

Section 104

1 Paper bid bonds will be retained by the Department until the contract bonds are furnished by
2 the successful bidder after which all such bid bonds will be destroyed unless the individual
3 bid bond form contains a note requesting that it be returned to the bidder or the Surety.

103-7 CONTRACT BONDS

5 The successful bidder, within 14 calendar days after the notice of award is received by him,
6 shall provide the Department with a contract payment bond and a contract performance bond
7 each in an amount equal to 100% of the amount of the contract. All bonds shall be in
8 conformance with NCGS § 44A-33. The corporate surety furnishing the bonds shall be
9 authorized to do business in the State.

103-8 EXECUTION OF CONTRACT

11 As soon as possible following receipt of the properly executed contract bonds, the Department
12 will complete the execution of the contract, retain the original contract and return one copy of
13 the contract to the Contractor.

103-9 FAILURE TO FURNISH CONTRACT BONDS

15 The successful bidder's failure to file acceptable bonds within 14 calendar days after the
16 notice of award is received by him shall be just cause for the forfeiture of the bid bond or bid
17 deposit and rescinding the award of the contract. Award may then be made to the next lowest
18 responsible bidder or the work may be readvertised and constructed under contract or
19 otherwise, as the Department may decide.

SECTION 104 SCOPE OF WORK

104-1 INTENT OF CONTRACT

23 The intent of the contract is to prescribe the work or improvements that the Contractor
24 undertakes to perform, in full compliance with the contract documents. In case the method of
25 construction or character of any part of the work is not covered by the plans, these
26 specifications shall apply. The Contractor shall perform all work in accordance with the lines,
27 grades, typical sections, dimensions and other data shown in the plans, or that may be
28 modified by written orders and shall do such additional, extra and incidental work as may be
29 considered necessary to complete the work to the full intent of the plans and specifications.
30 Unless otherwise provided in the contract, the Contractor shall furnish all implements,
31 machinery, equipment, tools, materials, supplies, transportation and labor necessary for the
32 prosecution and completion of the work.

104-2 SUPPLEMENTAL AGREEMENTS

34 Whenever it is necessary to make amendments to the contract to satisfactorily complete the
35 proposed construction or to provide authorized time extensions, the Engineer shall have the
36 authority to enter into a supplemental agreement covering such amendments.

37 Supplemental agreements shall become a part of the contract when executed by the Engineer
38 and an authorized representative of the Contractor. The Contractor shall file with the
39 Engineer a copy of the name or names of his representatives who are authorized to sign
40 supplemental agreements.

104-3 ALTERATIONS OF PLANS OR DETAILS OF CONSTRUCTION

42 The Engineer reserves the right to make, at any time during the progress of the work, such
43 alterations in the plans or in the details of construction as may be found necessary or
44 desirable. Under no circumstances will an alteration involve work beyond the termini of the
45 proposed construction except as may be necessary to satisfactorily complete the project. Such
46 alterations shall not invalidate the contract nor release the Surety, and the Contractor agrees to
47 perform the work as altered at his contract unit or lump sum prices the same as if it had been
48 a part of the original contract except as otherwise herein provided.

1 An adjustment in the affected contract unit or lump sum prices due to alterations in the plans
2 or details of construction that impacts the controlling operation and materially changes the
3 character of the work and the cost of performing the work will be made by the Engineer only
4 as provided in this article.

5 If the Engineer makes an alteration in the plans or details of construction, which he
6 determines will materially change the character of the work and the cost of performing the
7 work, an adjustment will be made and the contract modified in writing accordingly. The
8 Contractor will be paid for performing the affected work in accordance with
9 Subarticle 104-8(A).

10 When the Contractor is required to perform work that is, in his opinion, an alteration in the
11 plans or details of construction that materially changes the character of the work and the cost
12 of performing the work, he shall notify the Engineer in writing before performing such work.
13 The Engineer will investigate and, based upon his determination, one of the following will
14 occur:

15 **(A)** If the Engineer determines that the affected work is an alteration of the plans or details of
16 construction that materially changes the character of the work and the cost of performing
17 the work, the Contractor will be notified in writing by the Engineer and compensation
18 will be made in accordance with Subarticle 104-8(A).

19 **(B)** If the Engineer determines that the work is not such an alteration in the plans or details of
20 construction that materially changes the character of the work and the cost of performing
21 the work, he will notify the Contractor in writing of his determination. If the Contractor,
22 upon receipt of the Engineer's written determination, still intends to file a claim for
23 additional compensation by reason of such alteration, he shall notify the Engineer in
24 writing of such intent before beginning any of the alleged altered work, and the
25 provisions of Subarticle 104-8(B) shall be strictly adhered to.

26 No contract adjustment will be allowed under this article for any effects caused on
27 unaltered work.

28 If the Contractor elects to file a written claim or requests an extension of contract time, it shall
29 be submitted on the Contractor Claim Submittal Form available through the Construction
30 Unit.

31 **104-4 SUSPENSIONS OF WORK ORDERED BY THE ENGINEER**

32 **(A) Suspensions of the Work Ordered by the Engineer**

33 When the Engineer suspends in writing the performance of all or any portion of the work
34 for a period of time not originally anticipated, customary or inherent to the construction
35 industry and the Contractor believes that additional compensation for idle equipment or
36 labor is justifiably due as a result of such suspension, the Contractor shall notify the
37 Engineer in writing of his intent to file a claim for additional compensation within
38 7 calendar days after the Engineer suspends the performance of the work and the
39 provisions of Subarticle 104-8(C) shall be strictly adhered to.

