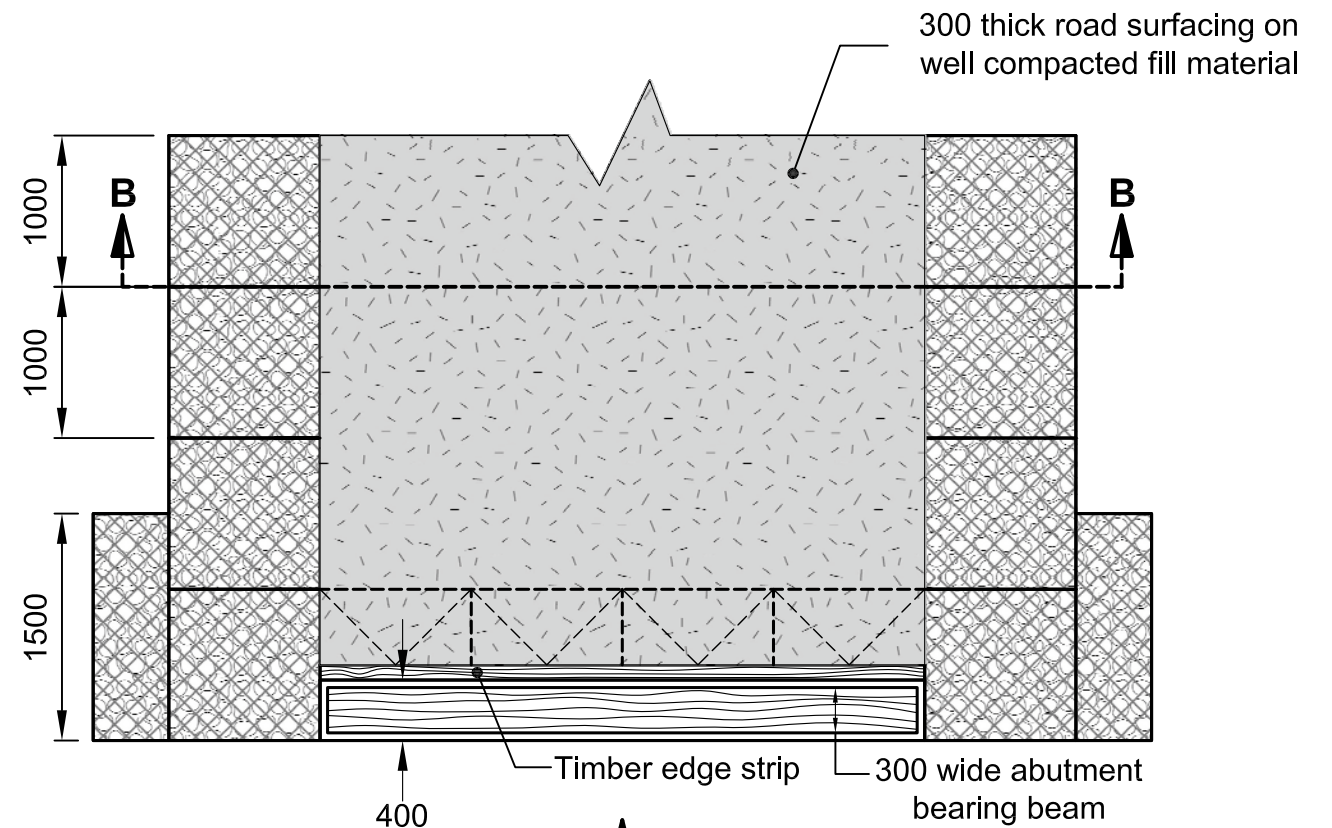


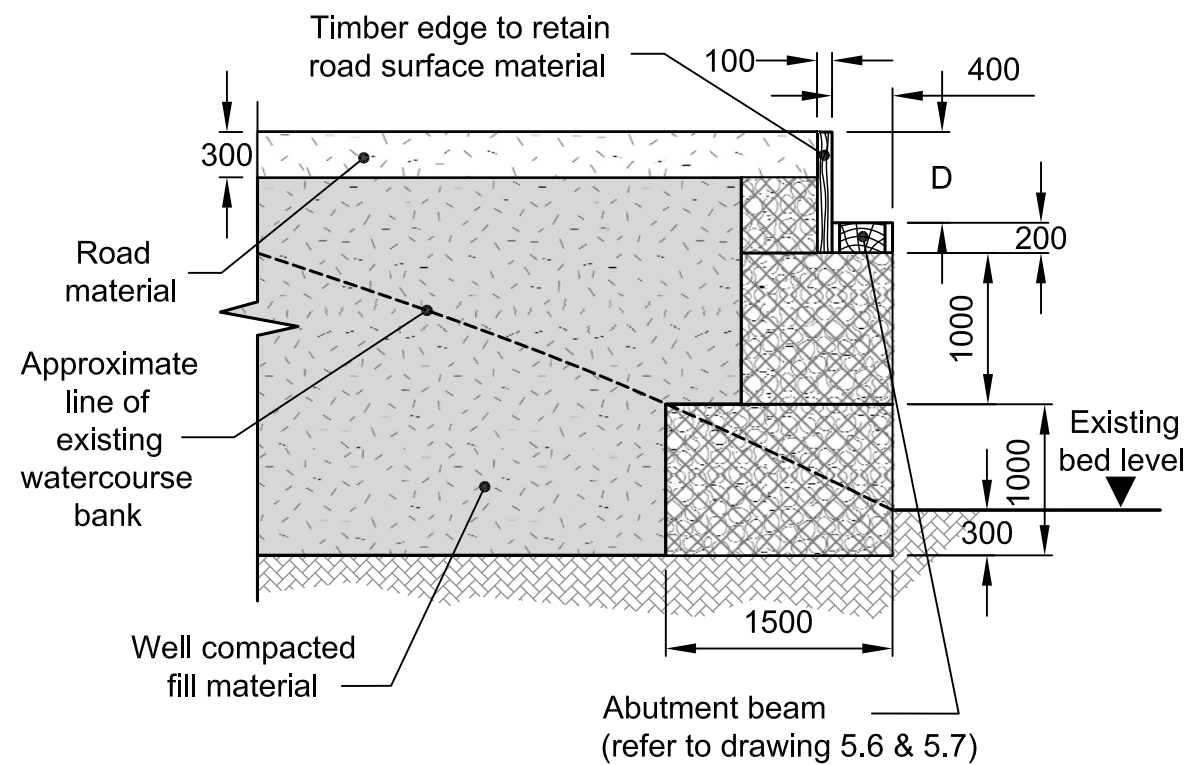
**CROSS SECTION ON B-B**

Well compacted fill material



**PLAN VIEW**

300 wide abutment bearing beam



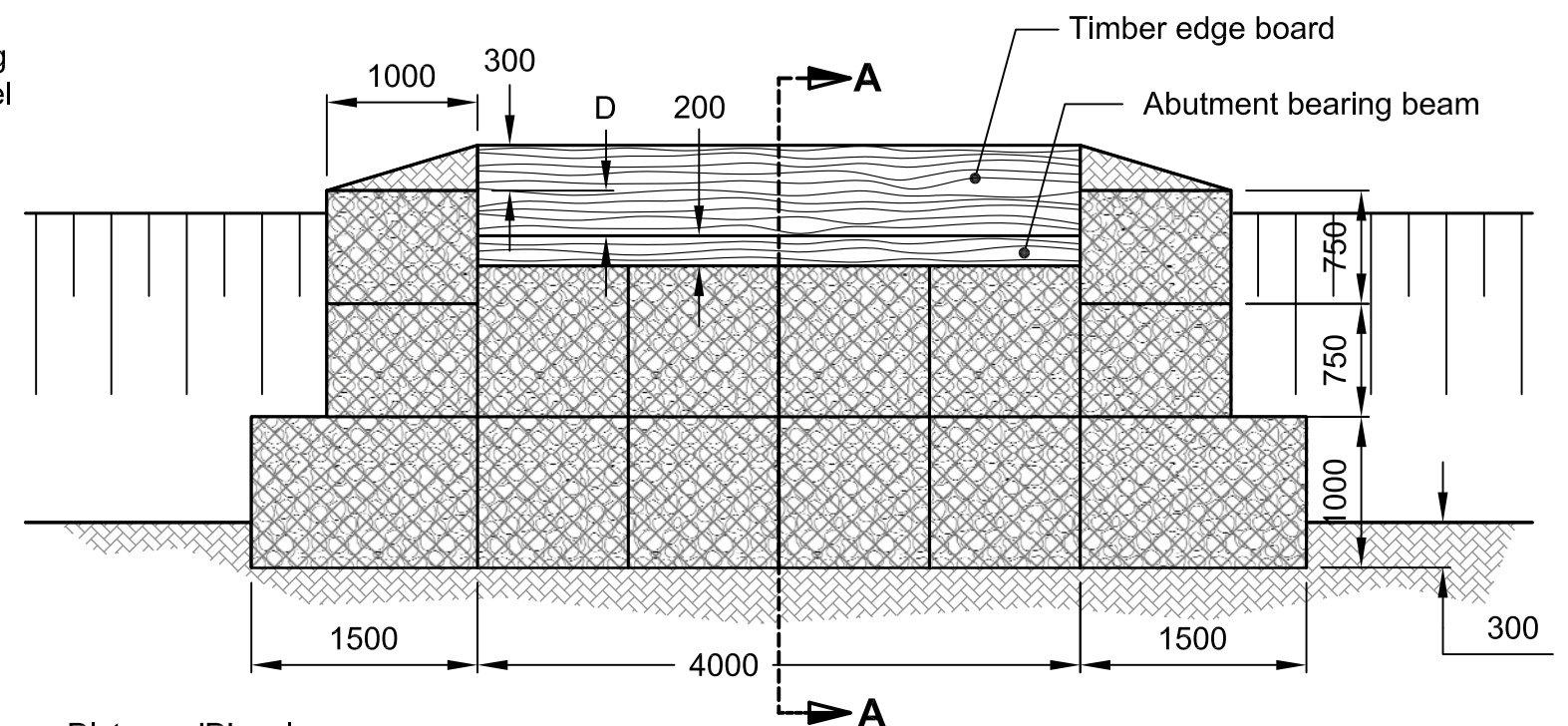
**CROSS SECTION ON A-A**

Road material

Approximate line of existing watercourse bank

Well compacted fill material

Abutment beam (refer to drawing 5.6 & 5.7)



