







4.2 Meghna Bridge



4.2.1 Crack, water leakage, isolated lime



(1) Substructure



Abutment 01	
Damage: a	Damage: a
	
No crack	No crack



Pier 01	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 02	
Damage: a	Damage: a
	
No crack	No crack



Pier 03	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 04	
Damage: a	Damage: a
	
No crack	No crack



Pier 05	
Damage: a	Damage: a
	
No crack	No crack



Pier 06	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 07	
Damage: a	Damage: a
	
No crack	No crack



Pier 08	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm

Pier 09	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm

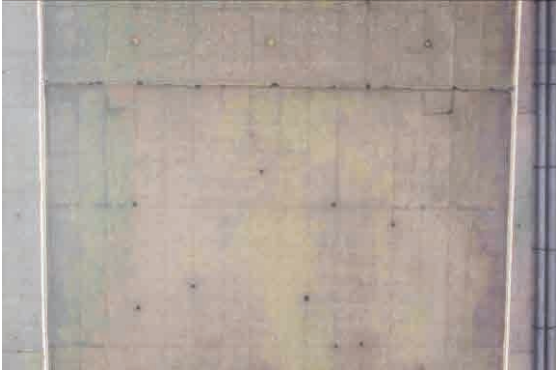

Pier 10	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 11	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 12	
Damage: a	Damage: a
	
No crack	No crack



Abutment 02	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



(2) Superstructure



Superstructure P1	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P2	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P3	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P4	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P5	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P6	
Damage: a	Damage: a
	
No crack	No crack

Superstructure P7	
Damage: a	Damage: a
	
No crack	No crack

Superstructure P8	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P10	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P11-P12	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P12-A2	
Damage: d	Damage: a
	
<p>Crack width over 0.2mm Small isolated lime</p>	<p>No crack</p>



4.2.2 Exposure of reinforcement



(1) Substructure



Abutment 01	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Pier 01	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 02	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 03	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 04	
Damage: Not exist	Damage: Not exist
 A photograph showing a concrete pier column supporting a bridge deck over a body of water. The column is clean and shows no signs of damage.	 A close-up photograph of the concrete surface of Pier 04, showing the texture and color of the concrete. There is no visible reinforcement damage.
No damage	No damage in reinforcement



Pier 05	
Damage: Not exist	Damage: Not exist
 A photograph showing a concrete pier column supporting a bridge deck over a body of water. The column is clean and shows no signs of damage.	 A close-up photograph of the concrete surface of Pier 05, showing a circular mark and some surface texture. There is no visible reinforcement damage.
No damage	No damage in reinforcement



Pier 06	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 07	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 08	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement

Pier 09	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 10	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 11	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Pier 12	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Abutment 02	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



(2) Superstructure



Superstructure P1	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P2	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P3	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P4	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P5	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P6	
Damage: Not exist	Damage: Not exist
	
No damage	No damage

Superstructure P7	
Damage: Not exist	Damage: Not exist
	
No damage	No damage

Superstructure P8	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P10	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P11-P12	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P12-A2	
Damage: Exist	Damage: Not exist
	
<p>Small area Corrosion in reinforcement</p>	<p>No damage</p>



4.2.3 Falling out damaged particle and Crack in concrete slab



(1) Slab



Slab P1	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P2	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P3	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P4	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P5	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P6	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P7	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P8	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P10	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P11-P12	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P12-A2

Damage: Not exist





Damage: a



No damage

No crack



4.2.4 Uneven on road surface



Surface	
Damage: Exist	Damage: Exist
	
Uneven more than 20mm	Uneven more than 20mm



4.3 Gumti Bridge



4.3.1 Crack, water leakage, isolated lime



(1) Substructure



Abutment 01	
Damage: a	Damage: a
	
No crack	No crack



Pier 01	
Damage: a	Damage: b
	
No crack	Crack width less 0.2mm



Pier 02	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 03	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 04	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 05	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 06	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 07	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 08	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 09	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 10	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 11	
Damage: a	Damage: a
	