40 Within 14 calendar days of receipt by the Contractor of the notice to resume work, the
41 Contractor shall submit his claim to the Engineer in writing on the Contractor Claim
42 Submittal Form available through the Construction Unit. Such claim shall set forth the
43 reasons and support for such adjustment in compensation including cost records and any
44 other supporting justification in accordance with Subarticle 104-8(C).

45 **(B) Alleged Suspension**

46 If the Contractor contends he has been prevented from performing all or any portion of
47 the work for a period of time not originally anticipated, customary or inherent to the
48 construction industry because of conditions beyond the control of and not the fault of the
49 Contractor, its suppliers or subcontractors at any tier and not caused by weather, but the

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1 Engineer has not suspended the work in writing, the Contractor shall submit to the
2 Engineer a written notice of intent to file a claim for additional compensation by reason
3 of such alleged suspension. No adjustment in compensation will be allowed for idle
4 equipment or labor before the time of the submission of the written notice of intent to file
5 a claim for additional compensation by reason of such alleged suspension. Upon receipt,
6 the Engineer will evaluate the Contractor's notice of intent to file a claim for additional
7 compensation. If the Engineer agrees with the Contractor's contention, the Engineer will
8 suspend in writing the performance of all or any portion of the work, and
9 Subarticle 104-8(C) shall be strictly adhered to.

10 If the Engineer does not agree with the Contractor's contention as described above and
11 determines that no portion of the work should be suspended, he will notify the Contractor
12 in writing of his determination. If the Contractor does not agree with the Engineer's
13 determination, Subarticle 104-8(C) shall be strictly adhered to. Within 14 calendar days
14 after the last day of the alleged suspension, the Contractor shall submit his claim to the
15 Engineer in writing on the Contractor Claim Submittal Form available through the
16 Construction Unit. Such claim shall set forth the reasons and support for such adjustment
17 in compensation, including cost records and any other supporting justification in
18 accordance with Subarticle 104-8(C).

19 (C) Conditions

20 No adjustment in compensation will be allowed under Subarticles 104-4(A) and 104-4(B)
21 for any reason whatsoever for each occurrence of idle equipment or idle labor that has
22 a duration of 24 hours or less.

23 No adjustment in compensation will be allowed under Subarticles 104-4(A) and 104-4(B)
24 to the extent that performance would have been suspended by any other cause or for
25 which an adjustment is provided for or excluded under any other term or condition of the
26 contract.

27 No adjustment in compensation will be allowed under Subarticles 104-4(A) and 104-4(B)
28 for any effects caused on unchanged work. No adjustment in compensation will be
29 allowed under Subarticles 104-4(A) and 104-4(B) except for idle equipment or idle labor
30 resulting solely from the suspension of work in writing by the Engineer.

31 No adjustment in compensation will be allowed under Subarticles 104-4(A) and 104-4(B)
32 where temporary suspensions of the work have been ordered by the Engineer in
33 accordance with Article 108-7 and the temporary suspensions are a result of the fault or
34 negligence of the Contractor.

35 104-5 OVERRUNS AND UNDERRUNS OF CONTRACT QUANTITIES

36 (A) General

37 The Engineer reserves the right to make at any time during the work such changes in
38 quantities as are necessary to satisfactorily complete the project. Such changes in
39 quantities shall not invalidate the contract, nor release the Surety, and the Contractor
40 agrees to perform the work as changed. The Engineer will notify the Contractor in
41 writing of the significant changes in the quantities.

42 The Contractor will be entitled to an adjustment in contract unit prices for increased costs
43 incurred over the original bid prices in performing contract items that overrun or
44 underrun the estimated contract quantities only as provided for in this article.

45 (B) Overruns - Increase in Unit Price

46 If the actual quantity of any major contract item overruns the original bid quantity by
47 more than 15% of such original bid quantity, or the actual quantity of any minor contract
48 item overruns the original bid quantity by more than 100% of such original bid quantity,
49 an increase to the contract unit price, excluding loss of anticipated profits, may be

1 authorized by the Engineer. Revised contract unit prices pertaining to overruns will be
 2 applicable only to that portion of the overrun that is in excess of the percentages stated
 3 above.

4 (1) Whenever it is anticipated that an overrun in a major or minor contract item in excess
 5 of that described above will occur, the Contractor may make written request for
 6 a revision to contract unit prices. It shall be incumbent upon the Contractor to justify
 7 the request for a revision to contract unit prices. After reviewing the Contractor's
 8 request, the Engineer will notify the Contractor of his determination as follows:

9 (a) If the Engineer determines a revision to the contract unit price is justified and
 10 the Engineer and the Contractor are in agreement as to the revision to be made
 11 to the contract unit price, a supplemental agreement covering the revised
 12 contract unit price will be consummated before performing work on that
 13 quantity in excess of the percentage set forth above.

14 If the Engineer determines a revision to the contract unit price is justified and
 15 the Engineer and the Contractor are not in agreement as to the revision to be
 16 made to the contract unit price, the Engineer will issue a force account notice
 17 before performing work on that quantity in excess of the percentage set forth
 18 above.

