


# Inspection sheet of visual survey

Bridge No. 6


Photo No. ( ~ )

Bridge name		Pra Nangklao Bridge		Route name		-		Authority		DOH		Code of authority		-		
Place		from Anphoe Bang Bua Thong		Distance		from km+ 0						No.		-		
		to Anphoe mueang Nonthaburi				to km+ 0						Survey date		24-oct-2009		
Bridge properties	Bridge type(1)	main road · side road · ramp														
	Bridge type(2)	bridge · viaduct · plank pass														
	Bridge type(3)	5-span continuous PC box girder														
	Total length	330.00 (m)														
	Span	51 + 72 + 84 + 72 + 51 (m)														
	Nos. of span	5 span														
	Width	21.80 (m) / (m)														
	Completion	1985														
Road information	Horizontal	Straight · incli ( $\theta = 1.5^\circ$ ) · Curve ( R m )														
	Gradient	One way ( $\nearrow$ · $\searrow$ ) parabo ( $\square$ · $\square$ )														
	Nearby tunnel	yes · no ( m )														
	Nearby crossing	yes · no ( m )														
	Traffic	Much · Medium · Little														
	Commercial traffic	Much · Medium · Little														
Environ	1. Urban	2. Suburbs		3. Mountain		4. Seaside										
	5. Industrial	6. Harbor		7. Residential		8. Business										
	9. Salty	10. Cold and snow		11. Heavy snow		12. Others										
Under brid	1. Shinkanser	2. Railway		3. Highway		4. Road										
	5. River	6. Lake		7. Ravine		8. Valley										
	9. Waterway	10. Parking		11. Bike parkin		12. Park										
	13. Vacant	14. Harbor		Name ( Chao Phraya )												
Access method	Superstructure	1. Inspection car 2. Falsework 3. On ground 4. Ladder 5. Lift car 6. On boat 7. Special camera 8. Others ( )														
	Substructure	1. Inspection car 2. Falsework 3. On ground 4. Ladder 5. Lift car 6. On boat 7. Special camera 8. Others ( )														
	Reason	· All bridge section is on the water · If inspection car is not available, false work will be required														
Survey result	Joint	Camber deform	yes · no													
		Difference in glade	yes · no													
		Continuous of barrier	yes · no													
		Continuous of curve	yes · no													
		Noise	yes · no													
	Out line of damage	Space change	yes · no													
		difference grade	yes · no													
		draining damage	yes · no													
		Blocked drainage	yes · no													
		Crack of pavement	yes · no													
Inspection way	Damage of lighting	yes · no														
	Damage of sign	-														
	Damage of handrail	yes · no														
	Possibility of scour	yes · no														
	Walkway yes · no															
Impressions	Vehicle yes · no															
	History of repair	· Vertical movement is occurred independently at hinge of center														
		· Free lime from construction joint														
		· Breaking of ship protection														
Diagnosis is	◆ Deterioration of bridge ◆ deficient · fair · good															
	◆ Noticeable point ◆ · Hinge is removed · Leakage from water supply															
History of repair		Repaint ; - yy - mm														
Surveyor ;		Mr. Chujo, Mr. Kudo														


Present state ( 1 / 10 )					
Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				



Picture No.	1
Span	1
Member	Side view
<i>*Survey on board, 31-oct</i>	



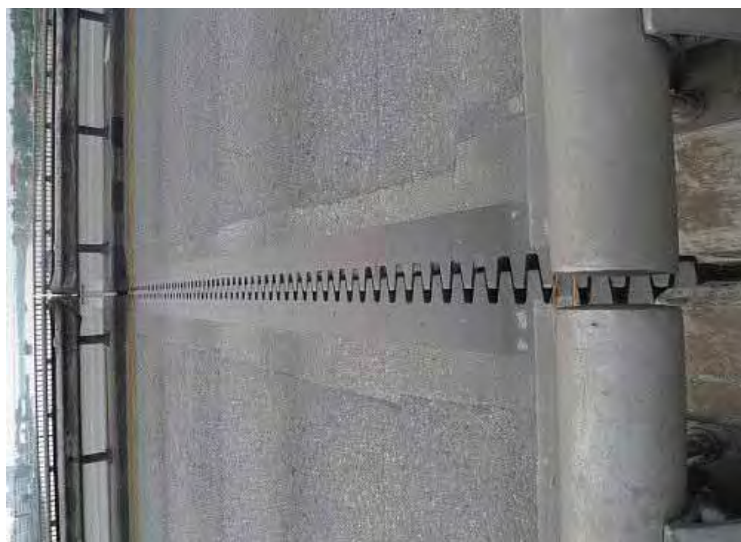
Picture No.	2
Span	2
Member	View on road



