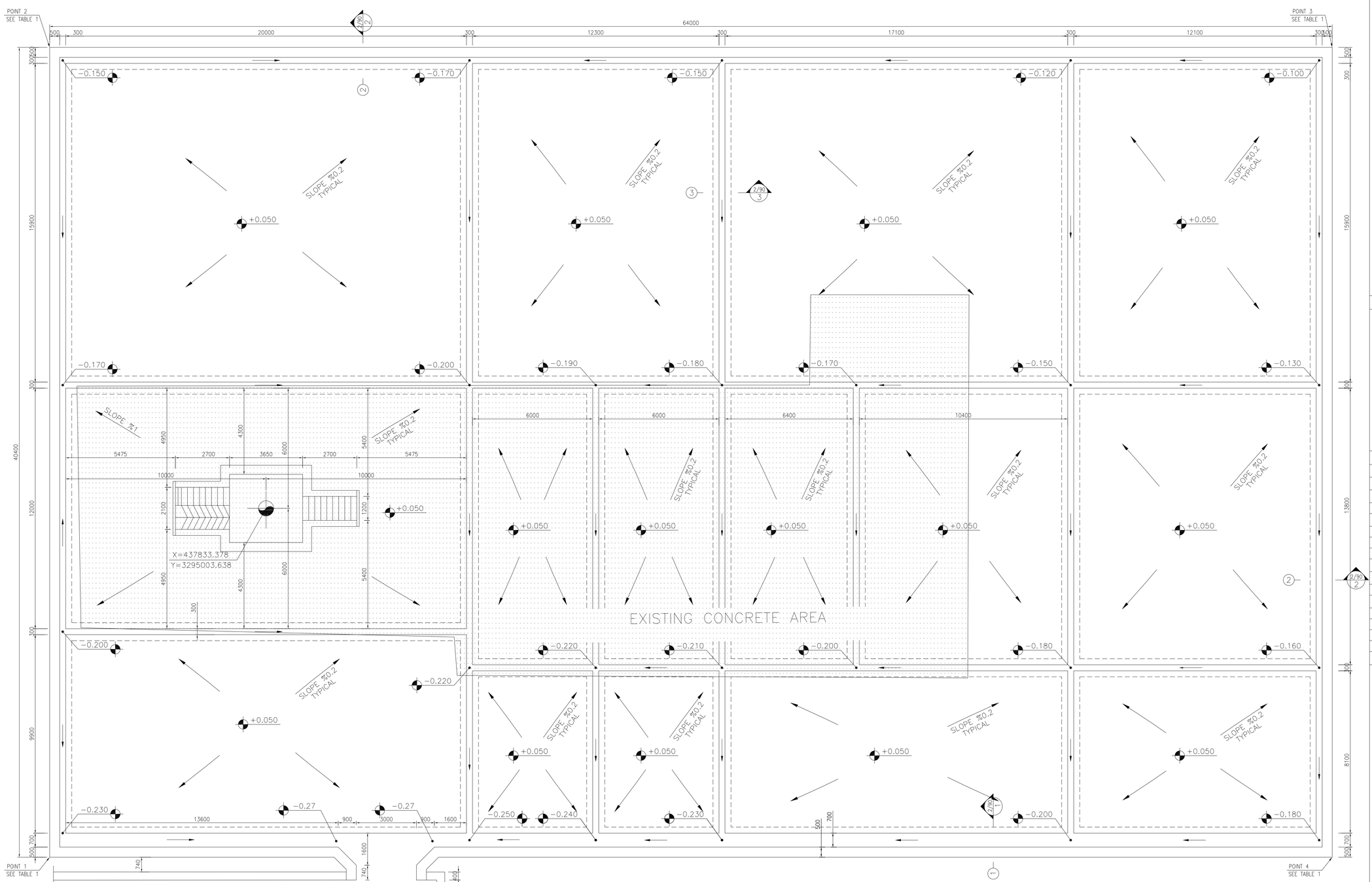


WELLPAD FOUNDATION PLAN
1:100 — FORMWORK

| TABLE 1 (CORNERS COORDINATES) | | |
|---|---|---|
| POINT 1 | E=437816.524 | N=3294992.005 |
| POINT 2 | E=437832.672 | N=3295029.038 |
| POINT 3 | E=437891.337 | N=3295003.457 |
| POINT 4 | E=437875.190 | N=3294966.425 |

## NOTES

1- ALL COORDINATES ARE IN METER.
2- ALL DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS ARE IN METER.
3- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.
4- ACCORDING TO THE SPECIFICATION OF CONCRETE WORKS: "BK-GNRL-PEDCO-000-ST-SP-0001",28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH OF MAIN CONCRETE IS 25 MPa(ON CYLINDRICAL SPECIMEN)
5- ACCORDING TO THE SPECIFICATION OF CONCRETE WORKS: "BK-GNRL-PEDCO-000-ST-SP-0001",28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH OF LEAN CONCRETE IS 15 MPa(ON CYLINDRICAL SPECIMEN)
6- REINFORCING BARS SHALL BE S400 ACCORDING TO: ISIRI3132 AND INBC9 WITH MINIMUM TENSILE YIELD STRENGTH 400 N/mm^2
7- MINIMUM FOUNDATION NET CONCRETE COVER SHALL BE 75 mm.
8- SPECIFICATIONS OF THERMO PLAST ACRYLIC COLOR, BASED ON No.3758 NATIONAL STANDARD CODE:
DENSITY : 4.1-5.1 gr/cm³
THICKNESS : 300-400 MICRON
GLOSS : DULL
SOLID MATERIAL PERCENTAGE BY WEIGHT : 75%±2
SOLID MATERIAL PERCENTAGE BY VOLUME : 48%±2
9- JOINT SEALANT MATERIALS SHALL BE WETHER-RESISTANT POLYURETHANE OR SILICONE SCH AS "AEROLASTIC 1674" OR SIMILAR AND SHALL CONFORM TO BS-4254 FOR VERTICAL JOINTS IN WALLS.
10- CONTRACTION JOINTS SHALL BE CONSIDERED IN CONCRETE SLABS EVERY 6m.
11- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:
HORIZONTAL COORDINATE SYSTEM: WGS84/UTM ZONE 39
ELLIPSOID : WORLD GEODETIC SYSTEM 1984 (WGS84)
MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR (UTM)
VERTICAL DATUM: MSL

±0.00 = +186.00(R.G.L.)MSL

## LEGEND AND ABBREVIATION

| | | | |
|---|---|---|---|
| REINFORCED CONCRETE | T.O.F. | TOP OF FOUNDATION |
| LEAN CONCRETE | T.O.W. | TOP OF WALL |
| CEMENT BLOCK WALL | T.O.C. | TOP OF CONCRETE |
| GRAVEL | T.O.PIT | TOP OF PIT |
| SUB GRADE | B.O.P. | BOTTOM OF PIPE |
| SLOPE | R.G.L. | ROUGH GRADING LEVEL |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| SPECIFICATION FOR FENCE & GATE | BK-GNRAL-PEDCO-000-CV-SP-0003 |
| GENERAL NOTES - STEEL STRUCTURES | BK-GNRAL-PEDCO-000-ST-DW-0011 |
| GENERAL NOTES - REINFORCED CONCRETE STRUCTURES | BK-GNRAL-PEDCO-000-ST-DW-0012 |
| GENERAL CIVIL LAYOUT - BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| ROUGH GRADING PLANS - BK14 | BK-BK14-PEDCO-110-CV-DW-0003 |
| STANDARD DRAWING FOR CULVERT & DETAILS | BK-GNRAL-PEDCO-000-CV-DW-0014 |
| STANDARD DETAILS OF MISCELLANEOUS ITEMS | BK-GNRAL-PEDCO-000-CV-DW-0040 |
| SPECIFICATION FOR EARTH WORK | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| FOUNDATION DRAWING FOR SECURITY BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0002 |
| STRUCTURAL DRAWING FOR SECURITY BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0003 |
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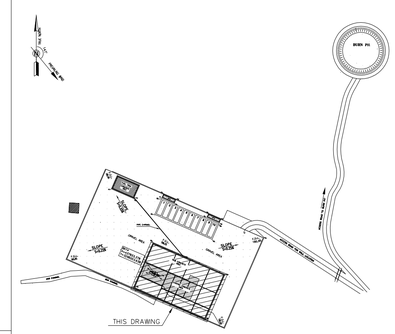
| FOUNDATION DRAWING FOR POTABLE WATER TANK FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0006 |
| FOUNDATION DRAWING FOR DIESEL GENERATOR SHELTER FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0007 |
| STRUCTURAL DRAWING FOR DIESEL GENERATOR SHELTER FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0008 |

KEY PLAN




| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |
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| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |

| REV. | DESCRIPTION | CHECKED BY | DATE | APPR. BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS
PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS-BK14
WELLPAD FOUNDATION FORMWORK PLAN

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 01 OF 90 | D01 |


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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
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| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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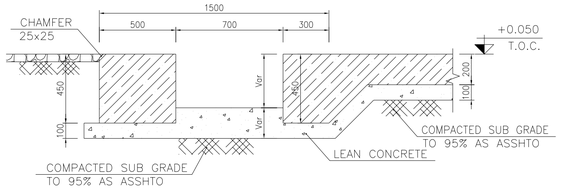
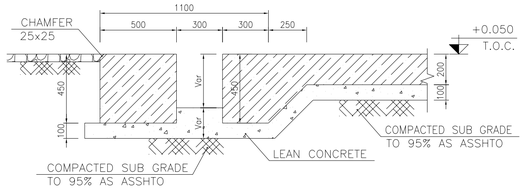
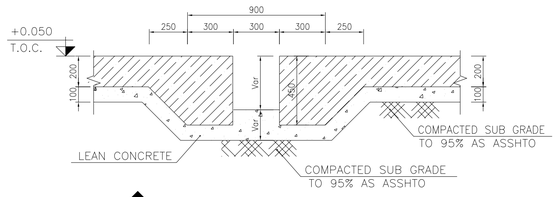


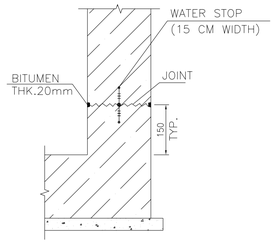

1/90 1:20 — 1 — TYPICAL CHANNEL SECTION IN BOUNDARY SIDE



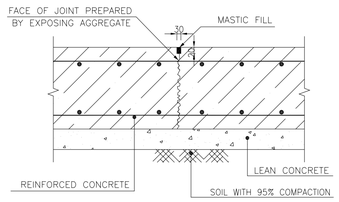

1/90 1:20 — 2 — TYPICAL CHANNEL SECTION IN BOUNDARY SIDE



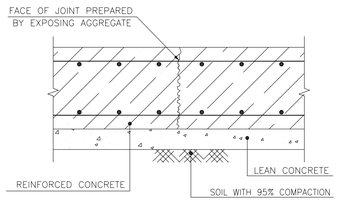

1/90 1:20 — 3 — TYPICAL CHANNEL SECTION IN MIDDLE SIDE



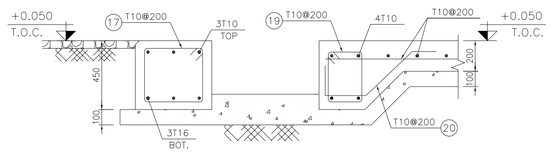

N.T.S. — 4 — TYPICAL DETAIL OF WATER STOP



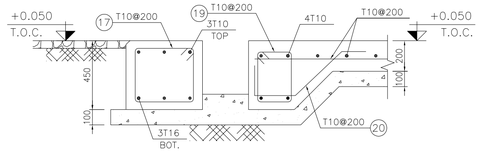

N.T.S. — 5 — TYPICAL CONTRACTION JOINT EVERY 6000



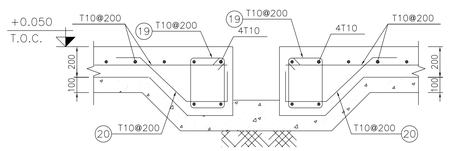

N.T.S. — 6 — TYPICAL CONSTRUCTION JOINT




3/90 1:20 — 7 — TYPICAL CHANNEL SECTION IN BOUNDARY SIDE




3/90 1:20 — 8 — TYPICAL CHANNEL SECTION IN BOUNDARY SIDE




3/90 1:20 — 9 — TYPICAL CHANNEL SECTION IN MIDDLE SIDE

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| | |
|---|---|
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| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

±0.00 = +186.00(R.G.L.)MSL

## LEGEND AND ABBREVIATION

REINFORCED CONCRETE
LEAN CONCRETE
CEMENT BLOCK WALL
GRAVEL
SUB GRADE
SLOPE

| | |
|---|---|
| T.O.F. | TOP OF FOUNDATION |
| T.O.W. | TOP OF WALL |
| T.O.C. | TOP OF CONCRETE |
| T.O.PIT | TOP OF PIT |
| B.O.P. | BOTTOM OF PIPE |
| R.G.L. | ROUGH GRADING LEVEL |

| REFERENCE DRAWING | DRG. No. |
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| SPECIFICATION FOR FENCE & GATE | BK-GNRAL-PEDCO-000-CV-SP-0003 |
| GENERAL NOTES - STEEL STRUCTURES | BK-GNRAL-PEDCO-000-ST-DW-0011 |
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| GENERAL CIVIL LAYOUT - BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
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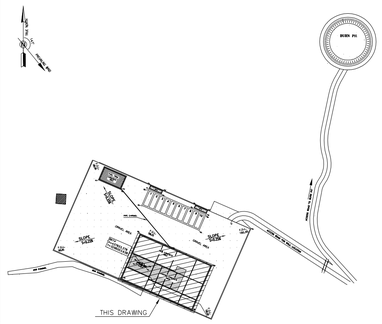
## KEY PLAN

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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
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DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS-BK14
WELLPAD AND RIG FOUNDATION DETAILS & SECTIONS

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 02 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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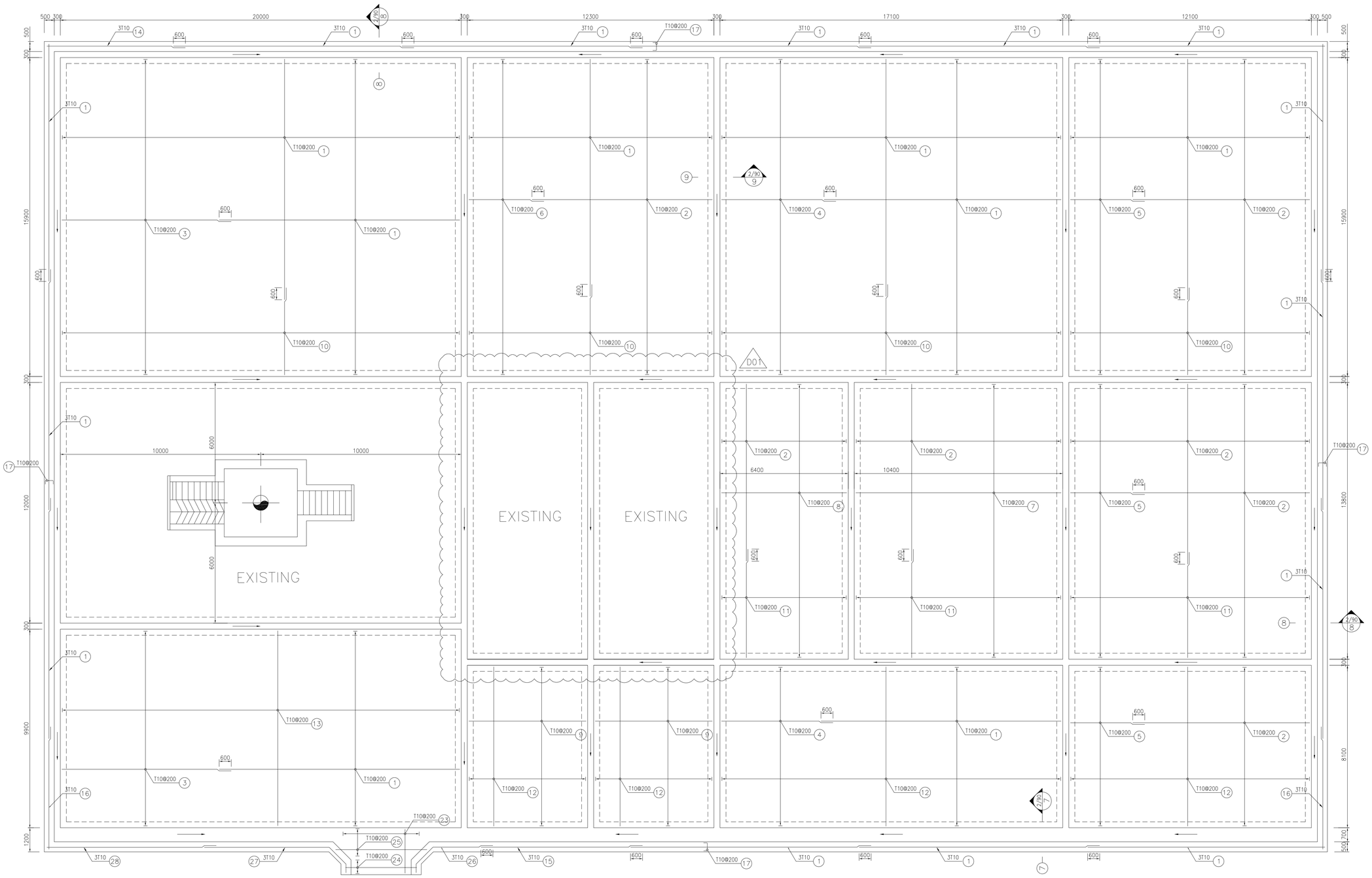


WELLPAD FOUNDATION PLAN
REINFORCEMENT
1:100

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## LEGEND AND ABBREVIATION

REINFORCED CONCRETE
LEAN CONCRETE
CEMENT BLOCK WALL
GRAVEL
SUB GRADE
SLOPE

| | |
|---|---|
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| T.O.W. | TOP OF WALL |
| T.O.C. | TOP OF CONCRETE |
| T.O.PIT | TOP OF PIT |
| B.O.P. | BOTTOM OF PIPE |
| R.G.L. | ROUGH GRADING LEVEL |

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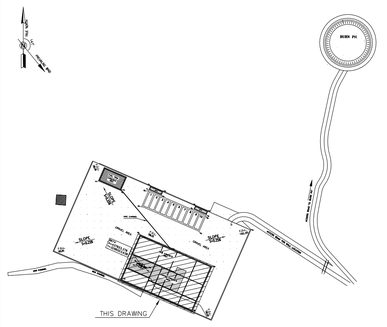
## KEY PLAN

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EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION | BY: | DATE:

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS-BK14
WELLPAD FOUNDATION REINFORCEMENT PLAN

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 03 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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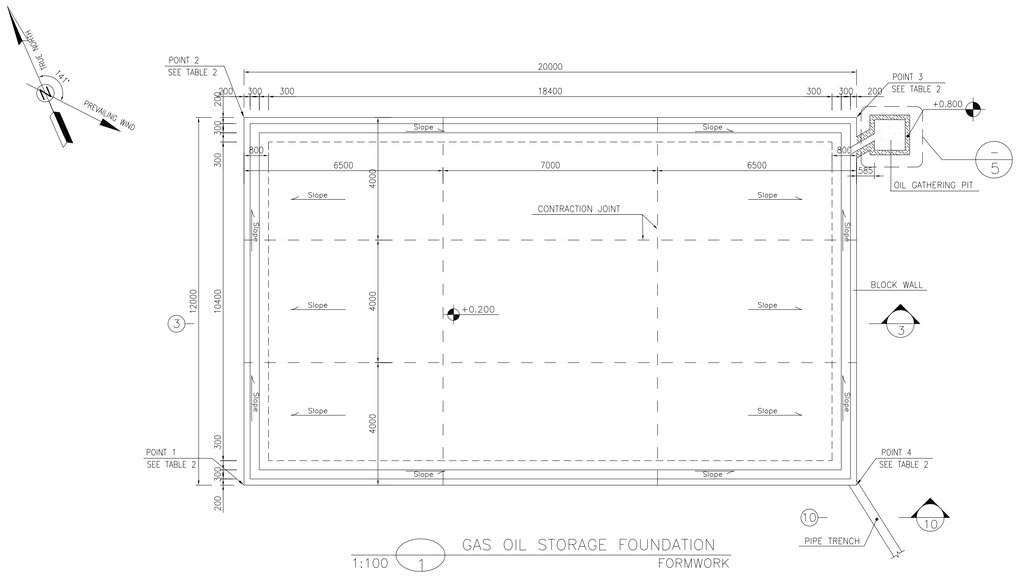
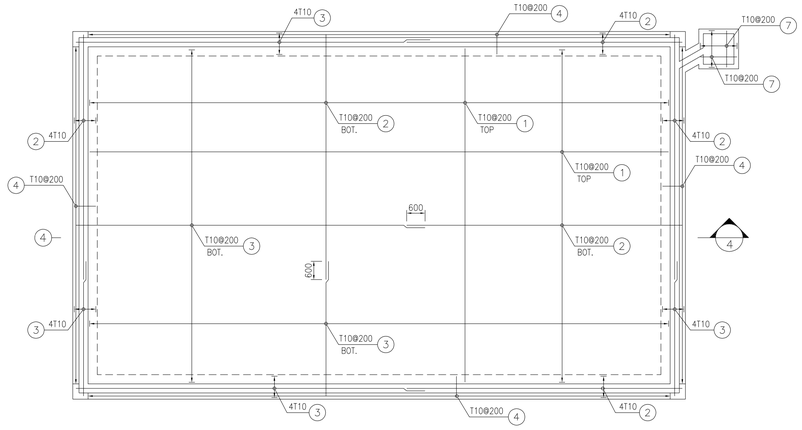
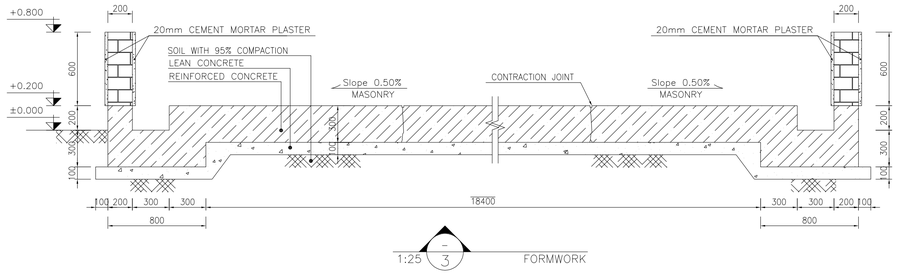
| 053-073-9184 | F | 4 | S | 708209 | 3 | D01 |



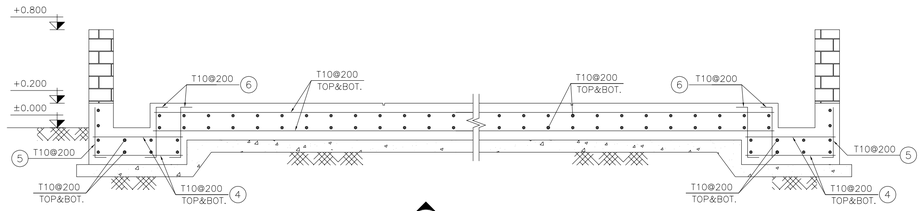

GAS OIL STORAGE FOUNDATION
1:100 1 FORMWORK



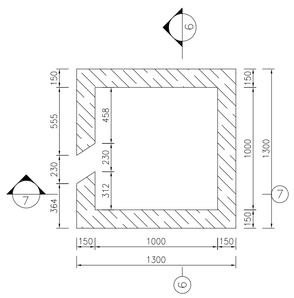

GAS OIL STORAGE FOUNDATION
1:100 2 REINFORCEMENT



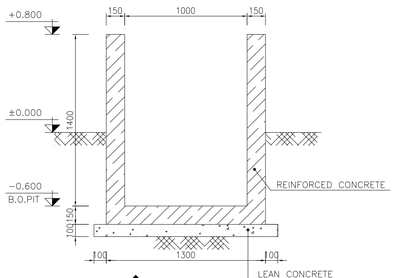

1:25 3 FORMWORK




1:25 4 REINFORCEMENT




1:25 5 OIL GATHERING PIT

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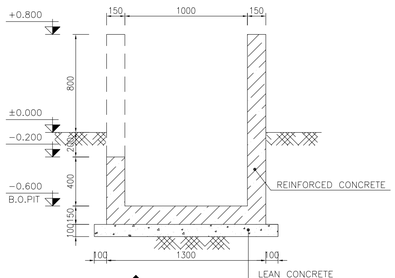


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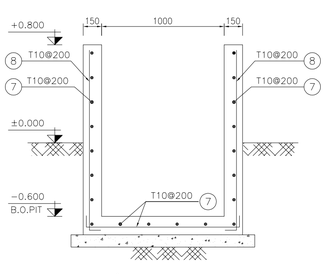


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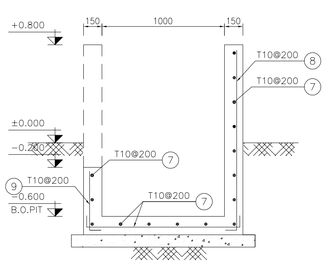
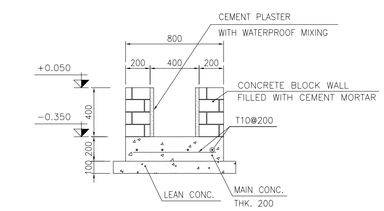



1:25 9 REINFORCEMENT




TYPICAL SECTION OF PIPE TRENCH
1:25 10

| TABLE 2 (CORNERS COORDINATES) | | |
|---|---|---|
| POINT 1 | E=437798.09 | N=3295073.04 |
| POINT 2 | E=437802.89 | N=3295084.04 |
| POINT 3 | E=437821.22 | N=3295076.05 |
| POINT 4 | E=437816.43 | N=3295065.05 |

## NOTES

1- ALL COORDINATES ARE IN METER.
2- ALL DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS ARE IN METER.
3- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.
4- ACCORDING TO THE SPECIFICATION OF CONCRETE WORKS: "BK-GNRL-PEDCO-000-ST-SP-0001",28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH OF MAIN CONCRETE IS 25 MPa(ON CYLINDRICAL SPECIMEN)
5- ACCORDING TO THE SPECIFICATION OF CONCRETE WORKS: "BK-GNRL-PEDCO-000-ST-SP-0001",28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH OF LEAN CONCRETE IS 15 MPa(ON CYLINDRICAL SPECIMEN)
6- REINFORCING BARS SHALL BE S400 ACCORDING TO: ISIRI31.32 AND INBC9 WITH MINIMUM TENSILE YIELD STRENGTH 400 N/mm^2
7- MINIMUM FOUNDATION NET CONCRETE COVER SHALL BE 75 mm.
8- SPECIFICATIONS OF THERMO PLAST ACRYLIC COLOR,
BASED ON No.3758 NATIONAL STANDARD CODE:
DENSITY : 4.1-5.1 gr/cm³
THICKNESS : 300-400 MICRON
GLOSS : DULL
SOLID MATERIAL PERCENTAGE BY WEIGHT : 75%±2
SOLID MATERIAL PERCENTAGE BY VOLUME : 48%±2
9- JOINT SEALANT MATERIALS SHALL BE WETHER-RESISTANT POLYURETHANE OR SILICONE SCH AS "AEROLASTIC 1674" OR SIMILAR AND SHALL CONFORM TO BS-4254 FOR VERTICAL JOINTS IN WALLS.
10- CONTRACTION JOINTS SHALL BE CONSIDERED IN CONCRETE SLABS EVERY 6m.
11- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

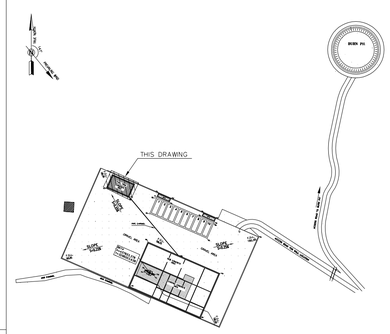
±0.00 = +186.00(R.G.L.)MSL

## LEGEND AND ABBREVIATION

| | | |
|---|---|---|
| REINFORCED CONCRETE | T.O.F. | TOP OF FOUNDATION |
| LEAN CONCRETE | T.O.W. | TOP OF WALL |
| CEMENT BLOCK WALL | T.O.C. | TOP OF CONCRETE |
| GRAVEL | T.O.PIT | TOP OF PIT |
| SUB GRADE | B.O.P. | BOTTOM OF PIPE |
| SLOPE | R.G.L. | ROUGH GRADING LEVEL |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| SPECIFICATION FOR FENCE & GATE | BK-GNRAL-PEDCO-000-CV-SP-0003 |
| GENERAL NOTES - STEEL STRUCTURES | BK-GNRAL-PEDCO-000-ST-DW-0011 |
| GENERAL NOTES - REINFORCED CONCRETE STRUCTURES | BK-GNRAL-PEDCO-000-ST-DW-0012 |
| GENERAL CIVIL LAYOUT - BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| ROUGH GRADING PLANS - BK14 | BK-BK14-PEDCO-110-CV-DW-0003 |
| STANDARD DRAWING FOR CULVERT & DETAILS | BK-GNRAL-PEDCO-000-CV-DW-0014 |
| STANDARD DETAILS OF MISCELLANEOUS ITEMS | BK-GNRAL-PEDCO-000-CV-DW-0040 |
| SPECIFICATION FOR EARTH WORK | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| FOUNDATION DRAWING FOR SECURITY BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0002 |
| STRUCTURAL DRAWING FOR SECURITY BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0003 |
| FOUNDATION DRAWING FOR SWICHGEAR BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0004 |
| STRUCTURAL DRAWING FOR SWICHGEAR BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0005 |
| FOUNDATION DRAWING FOR POTABLE WATER TANK FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0006 |
| FOUNDATION DRAWING FOR DIESEL GENERATOR SHELTER FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0007 |
| STRUCTURAL DRAWING FOR DIESEL GENERATOR SHELTER FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0008 |

## KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | ** ** | *** **** | ** ** | *** **** |
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS
PROJECT NO.: 971020
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR(GC): PEDCO PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS-BK14
GAS OIL PAD FORMWORK & REINFORCEMENT PLAN-SECTION

