SECTION 104 -- SCOPE OF WORK

104.01 -- Intent of Contract

The Contractor shall furnish all labor, materials, and other resources required to complete the work described in the contract.

104.02 -- Alteration of Plans or Character of Work

1. Differing site conditions:

a. (1) The Contractor shall notify the Department in writing of the specific differing conditions before they are disturbed, before any additional work is performed, and as soon as the condition is discovered.

(2) This includes subsurface or latent physical conditions which differ materially from those indicated in the contract.

(3) It also includes unknown physical conditions of an unusual nature and differing materially from those ordinarily encountered and generally recognized as inherent in the work provided in the contract.

b. Before the site is disturbed or the affected work is performed, the Engineer shall be given an opportunity to investigate.

c. Upon written notification, the Engineer will investigate the differing conditions. If the Engineer determines that they do materially differ and will result in an increase or decrease in the cost or time required for the performance of any work under the contract, a cost (excluding loss of anticipated profits) or time allowance adjustment will be made. The Engineer will make a written determination, and the contract will be modified in writing if a change is warranted.

d. No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

2. a. (1) The Engineer may change the quantities or requirements as needed to satisfactorily complete the project at any time during the contract.

(2) These changes will be provided to the Contractor in writing.

(3) These changes in quantities or requirements do not invalidate the contract nor release the contract surety.

(4) If the change requires additional time to complete the contract, adjustments to the contract time will be made according to Subsection 108.02.

b. Except for significant changes in the character of work, the work will be paid for at the contract unit prices.

c. For significant changes in the character of work, contract adjustments may be made according to Subsections 104.04 or 109.05. A significant change in the character of the work is deemed to have occurred when:

(1) The additional work differs materially in kind or nature from the work included in the original proposed construction; or

(2) A major item of work, defined as an item whose total original contract cost exceeds 10 percent of its original group total amount, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of the original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

(3) If the Engineer and the Contractor agree that the bid unit price is the correct unit cost for an overrun or underrun of the contract quantity and they agree on the actual quantity delivered and installed, then a change order is not required to justify the overrun or underrun.

d. Agreement will be reached for the contract adjustment before the work is begun. When the basis cannot be agreed upon, the Department may order prosecution of the work under the Force Account provision in Subsection 109.05.

104.03 -- Value Engineering Proposals (VEP))

1. These requirements apply to all proposals initiated, developed, and identified as VEPs by the Contractor. To be qualified as a VEP, a proposal must be identified as a VEP at the time of its submission to the Engineer.

2. The Contractor shall submit VEPs to the Engineer in writing with the understanding that the Engineer is not required to approve them. If a VEP is accepted by the Department, the resultant savings will be shared equally by the Department and the Contractor.

3. Each VEP must result in a net cost savings without impairing essential functions and characteristics of the item(s) or of any other part of the project, including but not limited to service life, reliability, economy of operation, ease of maintenance, desired aesthetics, and safety.

4. As a minimum, the following information shall be submitted with each VEP:

a. A statement that the proposal is submitted as a VEP.

b. A statement concerning the basis for the VEP and benefits to the Department together with an itemized list of the contract items and requirements affected by the VEP.

c. A detailed comparison of the estimated costs under the existing contract and under the VEP.

d. Proposed specifications and recommendations as to how such VEP changes are to be accomplished.

e. A statement indicating the time and date by which a change ordersupplemental agreement adopting the VEP must be issued so as to obtain the maximum cost effectiveness.

5. a. VEPs will be processed in the same manner prescribed for any other proposal which would necessitate issuance of a change order-supplemental agreement. The Department may accept in whole or in part any VEP by issuing a change order-supplemental agreement which identifies the VEP on which it is based. The Department will not be liable to the Contractor for failure to accept or act upon any VEP submitted pursuant to these requirements or for any delays to the work attributable to any such proposal.

b. Until the Department approves a VEP by a change order-supplemental agreement, the Contractor shall be obligated to the terms and conditions of the existing contract. If an executed change order-supplemental agreement or a work order has not been issued by the date specified in the Contractor's proposal or another date the Contractor may subsequently have specified in writing, the VEP shall be deemed rejected.

6. a. The change order-supplemental agreement effecting the necessary contract modification will establish the net savings agreed upon, will provide for adjustment in the contract prices, and will indicate the net savings to be equally divided between the Contractor and the Department.

b. The Contractor shall prepare and submit the VEP at no additional cost to the Department. All reasonably incurred costs of reviewing and administering the VEP will be borne by the Department. The Department reserves the right to include in the agreement any conditions it deems appropriate for consideration, approval, and implementation of the VEP. The Contractor's share of the net savings constitutes full compensation for designing and developing the VEP and effecting all changes pursuant to the agreement.

7. Acceptance of the VEP by the Department and performance of the work by the Contractor will not change the contract time limit unless specifically addressed in the change order-supplemental agreement authorizing the VEP.

8. The Department expressly reserves the right to adopt a VEP for general use in its contracts. VEPs identical or similar to previously accepted VEPs will be eligible for consideration and compensation provided they were not previously adopted for general application by the Department. When a VEP is adopted for general use, compensation for it will be applied only to those contracts awarded and for which the subject VEP has been submitted before the date of its general adoption.

- 9. The following will not normally be considered acceptable VEPs:
 - a. Changes to basic bridge design.
 - b. Changes to basic pavement designs.

