TABLE OF CONTENTS

Table of Contents 1

LIST OF FIGURES 2

19-3A Example Special Provision which Directly Revises the *Standard Specifications* 2
19-3B Example Special Provision which Does Not Directly Revise the *Standard Specifications* 2
19-3C Example of a Restrictive Type Unique Special Provision 2

Chapter Nineteen 3

19-1.0 GENERAL 3

19-1.01 Standards Committee 3
19-1.02 Contract Documents 4
19-1.03 Hierarchy of Contract Documents 4
19-1.03(01) Standard Specifications 5
19-1.03(02) Supplemental Specifications 5
19-1.03(03) Plans 5
19-1.03(04) Special Provisions 6
19-1.03(05) Instructions to Bidders and Schedule of Pay Items 8

19-2.0 INSTRUCTIONS FOR USING SPECIAL PROVISIONS AND RECURRING PLAN DETAILS 8

19-2.0(01) Standard Recurring Special Provisions and Recurring Plan Details 9
19-2.0(02) Contract-Specific Recurring Special Provisions 9
19-2.0(03) Unique Special Provisions 9
19-2.0(04) Finalization of Menu and Special Provisions 9

19-3.0 INSTRUCTIONS FOR UNIQUE SPECIAL PROVISION USE 10

19-3.01 Preparing a Unique Special Provision 10
19-3.01(01) Structure of a Unique Special Provision 15
19-3.01(02) Format of Unique Special Provision 16
19-3.01(03) Terminology 18
19-3.02 Unique Special Provision Review Process 20
19-3.03 Submittal of Approved Unique Special Provision 21

LIST OF FIGURES

Figure Title

19-3A Example Special Provision which Directly Revises the *Standard Specifications*
19-3B Example Special Provision which Does Not Directly Revise the *Standard Specifications*
19-3C Example of a Restrictive Type Unique Special Provision

CHAPTER NINETEEN

STANDARD CONTRACT DOCUMENTS AND UNIQUE SPECIAL PROVISIONS

Chapter Fourteen provides the Department's procedures for the preparation of construction plans. This Chapter describes the Department's standard contract documents, including the *Standard Specifications*, Supplemental Specifications, *Standard Drawings*, Recurring Special Provisions, Recurring Plan Details, and Schedule of Pay Items. This Chapter also provides guidelines for preparing Unique Special Provisions if the standard documents do not address the needs of the project.

19-1.0 GENERAL

19-1.01 Standards Committee

The mission of the Department's Standards Committee is to develop, review, and recommend for approval all substantive additions and revisions to the Department's standard documents used for design and construction of projects. These documents include this *Manual*, the INDOT *Standard Specifications* and the INDOT *Standard Drawings*.

The Standards Committee meets regularly to review and act on proposed changes to the standard documents. The Committee consists of representatives from the Department entities as follows:

1. Director, Construction Management Division – Committee Chairperson
2. Contract Administration Division
3. Construction Management Division, Office of Materials Management
4. Construction Management Division, Office of the State Construction Engineer
5. Construction Management Division, Office of Construction Technical Support
6. One representative from a district construction office
7. One representative from a district production office
8. Highway Operations Division, Office of Traffic Engineering
9. Planning Division, Office of Pavement Engineering
10. Production Management Division, Office of Roadway Services
11. Production Management Division, Office of Structural Services
12. Construction Management Division, Specifications Engineer – Secretary (non-voting)

A Federal Highway Administration representative is present to provide comments on proposals for use on the National Highway System. The FHWA representative is a non-voting member.

A proposal for consideration by the Standards Committee may be submitted through the Secretary for possible inclusion on the Committee's agenda.

19-1.02 Contract Documents

All bid and contract documents should complement and agree with each other to provide a clear, concise package that can be readily understood by bidders, contractors, and field personnel. A conflict between contract documents can result in change orders and claims which can delay construction and increase project cost.

In developing and assembling the contract documents for a project, the designer should ensure that all the documents are compatible. If the designer believes one of the standard documents may cause a conflict, the Project Manager should be notified.

19-1.03 Hierarchy of Contract Documents

The *Standard Specifications*, Supplemental Specifications, *Standard Drawings*, Special Provisions, Recurring Plan Details, construction plans, and supplementary documents are essential parts of the contract. A requirement occurring in one is as binding as though occurring in all. They are intended to compliment each other and are used to describe and provide complete instructions for the work to be accomplished.

The designer should perform quality control checks to reduce or eliminate discrepancies between the contract documents. However, discrepancies between documents will occur. The *Standard Specifications* define the following contractual hierarchy of relationships between the documents in order of precedence, as follows:

1. Instructions to Bidders and description of pay items listed in the Schedule of Pay Items;
2. Special Provisions;
3. Plans (including *Standard Drawings* and Recurring Plan Details);
4. Supplemental Specifications;
5. *Standard Specifications*.

In case of a discrepancy in dimensions, calculated dimensions govern over dimensions scaled from the plans.