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 04 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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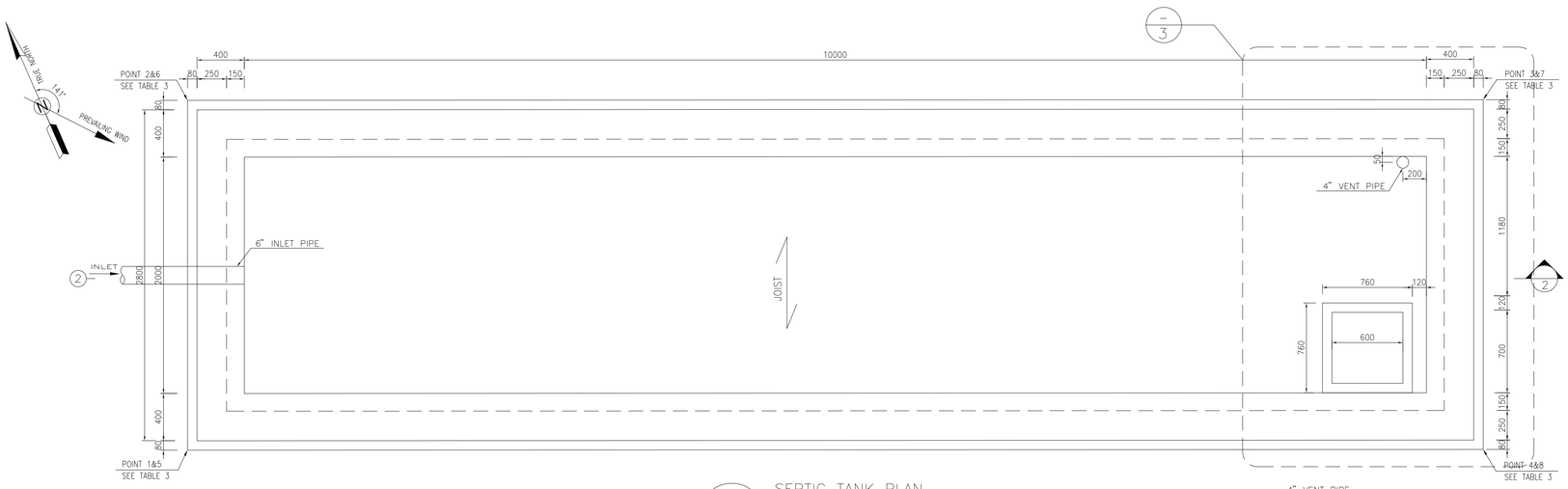
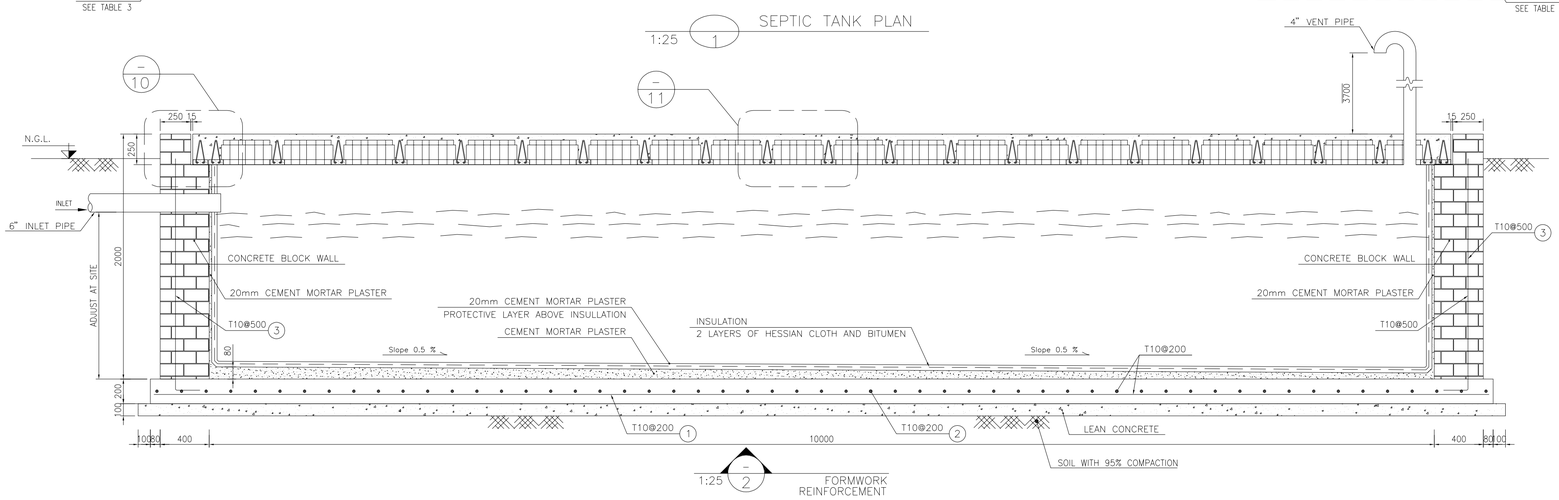
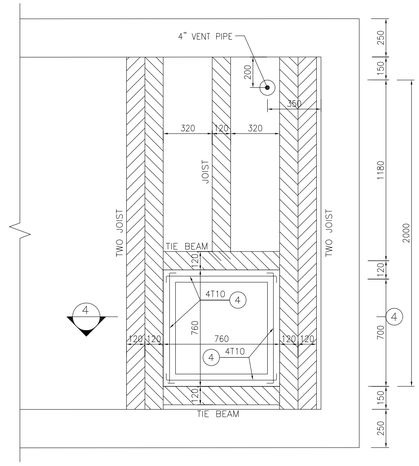
| 053-073-9184 | F | 4 | S | 708209 | 4 | D01 |




## SEPTIC TANK PLAN
1:25 (1)




1:25 (2) FORMWORK REINFORCEMENT




1:20 (3)

| TABLE 3 (CORNERS COORDINATES) | | |
|---|---|---|
| POINT 1 | E=437839.49 | N=3295065.88 |
| POINT 2 | E=437840.67 | N=3295068.60 |
| POINT 3 | E=437850.72 | N=3295064.22 |
| POINT 4 | E=437849.54 | N=3295061.51 |
| POINT 5 | E=437876.16 | N=3295049.89 |
| POINT 6 | E=437877.34 | N=3295052.61 |
| POINT 7 | E=437887.39 | N=3295048.23 |
| POINT 8 | E=437886.21 | N=3295045.52 |

## NOTES

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THICKNESS : 300-400 MICRON
GLOSS : DULL
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SOLID MATERIAL PERCENTAGE BY VOLUME : 48%±2
9-JOINT SEALANT MATERIALS SHALL BE WETHER-RESISTANT POLYURETHANE OR SILICONE SCH AS "AEROLASTIC 1674" OR SIMILAR AND SHALL CONFORM TO BS-4254 FOR VERTICAL JOINTS IN WALLS.
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ELLIPSOID : WORLD GEODETIC SYSTEM 1984 (WGS84)
MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR (UTM)
VERTICAL DATUM: MSL

±0.00 = +186.00(R.G.L.)MSL

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| SPECIFICATION FOR EARTH WORK | BK-GNRAL-PEDCO-000-CV-SP-0004 |
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| FOUNDATION DRAWING FOR POTABLE WATER TANK FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0006 |
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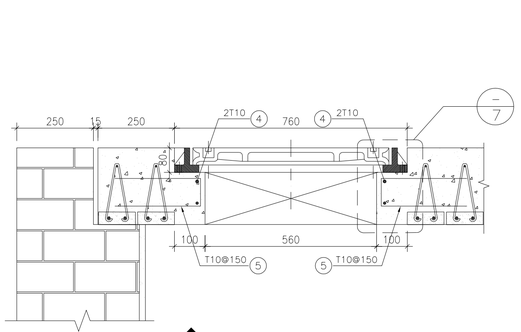
| STRUCTURAL DRAWING FOR DIESEL GENERATOR SHELTER FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0008 |

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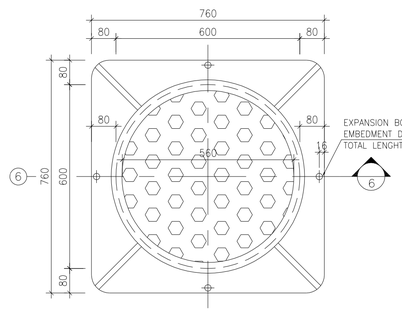
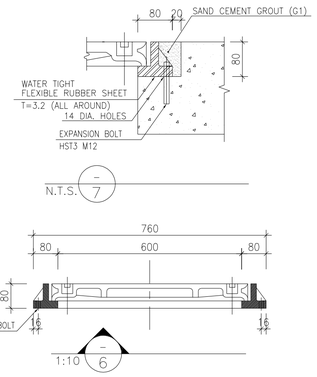



1:10 (5) DUCTILE IRON DETAIL
HEAVY DUTY DUCTILE IRON COATED FLAT COVERS AND FRAMES




N.T.S. (7)
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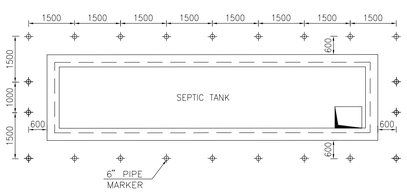
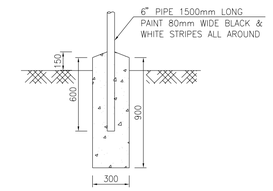
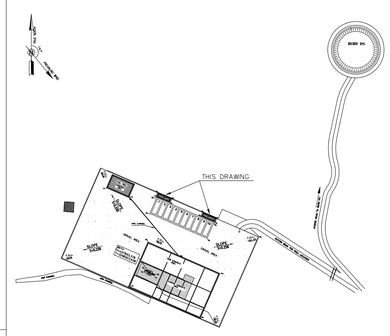


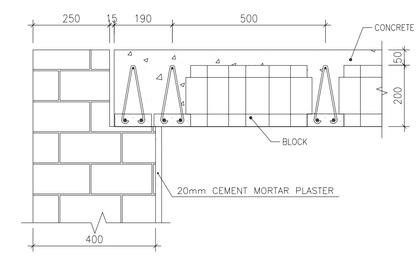

1:100 (8) ARRANGMENT OF MARKERS




1:25 (9) DETAIL OF MARKERS

## KEY PLAN

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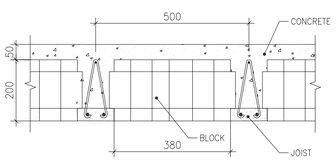


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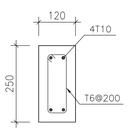
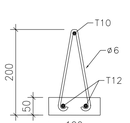



1:10 (12) TYPICAL SEC. OF TIE BEAM




1:10 (13) JOIST DETAIL

| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |
|---|---|---|---|---|---|---|
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |

| REV. | DESCRIPTION | CHECKED BY | CHECKED DATE | APPR. BY | APPR. DATE |
|---|---|---|---|---|---|
| *** | ********** | ** ** | *** **** | ** ** | *** **** |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS
PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS-BK14
SEPTIC TANK FORMWORK & REINFORCEMENT PLAN-SECTION

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APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 05 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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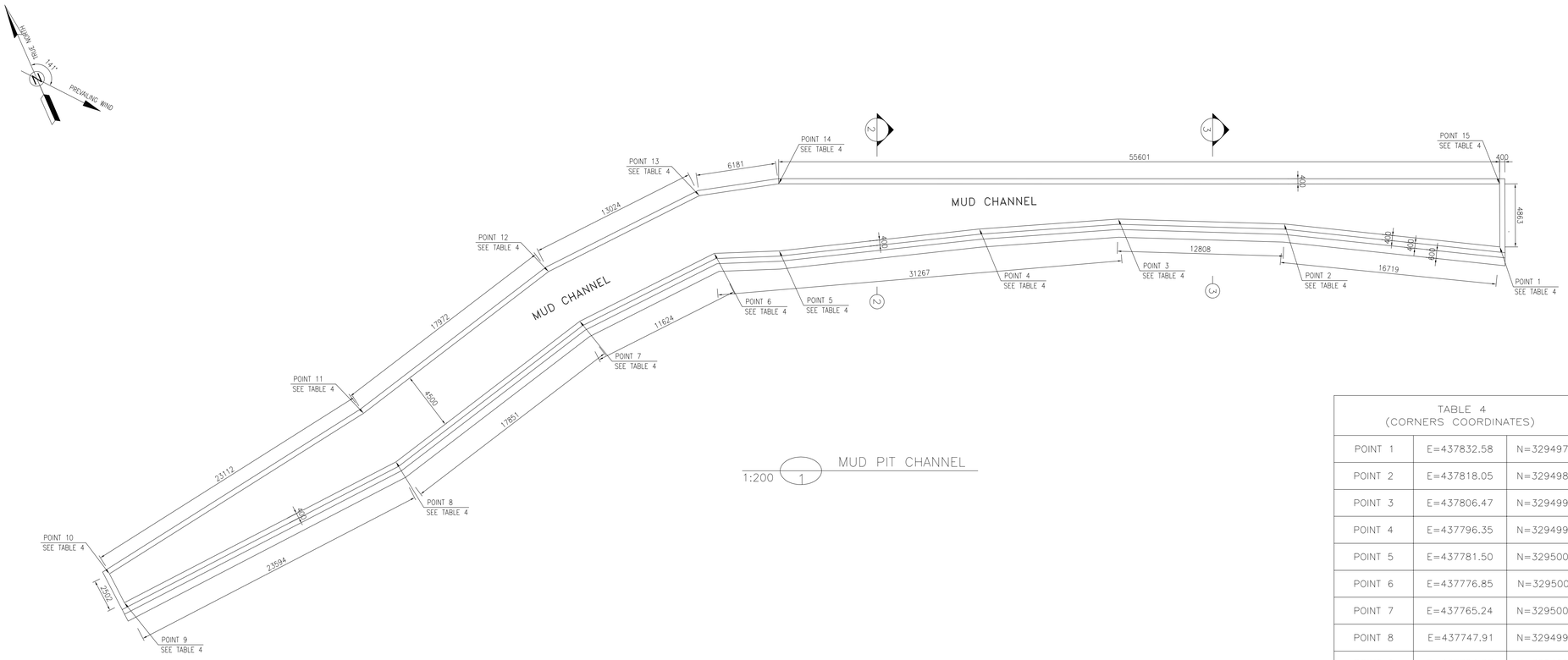


1:200 1 MUD PIT CHANNEL

| TABLE 4 (CORNERS COORDINATES) | | |
|---|---|---|
| POINT 1 | E=437832.58 | N=3294978.45 |
| POINT 2 | E=437818.05 | N=3294986.72 |
| POINT 3 | E=437806.47 | N=3294992.18 |
| POINT 4 | E=437796.35 | N=3294995.76 |
| POINT 5 | E=437781.50 | N=3295000.39 |
| POINT 6 | E=437776.85 | N=3295002.21 |
| POINT 7 | E=437765.24 | N=3295001.55 |
| POINT 8 | E=437747.91 | N=3294997.27 |
| POINT 9 | E=437724.37 | N=3294995.69 |
| POINT 10 | E=437724.20 | N=3294998.19 |
| POINT 11 | E=437747.13 | N=3295001.71 |
| POINT 12 | E=437764.57 | N=3295006.02 |
| POINT 13 | E=437777.58 | N=3295006.75 |
| POINT 14 | E=437783.55 | N=3295005.15 |
| POINT 15 | E=437834.51 | N=3294982.91 |

## NOTES

1- ALL COORDINATES ARE IN METER.

2- ALL DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS ARE IN METER.

3- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

4-ACCORDING TO THE SPECIFICATION OF CONCRETE WORKS: "BK-GNRL-PEDCO-000-ST-SP-0001",28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH OF MAIN CONCRETE IS 25 MPa(ON CYLINDRICAL SPECIMEN)

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6- REINFORCING BARS SHALL BE S400 ACCORDING TO: ISIRI3132 AND INBC9 WITH MINIMUM TENSILE YIELD STRENGTH 400 N/mm^2

7- MINIMUM FOUNDATION NET CONCRETE COVER SHALL BE 75 mm.

8- SPECIFICATIONS OF THERMO PLAST ACRYLIC COLOR,
BASED ON No.3758 NATIONAL STANDARD CODE:
DENSITY : 4.1-5.1 gr/cm³
THICKNESS :300-400 MICRON
GLOSS : DULL
SOLID MATERIAL PERCENTAGE BY WEIGHT :75%±2
SOLID MATERIAL PERCENTAGE BY VOLUME :48%±2

9-JOINT SEALANT MATERIALS SHALL BE WETHER-RESISTANT POLYURETHANE OR SILICONE SCH AS "AEROLASTIC 1674" OR SIMILAR AND SHALL CONFORM TO BS-4254 FOR VERTICAL JOINTS IN WALLS.

10-CONTRACTION JOINTS SHALL BE CONSIDERED IN CONCRETE SLABS EVERY 6m.

11-GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

±0.00 = +186.00(R.G.L.)MSL

## LEGEND AND ABBREVIATION

| | | | |
|---|---|---|---|
| REINFORCED CONCRETE | T.O.F. | TOP OF FOUNDATION |
| LEAN CONCRETE | T.O.W. | TOP OF WALL |
| CEMENT BLOCK WALL | T.O.C. | TOP OF CONCRETE |
| GRAVEL | T.O.PIT | TOP OF PIT |
| SUB GRADE | B.O.P. | BOTTOM OF PIPE |
| SLOPE | R.G.L. | ROUGH GRADING LEVEL |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| SPECIFICATION FOR FENCE & GATE | BK-GNRAL-PEDCO-000-CV-SP-0003 |
| GENERAL NOTES - STEEL STRUCTURES | BK-GNRAL-PEDCO-000-ST-DW-0011 |
| GENERAL NOTES - REINFORCED CONCRETE STRUCTURES | BK-GNRAL-PEDCO-000-ST-DW-0012 |
| GENERAL CIVIL LAYOUT - BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| ROUGH GRADING PLANS - BK14 | BK-BK14-PEDCO-110-CV-DW-0003 |
| STANDARD DRAWING FOR CULVERT & DETAILS | BK-GNRAL-PEDCO-000-CV-DW-0014 |
| STANDARD DETAILS OF MISCELLANEOUS ITEMS | BK-GNRAL-PEDCO-000-CV-DW-0040 |
| SPECIFICATION FOR EARTH WORK | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| FOUNDATION DRAWING FOR SECURITY BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0002 |
| STRUCTURAL DRAWING FOR SECURITY BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0003 |
| FOUNDATION DRAWING FOR SWICHGEAR BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0004 |
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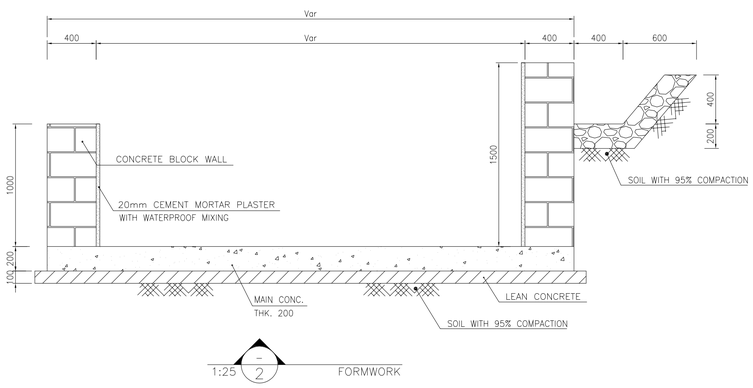
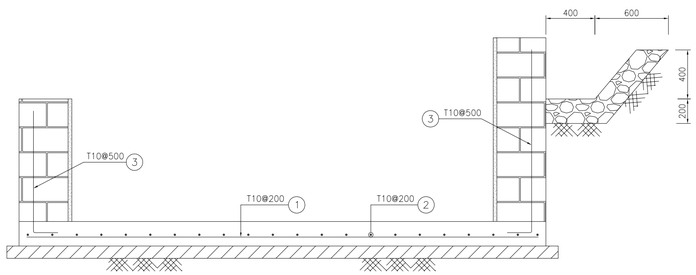
| FOUNDATION DRAWING FOR DIESEL GENERATOR SHELTER FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0007 |
| STRUCTURAL DRAWING FOR DIESEL GENERATOR SHELTER FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0008 |

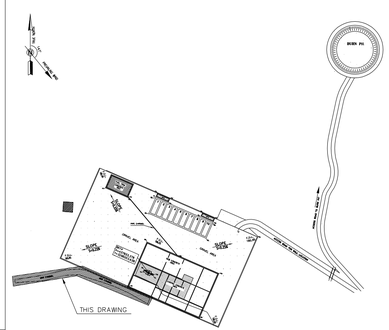



1:25 2 FORMWORK




1:25 3 REINFORCEMENT

## KEY PLAN




| REV. | DESCRIPTION | CHECKED BY | DATE | APPR. BY | DATE |
|---|---|---|---|---|---|
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| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

D01

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS-BK14
MUD PIT CHANNEL FORMWORK & REINFORCEMENT PLAN-SECTION

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APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 06 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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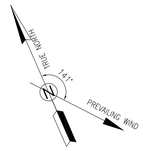
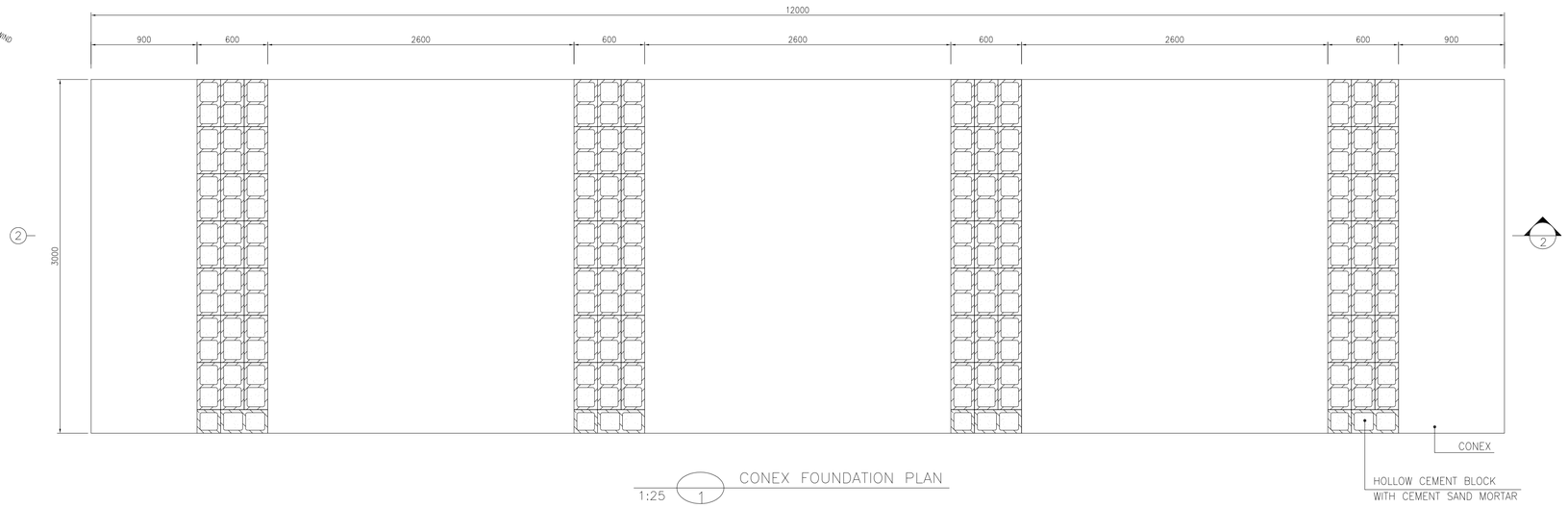
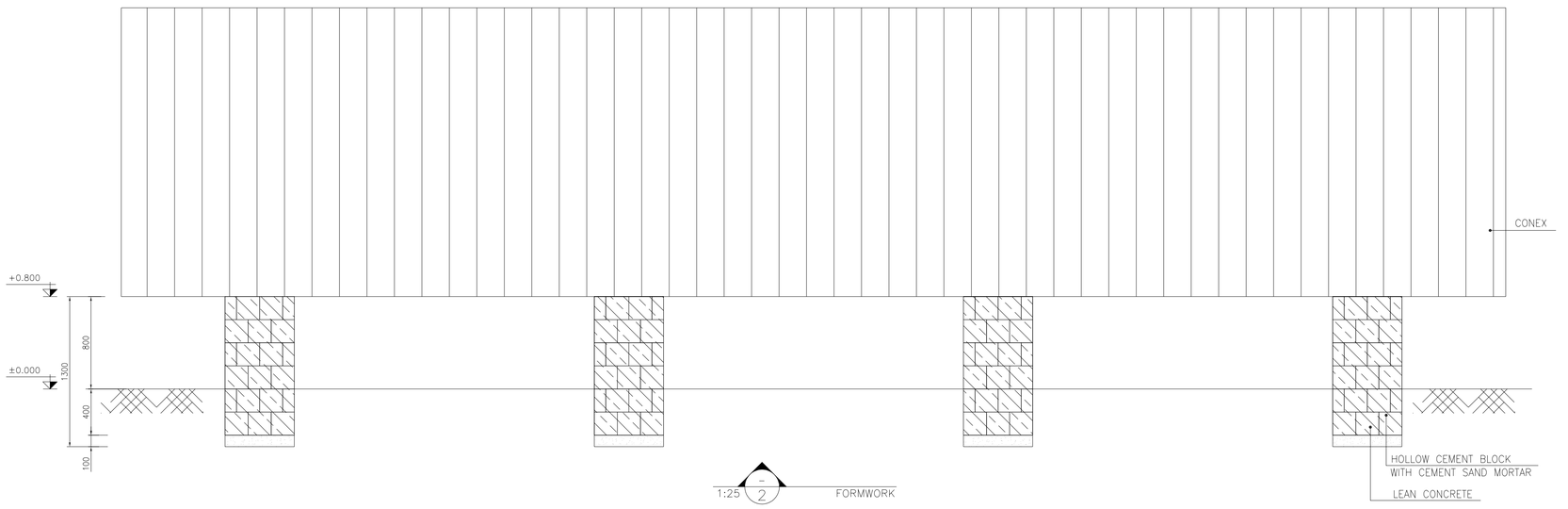



1:25 (1) CONEX FOUNDATION PLAN




1:25 (2)

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| VERTICAL DATUM: | MSL |

±0.00 = +186.00(R.G.L.)MSL

## LEGEND AND ABBREVIATION

REINFORCED CONCRETE
LEAN CONCRETE
CEMENT BLOCK WALL
GRAVEL
SUB GRADE
SLOPE

| | |
|---|---|
| T.O.F. | TOP OF FOUNDATION |
| T.O.W. | TOP OF WALL |
| T.O.C. | TOP OF CONCRETE |
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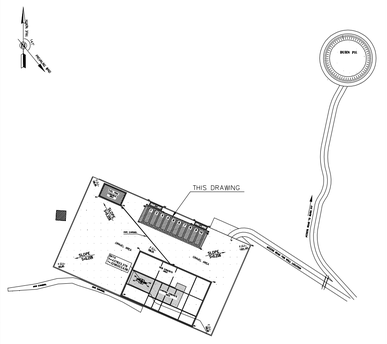
KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
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| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

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PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS-BK14
CONEX FOUNDATION PLAN AND SECTION

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

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APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 07 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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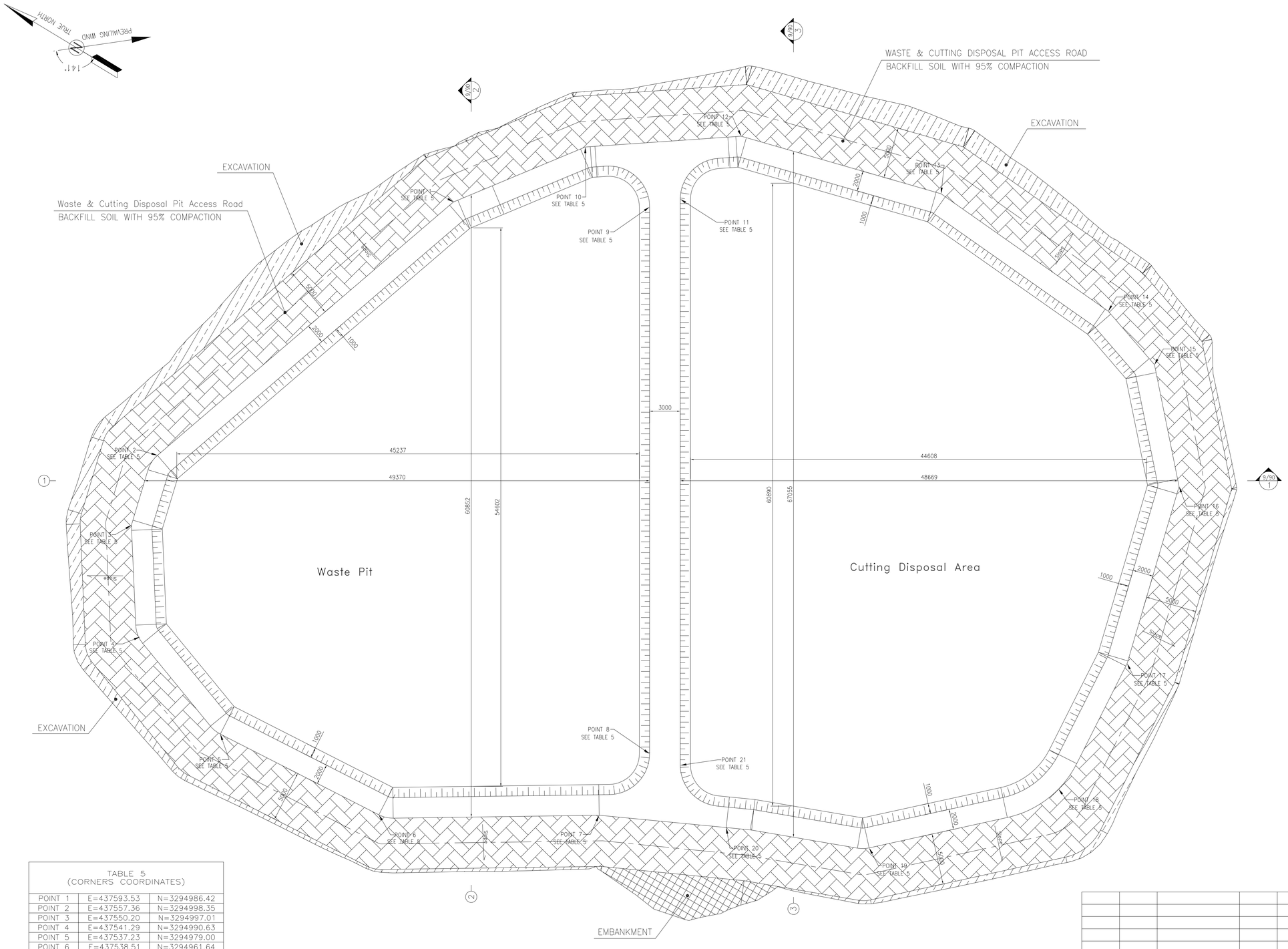


1:200 WASTE PIT & CUTTING DISPOSAL AREA PLAN

## TABLE 5 (CORNERS COORDINATES)

| | | |
|---|---|---|
| POINT 1 | E=437593.53 | N=3294986.42 |
| POINT 2 | E=437557.36 | N=3294998.35 |
| POINT 3 | E=437550.20 | N=3294997.01 |
| POINT 4 | E=437541.29 | N=3294990.63 |
| POINT 5 | E=437537.23 | N=3294979.00 |
| POINT 6 | E=437538.51 | N=3294961.64 |
| POINT 7 | E=437549.62 | N=3294943.18 |
| POINT 8 | E=437557.32 | N=3294942.08 |
| POINT 9 | E=437603.05 | N=3294969.75 |
| POINT 10 | E=437604.80 | N=3294978.17 |
| POINT 11 | E=437605.25 | N=3294967.58 |
| POINT 12 | E=437613.60 | N=3294965.67 |
| POINT 13 | E=437618.91 | N=3294946.03 |
| POINT 14 | E=437617.55 | N=3294926.09 |
| POINT 15 | E=437615.41 | N=3294919.53 |
| POINT 16 | E=437606.48 | N=3294911.30 |
| POINT 17 | E=437589.04 | N=3294906.69 |
| POINT 18 | E=437575.08 | N=3294906.07 |
| POINT 19 | E=437560.56 | N=3294918.94 |
| POINT 20 | E=437555.03 | N=3294931.93 |
| POINT 21 | E=437557.90 | N=3294938.93 |

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| VERTICAL DATUM: | MSL |

## LEGEND AND ABBREVIATION

REINFORCED CONCRETE
LEAN CONCRETE
CEMENT BLOCK WALL
GRAVEL
SUB GRADE
SLOPE
Excavation
Embankment

| | |
|---|---|
| T.O.F. | TOP OF FOUNDATION |
| T.O.W. | TOP OF WALL |
| T.O.C. | TOP OF CONCRETE |
| T.O.PIT | TOP OF PIT |
| B.O.P. | BOTTOM OF PIPE |
| R.G.L. | ROUGH GRADING LEVEL |

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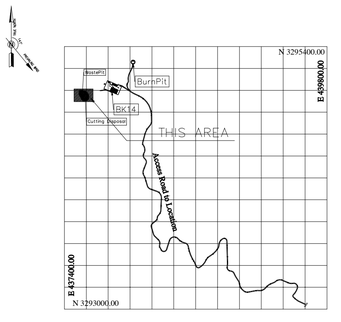
KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS
PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS-BK14
WASTE PIT & CUTTING DISPOSAL AREA PLAN

