

and no separate or additional compensation will be made therefor.

When obtaining right of way for certain projects, the Department may acquire ownership of the timber located thereon. In these instances, the Contractor's bid for Clearing and Grubbing within Roadway or Right of Way (as applicable) shall reflect a credit for the value of the merchantable timber. The successful bidder will have title to and be responsible for disposing of all timber that is required to be removed from the right of way.

Payment for each item includes all direct and indirect costs and expenses required to complete the work.

Payment will be made under:

Item No.	Pay Item	Pay Unit
2011000	Clearing and Grubbing within Right of Way	Lump Sum
2012000	Clearing and Grubbing within Roadway	Lump Sum
2013050	Clearing and Grubbing Ditches	Acre

SECTION 202

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

202.01 Description. This work shall consist of the removal, wholly or in part, and satisfactory disposal of all buildings, fences, structures, old pavements, abandoned pipe lines and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the contract. It shall include, unless otherwise provided, the salvaging of all materials and backfilling the trenches, holes and pits. When the proposal

does not include pay items for removal of structures and obstructions as set forth in this section or the removal is not measured and paid for as other items of work as hereinafter provided, such work shall be in accordance with Subsection **104.08** and Section **201**.

CONSTRUCTION REQUIREMENTS

202.02 General. The Contractor shall raze and dispose of all buildings, foundations, structures, fences, and any other obstructions that are on the right of way and are not designated to remain. The work shall also include buildings (structures) to be cut off at the right of way line and buildings and appurtenances located entirely outside the right of way limits when such items are indicated as items to be demolished on the plans.

In accordance with regulations of the South Carolina Department of Health and Environmental Control (SCDHEC), the Contractor must secure a permit anytime a facility is razed, due to the possible health hazards should the building contain asbestos. The Contractor shall inspect the facilities identified in the proposal as Demolition Items for the presence of asbestos before the submission of bids. If asbestos is located, the terms of Subsection **107.27**, *Hazardous and/or Toxic Waste*, shall apply. Any questions about the permit should be directed to the South Carolina Department of Health and Environmental Control's Bureau of Air Quality at (803) 734-4547.

When structures (buildings) or other obstructions are designated on the plans to be cut off at a right of way line, they shall be cut off to produce a completed job of first class workmanship and shall include the removal and disposal of all debris and appurtenances, including utility connections from the portion of the building within the right of way. The portion of the building remaining outside the right of way shall be adequately supported. Re-facing, unless otherwise provided, will not be required.

Utility service connections such as sewers, water lines, electrical connections, gas lines, etc., left in place after the removal of the structure (buildings) and obstructions, shall be removed and capped or sealed at the right of way line, the edge of the existing pavement, or shall be capped at the existing mains as directed by the Engineer. Utility materials shall be carefully stored and protected unless such materials are not desired by the owner in which case they shall become the property of the Contractor.

When structures (buildings) or other obstructions are designated on the plans to be cut off at the right of way or to be removed in their entirety, such work shall include the building and all appurtenances, and the material removed in performing this work shall, unless otherwise provided, become the property of the Contractor, except utility materials shall be as heretofore specified. Proper allowance for the value of the salvageable materials shall be taken into account in the bid price for the item involved.

Unusable perishable material shall be destroyed. Unless otherwise permitted, non-perishable material shall be disposed of outside the limits of view from the traveled roadway with written permission of the property owner on whose property the material is placed. Copies of all agreements with property owners are to be furnished to the Engineer. The Contractor shall be responsible for obtaining disposal sites and securing any applicable State, Federal, County or City permits that may be required. The Contractor shall certify in writing to the Department that all permit requirements have been met before placing any material in a disposal area.

Unsuitable material shall be removed from wells, cisterns, septic tanks, other tanks, basements, and cavities. Foundations left by structure removal shall be removed to a depth not less than one foot below natural ground, except that within construction limits, removal shall be to a depth not less than 2 feet below subgrade elevation. Basement floors shall be

broken up to prevent holding of water. Basements or cavities left by structure removal shall be backfilled as directed with material approved by the Engineer and shall be compacted in accordance with the provisions of Subsection **205.07**, unless otherwise directed.

Where a structure or obstruction has been previously removed and the existing utility connections have not been terminated and capped, the Contractor shall comply with the above provisions for utility service connections.

202.03 Removal of Bridges, Culverts, and Other Drainage Structures Bridges, culverts, and other drainage structures in use by traffic shall not be removed until satisfactory arrangements have been made to accommodate traffic. Any excavation adjacent to the structure or to its approaches shall be adequately shored to avoid damage to them or to traffic.

Before demolition of any bridge structure, the Contractor shall coordinate with the Engineer to complete and submit the South Carolina Department of Health and Environmental Control (SCDHEC) form entitled *Notification of Demolition and Renovation*. The completed form shall be submitted at least ten (10) working days before demolition begins to the following address:

Manager, Asbestos Section
Department of Health
And Environmental Control
2600 Bull Street
Columbia, SC 29201

Unless otherwise directed, the substructures of existing structures shall be removed down to the natural stream bottom and those parts outside of the stream shall be removed down one foot below natural ground surface. Where such portions of existing structures lie wholly or in part within the limits of a new structure, they shall be removed as necessary to accommodate the construction of the proposed structure.

