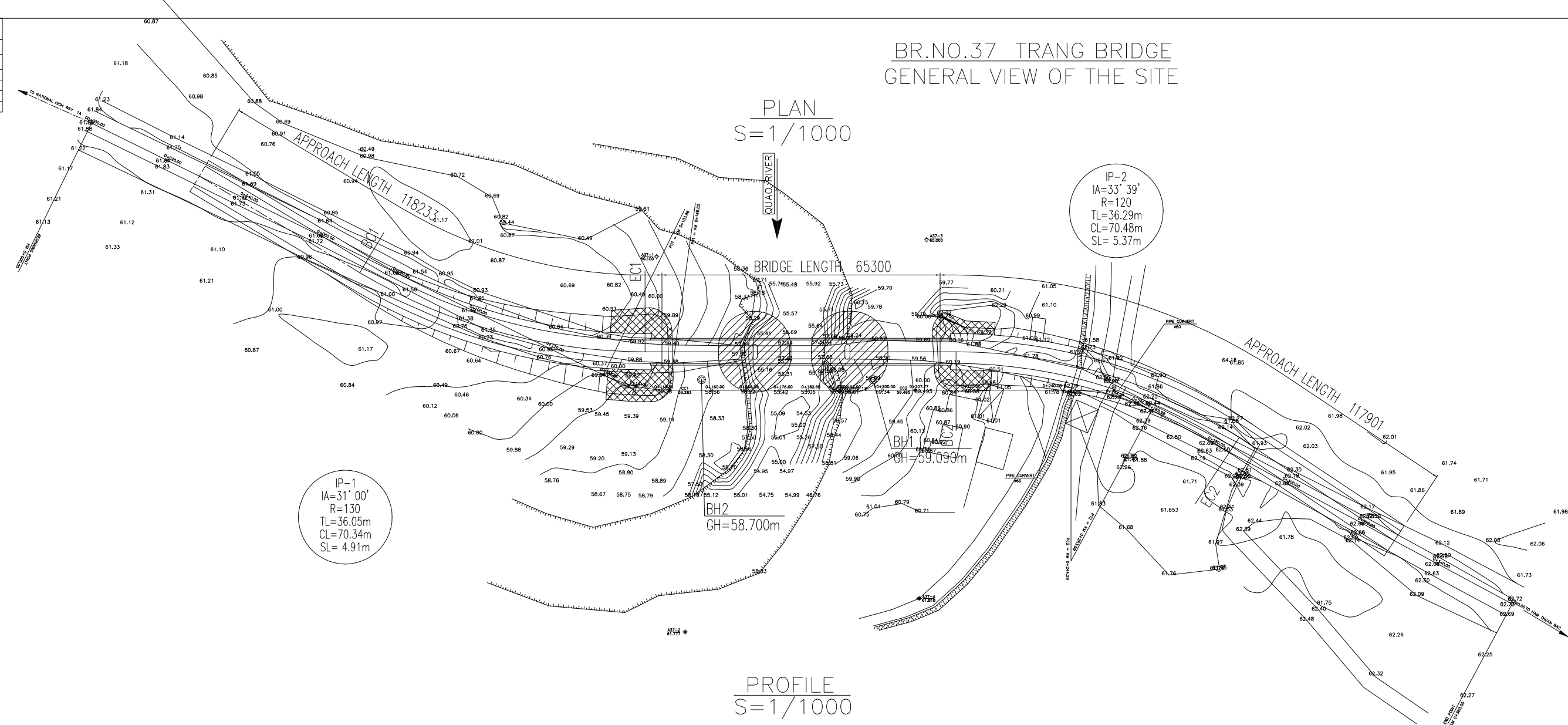


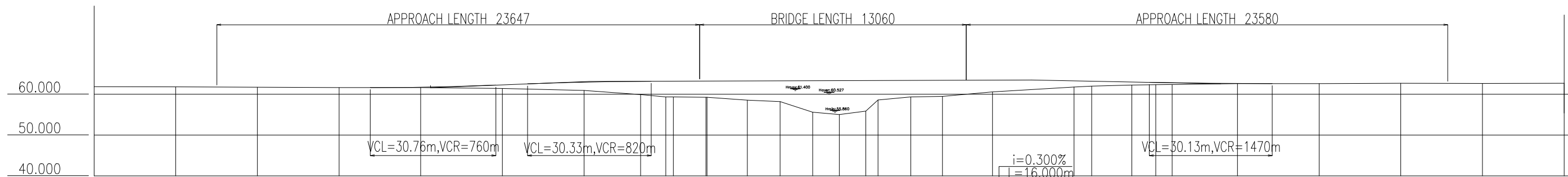
|   |  |             |        |
|---|--|-------------|--------|
| THE GOVERNMENT OF SOCIALIST REPUBLIC OF VIETNAM<br>PROJECTS MANAGEMENT UNIT NO.18, MINISTRY OF TRANSPORTS |  |             |        |
| PROJECT   | THE PROJECT FOR RECONSTRUCTION OF BRIDGES IN THE CENTRAL AREA OF VIETNAM |             |        |
| CONSULTANT  | CONSORTIUM OF PACIFIC CONSULTANTS INTERNATIONAL AND ORIENTAL CONSULTANTS |             |        |
| DESIGNED BY   | CHECKED BY   | APPROVED BY |        |
| NAME  | Y.FURUKAWA   | H.ENDO      | D.ZUNG |
| SIGNATURE   |  |             |        |
| DATE  |  |             |        |

|               |  |             |           |
|---------------|--|-------------|-----------|
| SECTION       | SCALE                                    | DRAWING NO. | SHEET NO. |
|               | 1/200, 1/1000                            | C-1         | 1 OF 1    |
| DRAWING TITLE | ROAD PLANNING<br>(BR.NO.37 TRANG BRIDGE) |             |           |
| REV. NO.      | DATE                                     | DESCRIPTION | SIGNATURE |
|               |  |             |           |
|               |  |             |           |

