

Section 105

1 (C) If the proposal is new and innovative, never used in the Department projects before as
2 approved by the Engineer and results in a net savings to the Department, the savings shall
3 be distributed in accordance with Article 104-12. However, when this innovative
4 proposal results in a net increase in project cost, Subarticle 104-13(B)(2) shall apply, and
5 at least \$500, but not more than \$2,500, may be awarded to the Contractor.

6 The Contractor shall provide certification that verifies the source of the material and the
7 percentage of targeted materials to be used.

8 The quantities of reused or recycled materials either incorporated in the project or diverted
9 from landfills and any practice that minimized the environmental impacts on the project shall
10 be reported by July 1 annually by the Contractor on the Project Construction Reuse and
11 Recycling Reporting Form. The Project Construction Reuse and Recycling Reporting Form
12 and a location tool for local recycling facilities are available on the Department's web site.

13 The Contractor shall remain obligated to perform the work in accordance with the terms of the
14 existing contract pending execution of the supplemental agreement that implements
15 an approved Recycled Products or Solid Waste Materials proposal and will not be entitled to
16 any additional compensation or additional contract time if a Recycled Products or Solid Waste
17 Materials proposal is not accepted.

18 The Department reserves the right to reject, at its discretion, any Recycled Products or Solid
19 Waste Materials proposal. The Engineer will be the sole judge of the acceptability, the value,
20 the estimated net savings and any additional compensation to be paid to the Contractor for all
21 or any part of the proposal.

22 Article 104-3 does not apply to a Recycled Products or Solid Waste Materials proposal.

23 Upon execution of the supplemental agreement, the Department will hereafter have the right
24 to use, duplicate or disclose in whole or in part any data necessary for use of the modification
25 on other projects without obligation or compensation of any kind to the Contractor.
26 Restrictions of conditions imposed by the Contractor for use of the proposal by the
27 Department on other projects shall not be valid.

28 The Department will not be liable to the Contractor for failure to accept or act upon any
29 Recycled Products or Waste Materials proposal submitted pursuant to this Specification, nor
30 for any delays to the work attributable to any third party claims, or fines that may be levied as
31 a result of the Contractor's decision to use targeted materials.

32 SECTION 105 33 CONTROL OF WORK

34 105-1 AUTHORITY OF THE ENGINEER

35 The Engineer will decide all questions that may arise as to the quality and acceptability of
36 materials furnished, work performed, rate of progress of the work; interpretation of the
37 contract; and fulfillment of the contract on the part of the Contractor. His decision shall be
38 final, and he shall have executive authority to enforce and make effective such decisions and
39 orders as the Contractor fails to carry out promptly.

40 The Engineer shall have the authority to issue any written order to the Contractor which he
41 considers necessary to the prosecution of the work and shall have executive authority to
42 enforce such written orders the Contractor fails to carry out promptly. Failure on the part of
43 the Contractor to comply with any written order issued by the Engineer may be justification
44 for disqualifying the Contractor from further bidding in accordance with Article 102-15.

45 105-2 PLANS AND WORKING DRAWINGS

46 Plans will show details of all structures, lines, grades, typical cross sections of the roadway,
47 location and design of all structures and a summary of items appearing in the proposal.

1 The plans shall be supplemented by such approved working drawings as are necessary to
 2 adequately control the work. Working drawings furnished by the Contractor and approved by
 3 the Engineer shall consist of such detailed drawings as may be required to adequately control
 4 the work and are not included in the plans furnished by the Department. They may include
 5 stress sheets, shop drawings, erection drawings, falsework drawings, cofferdam drawings,
 6 bending diagrams for reinforcing steel, catalog cuts, or any other supplementary drawings or
 7 similar data required of the Contractor. When working drawings are approved by the
 8 Engineer, such approval shall not operate to relieve the Contractor of any of his responsibility
 9 under the contract for the successful completion of the work.

