Amend **Section 203 - Excavation and Embankment** to read as follows:

"SECTION 203 - EXCAVATION AND EMBANKMENT

203.01 Description. This section is for roadway excavation, borrow excavation and disposal of unsuitable or surplus excavated material.

(A) Roadway Excavation. Roadway excavation includes the use or disposal of materials of whatever character encountered in the work. Use the suitable material removed from excavation in the formation of embankment, subgrade, shoulders, slopes, bedding, and backfill for structures, and for other purposes shown on the plans or as specified by the Engineer.

(B) Borrow Excavation. Borrow excavation includes using material obtained from acceptable sources outside of the highway rights-of-way for the construction of embankments or for other portions of the work.

203.02 Materials. None specified.

203.03 Construction Requirements. Clear and grub all areas requiring excavation, grading, and embankment according to Section 201 - Clearing and Grubbing. Excavate and embank roadways, intersections and entrances to a smooth and uniform surface. Excavate so as not to disturb the material outside the limits of slopes.

(A) Excavation.

(1) General. Obliterate old roadways according to Section 202 - Removal of Structures and Obstructions.

When encountering remains of prehistoric people's dwelling sites or artifacts of historical or archaeological significance, refer to Subsection 107.17(D) - Archaeological, Historic, and Burial Site Findings.

The Engineer will not allow blasting.

(2) Widening or Flattening and Steepening Cut Slopes. The Contractor may widen or flatten the planned cut slopes to obtain material required:

(a) for embankment construction;

(b) to preclude the opening of unsightly borrow pits;

(c) to increase the stability of cut slopes; or

(d) when specified by the Engineer.

The Contractor may submit the necessary data to steepen the cut slopes for acceptance by the Engineer, if:

(a) the material can stand at a slope steeper than shown in the contract and

(b) the Contractor does not need the planned material for roadway construction.

(3) Cut Slopes. Round the tops and ends of cut slopes according to the contract or as specified by the Engineer.

Finish cut slopes that are flatter than half horizontal to one vertical (0.5H:1V) true and straight according to the lines and grades of slope shown in the contract.

Finish cut slopes that are half horizontal to one vertical (0.5H:1V) or steeper and slopes in rock excavation in a rough condition with debris and loose material removed. When completed, the average plane of excavation slopes shall conform to the slopes shown on the plans. No points shall vary from the planned slopes by more than 6 inches measured at right angle to the slope.

(4) Potential Slide Areas. Excavate and remove the unstable material by:

(a) benching to the lines designated;

(b) excavating the material to a designated slope from an elevation at or near the roadway grade; or

(c) as specified by the Engineer.

Use this material in the construction of the roadway or dispose along the roadway as specified by the Engineer.

(5) Maintaining Slopes. The above provisions do not relieve the Contractor of maintaining slopes true and smooth or requiring the redesign of a sound slope.

(B) Excavated Material.

(1) Selected Material. Selected material is suitable excavated material from areas within the highway right-of-way.

Use the selected material:

(a) for finishing the top portion of the roadbed,

(b) for constructing roadbed shoulders,

(c) for structure backfill,

(d) for constructing berms,

(e) for erosion control,

(f) for landscaping,

(g) for other uses according to the plans, or

(h) as specified by the Engineer.

Place selected material on the roadbed according to Subsection 203.03(c) - Embankment Construction and selected topsoil for erosion control according to Section 209 - Erosion Control.

The selected material shall remain in place until the Contractor can haul, place, and compact it in final position. The Contractor may stockpile the material at specified locations for later placement in final position only if it is according to the contract. The stockpile locations shall be determined by the Contractor and accepted by the Engineer. The Engineer will not allow additional compensation for any delay or inconvenience in excavation caused by stockpiling the material.

The Engineer will not consider selected topsoil placed in windrows along the tops of roadway slopes for erosion control work as stockpiled material.

(2) Borrow Material. Borrow material shall conform to the size and quality requirements specified in the contract. When the contract does not specify size or quality, the material shall be of a quality suitable for the purpose intended. The sand equivalent (SE) value as determined by AASHTO T 176 for the top

three feet of the embankment, excluding the pavement structure, shall not be less than the filled area and less than two.

Arrange to obtain borrow material and pay the costs involved. Notify the Engineer 20 working days before opening borrow areas. Allow sufficient time for testing the borrow by the Engineer.

Control of borrow material shall be according to Section 106 - Control of Materials.

Do not excavate beyond the dimensions and elevations established for the borrow pit. Do not remove the borrow material until after the Engineer completes the staking out and cross sectioning of the site. Establish and specify the finished borrow areas approximately true to line and grade. Complete the finished borrow areas so no water may collect or stand therein. Blade and leave borrow areas in shape as to permit accurate measurements after completing the excavation.