BR.NO.37 TRANG BRIDGE  
GENERAL VIEW OF THE SITE

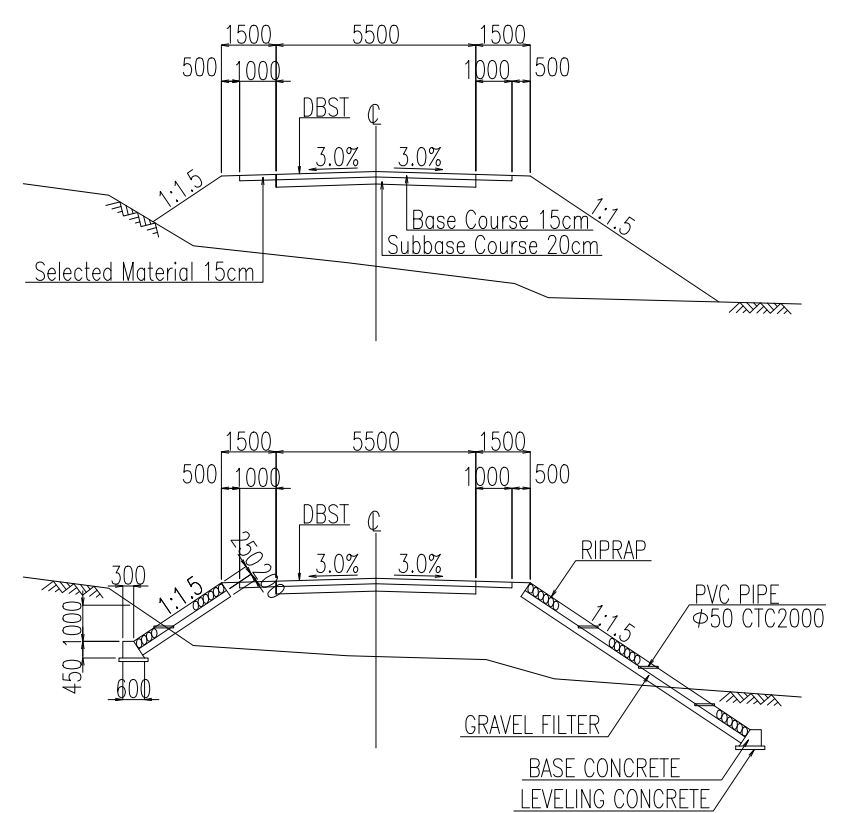


PROFILE  
S=1/1000



| GRADE  | PROPOSED HEIGHT | GROUND HEIGHT | STATION   |
|--------|-----------------|---------------|-----------|
| 61.646 | 61.646          | 61.88         | 0+000.00  |
| 61.613 | 61.782          | 61.81         | 0+020.00  |
|        |                 | 61.72         | 0+040.00  |
|        |                 | 61.65         | 0+060.00  |
|        |                 | 61.64         | 0+067.653 |
|        |                 | 61.42         | 0+080.00  |
|        |                 | 61.42         | 0+082.412 |
|        |                 | 61.42         | 0+100.00  |
|        |                 | 60.95         | 0+120.00  |
|        |                 | 60.95         | 0+121.300 |
|        |                 | 59.94         | 0+133.86  |
|        |                 | 59.38         | 0+140.00  |
|        |                 | 59.38         | 0+141.86  |
|        |                 | 59.28         | 0+148.300 |
|        |                 | 59.28         | 0+149.85  |
|        |                 | 58.56         | 0+150.13  |
|        |                 | 58.56         | 0+160.00  |
|        |                 | 58.22         | 0+168.00  |
|        |                 | 55.60         | 0+176.00  |
|        |                 | 55.06         | 0+182.50  |
|        |                 | 55.89         | 0+189.00  |
|        |                 | 56.61         | 0+192.00  |
|        |                 | 59.34         | 0+200.00  |
|        |                 | 59.50         | 0+207.77  |
|        |                 | 60.58         | 0+213.600 |
|        |                 | 60.58         | 0+220.00  |
|        |                 | 63.446        | 0+229.600 |
|        |                 | 61.78         | 0+240.00  |
|        |                 | 62.02         | 0+244.29  |
|        |                 | 62.28         | 0+254.14  |
|        |                 | 62.35         | 0+260.00  |
|        |                 | 62.42         | 0+263.99  |
|        |                 | 62.62         | 0+275.876 |
|        |                 | 62.62         | 0+280.00  |
|        |                 | 62.63         | 0+288.530 |
|        |                 | 62.63         | 0+300.00  |
|        |                 | 62.69         | 0+320.00  |
|        |                 | 62.68         | 0+340.00  |
|        |                 | 62.73         | 0+360.00  |

TYPICAL CROSS SECTION OF APPROACH ROAD  
S=1/200

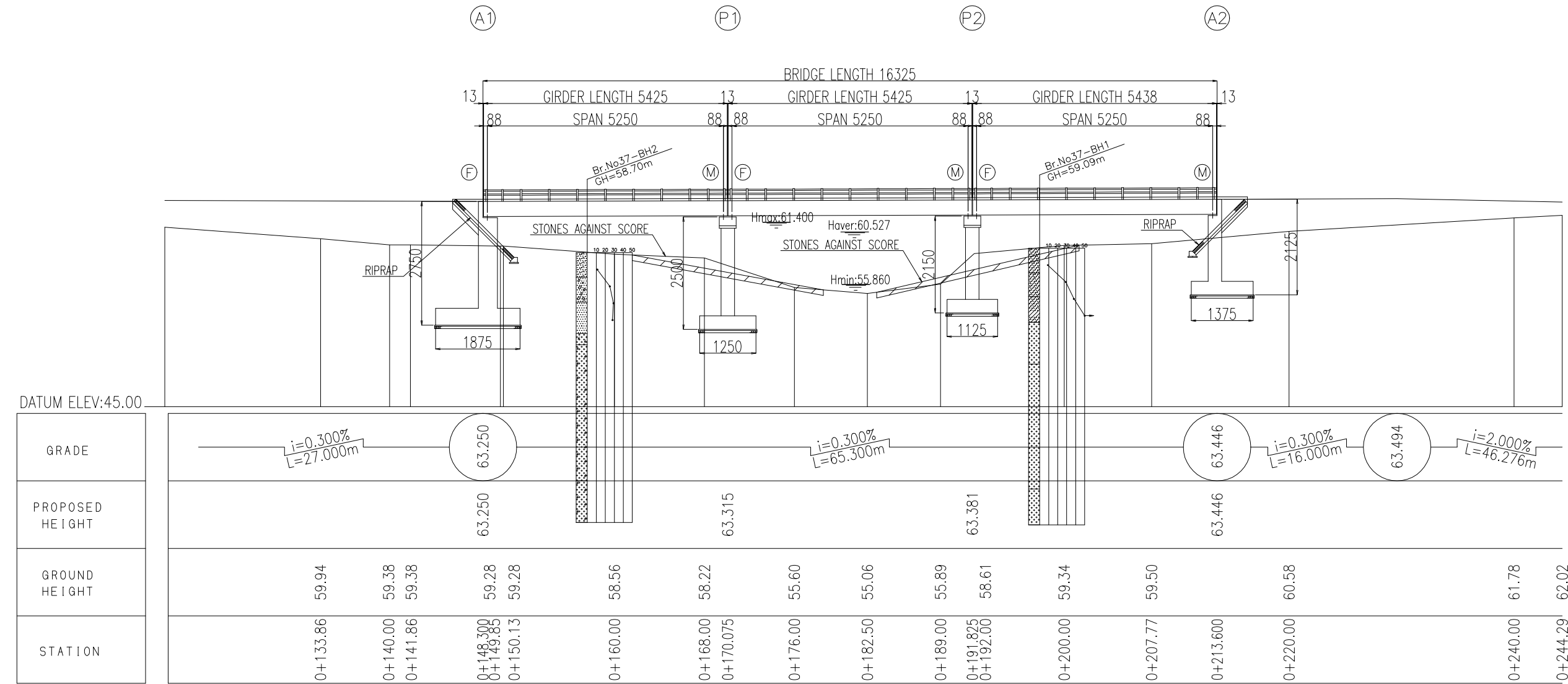


|   |            |             |  |
|---|------------|-------------|--|
| THE GOVERNMENT OF SOCIALIST REPUBLIC OF VIETNAM                                     |            |             |  |
| PROJECTS MANAGEMENT UNIT NO.18, MINISTRY OF TRANSPORTS                              |            |             |  |
| PROJECT THE PROJECT FOR RECONSTRUCTION OF BRIDGES IN THE GENERAL AREA OF VIETNAM    |            |             |  |
| CONSULTANT CONSORTIUM OF PACIFIC CONSULTANTS INTERNATIONAL AND ORIENTAL CONSULTANTS |            |             |  |
| DESIGNED BY   | CHECKED BY | APPROVED BY |  |
| Y.FURUKAWA  | H.ENDO     | DUANG       |  |
| SIGNATURE   |            |             |  |
| DATE  |            |             |  |

