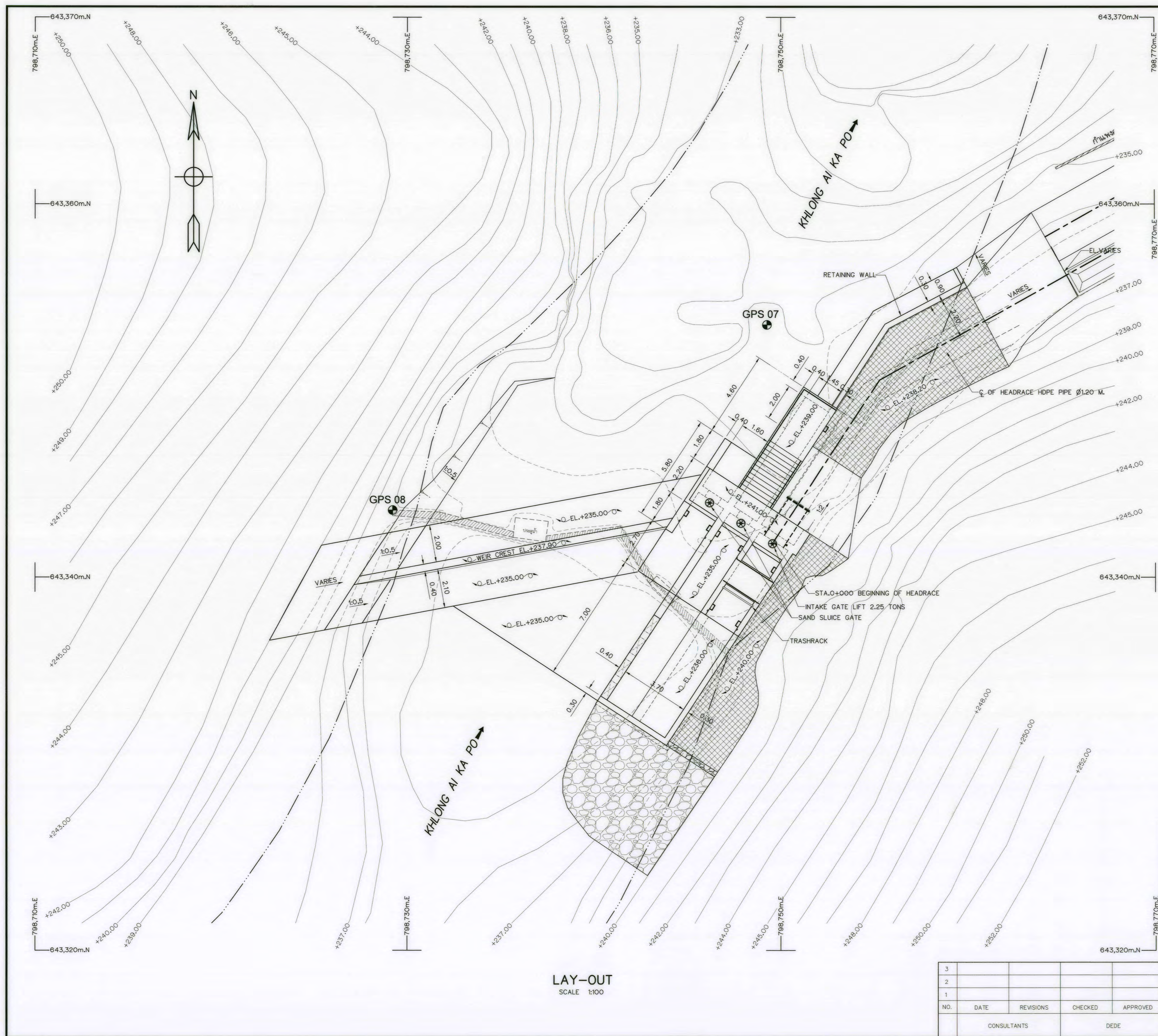


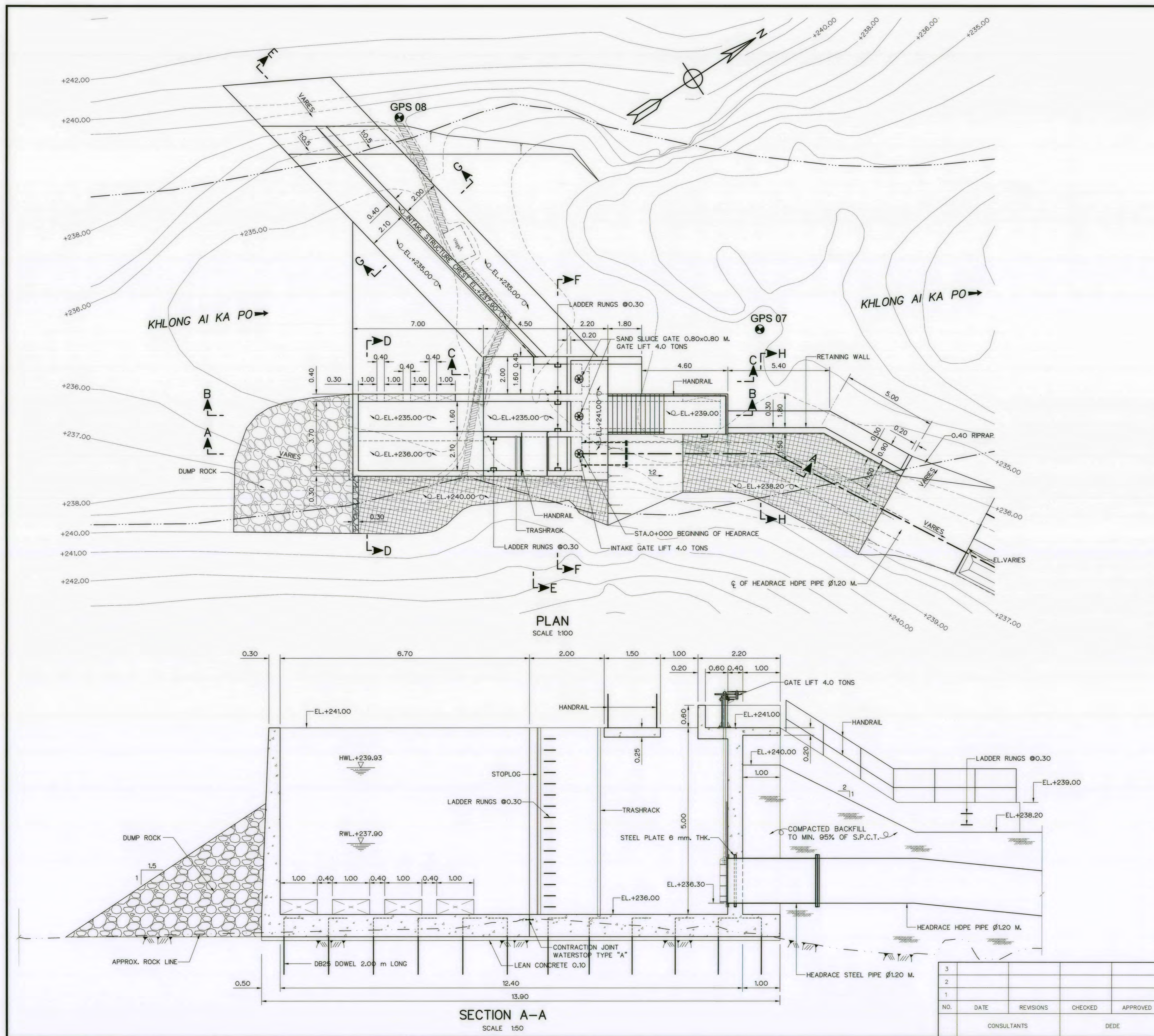


- NOTES :**
1. ALL DIMENSIONS AND ELEVATIONS (M.S.L.) ARE IN METERS, UNLESS OTHERWISE SHOWN.
  2. SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SEE DWG. NO. AKP-GN-03
  3. SPACING OF HANDRAIL CAN BE ADJUSTED IN THE FIELD TO FIT WITH THE STRUCTURE BY CONTRACTOR AND APPROVED BY ENGINEER.
  4. WEIR SHALL BE PLACED ON BED ROCK FOUNDATION, OTHER MATERIALS SHALL BE REMOVED AND BACKFILLED WITH LEAN CONCRETE

- REFERENCE DRAWINGS :**
- |                                         |           |
|-----------------------------------------|-----------|
| 1. WEIR, PLAN AND SECTION SECTIONS A-A  | AKP-WE-02 |
| 2. WEIR, SECTIONS B-B, C-C AND D-D      | AKP-WE-03 |
| 3. WEIR, SECTIONS E-E, F-F, G-G AND H-H | AKP-WE-04 |



|                                                                                                                           |                                       |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>KINGDOM OF THAILAND</b><br>Department of Alternative<br>Energy Development and Efficiency<br><b>MINISTRY OF ENERGY</b> |                                       |
| <b>AI KA PO HYDROPOWER PROJECT</b><br>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAT                            |                                       |
| <b>PART : 1 CIVIL WORKS AND TRANSMISSION LINE</b><br><b>WEIR</b><br><b>GENERAL LAYOUT</b>                                 |                                       |
| <b>DESIGNED</b> 18.29074 28.9462                                                                                          | <b>REVIEWED</b> <i>[Signature]</i>    |
| <b>DRAWN</b> <i>[Signature]</i>                                                                                           | <b>SUBMITTED</b> <i>[Signature]</i>   |
| <b>CHECKED</b> 28.8231                                                                                                    | <b>RECOMMENDED</b> <i>[Signature]</i> |
| <b>APPROVED</b> <i>[Signature]</i>                                                                                        | <b>APPROVED</b> <i>[Signature]</i>    |
| <b>PROJECT MANAGER</b> 28/10/2021                                                                                         | <b>DRAWING NO.</b> <b>AKP-WE-01</b>   |
| <b>DATE</b>                                                                                                               | <b>SHEET NO.</b> 13 OF 129            |

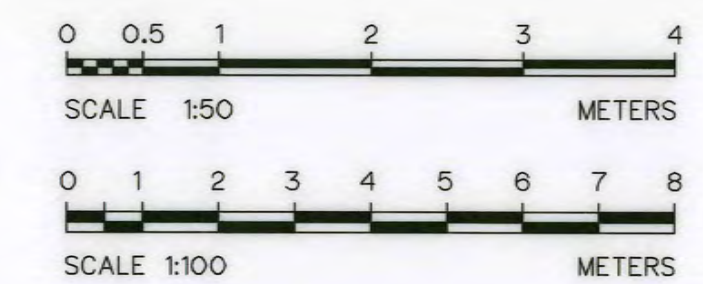


#### NOTES :

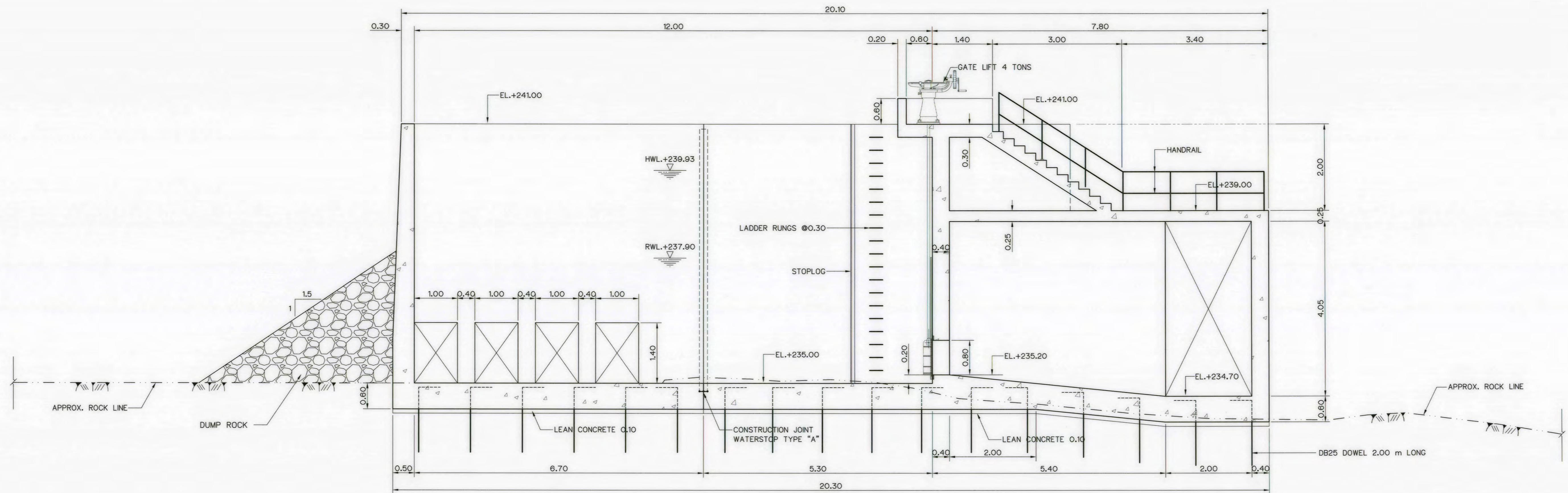
1. ALL DIMENSIONS AND ELEVATIONS (M.S.L.) ARE IN METERS, UNLESS OTHERWISE SHOWN.
2. SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SEE DWG. NO. AKP-GN-03
3. SPACING OF HANDRAIL CAN BE ADJUSTED IN THE FIELD TO FIT WITH THE STRUCTURE BY CONTRACTOR AND APPROVED BY ENGINEER.
4. WEIR SHALL BE PLACED ON BED ROCK FOUNDATION, OTHER MATERIALS SHALL BE REMOVED AND BACKFILLED WITH LEAN CONCRETE

#### REFERENCE DRAWINGS :

- |                                                        |           |
|--------------------------------------------------------|-----------|
| 1. WEIR, GENERAL LAYOUT                                | AKP-WE-01 |
| 2. WEIR, SECTIONS B-B, C-C AND D-D                     | AKP-WE-03 |
| 3. WEIR, SECTIONS E-E, F-F, G-G AND H-H                | AKP-WE-04 |
| 4. WEIR, MISCELLANEOUS DETAIL                          | AKP-WE-05 |
| 5. WEIR, REINFORCEMENT (SHEET 1/2)                     | AKP-WE-06 |
| 5. WEIR, REINFORCEMENT (SHEET 2/2)                     | AKP-WE-07 |
| 6. WEIR, ANCHOR BARS, TRASHRACK AND STEEL LINER DETAIL | AKP-WE-08 |



|                                                                                                                   |  |                                                                                           |  |
|-------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------|--|
| <p>KINGDOM OF THAILAND<br/>Department of Alternative Energy Development and Efficiency<br/>MINISTRY OF ENERGY</p> |  |                                                                                           |  |
| <p>AI KA PO HYDROPOWER PROJECT<br/>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAT</p>                   |  |                                                                                           |  |
| <p>PART : 1 CIVIL WORKS AND TRANSMISSION LINE<br/>WEIR<br/>PLAN AND SECTION SECTIONS A-A</p>                      |  |                                                                                           |  |
| <p>PCM P&amp;C MANAGEMENT CO., LTD.<br/>SPT CONSULTANTS CO., LTD.</p>                                             |  | <p>Department of Alternative Energy Development and Efficiency<br/>MINISTRY OF ENERGY</p> |  |
| DESIGNED <i>[Signature]</i> 28/10/2021                                                                            |  | REVIEWED <i>[Signature]</i>                                                               |  |
| DRAWN <i>[Signature]</i>                                                                                          |  | SUBMITTED <i>[Signature]</i>                                                              |  |
| CHECKED <i>[Signature]</i> 28/10/2021                                                                             |  | RECOMMENDED <i>[Signature]</i>                                                            |  |
| APPROVED <i>[Signature]</i>                                                                                       |  | APPROVED <i>[Signature]</i>                                                               |  |
| PROJECT MANAGER                                                                                                   |  | DRAWING NO. AKP-WE-02                                                                     |  |
| DATE                                                                                                              |  | SHEET NO. 14 OF 129                                                                       |  |



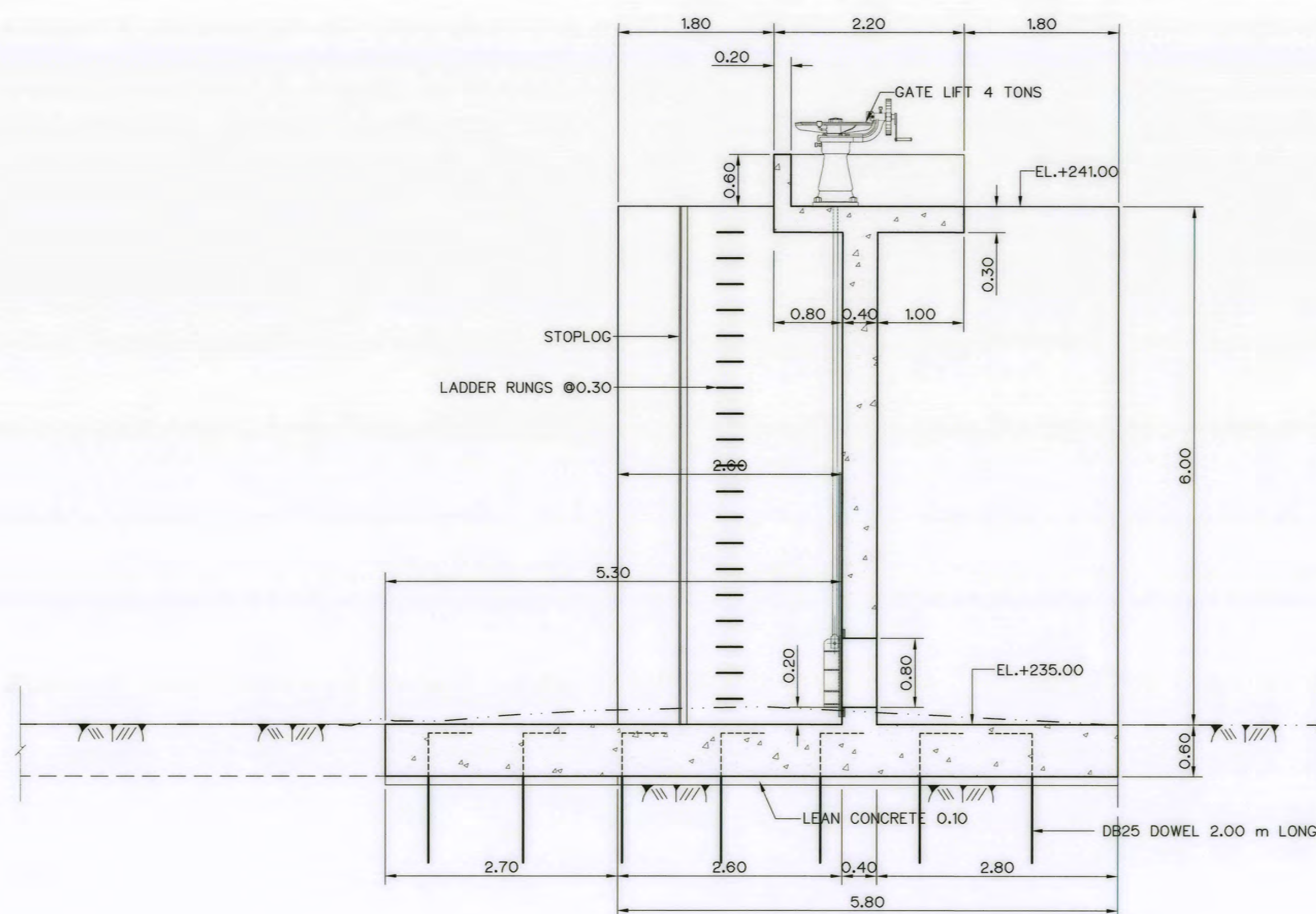
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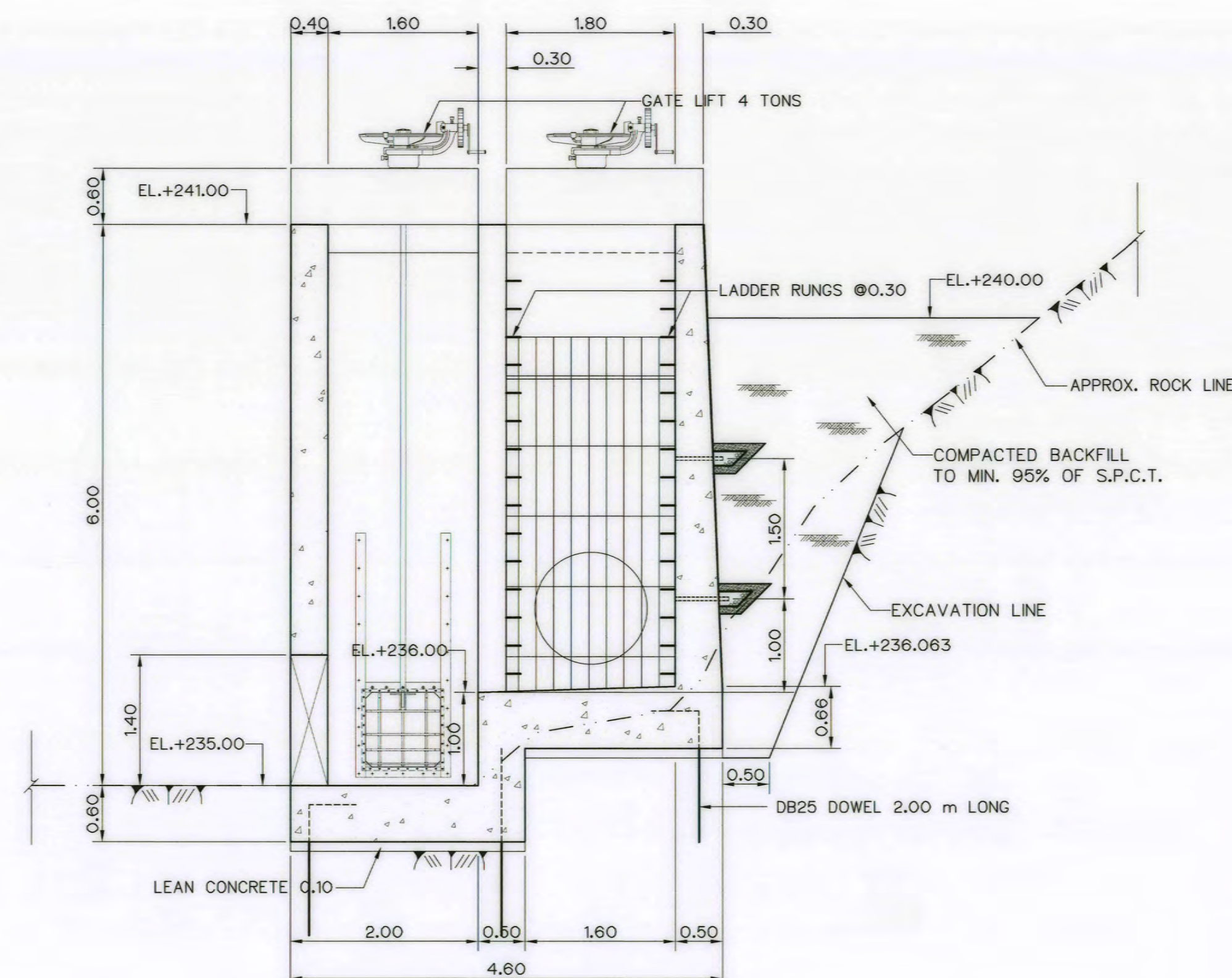
1. ALL DIMENSIONS AND ELEVATIONS (M.S.L.) ARE IN METERS, UNLESS OTHERWISE SHOWN.
2. SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SEE DWG. NO. AKP-GN-03
3. SPACING OF HANDRAIL CAN BE ADJUSTED IN THE FIELD TO FIT WITH THE STRUCTURE BY CONTRACTOR AND APPROVED BY ENGINEER.
4. WEIR SHALL BE PLACED ON BED ROCK FOUNDATION, OTHER MATERIALS SHALL BE REMOVED AND BACKFILLED WITH LEAN CONCRETE

