

**HIGHWAY CONSTRUCTION FACTORS GROUP  
ATTACHMENT 18 PART B  
NEW YORK SPECIFICATIONS CONTINUED**

quantity stated in the Earthwork Summary Sheet. For contracts containing Major Items of unclassified excavation and/or trench and culvert excavation, the Contractor shall submit, at the request of the Engineer, its price breakdown of the bid price of the composite item for the rock and non-rock components.

**E. Fixed Quantity Items.** Certain items of work may be 'fixed quantity' items, and payment will be restricted to the quantity stated in the Estimate of Quantities. The term 'significant change' shall be construed to apply to fixed quantity items only if, during the progress of the work, the quantity of work is found to be less than 75% or more than 125% of the quantity stated in the Estimate of Quantities.

**F. Lump Sum Items.** Certain items of work may be Lump Sum items, wherein a single bid amount is intended to provide payment for all necessary work during the execution of the contract. The term 'significant change' shall be construed to apply to lump sum items only to the extent that changes in other contract work items result in a significant change in the character of work required to complete "Lump Sum" items of work.

#### **104-05 SUSPENSIONS OF WORK DIRECTED BY THE ENGINEER.**

In accordance with 23 CFR 635.109(a)(2):

*If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, not customary, or not inherent to the construction industry) and the Contractor believes that it is due additional compensation and/or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.*

*Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by circumstances beyond the control of and not the fault of the Contractor, its Suppliers or subcontractors at any approved tier, and not caused by weather, the Engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The Contractor will be notified of the Engineer's determination whether or not an adjustment to the contract is warranted. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract. No contract adjustment will be allowed unless the Contractor has provided the required written request for adjustment within the time prescribed.*

The Department will administer the above Federal regulations as follows:

During the progress of the work, the Engineer may direct the Contractor in writing to suspend work due to circumstances beyond the Contractor's control. If the performance of all or any portion of the work is suspended or delayed by the Engineer for an unreasonable period of time (not originally anticipated, not customary, or not inherent to the construction industry) and the Contractor believes that it is due additional compensation and/or additional time to perform the work as a result of such suspension or delay, the Contractor shall promptly provide the Engineer written notice. The Contractor shall comply with the notice and recordkeeping provisions of §104-06 *Notice and Recordkeeping*.

The Contractor shall provide written notice to the Engineer of a request for adjustment within seven (7) calendar days of receipt of the notice to resume work. The Department will have no liability and no adjustment will be made for any damages which accrued more than seven (7) calendar days prior to the receipt of such a notice by the Engineer.

The Contractor shall keep daily records and make reports of all labor, material and equipment used in connection with such work and the cost thereof as specified in §109-05D. *Time Related Dispute Compensation*.

The Contractor shall then submit a request for contract adjustment and set forth the reasons and support for such adjustment. Upon receipt, the Engineer will evaluate the Contractor's request for contract adjustment, and if it is determined that the cost and/or time required for the performance of the contract has increased as a result of a suspension of work directed by the Engineer and the suspension was caused

by circumstances beyond the control of and not the fault of the Contractor, its Subcontractors, Manufacturers, Fabricators or Material Suppliers and not caused by weather, an adjustment, excluding profits, will be made to the contract. The Engineer will notify the Contractor of the determination whether or not an adjustment to the contract is warranted. No contract adjustment will be made to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of this contract. No contract adjustment will be allowed unless the Contractor has provided the required written notice, or written notice was provided to the Contractor by the State.

Compensation for increased costs of the work resulting from a Suspension of Work Directed by the Engineer will be made in accordance with §109-05 *Extra Work and Time Related Compensation*. Compensation for time related costs, if any, will be made in accordance with §109-05D. *Time Related Dispute Compensation*.

#### **104-06 NOTICE AND RECORDKEEPING.**

The Contractor shall provide the Engineer written notice of its contentions regarding Differing Site Conditions, Significant Changes in the Character of Work, Suspensions of Work Directed by the Engineer, disputed work, time related disputes or any other dispute in accordance with the notice provisions of the pertinent subsection that establishes the notice requirements. After submitting the required notice, the Contractor shall complete its dispute submission in accordance with §105-14 *Disputed Work and Dispute Resolution*.

Failure of the Contractor to provide such written notice in a timely fashion will be grounds for denial of the dispute and the Department does not have to show prejudice to its interest before such denial is made. In the event the Contractor fails to provide the required written notice within the time limit established, and/or in the event the Contractor fails to maintain and submit such specified records, the dispute for compensation shall be deemed waived, notwithstanding the fact that the Department may have actual notice of the facts and circumstances which comprise such dispute and is not prejudiced by said failure.

**A. Disputed Work.** The Contractor shall provide written notice to the Engineer within ten (10) work days of receipt of a direction to complete work that the Contractor believes is not contract work, or that any direction of the Engineer that the Contractor believes exceeds the requirements of the provisions of the contract.

During the progress of such disputed work, the Contractor shall keep daily records in accordance with §109-05C.1. *Daily Summary* for all labor, material and equipment used for disputed work.

**B. Time Related Disputes.** If time related damages are presumed to have been incurred and after providing the Department written notice of a dispute for time related damages, the Contractor shall keep daily records of all labor, material, and equipment for effected work incurred due to the delay. Records shall identify each operation affected and the specific locations where work is affected.

If it has been agreed that a delay has or is occurring, beginning the week following the date written notice was provided of a time related dispute, the Contractor shall compile and submit records on a weekly basis for the preceding week. If a delay has not been determined until after it occurs, the Contractor shall compile records on a weekly basis. Costs that are incurred on a monthly or similar basis, such as field office expenses, shall be submitted within one week following the week of receipt.

The Contractor shall prepare and submit to the Engineer, if requested, weekly written reports until complete resolution of the dispute. Such reports shall be available at the next scheduled contract meeting, and provide the following information:

1. Potential effect on the Contractor's schedule caused by the time related dispute;
2. Identification of all operations that have been, are, or may be affected or delayed;
3. Explanation of how the Department's act or omission affected or delayed each operation, and estimation of how much more time is required to complete the work;
4. Itemization of all extra costs being incurred, including:
  - a) An explanation as to how those extra costs relate to the effect or delay and how they are being calculated and measured.
  - b) Identification of all employees for whom costs are being compiled.
  - c) Identification of all items of equipment for which costs are being compiled.

**104-07 SITE HOUSEKEEPING.**

The contract site shall be cleaned up at the close of each work day, and be left in an orderly condition. Waste and debris shall be removed from the work site and surrounding areas cleaned of debris or waste generated from the work site. Containers shall be provided for the collection and separation of waste, and garbage and other waste shall be disposed of at frequent and regular intervals. Any salvaged material not specified to be disposed of otherwise, shall become the property of the Contractor and shall be removed from the site.

**104-08 MAINTAINING TRAFFIC.**

The Contractor shall maintain and protect traffic in accordance with the requirements of the MUTCD and the contract documents.

**A. Closing of Highway.** The legal closing of a highway to public travel in the manner provided by Section 104 of the Highway Law will be done by the Commissioner or by the County Superintendent of Highways when requested by the Department. Not all highways are legally closed during highway construction operations.

When a highway is legally closed and public travel diverted therefrom, adequate warning, danger and direction signs and lights shall be erected and maintained by the Contractor to properly protect and direct public travel by day and by night. Suitable barricades shall also be erected at the ends of such closed sections of highways and large signs displayed indicating such closure. All signs, barricades and other traffic control devices used shall conform to the MUTCD.

**B. Use of Restricted Highway.** With the award of a contract the Commissioner will, unless otherwise specified, designate the section of highway under contract a "Restricted Highway" pursuant to Section 104A of the Highway Law and Section 1625 of the Vehicle and Traffic Law. Pursuant to these legal sections, the Commissioner has the authority to (1) establish maximum and minimum speed limits at which vehicles may proceed along any such Restricted Highway; (2) establish weight and dimension limits of vehicles; (3) regulate the use of such Restricted Highway by pedestrians, equestrians, and animals; (4) regulate parking, standing, stopping, and backing of vehicles; (5) control persons and equipment engaged in work on such highway. When used on such Restricted Highways, all traffic control devices shall be considered as official traffic control devices and shall conform to the MUTCD.

The Commissioner will therefore cause signs indicating such restrictions to be placed at such points as deemed necessary for the safe use of the Restricted Highway. The traveling public and Contractor must observe and comply with these restrictions, as posted, except that the Contractor may be allowed greater latitude with respect to size and weight of construction equipment.

Construction Equipment or vehicles shall be operated on the Restricted Highway as provided under §105-12 *Load Restrictions*.

**104-09 CONTRACTOR'S RETENTION OF RECORDS.**

The Contractor shall retain all records for six years following the date of final contract payment. Required records shall include all payrolls, accounts, details that comprise its total cost pursuant to any of the provisions under §104-02 *Changes, Contingencies, Extra Work and Deductions*, records maintained pursuant to §105-14 *Disputed Work and Dispute Resolution* and §109-05 *Extra Work and Time Related Compensation*, papers, maps, photographs, or other documentary materials, regardless of physical form or characteristics, made or received by the Contractor in connection with the contract. Legible copies including microfilm copies, are acceptable, provided they are so arranged, identified, and indexed that any individual document, or component of the records, can be located with reasonable facility.

The Contractor shall make such records available to the Department for review and audit upon request, if deemed necessary by the Department. In case all or a part of such records are not made so available, the Contractor understands and agrees that any items not supported by reason of such unavailability of the records shall be disallowed, or if payment therefore has already been made, the Contractor shall, upon demand in writing by the Commissioner, refund to the Department the amount so disallowed.

**104-10 VALUE ENGINEERING CHANGE PROPOSAL (VECP).**

**A. Purpose and Scope.** The purpose of a Value Engineering Change Proposal (VECP) is to encourage the use of the Contractor's ingenuity and experience in arriving at alternative construction designs, methods, and procedures that result in a lower direct cost to accomplish a contract requirement. It is the intent of this provision to share with the Contractor any substantial direct cost savings which may be generated as a result of a VECP offered by the Contractor and approved by the Department. A VECP is a Contractor-initiated change request. If approved, the changes and payments will be authorized through the order-on-contract process. Before a VECP can be implemented, it must pass through three approval processes: conceptual approval, formal approval, and order-on-contract approval. To expedite the review process, the Contractor has the option of jointly submitting the conceptual VECP and the formal VECP for simultaneous review. If the VECP receives formal approval, as part of the order-on-contract process the Contractor may request that the Department consider granting advanced authorization of extra work.

The VECP should produce direct cost savings to the Department and the public without, in the sole judgment of the Department, impairing essential functions and characteristics of the facility including but not limited to service life, economy of operation, ease of maintenance, desired appearance, and safety. The Contractor, when developing a VECP, shall address the designer's objectives, environmental permit requirements and regulations, commitments made to the public to mitigate the impact of construction, and other such concerns.

The 'direct cost savings' is the difference of the 'construction savings' generated by implementing the VECP minus reasonable 'design costs' associated with the VECP. The 'construction savings' is the difference between what it would cost to complete all the contract work without implementing the VECP and the cost to complete all the contract work if the VECP is implemented. This includes any changes to quantities or unit prices across the entire contract if affected by the VECP. If the estimated cost to complete all the contract work without implementing the VECP differs from the contract bid amount for the work, supporting documentation to explain the variance shall be provided. Reimbursable 'design costs' are specific to engineering changes (examples: design changes, plan sheet revisions, and quantity estimating). Expenditures toward proposal preparation (examples: scheduling, documentation, cost analysis, material research, etc.) are not reimbursable.

Indirect cost savings (time, user delay, railroad force account costs, inspection costs, etc.), although considered when reviewing the merits of the VECP, are not reimbursed. A VECP may alter the progress schedule and milestone dates, which in turn could affect time-related contract provisions.

Proposals that reduce the time to complete the contract, and only result in indirect cost savings, may be accepted based on the mutual benefit derived. These proposals will be evaluated in accordance with §104-10F. *Time Savings*.

**B. Submittal of Conceptual VECP.** A conceptual proposal is required for all VECP. It should outline the general technical concepts associated with the VECP and the estimated direct cost savings which may result. Upon review by the Department, one of the following actions will be taken:

- Conceptual approval, and a request for the Contractor to submit a formal VECP.
- Request for additional information
- Rejection of the VECP

The Contractor shall submit an original and three copies of the conceptual VECP to the Engineer along with any additional information requested by the Department. The conceptual VECP should contain sufficient information for concept review and evaluation, including the following as a minimum:

**1. Conceptual VECP Summary.** A summary of the VECP identified as 'Conceptual VECP' which includes:

- a. Short title(description) of the VECP (10 or less words).
- b. Contract information (Contract D number, PIN, contract description, contractor, federal aid number if applicable, letting date, Region, and county).
- c. Original total contract bid price.
- d. Estimated contract cost. This may be different from the original total contract bid price due to addition or alteration of work (i.e., the estimated cost to complete the work if the VECP is not implemented). The Engineer must concur with the estimated contract cost.

- e. Estimated contract cost if the VECP is implemented (excludes VECP design cost and any VECP construction savings reimbursement).
- f. Estimated VECP construction savings (Item d. minus Item e.).
- g. Estimated VECP design cost (Not all VECP will have design cost).
- h. Estimated direct cost savings due to the VECP (Item f. minus Item g.).
- i. Fifty percent (50%) of the estimated direct cost savings (This should equal the overall savings to the State).
- j. Estimated total adjusted contract cost if VECP is implemented (includes VECP savings and design cost reimbursements).
- k. The type of VECP (either 'Cost Savings' or 'Time Savings Only').
- l. Date by which the authorization of extra work (order-on-contract) must be granted. (If time sensitive, requests for advance authorization of extra work per §104-02 *Changes, Contingencies, Extra Work and Deductions* will be considered.)
- m. Identification of any new or existing contract pay items requiring agreed prices.
- n. Identification of any materials with long lead times (to order, fabricate, deliver, etc.) that may require purchase authorization from the Engineer prior to formal approval/disapproval of the VECP, or may delay the implementation of the VECP. Identify any date by which authorization to order these materials must be received without affecting the progress schedule.
- o. A basic description of the VECP and associated benefits and impacts (progress schedule, environmental, maintenance & protection of traffic, quality, etc.).

**2. Conceptual Plans.** Conceptual plan drawings.

**3. Design Criteria.** If the VECP proposes design changes, supporting technical design criteria shall be provided.

**4. Schedules.**

- a. The most recently approved baseline progress schedule.
- b. The most recently approved construction progress schedule update.
- c. A draft, proposed, revised progress schedule illustrating the impacts of the VECP. The schedule shall identify: (1) the time required to develop a formal VECP; (2) the time required to order, fabricate, and deliver materials with long lead times; (3) the time required to obtain any environmental permits or other required approvals; (4) any anticipated progress schedule changes (contract completion date, milestone dates, task durations, etc.); (5) the latest date by which authorization of the VECP order-on-contract work must be granted without affecting the schedule. The draft progress schedule should provide a sufficient level of detail upon which the reasonableness of the VECP can be determined.

Should the Department find that insufficient time is available for review and processing, it may reject the VECP solely on such basis. If the Department fails to respond to the VECP by the date specified, the Contractor will consider the VECP rejected and will have no basis for a dispute against the State as a result thereof. The Department may accept a VECP that requires a contract time extension if sufficient cost savings are anticipated.

**5. Estimate of costs.** The conceptual VECP estimate of costs should include sufficient information to determine the reasonableness of the VECP. If the proposal requires the ordering of materials, the Contractor needs to provide documentation from the suppliers to justify the cost of the materials.

**6. Previous Use or Testing.** A description of any previous use or testing of the VECP on another Department contract or elsewhere and the conditions and results therewith. The Contractor shall submit the technical aspects of the VECP in sufficient detail so the Department can determine the suitability of the VECP from an engineering perspective. If the technology is new, test information shall be provided to the Department's satisfaction. If a similar VECP was previously submitted on another Department contract, indicate the date, contract number, and the action taken by the Department.

**C. Submittal of Formal VECP.** Upon notification by the Engineer that the conceptual VECP is approved and a formal VECP is necessary, the Contractor will submit to the Engineer an original and three copies of the following materials and information for each formal VECP along with any additional information requested by the Department:

- 1. Formal VECP Summary.** A summary of the VECP, identified as 'Formal VECP', which follows the conceptual VECP summary format and information requirements (Information and estimates may have changed since the conceptual VECP).
- 2. Complete Plans and Specifications.** Complete plans and specifications, which meet Department standards, showing the proposed changes relative to the original contract features and requirements. The Department requires a Professional Engineer's stamp and signature on any significant engineering changes.
- 3. Field Change Sheets.** Field change sheets and/or shop drawings. If the VECP results in a field change, and those items affected require the submission of shop drawings, the shop drawings will not be accepted unless accompanied by corresponding field change sheets. Documents shall be developed in compliance with Department requirements. The Department requires a Professional Engineer's stamp and signature on any significant engineering changes.
- 4. Schedules.** The same information requirements as for the conceptual VECP apply, except that a formal, proposed, revised progress schedule in accordance with §108-01 *Progress Schedule* is required.
- 5. Cost Analysis.** A complete cost analysis indicating quantity changes, unit price changes, and new contract pay items. As a minimum it shall include:
  - a. An itemized comparison of estimated costs to complete all the contract work with implementing the VECP and without implementing the VECP.
  - b. Proposed unit prices for any new contract pay items introduced by the VECP and appropriate documentation for review under the Agreed Price process.
  - c. Proposed unit prices for any existing contract pay items for which agreed prices are sought due to a significant change in character of work (quantity or complexity), see §104-04 *Significant Changes in the Character of Work*. Appropriate documentation for review under the Agreed Price process is required.
  - d. The cost of any items with long lead times (e.g., materials ordered) required after conceptual approval and before final approval shall be identified.
- 6. Differences.** Full descriptions of the difference between the existing contract requirements and the proposed changes, and the comparative advantages and disadvantages of each, including considerations of service life, economy of operation, ease of maintenance, traffic flow, safety, desired appearance, progress schedule, and any increase/reduction of environmental impacts.
- 7. Technical Presentation.** The Contractor may be required to conduct a technical presentation as part of the review process.
- 8. Cost Documentation.** All formal VECP costs submitted shall be supported by documentation as required by §109-05 *Extra Work and Time Related Compensation*.

The Department will not formally approve any VECP until all required VECP documentation has been submitted and is acceptable to the Department.

A formal VECP may be submitted concurrently with the conceptual VECP, however, the Contractor assumes any costs associated with the formal VECP at its own risk. Reimbursable costs will be considered only if the conceptual VECP is approved. Clearly identify whether a VECP is being submitted for conceptual approval, formal approval, or both.

Once a formal VECP has been approved, the VECP will then be submitted as an order-on-contract and processed accordingly. If time sensitive, requests for advanced authorization of extra

work per §104-02 *Changes, Contingencies, Extra Work and Deductions* will be considered, but only after formal VECP approval. The Contractor is responsible for submitting all appropriate information to the Engineer in a timely manner.

**D. Conditions.** The Contractor shall not base any bid prices on the anticipated approval of a VECP and should recognize that any VECP may be rejected. The following terms and conditions apply to VECP:

1. A VECP will only be considered after the contract is awarded.
2. A VECP applies only to the contract for which it was submitted. One VECP shall not be submitted for multiple contracts. Approval or disapproval of a VECP on one contract does not guarantee approval or disapproval on another contract.
3. The VECP becomes the property of the Department and will contain no restrictions imposed by the Contractor on its use or disclosure. The Department will have the right to use, duplicate, and disclose in whole or in part any data necessary for the utilization of the VECP. The Department retains the right to utilize any accepted or rejected VECP or part thereof on any other project without any obligation to the Contractor.
4. Approval of the conceptual VECP in no way obligates the Department to approve the formal VECP. The Contractor will have no claim against the Department as a result of the rejection of any such conceptual or formal VECP except as otherwise provided in §104-10E.4. *Payment*.
5. When the Department is in the process of making design and specification revisions and a Contractor submits a VECP with similar revisions, the Department will reject the VECP and proceed without any obligation to the Contractor.
6. A VECP will be considered only if reasonable, cost-effective options are not provided in the contract documents.
7. The Department will be the sole judge as to whether a VECP qualifies for consideration and evaluation. It may reject any VECP that requires excessive time or costs for design review, evaluation, and/or investigations. The Department will be the sole judge in determining if the proposed VECP will result in a sufficient amount of direct or indirect cost savings to offset the Department's effort to review the VECP.
8. A VECP shall be consistent with the Department's design policies and basic design criteria, provide the same service life or more, facilitate economy of operations, ease of maintenance, and achieve the desired appearance and safety.
9. A VECP will not be allowed that changes the type and/or thickness of the pavement structure and material, or solely substitutes one material for another. Examples of materials that may fall into this inappropriate substitution situation are drainage pipes, bridge coatings, pavement markings, etc. The simple elimination of work does not necessarily constitute a VECP, however, a VECP which introduces a simple material substitution, or elimination of work, may be considered if it is accompanied by a design change or change in the construction method. A simple material substitution which introduces a new material to the Department may be also considered.
10. The VECP will not be experimental in nature, but will have been proven to the Department's satisfaction under similar or acceptable conditions on another Department contract or at another location acceptable to the Department.
11. If the Department requires any additional information to evaluate the VECP, this information shall be provided in a timely manner. Unless otherwise mutually agreed upon, failure to do so will result in the rejection of the VECP. An incomplete or a poor quality VECP which hinders the Department's review may also result in the rejection of the VECP.
12. The Contractor shall encourage submissions of VECP from an approved Subcontractor, provided that reimbursement is made by the Department to the Contractor and that the terms of payment to the Subcontractor are satisfactorily negotiated and accepted before the VECP is submitted to the Department. Subcontractors may not submit a VECP except through the Contractor.
13. A VECP approved by the Department is considered to be a revision to the contract documents and progress schedule. Consequently, if unsatisfactory results are being achieved or adjustments



are necessary during implementation of a VECP, the rejection of work, removal of work, addition of work, or revision of work shall be evaluated in accordance with the Standard Specifications.

**14.** All contract pay items and quantities referenced in the VECP construction savings analysis shall be Department-approved contract provisions. Any extra work, inclusion of an omission of work, or other field changes shall be authorized prior to use in VECP savings calculations.

**15.** No work related to a VECP will be performed under force account. Agreed prices must be reached for any contract pay items related to the VECP before the VECP is approved. If the Contractor is deemed to have taken reasonable diligence in determining the work involved but if during the construction of VECP work a significant change in the character of work occurs, the Department may consider new agreed prices.

**16.** The Contractor will receive written notification from the Department when the VECP is approved. Material orders placed prior to VECP approval shall be submitted at the Contractor's risk.

**17.** Once a VECP has been submitted, no work, whether it is the original contract work that might be affected by the VECP or the proposed VECP work, should be performed until the VECP has been formally approved or disapproved. If the Contractor opts to perform work during the approval process, they do so at their own risk. If a VECP is approved and implemented, no payments will be made toward any original contract work affected by the VECP which the Contractor may have performed at risk. If a VECP is disapproved or not implemented, no payments will be made toward any VECP work that the Contractor may have performed at risk. The Contractor should consider potential impacts to the progress schedule and work limitations during the VECP approval process before submitting a VECP.

**E. Payment.** If the VECP is accepted by the Department, the changes and payments will be authorized through an order-on-contract. Reimbursement to the Contractor will be made as follows:

- 1.** A VECP introduces two individual payments, one for VECP construction savings, and one for VECP design cost. The contract pay item changes along with the VECP construction savings and design cost reimbursements to the Contractor should be submitted in one order-on-contract.
- 2.** The Department will pay to the Contractor fifty percent (50%) of the VECP construction savings. The VECP construction savings is the difference between the actual contract costs with the VECP implemented and a detailed estimate of what it would have cost to complete the contract work without implementing the VECP, based on final construction. If final construction savings differs from the amount estimated in the formal VECP, an adjustment may be made and included in another order-on-contract. The VECP construction savings reimbursement to the Contractor will not be paid until the VECP work has been completed (progress payments on the completed VECP work are allowed). The Department may withhold all or a portion of the payment for the Contractor's share of the VECP construction savings until the final contract accounting. In the event that at final contract accountings the implementation of VECP actually results in no construction savings, then the Contractor will receive no VECP construction savings payment. The Department is the sole judge in deciding the construction savings due to the implementation of the VECP. The Department will withhold VECP construction savings reimbursement until the Contractor supplies all required VECP documents,.
- 3.** If a design cost is submitted for a VECP, the Department will pay to the Contractor a fifty percent (50%) share of the Contractor's reasonable cost for design incurred after conceptual VECP approval. If the design cost submitted for Department approval is deemed unreasonable, only fifty percent (50%) of the design cost deemed to be reasonable will be reimbursed. Not every VECP will have a design cost associated with it. The Department is the sole judge in determining the reasonableness of the design cost. Reimbursable design costs are for engineering changes. Preparation and submission of the proposal (e.g., savings analysis, progress scheduling, etc.) are not considered design costs and are not reimbursable. Reimbursable VECP design may be performed by a consultant or directly by the Contractor. The Contractor shall not be charged for, nor can the Contractor claim, any VECP design performed by the Department.

The design cost shall be submitted as a lump sum item with supporting documentation. The supporting documentation shall include itemized direct salary costs (rates & hours), overhead (only for consultant design), and direct non-salary costs. Payment for direct salary costs and

overhead will be limited to the current Department reimbursement policies for Consultant Engineering agreements.

For consultant design, reasonable overhead on the direct technical salaries will be reimbursed. For Contractor design, overhead is not reimbursable for direct salary costs. Overhead shall not be charged for direct non-salary costs whether incurred by the Contractor or by a consultant. Payment for direct non-salary costs will be made at actual cost paid. Although for certain direct non-salary costs (lodging, meals, mileage) there are prevailing maximum rates established by the State Comptroller which the reimbursement rates shall not exceed.

The subtotal of direct salary costs, overhead, and direct non-salary costs shall be considered a 'professional service fee' and reimbursed in accordance with §109-05B.3. *Service Charges*. A maximum five percent (5%) for the Contractor's contract supervision and overhead is allowed, in addition to any overhead submitted for consultant direct salary costs. All design costs are subject to audit. Additional supporting documentation (receipts, time sheets, etc.) shall be supplied in a timely manner if requested by the Department.

In the case of a formal VECP being jointly submitted with the conceptual VECP, the Department will pay to the Contractor a fifty percent (50%) share of the Contractor's reasonable cost for design specific to the development of the formal VECP (nothing toward the conceptual VECP) if the conceptual VECP is approved.

**4.** In the event of the Department's conceptual approval of a direct cost savings VECP, and the Contractor is directed to proceed with the VECP implementation steps and final approval is not reached, regardless of whether due to the actions of the Department or the Contractor, fifty percent (50%) of the total reasonable design costs will still be reimbursed to the Contractor. If "advance" written approval was given to proceed with the work, procure materials, and begin fabrication; and rejection occurs, the work and fabrication costs will be reimbursed in accordance with §109-05, *Extra Work and Time Related Compensation*. Only those materials not incorporated and unique to the contract (i.e., not restockable) will be evaluated for payment.

**5.** There will be no reimbursement for any costs incurred for the conceptual VECP or prior preparations.

**6.** If more than one VECP is approved for a contract, construction savings and design costs shall be tracked separately for each VECP.

**7.** When multiple submittals of information for a VECP are required to satisfy the information needs of the conceptual or formal VECP procedure, and contract timing will be negatively impacted before review and subsequent approval can be given by the Department, then the VECP may be rejected. In such cases, there will be no claim by the Contractor for design costs or loss of anticipated savings and/or profits.

**8.** VECP payments only involve direct savings or costs. Indirect savings or costs (time, user delay, contract delay, etc.) are not included in VECP payment calculations. The calculations of VECP payments are independent from the payments or penalties for contract time related issues. If a VECP revises the progress schedule, the contract milestones upon which time related provisions are based may be affected. Time savings resulting from a VECP may be realized in a time related contract provision. Conversely, if a VECP negatively affects a progress schedule, time related contract provisions may be negatively affected.