19 (b) If the Engineer determines a revision to the contract unit price is not justified he
 20 will notify the Contractor of his determination in writing and payments will be
 21 made for the work at the contract unit price. Upon completion of the work, the
 22 Contractor may request an adjustment to the contract unit price as provided
 23 below.

24 (2) Whenever an overrun in a contract item in excess of the percentages previously set
 25 forth has occurred and a supplemental agreement establishing an increase to the
 26 contract unit price has not been executed or the Engineer has not issued a force
 27 account notice, the Contractor may make written request for a revision in the original
 28 contract unit price. Any adjustment to the contract unit prices due to overruns will
 29 be made by the Engineer based upon his evaluation and comparison of the
 30 Contractor's documented cost records of the contract unit prices for those contract
 31 items. The Contractor's documented cost records for the work performed on those
 32 quantities beyond the percentages stated above shall be kept in accordance with
 33 Article 109-3. The Contractor's cost records and supporting data shall be complete
 34 in every respect and in such form that they can be checked. It shall be incumbent
 35 upon the Contractor to satisfy the Engineer of the validity of any request presented
 36 by the Contractor for an adjustment to the contract unit price. After reviewing the
 37 Contractor's request, the Engineer can make such adjustment as he deems warranted
 38 based upon his engineering judgment and the payment to the Contractor will be
 39 made accordingly.

40 (C) Underruns - Increase in Unit Price

41 If the actual quantity of any major contract item underruns the original bid quantity by
 42 more than 15% of such original bid quantity, an increase to the contract unit price,
 43 excluding loss of anticipated profit, may be authorized by the Engineer. Revised contract
 44 unit prices pertaining to underruns of major contract items will be applicable to the entire
 45 quantity of the contract item that underruns. No revision will be made to the contract unit
 46 price for any minor contract item that underruns the original bid quantities.

47 (1) Whenever it is anticipated that an underrun in a major contract item in excess of that
 48 described above will occur, the Contractor may make written request for a revision
 49 to the contract unit price. If the Engineer and the Contractor are in agreement as to
 50 the revision to be made to the contract unit price, then a supplemental agreement
 51 covering the revised unit price will be entered into. If the Engineer and the

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1 Contractor are not in agreement, then after performance of the work, a revised unit
2 price may be determined as described below.

- 3 (2) Whenever an underrun in a major contract item in excess of the percentage
4 previously set forth has occurred and a supplemental agreement establishing
5 an increase to the contract unit price has not been executed, the Contractor may make
6 written request for a revision to the original contract unit price. The Contractor shall
7 submit sufficient documentation and analysis of his costs to satisfy the Engineer of
8 any non-recovered costs included in the item that underran. Any adjustment to the
9 contract unit prices due to underruns will be made by the Engineer based upon his
10 evaluation of the Contractor's documentation and an analysis showing how changes
11 in contract item cost are attributable to the underrun. An analysis of costs shall be
12 supplemented with the Contractor's documented cost records for work performed on
13 the total quantity of the affected item where the Contractor's request for
14 compensation includes compensation for costs other than recovered fixed costs.
15 The Contractor's cost records shall be complete in every respect and in such form
16 that the Engineer can check them. It shall be incumbent upon the Contractor to
17 satisfy the Engineer of the validity of any request presented by the Contractor for
18 adjustment to the contract unit price. After reviewing the Contractor's request, the
19 Engineer may make such adjustment as he deems warranted, based upon his
20 engineering judgment. Payment will be made on the final estimate. The total
21 payment, including any additional compensation granted by the Engineer due to an
22 underrun in a major contract item, shall not exceed the payment that would have
23 been made for the performance of 100% of the original contract quantity at the
24 original contract unit price.

25 Where non-stock fabricated materials are involved in minor items that underrun or in
26 major items that underrun by less than 15%, and where fabrication of such material
27 has begun or been completed before the Contractor is advised of the reduction in the
28 quantity of the pay item, the Department will reimburse the Contractor for the
29 verified fabrication cost, including the cost of material less salvage value, or it may
30 instruct the Contractor to have the fabricated material delivered to a site designated
31 by the Engineer and make payment for such material in accordance with
32 Article 109-6.

33 (D) Overruns and Underruns - Reduction In Unit Price

34 Whenever it is anticipated that an overrun or underrun in a major contract item in excess
35 of 15% or an overrun in a minor contract item in excess of 100% will occur, the Engineer
36 may make written request for a reduction to the contract unit price. If the Engineer and
37 the Contractor are in agreement as to the decrease to be made to the contract unit price,
38 a supplemental agreement covering the revised unit price will be consummated before
39 beginning work on that quantity in excess of the allowable percentages. If the Engineer
40 and the Contractor are not in agreement as to the decrease to be made, the Contractor will
41 be directed to perform the affected work on a force account basis. Payment for the
42 affected work will be made based upon force account records kept in accordance with
43 Article 109-3 but shall not exceed that payment that would have been made at the
44 original contract unit price.