REFERENCE DRAWINGS :

1. WEIR, PLAN AND SECTION AKP-WE-02
2. WEIR, MISCELLANEOUS DETAIL AKP-WE-05
3. WEIR, REINFORCEMENT (SHEET 1/2) AKP-WE-06
4. WEIR, REINFORCEMENT (SHEET 2/2) AKP-WE-07
5. WEIR, ANCHOR BARS, TRASHRACK AND STEEL LINER DETAIL AKP-WE-08

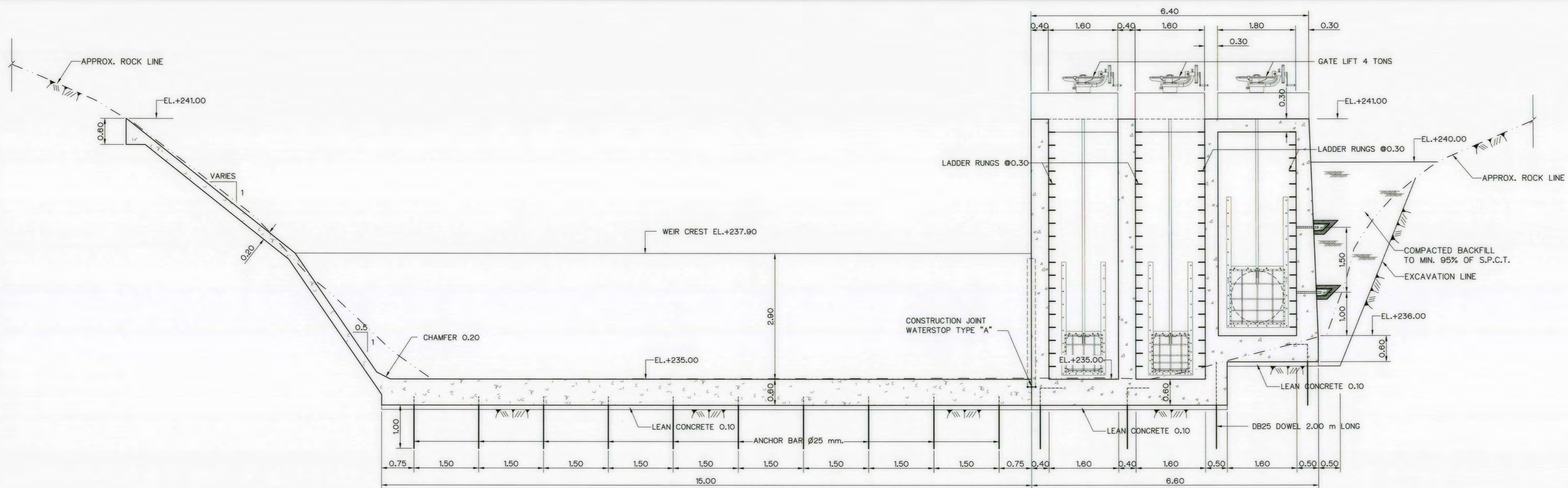


SECTION C-C  
SCALE 1:50

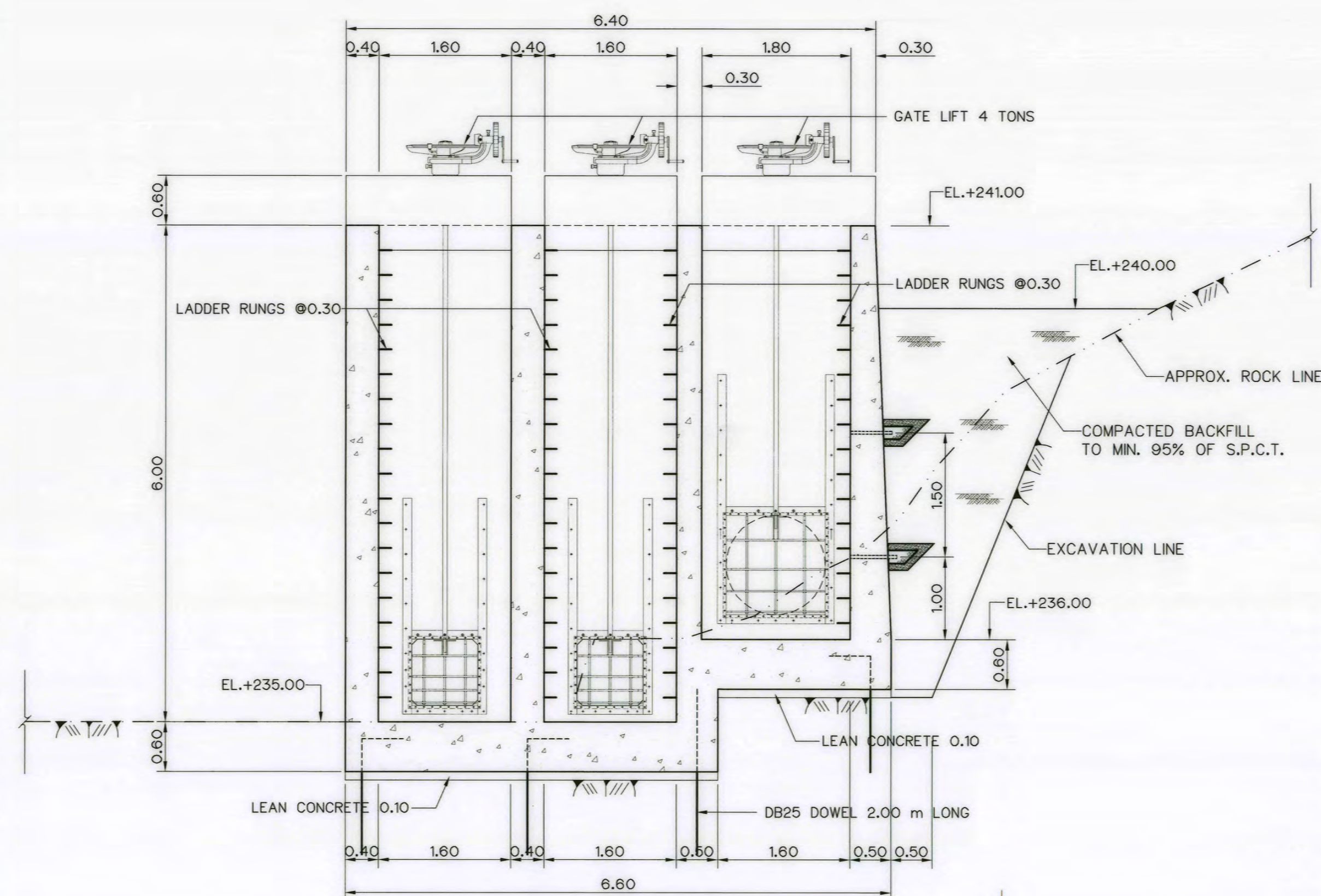


SECTION D-D  
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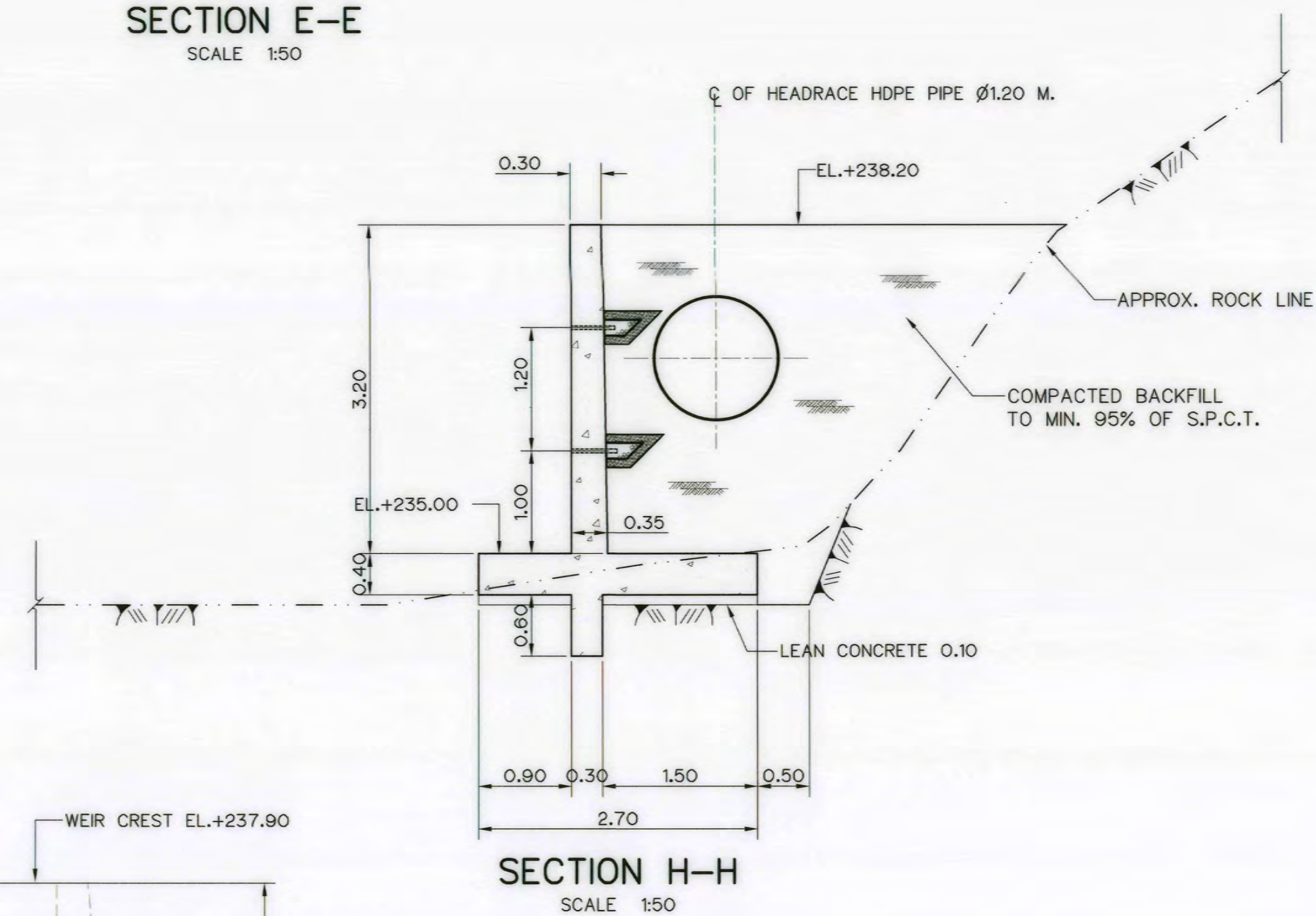
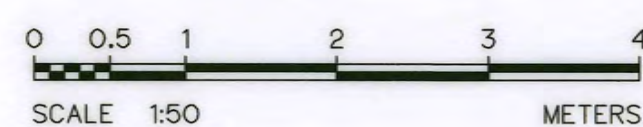
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|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| KINGDOM OF THAILAND<br>Department of Alternative<br>Energy Development and Efficiency<br>MINISTRY OF ENERGY |                                                                                                      |
| AI KA PO HYDROPOWER PROJECT<br>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAT                     |                                                                                                      |
| PART : 1 CIVIL WORKS AND TRANSMISSION LINE<br>WEIR<br>SECTIONS B-B, C-C AND D-D                             |                                                                                                      |
| P&C MANAGEMENT CO., LTD.<br>SPT CONSULTANTS CO., LTD.                                                       | Department of Alternative<br>Energy Development and Efficiency<br>MINISTRY OF ENERGY                 |
| DESIGNED 1/10/2021 28/10/2021<br>DRAWN 28/10/2021<br>CHECKED 28/10/2021<br>PROJECT MANAGER                  | REVIEWED 28/10/2021<br>SUBMITTED 28/10/2021<br>RECOMMENDED 28/10/2021<br>APPROVED 28/10/2021<br>DATE |
| NO. DATE REVISIONS CHECKED APPROVED                                                                         | DRAWING NO. SHEET NO.<br>AKP-WE-03 15 OF 129                                                         |



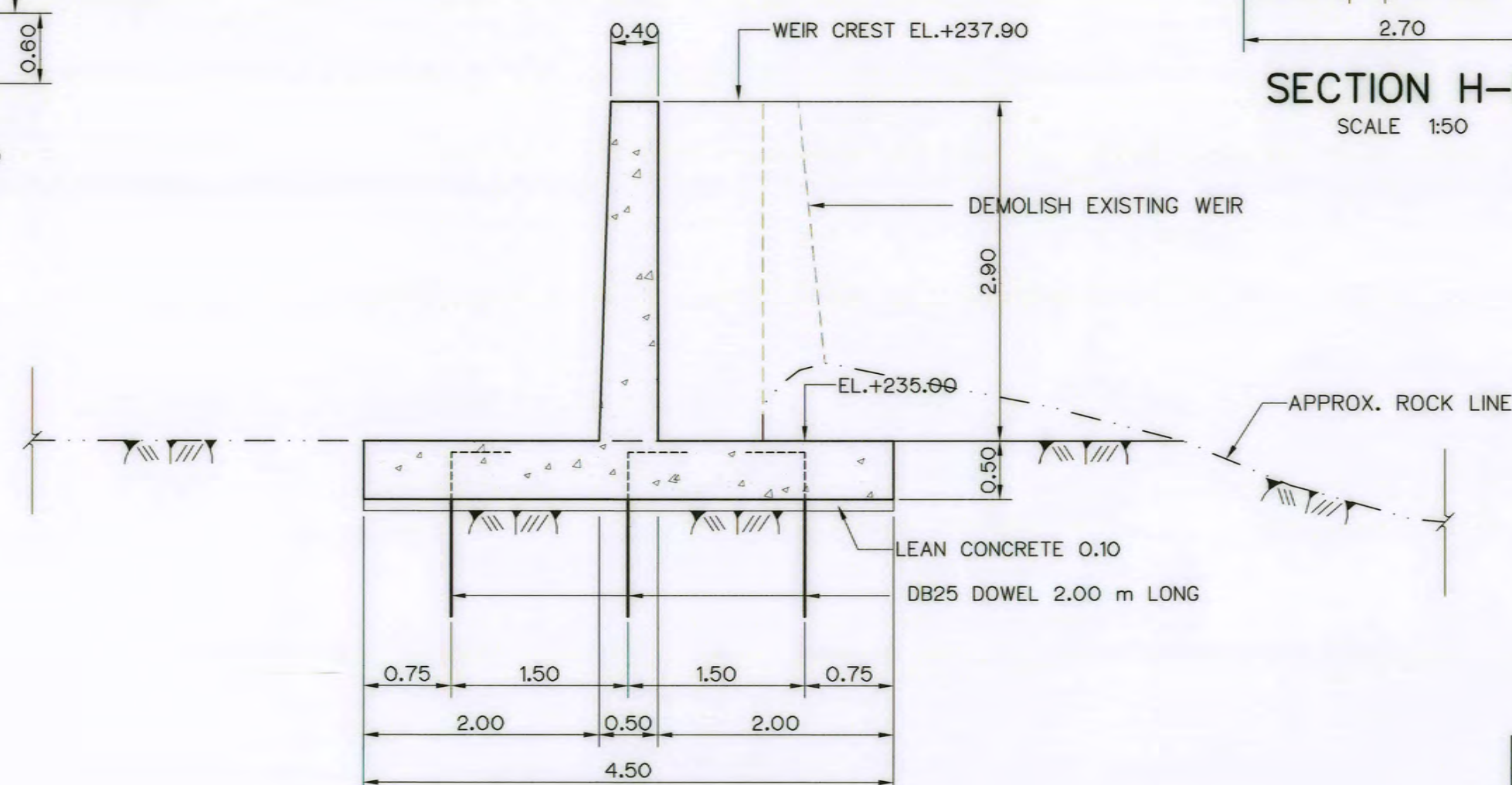
SECTION E-E  
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SECTION F-F  
SCALE 1:50



