CHANGE ORDERS

POLICY STATEMENT:

This policy implements the provisions of Ohio laws for increasing or decreasing the quantities of any item in the original contract for a highway construction project and for performing Extra Work necessary to complete the project, but for which there is no bid price in the original contract. This policy also implements the requirements of Federal-aid funding of construction projects.

AUTHORITY:

Ohio Revised Code Sections 5525.11 and 5525.14
23 Code of Federal Regulations: 635.102, 635.120, and 635.121
“Construction and Material Specifications” Sections 104.02, 104.03, 109.03, and 109.04

REFERENCES:

The following attached documents:

Appendix A: Force Account
Appendix B: Changed Contract Conditions and Claims
Appendix C: Extension of Project Limits
Appendix D: Third Party Billing

SCOPE:

This policy is for the use of the Districts in the processing of change orders on Department construction projects.

BACKGROUND AND PURPOSE:

State law and Federal-aid regulations require Department contract work to be awarded on a competitive bid basis. State law allows the adjustment of contract quantities and addition of new work up to the limit of the lesser of $100,000.00 or 5 percent of the total contract price (Contract Limits) without legislative oversight. Increases greater than these limits must be approved by the State Controlling Board or reported when an emergency is declared by the Director, the results of Final
Measurements, or the results of new Federal mandates.
This policy replaces Policy No. 512-004(P) dated April 16, 1998.

**DEFINITIONS:**

Blue Book: “Rental Rate Blue Book for Construction Equipment”

C&MS: “Construction and Material Specifications”

Change Order: Supplementary agreement (written and electronically stored in CMS) issued by the Department to the Contractor, covering changes in the plans or quantities or both, within or beyond the scope of the contract and establishing the basis of payment and time adjustments for the work affected by the changes.

CMS: Construction Management System, the Department wide computer system for administration of construction projects.

Contract Limits: The amount a contract pay item may be increased or the cost of a new item of work that may be added to a project without competitive bidding or State Controlling Board review. Under current statutes this figure is $100,000.00 or 5 percent of the total contract price, whichever is less.

DCE: District Construction Engineer

DCO: District Change Order, a change order with contract items within the Contract Limits and other allowed changes, except for added work based on negotiated prices or force account.

DDD: District Deputy Director

EWCO: Extra Work Change Order, a change order for Extra Work.

Extra Work: Work on contract items beyond the Contract Limits or added work based on negotiated prices or force account.

Final Measurements: An increase in an original pay item that was required to accomplish the originally planned work within the original project limits, and for the original unit price. Final Measurements that increase a pay item beyond the Contract Limits is not subject to State Controlling Board approval, but must be included in the quarterly
State Controlling Board report. Final Measurements are not limited to pay quantities determined during finalization, but may occur any time during the project.

NHS: National Highway System, the system of roadways so designated by the National Highway Systems Act of 1995.

Non-NHS: Those roadways not designated as NHS, but remain eligible for Federal funding.

OHM: Office of Highway Management, Division of Engineering Policy

ORC: Ohio Revised Code

PROCEDURE STATEMENT:

I. Only work that is necessary to complete the project as intended by the original plan or to implement an accepted Value Engineering change proposal may be added to a project. The added work must be within the existing right-of-way, covered by the approved environmental document, and within the project limits stated in the plans or extended by the District Deputy Director (DDD) as provided in Appendix C. Work beyond the scope of the plans shall not be added to a project except to eliminate an immediate threat to human life or safety.

II. All change orders shall be written in CMS.

   A. The District shall perform all duties required for the approval of change orders.

   B. The Deputy Director of the Division of Engineering Policy may prepare a change order in the Office of Highway Management (OHM) after consultation with the District.

   C. Change orders on projects funded by Central Office, administered for particular programs, must be approved by the Program Manager if the amount is over the specified threshold for the program. The OHM will provide to the Districts a current list of these Program Managers and the current thresholds for each program.

III. A District Change Order (DCO) shall be used for the following contract quantity and price adjustments:

   A. Increases and decreases of contract quantities to meet field condition and design changes.
Total increases in a contract quantity shall not exceed the Contract Limits.

B. Decreases in Extra Work quantities.

C. Lump sum adjustments of contract payments for the following:

1. Payment for unapproved material incorporated in the work and accepted with a cost deduction.

2. Adjustments of contract prices as provided in Table I of C&MS Section 104.02 when the item is reduced more than 25 percent.

3. Compensation for eliminated items as provided in C&MS Section 104.02 and Appendix B, Section I.C.4.

4. Asphalt binder price adjustments as specified in the project proposal.

5. Price adjustments as specified in an individual pay item’s specifications, such as, but not limited to, price adjustments specified in C&MS Sections 446, 448, and 451.

6. Material cost adjustments due to specification changes and calculated as described in Appendix B, Section I.C.5 and Section I.C.6.

D. Changes in contract specifications for the following:

1. Allow a substitute material because the specified item is not available.

2. Acceptance of a superior material at no additional cost to the project.

3. Acceptance of undocumented material incorporated into the work and performing acceptably.

4. Department ordered change in materials.

E. Other reasons as authorized by E-mail Administrative Rulings issued by the OHM.

IV. Central Office Change Orders shall not be used. When the OHM generates a change order in accordance with Section II.B of this policy, it will be either a DCO or EWCO.
V. Extra Work Change Orders (EWCO) are used for the following:

A. Increases in a contract quantity that result in a total increase in that contract quantity in excess of the Contract Limits.