No crack	No crack



Pier 12	
Damage: a	Damage: a
	
No crack	No crack

Pier 13	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Pier 14	
Damage: a	Damage: d
	
No crack	Crack width over 0.2mm Water leakage only



Pier 15	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm


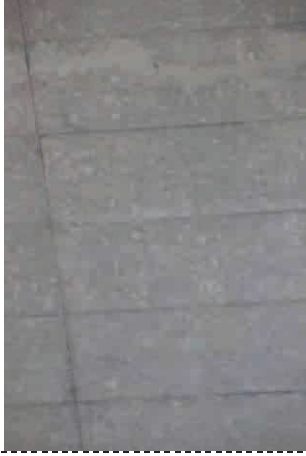
Pier 16	
Damage: a	Damage: d
	
No crack	Crack width over 0.2mm Water leakage only



Abutment 02	
Damage: a	Damage: a
	
No crack	No crack

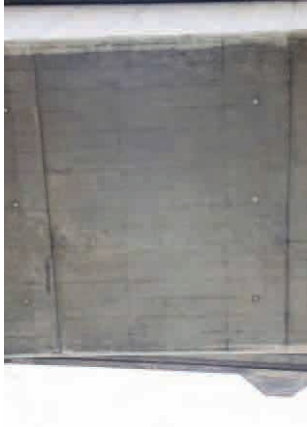

(2) Superstructure

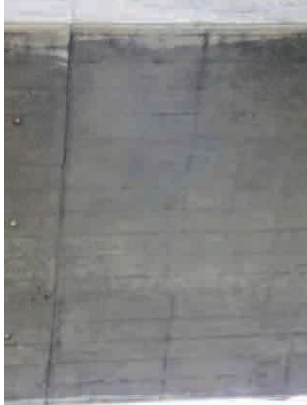

Superstructure P1	
Damage: a	Damage: c
	
No crack	Crack width over 0.2mm



Superstructure P2	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P3	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P4	
Damage: a	Damage: a
	
No crack	No crack

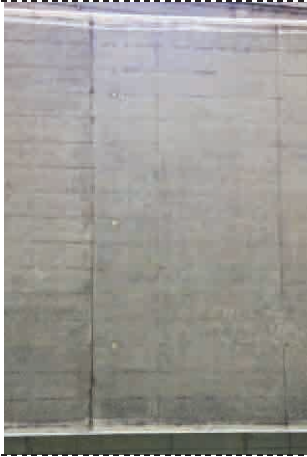

Superstructure P5	
Damage: a	Damage: d
	
No crack	Crack width over 0.2mm Water leakage only



Superstructure P6	
Damage: a	Damage: d
	
No crack	Crack width over 0.2mm Water leakage only


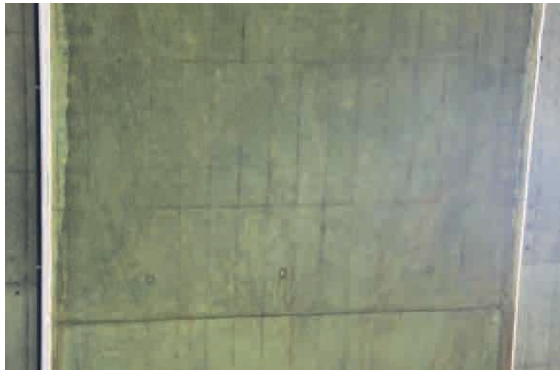
Superstructure P7	
Damage: c	Damage: d
	
Crack width over 0.2mm	Crack width over 0.2mm Water leakage only



Superstructure P8	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P9	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P10	
Damage: a	Damage: d
	
No crack	Crack width over 0.2mm Water leakage only



Superstructure P11	
Damage: a	Damage: a
	
No crack	No crack

Superstructure P12	
Damage: a	Damage: a
	
No crack	No crack

Superstructure P13	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P14	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P15	
Damage: a	Damage: a
	
No crack	No crack



Superstructure P16	
Damage: a	Damage: a
	
No crack	No crack



4.3.2 Exposure of reinforcement



(1) Substructure



Abutment 01	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Pier 01	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 02	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 03	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 04	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 05	
Damage: Not exist	Damage: Not exist
	