PROFILE  
S=1/400

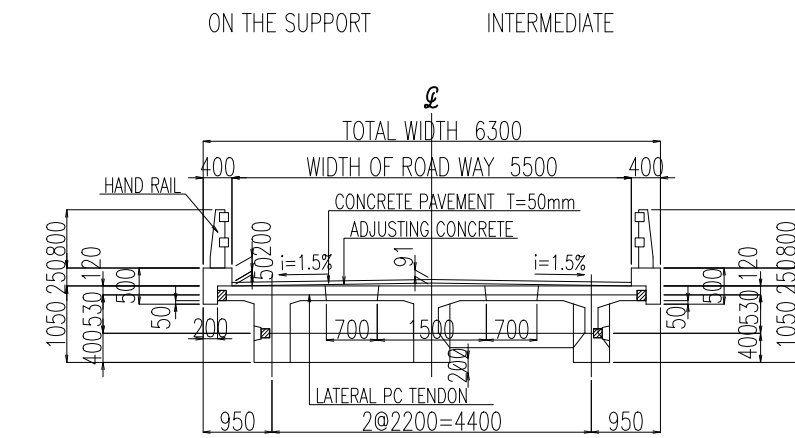
BR.NO.37 TRANG BRIDGE  
GENERAL VIEW OF THE BRIDGE

|               |  |             |           |
|---------------|--|-------------|-----------|
| SECTION       | SCALE                                    | DRAWING NO. | SHEET NO. |
|               | 1/100, 1/200, 1/400                      | C-3         | 1 OF 1    |
| DRAWING TITLE | BRIDGE STRUCTURE (BR.NO.37 TRANG BRIDGE) |             |           |
| REV. NO.      | DATE                                     | DESCRIPTION | SIGNATURE |
|               |  |             |           |
|               |  |             |           |



CROSS SECTION  
S=1/100

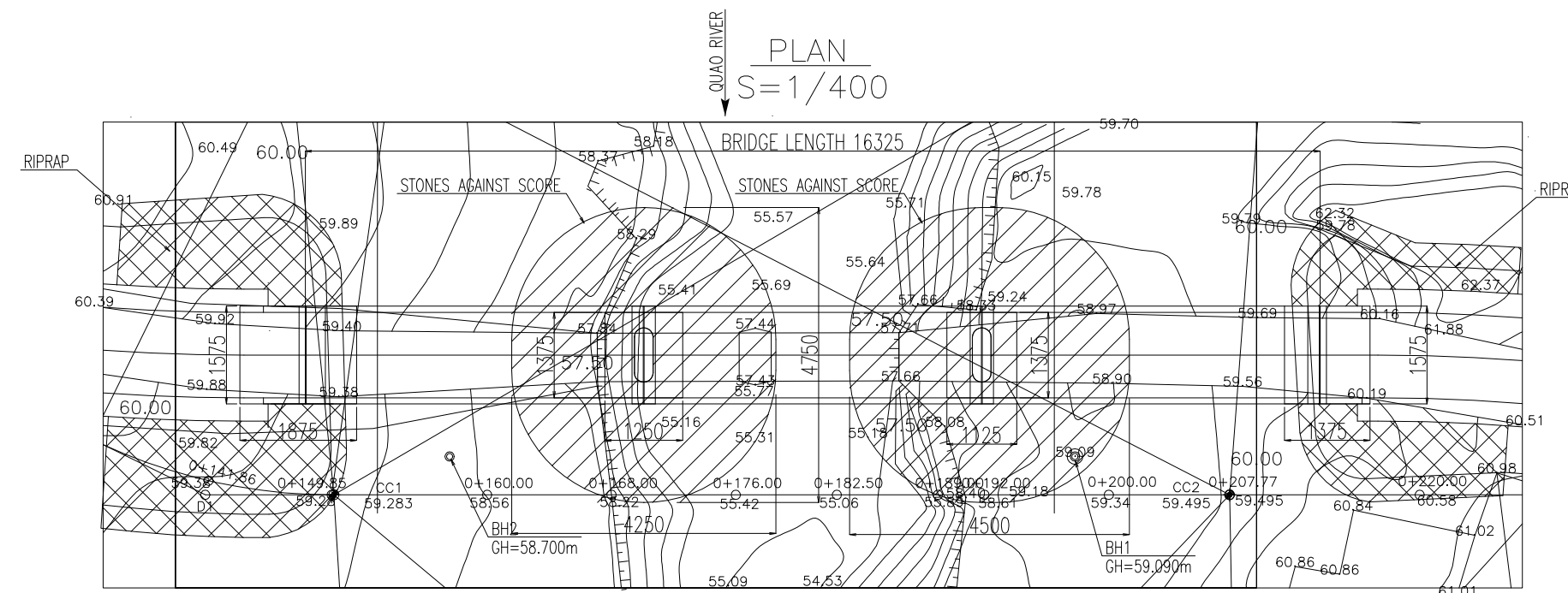
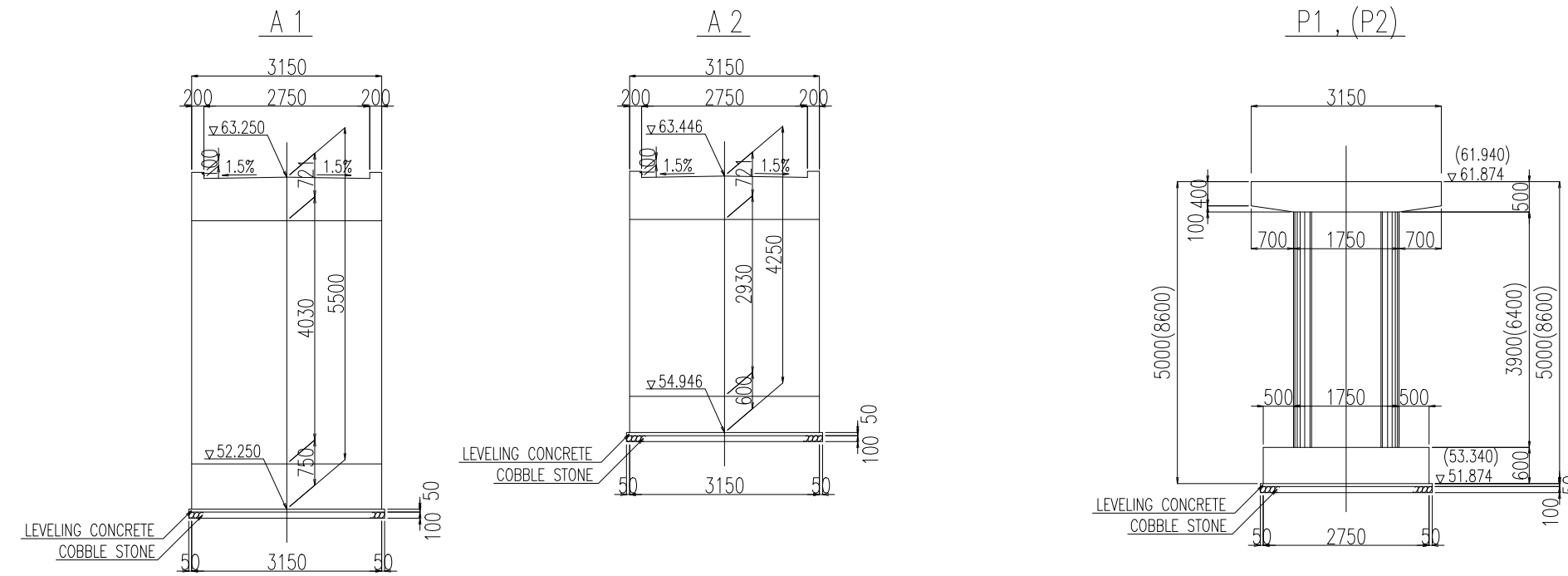
GIRDER LENGTH 21750