The order of precedence is from the least-standardized document to the most-standardized document. Each group of documents is discussed in detail below, listed from most standardized to

least standardized, since each successive document type may represent a modification of the previous documents.

19-1.03(01) Standard Specifications

The *Standard Specifications* consist of the standard contract language adopted by the Department for a construction project. They are incorporated into each contract by reference. They provide the Department's criteria for the following:

1. the contractor's duties;
2. control of material quality;
3. the contractor's and Department's contractual relationship; and
4. measurement and payment for contract items.

The *Standard Specifications* are published by the Construction Management Division and are available either from the Department's website or on CD. The Department also prints a limited number of copies for use by Department field personnel only. New editions are not published on a regular schedule. They are instead issued as warranted due to the number of changes authorized by the Standards Committee. If a new edition is issued, it will be published in March and become effective beginning with contracts let on or after September 1 of that year. The designer is responsible for ensuring that contract documents are developed using the edition of the *Standard Specifications* applicable to the project based on the contract letting date.

19-1.03(02) Supplemental Specifications

Supplemental Specifications are revisions to the *Standard Specifications* which have been adopted by the Department since the last publication of the *Standard Specifications*. The intent is that they will be incorporated into the *Standard Specifications*' next revision. Complete sets of Supplemental Specifications are added to the contract documents for each project and are intended for general use.

Beginning with the *Standard Specifications* 2008 edition, Supplemental Specifications are not being used. Instead, required revisions to the *Standard Specifications* necessary before the next edition is published are incorporated into contracts through Recurring Special Provisions.

19-1.03(03) Plans

Plans include the approved construction plans, profiles, typical cross sections, working drawings, the Standard Drawings, and applicable Recurring Plan Details, or exact reproductions thereof, which show the location, character, dimensions, and details of the work to be done on a project.

1. Recurring Plan Details. Recurring Plan Details are either standard details that have been adopted since the last update of the *Standards Drawings* or are details that are included in a contract to complement a Recurring Special Provision.

   As new or revised *Standard Drawings* are adopted by the Department, they will be included in contracts as Recurring Plan Details. The Department will determine for which letting the Recurring Plan Details will become effective. The Recurring Plan Details will then be included in the next update of the *Standard Drawing*s set and will be deleted as Recurring Plan Details.

   Recurring Plan Details that are included in a contract to complement a Recurring Special Provision may never become part of the *Standard Drawings*. Such Recurring Plan Details are discussed further in Section 19-1.03(04), item 1.

2. *Standard Drawings*. The *Standard Drawings* provide standardized construction details for various elements that are consistent from project to project (e.g., guardrail, fencing, drainage details, bridge elements, signs). They provide information on how to lay out or construct the various design elements. The complete set of Standard Drawings is included by reference as part of the plans in each construction contract. The Standard Drawings are typically updated once each year with the new set becoming effective for contracts let on or after September 1 of each year.

   Standard Drawings are available on the Department's website. Plan details required for a project which are not included in the *Standard Drawings* must be developed by the designer for inclusion in the plans.

19-1.03(04) Special Provisions

Special provisions are specifications in addition to the *Standard Specifications* that describe conditions and requirements for special situations on a specific project. Special provisions are added to the contract documents for a specific project and are not binding for a contract other than the one for which they are included.

A special provision serves one of two functions in the contract documents as follows:

1. Directly modifies the existing *Standard Specifications* by adding, deleting, or revising language in an existing section, or by adding a new section.

2. Adds a stand-alone specification to the contract that does not directly modify the *Standard Specifications*.

The two distinct types of special provisions are Recurring Special Provisions, which are further subdivided into Standard Recurring Special Provisions and Contract-Specific Recurring Special Provisions; and Unique Special Provisions.

1. Recurring Special Provision. A Recurring Special Provision is a specification created by the Department to describe work not included in the *Standard Specifications*. It is typically used in multiple contracts over a period of time. A Recurring Special Provision is typically created as a revision to the *Standard Specifications* as the result of action by the Standards Committee. Passage of a *Standard Specifications* revision by the Committee will often result in the need to issue the revision as a Recurring Special Provision prior to the next edition of the *Standard Specifications*, at which time the Recurring Special Provision may be adopted into the *Standard Specifications*.

   A Recurring Special Provision may require the inclusion of a Recurring Plan Detail in the contract to complement the special provision. The Department maintains a menu of all current Recurring Special Provisions and Recurring Plan Details that is updated as new provisions are adopted and existing provisions are revised or deleted. The Special Provision Menu is available on the Department's website and includes a basis for use for each provision.

