

SECTION 1.05 CONTROL OF THE WORK

1.05.01--Authority of Engineer: All work shall be subject to the review of the Engineer. He shall decide all questions as to interpretation of the plans and specifications, and questions of mutual or respective rights of Contractors. He shall decide on an acceptable rate of progress, on the manner of performance, and on what shall be deemed acceptable fulfillment of the Contract. The Engineer shall have the right to determine the points at which the Contractor may begin work and the order in which the work shall be prosecuted in the best interests of the State within the intent of the terms in the Contract.

If a Project-related dispute arises between the Contractor and Department personnel assigned to the Project, and if those parties prove unable to resolve it, the Contractor may submit a detailed written description of the dispute to the Department's Assistant District Engineer administering the Contract.

1.05.02--Plans, Working Drawings and Shop Drawings:

1--Plans: The plans prepared by the Department show the details necessary to give a comprehensive idea of the construction contemplated. The plans will generally show location, character, dimensions, and details necessary to complete the work. If the plans do not show complete details, they will show the necessary dimensions and details, which when used along with the other Contract documents, will enable the Contractor to prepare working drawings or shop drawings to complete the work.

2--Working Drawings: When required by the Contract or when ordered by the Engineer, the Contractor shall prepare and submit nine (9) copies of the working drawings to the Engineer for review. When requested, the Contractor shall also furnish the Engineer with a complete set of reproducible mylar drawings. The working drawings shall be signed, sealed and dated by a qualified Professional Engineer, licensed to practice in the State. Drawings for permanent structures shall be submitted on 22" X 34" sheets with an appropriate border and title block in the lower right hand corner of each sheet. Calculations, procedures and other supporting data may be submitted on 8 1/2" X 11" sheets.

Drawings, calculations, procedures and other supporting data for temporary structures may be submitted on 8 1/2" X 11" sheets. The drawings shall be submitted sufficiently (at least 30 calendar days) in advance of the proposed use to allow for their review, and any necessary revision, without delay to the work.

No work covered by the working drawings shall be done until the drawings have been submitted to the Engineer for review and the Engineer's comments have been resolved. The furnishing of the working drawings shall not serve to relieve the Contractor of any part of its responsibility for the safety of the work or for the successful completion of the work. Any comments or suggestions by the Engineer concerning working drawings prepared by the Contractor shall not relieve the Contractor of any of the Contractor's responsibility for claims, as per Article 1.07.10.

There will be no direct payment for furnishing any working drawings, but the cost thereof shall be considered as included in the general cost of the work.

3--Shop Drawings: When required by the Contract or when ordered by the Engineer, the Contractor shall prepare and submit nine (9) copies of the shop drawings to the Engineer for review and approval before fabrication. In the case of a structure carrying a railroad, an additional copy of the superstructure shop drawings shall be submitted to the Engineer. When requested, the Contractor shall also furnish the Engineer with a complete set of reproducible mylar drawings.

Drawings shall be submitted on 22" X 34" sheets with an appropriate border and title block in the lower right hand corner of each sheet. Procedures and other supporting data may be submitted on 8 1/2" X 11" sheets.

After review, each drawing will be stamped "Approved," "Approved as Noted," or "Revise and Resubmit." Three copies of each drawing which fall into either of the first two designations will be returned to the Contractor for its use. No additional copies of a drawing stamped "Approved as Noted" need be resubmitted. In case of a drawing which is reviewed and stamped "Revise and Resubmit," two copies will be returned to the Contractor, which shall address and resolve all comments, and resubmit the required number of copies for review and approval.

If the Contractor proposes a revision of a previously submitted shop drawing that has been stamped "Approved" or "Approved as Noted," nine (9) copies shall be resubmitted for approval. This resubmitted shop drawing shall clearly indicate, in a revision block, the date, description and location of the revision.

When any shop drawing is stamped "Approved" or "Approved as Noted" by the Engineer, such approval shall not relieve the Contractor from responsibility for omissions, errors in dimensions, shop fits, field connections, etc., for quantity of materials, or for their compliance with the Contract and the successful completion of the work. Any approval, comments or suggestions by the Engineer concerning shop drawings prepared by the Contractor shall not relieve the Contractor of any of the Contractor's responsibility for claims, as per Article 1.07.10.