**F. Time Savings.** The Department will consider proposals that result in time savings and at the same time may increase the cost of the contract. The Department will be the sole judge as to whether the benefits of completing the contract, or a phase, before the scheduled completion date or milestone offsets any increase in cost. These submittals, while not constituting a Value Engineering Change Proposal, will be reviewed using the VECP approval process. In addition to information required in §104-10B. *Submittal of Conceptual VECP* and §104-10C. *Submittal of Formal VECP*, the Contractor shall provide the Department the anticipated amount of time to be saved and sufficient information to enable the Department to calculate and evaluate the cost benefit of the savings in user delay. Time savings generated by the VECP may be claimed under an existing time related contract provision. If the time savings VECP increases the cost of the contract, the additional cost shall not be subtracted from any time related contract provision payments.

**G. Significant Changes.** The description of what will be considered a 'significant change' associated with a VECP are identified in §104-04 *Significant Changes in the Character of Work*. Once a VECP is approved, any future significant change is no longer based on the original contract bid conditions (quantity, nature or kind of a material involved), but rather on the conditions as adjusted by the VECP (adjusted quantities, anticipated site conditions and materials, etc.). Any item that was identified as a Major Item in the original contract documents is still considered a Major Item regardless of the change in quantity or price due to the VECP.

All significant changes shall be agreed upon prior to formal VECP approval. If after formal VECP approval, an unforeseen change in the VECP work causes a significant change in the character of work, quantities and prices may be adjusted and the VECP savings shall be adjusted accordingly.

## **SECTION 105 - CONTROL OF WORK**

### **105-01 ENGINEER'S AUTHORITY.**

The Engineer will make all decisions for the Department regarding the quality and acceptability of materials furnished, work performed, work progress, and contract interpretation. All communications by the Contractor with the Department, written or verbal, shall be in English. All references to costs, charges, prices, etc. shall be in United States dollars.

The Engineer may stop by written order any work or any part of the work under the contract if the methods or conditions are such that 1) unsatisfactory work might result; or 2) if improper material(s) or procedure(s) are being used; or 3) if the Contractor fails to comply with any requirement or provision of the contract documents or with any State or Federal law or regulation; or 4) conditions are considered to be sufficiently deficient as to seriously affect the safety of the public or the workers employed; or 5) non-conformance with the maintenance and protection of traffic provisions is causing serious disruptions to traffic operations. The Contractor will not be entitled to any additional monetary compensation for such a work stoppage. Any work completed in violation of a written stop order will not be paid for even if subsequently determined to be acceptable.

### **105-02 CHARACTER OF WORKERS.**

The Contractor shall give its constant attention to the work while it is in progress or it shall place it in charge of a competent and reliable English speaking Superintendent, who shall have authority to act for the Contractor and who shall be acceptable to the Engineer.

The Contractor shall, at all times, employ sufficient workers to progress the work to completion in the manner and time specified. All workers shall have sufficient skill and experience to properly perform the work assigned them. All workers engaged on special or skilled work shall have had sufficient experience in such work to properly and satisfactorily perform it and operate the equipment involved. Any person employed by the Contractor whom the Engineer may deem unruly, disorderly, incompetent or unfit to perform the work shall be at once discharged, and shall not be again employed. In case of a disagreement with the Contractor regarding the discharge of such employees, the matter may be reviewed by the Director, Construction Division.

Whenever the Contractor or its superintendent is not present on any part of the work where it may be desired to give directions, orders will be given by the Engineer or his/her representative and shall be received and obeyed by the foreperson who may have charge of the particular work in reference to which the orders are given. All forepersons shall speak English.

### **105-03 METHODS AND EQUIPMENT.**

Where particular methods or equipment are specifically required, the Contractor may apply in writing to the Regional Director to use alternate methods and equipment to provide the same results. Such alternates may be used only after favorable recommendation by the Regional Director and the written approval of the Director, Construction Division. When, in the opinion of the Regional Director, satisfactory results are not being obtained using the Contractor's alternate methods and equipment, the methods and/or equipment shall be immediately modified to produce satisfactory results.

The Contractor may use the most efficient equipment that is consistent with conditions at the time of use. It is anticipated that seasonal or weather conditions combined with the nature of the terrain will often require the use of lighter and smaller equipment than might be used under optimum conditions.

Earthwork construction operations requiring compaction shall not be performed from November 1 to

April 1 except with the written permission of, and under such special conditions and restriction as may be imposed by the Regional Director.

#### **105-04 INTERPRETATION OF CONTRACT DOCUMENTS.**

In case of any difference in the interpretation of the plans, special provisions, specifications, special specifications, standard sheets, or between them, the Contractor shall immediately submit the matter to the Engineer. The Engineer will consult with other Department personnel, as necessary, and provide the Contractor with an interpretation in a timely manner.

The detail plans and specifications for the contract have been prepared with care and are intended to show as clearly as is practicable the work required to be done. The Contractor shall realize, however, that construction details can not always be accurately anticipated and that in executing the work, field conditions may require reasonable modifications in the details of plans and quantities of work involved. Contract work shall be carried out to meet these field conditions to the satisfaction of the Engineer and in accordance with his/her instructions and the contract documents.

In the event the Contractor discovers an error or omission in the contract documents, it shall immediately notify the Engineer. The Engineer will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the contract documents.

#### **105-05 REASONABLE CLOSE CONFORMITY WITH CONTRACT DOCUMENTS.**

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

Plan dimensions and contract specification values are to be considered as the target value to be strived for and complied with as the design value from which any deviations are allowed. It is the intent of the specifications that the materials and work quality shall be uniform in character and shall conform as nearly as realistically possible to the prescribed target value or to the middle portion of the tolerance range. The purpose of the tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons. When a maximum or minimum value is specified, the production and processing of the material and the performance of the work shall be so controlled that material or work will not be preponderantly of borderline quality or dimension.

In the event the Engineer finds the materials or the finished product in which the materials are used not within reasonable close conformity with the plans and specifications, but that reasonably acceptable work has been produced, the Engineer shall then make a determination if the work shall be accepted and remain in place. In this event, the Engineer will document the basis of acceptance by contract modification which will provide for an appropriate adjustment in the contract price for such work or materials as he/she deems necessary to conform to his/her determination based on engineering judgment.

In the event the Engineer finds the materials or the finished product in which the materials are used or the work performed are not in reasonable close conformity with the plans and specifications, and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.

#### **105-06 COOPERATION WITH UTILITIES AND OTHER CONTRACTORS.**

The Contractor shall cooperate with Utilities and other contractors and coordinate and arrange the sequence of its work to conform with the operations of the work of other parties indicated in the Base Line Data. Delays and interferences to the Contractor's performance caused by activities of other Department contractors, which delays and/or interferences could not reasonably have been anticipated from the contract documents, may entitle the Contractor to an appropriate extension of time and/or time related damages.

The Contractor is responsible for cooperation and adjustments with the contractors already engaged and to be engaged upon the site to properly coordinate the construction efforts of all contractors, utilities, and subcontractors engaged in the work within and adjacent to the contract site. In the event that utility facility adjustments are to be made by a Utility's forces in connection with and during the life of the contract, the Contractor shall cooperate with the Utilities and coordinate and arrange the sequence of its work to conform with the progressive operations of the Utility's work underway or to be put underway.

In case of interference between the operations of the Utilities and contractors, the Department will adjust as necessary the schedule of each contractor and the sequence of work necessary to expedite the

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completion of the entire project. If it becomes necessary, coordination and access problems will be resolved by the Department.

If any part of the Contractor's work depends on the work of any other contractor and/or the Department for proper execution and/or results, that would render its work unsuitable for proper execution and/or results, the Contractor shall promptly notify the Department of any discrepancies and/or defects in said other work prior to proceeding with its own work.

### **105-07 TERMINATION.**

The provisions of Article 11 *Right to Suspend Work and Cancel Contract* of the contract agreement shall apply.

The Commissioner may, by written notice, terminate the contract or any portion thereof after determining that for reasons beyond either Department or Contractor control it is not feasible to proceed with or complete the work originally contracted for, and that termination would therefore be in the public interest. Such reasons for termination may include, but need not be necessarily limited to, executive orders of the President relating the prosecution of war or national defense, national emergency which creates a serious shortage of materials, orders from duly constituted authorities relating to energy conservation, and restraining orders or injunctions obtained by third-party citizen action resulting from national or local laws or regulations, or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor, or where the orderly progression of a project is interfered with or delayed by acts or omissions of persons or agencies other than the Contractor. The Contractor specifically understands that the issuance of such notice by the Commissioner shall be conclusive as to its necessity.

When the contract, or any portion thereof is terminated, for any of the above mentioned reasons, before completion of all items of work in the contract, payment will be made for the actual numbers of units or items of work completed at the contract unit price, or as mutually agreed for items of work partially completed, but no claim for loss of anticipated profits on uncompleted work shall be made by the Contractor nor shall the State of New York be liable for the loss of anticipated profits for such uncompleted work.

In such cases of termination, reimbursement for organization of the work (when not otherwise included in the contract) and moving equipment to and from the contract site will be considered where the volume of work completed is too small to compensate the Contractor for these expenses under the contract unit prices, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained by the Contractor for the work, that have been inspected, tested and accepted by the Engineer, and that are not incorporated in the work, shall be returned to the Manufacturer, Fabricator, or Material Supplier whenever it is possible to do so at nominal or no cost. Where the Contractor returns such materials to its Manufacturer, Fabricator, or Material Supplier, the State will pay the Contractor the actual documented costs connected with returning such materials to the extent such costs are reasonable as determined by the Department. In the event the Contractor is unable to return such material at reasonable or no cost, and provides documentation satisfactory to the Department that such material can not be economically returned, the State will be responsible for all such material and will either direct the manner of disposition or purchase such material from the Contractor at actual cost as shown by receipted bills and actual cost records to the extent such costs are reasonable as determined by the Department, at such points of delivery as may be designated by the Engineer.

Termination of a contract or a portion thereof shall not relieve the Contractor of its responsibilities for the completed work, nor shall it relieve its surety of its obligation for and concerning any just claims arising out of the work performed.

### **105-08 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK.**

All work which does not conform to the requirements of the contract shall be considered unacceptable unless otherwise determined acceptable under the provisions in §105-05, *Reasonable Close Conformity with Contract Documents*.

The Department may direct the Contractor to remove any portion of the work performed under this contract for inspection or for any other purpose. If such inspection shows that the work was constructed in accordance with the terms of the contract, payment shall be made to the Contractor for such removal and subsequent replacement at a fair and reasonable price for the work performed. No payment will be made for such removal or for replacement of the work to satisfactory condition if such inspection shows that the

work was not constructed in accordance with the contract requirements. No payment will be made for the removal or replacement of any work which may itself be satisfactory, but the removal of which is necessary for the replacement of unsatisfactory work. No payment shall be made in such removal and replacement situations if work was done or materials furnished without inspection by an authorized Department representative.

The above paragraph shall not apply to concrete foundation for pavement or portland cement concrete pavement rejected as a result of core tests. Work so rejected shall be removed and replaced at no additional cost to the State.

All work shall be in satisfactory condition at the time of contract acceptance. Any work done or materials used without inspection by an authorized Department representative may be ordered removed and replaced at the Contractor's expense.

Unacceptable work, whether caused by poor work, defective materials, damage through carelessness or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner irrespective of the presence of, or lack of, a Department Inspector or representative. This clause shall have full effect regardless of the fact that the defective work may have been done or the defective materials used with the full knowledge of the Inspector. The fact that the Inspector or Engineer may have previously overlooked such defective work shall not constitute an acceptance of any part of it.

#### **105-09 WORK AFFECTING RAILROADS.**

Requirements and procedures for operations on or adjacent to railway facilities are found in a Special Note entitled "Special Provisions for Protection of Railway Interests".

**A. Railroad Clearances.** No temporary bridge, falsework, staging or obstructions shall be erected over the track or tracks where the vertical underclearance is less than 6.71m (22 feet) over top of rail until the existing bridge warnings have been relocated or new or temporary bridge warnings are installed by the railroad company or companies affected and are in service.

An operated track, catenary or electrical facility is fouled when any object is brought closer than the clearances set forth by the railroad company. Vehicles or construction equipment shall be considered to be fouling the track when located in such a position that failure of same with or without load brings the equipment within the fouling limit. The Contractor shall conduct its work and handle its equipment such that no part of any material or equipment shall foul an operated track, catenary, electrical facility, or signal facility without written permission of the chief engineer of the railroad company or companies affected.

Information on required railroad clearances may be found in the contract documents in a Special Note entitled "Special Provisions for Protection of Railway Interests". If fouling distances are provided by Special Note, the Contractor need not contact the railroad to verify fouling distances. If information on required railroad clearances is not provided in the contract documents, the Contractor shall contact the railroad facility owner prior to operation of any equipment or vehicles within 6.0 meters of the centerline of a track; within 4.5 meters of a catenary, electrical wire or other electrical facility; or within 4.5 meters of a signal wire or other signal facility to establish the fouling limits for that facility.

**B. Supervision and Railroad Approval.** All work on any contract affecting a railroad company's property, right of way facilities, including temporary track detour, shall be carried out under the joint supervision of the Department and the railroad company or companies in a manner satisfactory to both agencies.

Information on required railroad notice and approvals may be found in the contract documents in a Special Note entitled "Special Provisions for Protection of Railway Interests". If notice and approval provisions are provided by Special Note, the Contractor shall provide the railroad written notice as required therein. If notice and approval provisions are not provided in the contract documents, the Contractor shall provide written notice to the railroad facility owner a minimum of 21 work days, or other shorter time required by the railroad, prior to start of work.

The Contractor shall obtain prior approval from the railroad company to use a railroad service road to access a site, and shall be responsible for any associated permit application and fees. The Contractor shall obtain the written approval of the chief engineer of the railroad company or

companies affected in respect to the details and methods to be employed in constructing any structures, track detours, falsework, removal of structures, allowable track clearances, and any or all other details that may in any manner affect the operation or maintenance of any or all railroad facilities. The requirement that written approval shall be obtained from the chief engineer of the railroad company shall be complied with before the Contractor starts work. The Contractor shall include in its unit prices bid for this work all the costs of these requirements including any expense occasioned by delay or interruption of its work by reason of the operation or maintenance of the railroad facilities. Approval by the chief engineer of the railroad company or companies affected does not absolve the Contractor from any liability resulting from its contractual operations.

**C. Coordination of Work.** The Contractor shall coordinate with the railroad company or railroad companies in carrying out railroad force account work. When the work of the Contractor or Subcontractor dovetails with the railroad force account work, the materials shall be delivered and the operations conducted so as to carry on the work continuously in an efficient and skillful order. Delays or oversight on the part of the Contractor or Subcontractors in getting any or all of their work done in the proper manner, thereby requiring removal and replacement of work already in place will not be the basis for a claim for extra compensation. Such work shall be done at the cost and expense of the responsible Contractor or Subcontractor.

**D. Railroad Employees.** When, in the opinion of the chief engineer of the railroad company or companies the Contractor's normal operations in progressing its contract are such that an operated track is or might be fouled or railroad traffic endangered, the railroad company or companies will employ protective labor, when found necessary for railroad operations. Unless an item for railroad protection is included in the contract, payment for the services described above shall be made to the railroad company directly by the State pursuant to the terms of a State-Railroad agreement negotiated for the contract. When an item for railroad protection is included in the contract, the Contractor shall pay for such services.

All services for protective labor and similar protective service occasioned by the operation of the Contractor, except as noted in the preceding paragraph shall be at the sole expense of the Contractor and the Contractor shall include all such costs in its unit bid prices for such protection.

The Contractor shall, at its own expense, carry compensation and other insurance for protective labor furnished by the railroad company or companies.

It is agreed that the furnishing of any protective labor shall not relieve the Contractor from any liability of payment for any damage caused by its operations.

**E. Protection of Railroad Service and Facilities.** The Contractor shall take special care and vigilance to avoid damage to the trains, tracks or other facilities of the railroad company and shall conduct its work so as not to interfere with the movement of trains or other operations of the railroad company. Whenever work may affect the safety or movement of trains, the method of doing the work shall be submitted to the chief engineer of the railroad company affected for approval. No work affecting safety or movement of trains shall be commenced or prosecuted until written approval of the chief engineer of the railroad company is received. The approval of the chief engineer of the railroad will not release the Contractor from any responsibility for any damages to the railroad company caused by the acts of the Contractor or its employees and Subcontractors. If, during the carrying out of the contract work, the trains, tracks or other facilities of the railroad company are endangered, the Contractor shall immediately do such work as directed by the Engineer to restore safe conditions and, upon failure of the Contractor to carry out such orders immediately, the railroad company may, with the approval of the Engineer, take whatever steps are necessary to restore safe conditions. The cost and expense to the railroad company of restoring safe conditions or of any damage to the railroad company's trains, tracks or other facilities caused by the Contractor's operations shall, when approved by the Engineer, be considered a charge against the Contractor and shall be paid for by it, or upon its failure or refusal to pay such charge within a reasonable time after the railroad company submits the bill to it, the amount thereof may be deducted from any monies due or that may become due to it under its contract, and any such sum so deducted may be paid to the railroad company after an audit by the State of the items of such cost and expense.

In performing construction operations both on and off railroad right of way areas, the Contractor shall prevent the fouling of railroad track ballast with earth, mud, silt, or other foreign matter. To prevent fouling of the ballast, it may be necessary for the Contractor to construct temporary erosion control measures or sheeting or provide other precautionary measures that are required.

Where, in the opinion of the railroad company, demolition work, concreting or hauling along or across tracks will result in ballast becoming fouled, the Contractor shall take preventive measures to protect the entire ballast section by nailing canvas, plywood or similar material to the ties in the entire area to be affected. The protective material shall remain in place until there is no further possibility of fouling the ballast and then shall be removed by the Contractor.

The work required to protect the railroad track ballast shall be performed by and at the expense of the Contractor and under the supervision of and to the satisfaction of the chief engineer of the railroad company or its authorized representative. The railroad company will assume no responsibility for the adequacy of the work.

In the event that the railroad track ballast does become fouled after the aforementioned protective measures are taken, the railroad company, with its own forces, shall remove and replace the fouled ballast with clean ballast. The charges for this work will be billed by the railroad company against the Contractor.

**F. Lifting.** All lifting operations shall be conducted in accordance with §107-05(P), *Lifting*. In addition, equipment used for the erection or removal of structures over railroad facilities shall have a minimum lifting capacity of one hundred-fifty percent (150%) of the lift weight (operational capacity limited to sixty-six and two-thirds ( $66\frac{2}{3}\%$ ) of the tipping load).

**G. Use of Explosives.** Blasting shall be conducted in such a manner as not to endanger facilities or operation of the railroad. The Contractor shall furnish, while blasting, at its own cost and expense, watch persons and other protection necessary to protect the public and railroad. The Contractor's attention is directed to §107-05, *Safety and Health Requirements*, with regard to blasting.

**H. Foundations.** Foundations may be extended or lowered if deemed necessary by the DCES and the chief engineer of the railroad company or companies affected only if such change is ordered by the DCES.

**I. Telephone, Telegraph Telecommunications and Signals.** The cost of all changes in telecommunication and signal facilities necessary to complete the contract work will be paid for by the State. The cost of all changes in telecommunication and signal facilities made for the convenience of the Contractor shall be paid for by the Contractor.

**J. Contractor's Private Grade Crossing.** If the Contractor elects, and the railroad company or companies approve, to have installed for its own use, a private grade crossing at the site of the work, it shall make a formal request to the railroad company or companies for such a crossing. After it has entered into an agreement with the railroad company or companies pertaining to the size and type of crossing, the payment of the cost for installing, and removing the crossing, the obtaining of the necessary insurance for the protection of the railroad company or companies, and the agreement as to the required protection to railroad traffic when the crossing is in use, the railroad company or companies will install and remove the temporary crossing at the sole expense of the Contractor.

**K. Sidetrack Facilities.** When sidetrack facilities are required by the Contractor, it shall at its sole cost and expense, make the necessary arrangements for the use of existing sidings, tracks not in service or the construction of new sidings. The Contractor shall restore any and all existing sidings and tracks used for sidetrack facilities to the condition existing prior to use by the Contractor. The construction location and use of all sidetrack facilities are to be subject to the approval of the chief engineer of the railroad company affected.

The railroad company may move the Contractor's cars, placed on existing sidings, at any time, to permit the placing of cars for said railroad company's business.

When any turnouts from the main tracks are approved by the railroad company such turnouts will be furnished, installed and removed by the railroad company at the expense of the Contractor. Any



signal work and derails necessary for sidetrack facilities will be furnished, installed and removed by the railroad company at the Contractor's expense.

**L. Railroad Use of Completed Work.** The railroad company affected may, prior to the completion of the work to be performed under contract and the acceptance thereof, enter upon and use any portion of said work without any compensation whatever to the Contractor for such use, and without any compensation or payment whatever to the Contractor for any delay in the work caused by such use. The taking possession and use shall not be deemed an acceptance of the work so taken and used or any part thereof.

**M. Work Trains and Railroad Equipment.** If the Contractor elects to use work trains or any railroad equipment which operates on the tracks of the railroad company, the operation of such trains and equipment is subject to any requirements determined by the chief engineer of the railroad company or companies affected. The cost of the services of any railroad employees required by the railroad company to operate such trains or equipment shall be paid by the Contractor, including the cost of necessary flaggers.

**N. Operation of Railroad.** The Contractor shall make every possible effort to reduce to a minimum the length of time that railroad company will have to operate over any track detour, and to this end it shall continue full operation throughout the winter months, if directed by the DCES on any and all works necessary to permit the railroad company to restore its tracks in their permanent location as quickly as possible. The Contractor shall conduct its work so that schedule speed can be maintained by the railroad at all times.

#### 105-10 SURVEY AND STAKEOUT.

Prior to the start of related construction, all right of way, property and survey markers located in or adjacent to areas which may be disturbed during construction shall be properly tied to fixed points or located from established control. Upon the completion of the work, any right of way, property or survey markers that have been disturbed shall be properly re-set under the direction of a Land Surveyor. All survey control and boundary location work shall be performed in accordance with the *Survey Standards and Procedures Manual* under the direction of a Land Surveyor.

If the contract does not contain a contract pay item for Survey and Stakeout, the Contractor will be provided horizontal and vertical control throughout the length of the contract by properly marked offset or reference stakes placed by the Engineer. The Contractor shall carefully preserve all such stakes and marks. The Contractor shall furnish, free of charge, all labor, stakes, paint, marking devices, other materials and such temporary structures as may be necessary for the Engineer to provide horizontal and vertical control for the work and to make necessary measurements for payment and records. The Contractor shall keep the Engineer informed of its schedule in accordance with §108-01 *Progress Schedule* and shall clear survey lines in advance in order to permit unimpeded survey work. When the work is ready for fine grading, the Engineer will set grade on stakes or pins located in the roadway, furnished and driven by the Contractor. These pins shall be carefully preserved by the Contractor.

If a contract contains a contract pay item for Survey and Stakeout, the Contractor shall furnish, at no additional cost, all labor, stakes, paint, marking devices, other materials and such temporary structures as may be necessary for the Engineer to make necessary measurements for payment and records. The Contractor shall keep the Engineer informed of its schedule in accordance with §108-01, *Progress Schedule* and shall clear survey lines in advance in order to permit unimpeded survey work by the Engineer.

The Contractor may propose the use of remote sensing or other automated survey control methods to allow construction to proceed without the placement of grade stakes or other construction markings/controls. If approved by the Department, the Contractor will conduct a survey at designated cross sections and other locations at major contract milestones for the purposes of verification that the Contractor's survey control system is producing desired accuracy.

#### 105-11 INSPECTION.

Department Inspectors are authorized to inspect all work done and materials furnished, including all or any part of the work and the preparation, fabrication or manufacture of the materials to be used.

Department Inspectors may be Department employees, or agents acting for the Department. Department Inspectors are not authorized to either alter or waive the provisions of these specifications or the contract, or to issue instructions contrary to the plans and specifications, without written approval of the Engineer, or act as a foreperson for the Contractor. Department Inspectors have the authority to reject unacceptable work or materials.

The Department inspections and tests are for the sole benefit of the Department and do not (1) relieve the Contractor of the responsibility for providing adequate quality control measures; (2) relieve the Contractor of responsibility for damage to or loss of the material before acceptance; (3) constitute or imply acceptance; or (4) affect the continuing rights of the Department after acceptance of the completed work under Article 9 *Final Acceptance of Work* of the contract agreement.

The Engineer and the Inspector shall be allowed full work access and shall be furnished with necessary information and assistance by the Contractor to make a complete and detailed inspection. The Contractor shall carry out the provisions of the contract at all times, regardless of whether an authorized inspector is present or not. Any work or item that is, at any time, found to be out of specification or not in compliance with the plans shall remain the responsibility of the Contractor and shall be subject to such corrective measures that are approved in writing by the Engineer.

The Contractor shall transmit a copy of any audit or inspection report conducted by SSPC, OSHA, or EPA of the contract site to the Engineer within seven days of receiving such a report. If the Contractor has been disciplined by SSPC or placed on warning, probation, suspended or revoked status from the Painting Contractor Certification Program (PCCP) during the past 24 months, the Contractor shall provide a written explanation of the cause for such action, the corrective measures enacted, and the Contractor's current PCCP status.

#### **105-12 LOAD RESTRICTIONS.**

Construction equipment or vehicles delivering materials or traveling to a site from outside the contract limits shall have all required permits issued through the established Department vehicle permit system in accordance with Section 385 of the Vehicle and Traffic Law (or 23 USC, Section 127 for Federal Aid Projects on the Interstate System). The permit will indicate the limits within which such equipment with over-legal gross weights or axle loadings may operate, the frequency of such passages and all other limiting factors.

Construction equipment or vehicles operating within the contract limits having gross weights or axle loadings within the legal limits Section 385 of the Vehicle and Traffic Law (or 23 USC, Section 127 for Federal Aid Projects on the Interstate System) may operate without specific approval.

Prior to the use of construction equipment or vehicles with over-legal gross weights or axle loadings on any structure, on any new pavement or on any resurfaced pavement within the contract limits, the Contractor shall submit a written request to the Engineer. This request shall be accompanied, upon request, by an appropriate analysis performed by a Professional Engineer, including the pertinent equipment data, and shall demonstrate that the operations will not result in detrimental effects on the highway or structure.

Use of over-weight construction equipment or vehicles within the contract limits other than listed above shall be subject to the approval of the Engineer. If it is determined that the use of construction equipment or vehicles is having a detrimental effect or will result in detrimental effects on the finished work, the Engineer will so notify the Contractor to modify or cease the operations.

#### **105-13 MAINTENANCE AND PROTECTION OF TRAFFIC FOR MOBILE OPERATIONS.**

For contracts that involve mobile operations, but do not include separate contract pay items for the maintenance and protection of traffic, a maintenance and protection of traffic sequence shall be provided by the Contractor in accordance with the MUTCD. When last following vehicle and/or trailing vehicles are required by these provisions, they shall meet the requirements of Section 619 for Shadow Vehicles. No separate payment will be made for this work, the cost shall be included in prices bid for the various contract items.

#### **105-14 DISPUTED WORK AND DISPUTE RESOLUTION.**

It is the goal of the Department to resolve disputes that may arise under the contract in a timely, just and fair manner consistent with the terms of the contract. The dispute resolution process may be undertaken at any time from the contract award to the issuance of the final payment by the Office of the

State Comptroller. The dispute resolution process recognizes and will take into consideration the risks and controls inherent in construction which the Contractor or the Department have agreed to assume pursuant to the terms of the contract.

The term "dispute" shall mean a disagreement between the Contractor and the Department concerning a matter of contract performance or contract compensation. Dispute resolution may involve adjustments in compensation, adjustment of contract pay items, the addition of new contract pay items to the contract, and/or extension of time for performance. The Contractor shall continue the work during the pendency of the dispute.