- c. Changes requiring different right-of-way limits.
- d. Requirements set by permit conditions.

10. VEPs based on prior changes to Department contracts/procedures are not acceptable.

11. The Engineer shall be the sole judge of the acceptability of a VEP.

12. Subject to the provisions contained herein, the Department or any other public agency shall have the right to use all or part of any accepted VEP without obligation or compensation of any kind to the Contractor.

13. Subsection 104.02, which pertains to adjustment of contract unit prices due to alterations of contract quantities, will not apply to the items adjusted or deleted as a result of effecting the VEP by change order-supplemental agreement.

104.04 -- Extra Work

1. The Contractor shall perform unforeseen work for which there is no price included in the contract whenever it is deemed necessary or desirable to complete the proposed improvement. Such "extra work" shall be performed in accordance with the specifications and as directed.

2. Except in emergency conditions, no payment is allowed for "extra work" unless it is authorized by a signed Work Order. The Work Order shall be completed before the Contractor starts the extra work.

3. The order shall stipulate that the work shall be paid for at the stated unit price or lump sum agreed upon previously by the Contractor and Engineer. Failing such agreement, the order shall stipulate that the work shall be done on a force account basis or by having the Engineer track and record construction costs for payment and complete a Supplemental Agreement when the extra work is complete.

104.05 -- Maintenance of Detours and Shooflies

1. The Contractor shall at all times, to the extent practicable, provide private dwellings, commercial properties, businesses, and public facilities access to and from the nearest intersecting public road or street. Accommodations shall be made to ensure local traffic which has its origin or destination within the limits of the project has access to all private dwellings, commercial properties, businesses, and public facilities. Temporary approaches and crossings constructed for public use shall be maintained in a safe condition by the Contractor.

2. a. The Contractor shall not close any road without the permission of the Engineer.

b. It is understood that although a road is closed, limited access must be maintained for authorized local traffic.

3. When the plans show a "DETOUR", it will be routed, marked, and maintained by the Department, county, or city.

4. a. When the contract requires the Contractor to build "shooflies", the Contractor shall be responsible for their maintenance.

b. (1) The Contractor shall receive "Equipment Rental" payments as prescribed in Section 919 for authorized shoofly maintenance.

(2) The Contractor shall also receive payment for all materials used in authorized shoofly maintenance.

c. All shoofly maintenance shall be done as prescribed in the relevant Section of these *Specifications*.

d. If the Contractor fails to perform required shoofly maintenance and it becomes necessary for the Department to perform the maintenance, the cost of labor, equipment, and material required to perform the maintenance (calculated in accordance with the methods described in Subsection 109.05) will be deducted from money due the Contractor.

104.06 -- Removal and Disposal of Unforeseen Structures and Obstructions

1. a. The Contractor shall remove unforeseen obstructing structures found in the roadway.

b. Whenever it is possible, structures shall not be removed until replacement structures are operational.

c. Material from existing structures which, in the opinion of the Engineer, can be used elsewhere shall remain the property of the State. This material shall be removed without damage, in sections which may be readily transported, and stored neatly by the Contractor as provided elsewhere in these *Specifications*.

d. Unless otherwise provided in these *Specifications* or the special provisions, removal of unforeseen structures and obstructions will be paid for as "extra work".

2. The Contractor shall remove and dispose of minor obstructions or obstacles encountered in the roadway, borrow pits, or material pits without compensation. Minor obstructions include such items as:

a. Abandoned pipes less than 3 m long and less than 750 mm in diameter.

- b. Abandoned cable.
- c. Boulders 1 m in diameter or smaller.
- d. Scrap iron.

- e. Fences.
- f. Trash.
- g. Stumps.
- h. Logs less than 450 mm in diameter and 6 m in length.
- i. Concrete pieces less than 1 m³.
- j. House foundations (less than 3 m long).

3. The above list of typical minor items will not be considered minor when several minor items are unearthed and the total volume exceeds 20 m³. This exclusion does not apply to items visible on the ground surface at the time of contract letting.

4. The Contractor shall remove all discarded material, rubbish, and/or debris from the highway at no additional cost to the Department and dispose of it as provided in Subsection 203.02.

104.07 -- Rights In and Use of Materials

1. a. The Engineer may authorize the use of soils found in the excavation that are suitable for completing other bid items of work. The Contractor will be paid for both the removal of the soils at the corresponding contract unit price and for the pay item for which the removed soils are used. No charge for the soils used will be made against the Contractor.

b. If the Contractor removes soils to complete other items of work, this soil shall be replaced with acceptable soils without compensation. Unless authorized by the Engineer, the Contractor shall not excavate or remove any soils from within the right-of-way limits that are not within the excavation limits established in the field.

2. Unless otherwise provided, material from any existing structure may be used temporarily in the erection of the new structure. This material shall not be cut without the approval of the Engineer. Extreme care shall be taken to avoid damage to the material.

104.08 -- Final Cleaning Up

1. As part of completion of the work and before acceptance and final payment, the Contractor shall remove all rubbish, excess materials, falsework, temporary structures, and equipment from the project site, borrow sites, and all ground occupied in connection with the work. All parts of the work shall be left in a neat and presentable condition. Waterways, including wetlands, shall be returned to their preconstruction condition.

2. The Contractor shall place, at no additional cost to the Department, waste material or strippings back into borrow and materials pits as directed by the Engineer.