FRONT VIEW  
S=1/200

ABUTMENT

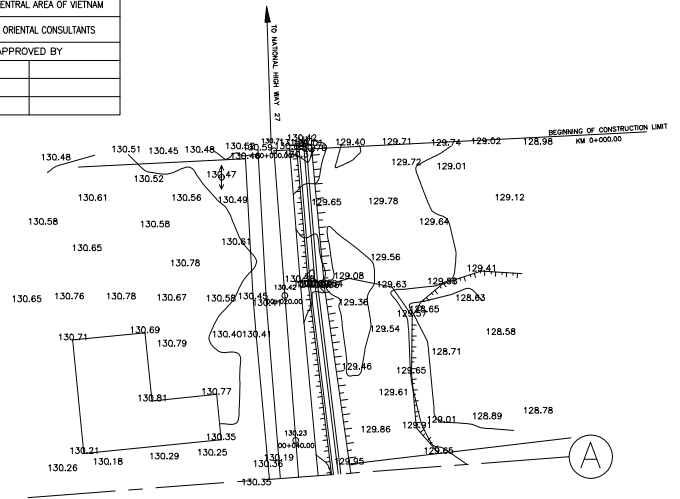
PIER



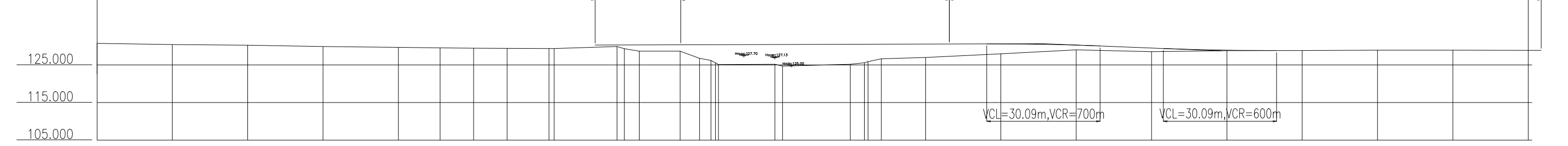
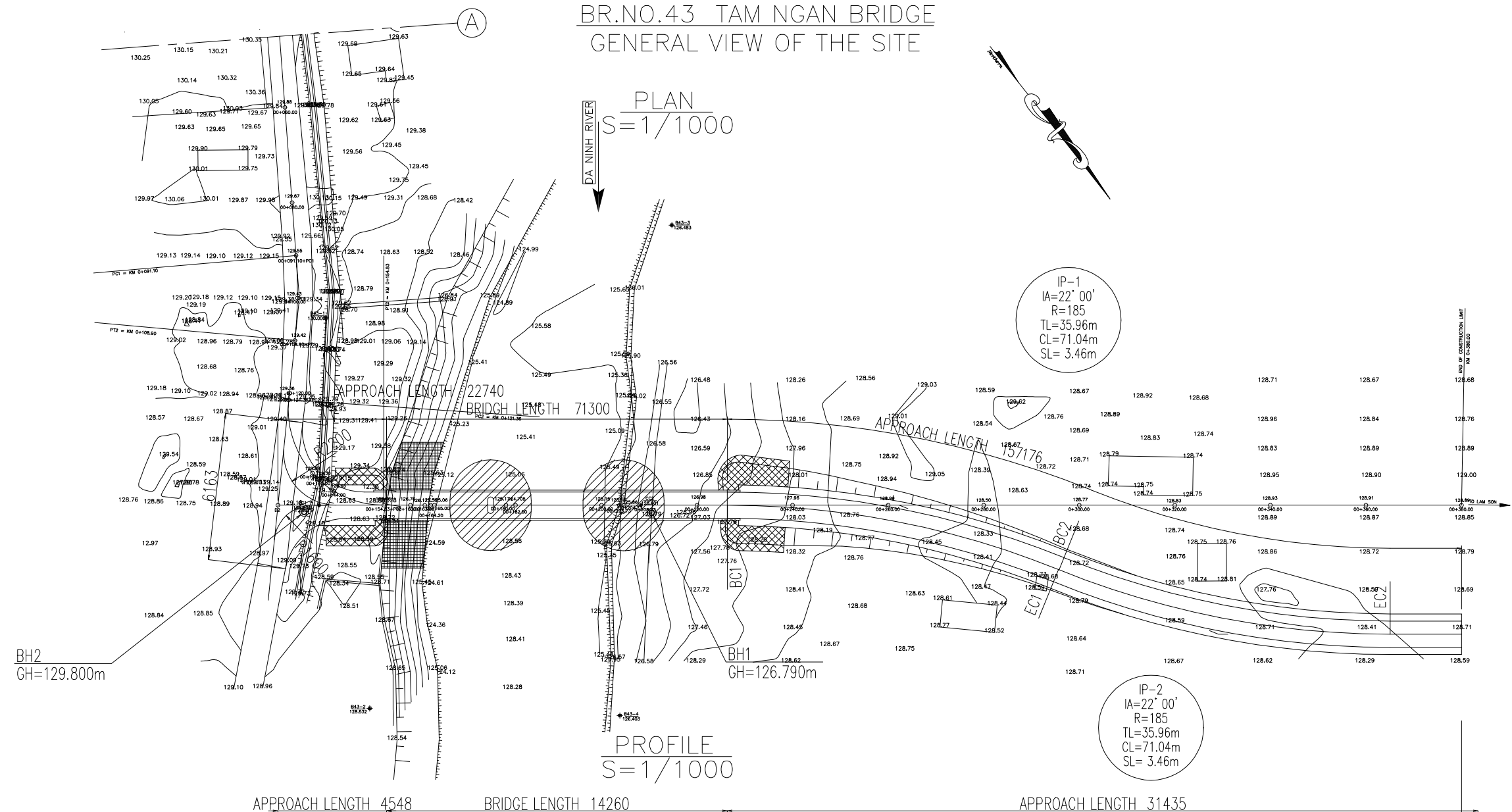
DESIGN CRITERIA

| General Condition          |                                     |
|----------------------------|-------------------------------------|
| Design Live Load           | H13,X60                             |
| Design Speed               | V=40km/h                            |
| Bridge Length(Span Length) | 65.30m(21.00m+21.00m+21.00m)        |
| Freeboard                  | 0.5m                                |
| Longitudinal Gradient      | 0.30 %                              |
| Cross-fall of Carriage way | 1.50 %                              |
| Super Structure Type       | Prestressed Concrete                |
| Sub Structure Type         | Abutment Reinforced Concrete        |
|                            | Pier Reinforced Concrete            |
| Foundation Type            | Abutment A1: Spread foundation      |
|                            | A2: Spread foundation               |
|                            | Pier P1: Spread foundation          |
|                            | P2: Spread foundation               |
| Material Strength          |                                     |
| Super Structure Type       | Girder $\sigma 28=35N/mm^2$         |
|                            | Cross Beam $\sigma 28=30N/mm^2$     |
| Surface                    | Slab $\sigma 28=30N/mm^2$           |
|                            | Curb, Handrail $\sigma 28=21N/mm^2$ |
| Sub Structure Type         | $\sigma 28=21N/mm^2$                |
| Reinforcing Steel          | SD295(py=295N/mm <sup>2</sup> )     |

|   |  |             |        |
|---|--|-------------|--------|
| THE GOVERNMENT OF SOCIALIST REPUBLIC OF VIETNAM<br>PROJECTS MANAGEMENT UNIT NO.18, MINISTRY OF TRANSPORTS |  |             |        |
| PROJECT   | THE PROJECT FOR RECONSTRUCTION OF BRIDGES IN THE CENTRAL AREA OF VIETNAM |             |        |
| CONSULTANT  | CONSORTIUM OF PACIFIC CONSULTANTS INTERNATIONAL AND ORIENTAL CONSULTANTS |             |        |
| DESIGNED BY   | CHECKED BY   | APPROVED BY |        |
| NAME  | Y.FURUKAWA   | H.ENDO      | D.ZUNG |
| SIGNATURE   |  |             |        |
| DATE  |  |             |        |



