

ITEM 010120

Item 0101201 - ADJUST MANHOLE OR CATCH BASIN IN CONCRETE BASE

Item 0101202 - ADJUST MANHOLE OR CATCH BASIN IN FLEXIBLE BASE

Item 0101203 - ADJUST WATER GATE IN CONCRETE BASE

Item 0101204 - ADJUST WATER GATE IN FLEXIBLE BASE

Item 0101205 - ADJUST MANHOLE OR WATER GATE USING EXTENSION RING

Item 0101206 - RESET MANHOLE OR CATCH BASIN IN CONCRETE BASE

Item 0101207 - RESET MANHOLE OR CATCH BASIN IN FLEXIBLE BASE

DESCRIPTION

Work under this item shall include furnishing materials, equipment and labor for the resetting or adjustment of storm and sewer manholes, water gates and catch basins, within the project limits to meet the proposed grades at each location as ordered by the Engineer.

The maximum adjustment in elevation of frames and covers and catch basin backs under this item will not exceed 6". Any vertical change greater than 6" shall be paid for under Item 0101206 or Item 0101207.

REFERENCED ITEMS

Item 0101206, 0101207

REQUIRED SUBMITTALS

None

MATERIALS

Brick intended for use below ground level shall conform to ASTM C-32-04 except that the table therein is amended to provide that the required minimum compressive strength in pounds per square inch shall be for any individual brick 3,000 pounds, for the average of five brick selected at random 4,000 pounds, and the maximum absorption of water by five-hour boiling test shall not exceed 18% for any individual brick or 15% for the average of any five brick selected at random. The above strength and absorption requirements, being somewhat less exacting than part of those of ASTM, are intended to admit the use of the product of most, but not all, of the brick manufacturing plants in the vicinity of Hartford.

Mortar shall be composed of one part portland cement and two parts, by volume, of surface dry fine aggregate.

Extension rings for raising manhole frames and water gates will be provided by the Metropolitan District Commission at no cost. Adjustment of manhole frames and water gates by this method is limited to 2".

All materials furnished by the Metropolitan District Commission must be picked up at the Metropolitan District Commission Yard at Maxim Road. Contractors are to be accompanied by the City of Hartford Construction Inspector assigned to the project.

CONSTRUCTION METHODS

For catch basins and for drainage and sewer manholes where extension rings are not used, bituminous concrete pavement and/or reinforced concrete base shall be removed around the frame, the walls or sides shall be rebuilt to conform to the required elevation of the new construction and the frames and grates or covers reset to within 1/4" of proposed grade. Where it is necessary to remove or add masonry blocks or a precast section to a manhole or catch basin, and when the adjustment is more than 6", the additional work will be paid for as extra work at an agreed price prior to performing work.

When a new precast section is added, it is the responsibility of the contractor to ensure that the joint of the new precast section will interlock properly with that of the existing section below. Resetting of cast iron catch basin backs, where applicable shall be included under this item. Cast iron catch basin backs shall be carefully supported by utilizing a full brick and mortar filler behind the curb inlet to provide proper support to the catch basin backs. All washers and bolts shall be replaced and tightened prior to acceptance.

Where water gate boxes are to be raised, and extension rings cannot be used, the bituminous concrete pavement and/or reinforced concrete base shall be removed from around the gate box and the gate box lifted to meet the proposed grade.

If frames, grates, covers or water gate boxes are found to be broken or damaged, they shall be replaced with new material conforming to the requirements of the Metropolitan District Commission. The Metropolitan District Commission will provide replacements at no charge provided these fixtures were not damaged by the contractor during his operations. The Contractor will be required to clean any and all gate boxes if required.

Frames, grates and covers to be reset shall be removed from their existing beds. The existing brick work or concrete shall be cleaned to ensure a good bond prior to laying fresh brick and mortar against it. The walls or sides of the manhole or catch basins shall be rebuilt to conform to the requirements of the Metropolitan District

Commission and the frames and covers reset on full mortar beds. Each brick shall be thoroughly wet before laying and shall be laid with a push joint, that is, by placing sufficient mortar on the bed and forcing the brick into it; so as to fill every joint with mortar in one operation, whether on the bottom side, or end of the brick.

Mortar joints shall not be over 1/4" except on the outside curved manhole walls. All brick work shall be raked brick, unless toothing is specifically ordered by the Engineer.

The outside of all brick work which is below ground shall be covered, as soon as possible after laying with a coat of mortar not less than 1/4" in thickness.

METHOD OF MEASUREMENT

Adjust utility cover will be measured for payment as units, completed and accepted by the Engineer.

BASIS OF PAYMENT

Payment for this work will be measured by the number of units of "ADJUST/RESET UTILITY COVER" completed and accepted and will be paid as follows:

- 0101201. Adjust Manhole or Catch Basin in concrete base road will be paid for at the contract unit price each, completed and accepted, which price shall include all materials, equipment, tools hauling of material from the Metropolitan District Commission Yard and labor incidental thereto.
- 0101202. Adjust Manhole or Catch Basin in flexible base road will be paid for at the contract unit price each, completed and accepted, which price shall include all materials, equipment, tools, hauling of material from Metropolitan District Yard and labor incidental thereto.
- 0101203. Adjust Water Gate in concrete base road will be paid for at the contract unit price each, completed and accepted, which price shall include all materials, equipment, tools, hauling of material from the Metropolitan District Commission Yard and labor incidental thereto.
- 0101204. Adjust Water Gate in flexible base road will be paid for at the contract unit price each, completed and accepted, which price

shall include all materials, equipment, tools, hauling of material from the Metropolitan District Commission Yard and labor incidental thereto.

- 0101205. Adjust Manhole or Water Gate using extension ring will be paid for at the contract unit price each, completed and accepted, which price shall include all materials from the Metropolitan District Commission Yard and labor incidental thereto.
- 0101206. Reset Manhole or Catch Basin in Concrete Base will be paid for at the contract unit price each, completed and accepted, which price shall include all materials, equipment, tools and labor incidental thereto.
- 0101207. Reset Manhole or Catch Basin in Flexible Base will be paid for at the contract unit price each, completed and accepted, which price shall include all materials, equipment, tools and labor incidental thereto.

<u>PAY ITEM</u>	<u>DESCRIPTION</u>	<u>PAY UNIT</u>
0101201	Adjust Manhole or Catch Basin in Concrete Base	EA
0101202	Adjust Manhole or Catch Basin in Flexible Base	EA
0101203	Adjust Water Gate in Concrete Base	EA
0101204	Adjust Water Gate in Flexible Base	EA
0101205	Adjust Manhole or Water Gate using Extension Ring	EA
0101206	Reset Manhole or Catch Basin in Concrete Base	EA
0101207	Reset Manhole or Catch Basin in Flexible Base	EA