- 1 The Contractor shall remain obligated to perform the work in accordance with the terms of the
- 2 existing contract pending execution of the supplemental agreement that implements
- 3 an approved Recycled Products or Solid Waste Materials proposal and will not be entitled to
- 4 any additional compensation or additional contract time if a Recycled Products or Solid Waste
- 5 Materials proposal is not accepted.
- 6 The Department reserves the right to reject, at its discretion, any Recycled Products or Solid
- 7 Waste Materials proposal. The Engineer will be the sole judge of the acceptability, the value,
- 8 the estimated net savings and any additional compensation to be paid to the Contractor for all 9 or any part of the proposal
- 9 or any part of the proposal.
- 10 Article 104-3 does not apply to a Recycled Products or Solid Waste Materials proposal.

11 Upon execution of the supplemental agreement, the Department will hereafter have the right

to use, duplicate or disclose in whole or in part any data necessary for use of the modification on other projects without obligation or compensation of any kind to the Contractor. Restrictions of conditions imposed by the Contractor for use of the proposal by the Department on other projects shall not be valid.

16 The Department will not be liable to the Contractor for failure to accept or act upon any 17 Recycled Products or Waste Materials proposal submitted pursuant to this Specification, nor 18 for any delays to the work attributable to any third party claims, or fines that may be levied as 19 a result of the Contractor's decision to use targeted materials.

- a result of the Contractor's decision to use targeted material
- 20
- 21

#### SECTION 105 CONTROL OF WORK

## 22 105-1 AUTHORITY OF THE ENGINEER

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

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

## 33 105-2 PLANS AND WORKING DRAWINGS

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

36 The plans shall be supplemented by such approved working drawings as are necessary to 37 adequately control the work. Working drawings furnished by the Contractor and approved by 38 the Engineer shall consist of such detailed drawings as may be required to adequately control 39 the work and are not included in the plans furnished by the Department. They may include 40 stress sheets, shop drawings, erection drawings, falsework drawings, cofferdam drawings, 41 bending diagrams for reinforcing steel, catalog cuts, or any other supplementary drawings or 42 similar data required of the Contractor. When working drawings are approved by the 43 Engineer, such approval shall not operate to relieve the Contractor of any of his responsibility 44 under the contract for the successful completion of the work.

1 Unless otherwise specified, the Contractor shall allow 40 calendar days for review and

2 approval, or acceptance, of working drawings from the date they are received until they are

3 returned by the Engineer, unless otherwise stated. If revised drawings are required,

4 appropriate additional time shall be allowed for review and approval, or acceptance, of the

- 5 revised drawings. The Contractor shall have no claim for extension of completion dates or
- 6 additional compensation due to this review period.
- Changes on shop drawings after approval or distribution shall be subject to the approval of the
  Engineer and he shall be furnished a record of such changes.

9 Payment at the contract prices will be full compensation for all costs of furnishing all working10 drawings.

## 11 105-3 CONFORMITY WITH PLANS AND SPECIFICATIONS

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

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

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

# 25 105-4 COORDINATION OF PLANS, SPECIFICATIONS, SUPPLEMENTAL 26 SPECIFICATIONS AND SPECIAL PROVISIONS

- The *Standard Specifications*, the Supplemental Specifications, the Plans, the Special Provisions and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are complimentary and provide and describe the complete contract. In case of discrepancy, the following will apply in ascending order:
- 32 Calculated dimensions shall govern over scaled dimensions;
- 33 Supplemental Specifications shall govern over *Standard Specifications*;
- 34 Plans shall govern over Supplemental Specifications and *Standard Specifications*;
- Standard Special Provisions shall govern over Plans, Supplemental Specifications and
   *Standard Specifications*; and
- Project Special Provisions shall govern over Standard Special Provisions, Plans,
   Supplemental Specifications and *Standard Specifications*.
- 39 The Contractor shall not take advantage of any apparent error or omission in the contract. In
- 40 the event such errors or omissions are discovered the Engineer will make such corrections and
- 41 interpretations as may be determined necessary for the fulfillment of the intent of the contract.

#### 1 105-5 COOPERATION BY CONTRACTOR

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

8 The Contractor shall keep available on the project site a copy of the entire contract at all 9 times.

#### 10 105-6 SUPERVISION BY CONTRACTOR

#### 11 (A) On Site Personnel

12 At all times that work is actually being performed, the Contractor shall have present on 13 the project one competent individual who has been authorized to act in a supervisory 14 capacity over all work on the project including work subcontracted. The individual who 15 has been so authorized shall be experienced in the type of work being performed and is to 16 be fully capable of managing, directing and coordinating the work, of reading and 17 thoroughly understanding the contract and of receiving and carrying out directions from 18 the Engineer or his authorized representatives. He shall be an employee of the Contractor 19 unless otherwise approved by the Engineer.

#### 20 (B) On Call Personnel

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

#### 27 (C) Exceptions

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

## 33 105-7 COOPERATION BETWEEN CONTRACTORS

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

36 When separate or additional contracts are let within the limits of any one project, each

- 37 Contractor shall conduct his work so as not to interfere with or hinder the progress or
- completion of the work being performed by other contractors. Contractors working within the
- 39 limits of the same project shall cooperate with each other.
- 40 Each Contractor shall conduct his operations in such a manner as to avoid damaging any work
- 41 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.