Disputes of any nature shall be made in strict accordance with the contract provisions, including the notice and recordkeeping provisions of §104-06 *Notice and Recordkeeping*, which are a condition precedent to any recovery. If the Contractor fails to strictly comply with either the notice or the recordkeeping provisions, any claim of the Contractor with respect thereto shall be deemed waived, and the Department does not have to show prejudice to its interest before such denial is made. Timely notice and recordkeeping affords the Department the opportunity to initiate measures, including but not limited to modification of specifications or deletion of portions of the work, in order to mitigate damages to all parties and/or to agree to terms and conditions for timely payment for any eligible additional costs. The Contractor is encouraged, when initiating a dispute, to provide information concerning measures that may be taken to mitigate the damages. The Department reserves the option whether to consider contract adjustment for work which is substantially completed prior to the issuance of written notice.

**A. Disputed Work.** If the Contractor is of the opinion that any work directed by the Engineer to be completed as contract work is extra work and not contract work, or that any order of the Engineer exceeds the requirements of the provisions of the contract, the Contractor shall provide the Department written notice and maintain records in accordance with §104-06, *Notice and Recordkeeping*. After submitting the required notice, the Contractor shall complete its dispute submission as soon as such information is ascertainable by the Contractor.

**1. Determined to Be Contract Work.** If the Department determines that the disputed work is contract work and not extra work, or that the direction given to the Contractor and protested was proper, the Department will direct the Contractor to continue the disputed work and the Contractor shall promptly comply. The Contractor's right to further pursue a dispute for extra compensation or damages will not be affected in any way by the Contractor complying with the directions of the Department to proceed with the work, provided the Contractor continues to keep and furnish the Engineer with required records.

**2. Determined to Be Extra Work.** If the Department, determines that the disputed work is extra work and not contract work, or that a direction given to the Contractor and protested was not proper, then a contract adjustment will be made. Compensation will be made for such work in accordance with §109-05 *Extra Work and Time Related Compensation*. The Contractor shall continue to maintain force account records until receipt of the order-on-contract approved by the Office of the State Comptroller. Documented, additional, actual and reasonable costs incurred by the Contractor pursuant to following a written order to perform work (that was subsequently contained in an order-on-contract which was disapproved) will be considered reimbursable. Eligibility for additional compensation shall cease upon notification of the disapproval of an order-on-contract.

**B. Time Related Disputes.** The term "time related dispute" shall mean any dispute arising from any event which affects the scheduled time of performance. This paragraph is intended to cover all such events which include major deductions or increases to quantities of work, suspension of work and cancellation of contract, and termination, as well as actions, forces or factors, such as "delay," "disruption," or "interference."

If the Contractor believes that it is or will be entitled to additional compensation for time related disputes, whether due to delay, extra work, disputed work, breach of contract, or other causes, the Contractor shall comply with the notice and recordkeeping provisions of §104-06 *Notice and Recordkeeping*. The Department will have no liability and no adjustment will be made for any damages which accrued more than ten (10) work days prior to the filing of written notice with the

Engineer. The primary tool used to evaluate the time of performance is the Contractor's progress schedule. Department approval of a schedule or a revised schedule does not entitle the Contractor to a time extension or any time related damages. Compensation will be made for such work in accordance with §109-05D. *Time Related Dispute Compensation*.

**C. Acceleration Disputes.** The Contractor may not dispute costs associated with acceleration of the work unless the Department has given prior express written direction to the Contractor to accelerate its effort. The Contractor shall always have the basic obligation to complete the work in the time frames set forth in the contract. Lack of express written direction on the part of the Department shall never be construed as approval.

If the Contractor does accelerate its work efforts pursuant to written direction from the Department, compensation will be made in accordance with §109-05D. *Time Related Dispute Compensation*. The Department, in determining whether or not any compensation is warranted, will evaluate the facts and circumstances which led to the acceleration to determine whether they were in the Contractor's control.

**D. Review Time Periods for Disputes.** After providing written notice, the Contractor shall, as soon as the information is available or ascertainable, provide the Engineer with summary of its dispute contentions in accordance with §105-14E. *Required Content of Dispute Submission*, with sufficient detail so that the Engineer may make a determination. The Engineer will make an initial response, in writing, within 15 work days after the Contractor provides the dispute submission.

If a dispute is not resolved by the Engineer to the satisfaction of the Contractor, within 10 work days of receipt of the Engineer's written decision or the Engineer fails to reply within 15 work days, the Contractor shall notify the Regional Director, in writing, with a copy to the Engineer, of its contentions relative to the dispute.

If the dispute is not resolved by the Regional Director to the satisfaction of the Contractor, within 10 work days of receipt of the Regional Director's written decision, the Contractor shall notify the Commissioner, in writing, with copies to the Engineer and the Regional Director, of its contentions relative to the dispute, indicating the substance of previous communication on the issue with the Engineer and the Regional Director and its rebuttal of their previous findings. If the Regional Director, or his/her designee, fails to reply within 30 calendar days, the Contractor may take the dispute to the Commissioner.

**1. Disputes to the Commissioner Up to \$50,000.** For all disputes to the Commissioner of \$50,000 or less, the Department will respond in writing within 45 calendar days of receipt of the dispute. If any additional documentation supporting the dispute, or relating to the subject matter of the dispute is required, the Department may request said documentation in writing within 30 calendar days of receipt of the dispute. The Contractor will provide such information within 30 calendar days of the request unless another time period is agreed to. The Department's written response to the additionally documented dispute will be submitted to the Contractor within 15 calendar days after receipt of said additional documentation or within a period of time no greater than that taken by the Contractor in producing said additional documentation, whichever is greater. If the Contractor disputes the Department's written response, or the Department fails to respond within the time prescribed, the Contractor may so notify the Department in writing within 15 calendar days of receipt of the Department's response, or within 15 calendar days of the Department's failure to respond. Upon the Contractor's request, the Department shall schedule a meeting or conference. By agreement between the Department and the Contractor, such time periods may be modified.

**2. Disputes to the Commissioner Over \$50,000 to \$250,000.** For all disputes to the Commissioner over \$50,000 and less than or equal to \$250,000, the Department will respond in writing within 60 calendar days of receipt of the dispute. If any additional documentation supporting the dispute, or relating to the subject matter of the dispute is required, the Department may request said documentation in writing within 30 calendar days of receipt of the dispute. The Contractor shall provide such information within 30 calendar days of the request unless another time period is agreed to. The Department's written response to the additionally documented

dispute will be submitted to the Contractor within 30 calendar days after receipt of said additional documentation, or within a period of time no greater than that taken by the Contractor in producing said additional documentation, whichever is greater. If the Contractor disputes the Department's written response, or the Department fails to respond within the time prescribed, the Contractor may so notify the Department in writing within 15 calendar days of receipt of the Department's response, or within 15 calendar days of the Department's failure to respond. Upon the Contractor's request, the Department will schedule a meeting or conference and notify the Contractor within 30 calendar days of the scheduled date. By agreement between the Department and the Contractor, such time periods may be modified.

**3. Disputes to the Commissioner Over \$250,000 or of Undetermined Value.** For disputes to the Commissioner over \$250,000 or that have an undetermined value, the Department will respond in writing within 90 calendar days of receipt of the dispute. If any additional documentation supporting the dispute, or relating to the subject matter of the dispute, is required, the Department may request said documentation in writing within 30 calendar days of receipt of the dispute. The Contractor shall provide such information within 30 calendar days unless another time period is agreed to. The Department's written response to the additionally documented dispute will be submitted to the Contractor within 60 calendar days after receipt of the said additional documentation, or within a period of time no greater than that taken by the Contractor in producing said additional documentation, whichever is greater. If the Contractor disputes the Department's written response, or the Department fails to respond within the time prescribed, the Contractor may so notify the Department in writing within 30 calendar days after the receipt of the Department's response, or within 30 calendar days of the Department's failure to respond. Upon the Contractor's request, the Department will schedule a meeting or conference and notify the Contractor within 30 calendar days of the scheduled date. By agreement between the Department and the Contractor, such times periods may be modified.

**E. Required Content of Dispute Submission.** All disputes shall be submitted in writing to the Engineer, and shall be in sufficient detail to enable the Engineer to ascertain the basis and the amount of each dispute. If requested and as a minimum, the following information shall be provided when such information is ascertainable by the Contractor:

**1. General.**

- a. The date on which actions resulting in the dispute occurred or conditions resulting in the dispute became evident.
- b. A copy of the notice of dispute for the specific dispute by the Contractor.
- c. To the extent known, the name, function, and activity of each Department official, or employee or agent, involved in, or knowledgeable about facts that gave rise to such dispute.
- d. The name, function, and activity of each Contractor or Subcontractor official, or employee, involved in, or knowledgeable about facts that gave rise to such dispute.
- e. The identification of any pertinent documents, and the substance of any material communication relating to such dispute.
- f. A statement as to whether the additional compensation or extension of time if requested is based on the provisions of the contract or is an alleged breach of contract.
- g. If an extension of time is also requested, the specific days for which it is sought and the basis for such request as determined by an analysis of the construction progress schedule.

**2. Time Related Dispute Submissions.**

- a. A description of the operations that were delayed, the reasons for the delay, how they were delayed, including the report of all scheduling experts or other consultants, if any.
- b. The documented process of establishing, maintaining and updating the progress schedule, showing when the delay occurred and how it affected the schedule, in accordance with §108-01 *Progress Schedule* or a CPM specification, if applicable.
- c. The amount of additional compensation sought in accordance with §109-05D. *Time Related Dispute Compensation.*

**3. Acceleration Dispute and Disputed Work Submissions.**

- a. A detailed factual statement of the dispute providing all necessary dates, locations and items of work affected by the dispute.
- b. The specific provisions of the contract which support the dispute and a statement of the reasons why such provisions support the dispute.
- c. The amount of additional compensation sought and a breakdown of that amount shall conform to the requirements of §109-05B. *Force Account Work* except for acceleration disputes which shall conform to the requirements and categories specified in §109-05D. *Time Related Dispute Compensation*.

**F. Required Certification of Disputes Over \$50,000.** When submitting any dispute over \$50,000, the Contractor shall certify in writing, under oath and in accordance with the formalities required by the contract, as to the following:

1. That supporting data is accurate and complete to the Contractor's best knowledge and belief;
2. That the amount of the dispute and the dispute itself accurately reflects what the Contractor in good faith believes to be the Department's liability;
3. The certification shall be executed by:
  - a. The Contractor, if the Contractor is an individual.
  - b. A senior company official in charge at the Contractor's plant or location involved or an officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs, if the Contractor is not an individual.

**G. Auditing of Records.** A Contractor who has filed a dispute, or Subcontractor, Manufacturer, Fabricator or Material Supplier on whose behalf a dispute has been filed, shall have the following records available for audit at any time following the filing of such dispute, and shall cooperate with the auditors, whether or not such dispute is part of a suit pending in the courts of this State. The audit may be performed by employees of the Department or by an independent auditor appointed by the Department, and may begin on ten (10) work days notice to the Contractor, Subcontractor, Manufacturer, Fabricator or Material Supplier as is appropriate. The Contractor, Subcontractor, Manufacturer, Fabricator or Material Supplier shall cooperate with the auditors. The Department will maintain the audit, its backup, reports, schedules and conclusions as confidential material. Failure to maintain and retain sufficient records shall constitute a waiver of that portion of such dispute that cannot be verified and shall bar recovery thereunder. In the event the Contractor fails to substantially furnish the required reports and accounting records, such failure shall constitute a waiver of the dispute for payment other than for payment at contract unit prices for the work performed. Without limiting the generality of the foregoing, the auditors shall have available to them and the Contractor agrees to provide access to the following documents:

1. All documents related to the preparation of the Contractor's bid including the final calculations on which the bid was based.
2. All documents which relate to each and every dispute together with all documents which support the amount of damages as to each dispute.
3. Daily time sheets, superintendent diaries or log sheets and foreperson's daily reports.
4. Union agreements and reports, if any.
5. Insurance policies, welfare and benefits records or plans for union and non-union personnel.
6. Payroll register, Individual employee earnings records and Payroll tax returns.
7. Material invoices, purchase orders, and all material and supply acquisition contracts.
8. Material cost distribution work sheet.
9. Equipment records (list of company equipment, rates, depreciation schedules, daily equipment reports or logs, fueling logs or records, equipment lease purchase agreements, and equipment purchase invoices).
10. Depreciation records on all company equipment whether such records are maintained by the company involved, its accountant, or others.
11. If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
12. Vendor rental agreements, subcontractor invoices, agreements and back charge records.

13. Subcontractor payment certificates.
14. Canceled checks (payroll and vendors).
15. Job cost ledger or report and Job payroll ledger
16. General ledger, general journal (if used), and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals.
17. Cash receipts, cash disbursements journal, purchase journal, petty cash journal and supporting vouchers.
18. Audited and unaudited financial statements for all years during operations on this contract.
19. Documents which reflect the Contractor's actual overhead during the years contract work was performed.
20. Work sheets used to prepare the dispute establishing the cost components for items of the dispute including, but not limited to, labor, benefits and insurance, materials, equipment, subcontractors, and all documents which establish the time periods, individuals involved, the hours and the rates for the individuals.

**H. Contract Closeout Process.** A dispute, or a portion thereof, that has been previously submitted to the Department which remains unresolved to the satisfaction of the Contractor, may be submitted for Department review in connection with the closeout process. The records made, and recommendations or actions of a facilitator, a Dispute Review Board, or any other dispute resolution method, shall be off the record, non-binding, confidential, and may not be used in any future litigation.

**1. Contract Closeout Meeting.** If requested by the Contractor, the Department will schedule a contract closeout meeting with the Construction Division in Albany. The contract closeout meeting process involves meeting(s) with the Contractor and its representatives and Department personnel to amicably resolve all remaining disputes of the Contract. In lieu of pursuing the closeout meeting process, the Contractor may elect to utilize the Gatekeeper process.

**2. Gatekeeper.** The Chief Engineer of the Department of Transportation is the Gatekeeper. The Contractor may submit a single request per contract to the Department to have the Gatekeeper identify an alternate dispute resolution process to be used for unresolved dispute(s) in the contract closeout process. The Contractor shall provide to the Gatekeeper a brief description of the contract work and identify the Contractor's preferred method of dispute resolution. The Contractor shall document to the Gatekeeper that (a) the unresolved dispute involves unique, unusual or complex construction, engineering or legal issues; (b) the unresolved dispute has a monetary value in excess of \$50,000 and (c) the Contractor has demonstrated a clear commitment to active participation in partnering during the conduct of this contract.

Upon conclusion of the review, the Gatekeeper will advise the Contractor how it should proceed with processing such dispute(s) in an attempt to resolve the matter. The Gatekeeper will advise the Contractor to proceed to one of the following: (1) a contract closeout meeting with the Construction Division, (2) a facilitated contract closeout meeting with the Construction Division or to (3) a Dispute Review Board (DRB). The decision of the Gatekeeper shall be final and shall not be subject to review under Article 78 of the New York Civil Practice Law and Rules. The expenses of the facilitator, a DRB, or any other method shall be equally shared by the Department and the Contractor.

*a. Facilitated Closeout Meeting.* A facilitator may be used to assist in resolving disputes arising out of the performance of the contract. The facilitator shall consist of one person, agreed to by the Department and the Contractor, who is knowledgeable in public works construction matters and who shall try to bring the parties to a mutually agreeable resolution of the disputes.

*b. Dispute Review Board.* A Dispute Review Board (DRB) may be established to assist in resolving disputes arising out of the performance of the contract. The DRB shall consist of one or three persons, agreed to by the Department and the Contractor, who are knowledgeable in public works construction matters. For a one person DRB, the person must

be mutually acceptable to the Department and the Contractor. For a DRB of three persons, one will be selected by the Department, one will be selected by the Contractor and one will be mutually selected by the Department and the Contractor. The DRB will make a recommendation as to the resolution of the disputes.

**3. Claims.** If any dispute, or portion thereof, remains unresolved following the meeting(s) or conference(s) and the payment of the final agreement, the Contractor may file a claim in the New York State Court of Claims in accordance with law and the provisions of the Contract.

#### **105-15 FURNISHING RIGHT OF WAY.**

The Department will secure all rights-of-way in advance of construction. Any exception will be indicated prior to the award of the contract. The Contractor shall not enter upon any parcel until the proper rights of entry have been obtained.

The Contractor's attention is directed to the fact that Permanent Easements (P.E.), Temporary Easements (T.E.) and Temporary Occupancies (T.O.) are obtained by the Department for specific construction purposes. Contractors should not anticipate unlimited usage of such areas and shall confine construction activities to such purposes as are specifically described in the ROW appropriation maps and/or as shown on the plans unless separate agreements are made between the Contractor and the landowner permitting other usage of such areas. Such limitations and related costs shall be reflected in the bid prices.

#### **105-16 SHOP DRAWING APPROVAL.**

Approval by the Department of shop drawings, methods of installation or Contractor's construction detail(s) does not relieve the Contractor of the responsibility for compliance with the contract specifications, or relieve the Contractor of the responsibility for providing adequate quality control measures and does not relieve the Contractor of the responsibility for providing proper and sufficient materials, equipment and labor to complete the approved work in accordance with the contract documents.

Unless otherwise stated in the contract documents, no portion of the work requiring shop drawings or a sample of the work shall be commenced until the submission has been approved by the Department. Should, for any reason, the contract not be awarded, the Contractor will not be entitled to reimbursement for work performed prior to the contract award. Subsequent to award, the Contractor will not be entitled to reimbursement for changes made to the contract documents unless changes occur after approval of the submission.

Unless otherwise stated in the contract documents, review of shop drawings, erection plans and demolition plans will begin only after the submission of a complete set of information required to complete a discrete item of work. The review process will allow two work days per drawing submitted or a minimum of 10 days, unless stated otherwise in the contract documents. Unless otherwise stated in the contract documents, including the Steel Construction Manual or the Prestressed Concrete Construction Manual, a drawing shall be defined as a sheet of similar size and scale as the plan sheets prepared and offered for sale to potential bidders, or sheet provided on a different size media and using a proportional scale. Submission of materials directly to a reviewing unit shall be done only with the prior approval of the Engineer. Complete copies of all submissions shall be provided to the Engineer.

#### **105-17 CONTRACT RECORDS.**

The Engineer will keep contract records in accordance with the Manual for Uniform Record Keeping (MURK). Changes that are made in subsequent revisions of the Manual will be incorporated in the contract procedures and records unless authorized to the contrary in writing by the Director, Construction Division. The Contractor is invited to review the contract records with the Engineer if desired. The Contractor may request occasional or incidental copies of contract records in support of on-going construction activities, subject to the availability of staff to fulfill the Contractor's request. If the Contractor desires significant or large numbers of copies of records, the Contractor shall file a Freedom of Information Law (FOIL) request with the Regional Director. In several instances, (such as Force Account work, application for approval of Subcontractors, etc.) the Contractor shall furnish such data and information on forms as established in MURK and furnished by the Department.



**105-18 MANUFACTURER WARRANTIES AND GUARANTEES.**

The Contractor shall provide to the Department or the authority having jurisdiction of the facility any manufacturer's warranties and guarantees normally given as customary trade practice. For contracts involving the furnishing and/or installing of electrical and mechanical equipment, the Contractor shall guarantee the satisfactory in-service operation of mechanical and electrical equipment and related components for a period of 6 months following contract acceptance, at no cost to the State for either parts or labor. This requirement does not apply to mechanical and electrical equipment furnished by the State.

**105-19 CONTRACTOR WARRANTIES.**

The Department may make available, subject to express agreement in writing between the Department and the Contractor, with approval from the FHWA when required, warranties associated with the contract for limited circumstances. A prototype warranty specification is available from the Department for the purpose of the Contractor's providing a warranty for a particular item, as opposed to providing a warranty for an entire contract. The product warranty will be developed between the Department and the Contractor with input from appropriate technical experts and the Office of Legal Affairs in conjunction with the Construction Division, and incorporated into the contract via order-on-contract. The warranty may be used in situations including, but not limited to, work performed not in full compliance with the contract documents, where initial testing does not indicate any deficiency in the end product.

**105-20 OPENING HIGHWAY TO TRAFFIC PRIOR TO ACCEPTANCE.**

When directed, in writing by the Regional Director, the Contractor shall open to traffic any portion of new pavement and/or structures before final acceptance of the contract. Traffic on these portions of highway so opened to travel by the Regional Director, shall be maintained and protected in accordance with all the provisions of the Maintenance and Protection of Traffic items in the contract.

Should the Contractor be dilatory in completing certain features of the work on the portion of the highway directed to be opened, the Regional Director may order all or a portion of the said highway open to traffic; and in this event the Contractor shall not be relieved of its liability and responsibility during the period the work is so opened prior to final acceptance.

These provisions apply not only to the reconstruction of existing highways, but also to work on new locations where traffic is not maintained during construction.

**105-21 CIVIL RIGHTS REPORTING.**

The Contractor shall use the current version of Department approved software for civil rights reporting, including workforce utilization data, D/M/WBE utilization, and tracking payments to Subcontractors and D/M/WBE Vendors on all contracts where the total contract bid price is equal to or greater than \$100,000.

**A. Contractor Proficiency.** The Contractor shall become proficient in software use through a Department-approved vendor or by downloading the current Department software users guide at [www.dot.state.ny.us/oeodc/ceieb.html](http://www.dot.state.ny.us/oeodc/ceieb.html). Other organizations may utilize software differently, and are not always compatible with Department requirements. Approved training vendors are listed on the Department website at [www.dot.state.ny.us/oeodc/champ.html](http://www.dot.state.ny.us/oeodc/champ.html).

**B. Reporting Requirements.** The Contractor shall submit complete, accurate, readable and unaltered signed hard copy monthly reports produced from the electronic data, as well as a complete electronic data file, to the Engineer not later than the 15th of the following month. The Contractor shall ensure data submissions are made using the current approved version of the software listed on the Department website at [www.dot.state.ny.us/oeodc/champ.html](http://www.dot.state.ny.us/oeodc/champ.html). Hard copy reports and D/M/WBE Subcontractor/Vendor signatures on non-significant revisions to utilization are not required, provided that the monthly electronic data submissions are up to date and accurate.

The following forms, when required to be submitted, shall be generated using the approved software:

**1. Schedule of Utilization.** The Contractor shall submit a schedule of utilization, with commitment dollar amounts for all D/M/WBE Subcontractors and D/M/WBE Vendors in accordance with §102-12G, *D/M/WBE Utilization Package*. The amounts shall agree with those

entered on the individual D/M/WBE utilization worksheets. Revisions shall be submitted in accordance with §102-12J. *Revisions to D/M/WBE Utilization*.

**2. D/M/WBE Utilization Worksheet.** The Contractor shall submit utilization worksheets, with commitment dollar amounts for all D/M/WBE Subcontractors and D/M/WBE Vendors in accordance with §102-12G. *D/M/WBE Utilization Package*. Revisions shall be submitted in accordance with §102-12J. *Revisions to D/M/WBE Utilization*.

**3. Approval to Subcontract.** The Contractor shall submit original and revised Subcontractor approval documents for all Subcontractors in accordance with §108-05 *Subletting or Assigning the Contract*. Commitment amounts by contract pay item shall be entered into the Department approved software for all Subcontractors. Printed reports of commitment amounts are not required.

**4. Report of Payments to Subcontractors/Vendors.** The Contractor shall submit a *Report of Payments to Subcontractors/Vendors* monthly to the Engineer in accordance with §102-12K.1. *Measuring Goal Attainment*, with dollar values current through the last day of the previous month, for all Subcontractors and D/M/WBE Vendors that are due a payment or have received a payment within the last month. The Subcontractors/Vendors certification and notarizations are not required for monthly submittals, but the Contractor shall provide the Subcontractor/Vendor with an informational copy. The Contractor shall submit a final report signed and notarized by both the Contractor and the Subcontractor/Vendor as soon as possible after the work is completed, but not later than 60 days after the Subcontractor/Vendor has completed its commitment.

**5. Employee Utilization Report.** The Contractor shall submit employee utilization reports in accordance with §102-11D.7.a. *Employee Utilization Reports*.

**6. Federal-Aid Highway Construction Contractors Annual EEO Report.** The Contractor shall submit a complete and accurate signed hard copy annual Form FHWA 1391 Federal-Aid Highway Construction Contractors Annual EEO Report produced from the electronic data to the Engineer in accordance with §102-11D.7.b. Annual EEO Report, in addition to the electronic file as a part of the July monthly submission.

**7. Monthly Training Progress Report.** When training is required under §102-11 *Equal Employment Opportunity Requirements* and/or Training Special Provisions, the Contractor shall submit a monthly training progress report to the Engineer.

**C. Final Reports.** At contract final acceptance, the Contractor shall update and submit a final revised *Schedule of Utilization* and final revised *D/M/WBE Utilization Worksheets* with final commitment dollar amounts for all Subcontractors and D/M/WBE vendors for all cumulative non-significant changes to utilization that have not been previously documented, signed by both parties. The commitment amount on the final *D/M/WBE Utilization Worksheet* should match the total payment due on the final *Report of Payments to Subcontractors/Vendors*.

**D. Data Submission.** The Contractor shall export the required contract data to an electronic file and generate a paper copy of the reports in consecutive operations so that the date/time stamp on the two data exports are nearly identical.

The Contractor shall submit concurrently to the appropriate Regional Compliance Specialist (RCS) with a copy (cc:) to the Engineer, the electronic data file via an e-mail attachment (or if submission via e-mail is unavailable, via an alternate approved method). The Contractor shall ensure that the electronic file is readable, complete and accurate, and the file has not been altered or corrupted in transmission. The file shall be attached to a message with the following subject line: [Month] Civil Rights Report D[123456].

**E. Compliance Reviews.** The Department typically conducts annual compliance reviews of at least two federal-aid contracts per region. A Contractor will typically not be selected for more than two compliance reviews per year statewide. A compliance review consists of a thorough review of all civil rights contract requirements, including non-discrimination in Labor/Employment, EEO, and DBE requirements. Based on contract monitoring and/or the results of compliance review(s), the Department may conduct a review of some or all ongoing contracts with a single Contractor, regardless of funding source.

## SECTION 106 - CONTROL OF MATERIAL

### 106-01 SOURCES OF SUPPLY.

Within seven (7) days of contract award, the Contractor shall notify the Deputy Chief Engineer (Structures) of the name and address of the fabricator of all Prestressed Concrete Units (Structural), Structural Steel, Bridge Bearings, Armored Bridge Joint Systems, Bridge and Culvert Railings and Overhead Sign Structures. This notification shall list the actual shop or shops in which the materials will be manufactured and/or fabricated. It shall be the responsibility of the Contractor to notify the Engineer of the proposed sources of materials sufficiently in advance of their use so that proper tests may be made.

At the preconstruction meeting, the Contractor shall furnish in writing to the Engineer the sources of supply, types and contract pay item(s) of materials which it proposes to use in the work in order to ensure that the materials are obtained from approved sources or that required inspection or approval will be completed in a timely manner. No change shall be made in the types of materials or sources of supply without written approval by the Engineer.

### 106-02 QUALITY REQUIREMENTS.

All materials used in the work shall meet the quality requirements described in Section 700 *Materials and Manufacturing*, unless the requirements are altered by a contract pay specification or by notes shown in the contract documents. Materials shall be inspected, sampled, and tested by the Department, or its designated representative, as described in Section 700 *Materials and Manufacturing*, as indicated by notes in the contract documents, or by procedural directives issued by the Department.

The Contractor shall provide to the Engineer a Material Safety Data Sheet (MSDS) for materials to be used in the work, before each material is first used in accordance with 29 CFR 1926 Subpart D. This applies to materials brought to the contract site to be incorporated into the work, as well as materials that are used at the contract site.

Test specimens shall be removed from sampled items in the presence of the Department representative, prepared for testing, and shipped to the Department as directed by the Department. The cost of all samples; shipment of samples; and any other expenses incurred in making materials or products ready for inspection, sampling and/or testing; shall be included in the unit prices bid for the various items in the contract. Where testing methods are not described in the specifications, details of test methods may be obtained by application to the Department.

The cost of all required inspection, sampling and testing performed in the 48 contiguous states of the United States and the provinces of Canada shall be paid for by the Department unless specifically excluded elsewhere in the contract documents or procedural directives.

