

## P2 Bridge Preservation - Concrete Deck Repair / Overlay Projects



### 2009-11 Bien Priority Array

(Sorted by Priority Number)



09-11 #	Bridge Number	Bridge Name	Mile post	Region	Future Work Description	Bridge Item\$'s
11	005/417	CLOVER CR	125.64	OL	Bridge Deck Overlay - PSP	\$481,896
29	410/048	PSPL CO CANAL	21.80	OL	Bridge Deck Overlay - HMA	\$26,379
47	005/344S-E	I-5 OC, S-E RAMP	114.09	OL	Bridge Deck Overlay - HMA	\$48,327
49	303/012	PORT WASHINGTON CS1840	0.73	OL	Bridge Deck Overlay - PSP	\$3,100,000
Total Number of Bridges = 4					Total of Bridge Item\$ =	\$3,656,602



## P2 Bridge Preservation - Concrete Deck Repair / Overlay Projects



### 2009-11 Bien Priority Array

(Sorted by State Route)



09-11 #	Bridge Number	Bridge Name	Mile post	Region	Future Work Description	Bridge Item\$'s
47	005/344S-E	I-5 OC, S-E RAMP	114.09	OL	Bridge Deck Overlay - HMA	\$48,327
11	005/417	CLOVER CR	125.64	OL	Bridge Deck Overlay - PSP	\$481,896
49	303/012	PORT WASHINGTON CS1840	0.73	OL	Bridge Deck Overlay - PSP	\$3,100,000
29	410/048	PSPL CO CANAL	21.80	OL	Bridge Deck Overlay - HMA	\$26,379
Total Number of Bridges = 4					Total of Bridge Item\$ =	\$3,656,602



BRIDGE NUMBER: <b>5 / 344S-E</b>	BRIDGE NAME: <b>I-5 OC, S-E RAMP</b>	REGION: <b>Olympic</b>	MILEPOST: <b>114.09</b>
YEAR BUILT / YR WIDENED: <b>1968</b>	CONTRACT NO.(S): <b>08100 , 14212, 15509</b>	SUFFICIENCY RATING: <b>91.23</b>	
BRIDGE TYPE: <b>CBox</b>		EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:	
DECK TYPE: <b>Conc cast-in-place</b>		<b>3/8in Polymer-MMA</b>	
DECK THICKNESS: (Main Span) <b>7.0 in.</b>		Year Applied - <b>1993</b>	
BRIDGE WIDTH (curb-curb): <b>23.0 ft.</b>		Overlay Thickness - <b>0.3 inches</b>	
BRIDGE LENGTH: <b>369 ft.</b>			
AVERAGE DAILY TRAFFIC (ADT): <b>7,521</b>			
NUMBER OF LANES: <b>1</b>			
<b>VERTICAL CLEARANCE</b>			
VC Type: <b>Undercrossing</b>			
<b>BRIDGE RAIL</b>			
BRIDGE RAIL TYPE: <b>WSDOT CODE - 73.2</b>			
<b>Conc Base - Type R</b>			
RAIL MEETS CURRENT STANDARDS?: <b>YES</b>		SIDEWALK / CURB WIDTH: <b>0.7 Lt 0.7 Rt</b>	
<b>9 EXPANSION JOINTS</b>			
Use Std. Plan A7, Transverse Joint Detail 1 at the ends of the bridge deck.			
<b>BRIDGE DECK SURVEY</b>			
DELAMINATION RESULTS: <b>54 sq ft</b>		DATE: <b>1 / 92</b>	
<b>0.6% of deck</b>			
CHLORIDE RESULTS: <b>42 % are &gt; 2 lbs./CY</b>			
<b>05 / 86</b>			
REBAR RESULTS: <b>8 % are &lt; or = 1 inch</b>			
<b>6 / 84</b>			
<b>DECK PROTECTIVE SYSTEM RECOMMENDATIONS</b>			
PROTECTIVE OVERLAY RECOMMENDED?: <b>YES</b> 09-11 P2 Priority #: <b>47</b>			
TYPE RECOMMENDED: <b>HMA 0.25'</b>			
COMMENTS: We recommend adding a 0.25' of ACP over the existing 3/8" Polymer overlay.  Depth of HMA is not to exceed 0.25'.			
REVIEWED BY: <b>Bruce Thill</b>			DATE: <b>12/12/2007</b>



BRIDGE NUMBER: <b>5 / 417</b>	BRIDGE NAME: <b>CLOVER CR</b>	REGION: <b>Olympic</b>	MILEPOST: <b>125.64</b>																								
YEAR BUILT / YR WIDENED: <b>1957</b>	CONTRACT NO.(S): <b>05523 , 09574 , 12808</b>	SUFFICIENCY RATING: <b>85.00</b>																									
BRIDGE TYPE: <b>CS</b>	EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:																										
DECK TYPE: <b>Conc cast-in-place</b>	<b>LMC Overlay</b>																										
DECK THICKNESS: (Main Span) <b>13.0 in.</b>	Year Applied - 1985																										
BRIDGE WIDTH (curb-to-curb): <b>194.0 ft.</b>	Overlay Thickness - 1.5 inches																										
BRIDGE LENGTH: <b>69 ft.</b>																											
AVERAGE DAILY TRAFFIC (ADT): <b>128,004</b>																											
NUMBER OF LANES: <b>10</b>																											
<b>VERTICAL CLEARANCE</b>																											
VC Type: <b>NA</b>																											
<b>BRIDGE RAIL</b>																											
BRIDGE RAIL TYPE: <b>WSDOT CODE - 60</b> <b>New Jersey Barrier</b>																											
RAIL MEETS CURRENT STANDARDS?: <b>YES</b> SIDEWALK / CURB WIDTH: <b>0.0 Lt   0.0 Rt</b>																											
<b>9</b>	<b>EXPANSION JOINTS</b>																										
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<b>DECK PROTECTIVE SYSTEM RECOMMENDATIONS</b>																											
PROTECTIVE OVERLAY RECOMMENDED?: <b>YES</b> 09-11 P2 Priority #: <b>11</b> TYPE RECOMMENDED: <b>Rapid Set LMC Overlay</b>																											
COMMENTS: The existing LMC is debonding and breaking up near the ends of the bridge. The Olympic Region Maintenance Office reports that the concrete overlay has debonded in the vicinity of their deck repair areas.  We recommend removing and replacing the existing LMC Overlay with a new 1.0" Polyester or 1.5" Rapid Set Concrete overlay.																											
REVIEWED BY: <b>Bruce Thill</b>			DATE: <b>12/12/2007</b>																								