The drawings shall be submitted sufficiently (at least 30 calendar days) in advance of the proposed use to allow for their review, any necessary revision, and approval without delay to the work.

No work covered by the shop drawings shall be done until the drawings have been submitted to the Engineer for review and approved by the Engineer.

There will be no direct payment for furnishing any shop drawings, but the cost thereof shall be considered as included in the general cost of the work.

1.05.03--Conformity with Plans and Specifications: All work performed and all materials furnished by the Contractor must be, in the opinion of the Engineer, in conformity with the lines, grades, cross-sections, dimensions and material requirements, including tolerances, shown on the plans or indicated in the specifications.

If the Engineer believes that the materials or the finished product in which the materials were used are not in conformity with the plans and specifications, but believes nonetheless that acceptable work has been produced, he will then make a determination if the work shall be accepted and remain in place. If the Engineer believes the work should be accepted, he will issue a construction order which may provide for any equitable adjustment in the basis of payment which he deems appropriate.

If, in the opinion of the Engineer, the materials or the finished product in which the materials were used or the work performed are not in conformity with the plans and specifications and have resulted in an unacceptable product, the work and material shall be removed and replaced or, if the Engineer so directs, otherwise corrected by and at the expense of the Contractor.

1.05.04--Coordination of Special Provisions, Plans, Supplemental Specifications and Standard Specifications and Other Contract Requirements: All requirements indicated on the plans or in the standard specifications, the supplemental specifications, special provisions or other Contract provisions shall be equally binding on the Contractor, unless there is a conflict between or among any of those requirements. In the case of such a conflict, the order of governance among those requirements, in order of descending authority, shall be as follows:

1. Environmental Permits,
2. Environmental Permit Applications,
3. Special Provisions,
4. Plans other than Standard Sheets (enlarged details on plans, used to clarify construction, shall take precedence over smaller details of the same area; information contained in schedules or tables titled as such shall take precedence over other data on plans),
5. Standard Sheets,
6. Supplemental Specifications,
7. Standard Specifications and other Contract Requirements.

Numerical designations of dimensions shall take precedence over dimensions calculated by applying a scale to graphic representations. Neither party to the Contract may take advantage of any obvious error or omission in the Contract. Should either party to the Contract discover such an error or omission, that party shall notify the other party of same immediately in writing. The Engineer will make such corrections and interpretations of the Contract as are necessary to fulfill the purposes of the Contract which are evident from examining the Contract as a whole.

If the Contract includes an item which does not have a corresponding specification for either performance or payment purposes, the Contractor shall notify the Engineer of that fact in writing at least two weeks prior to ordering materials for or commencing work on the item. If such a specification is lacking, the Engineer shall, if possible, derive an appropriate specification from applicable AASHTO Specifications or, if necessary ASTM Specifications. If neither of those sources provides a suitable specification, the Contractor shall seek guidance from the Engineer with regard to the item, and the Engineer will formulate a reasonable specification for the item.

Where compliance with two or more standards is specified and the standards may establish different or conflicting requirements for minimum quantities or quality levels, refer such issues to the Engineer for a decision before proceeding.

1.05.05--Cooperation by Contractor: The Contractor will be supplied by the Department with copies of the plans and it shall have available on the Project site at all times, during the prosecution of the work, a copy of the plans and specifications. The Contractor shall give the work constant attention to facilitate the progress thereof and shall cooperate with the Department and shall promptly comply with all orders or directions of the Engineer.

The Contractor shall at all times have on the Project one of its employees, thoroughly experienced in the type of work being performed, to supervise the work and accept directions from the Engineer. The Contractor shall always notify the Engineer of the identity of said employee representative in advance of the employee's assignment to that position. The Contractor's representative must have full authority to promptly execute and carry out the orders and directions of the Engineer within the terms of the Contract, and to supply such materials, equipment, tools, labor and incidentals as may be required for the Project or by the Engineer.

