

**SPECIAL PROVISIONS  
AND SUPPLEMENTAL  
STANDARD SPECIFICATIONS  
FOR COUNTY ROAD CONSTRUCTION**

**YAMHILL COUNTY  
MCMINNVILLE, OREGON**

**"YAMHILL COUNTY 2023 CHIP SEAL PROJECT"**

**SPECIAL PROVISIONS**

KIND OF WORK: Provide all Traffic control, trucking, loading, placing County provided chip rock from 6 stockpiles to 11 road segments, spray oils, roll, sweep, fog and install stick & stomps. Work includes a bid alternate for a Scrub Seal and Chip/Fog of segment 12.

COUNTY ROADS: As Specified in Bid Documents and Exhibit D

COUNTY: Yamhill County

PROPOSALS TO BE RECEIVED: April 18th, 2023 at 2:00 P.M.

PRECONSTRUCTION: Open  
Yamhill Co. Public Works Bldg.  
McMinnville, Oregon

## **PREFACE**

### **APPLICABLE STANDARD SPECIFICATIONS**

The Applicable Standard Specifications for this project is:

#### **2021 EDITION OF THE**

#### **OREGON STANDARD SPECIFICATIONS**

#### **FOR CONSTRUCTION**

### **GENERAL:**

These Supplemental Standard Specifications, Addenda, Supplements, and Special Provisions are issued for the information of bidders submitting proposals for the project or work described herein at the time and place specifically indicated herein. They are the Supplemental Standard Specifications, Addenda, Supplements, and Special Provisions that, subject to such revision as may be made according to provisions stated by law, will be incorporated in and made a part of any contract for said project or work that may be awarded based on a proposal received at said specifically indicated time and place.

Should the project or work described be re-advertised for proposals to be received at a time later than that indicated herein, these specifications and provisions will cease to be applicable and new ones will be issued. Bidders submitting proposals later should obtain the new specifications and provisions and base their proposals as such, as they will be bound by them in the event they are awarded the contract.

#### **Revisions Prior to Time of Opening of Bids:**

All data herein is subject to revisions by the County Engineering Manager any time prior to the time specified herein for the receiving of proposals. Prospective bidders for the work will be notified of any such revisions by e-mail, letter, or fax sent to the bidders at the addresses available to Yamhill County at the time.

#### **Revisions Prior to Execution of Contract:**

Between the time proposals are received and the time the contract is executed, revision of the data herein may be made only by mutual agreement between the successful bidder and the Yamhill County Board of Commissioners.

#### **Pamphlet May be Retained by Bidder:**

This pamphlet need not be returned to Yamhill County, either with proposal or otherwise. The accompanying Bid Schedule and any continuation sheets shall be submitted prior to the date of the bid opening shown in the 'Specifications and Call for Bids'.

**DESCRIPTION OF WORK – See Exhibit D Map**

Place single application of polymer-modified emulsion (PMCRS-2H) at 0.45-0.48 shot rate. Contractor to truck and spread chip rock (county provided), roll, sweep, install temporary centerline markers (25' -30' on short radius, 30-40' on long radius and tangents), and fog seal with asphalt emulsion diluted 50/50 at a 0.12 to 0.13 shot rate. This work is for the following road segments:

1.	Fort Hill Road (Begin at W. side of bridge to Dent)	2,725' x 23'
2.	Willamina Creek Road (200' N. of Fort Hill to Buck Hollow)	22,579' x 23'
3.	Cherry Hill (Hwy 18 to End of Gravel)	10,804' x 23'
4.	Dejong Road (County Line to Bridge)	4,759' x 21'
5.	McCabe Chapel Rd (Oldsville Rd to Masonville Rd)	7,924' x 18.5'
6.	Youngberg Hill Road (Masonville Rd to Peavine Rd)	9,445' x 21.0'
7.	Baker Creek Road (High Heaven to Powerhouse Hill)	10,348' x 20.0'
8.	Airport Way (Hwy 233 to Cruickshank)	11,624' x 22.0'
9.	Alderman Road (End new AC to Wallace)	4,250' x 18.5''
10.	Unionvale Road (End gravel to Hwy 221)	3,017' x 21.5'
11.	Wheatland Road (Hwy 221 Wallace Rd to Wheatland Ferry Ramp)	5,823' x 23.5'

Place a double application of: 1<sup>st</sup> Lift Scrub Seal Emulsion and chip and 2<sup>nd</sup> lift single application of Emulsion and chip as a bid alternate. Initial application to be a PRME scrub seal oil with a shot rate of 0.42 gallons per SY and broom. Second application to be placed as described above except at a 0.45 shot rate and standard fog seal.