The instructions for the use of all materials and products, as well as all identifying information required by the specifications (i.e., labels, tags, certifications, etc.) shall be in the English language. The U.S. Standard Screen Sieves meeting ASTM E11, shall be used on all materials requiring gradation tests.

Mechanical property measurements, dimensions, and all other numerical data included in documents such as shop drawings and computations prepared specifically for the contract, Material Details, and Manufacturer's Safety Data Sheets shall be presented in the International System (SI) of units, consisting of meters, kilograms, and seconds, but they may also include U.S. customary units as a second set of measurements. Shop drawings prepared for bridge rehabilitations, however, shall include both SI Units and U.S. Customary Units. Submissions in dual units shall be completely dimensioned in both systems. The SI Units will take precedence and reviews will be based on these units. The SI Units should be the units listed first, and the U.S. Customary Units should be included within parenthesis. Failure to adhere to this convention may result in the rejection of the drawing.

Documents which are relevant to the production and acceptance of hot mix asphalt (HMA) and portland cement concrete (PCC) mixtures shall be submitted in SI Units only. This refers to mix design

forms, production monitoring (QC) forms, batching tickets, delivery tickets, and all other mix design and production related documents.

Unless otherwise directed by the Department, no materials shall be used until the Engineer has received written notification of acceptance of that material and such material shall be used only so long as the quality remains equal to that of the accepted sample. This initial acceptance of a material will in no way preclude further examination and testing of a material at any time the Engineer suspects that the material is no longer properly represented by the accepted sample. The acceptance at any time of any materials will not bar its future rejection if it is subsequently found to be defective in quality or uniformity.

Unless otherwise designated, when a reference is made in these specifications to a specification or test designation either of the AASHTO, ASTM, Federal Specifications, or any other recognized non-proprietary national organization, it shall mean the specification or test method (including Provisional AASHTO and Tentative ASTM) which is current on the date of advertisement for bids.

### **106-03 PLANT INSPECTED MATERIALS.**

The manufacture, production and/or fabrication of some materials and products may require acceptance of the plant, including, but not limited to: mill, plant, shop or other location; on a recurring basis prior to the production and inspection of materials produced.

Materials inspected at manufacturing or fabrication plants shall be marked with the contract number and the contract pay item number prior to shipment to the contract site. Any material which has been plant inspected and accepted by this Department for any Department contract, shall not be shipped to other work unless authorized by the Department.

Where plant inspection is not maintained, the method and procedure for sampling, inspecting and reporting shall be in accordance with the procedural directives of the Department, issued by the Materials Bureau.

**A. Covered Locations.** The Department maintains plant inspection capabilities throughout the contiguous 48 states of the United States and the provinces of Canada. The Contractor shall notify the Department 60 calendar days in advance of beginning of the work in any mill, plant, shop or other manufacturing location that is not currently accepted, to allow time for a qualification inspection and arrangements for inspection, sampling and/or testing during the work.

**B. Non Covered Locations.** When inspection, sampling, and/or testing of materials and products manufactured, produced and/or fabricated in a non covered location, and deemed by the Department to require inspection, sampling and/or testing at the site of manufacture, production and/or fabrication, the plant, and manufacturer and/or fabricator shall be qualified by the Department prior to the required inspection, sampling and/or testing. The Contractor shall notify the Department 60 calendar days in advance of beginning of the work in any mill, plant, shop or other manufacturing location to allow time for a qualification inspection and arrangements for inspection, sampling and/or testing during the work.

The expense of all required inspection, sampling, testing and qualification of plants and manufacturers or fabricators in non-covered locations shall be paid for by the Contractor. These expenses shall include the costs of wages and benefits, travel, meals, lodging, communication and all other direct costs of inspection, sampling and testing paid by the Department to perform these services using Department employees or designated representatives under contract to the Department. Reimbursement to the Department shall be made in the form of a deduction from payments due the Contractor. The costs of tests performed in a Department Laboratory will not be charged to the Contractor.

The location of inspection, sampling and/or testing materials and products will, at the option of the Department, be performed at the site of manufacture, production and/or fabrication or at a covered location designated by the Contractor and approved by the Department.

**C. Stock Lot Testing.** When the Department determines that conformance with the contract requirements of plant inspected materials from non-covered locations may be determined by visual inspection and/or testing, specimens may be presented at a covered location in specifically defined lot quantities as directed by the Department. Such materials or products shall be offered for inspection

not less than 30 days prior to their intended shipment to the contract. All expenses attendant to making such materials or products available for inspection, sampling and/or testing shall be paid by the Contractor.

**D. Sample Shipment.** The shipment of samples to the Department Laboratory from locations outside of the 48 contiguous states of the United States and the provinces of Canada shall be a direct cost borne by the Contractor or its agent and all such shipments shall be made under provisions established by the Department to ensure identity and security of the sample.

**106-04 MATERIAL CERTIFICATION AND APPROVED LIST.**

Whenever any specification provides for “Manufacturer’s Certification” or “Approved List” as a Basis of Acceptance, the Department reserves the right to sample and/or test material in any shipment prior to incorporation in the work.

Manufacturers’ Certifications and documents prepared for general use, such as catalog cuts and manufacturer’s directions, may use S.I. or U.S. customary measurement units, or units from both systems. In drawings and documents containing dual units, the S.I. units will be the primary units, and the S.I. units will be the units reviewed. The Contractor shall be responsible for all annotations on the source documents, conversions between the measurement systems and all errors resulting therefrom.

Some standard specifications reference a Manufacturer’s Certification as evidence of acceptability of specific materials or products. A Manufacturer’s Certification can only be properly executed by the manufacturer or producer of the material or product. When manufactured products are subsequently provided by a Material Supplier other than the manufacturer, a Material Supplier’s Certification shall be provided in addition to the Manufacturer’s Certification.

**A. Material Certification.** When shipments are made directly to a contract by the manufacturer or producer a Manufacturer’s Certification shall include the essential components outlined below. When shipments are made to a contract by a Material Supplier, a Material Supplier’s Certification shall accompany the Manufacturer’s Certification and shall include the essential components outlined below.

**1. Identification of Manufacturer or Producer.** Name of the company and address of its manufacturing or producing facility.

**2. Identification of Material or Product.** Generic name of the material or product and the Department Section 700 materials designation number.

**3. Identification of Shipment.** Sufficient detail to describe the quantity contained in the shipment, the contract number and a date of shipment. A Material Supplier’s Certification shall clearly indicate that the shipment is all or a portion of the quantity detailed on the accompanying Manufacturer’s Certification.

**4. Statement of Conformance.** The certification shall definitively state that the material contained in the shipment meets the requirements of a specific Department specification or a specific specification or standard of another agency (i.e., ASTM, AASHTO, AWWA, etc.). If the material in the shipment contains steel and/or iron, the certification shall definitively state that the material is or is not of domestic origin. An acceptable statement is: “Conforms (or Does not conform) to the requirements of NYSDOT Standard Specification §106-11, *Buy America*.”

If the product supplied has been altered subsequent to the certification by the manufacturer, the Material Supplier’s Certification shall definitively state that the material or product contained in the shipment meets the requirements of a specific Department specification or a specific specification or standard of another agency.

**5. Certification Execution.** The certification shall be signed by a person authorized to legally bind the company, as indicated by statement or title/position. Notarization of the signature is not required.

**B. Improper Certification.** If the Material Certification does not properly identify conformance to the specification, the product shall be rejected. If the Manufacturer and/or Material Supplier requests to leave the product in place and provide a revised certification only, the revised certification shall be accompanied by a letter of explanation indicating the basis for use of the revised certification. The letter shall also include corrective action to ensure future certifications will be representative of the material or product supplied. The letter shall be signed by a person authorized to legally bind the company, as indicated by statement or title/position.

#### **106-05 RECYCLED MATERIALS.**

The Contractor is encouraged to provide reused or recycled materials to the maximum extent possible. Recycled materials currently approved by the Department include glass, recycled asphalt pavement (RAP), recycled portland cement concrete aggregate (RCA), blast furnace slag, fly ash, microsilica, waste stream plastics and tires.

In order to be considered for use by the Department, recycled or waste material must exhibit the desired engineering characteristics, consistently satisfy specification requirements, provide an acceptable level of performance, be economically competitive with available materials, and not be harmful to the environment. If waste materials are proposed to be used, the Contractor may need to obtain a beneficial use determination (BUD) from the NYS Department of Environmental Conservation prior to its use as specified in 6 NYCRR 360-1.15. The beneficial use determination, testing, evaluation and approval of unapproved waste materials can be a very long term process over multiple years, and should not be expected to be completed for any given contract.

#### **106-06 STORAGE AND HANDLING OF MATERIALS.**

Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. Stored materials, even though accepted before storage, shall be inspected prior to their use in the work and shall meet the contract requirements at the time of their use. Railroad cars, barges and other containers used for the transportation of materials shall be clean when any materials are deposited therein.

#### **106-07 BASIS FOR MEASUREMENT.**

Weight shall be used in all cases for percentage determination unless otherwise specified.

#### **106-08 REJECTED MATERIALS.**

Any material which is rejected because of failure to meet the required tests or that has been damaged so as to cause rejection, shall be immediately removed from the site of the work by the Contractor at no additional cost to the State unless otherwise directed by the Engineer. Material which has been rejected on the results of Department tests will not be resampled or retested unless otherwise directed by the Department. No rejected materials, the defects of which have been subsequently corrected, shall be used until written notification of the acceptance of the material has been received by the Engineer.

#### **106-09 EQUIVALENTS.**

The requirements for apparatus, articles, or materials shall be specified, if feasible, in generic terms which afford competition for equivalent products or items. When no generic specification can be found or devised, a minimum of at least three, if available, known acceptable trade names or proprietary products shall be provided for the Contractor's benefit and to afford the desired competition. The Department will determine whether a product proposed by a Contractor meets the requirements of the specifications.

#### **106-10 INDEPENDENT ASSURANCE SAMPLING AND TESTING.**

Independent Assurance Sampling and Testing (IAST) is a Federally mandated program that assures that when acceptance testing is performed on Department contracts, proper procedures are followed and all equipment used is in proper working order and calibration. IAST is separate and independent from acceptance testing. Testing performed for IAST will in no way affect any acceptance or payment decision. The results of IAST testing will be used to determine the qualifications of inspectors performing acceptance testing and the condition of equipment used in acceptance testing on Department projects.

The IAST program will evaluate the personnel and equipment responsible for performing quality control sampling and testing that is used to make acceptance decisions. The Contractor and all personnel, organizations, who are responsible for performing acceptance sampling and testing on behalf of the

Contractor shall cooperate with and accommodate this program by performing, and allowing State representatives to perform sampling and testing at the times and locations requested by the Regional IAST personnel. The required sampling and testing procedures are listed in the Department's Independent Assurance Sampling and Testing Manual. IAST personnel will observe the tester obtaining samples and performing the tests. IAST personnel will also take split samples to the Regional Laboratory for testing.

#### **106-11 BUY AMERICA.**

In accordance 41 U.S.C. §10a et. seq., 23 CFR 635.410 and Section 146 of the State Finance Law, as amended, permanently incorporated steel and/or iron materials shall be domestically produced regardless of the percentage they comprise in a manufactured product or form they take. Award of the contract will be made in accordance with §103-01, *Contract Award*.

For a contract awarded based on being allowed to permanently incorporate foreign steel and/or iron materials in the work, the Contractor may supply either domestic or foreign steel and/or iron materials and will be paid the foreign bid prices. For a contract awarded based on domestic steel and/or iron materials, the Contractor may permanently incorporate in the construction of this contract a minimal amount of foreign steel and/or iron materials if the combined cost of such materials does not exceed one-tenth of one percent (0.1 %) of the total contract cost or \$2,500, whichever is greater. The combined cost of foreign steel and/or iron materials will be the value of the materials as they are delivered to the contract, documented by invoice or bill of sale to the Contractor.

To qualify as domestic, all manufacturing processes, including manufacture, fabrication, grinding, drilling, welding, finishing, coating and assembly of any product containing steel and/or iron materials, must have been performed in the United States. To further define the coverage, a domestic product is a manufactured steel and/or iron materials construction material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States. Raw materials used in the steel and/or iron materials may be imported. Raw materials are materials such as iron ore, limestone, waste products, etc., which are used in the manufacturing process to produce the steel and/or iron materials products. Waste products include scrap; i.e., steel no longer useful in its present form from old automobiles, machinery, pipe, railroad rail, steel trimmings from mills or product manufacturing, and the like. Extracting, crushing, and handling the raw materials which is customary to prepare them for transporting are exempt from Buy America. The use of foreign source steel or iron billets is not acceptable under Buy America.

**A. Control of Materials.** All items, regardless of origin, shall comply with their individual specification requirements and with the requirements stated elsewhere in this subsection. In the event the contract is awarded based on using only domestic steel and/or iron materials, the Contractor shall supply only domestic steel and/or iron materials and will be paid the domestic bid prices. The Contractor will be responsible for ensuring the domestic steel and/or iron materials are supplied in conformance with the above referenced laws. Such responsibility extends to informing all affected Subcontractors and material suppliers of these specific requirements and ascertaining that steel and/or iron materials being supplied is in conformance with the standard specifications.

**B. Waivers.** In addition to the award of a bid based on foreign steel and/or iron materials, waivers to the Buy America requirement may be requested by the State to the Division Federal Highway Administration if it can be demonstrated that the use of domestic steel and/or iron materials would be inconsistent with the public interest, such materials and products are not produced in the United States in sufficient and reasonably available quantities and of satisfactory quality.

Provided one or more of the above requirements are met, the Contractor may submit a request for a waiver to the Engineer. The request shall include copies of all documentation verifying the unavailability of the material or product, and/or justification of the application for a waiver.

For Federally Aided contracts, final approval of the Buy America Waiver request will be made by the Division Federal Highway Administration and concurred with by the Director, Construction Division. For non-Federally Aided contracts, upon final approval of the affected Department program areas, notification and approval of the Buy America Waiver request will be made by the Director, Construction Division.

The following is a list of materials or products which are exempt from the Buy America provisions, and do not require submission of a waiver request:

1. Hollow "I" shaped, steel extrusions.

## SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

### 107-01 LAWS, RULES, REGULATIONS AND PERMITS.

The Contractor shall conduct its operations in compliance with all the laws and regulations of the United States, State of New York and Public Authorities and the applicable ordinances of any county, city, town, or village and the lawful direction of the officers, agents or representatives of the United States, the State of New York, Public Authorities or of said county, city, town, or village. The Contractor shall procure all licenses and permits necessitated by the Contractor's operations. All costs due to compliance with the above described laws, regulations, and ordinances shall be included in the contract bid prices unless otherwise provided for in the contract.

**A. Invasive Species.** Federal and State Agencies have promulgated regulations regarding invasive plant species, agricultural insects and diseases. The Contractor shall thoroughly clean all construction equipment and vehicles operating in infested areas prior to moving to non-infested areas in accordance with Federal and State Department of Agriculture regulations for plant pest control.

**B. Independent Contractor.** The relationship of the Contractor to the State is that of an independent Contractor, and said Contractor, in accordance with its status as such Contractor, covenants and agrees that it will conduct itself consistent with such status, that it will neither hold itself out as nor claim to be an officer or employee of the State by reason hereof, and that it will not, by reason hereof, make any claim, demand or application to or for any right or privilege applicable to an officer or employee of the State, including, but not limited to workers' compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

**C. Cooperation With Investigations.** The Contractor hereby agrees to the provisions of §139-a and §139-b of the State Finance Law which require that upon the refusal of a person, when called before a grand jury, head of a State department, temporary State commission or other State agency, or the organized crime task force in the NYS Department of Law, which is empowered to compel the attendance of witnesses and examine them under oath, to testify in an investigation, concerning any transaction or contract had with the State, any political subdivision thereof, a public authority or with any public department, agency or official of the State or of any political subdivision thereof or of a public authority, to sign a waiver of immunity against subsequent criminal prosecution or to answer any relevant question concerning such transaction or contract;

1. Such person, and any firm, partnership or corporation of which he is a member, partner, director or officer shall be disqualified from thereafter selling to or submitting bids to or receiving awards from or entering into any contracts with the State of any public department, agency or official thereof, for goods, work or services, for a period of five years after such refusal, and;
2. Any and all contracts made with the State or any public department, agency or official thereof, since the effective date of this law, by such person, and by any firm, partnership or corporation of which he is a member, partner, director or officer may be canceled or terminated by the State without incurring any penalty or damages on account of such cancellation or termination, but any moneys owing by the State for goods delivered or work done prior to the cancellation or termination shall be paid.

### 107-02 PATENTED DEVICES, MATERIALS AND PROCESSES.

It is mutually understood and agreed that the contract prices are to include all royalties and costs arising from patents, trademarks, and copyrights in any way involved in the work. Whenever the Contractor is required or desires to use any design, device, material or process covered by letters, patent or copyright, the Contractor shall indemnify and save harmless the State from any and all claims for infringement by reason of the use of any such patented design, device, material or process, to be performed under the contract, and shall indemnify the said State for any costs, expenses and damages which it may be obliged to pay, by reason of any such infringement, at any time during the prosecution or after the completion of the work.



**107-03 FEDERAL AID PARTICIPATION.**

All contracts in which the Federal Government participates financially are designated as Federal-Aid contracts. For all Federal-Aid contracts, the Contractor shall conform in all respects in accordance with the true intent and meaning of each and all of the requirements contained in the FHWA-1273 *Required Contract Provisions Federal-Aid Construction Contracts*, a copy of which will be found incorporated in each Federal-Aid contract proposal. When any of such Federal Provisions may be in conflict with any other provisions of the contract the Federal Provisions shall prevail and take precedence and be of force over and against any said conflicting provisions of said contract.

**107-04 SANITARY CODE.**

The Contractor shall comply with the provisions of the State Sanitary Code relating to camps and obtain from the local health officers permits for the construction, maintenance and operation of labor camps, if used.

**107-05 SAFETY AND HEALTH REQUIREMENTS.**

The Contractor shall perform all work in the contract with due regard to the safety and health of the employees and of the public. The Contractor shall comply with 29 CFR 1926, *Safety and Health Regulations for Construction*, administered by the Federal Occupational Safety and Health Administration (OSHA) regarding the safety and protection of persons employed in construction and demolition work.

No Contractor employee may use, distribute, dispense, possess or manufacture any alcoholic beverages, illegal drugs or any other intoxicating substance on a contract site. Contractor's written policy shall require that employees not report to work under the influence of drugs or alcohol, nor be impaired or unable to function at the workplace as a result of consuming alcohol or other intoxicants. While prescription drugs are not prohibited, they should not render an employee unfit for duty. Contractor employees that are suspected of using drugs or alcohol, or who are suspected to be under the influence of such substances, shall be reported to the Engineer. Contractor employees who are under the influence of drugs or alcohol may be deemed incompetent, and are subject to dismissal in accordance with §105-02 *Character of Workers*.

The Contractor shall notify the Engineer of any inspections scheduled or conducted on the contract by OSHA, NYS Department of Labor (NYSDOL), or other safety and health agencies, of any resulting closing conference, and provide the Engineer with the opportunity to be present at such inspections and closing conference. The Contractor shall notify the Department in writing of the results of any safety and health inspections conducted by representatives of OSHA, NYSDOL, or other safety and health agencies, within one work day of the completion of the closing conference resulting from such inspections. If any citations are issued for alleged violations of OSHA Regulations, a copy shall be provided to the Engineer within one work day of their receipt by the Contractor, and a copy of the final disposition of such citations shall be provided to the Engineer within one work day of receipt by the Contractor.

**A. High Visibility Apparel.** All Contractors' employees shall wear at all times protective helmets and construction apparel or other appropriate high-visibility apparel when working within a highway right of way or contract limits. All high-visibility apparel shall be closed front and rear; in good condition to maintain the color, visibility, reflectivity, and conspicuity. Contractors' employees will be considered to include everyone on the Contractor's payroll, Subcontractors, material suppliers, and other personnel under the direction of the Contractor. Protective helmets and high-visibility apparel are not required for employees when they are within a completely enclosed cab constructed of steel frame and glass, or inside a motor vehicle.

**1. Protective Helmets.** Protective helmets shall meet current OSHA standards for impact, electrical shock, and burn protection. Protective helmets used during nighttime operations shall be equipped with a minimum of 7500 mm<sup>2</sup> of reflective tape on all four sides (i.e., 25 mm by 75mm strip - 1875 mm<sup>2</sup> per side). Protective helmets for flaggers shall be orange.

**2. Construction Apparel.** Construction Apparel shall consist of a vest, shirt, or jacket; orange, fluorescent orange, yellow, fluorescent yellow, yellow-green, fluorescent yellow-green or combination of these colors meeting the requirements of the MUTCD.

**3. Nighttime Apparel.** Nighttime Apparel shall consist of a vest, shirt, or jacket; orange, fluorescent orange, yellow, fluorescent yellow, yellow-green, fluorescent yellow-green or combination of these colors meeting the requirements of ANSI 107 Class 2.

**4. Traffic Control Apparel.** Traffic Control Apparel shall consist of a vest, shirt, or jacket; fluorescent orange with fluorescent yellow-green striping bands or fluorescent yellow-green with fluorescent orange striping bands, placed both horizontal and vertical, meeting the requirements of ANSI 107 Class 2. The striping bands shall be approximately 120 mm wide with retroreflective strips.

Retroreflective strips shall consist of two 25 mm wide retroreflective strips being 50 mm apart in the center of the fluorescent striping band material or a single 50 mm wide in the center of the fluorescent striping band material.

**B. Project Safety and Health Plan.** It shall be the responsibility of the Contractor to perform all necessary planning, supervision, and training activities to ensure that all of the requirements of 29 CFR 1926 are fully met for all workers employed in the construction of the contract. The Contractor shall provide to the Department prior to the start of work satisfactory evidence that all current requirements of 29 CFR 1926 will be adequately addressed. As a minimum, the Contractor shall provide a written Project Safety and Health Plan which documents the Contractor's company policy relative to safety, and which identifies and addresses specific safety and health concerns to be encountered on the project. Before the work begins and periodically throughout the contract duration, the Contractor's project supervision staff shall meet with the Engineer to review and discuss the status of safety issues on the project. An appropriate notice shall be posted on the contract site that the Project Safety and Health Plan is available for examination by any worker. As a minimum this plan shall include the following items:

- Identification of project and company safety officers.
- Hazardous Materials Communications Plan.
- Employee Safety Training Program.
- Company safety policy.
- Procedures to address project safety and health concerns.
- Procedures for compelling worker compliance with safety and health requirements.

Certain of these items may be submitted in the format of a Company Safety and Health Program, with the Project Safety and Health Plan limited to project-specific issues.

The Contractor shall be responsible to ensure that each Subcontractor employed on the project complies with this requirement. The Contractor shall provide a Project Safety and Health Plan(s) to the Department covering all work to be done by Subcontractor(s) prior to starting work. As an alternative, the Contractor may provide a certification that all activities performed by and workers employed by the Subcontractor will be subject to the Contractor's Project Safety and Health Plan.

Submission of the required Project Safety and Health Plan(s) by the Contractor and its acceptance by the Department shall not be construed to imply approval of any particular method or sequence for addressing safety and health concerns, or to relieve the Contractor of its responsibility to adequately protect the safety and health of workers as well as any members of the public who may be affected.

**C. Emergency Contact Person.** The Contractor shall designate someone to be available to respond to emergency calls. The name of the person and the telephone number at which he/she can be reached at any time shall be given to the Engineer and all police agencies in the area. Such person shall have full authority and capability to mobilize forces promptly as required to respond to an emergency and protect the public.

**D. Accident Reporting.** The Contractor shall immediately notify the Department verbally of any accident or incident that results in the death of a worker, motorist or pedestrian. The Contractor shall

notify the Department in writing within 24 hours, with the details relative to any accident or incident occurring within the contract limits or is directly related to construction activity or involving any worker employed on the contract or delivering materials, equipment or supplies to the contract, provided:

- The accident or incident results in the death of a worker, or (2) requires that a worker is hospitalized overnight for treatment of the injury, or (3) results in 3 or more personal injuries: or:
- The accident or incident involved a utility (overhead or underground) or:
- The accident or incident involved a motorist or pedestrian or:
- The incident was a near miss or:
- The accident otherwise meets the notification requirements of OSHA.

The Engineer will provide the Contractor with a copy of the Department accident report for any accident occurring within the contract limits or involving the Contractor's personnel, equipment or operations.

**E. Imminent Danger and Emergency Actions.** Any action by the Contractor that presents a potentially imminent danger of injury to the public, a worker, or the inspection staff will be halted immediately by the Engineer, and operations stopped in accordance with §105-01 *Engineer's Authority*. The Contractor's personnel shall have local emergency numbers readily available. These numbers shall include local utility, police/fire and medical assistance. In the event of an emergency, the Contractor shall evacuate all employees and endangered persons from the immediate vicinity to the best of the Contractor's ability.

**F. Restricted Areas.** The Contractor shall identify, guard and protect restricted areas such as open and unattended excavations, areas subject to falling debris and other potentially hazardous locations in and adjacent to areas lawfully frequented by any person. Such protection shall consist of one, or a combination of, the following:

- A substantial fence or barricade, not less than 1.2m in height and mounted on satisfactory supports spaced at intervals of not more than 3m. Warning signs reading "DANGER-KEEP OUT" shall be mounted on the fence or barricade at no more than 30m intervals. The signs shall be a minimum of 600mm wide by 400mm high. The lower portion of the sign shall be white and shall bear the words "KEEP OUT" in 125mm black letters. The upper portion shall be predominantly red with 125mm white lettering spelling out the word "DANGER." The lettering shall be enclosed by an approximately elliptical, white ring and the entire sign bordered in black. All barricades and warning signs shall be furnished, erected, relocated, maintained, and removed as required.
- A 1.2m (minimum) extension of the trench sheeting above the ground surface adjacent to an excavation.
- A substantial covering over an excavation. Where it is possible that vehicles will move over such covering, the covering shall be of sufficient strength to withstand the loading.

**G. Work Site Access.** The Contractor shall provide safe access to the work site by workers and inspection staff such that no active traffic lanes are routinely crossed by pedestrian workers or inspection staff reporting to and leaving the work site. Vehicles and equipment used to transport personnel to the work site shall safely enter and depart the work site.

The Contractor shall designate a safe parking area(s) for workers to park private vehicles near the project site acceptable to the Engineer. Contractor personnel shall park in non-designated parking areas within the right of way only with the prior approval of the Engineer.

**H. Fall Protection.** The Contractor shall provide fall protection for all workers in compliance with 29 CFR 1926. The Contractor shall include procedures to provide fall protection in the Project Safety and Health Plan. The minimum fall protection requirements include the following:

1. Fall protection shall be provided for all workers at or above 1.8 m or the height thresholds listed in 29 CFR 1926, Subpart L and Subpart M, whichever is lower, and for all locations where there is a risk of a fall onto dangerous equipment or an impalement hazard, regardless of height. All fall protection systems shall meet the requirements of 29 CFR 1926, Subpart M. For

situations where lifelines are interrupted, double lanyards shall be utilized to ensure that workers are continuously protected. One lanyard shall remain connected at all times.

**2.** Attachments or other temporary appurtenances on all beams and other structural elements shall be in place prior to erection or removal to provide fall protection until other means of protection such as deck forms are in place. Fall protection shall consist of personal fall arrest systems, safety nets or other means. During placement or removal of structural members when the member is supported by a lifting device, workers exposed to moving members shall be required to tie off only if they are not exposed to a greater risk from the moving member. Fall protection systems utilized shall enhance safety rather than create a secondary hazard.

**3.** The Contractor shall establish procedures to minimize occurrences of unprotected exposure to fall hazards. When a worker must rig a fall protection system, and rigging cannot be accomplished from an aerial lift or by tying-off to the existing structure, momentary exposure to a fall hazard may be unavoidable.