**END ELEVATION ON 'C'**

Distance 'D' varies depending on depth of deck (refer to drawing 5.6 & 5.7)

KEY	
	Road surface
	Well compacted fill material
	Firm foundation/ Existing ground
	Gabion stone mattress
	Timber

- NOTES:**
- (1) All dimensions in mm.
  - (2) Refer to section 8.6 for gabion wall design.
  - (3) Drawing shown for ground with poor bearing capacity.
  - (4) Abutment beam and timber edge beam to be securely fixed to gabion baskets with tie wire.
  - (5) Road side drains to be constructed at least 3m away from gabion walls.
  - (6) Length of abutment wingwalls will depend on gradient of watercourse banks.

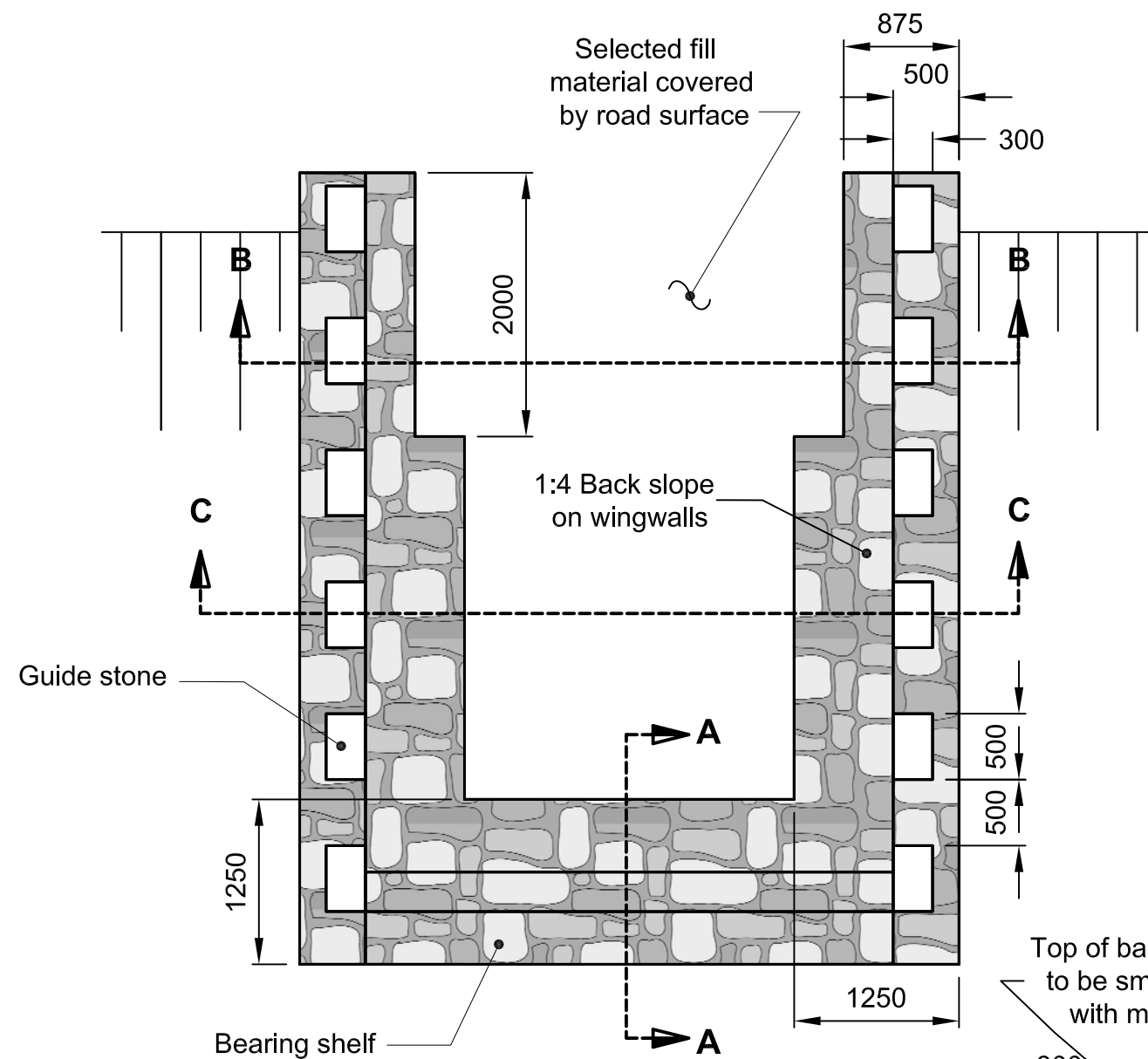
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**Gabion Abutment**

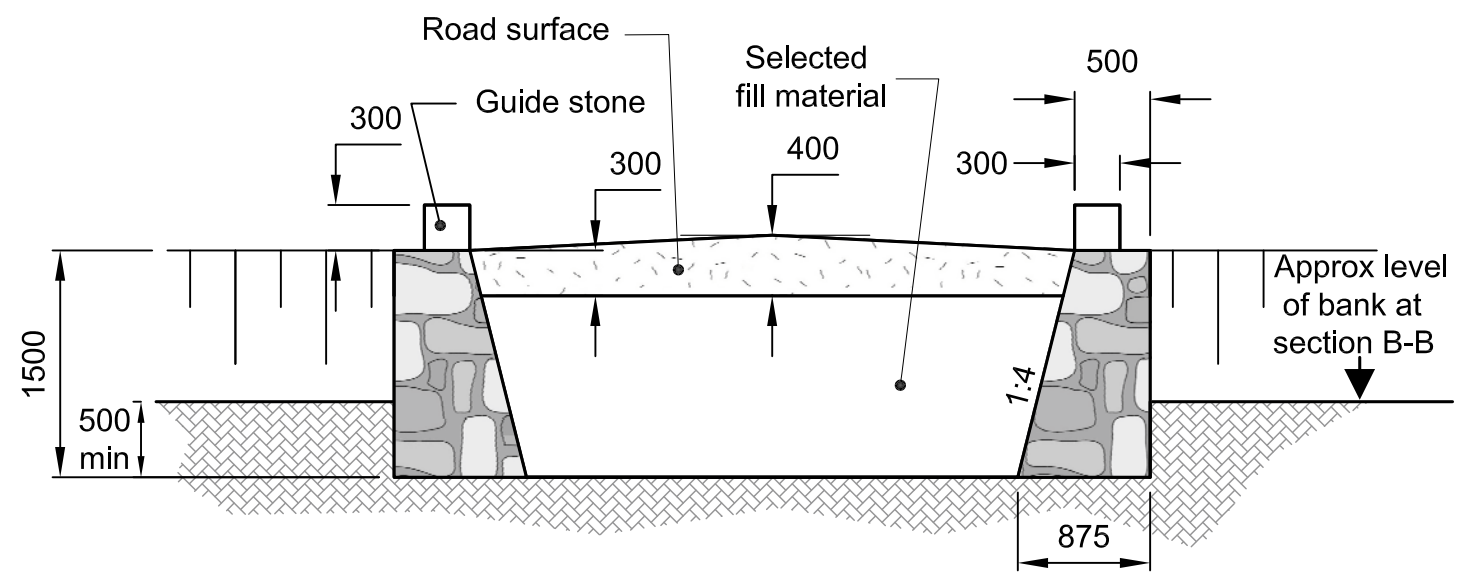
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Scale: 1 : 50 (at A3)