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 8 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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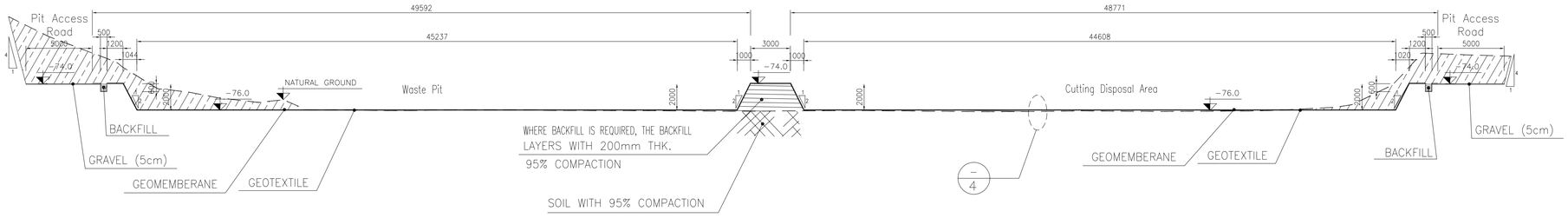
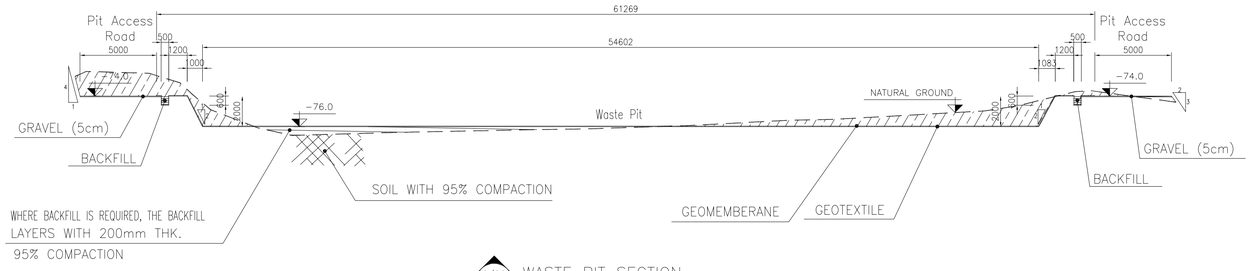
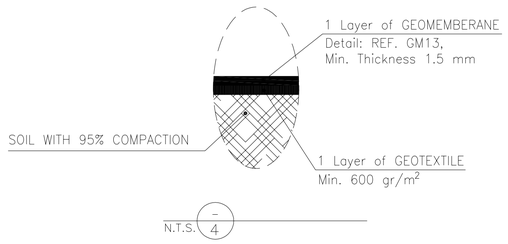



8/90 1:200 1 WASTE PIT & CUTTING DISPOSAL AREA SECTION




8/90 1:200 2 WASTE PIT SECTION

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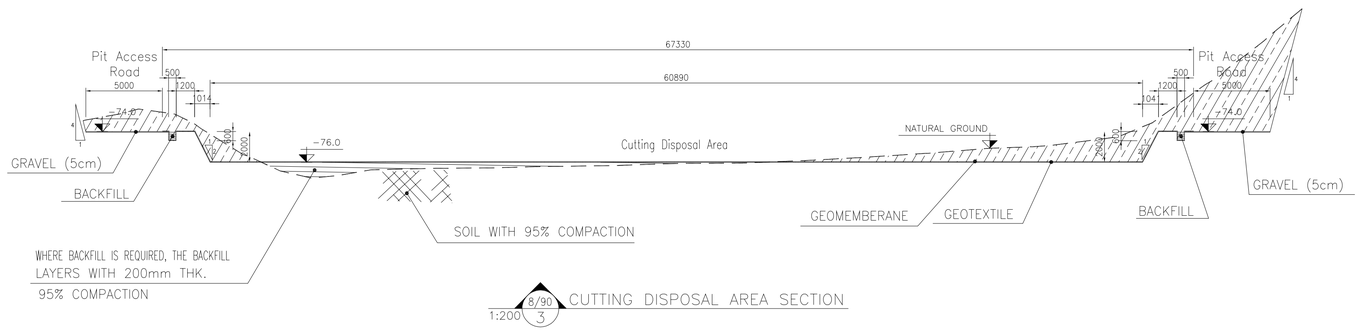



8/90 1:200 3 CUTTING DISPOSAL AREA SECTION

## NOTES

1- ALL COORDINATES ARE IN METER.
2- ALL DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS ARE IN METER.
3- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.
4- ACCORDING TO THE SPECIFICATION OF CONCRETE WORKS: "BK-GNRL-PEDCO-000-ST-SP-0001",28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH OF MAIN CONCRETE IS 25 MPa(ON CYLINDRICAL SPECIMEN)
5- ACCORDING TO THE SPECIFICATION OF CONCRETE WORKS: "BK-GNRL-PEDCO-000-ST-SP-0001",28 DAYS CHARACTERISTIC COMPRESSIVE STRENGTH OF LEAN CONCRETE IS 15 MPa(ON CYLINDRICAL SPECIMEN)
6- REINFORCING BARS SHALL BE S400 ACCORDING TO: ISIRI31.32 AND INBC9 WITH MINIMUM TENSILE YIELD STRENGTH 400 N/mm^2
7- MINIMUM FOUNDATION NET CONCRETE COVER SHALL BE 75 mm.
8- SPECIFICATIONS OF THERMO PLAST ACRYLIC COLOR,
BASED ON No.3758 NATIONAL STANDARD CODE:
DENSITY : 4.1-5.1 gr/cm
THICKNESS : 300-400 MICRON
GLOSS : DULL
SOLID MATERIAL PERCENTAGE BY WEIGHT : 75%±2
SOLID MATERIAL PERCENTAGE BY VOLUME : 48%±2
9- JOINT SEALANT MATERIALS SHALL BE WETHER-RESISTANT POLYURETHANE OR SILICONE SCH AS "AEROLASTIC 1674" OR SIMILAR AND SHALL CONFORM TO BS-4254 FOR VERTICAL JOINTS IN WALLS.
10- CONTRACTION JOINTS SHALL BE CONSIDERED IN CONCRETE SLABS EVERY 6m.
11- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

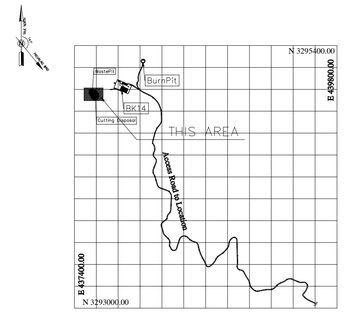
| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

## LEGEND AND ABBREVIATION

| | | | |
|---|---|---|---|
| REINFORCED CONCRETE | | T.O.F. | TOP OF FOUNDATION |
| LEAN CONCRETE | | T.O.W. | TOP OF WALL |
| CEMENT BLOCK WALL | | T.O.C. | TOP OF CONCRETE |
| GRAVEL | | T.O.PIT | TOP OF PIT |
| SUB GRADE | | B.O.P. | BOTTOM OF PIPE |
| SLOPE | | R.G.L. | ROUGH GRADING LEVEL |
| Excavation | | | |
| Backfill | | | |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| SPECIFICATION FOR FENCE & GATE | BK-GNRAL-PEDCO-000-CV-SP-0003 |
| GENERAL NOTES - STEEL STRUCTURES | BK-GNRAL-PEDCO-000-ST-DW-0011 |
| GENERAL NOTES - REINFORCED CONCRETE STRUCTURES | BK-GNRAL-PEDCO-000-ST-DW-0012 |
| GENERAL CIVIL LAYOUT - BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| ROUGH GRADING PLANS - BK14 | BK-BK14-PEDCO-110-CV-DW-0003 |
| STANDARD DRAWING FOR CULVERT & DETAILS | BK-GNRAL-PEDCO-000-CV-DW-0014 |
| STANDARD DETAILS OF MISCELLANEOUS ITEMS | BK-GNRAL-PEDCO-000-CV-DW-0040 |
| SPECIFICATION FOR EARTH WORK | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| FOUNDATION DRAWING FOR SECURITY BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0002 |
| STRUCTURAL DRAWING FOR SECURITY BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0003 |
| FOUNDATION DRAWING FOR SWICHGEAR BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0004 |
| STRUCTURAL DRAWING FOR SWICHGEAR BUILDING FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0005 |
| FOUNDATION DRAWING FOR POTABLE WATER TANK FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0006 |
| FOUNDATION DRAWING FOR DIESEL GENERATOR SHELTER FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0007 |
| STRUCTURAL DRAWING FOR DIESEL GENERATOR SHELTER FOR WELL PADS-BK-14 | BK-BK14-PEDCO-110-ST-DW-0008 |

## KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | ** | *** **** | ** | *** **** |
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| D00 | OCT.2022 IFC R.BERLOUEI M.FAKHARIAN M.MEHRSHAD **.** | | | | |
| REV. | DATE P.O.I.S PREP. CHK. APP. AUT. | | | | |


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PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

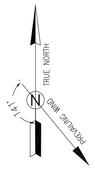
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

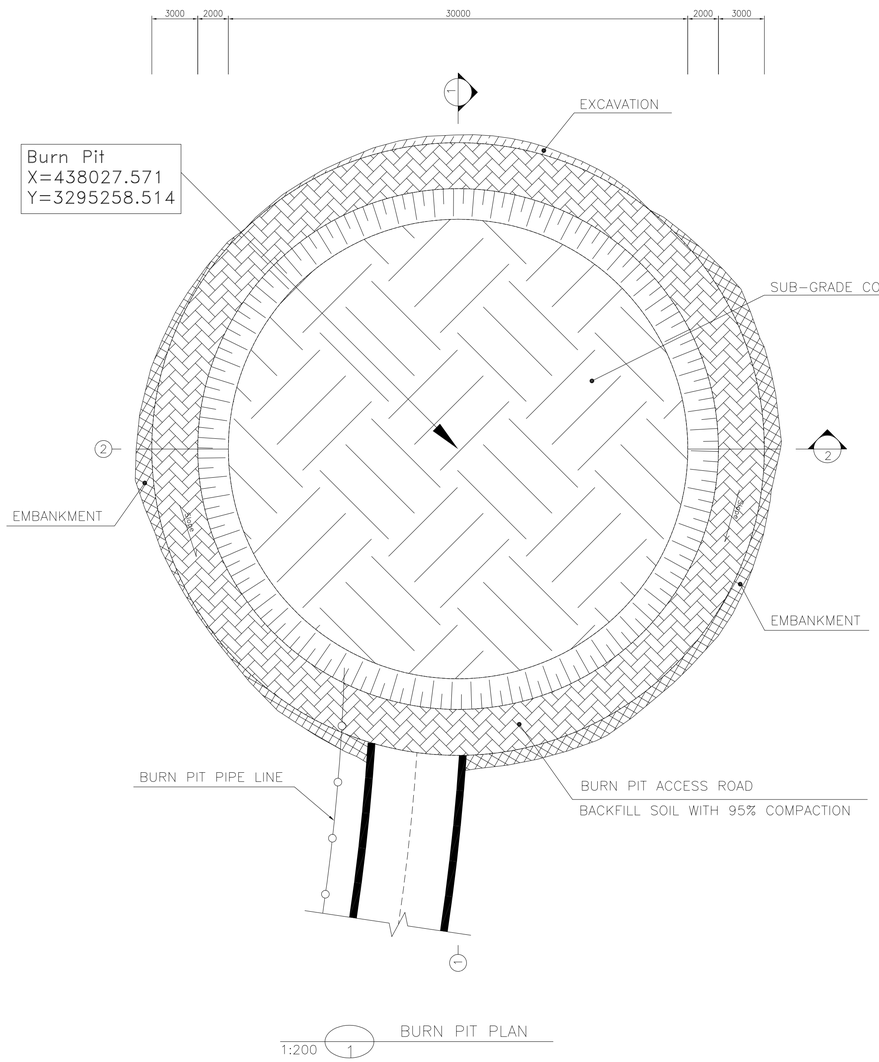
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS-BK14
WASTE PIT & CUTTING DISPOSAL AREA SECTIONS

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 9 OF 90 | D01 |

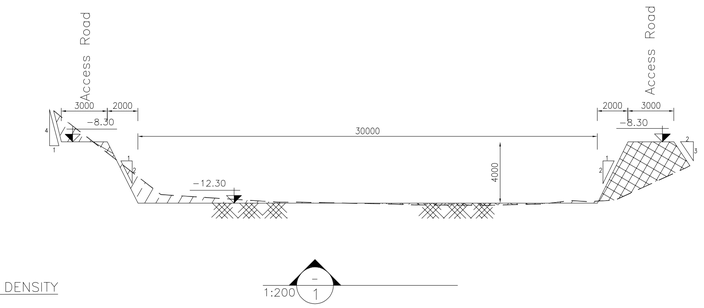
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 9 | D01 |




BURN PIT PLAN

1:200 (1)

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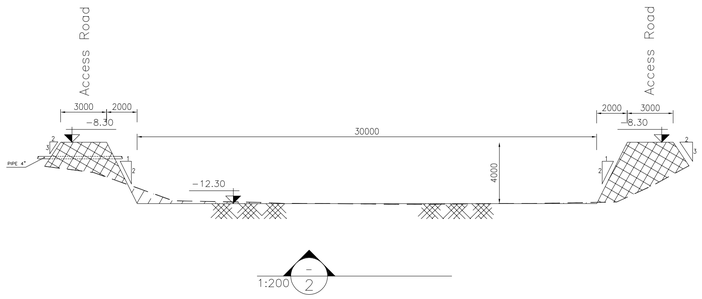


1:200 (2)

## NOTES

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8- SPECIFICATIONS OF THERMO PLAST ACRYLIC COLOR,
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10-CONTRACTION JOINTS SHALL BE CONSIDERED IN CONCRETE SLABS EVERY 6m.

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| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

## LEGEND AND ABBREVIATION

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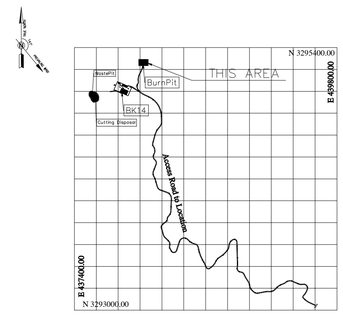
## KEY PLAN

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | REV. | DESCRIPTION | BY | DATE | BY | DATE |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | | | CHECKED | | REV. APPR. | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | | | | | | |


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|---|---|
| PROJECT NAME: | BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS |
| PROJECT NO.: | 971020 |
| EPC CONTRACTOR: | HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES |
| EPD/EPC CONTRACTOR(GC): | PETROIRAN DEVELOPMENT COMPANY (PEDCO) |
| DRAWING TITLE: | CIVIL AND STRUCTURAL DRAWINGS-BK14 BURN PIT PLAN-SECTIONS |

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| AS SHOWN | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 10 OF 90 | D01 |

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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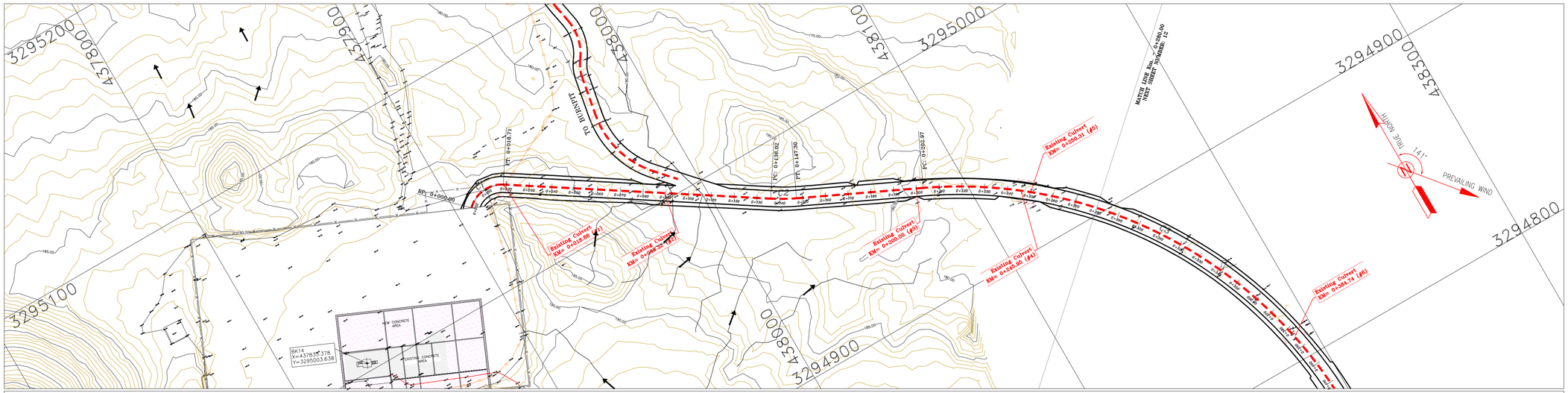
| 053-073-9184 | F | 4 | S | 708209 | 10 | D01 |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4379000
4379100
4380000
4380100
4380200
3295200
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3295000
3294900
3294800
PT: 0+018.71
PVI: 0+038.02
PT: 0+047.34
PC: 0+047.34
PT: 0+067.65
PC: 0+067.65
PT: 0+087.97
PC: 0+087.97
PT: 0+108.28
PC: 0+108.28
PT: 0+128.60
PC: 0+128.60
PT: 0+148.91
PC: 0+148.91
PT: 0+169.23
PC: 0+169.23
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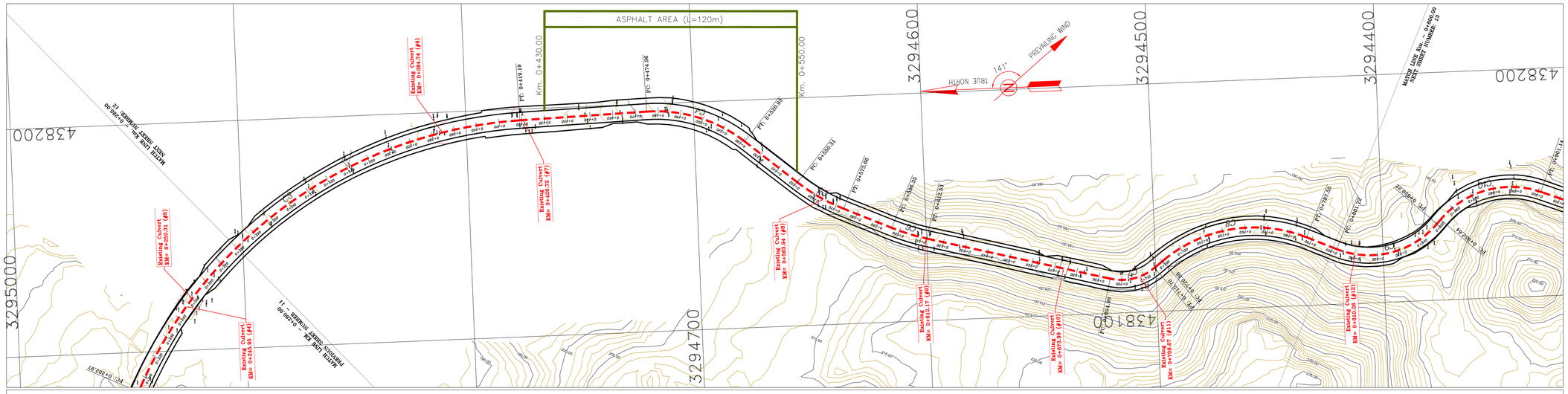
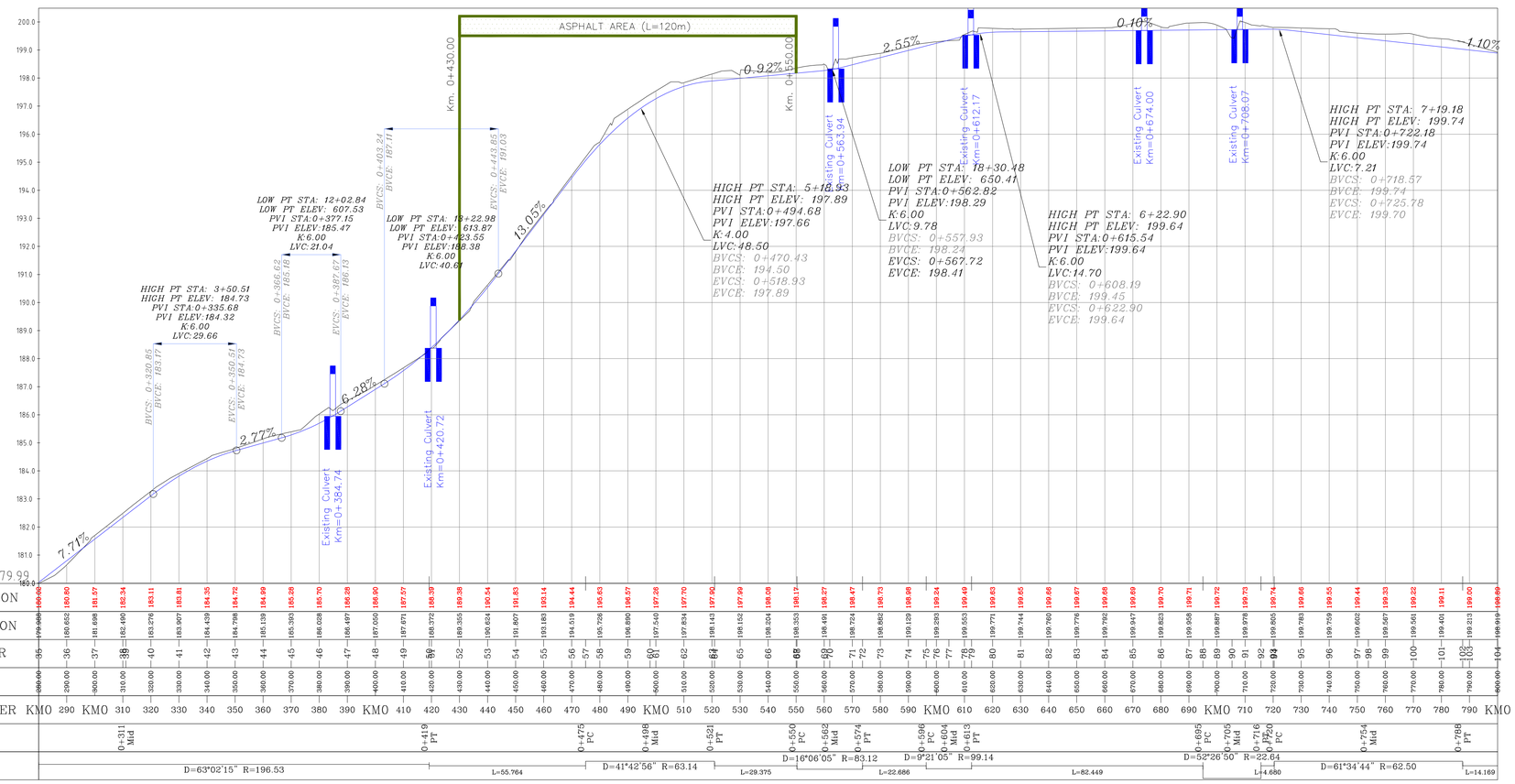



## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

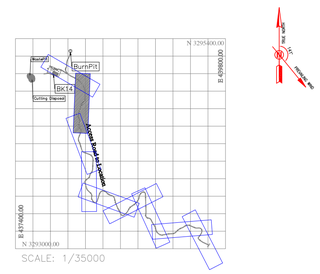
| | |
|---|---|
| WELL LOCATION | CANAL |
| WELL | RIVER |
| SITE | WATER COURSE |
| CAMP SITE | CONTOURS |
| ASPHALT ROAD | SPOT HEIGHT |
| GRAVEL ROAD | BENCH MARK |
| PROPOSED ROAD | BRIDGE |
| DAYLIGHT | CULVERT |
| | FLOWLINE |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




## Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---|---|---|---|---|---|
| C4 | 63.14 | 45.97 | S19° 13' 32.17"W | (438196.67,3294720.53) | (438181.86,3294678.08) |
| C5 | 83.12 | 23.36 | S32° 01' 57.72"W | (438162.94,3294655.60) | (438150.60,3294635.86) |
| C6 | 99.14 | 16.18 | S19° 18' 23.07"W | (438141.38,3294615.14) | (438136.03,3294599.88) |
| C7 | 22.64 | 20.72 | S11° 35' 34.44"E | (438115.21,3294520.11) | (438119.23,3294500.51) |
| C8 | 62.50 | 67.17 | S7° 01' 37.65"E | (438122.10,3294496.81) | (438129.92,3294433.31) |
| C9 | 39.00 | 48.50 | S11° 51' 59.09"E | (438124.21,3294420.34) | (438133.56,3294375.87) |
| C10 | 40.46 | 48.50 | S13° 09' 31.53"E | (438135.34,3294374.24) | (438145.73,3294329.79) |

| Station | Northing | Easting |
|---|---|---|
| 0+280.00 | 3294902.72 | 438144.19 |
| 0+290.00 | 3294895.15 | 438150.72 |
| 0+300.00 | 3294887.25 | 438156.85 |
| 0+310.00 | 3294879.05 | 438162.57 |
| 0+320.00 | 3294870.57 | 438167.87 |
| 0+330.00 | 3294861.83 | 438172.74 |
| 0+340.00 | 3294852.86 | 438177.15 |
| 0+350.00 | 3294843.68 | 438181.10 |
| 0+360.00 | 3294834.30 | 438184.57 |
| 0+370.00 | 3294824.76 | 438187.57 |
| 0+380.00 | 3294815.08 | 438190.07 |
| 0+390.00 | 3294805.29 | 438192.09 |
| 0+400.00 | 3294795.40 | 438193.60 |
| 0+410.00 | 3294785.45 | 438194.60 |
| 0+420.00 | 3294775.47 | 438195.10 |
| 0+430.00 | 3294765.47 | 438195.39 |
| 0+440.00 | 3294755.48 | 438195.67 |
| 0+450.00 | 3294745.48 | 438195.95 |

| | | |
|---|---|---|
| 0+460.00 | 3294735.48 | 438196.24 |
| 0+470.00 | 3294725.49 | 438196.52 |
| 0+480.00 | 3294715.49 | 438196.61 |
| 0+490.00 | 3294705.59 | 438195.31 |
| 0+500.00 | 3294696.01 | 438192.46 |
| 0+510.00 | 3294687.00 | 438188.14 |
| 0+520.00 | 3294678.79 | 438182.45 |
| 0+530.00 | 3294671.14 | 438176.02 |
| 0+540.00 | 3294663.49 | 438169.58 |
| 0+550.00 | 3294655.83 | 438163.14 |
| 0+560.00 | 3294647.84 | 438157.15 |
| 0+570.00 | 3294639.18 | 438152.16 |
| 0+580.00 | 3294630.07 | 438148.02 |
| 0+590.00 | 3294620.94 | 438143.96 |
| 0+600.00 | 3294611.77 | 438139.95 |
| 0+610.00 | 3294602.32 | 438136.70 |
| 0+620.00 | 3294592.66 | 438134.15 |
| 0+630.00 | 3294582.98 | 438131.62 |
| 0+640.00 | 3294573.30 | 438129.09 |

| | | |
|---|---|---|
| 0+650.00 | 3294563.63 | 438126.57 |
| 0+660.00 | 3294553.95 | 438124.04 |
| 0+670.00 | 3294544.28 | 438121.52 |
| 0+680.00 | 3294534.60 | 438118.99 |
| 0+690.00 | 3294524.92 | 438116.46 |
| 0+700.00 | 3294515.15 | 438114.48 |
| 0+710.00 | 3294505.40 | 438116.33 |
| 0+720.00 | 3294497.11 | 438121.86 |
| 0+730.00 | 3294488.79 | 438127.39 |
| 0+740.00 | 3294479.69 | 438131.52 |
| 0+750.00 | 3294470.06 | 438134.14 |
| 0+760.00 | 3294460.12 | 438135.20 |
| 0+770.00 | 3294450.15 | 438134.66 |
| 0+780.00 | 3294440.39 | 438132.54 |
| 0+790.00 | 3294431.07 | 438128.94 |
| 0+800.00 | 3294421.92 | 438124.91 |

| Pt Station | Northing | Easting |
|---|---|---|
| 0+323.49 | 3294896.74 | 438191.64 |
| 0+499.02 | 3294696.48 | 438197.35 |
| 0+562.06 | 3294646.61 | 438155.37 |
| 0+604.46 | 3294607.73 | 438138.08 |
| 0+706.13 | 3294509.32 | 438112.39 |
| 0+757.62 | 3294467.39 | 438144.93 |

D01
TOTALLY REVISED

Coordinate of Bench Marks (UTM–ZONE 39N)

| NAME | Easting(m) | Northing(m) | Elevation(m) |
|---|---|---|---|
| GPS2 | 437770.8593 | 3295060.1065 | 171.4186 |
| GPS3 | 437770.7943 | 3295060.0960 | 171.4184 |

| REV. | DATE | DESCRIPTION | BY | CHECKED |
|---|---|---|---|---|
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN / M.MEHRSHAD |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN / M.MEHRSHAD |
| REV. | DATE | P.O.I.S | PREP. | CHK. / APP. / AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY / PEDCO

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| 1/1000 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 12 OF 90 | D01 |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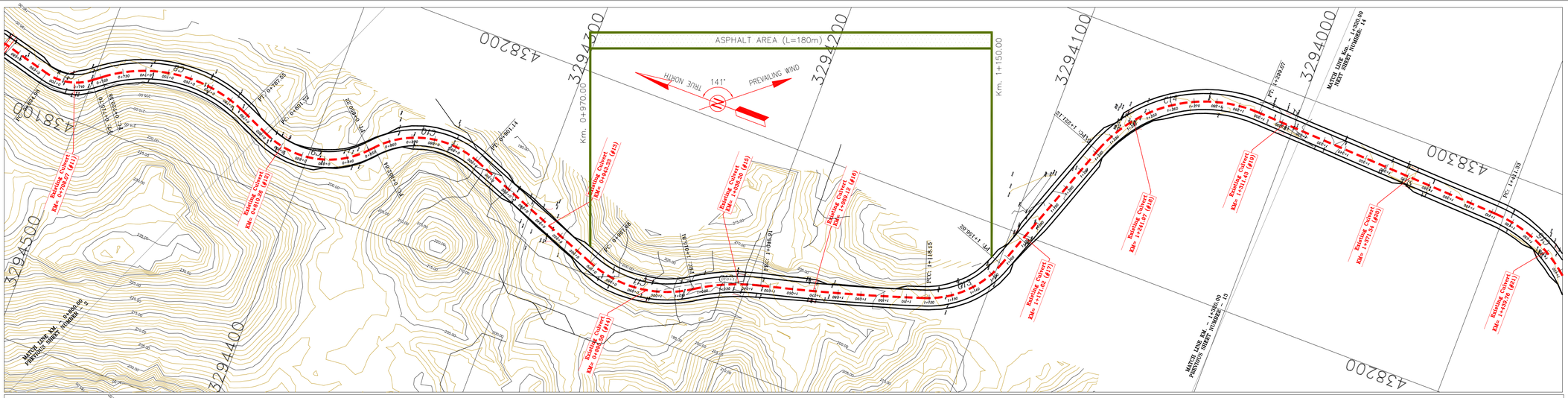
BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION BY: DATE:

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 12 | D01 |




## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,..) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

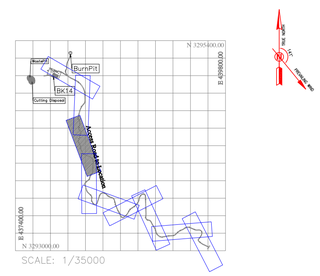
WELL LOCATION, WELL, SITE, CAMP SITE, ASPHALT ROAD, GRAVEL ROAD, PROPOSED ROAD, DAYLIGHT, CANAL, RIVER, WATER COURSE, CONTOURS, SPOT HEIGHT, BENCH MARK, BRIDGE, CULVERT, FLOWLINE

