

**SECTION 104  
SCOPE OF WORK**

**104-1 INTENT OF CONTRACT**

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

**104-2 SUPPLEMENTAL AGREEMENTS**

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

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

**104-3 ALTERATIONS OF PLANS OR DETAILS OF CONSTRUCTION**

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

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

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

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

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

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

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

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

13 **104-4 SUSPENSIONS OF WORK ORDERED BY THE ENGINEER**

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

15 When the Engineer suspends in writing the performance of all or any portion of the work  
16 for a period of time not originally anticipated, customary or inherent to the construction  
17 industry and the Contractor believes that additional compensation for idle equipment or  
18 labor is justifiably due as a result of such suspension, the Contractor shall notify the  
19 Engineer in writing of his intent to file a claim for additional compensation within  
20 7 calendar days after the Engineer suspends the performance of the work and the  
21 provisions of Subarticle 104-8(C) shall be strictly adhered to.

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

27 **(B) Alleged Suspension**

28 If the Contractor contends he has been prevented from performing all or any portion of  
29 the work for a period of time not originally anticipated, customary or inherent to the  
30 construction industry because of conditions beyond the control of and not the fault of the  
31 Contractor, its suppliers or subcontractors at any tier and not caused by weather, but the  
32 Engineer has not suspended the work in writing, the Contractor shall submit to the  
33 Engineer a written notice of intent to file a claim for additional compensation by reason  
34 of such alleged suspension. No adjustment in compensation will be allowed for idle  
35 equipment or labor before the time of the submission of the written notice of intent to file  
36 a claim for additional compensation by reason of such alleged suspension. Upon receipt,  
37 the Engineer will evaluate the Contractor's notice of intent to file a claim for additional  
38 compensation. If the Engineer agrees with the Contractor's contention, the Engineer will  
39 suspend in writing the performance of all or any portion of the work, and  
40 Subarticle 104-8(C) shall be strictly adhered to.

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

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### 1 (C) Conditions

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

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

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

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

### 17 **104-5 OVERRUNS AND UNDERRUNS OF CONTRACT QUANTITIES**

#### 18 (A) General

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

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

#### 27 (B) Overruns - Increase in Unit Price

28 If the actual quantity of any major contract item overruns the original bid quantity by  
29 more than 15% of such original bid quantity, or the actual quantity of any minor contract  
30 item overruns the original bid quantity by more than 100% of such original bid quantity,  
31 an increase to the contract unit price, excluding loss of anticipated profits, may be  
32 authorized by the Engineer. Revised contract unit prices pertaining to overruns will be  
33 applicable only to that portion of the overrun that is in excess of the percentages stated  
34 above.

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

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

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

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

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

### 27 (C) Underruns - Increase in Unit Price

28 If the actual quantity of any major contract item underruns the original bid quantity by  
29 more than 15% of such original bid quantity, an increase to the contract unit price,  
30 excluding loss of anticipated profit, may be authorized by the Engineer. Revised contract  
31 unit prices pertaining to underruns of major contract items will be applicable to the entire  
32 quantity of the contract item that underruns. No revision will be made to the contract unit  
33 price for any minor contract item that underruns the original bid quantities.

34 (1) Whenever it is anticipated that an underrun in a major contract item in excess of that  
35 described above will occur, the Contractor may make written request for a revision  
36 to the contract unit price. If the Engineer and the Contractor are in agreement as to  
37 the revision to be made to the contract unit price, then a supplemental agreement  
38 covering the revised unit price will be entered into. If the Engineer and the  
39 Contractor are not in agreement, then after performance of the work, a revised unit  
40 price may be determined as described below.

41 (2) Whenever an underrun in a major contract item in excess of the percentage  
42 previously set forth has occurred and a supplemental agreement establishing  
43 an increase to the contract unit price has not been executed, the Contractor may make  
44 written request for a revision to the original contract unit price. The Contractor shall  
45 submit sufficient documentation and analysis of his costs to satisfy the Engineer of  
46 any non-recovered costs included in the item that underran. Any adjustment to the  
47 contract unit prices due to underruns will be made by the Engineer based upon his  
48 evaluation of the Contractor's documentation and an analysis showing how changes  
49 in contract item cost are attributable to the underrun. An analysis of costs shall be  
50 supplemented with the Contractor's documented cost records for work performed on  
51 the total quantity of the affected item where the Contractor's request for  
52 compensation includes compensation for costs other than recovered fixed costs.

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1 The Contractor's cost records shall be complete in every respect and in such form  
2 that the Engineer can check them. It shall be incumbent upon the Contractor to  
3 satisfy the Engineer of the validity of any request presented by the Contractor for  
4 adjustment to the contract unit price. After reviewing the Contractor's request, the  
5 Engineer may make such adjustment as he deems warranted, based upon his  
6 engineering judgment and payment will be made on the final estimate. The total  
7 payment, including any additional compensation granted by the Engineer due to an  
8 underrun in a major contract item, shall not exceed the payment that would have  
9 been made for the performance of 100% of the original contract quantity at the  
10 original contract unit price.

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

### 19 **(D) Overruns and Underruns - Reduction In Unit Price**

20 Whenever it is anticipated that an overrun or underrun in a major contract item in excess  
21 of 15% or an overrun in a minor contract item in excess of 100% will occur, the Engineer  
22 may make written request for a reduction to the contract unit price. If the Engineer and  
23 the Contractor are in agreement as to the decrease to be made to the contract unit price,  
24 a supplemental agreement covering the revised unit price will be consummated before  
25 beginning work on that quantity in excess of the allowable percentages. If the Engineer  
26 and the Contractor are not in agreement as to the decrease to be made, the Contractor will  
27 be directed to perform the affected work on a force account basis. Payment for the  
28 affected work will be made based upon force account records kept in accordance with  
29 Article 109-3 but shall not exceed that payment that would have been made at the  
30 original contract unit price.