B. Addition of new items of work or changes in plan work for which there is not a contract item in the original contract.

C. Settlement of claims for equitable adjustment of the contract payments because of changed conditions, alteration of the plans or specifications, Department caused delays and suspension of work under C&MS Section 104.02 (b).

D. Project termination cost when terminated under C&MS Section 108.031 for the convenience of the Department.

VI. The prices paid for Extra Work, including contract items increased above Contract Limits, shall be comparable to prices that would have resulted from a competitive bid contract. These prices may be agreed unit prices or agreed lump sums. The CMS explanation shall document the establishment of competitive prices for the Extra Work. Acceptable methods are as follows:

A. Use of contract bid prices.

B. Use of the average unit prices awarded for the item of work as reported in the “Summary of Contracts Awarded” issued by the Office of Estimating each calendar year. These prices may be adjusted for inflation using factors issued by the OHM. No markup for subcontractor work is allowed in addition to an average unit price.

C. Use of prices bid on three different projects for the same type and quantity of work. Adjustments of these prices for inflation or subcontractor markups are not allowed.

D. Cost analysis of labor, equipment, and material with markups allowed under C&MS Section 109.04 except that markups for acceleration and claim costs will be reduced to remove 2.5 percent for profit. Subcontractor costs must be broken down by labor, equipment, and material. The individual totals for labor, equipment, and materials shall be stated in the CMS explanation. The full analysis shall be attached to the copy of the signature EWCO on file in the District. A cost analysis may be done by either the Contractor or District (consulting with the Contractor or Office of Estimating).

E. Force account as provided in C&MS Section 109.04 and Appendix A.
F. Third party billing as provided for in Appendix D.
VII. Additional bonding documents for EWCOs are not required. However, since sureties charge the Contractor based on the amount bid and not for the amount the project is bonded, Contractors are charged additional premiums when the cost of the project is increased by change orders. These bonding premiums for increases in the project cost are compensable by EWCO without any Contractor markup. Such charges usually occur during finalization when final quantities are determined.

VIII. Approval authority:

A. The District shall establish an approval process whereby two different people must approve a change order. The people selected shall be knowledgeable in this policy and familiar with the project involved. These people shall sign their own names on the recommended or approved lines, as appropriate, and enter approval of the change order in CMS at the appropriate level. The District shall inform the Contractor, at the preconstruction conference, of the people with change order approval authority for the project.

B. State Controlling Board approval is required on EWCOs for increases in contract quantities and new work that are greater than Contract Limits.

1. If the EWCO is not an emergency covered by Section X of this policy, the District shall approve it pending State Controlling Board approval. Approval shall not be entered into CMS before State Controlling Board approval is granted.
   a. The OHM will notify the District of the State Controlling Board’s approval. The District may then approve the EWCO in CMS.
   b. The OHM will send to the District the executed State Controlling Board approval of the EWCO. This approval shall be attached to the EWCO on file.
   c. The District shall inform the Contractor of the State Controlling Board approval.

2. If work beyond the Contract Limits is covered by the emergency process specified in Section X of this policy, then the EWCO may be approved without State Controlling Board approval. Such change orders shall be designated “Emergency” in CMS.
C. Deputy Director of the Division of Engineering Policy has approval authority of the OHM initiated change orders as provided in Section II.B of this policy, subject to State Controlling Board approval when required.

IX. The District shall consult with the appropriate Federal Highway Administration (FHWA) field and operations engineer when a major change is first contemplated on a Federal oversight project. This consultation may be by phone with follow-up documentation to the project file. The purpose of the consultation is to determine the eligibility of Federal participation in the change and the effect on Federal project funding.

A. FHWA considers a change order to be a major change if it:

1. Revises the geometric design of the mainline roadway, ramps, frontage roads, or cross areas.

2. Revises the structural section above the subbase.

3. Adds, deletes, or relocates bridges or other structures which would affect the functional scope and intent of the approved design.

4. Deviates from the planned access control.

5. Alters the intent or scope of the contract or character of the work.

6. Alters specifications, special provisions, or other contract requirements including previously approved provisions for maintaining traffic.

7. Has a net addition in excess of $100,000.00.

8. Results in significant new environmental impacts, significant worsening of anticipated environmental effects, or significantly reduces the degree of impact mitigation provided in the contract.

B. FHWA does not participate in maintenance items or purchase of surplus material.

C. FHWA does not participate in the repair of completed permanent items of work damaged by traffic and compensated under C&MS Section 107.16 with the following exceptions:

1. FHWA participation is allowed on Federally-funded projects on the non-NHS system
as determined by State law and policy.

2. FHWA participation is allowed on Federally-funded projects on the NHS when the proximate cause of damage was the result of traffic being diverted from its normal path by construction activity.

X. Emergency approval to proceed with work prior to processing a change order may be granted to the Contractor by the following people under the specified conditions and procedures:

A. The District Construction Engineer (DCE), under authority given to the Director by ORC Section 5525.14, may grant permission to proceed with new items of work not covered by original contract items if each of these items is under the Contract Limits.

1. The permission shall be written and kept in the project file with a copy to the Contractor, if requested.

2. The written permission shall define the extent of the work and the agreed price for the work negotiated with the Contractor or the estimated cost of the force account.

3. The District shall consult with the FHWA under the conditions stated in Section IX of this policy, prior to granting permission to proceed.