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




### Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---|---|---|---|---|---|
| C7 | 22.64 | 20.72 | S11° 35' 34.44"E | (438115.21,3294520.11) | (438119.23,3294500.51) |
| C8 | 62.50 | 67.17 | S7° 01' 37.65"E | (438122.10,3294496.81) | (438129.92,3294433.31) |
| C9 | 39.00 | 48.50 | S11° 51' 59.09"E | (438124.21,3294420.34) | (438133.56,3294375.87) |
| C10 | 40.46 | 48.50 | S13° 09' 31.53"E | (438135.34,3294374.24) | (438145.73,3294329.79) |
| C11 | 50.62 | 48.14 | S6° 03' 59.77"E | (438121.69,3294267.75) | (438126.59,3294221.67) |
| C12 | 89.24 | 30.10 | S23° 38' 52.94"E | (438126.59,3294221.67) | (438138.61,3294194.22) |
| C13 | 42.00 | 37.87 | S44° 30' 22.60"E | (438158.92,3294124.92) | (438184.57,3294098.82) |
| C14 | 61.37 | 77.95 | S33° 56' 47.38"E | (438245.87,3294076.91) | (438286.54,3294016.50) |
| C15 | 60.93 | 47.24 | S24° 39' 25.78"W | (438281.75,3293904.35) | (438262.53,3293862.48) |

| Station | Northing | Easting |
|---|---|---|
| 0+800.00 | 3294421.92 | 438124.91 |
| 0+810.00 | 3294412.47 | 438121.70 |
| 0+820.00 | 3294402.52 | 438120.96 |
| 0+830.00 | 3294392.71 | 438122.77 |
| 0+840.00 | 3294383.69 | 438127.01 |
| 0+850.00 | 3294376.03 | 438133.39 |
| 0+860.00 | 3294368.80 | 438140.28 |
| 0+870.00 | 3294360.17 | 438145.27 |
| 0+880.00 | 3294350.57 | 438147.99 |
| 0+890.00 | 3294340.60 | 438148.28 |
| 0+900.00 | 3294330.86 | 438146.13 |
| 0+910.00 | 3294321.53 | 438142.53 |
| 0+920.00 | 3294312.21 | 438138.92 |
| 0+930.00 | 3294302.88 | 438135.30 |
| 0+940.00 | 3294293.56 | 438131.69 |
| 0+950.00 | 3294284.23 | 438128.08 |
| 0+960.00 | 3294274.91 | 438124.47 |
| 0+970.00 | 3294265.56 | 438120.90 |

| | | |
|---|---|---|
| 0+980.00 | 3294255.83 | 438118.68 |
| 0+990.00 | 3294245.85 | 438118.40 |
| 1+000.00 | 3294236.01 | 438120.10 |
| 1+010.00 | 3294226.70 | 438123.69 |
| 1+020.00 | 3294218.11 | 438128.81 |
| 1+030.00 | 3294209.24 | 438133.41 |
| 1+040.00 | 3294199.91 | 438136.99 |
| 1+050.00 | 3294190.26 | 438139.61 |
| 1+060.00 | 3294180.58 | 438142.12 |
| 1+070.00 | 3294170.93 | 438144.75 |
| 1+080.00 | 3294161.31 | 438147.48 |
| 1+090.00 | 3294151.73 | 438150.33 |
| 1+100.00 | 3294142.17 | 438153.28 |
| 1+110.00 | 3294132.65 | 438156.34 |
| 1+120.00 | 3294123.18 | 438159.55 |
| 1+130.00 | 3294114.37 | 438164.23 |
| 1+140.00 | 3294106.92 | 438170.86 |
| 1+150.00 | 3294101.24 | 438179.07 |
| 1+160.00 | 3294097.48 | 438188.32 |

| | | |
|---|---|---|
| 1+170.00 | 3294094.11 | 438197.74 |
| 1+180.00 | 3294090.75 | 438207.15 |
| 1+190.00 | 3294087.38 | 438216.57 |
| 1+200.00 | 3294084.02 | 438225.99 |
| 1+210.00 | 3294080.65 | 438235.40 |
| 1+220.00 | 3294077.29 | 438244.82 |
| 1+230.00 | 3294073.33 | 438253.99 |
| 1+240.00 | 3294067.94 | 438262.40 |
| 1+250.00 | 3294061.27 | 438269.83 |
| 1+260.00 | 3294053.47 | 438276.08 |
| 1+270.00 | 3294044.76 | 438280.98 |
| 1+280.00 | 3294035.38 | 438284.40 |
| 1+290.00 | 3294025.56 | 438286.25 |
| 1+300.00 | 3294015.58 | 438286.50 |
| 1+310.00 | 3294005.59 | 438286.07 |
| 1+320.00 | 3293995.60 | 438285.64 |

| PI Station | Northing | Easting |
|---|---|---|
| 0+829.67 | 3294394.76 | 438112.95 |
| 0+880.28 | 3294355.57 | 438155.72 |
| 0+993.74 | 3294243.45 | 438112.28 |
| 1+031.01 | 3294208.97 | 438134.94 |
| 1+082.05 | 3294159.16 | 438147.34 |
| 1+138.48 | 3294105.66 | 438165.43 |
| 1+266.35 | 3294061.69 | 438288.46 |

D01 TOTALLY REVISED

Coordinate of Bench Marks (UTM–ZONE 39N)

| NAME | Easting(m) | Northing(m) | Elevation(m) |
|---|---|---|---|
| GPS2 | 437770.8593 | 3295060.1065 | 171.4186 |
| GPS3 | 437770.7943 | 3295060.0960 | 171.4184 |

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

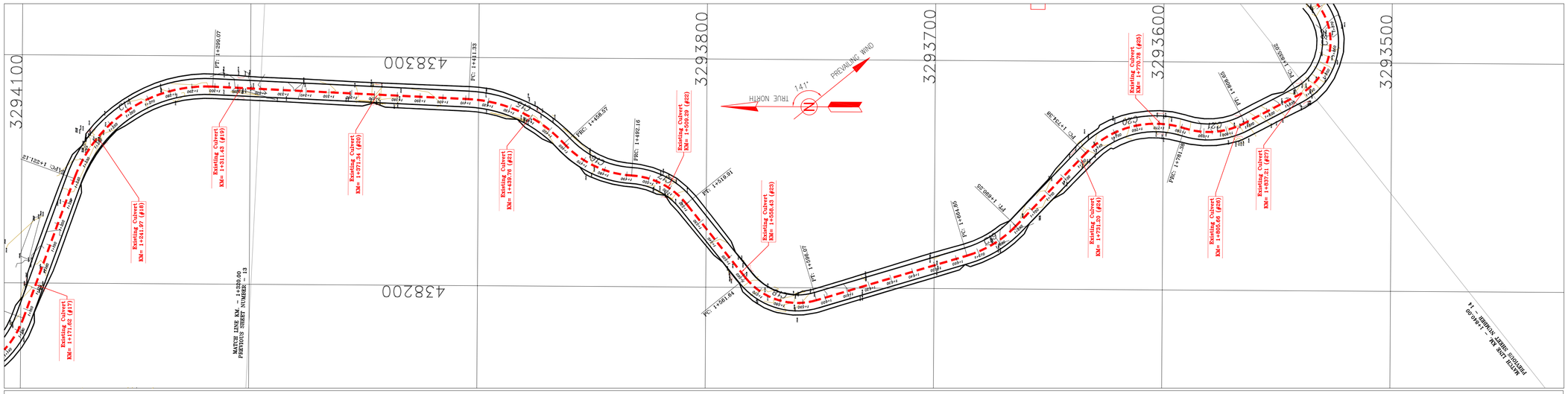
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

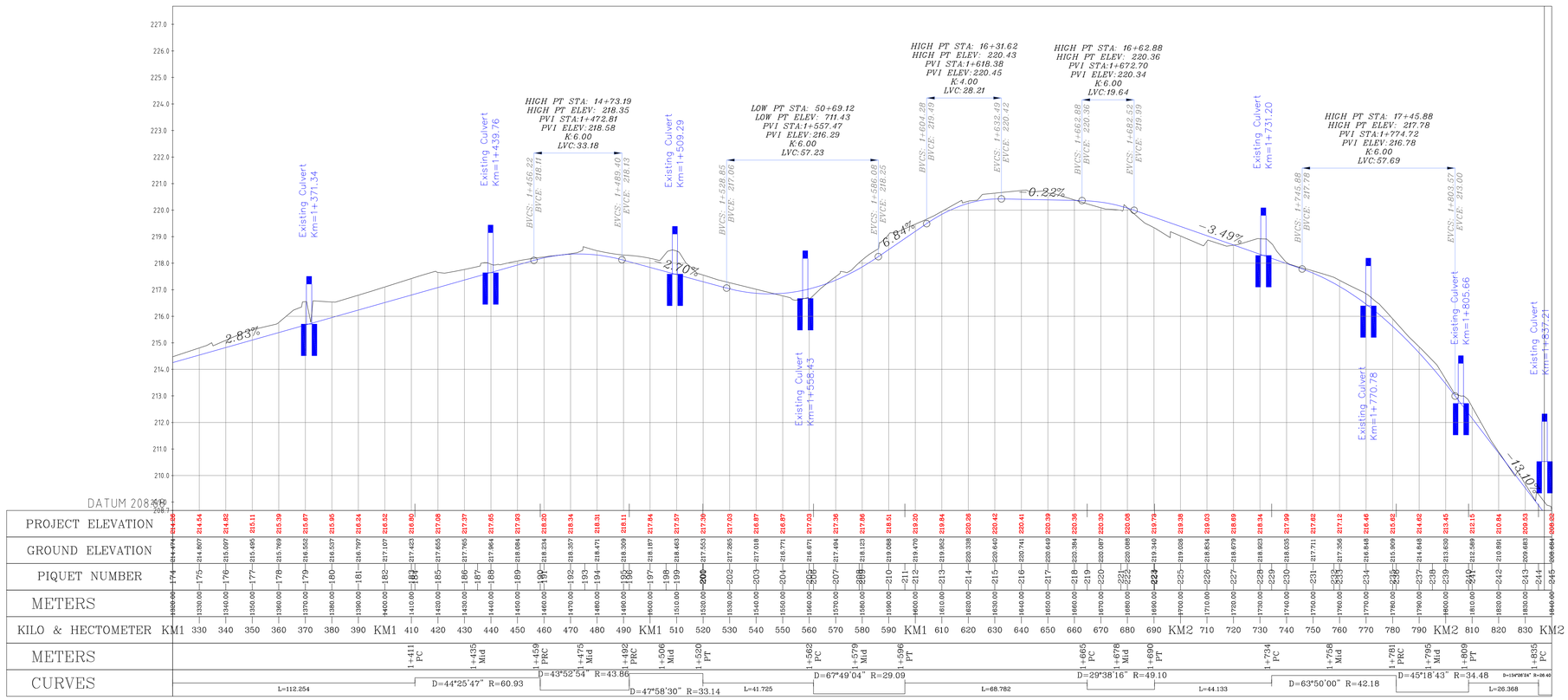
APPROVED FOR CONSTRUCTION | BY: | DATE:

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| 1/1000 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 13 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 13 | D01 |




## Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---|---|---|---|---|---|
| C14 | 61.37 | 77.95 | S33° 56' 47.38"E | (438245.87,3294076.91) | (438286.54,3294016.50) |
| C15 | 60.93 | 47.24 | S24° 39' 25.78"W | (438281.75,3293904.35) | (438262.53,3293862.48) |
| C16 | 43.86 | 33.59 | S24° 55' 51.90"W | (438262.53,3293862.48) | (438248.71,3293832.76) |
| C17 | 33.14 | 27.75 | S26° 58' 40.05"W | (438248.71,3293832.76) | (438236.49,3293808.75) |
| C18 | 29.09 | 34.43 | S17° 03' 23.37"W | (438204.08,3293782.47) | (438194.56,3293751.44) |
| C19 | 49.10 | 25.40 | S31° 40' 16.49"E | (438214.50,3293685.61) | (438227.69,3293664.24) |
| C20 | 42.18 | 47.00 | S14° 34' 24.38"E | (438259.70,3293633.85) | (438270.92,3293590.68) |
| C21 | 34.48 | 27.27 | S5° 18' 46.00"E | (438270.92,3293590.68) | (438273.38,3293564.23) |
| C22 | 26.40 | 61.94 | N84° 48' 40.27"E | (438285.75,3293540.94) | (438334.23,3293545.35) |

| Station | Northing | Easting |
|---|---|---|
| 1+320.00 | 3293995.60 | 438285.64 |
| 1+330.00 | 3293985.61 | 438285.22 |
| 1+340.00 | 3293975.61 | 438284.79 |
| 1+350.00 | 3293965.62 | 438284.36 |
| 1+360.00 | 3293955.63 | 438283.94 |
| 1+370.00 | 3293945.64 | 438283.51 |
| 1+380.00 | 3293935.65 | 438283.09 |
| 1+390.00 | 3293925.66 | 438282.66 |
| 1+400.00 | 3293915.67 | 438282.23 |
| 1+410.00 | 3293905.68 | 438281.81 |
| 1+420.00 | 3293895.74 | 438280.77 |
| 1+430.00 | 3293886.11 | 438278.13 |
| 1+440.00 | 3293877.03 | 438273.96 |
| 1+450.00 | 3293868.76 | 438268.35 |
| 1+460.00 | 3293861.49 | 438261.50 |
| 1+470.00 | 3293853.68 | 438255.30 |
| 1+480.00 | 3293844.66 | 438251.01 |
| 1+490.00 | 3293834.92 | 438248.88 |
| 1+500.00 | 3293825.06 | 438247.39 |
| 1+510.00 | 3293816.04 | 438243.15 |
| 1+520.00 | 3293808.69 | 438236.42 |
| 1+530.00 | 3293802.39 | 438228.66 |
| 1+540.00 | 3293796.10 | 438220.89 |
| 1+550.00 | 3293789.80 | 438213.12 |
| 1+560.00 | 3293783.50 | 438205.35 |
| 1+570.00 | 3293776.35 | 438198.43 |
| 1+580.00 | 3293767.30 | 438194.28 |
| 1+590.00 | 3293757.39 | 438193.42 |
| 1+600.00 | 3293747.68 | 438195.70 |
| 1+610.00 | 3293738.11 | 438198.60 |
| 1+620.00 | 3293728.54 | 438201.50 |
| 1+630.00 | 3293718.97 | 438204.40 |
| 1+640.00 | 3293709.40 | 438207.30 |
| 1+650.00 | 3293699.83 | 438210.20 |
| 1+660.00 | 3293690.25 | 438213.10 |
| 1+670.00 | 3293680.77 | 438216.25 |
| 1+680.00 | 3293672.01 | 438221.04 |
| 1+690.00 | 3293664.41 | 438227.51 |
| 1+700.00 | 3293657.52 | 438234.76 |
| 1+710.00 | 3293650.64 | 438242.02 |
| 1+720.00 | 3293643.75 | 438249.27 |
| 1+730.00 | 3293636.87 | 438256.52 |
| 1+740.00 | 3293629.72 | 438263.50 |
| 1+750.00 | 3293621.27 | 438268.80 |
| 1+760.00 | 3293611.81 | 438271.96 |
| 1+770.00 | 3293601.87 | 438272.82 |
| 1+780.00 | 3293592.01 | 438271.31 |
| 1+790.00 | 3293582.22 | 438269.40 |
| 1+800.00 | 3293572.30 | 438270.32 |
| 1+810.00 | 3293563.04 | 438274.01 |
| 1+820.00 | 3293554.21 | 438278.70 |
| 1+830.00 | 3293545.38 | 438283.39 |
| 1+840.00 | 3293536.79 | 438288.48 |

| PI Station | Northing | Easting |
|---|---|---|
| 1+436.21 | 3293879.49 | 438280.69 |
| 1+476.24 | 3293850.40 | 438249.64 |
| 1+506.91 | 3293818.03 | 438247.95 |
| 1+581.19 | 3293770.15 | 438188.89 |
| 1+677.84 | 3293673.18 | 438218.27 |
| 1+760.65 | 3293615.76 | 438278.75 |
| 1+795.77 | 3293576.95 | 438266.63 |

D01
TOTALLY REVISED

Coordinate of Bench Marks (UTM–ZONE 39N)

| NAME | Easting(m) | Northing(m) | Elevation(m) |
|---|---|---|---|
| GPS2 | 437770.8593 | 3295060.1065 | 171.4186 |
| GPS3 | 437770.7943 | 3295060.0960 | 171.4184 |

## NOTES

1–ALL COORDINATES AND ELEVATIONS ARE IN METER.

2–ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3–GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:
HORIZONTAL COORDINATE SYSTEM: WGS84/UTM ZONE 39
ELLIPSOID : WORLD GEODETIC SYSTEM 1984 (WGS84)
MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR (UTM)
VERTICAL DATUM: MSL

4–THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK–GNRAL–PEDCO–000–CV–SP–0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

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## LEGEND

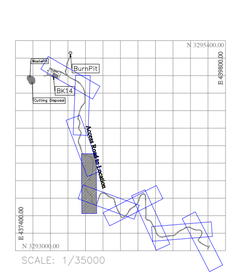
WELL LOCATION
WELL
SITE
CAMP SITE
ASPHALT ROAD
GRAVEL ROAD
PROPOSED ROAD
DAYLIGHT
CANAL
RIVER
WATER COURSE
CONTOURS
SPOT HEIGHT
BENCH MARK
BRIDGE
CULVERT
FLOWLINE

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK–BK14–PEDCO–110–CV–PY–0001 |
| Rough Grading Plan–BK14 | BK–BK14–PEDCO–110–CV–PY–0003 |
| Specification For Earth Work | BK–GNRAL–PEDCO–000–CV–SP–0004 |
| Standard Drawing For Slope Protection Details | BK–GNRAL–PEDCO–000–CV–DW–0002 |
| Geotechnical Investigation Report – BK14 | BK–BK14–PEDCO–110–GT–RT–0001 |
| Specification For Road & Paving | BK–GNRAL–PEDCO–000–CV–SP–0002 |
| MTO For Civil Works – BK14 | BK–BK14–PEDCO–110–CV–MT–0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS
PROJECT NO.: 971020


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

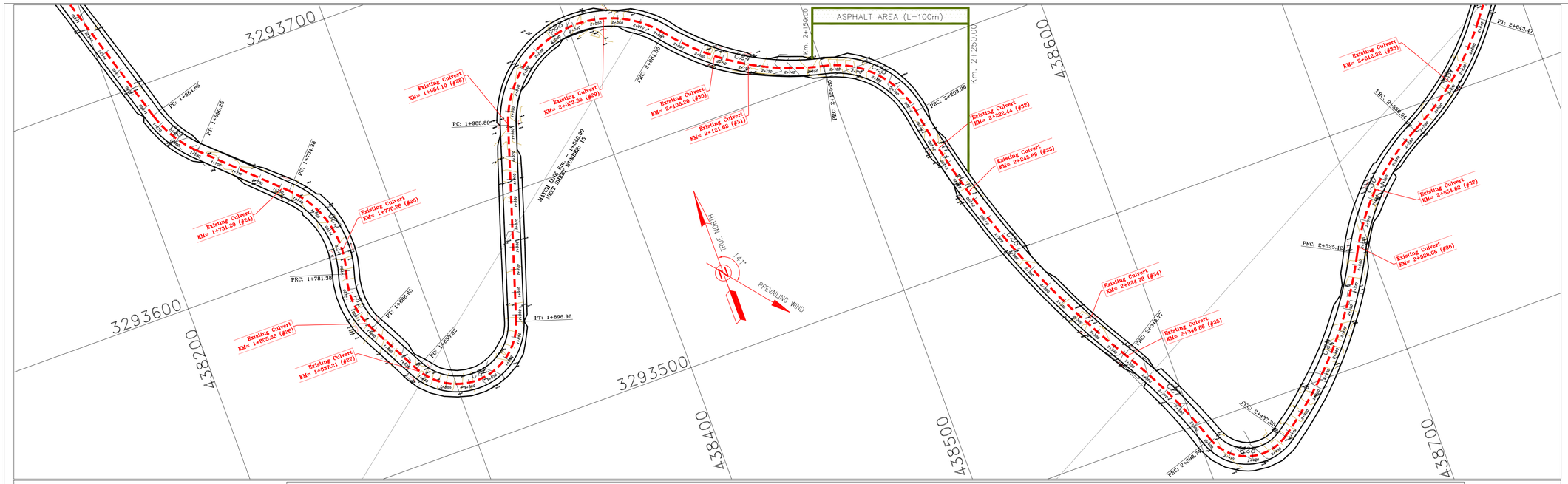
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

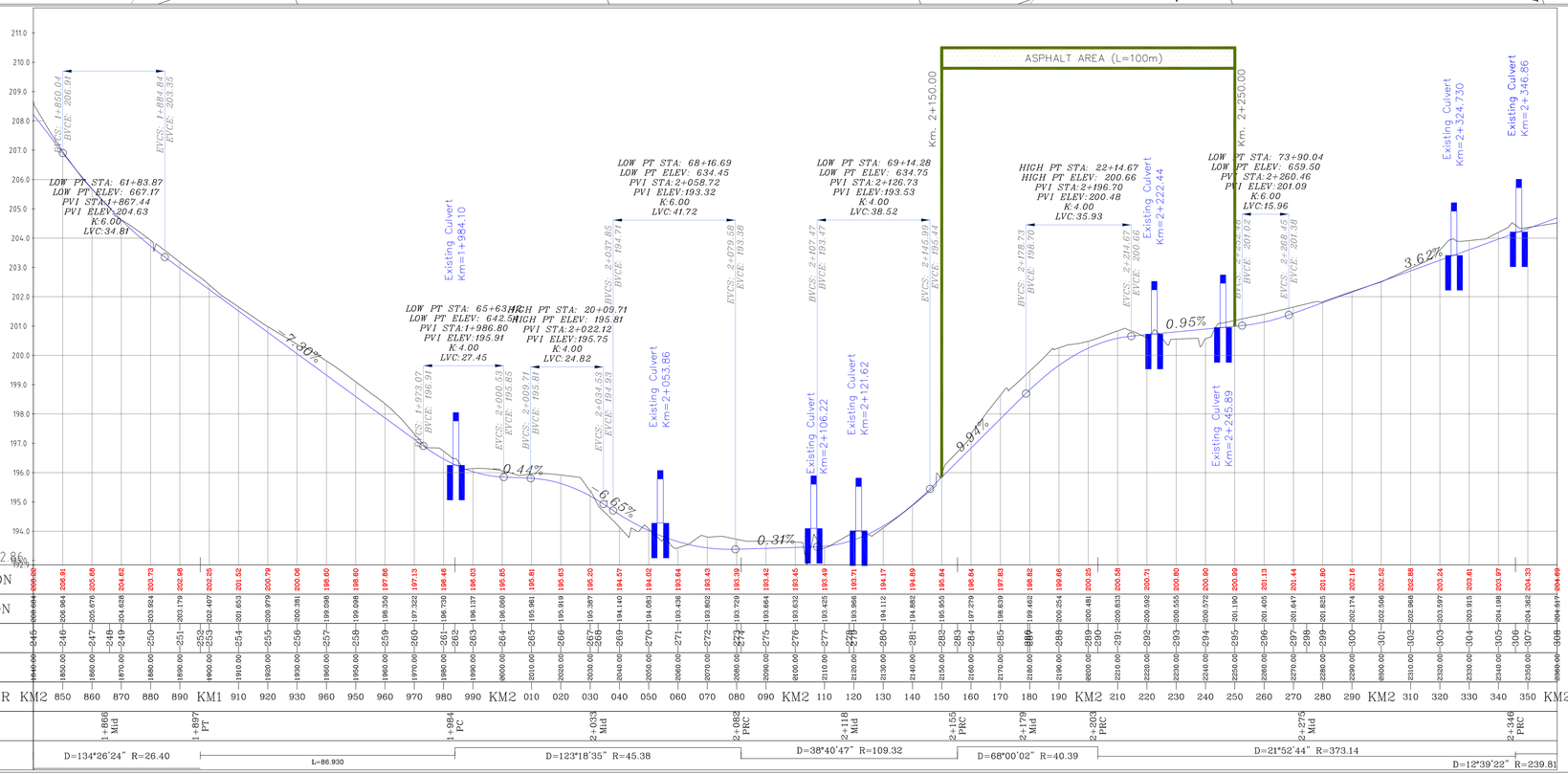
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION BY: DATE:

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| 1/1000 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 14 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053–073–9184 | F | 4 | S | 708209 | 14 | D01 |




## NOTES

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2–ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3–GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

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## LEGEND

WELL LOCATION
WELL
SITE
CAMP SITE
ASPHALT ROAD
GRAVEL ROAD
PROPOSED ROAD
DAYLIGHT
CANAL
RIVER
WATER COURSE
CONTOURS (60 / 50)
99.27 SPOT HEIGHT
BENCH MARK
BRIDGE
CULVERT
FLOWLINE

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

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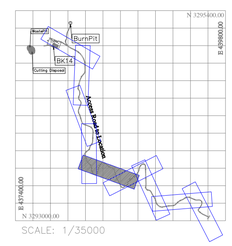
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




## Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---|---|---|---|---|---|
| C19 | 49.10 | 25.40 | S31° 40' 16.49"E | (438214.50,3293685.61) | (438227.69,3293664.24) |
| C20 | 42.18 | 47.00 | S14° 34' 24.38"E | (438259.70,3293633.85) | (438270.92,3293590.68) |
| C21 | 34.48 | 27.27 | S5° 18' 46.00"E | (438270.92,3293590.68) | (438273.38,3293564.23) |
| C22 | 26.40 | 61.94 | N84° 48' 40.27"E | (438285.75,3293540.94) | (438334.23,3293545.35) |
| C23 | 45.38 | 97.66 | N79° 14' 45.54"E | (438360.50,3293628.21) | (438438.97,3293643.12) |
| C24 | 109.32 | 73.80 | S58° 26' 20.63"E | (438438.97,3293643.12) | (438500.67,3293605.22) |
| C25 | 40.39 | 47.93 | S43° 46' 43.16"E | (438500.67,3293605.22) | (438531.92,3293572.60) |
| C26 | 373.14 | 142.49 | S20° 43' 04.02"E | (438531.92,3293572.60) | (438582.02,3293440.14) |
| C27 | 239.81 | 52.97 | S25° 19' 44.88"E | (438582.02,3293440.14) | (438604.63,3293392.36) |
| C28 | 20.92 | 38.51 | S71° 44' 47.10"E | (438604.63,3293392.36) | (438636.25,3293381.93) |
| C29 | 178.14 | 87.87 | N41° 22' 36.08"E | (438636.25,3293381.93) | (438693.75,3293447.20) |
| C30 | 98.32 | 60.92 | N44° 59' 38.16"E | (438693.75,3293447.20) | (438736.14,3293489.60) |
| C31 | 126.95 | 57.43 | N49° 46' 57.67"E | (438736.14,3293489.60) | (438779.62,3293526.37) |

| Station | Northing | Easting |
|---|---|---|
| 1+840.00 | 3293536.79 | 438288.48 |
| 1+850.00 | 3293530.35 | 438296.06 |
| 1+860.00 | 3293527.17 | 438305.48 |
| 1+870.00 | 3293527.70 | 438315.40 |
| 1+880.00 | 3293531.86 | 438324.43 |
| 1+890.00 | 3293539.06 | 438331.28 |
| 1+900.00 | 3293548.24 | 438335.15 |
| 1+910.00 | 3293557.78 | 438338.17 |
| 1+920.00 | 3293567.31 | 438341.19 |
| 1+930.00 | 3293576.84 | 438344.21 |
| 1+940.00 | 3293586.37 | 438347.23 |
| 1+950.00 | 3293595.91 | 438350.26 |
| 1+960.00 | 3293605.44 | 438353.28 |
| 1+970.00 | 3293614.97 | 438356.30 |
| 1+980.00 | 3293624.50 | 438359.32 |
| 1+990.00 | 3293633.89 | 438362.73 |
| 2+000.00 | 3293642.39 | 438367.96 |
| 2+010.00 | 3293649.54 | 438374.93 |
| 2+020.00 | 3293654.99 | 438383.28 |

| | | |
|---|---|---|
| 2+030.00 | 3293658.49 | 438392.63 |
| 2+040.00 | 3293659.86 | 438402.52 |
| 2+050.00 | 3293659.03 | 438412.46 |
| 2+060.00 | 3293656.05 | 438421.99 |
| 2+070.00 | 3293651.06 | 438430.63 |
| 2+080.00 | 3293644.30 | 438437.97 |
| 2+090.00 | 3293636.77 | 438444.55 |
| 2+100.00 | 3293629.84 | 438451.76 |
| 2+110.00 | 3293623.61 | 438459.57 |
| 2+120.00 | 3293618.11 | 438467.92 |
| 2+130.00 | 3293613.40 | 438476.73 |
| 2+140.00 | 3293609.51 | 438485.94 |
| 2+150.00 | 3293606.48 | 438495.47 |
| 2+160.00 | 3293603.97 | 438505.14 |
| 2+170.00 | 3293599.61 | 438514.12 |
| 2+180.00 | 3293593.19 | 438521.75 |
| 2+190.00 | 3293585.09 | 438527.57 |
| 2+200.00 | 3293575.81 | 438531.23 |
| 2+210.00 | 3293566.00 | 438533.12 |
| 2+220.00 | 3293556.20 | 438535.12 |

| | | |
|---|---|---|
| 2+230.00 | 3293546.46 | 438537.39 |
| 2+240.00 | 3293536.79 | 438539.92 |
| 2+250.00 | 3293527.18 | 438542.71 |
| 2+260.00 | 3293517.66 | 438545.75 |
| 2+270.00 | 3293508.22 | 438549.05 |
| 2+280.00 | 3293498.87 | 438552.60 |
| 2+290.00 | 3293489.62 | 438556.40 |
| 2+300.00 | 3293480.47 | 438560.44 |
| 2+310.00 | 3293471.44 | 438564.73 |
| 2+320.00 | 3293462.52 | 438569.26 |
| 2+330.00 | 3293453.73 | 438574.03 |
| 2+340.00 | 3293445.07 | 438579.03 |
| 2+350.00 | 3293436.52 | 438584.21 |
| 2+360.00 | 3293427.81 | 438589.12 |

| PI Station | Northing | Easting |
|---|---|---|
| 1+897.88 | 3293485.42 | 438315.23 |
| 2+068.01 | 3293708.39 | 438385.92 |
| 2+119.92 | 3293613.34 | 438463.17 |
| 2+182.59 | 3293599.45 | 438527.29 |
| 2+275.40 | 3293501.53 | 438544.17 |

D01 TOTALLY REVISED

Coordinate of Bench Marks (UTM–ZONE 39N)

| NAME | Easting(m) | Northing(m) | Elevation(m) |
|---|---|---|---|
| GPS2 | 437770.8593 | 3295060.1065 | 171.4186 |
| GPS3 | 437770.7943 | 3295060.0960 | 171.4184 |

| REV. | DATE | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|---|
| | | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

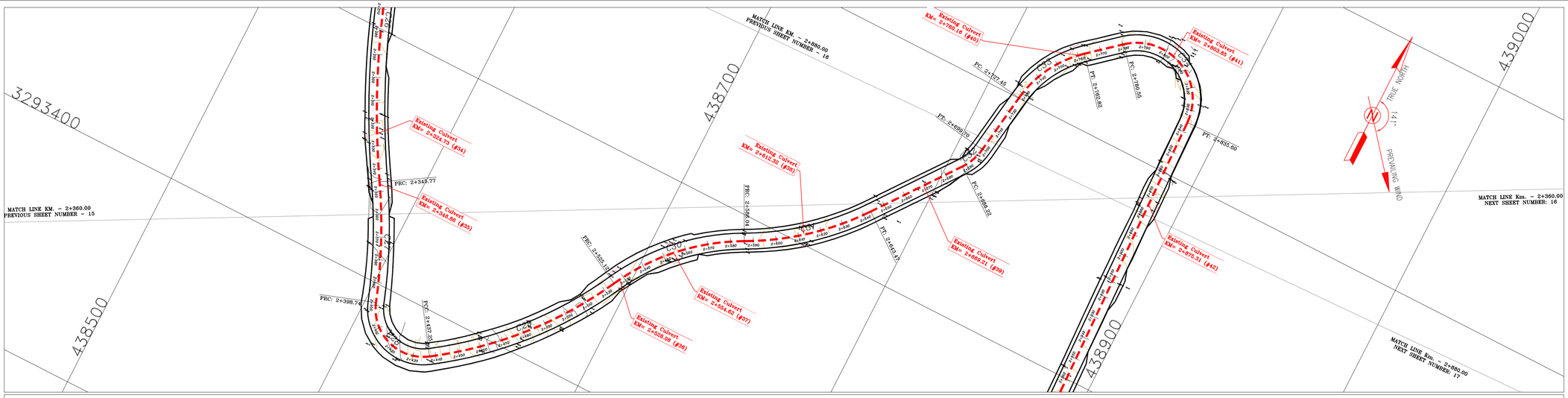
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