45 104-6 ELIMINATED CONTRACT ITEMS

46 The Engineer may eliminate any item from the contract, and such action will in no way
47 invalidate the contract. In the event the item of work involves pre-fabricated materials that
48 are not considered to be stock items and fabrication of such material is begun or completed
49 before the Contractor is advised of the elimination of the contract item, the Department may
50 reimburse the Contractor for the verified fabrication cost including the cost of materials less
51 salvage value or may instruct the Contractor to have the fabricated material delivered to a site

1 designated by the Engineer and make payment for such material in accordance with
2 Article 109-6.

3 If the Contractor has partially completed a contract item before notification of the elimination
4 of such item, the Department will reimburse the Contractor for the verified actual cost of the
5 partially completed work not to exceed the payment that would have been made at the
6 contract unit or lump sum price for the completed work.

7 No payment will be made for loss of anticipated profits, and no other allowance will be made
8 for eliminated items except as listed above.

9 **104-7 EXTRA WORK**

10 The Contractor shall perform extra work whenever it is deemed necessary or desirable to
11 complete fully the work as contemplated. Extra work, as defined in Section 101, shall be
12 performed in accordance with the contract and as directed. No extra work shall be
13 commenced before specific authorization for the performance of such extra work being given
14 by the Engineer.

15 Extra work that is specifically authorized by the Engineer will be paid in accordance with
16 Subarticle 104-8(A).

17 When the Contractor is required to perform work that is, in his opinion, extra work, he shall
18 notify the Engineer in writing before performing such work. The Engineer will investigate
19 and, based upon his determination, one of the following will occur.

20 **(A)** If the Engineer determines that the affected work is extra work, the Contractor will be
21 notified in writing by the Engineer and compensation will be made in accordance with
22 Subarticle 104-8(A).

23 **(B)** If the Engineer determines that the work is not extra work, he will notify the Contractor
24 in writing of his determination. If the Contractor upon receipt of the Engineer's written
25 determination intends to file a claim for additional compensation by reason of such work,
26 he shall notify the Engineer in writing of such intent before beginning any of the alleged
27 extra work and in conformance with Subarticle 104-8(B).

28 Work performed without prior written consent of the Engineer will be considered incidental to
29 the work of the contract.

30 If the Contractor elects to file a written claim or requests an extension of contract time, it shall
31 be submitted on the Contractor Claim Submittal Form available through the Construction
32 Unit.

33 **104-8 COMPENSATION AND RECORD KEEPING**

34 **(A) Compensation for Articles 104-3 or 104-7**

35 When the Engineer and Contractor agree that compensation is due under
36 Articles 104-3 or 104-7, payment will be made in accordance with one of the following:

37 (1) When the Engineer and the Contractor agree to the prices to be paid, the agreement
38 will be set forth in a supplemental agreement. If the estimated total cost of the
39 affected work is equal to or less than \$25,000 and the prices for performing the work
40 have been mutually agreed to, the Contractor may begin work before executing the
41 supplemental agreement. If the estimated total cost of the affected work is more than
42 \$25,000, the Contractor shall not begin the affected work until the supplemental
43 agreement is executed.

44 (2) When the Engineer and the Contractor cannot agree to the prices to be paid for the
45 affected work, the Engineer will issue a force account notice before the Contractor
46 begins work. In this instance the affected work shall be performed as directed by the
47 Engineer and paid in accordance with Article 109-3.

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1 (B) Claim for Additional Compensation

2 The Contractor's notice of intent to file a claim for additional compensation under
3 Articles 104-3 and 104-7 shall be given to the Engineer in writing. The Contractor shall
4 keep accurate and detailed cost records in accordance with Article 109-3. The
5 Contractor's cost records and supporting data shall be complete in every respect and in
6 such form that they may be checked by the Engineer. The Contractor's cost records and
7 supporting data shall clearly indicate the cost of performing the work in dispute and shall
8 separate the cost of any work for which payment has been made. The Contractor's cost
9 records shall be kept up to date and the Engineer shall be given the opportunity to review
10 the methods by which the records are being maintained. The cost records shall be
11 prepared weekly for each occurrence for which notice of intent to file a claim has been
12 given and submitted to the Engineer within 7 calendar days after the end of a given
13 weekly period.

14 If the Contractor chooses to pursue the claim after the disputed work is complete, he shall
15 submit a written claim to the Engineer for an adjustment in compensation based upon his
16 cost records within 120 calendar days after completion of the disputed work. This claim
17 shall summarize previously submitted cost records and clearly describe the Contractor's
18 justification for an adjustment in compensation under the terms of the contract. The
19 claim shall be accompanied by a certification from an officer of the company or person
20 authorized to execute supplemental agreements, stating that the claim is truthful and
21 accurate.

22 Upon receipt, the Engineer will review the Contractor's request and supporting
23 documentation and notify the Contractor if the request is complete with all necessary
24 supporting documentation and cost records.

25 If the Engineer determines that the work covered by the claim is in fact compensable
26 under the terms of the contract, an adjustment in compensation will be made based upon
27 the documentation presented and his engineering judgment. The adjustment will be made
28 on the next partial pay estimate and reflected on the final estimate. The compensation
29 allowed shall be limited to the amount that would be paid if the work was performed in
30 accordance with Article 109-3.

31 If the Engineer determines that the work covered by the claim is not compensable under
32 the terms of the contract, the claim will be denied. The Engineer will notify the
33 Contractor of his determination whether or not an adjustment of the contract is warranted
34 within 120 calendar days after receipt of the complete request, all necessary supporting
35 justification and cost records.