B. The DDD, by Director signature authority, may grant emergency permission under ORC Section 5525.14, to proceed prior to processing a change order with new work greater than the Contract Limits or with extensions of original contract items greater than the Contract Limits due to added work. Quantity increases within the definition of Final Measurements do not require emergency permission. This permission shall be in writing and granted only for emergency circumstances.

1. Emergency circumstances are those that would create a life, safety, or health threatening situation or would unduly delay the completion of the project and increase its cost.

2. Only work necessary to complete the project, adjustments to meet changed conditions, alteration in the original plans, unforeseen contingencies, or payments necessitated by contract terminations or suspensions are allowed by ORC Section 5525.14 to be approved under these emergency procedures.

3. The DDD written permission shall be headed "EMERGENCY PERMISSION TO
PROCEED WITH WORK UNDER ORC SECTION 5525.14” and shall:

a. Describe the work and state the estimated work quantities.

b. State the agreed prices negotiated for the work and the basis for finding the prices acceptable under Section VI of this policy. If a price agreement is not reached, the emergency permission shall state that the work will be done by force account and state the estimated total cost of such force account.

c. State the results of the consultation with the FHWA if required by Section IX of this policy.

d. State the finding of fact that an emergency circumstance exists and declare the emergency as required by ORC Section 5525.14.

4. The original signed emergency permission, with supporting documentation attached, shall be kept in the District project file.

5. Copies of the signed emergency permission shall be sent to:

a. Contractor, as the Department’s written commitment to pay for the work at the stated prices or by force account. The Contractor is not legally required to perform the added work until a change order is approved.

b. The OHM for inclusion on the quarterly report to the State Controlling Board.

c. Attach a copy of the emergency permission to the subsequent EWCO.

XI. An EWCO with a pay item in excess of Contract Limits and not covered by Section XI.F or XI.G of this policy, must be submitted to the State Controlling Board for approval prior to performance of the added work or payment of a claim settlement.

A. The District shall forward to the OHM a copy of the EWCO and a draft explanation appropriate for the State Controlling Board request. This draft explanation shall be free of obscure technical jargon and shall give a person unfamiliar with the project an easy understanding of the project and the requested addition.

B. The OHM will process the information submitted by the District into a State Controlling Board request and submit it to the Deputy Director for Engineering Policy, who will obtain
State Controlling Board approval.
C. The OHM will inform the District of the State Controlling Board action and the District shall then advise the Contractor.

D. When a District discovers that added work beyond the Contract Limits was performed without emergency permission, the EWCO shall be submitted for State Controlling Board approval prior to paying an estimate for the change order work.

E. EWCO shall not be divided into inappropriate pay items for the purpose of avoiding State Controlling Board review.

F. ORC Section 5525.14 requires reporting contract increases to the State Controlling Board for the following reasons, but does not require their approval:

1. Additions of quantities beyond the Contract Limits due to Final Measurements.

2. Added work due to Federal mandates that did not exist at the time of the original contract award.

3. Added quantities or work where the District gave emergency approval in accordance with Section X of this policy.

G. State Controlling Board approval or reporting is not required for the following:

1. Added payments due to a contract specified formula.

2. Changes in material or methods of construction of items of work when the net change in the contract price of all items affected, is below the Contract Limits.

3. Implementation of an accepted Value Engineering change proposal.

XII. An EWCO should include the following information, if applicable:

A. The EWCO should state whether the work will require additional time. This could be used in time extension processing. The statement should state one of the following:

1. The additional work would not take additional time.

2. The additional work will take ___ days to perform.
3. It is unknown how this additional work will effect the time on the project.

B. If the EWCO includes asphalt concrete, the explanation should state whether or not the asphalt concrete will be subject to the asphalt binder price adjustment.

C. If any additional cost of maintaining traffic is included in the agreed prices.

D. Other information as required by E-Mail issued by the OHM.

XIII. Change orders on projects under litigation shall be coordinated with the Chief Legal Counsel prior to submitting to the Contractor for signature. Monthly, the Chief Legal Counsel will supply to each District a list of District projects that are subject to a law suit. The District shall inform the Chief Legal Counsel’s Office, Court of Claims Section, of the following:

A. All change orders approved on each listed project.

B. Pending disputes on each listed project that could result in a change order.

C. Change orders currently in process on each listed project.

XIV. Printed copies of change orders shall be signed, copies distributed, and filed as follows:

A. DCO

1. Signed and dated by the Contractor and the District. The District signs on the “Recommended” and “Approved” lines indicating titles as appropriate. The District shall indicate any required Program Manager approval on the front of the change order.

2. Approval entered into CMS by the District.

3. District keeps the original signed copy in their project file and sends copies of the signed copy to the Contractor on all projects and to the FHWA on Federal oversight projects.

B. EWCO

1. Signed and dated by the Contractor and the District. The District signs on the “Recommended” and “Approved” lines indicating titles as appropriate. The CMS
Agreement Sheet shall not be used. The District shall indicate any required Program Manager approval on the front of the change order.

2. Approval entered into CMS by the District.

3. District sends the original signed copy with all attached documents to the Office of Accounting for filing with the original contract. A copy of the signed change order and attachments shall be kept in the District project file. Copies of the signed change orders shall be distributed to the Contractor and project on all projects and to the FHWA, with all attachments, on Federal oversight projects.

4. Copies of EWCOs for additions due to Final Measurements and work added due to Federal mandates shall be sent to the OHM for inclusion on the quarterly report to the State Controlling Board.