### 31 **104-6 ELIMINATED CONTRACT ITEMS**

32 The Engineer may eliminate any item from the contract, and such action will in no way  
33 invalidate the contract. In the event the item of work involves pre-fabricated materials that  
34 are not considered to be stock items and fabrication of such material is begun or completed  
35 before the Contractor is advised of the elimination of the contract item, the Department may  
36 reimburse the Contractor for the verified fabrication cost including the cost of materials less  
37 salvage value or may instruct the Contractor to have the fabricated material delivered to a site  
38 designated by the Engineer and make payment for such material in accordance with  
39 Article 109-6.

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

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

### 46 **104-7 EXTRA WORK**

47 The Contractor shall perform extra work whenever it is deemed necessary or desirable to  
48 complete fully the work as contemplated. Extra work shall be performed in accordance with  
49 the contract and as directed. No extra work shall be commenced before specific authorization  
50 for the performance of such extra work being given by the Engineer.

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

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

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

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

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

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

## 19 **104-8 COMPENSATION AND RECORD KEEPING**

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

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

23 (1) When the Engineer and the Contractor agree to the prices to be paid, the agreement  
24 will be set forth in a supplemental agreement. If the estimated total cost of the  
25 affected work is equal to or less than \$25,000 and the prices for performing the work  
26 have been mutually agreed to, the Contractor may begin work before executing the  
27 supplemental agreement. If the estimated total cost of the affected work is more than  
28 \$25,000, the Contractor shall not begin the affected work until the supplemental  
29 agreement is executed.

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

### 34 **(B) Claim for Additional Compensation**

35 The Contractor's notice of intent to file a claim for additional compensation under  
36 Articles 104-3 and 104-7 shall be given to the Engineer in writing. The Contractor shall  
37 keep accurate and detailed cost records in accordance with Article 109-3. The  
38 Contractor's cost records and supporting data shall be complete in every respect and in  
39 such form that they may be checked by the Engineer. The Contractor's cost records and  
40 supporting data shall clearly indicate the cost of performing the work in dispute and shall  
41 separate the cost of any work for which payment has been made. The Contractor's cost  
42 records shall be kept up to date and the Engineer shall be given the opportunity to review  
43 the methods by which the records are being maintained. The cost records shall be  
44 prepared weekly for each occurrence for which notice of intent to file a claim has been  
45 given and submitted to the Engineer within 7 calendar days after the end of a given  
46 weekly period.

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

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

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

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

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

- 25 (1) The failure to notify the Engineer in writing before performing the work in dispute  
26 that he intends to file a claim.
- 27 (2) The failure of the Contractor to keep records in accordance with Article 109-3.
- 28 (3) The failure of the Contractor to give the Engineer the opportunity to monitor the  
29 methods by which records are being maintained.
- 30 (4) The failure of the Contractor to submit additional documentation requested by the  
31 Engineer provided documentation requested is available within the Contractor's  
32 records.
- 33 (5) The failure of the Contractor to submit cost records weekly.
- 34 (6) The failure of the Contractor to submit the written request for an adjustment in  
35 compensation with cost records and supporting information within 120 calendar days  
36 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 121<sup>st</sup> 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.

**104-9 DISPOSITION OF SURPLUS PROPERTY**

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

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

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

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

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

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

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

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

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

**104-10 MAINTENANCE OF THE PROJECT**

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

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

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

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

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

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### 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, the Contractor shall remain obligated to perform in  
44 accordance with the terms of the existing contract. No time extension will be granted due  
45 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 in the Quality Enhancement Unit. 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 in the Quality Enhancement Unit. 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

### (F) Modifications

To facilitate the preparation of revisions to contract drawings, the Contractor may purchase reproducible copies of drawings for his use through the Department's Value Engineering Office. The preparation of new design drawings by or for the Contractor shall be coordinated with appropriate Department Branch through the State Value Management Engineer in the Quality Enhancement Unit. The Contractor shall provide, at no charge to the Department, one set of reproducible drawings of the approved design needed to implement the VEP.

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

If a VEP is approved, the necessary changes will be effected by supplemental agreement. Included as a part of the supplemental agreement will be requirements for price adjustment giving the Contractor 50% of the net savings to the project resulting from the modifications.

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

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

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

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

Unless and until a supplemental agreement is executed and issued by the Department, the Contractor shall remain obligated to perform the work in accordance with the terms of the existing contract.

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

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

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

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

### 9 **104-13 RECYCLED PRODUCTS OR SOLID WASTE MATERIALS**

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

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

22 To use recycled or solid waste materials, the Contractor shall submit to the Department of  
23 Transportation a Recycled Products or Solid Waste Materials Proposal for approval. This  
24 proposal shall be submitted to the Resident Engineer and the State Value Management  
25 Engineer in the Quality Enhancement Unit. The proposal shall contain, at a minimum,  
26 a statement that the request for the modification is being made as a Recycled Products or  
27 Solid Waste Materials proposal and the requirements in Subarticles 104-12(E)(2)  
28 through 104-12(E)(6).

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

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

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

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

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

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

## Section 105

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.

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  
12 to use, duplicate or disclose in whole or in part any data necessary for use of the modification  
13 on other projects without obligation or compensation of any kind to the Contractor.  
14 Restrictions of conditions imposed by the Contractor for use of the proposal by the  
15 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.

## SECTION 105 CONTROL OF WORK

### 105-1 AUTHORITY OF THE ENGINEER

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

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

### 105-2 PLANS AND WORKING DRAWINGS

34 Plans will show details of all structures, lines, grades, typical cross sections of the roadway,  
35 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.