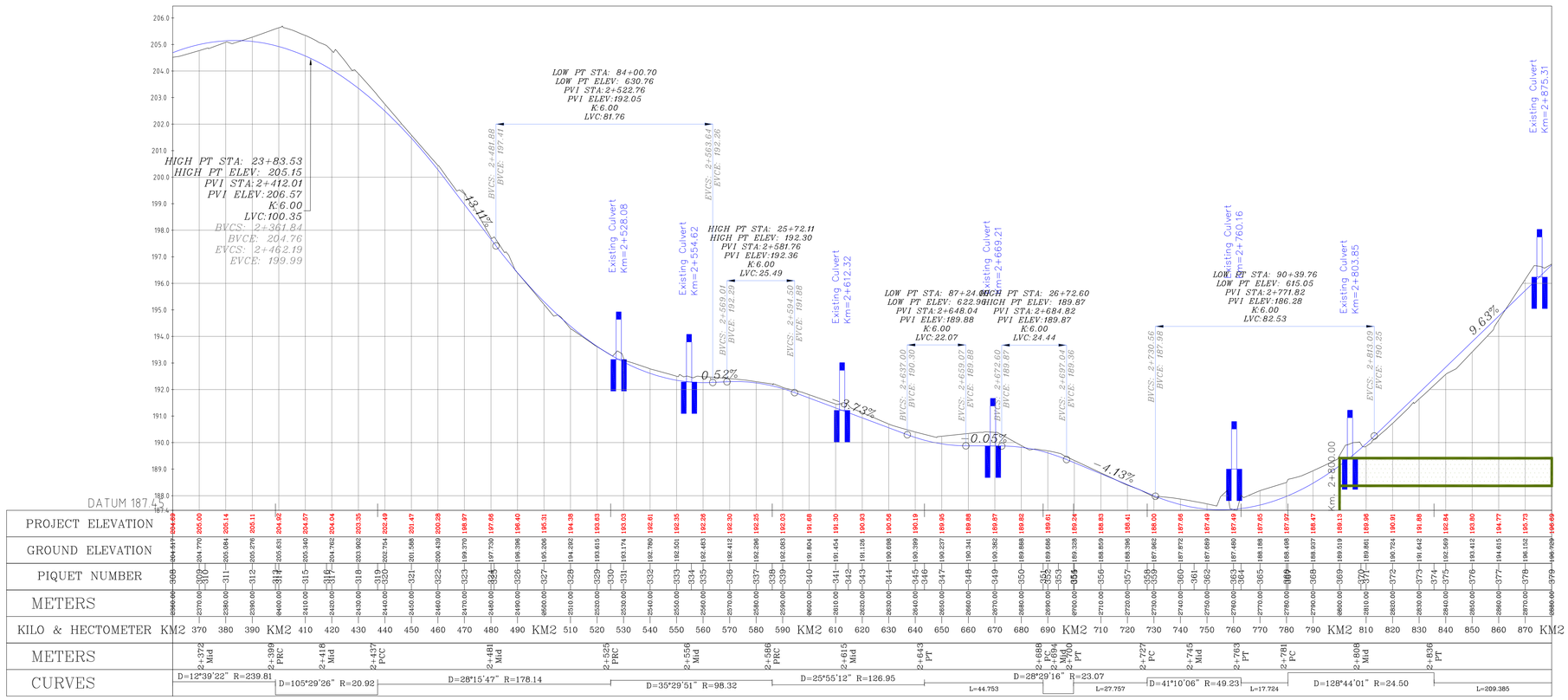
APPROVED FOR CONSTRUCTION | BY: | DATE:

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| 1/1000 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 15 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053–073–9184 | F | 4 | S | 708209 | 15 | D01 |

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| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

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## LEGEND

WELL LOCATION
WELL
SITE
CAMP SITE
ASPHALT ROAD
GRAVEL ROAD
PROPOSED ROAD
DAYLIGHT
CANAL
RIVER
WATER COURSE
CONTOURS (60 / 50)
SPOT HEIGHT (99.27)
BENCH MARK
BRIDGE
CULVERT
FLOWLINE

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
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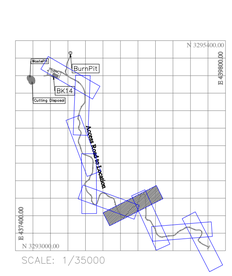
## KEY PLAN




Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---|---|---|---|---|---|
| C26 | 373.14 | 142.49 | S20° 43' 04.02"E | (438531.92,3293572.60) | (438582.02,3293440.14) |
| C27 | 239.81 | 52.97 | S25° 19' 44.88"E | (438582.02,3293440.14) | (438604.63,3293392.36) |
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| C30 | 98.32 | 60.92 | N44° 59' 38.16"E | (438693.75,3293447.20) | (438736.14,3293489.60) |
| C31 | 126.95 | 57.43 | N49° 46' 57.67"E | (438736.14,3293489.60) | (438779.62,3293526.37) |
| C32 | 23.07 | 11.47 | N22° 34' 43.64"E | (438806.44,3293562.19) | (438810.80,3293572.67) |
| C33 | 49.23 | 35.37 | N28° 55' 08.79"E | (438814.82,3293600.14) | (438831.56,3293630.44) |
| C34 | 24.50 | 55.05 | S66° 07' 47.91"E | (438845.04,3293641.95) | (438885.44,3293624.07) |

| Station | Northing | Easting |
|---|---|---|
| 2+360.00 | 3293427.81 | 438589.12 |
| 2+370.00 | 3293418.91 | 438593.67 |
| 2+380.00 | 3293409.82 | 438597.85 |
| 2+390.00 | 3293400.57 | 438601.64 |
| 2+400.00 | 3293391.18 | 438605.08 |
| 2+410.00 | 3293383.18 | 438610.92 |
| 2+420.00 | 3293378.77 | 438619.79 |
| 2+430.00 | 3293378.93 | 438629.70 |
| 2+440.00 | 3293383.51 | 438638.51 |
| 2+450.00 | 3293389.52 | 438646.50 |
| 2+460.00 | 3293395.98 | 438654.13 |
| 2+470.00 | 3293402.85 | 438661.40 |
| 2+480.00 | 3293410.12 | 438668.26 |
| 2+490.00 | 3293417.76 | 438674.71 |
| 2+500.00 | 3293425.75 | 438680.72 |
| 2+510.00 | 3293434.07 | 438686.27 |
| 2+520.00 | 3293442.68 | 438691.34 |
| 2+530.00 | 3293451.48 | 438696.09 |
| 2+540.00 | 3293459.87 | 438701.54 |
| 2+550.00 | 3293467.65 | 438707.80 |
| 2+560.00 | 3293474.76 | 438714.83 |
| 2+570.00 | 3293481.12 | 438722.54 |
| 2+580.00 | 3293486.67 | 438730.86 |
| 2+590.00 | 3293491.47 | 438739.63 |
| 2+600.00 | 3293496.66 | 438748.17 |
| 2+610.00 | 3293502.51 | 438756.28 |
| 2+620.00 | 3293508.98 | 438763.90 |
| 2+630.00 | 3293516.03 | 438770.99 |
| 2+640.00 | 3293523.61 | 438777.50 |
| 2+650.00 | 3293531.59 | 438783.53 |
| 2+660.00 | 3293539.60 | 438789.53 |
| 2+670.00 | 3293547.60 | 438795.52 |
| 2+680.00 | 3293555.61 | 438801.51 |
| 2+690.00 | 3293563.65 | 438807.45 |
| 2+700.00 | 3293572.97 | 438810.85 |
| 2+710.00 | 3293582.87 | 438812.29 |
| 2+720.00 | 3293592.76 | 438813.74 |
| 2+730.00 | 3293602.65 | 438815.26 |
| 2+740.00 | 3293612.19 | 438818.20 |
| 2+750.00 | 3293620.94 | 438823.00 |
| 2+760.00 | 3293628.54 | 438829.47 |
| 2+770.00 | 3293635.10 | 438837.02 |
| 2+780.00 | 3293641.59 | 438844.63 |
| 2+790.00 | 3293646.56 | 438853.22 |
| 2+800.00 | 3293647.72 | 438863.08 |
| 2+810.00 | 3293644.87 | 438872.60 |
| 2+820.00 | 3293638.48 | 438880.20 |
| 2+830.00 | 3293629.59 | 438884.63 |
| 2+840.00 | 3293619.67 | 438885.58 |
| 2+850.00 | 3293609.67 | 438885.88 |
| 2+860.00 | 3293599.68 | 438886.19 |
| 2+870.00 | 3293589.68 | 438886.50 |
| 2+880.00 | 3293579.68 | 438886.81 |

| PI Station | Northing | Easting |
|---|---|---|
| 2+372.36 | 3293417.51 | 438595.97 |
| 2+426.24 | 3293366.36 | 438613.59 |
| 2+482.10 | 3293407.33 | 438673.22 |
| 2+556.60 | 3293475.18 | 438708.16 |
| 2+615.26 | 3293502.98 | 438762.51 |
| 2+694.08 | 3293566.88 | 438809.95 |
| 2+745.94 | 3293618.43 | 438817.50 |
| 2+831.61 | 3293675.10 | 438883.87 |

D01 TOTALLY REVISED

Coordinate of Bench Marks (UTM–ZONE 39N)

| NAME | Easting(m) | Northing(m) | Elevation(m) |
|---|---|---|---|
| GPS2 | 437770.8593 | 3295060.1065 | 171.4186 |
| GPS3 | 437770.7943 | 3295060.0960 | 171.4184 |

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | ** ** | *** **** | ** ** | *** **** |
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | ** ** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | ** ** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| 1/1000 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 16 OF 90 | D01 |


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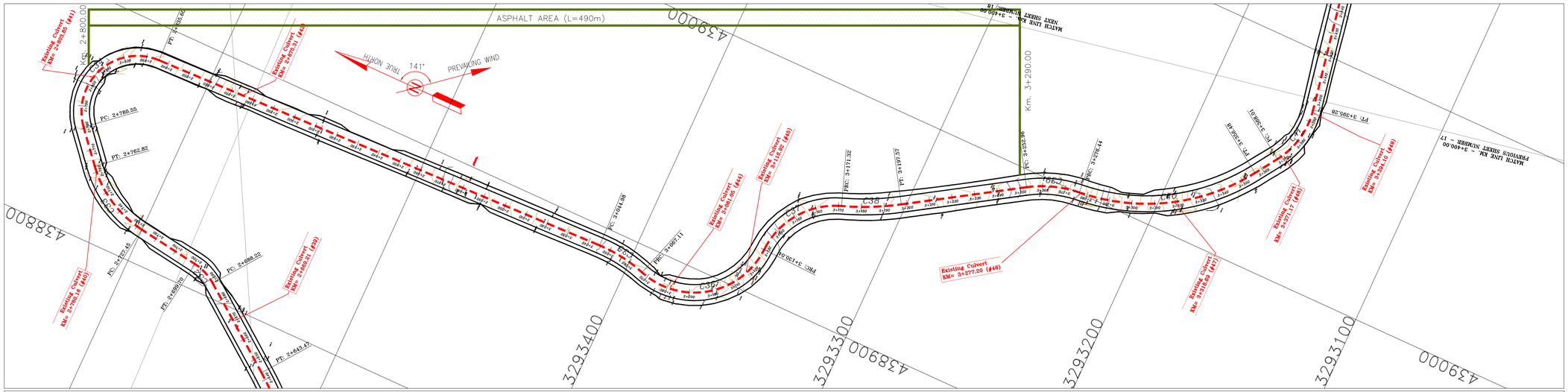
BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

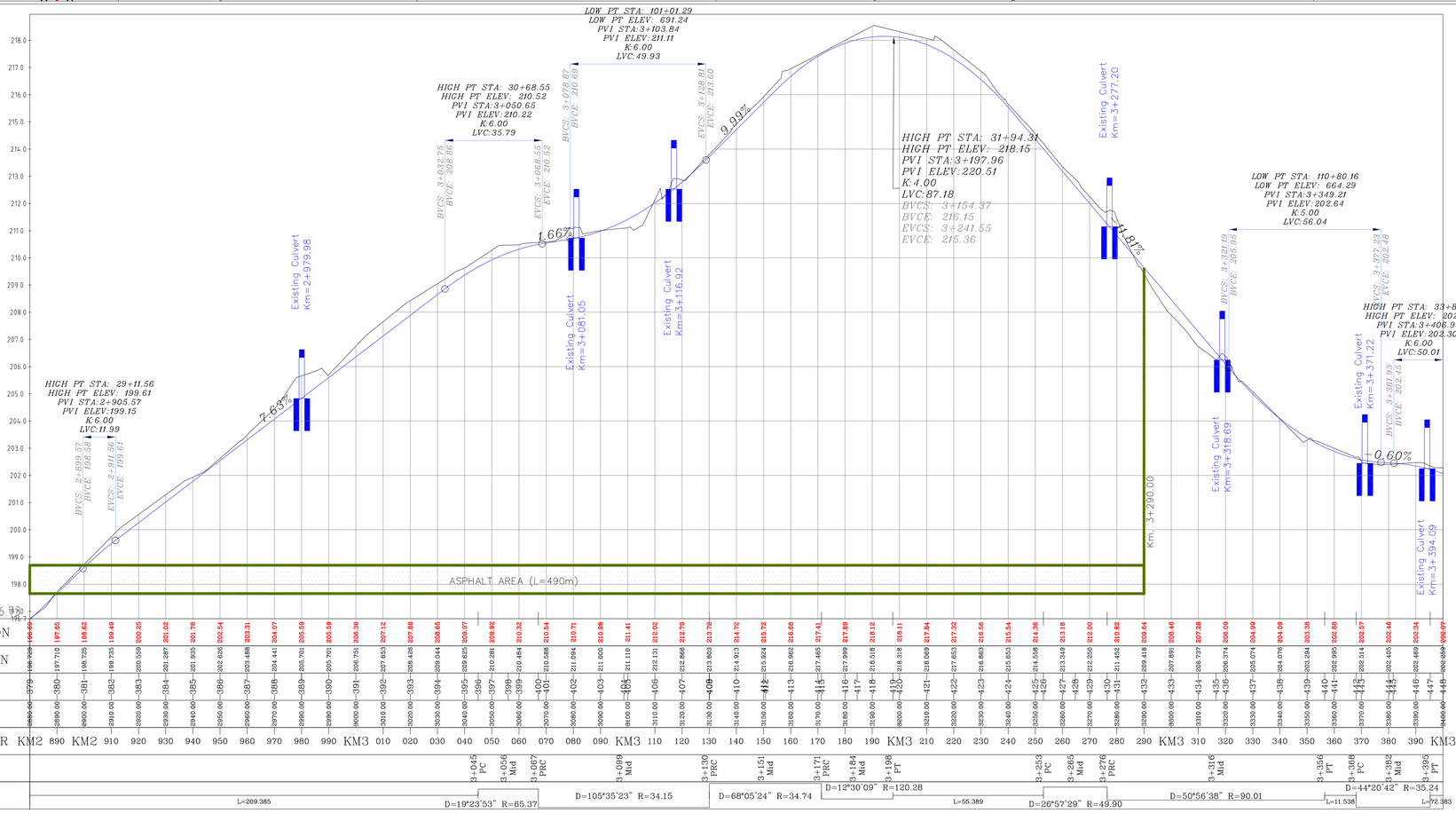
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

| APPROVED FOR CONSTRUCTION | BY: | DATE: |
|---|---|---|

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 16 | D01 |




## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

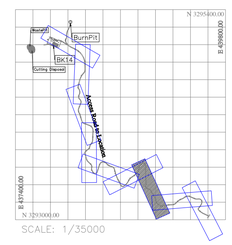
WELL LOCATION
WELL
SITE
CAMP SITE
ASPHALT ROAD
GRAVEL ROAD
PROPOSED ROAD
DAYLIGHT
CANAL
RIVER
WATER COURSE
CONTOURS (60 / 50)
99.27 SPOT HEIGHT
BENCH MARK
BRIDGE
CULVERT
FLOWLINE

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




### Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---|---|---|---|---|---|
| C32 | 23.07 | 11.47 | N22° 34' 43.64"E | (438806.44,3293562.19) | (438810.80,3293572.67) |
| C33 | 49.23 | 35.37 | N28° 55' 08.79"E | (438814.82,3293600.14) | (438831.56,3293630.44) |
| C34 | 24.50 | 55.05 | S66° 07' 47.91"E | (438845.04,3293641.95) | (438885.44,3293624.07) |
| C35 | 65.37 | 22.13 | S7° 56' 08.79"W | (438891.88,3293414.78) | (438888.84,3293392.97) |
| C36 | 34.15 | 62.93 | S35° 09' 36.23"E | (438888.84,3293392.97) | (438920.17,3293348.50) |
| C37 | 34.74 | 41.28 | S53° 54' 35.73"E | (438920.17,3293348.50) | (438951.60,3293325.59) |
| C38 | 120.28 | 26.25 | S26° 06' 58.48"E | (438951.60,3293325.59) | (438963.13,3293302.07) |
| C39 | 49.90 | 23.48 | S18° 53' 18.63"E | (438992.78,3293255.28) | (439000.31,3293233.27) |
| C40 | 90.01 | 80.04 | S30° 52' 53.39"E | (439000.31,3293233.27) | (439040.05,3293166.82) |
| C41 | 35.24 | 27.27 | S78° 31' 33.58"E | (439049.66,3293160.43) | (439075.72,3293155.14) |

| Station | Northing | Easting |
|---|---|---|
| 2+880.00 | 3293579.68 | 438886.81 |
| 2+890.00 | 3293569.69 | 438887.11 |
| 2+900.00 | 3293559.69 | 438887.42 |
| 2+910.00 | 3293549.70 | 438887.73 |
| 2+920.00 | 3293539.70 | 438888.04 |
| 2+930.00 | 3293529.71 | 438888.35 |
| 2+940.00 | 3293519.71 | 438888.65 |
| 2+950.00 | 3293509.72 | 438888.96 |
| 2+960.00 | 3293499.72 | 438889.27 |
| 2+970.00 | 3293489.73 | 438889.58 |
| 2+980.00 | 3293479.73 | 438889.88 |
| 2+990.00 | 3293469.74 | 438890.19 |
| 3+000.00 | 3293459.74 | 438890.50 |
| 3+010.00 | 3293449.75 | 438890.81 |
| 3+020.00 | 3293439.75 | 438891.11 |
| 3+030.00 | 3293429.76 | 438891.42 |
| 3+040.00 | 3293419.76 | 438891.73 |
| 3+050.00 | 3293409.76 | 438891.85 |
| 3+060.00 | 3293399.85 | 438890.62 |

| | | |
|---|---|---|
| 3+070.00 | 3293390.18 | 438888.08 |
| 3+080.00 | 3293380.25 | 438887.32 |
| 3+090.00 | 3293370.51 | 438889.46 |
| 3+100.00 | 3293361.81 | 438894.31 |
| 3+110.00 | 3293354.88 | 438901.47 |
| 3+120.00 | 3293350.32 | 438910.33 |
| 3+130.00 | 3293348.50 | 438920.13 |
| 3+140.00 | 3293346.73 | 438929.93 |
| 3+150.00 | 3293342.25 | 438938.83 |
| 3+160.00 | 3293335.43 | 438946.10 |
| 3+170.00 | 3293326.82 | 438951.12 |
| 3+180.00 | 3293317.54 | 438954.84 |
| 3+190.00 | 3293308.58 | 438959.28 |
| 3+200.00 | 3293300.01 | 438964.43 |
| 3+210.00 | 3293291.57 | 438969.78 |
| 3+220.00 | 3293283.12 | 438975.14 |
| 3+230.00 | 3293274.67 | 438980.49 |
| 3+240.00 | 3293266.23 | 438985.84 |
| 3+250.00 | 3293257.78 | 438991.20 |
| 3+260.00 | 3293249.09 | 438996.12 |

| | | |
|---|---|---|
| 3+270.00 | 3293239.62 | 438999.29 |
| 3+280.00 | 3293229.73 | 439000.72 |
| 3+290.00 | 3293219.92 | 439002.60 |
| 3+300.00 | 3293210.37 | 439005.56 |
| 3+310.00 | 3293201.21 | 439009.56 |
| 3+320.00 | 3293192.55 | 439014.55 |
| 3+330.00 | 3293184.50 | 439020.47 |
| 3+340.00 | 3293177.15 | 439027.25 |
| 3+350.00 | 3293170.60 | 439034.79 |
| 3+360.00 | 3293164.87 | 439042.99 |
| 3+370.00 | 3293159.38 | 439051.34 |
| 3+380.00 | 3293155.60 | 439060.56 |
| 3+390.00 | 3293154.55 | 439070.47 |
| 3+400.00 | 3293156.01 | 439080.35 |

| PI Station | Northing | Easting |
|---|---|---|
| 3+056.15 | 3293403.62 | 438892.23 |
| 3+112.09 | 3293350.10 | 438875.22 |
| 3+153.51 | 3293347.66 | 438943.62 |
| 3+184.50 | 3293313.19 | 438956.08 |
| 3+264.92 | 3293245.18 | 438999.18 |
| 3+319.32 | 3293190.58 | 439004.36 |
| 3+382.37 | 3293152.47 | 439061.61 |

D01 TOTALLY REVISED

Coordinate of Bench Marks (UTM–ZONE 39N)

| NAME | Easting(m) | Northing(m) | Elevation(m) |
|---|---|---|---|
| GPS2 | 437770.8593 | 3295060.1065 | 171.4186 |
| GPS3 | 437770.7943 | 3295060.0960 | 171.4184 |

| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |
|---|---|---|---|---|---|---|
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | ** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | ** |

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | ** | *** | ** | *** |
| | | CHECKED | | REV. APPR. | |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| 1/1000 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 17 OF 90 | D01 |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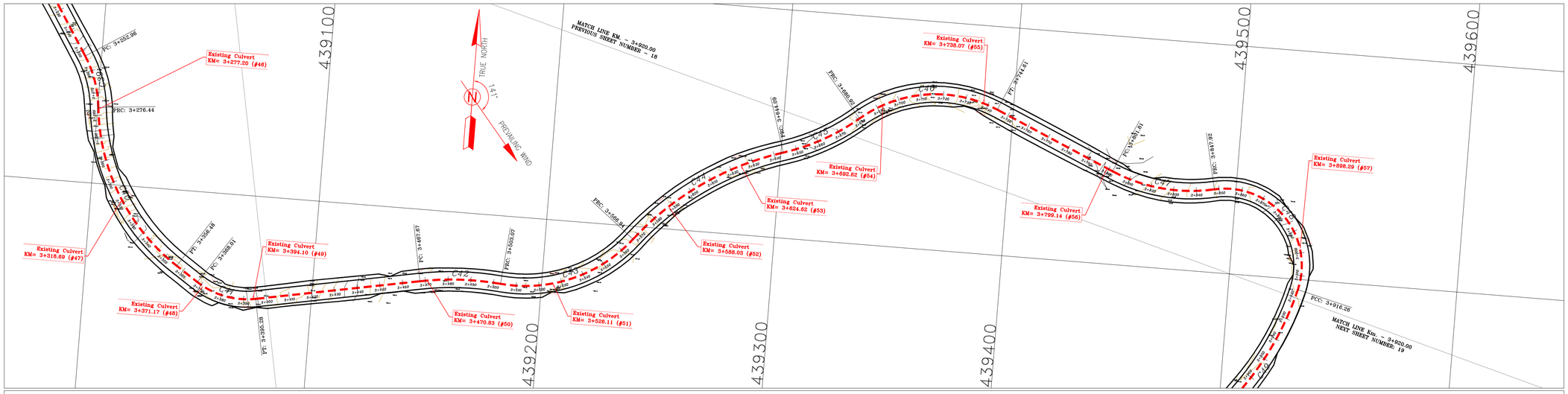
BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

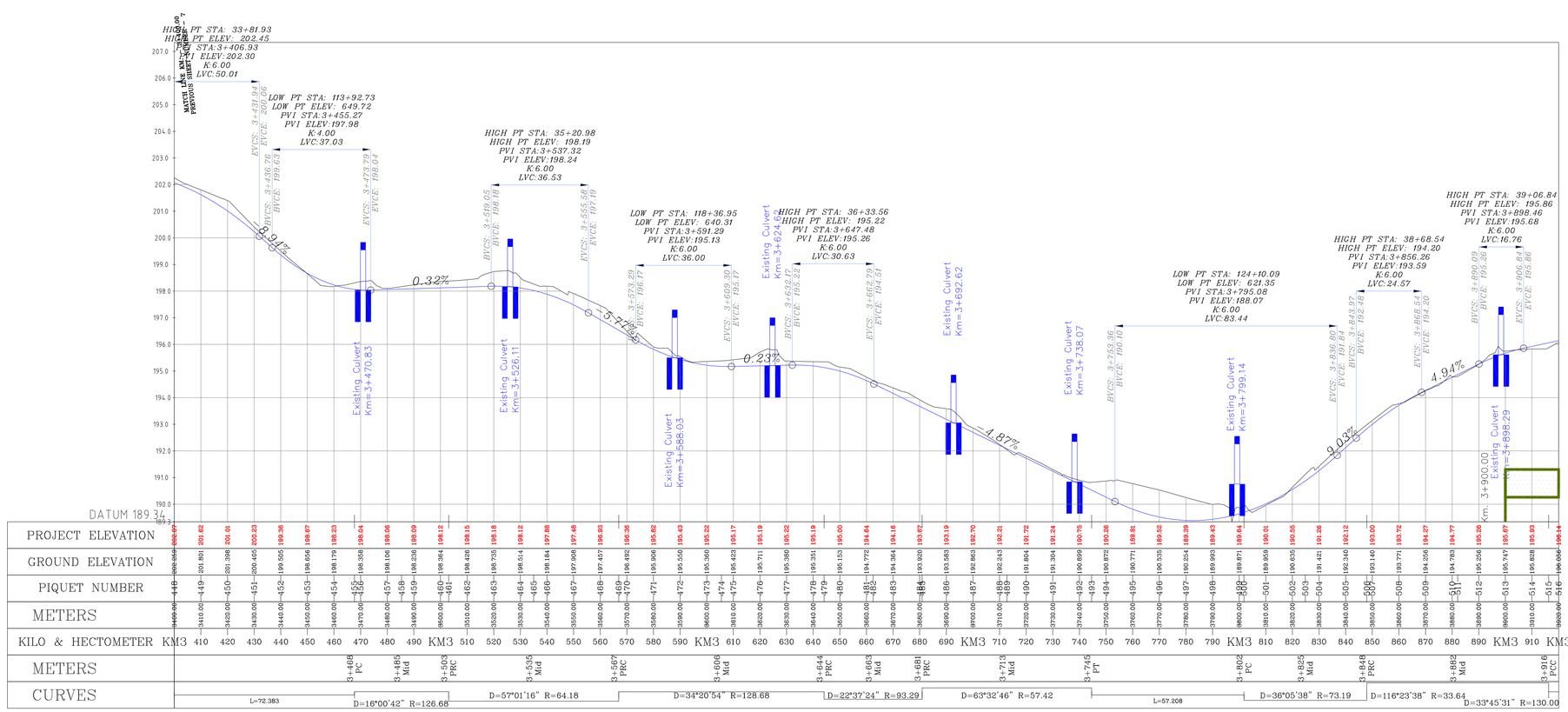
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

| APPROVED FOR CONSTRUCTION | BY: | DATE: |
|---|---|---|

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 17 | D01 |




## NOTES

1–ALL COORDINATES AND ELEVATIONS ARE IN METER.