36 The failure on the part of the Contractor to perform any of the following shall be a bar to
37 recovery under Articles 104-3 or 104-7:

- 38 (1) The failure to notify the Engineer in writing before performing the work in dispute
39 that he intends to file a claim.
- 40 (2) The failure of the Contractor to keep records in accordance with Article 109-3.
- 41 (3) The failure of the Contractor to give the Engineer the opportunity to monitor the
42 methods by which records are being maintained.
- 43 (4) The failure of the Contractor to submit additional documentation requested by the
44 Engineer provided documentation requested is available within the Contractor's
45 records.
- 46 (5) The failure of the Contractor to submit cost records weekly.
- 47 (6) The failure of the Contractor to submit the written request for an adjustment in
48 compensation with cost records and supporting information within 120 calendar days
49 of completion of the affected work.

(C) Compensation for Article 104-4

1 The Contractor's notice of intent to file a claim for additional compensation under
2 Subarticle 104-4(A) shall be given to the Engineer in writing within 7 calendar days after
3 the Engineer suspends the performance of the work. For an alleged suspension, the
4 Contractor's notice of intent to file a claim for additional compensation under
5 Subarticle 104-4(B) shall be given to the Engineer in writing. The Contractor shall keep
6 accurate and detailed records of the alleged idle equipment and alleged idle labor. The
7 Contractor's cost records, supporting data and supporting information shall be complete
8 in every respect and in such form that they may be checked by the Engineer. The
9 Contractor's cost records, supporting data and supporting information for equipment idled
10 due to the suspension or alleged suspension shall specifically identify each individual
11 piece of equipment, its involvement in the work, its location on the project, the requested
12 rental rate and justification as to why the equipment cannot be absorbed into unaffected
13 work on the project during the period of suspension or alleged suspension. The
14 Contractor's cost records, supporting data and supporting information for idle labor shall
15 include the specific employees, classification, dates and hours idled, hourly rate of pay,
16 their involvement in the project and justification as to why they cannot be absorbed into
17 the unaffected work on the project or other projects during the period of suspension or
18 alleged suspension. The Contractor's cost records, supporting data and supporting
19 information shall be kept up to date and the Engineer shall be given the opportunity to
20 review the methods by which the records, data and information are being maintained.
21 The cost records, supporting data and supporting information shall be prepared weekly
22 for each occurrence for which notice of intent to file a claim has been given and
23 submitted to the Engineer within 7 calendar days after the end of a given weekly period.
24

25 If the Contractor chooses to pursue the claim after the suspension or alleged suspension
26 period has ended, he shall submit a written claim to the Engineer for an adjustment in
27 compensation based upon his cost records due to idle equipment and/or idle labor within
28 14 calendar days of receipt of the notice to resume work or within 14 calendar days of
29 expiration of the alleged suspension period. This request shall summarize previously
30 submitted cost records and clearly describe the Contractor's justification for an
31 adjustment in compensation under the terms of the contract.

32 Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees
33 that the cost of the work directly associated with the suspension or alleged suspension has
34 increased as a result of such suspension or alleged suspension and the suspension or
35 alleged suspension was caused by conditions beyond the control of and not the fault of
36 the Contractor, his suppliers or subcontractors at any approved tier and not caused by
37 weather, the Engineer will make an adjustment, excluding profit, and will modify the
38 contract in writing accordingly. The Contractor will be paid the verified actual cost of
39 the idle equipment and idle labor. The compensation allowed shall be limited to the
40 equipment, labor, bond, insurance and tax costs, excluding profits, computed in
41 accordance with Article 109-3.

42 If the Engineer determines that the suspensions of the work by the Engineer or alleged
43 suspensions do not warrant an adjustment in compensation, he will notify the Contractor
44 in writing of his determination.

45 The Engineer will notify the Contractor of his determination of whether or not
46 an adjustment in compensation is warranted within 120 calendar days after receipt of the
47 complete request, all necessary supporting justification and cost records.

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1 The failure on the part of the Contractor to perform any of the following shall be a bar to
2 recovery under Article 104-4:

3 (1) The failure to notify the Engineer in writing within 7 calendar days after the
4 Engineer suspends in writing the performance of all or any portion of the work.

5 (2) The failure to notify the Engineer in writing that he intends to file a claim by reason
6 of alleged suspension.

7 (3) The failure of the Contractor to keep records in accordance with the details of
8 Article 109-3.

9 (4) The failure of the Contractor to give the Engineer the opportunity to monitor the
10 methods by which records are being maintained.

11 (5) The failure of the Contractor to submit additional documentation requested by the
12 Engineer provided the documentation requested is available within the Contractor's
13 records.

14 (6) The failure of the Contractor to submit cost records weekly.

15 (7) The failure of the Contractor to submit the written request for an adjustment in
16 compensation with cost records, supporting data and supporting information within
17 14 calendar days of receipt of the notice to resume work.

18 (8) The failure of the Contractor to submit the written request for an adjustment in
19 compensation with cost records, supporting data and supporting information within
20 14 calendar days after the last day of the period during which the Contractor
21 contends he has been prevented from performing all or any portion of the work for
22 an unreasonable period of time (not originally anticipated, customary, or inherent to
23 the construction industry) because of conditions beyond the control of, and not the
24 fault of, the Contractor, its suppliers or subcontractors at any approved tier and not
25 caused by weather.