BRIDGE NUMBER: <b>303 / 12</b>	BRIDGE NAME: <b>PORT WASHINGTON CS1840</b>	REGION: <b>Olympic</b>	MILEPOST: <b>0.73</b>
YEAR BUILT / YR WIDENED: <b>1958</b>	CONTRACT NO.(S): <b>05565 , XE2784 , 13916 , 14490</b>	SUFFICIENCY RATING: <b>54.09</b>	
BRIDGE TYPE: <b>SG CBox</b>		EXISTING WEARING SURFACE AND DECK PROTECTION TYPE:	
DECK TYPE: <b>Lightweight Conc</b>		<b>Polyester Overlay</b>	
DECK THICKNESS: <b>6.5 in.</b> <small>(Main Span)</small>		Year Applied - 1991	
		Overlay Thickness - 0.8 inches	
BRIDGE WIDTH (curb-curb): <b>55.0 ft.</b>	BRIDGE LENGTH: <b>1,717 ft.</b>		
AVERAGE DAILY TRAFFIC (ADT): <b>31,971</b>	NUMBER OF LANES: <b>4</b>		
<b>VERTICAL CLEARANCE</b>			
VC Type: <b>NA</b>			
<b>BRIDGE RAIL</b>			
BRIDGE RAIL TYPE: <b>WSDOT CODE - 71.1</b>			
<b>Conc Base - Type 2</b>			
RAIL MEETS CURRENT STANDARDS?: <b>NO</b>		SIDEWALK / CURB WIDTH: <b>4.0 Lt 4.0 Rt</b>	
402 410 412	<b>EXPANSION JOINTS</b>		
No modifications required at this time.			
<b>DECK PROTECTIVE SYSTEM RECOMMENDATIONS</b>			
PROTECTIVE OVERLAY RECOMMENDED?: <b>NO</b> 09-11 P2 Priority #: <b>49</b>			
TYPE RECOMMENDED: <b>None</b>			
COMMENTS:			
Bridge Inspections indicate existing overlay is deteriorating.			
A new 1" polyester overlay is required to rehabilitate the deck. This bridge is on the P2 Program Deck priority array.			
<b>BRIDGE DECK SURVEY</b>			
DELAMINATION RESULTS:		DATE	
<b>567 sq ft 0.6% of deck</b>		<b>4 / 97</b>	
CHLORIDE RESULTS:			
<b>58 % are &gt; 2 lbs./CY</b>		<b>8 / 88</b>	
REBAR RESULTS:			
<b>NA</b>			
REVIEWED BY: <b>Bruce Thill</b>		DATE: <b>12/12/2007</b>	



BRIDGE NUMBER: 410 / 48	BRIDGE NAME: PSPL CO CANAL	REGION: Olympic	MILEPOST: 21.80
YEAR BUILT / YR WIDENED: 1949	CONTRACT NO.(S): 03592	SUFFICIENCY RATING: 74.89 SD	
BRIDGE TYPE: SG		EXISTING WEARING SURFACE AND DECK PROTECTION TYPE: original concrete	
DECK TYPE: Conc cast-in-place			
DECK THICKNESS: (Main Span) 6.5 in.			
BRIDGE WIDTH (curb-curb): 33.0 ft.	BRIDGE LENGTH: 116 ft.		
AVERAGE DAILY TRAFFIC (ADT): 15,649	NUMBER OF LANES: 2		
<b>VERTICAL CLEARANCE</b>			
VC Type: NA			
<b>BRIDGE RAIL</b>			
BRIDGE RAIL TYPE: WSDOT CODE - 8 Thrie Beam attached to structure			
RAIL MEETS CURRENT STANDARDS?: YES		SIDEWALK / CURB WIDTH: 2.6 Lt 2.6 Rt	
402 408		<b>EXPANSION JOINTS</b>	
Modifications are required to accomodate the new overlay, please coordinate with the Bridge Office.			
		<b>DECK PROTECTIVE SYSTEM RECOMMENDATIONS</b>	
PROTECTIVE OVERLAY RECOMMENDED?: <b>YES</b> 09-11 P2 Priority #: <b>29</b>			
TYPE RECOMMENDED: HMA w/membrane			
COMMENTS: A new deck protection system is required.  We recommend placing 0.25' HMA with waterproofing membrane. Expansion Joint Modification is required.			
<b>BRIDGE DECK SURVEY</b>			
DELAMINATION RESULTS:		DATE	
143 sq ft 4.4% of deck		7 / 98	
CHLORIDE RESULTS:			
10 % are > 2 lbs./CY		6 / 85	
REBAR RESULTS:			
12 % are < or = 1 inch		6 / 85	
		REVIEWED BY: <i>Bruce Thill</i>	DATE: 12/12/2007