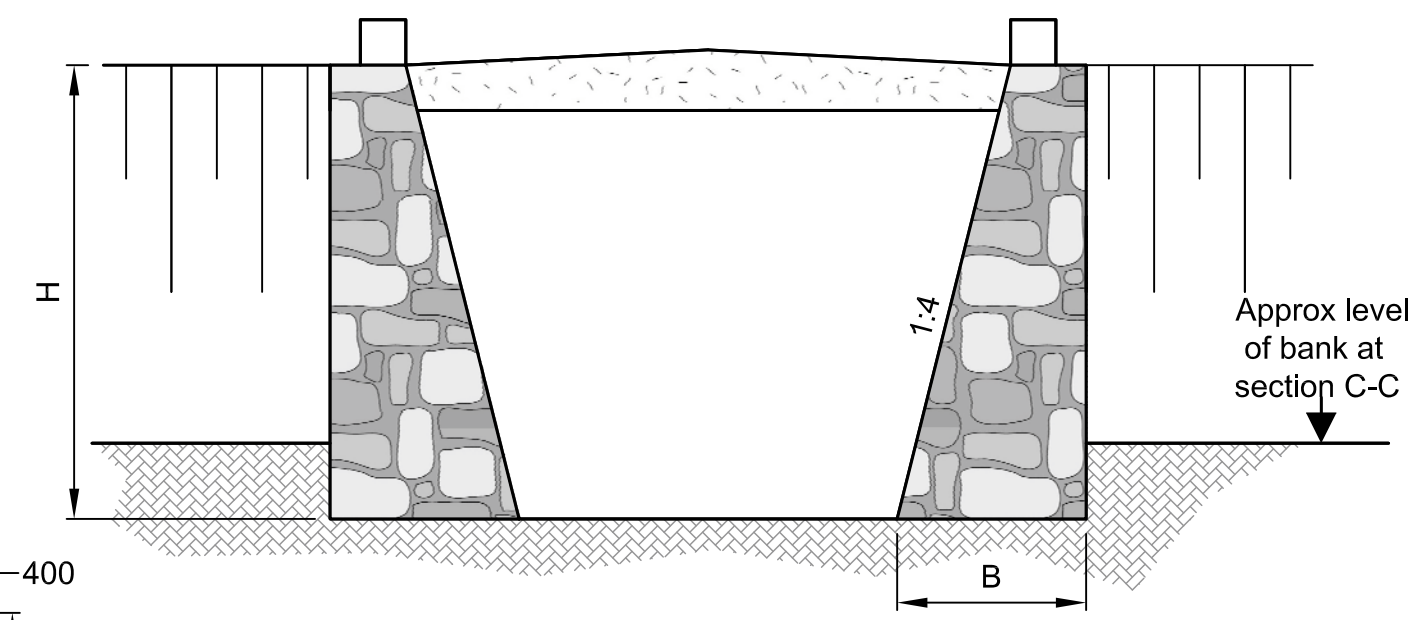
**Drawing No: 5.1**



**PLAN VIEW**

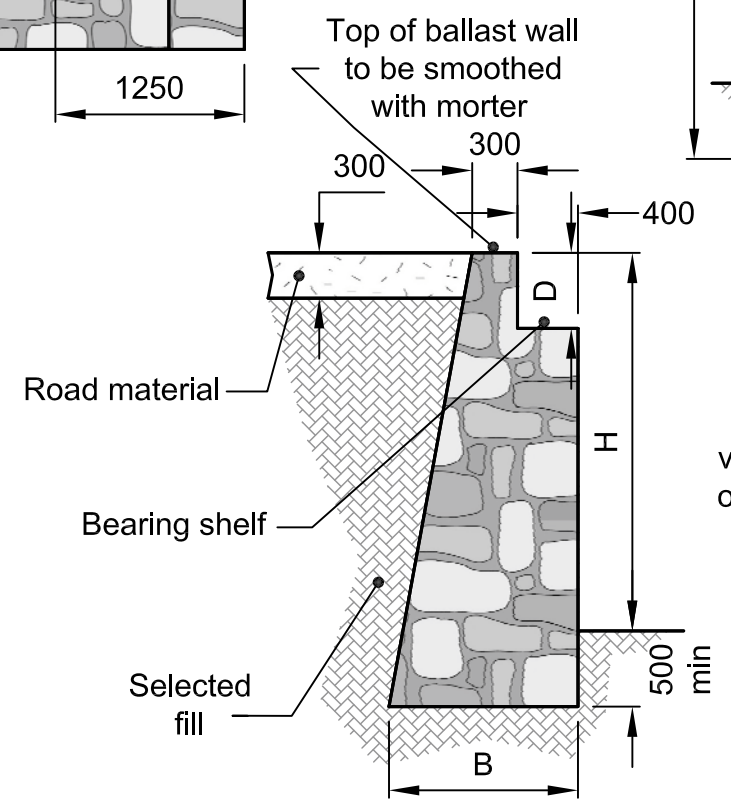


**SECTION B-B**



**SECTION C-C**

(remaining Dimensions as Section B-B)



**SECTION A-A**

Dimension 'D' varies depending on depth of deck

$$B = 500 + H/4$$

KEY	
	Firm foundation/ Existing ground
	Masonry
	Road surface

- NOTES:**
- (1) All dimensions in mm. (2) Drawing shown for ground with medium or high bearing capacity.
  - (3) Refer to drawing 5.6 & 5.7 for deck details.
  - (4) Fill material to be placed and compacted in 300mm layers.
  - (5) Length of abutment wingwalls will depend on gradient of watercourse banks
  - (6) Road side drains to be constructed at least 3m away from masonry wingwalls.
  - (7) Refer to design manual section 8.11 for deck bearing arrangements.

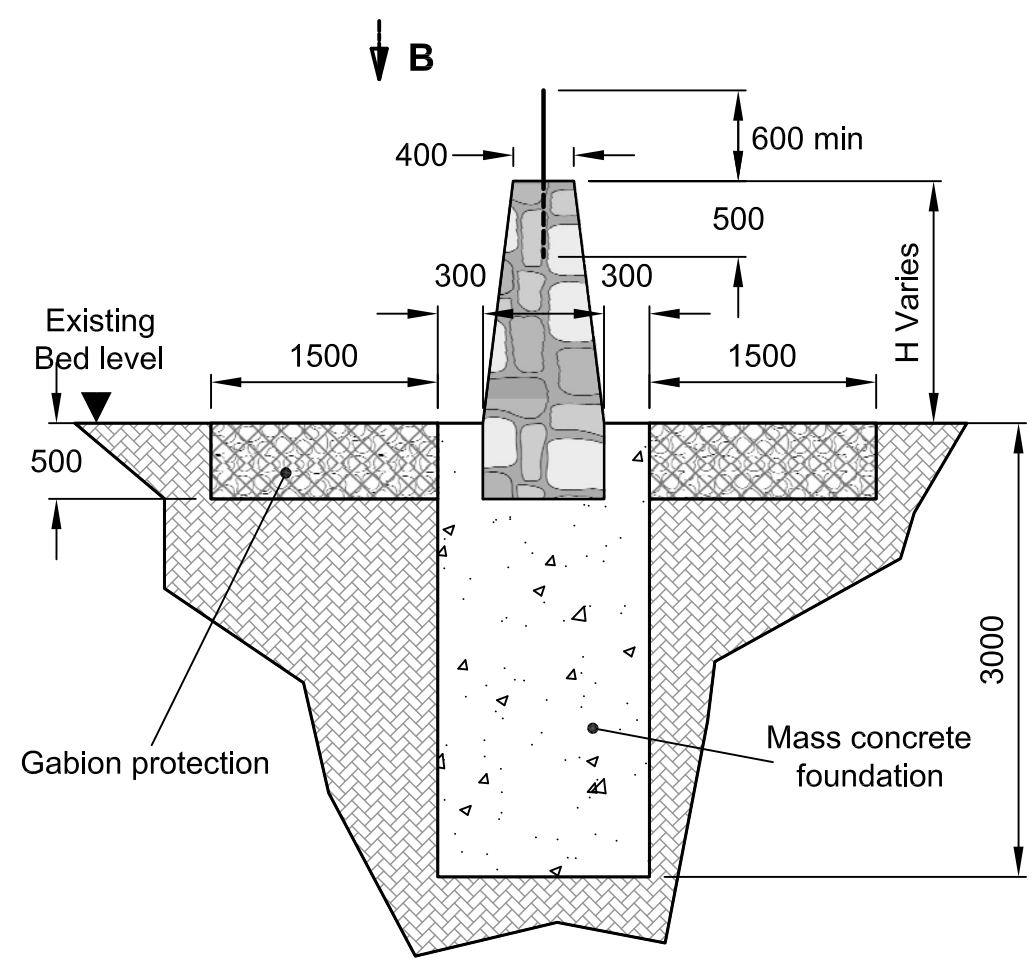
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**Masonry Abutment**