Unless otherwise specified in the plans and/or proposal, the material in the structure to be removed, except castings for drainage structures, shall become the property of the Contractor. It shall be removed from the site before completion of the work and proper allowance for its value shall be taken into account in the bid price of the item involved. If the plans or special provisions provide for the material in the structure to be removed to remain the property of the State, steel or wood bridges shall be carefully dismantled without unnecessary damage, steel members shall be match marked, and all salvaged material shall be stored as directed by the Engineer.

Blasting or other operations necessary for the removal of an existing structure or obstruction, which may damage new construction, shall be completed before placing the new work. Before blasting in any stream, river or lake the Contractor shall coordinate his plans and operations with the local South Carolina Department of Natural Resources District Fisheries Biologist and District Law Enforcement Captain.

Should the structural components designated for removal and disposal contain lead-based paints, the Contractor shall comply with all applicable Federal and State requirements for lead as waste, lead in air, lead in water, lead in soil, and worker health and safety.

Concrete or brick box culverts or arches designated on the plans to be removed and which do not interfere or conflict with the placing of a new structure shall be removed and disposed of to a point one foot below the bottom of the top slab or to a point where the side walls will be a minimum of 3 feet below the subgrade elevation. Culverts or arches that interfere or conflict with the new structures shall be removed in their entirety within the extreme limits of the project.

Unless otherwise provided, all concrete removed shall become the property of the Contractor.

202.04 Removal of Pipe and Tile Drains. All existing pipe and tile drains, located within the extreme limits of the project, including bridge sites, shall be removed when so noted on the plans or required by the Engineer. Pipe and tile shall be removed in a careful manner and neatly stored near the project at locations designated by the Engineer unless it is to be re-laid as a part of the contract. The Contractor shall be responsible for any damage to pipe or tile during removal and storing due to his negligence or to improper handling or storing. Pipe removed and designated by the Engineer, as having no value, shall be disposed of by the Contractor.

Any pipe or tile, any part of which conflicts with the installation of a new drainage structure, shall be removed by the Contractor, and all work and costs shall be included in the contract prices for the new structure. Likewise, no direct payment will be made for the removal of pipe or tile that is to be re-laid at the same or other locations on the project.

202.05 Removal and Disposal of Existing Pavements, Sidewalks, and Curbs. Existing portland cement concrete, brick, or stone pavements, with or without asphalt overlays; concrete, brick or stone sidewalks; concrete gutter or integral curb and gutter curb; asphalt concrete pavement; and bituminous curb designated for removal shall be removed and disposed of by the Contractor unless such material is suitable for use in constructing the embankment.

Such sawing as is necessary to produce a uniform line between the pavement to be retained and that to be removed shall be performed as directed.

Whenever the plans indicate that concrete gutter is to be retained as a base and the integral curb removed therefrom, the curb shall be removed to the top elevation of the gutter using such methods, as directed by the Engineer, to prevent damage to or displacement of the gutter to be retained.

202.06 Method of Measurement.

a. When the contract stipulates that payment will be made for removal of structures and obstructions on a lump sum basis, the pay item, Removal of Structures and Obstructions, will include all structures and obstructions within the right of way in accordance with the provisions of this Section. When the proposal stipulates that payment will be made for the removal of specific items on a unit basis, measurement will be made by the unit stipulated in the contract. Material used to backfill excavated areas, as directed, will be measured in cubic yards.

b. When the contract requires the removal of bridges, a separate item will be included in the proposal. Measurement will be a lump sum basis for the work involved. When the plans include an item for Removal and Disposal of Existing Culverts (*width*) ft. x (*height*) ft., the quantity measured will be for each reinforced concrete box culvert of the size indicated, regardless of length, removed as directed in the plans or by the Engineer. Otherwise, the removal of concrete or brick culverts or arches will not be measured. The cost of this work shall be included in the price for the other items of work.

c. Measurement for the removal of pipe, pipe arches and tile drains will be in cubic yards for the excavation necessary for the removal of these items and shall be the volume actually removed between the elevation of the ground surface and the bottom of the pipe, but shall be limited to the volume enclosed by vertical planes located one foot outside and parallel to the neat lines of the pipe, but in no case shall the distance between the vertical planes be less than 3 feet. The volume of the pipe will not be deducted from the measurement. No measurement will be made for the removal of pipe, which is to be replaced by new pipe or for the removal of pipe to be re-laid at any location.

d. When the item Removal and Disposal of Existing Pavement is included in the proposal, the quantity measured shall be the number of square yards of existing brick pavement, brick pavement with asphalt concrete overlay, brick sidewalk, cobblestone pavement, portland cement concrete pavement, portland cement concrete pavement with asphalt concrete overlay, portland cement concrete gutter, portland cement concrete integral curb and gutter, portland cement stabilized base with asphalt concrete overlay acceptably removed and disposed of in accordance with these specifications. The quantity will be determined by actual horizontal area measurements before removal.

e. When the item Removal and Disposal of Existing Asphalt Pavement is included in the proposal, the quantity measured shall be the number of square yards of the asphalt concrete pavement with a total thickness of 2 inches or greater, or as otherwise indicated on the plans or in the special provisions, acceptably removed and disposed of in accordance with these specifications. The quantity will be determined by actual horizontal area measurements before removal.