No damage in reinforcement	No damage


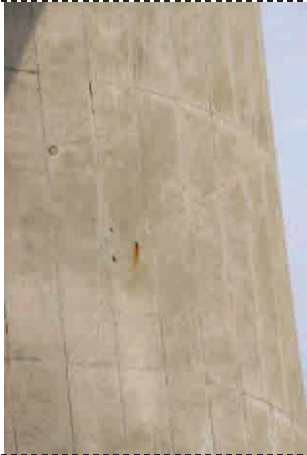
Pier 06	
Damage: Not exist	Damage: Not exist
	
No damage in reinforcement	No damage in reinforcement



Pier 07	
Damage: Not exist	Damage: Not exist
	
No damage in reinforcement	No damage in reinforcement



Pier 08	
Damage: Not exist	Damage: Not exist
	
No damage in reinforcement	No damage in reinforcement



Pier 09	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 10	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Pier 11	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Pier 12	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement

Pier 13	
Damage: Not exist	Damage: Not exist
	
No damage in reinforcement	No damage in reinforcement



Pier 14	
Damage: Not exist	Damage: Not exist
	
No damage in reinforcement	No damage in reinforcement



Pier 15	
Damage: Not exist	Damage: Not exist
	
No damage in reinforcement	No damage in reinforcement



Pier 16	
Damage: Not exist	Damage: Not exist
	
No damage	No damage in reinforcement



Abutment 02	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



(2) Superstructure

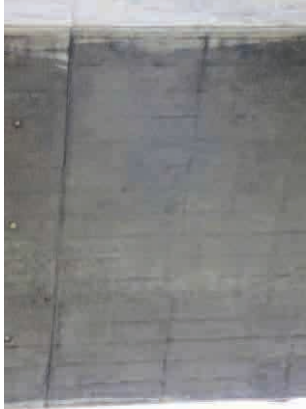

Superstructure P1	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P2	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P3	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P4	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P5	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P6	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P7	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P8	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P9	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P10	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P11	
Damage: Not exist	Damage: Not exist
	
No damage	No damage

Superstructure P12	
Damage: Not exist	Damage: Not exist
	
No damage	No damage

Superstructure P13	
Damage: Not exist	Damage: Not exist
	
No damage	No damage


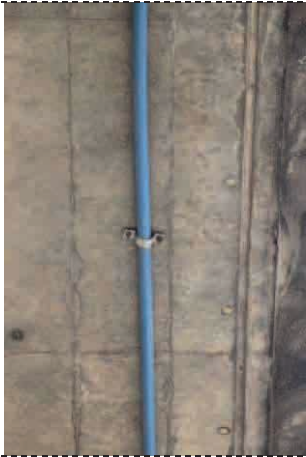
Superstructure P14	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P15	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



Superstructure P16	
Damage: Not exist	Damage: Not exist
	
No damage	No damage



4.3.3 Falling out damaged particle and Crack in concrete slab



(1) Slab



Slab P1	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P2	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P3	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P4	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P5	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P6	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P7	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P8	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P9	
Damage: Not exist	Damage: a
	
No damage	No crack

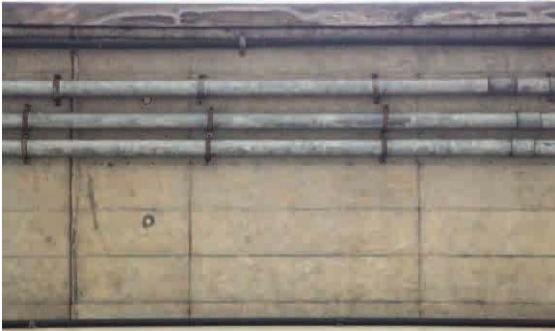

Slab P10	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P11	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P12	
Damage: Not exist	Damage: a
	
No damage	No crack



Slab P13	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P14	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P15	
Damage: Not exist	Damage: a
	