26 (D) Notification of Determination

27 The failure on the part of the Engineer to notify the Contractor of his determination on
28 the requested adjustment in compensation within 120 calendar days after receipt of the
29 complete request, all supporting justification and cost records will result in payment of
30 interest on any monies determined to be due from the requested adjustment in
31 compensation. Interest, at the average rate earned by the State Treasurer on the
32 investment within the State's Short Term Investment Fund during the month preceding
33 the date interest becomes payable, will be paid to the Contractor on the next partial pay
34 estimate and reflected on the final estimate for the period beginning on the 121st day after
35 receipt of the complete request, all supporting justification and cost records, and
36 extending to the date the Engineer makes his determination on the disputed work.

37 If the Contractor fails to receive such adjustment in compensation for the disputed work
38 as he claims to be entitled to under the terms of the contract, the Contractor may resubmit
39 the written request for an adjustment in compensation to the Engineer as a part of the
40 final claim after the project is complete. The Contractor will only be allowed to submit
41 the request for an adjustment in compensation one time during the construction of the
42 project.

1 **104-9 DISPOSITION OF SURPLUS PROPERTY**

2 All property that is surplus to the needs of the project will remain or become the property of
3 the Contractor, unless otherwise stated in the contract, with the following exceptions:

4 **(A)** Materials that are the property of utility companies providing service to buildings that are
5 to be demolished or removed in accordance with Sections 210 and 215,

6 **(B)** Materials resulting from the removal of existing pavement in accordance with
7 Section 250 that are to be stockpiled for the use of the Department,

8 **(C)** Materials resulting from the removal of existing structures in accordance with
9 Section 402 where the contract indicates that the material will remain the property of the
10 Department,

11 **(D)** Aggregate base course where the contract requires that this material become the property
12 of the Department,

13 **(E)** Left over materials for which the Department has reimbursed the Contractor as provided
14 in Article 109-6 and

15 **(F)** Materials that have been furnished by the Department for use on the project.

16 Property shall include but not be limited to materials furnished by the Contractor or the
17 Department for either temporary or permanent use on the project, salvaged materials that were
18 part of the existing facility on the date of availability for the project, and all implements,
19 machinery, equipment, tools, supplies, laboratories, field offices and watercraft that are
20 necessary for the satisfactory completion of the project.

21 All property that is the property of the Contractor shall be removed from the project by the
22 Contractor before final acceptance.

23 **104-10 MAINTENANCE OF THE PROJECT**

24 The Contractor shall maintain the project from the date of availability or the date of beginning
25 work, whichever occurs first, until the project is finally accepted. On resurfacing projects the
26 Contractor shall maintain each part of the project, as defined by map numbers, from the date
27 of beginning work on that part until such part is finally accepted. This maintenance shall be
28 continuous and effective and shall be prosecuted with adequate equipment and forces to the
29 end that all work covered by the contract is kept in satisfactory and acceptable condition at all
30 times.

31 The Contractor shall maintain all existing drainage facilities, except where the work consists
32 of resurfacing only, such that they are in the same condition upon acceptance of the project as
33 they were when the project was made available to the Contractor.

34 In the event that the Contractor's work is suspended for any reason, the Contractor shall
35 maintain the work covered by the contract, as provided herein.

36 When a portion of the project is accepted as provided in Article 105-17, immediately after
37 such acceptance the Contractor will not be required to maintain the accepted portions. Should
38 latent defects be discovered or become evident in an accepted portion of the project, such
39 defective work shall be repaired or replaced at no cost to the Department.

40 Where an observation period is required that extends beyond the final acceptance date, the
41 Contractor shall perform any work required by the observation period until satisfactory
42 completion of the observation period. The Contractor will not be directly compensated for
43 any maintenance operations necessary, as this work will be incidental to the work covered by
44 the various contract items.

Section 104

1 104-11 FINAL CLEANING UP

2 Before acceptance of the project, the highway, borrow sources, waste areas and all ground
3 occupied by the Contractor within the project limits in connection with the work shall be
4 cleaned of all rubbish, excess materials, temporary structures and equipment. All parts of the
5 work shall be left in an acceptable condition.

6 The Contractor will not be directly compensated for the work of final cleaning up, as this
7 work will be considered incidental to the work covered by the various contract items.

8 104-12 VALUE ENGINEERING PROPOSAL

9 This value engineering specification is to provide an incentive to the Contractor to initiate,
10 develop and present to the Department for consideration, any cost reduction proposals
11 conceived by him involving changes to the contract. This specification does not apply unless
12 the proposal submitted is specifically identified by the Contractor as being presented for
13 consideration as a Value Engineering Proposal (VEP). Submittals that propose material
14 substitutions of permanent features, such as, but not limited to, changes from rigid to flexible
15 or flexible to rigid pavements, concrete to steel or steel to concrete bridges will not be
16 considered acceptable VEPs. Depending on the complexity of evaluation and
17 implementations, VEPs that provide for a total savings before distribution of less than
18 \$10,000 may not be considered.