10 Unless otherwise specified, the Contractor shall allow 30 calendar days for review and
 11 approval, or acceptance, of working drawings from the date they are received until they are
 12 returned by the Engineer, unless otherwise stated. If revised drawings are required,
 13 appropriate additional time shall be allowed for review and approval, or acceptance, of the
 14 revised drawings. The Contractor shall have no claim for extension of completion dates or
 15 additional compensation due to this review period.

16 Changes on shop drawings after approval or distribution shall be subject to the approval of the
 17 Engineer and he shall be furnished a record of such changes.

18 Payment at the contract prices will be full compensation for all costs of furnishing all working
 19 drawings.

20 **105-3 CONFORMITY WITH PLANS AND SPECIFICATIONS**

21 All work performed and all materials furnished shall be in reasonably close conformity as
 22 determined by the Engineer with the lines, grades, cross sections, dimensions and material
 23 requirements, including tolerances, shown in the contract.

24 In the event the Engineer finds the materials or the finished product in which the materials are
 25 used not within reasonably close conformity with the contract but that reasonably acceptable
 26 work has been produced, he will then make a determination if the work is to be accepted and
 27 remain in place. If the Engineer determines that the work is to be accepted, he will have the
 28 authority to make such adjustment in contract price as he deems warranted based upon his
 29 engineering judgment and the final estimate will be paid accordingly.

30 In the event the Engineer finds the materials, or the finished product in which the materials
 31 are used, or the work performed, are not in reasonably close conformity with the contract and
 32 have resulted in an inferior or unsatisfactory product, the work or materials shall be removed
 33 and replaced or otherwise corrected by the Contractor at no cost to the Department.

34 **105-4 COORDINATION OF PLANS, SPECIFICATIONS, SUPPLEMENTAL 35 SPECIFICATIONS AND SPECIAL PROVISIONS**

36 The *Standard Specifications*, the Supplemental Specifications, the Plans, the Special
 37 Provisions and all supplementary documents are essential parts of the contract, and
 38 a requirement occurring in one is as binding as though occurring in all. They are
 39 complimentary and provide and describe the complete contract. In case of discrepancy or
 40 ambiguity, the following will apply in ascending order:

41 Calculated dimensions shall govern over scaled dimensions;

42 Supplemental Specifications shall govern over *Standard Specifications*;

43 Plans shall govern over Supplemental Specifications and *Standard Specifications*;

44 Standard Special Provisions shall govern over Plans, Supplemental Specifications and
 45 *Standard Specifications*; and

46 Project Special Provisions shall govern over Standard Special Provisions, Plans,
 47 Supplemental Specifications and *Standard Specifications*.

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1 The Contractor shall not take advantage of any apparent error or omission in the contract. In
2 the event such errors or omissions are discovered the Engineer will make such corrections and
3 interpretations as may be determined necessary for the fulfillment of the intent of the contract.

4 **105-5 COOPERATION BY CONTRACTOR**

5 The Contractor shall cooperate with the Engineer, his inspectors and other contractors in
6 every way possible and shall give the work the constant attention necessary to facilitate the
7 progress and satisfactory performance thereof. The Contractor shall notify the Engineer in
8 writing at least 7 calendar days before beginning work on the project. He shall notify the
9 Engineer at least 1 calendar day in advance when work is to be suspended and at least
10 2 calendar days in advance when work is to be resumed.

11 The Contractor shall keep available on the project site a copy of the entire contract at all
12 times.

13 **105-6 SUPERVISION BY CONTRACTOR**

14 **(A) On Site Personnel**

15 At all times that work is actually being performed, the Contractor shall have present on
16 the project one competent individual who has been authorized to act in a supervisory
17 capacity over all work on the project including work subcontracted. The individual who
18 has been so authorized shall be experienced in the type of work being performed and is to
19 be fully capable of managing, directing and coordinating the work, of reading and
20 thoroughly understanding the contract and of receiving and carrying out directions from
21 the Engineer or his authorized representatives. He shall be an employee of the Contractor
22 unless otherwise approved by the Engineer.