Do not place borrow material until after placing the selected material in fill. When there is more borrow material than is required, the Engineer will deduct the excess quantity from the borrow volume as measured in the borrow area.

When necessary to remove an existing fence, replace it to as good condition as the existing fence. The Contractor shall be responsible for the confinement of livestock when removing part of the fence. Provide and maintain temporary fencing, when required for security purpose, at no cost to the State. Furnish and install permanent fencing after the temporary fence is no longer needed at no cost to the State.

(3) Surplus Selected Material. Use surplus excavated material to uniformly widen the embankments, flatten the slopes, or dispose along the locations specified by the Engineer. Do not dispose surplus material above the grade of the adjacent roadbed. Complete the embankments before arranging the disposal of surplus excavation. Do not dispose material unless authorized by the Engineer.

The quantity of surplus material, when shown, is only approximate. When disposing the surplus excavated material prematurely, replace the shortage of material at no cost to the State.

Unused surplus excavated material shall become the Contractor's property. Level or free the disposal area from depressions and humps upon completion of disposal operations.

(4) Unsuitable Material. Where excavation to the finished grade results in a subgrade or slopes of unsuitable soil, the Engineer will require:

(a) removing of the unsuitable material and

(b) backfilling to the finished grade with acceptable material according to Subsection 203.03(c) - Embankment Construction.

The Engineer may designate as unsuitable those soils that cannot be properly compacted in embankment. Unsuitable material may include vegetable matter, garbage and junk piles, on the surface or buried. Unsuitable material shall become the property of the Contractor.

Conduct the operations so that the Engineer can take the necessary cross-sectional measurement before placing the backfill.

When the relative compaction of the original ground is less than the compaction shown in Subsection 203.03(C)(2)-Compaction of Embankment with Moisture and Density Control and Subsection 203.03(C)(3) - Compaction of Embankment without Moisture and Density Control, compact the upper six inches of the exposed original ground according to the contract.

(5) Highly Sensitive Soil. When soil, having a high moisture content, loses its stability and becomes plastic or muddy, the Engineer will allow such equipment and methods in excavating the material that will result in the least possible manipulation or churning of this material. The Engineer will not permit cable operated scrapers of the Sauerman type.

(C) Subgrade Preparation. Subgrade preparation includes preparing the subgrade to the required density, cross section and grade.

(1) General. Prepare the subgrade after compacting the earthwork and completing and backfilling drainage facilities and structures. Compact the subgrade by power rollers equipped with smooth steel-tired wheels.

When choosing to remove rocks or lumps including filling of voids with acceptable materials, the Contractor may do such work at no cost to the State. The material shall conform to the requirements of the specified material to be placed on the subgrade.

(2) Density Requirement. The finished subgrade immediately before placing of subsequent material thereon shall have a relative compaction of 95 percent or more for a depth of six inches.

(3) Surface Tolerances of Subgrade. The finished subgrade upon which the subbase course is placed shall not vary more than 0.10 foot above or below the theoretical grade.

The finished subgrade upon which the base course is placed shall not vary more than 0.05 foot above or below the planned grade.

The finished subgrade upon which the final wearing surface is placed shall not vary more than 0.04 foot above or below the planned grade. Reshape, water, and recompact the subgrade that does not conform to the specified tolerances at no cost to the State.

When the Engineer pays the subbase or base course on a cubic yard basis, the Contractor may waive the lower finish surface tolerance if acceptable by the Engineer.

203.04 Method of Measurement.

(A) Roadway Excavation. The Engineer will not measure roadway excavation for payment.

The Engineer will not measure stockpiling of selected material for payment.

(B) Borrow Excavation. The Engineer will not measure borrow excavation for payment.

203.05 Basis of Payment.

(A) Roadway Excavation. The Engineer will not pay for the accepted roadway excavation. The Engineer will consider the cost for roadway excavation as included in the bid price of the various contract items.

The price includes full compensation for obliterating old roadways; preparing the subgrade; placing selected material in final position; disposing surplus excavation material; rounding of slopes; using water for compaction; and furnishing labor, materials, tools, equipment, and incidentals necessary to complete the work.

The Engineer will not pay for stockpiling selected material or subsequently placing it in final position. The Engineer will consider the cost for stockpiling selected material as included in the bid price of the various contract items.

(B) Borrow Excavation. The Engineer will not pay for the accepted borrow excavation for payment. The Engineer will consider the cost for borrow excavation as included in the bid price of the various contract items.

The price includes full compensation for staking out and cross sectioning the site; establishing the borrow area; providing, replacing, and maintaining temporary and permanent fencing; confining livestock; watering; and furnishing labor, materials, tools, equipment, and incidentals necessary to complete the work."

END OF SECTION