12.	Baker Creek Road (Bridge to High Heaven)	14,000' x 22.5'
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**TIME AND PLACE OF RECEIVING PROPOSALS**

Proposals for the work described above will be received in the Office of the Department of Public Works in McMinnville, Oregon, at 2:00 P.M. on the **18th day of April, 2023**. Proposals will be opened and read publicly.

**COMPLETION TIME LIMIT**

All work to be done under the contract shall be scheduled no sooner than July 31st, 2023, and shall be completed no later than **September 16th, 2023.**

**CLASS OF PROJECT**

This is a Yamhill County project

**PROJECT INFORMATION**

Yamhill County Department of Public Works  
N.E. 2060 Lafayette Avenue  
McMinnville or 97128  
Phone (503) 434-7365

**APPLICABLE STANDARD SPECIFICATIONS**

**2021 EDITION OF THE**

**OREGON STANDARD SPECIFICATIONS**

**FOR CONSTRUCTION**

**Are to be used for the work to be performed under this contract**

<b>Section</b>	<b>DESCRIPTION</b>	<b>YES</b>	<b>NO</b>
00100	GENERAL REQUIREMENTS	X	
00200	TEMPORARY FEATURES AND APPURTENANCES	X	
00300	ROAD WORK	X	
00400	DRAINAGE AND SEWERS		X
00500	BRIDGES		X
00600	BASES		X
00700	WEARING SURFACES	X	
00800	PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES		X
00900	PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS		X
01000	RIGHT OF WAY DEVELOPMENT AND CONTROL		X
01100	WATER SUPPLY SYSTEMS		X
02000	MATERIALS		X
03000	MATERIALS		X

**SCHEDULE OF MINIMUM HOURLY WAGE RATES**

The minimum hourly wage rates and fringe benefits applicable to the work to be done under this contract as called for in subsection 170.65(c) of the Standard Specifications and as prescribed under the provisions of ORS 279C and Oregon Administrative Rules promulgated pursuant thereto are available as hereinafter set forth.

**PREVAILING WAGE RATES  
FOR  
PUBLIC WORKS CONTRACTS IN OREGON  
EFFECTIVE January 1, 2023**

**RESEARCH UNIT  
BUREAU OF LABOR AND INDUSTRIES  
800 N.E. OREGON STREET #32  
PORTLAND, OREGON 97232**

**OR**

**<https://www.oregon.gov/boli/employers/Pages/prevailing-wage-rates.aspx>**

**FIRST COPY FREE - ADDITIONAL COPIES \$2.00**

## **WORK TO BE DONE**

The work to be done under this contract consists of the following work:

1. Place single lift application of polymer-modified emulsion (see specials for Yamhill Co. required properties) at 0.45-0.48 shot rate. Contractor to truck and spread chip rock (county provided), roll, sweep, install temporary centerline markers (25' -30' on short radius, 30-40' on long radius and tangents), and fog seal (see specials for Yamhill Co. required properties) with asphalt emulsion diluted 50/50 at a 0.12 to 0.13 shot rate. See Exhibit D for approximate road segments and county provided stockpile locations.
2. Place double lift chip applicacation: 1<sup>st</sup> Lift Scrub Seal, 2<sup>nd</sup> lift Chip/Fog - Place initial lift of PMRE drage out with scrub seal brush. Initial shot rate of 0.42 gallons per SY. Adjust to fill all cracks. Place chips and roll. Allow to cure as required. Place a second lift as described in item 1 above. **(Scrub Seal is a Bid Alternate)**
3. **Basis of award will be Base Bid and Bid Alternate. Actual work awarded is subject to funding.**

## **APPLICABLE STANDARD AND SPECIFICATIONS**

The Standard Specifications which are applicable to the work on this project is the **2021 edition of the "Oregon Standard Specifications for Construction."**

All numbers referenced in these special provisions shall be understood to refer to the Sections or Subsections of the Standard Specifications bearing like numbers and any applicable modification herein.