No damage	No crack

Slab P16	
Damage: Not exist	Damage: a
	
No damage	No damage

4.3.4 Uneven on road surface

Surface	
Damage: Exist	Damage: Exist
	
Uneven more than 20mm	Uneven more than 20mm

2. Schmidt hammer test

PIER No: #P1 (UPSTREAM)

44	42	44	46
46	42	44	52
40	42	46	42
42	40	46	54

AVERAGE= 44.50

PIER No: #P1 (DOWN STREAM)

45	38	48	50
46	48	50	47
40	43	40	50
46	44	50	40

AVERAGE= 45.31

PIER No: #P2 (UPSTREAM)

44	46	46	46
44	46	40	48
44	42	40	42
50	54	48	40

AVERAGE= 45.00

PIER No: #P2 (DOWN STREAM)

50	52	46	50
40	50	48	50
42	44	42	42
40	50	42	42

AVERAGE= 45.63

PIER No: #P3 (UPSTREAM)

42	36	36	38
44	45	50	36
48	38	32	35
44	40	35	38

AVERAGE= 39.81

PIER No: #P3 (DOWN STREAM)

50	44	37	40
38	40	40	38
38	40	40	42
40	38	36	40

AVERAGE= 40.06

PIER No: #P4 (UPSTREAM)

40	39	38	36
38	42	40	40
38	39	44	36
36	32	40	42

AVERAGE= 38.75

PIER No: #P4 (DOWN STREAM)

42	36	34	34
36	36	38	36
38	36	34	40
40	38	38	36

AVERAGE= 37.00

PIER No: #P5 (UPSTREAM)

PIER No: #P5 (DOWN STREAM)

40	44	38	50
42	44	42	42
44	42	40	46
48	46	40	44

AVERAGE= 43.25

PIER No: #P7 (UPSTREAM)

46	44	40	46
44	42	42	44
50	48	50	50
46	46	45	48

AVERAGE= 45.69

PIER No: #P7 (DOWN STREAM)

44	42	44	44
46	42	48	48
42	46	42	47
48	48	40	46

AVERAGE= 44.81

Piercap

40	36	42	40
44	38	44	36
42	36	40	38
40	39	42	44

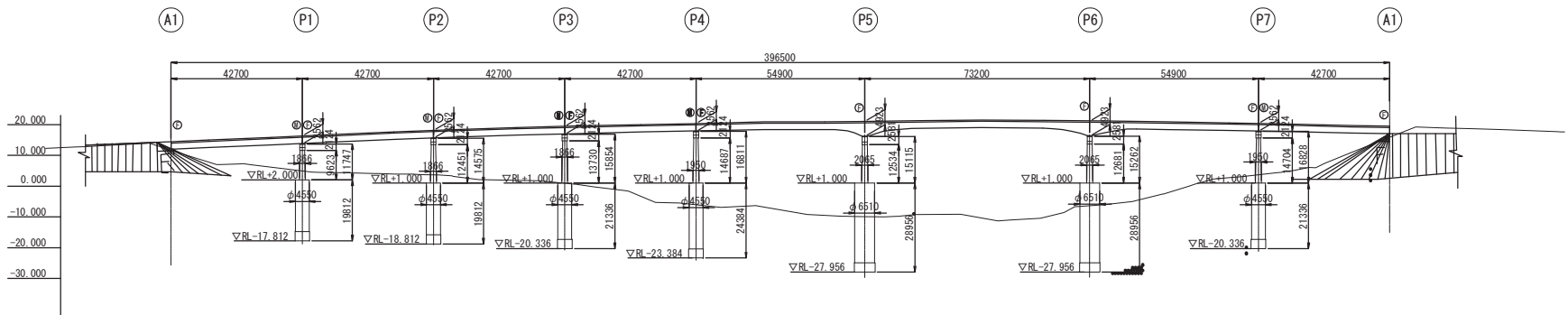
AVERAGE= 40.06



3. Measuring

GENERAL VIEW

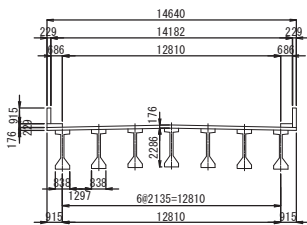
PROFILE S=1:1500



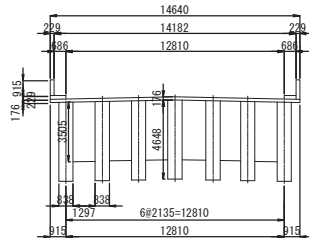
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(PC I-BEAM GIRDER)