   In preparing a project for submittal of plans and contract documents, the designer is responsible for calling out the appropriate Recurring Special Provisions and Recurring Plan Details from the menu. The designer must ensure that the provisions selected are applicable for the specific project before their inclusion in the contract documents. Section 19-2.0 provides further guidance on the use of the Special Provision Menu.

   a. Standard Recurring Special Provision. A Standard Recurring Special Provision can either be a direct modification of the *Standard Specifications* or a completely new specification for work not addressed in the *Standard Specifications*. Standard Recurring Special Provisions are not to be modified by the designer and are included in a contract, in their entirety, as the Department-approved version for the contract letting date. If the language of a Recurring Special Provision must be revised to suit a specific contract need, the designer must submit the revised provision as a Unique Special Provision.

   b. Contract-Specific Recurring Special Provision. A Contract-Specific Recurring Special Provisions, or fill-in-the-blanks special provisions, requires project-specific information to be entered by the designer. Each Contract-Specific Recurring Special Provision has defined fields to be completed by the designer with information specific to that project. No other portion of the provision is to be edited by the designer. As with a Standard Recurring Special Provision, if the language in the

non-editable fields of a Contract-Specific Recurring Special Provision must be revised, the designer must submit the revised provision as a Unique Special Provision.

2. Unique Special Provision. A Unique Special Provision is a specification that pertains only to a specific situation on a project that is not covered by an existing standard document. A Unique Special Provision is intended only for a single use in a specific contract. The Department tracks the use of Unique Special Provisions and considers creation of a new Recurring Special Provision if the same general specification requirements begin to occur in several Unique Special Provisions.

   If a project-specific situation that is not described by an existing standard document, a Unique Special Provision must be written and submitted by the designer. Section 19-3.0(01) discusses guidelines for preparing a Unique Special Provision.

19-1.03(05) Instructions to Bidders and Schedule of Pay Items

Instructions to Bidders are formal instructions issued to bidders as part of or by reference in the bidding documents. These include instructions regarding the procedures for the bidder to follow in preparing and submitting a bid, as well as other special requirements. The instructions are set based on Departmental needs and State and Federal codes. They should be understood by the designer, but the designer is typically not responsible for preparing or revising such instructions. If a contract-specific instruction is required (e.g., mandatory pre-bid meeting), the designer should add this as a Unique Special Provision.

The Schedule of Pay Items in the Contract Information book includes the description of each pay item in the contract and the unit of measure for the pay item. Each pay item listed in the Schedule of Pay Items should have a related specification in the contract documents that uses the same pay item description and the same unit of measure as the pay item shown in the Schedule of Pay Items. It is the designer's responsibility to ensure this compatibility of pay items and specifications.

19-2.0 INSTRUCTIONS FOR USING SPECIAL PROVISIONS AND RECURRING PLAN DETAILS

The Special Provision Menu is maintained by the Department and is available on the Department's website. The Menu lists each current approved Recurring Special Provision and Recurring Plan Detail. A basis for use is included for each provision and plan detail to define the conditions that warrant the inclusion of a Recurring Special Provision or Recurring Plan Detail in a contract.

For each provision on the Menu, the date on which the provision was either adopted or revised, and the first letting date for which the provision is effective, is included. If a provision is listed twice, it will have two different effective letting dates. This occurs if an older version is being replaced by a newer version, but the new version's effective letting date has not yet passed. Once the new letting effective date has passed, the older version will be removed from the Menu.

19-2.0(01) Standard Recurring Special Provisions and Recurring Plan Details

Provisions listed in the Menu's Section I – Standard Recurring Special Provisions and Recurring Plan Details, are intended to appear in the contract as shown on the Department's website. If such a provision is required, place an X in the Place In Contract box that corresponds to the desired provision or detail. The designer should not submit a copy, electronic or printed, of a Standard Recurring Special Provision or Recurring Plan Detail that is to be included in the contract. Some provisions or plan details are required in every contract. The check box for Place In Contract will be pre-selected and will not open for editing by the designer.

19-2.0(02) Contract-Specific Recurring Special Provisions

Provisions listed in the Menu's Section II – Contract-Specific Recurring Special Provisions, will require an attachment to be submitted. For each such provision, place an X in the Place In Contract box that corresponds to the desired provision. The Attach. Req'd. box will be pre-selected and will not open for editing by the designer. The designer must submit an electronic copy of the provision with the blank fields completed.

Instructions for use of the Recurring Special Provisions and Recurring Plan Details Menu are included with the Menu on the Department's website.

19-2.0(03) Unique Special Provisions

The Menu's Section III is reserved for the designer to list each Unique Special Provision being submitted for the contract. The designer must enter the title of each Unique Special Provision and the Standard Specification section it is most closely related to. The Unique Special Provisions should be listed in numerical order by the related Standard Specifications Section number. An electronic copy of each provision must be submitted and the filename of the electronic document for the provision must be entered in the Menu.

19-2.0(04) Finalization of Menu and Special Provisions

The completed Special Provision Menu must be submitted to the Contract Administration Division. Regardless of the number of Des numbers associated with a contract, only one menu is required. If multiple menus are submitted, they will be returned to the designer to combine them.

Contract-Specific Special Provisions attachments should be placed into one electronic file, in the order in which they are listed in the Menu's Section II. Unique Special Provisions should be placed into another electronic file, in the order in which they are listed the Menu's Section III.