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3–GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4–THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK–GNRAL–PEDCO–000–CV–SP–0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5–BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

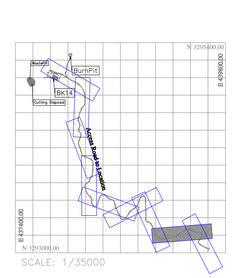
WELL LOCATION
WELL
SITE
CAMP SITE
ASPHALT ROAD
GRAVEL ROAD
PROPOSED ROAD
DAYLIGHT
CANAL
RIVER
WATER COURSE
CONTOURS (60 / 50)
SPOT HEIGHT (99.27)
BENCH MARK
BRIDGE
CULVERT
FLOWLINE

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK–BK14–PEDCO–110–CV–PY–0001 |
| Rough Grading Plan–BK14 | BK–BK14–PEDCO–110–CV–PY–0003 |
| Specification For Earth Work | BK–GNRAL–PEDCO–000–CV–SP–0004 |
| Standard Drawing For Slope Protection Details | BK–GNRAL–PEDCO–000–CV–DW–0002 |
| Geotechnical Investigation Report – BK14 | BK–BK14–PEDCO–110–GT–RT–0001 |
| Specification For Road & Paving | BK–GNRAL–PEDCO–000–CV–SP–0002 |
| MTO For Civil Works – BK14 | BK–BK14–PEDCO–110–CV–MT–0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




## Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---|---|---|---|---|---|
| C39 | 49.90 | 23.48 | S18° 53' 18.63"E | (438992.78,3293255.28) | (439000.31,3293233.27) |
| C40 | 90.01 | 80.04 | S30° 52' 53.39"E | (439000.31,3293233.27) | (439040.05,3293166.82) |
| C41 | 35.24 | 27.27 | S78° 31' 33.58"E | (439049.66,3293160.43) | (439075.72,3293155.14) |
| C42 | 126.68 | 35.40 | N87° 18' 26.27"E | (439146.85,3293168.58) | (439182.09,3293170.23) |
| C43 | 64.18 | 63.88 | N66° 48' 08.86"E | (439182.09,3293170.23) | (439238.41,3293194.37) |
| C44 | 128.68 | 77.14 | N55° 27' 57.77"E | (439238.41,3293194.37) | (439301.02,3293237.45) |
| C45 | 93.29 | 36.83 | N61° 19' 42.70"E | (439301.02,3293237.45) | (439333.12,3293255.01) |

| Station | Northing | Easting |
|---|---|---|
| 3+400.00 | 3293156.01 | 439080.35 |
| 3+410.00 | 3293157.87 | 439090.18 |
| 3+420.00 | 3293159.73 | 439100.01 |
| 3+430.00 | 3293161.58 | 439109.83 |
| 3+440.00 | 3293163.44 | 439119.66 |
| 3+450.00 | 3293165.30 | 439129.49 |
| 3+460.00 | 3293167.15 | 439139.31 |
| 3+470.00 | 3293168.99 | 439149.14 |
| 3+480.00 | 3293170.27 | 439159.06 |
| 3+490.00 | 3293170.77 | 439169.04 |
| 3+500.00 | 3293170.48 | 439179.03 |
| 3+510.00 | 3293169.97 | 439189.02 |
| 3+520.00 | 3293170.89 | 439198.96 |
| 3+530.00 | 3293173.36 | 439208.64 |
| 3+540.00 | 3293177.29 | 439217.83 |
| 3+550.00 | 3293182.60 | 439226.29 |
| 3+560.00 | 3293189.16 | 439233.82 |
| 3+570.00 | 3293196.74 | 439240.33 |

| | | |
|---|---|---|
| 3+580.00 | 3293204.19 | 439247.01 |
| 3+590.00 | 3293211.09 | 439254.24 |
| 3+600.00 | 3293217.41 | 439261.98 |
| 3+610.00 | 3293223.11 | 439270.20 |
| 3+620.00 | 3293228.16 | 439278.83 |
| 3+630.00 | 3293232.52 | 439287.82 |
| 3+640.00 | 3293236.17 | 439297.13 |
| 3+650.00 | 3293239.39 | 439306.60 |
| 3+660.00 | 3293243.47 | 439315.72 |
| 3+670.00 | 3293248.49 | 439324.36 |
| 3+680.00 | 3293254.42 | 439332.41 |
| 3+690.00 | 3293260.27 | 439340.51 |
| 3+700.00 | 3293264.64 | 439349.49 |
| 3+710.00 | 3293267.38 | 439359.09 |
| 3+720.00 | 3293268.42 | 439369.03 |
| 3+730.00 | 3293267.73 | 439378.99 |
| 3+740.00 | 3293265.31 | 439388.68 |
| 3+750.00 | 3293261.49 | 439397.92 |
| 3+760.00 | 3293257.49 | 439407.08 |

| | | |
|---|---|---|
| 3+770.00 | 3293253.49 | 439416.25 |
| 3+780.00 | 3293249.49 | 439425.42 |
| 3+790.00 | 3293245.50 | 439434.58 |
| 3+800.00 | 3293241.50 | 439443.75 |
| 3+810.00 | 3293237.93 | 439453.08 |
| 3+820.00 | 3293235.64 | 439462.81 |
| 3+830.00 | 3293234.70 | 439472.76 |
| 3+840.00 | 3293235.12 | 439482.74 |
| 3+850.00 | 3293236.80 | 439492.59 |
| 3+860.00 | 3293236.89 | 439502.55 |
| 3+870.00 | 3293234.05 | 439512.10 |
| 3+880.00 | 3293228.53 | 439520.40 |
| 3+890.00 | 3293220.83 | 439526.72 |
| 3+900.00 | 3293211.62 | 439530.51 |
| 3+910.00 | 3293201.70 | 439531.43 |
| 3+920.00 | 3293191.90 | 439529.56 |

| PI Station | Northing | Easting |
|---|---|---|
| 3+485.48 | 3293171.88 | 439164.35 |
| 3+537.93 | 3293167.01 | 439216.81 |
| 3+606.72 | 3293225.58 | 439263.06 |
| 3+662.75 | 3293243.02 | 439318.83 |
| 3+716.49 | 3293277.86 | 439360.37 |
| 3+825.66 | 3293231.24 | 439467.27 |
| 3+902.17 | 3293248.18 | 439543.50 |

D01
TOTALLY REVISED

Coordinate of Bench Marks (UTM–ZONE 39N)

| NAME | Easting(m) | Northing(m) | Elevation(m) |
|---|---|---|---|
| GPS2 | 437770.8593 | 3295060.1065 | 171.4186 |
| GPS3 | 437770.7943 | 3295060.0960 | 171.4184 |

| REV. | DATE | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|---|
| *** | ********** | | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |
| | | | CHECKED | | REV. APPR. | |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

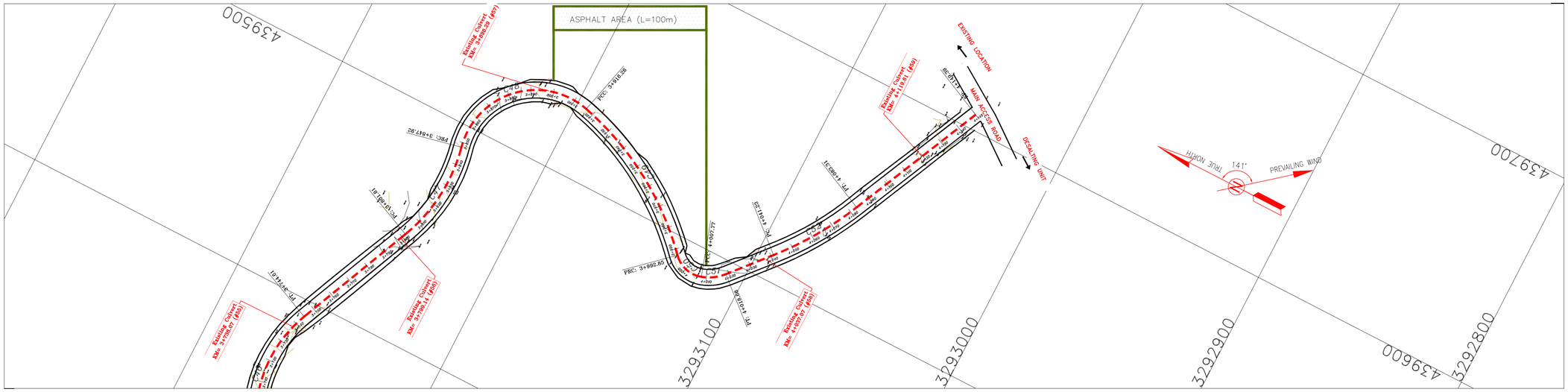
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

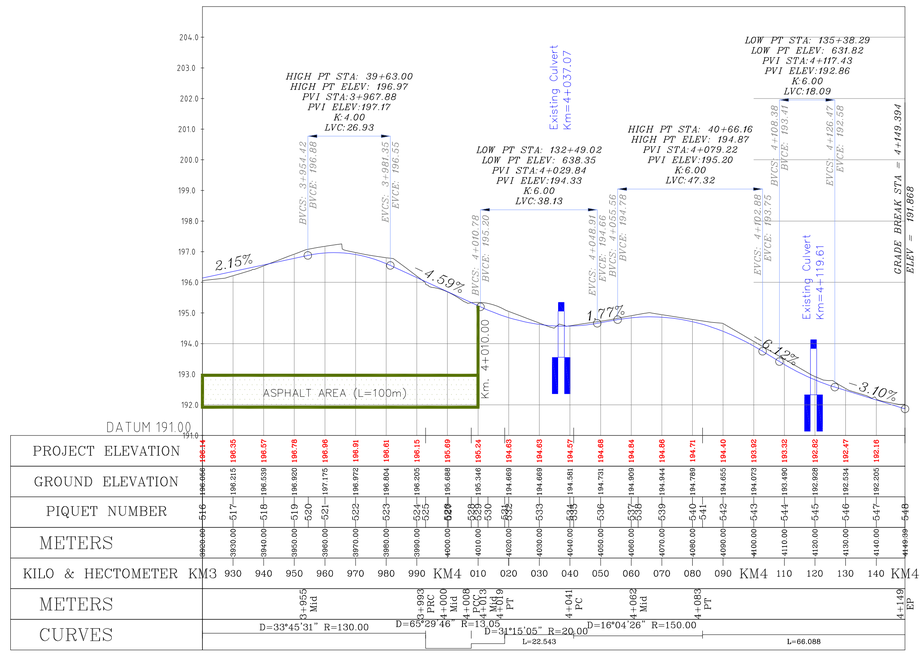
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| 1/1000 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 18 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053–073–9184 | F | 4 | S | 708209 | 18 | D01 |




## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

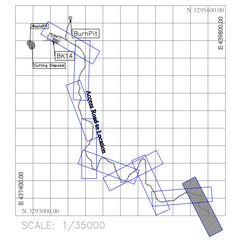
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | | BRIDGE |
| ∿ | DAYLIGHT | | CULVERT |
| | | | FLOWLINE |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




## Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---|---|---|---|---|---|
| C46 | 57.42 | 63.68 | N81° 47' 23.60"E | (439333.12,3293255.01) | (439392.97,3293263.64) |
| C47 | 73.19 | 46.11 | S84° 29' 02.42"E | (439445.41,3293240.77) | (439490.55,3293236.41) |
| C48 | 33.64 | 68.33 | S44° 20' 02.31"E | (439490.55,3293236.41) | (439530.51,3293195.52) |
| C49 | 130.00 | 76.60 | S30° 44' 32.20"W | (439530.51,3293195.52) | (439491.92,3293130.64) |
| C50 | 13.05 | 14.92 | S14° 52' 24.31"W | (439491.92,3293130.64) | (439488.29,3293116.99) |
| C51 | 20.00 | 10.91 | S33° 30' 01.16"E | (439488.29,3293116.99) | (439494.24,3293108.00) |
| C52 | 150.00 | 42.08 | S57° 09' 46.39"E | (439511.28,3293093.25) | (439546.52,3293070.51) |

| Station | Northing | Easting |
|---|---|---|
| 3+920.00 | 3293191.90 | 439529.56 |
| 3+930.00 | 3293182.37 | 439526.51 |
| 3+940.00 | 3293173.11 | 439522.75 |
| 3+950.00 | 3293164.17 | 439518.28 |
| 3+960.00 | 3293155.59 | 439513.14 |
| 3+970.00 | 3293147.44 | 439507.36 |
| 3+980.00 | 3293139.75 | 439500.97 |
| 3+990.00 | 3293132.58 | 439494.00 |
| 4+000.00 | 3293124.64 | 439488.18 |
| 4+010.00 | 3293114.91 | 439489.09 |
| 4+020.00 | 3293107.14 | 439495.23 |
| 4+030.00 | 3293100.59 | 439502.80 |
| 4+040.00 | 3293094.05 | 439510.36 |
| 4+050.00 | 3293087.70 | 439518.08 |
| 4+060.00 | 3293081.88 | 439526.21 |
| 4+070.00 | 3293076.61 | 439534.71 |
| 4+080.00 | 3293071.93 | 439543.54 |
| 4+090.00 | 3293067.70 | 439552.60 |
| 4+100.00 | 3293063.50 | 439561.68 |
| 4+110.00 | 3293059.31 | 439570.76 |

| | | |
|---|---|---|
| 4+120.00 | 3293055.11 | 439579.83 |
| 4+130.00 | 3293050.92 | 439588.91 |
| 4+140.00 | 3293046.72 | 439597.99 |
| 4+149.39 | 3293042.79 | 439606.51 |

| PI Station | Northing | Easting |
|---|---|---|
| 3+955.70 | 3293157.22 | 439521.05 |
| 4+001.25 | 3293124.98 | 439485.71 |
| 4+013.37 | 3293111.66 | 439490.01 |
| 4+062.40 | 3293079.39 | 439527.30 |
| 4+149.39 | 3293042.78 | 439606.52 |

D01
TOTALLY REVISED

Coordinate of Bench Marks (UTM–ZONE 39N)

| NAME | Easting(m) | Northing(m) | Elevation(m) |
|---|---|---|---|
| GPS2 | 437770.8593 | 3295060.1065 | 171.4186 |
| GPS3 | 437770.7943 | 3295060.0960 | 171.4184 |

| REV. | DATE | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|---|
| *** | ********** | | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | CHECKED | | REV. APPR. | |

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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY — PEDCO

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

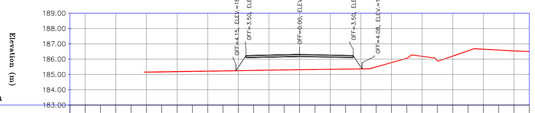
APPROVED FOR CONSTRUCTION | BY: | DATE:

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| 1/1000 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 19 OF 90 | D01 |

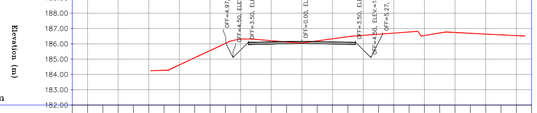
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 19 | D01 |

## 0+000.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 185.15 | 185.17 | 185.18 | 185.20 | 185.22 | 185.23 | 185.25 | 185.27 | 185.28 | 185.30 | 185.31 | 185.32 | 185.34 | 185.35 | 185.36 | 185.49 | 185.78 | 186.06 | 186.18 | 185.90 | 186.20 | 186.54 | 186.65 | 186.59 | 186.53 | | | | | | |
| PROJECT ELEVATION | | | | | | | 185.48 | 186.25 | 186.27 | 186.29 | 186.31 | 186.29 | 186.27 | 186.25 | 185.48 | | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 13.73 | | |

## 0+009.35




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 184.27 | 184.62 | 185.09 | 185.56 | 186.03 | 186.31 | 186.28 | 186.20 | 186.13 | 186.06 | 186.19 | 186.33 | 186.47 | 186.55 | 186.63 | 186.70 | 186.77 | 186.54 | 186.71 | 186.74 | 186.69 | 186.64 | 186.58 | 186.53 | | | | | | | |
| PROJECT ELEVATION | | | | | | 185.60 | 186.11 | 186.13 | 186.15 | 186.17 | 186.15 | 186.13 | 186.11 | 185.60 | 186.10 | | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 13.92 | | |

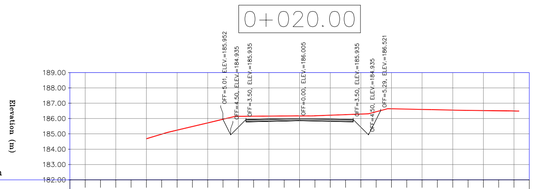
## 0+010.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 184.13 | 184.49 | 184.95 | 185.40 | 185.79 | 186.03 | 186.27 | 186.30 | 186.30 | 186.25 | 186.17 | 186.25 | 186.38 | 186.48 | 186.55 | 186.62 | 186.70 | 186.77 | 186.64 | 186.78 | 186.73 | 186.68 | 186.63 | 186.58 | 186.53 | | | | | | |
| PROJECT ELEVATION | | | | | | 185.59 | 186.10 | 186.12 | 186.14 | 186.16 | 186.14 | 186.12 | 186.10 | 185.59 | 186.09 | | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 13.93 | | |

## 0+018.71

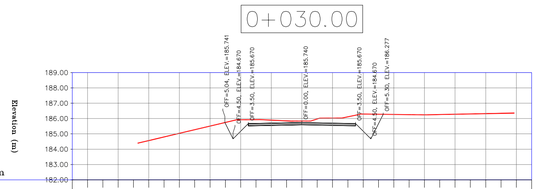
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 184.83 | 185.13 | 185.44 | 185.74 | 185.98 | 186.17 | 186.18 | 186.19 | 186.19 | 186.19 | 186.26 | 186.32 | 186.36 | 186.40 | 186.44 | 186.54 | 186.69 | 186.67 | 186.65 | 186.63 | 186.61 | 186.58 | 186.56 | 186.54 | | | | | | | |
| PROJECT ELEVATION | | | | | | 185.96 | 185.46 | 185.97 | 185.99 | 186.01 | 186.03 | 186.01 | 185.99 | 185.97 | 185.46 | 185.96 | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.06 | | |

## 0+020.00



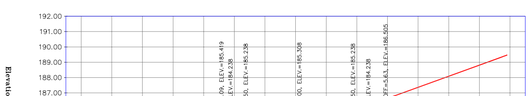

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 184.68 | 184.99 | 185.24 | 185.48 | 185.72 | 185.95 | 186.14 | 186.15 | 186.16 | 186.17 | 186.17 | 186.18 | 186.22 | 186.25 | 186.29 | 186.44 | 186.62 | 186.60 | 186.57 | 186.55 | 186.53 | 186.52 | 186.51 | 186.50 | | | | | | | |
| PROJECT ELEVATION | | | | | | 185.94 | 185.44 | 185.95 | 185.97 | 185.99 | 186.01 | 185.99 | 185.97 | 185.95 | 185.44 | 185.94 | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | | |

## 0+030.00



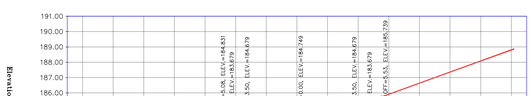

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 184.56 | 184.80 | 185.04 | 185.28 | 185.51 | 185.75 | 185.92 | 185.93 | 185.89 | 185.85 | 185.84 | 185.98 | 186.03 | 186.11 | 186.29 | 186.28 | 186.27 | 186.26 | 186.24 | 186.26 | 186.28 | 186.30 | 186.32 | 186.34 | | | | | | | |
| PROJECT ELEVATION | | | | | | 185.67 | 185.17 | 185.68 | 185.70 | 185.72 | 185.74 | 185.72 | 185.70 | 185.68 | 185.17 | 185.67 | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | | |

## 0+040.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 184.45 | 184.62 | 184.78 | 184.94 | 185.11 | 185.27 | 185.43 | 185.54 | 185.49 | 185.44 | 185.43 | 185.42 | 185.44 | 185.45 | 185.51 | 185.91 | 186.27 | 186.64 | 187.00 | 187.36 | 187.72 | 188.09 | 188.45 | 188.81 | 189.17 | | | | | | |
| PROJECT ELEVATION | | | | | | 185.24 | 184.74 | 185.25 | 185.27 | 185.29 | 185.31 | 185.29 | 185.27 | 185.25 | 184.74 | 185.24 | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | | |

## 0+050.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 183.94 | 184.03 | 184.19 | 184.35 | 184.52 | 184.68 | 184.84 | 184.97 | 184.94 | 184.94 | 184.93 | 184.90 | 184.89 | 184.87 | 184.85 | 185.17 | 185.55 | 185.91 | 186.27 | 186.63 | 187.00 | 187.36 | 187.72 | 188.08 | 188.45 | 188.81 | | | | | |
| PROJECT ELEVATION | | | | | | 184.68 | 184.18 | 184.69 | 184.71 | 184.73 | 184.75 | 184.73 | 184.71 | 184.69 | 184.18 | 184.68 | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

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| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

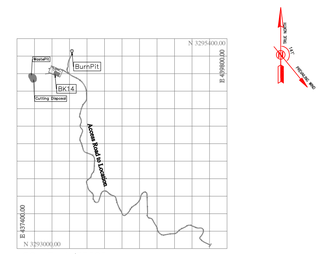
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |
|---|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DESCRIPTION | | BY | DATE | BY | DATE |
| | | | CHECKED | | REV. APPR. | |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

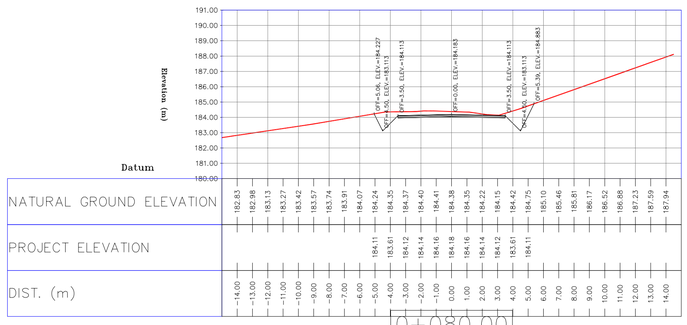
APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 20 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 20 | D01 |

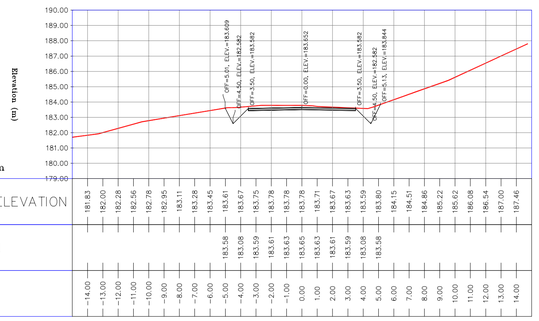
D01 TOTALLY REVISED

## 0+060.00



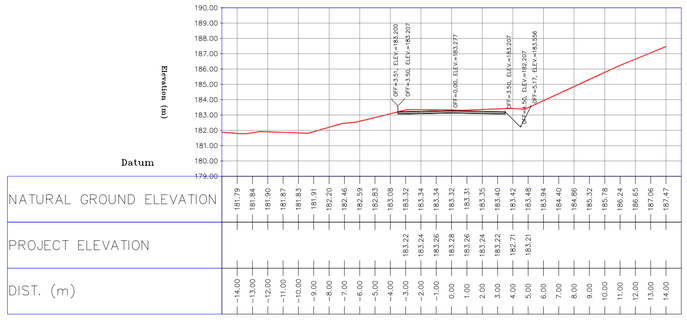

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.83 | 182.88 | 183.13 | 183.27 | 183.42 | 183.57 | 183.74 | 183.91 | 184.07 | 184.24 | 184.35 | 184.37 | 184.40 | 184.41 | 184.38 | 184.35 | 184.22 | 184.15 | 184.42 | 184.75 | 185.10 | 185.46 | 185.81 | 186.17 | 186.52 | 186.88 | 187.23 | 187.59 | 187.94 |
| PROJECT ELEVATION | | | | | | | | | | 184.11 | 183.61 | 184.12 | 184.14 | 184.16 | 184.18 | 184.16 | 184.14 | 184.12 | 183.61 | 184.11 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+070.00



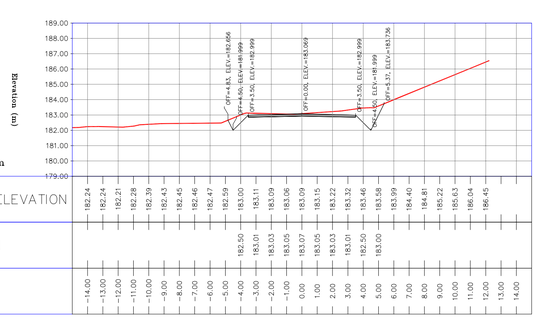

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 181.83 | 182.00 | 182.28 | 182.56 | 182.78 | 182.95 | 183.11 | 183.28 | 183.45 | 183.61 | 183.67 | 183.75 | 183.78 | 183.78 | 183.78 | 183.78 | 183.71 | 183.67 | 183.63 | 183.59 | 183.80 | 184.15 | 184.51 | 184.86 | 185.22 | 185.62 | 186.08 | 186.54 | 187.00 | 187.46 |
| PROJECT ELEVATION | | | | | | | | | | 183.58 | 183.08 | 183.59 | 183.61 | 183.63 | 183.65 | 183.63 | 183.61 | 183.59 | 183.08 | 183.58 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+080.00



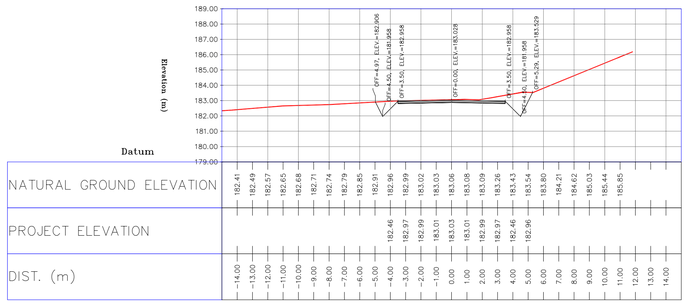

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 181.79 | 181.84 | 181.90 | 181.87 | 181.83 | 181.91 | 182.20 | 182.46 | 182.59 | 182.83 | 183.08 | 183.32 | 183.34 | 183.34 | 183.32 | 183.31 | 183.35 | 183.40 | 183.42 | 183.48 | 183.94 | 184.40 | 184.86 | 185.32 | 185.78 | 186.24 | 186.65 | 187.06 | 187.47 |
| PROJECT ELEVATION | | | | | | | | | | | | 183.22 | 183.24 | 183.26 | 183.28 | 183.26 | 183.24 | 183.22 | 182.71 | 183.21 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+090.00



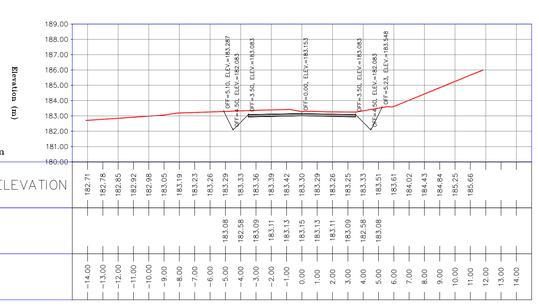

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.24 | 182.24 | 182.21 | 182.28 | 182.39 | 182.43 | 182.46 | 182.47 | 182.59 | 183.00 | 183.11 | 183.09 | 183.09 | 183.06 | 183.06 | 183.09 | 183.15 | 183.22 | 183.32 | 183.46 | 183.58 | 183.99 | 184.40 | 184.81 | 185.22 | 185.63 | 186.04 | 186.45 | |
| PROJECT ELEVATION | | | | | | | | | | 182.50 | 183.01 | 183.03 | 183.05 | 183.07 | 183.05 | 183.03 | 183.01 | 182.50 | 183.00 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+100.00



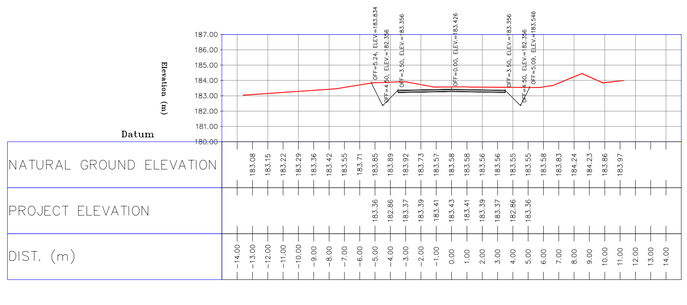

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.41 | 182.49 | 182.57 | 182.65 | 182.68 | 182.71 | 182.74 | 182.79 | 182.85 | 182.91 | 182.96 | 182.99 | 183.02 | 183.03 | 183.06 | 183.08 | 183.09 | 183.26 | 183.43 | 183.54 | 183.80 | 184.21 | 184.62 | 185.03 | 185.44 | 185.85 | | | |
| PROJECT ELEVATION | | | | | | | | | | 182.46 | 182.97 | 182.99 | 183.01 | 183.03 | 183.01 | 182.99 | 182.97 | 182.46 | 182.96 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+110.00



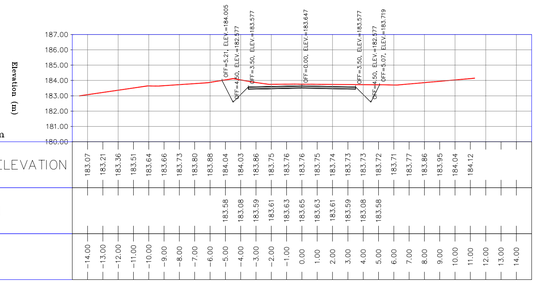

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.71 | 182.78 | 182.85 | 182.92 | 182.98 | 183.05 | 183.19 | 183.23 | 183.26 | 183.29 | 183.33 | 183.36 | 183.39 | 183.42 | 183.30 | 183.29 | 183.26 | 183.25 | 183.33 | 183.51 | 183.61 | 184.02 | 184.43 | 184.84 | 185.25 | 185.66 | | | |
| PROJECT ELEVATION | | | | | | | | | | 183.08 | 182.58 | 183.09 | 183.11 | 183.13 | 183.15 | 183.13 | 183.11 | 183.09 | 182.58 | 183.08 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+120.00




| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 183.08 | 183.15 | 183.22 | 183.29 | 183.36 | 183.42 | 183.55 | 183.71 | 183.85 | 183.89 | 183.92 | 183.73 | 183.57 | 183.58 | 183.58 | 183.56 | 183.56 | 183.55 | 183.55 | 183.58 | 183.83 | 184.24 | 184.23 | 184.86 | 183.97 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 182.86 | 183.37 | 183.39 | 183.41 | 183.41 | 183.39 | 183.37 | 182.86 | 183.36 | | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+130.00




| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 183.07 | 183.21 | 183.36 | 183.51 | 183.64 | 183.73 | 183.80 | 183.88 | 184.04 | 184.03 | 183.86 | 183.75 | 183.76 | 183.76 | 183.75 | 183.74 | 183.73 | 183.73 | 183.72 | 183.71 | 183.77 | 183.86 | 183.95 | 184.04 | 184.12 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 183.58 | 183.08 | 183.59 | 183.61 | 183.63 | 183.65 | 183.63 | 183.61 | 183.59 | 183.08 | 183.58 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌇ | DAYLIGHT | ⊓ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
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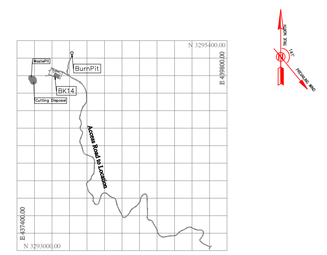
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DATE | DESCRIPTION | BY | CHECKED | APPR. |
|---|---|---|---|---|---|
| *** | ********** | | **.** | ***.**** | **.** ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 21 OF 90 | D01 |

D01 TOTALLY REVISED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BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

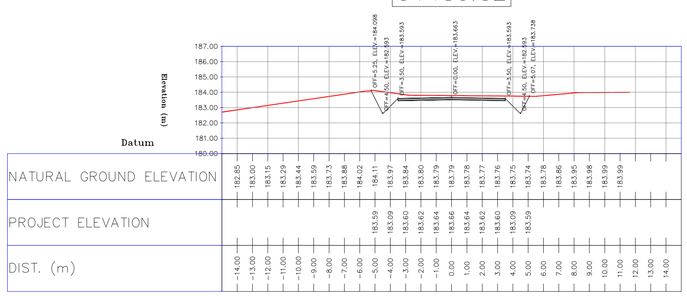
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

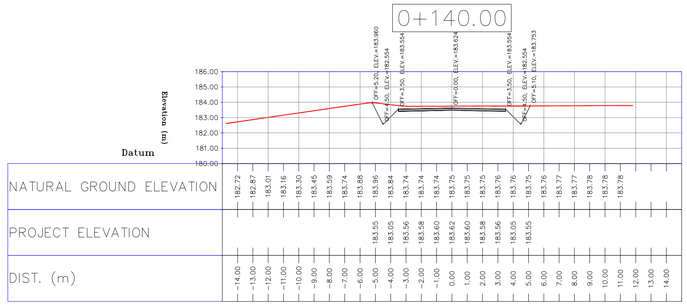
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 21 | D01 |

## 0+136.02



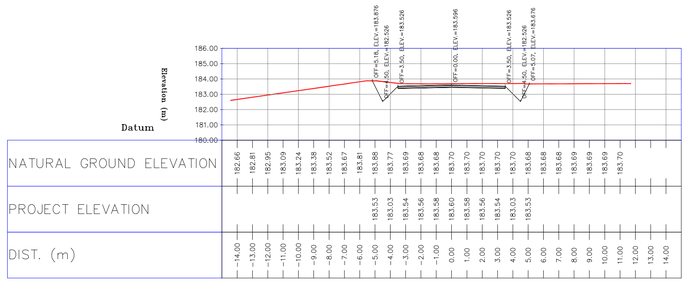

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.85 | 183.00 | 183.15 | 183.29 | 183.44 | 183.59 | 183.73 | 183.88 | 184.02 | 184.11 | 183.97 | 183.84 | 183.80 | 183.79 | 183.79 | 183.78 | 183.78 | 183.77 | 183.76 | 183.74 | 183.78 | 183.86 | 183.95 | 183.98 | 183.99 | 183.99 | | | |
| PROJECT ELEVATION | | | | | | 183.59 | 183.09 | 183.60 | 183.62 | 183.64 | 183.66 | 183.64 | 183.62 | 183.60 | 183.59 | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+140.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.72 | 182.87 | 183.01 | 183.16 | 183.30 | 183.45 | 183.59 | 183.74 | 183.88 | 183.96 | 183.84 | 183.74 | 183.74 | 183.74 | 183.75 | 183.75 | 183.76 | 183.76 | 183.75 | 183.76 | 183.76 | 183.77 | 183.77 | 183.78 | 183.78 | 183.78 | | | |
| PROJECT ELEVATION | | | | | | | | | | 183.55 | 183.05 | 183.56 | 183.58 | 183.60 | 183.62 | 183.60 | 183.58 | 183.56 | 183.05 | 183.55 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+141.66

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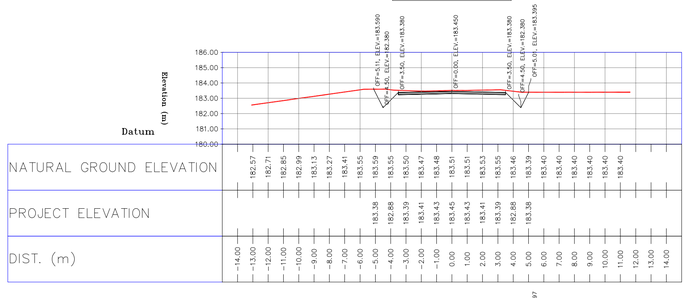
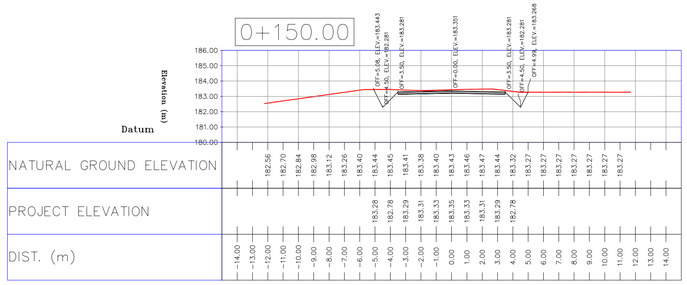
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.66 | 182.81 | 182.95 | 183.09 | 183.24 | 183.38 | 183.52 | 183.67 | 183.81 | 183.86 | 183.77 | 183.69 | 183.68 | 183.68 | 183.70 | 183.70 | 183.70 | 183.70 | 183.68 | 183.68 | 183.68 | 183.69 | 183.69 | 183.69 | 183.70 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 183.53 | 183.03 | 183.54 | 183.56 | 183.58 | 183.60 | 183.58 | 183.56 | 183.54 | 183.03 | 183.53 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+147.30