### **SECTION 00110 - TERMS, ABBREVIATIONS, AND DEFINITION**

Comply with Section 00110 of the Standard Specifications supplemented and/or modified as follows:

**00110.20 Definitions** - Delete the entire definition listed after the word "Engineer" and substitute with the following definition:

"The County Engineering Manager acting directly or through authorized representatives."

**00110.20 Definitions** - Delete the entire definition listed after the word "State" and substitute with the following definition:

"The County of Yamhill"

## **SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES**

Comply with Section 00120 of the Standard Specifications supplemented and/or modified as follows:

**00120.00 Prequalification of Bidders:** Delete this section

**00120.05 Requests for Plans, Special Provisions, and Bid Booklets** - Delete this subsection and substitute with the following:

Bidding Documents are available by email request from Greg Haffner, Public Works Engineering Manager at [haffnerg@co.yamhill.or.us](mailto:haffnerg@co.yamhill.or.us). Hard Copies are also available at Public Works, 2060 N.E. Lafayette Avenue, McMinnville, Oregon 97128. Copies of the "Oregon Standard Specifications for Construction - Oregon Department of Transportation - 2021 Oregon" may be purchased at the Oregon Department of Transportation.

**00120.20 Interpretation of Quantities in Bid Schedule:** Add the following to the end of the first sentence of this subsection:

except for Lump Sum bid items listed in the Bid Schedule. When Lump Sum items are listed as the method of payment, the contractor is responsible for estimating quantities, labor costs, and appropriate profit percentages.

**00120.40 Preparation of Bids:** - Delete this subsection and substitute with the following:

(a) General:

(1) Paper Bids – For Bids submitted by paper, the Bidders shall not alter, in any manner, the paper documents bound within the Bid Section. Bid Sections available electronically shall not be substituted for paper Bid Sections. Bidders shall complete the certifications and statements included in the Bid Section of the Bid Booklet according to the instructions. Signature of the Bidder's authorized representative thereon constitutes the Bidder's confirmation of, and agreement to all certifications and statements contained in the paper Bid Booklet. Entries on the paper documents in the Bid Section shall be in ink or typed. Signatures and initials shall be in ink.

**00120.40 Preparation of Bids:**

(2) Electronic Bids : Delete this subsection

**00120.40(e) (1) Bid Guaranty with Paper Bids:** Delete the last two words of the first paragraph of this subsection and substitute with the following:

"Yamhill County Department of Public Works."

**00120.60 Revision or Withdrawal of Proposals** - Add the following after the last sentence of the first paragraph of this subsection.

"These changes must be received and confirmed by the County Engineering Manager or designated Project Manager prior to the time set for opening proposals."



Also add the following to the end of the second paragraph of this subsection.

"A bidder may withdraw a proposal after it has been delivered to the Yamhill County Department of Public Works if the withdrawal request is received in writing by the said Public Works office prior to the time set for opening proposals."

Also Delete section (b) Electronic Bids.

### **SECTION 00130 - AWARD AND EXECUTION OF CONTRACT**

Comply with Section 00130 of the Standard Specifications supplemented and/or modified as follows:

**00130.40(a) Performance and Payment Bonds** - Delete this subsection and substitute with the following:

(a) Performance and Payment Bonds - Within 10 calendar days after sending the contractor the "Notice of Award," the contractor must furnish a performance bond and a payment bond of a surety company authorized to do business in the State of Oregon and listed in Circular 570 of the U.S. Department of the Treasury. This circular is published annually as of July 1, and interim changes are published in the Federal Register as they occur. The amount of each bond shall be the same dollar amount specified in the contract. The surety company's authorized Attorney in fact shall sign the performance bond and the payment bond. The surety company's seal shall be affixed to each bond. A Power of Attorney for the Attorney in Fact shall be attached to the bond.