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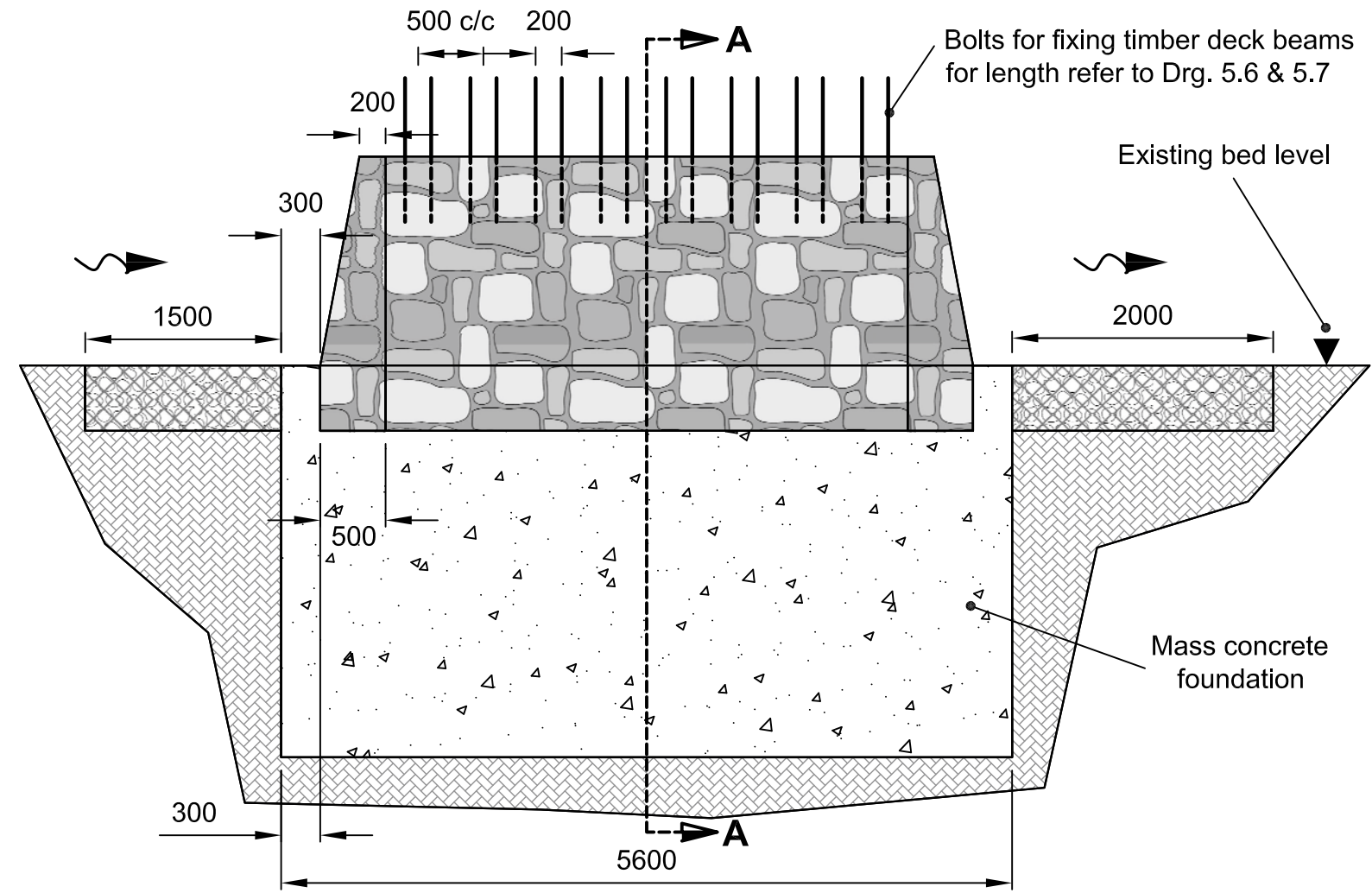
Scale: 1 : 50 (at A3)

**Drawing No: 5.2**

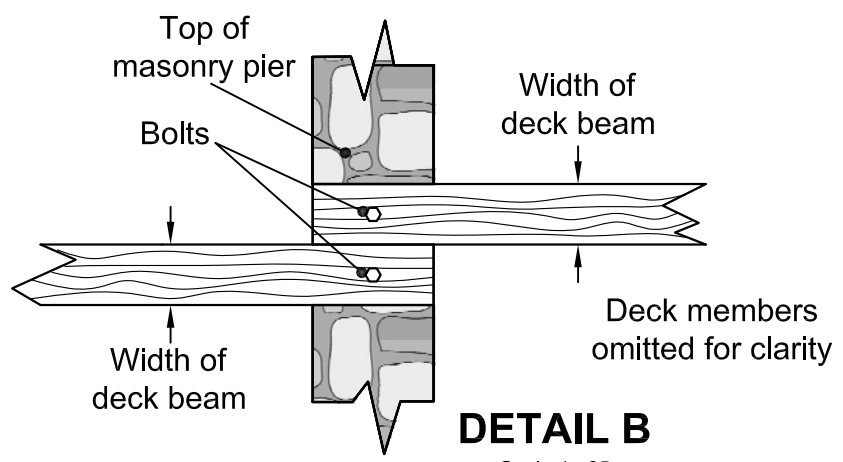


**CROSS SECTION A-A**

$W = 400 + H/s$

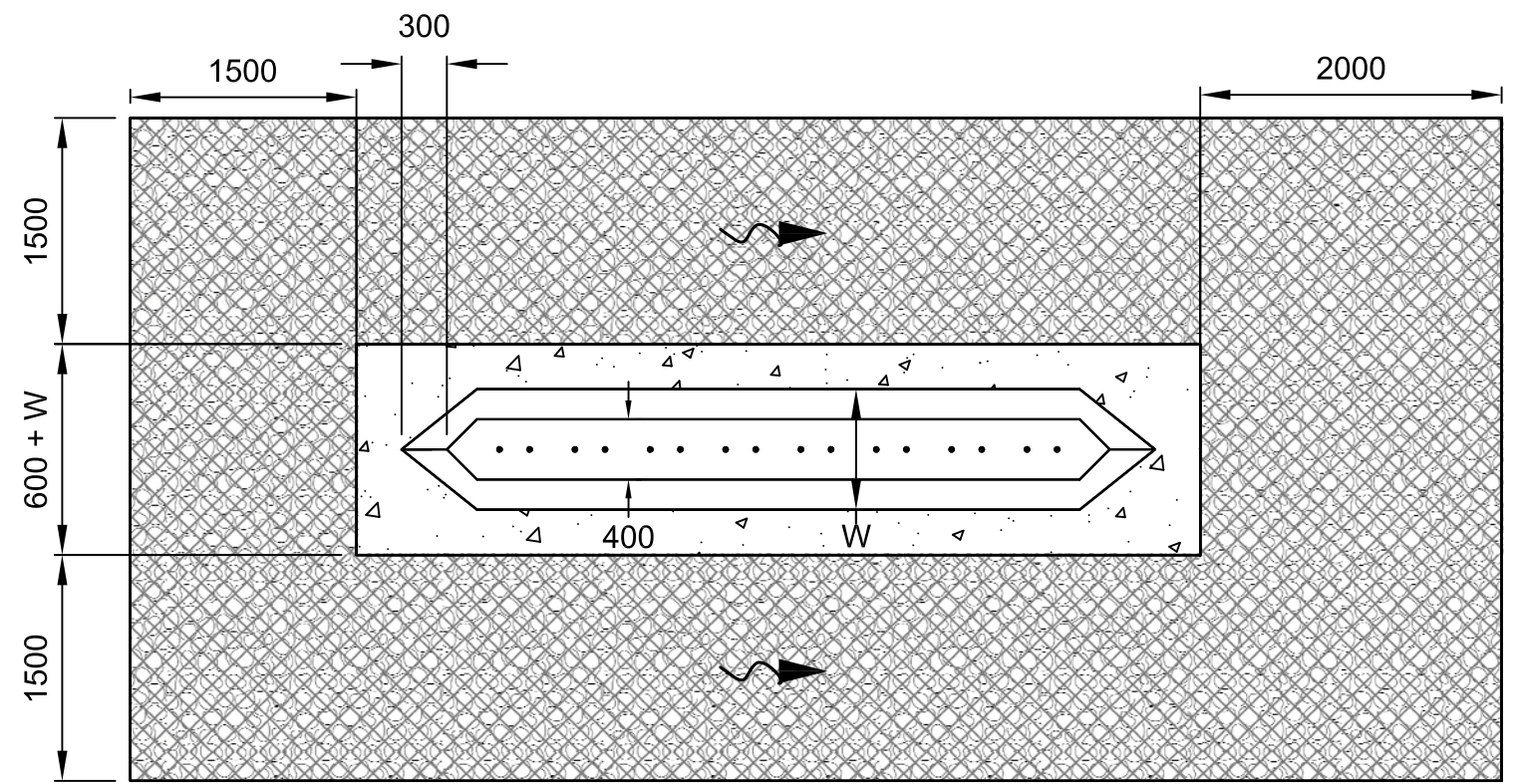


**LONGITUDINAL SECTION**



**DETAIL B**  
Scale 1 : 25

KEY	
	Concrete
	Masonry
	Gabion stone mattress
	Firm foundation/ Existing ground
	Timber



**PLAN VIEW**

- NOTES:**
- (1) All dimensions in mm.
  - (2) Foundation depth should be increased if significant scour is expected.
  - (3) Bolts to be manufactured from mild steel reinforcing bar.
  - (4) Exact positions of bolts will depend on deck arrangement, refer to drawings 5.6 & 5.7.