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.57 | 182.71 | 182.85 | 182.99 | 183.13 | 183.27 | 183.41 | 183.55 | 183.59 | 183.55 | 183.50 | 183.47 | 183.48 | 183.51 | 183.51 | 183.53 | 183.55 | 183.46 | 183.39 | 183.40 | 183.40 | 183.40 | 183.40 | 183.40 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 183.36 | 182.88 | 183.39 | 183.41 | 183.43 | 183.45 | 183.43 | 183.41 | 183.39 | 182.88 | 183.38 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+150.00

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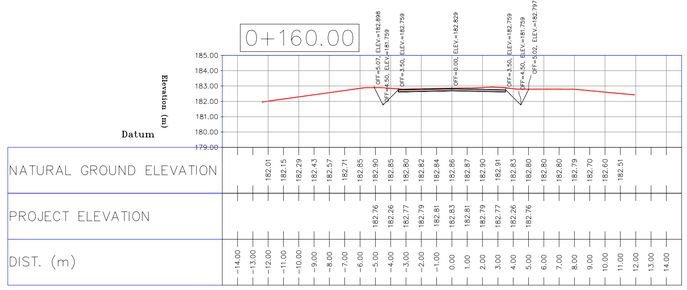
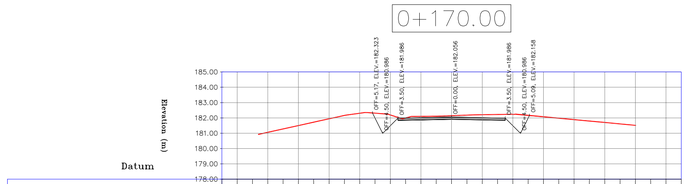
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.56 | 182.70 | 182.84 | 182.98 | 183.12 | 183.26 | 183.40 | 183.44 | 183.45 | 183.41 | 183.38 | 183.40 | 183.43 | 183.46 | 183.47 | 183.44 | 183.32 | 183.27 | 183.27 | 183.27 | 183.27 | 183.27 | 183.27 | | | | | | |
| PROJECT ELEVATION | | | | | | | | | 183.28 | 182.78 | 183.29 | 183.31 | 183.33 | 183.35 | 183.33 | 183.31 | 183.29 | 182.78 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+160.00



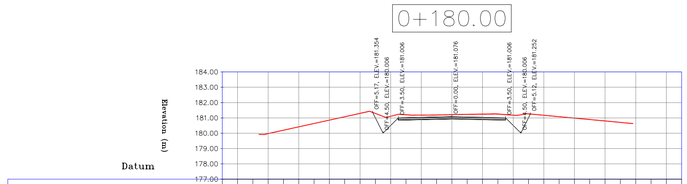

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.01 | 182.15 | 182.29 | 182.43 | 182.57 | 182.71 | 182.85 | 182.90 | 182.85 | 182.80 | 182.82 | 182.84 | 182.86 | 182.87 | 182.90 | 182.91 | 182.83 | 182.80 | 182.80 | 182.80 | 182.79 | 182.70 | 182.60 | 182.51 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 182.76 | 182.26 | 182.77 | 182.79 | 182.81 | 182.83 | 182.81 | 182.79 | 182.77 | 182.26 | 182.76 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+170.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 181.06 | 181.28 | 181.50 | 181.72 | 181.94 | 182.16 | 182.30 | 182.31 | 182.19 | 181.99 | 182.10 | 182.11 | 182.15 | 182.18 | 182.21 | 182.22 | 182.23 | 182.17 | 181.98 | 181.89 | 181.79 | 181.70 | 181.61 | 181.52 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 181.99 | 181.49 | 182.00 | 182.02 | 182.04 | 182.06 | 182.04 | 182.02 | 182.00 | 181.49 | 181.99 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+180.00

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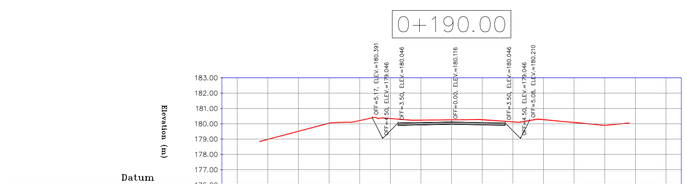
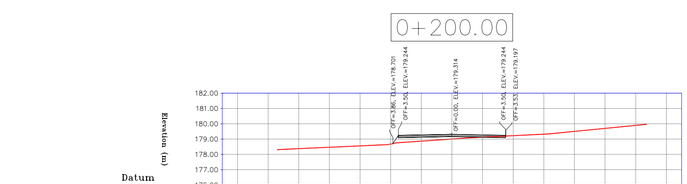
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 179.98 | 180.20 | 180.42 | 180.63 | 180.85 | 181.07 | 181.29 | 181.11 | 181.20 | 181.02 | 181.04 | 181.06 | 181.08 | 181.06 | 181.04 | 181.02 | 180.51 | 181.01 | 181.26 | 181.17 | 181.08 | 180.99 | 180.89 | 180.80 | 180.71 | | | | |
| PROJECT ELEVATION | | | | | | | | 181.01 | 180.51 | 181.02 | 181.04 | 181.06 | 181.08 | 181.06 | 181.04 | 181.02 | 180.51 | 181.01 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+190.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 178.98 | 179.24 | 179.51 | 179.77 | 180.04 | 180.10 | 180.21 | 180.42 | 180.34 | 180.27 | 180.24 | 180.25 | 180.26 | 180.27 | 180.26 | 180.19 | 180.12 | 180.20 | 180.27 | 180.18 | 180.08 | 179.99 | 179.90 | 179.99 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 180.05 | 179.55 | 180.06 | 180.08 | 180.10 | 180.12 | 180.10 | 180.08 | 180.06 | 179.55 | 180.05 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+200.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 178.33 | 178.38 | 178.42 | 178.47 | 178.51 | 178.56 | 178.60 | 178.67 | 178.80 | 178.87 | 178.93 | 179.00 | 179.07 | 179.12 | 179.17 | 179.22 | 179.27 | 179.32 | 179.40 | 179.50 | 179.60 | 179.70 | 179.80 | 179.90 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 179.25 | 179.27 | 179.29 | 179.31 | 179.29 | 179.27 | 179.27 | 179.25 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | | BRIDGE |
| ▬ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN

SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

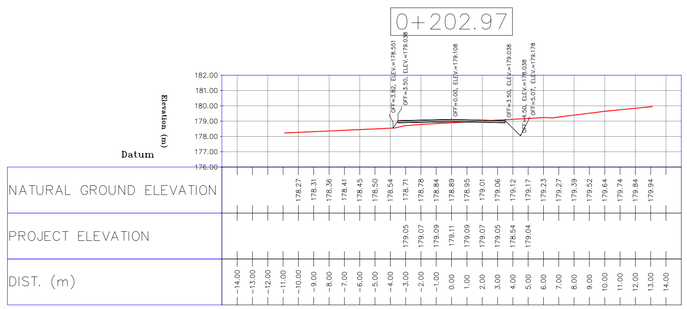
APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 22 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 22 | D01 |

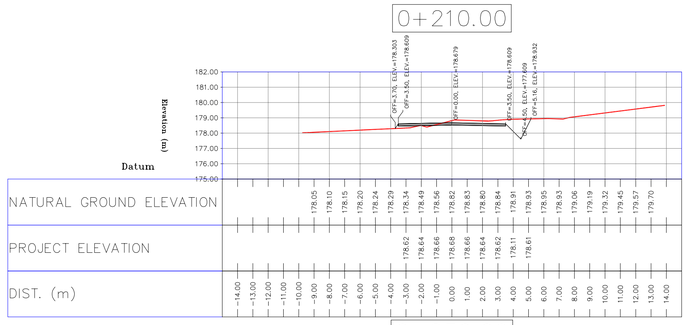
D01 TOTALLY REVISED

## 0+202.97



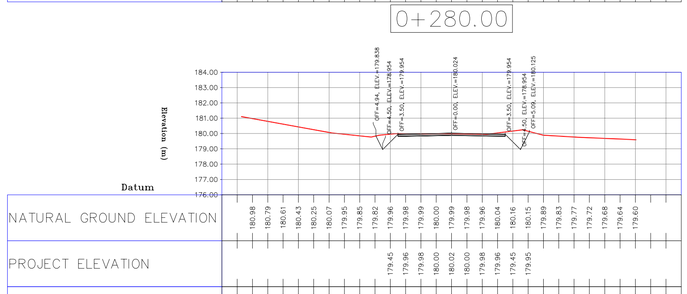

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 178.27 | 178.31 | 178.36 | 178.41 | 178.45 | 178.50 | 178.54 | 178.71 | 178.78 | 178.84 | 178.89 | 178.95 | 179.01 | 179.06 | 179.12 | 179.17 | 179.23 | 179.27 | 179.39 | 179.52 | 179.64 | 179.74 | 179.84 | 179.94 | | |
| PROJECT ELEVATION | | | | | | | | 179.05 | 179.07 | 179.09 | 179.11 | 179.09 | 179.07 | 179.05 | 178.54 | 179.04 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+210.00



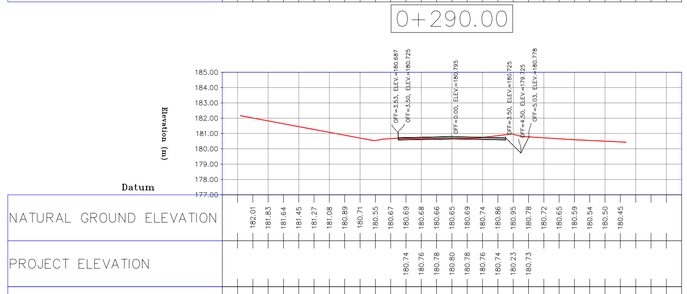

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 178.05 | 178.10 | 178.15 | 178.20 | 178.24 | 178.29 | 178.34 | 178.49 | 178.56 | 178.66 | 178.68 | 178.82 | 178.83 | 178.80 | 178.84 | 178.91 | 178.93 | 178.95 | 178.93 | 179.06 | 179.19 | 179.32 | 179.45 | 179.57 | 179.70 | |
| PROJECT ELEVATION | | | | | | 178.62 | 178.64 | 178.64 | 178.66 | 178.68 | 178.66 | 178.64 | 178.62 | 178.64 | 178.62 | 178.11 | 178.61 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+220.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.71 | 177.76 | 177.80 | 177.85 | 177.90 | 177.95 | 178.00 | 178.05 | 178.13 | 178.39 | 178.36 | 178.37 | 178.43 | 178.48 | 178.49 | 178.51 | 178.53 | 178.59 | 178.78 | 178.91 | 179.04 | 179.17 | 179.30 | 179.43 | | |
| PROJECT ELEVATION | | | | | | 178.14 | 178.16 | 178.18 | 178.20 | 178.18 | 178.16 | 178.14 | 177.63 | 178.13 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+230.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.34 | 177.39 | 177.44 | 177.49 | 177.54 | 177.59 | 177.64 | 177.69 | 177.74 | 177.82 | 177.89 | 177.94 | 177.99 | 178.05 | 177.34 | 177.84 | 178.08 | 178.09 | 178.11 | 178.20 | 178.43 | 178.56 | 178.69 | 178.82 | 178.95 | 179.08 |
| PROJECT ELEVATION | | | | | | | 177.85 | 177.87 | 177.89 | 177.91 | 177.89 | 177.87 | 177.85 | 178.05 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+240.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.26 | 177.26 | 177.26 | 177.26 | 177.26 | 177.26 | 177.30 | 177.35 | 177.40 | 177.38 | 177.37 | 177.43 | 177.47 | 177.52 | 177.56 | 177.61 | 177.66 | 177.68 | 177.70 | 177.93 | 178.14 | 178.28 | 178.41 | 178.54 | 178.67 | 178.81 |
| PROJECT ELEVATION | | | | | | | | | 177.82 | 177.84 | 177.86 | 177.88 | 177.86 | 177.84 | 177.82 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+250.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 178.08 | 177.97 | 177.85 | 177.74 | 177.63 | 177.51 | 177.40 | 177.42 | 177.65 | 177.75 | 177.74 | 177.74 | 177.74 | 177.75 | 177.75 | 177.70 | 177.60 | 177.61 | 177.79 | 177.92 | 178.06 | 178.19 | 178.32 | 178.46 | 178.59 | |
| PROJECT ELEVATION | | | | | | | 178.03 | 178.05 | 178.07 | 178.07 | 178.09 | 178.07 | 178.05 | 178.03 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+260.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 179.03 | 178.93 | 178.84 | 178.74 | 178.65 | 178.54 | 178.42 | 178.31 | 178.26 | 178.47 | 178.47 | 178.47 | 178.50 | 178.56 | 178.63 | 178.69 | 178.71 | 178.67 | 178.50 | 178.41 | 178.18 | 178.05 | 178.01 | 178.03 | 178.09 | 178.17 | 178.31 |
| PROJECT ELEVATION | | | | | | | | | 178.49 | 178.51 | 178.53 | 178.50 | 178.53 | 178.51 | 178.49 | 177.98 | 178.48 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+270.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 179.77 | 179.67 | 179.57 | 179.48 | 179.38 | 179.28 | 179.18 | 179.08 | 179.25 | 179.47 | 179.48 | 179.47 | 179.47 | 179.46 | 179.44 | 179.41 | 179.48 | 179.22 | 178.97 | 178.92 | 178.88 | 178.84 | 178.80 | 178.77 | 178.73 | |
| PROJECT ELEVATION | | | | | | | | | 178.68 | 179.19 | 179.21 | 179.23 | 179.25 | 179.23 | 179.21 | 179.19 | 178.68 | 179.18 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+280.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 180.98 | 180.79 | 180.61 | 180.43 | 180.25 | 180.07 | 179.95 | 179.85 | 179.82 | 179.96 | 179.98 | 179.99 | 180.00 | 180.00 | 179.99 | 179.98 | 179.96 | 180.04 | 180.16 | 180.15 | 179.89 | 179.83 | 179.77 | 179.72 | 179.68 | 179.64 | 179.60 |
| PROJECT ELEVATION | | | | | | | | | 179.45 | 179.96 | 179.98 | 180.00 | 180.02 | 180.00 | 179.98 | 179.96 | 179.45 | 179.95 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+290.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 182.01 | 181.83 | 181.64 | 181.45 | 181.27 | 181.08 | 180.89 | 180.71 | 180.55 | 180.67 | 180.69 | 180.68 | 180.66 | 180.65 | 180.69 | 180.74 | 180.86 | 180.95 | 180.78 | 180.72 | 180.65 | 180.59 | 180.54 | 180.50 | 180.45 | |
| PROJECT ELEVATION | | | | | | | | | 180.74 | 180.76 | 180.78 | 180.80 | 180.78 | 180.76 | 180.74 | 180.73 | 180.73 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

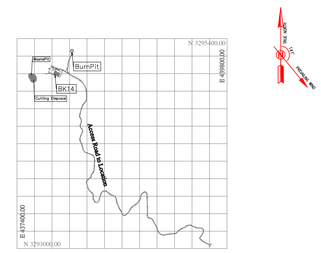
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | | | | | |
|---|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** | |
| | | BY | DATE | BY | DATE | |
| | | CHECKED | | REV. APPR. | | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

D01 TOTALLY REVISED

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 23 OF 90 | D01 |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

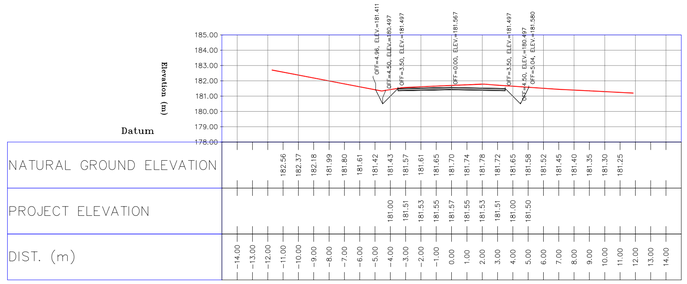
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

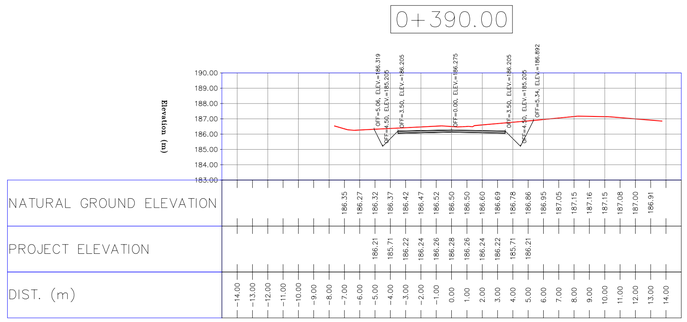
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 23 | D01 |

## 0+300.00


Elevation (m)
Datum
OFF=4.69, ELEV=181.611
OFF=4.50, ELEV=180.497
OFF=3.50, ELEV=181.497
OFF=0.00, ELEV=181.567
OFF=3.50, ELEV=181.497
OFF=4.50, ELEV=180.497
OFF=5.94, ELEV=181.560

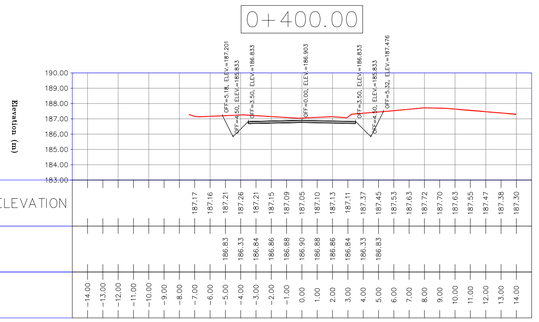
| | | |

## 0+390.00



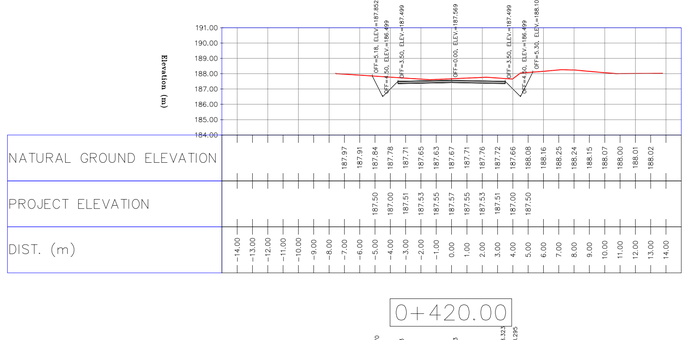

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 186.35 |
| -13.00 | | 186.27 |
| -12.00 | | 186.32 |
| -11.00 | | 186.37 |
| -10.00 | | 186.42 |
| -9.00 | | 186.47 |
| -8.00 | | 186.52 |
| -7.00 | | 186.50 |
| -6.00 | | 186.50 |
| -5.00 | 186.21 | 186.60 |
| -4.00 | 185.71 | 186.69 |
| -3.00 | 186.22 | 186.78 |
| -2.00 | 186.24 | 186.86 |
| -1.00 | 186.26 | 186.95 |
| 0.00 | 186.28 | 187.05 |
| 1.00 | 186.26 | 187.15 |
| 2.00 | 186.24 | 187.16 |
| 3.00 | 186.22 | 187.15 |
| 4.00 | 185.71 | 187.08 |
| 5.00 | 186.21 | 187.00 |
| 6.00 | | 186.91 |
| 7.00 | | |
| 8.00 | | |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 0+400.00



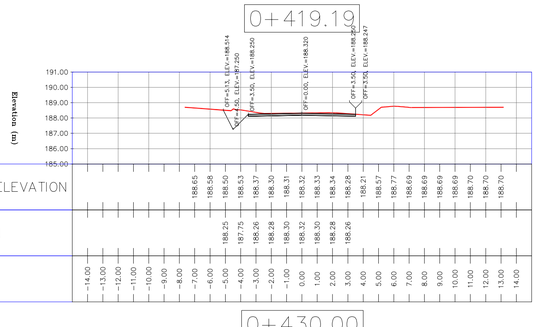

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 187.17 |
| -13.00 | | 187.16 |
| -12.00 | | 187.21 |
| -11.00 | | 187.26 |
| -10.00 | | 187.21 |
| -9.00 | | 187.15 |
| -8.00 | | 187.09 |
| -7.00 | | 187.05 |
| -6.00 | | 187.10 |
| -5.00 | 186.83 | 187.13 |
| -4.00 | 186.33 | 187.11 |
| -3.00 | 186.84 | 187.37 |
| -2.00 | 186.86 | 187.45 |
| -1.00 | 186.88 | 187.53 |
| 0.00 | 186.90 | 187.63 |
| 1.00 | 186.88 | 187.72 |
| 2.00 | 186.86 | 187.70 |
| 3.00 | 186.84 | 187.63 |
| 4.00 | 186.33 | 187.55 |
| 5.00 | 186.83 | 187.47 |
| 6.00 | | 187.38 |
| 7.00 | | 187.30 |
| 8.00 | | |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 0+410.00



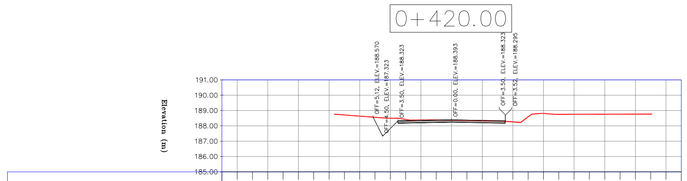

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 187.97 |
| -13.00 | | 187.91 |
| -12.00 | | 187.84 |
| -11.00 | | 187.78 |
| -10.00 | | 187.71 |
| -9.00 | | 187.65 |
| -8.00 | | 187.63 |
| -7.00 | | 187.67 |
| -6.00 | | 187.71 |
| -5.00 | 187.50 | 187.76 |
| -4.00 | 187.00 | 187.72 |
| -3.00 | 187.51 | 187.66 |
| -2.00 | 187.53 | 188.08 |
| -1.00 | 187.55 | 188.16 |
| 0.00 | 187.57 | 188.25 |
| 1.00 | 187.55 | 188.24 |
| 2.00 | 187.53 | 188.15 |
| 3.00 | 187.51 | 188.07 |
| 4.00 | 187.00 | 188.00 |
| 5.00 | 187.50 | 188.01 |
| 6.00 | | 188.02 |
| 7.00 | | |
| 8.00 | | |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 0+419.19



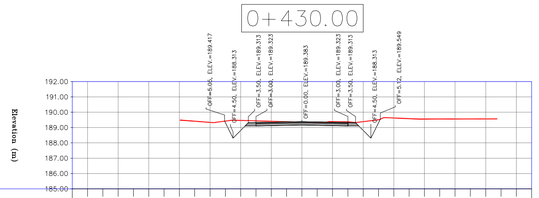

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 188.65 |
| -13.00 | | 188.58 |
| -12.00 | | 188.50 |
| -11.00 | | 188.53 |
| -10.00 | | 188.37 |
| -9.00 | | 188.30 |
| -8.00 | | 188.31 |
| -7.00 | | 188.32 |
| -6.00 | | 188.33 |
| -5.00 | 188.25 | 188.34 |
| -4.00 | 187.75 | 188.28 |
| -3.00 | 188.26 | 188.21 |
| -2.00 | 188.28 | 188.57 |
| -1.00 | 188.30 | 188.77 |
| 0.00 | 188.32 | 188.69 |
| 1.00 | 188.30 | 188.69 |
| 2.00 | 188.28 | 188.69 |
| 3.00 | 188.26 | 188.69 |
| 4.00 | | 188.70 |
| 5.00 | | 188.70 |
| 6.00 | | |
| 7.00 | | |
| 8.00 | | |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 0+420.00



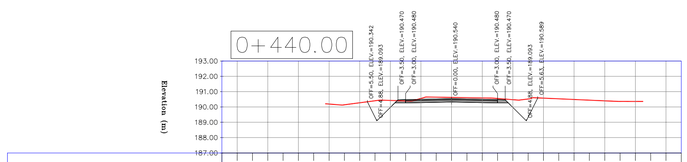

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 188.71 |
| -13.00 | | 188.64 |
| -12.00 | | 188.56 |
| -11.00 | | 188.50 |
| -10.00 | | 188.42 |
| -9.00 | | 188.35 |
| -8.00 | | 188.39 |
| -7.00 | | 188.37 |
| -6.00 | | 188.36 |
| -5.00 | 188.32 | 188.34 |
| -4.00 | 187.82 | 188.33 |
| -3.00 | 188.33 | 188.26 |
| -2.00 | 188.35 | 188.59 |
| -1.00 | 188.37 | 188.81 |
| 0.00 | 188.39 | 188.75 |
| 1.00 | 188.37 | 188.75 |
| 2.00 | 188.35 | 188.76 |
| 3.00 | 188.33 | 188.76 |
| 4.00 | | 188.76 |
| 5.00 | | 188.76 |
| 6.00 | | 188.77 |
| 7.00 | | |
| 8.00 | | |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 0+430.00



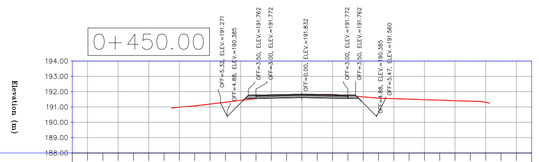

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 189.41 |
| -13.00 | | 189.34 |
| -12.00 | | 189.42 |
| -11.00 | | 189.47 |
| -10.00 | | 189.44 |
| -9.00 | | 189.41 |
| -8.00 | | 189.38 |
| -7.00 | | 189.35 |
| -6.00 | | 189.33 |
| -5.00 | 188.98 | 189.39 |
| -4.00 | 188.81 | 189.37 |
| -3.00 | 189.32 | 189.39 |
| -2.00 | 189.34 | 189.51 |
| -1.00 | 189.36 | 189.62 |
| 0.00 | 189.38 | 189.58 |
| 1.00 | 189.36 | 189.55 |
| 2.00 | 189.34 | 189.56 |
| 3.00 | 189.32 | 189.56 |
| 4.00 | 188.81 | 189.56 |
| 5.00 | 188.76 | 189.56 |
| 6.00 | | |
| 7.00 | | |
| 8.00 | | |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 0+440.00




| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 190.19 |
| -13.00 | | 190.14 |
| -12.00 | | 190.28 |
| -11.00 | | 190.41 |
| -10.00 | | 190.43 |
| -9.00 | | 190.40 |
| -8.00 | | 190.56 |
| -7.00 | | 190.64 |
| -6.00 | | 190.62 |
| -5.00 | 189.34 | 190.61 |
| -4.00 | 189.97 | 190.59 |
| -3.00 | 190.48 | 190.55 |
| -2.00 | 190.50 | 190.47 |
| -1.00 | 190.52 | 190.52 |
| 0.00 | 190.54 | 190.57 |
| 1.00 | 190.52 | 190.53 |
| 2.00 | 190.50 | 190.49 |
| 3.00 | 190.48 | 190.44 |
| 4.00 | 189.97 | 190.45 |
| 5.00 | 189.34 | 190.36 |
| 6.00 | | 190.36 |
| 7.00 | | |
| 8.00 | | |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 0+450.00

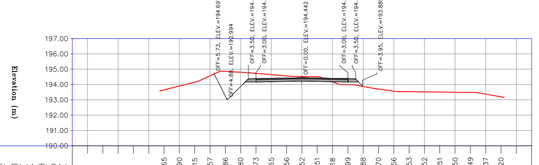



| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 190.99 |
| -13.00 | | 191.07 |
| -12.00 | | 191.19 |
| -11.00 | | 191.31 |
| -10.00 | | 191.43 |
| -9.00 | | 191.55 |
| -8.00 | | 191.67 |
| -7.00 | | 191.79 |
| -6.00 | | 191.81 |
| -5.00 | 190.63 | 191.82 |
| -4.00 | 191.26 | 191.81 |
| -3.00 | 191.77 | 191.74 |
| -2.00 | 191.79 | 191.66 |
| -1.00 | 191.81 | 191.58 |
| 0.00 | 191.83 | 191.54 |
| 1.00 | 191.81 | 191.51 |
| 2.00 | 191.79 | 191.48 |
| 3.00 | 191.77 | 191.44 |
| 4.00 | 191.26 | 191.41 |
| 5.00 | 190.63 | 191.37 |
| 6.00 | | 191.30 |
| 7.00 | | |
| 8.00 | | |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 0+460.00

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 192.47 |
| -13.00 | | 192.86 |
| -12.00 | | 193.32 |
| -11.00 | | 193.12 |
| -10.00 | | 193.23 |
| -9.00 | | 193.30 |
| -8.00 | | 193.26 |
| -7.00 | | 193.22 |
| -6.00 | | 193.18 |
| -5.00 | 191.93 | 193.10 |
| -4.00 | 192.57 | 193.84 |
| -3.00 | 193.08 | 193.52 |
| -2.00 | 193.10 | 192.59 |
| -1.00 | 193.12 | 192.52 |
| 0.00 | 193.14 | 192.53 |
| 1.00 | 193.12 | 192.52 |
| 2.00 | 193.10 | 192.40 |
| 3.00 | 193.08 | 192.59 |
| 4.00 | | 192.55 |
| 5.00 | | 192.54 |
| 6.00 | | 192.53 |
| 7.00 | | 192.52 |
| 8.00 | | 192.40 |
| 9.00 | | 192.59 |
| 10.00 | | 192.59 |
| 11.00 | | 192.59 |
| 12.00 | | 192.59 |
| 13.00 | | 192.59 |
| 14.00 | | 192.39 |

## 0+470.00




| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 193.65 |
| -13.00 | | 193.90 |
| -12.00 | | 194.15 |
| -11.00 | | 194.57 |
| -10.00 | | 194.86 |
| -9.00 | | 194.80 |
| -8.00 | | 194.73 |
| -7.00 | | 194.65 |
| -6.00 | | 194.56 |
| -5.00 | 193.24 | 194.52 |
| -4.00 | 193.87 | 194.51 |
| -3.00 | 194.38 | 194.51 |
| -2.00 | 194.40 | 194.18 |
| -1.00 | 194.42 | 193.99 |
| 0.00 | 194.44 | 193.88 |
| 1.00 | 194.42 | 193.70 |
| 2.00 | 194.40 | 193.56 |
| 3.00 | 194.38 | 193.52 |
| 4.00 | | 193.51 |
| 5.00 | | 193.50 |
| 6.00 | | 193.49 |
| 7.00 | | 193.37 |
| 8.00 | | 193.20 |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

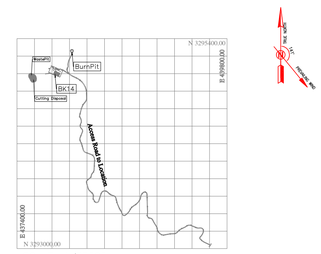
| | |
|---|---|
| WELL LOCATION | CANAL |
| WELL | RIVER |
| SITE | WATER COURSE |
| CAMP SITE | CONTOURS |
| ASPHALT ROAD | SPOT HEIGHT |
| GRAVEL ROAD | BENCH MARK |
| PROPOSED ROAD | BRIDGE |
| DAYLIGHT | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DATE | DESCRIPTION | BY | DATE | CHECKED | BY | DATE | REV. APPR. |
|---|---|---|---|---|---|---|---|---|
| *** | ********** | | **.** | ***.**** | **.** | ***.**** | | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | | |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | | |

D01
TOTALLY REVISED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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