**4.** Ladders or stairways meeting the requirements of 29 CFR 1926, Subpart X shall be provided at all points of personnel access where there is a change in elevation of 480 mm (19 in) or more, and no ramp, runway, sloped embankment or personnel hoist is provided. Climbing on forms, falsework, or the structure to gain access to work areas is expressly prohibited.

**5.** Scaffolds necessary to provide temporary access to work areas shall be in compliance with 29 CFR 1926, Subpart L and shall include a top rail, mid rail, and toe board on all open sides and ends. Scaffolds shall be erected, moved, altered and/or dismantled only under the supervision and direction of a competent person.

**6.** Suspended scaffolds may be used only if personnel lifts, scaffolds, or other means are not practical, and shall meet the requirements of 29 CFR 1926, Subpart L. Specifically, the scaffold shall be secured to the suspension cables at all times. All personnel working on a suspended scaffold shall be provided fall protection using an independent anchorage.

**7.** Workers in personnel aerial lifts shall use a personal fall arrest system attached to the boom or basket. Aerial lifts shall be operated in accordance with 29 CFR 1926, Subpart L.

**I. Working Over Water.** Any worker who is exposed to the risk of drowning shall wear a U.S. Coast Guard approved personal flotation device (PFD) at all times. A risk of drowning shall be considered to exist where water depths exceed 1.5m, or water is subject to sudden fluctuations to a depth exceeding 1.5m. A risk of drowning may also exist where water depths as little as 0.6m are combined with swift currents, or a fall into the water may result in a person being rendered unconscious or otherwise disabled. Working on top of ice shall be considered as working over water. Where practical, workers should not work alone in situations where a risk of drowning exists.

When continuous fall protection is used, without exception, the drowning hazard has effectively been removed, and wear of a PFD is not required. When safety nets are used as fall protection the drowning hazard has not been removed, and wear of a PFD is required. When aerial lifts are used over or near water the drowning hazard has not been removed, and wear of a PFD is required by occupants of the lift, regardless of whether a personal fall arrest system is used.

When working over or adjacent to water, ring buoys with a minimum of 30m of line attached, shall be placed at a maximum interval of 60m along the work site shoreline or along the work limits and a boat/skiff for emergency response shall be in place prior to that exposure. The boat/skiff shall be unlocked and available for immediate use at all times, and able to retrieve a worker from the water in no more than 4 minutes from the time they entered the water. If additional hazards (very cold water, rapids, etc.) exist the boat/skiff shall be able to retrieve the worker before being overcome by that hazard.

A boat/skiff for emergency rescue operations shall be equipped with a motor, paddles or oars, a ring buoy, and a reach extension device. The boat/skiff shall be equipped and operated in accordance with NYS Navigation Law.

**J. Electrical Safety.** Electrical safety policy and procedures are based on the New York State High Voltage Proximity Act and 29 CFR 1926. They apply to all operations that could cause employees or the vehicles or equipment they are operating to come into contact with ("direct contact") or enter into dangerous proximity to ("indirect contact") energized electrical systems. Electrical systems shall be assumed to be energized high voltage until verified otherwise by the

Utility. The Contractor shall identify and reference all potential electrical hazards and document such actions to the Engineer as part of the Project Safety and Health Plan.

Pursuant to the High Voltage Proximity Act, for all electrical systems carrying 600 volts or more, the Contractor shall:

- Notify the Utility at least 5 working days before any work begins which requires the Utility to identify voltages and clearances, or de-energize, insulate or relocate lines.
- Ensure employees are not placed in dangerous proximity to high voltage. Dangerous proximity is defined as within 3.05 m (10ft) for voltages up to 50 kilovolts, and an additional 0.1m for every 10 kilovolts over 50 kilovolts. Dangerous proximity applies to the individual and any conductive object.
- Inform employees of the hazards and corresponding precautions when working near high voltage.
- Post warning decals on equipment regarding 3.05 m (10ft) minimum clearance.
- Ensure that when any equipment operator is unable to assess clearances, a "spotter" observes for clearance and directs the operator.

Prior to the start of work where contact with energized electrical systems is possible, the Contractor shall identify existing facilities and reference their location to prominent physical features. In advance of work, the Utility shall be called upon to identify energized facilities, and to determine the need to de-energize, insulate, or otherwise protect the facilities against accidental contact. The actual work of protecting facilities will be carried out by the Utility. Facility relocation or protection provided at the request of the Department will be as described in the contract documents. Protection provided for the benefit, or at the request, of the Contractor shall be the financial responsibility of the Contractor.

Energized electrical lines or equipment shall be conspicuously marked and workers shall be reminded of their locations and the safeguards and precautions to be taken prior to beginning any nearby work that may cause the workers to approach electrical lines. New employees shall be informed of electrical hazards and proper precautions and procedures.

**1. Paving Operations.** Prior to the start of each workday high visibility markers or other devices approved by the Engineer shall be placed to mark the location of all overhead wires, including, but not limited to electrical, telephone and cable television. As an alternative, the pavement beneath overhead lines may be marked with spray paint or by other means approved by the Engineer. This requirement shall also apply to off-site areas used for contract purposes. The Contractor shall periodically patrol the worksite to ensure that the markings are in place and shall replace any that are missing and shall maintain all markings in good condition.

**2. Aerial Lifts, Lifting Equipment, Boom Devices.** Where there is potential for proximity or contact with energized lines or equipment, work shall not begin until a safety meeting is conducted and appropriate steps are taken to identify, mark, and warn against accidental contact.

**3. Tree Work.** Branches touching wires shall be removed by the Utility before work begins. Limbs and branches shall not be dropped onto overhead wires. If limbs or branches fall across electrical wires, work shall stop immediately and the Utility shall be notified. Workers shall be equipped with appropriate personal protective gear for working near electricity.

**4. Building Electrical Work.** Employees working on electrical systems for buildings shall be knowledgeable about and shall employ, when appropriate, OSHA Lock-Out/Tag-Out procedures to prevent exposure to unguarded electrical systems.

**K. Open Excavations and Trenches.** In accordance with 29 CFR 1926.650, a trench is a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 4.6 m. If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 4.6 m or less, the excavation is also considered to be a trench. The Contractor shall provide protection from collapse and cave-in for any employee who enters a trench or other excavation in accordance with the

requirements of 29 CFR 1926 Subpart P, unless the excavation is less than 1.5 m in depth and examination of the ground by the Contractor's competent person provides no indication of a potential cave-in. The Contractor shall include procedures to meet the excavation safety requirements in the Project Safety and Health Plan.

Trenching and excavation work shall be carried out under the supervision of the Contractor's competent person. The Contractor shall provide ladders or ramps for access and egress within 7.5m of an employee work area if a trench is 1.2m or more deep. The Contractor shall keep traffic, equipment and materials at least 0.6m away from the edge of any trench or excavation, or use retaining devices. When mobile equipment is operated near an excavation or must approach the edge of an excavation, either the operator must have a clear and direct view of the edge of the excavation; or a warning system of barricades, hand signals or mechanical signals shall be used. Workers shall not be permitted under loads that are being handled by lifting or digging equipment.

For the purposes of open excavations and trenches, the term "competent person" shall be defined as one who has had specific training in, and is knowledgeable about, soil analysis, the use of protective systems and the requirements of 29 CFR 1926 Subpart P.

**L. Hazardous Materials.** The Contractor shall provide workers Hazard Communication Training (29 CFR 1926.59), Safety Training (29 CFR 1926.21), and other training as required by 29 CFR 1926.

**1. Asbestos.** Asbestos abatement contractors and workers, including both removal and air monitoring contractors, shall be appropriately licensed and certified by the NYS Department of Labor (NYSDOL). The asbestos abatement contractor will perform all removal and disposal of asbestos-containing material. The Contractor shall verify that a disposal site for the asbestos-containing material is available before starting work. Prior to removal and disposal work, the Contractor shall supply the Engineer with proof that:

- The firm performing the work has a valid asbestos-handling license.
- The firm's insurance coverage consists of an asbestos specific-occurrence type policy with no deductible or sunset clause.
- Its abatement supervisor is a NYSDOL certified asbestos project supervisor.
- All employees engaged in the work are properly certified and have current physical examinations and respirator fit tests.
- Proper notification of work beginning on the asbestos project has been given to NYSDOL and the United States Environmental Protection Agency (USEPA).

After work is completed, the Contractor shall provide the Engineer with two (2) copies of Daily Logs, Visitor's Logs, OSHA Air Monitoring Records, and NYSDOL compliance air monitoring records.

**2. Lead Safety and Health.** The Contractor shall provide worker lead protection in accordance with 29 CFR 1926.62. The Contractor shall provide to the Engineer a written Lead Compliance program addressing as a minimum the specific issues listed in 29 CFR 1926.62 (e)(2), a written Hazard Communication program and Worker Lead Training program as components of the Project Safety and Health Plan. The Contractor shall provide detailed information describing the training and experience of the competent person who will supervise the compliance program on site, provide a description of procedures to monitor worker exposures to lead and provide the proposed medical monitoring program. If respirators are to be used to protect workers from lead exposure, a written respirator program shall be provided.

Specific operations that would likely result in worker exposure to lead include, but are not limited to:

- Removal of lead based paint coatings by abrasive blasting or other procedures.
- Cleanup and removal of paint debris.
- Cleanup, relocation, and dismantling of paint removal containment structures.
- Flame cutting, heating, or welding of steel coated with lead-based paint.
- Removal of bolts or rivets coated with lead-based paint.

- Any other operations that may dislodge existing coatings of lead-based paint, or subject them to abrasion or elevated temperatures.

The Contractor shall identify and implement engineering and work practice controls to reduce worker exposure to lead to a level at or below the Permissible Exposure Level (PEL). The use of respirators and protective clothing shall be used to supplement engineering and work practice controls, if necessary, to protect workers from exposures above the PEL. Reliance on respirators or protective clothing to protect workers from exposures above the PEL, without first implementing feasible engineering and work practice controls, shall not be permitted except for initial assessment of exposure levels as described in 29 CFR 1926.62 (d). The removal of lead-based paint from structural steel shall be required prior to heating, welding, or flame cutting to reduce worker exposure below the PEL. In cases where the Contractor can clearly demonstrate through exposure monitoring that other work practices and engineering controls, under the oversight of a certified industrial hygienist, can effectively maintain actual worker exposure below the permissible exposure level, exceptions to this requirement may be granted by the Engineer.

The Contractor shall provide to the Engineer copies of documentation, as they are completed, to demonstrate full compliance with 29 CFR 1926.62. These records shall include, as applicable, the completed worker lead training, completed respirator programs, air monitoring results, exposure monitoring results, worker medical monitoring results, and other such records as are necessary to document compliance with the standard.

**3. Equipment Involving Radioactive Materials.** The use of equipment involving radioactive materials, including but not limited to nuclear density gauges, shall adhere to all applicable regulations, including U.S. Nuclear Regulatory Commission regulations, related USDOT regulations concerning transportation of radioactive materials, and 12 NYCRR 38. Fourteen (14) days prior to the start of any work involving such equipment, the Contractor shall submit to the Engineer a written Radiation Safety Plan. The plan shall address in detail transportation and storage of the equipment and operating and emergency procedures. It shall provide the name and address of the Contractor's Radiation Safety Officer. A copy of the owner's license to possess the radiation source, issued by the NYSDOL, shall also be provided. All operators of the equipment shall be certified by a gauge manufacturer as to having completed training on the safe use of the equipment. A copy of the certification shall be provided to the Engineer for each operator prior to their work on the project.

**4. Silica.** The Contractor shall provide protection to all workers from exposure to hazardous levels of silica in accordance with 29 CFR 1926.55. In accordance with §107-05B, *Project Safety and Health Plan*, the Contractor shall identify and address silica health and safety in the written Project Safety and Health Plan. The Contractor shall identify and implement worker training, engineering controls, and workplace practice controls to reduce worker exposure to silica prior to instituting a program based on respirators or protective clothing to protect workers from exposures. Engineering controls shall include, but shall not be limited to; dust suppression through the application of water or other methods, use of general or local ventilation, and containment/isolation. Workplace practice controls shall include proper use and implementation of supervision, task procedures, employee training, signing, protective clothing, housekeeping, and personal hygiene. If engineering controls and work practice controls cannot reduce exposures below the personal exposure limit, the Contractor shall institute a respirator program. Each of these safety components is covered individually by 29 CFR 1926.

Many materials disturbed by the Contractor's operations may contain hazardous levels of silica. Silica may be in soil, concrete or asphalt pavement, superstructure or substructure materials. Specific operations that may result in worker exposures to silica, include, but are not limited to:

- Saw cutting, grinding, milling, hammering, drilling, or chipping of rock, cement concrete, or asphalt concrete.
- Concrete pavement rubblizing.
- Demolition of brick, cement concrete, or masonry structures.

- Abrasive blasting, if the abrasive contains silica, or of cement concrete, rock, or asphalt concrete.
- Dry sweeping or pressurized air blowing of cement concrete, rock, sand, or asphalt concrete dust.

**M. Demolition/Removal of Buildings and Structures.** Demolition or removal work shall not be performed by the use of explosives unless approved by the Regional Director.

**N. Drilling and Blasting.** Blasting shall be performed in accordance with the Department publication entitled *Procedures for Blasting*. This publication is available upon request from the Regional Director or the Director, Geotechnical Engineering Bureau.

The Contractor shall submit a written Blast Plan in accordance with *Procedures for Blasting* for approval by the Department a minimum of 10 work days prior to start of blasting operations. A preblast meeting relative to the method, manner and procedure of blasting operations shall be held with the Engineer, the Contractor, the Blaster, a Departmental Engineering Geologist and representatives of all interested agencies prior to the commencement of drilling and blasting operations.

Whenever explosives are used, they shall be of such character and strength and in such amounts as permitted by state and local laws and ordinances and all agencies having jurisdiction over them. The Department reserves the right to specify the maximum size of the charges. Blasting shall be done only when the Engineer and those agencies shall approve and under such restrictions as they may impose.

If a blast causes injury, damage to property, adverse affects upon traffic, or causes gases to migrate and/or accumulate in a potentially harmful manner, all blasting operations shall cease pending review of the procedures. The review will be conducted by the Engineer in conjunction with an Engineering Geologist to ensure that proper procedures and practices were used to determine if the approved procedures need to be revised. Should the findings of the review indicate the injury, damage, traffic delay, or migration/accumulation of gases was attributed to improper blasting operations, the blaster of record may be removed at the Department's option.

The Contractor shall meet all the requirements of 12 NYCRR 23 and 12 NYCRR 39, which include but are not limited to the licensing for ownership, possession, transportation, or use of explosives, certifications for blasters, and provisions for storage, construction and maintenance of magazines.

**O. Equipment Safety Procedures.** The following provisions shall apply to all work on the project, including but not limited to, the activities of all Subcontractors, Manufacturers, Fabricators, Material Suppliers, independent truckers and owner-operators. The Contractor shall include the proposed equipment safety procedures in the Project Safety and Health Plan.

- A spotter shall guide the backing of any vehicle or equipment with restricted visibility to the rear. This rule applies in any location where workers on foot, pedestrians, private vehicles or similar hazards may be present.
- If the operator loses visual contact, the vehicle shall immediately be brought to a full stop until visual contact with the spotter is reestablished.
- Dump truck boxes may be raised only under the control of a spotter, unless the vehicle is in an area clearly marked to be free of overhead wires and safe for dumping.
- Dump truck boxes shall be lowered prior to moving, except when dumping into a paver or similar operations, under the control of a spotter.
- All excavating, lifting and similar equipment shall comply with electrical safety requirements, and shall operate under the control of a spotter whenever working within 5m of an overhead line. The distance shall be measured as a slope distance perpendicular from the conductor to the nearest point on the vehicle.
- Any operator found in violation of the above rules by the Engineer or his/her representative will be removed from the project immediately, and will not be allowed to work on any Department project for a minimum of one (1) year.



**P. Lifting.** The following shall apply for all lifting operations when utilizing lift equipment. Lift equipment for this lifting paragraph shall be defined as equipment capable of lifting an item more than five meters high, has the ability to swing or rotate a boom, and has a maximum rated lifting capacity exceeding one metric ton. All lift provisions of the Steel Construction Manual and the Prestressed Concrete Construction Manual remain in effect. This paragraph does not pertain to lifting operations covered under Section 585, *Structural Lifting Operations*, nor ordinary excavation operations. This paragraph does apply however to cranes with either fixed or swinging leads that are dedicated to pile driving operations.

**1. Competent Person.** The Contractor shall designate, to the Engineer, one person, who is competent in lifting operations, to be completely in charge of each lifting operation. In general, Competent Person shall mean one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. The Competent Person shall have the authority to take an unsafe piece of equipment out of service until the hazard is eliminated. The Competent Person shall be knowledgeable about lifting equipment and equipment operations, Manufacturer's specifications and recommendations, and have a thorough knowledge of the requirements, regulations and standards governing his/her duties. The Competent Person shall, as a minimum, have the ability to interpret load charts, calculate lift loads, recognize overhead wire hazards and know all aspects of the rigging.

The Competent Person shall inspect all lift equipment prior to and during usage to make sure the equipment is in a safe operating condition.

**2. Lift Equipment.** Lift equipment shall have durable, legible load charts which shall have been prepared by either the equipment manufacturer or a Professional Engineer. If manufacturer's load charts are unavailable, charts may be prepared by a Professional Engineer. The Professional Engineer shall utilize the same factors of safety against overturning as the equipment manufacturer. The charts shall be attached to the equipment in a location accessible to the operator while at the controls. The charts shall contain a full range of load ratings at all stated operating radii. The charts shall also note conditions such as outriggers, counter weights, and work area, i.e., over side, over front, or over rear of equipment.

Equipment may lift loads up to those indicated on the manufacturer's or Professional Engineer's load chart if the equipment has the following safety devices and the safety devices are operating:

- a. Load and radius measuring device pre-programmed to continuously relate the measured data to the load radius chart as a direct reading of load or percentage of the rated load, and connected to a warning light and an acoustical signal located at the operator's position or in the cab to indicate overload.
- b. A device that continuously indicates the levelness of the machine and is visible from the operator's controls.

Lift equipment with non-operational safety devices or no safety devices shall be operated at levels not to exceed 78 percent of the Manufacturer's or Professional Engineer's load charts. This equipment shall have a separate load chart labeled "78% Load Chart" and it shall be attached to the equipment.

Lift Equipment with operational safety devices that is operating from a barge shall utilize a manufacturer's or Profession Engineer's load chart that is established specifically for operating from a barge. Lift Equipment on barges with non-operational safety devices or no safety devices shall operate at 78 percent of the Manufacturer's or Professional Engineer's load chart for working on barges. This equipment shall have a separate load chart labeled "78% Load Chart for Equipment on Barges."

Equipment used for lifting over a railroad shall be restricted such that the operational capacity shall be limited to 66 2/3% of its tipping load as specified in §105-09, *Work Affecting Railroads* or be limited to the load limits indicated in the previous three paragraphs, whichever is lower.

**3. Lift Plan.** A Lift Plan is necessary only when required by a contract pay item specification, the Steel Construction Manual, or Prestressed Concrete Construction Manual. The Contractor shall submit erection drawings, demolition plans or other information as required, which detail the lifting procedure or lift plan. This information shall be submitted to the Engineer 30 days prior to the commencement of erection or demolition work, for review and approval by the Department and, when applicable, any railroad affected by the proposed procedure.

Structural elements shown on shop drawings and erection drawings may have units expressed in both metric and English units, however metric measurements or dimensions shall control.

As a minimum, the information in the submittal for a lift plan shall include the following:

- a. Plan of the work area showing support structures, roads, railroad tracks, canals, streams and utilities.
- b. Lift radii and pin locations.
- c. Length of boom.
- d. Counterweight size and location.
- e. Lift configuration(s).
- f. Location of trucks for delivery or removal of materials.
- g. Restrictions on swing radii.
- h. Sectional views of all lifts where electrical facilities are within a 5 meter radius of any part of the lifting equipment or object being lifted.
- i. Wind restrictions if they are a requirement of the Manufacturer's lifting notes.
- j. Catalog cuts for all lifting devices shown on the drawing.
- k. All pertinent rigging with dimensions.
- l. Equipment such as rigging, beam clamps, jibs, swing-away, super-lifts, additional blocks, cheek plates, headache balls, and additional cables at the time of the lift shall be included as part of the load and shall be indicated as such.
- m. Position of outriggers and outrigger supports.
- n. Outside dimension of tracks for track mounted lifting equipment.
- o. Parts of line for hook block.
- p. A comparison of total lift weight vs. lifting equipment capacity for the pick radius.
- q. Maintenance and protection of traffic provisions specifically required for the lift.

When the lifting operation imparts loads on a structure, false work or utility, when there is a two machine lift, or when a slider beam is used, the Contractor shall submit calculations which show that the proposed operation is safe and/or that the operation will not cause an overstress condition. The calculations and any supporting drawings or other information shall be stamped and signed by a Professional Engineer. Any and all alterations or modifications to a lift plan shall be signed and stamped by a Professional Engineer if the originally approved lift plan was prepared and signed by a Professional Engineer. The Engineer shall be notified of any alterations or modifications.

**4. Pre-Lift Meeting.** A pre-lift meeting will be required for projects that require a lift plan. The Competent Person, and other appropriate contractor staff, shall attend the pre-lift meeting with the Engineer, as well as representatives from the utilities and railroads if deemed applicable, five work days before lifting operations are to be performed. The meeting shall include but not be limited to: the review of site conditions, erection or demolition plans, lift loads vs. lift equipment capacity, obstructions, utilities, traffic concerns, and the roles of Department and Contractor personnel.

**5. Lift Operations.** The Competent Person shall be present for all lifting operations. If a crane is utilized in a lifting operation, or a crane with either fixed or swinging leads is utilized in a pile driving operation, the operator shall present to the Engineer a valid New York State Certificate of Competence to operate a crane, except an individual operating a crane within a city having a population of one million or more. Individuals operating a crane within a city having a population of one million or more shall present the Engineer with a valid license or certification to operate a crane issued by such city. If there are any other local crane license requirements,

they too shall be presented to the Engineer. In addition, a copy of the annual inspection report of the crane shall be readily available and provided upon the Engineer's request.

Any discrepancies between the Lift Plan and the actual lift conditions shall be reported immediately to the Competent Person in charge of the lift operations and to the Engineer. The operation shall not proceed until all issues are resolved to the satisfaction of the Engineer.

**Q. *Histoplasmosis.*** Histoplasmosis is a fungal infection caused by a soil organism found in large masses of bird or bat droppings, and is a potential health hazard in areas where birds or bats have nested for long periods. Such conditions are often found on bridge structures, in barns, farm buildings and cold storage facilities, areas with small amounts of dried droppings pose minimal hazard. Airborne material may enter the body by inhalation or ingestion.

Prior to work in any area where birds or bats nest, the Contractor shall conduct a thorough inspection to determine if, and to what extent there is a build-up of droppings. Workers conducting an inspection shall be equipped with personal protective equipment, which include gloves, rubber boots, rain suit components, goggles and a dust/nuisance respirator. Questions regarding proper equipment for this activity shall be directed to the Engineer.

If substantial material is found, the Contract shall clean the work area using a high powered water hose or by scraping. If the material is to be scraped away, it shall be kept wet during the entire process. Workers engaged in cleaning activity shall wear personal protective equipment specified above. Application of a cleaning agent (bleach, for example), before removal may help dissolve the material, and a disinfectant shall be applied to cleaned surfaces. Compressed air shall not be used to remove pigeon droppings because it produces airborne particles.

When cleaning has been successfully completed, the personal protective equipment specified above is no longer required. Employees engaged in cleaning, or any other activity which involves exposure to pigeon droppings, shall observe a high degree of personal hygiene, even if the exposure is casual. Special care shall be taken to wash hands thoroughly before eating or smoking.

**R. *Confined Spaces.*** Confined spaces are defined as any space having limited means of egress, which is subject to the accumulation of toxic or flammable contaminants or has an oxygen deficient atmosphere. Confined spaces include, but are not limited to: sanitary sewers, sanitary manholes and structures, drainage lines and drainage structures, underground utility vaults, enclosed bridge beams and heated enclosures. All personnel required to enter confined spaces shall be instructed as to the nature of the hazards, the necessary precautions and in the use of protective and emergency equipment required.

Fuel-fired heated enclosures are frequently constructed to provide the requirements for winter concrete placement or similar operations. The Contractor shall provide adequate ventilation to maintain acceptable air quality or conduct air quality monitoring when heaters are or have been operating prior to personnel entry. If acceptable air quality cannot be verified, then appropriate respirators shall be worn. No worker shall enter a confined, heated space unless that space can be ventilated or the worker removed from outside the enclosure if the worker is overcome by fumes. Particularly during off-shift hours, no worker shall enter an unventilated, heated enclosure unless another worker is present immediately outside the enclosure. All unnecessary combustibles and debris shall be removed from the enclosure and escape exits shall be provided so workers can escape safely if a fire starts, prior to heating.

**S. *Fire and Explosion Prevention.*** The Contractor shall ensure that combustibles do not accumulate. Flammable materials shall be handled and stored as required by OSHA regulations. "No Smoking" signs shall be posted and enforced wherever flammable materials are stored or used. Fire extinguishers shall be provided and maintained throughout the site, in accordance with the requirements of 29 CFR 1926, Subpart F. Fires will be considered, as a minimum, a near-miss accident, and therefore shall be reported in accordance with existing reporting requirements.

During refueling, all possible sources of ignition, including, but not limited to sparks, open flames and electrical equipment shall be eliminated. Fuel containers shall be grounded to the tank to prevent static electrical sparks. A "No Smoking or Open Flame" sign shall be posted conspicuously in the vicinity of refueling operations.

Cutting and welding equipment shall be stored according to recognized safety standards. Any defective tanks or equipment shall be removed to a safe storage area immediately until repairs are made. When cutting or burning is underway, steps shall be taken to ensure that sparks do not ignite combustibles.

**T. Pavement Striping.** The Contractor's striping safety procedures shall be spelled out, as appropriate, in the Project Safety and Health Plan. For polyester striping operations, specific procedures for the safe handling and storage of MEKP (organic peroxides) shall be addressed in the Contractor's project safety and health plan. The equipment shall be carefully inspected by a person knowledgeable about striping operations and trained on safe operating and emergency procedures prior to the start of work to ensure safety features are in place. All appropriate Material Safety Data Sheets and safety operations manuals shall be present in the cab of the striper at all times. All required placards and warnings shall be in place and clearly legible at all times.

**107-06 INSURANCE.**

The Contractor shall procure and maintain, at its own expense and without expense to the State, insurance for liability for damages imposed by law, for the work covered by the contract, of the types and in the amounts hereinafter provided, covering all operations under the contract whether performed by it or its Subcontractors. Insurance shall be procured from insurance companies authorized to do such business in the State and shall be maintained until contract final acceptance by the State. Before commencing work, the Contractor shall furnish to the Commissioner a certificate or certificates of insurance, in form satisfactory to the Commissioner, showing that it has complied with this subsection, which certificate or certificates shall provide that the policies shall not be changed or canceled until thirty (30) days written notice has been given to the Commissioner. All policies supplied under the provisions of this Section shall be endorsed to provide for the above 30 day written notice of cancellation or change provisions.

The types of insurance are as follows:

**A. Workers' Compensation Insurance.** A policy covering the obligations of the Contractor in accordance with the provisions of the Workers' Compensation Law and the Disability Benefits Law, covering all operations under the contract, whether performed by it or its Subcontractor(s). The contract shall be void and of no effect unless the person or corporation making or executing same shall secure compensation and disability benefits coverage for the benefit of, and keep insured during the life of said contract, such employees in compliance with the provisions of the Workers' Compensation Law (State Finance Law Section 142).

**B. Liability and Property Damage Insurance.** Policies shall follow the current 1986 Insurance Services Office (ISO) format. Unless otherwise specifically required by special provision, policies shall not be amended or contain deductible clauses or coverage exclusions of any nature and shall have limits not less than:

***Bodily Injury and Property Damage Liability Combined Single Limit***

<b><i>Each Occurrence</i></b>	<b><i>Aggregate</i></b>
\$1,000,000	\$2,000,000

For all damages arising during the policy period, insurance shall be furnished in the types (1.) through (6.) as described below. An umbrella type policy, dedicated to the contract, may be used to meet these limits.