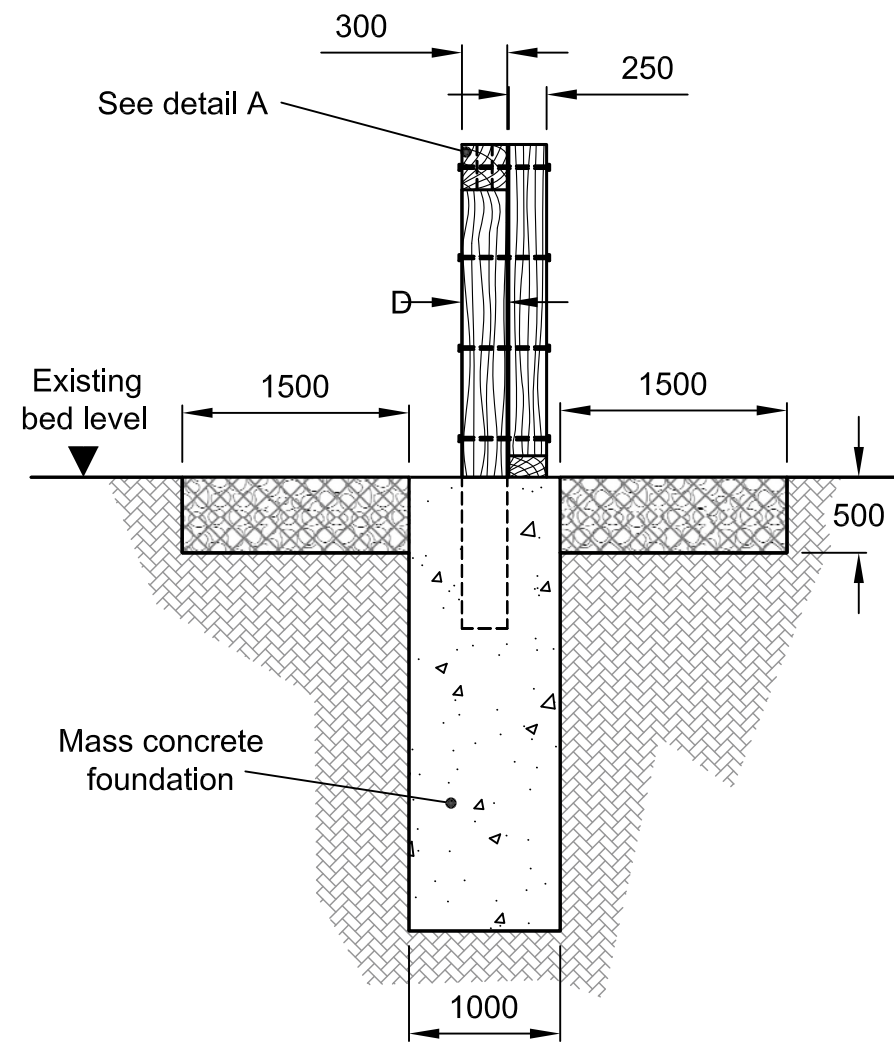
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**Masonry Pier**

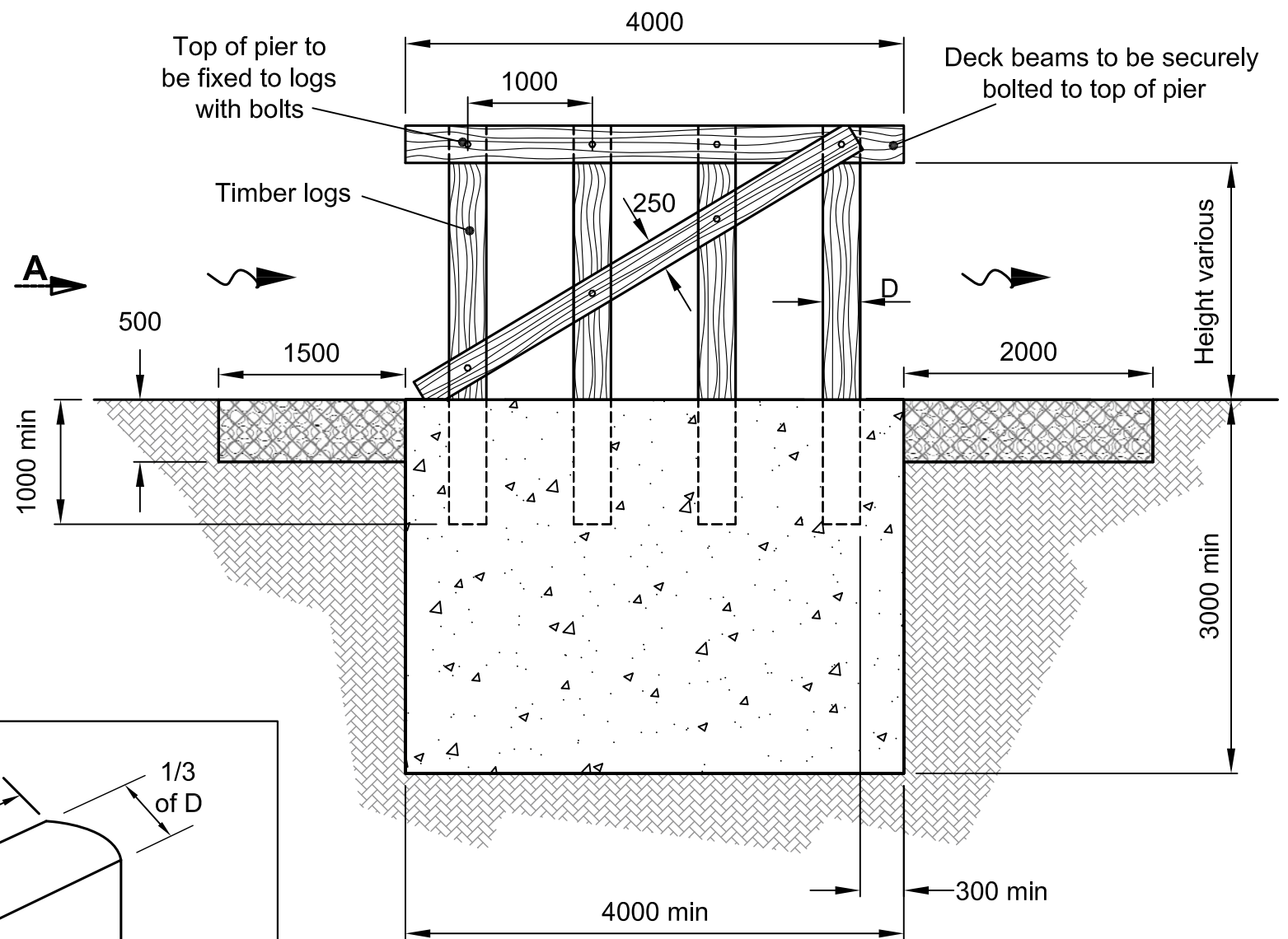
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Scale: 1 : 50 (at A3)

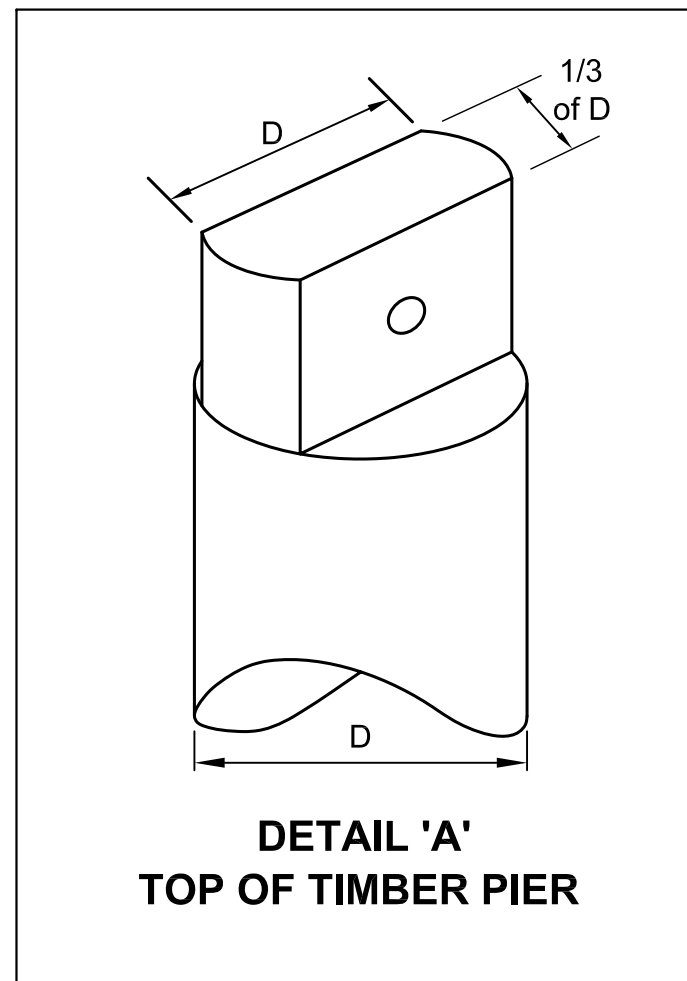
**Drawing No: 5.3**



**END ELEVATION VIEWED ON 'A'**



**SIDE ELEVATION**



**DETAIL 'A'  
TOP OF TIMBER PIER**

**KEY**



Concrete



Firm foundation/  
Existing ground



Timber



Gabion stone mattress

Timber pier dimensions			
Height - H (m)	Diameter (D)		
	Heavy Hardwood	Lighter Hardwood	Soft Wood
0 - 2	200	300	300
0 - 4	300	300	400

- NOTES:** (1) All dimensions in mm. (2) Foundation depth should be increased if significant scour is expected.  
 (3) All timber should be seasoned with defects within acceptable limits (see design manual).  
 (4) Bolts should be coachbolts or manufactured from mild steel reinforcing bar.  
 (5) Nuts should be touchwelded to bolts.  
 (6) Diagonal bracing can be either sawn timber or timber log, stripped of bark.  
 (7) Bolt hole to be at least 200mm from end of diagonal brace.