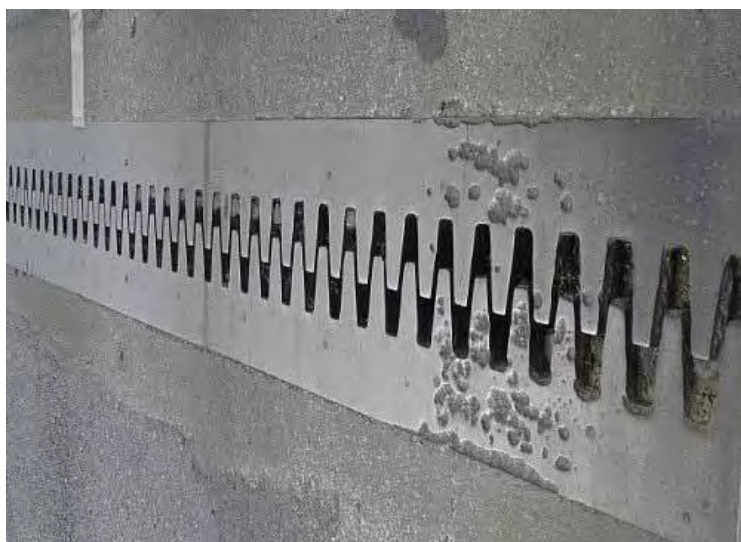
Picture No.	3
Span	1
Member	View under bridge

# Present state ( 2 / 10 )

Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				



Picture No.	4
Span	1
Member	Hinge
Joint on hinge part	
Vertical movement independently especially in upstream girder	



Picture No.	5
Span	1
Member	Expansion joint
Spacing is widen	
Bangkok side	



Picture No.	6
Span	1
Member	Expansion joint
Spacing is widen	
Thon Buri side	



# Present state ( 3 / 10 )

Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				



Picture No.	7
Span	1
Member	Water supply
Leakage inside of PC-box girder	



Picture No.	8
Span	1
Member	Bearing
Movement of girder	
Thon Buri side	
effect of shrinkage and creep	



Picture No.	9
Span	1
Member	Bearing
Movement of girder	
Bangkok side is lager than Thonbu	

# Present state ( 4 / 10 )

Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				



Picture No.	10
Span	1
Member	Bearing
Deterioration of corrosion proofi	



Picture No.	11
Span	1
Member	Expansion joint
Deterioration of drain function	
Leakage from medium	



Picture No.	12
Span	1
Member	Pylon



Present state ( 5 / 10 )

Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				

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# Present state ( 6 / 10 )

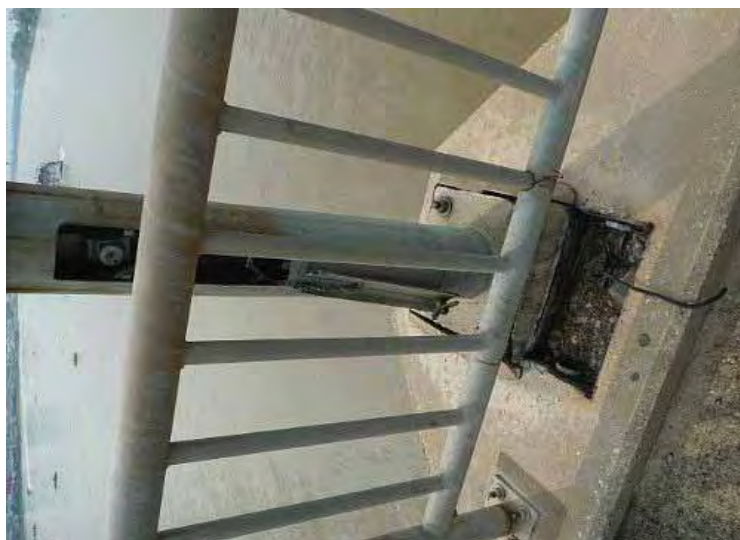
Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				



Picture No.	10
Span	1
Member	Manhole
graffiti	
Manhole can be access by ladder	




Picture No.	11
Span	1
Member	Manhole
With a key	



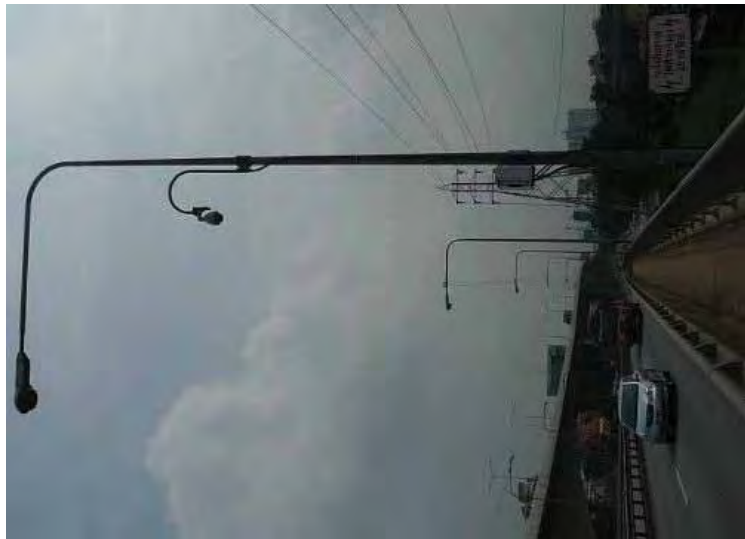
Picture No.	12
Span	1
Member	Lighting pole
Damaged	