1. a. *Contractor's Liability Insurance.* A policy issued to and covering the liability for damages imposed by law upon the CONTRACTOR with respect to all work performed by it under the contract agreement;
- b. *Contractor's Liability Insurance.* A policy issued to and covering the liability for damages imposed by law upon EACH SUBCONTRACTOR with respect to all work performed by said Subcontractor under the contract agreement;

**2. Owners Protective Liability Insurance.** A policy issued to and covering the liability for damages imposed by law upon The People of the State of New York, the State of New York, the Commissioner of Transportation, all employees of the Department of Transportation both officially and personally, any municipality in which the work is being performed, any public benefit corporation, railroad, public utility whose property or facilities are affected by the work, any consultant inspecting engineer or inspector working for or on the contract, and their agents or employees, with respect to all operations under the contract agreement by the Contractor or its Subcontractors, including omissions and supervisory acts of the State, municipality, public benefit corporation or consultant. Specifically, this includes, but is not necessarily limited to the parties listed in the Special Note entitled *Additional Insured Parties*. Failure to list a firm, organization or municipality, etc. does not eliminate the requirement to provide such coverage.

If the Contractor elects to use the same policy for more than one contract, it shall provide, with the insurance certificate, the Aggregate Limits of Insurance Endorsement (per contract) indicating the specific contract site and contract number;

**3. Contractor's Protective Liability Insurance.** A policy issued to and covering the liability for damages imposed by law upon the Contractor with respect to all work under the contract agreement performed for the Contractor by Subcontractors;

**4. Completed Operations Liability Insurance.** A policy issued to and covering the liability for damages imposed by law upon the Contractor and each Subcontractor arising out of that part of the work performed by each between the date of final cessation of the work and the date of final acceptance thereof;

**5. Commercial General Liability Insurance.** A policy issued to and covering the liability for damages imposed by law upon The People of the State of New York, the State of New York and the Commissioner of Transportation and all employees of the Department of Transportation both officially and personally, any municipality in which the work is being performed, any public benefit corporation, railroad, or public utility whose property or facilities are affected by the work, or any consultant inspecting engineer or inspector working for or on the project, and their agents or employees, with respect to temporarily opening any portion of the State construction project under this contract agreement, until the construction or reconstruction pursuant to the contract agreement has been accepted by the State. Specifically, this includes, but is not necessarily limited to the parties listed in the Special Note entitled *Additional Insured Parties*. Failure to list a firm, organization or municipality, etc. does not eliminate the requirement to provide such coverage. This coverage will not be required for contracts involving only turf establishment, landscaping, or traffic signals, which do not involve work on the roadway.

**6. Automobile Liability and Automobile Property Damage Insurance.** A policy covering all owned, non-owned and hired vehicles used in connection with the work covered by the contract documents, bearing, or required by NYS Motor Vehicle Law to bear, license plates under the circumstances for which they are being used.

#### **107-07 PROTECTION OF UNDERGROUND FACILITIES.**

The Contractor shall use the necessary precautions to prevent damage to pipes, conduits, and other underground facilities. All costs associated with verification of the location of underground facilities pursuant to 16 NYCRR 753 *Protection of Underground Facilities*, as amended, shall be included in the prices bid for the respective contract items involved unless separate payment is otherwise provided for in the contract. The Contractor shall provide access to Public Service Commission personnel to examine and inspect excavation and demolition methods used within 4.5m (15 feet) in any direction of any underground facility.

**A. One-Call.** Pursuant to 16 NYCRR 753 *Protection of Underground Facilities*, prior to non-emergency excavation, subsurface exploration of any kind, or installation below existing grade, including, but not limited to; digging, auguring, backfilling, boring, drilling, excavation, grading, jack hammering, pipe jacking, pavement milling, pile driving, plowing in, pulling in, sawcutting, tree root

removal, trenching, tunneling and the installation of guiderail posts, sign posts, fence posts or underground conduit, the One-Call notification system shall be notified of the date and location of the proposed work. The Contractor shall contact the One-Call notification system serving the area a minimum of 2 days and a maximum of 10 days, not including the date of the call, prior to work. The Contractor shall mark proposed locations of excavation, or other activity listed above, with white paint, white stakes or other indications as agreed to by the Utilities to facilitate the work of underground utility designation. Utilities that do not belong to the One-Call notification system shall be contacted separately. The Town, City or County may be contacted to obtain a list of Utilities. If additional work is required, and staking, marking or other designation has been lost, the Contractor shall contact the One-Call notification system for subsequent designation. If an underground facility has been designated, but the Contractor cannot physically locate the facility, the Utility shall be notified, so that the designation can be verified. If an unmarked or unknown facility is discovered during the course of the Contractor's operations, the Utility or suspected Utility shall be notified. If the owner cannot be determined, the One-Call notification system shall be notified. The Contractor shall support and protect from damage all exposed underground facilities. The Contractor shall notify the Engineer of any accidental contact with or potential damage to any underground facility, regardless of whether the damage is visible or not.

The Contractor shall provide to the Engineer, in writing, the information provided to the One-Call notification system, or the Utility if it is not a One-Call notification system member, and the control number issued for each call placed to request designation of underground facilities. The Contractor shall protect and preserve designations until no longer required for safe work near the underground facility.

The Contractor shall identify and provide to all forepersons and equipment operators, a list of emergency phone numbers for each Utility having facilities within the contract limits. Supervisors shall periodically review the location of underground facilities with all workers who are subject to exposure, including new employees. If the Contractor fails to notify the One-Call notification system or a non-member Utility prior to excavation or activity listed above, a Stop Work Order will be issued in accordance with the provisions of §105-01 *Engineer's Authority*. Prior to lifting the Stop Work Order, the Department will consider convening a show cause meeting, at its convenience, to consider possible worker dismissal in accordance with §105-02 *Character of Workers* or contract termination in accordance with Article 11 *Right to Suspend Work and Cancel Contract* of the contract agreement.

**B. Verification.** Pursuant to 16 NYCRR 753 *Protection of Underground Facilities*, the Contractor shall verify precise location, size, depth and direction of run of an underground facility or its encasement, by hand shovel or vacuum excavation, prior to the use of powered equipment or the installation of any proposed work, including the projected line of a trenchless installation such as boring or drilling, within the tolerance zone. Powered equipment may be used to remove pavement or masonry within the tolerance zone, but only to the depth of such pavement or masonry. Powered equipment shall not be used within 100 mm of the verified location of an underground facility.

**C. Contact or Damage.** Pursuant to 16 NYCRR 753 *Protection of Underground Facilities*, the Contractor shall, in the event of contact or damage to an underground facility, immediately notify the Utility and the Engineer, suspend excavation or demolition in the immediate vicinity of the contacted or damaged facility and take such emergency actions as are warranted to protect all endangered persons to the best of its ability.

**D. Pressure Pipes.** Pressure pipes shall not be pressurized without being adequately restrained against movement, and no personnel shall be allowed in a trench or area containing a pressure pipe during initial pressurization until the pipe has been fully pressurized. Particular attention shall be paid to fittings and bends that create a thrust, which, if improperly restrained, may cause the pipe joints to separate and injure nearby personnel.

**E. Quality Level Designations.** The quality of information gathered about underground utilities is shown on contract plans using a Quality Level Designation. The Quality Level Designation may be different within the same area for different underground utilities, depending on the accuracy and availability of information. Below are the Quality Level Designation definitions:

**1. Quality Level A.** Quality Level A is the highest degree of accuracy. The information shown on the plans has been obtained by the actual exposure (or verification of previously exposed and surveyed utility facilities) of subsurface utilities, using (typically) minimally intrusive excavation equipment to determine their precise horizontal and vertical positions, as well as their other utility facility attributes. Shown on contract plans as QLA.

**2. Quality Level B.** Quality Level B is the second highest degree of accuracy. The information shown on the plans has been obtained through the application of appropriate surface geophysical methods (i.e., underground cameras, radar, sonar, tone outs, etc.) to identify the existence and appropriate horizontal position of subsurface utility facilities. Quality Level B data are reproducible by surface geophysics at any point of their depiction. The information was surveyed to applicable tolerances and reduced onto the plans. No excavations were performed. Shown on contract plans as QLB.

**3. Quality Level C.** Quality Level C is the third highest degree of accuracy. The information shown on the plans has been obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to Quality Level D information. Shown on contract plans as QLC.

**4. Quality Level D.** Quality Level D is the lowest degree of accuracy. The information shown on the plans was derived solely from existing NYSDOT and/or utility company records or recollections. Shown on contract plans as QLD.

#### **107-08 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE.**

The Contractor shall protect and preserve all public and private property, including all existing vegetation, existing landscape features, and monuments within, along, and adjacent to the highway right of way. The Contractor shall use every precaution necessary to prevent damage, injury, pollution or destruction; shall protect all trees and other woody plants which are to remain; and shall take special care to protect the natural vegetation and surroundings including all natural drainageways, waterways, wetlands, woods and fields. The Contractor shall store materials in such a manner as to prevent leaching which would be injurious to water, soils, and plants.

**A. Within the Right of Way.** Before beginning the use of any area within the right of way, but not within the limits of disturbance shown in the contract documents, the Contractor shall obtain the written approval of the Engineer. Before beginning the use of any area within the right of way, but outside the contract limits, the Contractor shall obtain the written approval of the Department through modification of the contract limits by order-on-contract or the issuance of a highway work permit.

Approval will not be given if the area is not suitable for acceptable restoration or if serious or permanent environmental damage is foreseeable. This applies to areas such as, but not limited to: borrow areas, spoil areas, equipment and/or material storage areas, haul roads, batching areas, water points, shop areas and all similar areas.

Where a contract pay item for turf establishment is not included in the contract, disturbed earth areas within the work limits shall be graded and seeded as specified for the standard turf establishment item. The cost of this work shall be included in the prices bid for the various items in the contract and no separate payment will be made therefore.

**B. Outside the Right of Way.** The Contractor shall notify the Engineer of the use of any specific area outside the right of way before work in any such area is begun, except areas which have been or are being used by the Contractor as its established and permanent headquarters, equipment storage sites or to commercial borrow sources, commercial gravel pits, commercial quarries, and all similar areas. The Contractor shall provide the Engineer with a copy of any permit application or notice of intent, without attachments.

In accordance with the SPDES General Permit for Stormwater Discharges from Construction Activity, any construction activity that results in a soil disturbance of more than 0.4 Ha (1 acre) on a single property will require SPDES permit coverage from the NYS Department of Environmental

Conservation (NYSDEC). When SPDES permit coverage is required, the property owner, as the "Operator" must develop and implement a NYSDEC approved stormwater pollution prevention plan (SWPPP) and conduct required periodic inspections until the permit coverage is terminated.

In accordance with the Mined Land Reclamation Law, (Environmental Conservation Law Article 23, Title 27), all borrow pits and aggregate sources outside of the State right of way, where more than 910 metric tons or 570 cubic meters (1,000 tons or 750 cubic yards), whichever is less, of minerals are removed from the earth within any twelve successive calendar months, require mining permits obtained from NYSDEC. When a mining permit is required, the Contractor, in addition to complying with restoration requirements for all areas as stated below, may be required by the Engineer to meet pertinent standards contained in the law and/or 6 NYCRR Part 420 et. seq.

Where borrow pits result in the formation of ponds or low areas intermittently filled with water, the Contractor shall furnish the Engineer with a copy of its agreement with the landowner permitting the use of such areas. If such an area is within sight of any highway, the Regional Director's written approval shall be obtained prior to the removal of borrow from such a location. If such approval is not granted, material for use on the contract or for any other State contract may not be removed from the area. If the Contractor removes material from such an area without the written approval of the Regional Director, payment will not be made for any item of work in which the material has been used. Grading plans may be required for such areas and due consideration given to the appearance of the areas if they are visible from any highway.

**C. Restoration.** All areas disturbed by the Contractor shall be restored to a pleasing and acceptable condition, particularly those areas within sight of the finished highway or any other highway. All such areas shall present a pleasing appearance to travelers on any highway. Where deemed necessary by the Engineer, the Contractor shall submit a grading plan. Grading plans shall include the sequence of operations, the erosion and sediment controls, final slopes and surface restoration details.

Because the extent of such areas and the use and treatment during construction is within the discretion of the Contractor, within the limitations and requirements outlined, no direct payment will be made for any labor, material or equipment necessary for the restoration of these areas. The cost of the work shall be included in the amount bid for other items of work. Work shall be done in general accordance with the Department's specifications for similar items of work.

The Contractor shall repair all injuries to woody plants which are to remain by approved horticultural methods; and shall scarify the compacted soil and regrade so as to restore the property to a natural condition. Where the soil over the root area of trees to be preserved has been compacted, it shall be restored by proper cultivation to a condition to permit the entrance of water and the proper aeration of roots.

In general, the restoration of disturbed areas shall include:

1. The removal of all equipment and parts, junk, rubbish, excess materials and debris of all kind;
2. Clean up as required, grading as shown on a grading plan if required; or graded so as to blend into the surrounding ground forms;
3. Scarification of yards, batch sites, haul roads, etc., to the depth necessary to support vegetation;
4. The removal of pavement or granular surfacing from, and regrading of, temporary roads or areas;
5. The repair/removal of damaged trees;
6. The fertilizing, seeding and mulching of disturbed areas;
7. Grading the slopes of excavated areas to a stable condition, but in no case shall earth cut faces be left steeper than one (1) vertical on one and one-half (1.5) horizontal. All rock cut slopes shall be scaled to remove any loose or unstable rock.

The restoration of disturbed areas shall be accomplished prior to contract final acceptance. The work of restoring Contractor's work areas (storage, batching, equipment, shop areas, etc.) may be done after contract final acceptance, but shall be completed prior to execution of the final agreement.

#### **107-09 DAMAGE.**

All damage, direct or indirect, of whatever nature resulting from the performance of the work or resulting to the work during its progress from whatever cause, including omissions and supervisory acts



of the State, shall be borne and sustained by the Contractor, and all work shall be solely at its risk until it has been finally inspected and accepted by the State except that:

**A. Damage by Public Traffic.** Payment shall be made to the Contractor for repair or replacement of any permanent element of the highway which is completed to the stage of serving its intended function and is subsequently damaged by accident by public traffic. The Contractor must supply satisfactory evidence that such damage was caused by a public traffic accident and not by vandalism or by the Contractor's equipment. Satisfactory evidence shall generally be limited to: accident reports filed with the NYS Department of Motor Vehicles, police agencies or insurance companies; statements by reliable, unbiased eye witnesses; or identification of the vehicle involved in the accident. Physical evidence that the damage was caused by a motor vehicle (such as tire marks or broken headlight glass) will not be sufficient unless it can be shown that the damage was not caused by the Contractor's vehicles or by vandalism.

Work for which there is a bid item will be paid for at the unit price for that item. Work for which there is no bid item will be paid for at an agreed price or by means of force account. Payment will not be made for repair or replacement in any way connected with untimely failure of any portion of the highway under public traffic, and the determination regarding this matter shall be made by the Regional Director, taking into consideration the normal life and the amount of normal wear of the element involved. This provision does not relieve the Contractor of the responsibility of maintenance and protection of traffic for the contract or the responsibility of having wholly complete and acceptable work at the time of final inspection and contract acceptance. Payment for such damage shall be made only after the Contractor has demonstrated to the satisfaction of the Regional Director that it had made every reasonable effort to collect the costs from the person or persons responsible for damage.

The Contractor shall not be responsible for damages resulting from faulty designs as shown in the contract documents nor damages resulting from willful acts of Department officials or employees and nothing in this paragraph or contract shall create or give to third parties any claim or right of action against the Contractor or State beyond such as may legally exist irrespective of this paragraph or contract.

**B. Damage by Occurrence.** In the event that damage to the work in progress is caused by an Occurrence, as hereinafter defined, and to the extent that such damage has been determined by the Department to be beyond that which may be anticipated from heavy storms, and also to the extent that such damage is not reimbursable by insurance carried by the Contractor, the Contractor may apply to the State to pay or participate in the cost of repairing the damage to the work, unless such damage is caused by the Contractor's action or inaction or the Contractor's means and methods of construction. At the sole discretion of the Department, terminate the contract may be terminated and the Contractor relieved of further obligation to perform the work, subject to the following:

**1. Occurrence.** Occurrence shall include only those floods, droughts, tidal waves, fires, hurricanes, earthquakes, windstorms or other storms, landslides or other catastrophes when such occurrences or conditions and effects have been proclaimed a disaster or state of emergency by the President of the United States, or the Governor of New York State, or the Federal Highway Administrator, or the chief executive of a county or city.

**2. Application by Contractor.** The Contractor's written request for the State to pay or participate in the cost of rebuilding, repairing, restoring or otherwise remedying damage to the work caused by an occurrence shall be submitted to and approved by the Commissioner before performing any work other than emergency work, including emergency work necessary to provide for passage of public traffic.

**C. Obligation to Indemnify by the Contractor.** The Contractor shall indemnify and save harmless the State, except as prohibited by law, any municipality in which the work is being performed, and/or any public benefit corporation, railroad, or public utility whose property or facilities are affected by the work, from suits, claims, actions, damages and costs, of every name and description resulting from the work under its contract during its prosecution and until the acceptance

thereof. The Contractor and any assigns, heirs, or successors in interest shall also indemnify and save harmless, except as prohibited by law, the consultant inspecting engineer or inspector working for the State relative to the project from suits, claims, actions, damages and costs involving personal injury and property damage resulting from the Contractor's work under the contract during its prosecution and until the acceptance thereof. The State may retain such monies from the amount due the Contractor as may be necessary to satisfy any claim for damages recovered against the State, any municipality in which the work is being performed, and/or any public benefit corporation, railroad or public utility whose property or facilities are affected by the work or consultant inspecting engineers or inspectors working for the State relative to the project. The Contractor's obligation under this paragraph shall not be deemed waived by the failure of the State to retain the whole or any part of such monies due the contractor, nor where such suit, action, damages and/or costs have not been resolved or determined prior to release of any monies to the Contractor under the contract, nor shall such obligation be deemed limited or discharged by the enumeration or procurement of any insurance for liability for damages imposed by law upon the Contractor, Subcontractor or the State, any municipality in which the work is being performed, and/or any public benefit corporation, railroad or public utility whose property or facilities are affected by the work, or any consultants or contract engineers working for the State relative to the project.

The Contractor has the obligation, at its own expense, for the defense of any action or proceeding which may be brought against the parties specified in this Section. This obligation shall include the cost of attorney fees, disbursements, costs and other expenses incurred in connection with such action or proceeding.

Such obligation does not extend to those suits, actions, damages and costs of every name which arise out of the sole negligence of the State, any municipality in which the work is being performed, and/or any public benefit corporation, railroad or public utility whose property or facilities are affected by the contract work, or any consultants or contract engineers working for the State relative to the project, their agents or employees, relative to the construction, alteration, or repair or maintenance of a building, highway or structure and appurtenances and appliances thereof including moving, demolition and excavating connected therewith.

***D. Prompt Response to Claims by the Public.*** The Contractor's responsibility for the contract site applies to the full limits of the contract regardless of the extent or nature of contract work at a particular location. This obligation begins when the contract is awarded and continues until final acceptance of the work. The Contractor shall promptly address all written damage claims of the public and, if not addressed directly, claims shall be promptly turned over to the Contractor's insurance carrier without prejudicing the validity of the claim. There should be an interval of no more than ten (10) working days between receipt of a written claim by the Contractor and receipt by the carrier. The Contractor and/or the Insurance Carrier are expected to investigate, determine and adjust such claims promptly and fairly with notice to the Engineer. The Engineer will monitor claims by the public. If the Contractor fails to provide satisfactory resolution through a timely claims adjustment process or denies the claim without proper cause and justification, the Department may invoke Article 8 of the contract or utilize other remedies.

#### **107-10 MANAGING SURPLUS MATERIAL AND WASTE.**

The Contractor shall manage all surplus materials and waste generated in the performance of the contract in accordance with applicable federal, state, and local laws and regulations. Nothing herein is intended to prevent the Contractor from removing surplus materials or waste to appropriate off-site locations for beneficial reuse, recovery, or recycling purposes. The Contractor is encouraged to reuse, salvage or recycle materials to the maximum extent possible. Surplus or used materials generated from Department contracts that are easily recognizable, maintain their physical properties, are easily separated and transported, and have value as commodities are often recycled. These include metals (steel, iron, etc.), recycled asphalt pavement (RAP) in the form of chunks or millings, and recycled portland cement concrete aggregate (RCA). Surplus and used materials, unless identified otherwise, become the property of the Contractor. In accordance with 6 NYCRR 371.1(e)(1)(xiii) excluded scrap metal is not solid waste when being recycled.

Waste Management shall mean the collection, transportation, transfer, processing, recovery, storage, reclamation, treatment, handling and disposal of waste whether performed directly by the Contractor or

others. Unless otherwise noted in the contract documents, all materials or substances that are spent, useless, worthless, or in excess to the Department, including materials generated on-site by the Department's contract supervision and inspection activities, are covered by this subsection.

Unless specifically noted in the contract documents, it is not guaranteed that placement of surplus materials or spoil will be allowed within the right of way. Payment for managing surplus material and solid waste shall be included in the various contract pay items. The absence or unavailability of disposal areas on the contract site or the refusal of a permitted solid waste management facility to accept waste will not be the basis for a dispute for additional compensation for the disposal of wastes.

**A. Excess Soil and Rock.** Excess soil and rock may be generated by construction activities associated with Department contracts. Excess soil and rock may be presumed uncontaminated absent records, existing data, or knowledge/observation to the contrary. These materials may be excess because the quantity available exceeds the quantity required, or they do not have the engineering properties required for use, or they may not be of economic value in the current location, such as when the cost to transport the material approaches or exceeds its sale value. Provided these materials are uncontaminated, in accordance with 6 NYCRR 360-1.15(b)(7) they are not considered waste when used as fill material. These materials may be sold ("placed in commerce") to a consumer and the consumer is responsible for its use/placement.

**B. Spoil.** Spoil may include excess soil and rock, and contains recognizable, uncontaminated concrete (including incidental pavement markings), asphalt pavement (including incidental pavement markings), brick, glass or soil materials generated by the cleaning of drainage ditches, culverts, storm sewers, catch basins or related appurtenances. Reinforcing steel embedded in concrete is considered an incidental metal and is included within the definition of concrete. Spoil may be presumed uncontaminated absent records, existing data, or knowledge/observation to the contrary. Spoil shall not be pulverized, shredded, or otherwise processed such that the individual waste components are rendered unrecognizable. Provided spoil is uncontaminated, in accordance with 6 NYCRR 360-1.15(b)(11) these materials are not considered waste when placed in commerce for service as a substitute for conventional aggregate.

Spoil areas for the disposal of excess soil and rock and spoil shall be established and restored in accordance with §107-08 *Protection and Restoration of Property and Landscape*. Excess soil and rock and spoil may be disposed of within the right of way whenever possible to flatten embankment side slopes, or may be disposed of in other locations within the right of way approved by the Engineer, but is not subject to the provisions governing lift placement and compaction. The Department makes no assurance that appropriate spoil areas within the right of way will be available for any individual contract. If no spoil area is available within the right of way, the Contractor shall dispose of these materials elsewhere, subject to appropriate environmental and land use regulations. Excess soil and rock and spoil may be disposed of at a location outside the right of way that takes no compensation, fee or other form of consideration, exempt from permit requirements, in accordance with 6 NYCRR 360-7(b)(1), between the hours of sunrise and sunset.

**C. Construction and Demolition Debris.** In accordance with 6 NYCRR 360-1.2(b)(38), Construction and demolition (C&D) debris is uncontaminated solid waste resulting from land clearing and from the construction, remodeling, repair and demolition of utilities, structures, and roads. C&D debris may include excess soil and rock or spoil, and includes but is not limited to: wood (including painted, treated and coated wood and wood products), land clearing debris, plumbing fixtures, electrical wiring, electrical components containing no hazardous liquids, nonfriable asbestos, wall coverings, plaster, drywall, roofing shingles and other roof coverings and pipes or metal attached to or embedded in these waste materials. C&D debris shall not be pulverized, shredded, or otherwise processed such that the individual waste components are rendered unrecognizable. C&D debris shall be disposed of in an permitted C&D waste management or processing facility. Nonfriable asbestos shall be disposed of at permitted C&D waste management facility. If a C&D waste facility is not available, C&D debris may be disposed of at a solid waste facility.

Unadulterated wood chips and mulch used for mulch, landscaping, or erosion control purposes are not solid waste. Trees, stumps, wood chips and yard waste generated from activities within the right of way may be disposed of in spoil areas within the right of way only, but are not subject to the

provisions governing lift placement and compaction. Spoil areas shall be established and restored in accordance with §107-08 *Protection and Restoration of Property and Landscape*. These materials may also be disposed of at a permitted C&D or solid waste management facility.

In Nassau and Suffolk Counties all C&D debris shall be disposed of only in a C&D landfill or processing facility permitted by the NYS Department of Environmental Conservation (NYSDEC). In addition to the requirements of these specifications, no on-site disposal shall take place in these counties without appropriate notice to the Regional Office of the NYSDEC.

Within the Adirondack Park, construction and demolition debris shall only be deposited in accordance with additional requirements of the Adirondack Park Agency.

**D. Non-Hazardous Solid Waste.** Non-hazardous solid waste includes, but is not limited to: tires, office trash, garbage, roadside litter and street sweepings. The Contractor may collect and store non-hazardous solid waste on the contract site in transfer containers or other appropriate containers pending transportation to a legally permitted solid waste management facility. The Contractor shall meet the following conditions:

- Waste management activities shall be controlled to prevent odors and other nuisance conditions.
- Putrescible solid waste shall be removed when transfer containers are full, or weekly, whichever comes first.
- Non-putrescible solid waste may be collected and stored on the site in a transfer or other appropriate container not longer than 45 days.

**E. Non-Hazardous Industrial Waste.** Non-hazardous industrial waste includes, but is not limited to: asbestos, pavement marking waste, contaminated soil, empty drums and empty fuel tanks. These wastes require disposal at permitted solid waste management facilities or may be used in applications that have received generic or case-specific beneficial use determinations from NYSDEC. A waste transporter permitted by NYSDEC is required for transport of over 225 kg (500 pounds) of waste in a single load to a disposal facility.

**1. Asbestos.** Friable and nonfriable asbestos containing materials (ACM) shall only be handled or packaged for transport by a NYS Department of Labor licensed contractor using certified personnel. Friable asbestos waste shall only be transported by a permitted waste transporter under a waste shipment record and disposed of at a permitted waste management facility approved to accept friable asbestos. Non-friable asbestos shall be transported and disposed of as C&D debris.

**2. Pavement Marking Wastes.** Pavement marking wastes, including millings from the localized removal of only pavement markings and not surface milling, including the pavement material and debris containing the removed markings generated by cleaning and removal operations shall be disposed of as non-hazardous industrial solid waste, at a permitted solid waste management facility, typically a municipal landfill. Pavement marking waste should be collected by typical construction methods such as sweeping and/or vacuuming.

Solid waste management facilities may question whether pavement marking wastes are regulated hazardous wastes because yellow pavement marking products may contain lead and chromium in the pigments. Testing by the Department (toxicity characteristic leaching potential (TCLP)) of yellow pavement marking waste as well as the dried pure paint samples indicated that although it contained lead and chromium, it did not meet the regulatory limit for classification as a hazardous waste and was therefore considered a non-hazardous industrial waste.

**3. Contaminated Soil.** Soil contaminated with petroleum or other non-hazardous materials shall be disposed of as non-hazardous industrial waste at a permitted solid waste management facility or used in applications that have received generic or case-specific beneficial use determinations from the NYSDEC.