SECTION H-H  
SCALE 1:50



SECTION G-G  
SCALE 1:50

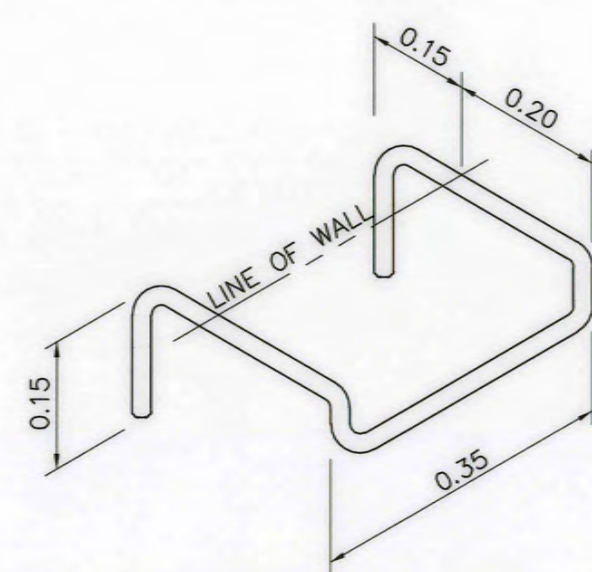
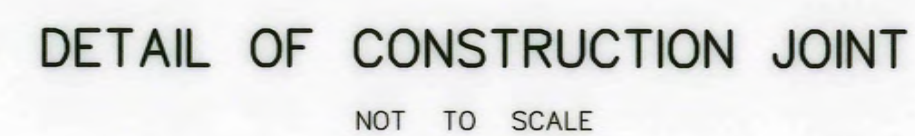
#### NOTES :

1. ALL DIMENSIONS AND ELEVATIONS (M.S.L.) ARE IN METERS, UNLESS OTHERWISE SHOWN.
2. SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SEE DWG. NO. AKP-GN-03
3. SPACING OF HANDRAIL CAN BE ADJUSTED IN THE FIELD TO FIT WITH THE STRUCTURE BY CONTRACTOR AND APPROVED BY ENGINEER.
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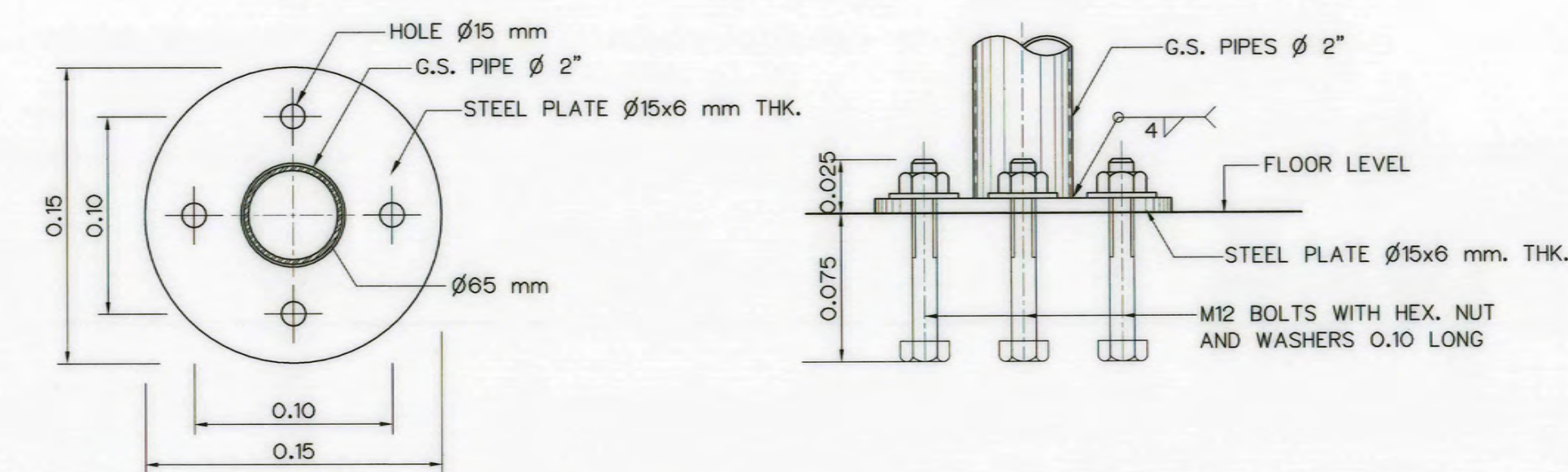
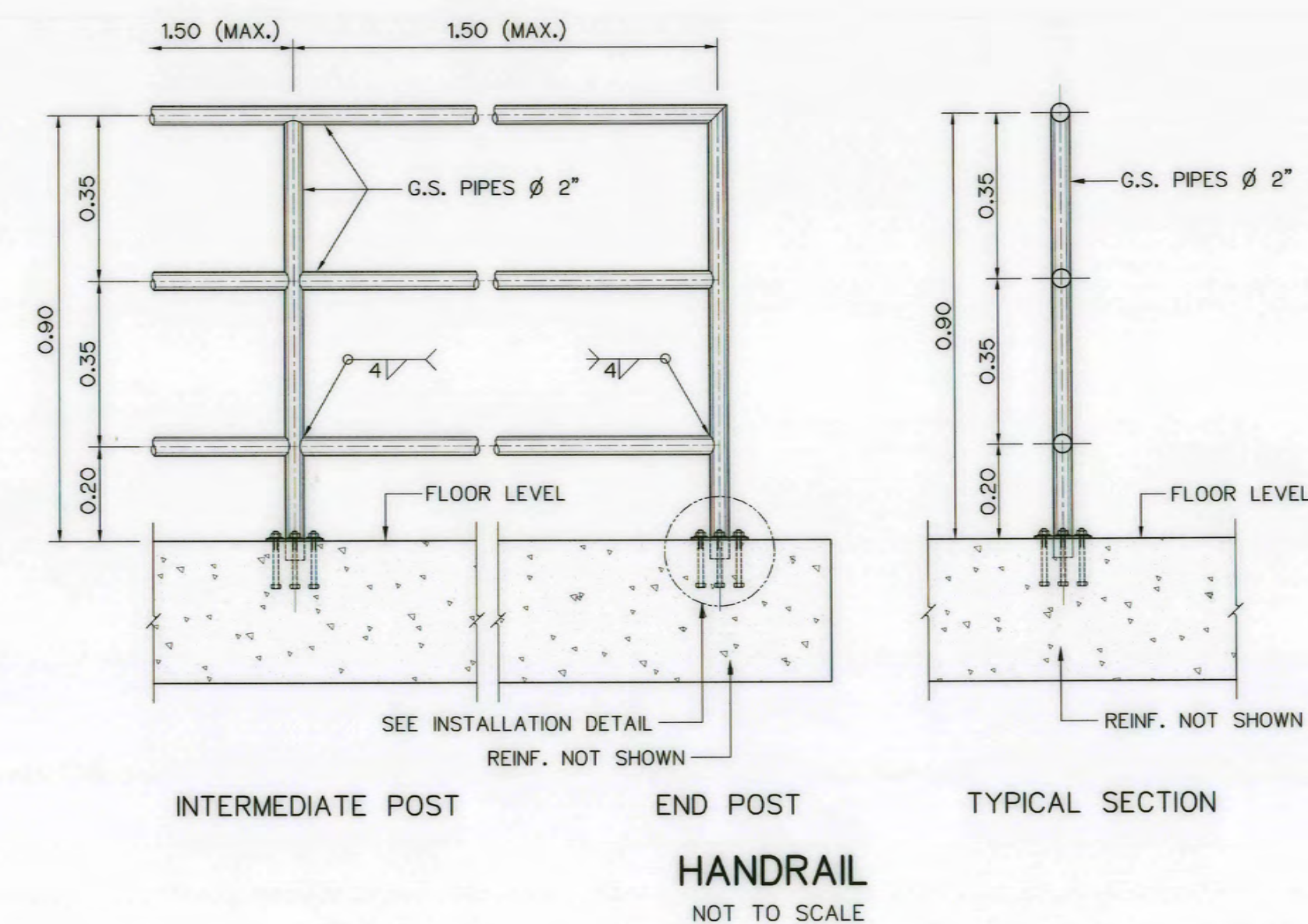
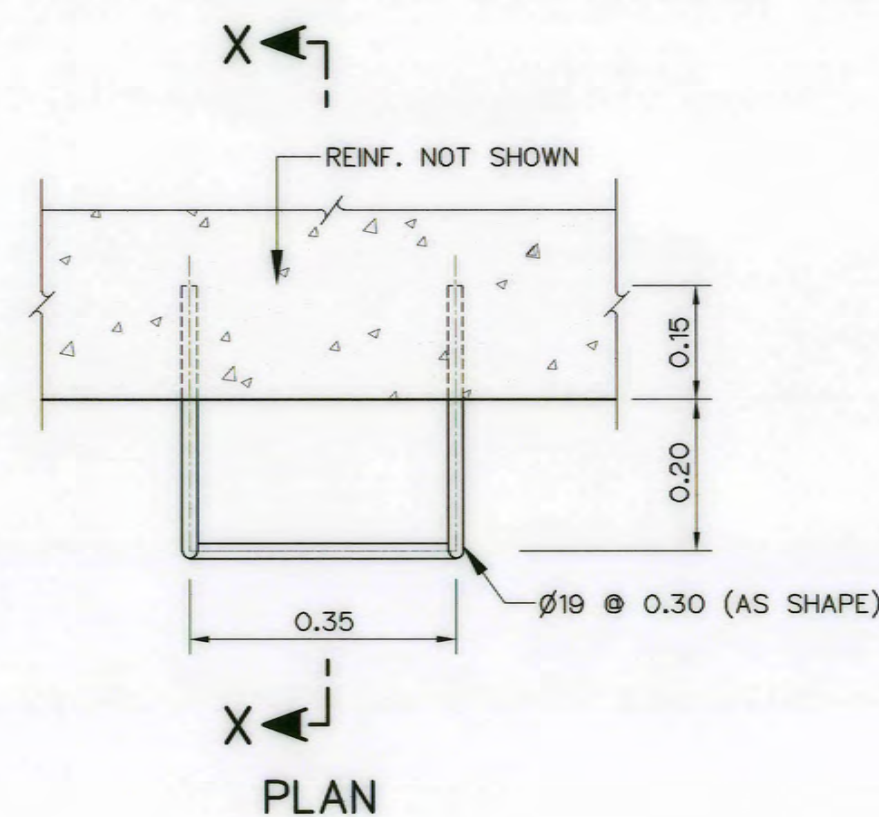
#### REFERENCE DRAWINGS :

1. WEIR, PLAN AND SECTION SECTIONS A-A AKP-WE-02
2. WEIR, MISCELLANEOUS DETAIL AKP-WE-05
3. WEIR, REINFORCEMENT (SHEET 1/2) AKP-WE-06
4. WEIR, REINFORCEMENT (SHEET 2/2) AKP-WE-07
5. WEIR, ANCHOR BARS, TRASHRACK AND STEEL LINER DETAIL AKP-WE-08

|                                                                                                                            |                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| KINGDOM OF THAILAND<br>Department of Alternative<br>Energy Development and Efficiency<br><b>MINISTRY OF ENERGY</b>         |                                                                                                                                               |
| <b>AI KA PO HYDROPOWER PROJECT</b><br><b>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAT</b>                      |                                                                                                                                               |
| <b>PART : 1 CIVIL WORKS AND TRANSMISSION LINE</b><br><b>WEIR</b><br><b>SECTIONS E-E, F-F, G-G AND H-H</b>                  |                                                                                                                                               |
| P&C MANAGEMENT CO., LTD.<br>SPT CONSULTANTS CO., LTD.                                                                      | Department of Alternative<br>Energy Development and Efficiency<br><b>MINISTRY OF ENERGY</b>                                                   |
| DESIGNED <i>[Signature]</i> 28/10/21<br>DRAWN <i>[Signature]</i><br>CHECKED <i>[Signature]</i> 28/10/21<br>PROJECT MANAGER | REVIEWED <i>[Signature]</i><br>SUBMITTED <i>[Signature]</i><br>RECOMMENDED <i>[Signature]</i><br>APPROVED <i>[Signature]</i> 28/10/21<br>DATE |
| 3<br>2<br>1<br>NO. DATE REVISIONS CHECKED APPROVED<br>CONSULTANTS DEDE                                                     | SHEET NO.<br><b>AKP-WE-04</b> 16 OF 129                                                                                                       |



ISOMETRIC VIEW

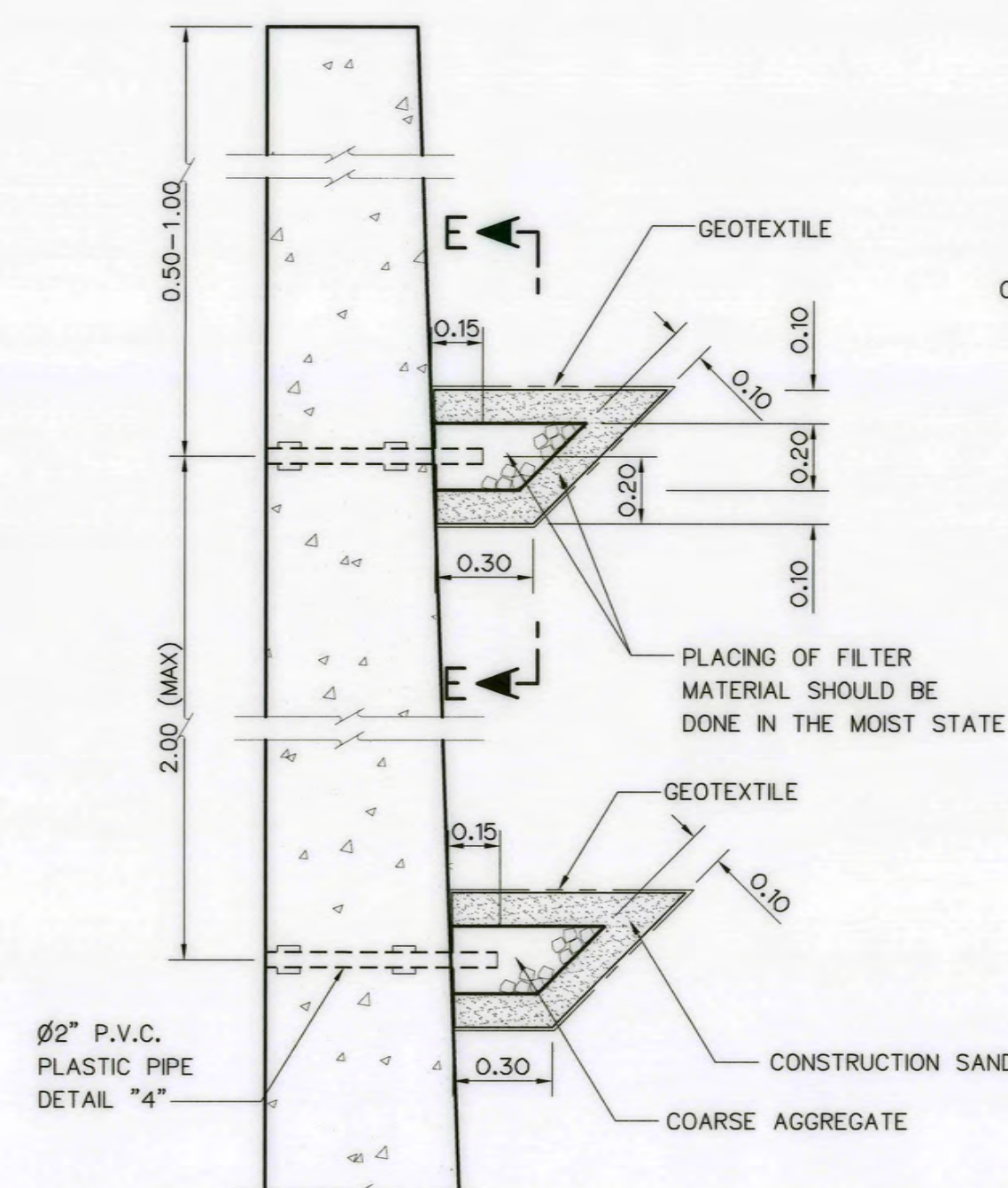


### INSTALLATION DETAIL

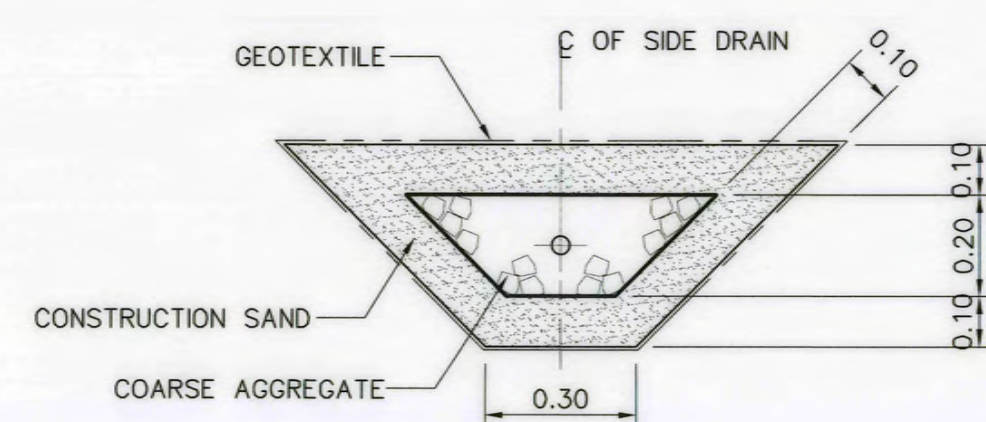
NOT TO SCALE

NOTES :

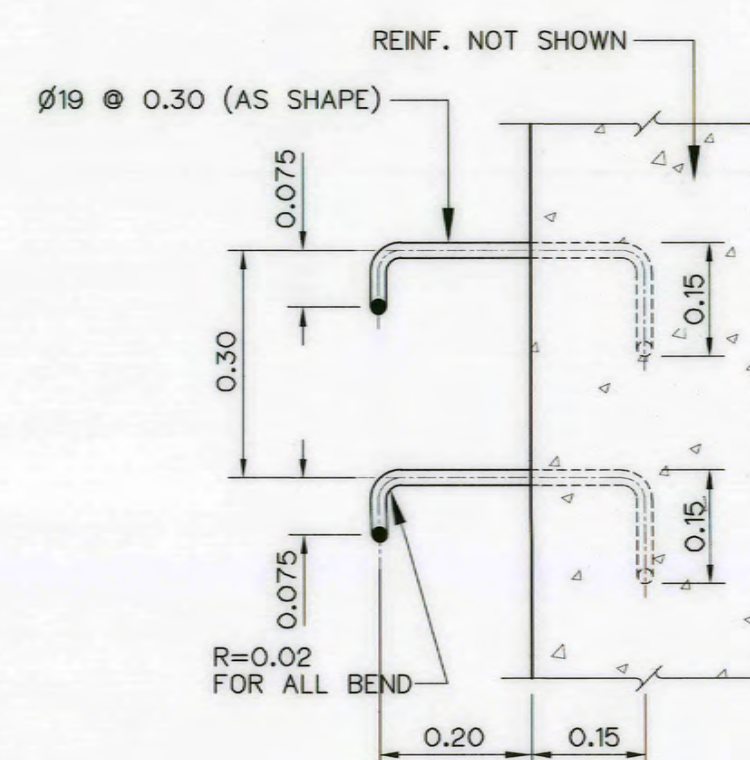
1. ALL DIMENSIONS AND ELEVATIONS (M.S.L.) ARE IN METERS,  
UNLESS OTHERWISE SHOWN.
2. SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SEE DWG. NO. AKP-GN-03



