and time of

Material Description	Quantity	Location	Additional Information
			delivery to be coordinated with the Engineer in accordance with other contractual requirements.
Proof of Payment sign panels (30"x 66")	5 each	Samtrans Central Office 1250 San Carlos Avenue San Carlos, CA	

Section 01700 Contract Closeout

The purpose of this Section is to describe requirements for obtaining Notice of Substantial Completion and Notice of Final Completion, completing final cleanup and demobilization.

Do not edit this section except as follows:

- Article 1.03 – Deliverables – Insert number of days, use “fourteen (14)” days for most projects, use “thirty (30)” days for large projects. with potentially significant inspection requirements. The number of days must be exactly the same as in Article 1.04.
- Article 1.04 – Substantial Completion – Insert number of days, use “fourteen (14)” days for most projects, use “thirty (30)” days for large projects with potentially significant inspection requirements.

Section 01720 Contract Record Documents

The purpose of this Section is to describe requirements for preparing, maintaining and submitting Contract Record Documents, including As-built record drawings.

- Make no edits to this Section

SECTION 8

EDITING INSTRUCTIONS FOR SUPPLEMENTAL TECHNICAL PROVISIONS

8.01 General

The Supplemental Technical Provisions incorporate requirements applicable to a specific Contract by invoking Standard Specifications sections, invoking sections with modifications, or by adding new specifications. Since only certain Standard Specification sections will apply depending on the scope of the project, the Standard Specifications are not invoked in their entirety. The Supplemental Technical Provisions Table of Contents lists all invoked, invoked and modified Standard Specification sections, and all new specification sections that apply to the contract.

8.02 Invocation of Standard Specifications:

Invoke sections of the Standard Specifications when applicable to the Work, as written without modifications. To invoke a particular section, list the section number and title in the table of contents. A sheet is included in the Supplemental Technical Provisions section that includes the specification number and title and the statement as follows:

SECTION #####

##@#TITLE#@#

Caltrain Standard Specification Section #####, ##@#Title#@#, is invoked for this Contract.

8.03 Modifications to Standard Specifications:

When a section of the Standard Specifications applies generally to the Work but must be modified to reflect project specific requirements, or if only a portion of the section applies to the Work, then the section must be invoked with modifications. List the section number and title in the table of contents.

Include the Section number and title of the Standard Specification section to be modified in the Supplemental Technical Provisions followed by the statement: "Caltrain Standard Specification Section #####, ##@# Title #@#, is invoked for this contract and modified as follows: List modifications to the specification by section number in precise detail. An example is shown as follows:

SECTION 02821

CHAIN LINK FENCE

Caltrain Standard Specification Section 02821, Chain Link Fence is invoked for this contract and modified as follows:

Part 1.04, Reference Standards, paragraph A., item 3 is deleted in its entirety

Part 2.01, Materials, paragraph B. is deleted in its entirety and replaced with the following:

“B. Chain Link Fabric: Hot dipped galvanized conforming to ASTM A123 and A153 as applicable”

Part 2.01, Materials, paragraph H. is deleted in its entirety.

8.04 New Sections:

When a new section must be added to describe work not covered by the Standard Specifications, assign a new specification number consistent with the CSI numbering scheme. List the new section number and title in the table of contents.

Prepare the new specification following the same section numbering and formatting as in the Standard Specifications and include the new section in the Supplemental Technical Provisions.

APPENDIX A

WORKING COPY – 01300-A, SUBMITTALS
 WORKING COPY – 01300-B, DELIVERABLES

Attachment 01300-A, SUBMITTALS		
SPEC TITLE	SPEC SECTION	SUBMITTAL TITLE
CONTRACT TIME AND ORDER OF WORK	01001	None
LIQUIDATED DAMAGES	01002	None
OWNER FURNISHED LABOR AND EQUIPMENT	01004	None
CONTRACTOR'S PERSONNEL AND EQUIPMENT	01005	Equipment list
		Resumes
SUMMARY OF WORK	01010	None
WORK PLANNING	01011	Site Specific Work Plans
		Requests to Work
PARTNERING	01012	None
LOCATION AND EXISTING SITE	01020	None
WORK HOURS AND TRACK ACCESS	01040	None
COORDINATION - GENERAL	01045	None
UTILITIES AND SYSTEMS COORDINATION	01047	<i>### (Optional: Utility Installation Plan)</i>
FIELD ENGINEERING	01050	None
REFERENCES	01090	None
(OPTIONAL SECTION) ### (Delete Row if Not Used) ENVIRONMENTAL MITIGATION PROCEDURES	01100	<i>### (Insert as needed)</i>

