

**MAINTENANCE PLANNING GUIDELINES**

2/2014

**ACTIVITY:** Bridge Maintenance  
(R321)

**ACTION:** Substructure Repairs  
*A. Sealing Abutment & Pier Caps*

**MAJOR & MINOR**

**DEFINITION:** The time and expenses incurred with maintaining bridges on the state highway system. Examples include handrail, curb, sidewalks and median, cathodic protection maintenance and super and sub structure repairs.

**PURPOSE:** To prevent intrusion of water and chlorides leading to deterioration.

**SCHEDULING:** Sealing may be performed anytime during dry weather conditions. Refer to manufacturer’s recommendations for appropriate temperatures.

J	F	M	A	M	J	J	A	S	O	N	D
A	E	A	P	A	U	U	U	E	C	O	E
N	B	R	R	Y	N	L	G	P	T	V	C

**RECOMMENDED EQUIPMENT:**

- Heavy Duty Van Truck
- Scaffolds
- Electric Generator
- Sandblaster/Hoses
- Compressor
- Traffic Control Equipment;  
(See EPG [616.23 Traffic Control for Field Operations](#))

**RECOMMENDED PROCEDURE:**

1. Place traffic control devices as needed.
2. Remove all dirt and debris by compressed air, scraping, or other hand tool methods.
3. Lightly sandblast, pressure wash or wire brush top of caps and up or down on each vertical face at least 6 inches.
4. Remove any remaining material with compressed air.
5. After surface is cleaned and dried, install sealant on top of caps and up or down on each vertical face at least 5 inches.
6. Remove traffic control devices.

**RECOMMENDED MATERIAL:**

- Blasting Sand or Abrasive
- Horseysset WD
- Carboline Multi-gard 954
- Pilgrim Plastic
- Pavon
- Vulken 925
- C.I.M. 1000
- Future-Flex 520 HB
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- Mark 68.1 (Poly-Carb Co.)
- Tapco H-550

**SAFETY:** Refer to the [Comprehensive Safety Program sharepoint portal](#). Wear all appropriate PPE. Refer to the [Risk Based Assessment](#) for additional information.

**OTHER CONSIDERATIONS:**

**REFERENCES:** EPG [771.13 Sealing Abutment and Pier Caps](#).

**MAINTENANCE PLANNING GUIDELINES**

2/2014

**ACTIVITY:** Bridge Maintenance  
(R321)

**ACTION:** Substructure Repairs  
*B. Spot Painting of Bearings & Piling*

**MAJOR & MINOR**

**DEFINITION:** The time and expenses incurred with maintaining bridges on the state highway system. Examples include handrail, curb, sidewalks and median, cathodic protection maintenance and super and sub structure repairs.

**PURPOSE:** To protect the bearings and piling from rusting.

**SCHEDULING:** April to November, with temperatures above 40°F and dry conditions. Can be extended to all year around with dry and suitable temperatures.

J	F	M	A	M	J	J	A	S	O	N	D
A	E	A	P	A	U	U	U	E	C	O	E
N	B	R	R	Y	N	L	G	P	T	V	C

**RECOMMENDED EQUIPMENT:**

- Heavy Duty Van Truck
- Heavy Duty Flatbed/Extra Heavy Duty Compressor
- Sandblaster/Hoses
- Paint Sprayer
- Scaffolds
- 1½-in. H.D. Air Drill
- Traffic Control Equipment;  
(See EPG [616.23 Traffic Control for Field Operations](#))

**RECOMMENDED PROCEDURE:**

1. Employees performing this work should contact their District Safety & Health Manager to assure training, licensing and physicals are completed. See the following link for details. [Lead Safety Guidelines](#)
2. Place traffic control devices as needed.
3. Hang scaffolds, if necessary.
4. If lead paint is being removed place tarps to catch paint chips and debris.
5. Remove all loose paint scale, rust, and other surface material by sandblasting, scraping, grinding, or wire brushing.
6. Prime exposed steel with rust resistant primer or penetrating sealer using paint sprayer or brush immediately following prep work.
7. When primer has dried, apply topcoat with paint sprayer or brush.
8. Clean area, equipment, and tools. Follow procedures outlined in [Lead Safety Guidelines](#).
9. Dispose paint chips and debris in accordance with hazardous waste procedures.
10. Remove traffic control devices.

**RECOMMENDED MATERIAL:**

- Blasting Sand or Abrasive
- Calcium Sulfonate Primer or Penetrating Sealer
- Gray Calcium Sulfonate Topcoat

**SAFETY:** Refer to the [Comprehensive Safety Program sharepoint portal](#). Wear all appropriate PPE. Refer to the [Risk Based Assessment](#) for additional information.

**OTHER CONSIDERATIONS:** Where lead based paint exists, take proper precautions to collect and properly dispose of debris.

**REFERENCES:**