Present state ( 7 / 10 )					
Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				



Picture No.	13
Span	1
Member	
Repair of electric cable	



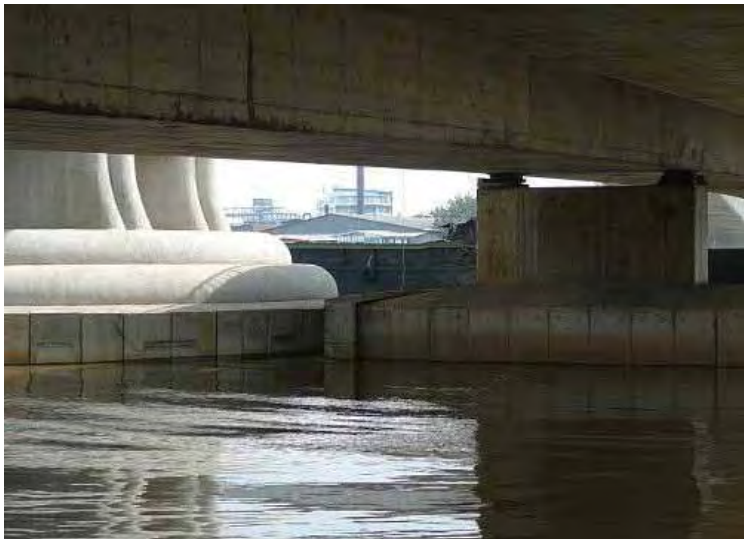


Picture No.	14
Span	1
Member	Monitoring camera



Picture No.	15
Span	1
Member	Management office



Present state ( 8 / 10 )					
Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				

	Picture No.	16
	Span	1
	Member	Footing
	Footing is close to new pra nangklao bridge at Thonburi side	
	Picture No.	17
	Span	1
	Member	View of footing
	<i>*Survey on board, 31-oct</i>	
	Picture No.	18
	Span	1
	Member	Water supply
	Much water from manhole due to leakage of water supply	
	<i>*Survey on board, 31-oct</i>	

## Present state ( 9 / 10 )

Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				



Picture No.	7
Span	1
Member	PC-box
Free lime from construction joint	
<i>*Survey on board, 31-oct</i>	




Picture No.	8
Span	1
Member	Hinge
Lack of pin	
Vertical movement is occurred independently	
<i>*Survey on board, 31-oct</i>	



Picture No.	9
Span	1
Member	PC-box
Nest and droppings	
<i>*Survey on board, 31-oct</i>	

Present state (10/10)					
Authority	DOH	Address	Bangkok	Data	24-Oct-09
Bridge	Phra NangKlao Bridge				

	Picture No.	10
	Span	1
	Member	Footing
	Breaking and movement	
	<i>*Survey on board, 31-oct</i>	
	Picture No.	11
	Span	1
	Member	
	Picture No.	12
	Span	1
	Member	



# Inspection sheet of visual survey

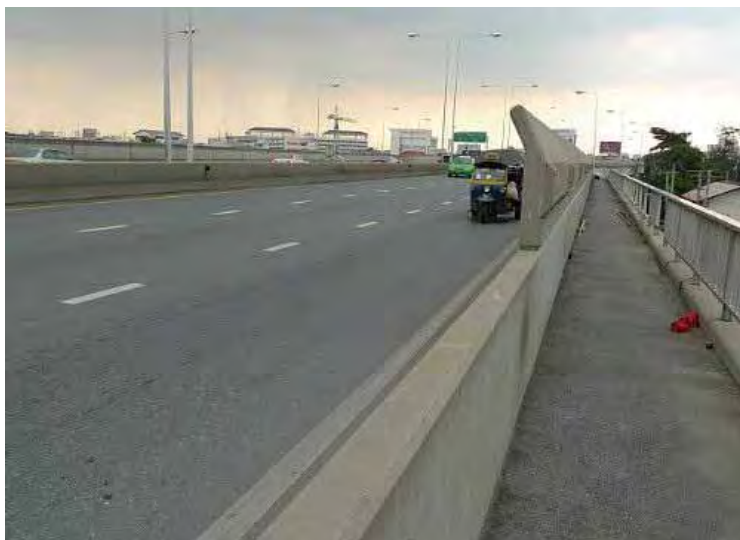
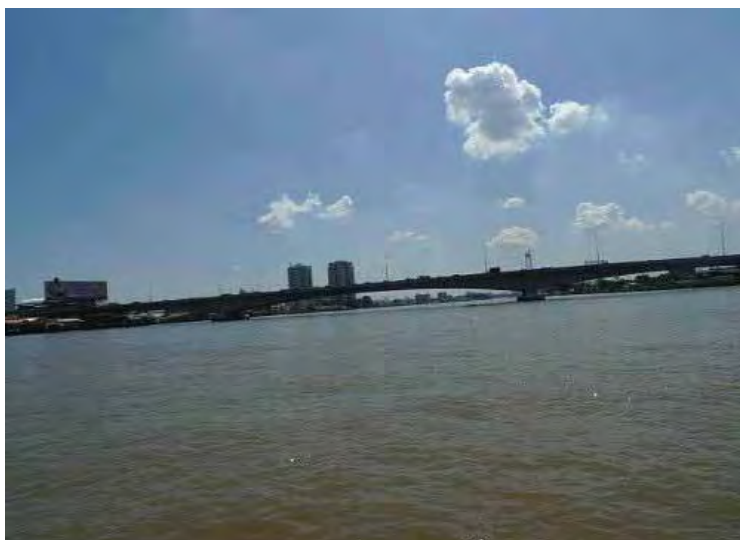
Bridge No. 7