23 **(B) On Call Personnel**

24 At all times during the life of the project the Contractor shall provide one permanent
25 employee who shall have the authority and capability for the overall responsibility of the
26 project and who shall be personally available at the site of work within 24 hours' notice.
27 Such employee shall be fully authorized to conduct all business with the subcontractors,
28 to negotiate and execute all supplemental agreements and to execute the orders or
29 directions of the Engineer.

30 **(C) Exceptions**

31 If the Contractor elects to have the employee described under Subarticle 105-6(B)
32 constantly available in person on the project, then the presence of this employee will be
33 considered as meeting Subarticle 105-6(A). However, whenever such employee is absent
34 from the project then an authorized individual meeting Subarticle 105-6(A) shall be
35 present on the project.

36 **105-7 COOPERATION BETWEEN CONTRACTORS**

37 The Department reserves the right at any time to contract for and perform other or additional
38 work on or near the work covered by the contract.

39 When separate or additional contracts are let within the limits of any one project, each
40 Contractor shall conduct his work so as not to interfere with or hinder the progress or
41 completion of the work being performed by other contractors. Contractors working within the
42 limits of the same project shall cooperate with each other.

43 Each Contractor shall conduct his operations in such a manner as to avoid damaging any work
44 being performed by others or that has been completed by others.

1 When a project is let under more than one contract and the plans or special provisions include
2 a construction schedule, it shall be the responsibility of the Contractors to complete the
3 various phases of the project in accordance with the time limits specified such that the total
4 contracts will be completed by the completion date. This construction schedule will remain in
5 effect until such time as the Contractors, at their option submit to the Engineer a joint
6 construction schedule meeting the approval of the Engineer. This joint construction schedule
7 shall be signed by authorized representatives of each firm and upon the approval of the
8 Engineer shall be binding on each firm. Subsequent modifications to the joint construction
9 schedule may be made during the course of the work in the same manner.

10 Failure of the Contractor to complete the various phases of work within the time limits set
11 forth in the construction schedule or latest approved joint construction schedule shall be just
12 cause for removing the Contractor from the Department's list of qualified contractors.
13 A Contractor disqualified by reason of this provision will not be reinstated until such time as
14 his progress is in accordance with the latest approved construction schedule or until the
15 project is completed and accepted, whichever occurs first.

16 The Department will under no circumstances be liable for any claim for additional
17 compensation due to acts of one contractor holding up the work of another.

18 The Department will under no circumstances be liable for any damages experienced by one
19 Contractor as a result of the presence and operations of other contractors working within the
20 limits of the same project.

21 **105-8 COOPERATION WITH UTILITY OWNERS**

22 Before the beginning of construction, the Department will notify all utility owners known to
23 have facilities affected by the construction of the project and will make arrangements for the
24 necessary adjustments of all affected public or private utility facilities. The utility
25 adjustments may be made either before or after the beginning of construction of the project.
26 The adjustments will be made by the utility owner or his representative or by the Contractor
27 when such adjustments are part of the work covered by his contract.

28 The Contractor shall use an independent utility locating service to locate utilities. Identify
29 excavation locations by means of pre-marking with white paint, flags, or stakes or provide a
30 specific written description of the location in the locate request. The Contractor shall use
31 special care working in, around and near all existing utilities that are encountered during
32 construction, protecting them where necessary so that they will give uninterrupted service.

33 The Contractor shall cooperate with the utility owner and/or the owner's representative in the
34 adjustment or placement of utility facilities when such adjustment or placement is made
35 necessary by the construction of the project or has been authorized by the Department.

36 In the event that utility services are interrupted by the Contractor, the Contractor shall
37 promptly notify the owners and shall cooperate with the owners and/or the owner's
38 representative in the restoration of service in the shortest time possible.

39 Existing fire hydrants shall be kept accessible to fire departments at all times.

40 Before submitting his bid, the Contractor shall make his own determination as to the nature
41 and extent of the utility facilities, including proposed adjustments, new facilities, or temporary
42 work to be performed by the utility owner or his representative; and as to whether or not any
43 utility work is planned by the owner in conjunction with the project construction. The
44 Contractor shall consider in his bid all of the permanent and temporary utility facilities in their
45 present or relocated positions, whether or not specifically shown in the plans or covered in the
46 project special provisions. It will be the Contractor's responsibility to anticipate any
47 additional costs to him resulting from such utility work and to reflect these costs in his bid for
48 the various items in the contract.