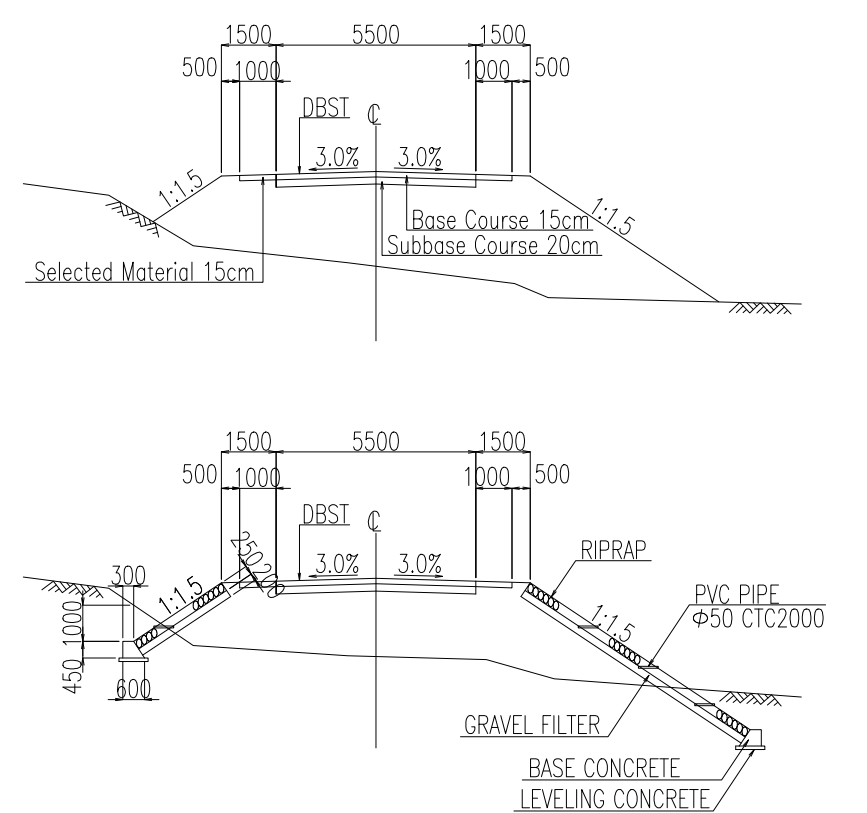
### BR.NO.43 TAM NGAN BRIDGE GENERAL VIEW OF THE SITE



| GRADE           | 130.282 $i=0.300\%$ $L=22.740m$ |          | $i=0.300\%$ $L=71.300m$ |          | 130.564 $i=0.300\%$ $L=25.000m$ |          | $i=4.000\%$ $L=47.224m$ |          | 128.750  | 128.810  |           |          |          |          |          |           |          |          |          |          |          |          |          |          |          |          |           |          |           |          |          |           |          |           |          |          |          |          |
|-----------------|---------------------------------|----------|-------------------------|----------|---------------------------------|----------|-------------------------|----------|----------|----------|-----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|-----------|----------|----------|-----------|----------|-----------|----------|----------|----------|----------|
| PROPOSED HEIGHT |                                 | 130.282  | 130.350                 |          | 130.564                         | 130.639  |                         | 128.908  | 128.810  |          |           |          |          |          |          |           |          |          |          |          |          |          |          |          |          |          |           |          |           |          |          |           |          |           |          |          |          |          |
| GROUND HEIGHT   | 130.71                          | 130.42   | 130.23                  | 129.88   | 129.67                          | 129.55   | 129.43                  | 129.42   | 129.36   | 129.35   | 128.66    | 126.76   | 125.17   | 125.56   | 125.06   | 125.17    | 124.76   | 125.15   | 125.88   | 125.86   | 126.60   | 126.98   | 127.96   | 128.99   | 128.50   | 128.77   | 128.83    | 128.93   | 128.91    | 128.89   |          |           |          |           |          |          |          |          |
| STATION         | 0+000.00                        | 0+020.00 | 0+040.00                | 0+060.00 | 0+080.00                        | 0+091.10 | 0+100.00                | 0+108.90 | 0+120.00 | 0+121.36 | 0+132.260 | 0+138.00 | 0+140.00 | 0+144.00 | 0+154.83 | 0+155.000 | 0+160.00 | 0+164.20 | 0+165.00 | 0+180.00 | 0+182.00 | 0+200.00 | 0+203.73 | 0+204.73 | 0+208.23 | 0+220.00 | 0+226.300 | 0+240.00 | 0+251.300 | 0+260.00 | 0+280.00 | 0+298.524 | 0+300.00 | 0+313.208 | 0+320.00 | 0+340.00 | 0+360.00 | 0+360.00 |

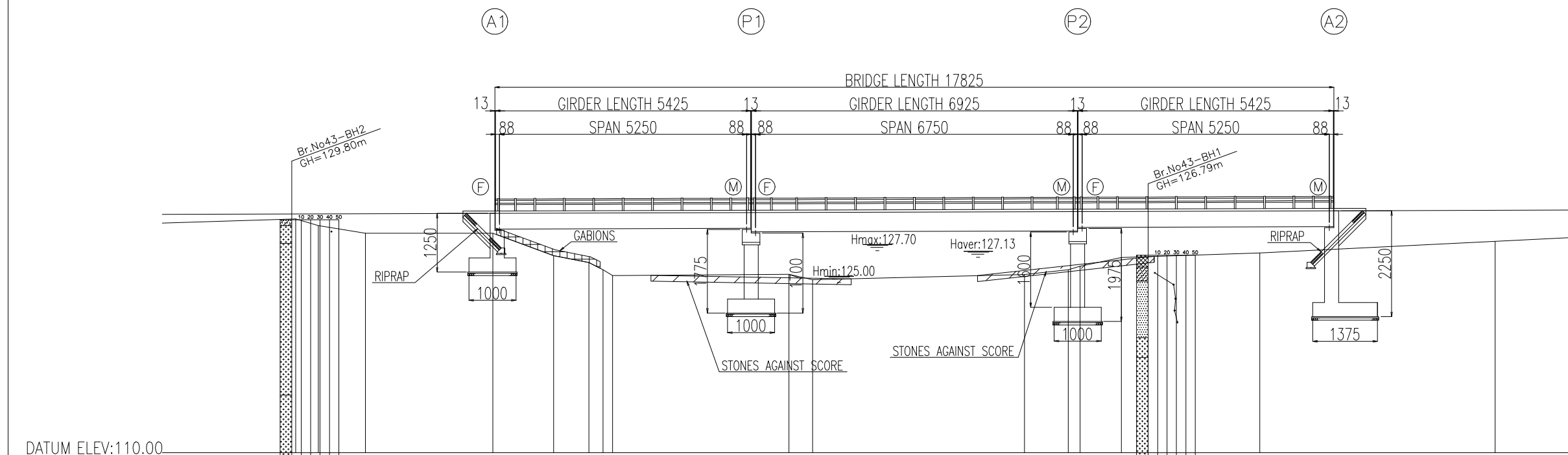
|               |  |             |           |
|---------------|--|-------------|-----------|
| SECTION       | SCALE                                    | DRAWING NO. | SHEET NO. |
|               | 1/200, 1/1000                            | C-1         | 1 OF 1    |
| DRAWING TITLE | ROAD PLANNING (BR.NO.43 TAM NGAN BRIDGE) |             |           |
| REV. NO.      | DATE                                     | DESCRIPTION | SIGNATURE |
|               |  |             |           |