**00130.50(b) By the Agency** – Delete the words of this subsection and substitute with the following:

After the Yamhill County Department of Public Works office has received and has verified the properly executed contract documents, the Project Manager will notify the successful bidder with written confirmation that he or she has satisfied all the necessary contract provisions and requirements outlined in Section 00130 and is officially declared the General Contractor. This notice will also serve as a "Notice to Proceed" as outlined in Subsection 00130.90. If the Engineer discovers that the Successful Bidder has not met all the said necessary contract provisions and requirements outlined in Section 00130, he may elect to follow the options outline in Subsection 00130.60.

**00130.90 Notice to Proceed** – Delete the words of this subsection and substitute with the following:

Notice to Proceed will be issued after the Yamhill County Department of Public Works Office has received and has verified the properly executed contract documents as required and explained in Subsection 00130.50(b) of these special provisions. The successful bidder will be required to coordinate start work days and projects with the County.

## **SECTION 00150 - CONTROL OF WORK**

Comply with Section 00150 of the Standard Specifications supplemented and/or modified as follows:

**00150.60(a) Load and Speed Restriction for Construction Vehicles and Equipment** - Add the following sentence to the end of the first paragraph of this subsection:

The contractor shall submit to the Project Manager a list of all possible project vehicles. The list shall include the tare weight of each vehicle and the legal weight limit as established by the P.U.C. This list shall be submitted no later than five (5) work days prior to the start of on-site work. The contractor is responsible to ensure that no vehicle exceeds its legal weight limit. Any vehicle that exceeds its legal weight limit will not be paid for the excess weight carried by the vehicle. The Project Manager will issue a copy to the contractor of all vehicles exceeding their weight limit and the total tonnage in excess. If the contractor does not agree with the information submitted by the Project Manager, he must submit his reasons in writing to the Project Manager. The Project Manager will review the data and issue his finding within five (5) work days after receiving the "Request for Review" by the contractor. The engineer's findings will be held as the final decision (refer to Section 00150.00). Random testing for "Over Weight Vehicles" may be conducted by the County at non-designated times and at non-designated locations outside the limits of the project. All overweight vehicles will be subject to all prudent fines, fees and penalties.

**00150.60(c) Responsibility for Damages** - Add the following to the end of this subsection:

The following procedure and information will be used as the source of reference if the measure of damage is necessary as outlined in this subsection. The following procedure will be a requirement of this contract:

The contractor shall submit to the Project Manager, a list showing all haul or transport roads that will be used during the "Contract Time" of the project. This list shall be submitted no later than five (5) work days prior to the start of any on-site work within the project limits.

During the "Final Inspection" process as outline in Subsection 00150.90, the Project Manager shall list the location and description of all damage caused by the actions of the contractor and the contractor shall make all necessary repairs prior to Yamhill County releasing them from their responsibilities as outlined in this subsection.

**00150.75 Protection and Maintenance of Work During Construction:** Add the following sentences after the first sentence of this subsection:

Yamhill County will perform the initial cleaning/brooming prep work for the chip seal and scrub seal applications.

A pilot car shall be used at all times when lane closures are required. Contractor will provide the pilot car and operator. Contractor will provide temporary traffic control signage and provide the flaggers for the work. Contractor will furnish and install the temporary centerline markers.

Traffic will be prohibited from using newly placed Chip Seal/Premium Sealer until finished rolling is complete and/or sealer is cured.

During other times when necessary, one lane may be closed to traffic in the immediate work area but only during those hours when work is actually being performed.

The contractor is responsible for setting up rolling patterns. The contractor will material certifications prior to payment for the job. The County reserves the right to perform check tests as needed.

If the contractor fails to comply with these provisions at any time, the Engineering Manager will at the time of discovery, notify the contractor of such noncompliance'.