C. Change Orders sent to the Office of Accounting and FHWA shall be no larger than 20 pages. When a change order exceeds this limit the District shall consult the Office of Accounting and FHWA to determine which attachments are required. The bulk attachments that are not sent to the Office of Accounting and FHWA shall be summarized on an attached sheet to the change order that states what bulk documentation is on file in the District with the consent of the Office of Accounting and FHWA.

XV. The OHM will monitor CMS and conduct periodic Quality Assurance Reviews (QAR) to assure District compliance with this policy. Districts that are found in non-compliance may have their change order approval authority removed until conformity is assured.

**TRAINING**

The OHM will provide consultation to the Districts and individual training when requested.

**FISCAL ANALYSIS**

This policy will not have any monetary impact.
FORCE ACCOUNT

The documentation of estimated and actual cost of force account EWCOs shall be as follows:

I. An Estimated Cost of Force Account change order shall be processed if the amount of the Extra Work is greater than the Contract Limits. It shall set forth a complete description of work to be performed and the estimated cost. Approval of such a change order will allow payments as the work is performed up to the estimated change order amount. A cost analysis or estimate, as provided in Section IV of this Appendix, shall be included in the change order.

II. After the force account work is complete, the District shall prepare a change order reflecting the actual total cost, substantiated by a summary of the actual cost of performing the force account work, prepared according to Section XII of this Appendix.

III. The difference between the actual cost and the original estimated cost of the force account work shall be entered as a plus (positive) or a minus (negative), as the case may be and labeled "Difference Between Actual Cost and Estimated Cost of Force Account Work, Authorized by Change Order Number xx."

   A. The explanation shall give the reasons for difference in cost and any conditions encountered that differ from those originally anticipated, in order to substantiate final payment.

   B. If the difference is positive, another EWCO must be used.

   C. If the difference is negative, a DCO shall be used.

IV. A force account can be estimated based on similar bid items of work in lieu of a cost analysis. When this method is employed, a statement must appear in the explanation of the change order stating that prevailing wage rates identified in the original proposal will be paid by the Contractor for all labor employed and that adjusted Blue Book rates will be recognized by Department for all owned equipment used.

V. Rental rates for owned equipment shall be based upon prevailing local rates and shall, in general, not exceed the current adjusted Blue Book rental rates for each type of construction equipment. No percentage may be added for profit and overhead.

   A. When owned equipment located on the project for original contract bid work, will be used on non-bid work, hourly rates shall not exceed 1 / 176 of the adjusted monthly Blue Book
rates regardless of the total number of estimated operative hours owned equipment will be used on non-bid work. In addition, compensation will be allowed for the "Estimated Operating Cost" at the rate published by the Blue Book for each hour that the equipment is used.

B. When owned equipment will be brought to the project for only non-bid work, payment shall be made on the basis of the total estimated number of hours such owned equipment will be used on non-bid work. The chart below provides the pay factors used to adjust the payment for equipment brought for less than one month (176 hours). The hourly rate allowed will be 1 / 176 of the adjusted monthly Blue Book rates times the appropriate factor for the number of hours used. In addition, compensation will be allowed for the "Estimated Operating Cost" at the rate published by the Blue Book for each hour that the equipment is used.

<table>
<thead>
<tr>
<th>HOURS</th>
<th>PAY FACTOR</th>
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<tbody>
<tr>
<td>Less than or equal to 8.0</td>
<td>2.00</td>
</tr>
<tr>
<td>8.1 to 175.9</td>
<td>2.048 - (hours / 168)</td>
</tr>
<tr>
<td>176 or greater</td>
<td>1.00</td>
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C. The Regional and Equipment Model Year Adjustment Factors given in the Blue Book shall be used to adjust rental rates.

D. Equipment shall be listed separately under an appropriate heading.

E. In the case of equipment for which the Blue Book lists no information (or insufficient information), substantiation of the rates requested will be required if they appear to exceed the prevailing local rates. Allowable rates may be established by E-mail notices from the OHM.

VI. In all cost analyses which include the cost of transportation for a foreman, the item will be listed as "Foreman's Transportation" without further description and the amount of $3.25 per hour will be allowed regardless of the type of transportation furnished and whether rented or owned. The hours allowed are all hours the foreman is engaged in the force account. No other allowance will be made. This compensation will include any mobile communication devices (two-way radio, cellular phone, pager, etc.).
VII. Rented equipment rates shall be based on actual rental rates in accordance with C&MS Section 109.04 (c)(3). Stand-by and idle equipment rates are as stated in C&MS Section 109.04(c)(2). Stand-by is when the Engineer orders equipment brought to the site before it is to be used. Equipment is considered idle if it is not used for a working day or more, but has been used before and will be used after the idle period. Equipment used intermittently during a working day will be paid at the full rate for the whole day, including operating costs.

VIII. All owned or rented equipment must be in good operating condition. Additional payment will not be made to the Contractor for cost of repairs and maintenance in connection with rental payments for either owned or rented equipment. Cost of moving owned or rented equipment is in accordance with C&MS Section 109.04 (c)(4).

IX. The estimated cost of owned or rented equipment used to haul materials to the project is not part of the materials cost. Such equipment, when used for hauling materials, shall be listed under cost of equipment.

X. A Contractor’s affidavit shall be attached to the cost analysis stating that, "Labor rates shown are the actual rates paid for labor, unit prices for materials and rates for owned and rented equipment have been estimated on the basis they are not in excess of those charged in the area in which the work will be performed and discounts usually allowed are not included."