The Contract Administration Division uses the submitted menu to assemble the Standard Recurring Special Provisions, Recurring Plan Details and Contract-Specific Special Provisions that will be included in the Contract Information book. The approved versions of the provisions and details, as maintained by the Department, will then be placed in the Contract Information book. Information required for Contract-Specific Recurring Special Provisions will be copied from the attachments submitted by the designer and placed into the Department-approved version of the special provision. Unique Special Provisions, as submitted by the designer and approved by the Department, will also be included in the Contract Information book.

19-3.0 INSTRUCTIONS FOR UNIQUE SPECIAL PROVISION USE

A Unique Special Provision is required if the items of work, methods, materials, sequence of operations, or other restrictions or requirements necessary for completion of the project cannot be described completely by a Recurring Special Provision, a Recurring Plan Detail, the *Standard Drawings*, the Supplemental Specifications, or the *Standard Specifications*. Described completely should be interpreted to mean that the work to be accomplished, the type of materials or equipment required, the construction methods or details to be used, the method of measuring the work, the basis of payment for the work, and all restrictions or requirements specific to the contract are clearly defined.

If a Unique Special Provision is required for a project, the use of a provision that specifies a proprietary product is discouraged. However, the use of a proprietary product may be justified if it will enhance safety, control costs, or otherwise improve the project. In specifying a proprietary product, the designer must provide a written explanation that describes why the proprietary item is necessary and what the benefits of the product are. Section 17-1.05 provides guidance concerning use of and approval of proprietary products.

19-3.01 Preparing a Unique Special Provision

A Unique Special Provision can be written to satisfy one of two basic purposes.

A constructive special provision is used to define a portion of the actual construction work, including materials, equipment, methods, measurement, and payment.

A restrictive special provision sets out specific restrictions or requirements that must be followed by the contractor. An example of a restrictive-type Unique Special Provision is illustrated in Fig. 19-3C.

The focus of this Section is to provide guidelines for preparing a constructive-type Unique Special Provision.

1. Define Need. Review existing *Standard Specifications*, *Standard Drawings*, Recurring Special Provisions, and Recurring Plan Details to determine if an existing document adequately addresses the situation. A Unique Special Provision be prepared only if a situation is not adequately addressed in an existing document.

2. Research. Research the topic so that complete and detailed information is available before writing the provision. This may require contacting manufacturers, contractors, or suppliers for the latest information. Local conditions and problems should also be fully investigated.

3. Structure and Format. Prepare a Unique Special Provision in the same structure and format as the *Standard Specifications* (i.e., Description, Materials, Construction Requirements, Method of Measurement, and Basis of Payment). Section 19-3.01(02) provides guidance for the structure, and Section 19-3.01(03) provides guidance for the format that should be used for a Unique Special Provision.

4. Type. Analyze the type of construction to be addressed in the provision to determine the type of specification to prepare. A specification can be written as either a method specification or a performance-based specification. A method specification describes the exact methods, materials, or procedures to be used to construct the work. A performance-based specification describes the quality of the materials to be used and the required end result of the work. A performance-based specification is preferred to encourage innovation and efficiency by the contractor. A method specification should only be used if the method is critical to achieving the desired result.

5. Outline. Develop an outline that addresses the basic requirements of the work to be completed. It should define the essential physical characteristics of the work (e.g., material requirements, dimensional limitations, time, strength, weight, size, shape, configuration, etc.). The contractor's responsibilities should be clearly stated. Organize all relevant factors under each appropriate heading.

6. Write the Unique Special Provision. Once the outline has been developed and all research has been completed, prepare the first draft. The designer should review existing Recurring Special Provisions for guidance on format and language. The following provides grammatical recommendations for preparing a Unique Special Provision:

a. Voice. Use passive voice and indicative mood: "A rubbed finish shall be applied to the exposed surfaces." instead of "Apply a rubbed finish to exposed surfaces."

b. Sentences. Use simple language and words. Keep sentences short, to 20 words or less, unless complexity is unavoidable. Avoid use of too many commas in a sentence.

c. Paragraphs. Limit paragraphs to three to four sentences if possible.

d. Terminology. Words should be used consistent with their exact meaning. The same word should be used throughout. Do not use synonyms. Avoid words which have more than one meaning. Section 19-3.01(03) provides the recommended terminology that should be used. Nonessential words and phrases should be omitted.

e. Pronouns. Avoid the use of pronouns, even if this results in frequent repetition of nouns.

f. Punctuation. Use the minimum number of punctuation marks consistent with the precise meaning of the language. Ensure that there can be no doubt regarding the meaning of a sentence.

g. Capitalization. The only phrases which require full capitalization are the special provision title and subsection headings. The only words which require an initial capital letter without regard to their location in the sentence are Department, Engineer, Contractor, titles of reference publications, traffic sign copy, or other proper nouns if their use is required.