1.05.06--Cooperation with Utilities (Including Railroads): It will be the State's duty to notify all utility companies (including railroads), all pipeline owners, and other parties whose facilities or operations will be affected by the Project, and to endeavor to have all necessary adjustments of the public or private utility fixtures, pipelines, and other appurtenances within or adjacent to the limits of construction made as soon as practicable, when such changes are required by the State or a municipality.

Whenever the Engineer determines that the relocation or adjustment of poles or the overhead plant of public or private utilities or railroad facilities is dependent upon the performance of certain Contract requirements, the Contractor shall perform these operations within a reasonable length of time.

Temporary and permanent changes required by the State or a municipality in water lines, gas lines, sewer lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals and all other utility (including railroad) appurtenances within the proposed construction work are to be made by others at no expense to the Contractor, except as otherwise provided for in the special provisions or as noted on the plans.

When the Contractor is required by the State to relocate utility installations, such work will be paid for as extra work unless specific bid items for such work appear in the Contract.

If the Contractor desires changes of location for its convenience for any reason whatsoever, of water lines, gas lines, sewer lines, wire lines, service connections, water and gas meter boxes, valve boxes, light standards, cableways, signal or any other utility (including railroad) appurtenances, the Contractor shall satisfy the Department that the proposed relocation will not interfere with the Contractor's or other contractors' operations or the requirements of the plans, and that it will not cause an obstruction or a hazard to traffic. The Contractor shall make its own request for such relocation work to the utility companies, pipe owners or other parties affected. Such relocation work shall be made solely at the Contractor's expense.

The Contractor shall schedule its operations in such a manner as to minimize interference with the operations of the utility companies or municipalities in effecting the installation of new facilities as shown on the plans or the relocation of their existing facilities. The Contractor shall consider in its bid all permanent and temporary utility appurtenances in their present or relocated positions and installation of new facilities as required for the Project; and no additional compensation will be made for delays, inconvenience or damage sustained by the Contractor due to interference from utility (including railroad) appurtenances or the operation of installing or moving such appurtenances.

1.05.07--Coordination with Work by Other Parties: The Contractor shall make every effort to perform its work so as not to interfere with other work for the State or other parties. In the case of a dispute with another contractor working for the Department regarding their work for the State, or in the case of a conflict between their planned operations or the needs of their projects, the Contractor shall bring that dispute or conflict to the Engineer's attention, and the Engineer shall decide how it shall be resolved. The Engineer's decision shall be binding upon all of the contractors working for the Department who are involved in the matter.

The Contractor shall, as far as possible, schedule and otherwise plan and arrange its work, and place and dispose of its Project materials, so as not to interfere with the operations of other contractors working for the State. The Contractor shall, as necessary to accomplish this goal, integrate and coordinate its work in the proper or least obstructive sequence with that of the others.

If the Contractor's work or activities under the Contract come into conflict with other activities or work for the State, any financial or other liability arising from such conflicts shall be the Contractor's, and the Contractor shall protect and save harmless the State from any and all damages or claims, and the costs of defending same, which may arise because of inconvenience, delay or other financial or other injuries caused to the Contractor or to other contractors as a result of such conflicts, unless:

(a) the Contractor notifies the Engineer of such conflicts as soon as the likelihood of such a conflict becomes apparent, or, if such likelihood could not have been foreseen earlier, then as soon as the conflict becomes apparent;

(b) the Contractor waits for direction from the Engineer as to how the conflict should be avoided or resolved, and the Contractor does not proceed with the work involved in the conflict until the Engineer has provided the Contractor with such direction; and (c) the Contractor follows the directions given by the Engineer for avoiding or resolving the conflict. The Contractor shall be responsible for the completion of its Contract work regardless of any interference with or delay of that work which may be caused by the presence or activities of other contractors working for the State.

1.05.08--Vacant

1.05.09--Authority of Inspectors: Inspectors employed by the Department are authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of the work, and to the preparation or manufacture of the materials to be used. In case of any dispute arising between the Contractor and the inspector as to materials furnished or the manner of performing the work, the inspector has the authority to reject material or stop the work until the question at issue can be referred to and decided by the Engineer. The inspector is not authorized to revoke, alter, enlarge, relax or release any requirements of the Contract, nor to approve or accept any portion of the work nor to issue instructions contrary to the Contract. The inspector shall in no case act as a foreman or fulfill other duties for the Contractor. Any advice which the inspector may give the Contractor shall not be construed as binding the Department in any way, nor releasing the Contractor from the fulfillment of the terms of the Contract.