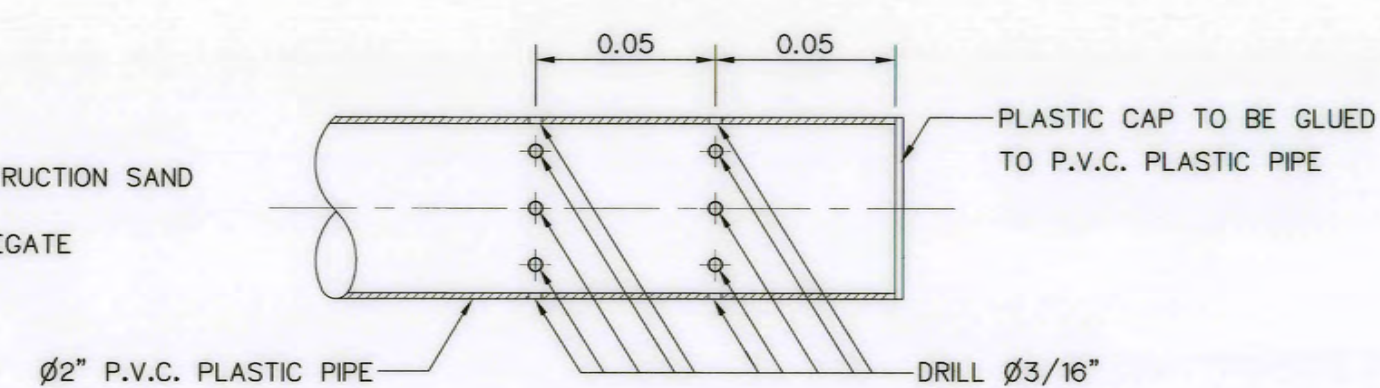
DETAIL OF SIDE DRAIN  
NOT TO SCALE



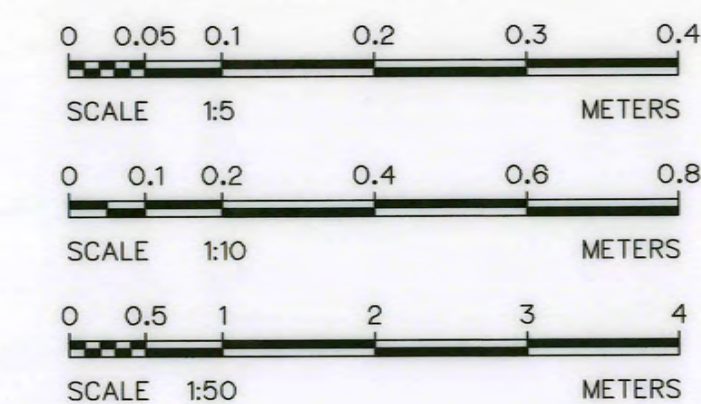
SECTION E - E  
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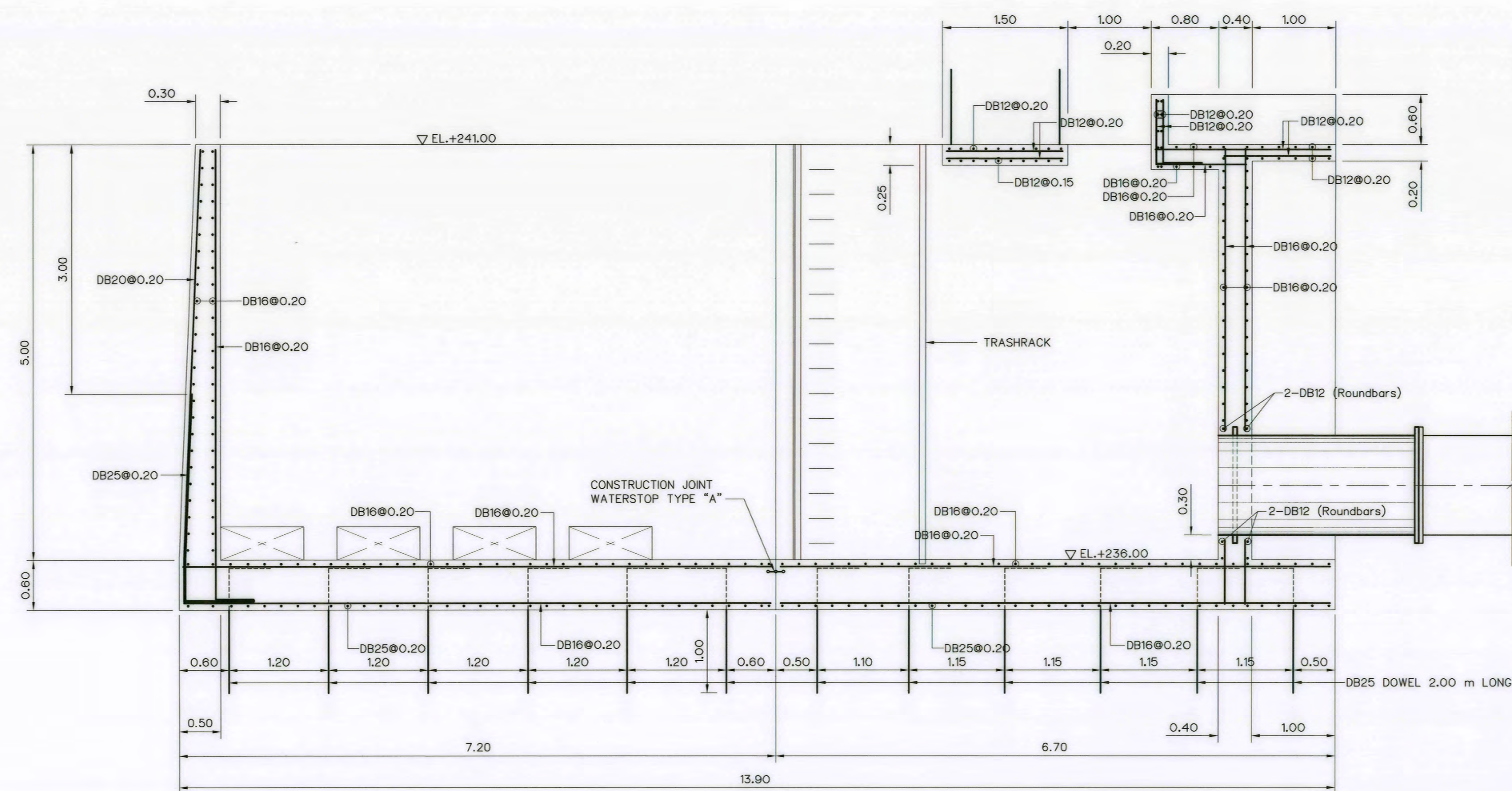
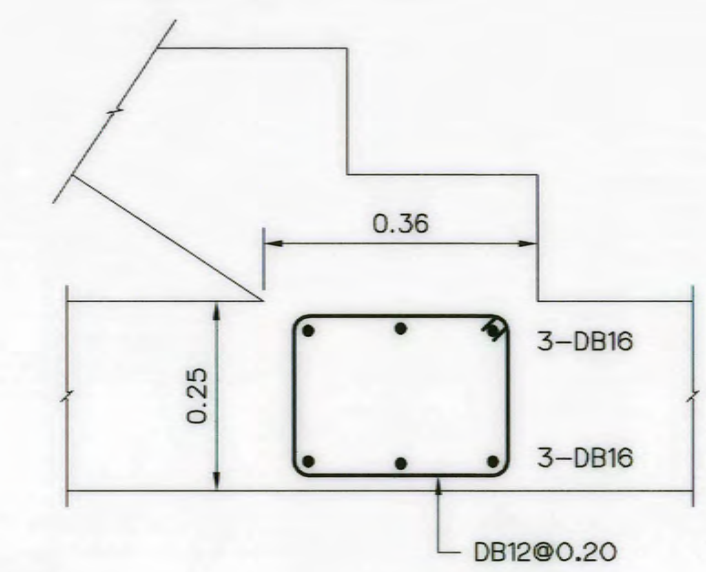
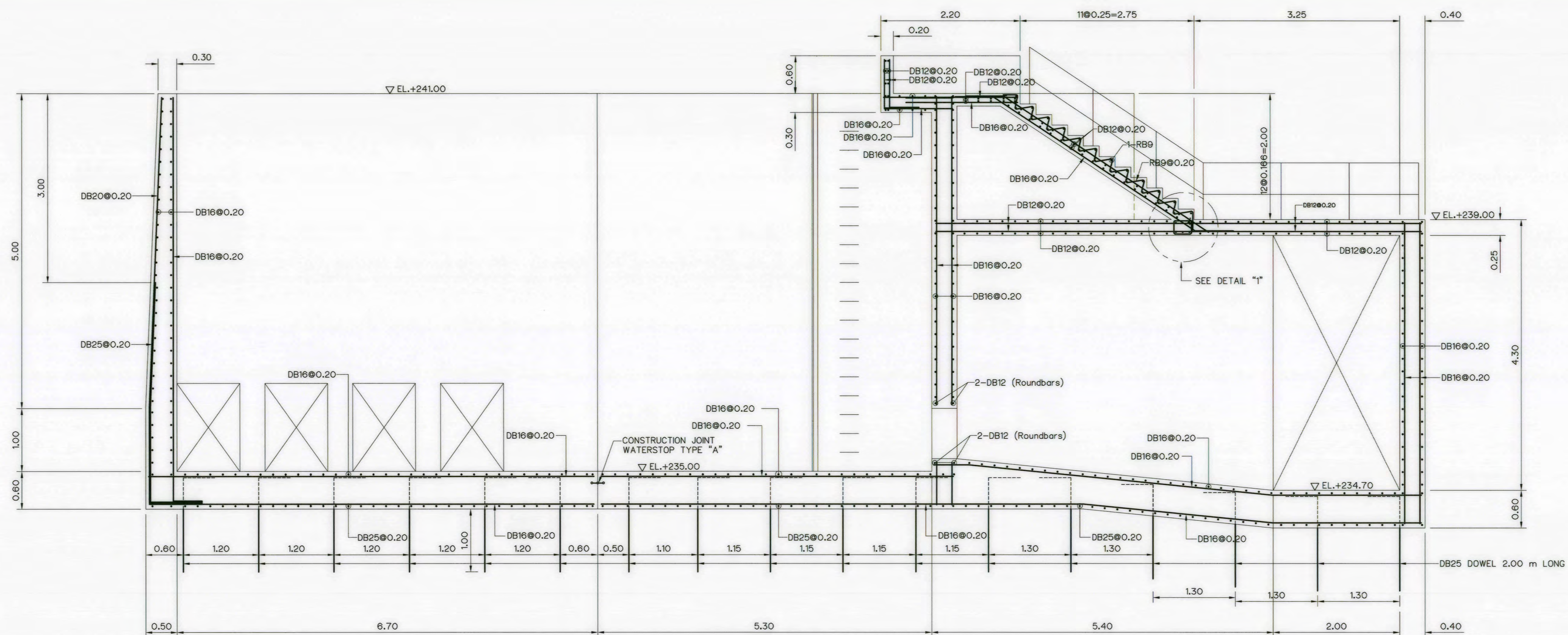
SECTION X-X  
DETAIL OF LADDER RUNGS  
NOT TO SCALE



DETAIL "4"  
NOT TO SCALE

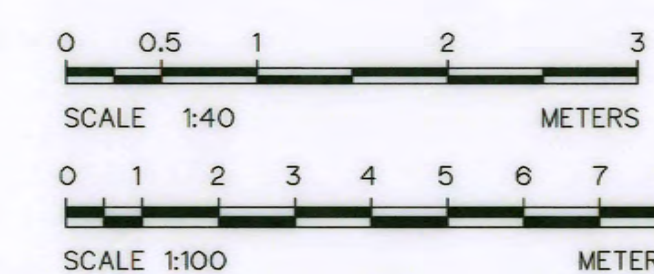


|                                                                                                                        |      |                                                                                                 |         |                                                     |
|------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------|
| <br>KINGDOM OF THAILAND<br>Department of Alternative<br>Energy Development and Efficiency<br><b>MINISTRY OF ENERGY</b> |      |                                                                                                 |         |                                                     |
| <b>AI KA PO HYDROPOWER PROJECT</b><br><b>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAT</b>                  |      |                                                                                                 |         |                                                     |
| <b>PART : 1 CIVIL WORKS AND TRANSMISSION LINE</b><br><b>WEIR</b><br><b>MISCELLANEOUS DETAIL</b>                        |      |                                                                                                 |         |                                                     |
| <b>P&amp;C MANAGEMENT CO., LTD.</b><br><b>SPT CONSULTANTS CO., LTD.</b>                                                |      | <br>Department of Alternative<br>Energy Development and Efficiency<br><b>MINISTRY OF ENERGY</b> |         |                                                     |
| 3                                                                                                                      |      |                                                                                                 |         | REVIEWED                                            |
| 2                                                                                                                      |      |                                                                                                 |         | DESIGNED  181.29074 281.9462                        |
| 1                                                                                                                      |      |                                                                                                 |         | DRAWN                                               |
| NO.                                                                                                                    | DATE | REVISIONS                                                                                       | CHECKED | APPROVED                                            |
| 3                                                                                                                      |      |                                                                                                 |         | CHECKED  281.8231                                   |
| CONSULTANTS                                                                                                            |      | DEDE                                                                                            |         | 28/10/2021<br>PROJECT MANAGER DATE                  |
|                                                                                                                        |      |                                                                                                 |         | DRAWING NO. <b>AKP-WE-05</b><br>SHEET NO. 17 OF 129 |



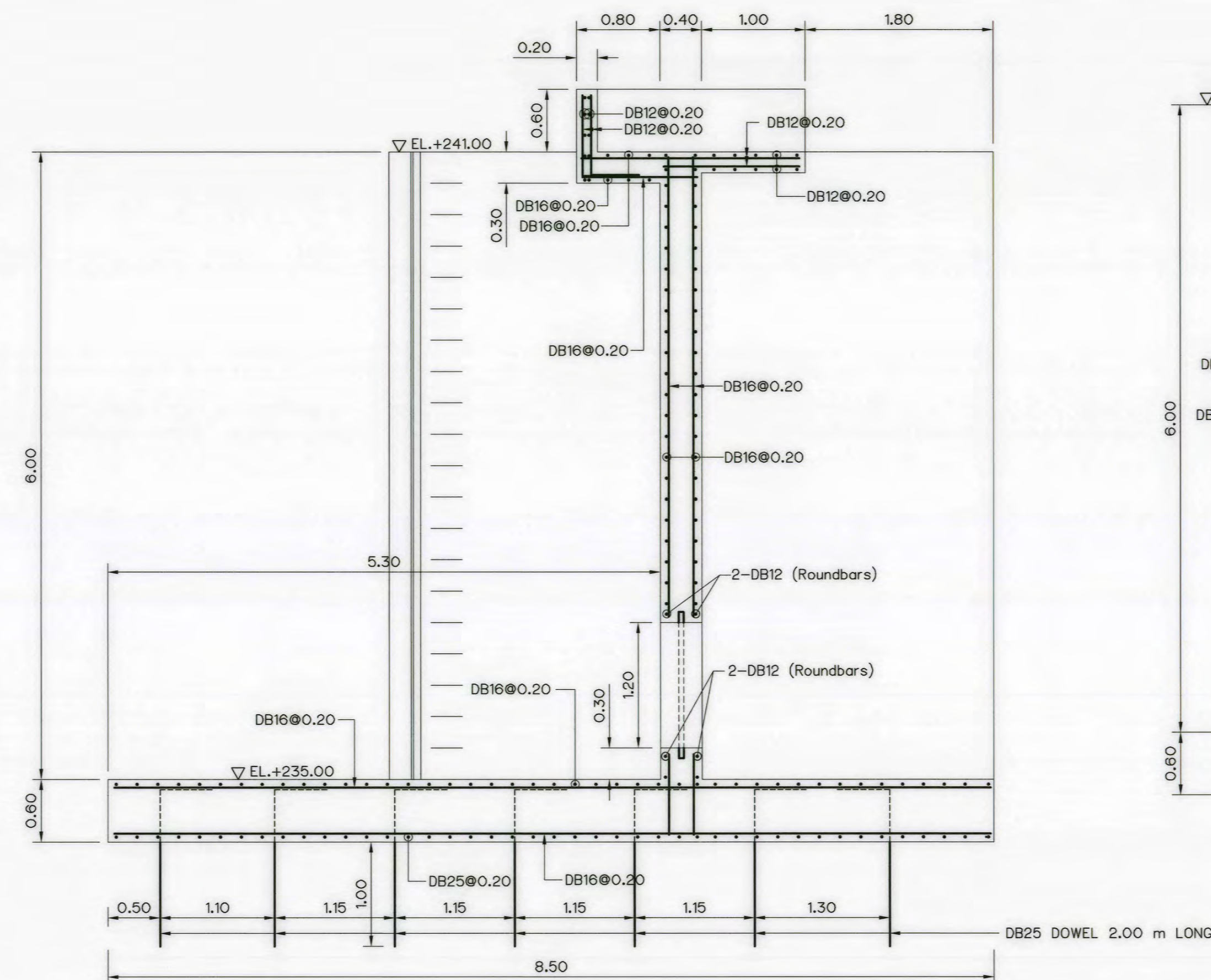
- NOTES :**
1. ALL DIMENSIONS AND ELEVATIONS (M.S.L.) ARE IN METERS,  
UNLESS OTHERWISE SHOWN.
  2. SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SEE DWG. NO. AKP-GN-03

- | REFERENCE DRAWINGS :                                   |           |
|--------------------------------------------------------|-----------|
| 1. WEIR, PLAN AND SECTION SECTIONS A-A                 | AKP-WE-02 |
| 2. WEIR, MISCELLANEOUS DETAIL                          | AKP-WE-05 |
| 3. WEIR, REINFORCEMENT (SHEET 2/2)                     | AKP-WE-07 |
| 4. WEIR, ANCHOR BARS, TRASHRACK AND STEEL LINER DETAIL | AKP-WE-08 |

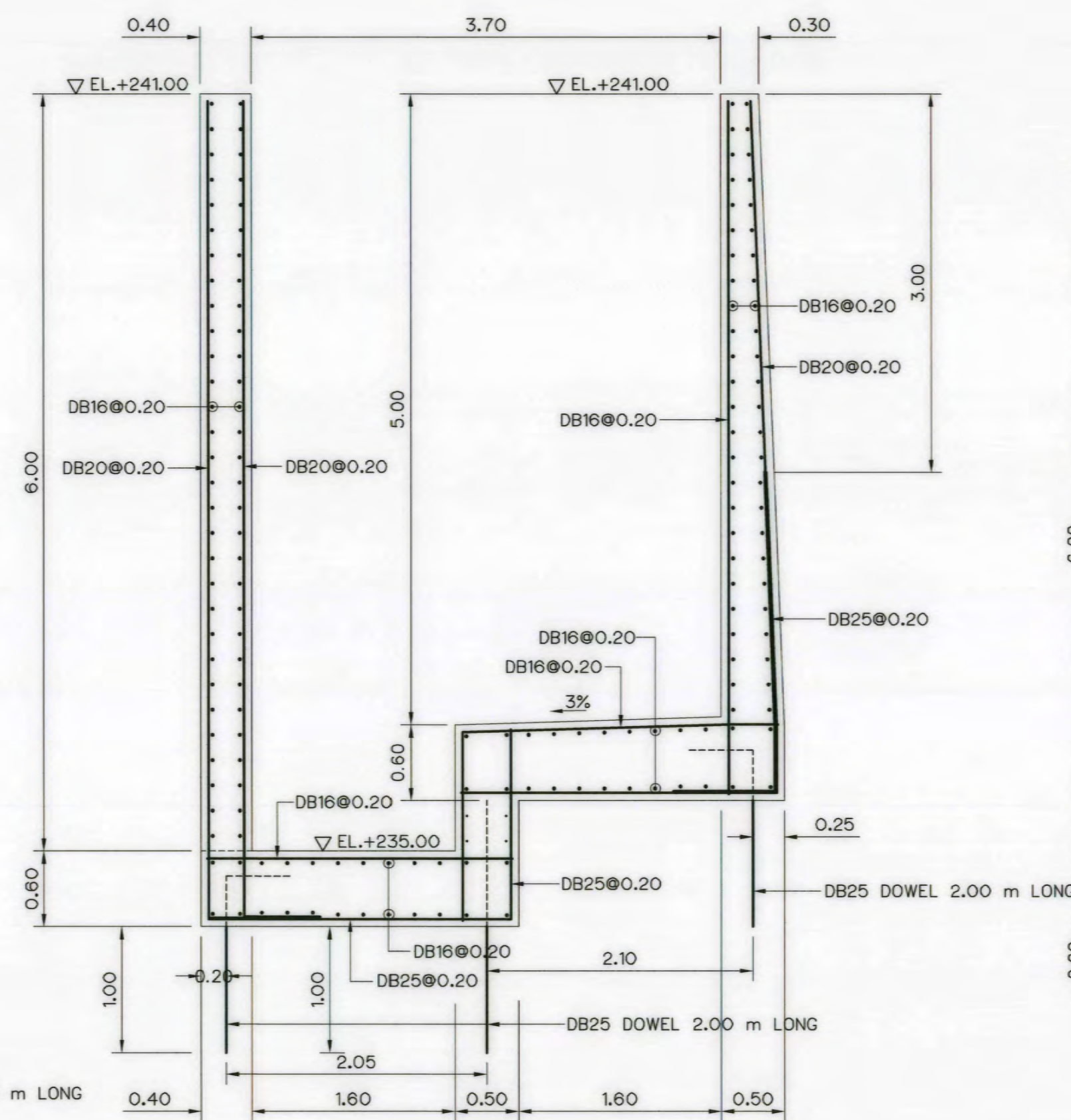


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|-----|-------------|-----------|---------|----------|
| 3   |             |           |         |          |
| 2   |             |           |         |          |
| 1   |             |           |         |          |
| NO. | DATE        | REVISIONS | CHECKED | APPROVED |
|     | CONSULTANTS |           | DEDE    |          |