XI. For work performed by an approved Subcontractor, the Contractor will be compensated as per C&MS Section 109.04 (e).

XII. An orderly summary of the actual cost of items required to perform non-bid work on force account basis shall be included in the EWCO explanation. This shall be substantiated by comparison to project records and as follows:

A. The actual cost of labor covered by prevailing wage shall be substantiated by the Contractor's payroll records. The rates paid to workers not covered by prevailing wages, such as time keepers and salaried foreman, shall be substantiated by the Contractor’s affidavit required in Section XII.F of this Appendix. If any person is paid more than the one rate, a separate listing shall be made for that person for each rate paid. Labor rates shall conform to C&MS Section 109.04 (a) and shall not be in excess of rates paid when the crew is engaged in original contract work.

B. Invoices must be attached to support the quantities of materials used and the unit prices paid. Credit for any discounts received by the Contractor must be taken into account in
arriving at prices allowed for payment. Freight or hauling costs charged to the Contractor and not included in unit prices shall be itemized and supported by invoices. If only part of the expenditure represented by an invoice is applicable to force account work, or if the invoice represents expenditure for more than one force account item, the District will clearly indicate the actual amount of expenditure applicable to each Reference Number. If materials used on the force account work are not specifically purchased for such work, but are produced by the Contractor or taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were produced by the Contractor or taken from the Contractor’s stock, that the quantity claimed used, and that the price and transportation claimed represent the actual cost to the Contractor.

C. List each kind of owned equipment used. The rental rates for owned equipment previously listed and agreed upon in the change order authorizing the force account work shall be used. Payment for owned equipment not previously listed shall be in accordance with Section V of this Appendix. No percentage for profit and overhead may be added to the actual cost of owned equipment. In addition, compensation will be allowed for the "Estimated Operating Cost" at the rate published by the Blue Book for each hour that the equipment is used.

D. List each kind of rented equipment used. The rate of payment for rented equipment brought to the project for performance of only non-bid work shall not exceed the actual cost as supported by attached invoices in conformance with Section VII of this Appendix.

E. Foreman’s transportation shall be as provided in Section VI of this Appendix.

F. An affidavit by the Contractor shall be attached to the change order stating:

The name, classification, total hours worked and rates paid each person listed on the Summary of Actual Cost are substantiated by actual records of persons employed on the force account work. All materials and equipment listed on the Summary of Actual Costs are substantiated by actual records of materials and equipment actually used in performance of the force account work and the price of any owned equipment not previously agreed upon is not in excess of prices charged for similar equipment in the area in which the work was performed.

G. The prime Contractor’s allowance is as provided in C&MS Section 109.04 (e).
H. Force account wages and fringes on all Federally funded projects, including projects without Federal oversight, shall be checked by the District for compliance with prevailing wages and fringes. This check shall be documented on the change order.
CHANGED CONTRACT CONDITIONS AND CLAIMS

Contractor costs incurred as the result of a change in contract conditions from the time of bid are compensable by EWCO. The District shall establish the existence of any changed condition and allowable compensation based upon acceptable Contractor supplied documentation or project records and the guidelines stated in this Appendix. If the District and Contractor do not agree on the existence of a changed condition or the compensable cost and time extension resulting from an established changed condition, then a claim situation exists which is subject to the claims process established by the proposal note entitled “Revised Specification 105.17.”

I. The following are compensable changed contract conditions that cover most situations, but are not all inclusive of every possible situation. The OHM is authorized to modify this list by E-mailing Administrative Ruling to the Districts.

A. Differing site conditions covered by C&MS Section 104.02 (a).

1. Examples are:

   a. Rock strata encountered at a different location than shown in the plans.

   b. Rock strata encountered that is substantially different in type or condition than shown in the plans. Examples are differences in layer thickness, weathering, strength or hardness, recovery or loss of core, or rock quality designation.

   c. In the absence of plan soil borings or profile or any other contract indication of subsoil conditions, the excavation of rock does not warrant additional compensation, except if the rock strata is unusual for the geographic area of the project site. However, if rock or shale is encountered in the excavation for a structure, it shall be paid under item 503 Unclassified excavation including rock, shale, or rock and/or shale.

   d. Boulders not shown on the plans and of a size and number that are unusual for the area.

   e. Any human-buried object or structure not shown in the plans.

   f. Any buried object or structure which is larger or in a different location than shown in the plans.
2. Groundwater is not a differing site condition, except for an artesian condition not shown in the plans. An artesian condition is groundwater that rises above the water bearing strata in an excavation.

3. Compensation is in accordance with C&MS Section 109.04.

B. Suspension of the work under C&MS Section 104.02 (b).

1. The Engineer may order a suspension of work for any reason. Usually ordered suspensions are to avoid conflicts with local events or adjacent projects, to comply with a court order, to allow archaeological studies under C&MS Section 203.04, and to resolve plan errors or omissions.

2. Suspensions that are the result of improper work, faults of the Contractor, subcontractors, or suppliers are not compensable.

3. Suspensions due to weather, strikes, shortages of labor, equipment, or material, natural cataclysm, epidemics, fires, and vandalism, and other unforeseeable delays are not compensable, but may warrant a postponement of the contract completion date. The cost of the State Field Office and computer equipment for the extended contract period is compensable. The repair of damage to the work caused by weather or a natural cataclysm is compensable if the Contractor did exercise normal care to protect the work.