h. Parentheses. Avoid the use of parentheses for other than metric-measure equivalents. Instead, use commas or rewrite the sentence.

i. Numbers. It is unnecessary to write numbers both in words and figures, e.g., "Use four (4) bolts". Numbers of 9 or less should be written as words. Numbers of 10 or greater should be written numerically. In writing dimensions, numbers should be used, e.g., ¼ in., 10 ft, 3 gal.. Do not write 2 in. x 4 in., but instead, 2 in. by 4 in. Times and dates should be written numerically. Decimals of less than one should be preceded by the zero, e.g., 0.02 ft. Do not begin a sentence with a numeral. Either write the number in words, or rewrite the sentence by placing the numeral within the sentence.

j. Units of Measure. Write out units of measure within a sentence where not accompanied by a quantity. Symbolize units of measure where used in a tabular form or where accompanied by a quantity.

k. Emphasis. All parts of a specification are equally important contractually. Do not use all capitals, underlines, italics, bold type, or punctuation to emphasize words, sentences, pay items, or pay units.

l. Percentages. Where a percent is preceded by a number, the % symbol is used. Where percent is used in a sentence without a number preceding it, the word percent is spelled out.

7. Clarity. To ensure that the provision is clearly written, the designer should review the following.

a. Give directions, not suggestions.

b. Do not assume that the reader understands your intent.

c. Limit the use of phrases such as "as approved by the Engineer," "at the discretion of the Engineer," or "as directed by the Engineer" in place of definite workmanship requirements. Such phrases may lead to confusion or misunderstanding. The contractor may not know what the engineer is thinking.

d. Avoid conflicting or ambiguous requirements. Every specification statement should have only one meaning.

e. Disclose known difficulties or hazards.

f. Use the standard abbreviations listed in *Standard Specifications*.

8. Conciseness. A Unique Special Provision should be as concise as practical. In reviewing a provision, the designer should consider the following.

a. Avoid duplications between the Unique Special Provision and other contract documents, including the *Standard Specifications*.

b. Do not give reasons for a specification requirement.

c. Do not provide additional information which is unnecessary for the preparation of bids and the accomplishment of the work.

d. Once stated, do not repeat an instruction, requirement, direction, or piece of information provided elsewhere in the contract documents.

e. Do not include mandatory provisions that are required in general by the contract.

f. Write the specification in a positive form (e.g., use “shall” instead of “shall not”).

g. Do not include instructions to the Department.

h. Do not include design information that is not necessary for the performance of the work.

9. Completeness. Ensure that the essentials have been included and that each requirement is definitive and complete. The Unique Special Provision should not be vague or open to differing interpretations.

10. Correctness. To ensure that a Unique Special Provision is written correctly, the designer should consider the following.

a. Check all references to the *Standard Specifications* or other contract documents to ensure that the references are correct.

b. Where practical, independently cross-check every factual statement.

c. Do not include conditions that cannot be required or enforced.

d. Ensure that the provision does not punish the contractor or supplier. Penalties or liquidated damages may be included, but the conditions that will result in penalties or liquidated damages must be clearly defined.

e. Ensure that the provision does not unintentionally exclude an acceptable product, construction method, or equipment.

f. Ensure that the provision does not change the basic design of the work.

g. Do not specify impossibilities. The practical limits of workers, equipment, and materials must be known and recognized.

h. Specify standard sizes and patterns where practical.

i. Avoid personal whims and favorite requirements.

j. Ensure that sufficient attention has been provided to assessing the durability or reliability of the material or procedure discussed. The use of recognized standards

should be quoted to ensure that the specified performance or characteristics are achieved.

k. Make a careful, critical examination of manufacturer or trade association recommendations, and require supporting evidence to be submitted by the contractor.

l. Ensure that the provision gives directions to the contractor that are consistent with standard industry practice and current Department policies and procedures.

m. Ask a colleague to review the provision. What may seem clear to one person may not be clear to someone else.

11. Submittal. Submit the completed draft Unique Special Provision for review and approval. Section 19-3.02 discusses the submittal of a Unique Special Provision for review and approval.

19-3.01(01) Structure of a Unique Special Provision

Prepare a Unique Special Provision using the same structure as the *Standard Specifications*, including subsection layouts. The use of the standardized structure of the *Standard Specifications* provides a common outline for special provisions that helps to ensure that all the necessary information is included in a provision. The designer should review the *Standard Specifications* before writing a Unique Special Provision in order to become familiar with the structure and typical phrasing used throughout.

The standard structure consists of the "Big Five": Description, Materials, Construction Requirements, Method of Measurement, and Basis of Payment.

1. Description. Briefly, but completely describe the scope of work to be performed, with references to specifications, plans, or other recurring special provisions that further define the work. Where necessary or desirable for clarity, describe the relationship of this work to other work or other phases of construction. Do not editorialize.

