

## SECTION 13

### REMOVAL ITEMS

#### 13.1 DESCRIPTION

##### A. General:

This work shall include, but not be limited to: the removal and disposal of buildings, fences, structures, pavements; sawing of pavements prior to removal; and removal and disposal or salvage of abandoned pipe lines, pipe culverts, and other obstructions which are not designated or permitted to remain, except for obstructions to be removed and disposed of under other items in the contract. It shall also include the salvaging of designated materials and backfilling the resulting trenches, holes, and pits. When the proposal does not include pay items for removal items as set out in this section, such work shall be performed under various other contract items.

##### B. Related Items:

Section 15 - Disposal of Surplus Excavation and Waste  
Section 19 - Incidental Work  
Section 90 - Traffic Control

#### 13.2 MATERIALS (not specified)

#### 13.3 CONSTRUCTION REQUIREMENTS

##### A. Structure Removal:

Designated salvageable material shall be removed without unnecessary damage in sections or pieces, which may be readily transported and shall be stored by the Contractor at specified places. Unusable perishable material shall be destroyed or disposed of off the project. Nonperishable material may be disposed of outside the limits of view from the project with written permission of the property owner and in accordance with City Ordinance.

Basements or similar cavities left by structure removal shall be filled to the level of the surrounding ground and shall be compacted to the satisfaction of the Engineer under the same specifications as the embankment. Concrete basement floors and similar structures shall be broken up to prevent entrapment of water.

Bridges, culverts, and other drainage structures designated for removal and in use by traffic shall not be removed until satisfactory arrangements have been made to accommodate traffic.

Unless otherwise directed, the substructures of existing bridges, culverts, and other drainage structures shall be removed down to the flow line of watercourse. Those parts outside of the stream shall be removed one (1) foot below natural ground surface. Where such portions of existing structures are within the limits of a new structure, they shall be removed as necessary to accommodate the construction of the proposed structure.

Steel bridges and wood bridges, if designated, shall be dismantled without damage. Structures designated to become the property of the Contractor shall be removed to an approved site.

Blasting or other operations necessary for the removal of an existing structure or obstruction, which may damage new construction, shall be completed prior to placing the new work. Blasting shall be accomplished according to the requirements stated in Section 7.

Pipe to be re-laid shall be removed, transported to a location approved by the Engineer and stored, when necessary, so that there will be no damage before relaying. The Contractor will be required to replace sections of pipe damaged by his negligence.

In removing manholes, catch basins, and drop inlets, any live sewers connected with them shall be rebuilt and properly reconnected. Satisfactory by-pass service shall be maintained during such construction operations. Any work on or removal of sanitary sewer or water facilities shall conform to Sections 8, 9, and 11.

- B. Paving Surface Removal: In removing pavement, curb, gutter, sidewalk, and similar structures where portions of the existing structures are to be left in the finished work, the old structure shall be removed to an existing joint or saw cut, and chipped, if necessary, to a true line with a vertical face. Openings in the existing pavement shall be made, by sawing to full depth of the pavement.

Protection of Existing Surface: Use of steel faced or shod equipment without adequate padding to prevent damage to the existing pavement shall be at the Contractor's risk. Extra care shall be taken to prevent damage from excavator, loader bucket, or other equipment edges/teeth when placing or removing trench spoil or materials piles. Damaged pavement because of the Contractor's equipment shall be repaired or replaced at no additional cost to the City.

Saw cutting of the pavement structure ahead of excavation operations shall be required to confine pavement damage to the limits of the trench or excavation. Initial saw cuts shall be made a minimum of one foot outside of the anticipated trench width or removal area. Asphalt or Portland concrete pavement shall be cut to full depth. Pavement removal limits shall be approved by the Engineer prior to sawing.

A second saw cut located one foot outside the trench limits will be required for all asphalt concrete removals. These second, final pavement saw cuts shall be full depth and shall be one (1) foot outside the initial cut. Final saw cuts shall provide a

smooth vertical face, against which to resurface. Care shall be taken to prevent damage to the newly cut edge.

Final removal area limits for Portland cement concrete excavation shall be as approved by of the Engineer. Minimum width of final removal shall be ½ panel on large panels and full panel on small panels.

If undermining of the asphalt concrete pavement edge occurs at any time during the construction, such undermined pavement must be saw cut back and removed to form a square edge and a straight and even alignment to a horizontal distance of at least one (1) foot beyond the edge of the undermined area. Removals for Portland cement concrete that has become undermined shall be as directed by the Engineer.