4. Compensation will be made provided the Contractor documents the costs incurred by an ordered compensable suspension, to the Engineer within seven calendar days of receipt of notice from the Engineer to resume work.

5. Recognized costs will be compensated in accordance with C&MS Section 109.04 except the overhead markups allowed are as follows because of exclusion 2.5 percent profit (profit is excluded by C&MS Section 104.02 (b)2.):

   a. Labor 35.5 percent

   b. Rented equipment 12.5 percent

   c. Material 12.5 percent
C. Changes in scope of work

1. Changed contract quantities are paid at the unit bid price provided:
   a. The total increase in a reference number is less than the Contract Limits.
   b. A decrease in reference number is no more than 25 percent.
   c. The cost of maintaining traffic associated with a quantity increase is compensable since the lump sum bid for Item 614 Maintaining Traffic is based on the proposal estimated quantities. The Department will not seek a savings in the maintaining traffic item for decreases or elimination of work, unless there is a significant change in the scope of maintaining traffic.

2. Increases in a reference number greater than the Contract Limits are compensated in accordance with C&MS Section 109.04.

3. When a decrease in a reference number quantity is more than 25 percent and the Contractor requests compensation for costs not covered by the remaining pay quantity, the District shall make a lump sum payment based on the unit price increase of the remaining work as prescribed in Table I of C&MS Section 104.02. If the Contractor documents that the adjustment in Table I is not sufficient to cover fixed costs associated with the diminished work, the Engineer shall determine a fair and equitable adjustment based upon the Contractor documented costs if compensation is found warranted.

4. The following costs associated with eliminated items are compensable and paid in accordance with C&MS Section 109.04:
   a. Restocking charges supported by paid invoices. A 5 percent markup is added to the compensation for overhead and profit.
   b. The cost of material transferred to the Department or a local government agency in lieu of restocking or disposal. The allowed compensation is the paid invoice cost plus 15 percent markup, but no more than the unit bid price for the reference number involved. Federal participation is not allowed.
   c. Hauling costs, if not included in restocking charges, for returned material and for
material delivered to the Department.

5. Changes in material specifications that result in increased cost to the Contractor are compensated by lump sum adjustment to the reference number. The allowed compensation is equal to the invoice supported material cost increase plus 15 percent markup for profit and overhead.

6. Material cost savings resulting from a specification change shall be credited to the project by a lump sum adjustment to the reference number plus a 15 percent markup if the originally specified material has not been ordered. If the original material was ordered before the Contractor was informed of the change, the savings markup allowed is 2.5 percent in order to exclude profit on the original bid price and pay only for incurred overhead. If the Contractor does not agree with savings calculated by the criteria in this Section, then the original item shall be nonperformed and the work shall be performed under the new specification by force account under C&MS Section 109.04.

7. Compensation for loss of anticipated profit resulting from any change in the scope of work is not allowed. This prohibition is specified in C&MS Section 104.02.

8. Increased bonding cost due to increased contract cost is compensable. The amount of compensation is the additional premium without any markup. If the premium is more than $1,000.00, a paid invoice must be submitted to the project.

D. Utility delay and interference, C&MS Section 105.06.

1. The Contractor shall be compensated for actual costs incurred as the result of a utility caused delay or interference provided:

   a. The utility facility in question was located more than 2 feet from where it was shown in the plans, described in the 4A proposal notes, or marked in the field; or

   b. The utility failed to relocate their facilities by the time period stated in the 4A proposal notes; or

   c. The utility failed to relocate their facilities or mark them to a 2-foot accuracy within two working-days of being notified by the Contractor of planned work in the area; and
d. The Contractor made a reasonable effort to prosecute the work despite the utility interference. Reasonable effort includes field adjustments in the work allowed by the specifications such as one foot vertical adjustment of pipe flowline, C&MS Section 603.03, and one foot adjustment in the plan location of various drainage items, C&MS Section 604.04.

2. Compensation for utility delays and interferences shall be in accordance with C&MS Section 109.04, except that the prime Contractor markup for subcontractor expenses is not allowed under C&MS Section 105.06.

3. FHWA does not participate in utility delay and interference costs with the following exceptions:

a. FHWA participation is allowed on Federally-funded projects on the non-NHS system as determined by State law and policy.

b. FHWA participation is allowed on Federally-funded projects on the NHS when the delay would be compensable in accordance with State law and policy and when one or more of the following applies:

   (1) The utility is owned by a public agency or political subdivision.

   (2) The utility has the right of occupancy in its existing location because it holds the fee, an easement, or other real property interest, the damaging or taking of which is compensable in eminent domain.

   (3) The delay involves utility work that is solely for the purpose of implementing safety corrective measures to reduce the roadside hazards of utility facilities to the highway user.

   (4) The delay was caused by the utility being delayed by significant events outside the utility's control. Examples could include strikes and floods. If this situation occurs, approval from FHWA is required.

E. The Director may terminate a contract under C&MS Section 108.031 for the convenience of the Department at any time. The Contractor shall be compensated for added expenses resulting from a C&MS Section 108.031 termination. Compensation will not be made for loss of anticipated profits. Project termination or defaults made under C&MS Section
108.08 for unsatisfactory progress will not result in any compensation for work resulting from such termination or default.

