



**TYPICAL ITEMS OF WORK**  
**Zones of Benefit**

Standardized work description:	<i>Example:</i>
Grading	Grading to reshape the roadway.
Ditching	Ditching, including grading to reshape roadside ditches to provide proper drainage, removing vegetation, and clearing debris from culvert inlet and outlet; etc.
Aggregate Base	Placing $\frac{3}{4}$ inch Class II aggregate base, watered and compacted to a minimum depth of six inches (6").
Tack Coat	Applying a tack coat of SS-1h emulsion.
Placing Hot Mix Asphalt - Paving	Placing hot mix asphalt using $\frac{1}{2}$ inch aggregate and asphalt binder (typically PG64-10), rolled and compacted to a depth specified. The newly placed asphalt shall tie in smoothly with the existing road surface.
Removal of Surface (Pothole Repair)	Neat cutting the road surface (or approximately xx square feet of roadway as marked in the field by the road zone representative) into a square pattern six inches (6") outside of the outer boundary of each potholed area and excavating and removing the material to a depth of approximately three inches (3") depending upon conditions in the field.
Placing Aggregate in Potholed Area	Placing $\frac{3}{4}$ inch Class II aggregate, watered and compacted to a minimum depth of 4 inches (4").
Pothole Patching with Hot Mix Asphalt	Applying a tack coat of SS1H emulsion to the vertical edges; placing hot mix asphalt using $\frac{1}{2}$ inch aggregate (can also be $\frac{3}{4}$ ") and asphalt binder (typically PG64-10) into the excavated area in two lifts, rolled and compacted to minimum depth of four inches (4") to tie in smoothly with the existing road surface.
Edge repair	Neat cutting into a square pattern approximately six inches (6") outside of the outer boundary of each failed edge area and excavating and removing the existing material to a depth of approximately three inches (3") depending on conditions in the field; applying a tack coat of SS1H emulsion to the vertical edges; placing hot mix asphalt concrete into the excavated area rolled and compacted to tie in smoothly with the existing road surface or



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	<p>ALTERNATIVE: Edge repairs including cleaning the repair areas and removing loose material; applying a tack coat of SS-1h emulsion to the vertical edges; placing hot mix asphalt using ½ inch aggregate and PG64-16 asphalt binder, rolled and compacted to a depth of one and one-half inches (1.5”) depending on conditions in the field to tie in smoothly with the existing road surface, etc.</p>
Sweeping/Clean	<p>Sweeping or cleaning the road surfaces using a self-propelled power broom and water truck to remove debris and loose materials prior to applying the chip seal, etc.</p>
Crack Seal	<p>Cleaning the road surface and existing cracks in the pavement as necessary with a blower, sweeper and/or pressure washer; filling cracks measuring ¼ inch or greater with hot applied crack filler material.</p>
Asphalt Blanket Patching	<p>Placing hot mix asphalt concrete using ½ inch aggregate and asphalt binder (typically PG64-10 or PG 64-16), rolled and compacted to a minimum depth of three inches (3”). The newly placed asphalt shall tie in smoothly with the existing road surface.</p>
Culvert Placement	<p>Neat cutting the existing asphalt; excavating to a minimum depth of thirty-three inches (33”) to allow for the installation of a corrugated steel culvert pipe thirty-five feet (35’) long and twelve inches (12”) in diameter; placing 12 inches of backfill material over the culvert pipe and six inches (6”) of ¾ inch Class II aggregate base on top of the backfill; and placing hot mix asphalt concrete using ½ inch aggregate and PG64-16 asphalt binder, or equal, rolled and compacted to minimum three inch (3”) depth over the culvert installation area. The newly placed asphalt shall tie in smoothly with the existing road surface.</p>
Chip Seal Prep	<p>Cleaning the road surface using a self-propelled power broom and water truck to remove debris and loose materials prior application of chip seal. Cover existing manhole covers, water valve boxes and any other utility covers to protect them from emulsion during application of chip seal.</p>
Fog Seal	<p>Applying a fog seal to newly placed patches in areas designated to receive chip seal. Fog seal emulsion shall be type SS-1h mixed with an equal portion of water and spread at a rate of .05 gallon</p>