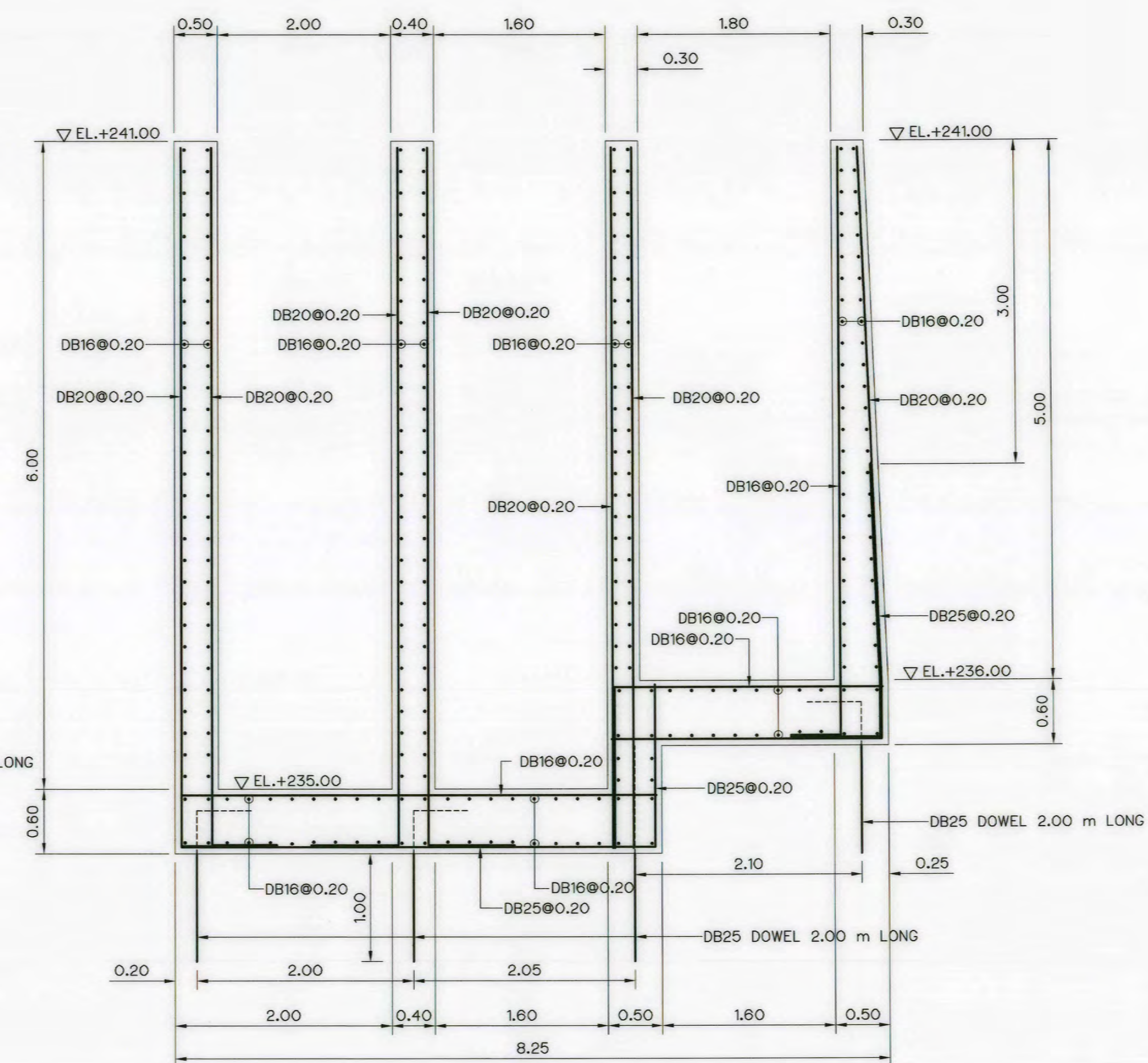
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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
|  <p>KINGDOM OF THAILAND<br/>Department of Alternative<br/>Energy Development and Efficiency<br/><b>MINISTRY OF ENERGY</b></p>                               |                                                                                                                                                                                            | <p><b>AI KA PO HYDROPOWER PROJECT</b></p> <p><b>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAT</b></p>    |                                         |
|                                                                                                                                                                                                                                                  |                                                                                                                                                                                            | <p><b>PART : 1 CIVIL WORKS AND TRANSMISSION LINE</b></p> <p><b>WEIR</b></p> <p><b>REINFORCEMENT (SHEET 1/2)</b></p> |                                         |
|  <p>P&amp;C MANAGEMENT CO., LTD.</p>  <p>SPT CONSULTANTS CO., LTD.</p> |  <p>Department of Alternative<br/>Energy Development and Efficiency<br/><b>MINISTRY OF ENERGY</b></p> | <p>DESIGNED <i>Wan</i> ๒๒.๒๙๐74 <i>Sh</i> ๒๒.๑462</p>                                                               | <p>REVIEWED <i>Sh</i></p>               |
| <p>DRAWN <i>Sh</i></p>                                                                                                                                                                                                                           | <p>SUBMITTED <i>Sh</i></p>                                                                                                                                                                 | <p>CHECKED <i>Sh</i></p>                                                                                            | <p>RECOMMENDED <i>Sh</i></p>            |
| <p>28/10/2021</p>                                                                                                                                                                                                                                | <p>APPROVED <i>Wan</i></p>                                                                                                                                                                 | <p>PROJECT MANAGER</p>                                                                                              | <p>DRAWING NO.<br/><b>AKP-WE-06</b></p> |
| <p>DATE</p>                                                                                                                                                                                                                                      | <p>SHEET NO.<br/>18 OF 129</p>                                                                                                                                                             |                                                                                                                     |                                         |



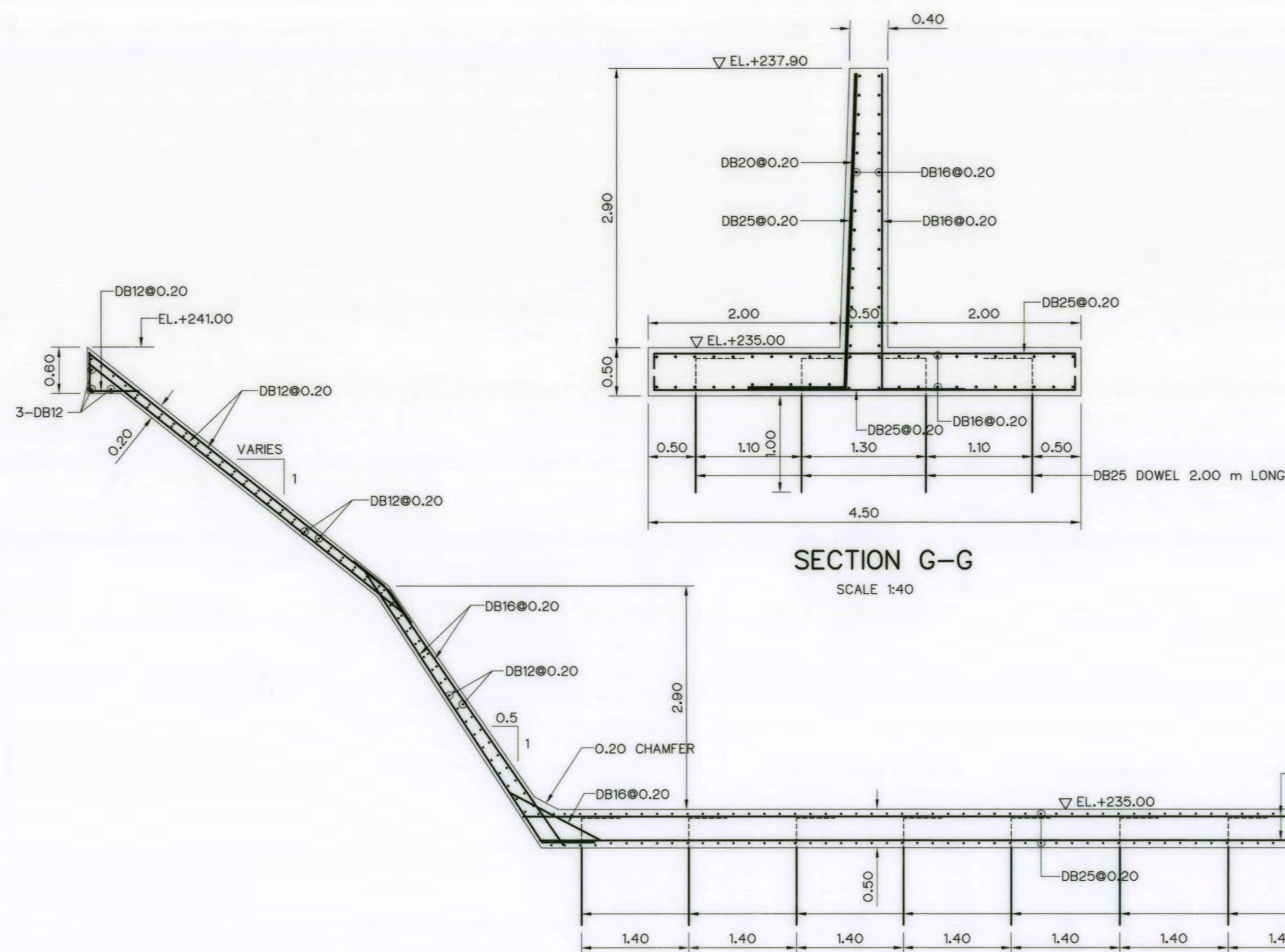
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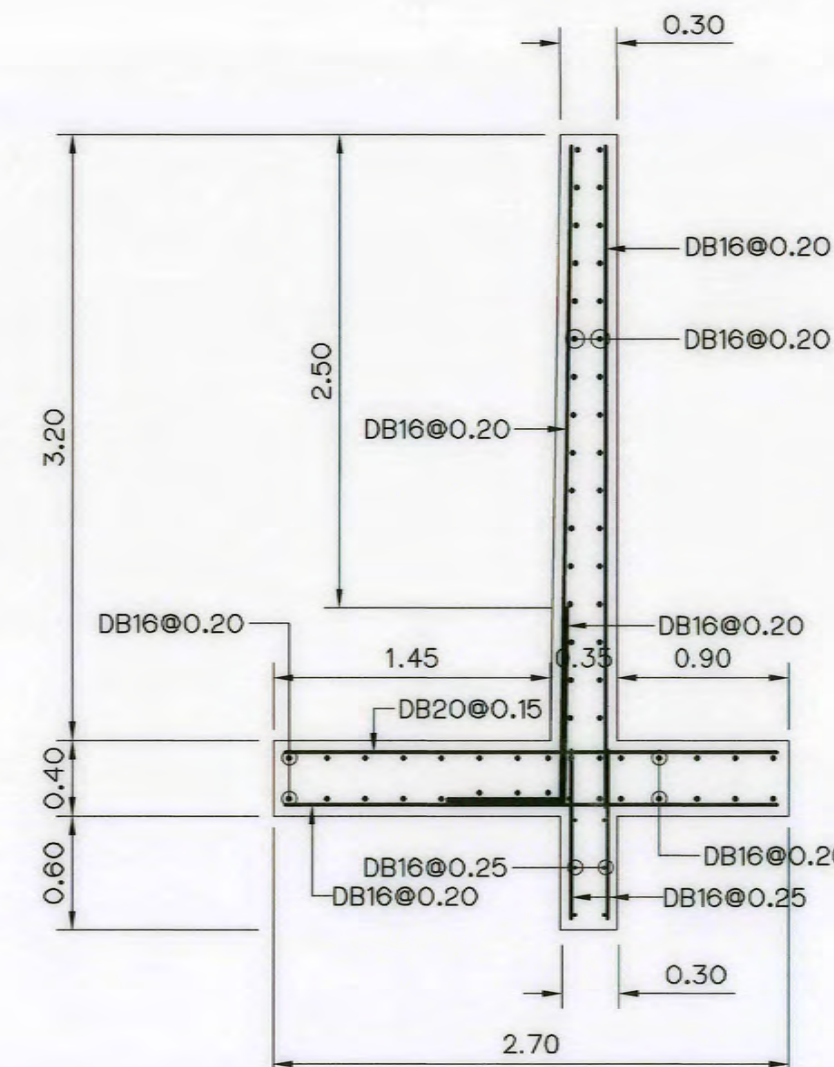
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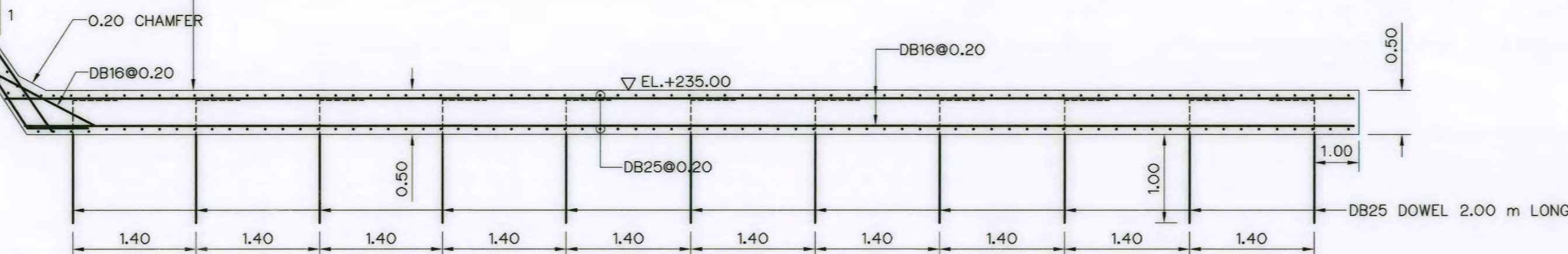
SECTION F-F  
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SECTION G-G  
SCALE 1:40



SECTION H-H  
SCALE 1:40



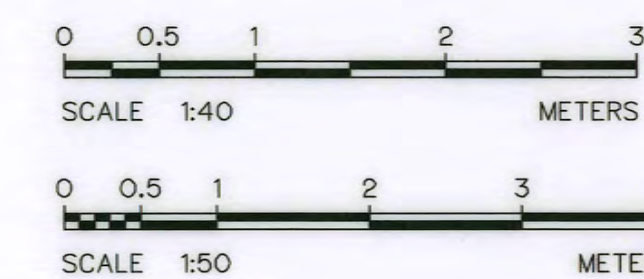
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#### NOTES :

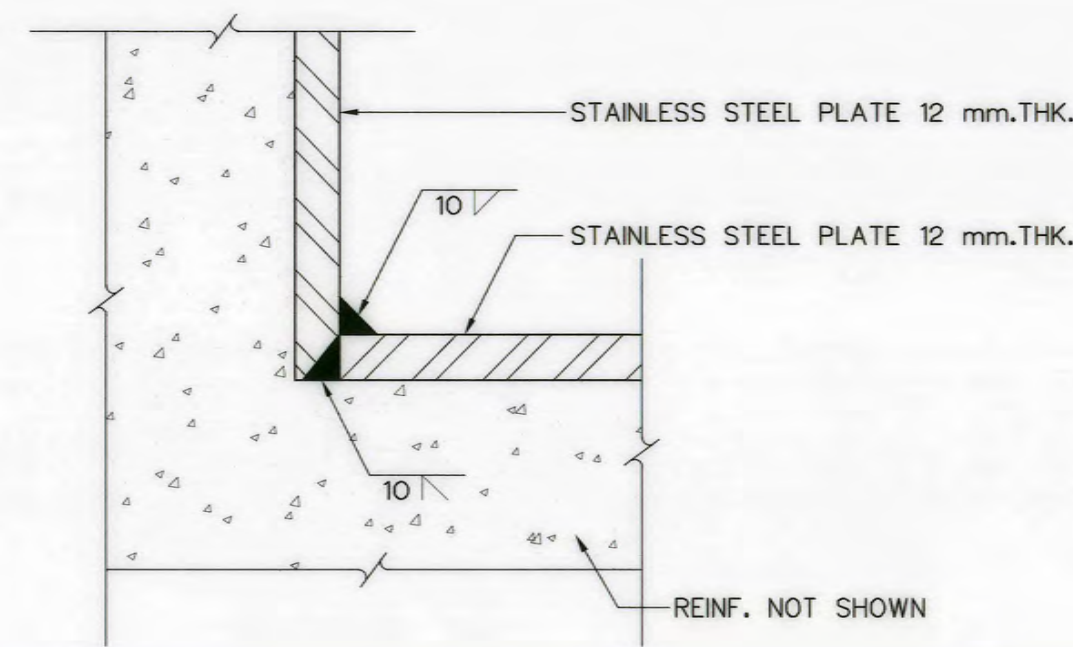
1. ALL DIMENSIONS AND ELEVATIONS (M.S.L.) ARE IN METERS, UNLESS OTHERWISE SHOWN.
2. SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SEE DWG. NO. AKP-GN-03

#### REFERENCE DRAWINGS :

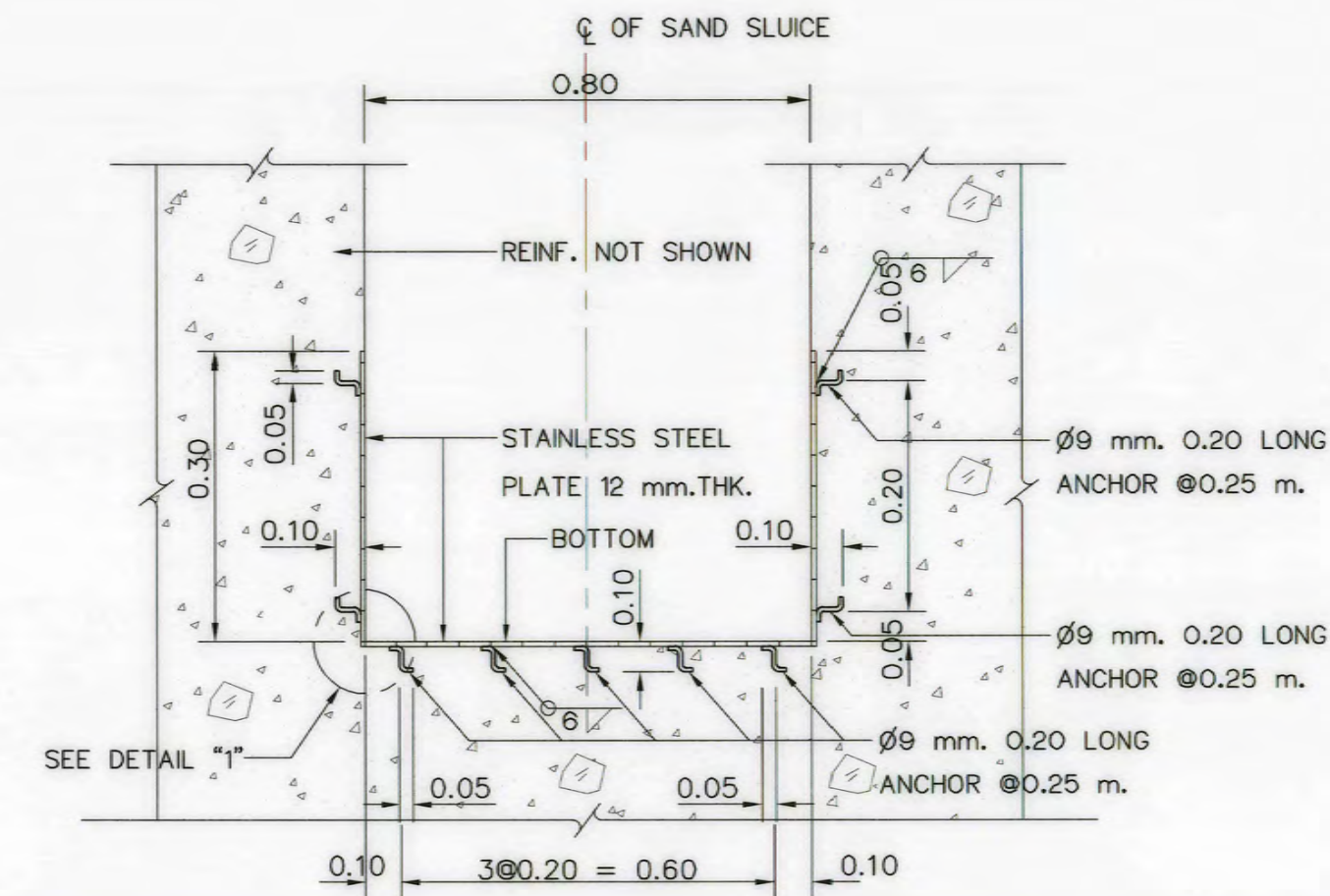
1. WEIR, PLAN AND SECTION SECTIONS A-A AKP-WE-02
2. WEIR, MISCELLANEOUS DETAIL AKP-WE-05
3. WEIR, REINFORCEMENT (SHEET 1/2) AKP-WE-06
4. WEIR, ANCHOR BARS, TRASH RACK AND STEEL LINER DETAIL AKP-WE-08