Where the existing street contains special subsurface drains or soil support fabric and where plans call for portions of such to remain, be extended, or be repaired, special removal techniques shall be as follows:

Streets that utilize basecourse over an engineering soil support fabric shall, upon removal of the asphalt or concrete pavement, be generally excavated down to the fabric with sufficient care to leave the fabric undamaged. Once the basecourse is removed, the fabric shall be cut allowing sufficient material to patch or connect to, the fabric laid back and the area excavated and backfilled with care to prevent damage to the fabric. When backfill is complete to the level of the fabric, the laid back fabric edges shall be laid flat over the backfilled area and covered with a new piece of similar fabric so that the edge of existing fabric is overlapped with new fabric to a minimum width of one and one half (1 ½) feet on either side of the undamaged, existing fabric edge. If the soils support fabric is inadvertently damaged by the Contractor, the Contractor shall notify the Engineer of the damage so that the Engineer may examine the extent of damage and direct the repair. Such repair shall be performed to the satisfaction of the Engineer and at the expense of the Contractor.

Special subsurface drains damaged by construction shall be repaired in kind at no expense to the City unless otherwise indicated in the Contract Documents.

Established drainage in the street, alley, or drainage ditch must be maintained by the Contractor during his construction operations. Contractor shall take necessary precautions to prevent drainage from running into the excavation.

Street and traffic signs within the excavation area shall be removed by the Contractor and delivered to the Rapid City Sign Shop. Care shall be taken to prevent damage to the signs, posts or hardware. New signs not specifically called out in the plans to be installed by the Contractor shall be erected by Sign Shop Personnel upon notification by the Contractor to the Traffic Operations Engineer that construction is sufficiently completed to enable sign installation. The Contractor shall give no less than twenty-four (24) hours' notice to the Traffic Operations Engineer.

Monuments, property pins, survey referenced points, and benchmarks shall not be disturbed without specific written permission from the Engineer. Any such markers disturbed without permission shall be replaced at the Contractor's expense by a licensed land surveyor.

City construction project plans will indicate known, existing monuments that are scheduled to be disturbed, demolished or removed.

Damage to the property of others, such as fences, trees, shrubs, lawns, sidewalks, etc. shall be repaired or replaced at the Contractor's expense, unless removal of such is shown on the plans or written permission was first obtained from the Engineer.

Monuments, property pins, survey referenced points, and benchmarks shall not be disturbed without written permission from the Engineer. Any such markers disturbed without permission, shall be replaced at the Contractor's expense, by a licensed land surveyor.

#### C. Dirt/Dust Control

All activities associated with this contract shall conform to Rapid City Municipal Ordinance Chapters 8.34 through 8.44 and/or Pennington County Ordinance No. 12. The Contractor shall make every reasonable effort to minimize fugitive dirt or dust from construction activities. The Engineer may require the Contractor to water or take other actions necessary to prevent blowing dirt and/or dust and other nuisance conditions.

### 13.4 METHOD OF MEASUREMENT

When the contract stipulates that payment will be made for removal of obstructions on a lump sum basis, the plans will list in detail the items to be removed.

When the contract 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.

When removal of pipe is to be made on a unit basis, the quantity will be measured in linear feet to the nearest tenth (0.1) foot. Quantities will be determined by measuring in place prior to removal. Flared end sections will be measured in linear feet at the flow line as part of overall length of pipe.

When removal of AC or PCC pavement or sidewalk is to be made on a unit basis, the quantity will be measured in square feet or square yards to the square foot or nearest tenth (0.1) square yard. Quantities will be determined by measuring in place prior to removal.

Where curb and/or gutter is adjoining Portland Cement Concrete pavement to be removed, it will be considered as pavement and will be measured as such.

When removal of obstructions will be on a unit basis, pavement sawing will be measured and paid for separately. Measurement for sawing of pavement shall be by the linear foot. Sawing limits shall be approved by the Engineer prior to sawing.

### **13.5 BASIS OF PAYMENT**

Payment for removal of obstructions on a lump sum basis will be as set forth in Section 19.

Pipe removal, will be considered as Incidental Work unless a bid item for the removal is provided. Variance from pipe removal quantities, locations, or dimensions shown on the plans or specified herein will not be cause for adjustments in payment for Incidental Work.

Payment for removal of obstructions on a unit basis will be made under the appropriate bid item. Unless otherwise indicated the measurement of the unit will be to the nearest whole unit.

Payment for removal of obstructions by the Incidental work item, lump sum, or on a unit basis will be full compensation for removal and disposal of such items, excavation and subsequent backfill incidental to their removal. This payment will also include salvage of materials removed, their custody, preservation, storage, and disposal as provided herein or on the plans.

When there is a bid item provided, payment for sawing will be at the contract unit price per linear foot sawed. When no bid item is provided, sawing will be considered as incidental to the bid item for which it pertains.

**END OF SECTION**