

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
ADJUSTING DRAINAGE STRUCTURE, CASE 1, MODIFIED

CFS:DMG

1 of 3

APPR:TES:DBP:03-08-22
FHWA:APPR:03-22-22

a. Description. This work consists of adjusting drainage structures, including utility manhole covers, in accordance with section 403 of the Standard Specifications for Construction, as shown on the plans, as directed by the Engineer, and as stated herein.

b. Materials. Furnish materials in accordance with subsection 403.02 of the Standard Specifications for Construction with the following exceptions:

Furnish Concrete, Grade 3500 or Grade P-NC as directed by the Engineer in accordance with sections 1004 and 1006 of the Standard Specifications for Construction, respectively. Furnish epoxy anchored lane ties in accordance with section 914 of the Standard Specifications for Construction. Ensure the lane ties are #5 bar size with a nominal length of 18 inches. Ensure the circular bar for the rotary cut application is epoxy coated #5 bar of a diameter that will center it between the structure cover and the existing surrounding pavement. Select epoxy for anchoring lane ties into the concrete from section 712.03J of the Qualified Products List. Furnish hot-poured joint sealant in accordance with section 914 of the Standard Specifications for Construction.

For concrete curb, concrete curb and gutter, or concrete traffic island repairs furnish materials in accordance with the standard specifications.

c. Construction. For structures within the pavement area remove pavement adjacent to the drainage structure cover using a rotary or sawing method. When using a rotary coring method, remove a minimum 4 foot diameter section of pavement around the drainage structure frame and cover. If the frame outside diameter measurement is greater than 36 inches, use a rotary coring head to remove a minimum 4.5 foot diameter section of pavement. When using a sawing method, saw cut clean and remove a 6 foot by 6 foot pavement square.

For structures within the curb line, saw cut and remove a 4 foot by 6 foot section of pavement around the frame with the 6 foot dimension measured along the curb line. Remove curb and/or curb and gutter associated with the adjustment of structures, as directed by the Engineer.

For structures located adjacent to concrete traffic control islands, remove concrete island full-width or up to 6 feet wide to facilitate adjustment of the drainage structure cover frame, as directed by the Engineer.

Prior to setting the frame, compact exposed soil using a method approved by the Engineer.

Support the cover frame over the structure matching the adjacent roadway cross slope. Secure the frame in-place to allow for placement of concrete using brick or block as required on a full bed of mortar without altering frame position.

Install epoxy anchored lane ties in accordance with section 603 of the Standard Specifications for Construction to anchor the concrete to adjacent composite pavement. Install circular epoxy coated bar as detailed herein. For structures within the pavement area, replace pavement around the frame with Concrete, Grade 3500 or Grade P-NC as directed by the Engineer matching the finished elevation and cross-slope of the roadway. Construct plane of weakness joint as directed by the Engineer.

For structures within the curb line, replace pavement around the frame with Concrete, Grade 3500 or Grade P-NC as directed by the Engineer and HMA top course as shown on the detail herein. Install epoxy anchored lane ties to anchor the concrete to adjacent composite pavement for curb drainage structures located in curbed areas. Replace concrete curb, concrete curb and gutter, or concrete traffic control islands in-kind in accordance with Standard Plan R-30 Series and section 802 of the Standard Specifications for Construction.

Immediately remove any debris that falls into drainage structures or other utility manholes due to Contractor operations.

Ensure saw overcuts are cleaned and sealed with hot-poured joint sealant.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Dr Structure Cover, Adj, Case 1, Modified	Each

Dr Structure Cover, Adj, Case 1, Modified includes furnishing all materials, saw cutting, removal and disposal of existing pavement and curb or curb and gutter, adjustment of cover to required elevation and cross-slope, installation of epoxy anchored lane ties and epoxy coated circular bars, placement and finishing of new curb or curb and gutter, placement and finishing of new concrete and HMA, placement and removal of temporary HMA wedging for maintaining traffic, if required, placement of cover on open structures to prevent accumulation of debris and cleaning existing drainage structures due to Contractor operations.