2. Materials. List the materials to be used in the work and clearly indicate the criteria for acceptance of the materials. Define the specifications and properties of each material and the method of tests for acceptance. Use references to the *Standard Specifications*' materials section as much as possible. References may be made to AASHTO, ASTM, or other recognized specifications if the materials are not addressed in the *Standard Specifications*. Ensure that references to AASHTO, ASTM, or other specifications or test methods from agencies outside of INDOT are accurate and up to date. If a certification is required, ensure

that the certification type fits the situation and that information required in the certification is clearly defined.

A prime consideration in establishing materials requirements is whether the material will be tested by the Department and if the Department has the capability to perform the test. The Office of Materials Management can provide guidance for specifying materials testing and acceptance criteria.

3. Construction Requirements. The construction requirements should be written in the logical order in which field operations are anticipated to proceed. Clearly define the requirements for general conditions, types of construction, and quality of workmanship. Do not leave the contractor in doubt as to what is required.

   Describe the sequence of construction operations (method specification) or the desired end product (performance-based specification) as described in Section 19-3.01, item 4. Where practical, a performance-based specification is preferred. The construction requirements should define tolerances, limits, restrictions, preparations, or other criteria related construction of the work that must be satisfied for an acceptable product. These requirements can include, but are not limited to, dimensions, on-site test criteria, weather conditions, traffic condition, or time limits.

4. Method of Measurement. Describe the components of the completed work that will be measured to determine the pay quantity for the pay item as it will be described in the Schedule of Pay Items. Define the units of measurement and whether the item will be measured in original position, in transporting vehicles, or in the completed work. Designate modifying factors or other requirements needed to establish a definitive, measurable unit. A prime consideration for method of measurement should be the degree of difficulty that field personnel will encounter in making measurements.

5. Basis of Payment. Define the measured units for which payment will be made. Include the pay item name as it will appear in the Schedule of Pay Items and define the scope of work included in payment. Determine and identify which work is to be paid for as an individual pay item, what work is to be included in the cost of that pay item and what work is to be included in the cost of other pay items. The Basis of Payment must clearly identify to the contractor what work is and is not to be included in the unit cost of the pay item. For work that is not included in the pay item in the provision, the designer must then determine and clearly state where the cost of such work is to be placed.

19-3.01(02) Format of Unique Special Provision

The format of a Unique Special Provision will depend on whether it directly modifies the *Standard Specifications* or not.

A provision that directly modifies the *Standard Specifications* must identify the section and line numbers in the applicable edition of the *Standard Specifications* that are being modified and clearly indicate the modifications being made. The following guidelines should be used in preparing a Unique Special Provision that directly modifies the *Standard Specifications*.

1. Identify the section and line numbers being revised. Place distinct revisions within a section in line numerical order. For example:

```
SECTION 101, LINE 13, INSERT AS FOLLOWS:
SECTION 101, BEGIN LINE 176, DELETE AS FOLLOWS:
SECTION 101, DELETE LINES 525 THROUGH 548.
SECTION 101, AFTER LINE 1083, DELETE AND INSERT AS FOLLOWS:
```

2. Where more than one section is revised in a single Unique Special Provision, place the revised sections in numerical order. For example:

```
SECTION 205, DELETE LINES 52 THROUGH 86.
SECTION 404, AFTER LINE 1448, INSERT AS FOLLOWS:
SECTION 609, BEGIN LINE 990, DELETE AND INSERT AS FOLLOWS:
```

3. Spaces in the *Standard Specifications* between paragraphs count as lines. Also, horizontal lines shown in tables count as lines.

4. Show revisions to *Standard Specifications* text by using strikethroughs to show deleted text and italics for inserted text. Delete, then insert. Do not insert, and then delete. Do not use a "track changes" feature in word-processing software to indicate revisions.

5. Retain all unrevised existing *Standard Specification* text in the sentence for clarity of the revision. Show entire sentences, even if only one word in the sentence is revised.

6. Include all text shown in each line involved in the revision. This includes sentence fragments not involved in the revision which may appear in the first or last line involved.

7. Where four or more lines of the existing text are entirely deleted without insertions, the deleted copy need not to be shown as overstruck. Indicate the deleted section and lines as follows:

```
SECTION 101, DELETE LINES 267 THROUGH 288.
```

8. In making a revision which inserts new text after an existing paragraph, identify the space after the paragraph as the line to begin after.

Figure 19-3A, Example Special Provision which Directly Modifies the *Standard Specifications*, illustrates the outline and layout that should be used for such a provision.

A provision that does not directly modify the *Standard Specifications* is formatted differently than that which does. Figure 19-3B, Example Special Provision which Does Not Directly Modify the *Standard Specifications*, illustrates the format to use for a stand-alone Unique Special Provision.

19-3.01(03) Terminology

Phraseology and terminology used in a Unique Special Provision should be consistent with that used in the *Standard Specifications*. In addition, the designer should consider the following.

1. Amount, quantity. Use "amount" when writing about money only. If writing about measures of volume, such as ft^3, gal., etc., use "quantity."