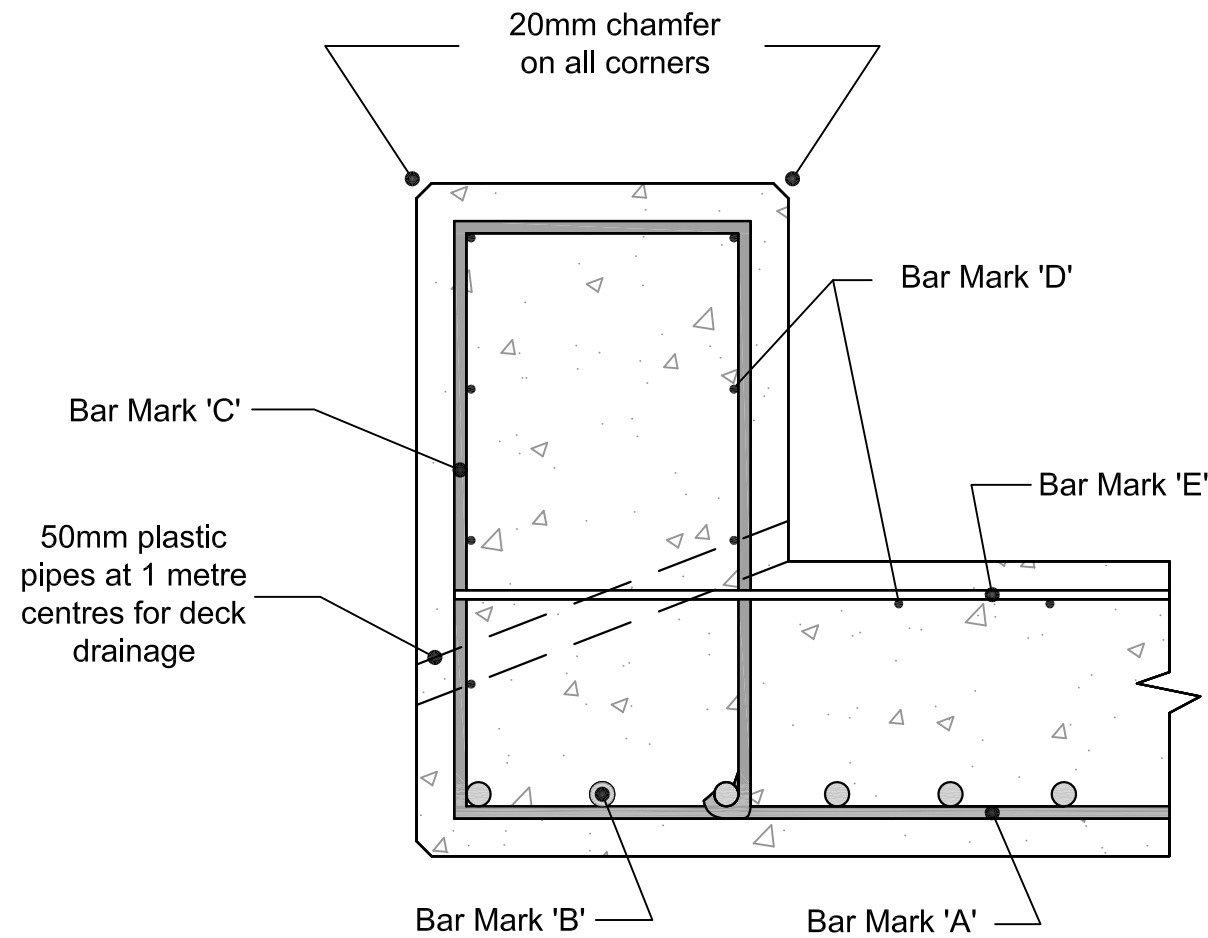
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**Timber Pier**

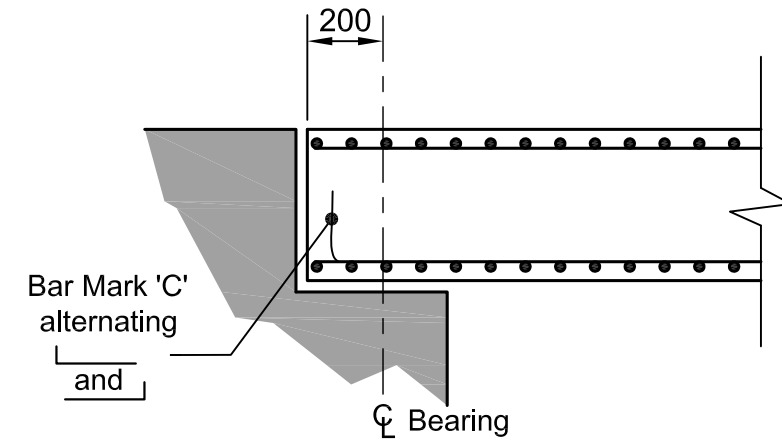
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Scale: 1 : 50 (at A3)

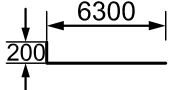
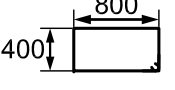
**Drawing No: 5.4**

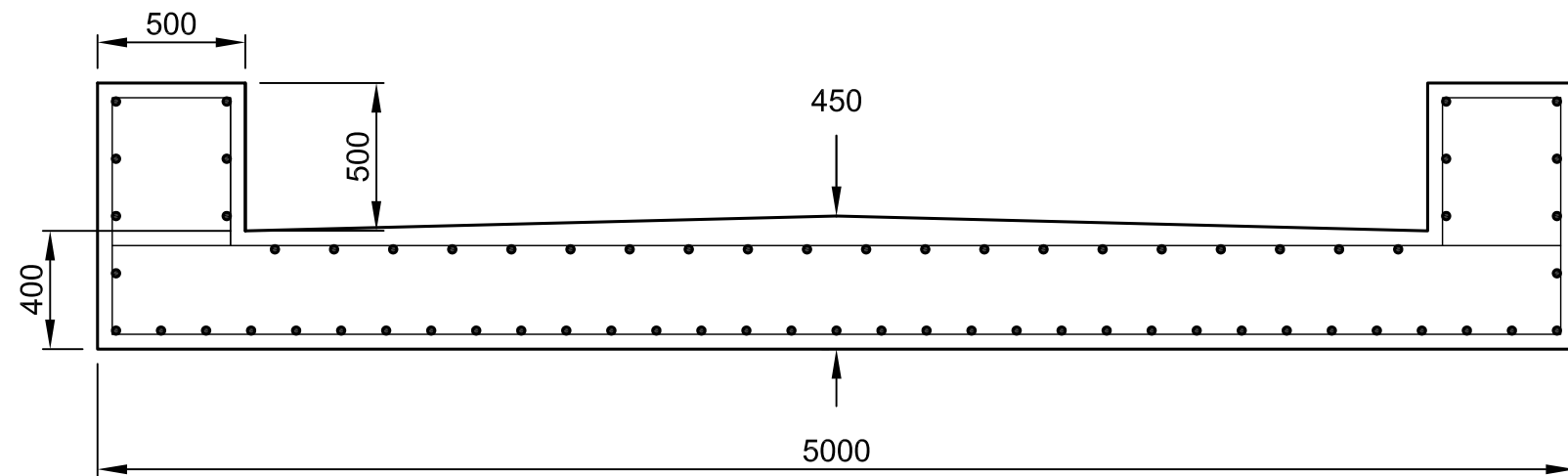


**DECK EDGE DETAIL**  
Scale 1 : 10



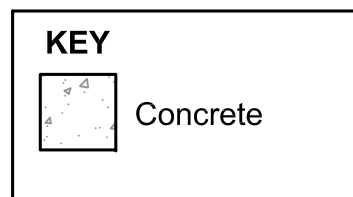
**DETAIL AT SUPPORT**  
Not to scale

Bar Mark	A	B	C	D	E
Bar Shape overall dimensions	Straight 4900			Straight 6300	Straight 4900
Bar Size/ spacing	16@125	32@150	16@200	12@200	12@200



**LONGITUDINAL SECTION**

Scale 1 : 25



- NOTES:** (1) All dimensions in mm.  
(2)  
(3) All concrete to be class 20.  
(4) Cover to concrete to be 50mm.  
(5) Reinforcement - mild steel bar 250 N/mm<sup>2</sup>.  
(6) Refer to design manual for bearing detail.

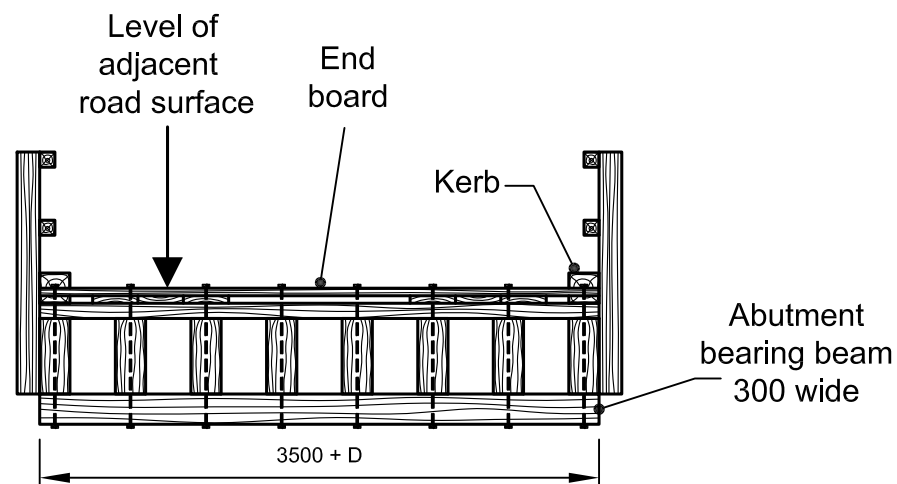
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**Simple R C Deck - 6m span**