**4. Empty Drums or Containers that Previously Held a Known Hazardous Material.** In accordance with 6 NYCRR Part 371.1(h), drums and containers that have had the contents removed by common practices, have less than 25 mm of product residue on the bottom, and less than 3% of the original product are considered “empty” and non-hazardous, even if the material

they previously contained would otherwise have been classified as a hazardous waste. This does not apply to drums or containers that held acutely hazardous wastes. Empty drums and containers shall be recycled or disposed of at a permitted waste management facility. Empty containers may be returned to the manufacturer, sent to a reconditioner or handled as scrap metal, cardboard, etc. and are exempt from waste transporter requirements when destined for such reuse.

**F. Hazardous Waste.** Hazardous wastes are those wastes that are specifically “listed wastes” per 6 NYCRR 371 and/or those that display hazardous wastes characteristics for ignitability, corrosivity, reactivity and/or toxicity.

**1. Generator Status.** Unless specifically noted otherwise in the contract documents, for all contacts that generate more than 100 kg of hazardous waste per month, the Contractor shall comply with the regulations governing a Large Quantity Generator.

- a. Conditionally Exempt Small Quantity Generator (CESQG).* Federal and State hazardous waste regulations classify a CESQG as one that generates less than 100 kg of hazardous waste per month and stores less than 1,000 kg of hazardous waste.
- b. Small Quantity Generator (SQG).* Federal and State hazardous waste regulations classify an SQG as one that generates between 100 and 1,000 kg of hazardous waste per month or stores between 1,000 kg and 6,000 kg of hazardous waste.
- c. Large Quantity Generator (LQG).* Federal and State hazardous waste regulations classify an LQG as one that generates more than 1000 kg of hazardous waste per month.

**2. Hazardous Waste Handling Requirements.** The Contractor shall meet the following hazardous waste requirements:

- a.* Waste shall be properly packaged, with a written description and labeled as hazardous.
- b.* Waste shall be inspected at least weekly while stored on site.
- c.* Waste shall be shipped by a permitted waste transporter with a hazardous waste manifest and required documentation.
- d.* Waste shall be disposed of at a permitted hazardous waste treatment storage and disposal facility (TSDF).
- e.* Waste shall be removed within 90 days after generation, unless a specific contract pay item requires removal sooner.
- f.* Hazardous waste shall be stored on the site of generation until manifested and shipped for disposal. The only exceptions for this are for CESQG wastes which may be temporarily relocated to non-permitted facilities.
- g.* Preparedness and prevention features and contingency planning and emergency procedures shall be developed as per 6 NYCRR 373-3.3 and 373-3.4, respectively.
- h.* Personnel must be trained in hazardous waste management procedures relevant to the positions in which they are employed.
- i.* Appropriate security shall be provided for hazardous wastes while stored on site.

#### **107-11 AIR QUALITY PROTECTION.**

The Contractor shall schedule and conduct activities to minimize impacts to air quality and to prevent hazardous or objectionable air quality conditions within the contract limits and in areas adjacent to or affected by the work. The Engineer will suspend the performance of any construction activity that creates hazardous or objectionable air quality conditions until the unsatisfactory condition has been corrected.

**A. Dust.** The Contractor shall apply pro-active measures to prevent discharge of dust into the atmosphere that unreasonably interferes with the comfortable enjoyment of life and property or is harmful to plants or animals.

**B. Burning.** Any material generated by any activity for the development, modification and construction of any transportation facility shall not be burned on the contract site. This shall include but not be limited to products of land clearing and demolition.

**C. Prevention.** The Contractor shall employ appropriate protection techniques and/or systems to prevent hazardous or objectionable air quality conditions, particularly when conducting drilling, cutting, grinding, abrasive blasting or similar operations that impact air quality.

#### **107-12 WATER QUALITY PROTECTION.**

Water quality protection is a joint responsibility of the Department, as the owner and the holder of environmental permits, and the Contractor, acting as an agent for the Department. The Contractor shall protect all water resources within the contract limits and on lands adjacent to or affected by the work, and take measures to maintain water quality of receiving water bodies.

The Contractor shall schedule and conduct its work to minimize soil erosion, not cause or contribute to a violation of water quality standards and prevent sedimentation on lands adjacent to or affected by the work. Construction of temporary soil erosion and sedimentation control measures, temporary and permanent soil stabilization, construction of drainage facilities and performance of other contract work which will contribute to the control of erosion and sedimentation shall be carried out in conjunction with related construction operations. The area of disturbance at any one time by construction operations shall be kept to a minimum and shall not exceed the limits established in the contract documents or applicable permits.

Prior to the start of related construction, the Contractor shall review the erosion and sediment control plan included in the contract documents, and if necessitated by the Contractor's operations, modify the plan for compatibility with the Contractor's intended sequence of construction operations, to include, but not limited to: construction phases; contract milestones, installation of control measures, clearing and grubbing operations, earthwork, etc. The Contractor's modified erosion and sediment control plan shall be submitted to the Engineer for approval, along with a progress schedule for accomplishment of temporary and permanent erosion and sediment control work in accordance with §108-01 *Progress Schedule*.

Prior to the start of related construction, the Contractor shall submit for approval a proposed plan of erosion and sediment control and water pollution control on material storage areas, haul roads and borrow pits and a plan for disposal of surplus excavated materials within the right of way. The Contractor shall submit for approval the names of individuals who will be inspecting control measures, and a description of their qualifications. The Contractor's erosion and sediment control plan shall be prepared in accordance with Department specifications and the guidance contained in the *New York Guidelines for Urban Erosion and Sediment Control*, latest edition, printed by the Empire State Chapter, Soil and Water Conservation Society, c/o Cayuga County SWCD, 7413 County House Road, Auburn, New York 13021.

No related work shall be started until the erosion and sediment control plans and progress schedules have been approved by the Engineer. As conditions change during construction or work is not progressed in accordance with the schedule, the Contractor shall regularly submit a progress schedule update in accordance with §108-01 *Progress Schedule* and an updated erosion and sedimentation control plan, as necessary, for approval by the Engineer.

The Contractor's operations shall be carried out in accordance with the approved erosion and sediment control plans, progress schedule, contract documents and permits. The Contractor shall be guided by, but not limited to, the following:

**A. Permits.** All applicable statutes, regulations, permits and approvals of the NYSDEC, other water quality management agencies and fish and wildlife agencies shall be complied with in the performance of the contract. Care shall be taken so as not to cause turbidity that will result in a visible contrast to the natural conditions of a waterway or impoundment, cause sedimentation or impair the waters for their best usages.

**B. Borrow or Spoil Areas.** Erosion and sediment control of borrow areas, spoil areas and construction roads shall be conducted both during and after completion of the work, to minimize soil erosion and not cause or contribute to a violation of water quality standards and prevent sedimentation on lands adjacent to or affected by the work.

**C. Fording.** Fording of waterways may require a permit from NYSDEC, and will not normally be allowed, therefore, temporary bridges or other structures shall be used where a waterway crossing is

necessary. Unless otherwise approved in writing by the Engineer, the Contractor shall not ford or operate mechanized equipment in waterways.

**D. Work Areas Adjacent to Waterways.** When work areas, borrow areas, spoil areas or gravel pits are located in or adjacent to waterways or impoundments, such areas shall be separated from the rest of the waterway or impoundment by a dike or other barrier to prevent sediment from entering a flowing waterway or impoundment. Care shall be taken during the construction and removal of such barriers so as not to cause turbidity or sedimentation.

**E. Removal of Temporary Obstructions.** All waterways shall be cleared as soon as practicable of false work, piling, debris or other obstructions placed during construction operations and which are not a part of the finished work.

**F. Maintenance.** Ditches which are filled, or are partly or wholly inoperative, shall be cleaned and made operative before the Contractor stops work for each day, and shall be maintained in a satisfactory condition for the duration of the contract. All erosion and sedimentation control measures which have been displaced, or are partly or wholly inoperative, shall be repaired within 72 hours after required inspection, unless repairs are required sooner by the contract documents.

**G. Water Discharges.** Water containing sediment from aggregate washing, pump discharges or other operations shall be treated by filtration, settling basin or other means sufficient to prevent turbidity or sedimentation of receiving waterways. Turbid wash water or pump discharges shall not be allowed to enter waterways or impoundments.

**H. Pollutants.** Pollutants such as fuels, lubricants, bitumens, raw sewage and other harmful materials shall not be discharged into or near waterways and impoundments or into natural or manmade channels leading thereto.

The Contractor shall ensure that all controls are functioning in an effective manner and address all failures or other problems in a pro-active manner, immediately. If a situation comes to the Engineer's attention, the Engineer will inform the Contractor of unsatisfactory construction procedures and operations insofar as water quality management are concerned. The Engineer will also review the Contractor's compliance with state and federal permit conditions as they relate to water quality. If the unsatisfactory construction procedures and operations are not corrected in a timely manner, the Engineer will suspend the performance of any or all operations in accordance with §105-01, *Engineer's Authority* until the unsatisfactory condition has been corrected.

## SECTION 108 - PROSECUTION AND PROGRESS

### 108-01 PROGRESS SCHEDULE.

All costs to create and update the progress schedule shall be solely the Contractor's obligation and will be at no additional cost to the State unless specifically provided for in other contract provisions.

**A. Initial Progress Schedule.** Within five days after date of commencement of work, or within such time as determined by the Regional Director, the Contractor shall prepare and submit to the Engineer for approval, a progress schedule showing the order in which the Contractor proposes to carry on the work, the date on which it will start the major items of work (including but not limited to excavation, drainage, paving, structures, mobilization, soil erosion and sediment control, etc.) and the critical features (including procurement of materials, plant and equipment) and the contemplated dates for completing the same. The purpose of the progress schedule is to ensure adequate planning and execution of the work and to evaluate the progress of the work. Any graphical representations shall be shown at a suitable scale to be legible and readable. Progress schedules shall, at a minimum, include the following items, as applicable: (a) major work items and activities to be performed; (b) seasonal weather limitations; and (c) phase duration or milestone events.

Such schedule may be utilized to facilitate the State's inspection and coordination of construction activities. Approval of the progress schedule shall not be construed to imply approval of any

particular method or sequence of construction or to relieve the Contractor of providing sufficient materials, equipment and labor to guarantee completion of the contract in accordance with the contract documents. Approval shall not be construed to modify or amend the contract agreement or the date of completion therein.

**B. Progress Schedule Updates.** On a monthly basis, or at such intervals as directed by the Engineer, the Contractor shall adjust the schedule to reflect any major changes in the contract work, completion time, or both, and submit the adjusted schedule to the Engineer.

When requested by the Regional Director, the Contractor shall furnish weekly progress schedule updates indicating number of personnel, equipment type, and location and nature of the work to be performed.

If the work falls behind the progress schedule, the Contractor shall take such actions as necessary to improve its progress. If the Contractor is behind schedule any month, the Contractor shall indicate what measures it will take in the next thirty (30) days to put the work back on schedule so as to meet the contract completion date specified in the contract. In preparing the revised schedule, the Contractor shall consider increasing its work force, construction plant and equipment, the number of work shifts, etc. If the Engineer finds the proposed schedule not acceptable, he/she may require the Contractor to submit a new schedule. The Department may request that meetings be held by the Contractor at least on a monthly basis and be attended by the Engineer who shall monitor the Contractor's progress and performance.

**C. Failure to Submit Progress Schedule.** If the Contractor fails to submit a progress schedule within the time period described or any revision or update when required, the Engineer may withhold approval of contract payments pursuant to Article 8 *No Payment on Contractor's Non-compliance* of the contract agreement until such time as the Contractor submits the required progress schedule.

#### **108-02 COMPLETION DATE.**

The Contractor shall employ and supply a sufficient force of workers, materials and equipment and shall progress the work with such diligence so as to ensure completion of the work prior to the contract completion date.

In accordance with Article 4 Date of Completion of the contract agreement, the Contractor shall complete all work to be performed under the contract within the time stated in the contract agreement or within such extended time for completion as may be granted by the Commissioner. If the Contractor desires an extension of time, an Application For Extension of Completion Date shall be submitted to the Engineer sufficiently early for the Engineer to make a recommendation and forward the application so that it may be filed with the Regional Director at least 15 days prior to the contract completion date.

#### **108-03 FAILURE TO COMPLETE WORK ON TIME.**

For each calendar day, or any portion thereof, that any work remains uncompleted after the contract completion date specified in the contract agreement, Liquidated Damages and/or Engineering Charges from the contract completion date to the final date of completion of the work will be assessed against the Contractor. When specified in the contract documents, Liquidated Damages may also be assessed for each calendar day, or any portion thereof, for failure to complete certain portions of work or for failure to comply with requirements shown in the contract documents. Liquidated Damages will be assessed not as a penalty, but as liquidated damages; provided however that due account shall be taken of any adjustment of the contract time for completion of the work as provided for elsewhere in the specifications.

**A. Engineering Charges.** Engineering Charges include all appropriate engineering and inspection expenses incurred by the State, its consultants and inspection agencies, and by railroad companies.

Engineering Charges will be assessed in cases where the work has been unduly delayed by the Contractor because of unwarranted reasons, inefficient operation, or for any other reason for which the Department determines the Contractor to be responsible. Reasonable time necessary for reviews of shop drawings by the State or its agents, for changes or additions to the work to meet field conditions which do not significantly affect the scheduled completion of the contract, delays incurred by seasonal and weather limitations, localized labor actions and shortages of supplies or materials,



and other situations which should be anticipated are neither compensatory nor eligible for extensions of time without the assessment of Engineering Charges, except as provided for under §108-04 *Delay Provisions*.

Before assessing Engineering Charges, the Department will give due consideration to factors attributing to such delay due to extenuating circumstances beyond the control of the Contractor limited to the following:

1. The work or the presence on the contract site of any third party, including but not limited to that of other contractors or personnel employed by the State, by other public bodies, by railroad, transportation or utility companies or corporations, or by private enterprises, or any delay in progressing such work by any third party except as indicated or disclosed in the contract documents or ordinarily encountered or generally recognized as inherent in the work.
2. The existence of any facility or appurtenance owned, operated, or maintained by any third party, except as indicated or disclosed in the contract documents or ordinarily encountered or generally recognized as inherent in the work .
3. The act, or failure to act, of any public or governmental body, railroad, transportation or utility companies or corporations, including, but not limited to, approvals, permits, restrictions, regulations or ordinances not attributable to a Contractor's submission, action or inaction or Contractor's means and methods of construction.
4. Restraining orders, injunctions, or judgments issued by a court not caused by a Contractor's submission, action or inaction or Contractor's means and methods of construction.
5. Any industry-wide labor boycotts, strikes, picketing or similar situations, as differentiated from jurisdictional disputes or labor actions affecting a single or small group of contractors or suppliers.
6. Any industry-wide shortages of supplies or materials required by the contract work, as differentiated from delays in delivery by a specific or small group of suppliers.
7. Unusually severe storms of extended duration or impact, other than heavy storms or climatic conditions which could generally be anticipated by the bidders, as well as floods, droughts, tidal waves, fires, hurricanes, earthquakes, landslides, or other catastrophes.
8. Decisions by the Department to open certain sections of the contract to traffic before the entire work is completed.
9. Significant changes in contract quantities, major extra contract work, delays in the review or issuance of orders-on-contract or field change sheets, or delays beyond the established time periods for review and approval for shop drawings, which significantly affect the overall completion of the contract
10. Failure of the State to provide individual rights-of-way parcels for an extended period of time beyond that indicated by the contract if such unavailability, as determined by the Commissioner, significantly affects the scheduled completion of the contract.
11. Any situation which was beyond the contemplation of the parties at the time of entering into the contract.
12. Award of the contract by the State more than forty-five (45) days beyond the letting date.
13. Situations covered by §104-03 Differing Site Conditions, §104-04 Significant Changes in the Character of Work and §104-05 Suspensions of Work Directed by the Engineer.

**B. Liquidated Damages.** Liquidated damages will be in the amount per calendar day specified in Table 108-1 *Schedule of Liquidated Damages*, in addition to Engineering Charges as provided for in §108-03A. *Engineering Charges*. Liquidated Damages for special or very large contracts may be specified in the contract proposal. Liquidated Damages will not apply to contracts containing no work within the roadway limits. The Commissioner may waive such portions of the liquidated damages as may accrue if the work is deemed to be in such condition as to be safe and convenient for use by the traveling public.

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion or after the date to which the time for completion may have been extended, will in no way constitute a waiver on the part of the State of any of its rights under the contract.

The Contractor is responsible and liable for said liquidated damages even in the event that the Contractor abandons the performance of the contract or the Contractor's employment is terminated pursuant to the provisions of this contract.

<b>TABLE 108-1 SCHEDULE OF LIQUIDATED DAMAGES</b>		
<b>Original Total Contract Bid Price</b>		<b>Liquidated Damages per Calendar Day</b>
<b>From More Than</b>	<b>To and Including</b>	
\$0	\$ 100,000	\$ 500
\$100,000	\$500,000	\$1,000
\$500,000	\$2,000,000	\$1,500
\$2,000,000	\$5,000,000	\$2,000
\$5,000,000	\$10,000,000	\$2,500
\$10,000,000	\$20,000,000	\$4,000
\$20,000,000	-	\$7,000

#### **108-04 DELAY PROVISIONS.**

**A. Compensable Delays.** The Department may provide monetary compensation for delays and interference in certain defined instances. The Contractor will only be eligible for extra compensation caused by delay or interference affecting the performance or the scheduling of contract work for those instances arising out of:

1. §104-03 Differing Site Conditions;
2. §104-04 Significant Changes in the Character of the Work; and
3. §104-05 Suspensions of Work Directed by the Engineer ;
4. Situations not referenced in this paragraph and which are not within the contemplation of the parties at the time of entering into the contract.

These aforementioned provisions may also form the basis for extra work compensation pursuant to §105-14 *Disputed Work and Dispute Resolution* and §109-05 *Extra Work and Time Related Compensation*. Failure of the Contractor to adequately progress completion of the work will be considered in determining whether the aforementioned instances are the primary causes of delay. In all such instances, for any requests made under this subsection, the Contractor shall keep detailed written records of the costs in accordance with §104-06 *Notice and Recordkeeping*. Any dispute shall be promptly submitted to the Engineer in writing, pursuant to §105-14 *Disputed Work and Dispute Resolution*.

**B. Non-Compensable Delays.** The Contractor agrees to make no monetary request for, and has included in its bid prices for the various items of the contract, any extra/additional costs attributable to any delays, inefficiencies or interferences in the performance of the contract caused by or attributable to the items set forth below. The Contractor shall be compensated solely by an extension of time, with or without engineering charges as appropriate, to complete the performance of the work in accordance with the provisions of §108-02 *Completion Date*.

1. The work, or the presence on the contract site, of any third party, including but not limited to personnel or other contractors employed by the State, by other public bodies, by railroad, transportation or utility companies or corporations, or by private enterprises.
2. Any delay in progressing work by any third party as indicated or disclosed in the contract documents or ordinarily encountered or generally recognized as inherent in the work.
3. The existence of any facility or appurtenance owned, operated, or maintained by any third party, as indicated or disclosed in the contract documents or ordinarily encountered or generally recognized as inherent in the work.
4. The act, or failure to act, of any other public or governmental body, railroad, transportation or utility companies or corporations, including, but not limited to, approvals, permits, restrictions, regulations or ordinances attributable to a Contractor's submission, action or inaction or Contractor's means and method of construction.
5. Restraining orders, injunctions, or judgments issued by a court which were caused by a Contractor's submission, action or inaction or Contractor's means and method of construction.

6. Any labor boycott, strike, picketing or similar situation.
7. Any shortages of supplies of materials required by the contract work.
8. Climatic conditions, storms, floods, droughts, tidal waves, fires, hurricanes, earthquakes, landslides, or other catastrophes. However, payment may be made for repairing damage to the work caused by an "occurrence" as provided in §107-09 *Damage*.
9. Extra work which does not significantly affect the overall completion of the contract, delays in the review or issuance of orders-on-contract, or field change sheets or delays within the established time periods for review and approval for shop drawings.
10. Any situation which was within the contemplation of the parties at the time of entering into the contract.
11. Award of the contract by the State more than forty-five (45) days beyond the letting date.

**108-05 SUBLETTING OR ASSIGNING THE CONTRACT.**

The Contractor shall perform with its own organization contract work amounting to not less than 50 percent of the original total contract bid price, except that any items designated by the State as "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the original total contract bid price before computing the amount of work required to be performed by the Contractor with its own organization. The contract amount upon which the 50 percent requirement is computed includes the cost of materials and manufactured products which are to be purchased or produced by the Contractor under the contract provisions.

- "Its own organization" shall be construed to include only workers employed and paid directly by the Contractor and equipment owned or rented by it, with or without operators.
- "Specialty Items" shall be construed to be limited to work that requires specialized knowledge, skill or equipment not ordinarily available in contracting organizations qualified to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

The Contractor shall be responsible for all work performed by Subcontractors, Manufacturers, Fabricators, Material Suppliers and any other parties in the performance of the contract. Contract work shall be performed under a subcontract only after approval by the Regional Director. Work shall be performed only by the Subcontractor specifically approved by the Regional Director. Work shall not be assigned by the Subcontractor to a lower tier subcontractor. Violations of the aforementioned will result in no payment by the State for the completed work.

**A. Subcontractor Approval.**

Approval of Subcontractors is required for:

- The on-site completion of items of work as defined in the contract documents.
- The on-site maintenance of previously furnished and installed products.
- The delivery of materials to the contract site and incorporation directly into the work by the supplier's work force in such a manner that no further handling or manipulation of the material is necessary in order to conform with the construction details of the appropriate specification item.
- Approval of subcontractors excludes:
- Manufacturers, Fabricators and Material Suppliers who do not incorporate supplies or materials directly into the contract work.
- The on-site completion of a portion of the work that does not constitute a complete contract item, and that occurs over less than an aggregate of 5 days on the contract site.
- Specialized work which is not accounted through labor, equipment and materials, such as professional fees, testing fees, dumping fees, utility charges
- Owner/Operator Trucking, both on-site and off-site.

**B. Approval Procedure.** Subcontractors will not be approved by the Department until such time as the Contract Management Bureau has received a completed Form CCA-1, *New York State Uniform Contracting Questionnaire* from the Subcontractor. For each Subcontractor, the Contractor shall submit an *Approval to Subcontract*, a labor affidavit on Form AC 2948 *Subcontractor's Certification*, a *Designation of Affirmative Action Representatives*, and a *Contractor/Subcontractor SPDES Permit Certification* to the Regional Construction Group for approval by the Regional Director. Contractors

that own Department approved civil rights reporting software shall submit subcontractor approval forms generated with that software. The Contractor shall not subsequently alter software generated forms.

**C. Trucking and Other Equipment Owner/Operators.** Equipment owner/operators are recognized by the Department and by Labor Law as unique business situations. Owner/Operators, by definition are individual businesses, do not have employees, and therefore are not subject to prevailing wage rates.

**D. Disadvantaged/Minority/Women's Business Enterprises (D/M/WBE) Policy.** In the solicitation of Subcontractors to perform work under this contract, prior to bidding or entering into any commitments for subcontracting or for purchase of supplies, materials or leasing of equipment, the Contractor shall solicit participation of D/M/WBEs in accordance with the utilization goals published in the contract documents, and in accordance with the provisions of §102-12 *D/M/WBE Utilization*.

**E. Subcontract Provisions.** All Subcontracts shall be in writing and shall contain all pertinent provisions of the contract in regard to Federal and State Laws and Regulations. All Subcontractors shall maintain insurance coverages as required by §107-06 *Insurance*.

All subcontracts, supply or equipment contracts in excess of \$10,000 shall incorporate the provisions of §102-11 *Equal Employment Opportunity Requirements*.

All subcontracts, supply or equipment contracts shall incorporate the provisions of §105-14 *Disputed Work and Dispute Resolution*. If such subcontracts or supply or equipment contracts do not have similar provisions, then the State payments to the Contractor for such subcontract or supply or equipment work shall be limited to only that which are provided by the provisions of this subsection as if it were in effect for such subcontract or supply or equipment contract.

For all Federal-Aid contracts, all subcontracts, supply or equipment contracts shall incorporate all of the provisions of Form FHWA-1273, *Required Contract Provisions Federal-Aid Construction Contracts*. The provisions of Form FHWA-1273 shall be directly incorporated into each subcontract, and may not be incorporated by reference.

All Subcontractors working within the contract limits or at a facility dedicated to the contract shall have a written Project Safety and Health Plan in accordance with §107-05 *Safety and Health Requirements* or shall have a copy of the Contractor's written Project Safety and Health Plan and shall confirm by written agreement with the Contractor that all Subcontractor operations are adequately addressed. The Contractor shall have a copy of each Subcontractor's written Safety and Health Plan, and shall ensure that the Subcontractor's plans are not in conflict with the Contractor's written Safety and Health Plan.

#### **108-06 COMMENCEMENT OF ACTIONS ON STATE PUBLIC WORKS CONTRACTS.**

In accordance with State Finance Law §138-a, the time within which an action on this contract, against the Contractor, must be commenced shall be computed from the date of completion of the physical work. The Contractor may notify the Department in writing that such physical work has been completed by specifying a completion date, which date shall be no more than 30 days previous to the date of such notice, in which case the completion date set forth in such notice shall be deemed to be the date of completion of the physical work unless the Department, within 30 days of receipt of such notice, notifies the Contractor in writing of its disagreement.

In the event the Contractor fails to send a notice provided for herein, or the State disagrees, then the date of completion of the physical work shall be determined in any other manner provided by law. If the Contractor elects to send such a notice, it shall be sent by certified mail to:

New York State Department of Transportation  
Office of Legal Affairs  
50 Wolf Road  
Albany, New York 12232

The Department hereby disagrees with any date selected by the Contractor pursuant to §138-a of the State Finance Law which is earlier than the date of contract final acceptance as determined by the Commissioner or his/her designee. The provisions of §138-a shall in no way modify the duties and obligations of the Department to comply with Article eleven-A of the State Finance Law (prompt payment legislation).

#### **108-07 SEASONAL SHUT-DOWN.**

If it should become necessary to stop the work due to the lateness of the season, the Contractor shall open proper draining ditches, erect temporary structures where necessary, prepare the contract site so that there will be a minimum interference with traffic, set up and maintain a competent organization to maintain traffic through the contract site, and take precautions to prevent damage or unreasonable deterioration of the work during the time it is closed.

### **SECTION 109 - MEASUREMENT AND PAYMENT**

#### **109-01 MEASURING QUANTITIES.**

All contract payments, including the final, will be made for quantities of work performed and materials placed in accordance with the contract documents as determined by the measurements of the Engineer, and the resulting quantities shall be accepted as final, conclusive and binding upon the Contractor. Various methods of quantity computation may be used by the Engineer, including but not limited to: manual arithmetic calculations, manual measuring tools such as a planimeter, and computer tools/software. The Engineer will choose the computation method, and the method may vary by contract and by contract pay item as appropriate. The Engineer will choose the method by which the work will be measured, such as: measure from documents/data (contract plans, cross sections, CADD files, etc.) or measure from field survey of completed work, with the goal of obtaining reasonably accurate quantities of work for payment using a commensurate amount of effort and resources.

#### **109-02 COMPENSATION FOR ALTERED QUANTITIES.**

The Department reserves the right to order changes in quantities of contract pay items as is necessary to complete the work, in accordance with the intent of the contract documents.

**A. Major Items.** For Major Items (as defined in §101-02 Definitions of Terms), payment will be made for all extra work at the contract unit bid price for work up to 125% of the original contract quantity. For Major Item quantities less than 75% or more than 125% of the original contract quantity, consideration of contract adjustment will be in accordance with §104-04B. Major Items. Total payments made for all work on a Major Item that decreases to below 75% of the original contract item quantity, will not exceed the total payments which would have been made if the original contract quantity had been completed at the original unit price bid.

**B. Minor Items.** For Minor Items (as defined in §101-02 Definitions of Terms), payment will be made for extra work at the contract unit bid price, except for any extra work that is both: (1) more than 200% of the original contract quantity and (2) results in an increase of more than \$1,000 from the original contract amount, will be in considered a Significant Change in accordance with §104-04C Minor Items.