### TYPICAL CROSS SECTION OF APPROACH ROAD S=1/200



|   |            |             |  |
|---|------------|-------------|--|
| THE GOVERNMENT OF SOCIALIST REPUBLIC OF VIETNAM<br>PROJECTS MANAGEMENT UNIT NO.18, MINISTRY OF TRANSPORTS |            |             |  |
| PROJECT THE PROJECT FOR RECONSTRUCTION OF BRIDGES IN THE GENERAL AREA OF VIETNAM                          |            |             |  |
| CONSULTANT CONSORTIUM OF PACIFIC CONSULTANTS INTERNATIONAL AND ORIENTAL CONSULTANTS                       |            |             |  |
| DESIGNED BY   | CHECKED BY | APPROVED BY |  |
| Y.FURUKAWA  | H.ENDO     | DUANG       |  |
| SIGNATURE   |            |             |  |
| DATE  |            |             |  |

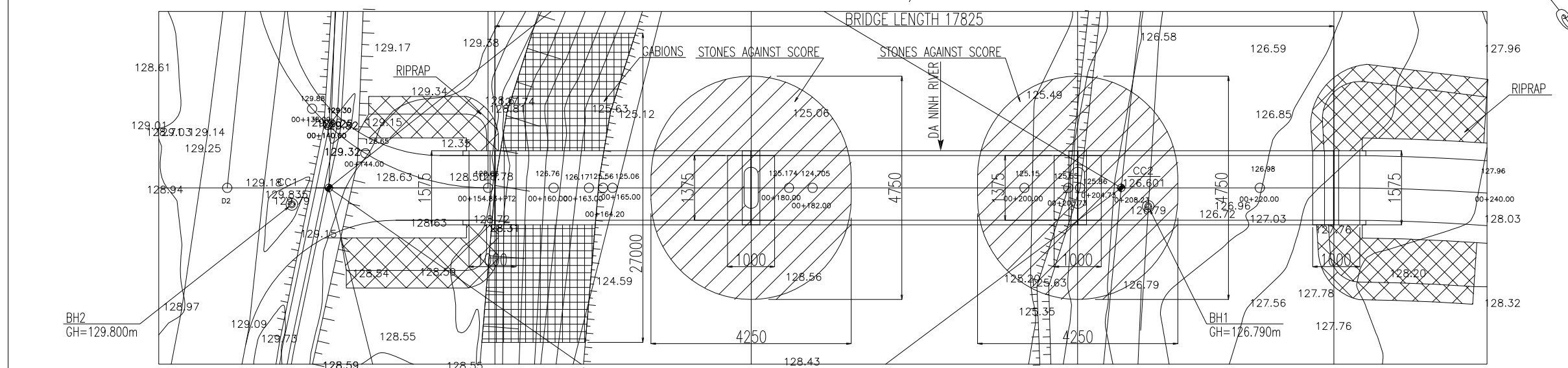
PROFILE  
S=1/400



DATUM ELEV:110.00

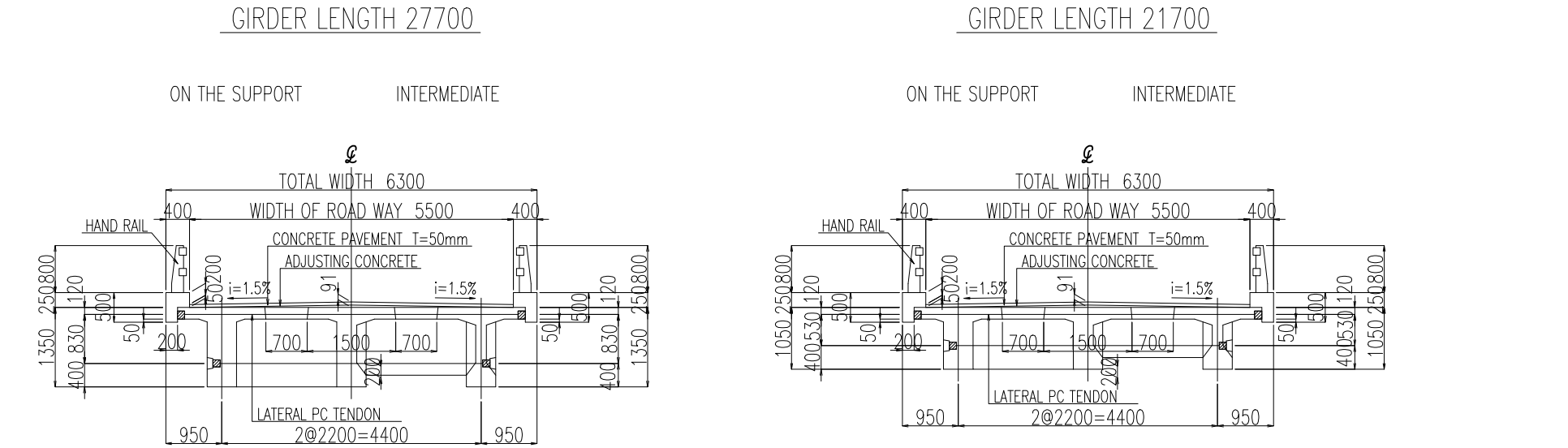
|                 |                       |          |                       |          |                       |          |
|-----------------|-----------------------|----------|-----------------------|----------|-----------------------|----------|
| GRADE           | i=0.300%<br>L=22.740m |          | i=0.300%<br>L=71.300m |          | i=0.300%<br>L=25.000m |          |
| PROPOSED HEIGHT | 130.350               |          | 130.415               |          | 130.564               |          |
| GROUND HEIGHT   | 129.88                | 129.30   | 128.65                | 128.66   | 126.76                | 125.06   |
| STATION         | 0+138.09              | 0+140.00 | 0+144.00              | 0+154.83 | 0+160.00              | 0+165.00 |
|                 | 0+140.00              | 0+144.00 | 0+148.00              | 0+158.00 | 0+163.00              | 0+168.00 |
|                 | 0+144.00              | 0+148.00 | 0+152.00              | 0+162.00 | 0+167.00              | 0+172.00 |
|                 | 0+148.00              | 0+152.00 | 0+156.00              | 0+166.00 | 0+171.00              | 0+176.00 |
|                 | 0+152.00              | 0+156.00 | 0+160.00              | 0+170.00 | 0+175.00              | 0+180.00 |
|                 | 0+156.00              | 0+160.00 | 0+164.00              | 0+174.00 | 0+179.00              | 0+184.00 |
|                 | 0+160.00              | 0+164.00 | 0+168.00              | 0+178.00 | 0+183.00              | 0+188.00 |
|                 | 0+164.00              | 0+168.00 | 0+172.00              | 0+182.00 | 0+187.00              | 0+192.00 |
|                 | 0+168.00              | 0+172.00 | 0+176.00              | 0+186.00 | 0+191.00              | 0+196.00 |
|                 | 0+172.00              | 0+176.00 | 0+180.00              | 0+190.00 | 0+195.00              | 0+200.00 |
|                 | 0+176.00              | 0+180.00 | 0+184.00              | 0+194.00 | 0+199.00              | 0+204.00 |
|                 | 0+180.00              | 0+184.00 | 0+188.00              | 0+198.00 | 0+203.00              | 0+208.00 |
|                 | 0+184.00              | 0+188.00 | 0+192.00              | 0+202.00 | 0+207.00              | 0+212.00 |
|                 | 0+188.00              | 0+192.00 | 0+196.00              | 0+206.00 | 0+211.00              | 0+216.00 |
|                 | 0+192.00              | 0+196.00 | 0+200.00              | 0+210.00 | 0+215.00              | 0+220.00 |
|                 | 0+196.00              | 0+200.00 | 0+204.00              | 0+214.00 | 0+219.00              | 0+224.00 |
|                 | 0+200.00              | 0+204.00 | 0+208.00              | 0+218.00 | 0+223.00              | 0+228.00 |
|                 | 0+204.00              | 0+208.00 | 0+212.00              | 0+222.00 | 0+227.00              | 0+232.00 |
|                 | 0+208.00              | 0+212.00 | 0+216.00              | 0+226.00 | 0+231.00              | 0+236.00 |
|                 | 0+212.00              | 0+216.00 | 0+220.00              | 0+230.00 | 0+235.00              | 0+240.00 |