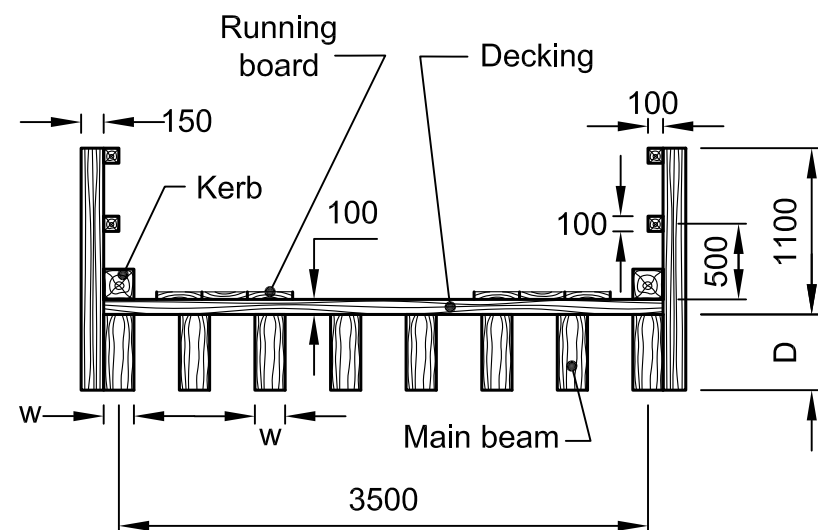
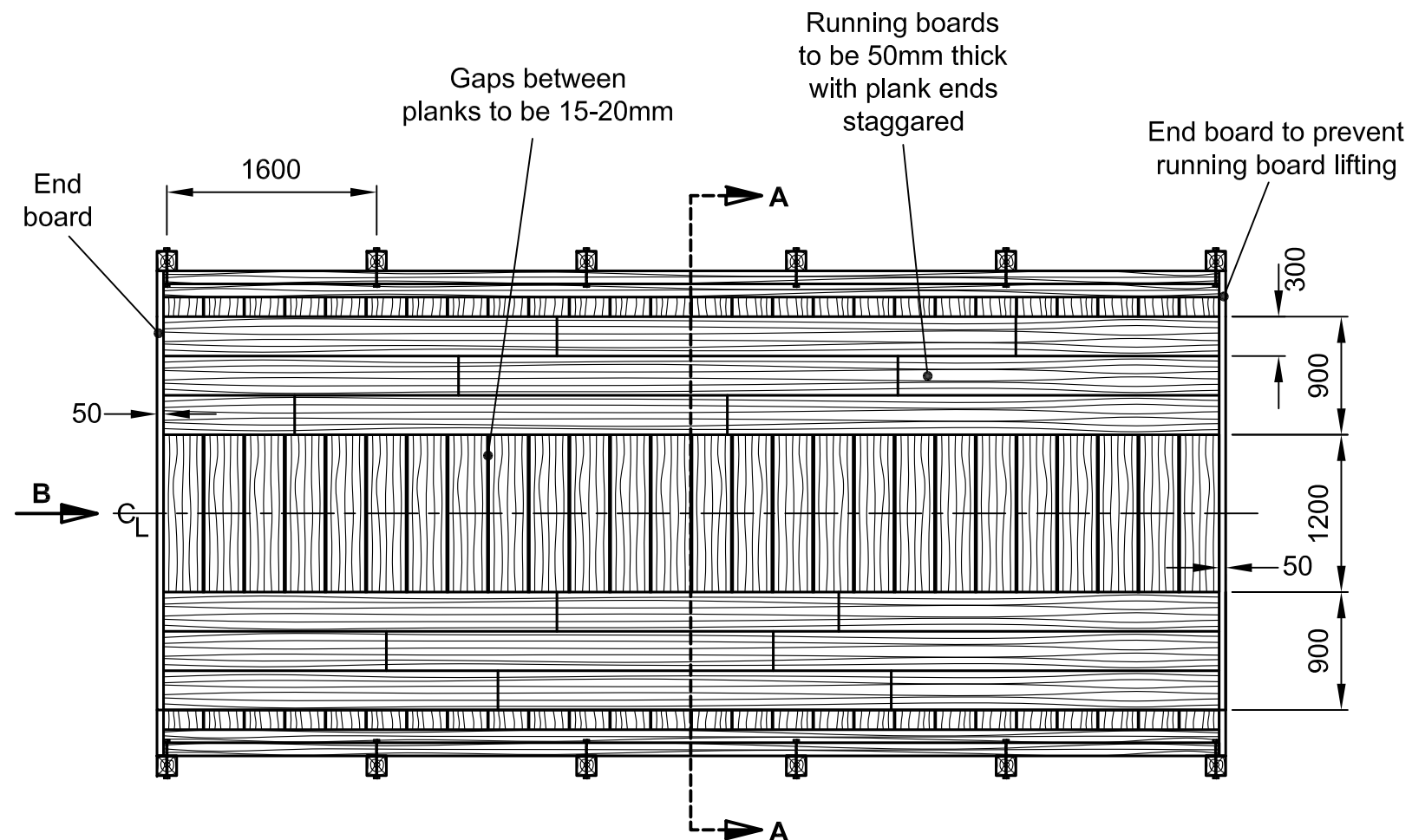
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Scale: 1 : 25 (at A3)

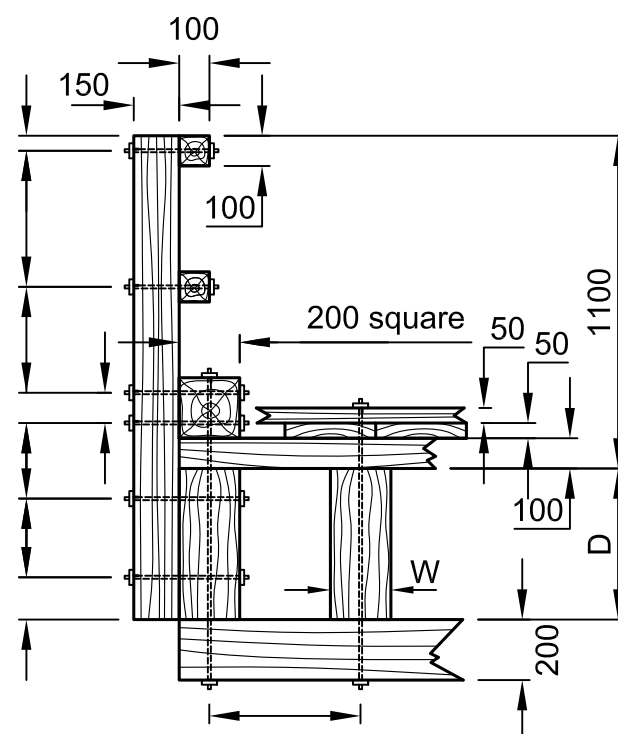
**Drawing No: 5.5**



**END ELEVATION ON B**

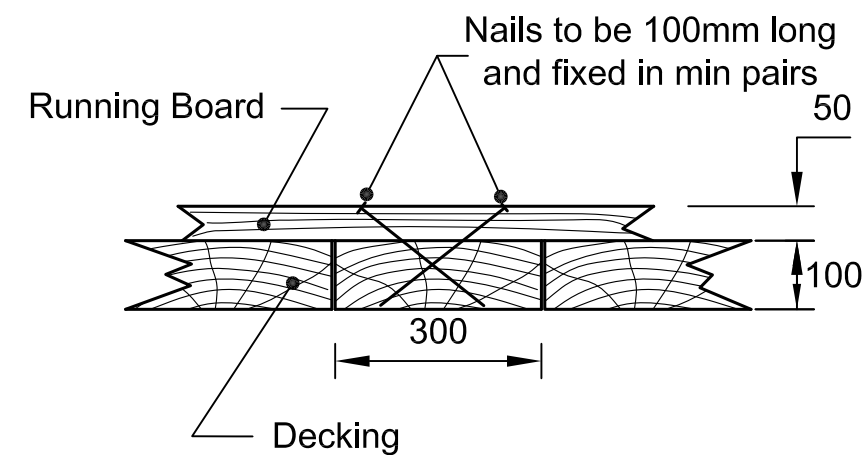


**SECTION A-A**



**EDGE FIXING DETAIL**

Scale 1 : 25



**RUNNING BOARD NAILING DETAIL**

Not to scale

KEY	
	Firm foundation/ Existing ground
	Timber

Span (m)	Main beam dimensions					
	Heavy Hardwood		Lighter Hardwood		Soft Wood	
	D	W	D	W	D	W
5	350	150	400	200	500	200
8	400	125	500	200	600	250

See design manual for timber classification

- NOTES:** (1) All dimensions in mm. (2) Lighter hardwood 8m span bridge shown.  
 (3) All timber should be seasoned with defects within acceptable limits (see design manual).  
 (4) Bolts should be coachbolts or manufactured from mild steel reinforcing bar. (5) Nuts should be tackwelded to bolts.  
 (6) Transverse beams to be fixed to main beams with screws or bolts.  
 (7) Running boards should be screwed to transverse boards at each end, and screwed or nailed every 1m along their length.  
 (8) Abutment beam to be securely fixed to abutment.