1. The Contractor is not entitled to any compensation if the Department elects not to execute the contract.

2. If the termination occurs after the execution of the contract, but before work starts at the project site, the Contractor is entitled to compensation for:
   a. Documented and reasonable salaries and expenses of the superintendent and company officers and staff expended for project planning and organization, exclusive of bid preparation and bid shopping.
   b. Mobilization costs incurred and documented.
   c. Documented bonding cancellation charges.
   d. Restocking charges for material purchased for the project. Compensation will be the documented charge plus 5 percent markup and hauling costs paid under C&MS Section 109.04.

3. If the termination occurs after the Contractor has worked on the project and received payment for completed work, the Contractor is entitled to compensation for:
   a. Added work compensated per C&MS Section 109.04 to close down the project and make the roadway safe and usable.
   b. Maintaining traffic by prorating the lump sum bid for Item 614 by the percentage of the project completed plus compensation for traffic control devices purchased, but not used. Compensation may be based on a cost analysis of the traffic control performed in lieu of prorating the maintaining traffic item.
   c. Unpaid mobilization withheld due to the limits imposed by C&MS Section 624.06 is prorated on the percentage of the contract complete. The 10 percent of mobilization payment withheld under C&MS Section 624.05(3) shall be paid after project site clean up.
   d. Bonding costs less any refunds.
e. Unused material compensated per C&MS Section 104.02 (d) and I.B.4. of this Appendix. The FHWA will participate in restocking fees, but not in the purchase of surplus material.

f. Documented and reasonable salaries and expenses of the superintendent and company offices and staff expended as part of the planning and organization of the project before the start of work on the project site and not compensated by the payment for work completed. The compensation is calculated by reaching agreement on the amount expended preparing for the project, less bid preparation and bid shopping, and multiplying it by the percentage of the original contract not completed.

4. The Department will not compensate for claimed loss of anticipated profits or unabsorbed home office overhead.

F. The following acceleration costs are allowed for compensation if agreed to by the District as part of an ordered acceleration or established as part of a forced acceleration if the Contractor provided early notice in accordance with the proposal note entitled “Revised Specification 105.17”:

1. Premium time wages plus 35.5 percent markup (2.5 percent profit excluded). Fringes are not paid on premium time except when required by labor contracts.

2. Additional cost of material plus 12.5 percent markup (2.5 percent profit excluded).

3. Multiple shift charges on rented equipment plus 12.5 percent markup (2.5 percent profit excluded).

4. Blue Book allowances on owned equipment worked multiple shifts.

5. Efficiency losses due to overtime work by individuals and cold weather work.

   a. Inefficiency allowances are applicable to both straight-time and overtime worked by the same individuals within the period of acceleration.

   b. Inefficiency factors are to be established by force account records and comparison to the same work done under a nonaccelerated condition or similar work on another unaccelerated project.
c. Productivity versus overtime work charts from general construction literature may be used to establish inefficiency factors up to a maximum of 5 percent if such agreement is made for such compensation prior to an ordered acceleration.

d. No markups are allowed on inefficiency factors or allowances.

6. Cold weather protection and night work lighting is compensated per C&MS Section 109.04.

7. The prime Contractor markup on accelerated subcontract work is limited to 2.5 percent to a maximum of $5,000.00.

II. Costs incurred during an extended contract period that is the result from a Department caused delay are compensable. Concurrent delays such as weather shall be deducted from the compensation period.

A. Delay costs that are compensable are as follows:

1. Project superintendent salary, plus 35.5 percent markup, fringes, taxes, and insurance. Compensation is for the time the superintendent was occupied with work on the delayed project. If the person was used on other projects or general company work, that time should be deducted from the compensable time.

   a. Compensation is limited to one superintendent on projects under $16 million, current contract cost.

   b. Compensation for one superintendent and an assistant is allowed on projects of $16 million in current contract cost and greater.

   c. The wages of project timekeepers and other project staff under the superintendent are not compensable.

   d. Salaries and expenses of company officers and staff that are over the project superintendent are not compensable.

2. Superintendent’s transportation is compensable at the same rate allowed for foreman’s transportation in Appendix A, which includes the cost of mobile communication devices. The allowed hours are when the superintendent is at the project site.
3. Superintendent’s subsistence, provided this is an established company terms of compensation to such employees.

4. Contractor field office is compensable as follows:
   a. Rental plus 12.5 percent markup based on paid invoices.
   b. Utilities and other necessary services based on paid bills plus 2.5 percent markup.
   c. Blue Book rate for an owned field office. Operation expenses are not allowed since these are only applicable for when the office is being transported.

5. Maintaining Traffic
   a. Prorating of the Item 614 lump sum for maintaining traffic is allowed provided the extended contract period required the same traffic control as the original contract period.
   b. Paid rental invoices from a traffic control rental company plus 12.5 percent markup is an allowed basis of compensation.
   c. Payment in accordance with C&MS Section 109.04 is allowed.

6. Move-in and move-out costs are compensable in accordance with C&MS Section 109.04 provided the project agreed to this course of action in lieu of idle equipment charges.

7. Idle equipment costs are compensable in accordance with C&MS Section 109.04 (c)(2).

8. Compensation for “Extended Equipment Usage” is not allowed. This is defined as equipment used after the original contract completion date. Since this equipment is working on original contract work or Extra Work it is compensated by payment of completed contract items.

9. Escalation of labor, material, and equipment costs are compensated per C&MS Section 109.04 upon documentation of such increases in the extended contract period.
10. Winter concrete protection is compensable in accordance with C&MS Section 109.04 when the Department delays such work into cold weather.

B. The delays that are eligible for these compensable items are:

1. Ordered suspension, C&MS Section 104.02 (b) for the convenience of the Department. This will include suspensions caused by railroad work, interference by another Department project beyond that expected under C&MS Section 105.07, encountering an archaeological site, and local government interference.