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1 No additional compensation, except as provided for in Article 104-4, will be allowed for
2 delays, inconvenience or damage sustained by the Contractor due to any interference from
3 said utility facilities or the operation of moving them, and any such delay, inconvenience or
4 damage, except as provided for in Article 104-4, shall not constitute a basis for a claim for
5 additional compensation.

6 Where changes to utility facilities are to be made solely for the convenience of the Contractor,
7 it shall be the Contractor's responsibility to arrange for such changes and the Contractor shall
8 bear all costs of such changes.

9 **105-9 CONSTRUCTION STAKES, LINES AND GRADES**

10 Unless otherwise required in the contract, the Engineer will set construction stakes
11 establishing lines, slopes and continuous profile-grade in road work, centerline and bench
12 marks for bridge work, culvert work, protective and accessory structures and appurtenances
13 that require the use of an engineer's level and transit, and will furnish the Contractor with all
14 necessary information relating to lines, slopes and grades. These stakes and marks shall
15 constitute the field control by, and in accordance with which, the Contractor shall establish
16 other necessary controls and perform the work.

17 The Contractor shall be held responsible for the preservation of all stakes and marks, and if
18 any of the construction stakes or marks have been destroyed or disturbed by the Contractor,
19 the cost of replacing them will be charged against him and will be deducted from the payment
20 for the work.

21 **105-10 AUTHORITY AND DUTIES OF THE INSPECTOR**

22 Inspectors employed by the Department are authorized to inspect all work performed and
23 materials furnished. Such inspection may extend to all or any part of the work and to the
24 preparation, fabrication, or manufacture of the materials to be used. The inspector is not
25 authorized to alter or waive the requirements of the contract. The inspector is not authorized
26 to issue instructions contrary to the contract, or to act as foreman for the Contractor; however,
27 he has the authority to reject work or materials until any questions at issue can be referred to
28 and decided by the Engineer. The inspector is not authorized to make any final acceptance of
29 the work.

30 **105-11 INSPECTION OF WORK**

31 All materials and each part or detail of the work shall be subject to inspection by the
32 Engineer. The Contractor shall allow and provide a reasonable access to all parts of the work
33 to the Engineer or his authorized representative. The Contractor shall furnish such
34 information and assistance as is required to make a complete and detailed inspection. Such
35 access shall meet the approval of the Engineer.

36 The presence of the Engineer or inspector at the work site shall in no way lessen the
37 Contractor's responsibility for conformity with the contract. Should the Engineer or
38 Inspector, at any time before final acceptance, fail to point out or reject materials or work that
39 does not conform to the contract, whether from lack of discovery or for any other reason, it
40 shall in no way prevent later rejection or corrections to the unsatisfactory materials or work
41 when discovered. The Contractor shall have no claim for losses suffered due to any necessary
42 removals or repairs resulting from the unsatisfactory work.

1 If the Engineer requests it, the Contractor, at any time before final acceptance of the work,
2 shall remove or uncover such portions of the finished work as may be directed. After
3 examination, the Contractor shall restore said portions of the work to the standard required by
4 the specifications. The Contractor shall keep cost records of the work performed and if the
5 uncovered work is found to be acceptable by the Engineer, the Department will pay the
6 Contractor on a force account basis in accordance with Article 109-3 for the cost of
7 uncovering, or removing and the replacing of the covering or making good of the parts
8 removed; but should the work so exposed or examined prove unacceptable by the Engineer,
9 the uncovering or removing and the replacing of the covering or making good of the parts
10 removed, shall be at no cost to the Department.

11 When any other unit of government or political subdivision is to pay a portion of the cost of
12 the work covered by the contract, its respective representatives shall have the right to inspect
13 the work. When work is to be performed on the right of way of any railroad corporation or in
14 proximity to other public utilities, the representatives of the railroad corporation and/or the
15 public utilities shall have the right to inspect the work. Such inspection shall in no sense
16 make any unit of government or political subdivision or any railroad corporation or public
17 utility a party to the contract and shall in no way interfere with the rights of either party
18 thereunder.