Asphalt pavements with a total thickness less than 2 inches or as otherwise indicated on the plans or in the special provisions, aggregate bases, earth type bases, and other flexible pavement structure components shall not be measured as a separate item but will be measured as Unclassified Excavation as provided in Section **203**.

f. When an item for the removal and disposal of existing curb is included in the proposal, the quantity measured shall be the number of linear feet of stone, bituminous, or concrete curb acceptably removed and disposed of in accordance with these specifications. The quantity will be determined by actual measurements before removal.

g. When the plans indicate that existing pavement or curb is to be removed and an item for the removal and disposal of existing pavement or curb is not included in the proposal, the removal and disposal of existing pavement and curb will be measured and paid for as Unclassified Excavation as provided in Section **203**.

202.07 Basis of Payment. The accepted quantities of Removal of Structures and Obstructions will be paid for at the contract lump sum price bid, which price shall be full compensation for removal and disposing of the obstructions in accordance with the contract. If no contract price is listed in the proposal for any item set forth in this specification, no direct payment will be made for any work necessary to comply with the provisions of such items, except as set out herein, the cost thereof to be included in the various pay items of the contract.

The excavation necessary for the removal of Pipe, Pipe Arches, and Tile Drains shall be paid for at the contract unit price per cubic yard for Unclassified Excavation.

Any necessary backfill required under this section will be paid for as Unclassified Excavation or Borrow Excavation as applicable.

The work necessary to remove existing brick pavement, brick pavement with asphalt concrete overlay, brick sidewalk, cobblestone pavement, portland cement concrete pavement, portland cement concrete pavement with asphalt concrete overlay, portland cement concrete gutter, portland cement concrete integral curb and gutter, portland cement stabilized base with asphalt concrete overlay shall be paid for at contract unit price for Removal and Disposal of Existing Pavement, which price and payment shall be full compensation for removal and disposal of such material.

The work necessary to remove existing asphalt pavements measured in Subsection **202.06** shall be paid for at the

contract unit price for Removal and Disposal of Existing Asphalt Pavement, which price and payment shall be full compensation for removal and disposal of such material.

The work necessary to remove existing concrete, bituminous or stone curb shall be paid for at contract unit price for Removal and Disposal of Existing Curb, which price and payment shall be full compensation for removal and disposal of such material.

Overhaul will be in accordance with the provisions of Section **207**, except no overhaul will be paid for concerning removal and disposal of existing pavements.

Specific obstruction items, stipulated for removal and disposal under unit price pay items, will be paid for at the contract unit price per unit specified in the proposal, which prices and payments shall be full compensation for removal and disposal of such items. The price shall include salvage of materials removed, their custody, preservation, storage on the right of way or as designated, and disposal as provided herein. Subsequent backfill incidental to removal will be paid for at the contract unit price for Unclassified Excavation or Borrow Excavation as applicable.

If the itemized proposal contains the lump sum item Clearing & Grubbing within Right of Way, it shall, in addition to the requirements of Section **201**, include the cost of all items in Section **202**, except for those set out specifically as pay items in the itemized proposal or as otherwise provided herein.

Payment for each item includes all direct and indirect costs and expenses required to complete the work.

Payment will be made under:

Item No.	Pay Item	Pay Unit
2021000	Removal of Structures and Obstructions	Lump Sum
20220XX	Removal & Disposal Item No. <i>(number)</i>	Lump Sum
2023000	Removal & Disposal of Existing Pavement	Square Yard
2024100	Removal & Disposal of Existing Curb	Linear Foot
2024200	Removal & Disposal of Existing Bituminous Curb	Linear Foot
2025000	Removal & Disposal of Existing Asphalt Pavement	Square Yard
20281XX	Removal & Disposal of Existing Bridge	Lump Sum
20285XX	Removal & Disposal of Existing Culvert <i>(width)</i> ft. x <i>(height)</i> ft.	Each

SECTION 203

ROADWAY AND DRAINAGE EXCAVATION

203.01 Description. This work shall consist of the removal, placement, and compaction or satisfactory disposal of all materials encountered within the limits of the right of way and borrow pits for the construction of the roadway. The above limits may include intersecting roads, driveways, ditches, channels, parking areas, ramps, and private entrances. This work shall also consist of the removal and replacement of unsuitable material in the subgrade or under structures, the stripping of the roadway and material pits, and the excavation work necessary for the formation, compaction, and shaping of all embankments, subgrade, shoulders, slopes, and intersections. All work performed under this section shall conform to