PLAN  
S=1/400



BR.NO.43 TAM NGAN BRIDGE  
GENERAL VIEW OF THE BRIDGE

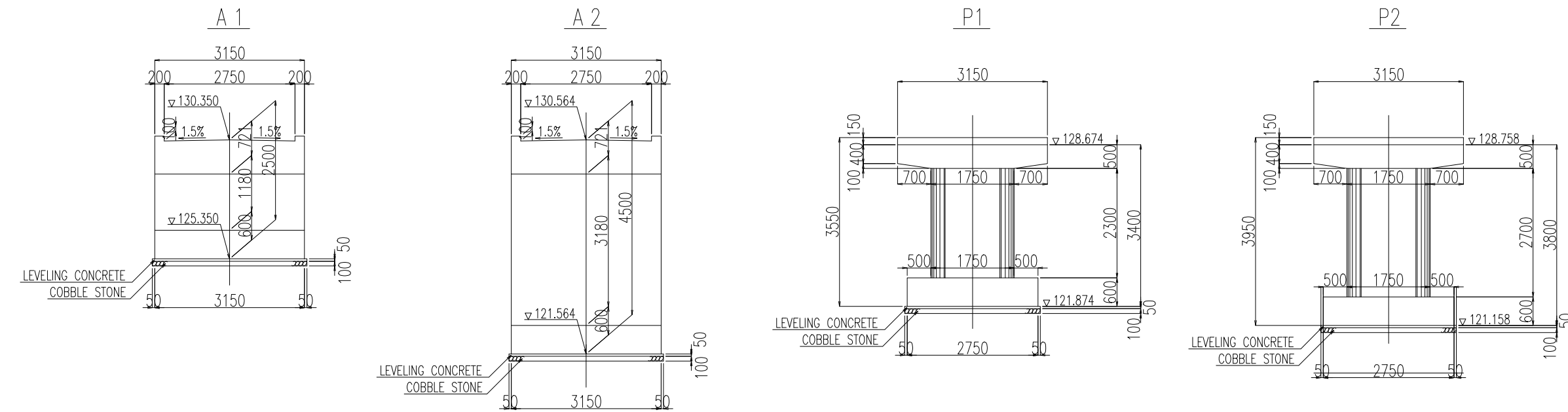
CROSS SECTION  
S=1/100



FRONT VIEW  
S=1/200

ABUTMENT

PIER



DESIGN CRITERIA

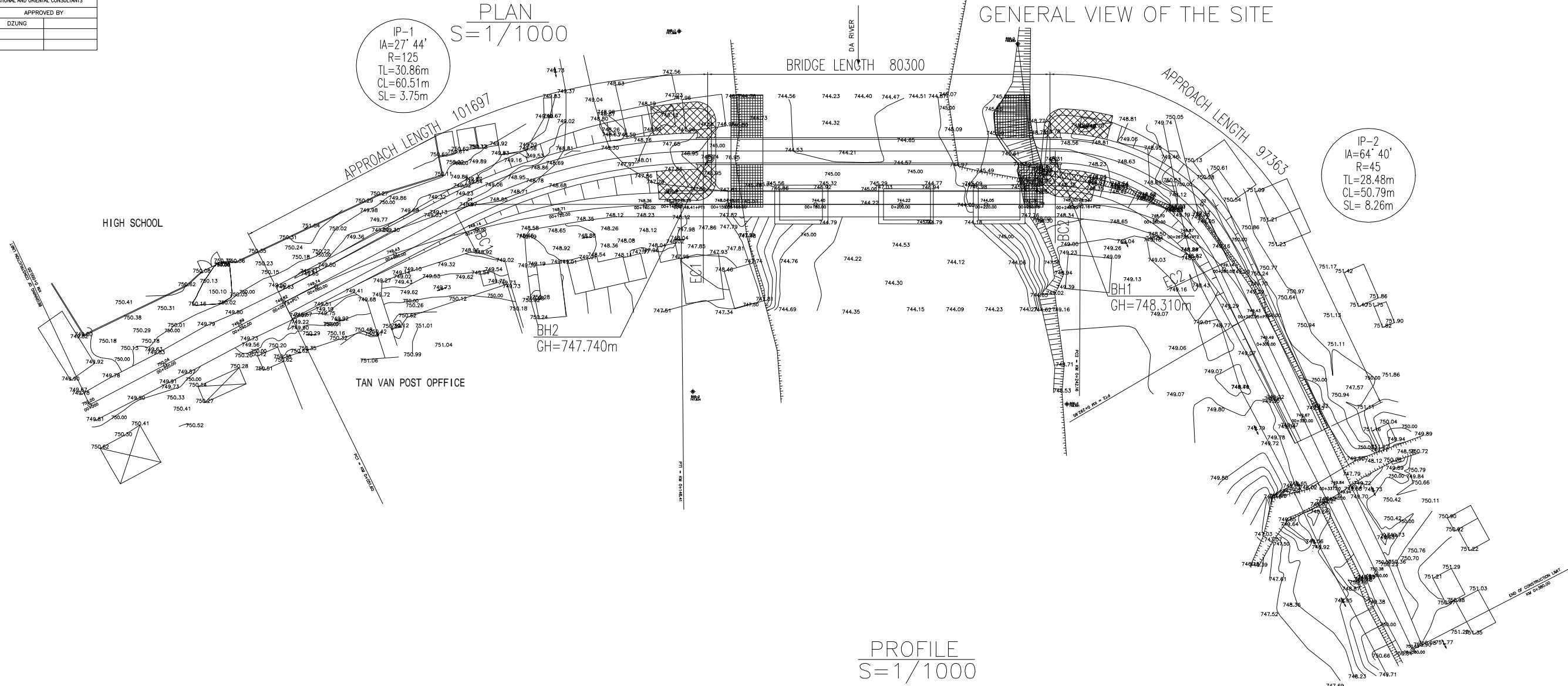
|                            |   |                                 |
|----------------------------|---|---------------------------------|
| General Condition          |   |                                 |
| Design Live Load           | H13,X60   |                                 |
| Design Speed               | V=40km/h  |                                 |
| Bridge Length(Span Length) | 71.30m(21.00m+27.00m+21.00m)                            |                                 |
| Freeboard                  | 1.0m  |                                 |
| Longitudinal Gradient      | 0.30 %  |                                 |
| Cross-fall of Carriage way | 1.50 %  |                                 |
| Super Structure Type       | Prestressed Concrete                                    |                                 |
| Sub Structure Type         | Abutment Reinforced Concrete                            |                                 |
|                            | Pier Reinforced Concrete                                |                                 |
| Foundation Type            | Abutment A1: Spread foundation<br>A2: Rc. Pile Ø400x400 |                                 |
|                            | Pier P1: Spread foundation<br>P2: Rc. Pile Ø400x400     |                                 |
| Material Strength          |   |                                 |
| Super Structure Type       | Girder  | σ28=35N/mm <sup>2</sup>         |
|                            | Cross Beam  | σ28=30N/mm <sup>2</sup>         |
|                            | Slab  | σ28=30N/mm <sup>2</sup>         |
| Surface                    | Curb, Handrail  | σ28=21N/mm <sup>2</sup>         |
| Sub Structure Type         |   | σ28=21N/mm <sup>2</sup>         |
| Reinforcing Steel          |   | SD295(py=295N/mm <sup>2</sup> ) |