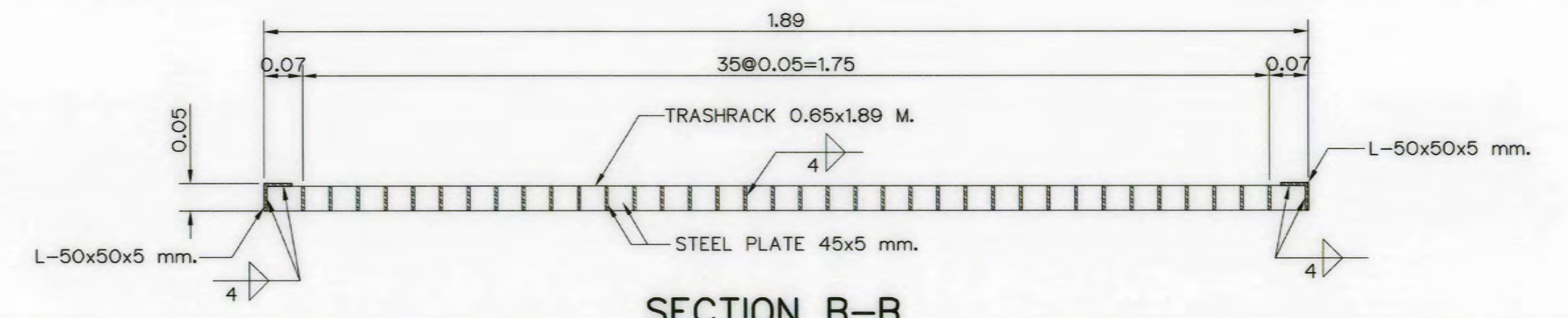
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|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| KINGDOM OF THAILAND<br>Department of Alternative<br>Energy Development and Efficiency<br><b>MINISTRY OF ENERGY</b>         |                                                                                                                                                 |
| <b>AI KA PO HYDROPOWER PROJECT</b><br><b>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAT</b>                      |                                                                                                                                                 |
| <b>PART : 1 CIVIL WORKS AND TRANSMISSION LINE</b><br><b>WEIR</b><br><b>REINFORCEMENT (SHEET 2/2)</b>                       |                                                                                                                                                 |
| DESIGNED <i>[Signature]</i> 28/07/21<br>DRAWN <i>[Signature]</i><br>CHECKED <i>[Signature]</i> 28/07/21<br>PROJECT MANAGER | REVIEWED <i>[Signature]</i><br>SUBMITTED <i>[Signature]</i><br>RECOMMENDED <i>[Signature]</i><br>APPROVED <i>[Signature]</i> 28/10/2021<br>DATE |
| 3<br>2<br>1<br>NO. DATE REVISIONS CHECKED APPROVED                                                                         | SHEET NO.<br><b>AKP-WE-07</b><br>19 OF 129                                                                                                      |



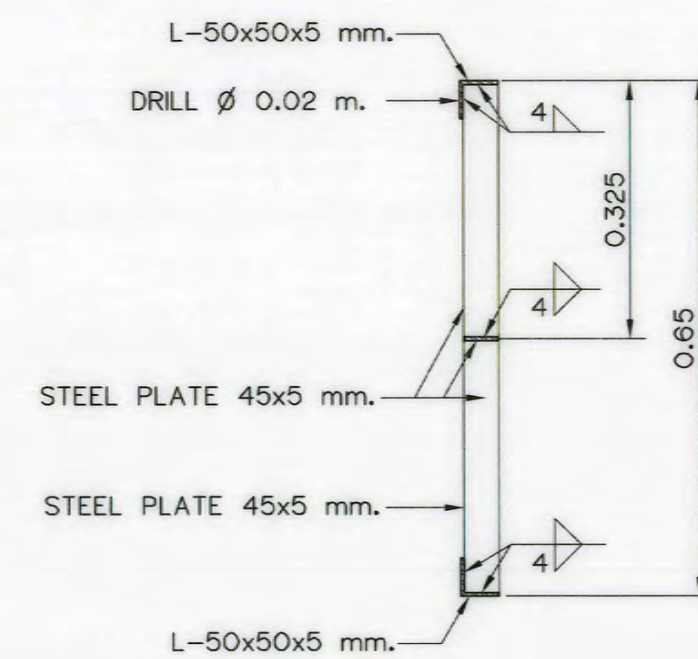
DETAIL "1"  
NOT TO SCALE



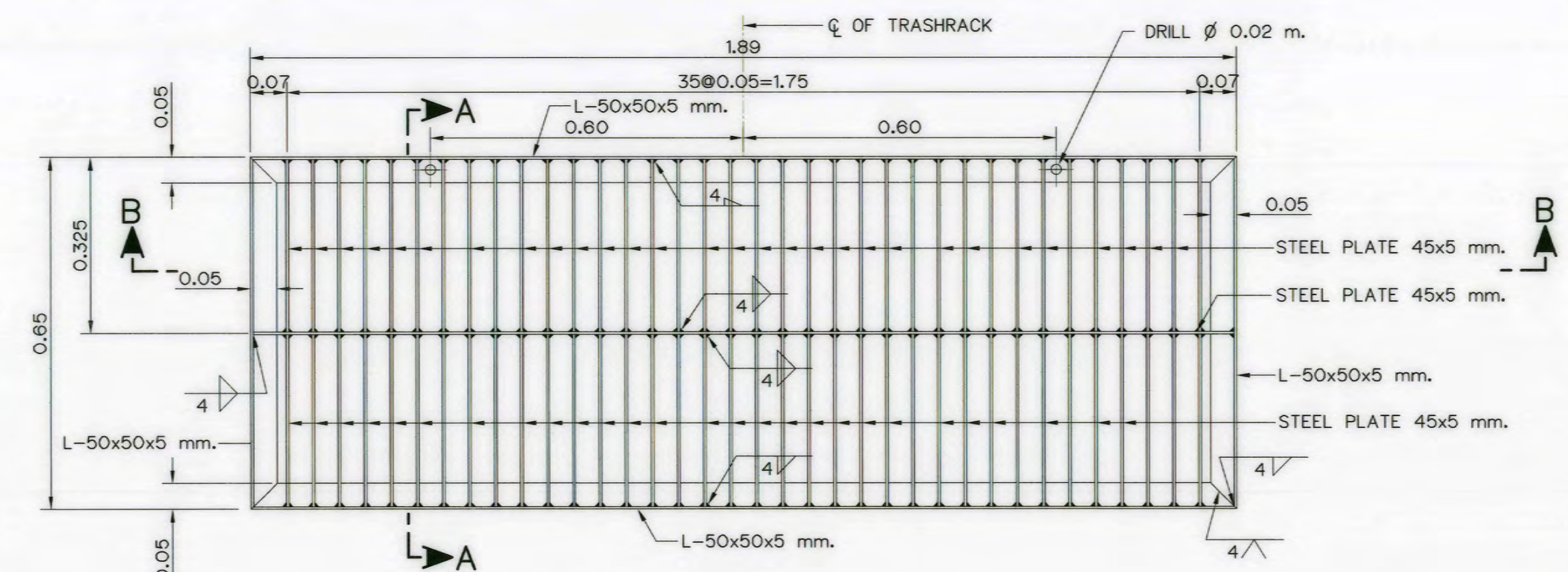
DETAIL OF STEEL LINER AT SAND SLUICE  
NOT TO SCALE



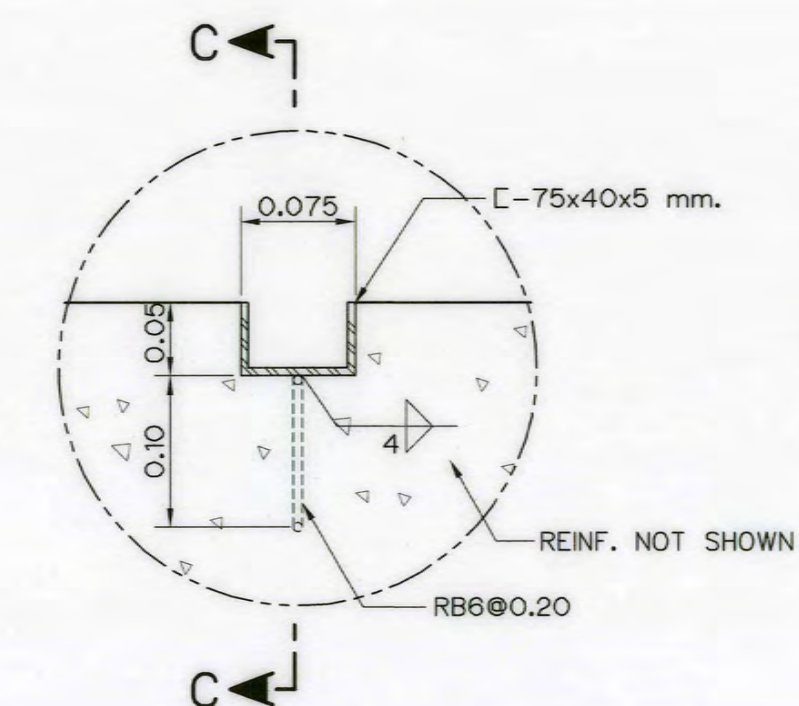
SECTION B-B



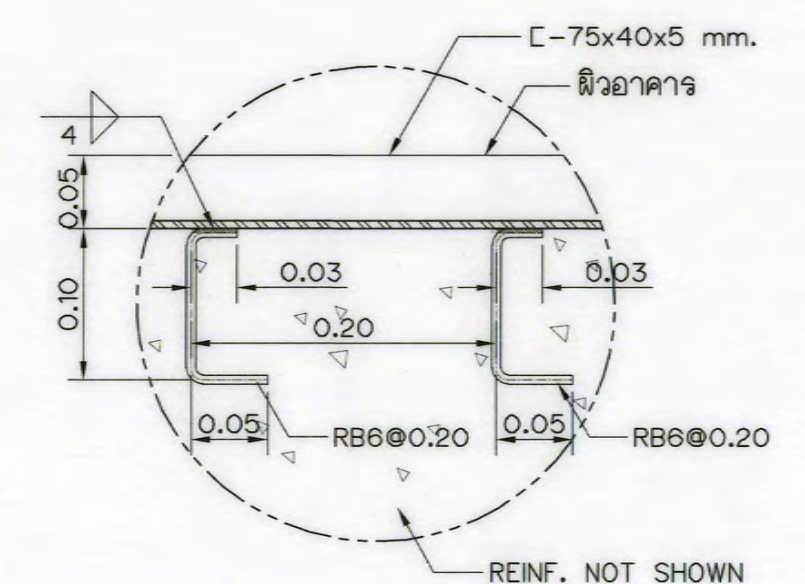
SECTION A-A  
SCALE 1:10



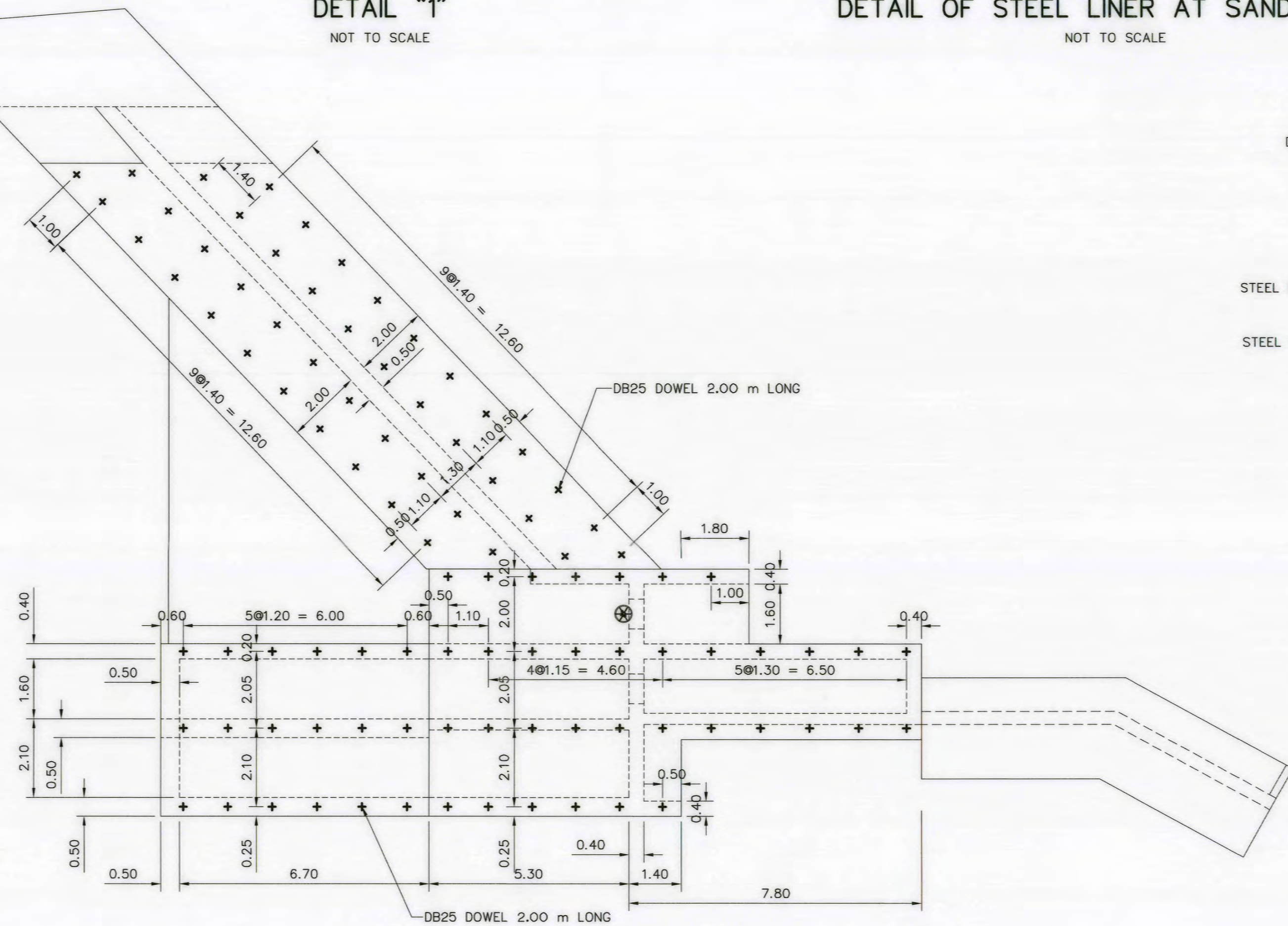
TRASH RACK DETAIL  
(REQUIRED 7 PIECES)  
SCALE 1:10



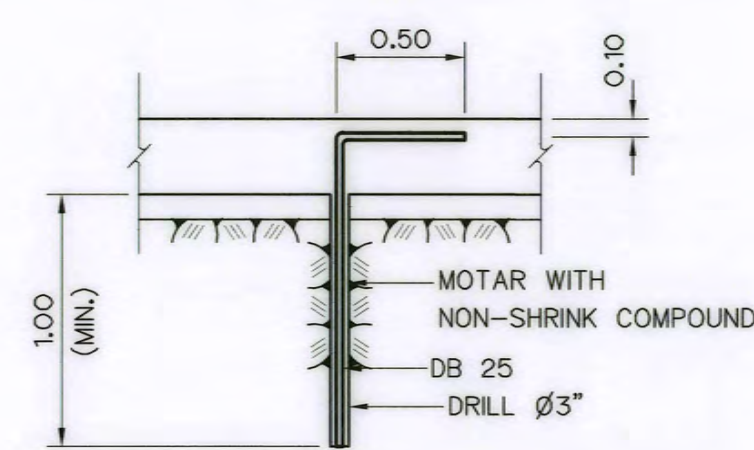
TRASHRACK GROOVE DETAIL  
SCALE 1:5



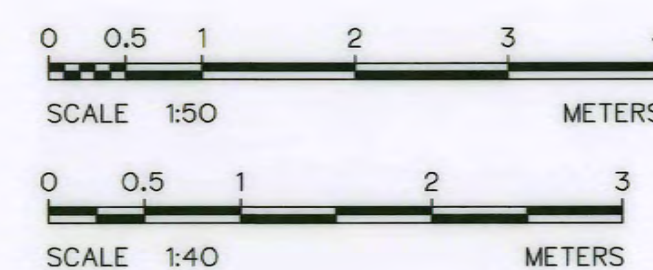
SECTION C-C  
SCALE 1:5



ANCHOR BARS PLAN  
SCALE 1:100



ANCHOR BAR  
SCALE 1:30



NOTES :

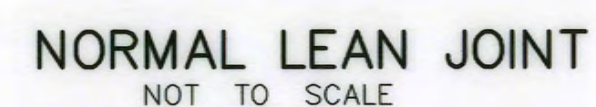
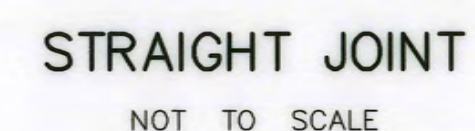
1. ALL DIMENSIONS AND ELEVATIONS (M.S.L.) ARE IN METERS, UNLESS OTHERWISE SHOWN.
2. SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SEE DWG. NO. AKP-GN-03

| 3   |      |           |         |          |
|-----|------|-----------|---------|----------|
| 2   |      |           |         |          |
| 1   |      |           |         |          |
| NO. | DATE | REVISIONS | CHECKED | APPROVED |
|     |      |           |         |          |

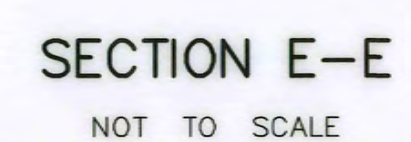
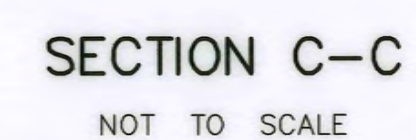
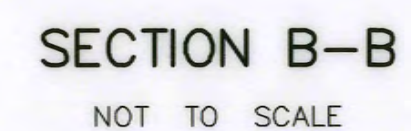
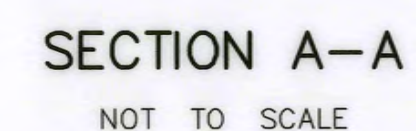
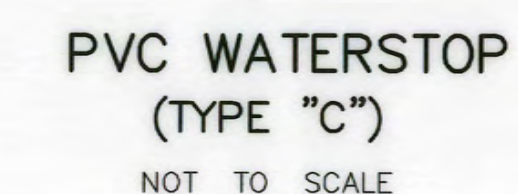
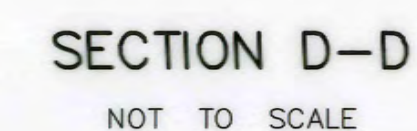
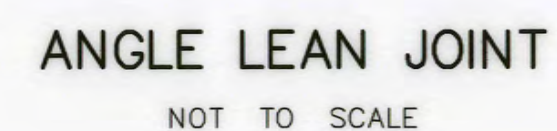
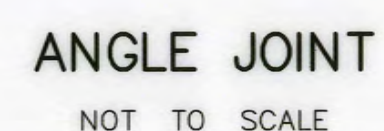
CONSULTANTS