Photo No. ( ~ )

Bridge name		RAMA V Bridge		Route name		-		Authority		DRR		Code of authority		-		
Place		from Anphoe Bang Bua Thong		Distance		from km+ 0						No.		-		
		to Anphoe mueang Nonthaburi				to km+ 0						Survey date		2009/10/20		
Bridge properties	Bridge type(1)	main road · side road · ramp														
	Bridge type(2)	bridge · viaduct · plank pass														
	Bridge type(3)	3-span continuous PC box girder														
	Total length	320.00 (m)														
	Span	95 + 130 + 95 (m)														
	Nos. of span	3 span														
	Width	11.7 x 2 (m) / (m)														
	Completion	2002														
Road information	Horizontal	Straight · incli ( $\theta =$ ° ) · Curve ( R m )														
	Gradient	One way ( ↗ · ↘ ) parabo ( $\frac{1}{4}$ · $\frac{3}{4}$ )														
	Nearby tunnel	yes · no ( m )														
	Nearby crossing	yes · no ( m )														
	Traffic	Much · Medium · Little														
	Commercial traffic	Much · Medium · Little														
Environ	1. Urban	2. Suburbs			3. Mountain			4. Seaside								
	5. Industrial	6. Harbor			7. Residential			8. Business								
	9. Salty	10. Cold and snow			11. Heavy snow			12. Others								
Under brid	1. Shinkanser	2. Railway			3. Highway			4. Road								
	5. River	6. Lake			7. Ravine			8. Valley								
	9. Waterway	10. Parking			11. Bike parkin			12. Park								
	13. Vacant	14. Harbor			Name ( Chao Phraya )											
Access method	Superstructure	1. Inspection car 2. Falsework 3. On ground 4. Ladder 5. Lift car 6. On boat 7. Special camera 8. Others ( )														
	Substructure	1. Inspection car 2. Falsework 3. On ground 4. Ladder 5. Lift car 6. On boat 7. Special camera 8. Others ( )														
	Reason	· All bridge section is on the water · If inspection car is not available, false work will be required														
Survey result	Joint	Camber deform	yes · no													
		Difference in glade	yes · no													
		Continuous of barrier	yes · no													
		Continuous of curve	yes · no													
	Noise	Noise	yes · no													
		Space change	yes · no													
		difference grade	yes · no													
		draining damage	yes · no													
Blocked drainage	Blocked drainage	yes · no														
	Crack of pavement	yes · no														
	Damage of lighting	yes · no														
	Damage of sign	-														
Damage of handrail	Damage of handrail	yes · no														
	Possibility of scour	yes · no														
	Walkway yes · no															
	Vehicle yes · no															
Inspection way																
Height of girde	Height of girde	about 5.5m														
Deterioration of bridge	◆ Deterioration of bridge ◆	deficient · fair · good														
	◆ Noticeable point ◆															
Impressions		· Scratch was seen under girder in center span														
		· Spacing of expansion joint increase about 5cm after completion.														
History of repair	History of repair	Repaint ; - yy - mm														
	Surveyor ;	Mr. Chujo, Mr. Kudo														

## Present state ( 1 / 10 )

Road		Address	Bangkok	Data	20-Oct-09
Bridge	Rama V				

[illegible][illegible][illegible]

# Present state ( 2 / 10 )

Road		Address	Bangkok	Data	20-Oct-09
Bridge	Rama V				



Picture No.	4
Span	1
Member	Manhole
No key	



Picture No.	5
Span	1
Member	Manhole (walkway side)
With key	



Picture No.	6
Span	1
Member	Manhole
About 6m height	
Lift car or ladder is needed to access	



# Present state ( 3 / 10 )

Road		Address	Bangkok	Data	20-Oct-09
Bridge	Rama V				



Picture No.	7
Span	1
Member	Catch basin
Blocking	
Part without noise barrier is cleaned and has no blocking	



Picture No.	8
Span	1
Member	slab (walkway, roadway)
Electric and communication line	



Picture No.	9
Span	1
Member	Girder
Defect of construction?	