|   |            |             |  |
|---|------------|-------------|--|
| THE GOVERNMENT OF SOCIALIST REPUBLIC OF VIETNAM<br>PROJECTS MANAGEMENT UNIT NO.18, MINISTRY OF TRANSPORTS |            |             |  |
| PROJECT THE PROJECT FOR RECONSTRUCTION OF BRIDGES IN THE CENTRAL AREA OF VIETNAM                          |            |             |  |
| CONSULTANT CONSORTIUM OF PACIFIC CONSULTANTS INTERNATIONAL AND ORIENTAL CONSULTANTS                       |            |             |  |
| DESIGNED BY   | CHECKED BY | APPROVED BY |  |
| Y.FURUKAWA  | H.ENDO     | D.ZUNG      |  |
| SIGNATURE   |            |             |  |
| DATE  |            |             |  |

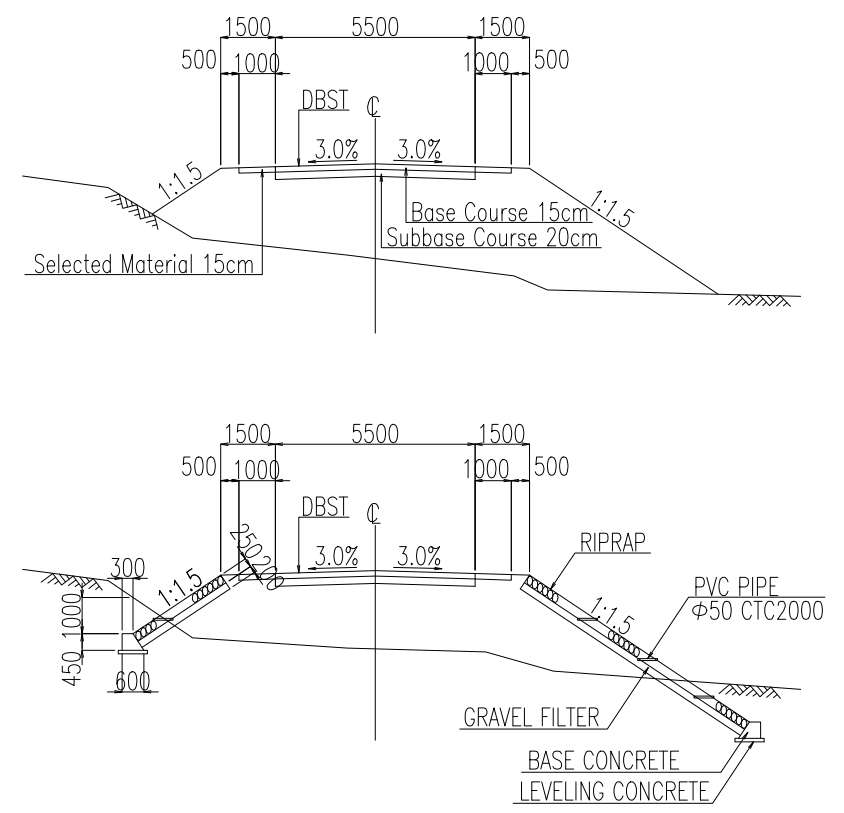
|               |   |             |           |
|---------------|---|-------------|-----------|
| SECTION       | SCALE                                   | DRAWING NO. | SHEET NO. |
|               | 1/200, 1/1000                           | C-1         | 1 OF 1    |
| DRAWING TITLE | ROAD PLANNING (BR.NO.46 TAN VAN BRIDGE) |             |           |
| REV. NO.      | DATE                                    | DESCRIPTION | SIGNATURE |
|               |   |             |           |

BR.NO.46 TAN VAN BRIDGE  
GENERAL VIEW OF THE SITE

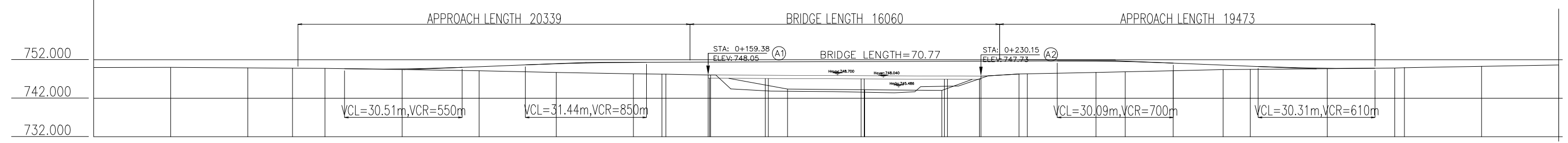
PLAN  
S=1/1000



TYPICAL CROSS SECTION OF APPROACH ROAD  
S=1/200



PROFILE  
S=1/1000



| GRADE                      | PROPOSED HEIGHT | GROUND HEIGHT | STATION   |
|----------------------------|-----------------|---------------|-----------|
| 749.661                    | 749.661         | 750.00        | 0+000.00  |
| 749.425                    | 749.636         | 750.04        | 0+020.00  |
| $i=4.000\%$<br>$L=47.350m$ |                 | 749.89        | 0+040.00  |
|                            |                 | 749.82        | 0+051.60  |
|                            |                 | 749.74        | 0+060.00  |
|                            |                 | 749.085       | 0+065.085 |
|                            |                 | 749.43        | 0+080.00  |
|                            |                 | 749.350       | 0+080.350 |
|                            |                 | 749.14        | 0+100.00  |
|                            |                 | 748.71        | 0+120.00  |
|                            |                 | 751.174       | 0+127.700 |
|                            |                 | 748.36        | 0+140.00  |
|                            |                 | 748.28        | 0+147.47  |
|                            |                 | 748.25        | 0+148.41  |
|                            |                 | 748.04        | 0+154.700 |
|                            |                 | 748.05        | 0+159.38  |
|                            |                 | 748.05        | 0+160.00  |
|                            |                 | 744.40        | 0+180.00  |
|                            |                 | 744.22        | 0+200.00  |
|                            |                 | 744.05        | 0+220.00  |
|                            |                 | 747.73        | 0+230.15  |
|                            |                 | 748.30        | 0+235.000 |
|                            |                 | 748.34        | 0+240.00  |
|                            |                 | 748.34        | 0+242.16  |
|                            |                 | 748.70        | 0+260.00  |
|                            |                 | 748.87        | 0+265.000 |
|                            |                 | 748.87        | 0+267.55  |
|                            |                 | 749.14        | 0+280.00  |
|                            |                 | 749.43        | 0+292.95  |
|                            |                 | 749.49        | 0+300.00  |
|                            |                 | 749.67        | 0+317.164 |
|                            |                 | 749.67        | 0+320.00  |
|                            |                 | 749.84        | 0+332.363 |
|                            |                 | 749.94        | 0+337.50  |
|                            |                 | 749.94        | 0+340.00  |
|                            |                 | 750.28        | 0+360.00  |
|                            |                 | 750.63        | 0+380.00  |