Attachment 01300-A, SUBMITTALS		
SPEC TITLE	SPEC SECTION	SUBMITTAL TITLE
HAZARDOUS MATERIALS CONDITIONS AND PROCEDURES	01120	Hazardous Material Site-Specific Health and Safety Plan and amendments
MEETINGS	01200	None
SUBMITTAL AND DELIVERABLES	01300	Submittal Schedule
		Deliverable Schedule
SCHEDULES	01310	Baseline Schedule
		Progress Schedules
		Subcontractor Documentation
		Final Progress Schedule
		Scheduler Qualifications
QUALITY CONTROL AND ASSURANCE	01400	Qualifications of ITA
		Contractor's Quality System Manual
		Contractor's Quality Control Plan
MOBILIZATION	01505	None
TEMPORARY CONSTRUCTION	01520	Method of Placement for Temporary Construction Fence
WORK SITE SAFETY AND SECURITY	01545	RWP Training Records
		Health and Safety Plan
		Material Safety Data Sheets
TEMPORARY CONTROLS	01560	Storm Water Pollution Prevention Plan and amendments
VEHICULAR AND PEDESTRIAN TRAFFIC CONTROL	01570	Traffic Control Plans
		Haul routes
		Details for Advance Notice Signs
CONSTRUCTION FACILITIES	01590	Layout of Project Identification Signs

Attachment 01300-A, SUBMITTALS		
SPEC TITLE	SPEC SECTION	SUBMITTAL TITLE
		<i>### (Insert as needed for optional articles)</i>
MATERIALS	01600	None
CONTRACT CLOSEOUT	01700	None
CONTRACT RECORD DOCUMENTS	01720	As-built Drawings
<i>### (Insert Rows as needed for Technical Sections 2 through 20)</i>		

Attachment 01300-B, DELIVERABLES		
SPEC TITLE	SPEC SECTION	DELIVERABLE TITLE
CONTRACT TIME AND ORDER OF WORK	01001	None
LIQUIDATED DAMAGES	01002	None
OWNER FURNISHED LABOR AND EQUIPMENT	01004	None
CONTRACTOR'S PERSONNEL AND EQUIPMENT	01005	None
SUMMARY OF WORK	01010	None
WORK PLANNING	01011	None
PARTNERING	01012	Resume of proposed Facilitator
		Proposed contract with Facilitator
		Proposed workshop facility arrangements
LOCATION AND EXISTING SITE	01020	None
WORK HOURS AND TRACK ACCESS	01040	None
COORDINATION - GENERAL	01045	Copies of permits and similar documents
UTILITIES AND SYSTEMS COORDINATION	01047	None
FIELD ENGINEERING	01050	Field Notes
REFERENCES	01090	None
(OPTIONAL SECTION) ## (Delete Row if Not Used) ENVIRONMENTAL MITIGATION PROCEDURES	01100	## (Insert as needed)
HAZARDOUS MATERIALS CONDITIONS AND PROCEDURES	01120	Hazardous Substance Site-Specific Health and Safety Plan and amendments

Attachment 01300-B, DELIVERABLES		
SPEC TITLE	SPEC SECTION	DELIVERABLE TITLE
MEETINGS	01200	None
SUBMITTAL AND DELIVERABLES	01300	None
SCHEDULES	01310	Three Week Look Ahead Schedule
QUALITY CONTROL AND ASSURANCE	01400	Resume of Quality Representative
		Non-conformance reports
		Test Reports
MOBILIZATION	01505	None
TEMPORARY CONSTRUCTION	01520	None
WORK SITE SAFETY AND SECURITY	01545	None
TEMPORARY CONTROLS	01560	None
VEHICULAR AND PEDESTRIAN TRAFFIC CONTROL	01570	Certificate of Compliance for Temporary K rail
CONSTRUCTION FACILITIES	01590	<i>### (Insert as needed for optional articles)</i>
MATERIALS	01600	Certificates of Compliance
		Material Storage Plan
		Material Transfer/Acceptance receipt
		Inventory Records
		Spare Parts
CONTRACT CLOSEOUT	01700	Documents supporting request for inspection for Substantial Completion
CONTRACT RECORD DOCUMENTS	01720	None
<i>### (Insert Rows as needed for Technical Sections 2 through 20)</i>		

Appendix B

Liquidated Damages Calculation Worksheet

LIQUIDATED DAMAGES CHECK LIST			
Contract No.:			
Contract Title:			
ESTIMATED CONTRACT VALUE:			
Project Manager:			
Date: PM Signature:			
Item	Project Manager's Determination		If Applicable, Estimated Dollar Amount
	Applicable	Non-Applicable	
1. Costs reflecting the relative importance of completion of this contract to the completion of other directly associated activities or contracts, i.e.: the current contract has significant impact on concurrent or future contracts or procurements.			
Description/Justification:			Calculation method:
2. Rental costs for facilities and equipment necessitated by delays in contract completion.			
Description/Justification:			Calculation method:
3. Cost(s) for additional maintenance required on equipment or structures being replaced as a result of delay in contract completion.			

Description/Justification:		Calculation method:	
4. Additional operating costs to Owner as a result of delay in contract completion. Consider costs of route detours or substitution of one transit mode for another (bus bridges).			
Description/Justification			Calculation method
5. Loss of revenue to Owner's operations as a result of delay in contract completion.			
Description/Justification:		Calculation method:	
6. Any other damages for each day of delay in completion which Owner may anticipate, e.g., is there a high potential for delay of one prime contract with resulting costs to Owner for the other prime contracts.			
Description/Justification:		Calculation method:	
7. Additional costs of inspection, administration, and construction management resources.			
Description/Justification:		Calculation method:	