### **SECTION 00180 - PROSECUTION AND PROGRESS**

Comply with Section 00180 of the Standard Specifications supplemented and/or modified as follows:

**00180.50(c) Beginning of Contract Time** - Delete the words within this subsection and substitute with the following:

The contractor shall not commence work before July 31<sup>st</sup>, 2023.

**00180.85 (b) Liquidated Damages** - Add the following

In this project, the contractor agrees to pay to Yamhill County, not as a penalty but as Liquidated Damages, the amount of \$500.00 for each calendar day used in excess of the "Contract Time" or "Adjusted Contract Time.

### **SECTION 00195 - PAYMENT**

Comply with Section 00195 of the Standard Specifications supplemented and/or modified as follows:

**00195.10 Payment For Changes in Materials Costs** - Delete this subsection  
De-Escalation and Escalation clauses on materials used do not apply to this contract.

**00195.50(c)(2) Cash, Alternate B (interest Earned)** - Delete this subsection.

**00195.50(c)(3) Cash, Alternate C (Retainage Surety Bond)** - Delete this subsection.

**00195.50(c)(4) Bonds and Securities** - Delete this subsection.

**00195.50(d) Reduction of Retainage** - Delete this subsection.

## **SECTION 00210 - MOBILIZATION**

Comply with Section 00210 of the Standard Specifications.

## **SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC**

Comply with Section 00220 of the Standard Specifications supplemented and/or modified as follows:

### **00220.40 General Requirements** - Add the following:

**(e) Lane Restrictions** – This project must remain open to traffic during non-work hours. The appropriate road surface and road width will be evaluated by the Project Manager each evening prior to allowing the traveling public thru the project site without continuous traffic control. If unsafe conditions exist, contractor must correct the problem or provide continuous traffic control at his own expense.

### **00220.60(a)(2) Division Responsibility** - Delete this subsection.

## **SECTION 00225 - WORK ZONE TRAFFIC CONTROL**

Comply with Section 00225 of the Standard Specifications supplemented and/or modified as follows:

### **225.02 General Requirements:** Add the following to the end of this subsection:

Work that will restrict or interrupt traffic movement shall not be performed on opposite sides of the traveled way at the same time unless prior written approval has been obtained from the Engineering Manager. Contractor shall place temporary, flexible yellow pavement markers with bi-directional reflective surfaces, also known as “Stick n Stomps” at a rate of one per every 30-40 horizontal feet along tangent sections of the road: and at a rate of one per 25-30 feet horizontal along horizontal curves in the road.

### **00225.61 Signs and Other Existing T.C.D.** - Add the following to the end of this subsection:

When existing signing conflicts with temporary signing installed on the project, the conflicting existing signs shall be covered with appropriate short-term covers until the temporary signs are removed.

### **00225.90 General** - Add the following to this section:

All pay items listed within subsections 00225.90(a), 00225.90(b), 00225.91, 00225.92, 00225.93, 00225.94, 00225.95, 00225.96, 00225.97, 00225.98, 00225.97 which apply on this project, will be paid for at the contract lump sum amount as shown on the bid schedule for the item "Traffic Control."

**00225.99 Pilot Cars** - Delete this subsection and add

Pilot cars will be provided and operated by the **contractor** and will not be a pay item.

**SECTION 00705 – EMULSIFIED ASPHALT FOG COAT**

Comply with Section 00705 of the Standard Specifications modified as follows:

**00705.11** Delete verbiage in 00705.11 (a), (b), & first sentence in (c).

Add: Use **CQS-1HD** dilute 50/50 Emulsified Asphalt with the following Properties:

	Test Method	Specification	
		MIN	MAX
Tests on Emulsion			
Viscosity @ 25°C (77°F), SFS	AASHTO T 59	15	100
Sieve Test, %	AASHTO T 59	-	0.10
Particle Charge Test	AASHTO T 59	Positive	-
Residue by Distillation to 204°C (400°F)	AASHTO T 59	57	
Penetration @ 25°C, (77°F), 100g, 5s dmm	AASHTO T 49	40	90

**00705.43 Application of Asphalt:**

**(b) Fog Coats:** delete range of 0.10 to 0.15 gallons per square yard. Replace with “range of 0.12 to 0.13 gallons per square yard”.