**TYPICAL ITEMS OF WORK**  
**Zones of Benefit**

	<p>per square yard. Application of fog seal shall be completed prior to the application of chip seal.</p>
<p>Single Chip Seal</p>	<p>Applying a <b>single</b> chip seal over an existing <b>(dirt or asphalt) chip seal</b> roadway surface. Asphaltic emulsion shall be polymer or latex modified CRS-2H <b>PMCRS 2H, (SC800 if over dirt)</b> and shall be spread at the rate of (.25 to .40) gallons per square yard with adjustments to the spread rates allowable in the field based on conditions. The temperature of the emulsion shall be between 130 degrees and 180 degrees Fahrenheit. Atmospheric temperatures at the time of application shall be a minimum of 65 degrees Fahrenheit and not greater than 110 degrees Fahrenheit. Aggregate screenings (chips) shall be 5/16" x No. 8 and spread at a rate of <b>(20 to 30 pounds)</b> per square yard with adjustments to the spread rate in the field based on conditions.</p> <p>Chips shall be free of dust and other deleterious materials. Chips shall be compacted into place with a pneumatic roller.</p> <p><b>Roadway shall be swept within 48 hours of the chip seal application and again after 5 days.</b></p>
<p>Double Chip Seal</p>	<p>Applying a <b>double</b> chip seal over an existing <b>(chips seal, dirt or asphalt)</b> roadway surface. The first application of asphaltic emulsion shall be <b>polymer or latex modified CRS-2H (SC800 if over dirt)</b> and shall be spread at the rate of (.25 to .30) gallons per square yard with adjustments to the spread rates allowable in the field based on conditions. The second application of asphaltic emulsion shall be <b>polymer or latex modified CRS2H</b> with an application rate of (.25 to .30) gallons per square yard with adjustments to the spread rates allowable in the field based on conditions. The temperature of the emulsion shall be between 130 degrees and 180 degrees Fahrenheit. Atmospheric temperatures at the time of application shall be a minimum of 65 degrees Fahrenheit and not greater than 110 degrees Fahrenheit. Aggregate screenings (chips) shall be <b>5/16" x No. 8</b> and spread at a rate of <b>(20 to 30 pounds)</b> per square yard with adjustments to the spread rate in the field based on conditions.</p> <p>Chips shall be free of dust and other deleterious materials. Chips shall be compacted into place with a pneumatic roller.</p> <p><b>Roadway shall be swept within 48 hours of the chip seal application and again after 5 days.</b></p>
<p>Double Chip Seal with Fabric</p>	<p>Applying paving fabric over an existing chip seal roadway surface prior to application of chip seal including machine placing paving</p>