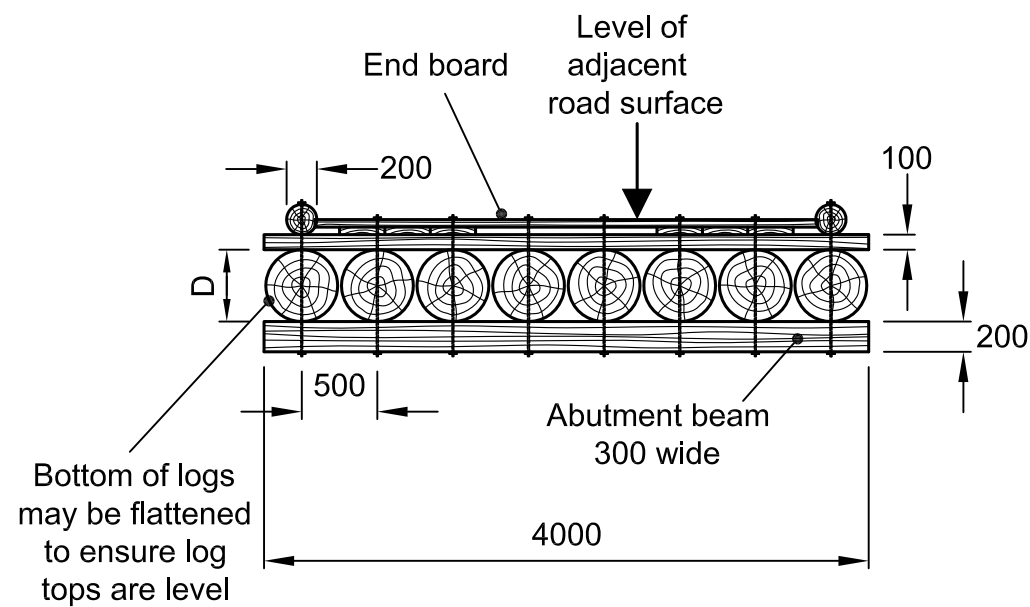
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**Sawn Timber Bridge Deck**

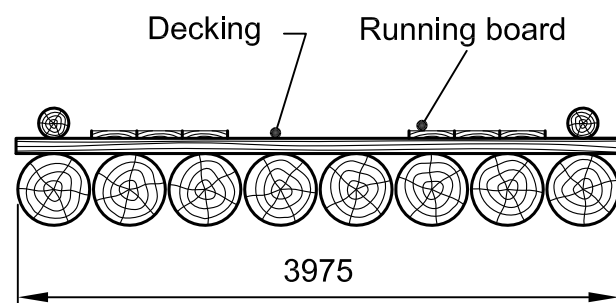
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Scale: 1 : 50 (at A3)

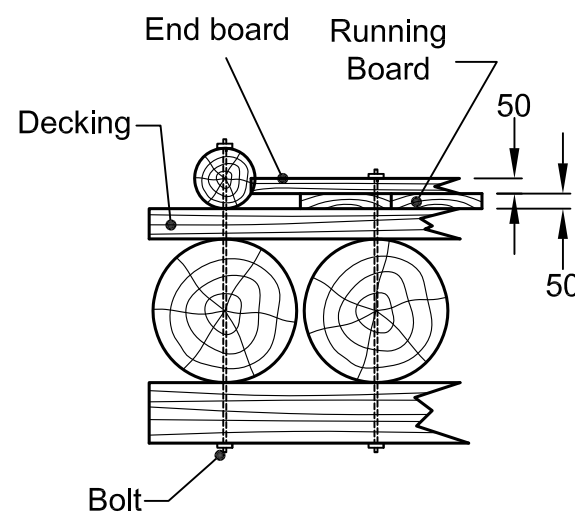
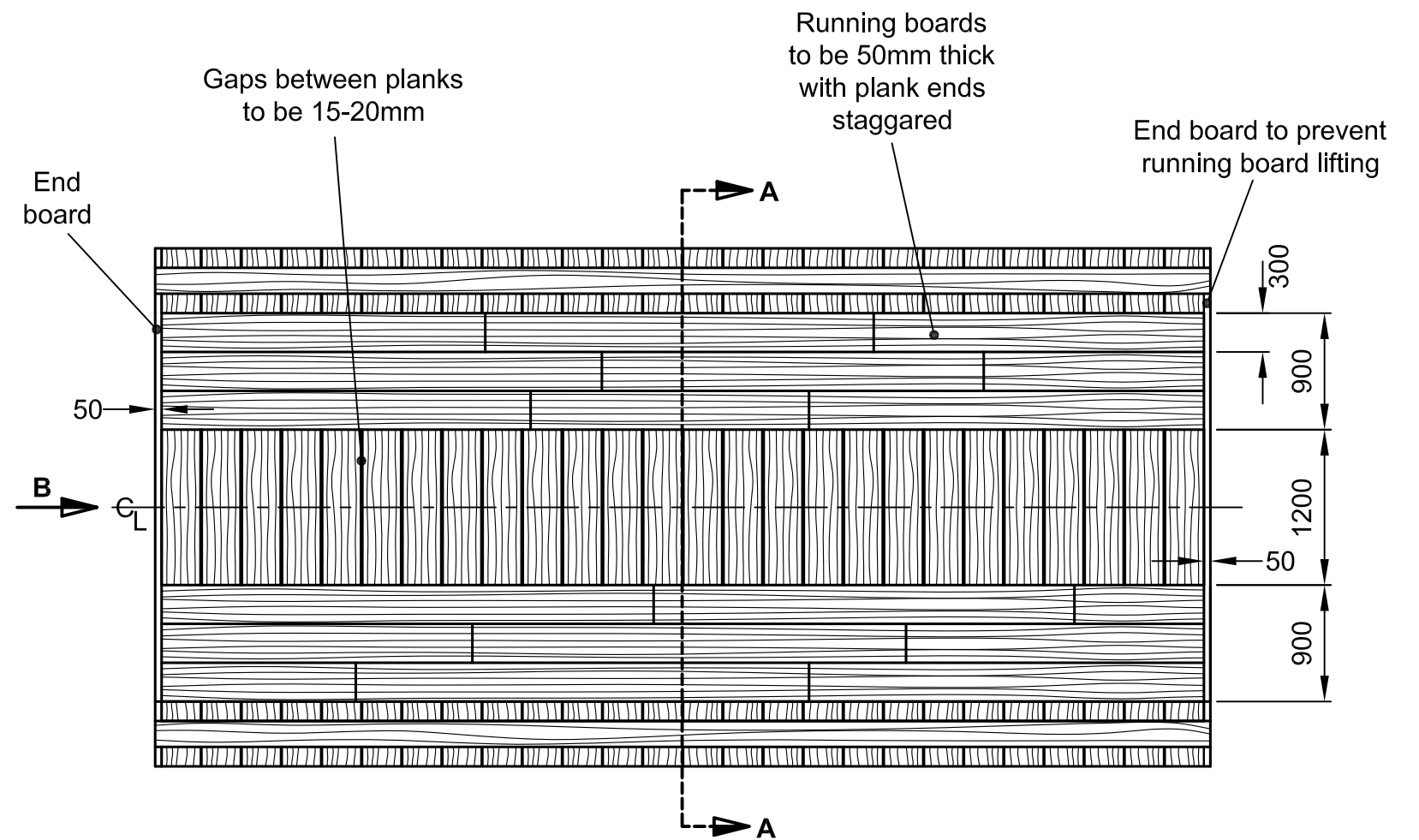
**Drawing No: 5.6**



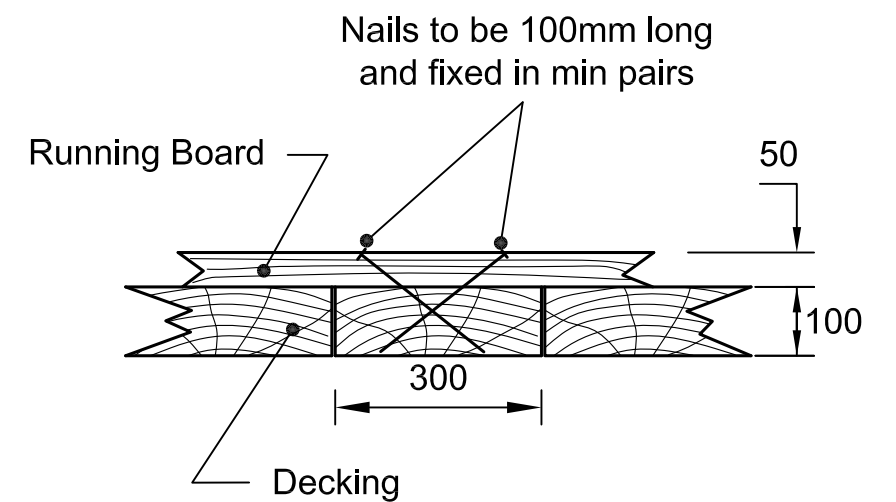
**END ELEVATION ON B**



**SECTION A-A**



**EDGE FIXING DETAIL**  
Scale 1 : 25



**RUNNING BOARD NAILING DETAIL**  
Not to scale

**KEY**

	Firm foundation/ Existing ground
	Timber

Log dimensions			
Span	Heavy Hardwood	Lighter Hardwood	Soft Wood
5	325	400	475
8	400	475*	575*

\*With 7 logs at 575 centres.  
Dimensions are for logs stripped of bark.

- NOTES:** (1) All dimensions in mm. (2) Lighter hardwood 8m span bridge shown. (3) All timber should be seasoned with defects within acceptable limits (see design manual). (4) Bolts should be coachbolts or manufactured from mild steel reinforcing bar. (5) Nuts should be tackwelded to bolts. (6) Transverse beams to be fixed to main beams with screws or bolts. (7) Running boards should be screwed to transverse boards at each end, and screwed or nailed every 1m along their length. (8) Abutment beam to be securely fixed to abutment. (9) Abutment beam may be substituted for 300 diameter log. (10) Where decking does not touch a log, hardwood packing pieces should be used to make up the gap.

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**Timber Log Bridge Deck**

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Scale: 1 : 50 (at A3)

**Drawing No: 5.7**