For Minor Items where the contract bid price does not exceed 125% of either the statewide or regional weighted average bid price, the contract bid price may be extended up to a increase of \$5,000 from the original contract amount.

#### **109-03 SCOPE OF PAYMENT.**

The Contractor is directed to the provisions of Sections 70, 71 and 79-a of the Lien Law that apply to funds being received by a Contractor for a public improvement. The funds received by the Contractor shall constitute trust funds in the hands of the Contractor and shall be applied first to the payment of certain claims.

No certificate approving or authorizing the first partial payment, or in the event there shall be no first partial payment, then no certificate approving or authorizing any final payment will be made to a foreign Contractor unless such Contractor shall have furnished satisfactory proof that all taxes due by such

Contractor under the provisions of Articles 9, 9A, 16 and 16A of the Tax Law have been paid. The certificate of the State Tax Commission to the effect that all such taxes have been paid shall be conclusive proof of the payment of such taxes. The term foreign Contractor means: in the case of an individual, a person who is not a resident of this State; in the case of a partnership, one having one or more partners who is not a resident of this State; and in the case of a corporation, one not organized under the laws of this State.

Section 179 of the State Finance Law requires the Department to make payment on highway construction contracts within certain time frames. If the Department unjustifiably fails to pay within the prescribed time, it may be required to pay interest for each day in excess of the prescribed time.

#### **109-04 PARTIAL PAYMENTS.**

Upon application by the Contractor, and approval by the Regional Director, payments for the actual cost of certain materials may be made to the Contractor prior to incorporation of such material in the permanent work.

**A. Eligibility.** To be eligible for partial payment, materials must meet all of the following conditions:

1. Inclusion on the listing later in this section;
2. Have a minimum material cost of \$5,000. Individual components of an item or related items may be combined to meet the minimum (i.e. combination of all guiderail components);
3. Be materials which will be incorporated into permanent work;
4. Steel and iron materials shall be in a condition which is ready for fabrication or installation.

Other materials shall be in a condition which is ready for on-site installation without further fabrication or processing;

5. Be delivered and stored at the work site or at a site and in a manner approved by the Regional Director; and
6. Be materials which will be stored, or already have been stored, for a minimum of 60 days.

**B. Application for Partial Payment.** With application for partial payments, the Contractor shall provide documentation as follows:

1. Bill(s) of sale or vouchers indicating the actual dollar value of the materials as stored;
2. Certification of Title showing that title to the materials, without encumbrances, is in the name of the Contractor and that title is warranted to the NYS Department of Transportation;
3. Documented evidence of acceptability of the materials; and
4. If the materials are stored on private property, a release and waiver covering such materials, and providing access to the storage site, which release and waiver shall be executed by the property owner in favor of the NYS Department of Transportation or its agents.

When applying for partial payment of products which are claimed to be in short supply or unique to an individual contract, the Contractor shall include documentation supporting that claim, to the satisfaction of the Regional Director.

The amount of partial payments will not exceed the total invoice amount for stored materials, nor will the partial payment for materials relating to any contract work item exceed eighty five percent (85%) of the unit price for that item. The quantity of material for which payments are made will not exceed the estimated contract quantity for that item.

The making of partial payments shall not be deemed to be a final acceptance of materials, nor will it relieve the Contractor of responsibility for such materials. The Contractor shall be responsible for ensuring that only those materials which comply with the specifications are incorporated into the work.

All costs associated with handling, transportation and storage of materials; including any storage site rental, security, and weather protection; shall be borne by the Contractor and included in the prices bid for contract work. Any materials, other than those which are determined by the Regional Director to be unique to the contract, not incorporated into the work shall remain the property of the Contractor. Partial payments made for such unused materials will be withdrawn with no further obligation by the State.

## §109

### LIST OF MATERIALS

Iron, Steel and Aluminum products (including bridge bearings and all metal components of railings and bridge superstructures);  
Precast and Prestressed Concrete products;  
Pipe and Underdrain products;  
Concrete and Stone curb or masonry products;  
Concrete, Steel and Timber piles and appurtenances;  
Timber products;  
Traffic Signal, Traffic Control, Signing and Lighting components;  
Intelligent Transportation System (ITS) components (cameras, telecommunications components, computers, etc.)  
Cable, Wire and Conduit;  
Impact Attenuator components;  
Materials in short supply; or  
Materials meeting specific, unique requirements (determined by the Regional Director)

### 109-05 EXTRA WORK AND TIME RELATED COMPENSATION.

The Contractor will be compensated for extra work under existing unit prices in accordance with §109-02 *Compensation for Altered Quantities*, by agreed price in accordance with §109-05A. *Agreed Price Work*, or by force account in accordance with §109-05B. *Force Account Work*.

**A. Agreed Price Work.** Agreed prices for new items of work or materials in accordance with one of the methods outlined below may be accepted by the Engineer and incorporated into an order-on-contract as the Department may deem them to be just and fair and beneficial to the State. An order-on-contract containing an agreed price not supported by one of the following may be subsequently rejected by the Department or the Office of the State Comptroller.

**1. Original Contract Bid Price.** The original contract bid price, adjusted for documented increase or decrease in material cost, equipment rate, mobilization, and/or site conditions.

**2. Weighted Average Bid Price.** Reference to the statewide or regional weighted average bid price for a minimum of 3 contracts for similar type, quantity, and/or location of work from the Weighted Average Item Price Report or other recent contracts, adjusted for documented increase or decrease in labor, materials, equipment, mobilization, and/or site conditions.

**3. Average of 3 Bidders.** For work in unusual circumstances or unusual site conditions, the average bid price for the 3 lowest responsible bidders presented in the Tabulation of Bids for that contract. If less than 3 responsible bids were received, this option shall not be used.

**4. Price Analysis.** A price analysis shall be based on an estimated breakdown of charges listed in §109-05B *Force Account Work* below, using the equipment and other rates in effect when the agreed price is developed by the Contractor. The analysis shall be based on crew composition, material prices, equipment production and overall production rates that are reasonable in comparison with contract bid price work.

Equipment rates shall be used with no rate adjustment factor and no regional adjustment factor. An appropriate type and size of equipment similar to that available on the contract site, if present, shall be used.

Labor rates may be determined using 15% of wages and supplemental (fringe) benefits for FICA, Medicare, paid holidays, Federal unemployment tax, and State unemployment insurance in lieu of a detailed accounting. Overhead and profit will not be allowed on the labor markup.

Due to the cost and effort associated with development, a price analysis should generally be reserved for extra work under an individual contract pay item or a single price analysis, of more than \$1,000.

The Contractor shall provide a price analysis within 10 work days of request by the Engineer. The Department will accept or reject the Contractor's proposed agreed price within 10 work days of receipt of a complete price analysis.

**B. Force Account Work.** Where there are no applicable unit prices for extra work and agreed prices cannot be readily established or substantiated, the Contractor will be paid by Force Account for the actual, reasonable and verifiable cost of the items listed below. The Contractor shall maintain and submit force account records in accordance with §109-05C. *Force Account Report*.

**1. Contractor Charges.** At the preconstruction meeting, the Contractor should provide the Engineer documentation supporting its Commercial General Liability Insurance rates for the current period, and provide updates within 30 days after the renewal date, to assist in timely preparation and review of force account reports.

*a. Labor.* Necessary labor costs include wages, supplemental (fringe) benefits, payroll taxes, state unemployment insurance, workers compensation insurance and other such reasonable charges that are paid by the Contractor pursuant to existing written agreements with its employees and/or labor organizations. Each class of labor shall be billed separately at actual payroll rates, average rates based on different classes of labor will not be accepted. The wage rate for an individual worker may be up to 110% of the prevailing wage, provided the Contractor documents through certified payrolls that the worker has and continues to be paid more than the prevailing wage for contract work. No reimbursement will be made for travel, lodging, signing bonuses, or other similar payments made to workers.

At the Contractor's option, a labor markup of 15% of all wages, not including supplemental (fringe benefits), for FICA, Medicare, paid holidays, Federal unemployment tax, and State unemployment insurance in lieu of a detailed accounting. Overhead and profit will not be paid on the labor markup.

Workers compensation insurance rate will be the base rate and the territorial differential only established by the NYS Workers Compensation Insurance Rating Board, subject to the Construction Employment Limitation Program limits. No other additional charges or modifiers will be included.

Insurance and other costs incurred or limited on a weekly basis will be reimbursed based on the percentage of the employees weekly gross wages paid under force account.

*b. Materials.* Materials are necessary products incorporated in the temporary or permanent work, including transportation to the site. Transportation may be accounted for under materials as either a unit price for transportation or equipment/operator charges. Equipment charges for transportation of materials shall be accounted for as equipment in accordance with §109-05B.1.c. *Equipment* with no allowance for overhead and profit. Materials will be measured as quantities incorporated, with no reduction for required overlap, and appropriate waste due to construction and/or installation.

Oxygen, acetylene, propane, welding rods, grinding wheels, saw blades, hammer and drill bits, drill steel, and tooth-bits consumed in progressing the work are considered to be materials for which reimbursement will be made. Other materials which are consumed in progressing the work are considered to be included in overhead and no separate reimbursement will be made. Material acquired by direct purchase shall be documented by bills or acceptable invoices. All prices on used material incorporated in either temporary or permanent work shall be billed at a fair value, less than the original cost when new. A reasonable salvage credit will be determined by the Engineer in coordination with the Contractor for substantial salvageable material recovered.

*c. Equipment.* Equipment, other than small tools, used by the Contractor shall be of suitable size and suitable capacity required for the work to be performed. If the Contractor elects to use equipment of a higher rate than the equipment suitable for the work, payment will be made at the rate applicable to the suitable equipment. The equipment actually used and the suitable equipment upon which the rate is based will be recorded as a part of the force account report. Usage will be recorded in hours to the nearest whole hour. The Engineer will determine the suitability of the equipment. If there is a differential in the rate of pay of the



operator of oversize or higher rate equipment, the rate paid for the operator will likewise be related to the suitable equipment.

*(1) Contractor Owned Equipment.* The Contractor will be reimbursed for its ownership costs and for its operating costs for self owned equipment at the rates listed in the "Rental Rate Blue Book for Construction Equipment" published by Primedia Information, Inc. (hereafter referred to as the Blue Book) in effect at the time the work is performed.

*a) Ownership Costs.* The rates for ownership costs will reimburse the Contractor for all non-operating costs of owning equipment, including depreciation on the original purchase, major overhaul repairs, cost of facilities capital, normal risk insurance, property taxes, storage, licenses, record keeping costs, overhead, and profit.

In the event that the Contractor does not have a needed type or piece of equipment on the contract site, the Contractor will be paid for the reasonable cost of moving the equipment onto and away from the contract site.

The hourly rate for the first 8 hour shift will be the Blue Book monthly rate divided by 176 multiplied by the rate adjustment factor and then multiplied by the regional adjustment factor. The hourly rate for subsequent shifts during the same day will be 75% of the first shift hourly rate. Equipment required to be present, but idle, will be paid at 50% of the first shift hourly rate. Reimbursement will be made for the product of the hours of actual use or hours it is required to be present, and not available for mobilization elsewhere, multiplied by the hourly rate.

*b) Operating Costs.* The rate for operating costs includes preventative and field maintenance, fuel, lubricants, and other operating expendables. Operating cost does not include the operator's wages. Reimbursement will be made for the product of the number of hours of actual use multiplied by the operating rate. The hourly rate will be paid for all hours of operation, including those during subsequent shifts on the same day.

*c) No Established Rate.* In the event that rates are not established in the Blue Book for a particular piece of equipment, the Contractor shall contact the Blue Book publisher to establish rates. If the publisher will not establish rates, the Department will establish rates for ownership costs and operating costs for that piece of equipment consistent with its cost and expected life.

*(2) Rented Equipment.* In the event that the Contractor does not own a specific type of equipment and must obtain it by rental, the Contractor will be paid for the time that the equipment is used to accomplish the work or is required to be present, plus the reasonable cost of moving the equipment onto and away from the contract site.

*a) Rental Costs.* The Contractor will be paid the invoiced rental rate for the equipment, not to exceed the Blue Book ownership rate.

*b) Operating Costs.* The Contractor will be paid for the operating cost of the equipment in accordance with §109-05B.1.c.(1)b) unless reflected in the rental price.

*c) Rates Including Operator.* In the event that the Contractor rents equipment with an operator or fully fueled and/or maintained equipment such as cranes, concrete pumpers, trucks, etc. payment will be made on the basis of an invoice for the rental of the equipment and the costs of moving to and from the site, provided the total rate is substantiated by area practice. The rate including operator will not exceed the total of the ownership rate and the operating rate from the Blue Book, and the prevailing wage rate of an appropriate operator, if an operator is supplied.

(3) *Maximum Ownership/Rental Costs.* The maximum amount paid for the ownership costs of Contractor owned or the rental costs of rented equipment, is limited to the original purchase price as listed in the "Green Guide for Construction Equipment" published by Primedia Information, Inc. If the ownership or rental reimbursement is limited by the original purchase price, the Contractor will be reimbursed for the operating cost per hour for each hour of actual use.

d. *Sales Taxes.* Sales taxes, if any, required to be paid on rented equipment or materials not permanently incorporated into the work.

e. *Overhead.* Overhead will be computed at ten percent (10%) of items §109-05B.1.a. *Labor* (but not including the premium portion of overtime) and §109-05B.1.b. *Materials*, and will be defined to include the following:

- (1) Additional premium on bond, additional premium for insurance required by the State other than Workers Compensation Insurance and Commercial General Liability Insurance;
- (2) All salary and expenses of executive officers, supervising officers/ employees, superintendents, and clerical or administrative employees, including payroll taxes, unemployment insurance, workers compensation insurance, and charges that are paid by the Contractor to or on behalf of those employees pursuant to written agreement with its employee(s) and/or labor organizations;
- (3) Minor equipment such as small tools, including shovels, picks, axes, saws, bars, sledges, lanterns, jacks, etc., and other miscellaneous supplies and services;
- (4) Contractor's field office rental, utility charges, potable water, sanitation, cleaning, computers, CADD equipment, drafting equipment reproduction costs, etc.

f. *Profit.* Profit will be computed at ten percent (10%) of items §109-05B.1.a. *Labor* (but not including the premium portion of overtime) and §109-05B.1.b. *Materials*.

g. *Commercial General Liability (CGL) Insurance.* Commercial General Liability (CGL) insurance will be reimbursed at the rate paid by the Contractor in accordance with the method procured from its insurer.

- (1) Contractors that pay commercial general liability on the basis of a percentage of payroll will be paid that percentage of item §109-05B.1.a. *Labor*.
- (2) Contractors that pay commercial general liability on the basis of a percentage of gross sales will be paid that percentage of items §109-05B.1.a. through f.

**2. Subcontractor Charges.** When the work is performed by a Subcontractor, the Contractor will be paid the actual and reasonable cost of such subcontracted work as outlined above in §109-05B.1.a through §109-05B.1.g, plus an additional overhead of five percent (5%) of the cost of items §109-05B.1.a. *Labor* and §109-05B.1.b. *Materials*.

**3. Service Charges.** When work is performed by, and a fee is paid to, a service provider, the Contractor will be paid the actual cost of the service fee plus five percent (5%) for contract supervision, overhead and profit. This 5% will be applied once to the service fee regardless of the firm making direct payments to the service provider.

**C. Force Account Report.** Payment for force account work will be made on the basis of the following reports. Reports shall be submitted in a format acceptable to the Department. Appropriate forms are available from the Department.

If the Engineer disagrees with the accuracy, applicability, or reasonableness of any portion of a Contractor's submission, he/she shall promptly notify the Contractor. The Engineer will make any notations, remarks or comments on the records that may assist in final payments and then sign and date to indicate receipt, but not necessarily concurrence.

**1. Daily Summary.** The Contractor shall deliver a daily summary of force account work to the Engineer not later than close of business on the work day following that for which the work is reported. This summary shall be dated and signed by the Contractor's authorized representative.

The summary shall contain:

- a. The contract number, other contract information, and the Contractor name/information.
- b. A brief description of the work performed and the work location for that day.
- c. A list of personnel by name, including the hours worked, and labor classification.
- d. A list of materials used indicating the quantity and nature. The cost shall be documented later by proper receipts.
- e. A list of equipment used indicating the number of hours used and the type, manufacturer, model, model year, size of equipment, and any required attachments.

**2. Weekly Labor Summary.** Within 5 calendar days after the end of each pay period, the Contractor should deliver to the Engineer a Force Account Summary of Labor used on the work, which shall include the name, labor classification, hours worked, hourly rate of pay, supplemental (fringe) benefits, and/or other items as shown on the certified payroll. If the Contractor does not provide the Engineer with Weekly Labor Summaries, no progress payments on that force account will be made.

**3. Force Account Report Submission.** On completion of the specific force account work, the Contractor shall deliver to the Engineer a Force Account Report, wherein all labor, materials, equipment, and other charges are shown and totaled. The Force Account Report shall be dated and signed by the Contractor's authorized representative. When the Contractor and the Engineer agree on the Force Account Report, the Engineer will prepare and submit an order-on-contract containing the Force Account Report to the Regional Construction Engineer for approval.

**4. Force Account Review.** The Department will review the Force Account Report and make any notations, remarks or comments on this form that may assist in final payments. The emphasis of this review will be on labor rates, payroll taxes, material costs, equipment rates, insurance rates, conformance with payment provisions of technical specifications, and overall documentation. The Regional Construction Engineer will forward the order-on-contract to the Director, Construction Division. The Department, after review and approval, will forward the order-on-contract to the Office of the State Comptroller (OSC) for review and approval. Payment cannot be made prior to approval by the OSC.

**5. Late Submissions.** In the event the Contractor fails to deliver the required force account documentation to the Engineer in a timely manner, and as a result the order-on-contract for the force account work is not fully approved at the date of final acceptance, the required final payment date will be extended by the number of calendar days between final acceptance and the issuance of this force account order-on-contract, attributable to the Contractor's late force account submissions.

**D. Time Related Dispute Compensation.** The Contractor will only be eligible for extra compensation for expenses or costs which are identified as compensable under §108-04A.

*Compensable Delays.* In the event any legal action is instituted against the State by the Contractor due to any such dispute for additional compensation, whether due to time related dispute, delay, acceleration, breach of contract, or otherwise, the State's liability will be limited to those items which are specifically identified as compensable under §109-05D.1. *Recoverable Contractor Costs.*

Nothing in this subsection is intended to create any liability of the State not existing at common law or pursuant to the terms of this contract or to prevent the Contractor from filing a claim in the New York State Court of Claims. The remedies contained herein are exclusive.

**1. Recoverable Contractor Costs.** Only the following elements, will be recoverable by the Contractor as "time related dispute compensation" provided that they are actual and reasonable. Any such adjustment will be made via order-on-contract. Escalated costs will include

unanticipated higher or lower costs attributable, with appropriate credits, to the performance of work or portions of work in an extended time period due to extenuating circumstances beyond the control of the Contractor.

Extra work required due to a time related dispute shall be accounted for and reimbursed in accordance with §109-05B., less any appropriate credit.

*a. Labor.* Documented escalated labor costs determined in accordance with §109-05B.1.a. *Labor*;

*b. Materials.* Documented escalated material costs determined in accordance with §109-05B.1.b. *Materials*;

*c. Equipment.* Documented escalated equipment costs less appropriate credits, determined in accordance with §109-05B.1.c. *Equipment*. The ownership cost for idle equipment will be 50% of the rate set forth in §109-05B.1.c. *Equipment*. Idle time shall not exceed 8 hours per day, 40 hours per week, or the annual usage hours established in the "Blue Book". No operating costs will be paid for idle equipment;

*d. Extended Field Office Costs.* Fees paid to service provider(s) for required Contractor's field office rental, utility charges, potable water, sanitation, cleaning, etc. The Contractor will be paid the actual cost of the service fee plus five percent (5%) for contract supervision, overhead and profit. This 5% will be applied once to the service fee regardless of the firm making direct payments to the service provider;

*e. Extended Contract Site Overhead.* Documented additional or escalated contract site overhead costs during the extended period, including superintendent, office engineer and clerical staff, but not including working forepersons;

*f. Home Office Overhead.* Home office overhead equal to 10% of the total of items §109-05D.1.a *Labor* and §109-05D.1.b. *Materials*;

*g. Profit.* Profit of 10% of the total of items §109-05D.1.a through §109-05D.1.d. except when §104-03 *Differing Site Conditions*, §104-04 *Significant Changes in Character of the Work* or §104-05 *Suspensions of Work Ordered by the Engineer* apply, no profit or anticipated profits will be allowed;

*h. Insurance and Bond Costs.* Documented additional or escalated premium on bond and insurance for the extended period;

**2. Recoverable Subcontractor Costs.** When the work is performed by a Subcontractor, the Contractor will be paid the actual and reasonable costs of such subcontracted work as outlined above in §109-05D.1.a. through §109-05D.1.g. and an additional overhead of 5% of the costs outlined in §109-05D.1.a through §109-05D.1.c.,

**3. Non-Recoverable Costs.** The parties agree that, in any dispute for time related compensation, the Department will have no liability for the following items and the Contractor further agrees it shall make no claim for the following items:

- a.* Home office overhead in excess of that provided in §109-05D.1.e. *Home Office Overhead*;
- b.* Profit, in excess of that provided in §109-05D.1.f. *Profit*;
- c.* Loss of anticipated or unanticipated profit;
- d.* Labor inefficiencies and loss of productivity;
- e.* Consequential damages, including but not limited to interest on monies in dispute, including interest which is paid on such monies, loss of bonding capacity, bidding opportunities, or interest on investment, or any resultant insolvency;
- f.* Indirect costs or expenses of any nature;

- g. Direct or indirect costs attributable to performance of work where the Contractor, because of situations or conditions within its control, has not progressed the work in a satisfactory manner.
- h. Attorneys fees and dispute or claims preparation expenses.

#### **109-06 CONTRACT PAYMENTS.**

Payments will be made to the Contractor for work satisfactorily performed monthly in accordance with Article 7 *Contract Payments* of the contract agreement. No contract payment will be rendered unless the value of the work done equals 5% of the Contract Amount or \$1000, whichever is the lesser. At the Contractor's request, semimonthly contract payments may be rendered provided the value of the work performed in a two-week interval is in excess of \$50,000 or if, in the opinion of the Department, it is to the best interests of the State to do so.

#### **109-07 PROMPT PAYMENTS BY THE CONTRACTOR.**

Section 139-f(2) of the State Finance Law requires the Contractor to pay each Subcontractor and materialman for the value of work performed pursuant to contract no later than fifteen (15) calendar days from the receipt of each payment the Contractor receives from the State. Payment by the Contractor to Subcontractors or materialmen shall represent the value of work performed and/or materials furnished and reflect the percentage of work completed or materials furnished by the Subcontractor or materialmen and be based upon the actual value of the subcontract or purchase order. The Contractor shall not hold any retainage, but may deduct an amount necessary to satisfy any claims, liens or judgments against a Subcontractor or materialman which have not been fully discharged.

The Contractor shall maintain an accounting system acceptable to the Department to track payments made by the State to the Contractor and payments made by the Contractor to each Subcontractor, Manufacturer, Fabricator or Material Supplier by item and by date, for the purpose of enabling the Department to audit the payment provisions of this subsection. The system shall be able to provide data necessary for the completion of Contractor Report of Contract Payments. Reports shall include a certification that Subcontractors, Manufacturers, Fabricators and Material Suppliers have been paid with any exceptions noted and explained.

#### **109-08 ELIMINATED MATERIALS.**

Materials required by the contract documents and not incorporated into the work due to changes caused by field conditions or revisions to the design by the State after the material was ordered or purchased may be eligible for reimbursement. Materials will be eligible for reimbursement if they are determined by the Regional Director to be unique to the contract, and meet one or more of the following conditions:

- The material order cannot be canceled or changed to reflect the revised quantity required.
- The material cannot be restocked or the cost of restocking is excessive.
- The Contractor or Subcontractor does not maintain a supply of the material.
- The cost of the material exceeds \$1000. or five percent (5%) of the item, whichever is greater.

The Contractor will be reimbursed its material cost minus salvage value, or the material cost plus necessary delivery costs to a site identified by the Engineer, if the Department opts to take the material. Overhead and profit will be paid once, at a maximum of five percent (5%) for all materials not incorporated into the work, regardless of whether the Contractor or the Subcontractor pays for the material and/or delivery costs.

#### **109-09 FINAL ACCEPTANCE AND FINAL PAYMENT.**

The provisions of Article 9 *Final Acceptance of Work* and Article 10 *Final Payment* of the contract agreement shall apply.

**A. Final Additions or Deductions.** Upon the completion of the required work as shown in the contract documents, should the final quantities show either an increase or decrease from the original estimate of quantities, then such increases or decreases will be computed at the unit bid prices, unless the unit bid prices have been adjusted and the final value will be computed by adding or deducting this amount from the gross sum bid as modified by any orders-on-contract.

**B. Final Acceptance.** Prior to the final acceptance of the work by the Commissioner or his/her designee, the contract work may be inspected, accepted and approved by other agencies and/or municipalities who will have jurisdiction of the work after final acceptance. Upon final acceptance, seventy percent (70%) of the withheld retainage may be released in accordance with Article 9 *Final Acceptance of Work*. Within 7 days of Final Acceptance, the Contractor shall provide a completed *FHWA Record of Materials, Supplies and Labor* (Form FHWA-47M).

**C. Final Agreement.** The final agreement will not be drawn and finalized until all work required under the contract has been satisfactorily completed, all disputes presented and all accounts for extra work and materials have been rendered, considered, and if agreed to, incorporated by order on contract or made a part of such final agreement. Work remaining to be accomplished under an Uncompleted Work Agreement shall be considered as completed work for the purpose of the final agreement, provided the Uncompleted Work Agreement has been executed in accordance with §109-10 *Uncompleted Work Agreement*. Work accomplished under a warranty agreement shall be considered as completed work for the purpose of the final agreement, provided the warranty agreement has been executed and any required bond deposited by the Contractor.

The Commissioner, or his/her designee, will approve a final agreement as prepared and approved by the Regional Director, less any and all deductions authorized to be made by the Commissioner under the contract. Payment pursuant to such final agreement less any deductions authorized to be made by the Comptroller shall constitute the final payment to the Contractor.

In order to enable the Department to process the final agreement properly and expeditiously, the Contractor shall submit the following documents, as may be appropriate, to enable the processing of the final payment as described above.

Certified Payrolls

Final Labor Affidavits (AC 2947, Contractor's Certification & AC 2948, Subcontractor's Certification)

Final Civil Rights Reports (In accordance with §105-21 *Civil Rights Reporting*)

Final Agreement

Release from any Outstanding Disputes

Final Survey Notes/Computations

Approved Reproducible Drawings

Approved Field Change Sheets (From VECP or other Contractor Proposals)

Material Certifications

Tax Clearance for "Foreign" (out of State) Contractors, Corporations or Entities

The above list is general in nature, every item may not be applicable to the contract and other documents and submissions not shown above may be required to enable the processing of the final payment. Any time taken beyond the date of final acceptance to satisfy or furnish the above information shall extend the required payment date by an equal period of time.

**D. Final Payment.** Section 179 of the State Finance Law requires the Department to make final payment on highway construction contracts within seventy-five (75) calendar days after final acceptance by the Commissioner. If the Department unjustifiably fails to pay the final payment within the prescribed 75 calendar days, it may be required to pay interest for each day in excess of the 75 calendar days. The Department, in accordance with Section 179 of the State Finance Law, has determined that a thirty (30) calendar day inspection period after contract final acceptance is required for final payments, after which time the 75 day interest-free processing period will commence.

**E. Acceptance of Final Payment.** The acceptance by the Contractor, or by anyone claiming by or through it, of the final payment shall constitute and operate as a release to the State from any and all claims of any liability to the Contractor for anything theretofore done or furnished for or relating to or arising out of the work done thereunder, and for any prior act, neglect, or default on the part of the State or any of its officers, agents, or employees unless the Contractor serves a detailed and verified statement of claim upon the NYS Department of Transportation not later than 40 days after the mailing of such final payment. Such statement shall specify the items and details upon which the