The presence, absence, sufficiency, or accuracy of any inspection does not relieve the Contractor of its responsibility to perform the work properly, to monitor its work and the work of its subcontractors and to institute quality control systems as appropriate for the proper execution of the work.

1.05.10--Inspection: All materials and each part or detail of the work shall be subject at all times to inspection by the Engineer. Such inspection may include mill, plant, shop or other types of inspection; and any material furnished under the Contract is subject to such inspection. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as the Engineer deems necessary to make a complete, detailed and timely inspection.

The Contractor shall always notify the Engineer of its intention to perform work on the Project, including notice of the particular work it intends to perform, at least 48 hours before the Contractor commences that work. If, after receiving such notice, the Engineer decides that he needs more than 48 hours to arrange for and conduct inspection related to that work, he shall so notify the Contractor, and the Contractor shall refrain from commencing the work until such inspection has been conducted. The Contractor may not commence any portion of its work without prior related inspection by the Engineer unless the Engineer so consents.

If, at any time before the Department's acceptance of the Project, the Engineer requests the Contractor to remove or uncover any portion of the Project work for inspection by the Engineer, the Contractor shall do so. After such inspection is completed, the Contractor shall restore such portions of the work to the condition required by the Contract as construed by the Engineer. If the work exposed and inspected under this provision proves acceptable to the Engineer, the Department shall pay the Contractor for removing or uncovering of its previous Contract work. The Department shall pay the Contractor for such removal or uncovering work and restoration of the prior work as extra work. If the work exposed and inspected proves, in the opinion of the Engineer, not to conform to Contract requirements, the Contractor shall be responsible for the costs of the removal or uncovering work and the restoration to acceptable standards as established by the Engineer.

Any work done or materials used without suitable inspection by Department representative may be ordered exposed for examination and testing, and restored at the Contractor's expense. If found unacceptable, the work shall be removed and replaced at the Contractor's expense.

1.05.11--Removal of Defective or Unauthorized Work: Work that does not conform to the requirements of the Contract shall be remedied in a manner acceptable to the Engineer or removed and replaced at the Contractor's expense in a manner acceptable to the Engineer.

No work shall be done without lines and grades having been established in the field. Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans, or any extra work done without written direction from the Engineer will be considered as unauthorized and will not be paid for. Work so done may be ordered removed or replaced at the Contractor's expense.

If the Contractor fails to comply with any order of the Engineer made under the provisions of this Article, the Engineer has the authority to cause unacceptable work to be remedied or removed and replaced, and unauthorized work to be removed, by a party or parties other than the Contractor and to deduct the costs of such activities from any monies due or to become due to the Contractor.

1.05.12--Payrolls: The Contractor shall furnish to the Engineer certified copies of payrolls showing the names of employees, hours of employment and the amount paid each person employed on the work. If the Engineer so directs, such payrolls shall also include the rates paid for rented trucks or rented equipment of any kind being used on the work. This requirement shall also apply to the work of any subcontractor having a subcontract for any part of the work performed on the Project.

Every Contractor or Subcontractor performing work on the project is required to post the prevailing wage rates as determined by the State Labor Commissioner and, on federal aid projects, the Secretary of Labor. The wage rate determinations shall be posted in prominent and easily accessible places at the site of work.

1.05.13--Examining and Copying Contractor's Records: The Contractor shall permit the Department and its duly authorized representatives to examine and copy all documents and other records of the Contractor which are relevant to charges for extra work, alleged breaches of Contract, settlement of claims, or any other matter involving a demand by the Contractor for added compensation from the Department in connection with the Project.