# Present state ( 4 / 10 )

Road		Address	Bangkok	Data	20-Oct-09
Bridge	Rama V				



Picture No.	10
Span	1
Member	Expansion joint
Leaving of form work	



Picture No.	11
Span	1
Member	Expansion joint
Spacing is expanded 5cm	



Picture No.	12
Span	1
Member	Handrail
Joint is off by unusual movement	

# Present state ( 5 / 10 )

Road		Address	Bangkok	Data	20-Oct-09
Bridge	Rama V				



Picture No.	7
Span	1
Member	walkway
Less than 2m	
Inspection vehicle cannot park in walkway	



Picture No.	8
Span	1
Member	Handrail
Stolen of stainless handrail	



Picture No.	9
Span	1
Member	Pier head
Genellary healthy	



## Present state ( 6 / 10 )

Road		Address	Bangkok	Data	20-Oct-09
Bridge	Rama V				

[illegible]

Picture No.	11
Span	1
Member	Girder
Scrach by ship collision	
<i>*Survey on board, 31-oct</i>	

[illegible]

# Inspection sheet of visual survey

Bridge No. 8

Photo No. ( ~ )

Bridge name		RAMA 7 Bridge		Route name		-		Authority		DRR		Code of authority		-		
Place		from Khat Bang Phlat to Khet Dusit		Distance		from km+ 0 to km+ 0						No.		-		
												Survey date		2009/10/20		
Bridge properties	Bridge type(1)		main road · side road · ramp													
	Bridge type(2)		bridge · viaduct · plank pass													
	Bridge type(3)		3-span continuous PC box girder													
	Total length		290.00 (m)													
	Span		85 + 120 + 85 (m)													
	Nos. of span		3 span													
	Width		14.45 x 2 (m) / (m)													
	Completion		1992													
Road information	Horizontal		Straight · incli (θ = °) · Curve (R m)													
	Gradient		One way ( ↗ · ↘ ) parabo ( 〇 · 〇 )													
	Nearby tunnel		yes · no ( m)													
	Nearby crossing		yes · no ( m)													
	Traffic		Much · Medium · Little													
	Commercial traffic		Much · Medium · Little													
Environ	1. Urban		2. Suburbs		3. Mountain		4. Seaside									
	5. Industrial		6. Harbor		7. Residential		8. Business									
	9. Salty		10. Cold and snow		11. Heavy snow		12. Others									
Under brid	1. Shinkanser		2. Railway		3. Highway		4. Road									
	5. River		6. Lake		7. Ravine		8. Valley									
	9. Waterway		10. Parking		11. Bike parkin		12. Park									
	13. Vacant		14. Harbor		Name ( Chao Phraya )											
Access method	Superstructure		1. Inspection car 2. Falsework 3. On ground 4. Ladder 5. Lift car 6. On boat 7. Special camera 8. Others ( )													
	Substructure		1. Inspection car 2. Falsework 3. On ground 4. Ladder 5. Lift car 6. On boat 7. Special camera 8. Others ( )													
	Reason		· All bridge section is on the water · If inspection car is not available, false work will be required													
Survey result	Camber deform		yes · no													
	Difference in glade		yes · no													
	Continuous of barrier		yes · no													
	Continuous of curve		yes · no													
	Noise		yes · no													
	Space change		yes · no													
	difference grade		yes · no													
	draining damage		yes · no													
	Blocked drainage		yes · no													
	Crack of pavement		yes · no													
Out line of damage	Damage of lighting		yes · no													
	Damage of sign		-													
	Damage of handrail		yes · no													
	Possibility of scour		yes · no													
	Walkway yes · no															
	Vehicle yes · no															
Inspection way																
Impressions	Height of girder		about 8.9m													
History of repair		Repaint ; - yy - mm														
Surveyor ;		Mr. Chujo, Mr. Kudo														

添付資料


## Present state ( 1 / 6 )

Authority	DRR	Address	Bangkok	Data	20-Oct-09
Bridge	Rama VII				

[illegible][illegible][illegible]




Present state ( 2 / 6 )					
Authority	DRR	Address	Bangkok	Data	20-Oct-09
Bridge	Rama VII				