DEDE

|                                                                                                             |                                                                                     |
|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| KINGDOM OF THAILAND<br>Department of Alternative<br>Energy Development and Efficiency<br>MINISTRY OF ENERGY |                                                                                     |
| AI KA PO HYDROPOWER PROJECT<br>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAT                     |                                                                                     |
| PART : 1 CIVIL WORKS AND TRANSMISSION LINE<br>WEIR<br>ANCHOR BARS, TRASH RACK AND STEEL LINER DETAIL        |                                                                                     |
| P&C MANAGEMENT CO., LTD.<br>SPT CONSULTANTS CO., LTD.                                                       | DESIGNED: 28/12/2021<br>DRAWN: 28/12/2021<br>CHECKED: 28/12/2021<br>PROJECT MANAGER |
| REVIEWED: 28/12/2021<br>SUBMITTED: 28/12/2021<br>APPROVED: 28/12/2021<br>DATE                               | SHEET NO.<br>20 OF 129                                                              |

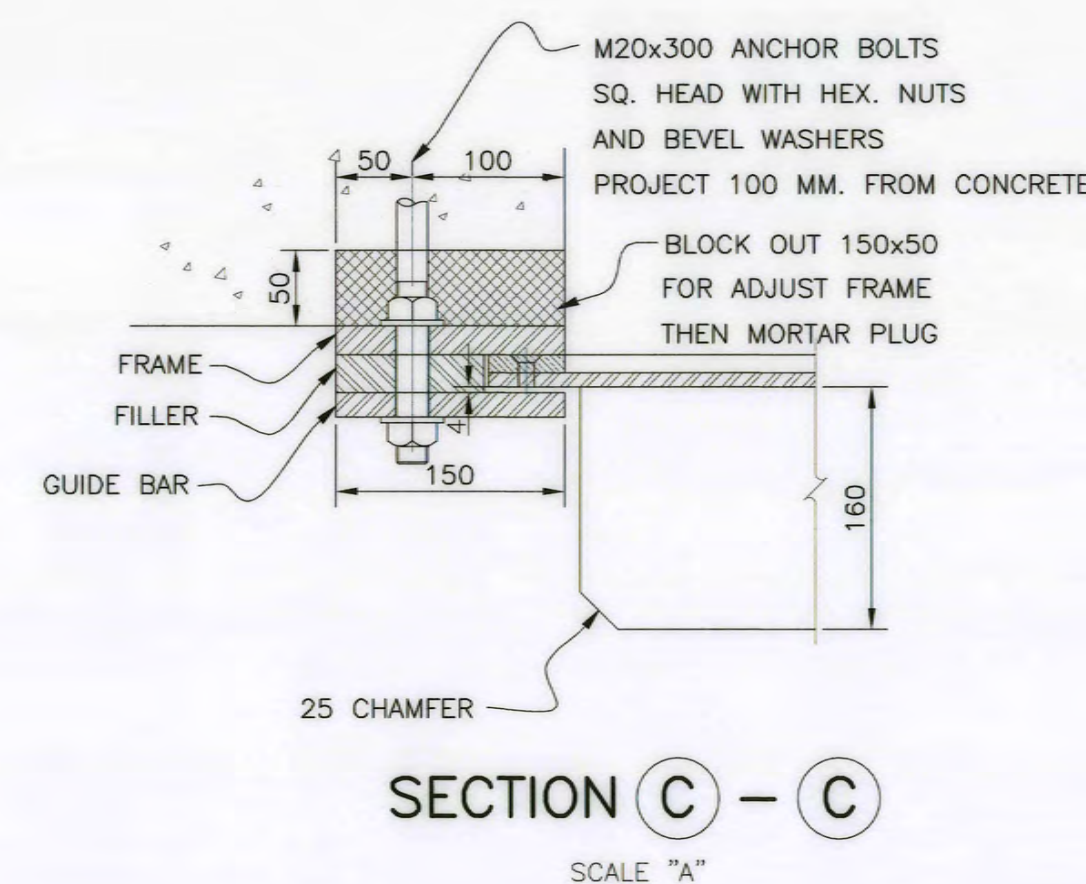
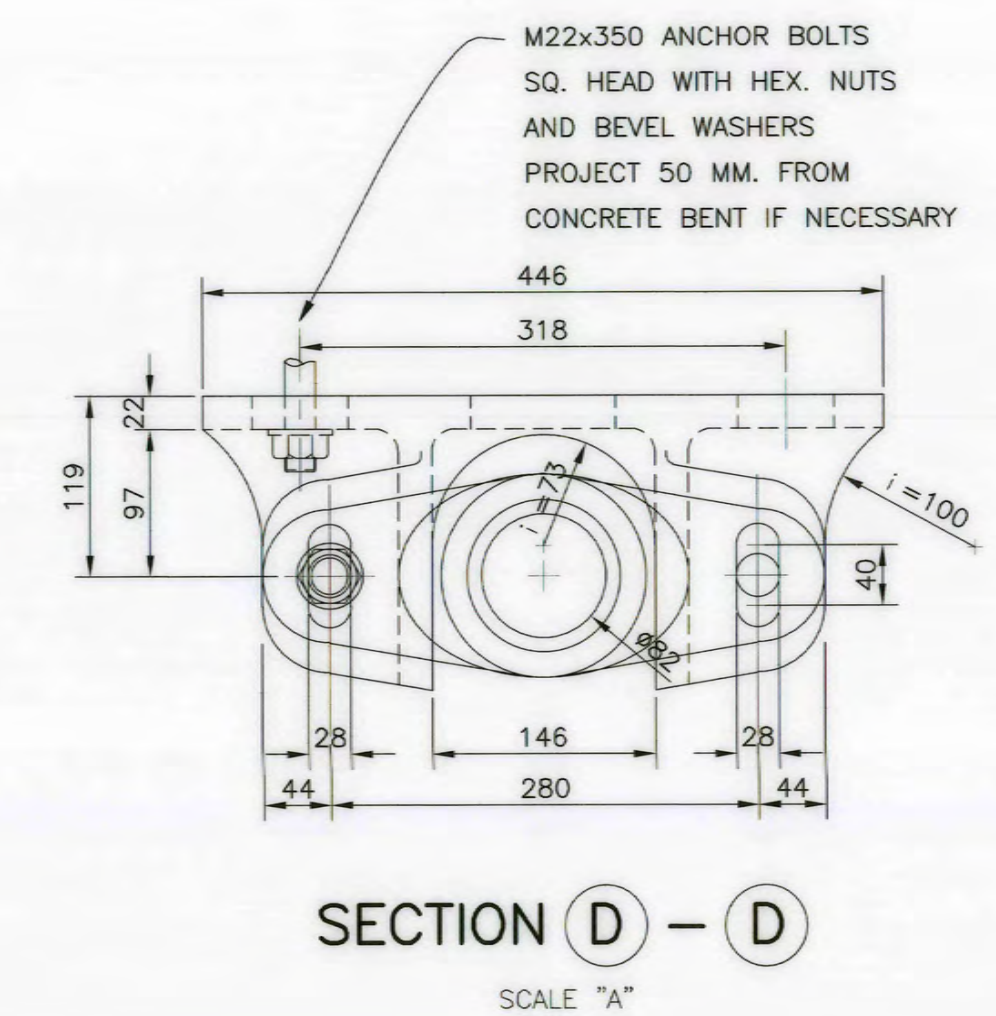
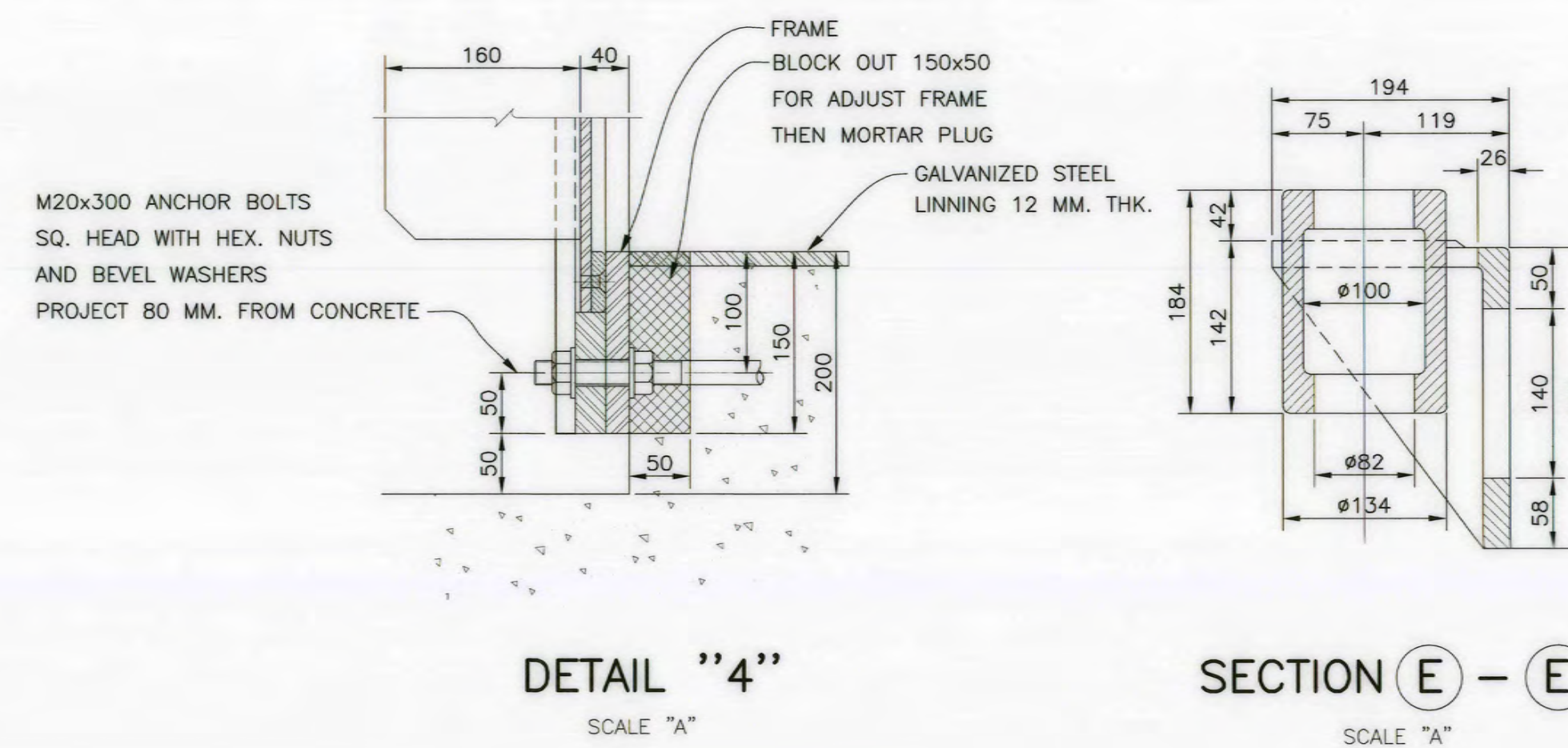
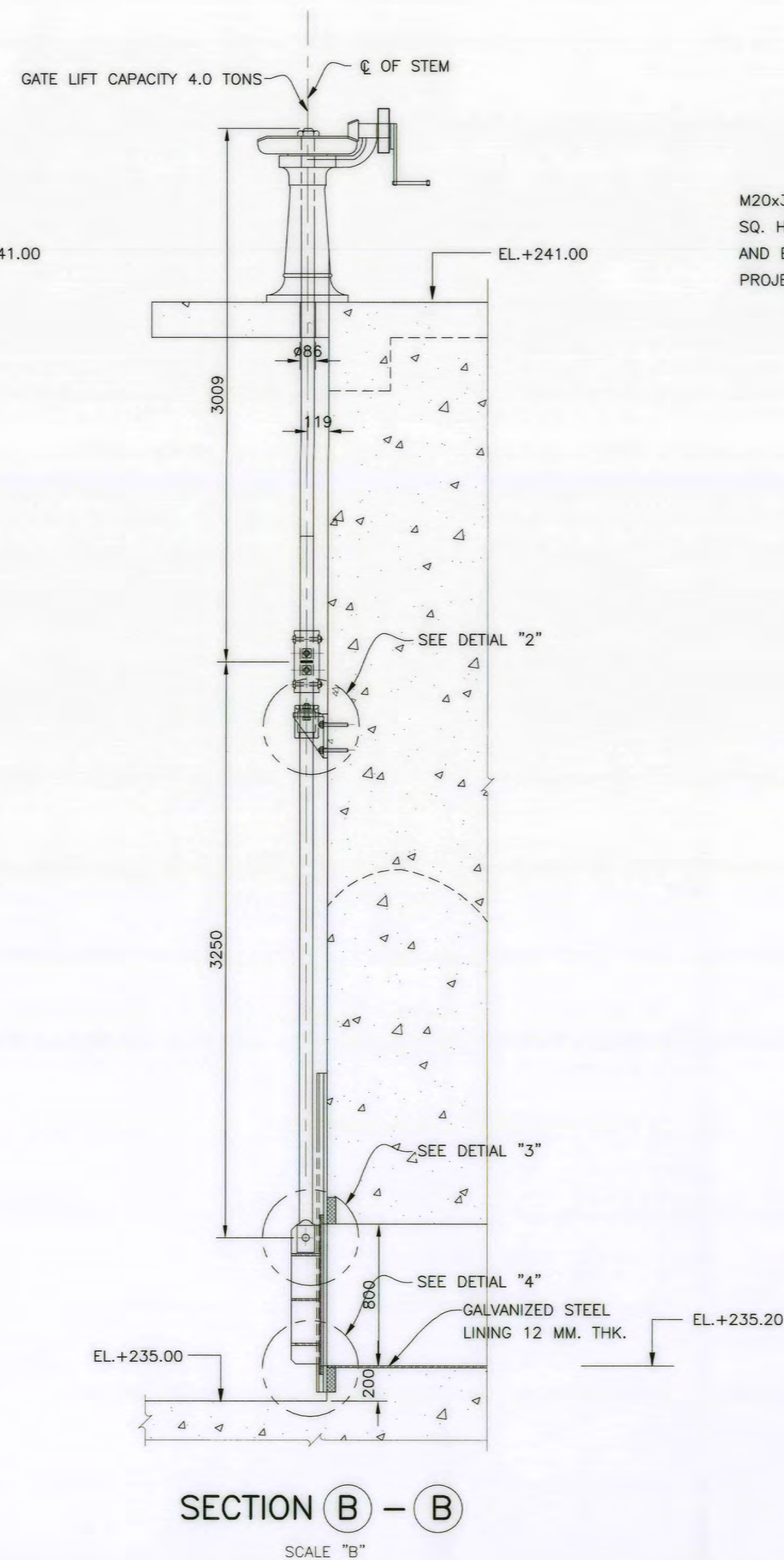
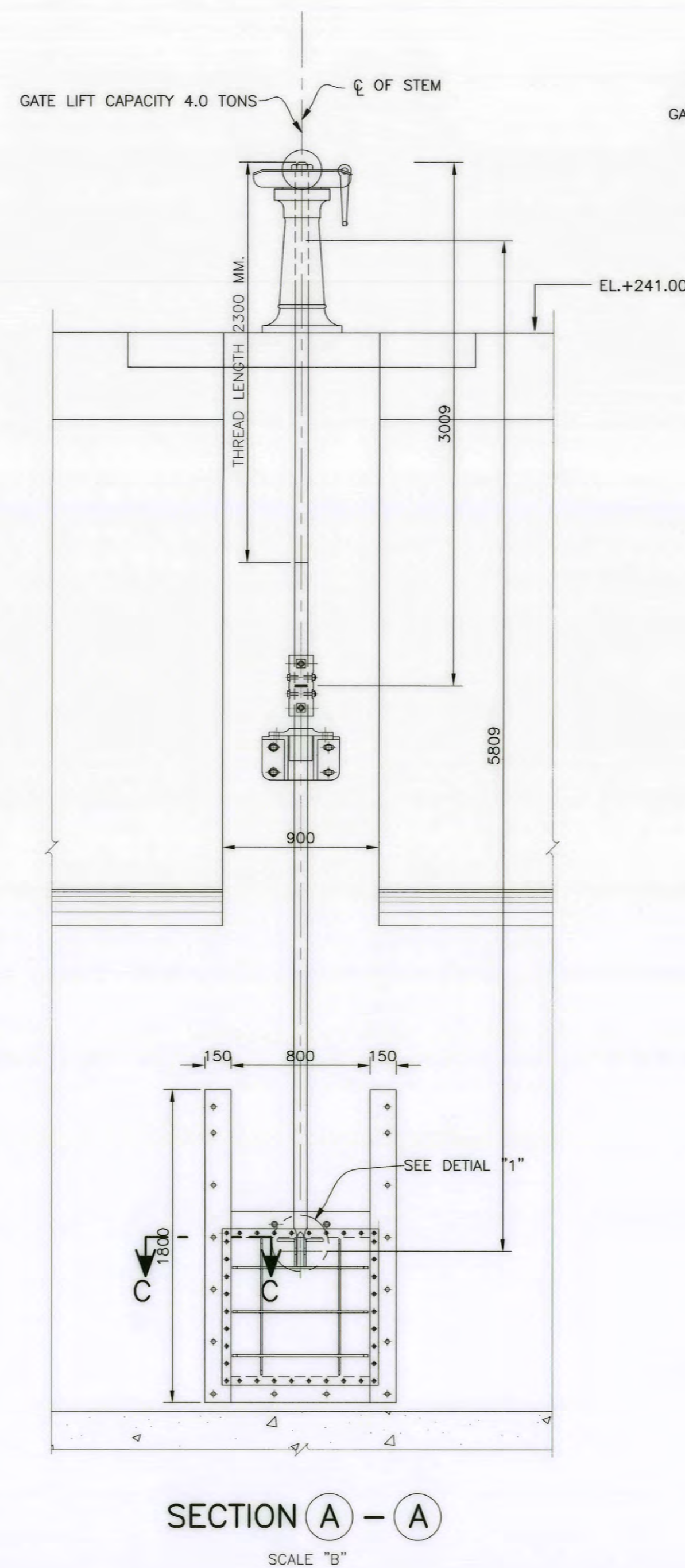
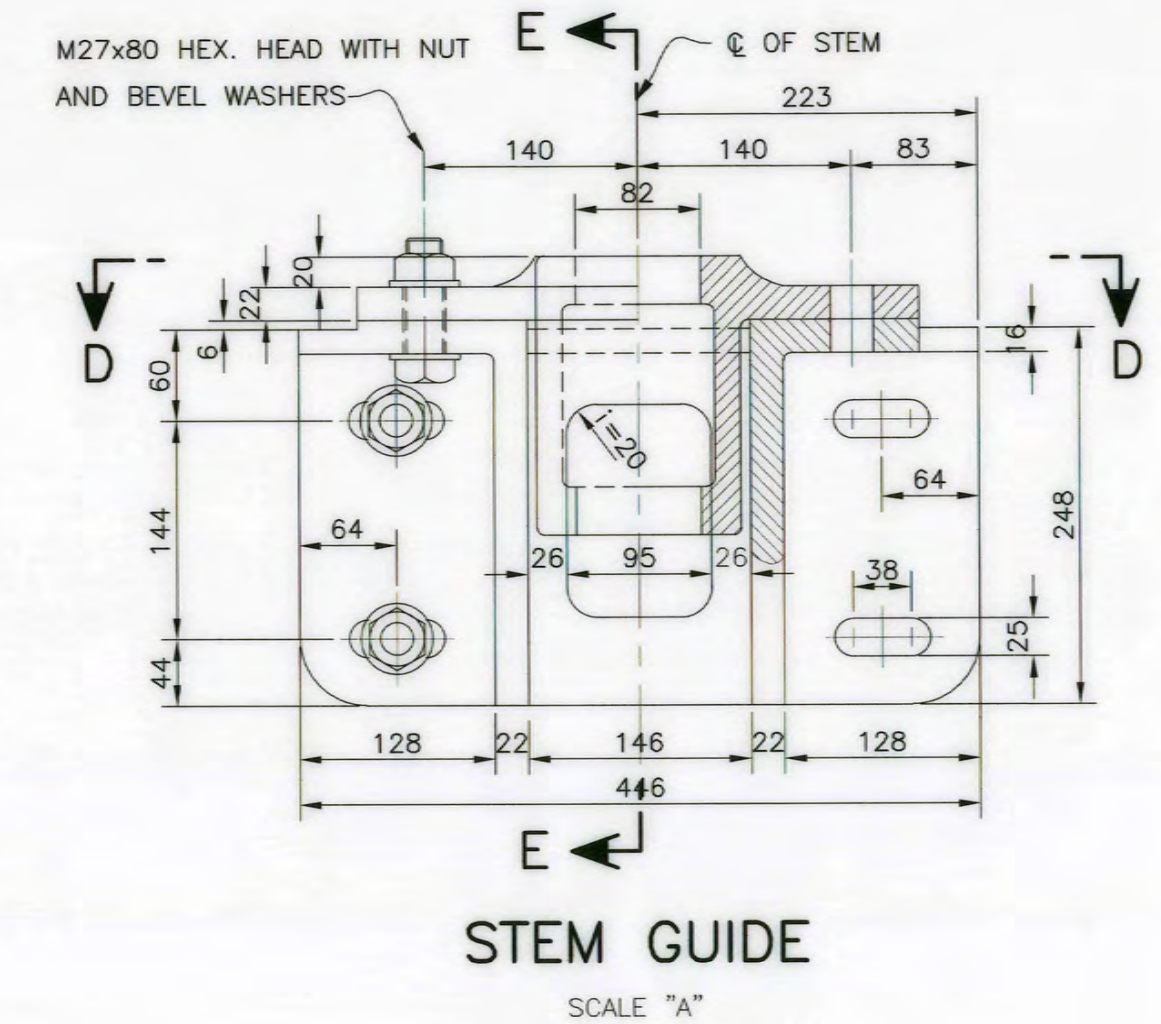
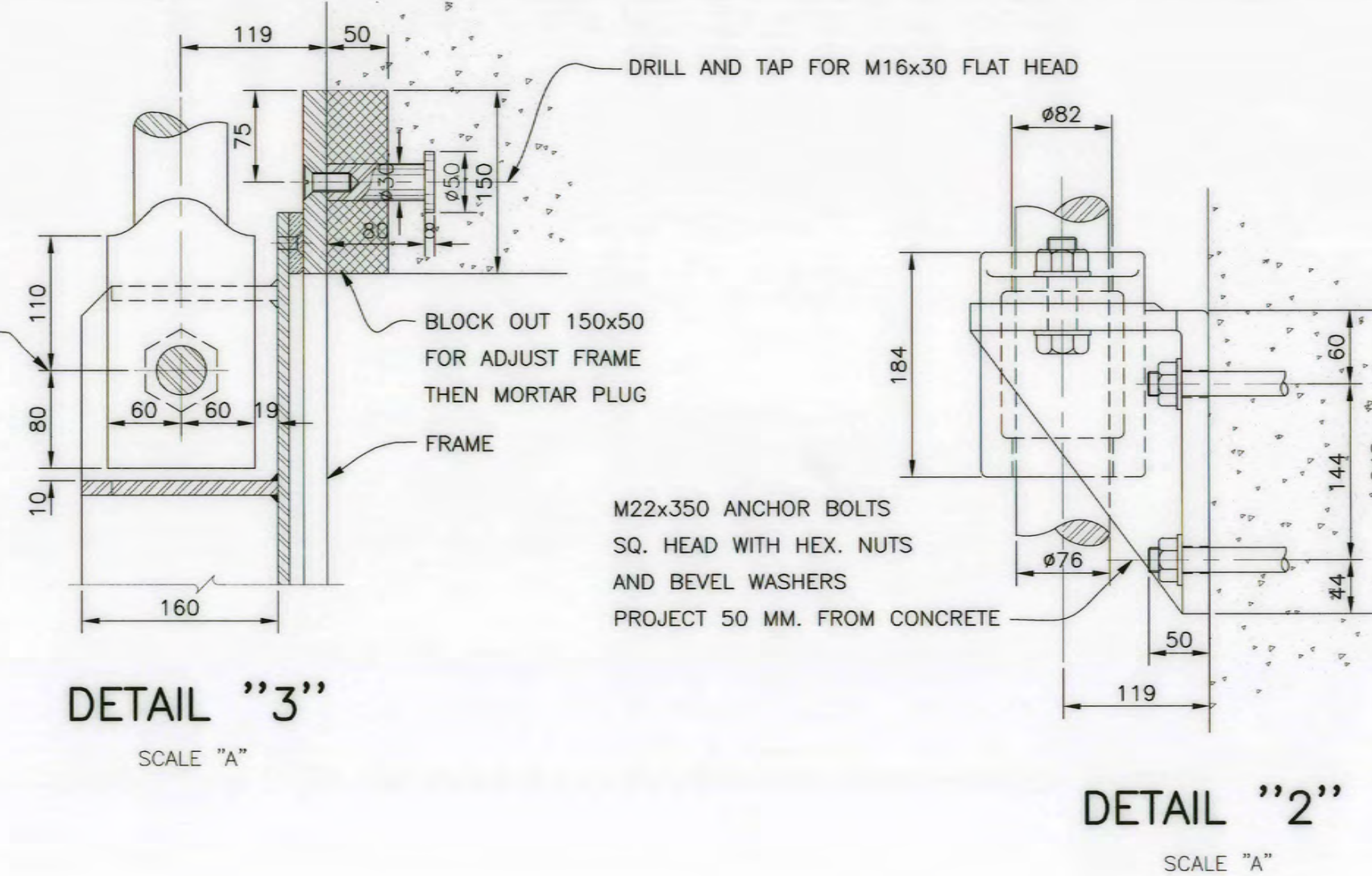
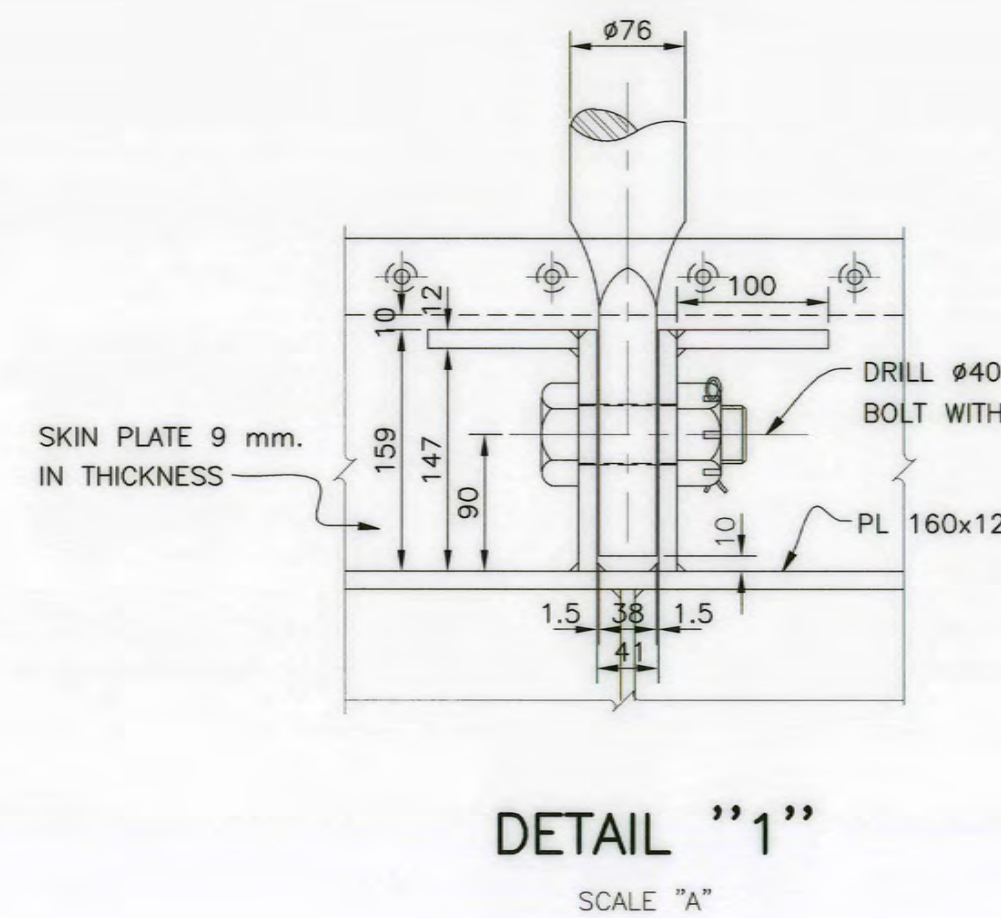
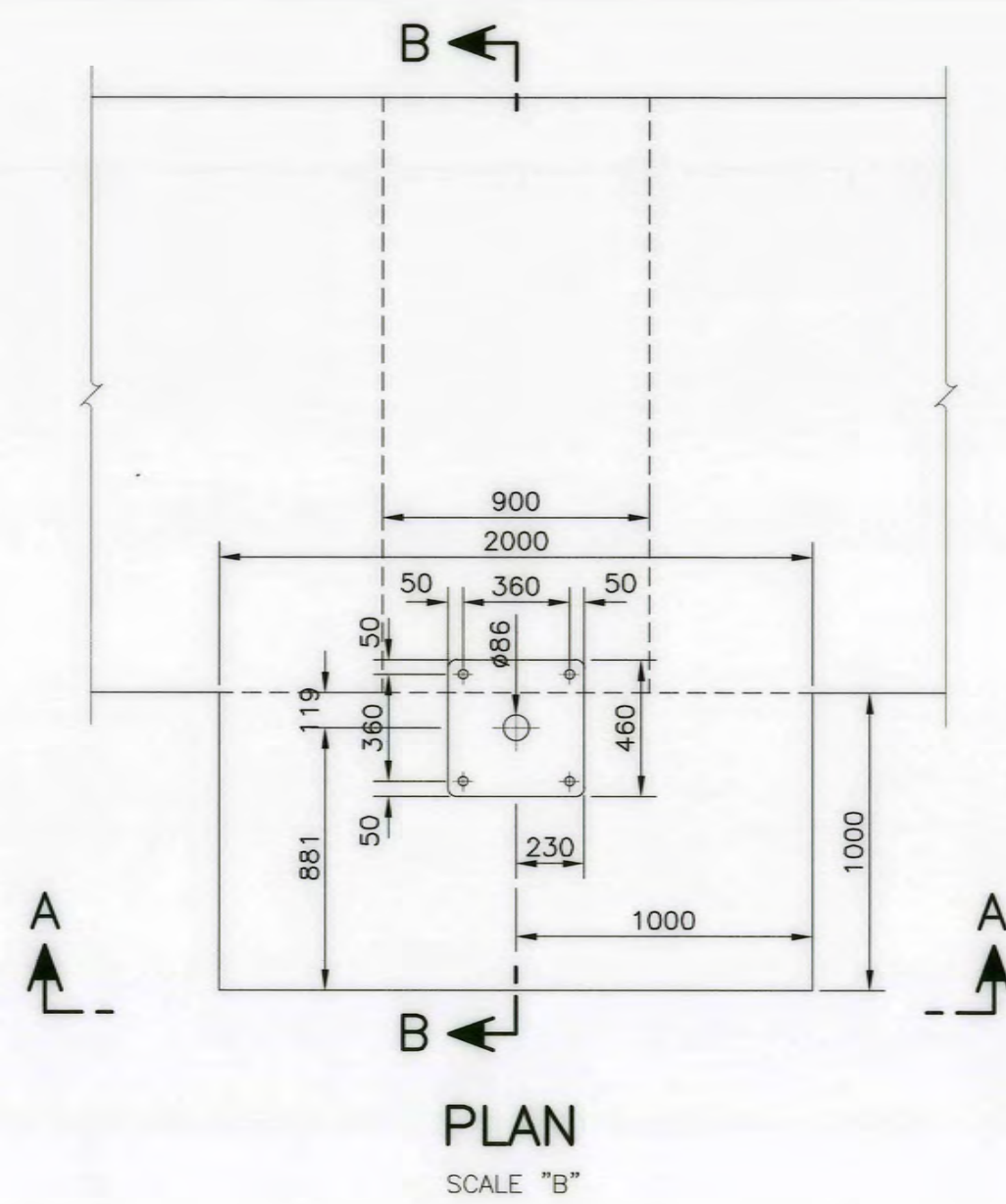