2. Utility conflicts, as defined in C&MS Section 105.06.

3. Differing site conditions as defined in C&MS Section 104.02 (a).

4. Plan errors and omissions that cause delays other than that which is related to Extra Work.

5. Department neglect in not reviewing shop drawings or giving requested clarifications in a timely manner which is normally 30 calendar days after receipt of drawings or request, unless otherwise provided in the plans or specifications. Delay due to inaccurate or incomplete submissions are not compensable.

C. Delay costs that are due to Extra Work are not allowed because under C&MS Section 109.04 (f) the compensation paid by the change order for the Extra Work includes administration, superintendence, project overhead, and other costs incurred by a delay. Traffic control required to do the Extra Work is compensable if the change order did not include this expense and if the traffic control required was in addition to that required for other contract work.

D. If Extra Work delays a project over a winter shutdown, then delay costs during the winter are compensable.

E. Costs due to delays caused by weather, strikes, labor, material, or equipment shortages are not compensable except for the State Field Office and computer equipment.

F. State Field Office and computer equipment are compensable for any postponed completion date if the Department requires them on the project. If compensation is calculated by dividing a lump sum by the months of the contract, the beginning date of the months of the
contract is the day the equipment is on the project and usable and ends on the original contract completion date. Long distance phone calls are not included in the monthly compensation for the State Field Office. These calls, when itemized, are compensable as a separate item with a 5 percent markup.

G. Interest is payable on delays in processing payments on completed work, change orders, and claims. Interest will be calculated by the Office of Accounting upon submission of the principle figure and allowed interest period.

1. Allowed interest periods are as specified for the following cases:

   a. Completed work:

      (1) Begins 30 days after work is completed and all necessary tests and documentation are submitted by the Contractor and acceptable.

      (2) Ends with date of the warrant.

   b. Change order processing:

      (1) Begins 30 days after Contractor submission of all documentation necessary to write the change order provided the Contractor signs and returns the change order within 3 working days.

      (2) Ends on the date the Department approves the change order provided payment is made within a month of approval. If State Controlling Board approval is required, it is included in the interest period.

   c. Claims processing:

      (1) Begins 30 days after the claim, as defined in Part (B) of the proposal note entitled “Revised Specification 105.17,” is submitted to the District.

      (2) Ends on the date of the decision that settles the claim provided payment is received within two months. The decision may be made by the Engineer, Director’s Claim Board, or Arbitrator. If the decision is made by the Court of Claims, the decision will specify the ending date.
d. The beginning date is modified when the District notifies the Contractor of required additional information or corrections. This notice must be sent to the Contractor within 15 days of receipt of the documents. The new beginning period will start 30 days after District receipt of the requested information or correction.

III. Claims will be paid by EWCO based upon the decision of the Engineer, Director’s Claim Board, Arbitrator, or Ohio Court of Claims. The description of the change order shall include a disclaimer stating: “The execution of this document constitutes full settlement of Claim Number ( ) and all rights for any additional compensation based on this cause are waived.”

IV. Compensable costs that can not be established by the foregoing Sections of this Appendix may be paid as a negotiated settlement provided the District judges that the negotiated amount is fair and reasonable compensation for recognized costs and is no more than the Contractor could obtain in a claim. The EWCO covering such a settlement shall state the payment was based on all available documentation and was reached by negotiations with the Contractor and the Contractor waives all rights to any additional compensation based on this cause.
EXTENSION OF PROJECT LIMITS

I. The DDD may extend project limits on a project under contract for the purpose of adding work outside of the original project. This action shall be limited to work required to complete the project as originally intended or to prevent an immediate threat to human life. The procedures are as follows:

A. The project limits are extended by the DDD signature of a document entitled “EXTENSION OF PROJECT LIMITS” with the following contents:

1. The extension must identify the original project limits by station, the new project limits, the amount of extension in kilometers, miles, meters, or feet, and the direction of extension.

2. The extension must describe the added work to be performed in the new project limits.

3. The extension must explain the emergency situation or the circumstances requiring the extension of the project limits.

4. The extension of the project limits may be included on an emergency permission to proceed with the work prior to processing a change order described in Section X.B.3 of the “Change Orders” policy.

B. The extension shall be kept in the District project file.
THIRD PARTY BILLING

I. Third party billing shall consist of a paid invoice amount plus 5 percent mark up. The allowed mark up is limited to $10,000.00 for the entire third party billing work.

II. Third party billing is limited to the following circumstances and services:

   A. Emergency work to eliminate a hazardous situation which does not allow time to process a Form C-92 (Request to Sublet).

   B. Professional services such as surveying, testing, or consultant engineering.

   C. Specialized work that is not usually performed on a project such as:

      1. Removal of asbestos, underground storage tanks, or other hazardous waste.

      2. Railroad flagging performed by a railroad approved consultant.

   D. Maintaining traffic items installation, periodic maintenance, and removal by a traffic control service or rental company provided the workers are not on the project full-time.

   E. Owner-operator trucking with acceptable documentation of their ownership, such as matching truck registration and drivers license. The billing shall include copies of this documentation.

III. The following non emergency work cannot be paid by third party billing:

   A. Work entirely within the project right of way and covered by prevailing wages and contractor work types.

   B. Work usually performed by a contractor or subcontractor.

   C. Operators of rented equipment within the project right of way.