2. And/Or. Use "and" alone, or "or" alone. Do not use "and/or".

3. Any, all. The word "any" implies a choice and may cause confusion. In place of "any," the term "all" should be used. For example, "Correct all defects."

4. As per. Instead, use "as stated," "as shown," "in accordance with," or another similar phrase.

5. As shown on the plans. Use this phrase instead of "as shown in the plans," "as detailed on the plans," "as shown on the detail sheets," "as shown on the *Standard Drawings*," or "as shown on sheet __ of the plans."

6. At the contractor's expense. Instead of this phrase, use "_____ shall be included in the costs of _____."

7. Balance, remainder. "Balance" should be used if referring to money. "Remainder" should be used to describe something or material left over.

8. Broken, skip line. Use "broken line" rather than "skip line."

9. Coarse, course. Use "coarse" to describe a texture. Use "course" for a layer.

10. Conform. Use the word "conform" to refer to dimensions, sizes, or fits that must be strictly adhered to (e.g., "cut bolt threads conforming to ASA Standards, Class 2 fit, coarse thread

series”). Where a better product is acceptable, use the phrase “in accordance with...” (e.g., aggregates in accordance with the specification requirements when tested in accordance with AASHTO T 27.)

11. Contractor. Use the word “Contractor” in place of the word “Bidder.” “Bidder” should only be used in a proposal.

12. Department. Use “Department” in place of “Indiana Department of Transportation.” The abbreviation INDOT should not be used in the contract documents.

13. Engineer. Use of "the Engineer" refers to the Chief Engineer of the Department acting directly or through a duly authorized representative. If used in this context, "Engineer" is always capitalized.

14. Ensure. Do not use “insure” or “assure” but instead use, “ensure.”

15. Guardrail. Spell “guardrail” as one word rather than as two.

16. In accordance with. Use the phrase “in accordance with” in place of “in conformance with.”

17. May. Use “may” for contractor’s operations that are optional.

18. Milling. Do not use “scarifying” but instead use, “milling” or “surface milling.”

19. Or equal. Do not use this phrase without clearly defining what is “equal”.

20. Pay item. Use this phrase instead of “bid item,” “item,” or “line item.”

21. Proposal. The word “proposal” should not be used where the word “contract” is intended. The term “proposal” should only be used to describe requirements during the bidding process.

22. Resisting, resistant. Do not use “corrosion-resisting,” but instead use, “corrosion-resistant.”

23. Said. Do not use “said pipe,” “said aggregates” but instead, use “this pipe,” “these aggregates.”

24. Same. Do not use “same” to replace a pronoun like “it” or “them” standing alone, such as “connected to same,” “specified for same,” “same will be given consideration,” “conforming to requirements for same.” The sentence should be rewritten to clearly describe what is meant.

25. Schedule of Pay Items. Use this phrase instead of "Itemized Proposal" or "Proposal" in referring to the list of pay items.

26. Shall. Use "shall" to define what the contractor is required to do. Do not use "may" or "should" unless the contractor has an option under the specification.

27. State. The term "State" is preferred over the "State of Indiana" or "Indiana."

28. Such. Do not end a sentence with the word "such." "Such" usually means "of this or that kind," or similar to something stated. Instead, state that which is actually meant, or name the work to be completed or rephrase the sentence.

29. Symbols. Do not use the following symbols in writing a unique special provision.

Symbol	Write Instead
/	per, or "a"
Fº or Cº	ºF or ºC
+	plus
-	minus
x	by

30. The. Do not eliminate "the" for brevity.

31. Thoroughly. Avoid using this or other similar adverbs, e.g., thoroughly wet, thoroughly dry, thoroughly clean, etc., as they are unenforceable. Preferably, state the value of the intended requirements in percent, dimensions, number of passes, etc.

32. Unit Price. Use "contract unit price" instead of "contract unit price bid."

33. Will. Use only in describing something the Department will do that affects the contractor's performance, e.g., "The Engineer will respond in writing in 14 days" or "_____ will be accepted based on the Department's test results."

19-3.02 Unique Special Provision Review Process

Once a Unique Special Provision is developed, an electronic copy is to be transmitted to the project manager, at the time of Stage III submission. An explanation of the need for the Unique Provision must also be provided. The project manager will transmit the provision to the Construction Management Division's specifications engineer and the appropriate offices of construction, testing, operations, or design at the Central Office and the district for review prior to inclusion in the contract documents.

The Unique Special Provision will be reviewed to ensure that it does not duplicate a description of work addressed by the *Standard Specifications* or a Recurring Special Provision and that the work it describes is materially available, testable, constructible, and non-proprietary unless approved. The provision will also be checked for proper structure, language, and format.

The reviewing parties will return their comments and recommendations to the project manager for action by the designer. The designer should work through the project manager to resolve concerns or questions regarding reviewers' comments and recommendations.

19-3.03 Submittal of Approved Unique Special Provision

Once a Unique Special Provision has been reviewed and approved for use in a contract, the designer must submit the provision along with the other required contract documents.