19 (A) Types of Proposals

20 VEPs contemplated are those that would result in a net savings to the Department by
21 providing a decrease in the total cost of construction or reduce the construction time
22 without increasing the cost to construct the project. The effects the VEP may have on the
23 following items, but not limited to these items, will be considered by the Department
24 when evaluating the VEP:

- 25 (1) Service life,
- 26 (2) Safety,
- 27 (3) Reliability,
- 28 (4) Economy of operation,
- 29 (5) Ease of maintenance,
- 30 (6) Desired aesthetics,
- 31 (7) Design,
- 32 (8) Standardized features, and
- 33 (9) Environmental impact.

34 (B) Evaluation of Proposals

35 The Department reserves the right to reject the VEP or deduct from the savings identified
36 in the VEP to compensate for any adverse effects to these items that may result from
37 implementation of the VEP.

38 The Department reserves the right to reject, at its discretion, any VEP submitted that
39 would require additional right of way. Substitution of another design alternate detailed in
40 the contract plans for the one that the Contractor bid will not be allowed. Plan errors that
41 are identified by the Contractor and that result in a cost reduction will not qualify for
42 submittal as a VEP. Pending execution of a formal supplemental agreement
43 implementing an approved VEP and transferal of final plans (hard copy and electronic)
44 sealed by an engineer licensed in the State of North Carolina incorporating an approved
45 VEP to the Resident Engineer and the State Value Management Engineer, the Contractor
46 shall remain obligated to perform in accordance with the terms of the existing contract.
47 No time extension will be granted due to the time required to review a VEP.

(C) Subcontractors

The Contractor is encouraged to include this specification in contracts with subcontractors. The Contractor shall encourage submissions of VEPs from subcontractors; however, it is not mandatory that the Contractor accept or transmit to the Department, VEPs proposed by his subcontractors. The Contractor may choose any arrangement for the subcontractor value engineering payments, provided that these payments shall not reduce the Department's share of the savings resulting from the VEP.

(D) Preliminary Review

Should the Contractor desire a preliminary review of a possible VEP, before expending considerable time and expense in full development, a copy of the preliminary VEP shall be submitted to the Resident Engineer and the State Value Management Engineer at ValueManagementUnit@ncdot.gov. The submittal shall state "Preliminary Value Engineering Proposal Review Request" and shall contain sufficient drawings, cost estimates and written information that can be clearly understood and interpreted. Include the identity of any Private Engineering Firms proposed by the Contractor to prepare designs or revisions to designs. The Department will review the preliminary submittal only to the extent necessary to determine if it has possible merit as a VEP. This review does not obligate the Department to approve the final VEP should a preliminary review indicate the VEP has possible merit. The Department is under no obligation to consider any VEP (Preliminary or Final) that is submitted.

(E) Final Proposal

A copy of the Final VEP shall be submitted by the Contractor to the Resident Engineer and the State Value Management Engineer at ValueManagementUnit@ncdot.gov. The VEP shall contain, at a minimum, the following:

- (1) A statement that the request for the modification is being made as a VEP.
- (2) A description of the difference between the existing contract requirements and the proposed modifications, with the comparative advantages and disadvantages of each.
- (3) If applicable, a complete drawing of the details covering the proposed modifications and supporting design computations shall be included in the final submittal. The preparation of new designs or drawings shall be accomplished and sealed by an engineer licensed in the State of North Carolina. Further, the Department may require a review, and possibly the redesign, be accomplished by the project's original designer, or an approved equal. The Department may contract with private engineering firms, when needed, for reviews requested by the Department. The Contractor shall contract with the original project designer, or an approved equal, when required by the Department, for any design work needed to completely and accurately prepare contract drawings. The Department may waive the requirements to have the preparation of contract drawings accomplished by an engineer licensed in the State of North Carolina or the project's original design based on the extent, detail and complexity of the design needed to implement the proposal.
- (4) An itemized list of the contract requirements that would be modified and a recommendation of how to make each modification.
- (5) A detailed estimate of the cost of performing the work under the proposed modification.
- (6) A statement of the time when approval of the proposal shall be issued by the Department to obtain the total estimate cost reduction during the remainder of the contract, noting any effect on the contract completion or delivery schedule.

Section 104

1 (F) Modifications

2 To facilitate the preparation of revisions to contract drawings, the Contractor may
3 purchase reproducible copies of drawings for his use through the Department's Value
4 Management Unit. The preparation of new design drawings by or for the Contractor
5 shall be coordinated with the appropriate Design Branch through the State Value
6 Management Engineer. The Contractor shall provide, at no charge to the Department,
7 one set of reproducible drawings of the approved design needed to implement the VEP.
8 Drawings (hardcopy and electronic) which are sealed by an engineer licensed in the State
9 of North Carolina shall be submitted to the State Value Management Engineer no later
10 than 10 business days after acceptance of a VEP unless otherwise permitted.

11 The Engineer will be the sole judge of the acceptability of a VEP requested in accordance
12 with these requirements and of the estimated net savings resulting from the approval of
13 all or any part of the VEP. The Contractor has the right to withdraw, in whole or in part,
14 any VEP not accepted by the Department within the period to be specified in the VEP per
15 Subarticle 104-12(E)(6).

16 If a VEP is approved, the necessary changes will be effected by supplemental agreement.
17 Included as a part of the supplemental agreement will be requirements for price
18 adjustment giving the Contractor 50% of the net savings to the project resulting from the
19 modifications. Supplemental agreements executed for design-bid-build contracts shall
20 reflect any realized savings in the corresponding line items. Supplemental agreements
21 executed for design-build contracts shall add one line item deducting the full savings
22 from the total contract price and one line item crediting the Contractor with 50% of the
23 total VEP savings.