**TYPICAL ITEMS OF WORK**  
**Zones of Benefit**

	<p>fabric in paving asphalt binder (typically PG 64-16) applied at the rate of .30 to .35 gallons per square yard with adjustments to the spread rate allowable in the field based on conditions; and rolling fabric in place using a pneumatic roller. Excess fabric mat not attached to the oil shall be trimmed off. Wrinkles in the fabric shall not be permitted. Longitudinal joints shall be lapped two inches (2") to four inches (4"); transverse joints shall be butt joints. Fabric mat shall be placed within six inches (6") of gutters unless otherwise directed by the zone of benefit representative.</p> <p>Apply double chip seal over the paving fabric. The first and second applications of asphaltic emulsion shall be latex modified CRS-2H, or equal, and shall be spread at a rate of .35 to .40 gallons per square yard with adjustments to the spread rate allowable in the field based on conditions. The temperature of the emulsion shall be between 285 degrees and 325 degrees Fahrenheit. Atmospheric temperatures at the time of application shall be a minimum of 65 degrees Fahrenheit and not greater than 110 degrees Fahrenheit. The first application of chips shall be 3/8" x No. 6 and shall be spread at a rate of 27 pounds per square yard. The second application of chips shall be 5/16" x No. 8 and shall be spread at a rate of 24 pounds per square yard with adjustments to the spread rate in the field based on conditions. Chips shall be free of dust and other deleterious materials and shall be compacted into place with a pneumatic roller. Roadway shall be swept within 5 days of the chip seal application.</p>
<p>Asphalt Overlay with Paving Fabric</p>	<p>Apply paving fabric over an existing roadway surface prior to application of asphalt overlay, including machine placing paving fabric in paving asphalt binder (typically PG 64-16), applied at the rate of .30 to .35 gallons per square yard with adjustments to the spread rate allowable in the field based on conditions; and rolling fabric in place using a pneumatic roller. Excess fabric mat not attached to the oil shall be trimmed off. Wrinkles in the fabric shall not be permitted. Longitudinal joints shall be lapped two inches (2") to four inches (4"); transverse joints shall be butt joints. Fabric mat shall be placed within six inches (6") of gutters unless otherwise directed by the zone of benefit representative;</p> <p>Placing hot mix asphalt concrete using ½ inch aggregate and asphalt binder (typically PG64-16), rolled and compacted to a minimum depth of two inches (2") to tie in smoothly with the existing road surface, etc.</p>
<p>Aggregate Retention Coat</p>	<p>Applying an aggregate retention coat of SS-1h emulsion spread at the rate of .15 gallons per square yard with a four (4) hour cure</p>



**TYPICAL ITEMS OF WORK**  
**Zones of Benefit**

	<p>time during which no traffic will be allowed on the newly placed surface. The SS-1h emulsion coat shall be placed in two applications, each covering one half of the width of the roadway to allow the roads to remain open to traffic at all times, etc.</p>
Spray Injection Patching Method	<p>Cleaning the area with compressed air to remove loose material; applying two (2) courses of asphaltic emulsion type CRS2H, or equal, and 3/8 inch x No. 6 aggregate using the spray injection patching method.</p>
Spray Injection Patching with Fabric	<p>Cleaning the area with compressed air to remove loose material; applying of a tack coat of CRS2H prior to placement of the fabric; placement of pavement fabric; applying asphaltic emulsion and 3/8 inch x No. 6 aggregate in two (2) courses using the spray injection patching method; and compacting the patches with a pneumatic smooth drum roller to tie in smoothly with the existing road surface.</p>
Type II Slurry Seal	<p>Cleaning the road surface using a self-propelled power broom and water truck to remove debris and loose materials prior application of slurry seal, etc.</p> <p>Covering existing manhole covers, water valve boxes and any other utility covers to protect them from emulsion during application of slurry seal, etc.</p> <p>Applying single application emulsified asphalt Type II Slurry Seal in conformance with Section 37-2, Slurry Seal of the Standard Specifications. The slurry seal coat shall be placed in two applications, each covering one half of the width of the roadway to allow the roads to remain open to traffic at all times. Contractor shall furnish test reports for aggregate and emulsions used in conjunction with the Work to the Contract Administrator at the time the Work is completed, etc.</p>
Seal Coat	<p>Cleaning the road surface using hand brooms and high pressure blowers, a pressure washer with a water tank, and a hand scraper to remove debris and loose materials from the road surface, cracks, and edges between the concrete gutters and asphalt road surface prior to application of seal coat material;</p> <p>Protecting concrete gutters, the metal drainage inlet grate, and any utility boxes within the roadway; applying two (2) coats of Overkote, or equal, asphalt sealcoating material using power brush squeegees. The second coat of material shall be applied in a cross directional manner to the first coat, etc.</p>



**TYPICAL ITEMS OF WORK**  
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