PVC WATERSTOP  
(TYPE "A" & TYPE "B" )  
NOT TO SCALE



1. ALL DIMENSIONS AND ELEVATIONS (M.S.L.) ARE IN METERS, UNLESS OTHERWISE SHOWN.
2. SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SEE DWG. NO. AKP-GN-03.
3. PVC PLUG HOLES TIGHT AND STICK WITH PVC WATERSTOP.
4. BOLTS WITH HEX. NUTS ARE BRASS OR STAINLESS.

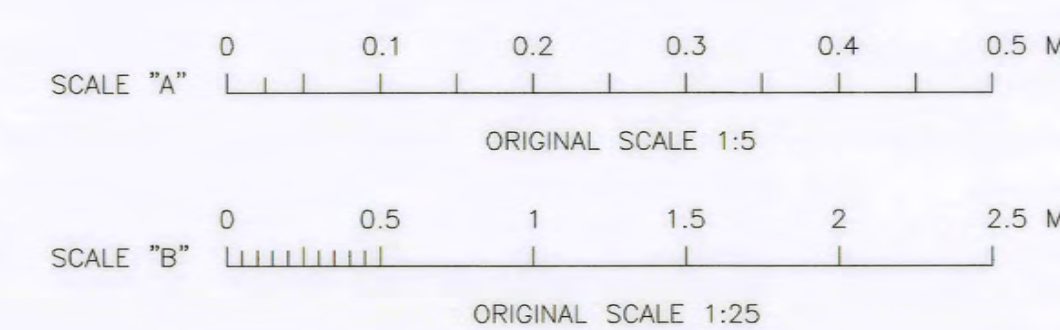
|                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                 |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
|  <p style="margin: 0;">KINGDOM OF THAILAND<br/>Department of Alternative<br/>Energy Development and Efficiency<br/><b>MINISTRY OF ENERGY</b></p>                                                                                                                                     |                                                                                                                                                 |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |                                                                                                                         |
| <p style="margin: 0;"><b>AI KA PO HYDROPOWER PROJECT</b></p> <p style="margin: 0;"><b>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAR</b></p>                                                                                                                                                                                                                    |                                                                                                                                                 |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |                                                                                                                         |
| <p style="margin: 0;"><b>PART : 1 CIVIL WORKS AND TRANSMISSION LINE</b></p> <p style="margin: 0;"><b>WEIR</b></p> <p style="margin: 0;"><b>STANDARD PVC WATERSTOP, SECTION AND DETAILS</b></p>                                                                                                                                                                            |                                                                                                                                                 |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |                                                                                                                         |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">  </td> <td style="width: 90%;"> <p style="margin: 0;">P&amp;C MANAGEMENT CO., LTD.</p> <p style="margin: 0;">SPT CONSULTANTS CO., LTD.</p> </td> </tr> </table> |                                                            | <p style="margin: 0;">P&amp;C MANAGEMENT CO., LTD.</p> <p style="margin: 0;">SPT CONSULTANTS CO., LTD.</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">  </td> <td style="width: 90%;"> <p style="margin: 0;">Department of Alternative<br/>Energy Development and Efficiency<br/><b>MINISTRY OF ENERGY</b></p> </td> </tr> </table> |  | <p style="margin: 0;">Department of Alternative<br/>Energy Development and Efficiency<br/><b>MINISTRY OF ENERGY</b></p> |
|                                                                                                                                                                                                                                                                                      | <p style="margin: 0;">P&amp;C MANAGEMENT CO., LTD.</p> <p style="margin: 0;">SPT CONSULTANTS CO., LTD.</p>                                      |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |                                                                                                                         |
|                                                                                                                                                                                                                                                                                      | <p style="margin: 0;">Department of Alternative<br/>Energy Development and Efficiency<br/><b>MINISTRY OF ENERGY</b></p>                         |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |                                                                                                                         |
| <p>DESIGNED <i>[Signature]</i> 28.12.90/74 <i>[Signature]</i> 28.12.94/82</p> <p>DRAWN <i>[Signature]</i></p> <p>CHECKED <i>[Signature]</i> 28.12.93/1</p>                                                                                                                                                                                                                | <p>REVIEWED <i>[Signature]</i></p> <p>SUBMITTED <i>[Signature]</i></p> <p>RECOMMENDED <i>[Signature]</i></p> <p>APPROVED <i>[Signature]</i></p> |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |                                                                                                                         |
| <p><b>PROJECT MANAGER</b></p> <p><b>DATE</b></p>                                                                                                                                                                                                                                                                                                                          | <p><b>DRAWING NO.</b></p> <p><b>AKP-WE-09</b></p>                                                                                               |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                           | <p><b>SHEET NO.</b></p> <p><b>21 OF 129</b></p>                                                                                                 |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |                                                                                                                         |



- NOTE :**
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SHOWN.
  2. ALL WELDING WILL BE 6 MILLIMETERS, UNLESS OTHERWISE SHOWN.
  3. ALL BOLTS AND NUTS USE ASTM A325
  4. ALL STRUCTURAL STEELS ARE JIS G 3101 SS400
  5. ALL STAINLESS STEELS PLATES ARE JIS G 4304 SUS 304
  6. THIS DRAWING IS DESIGNED FOR GUIDE LINE ONLY, THE CONTRACTOR HAS TO SUBMITTED SHOP DRAWING TO FIELD ENGINEER FOR APPROVAL.

- REFERENCE DWGS :**
1. WEIR, SECTIONS B-B, C-C AND D-D AKP-WE-03
  2. WEIR, 0.80x0.80 SAND SLUICE GATE (GATE DETAIL) AKP-WE-11
  3. WEIR, GATE LIFT, CAPACITY 4.0 TONS AKP-WE-14

|                                                                                                                              |                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| KINGDOM OF THAILAND<br>Department of Alternative Energy Development and Efficiency<br><b>MINISTRY OF ENERGY</b>              |                                                                                          |
| <b>AI KA PO HYDROPOWER PROJECT</b><br><b>TAMBON PHUKHAO THONG AMPHOE SUKHIRIN CHANGWAT NARATHIWAT</b>                        |                                                                                          |
| <b>PART : 1 CIVIL WORKS AND TRANSMISSION LINE</b><br><b>WEIR</b><br><b>0.80x0.80 m. SAND SLUICE GATE (GATE INSTALLATION)</b> |                                                                                          |
| P&C MANAGEMENT CO., LTD.<br>SPT CONSULTANTS CO., LTD.                                                                        | Department of Alternative Energy Development and Efficiency<br><b>MINISTRY OF ENERGY</b> |
| DESIGNED <i>mm</i> 28/10/2021                                                                                                | REVIEWED <i>mm</i>                                                                       |
| DRAWN <i>mm</i>                                                                                                              | SUBMITTED <i>mm</i>                                                                      |
| CHECKED <i>mm</i>                                                                                                            | RECOMMENDED <i>mm</i>                                                                    |
| APPROVED <i>mm</i> 28/10/2021                                                                                                | APPROVED <i>mm</i>                                                                       |
| PROJECT MANAGER                                                                                                              | DRAWING NO. AKP-WE-10                                                                    |
| DATE                                                                                                                         | SHEET NO. 22 OF 129                                                                      |



| 3   |      |           |         |          |
|-----|------|-----------|---------|----------|
| 2   |      |           |         |          |
| 1   |      |           |         |          |
| NO. | DATE | REVISIONS | CHECKED | APPROVED |
|     |      |           |         |          |
|     |      |           |         |          |