



ASM – AHB STRUCTURAL INSPECTION

Pier Bracket External Principal (Pier 6)

s 9(2)(a)

17 DECEMBER 2021

REVISION

DOCUMENT CONTROL

Report

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Inspection Details	
Inspector	Date of Inspection
s 9(2)(a)	04/11/2021 to 05/11/2021
	04/11/2021 to 05/11/2021

Quality Assurance

Quality Assurance Statement	
Report Prepared by:	s 9(2)(a)
Report Reviewed by:	s 9(2)(a) 11/01/22
Approved for issue by:	s 9(2)(a) 12/01/22
Issued to:	s 9(2)(a) (12-10-22)

Revision Control

Revision	Name	Date	Description

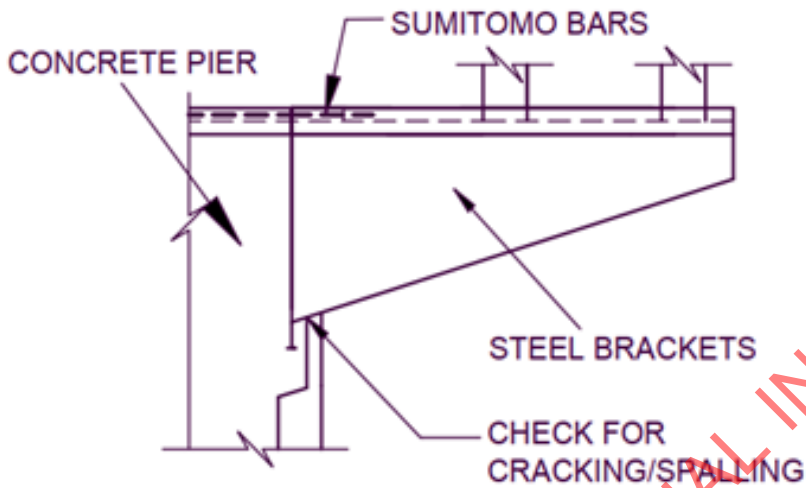
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SCOPE

A Principal Inspection was carried out on the Pier Bracket external components of Pier 6. Inspection items included Sumitomo Bar threads, bolts and anchor block, handrails, steel to concrete interface and steel plate. Access was gained from the rocker slab (interior of the concrete piers), the lower access walkways and by rope access.



CONDITION RATING

The general condition of the pier bracket externals can be described as moderate. There was noted section loss on both sides. The underside of East Pier Bracket has minor section loss and requires attention. The handrail of the East Pier Bracket has minor to major section loss and needs to be replaced.

Table 1 – General Condition Ratings

Mark	Priority	No. Defects
I	-	-
2	-	-
R	H	9
R	M	-
R	L	1
S	H	2
S	M	-
S	L	-
Total		12

3 DEFECTS

3.1 Pier 6 Brackets External East Side



Photo ID	Marking Code	Description of Defects	Maintenance/ Repairs Recommendations	Maintenance/ Repairs Priority & Timeframe
PBE1.	R			
PBE2.				
		Concrete to steel interface North-east. Section Loss (5mm).	Blast and Paint.	H 1 Year



Photo ID	Marking Code	Description of Defects	Maintenance/ Repairs Recommendations	Maintenance/ Repairs Priority & Timeframe
PBE3.				
	R			
PBE4.				
		Underside Pier Brackets to concrete interface North-east. Minor Section Loss	Blast and Paint	H 1 Year




Photo ID	Marking Code	Description of Defects	Maintenance/ Repairs Recommendations	Maintenance/ Repairs Priority & Timeframe
PBE5.	R			
PBE6.				
		Underside Pier Brackets East side. Minor Section Loss.	Blast and Paint	H 1 Year

Photo ID	Marking Code	Description of Defects	Maintenance/ Repairs Recommendations	Maintenance/ Repairs Priority & Timeframe
PBE7.	R	 <p>Underside Pier Brackets to concrete interface South-east. Minor Section Loss.</p>	Blast and Paint	H 1 Year
PBE8.	R	 <p>Concrete to steel interface South-east. Section Loss.</p>	Blast and Paint	H 1 Year

Photo ID	Marking Code	Description of Defects	Maintenance/ Repairs Recommendations	Maintenance/ Repairs Priority & Timeframe
PBE9.	S			
PBE10.				

Photo ID	Marking Code	Description of Defects	Maintenance/ Repairs Recommendations	Maintenance/ Repairs Priority & Timeframe
PBE11.		 <p>Pier 6 East side Handrail. Typical. Minor Section Loss to Major Section Loss.</p>	Replace Handrail	H 1 Year

3.2 Pier 6 Brackets External West Side

Photo ID	Marking Code	Description of Defects	Maintenance/ Repairs Recommendations	Maintenance/ Repairs Priority & Timeframe
PBE12.	R			
PBE13.			Blast and Paint	L 2+ Years



Photo ID	Marking Code	Description of Defects	Maintenance/ Repairs Recommendations	Maintenance/ Repairs Priority & Timeframe
PBE14.	R	 <p>Concrete to steel interface North-west. Severe surface corrosion to Minor section Loss.</p>	Blast and Paint	H 1 Year
PBE15.	R	 <p>Underside Pier Brackets. Severe Surface Corrosion to Minor section Loss.</p>	Blast and Paint	H 1 Year

Photo ID	Marking Code	Description of Defects	Maintenance/ Repairs Recommendations	Maintenance/ Repairs Priority & Timeframe
PBE16.	R	 <p>Concrete to steel interface South-west. Severe surface corrosion to Minor section Loss.</p>	Blast and Paint	H 1 Year
PBE17.	S	 <p>Pier 6 East side Handrail. Typical. Severe Surface Corrosion to Minor Section Loss.</p>	Blast and Paint	H 1 Year

APPENDIX A – MARKING CODE AND PRIORITISATION OF THE WORKS

Defects are categorised by marking code, as used in NZTA S6 *Bridges and other significant highway structures inspection policy*:

0 = Not inspected

1 = Satisfactory

2 = Monitor next inspection

R = Routine maintenance

S = Structural maintenance

N = Not applicable

I = Further investigation required

The following timeframes are used for prioritising maintenance works:

- **High** – must be done as soon as possible, within 12 months
- **Medium** – preferable to do as soon as possible, within 1-2 years
- **Low** - no work required within the next 2 years

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