19 **105-12 UNAUTHORIZED WORK**

20 No work shall be performed without established lines and grades except as otherwise
21 permitted by the Engineer. Work performed contrary to the instructions of the Engineer or
22 contrary to any approvals granted by the Engineer will be considered as unauthorized and
23 may not be paid under the requirements of the contract. Work performed beyond the lines
24 shown in the plans or as given, except as herein specified, or any extra work performed
25 without authority will be considered as unauthorized and may not be paid under the
26 requirements of the contract. Any of the above work so performed may be ordered removed,
27 replaced, or repaired at no cost to the Department.

28 Upon failure on the part of the Contractor to comply on time with any order of the Engineer
29 made under the provisions of this article, the Engineer will have the authority to cause such
30 unauthorized work to be removed or adjusted or both to conform to the contract and to deduct
31 the cost of removal or adjustment, or both, from any monies due or to become due the
32 Contractor.

33 **105-13 LIMITATIONS OF OPERATIONS**

34 At any time when, in the opinion of the Engineer, the Contractor has obstructed, closed, or is
35 conducting operations on a greater portion of the work than is necessary for the prosecution of
36 the work so as to constitute a hazard to the general public or impair the function of the facility
37 being constructed where traffic shall be maintained, the Engineer may require the Contractor
38 to suspend such unnecessary operations or closures and to finish the portions on which work
39 is in progress before starting work on additional portions of the work.

40 **105-14 NIGHT WORK**

41 Whenever the Contractor's operations are being conducted at night, the Contractor shall
42 provide such artificial lighting as may be necessary to provide for safe and proper
43 construction and to provide for adequate inspection of the work as described in Section 1413.
44 The Contractor shall comply with all applicable regulations governing noise abatement.

45 **105-15 RESTRICTION OF LOAD LIMITS**

46 The Contractor shall comply with all legal load restrictions in hauling equipment and
47 materials on roads under the jurisdiction of the Department.

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1 The Department has the right to place load limit restrictions on the load a Contractor may haul
2 on any road or bridge in the vicinity of his contract. The Contractor, before bidding on
3 a project, will be responsible for making his own investigations to determine the possibility of
4 load limit restrictions being placed on any of the highways he plans to use for hauling
5 purposes. The Contractor shall not be entitled to an extension of time or to compensation for
6 any costs, inconvenience, delay, or any other adversity to the Contractor as the result of any
7 reduction by the Department in load limit, or as the result of a refusal by the Department to
8 raise load limits as hereinafter provided or under any other conditions. Any such reduction in
9 load limit or refusal to raise load limits shall not constitute a basis for a claim for additional
10 compensation.

11 Wherever load limit restrictions below the statutory legal load limit have been posted on any
12 roads and bridges on the project or within the vicinity of the project, the Department may
13 remove the load limit restrictions from such roads and bridges upon written request from the
14 Contractor, and the Contractor thereafter will be allowed to haul up to the statutory legal
15 limits over such roads and bridges, provided the Contractor enters into an agreement with the
16 Department providing for:

17 (A) Maintenance by the Contractor of such roads in a condition satisfactory to the Engineer
18 during the haul period.

19 (B) Repair by the Contractor at his expense, of all damages to such roads after haul is
20 completed to place them in a condition as good as they were before removal of the load
21 limits.

22 (C) Furnishing a bond by the Contractor in an amount determined by the Engineer for the
23 roads. Furnishing a bond for the roads does not entitle the Contractor to exceed the
24 posted load limits of any bridge.

25 (D) Assumption by the Contractor of all costs of strengthening any bridges that may be
26 necessary to safely haul loads up to statutory legal limits. The Department will, upon
27 request by the Contractor, make a determination as to the method and extent of
28 strengthening required for the bridges and will advise the Contractor as to the amount of
29 work to be done or an estimate of the charges for the work if performed by Department
30 forces. When Department forces perform the work, the Contractor shall reimburse the
31 Department in the amount of the actual charges for said work. When Contractor's forces
32 perform the work, it shall be done in accordance with plans approved by the Engineer and
33 under his inspection.