With the exception noted below, the Contractor shall also permit the Department to examine and copy such of its documents and other records pertaining to the Project as the Department may deem necessary in order to determine whether or not the Contractor has complied with all laws, regulations and other governmental mandates, e.g., those relating to labor compliance, affirmative action programs, and equal employment opportunity. Documents and other records relating to the Project if they were created prior to the opening of bids for the Contract, and if they are sought by the Department only for the purpose of confirming such compliance with legal requirements, shall, however, not be subject to examination by the Department pursuant to this Article without the consent of the Contractor.

The Contractor further agrees that it shall keep all documents and other records relating to the Project at least until the expiration of three (3) years after the date of acceptance of the Project by the Department as designated in a certificate of acceptance issued by the Department. If any claims are brought by the Department or the Contractor prior to that expiration, however, the Contractor shall keep all such records until the Department has given the Contractor a full and final release from all pending and potential claims regarding the Project.

The Contractor shall ensure that the requirements of this provision are made applicable to its subcontractors and suppliers, for the State's benefit, by including the operative language of this Article in its Project subcontracts and purchase agreements.

1.05.14--Termination Clause: The State may terminate the Contract whenever the Engineer shall determine that such termination is in the best interests of the State. Any such termination shall be effected by delivery to the Contractor of a written Notice of Termination specifying the extent to which performance of work under the Contract is terminated, and the date upon which such termination shall be effective.

Payment at the Contract unit prices will be made for the actual number of units or items of work completed prior to the effective date of termination, or as may be agreed by the parties for items of work partially completed. No claim for loss of overhead or anticipated profits shall be allowed.

When the volume of work completed is too small to compensate the Contractor under Contract unit prices for its related expenses, the Department may consider reimbursing the Contractor for such expenses.

Materials obtained by the Contractor for the work, that have been inspected, tested as required, and accepted by the Engineer, and that are not incorporated in the work, shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills. To this cost shall be added all actual costs for delivery at such points of delivery as may be designated by the Engineer, as shown by actual cost records.

Termination of the Contract shall not relieve the Contractor of its responsibilities for the completed work, nor shall it relieve the Contractor's surety of its obligation concerning any claims arising out of the work performed, until the requirements of Article 1.08.13 and 1.08.14 have been complied with.

1.05.15--Warning Markings for Underground Facilities: In conformance with Section 16-345 of the Regulations of the Department of Public Utility Control, the Contractor shall install a warning tape located a minimum of twelve (12) inches above all conduits, wires, cables, utility pipes, drainage pipes, underdrains or other facility. The warning tape shall be of durable impervious material, designed to withstand extended underground exposure without material deterioration or fading of color. The tape shall be of the color assigned to the type of facility for surface markings and shall be durably imprinted with an appropriate warning message. The tape shall also comply with the specific requirements of the utility which owns the facility.

All tapes, unless otherwise directed by the specific utility, shall be detectable to a depth of at least three feet with a commercial radio-type metal locator.

Assigned colors are:

Green -- Storm and sanitary sewers and drainage systems, including force mains and other non-hazardous materials.

Blue -- Water.

Orange -- Communication lines or cables, including, but not limited to, those used in or in connection with telephone, telegraph, fire signals, cable television, civil defense, data systems, electronic controls and other instrumentation.

Red -- Electrical power lines, electrical power conduits and other electrical power facilities, traffic signals and appurtenances and illumination facilities.

Yellow -- Gas, oil petroleum products, steam, compressed air, compressed gases and all other hazardous material except water.

Brown -- Other.

Purple -- Radioactive materials.

Article 1.05.16 - Dimensions and Measurements

The Contractor shall verify each dimension which is needed in order to ensure that its work complies with the Contract, and must do so before ordering any material or doing any work for which such dimension is needed. Such dimensions include, but are not limited to, dimensions given on the plans as well as dimensions of structures in place prior to Project construction or installed in the course of construction. The Contractor or any subcontractor that finds a discrepancy or error in dimensions must report it promptly to the Engineer, and may proceed with affected work only after receiving clarification and direction from the Engineer regarding the matter. Any costs for delays, changes, cutting or repairs necessitated by the failure to observe the above requirements shall be borne by the Contractor.

Basis of Payment: Payment for warning tapes will be included in the bid price for the pay item of the specific facility for which they are installed.