Picture No.	4
Span	1
Member	Water supply



Picture No.	5
Span	1
Member	Handrail
Antitheft welding	



Picture No.	6
Span	1
Member	Lighting pole
Deformation of bolt	

# Present state ( 3 / 6 )

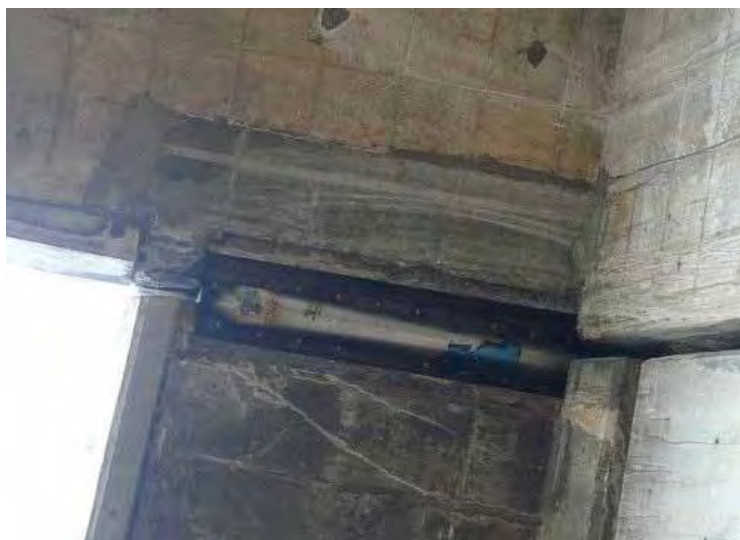
Authority	DRR	Address	Bangkok	Data	20-Oct-09
Bridge	Rama VII				



Picture No.	7
Span	1
Member	Catch basin
Partly blocked	



Picture No.	8
Span	1
Member	Expansion joint
Deterioration of drain function	



Picture No.	9
Span	1
Member	Expansion joint
Deterioration of drain function	

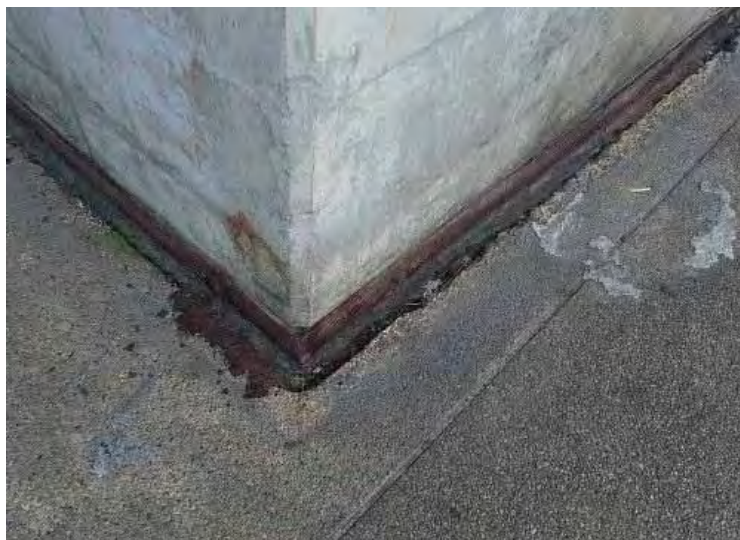


# Present state ( 4 / 6 )

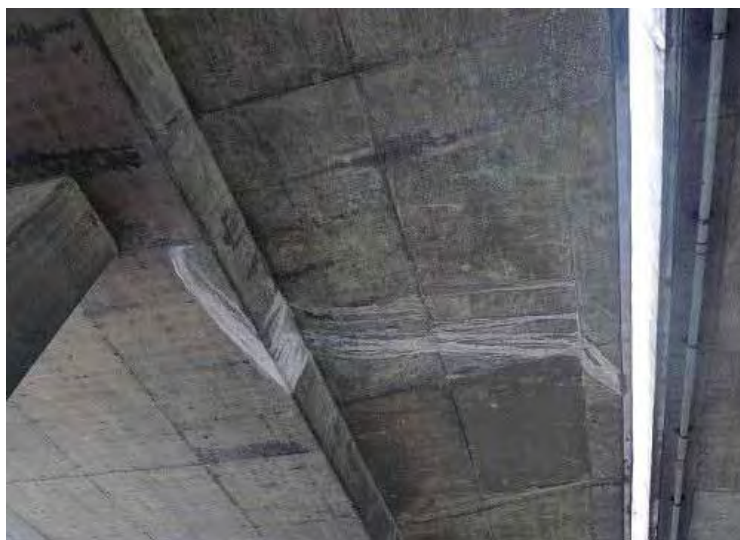
Authority	DRR	Address	Bangkok	Data	20-Oct-09
Bridge	Rama VII				