34 (E) Indemnification of the Department against any and all claims from third persons arising
35 out of or resulting from the hauling operation or the maintenance, or lack of maintenance,
36 of haul roads. Haul roads shall be maintained for the Contractor's hauling operations and
37 for the use of the general public.

38 Equipment operated on proposed bridges shall comply with load restrictions in Table 105-1.

Property	Maximum Load in Pounds
Axle load	36,000
Axle load on tandem axles	30,000
Gross load	90,000

39 The Contractor shall keep the bridge floor clean to reduce impact forces and place approved
40 temporary guides on the bridge floor to position the wheel loads as nearly as possible over the
41 bridge girders. Only one earth-moving vehicle shall be on a bridge at any time. Upon
42 completion of hauling over each bridge, the Contractor shall clean the bridge floor, curbs and
43 rails.

1 Regulations pertaining to size and weight will not apply to equipment used on the project
2 provided the vehicles involved are not operated on pavement, completed base course, or
3 structures.

4 **105-16 FAILURE TO MAINTAIN THE PROJECT OR PERFORM EROSION**
5 **CONTROL WORK**

6 Failure on the part of the Contractor to comply with Article 104-10 or to perform erosion
7 control work as directed will result in the Engineer notifying the Contractor to comply with
8 these Specifications. In the event that the Contractor fails to begin such remedial action or
9 fails to begin erosion control work within 24 hours after receipt of such notice with adequate
10 forces and equipment, the Engineer may proceed to have the work performed with other
11 forces. No payment will be made to the Contractor for work performed by others. Any costs
12 incurred by the Department for work performed by others as provided above in excess of the
13 costs that would have been incurred had the work been performed by the Contractor will be
14 deducted from monies due the Contractor on his contract.

15 **105-17 INSPECTION AND ACCEPTANCE**

16 Upon completion of the entire project as determined by the Engineer, the Engineer will
17 inspect the project for final acceptance. If all construction provided for and contemplated by
18 the contract is found to be satisfactorily completed, the project will be accepted. The
19 acceptance of projects in their entirety will not be altered except as listed below:

20 **(A)** When any continuous project is equal to or in excess of 5 miles in length, the Department
21 will accept the project in two increments with the first increment equaling at least 50% of
22 the total length of the project.

23 **(B)** Under resurfacing contracts, the Department will accept the project in parts as defined by
24 map numbers representing at least 25% of the total length of project.

25 **(C)** When it is considered to be in the best interest of the Department, other increments or
26 parts of projects may be considered for acceptance.

27 **(D)** When the contract contains an intermediate completion date requiring the completion of
28 a portion of the work in its entirety, such portion of the work may be accepted if
29 requested in writing by the Contractor.

30 **(E)** Bridge decks and rails that have been constructed or rehabilitated at such time as when
31 they are open to public traffic.

32 **(F)** Permanent sign panels, including hardware and retroreflective sheeting, that are located
33 where the roadway is open to public traffic and that are required to be installed before the
34 final acceptance of the project.

35 Acceptance of any increment or part of a project shall not operate to waive the assessment of
36 all or any portion of liquidated damages assessable under the terms of the contract.

37 When the inspection discloses any work, in whole or in part, as being unsatisfactory or
38 incomplete, the Engineer will advise the Contractor of such unsatisfactory or incomplete
39 work, and the Contractor shall immediately correct, repair or complete such work. The
40 project will not be accepted and the Contractor shall be responsible for the maintenance of the
41 project and maintenance of traffic until all of the recommendations made at the time of the
42 inspection have been satisfactorily completed.

43 The Engineer will notify the Contractor in writing that the project has been accepted as soon
44 as practicable after the completion of the project. When an observation period is required that
45 extends beyond the final acceptance date, the satisfactory completion of the observation
46 period shall be covered by the contract bonds.