**00705.80** Delete verbiage in section. Add Measurement to be S.Y. accepted and in place.

**00705.90** Delete verbiage in section. Add Payment to be S.Y. accepted and in place.

**SECTION 00710 – SINGLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT**

Comply with Section 00710 of the Standard Specifications modified as follows:

**00710.00 Scope** - Add the following to this section:

Yamhill County to provide Graded Medium chip rock, 3/8” – No. 4 that meets the specifications contained in 00710.00 for Segments 1-12.

**00710.11** Delete verbiage in section. Add in: Use **PMCRS-2H** Polymer-modified emulsified Asphalt with the following properties:

### **PMCRS-2H**

<b>PROPERTIES</b>	<b>MIN</b>	<b>MAX</b>
Viscosity SFS @ 25°C	100	400
Settlement 5 days, % (a)		5
Storage Stability 1 day (b)		1
Particle charge	Positive(c)	
Sieve %		0.30

#### **TESTS ON RESIDUE FROM DISTILLATION**

Residue by 177°C Distillation, %	65.0	
Penetration @ 25°C	40	90
Torsional Recovery %	18	
Solubility in Trichlorethylene, %	97.5	

- (a) The test requirement for settlement may be waived when the emulsified asphalt is used in less than 5 days, or the purchaser may require that the settlement test be run from the time the sample is received until it is used, if the elapsed time is less than 5 days.
- (b) The 24-hour (1 day) storage stability test may be used instead of the 5 day settlement test.
- (c) Must meet a pH requirement of 6.7 maximum (AASHTO T 200 pH of Aqueous Solutions with the Glass Electrode) if the Particle charge test result is inconclusive.

**00710.30 Quality Control Personnel** - Add the following to this section:

Contractor's to provide Oil manufacturer's representative if required by the Yamhill County Engineering manager.

**00710.80 Measurement:** Delete verbiage in section. Add Measurement to be S.Y. accepted and in place.

- a) **00710.90 Payment:** The accepted quantities of Work performed under this Section will be paid for the material in place per Square Yard unit. Payment includes providing and spraying the Emulsion, placing the County provided chip rock, rolling, and sweeping.

**SECTION 00715 – MULTIPLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT**

Comply with Section 00715 of the Standard Specifications supplemented and/or modified as follows:

**00715.10 Aggregates (b)**

**Add** 3/8” to No. 4 Chip rock as specified on page 700 of section 00710.00 (c). Chip rock to be supplied and stockpiled by owner as shown on plans.

**00715.10 (h) Stockpiling Contractor Furnished Aggregates – Delete Section**

**00715.11 Emulsified Asphalt**

- (a) **Delete** Non-Polymer Modified Emulsified Asphalt
- (b) **Delete** “When polymer-modified...” **and replace** with **PMRE (Polymer Modified Anionic Emulsions for rejuvenating chip seals)**

The asphalt shall be polymer modified prior to emulsification. The emulsion shall be smooth and homogeneous and conform to the following requirements:

<b><u>TESTS ON EMULSION</u></b>	<b><u>MIN.</u></b>	<b><u>MAX.</u></b>
Viscosity @ 122°F, SSF	50	400
pH	10.0	13.0
Sieve Test, %		0.10
<b><u>TESTS ON RESIDUE FROM DISTILLATION 350F</u></b>	<b><u>65%</u></b>	
Oil in Distillate Volume %		1.0
DSR at 64C kPa		2.50
Penetration @ 39.2°F	40	
Elastic Recovery, 50°F T-301 Specification	60%	
Float Test Sec	1200	
<b><u>Rejuvenating agent</u></b>		
Flash Point COC F	380	
Viscosity	200	750
Saturate % by WT		30%
Asphaltenes %		1.0

**00715.25 Scrub Seal Brush** to be added as follows:

(a) Supplier shall provide to the County a broom designed for use immediately following the application of the liquid asphalt emulsion sealer to the road surface. The broom shall be constructed for the purpose of forcing the emulsion sealer into the existing surface and distributing the emulsion sealer evenly over variable road surface contours.