Picture No.	10
Span	1
Member	End pier
Corrosion of steel plate at base	



Picture No.	11
Span	1
Member	End pier
Corrosion of steel plate at base	



Picture No.	12
Span	1
Member	Approach bridge
Free lime	



# Present state ( 5 / 6 )

Authority	DRR	Address	Bangkok	Data	20-Oct-09
Bridge	Rama VII				



Picture No.	7
Span	1
Member	Approach bridge

Settlement around pier



Picture No.	8
Span	1
Member	Approach bridge

Deterioration of drain function

First one is good. 2nd, 3rd drain is blocked



Picture No.	9
Span	1
Member	Site management office

Management office

Technical 1 person

Labor 15 person

Management of bridge and park

They send report of bridge once a week to DRR

# Present state ( 6 / 6 )

Authority	DRR	Address	Bangkok	Data	20-Oct-09
Bridge	Rama VII				



Picture No.	10
Span	1
Member	Site management office

Management area is yellow section

Green section is managed by BMA




Picture No.	11
Span	1
Member	Site management office



Picture No.	12
Span	1
Member	Site management office

Present state ( 7 / 7 )					
Authority	DRR	Address	Bangkok	Data	20-Oct-09
Bridge	Rama VII				

	Picture No.	7
	Span	1
	Member	Substructure

	Picture No.	8
	Span	1
	Member	

	Picture No.	9
	Span	1
	Member	




# Inspection sheet of visual survey

Bridge No. 10


Photo No. ( ~ )

Bridge name		Krung Thon Bridge		Route name		-		Authority		DRR		Code of authority		-			
Place		from Khat Bang Phlat to Khet Dusit		Distance		from km+ 0 to km+ 0						No.		-			
												Survey date		2009/10/24			
Bridge properties	Bridge type(1)	main road · side road · ramp															
	Bridge type(2)	bridge · viaduct · plank pass															
	Bridge type(3)	6-span steel truss															
	Total length	360.00 (m)															
	Span	58 + 58 + 64 + 64 + 58 + 58 (m)															
	Nos. of span	6 span															
	Width	12.00 (m) / (m)															
	Completion	1958															
Road information	Horizontal	Straight · incli (θ = 1.7 %) · Curve (R m)															
	Gradient	One way ( ↗ · ↘ ) parabo ( ▽ · ▹ )															
	Nearby tunnel	yes · no ( m)															
	Nearby crossing	yes · no ( m)															
	Traffic	Much · Medium · Little															
	Commercial traffic	Much · Medium · Little															
Environ	1. Urban				2. Suburbs				3. Mountain				4. Seaside				
	5. Industrial				6. Harbor				7. Residential				8. Business				
	9. Salty				10. Cold and snow				11. Heavy snow				12. Others				
Under brid	1. Shinkanser				2. Railway				3. Highway				4. Road				
	5. River				6. Lake				7. Ravine				8. Valley				
	9. Waterway				10. Parking				11. Bike parkin				12. Park				
	13. Vacant				14. Harbor				Name ( Chao Phraya )								
Access method	Superstructure		1. Inspection car 2. Falsework 3. On ground 4. Ladder 5. Lift car 6. On boat 7. Special camera 8. Others ( )														
	Substructure		1. Inspection car 2. Falsework 3. On ground 4. Ladder 5. Lift car 6. On boat 7. Special camera 8. Others ( )														
	Reason		· All bridge section is on the water · If inspection car is not available, false work will be required														
Survey result	Joint	Camber deform	yes · no														
		Difference in grade	yes · no														
		Continuous of barrier	yes · no														
		Continuous of curve	yes · no														
		Noise	yes · no														
	Out line of damage	Space change	yes · no														
		difference grade	yes · no														
		draining damage	yes · no														
		Blocked drainage	yes · no														
		Crack of pavement	yes · no														
Inspection way	Joint	Damage of lighting	yes · no														
		Damage of sign	-														
		Damage of handrail	yes · no														
		Possibility of scour	yes · no														
		Walkway yes · no															
	Inspection way	Joint	Vehicle yes · no														
Impressions	Joint	Height of girde	about 8.5m														
	Impressions	Joint	· scour (information from DRR)														
			· Remarkable crack and exfoliation is found at bottom surface of walkway														
			· Some drainage pipe was drop off														
			· Condition of painting is not bad, but some plate thickness was reduced by corrosion. Especially flange of bracket should be take care a strength.														
			· Deformation by ship collision was found at 1 center span.														
History of repair	· Detail survey was finished on Sep. 2009																
	Surveyor ; Mr. Chujo, Mr. Kudo																
Diagnosis	◆ Deterioration of bridge ◆ deficient · fair · good																
	◆ Noticeable point ◆ · Exfoliation of slab · Reduce thickness by corrosi																


Present state ( 1 / 19 )					
Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	1
Span	1
Member	Side view




Picture No.	2
Span	1
Member	View on road




Picture No.	3
Span	1
Member	View under girder


Present state ( 2 / 19 )					
Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	4
Span	1
Member	Side view of 1 span



Picture No.	5
Span	1
Member	View of walkway






Picture No.	6
Span	1
Member	Expansion joint
Between 1st and 2nd span (Thon Buri side)	



Present state ( 3 / 19 )

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				

	Picture No.	7
	Span	1
	Member	Expansion joint
	Thon Buri end	
	Fracture of side barrier	
	Picture No.	8
	Span	1
	Member	Side barrier
	Fracture of side barrier	
	Picture No.	9
	Span	1
	Member	Sign