24 The Department reserves the right to include in the supplemental agreement any
25 conditions it deems appropriate for consideration, approval and implementation of the
26 VEP. Acceptance of the supplemental agreement by the Contractor shall constitute
27 acceptance of such conditions.

28 The final net savings to be distributed will be the difference in cost between the existing
29 contract cost for the involved unit bid items and actual final cost occurring as a result of
30 the modification. Only those unit bid items directly affected by the supplemental
31 agreement will be considered in making the final determination of net savings. In
32 determining the estimated net savings, the Department reserves the right to disregard the
33 contract prices if, in the judgment of the Department, such prices do not represent a fair
34 measure of the value of the work to be performed or to be deleted. Subsequent change
35 documents affecting the modified unit bid items, but not related to the VEP, will be
36 excluded from such determination. The Department's review and administrative costs for
37 VEPs will be borne by the Department. The Contractor's costs for designs and/or
38 revisions to designs and the preparation of design drawings will be borne by the
39 Contractor. The costs to either party will not be considered in determining the net
40 savings obtained by implementing the VEP. The Contractor's portion of the net savings
41 shall constitute full compensation to him for effecting all changes pursuant to the
42 agreement. The net savings will be prorated, 50% to the Contractor and 50% to the
43 Department, for all accepted VEPs.

44 Upon execution of the supplemental agreement, the Department will thereafter have the
45 right to use, duplicate or disclose, in whole or in part, any data necessary for the use of
46 the modification on other projects without obligation or compensation of any kind to the
47 Contractor. Restrictions or conditions imposed by the Contractor for use of the VEP on
48 other projects shall not be valid.

49 Except as may be otherwise precluded by this specification, the Contractor may submit
50 a previously approved VEP on another project.

1 Unless and until a supplemental agreement is executed and issued by the Department and
 2 final plans (hard copy and electronic) sealed by an engineer licensed in the State of North
 3 Carolina incorporating an approved VEP have been provided to the Resident Engineer
 4 and the State Value Management Engineer, the Contractor shall remain obligated to
 5 perform the work in accordance with the terms of the existing contract.

6 Acceptance of the modification and its implementation will not modify the completion
 7 date of the contract unless specifically provided for in the supplemental agreement.

8 The Contractor shall not be entitled to additional compensation under Section 104 for
 9 alterations in the plans or in the details of construction pursuant to the VEP.

10 The Department will not be liable to the Contractor for failure to accept or act upon any
 11 VEP nor for any delays to the work attributable to any such VEP.

12 The Department reserves the right to negotiate desired changes with the Contractor under
 13 the requirements of the contract even though the changes are the result of a VEP
 14 submitted on another contract. In this instance the savings will be prorated in accordance
 15 with the terms of the negotiated agreement.

16 **104-13 RECYCLED PRODUCTS OR SOLID WASTE MATERIALS**

17 It is the policy of the Department to aid in reduction of materials that become a part of our
 18 solid waste stream. To that extent the Department encourages contractors to initiate, develop
 19 and use products and construction methods that incorporate the use of recycled or solid waste
 20 products in the project. Recycled products or waste materials will be those products or
 21 materials that would otherwise become solid waste and are collected, separated, or processed
 22 and reused or returned to reuse in the form of raw materials or products that are incorporated
 23 into a beneficial reuse on the project. Targeted materials include, but are not limited to, the
 24 following: plastic, glass, paper, cardboard, shingles, tires, fly ash, bottom ash, sludge and
 25 construction and demolition debris.

26 This Specification will not be applicable to reclaimed asphalt materials used in accordance
 27 with Section 610 and shall not be applicable to any recycled or solid waste materials that are
 28 specified for use by the Department on the project.

29 To use recycled or solid waste materials, the Contractor shall submit to the Department of
 30 Transportation a Recycled Products or Solid Waste Materials Proposal for approval. This
 31 proposal shall be submitted to the Resident Engineer and the State Value Management
 32 Engineer in the Value Management Office. The proposal shall contain, at a minimum,
 33 a statement that the request for the modification is being made as a Recycled Products or
 34 Solid Waste Materials proposal and the requirements in Subarticles 104-12(E)(2)
 35 through 104-12(E)(6).

36 The Contractor shall be responsible for obtaining any and all permits that may be required for
 37 the hauling, storing, or handling of the targeted materials.

38 If a Recycled Products or Solid Waste Materials proposal is approved, the necessary changes
 39 will be effected by supplemental agreement. Included as a part of the supplemental
 40 agreement will be requirements for price adjustment as follows:

41 **(A)** If the proposal results in a net savings to the Department the savings and distribution of
 42 the savings shall be done in accordance with Article 104-12.

43 **(B)** If the proposal results in a net increase in the project cost but is judged to have
 44 a significant effect on the development of long term markets for the targeted materials, or
 45 results in significant beneficial usage of project generated debris that would have
 46 otherwise been disposed of in accordance with Section 802, the Department will bear the
 47 approved increased costs, if any. This includes recycled products that have been
 48 approved by the Department but were not originally included in this contract.

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.