(b) The scrub broom frame shall be constructed of metal. The scrub broom shall be attached to and pulled by the distributor truck. The scrub broom must be equipped with the means to mechanically raise and lower the scrub broom off and onto the road surface at designated points of completion and start up. It shall be towable in the elevated position to the next area of construction. The weight and configuration of the broom assembly shall be such that it does not squeegee the emulsion sealer off the roadway surface.

(c.) The main body of the broom shall be a minimum of 6'-9" wide and 8'-0" long. The maximum width of the rigid frame at any point shall not exceed 8'-0". The length shall not exceed 10'-0". The nearest and furthest members paralleling the back of the spreader truck, and diagonal members shall be equipped with street brooms. The leading member and the trailing member shall have broom heads angled at approx. 15 degrees off the centerline of the supporting member. The diagonal members shall have broom heads attached in line with the centerline of the supporting member. Each individual street broom attached to the scrub broom assembly shall be 3.5" W x 6.5" H x 16" L and have stiff, nylon bristles. Bristle height is to be maintained at a minimum of 5". The scrub broom shall be equipped with a minimum of 2 hinged wing assemblies attached to the main body not to exceed 4' - 6' (ft) in total per side, with diagonals and equipped with street brooms. The purpose of the maximum rigid frame width and the hinged wing extensions is not only for maximum of 16' (ft) but to maintain the scrubbing process evenly as contours and cross-sections change across the existing road surface.

(d) Supplier shall verify the scrub broom has appropriate adjustments to maintain uniform contact across the pavement, creating a 4 to 6 in. wave of emulsion ahead of each of the broom sections (front, middle, and rear). The emulsion must be retained within the area contacted by the brooms and not squeegeed off the pavement surface.

(e) The Contractor to provide a ground person walking along side the scrub broom in radio contact with the distributor truck operator. The ground person is to inform the distributor truck operator on shot rate adjustment in order to produce the 4 to 6 in. wave of emulsion in front of the brooms.

**NOTE:**

The supplier shall supply a scrub broom as described for the purpose of scrubbing the Polymer Modified Rejuvenating Emulsion. If the supplier fails to supply the scrub broom specified, the project may be shut down until the supplier supplies the required equipment fully equipped for operation.



**00715.41 Aggregate Surfaces** delete “bring old bases and foundations, constructed by others, to the applicable condition according to Section 00610 , and within 0.04 foot of established grade and Cross Section.”

**00715.42 Sequence of Operations and Application Rates** Delete section and replace with the following:

1. Initial Lift – Scrub Seal - Place initial lift of **PMRE scrub seal at an approximate shot rate of 0.42 gallons per SY with Scrub Seal brush**. Adjust as required to produce the rolling wave to fill cracks. Place chips at 26 lbs. per SY. Allow to cure as required.
2. Place second lift application of polymer-modified emulsion (**PMCRS-2H**) at **0.45 shot rate**. Contractor to truck and spread chip rock (county provided), roll, sweep, install temporary centerline markers (25' -30' on short radius, 30-40' on long radius and tangents), and **fog seal** (see specials for Yamhill Co. required properties) with asphalt emulsion **diluted 50/50 at a 0.12 to 0.13 shot rate**. See Exhibit D for approximate road segments and county provided stockpile locations.

**00715.80 Measurement:** Delete verbiage in section. Add Measurement to be S.Y. accepted and in place.

**00715.90 Payment:** The accepted quantities of Work performed under this Section will be paid for all materials in place per Square Yard (**both lifts paid as a single SY measurement – Fog measured separately**).

Payment includes providing and spraying emulsions for both lifts, placing County provided chip rock both lifts, rolling and sweeping both lifts, and placing temporary markers (Stick N Stomps).

Payment will be in full for furnishing and placing all materials, all equipment, all labor, and all incidentals necessary to compete the work as specified.

No separate or additional payment will be made for preparing the road surface, placing material in final position, or blading and brooming.