The Department maintains instructions for use and submittal of Unique Special Provisions on its website. These instructions are located along with the instructions for use of the Special Provision Menu.

USE OF CONES IN LIEU OF DRUMS

SECTION 107, BEGIN LINE 416, DELETE AND INSERT AS FOLLOWS:

Pavements and shoulders having an edge drop of more than 3 in. (75 mm) shall be delineated with drums in accordance with 801.09. Delineation shall be at a maximum spacing of 200 ft (60 m). The use of cones in accordance with 801.08 will be permitted ~~during daylight hours in lieu of drums~~ *as shown on the plans. However, cones shall not be used for Interstate-route lane restrictions.*

SECTION 801, BEGIN LINE 259, DELETE AND INSERT AS FOLLOWS:

Cones shall be made of a material to withstand impact without damage to striking vehicles. They shall have a substantial base to restrict overturning. Cones and tubular markers shall be as shown on the plans.

Cones shall be used only during temporary activities where portability is advantageous and they remain in place and do not create a hazard to traffic. The use of cones in lieu of drums will be permitted ~~during daylight hours unless otherwise directed~~ *as shown on the plans. However, cones shall not be used for Interstate-route lane restrictions*.

Tubular markers shall be used for separating two-lane two-way traffic as shown on the plans or as directed.

Cones and tubular markers shall be secured in place either by weighting or adhesives. The use of metal bases will not be permitted.

EXPLANATION

1. Provision title is centered and is Courier New font, 10-pt. pitch, all capitals.

2. Referenced *Standard Specifications* section and line numbers are Courier New font, 10-pt. pitch, all capitals.

3. Specification text is Times New Roman font, 12-pt. pitch.

4. Deletions are shown by overstrike.

5. Insertions are shown in italics.

EXAMPLE SPECIAL PROVISION WHICH DIRECTLY REVISES THE *STANDARD SPECIFICATIONS*

Figure 19-3A

LIGHTWEIGHT AGGREGATE FOR EMBANKMENT

Description.

This work shall consist of furnishing and placing lightweight aggregate fill for embankment construction in accordance with 105.03.

Materials.

Materials shall be in accordance with the following:

The aggregate source shall submit independent laboratory test results for the quality parameters listed. The test report shall be dated not later than 18 months from the time it is submitted. Independent laboratory test results will not be required if the aggregate is supplied by a certified aggregate producer on the Department's approved Certified Aggregate Producer List.

The lightweight aggregate shall satisfy the requirements as follows:

1. Dry Rodded Unit Weight (Mass), Max... 58 pcf (929 kg/m^3)
2. Gradation, AASHTO M 195..... 1/2 in. to No. 4 (12.7 mm to 4.75 mm)
3. Finer than No. 200, Max..... 8.0% by wet analysis
4. Wear, Max..... 50%
5. Soundness, Max..... 12% loss
6. Friable Particles, Max..... 10.0%
7. Deleterious Particles, Max..... 1.0%

The source of lightweight aggregate is subject to approval of the Engineer. Aggregate that is without suitable documentation of testing by an independent testing laboratory and is not approved or is not supplied by a certified aggregate producer, will not be accepted.

Recycled materials will not be allowed in an environmentally-sensitive area.

Construction Requirements.

After placement, this material shall be lightly compacted. Density tests will not be required after placement.

Method of Measurement.

Lightweight aggregate for embankment will be measured in accordance with 203.27(d).

Basis of Payment.

Lightweight aggregate for embankment will be paid at the contract unit price per ton (megagram).

Payment will be made under:

Pay Item	**Pay Unit Symbol**
Lightweight Aggregate for Embankment.....	TON (Mg)

The costs of material, transportation, placement, and all incidentals shall be included in the cost of the pay item.

EXPLANATION

1. Provision title is centered and is Courier New font, 10-pt. pitch, all capitals.

2. There are no referenced *Standard Specifications* sections and line numbers.

3. Provision subheadings are Courier New font, 10-pt. pitch, boldface.

4. Specification text is Courier New font, 10-pt. pitch.

5. There are no deletions or insertions.

EXAMPLE SPECIAL PROVISION WHICH
DOES NOT DIRECTLY REVISE THE *STANDARD SPECIFICATIONS*

Figure 19-3B

STOCKPILED BORROW MATERIAL FOR PROJECT

The Department has stockpiled sufficient borrow material for use in the project in the southwest quadrant of the I-465 interchange with I-70 on the eastside of Indianapolis.

All borrow required for the project shall be taken from this stockpile.

EXPLANATION

1. Provision title is centered and is Courier New font, 10-pt. pitch, all capitals.

2. There are no referenced *Standard Specifications* sections and line numbers.

3. Specification text is Courier New font, 10-pt. pitch.

5. There are no deletions or insertions.

EXAMPLE OF A RESTRICTIVE TYPE UNIQUE SPECIAL PROVISION

Figure 19-3C