## Present state ( 4 / 19 )

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	10
Span	1
Member	Newel



Picture No.	11
Span	1
Member	Approach bridge

Limit of vehicle height	2.6m
(Thon Buri side)	

Many scratch
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Picture No.	12
Span	1
Member	Approach bridge

Limit of vehicle height 3.2m (Bangkok side)
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## Present state ( 5 / 19 )

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				

[illegible][illegible][illegible]




## Present state ( 6 / 19 )


Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				

[illegible][illegible][illegible]


Present state ( 7 / 19 )					
Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	19
Span	1
Member	Bearing
Deterioration of corrosion proofi	
Fracture of edge	
Approach bridge	



Picture No.	20
Span	1
Member	Bearing
Bearing on cross beam between main girder	
Approach bridge	



Picture No.	21
Span	1
Member	Bearing
Deterioration of corrosion proofi	



Present state ( 8 / 19 )					
Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	22
Span	1
Member	Bearing
Deformation of base plate	



Picture No.	23
Span	1
Member	Bearing



Picture No.	24
Span	1
Member	Bearing
Deterioration of corrosion proofi	



# Present state ( 9 / 19 )

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	25
Span	1
Member	Bearing
Rivet at bottom side is replaced by bolt	
It might be corroded before	



Picture No.	26
Span	1
Member	Cross frame
Peeling of paint	
Expansion of steel by corrosion	



Picture No.	27
Span	1
Member	Bearing
Accumulation of soil	

# Present state (10/19)

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	28
Span	1
Member	Bracket
Reduction of plate thickness	



Picture No.	29
Span	1
Member	Bracket
Reduction of plate thickness	



Picture No.	30
Span	1
Member	Chord member
It's not clear the concept of gap Gap width is small.	



# Present state (11/19)

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	31
Span	1
Member	Stringer
Peeling of paint	



Picture No.	32
Span	1
Member	Chord member
Fracture of concrete	



Picture No.	33
Span	1
Member	Chord member
Mount up to prevent remaining water	
Possibility of corrosion inside of concrete slab	



# Present state (12/19)

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	34
Span	1
Member	Chord member
Crack and mark of water	



Picture No.	35
Span	1
Member	Chord member
Corrosion	



Picture No.	36
Span	1
Member	Bottom chord
Deterioration of corrosion proofing	

# Present state (13/19)

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	37
Span	1
Member	Upper chord
Deterioration of corrosion proofing	



Picture No.	38
Span	1
Member	Vertical member
Reinforcement by additional plate	
4-vertical member was reinforced	



Picture No.	39
Span	1
Member	Cross frame
Deformation at the end of cross frame	
Adjustment of height?	

# Present state (14/19)

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	40
Span	1
Member	Chord member
Deformation by vehicle collision	



Picture No.	41
Span	1
Member	slab
Replaced slab under roadway	



Picture No.	42
Span	1
Member	Slab
Slab under walkway	
Crack and free lime	



# Present state (15/19)

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	43
Span	1
Member	Slab
Slab under walkway	
Crack and free lime	



Picture No.	44
Span	1
Member	Slab
Exposure of rebar	
Crack above bracket	



Picture No.	45
Span	1
Member	slab
Exposure of rebar	

Present state (16/19)					
Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				

	Picture No.	46
	Span	1
	Member	Slab
	Exposure of rebar	
	Picture No.	47
	Span	1
	Member	slab
	Crack on walkway	
	Crack spacing is 2-4m.	
	Picture No.	48
	Span	1
	Member	Slab
	Walkway. Crack	
	0.4mm~0.75mm	




Present state (17/19)					
Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	49
Span	1
Member	Under bridge
Residence under bridge	
Bangkok side	



Picture No.	50
Span	1
Member	Slab
Signboard of inspection and repairing work	
150days from 2009.Feb	
Consultant is Norconsultant	



Picture No.	51
Span	1
Member	Substructure
*Survey on board, 31-oct	



## Present state (18 / 19)

Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				



Picture No.	52
Span	1
Member	Slab
Falling of drainage pipe	
<i>*Survey on board, 31-oct</i>	





Picture No.	53
Span	1
Member	slab
Crack and free lime under walkway	
<i>*Survey on board, 31-oct</i>	



Picture No.	54
Span	1
Member	Slab
Crack and free lime under walkway	
<i>*Survey on board, 31-oct</i>	

Present state (19/19)					
Authority	DRR	Address	Bangkok	Data	24-Oct-09
Bridge	Krung Thon Bridge				

	Picture No.	55
	Span	1
	Member	Slab
	Deformation by ship collision	
*Survey on board, 31-oct		
	Picture No.	56
	Span	1
	Member	Water supply
	Deterioration of corrosion proofi	
*Survey on board, 31-oct		
	Picture No.	57
	Span	1
	Member	