AT ABUTMENT

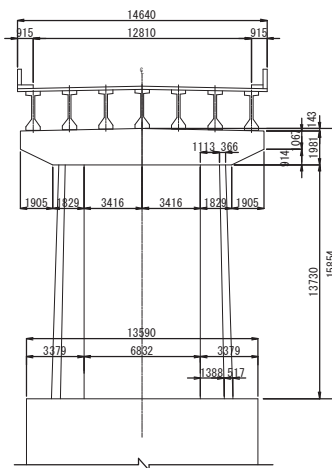


AT CENTER

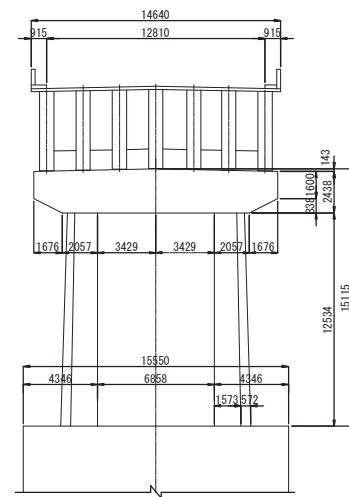


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(P3) PIER

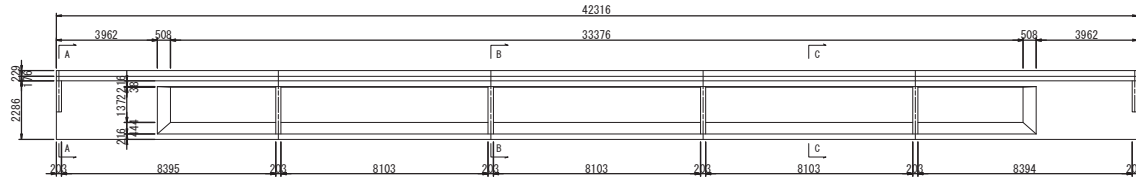


(P5) PIER

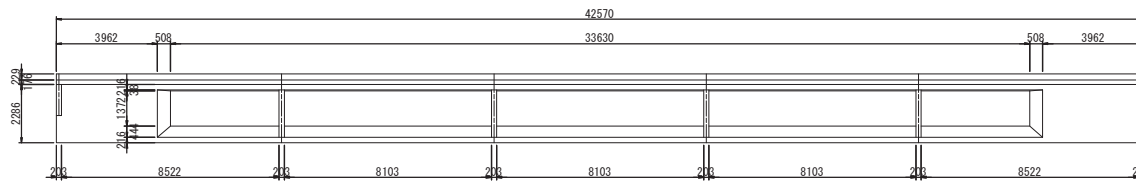


SUPERSTRUCTURE

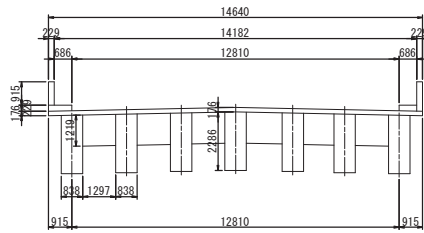
A1-P1 P7-A2



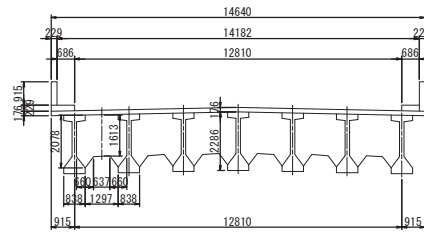
P1-P2 P2-P3 P3-P4



A-A



B-B



C-C