Failure of the Contractor to complete the various phases of work within the time limits set forth in the construction schedule or latest approved joint construction schedule shall be just cause for removing the Contractor from the Department's list of qualified bidders. A Contractor disqualified from bidding by reason of this provision will not be reinstated until such time as his progress is in accordance with the latest approved construction schedule or until the 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

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

The Contractor shall use an independent utility locating service to locate utilities. The Contractor shall use special care working in, around and near all existing utilities that are encountered during construction, protecting them where necessary so that they will give uninterrupted service.

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

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

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

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

- 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

Unless otherwise required in the contract, the Engineer will set construction stakes establishing lines, slopes and continuous profile-grade in road work, centerline and bench marks for bridge work, culvert work, protective and accessory structures and appurtenances that require the use of an engineer's level and transit, and will furnish the Contractor with all necessary information relating to lines, slopes and grades. These stakes and marks shall constitute the field control by, and in accordance with which, the Contractor shall establish 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 carelessly or willfully destroyed or 19 disturbed by the Contractor, the cost of replacing them will be charged against him and will 20 be deducted from the payment 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

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

The presence of the Engineer or inspector at the work site shall in no way lessen the Contractor's responsibility for conformity with the contract. Should the Engineer or Inspector, before or during construction, fail to point out or reject materials or work that does not conform with the contract, whether from lack of discovery or for any other reason, it shall in no way prevent later rejection or corrections to the unsatisfactory materials or work when discovered. The Contractor shall have no claim for losses suffered due to any necessary removals or repairs resulting from the unsatisfactory work. 1 If the Engineer requests it, the Contractor, at any time before acceptance of the work, shall 2 remove or uncover such portions of the finished work as may be directed. After examination, 3 the Contractor shall restore said portions of the work to the standard required by the 4 specifications. The Contractor shall keep cost records of the work performed and if the uncovered work is found to be acceptable, the Department will pay the Contractor on a force 5 account basis in accordance with Article 109-3 for the cost of uncovering, or removing and 6 7 the replacing of the covering or making good of the parts removed; but should the work so exposed or examined prove unacceptable, the uncovering or removing and the replacing of 8 9 the covering or making good of the parts removed, shall be at no cost to the Department.

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

## 18 **105-12 UNAUTHORIZED WORK**

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

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

## 32 **105-13 LIMITATIONS OF OPERATIONS**

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

## 39 **105-14 NIGHT WORK**

40 Whenever the Contractor's operations are being conducted at night, the Contractor shall 41 provide such artificial lighting as may be necessary to provide for safe and proper 42 construction and to provide for adequate inspection of the work as described in Section 1413.

## 43 **105-15 RESTRICTION OF LOAD LIMITS**

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

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 and any such reduction 9 in 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 of all damages to such roads after haul is completed to place 20 them in a condition as good as they were before removal of the load limits.
- 21 (C) Furnishing a bond by the Contractor in an amount determined by the Engineer for the 22 roads. Furnishing a bond for the roads does not entitle the Contractor to exceed the 23 posted load limits of any bridge.
- 24 (D) Assumption by the Contractor of all costs of strengthening any bridges that may be 25 necessary to safely haul loads up to statutory legal limits. The Department will, upon 26 request by the Contractor, make a determination as to the method and extent of 27 strengthening required for the bridges and will advise the Contractor as to the amount of 28 work to be done or an estimate of the charges for the work if performed by Department 29 forces. When Department forces perform the work, the Contractor shall reimburse the 30 Department in the amount of the actual charges for said work. When Contractor's forces 31 perform the work, it shall be done in accordance with plans approved by the Engineer and 32 under his inspection.
- 33 (E) Indemnification of the Department against any and all claims from third persons arising 34 out of or resulting from the hauling operation or the maintenance, or lack of maintenance, 35 of haul roads. Haul roads shall be maintained for the Contractor's hauling operations and 36 for the use of the general public.

| TABLE 105-1<br>RESTRICTIONS FOR EQUIPMENT ON BRIDGES |                           |
|--|---------------------------|
| Property   | Maximum Load<br>in Pounds |
| Axle load  | 36,000                    |
| Axle load on tandem axles                            | 30,000                    |
| Gross load   | 90,000                    |

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

38 The Contractor shall keep the bridge floor clean to reduce impact forces and place approved 39 temporary guides on the bridge floor to position the wheel loads as nearly as possible over the 40 bridge girders. Only one earth-moving vehicle shall be on a bridge at any time. Upon 41 completion of hauling over each bridge, the Contractor shall clean the bridge floor, curbs and 42 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 apparent completion of the entire project, the Engineer will inspect the project for final 17 acceptance. If all construction provided for and contemplated by the contract is found to be 18 satisfactorily completed, the project will be accepted. The acceptance of projects in their 19 entirety will not be altered except as listed below:

- (A) When any continuous project is equal to or in excess of 5 miles in length, the Department
   will accept the project in 2 increments with the first increment equaling at least 50% of
   the total length of the project.
- (B) Under resurfacing contracts, the Department will accept the project in parts as defined by
   map numbers representing at least 25% of the total length of project.
- (C) When it is considered to be in the best interest of the Department, other increments or parts of projects may be considered for acceptance.
- (D) When the contract contains an intermediate completion date requiring the completion of
   a portion of the work in its entirety, such portion of the work may be accepted if
   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.
- (F) Permanent sign panels, including hardware and retroreflective sheeting, that are located
   where the roadway is open to public traffic and that are required to be installed before the
   final acceptance of the project.
- Acceptance of any increment or part of a project shall not operate to waive the assessment of all or any portion of liquidated damages assessable under the terms of the contract.

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

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