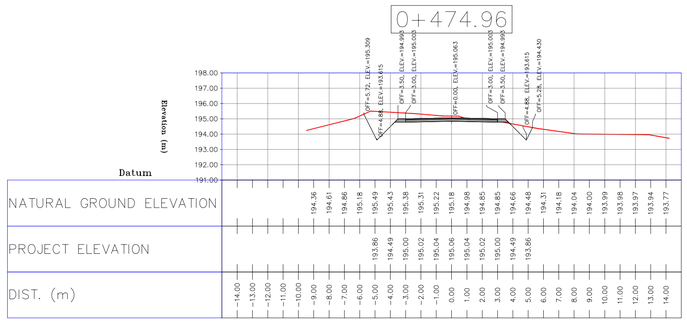
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

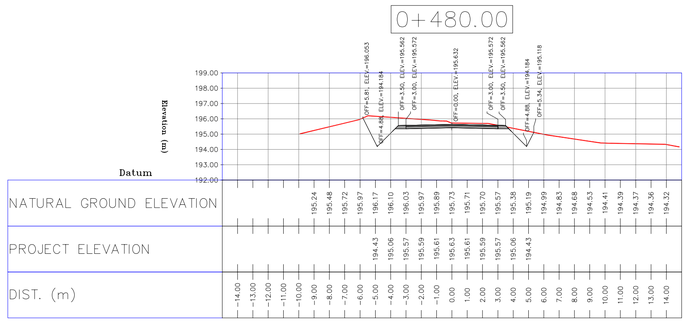
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

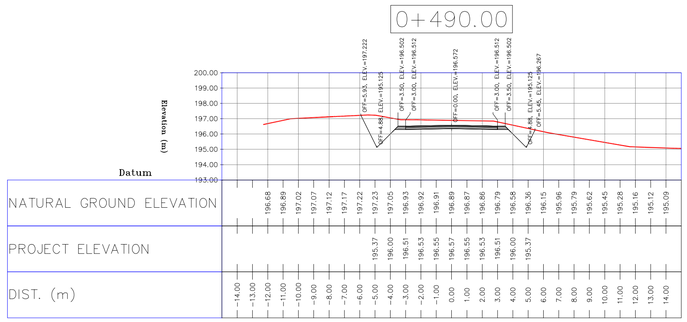
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

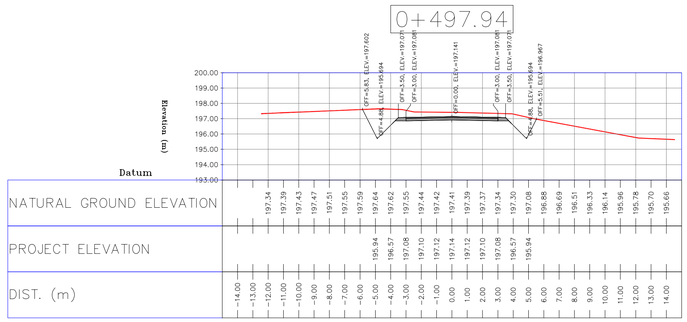
APPROVED FOR CONSTRUCTION | BY: | DATE:

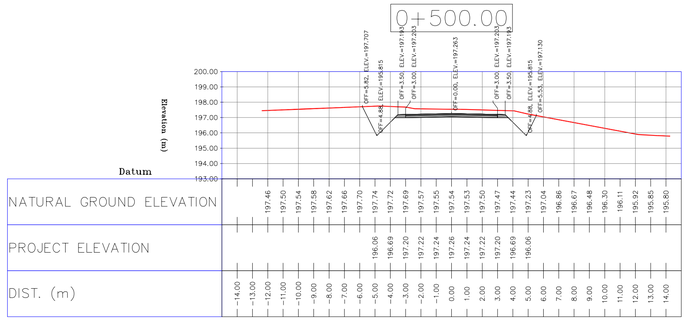
| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 25 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 25 | D01 |

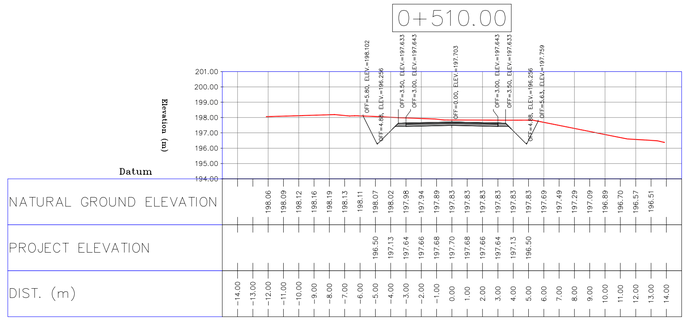


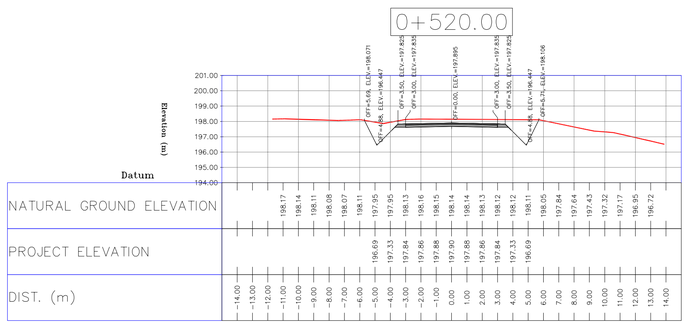



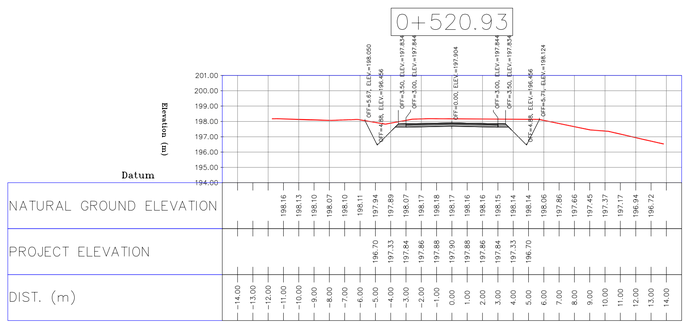




## NOTES

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## LEGEND

WELL LOCATION
WELL
SITE
CAMP SITE
ASPHALT ROAD
GRAVEL ROAD
PROPOSED ROAD
DAYLIGHT
CANAL
RIVER
WATER COURSE
CONTOURS
SPOT HEIGHT
BENCH MARK
BRIDGE
CULVERT

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

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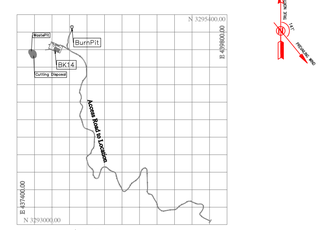
## KEY PLAN




| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | REV. | DESCRIPTION | BY | DATE | BY | DATE |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | | | CHECKED | | REV. APPR. | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | | | | | | |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 26 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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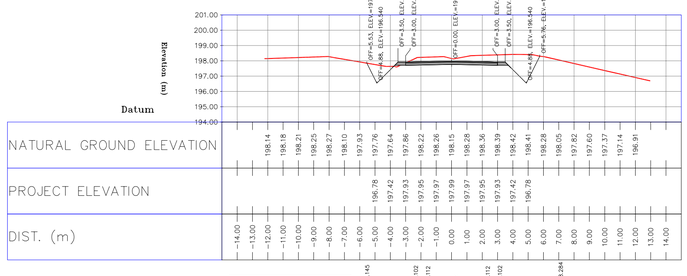
| 053-073-9184 | F | 4 | S | 708209 | 26 | D01 |

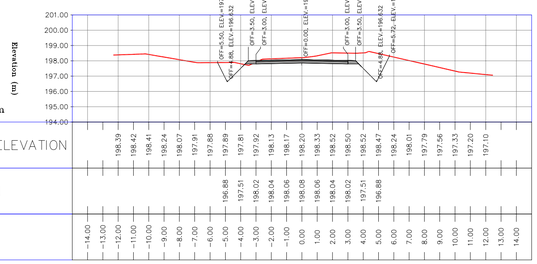
D01 TOTALLY REVISED

## 0+530.00



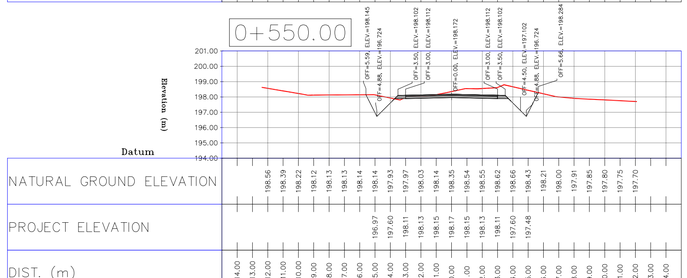

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 198.14 | 198.18 | 198.21 | 198.25 | 198.27 | 198.10 | 197.93 | 197.76 | 197.64 | 197.86 | 198.22 | 198.26 | 198.15 | 198.28 | 198.36 | 198.39 | 198.42 | 198.41 | 198.28 | 198.05 | 197.82 | 197.60 | 197.37 | 197.14 | 196.91 |
| PROJECT ELEVATION | | | | | | | | | | | 196.78 | 197.42 | 197.93 | 197.95 | 197.97 | 197.99 | 197.97 | 197.95 | 197.93 | 197.42 | 196.78 | | | | | | | | | | | | | | |

## 0+540.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 198.39 | 198.42 | 198.41 | 198.24 | 198.07 | 197.91 | 197.88 | 197.89 | 197.81 | 197.92 | 198.13 | 198.17 | 198.20 | 198.33 | 198.52 | 198.50 | 198.52 | 198.47 | 198.24 | 198.01 | 197.79 | 197.56 | 197.33 | 197.20 | 197.10 |
| PROJECT ELEVATION | | | | | | | | | | | 196.88 | 197.51 | 198.02 | 198.04 | 198.06 | 198.08 | 198.06 | 198.04 | 198.02 | 197.51 | 196.88 | | | | | | | | | | | | | | |

## 0+550.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 198.56 | 198.39 | 198.22 | 198.12 | 198.13 | 198.14 | 198.13 | 198.14 | 197.93 | 197.97 | 198.03 | 198.14 | 198.35 | 198.54 | 198.55 | 198.62 | 198.66 | 198.43 | 198.21 | 198.00 | 197.91 | 197.85 | 197.80 | 197.75 | 197.70 |
| PROJECT ELEVATION | | | | | | | | | | | 196.97 | 197.60 | 198.11 | 198.15 | 198.14 | 198.17 | 198.15 | 198.13 | 198.11 | 197.48 | 198.21 | | | | | | | | | | | | | | |

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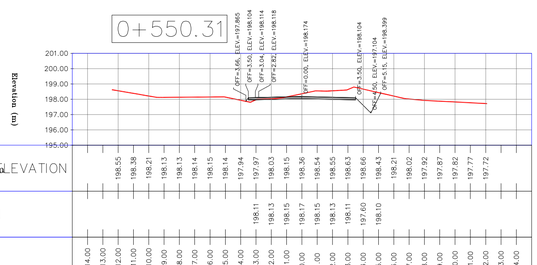
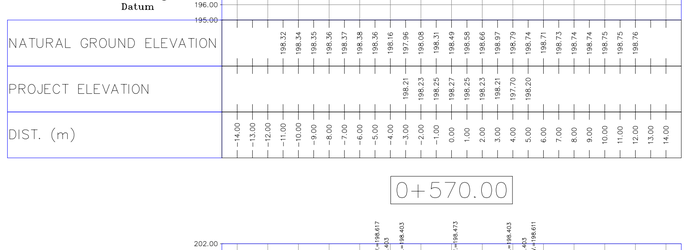


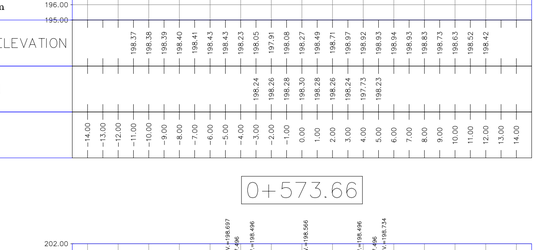

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 198.55 | 198.38 | 198.21 | 198.13 | 198.14 | 198.15 | 198.14 | 197.94 | 197.97 | 198.03 | 198.15 | 198.36 | 198.54 | 198.55 | 198.63 | 198.66 | 198.43 | 198.21 | 198.02 | 197.92 | 197.87 | 197.82 | 197.77 | 197.72 | |
| PROJECT ELEVATION | | | | | | | | | | | 195.11 | 198.13 | 198.15 | 198.15 | 198.17 | 198.15 | 198.15 | 198.13 | 198.11 | 197.60 | 198.10 | | | | | | | | | | | | | | |

## 0+560.00



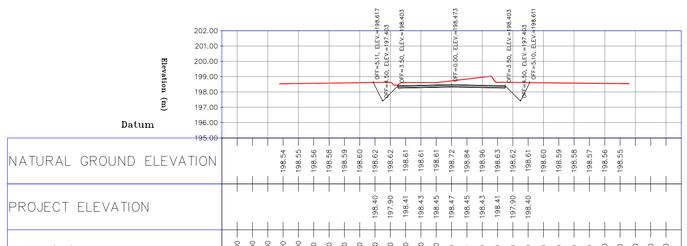

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 198.32 | 198.34 | 198.35 | 198.36 | 198.37 | 198.38 | 198.36 | 198.16 | 197.96 | 198.08 | 198.31 | 198.49 | 198.58 | 198.66 | 198.97 | 198.79 | 198.74 | 198.71 | 198.73 | 198.74 | 198.74 | 198.75 | 198.75 | 198.75 | 198.76 |
| PROJECT ELEVATION | | | | | | | | | | | 198.21 | 198.23 | 198.25 | 198.27 | 198.25 | 198.23 | 198.21 | 197.70 | 198.20 | | | | | | | | | | | | | | | | |

## 0+561.98



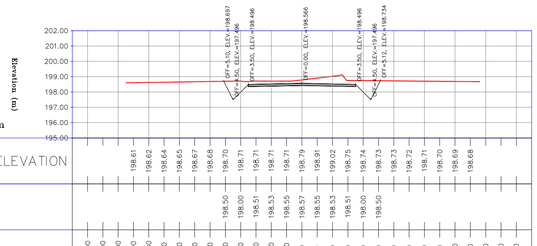

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 198.37 | 198.38 | 198.39 | 198.40 | 198.41 | 198.43 | 198.43 | 198.23 | 198.05 | 197.91 | 198.08 | 198.27 | 198.30 | 198.49 | 198.71 | 198.97 | 198.92 | 198.93 | 198.94 | 198.93 | 198.83 | 198.73 | 198.63 | 198.52 | 198.42 |
| PROJECT ELEVATION | | | | | | | | | | | 198.24 | 198.26 | 198.28 | 198.30 | 198.28 | 198.26 | 198.26 | 198.24 | 197.73 | 198.23 | | | | | | | | | | | | | | | |

## 0+570.00



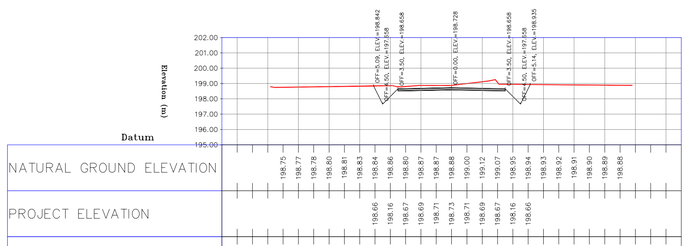

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 198.54 | 198.55 | 198.56 | 198.58 | 198.59 | 198.60 | 198.62 | 198.62 | 198.61 | 198.61 | 198.61 | 198.72 | 198.84 | 198.96 | 198.63 | 198.62 | 198.61 | 198.60 | 198.59 | 198.58 | 198.57 | 198.56 | 198.55 | | |
| PROJECT ELEVATION | | | | | | | | | | | 198.40 | 197.90 | 198.41 | 198.43 | 198.45 | 198.47 | 198.45 | 198.43 | 198.41 | 197.90 | 198.40 | | | | | | | | | | | | | | |

## 0+573.66



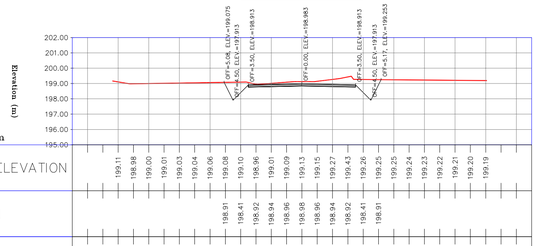

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 198.61 | 198.62 | 198.64 | 198.65 | 198.67 | 198.68 | 198.70 | 198.71 | 198.71 | 198.71 | 198.71 | 198.71 | 198.79 | 198.91 | 199.02 | 198.75 | 198.74 | 198.73 | 198.72 | 198.71 | 198.70 | 198.69 | 198.68 | | |
| PROJECT ELEVATION | | | | | | | | | | | 198.50 | 198.00 | 198.51 | 198.53 | 198.55 | 198.57 | 198.55 | 198.53 | 198.51 | 198.00 | 198.50 | | | | | | | | | | | | | | |

## 0+580.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 198.75 | 198.77 | 198.78 | 198.80 | 198.81 | 198.83 | 198.84 | 198.86 | 198.80 | 198.87 | 198.87 | 198.88 | 199.00 | 199.12 | 199.07 | 198.95 | 198.94 | 198.93 | 198.92 | 198.91 | 198.90 | 198.89 | 198.88 | | |
| PROJECT ELEVATION | | | | | | | | | | | 198.66 | 198.16 | 198.67 | 198.69 | 198.71 | 198.73 | 198.71 | 198.69 | 198.67 | 198.16 | 198.66 | | | | | | | | | | | | | | |

## 0+590.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 199.11 | 198.98 | 199.00 | 199.01 | 199.03 | 199.04 | 199.06 | 199.10 | 198.96 | 199.01 | 199.09 | 199.13 | 199.15 | 199.27 | 199.43 | 199.26 | 199.25 | 199.24 | 199.23 | 199.22 | 199.21 | 199.20 | 199.19 | | |
| PROJECT ELEVATION | | | | | | | | | | | 198.91 | 198.41 | 198.92 | 198.94 | 198.96 | 198.98 | 198.96 | 198.94 | 198.92 | 198.41 | 198.91 | | | | | | | | | | | | | | |

## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

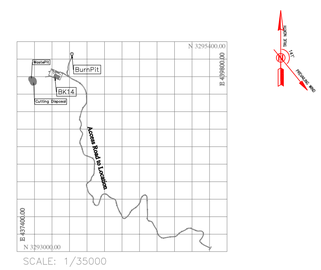
| | | | |
|---|---|---|---|
| | WELL LOCATION | | CANAL |
| | WELL | | RIVER |
| | SITE | | WATER COURSE |
| | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VERTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | ** | ***.**** | ** | ***.**** |
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

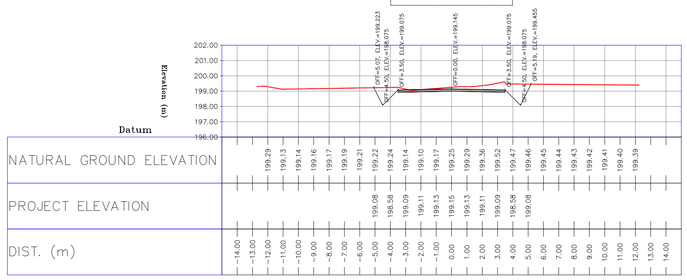
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 27 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 27 | D01 |

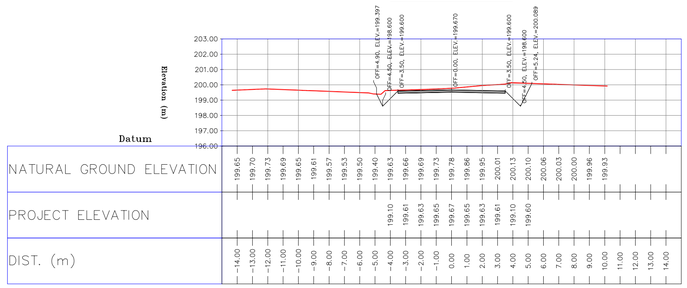
D01 TOTALLY REVISED

## 0+596.35


Elevation (m)
Datum
OFF=5.07, ELEV.=199.223
PT=4.56, ELEV.=198.070
OFF=3.50, ELEV.=199.075
OFF=0.08, ELEV.=198.145
OFF=3.50, ELEV.=199.075
PVI=4.50, ELEV.=198.075
OFF=5.19, ELEV.=199.455

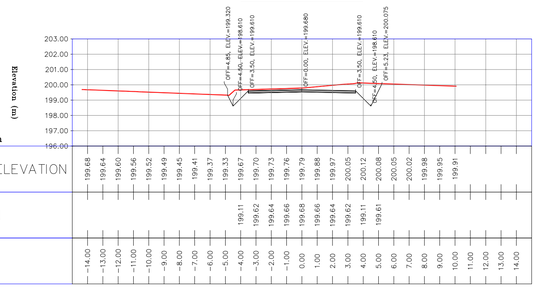
| | | |

## 0+650.00



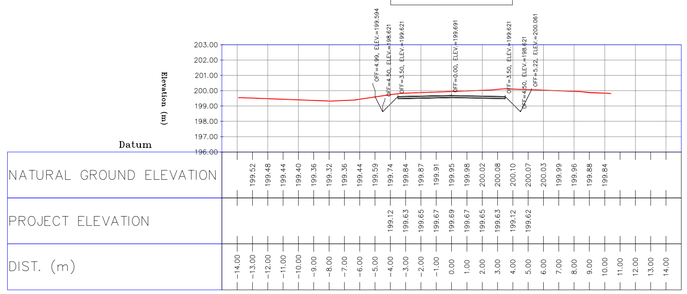

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.65 | 199.70 | 199.73 | 199.69 | 199.65 | 199.61 | 199.57 | 199.53 | 199.50 | 199.40 | 199.63 | 199.66 | 199.69 | 199.73 | 199.78 | 199.86 | 199.95 | 200.01 | 200.13 | 200.10 | 200.06 | 200.03 | 200.00 | 199.96 | 199.93 | | | | |
| PROJECT ELEVATION | | | | | | | | | | | 199.10 | 199.61 | 199.63 | 199.65 | 199.67 | 199.65 | 199.63 | 199.61 | 199.10 | 199.60 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+660.00



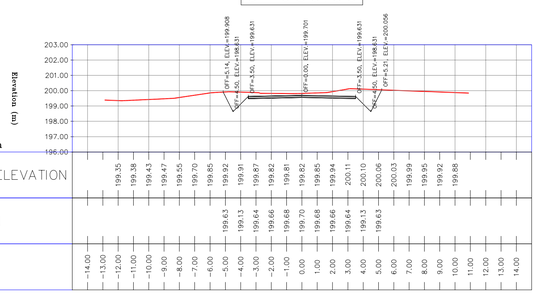

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.68 | 199.64 | 199.60 | 199.56 | 199.52 | 199.49 | 199.45 | 199.41 | 199.37 | 199.33 | 199.67 | 199.70 | 199.73 | 199.76 | 199.79 | 199.88 | 199.97 | 200.05 | 200.12 | 200.08 | 200.05 | 200.02 | 199.98 | 199.95 | 199.91 | | | | |
| PROJECT ELEVATION | | | | | | | | | | | 199.11 | 199.62 | 199.64 | 199.66 | 199.68 | 199.66 | 199.64 | 199.62 | 200.05 | 199.11 | 199.61 | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+670.00



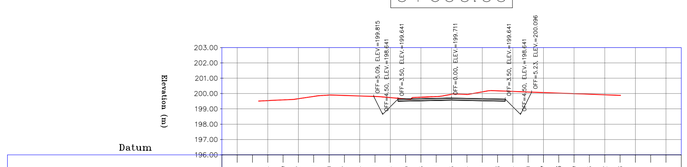

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.52 | 199.48 | 199.44 | 199.40 | 199.36 | 199.32 | 199.36 | 199.44 | 199.59 | 199.74 | 199.84 | 199.87 | 199.91 | 199.95 | 199.98 | 200.02 | 200.08 | 200.10 | 200.07 | 200.03 | 199.99 | 199.96 | 199.88 | 199.84 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 199.12 | 199.63 | 199.65 | 199.67 | 199.69 | 199.67 | 199.65 | 199.63 | 199.12 | 199.62 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+680.00



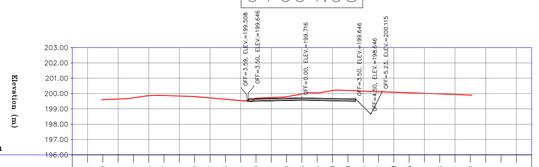

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.35 | 199.38 | 199.43 | 199.47 | 199.55 | 199.70 | 199.85 | 199.92 | 199.91 | 199.87 | 199.82 | 199.81 | 199.82 | 199.85 | 199.94 | 200.11 | 200.10 | 200.06 | 200.03 | 199.99 | 199.95 | 199.92 | 199.88 | | | | | | |
| PROJECT ELEVATION | | | | | | | | 199.63 | 199.13 | 199.64 | 199.66 | 199.68 | 199.70 | 199.68 | 199.66 | 199.64 | 199.13 | 199.63 | | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+690.00



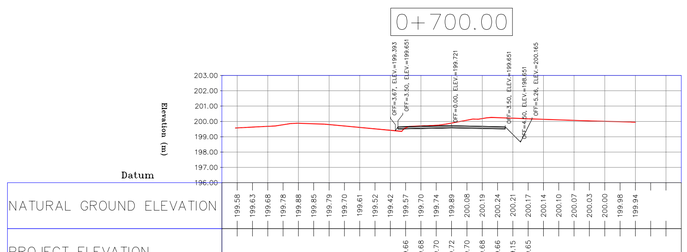

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.54 | 199.59 | 199.67 | 199.81 | 199.90 | 199.87 | 199.84 | 199.81 | 199.74 | 199.65 | 199.76 | 199.81 | 199.86 | 199.94 | 200.11 | 200.18 | 200.14 | 200.10 | 200.07 | 200.03 | 199.99 | 199.96 | 199.92 | 199.88 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 199.64 | 199.14 | 199.65 | 199.67 | 199.69 | 199.71 | 199.69 | 199.67 | 199.65 | 199.64 | | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+694.98



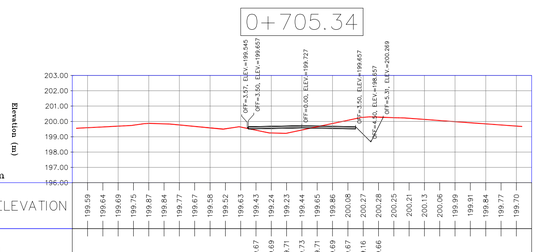

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.60 | 199.64 | 199.72 | 199.86 | 199.87 | 199.84 | 199.80 | 199.72 | 199.63 | 199.54 | 199.70 | 199.74 | 199.80 | 199.98 | 200.04 | 200.20 | 200.20 | 200.16 | 200.12 | 200.09 | 200.05 | 200.01 | 199.98 | 199.94 | 199.90 | | | | |
| PROJECT ELEVATION | | | | | | | | | | | 199.66 | 199.68 | 199.70 | 199.72 | 199.70 | 199.68 | 199.66 | 199.66 | 199.15 | 199.65 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+700.00




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.58 | 199.63 | 199.68 | 199.78 | 199.88 | 199.85 | 199.79 | 199.70 | 199.61 | 199.52 | 199.42 | 199.57 | 199.70 | 199.74 | 199.89 | 200.08 | 200.19 | 200.24 | 200.21 | 200.17 | 200.10 | 200.07 | 200.03 | 200.00 | 199.98 | 199.94 | | | |
| PROJECT ELEVATION | | | | | | | | | | | | 199.66 | 199.68 | 199.70 | 199.72 | 199.70 | 199.68 | 199.66 | 199.15 | 199.65 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+705.34




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.59 | 199.64 | 199.69 | 199.75 | 199.87 | 199.84 | 199.77 | 199.67 | 199.58 | 199.52 | 199.63 | 199.43 | 199.24 | 199.23 | 199.44 | 199.65 | 199.86 | 200.08 | 200.27 | 200.28 | 200.25 | 200.21 | 200.13 | 200.06 | 199.99 | 199.91 | 199.84 | 199.77 | 199.70 |
| PROJECT ELEVATION | | | | | | | | | | | 199.67 | 199.69 | 199.71 | 199.73 | 199.71 | 199.69 | 199.67 | 199.16 | 199.66 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

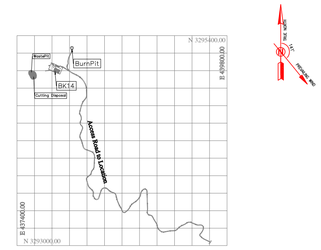
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | CHECKED BY | DATE | REV. APPR. BY | DATE |
|---|---|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** | | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

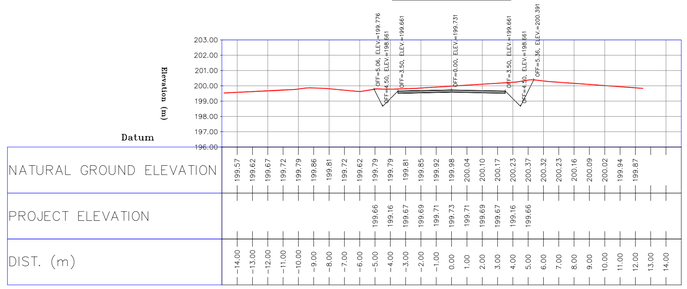
APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 29 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 29 | D01 |

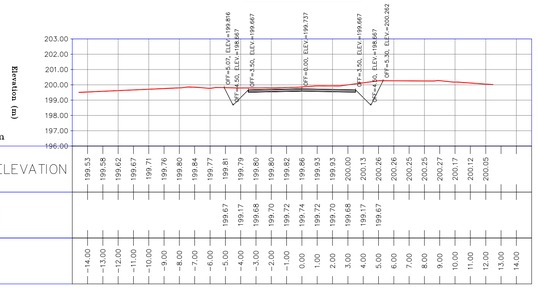
D01 TOTALLY REVISED

## 0+710.00



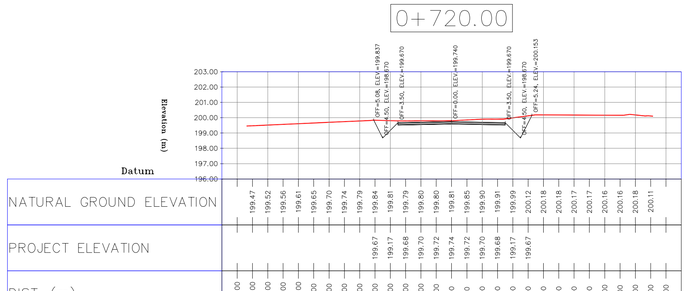

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.57 | 199.62 | 199.67 | 199.72 | 199.79 | 199.86 | 199.81 | 199.72 | 199.62 | 199.79 | 199.79 | 199.81 | 199.85 | 199.92 | 199.98 | 200.04 | 200.10 | 200.17 | 200.23 | 200.37 | 200.32 | 200.23 | 200.16 | 200.09 | 200.02 | 199.94 | 199.87 | | |
| PROJECT ELEVATION | | | | | | | | | | 199.66 | 199.16 | 199.67 | 199.69 | 199.71 | 199.73 | 199.71 | 199.69 | 199.67 | 199.16 | 199.66 | | | | | | | | | |

## 0+715.70



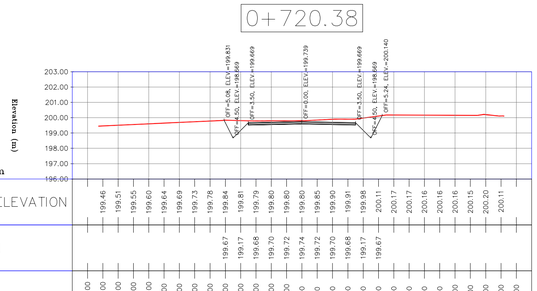

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.53 | 199.58 | 199.62 | 199.67 | 199.71 | 199.76 | 199.80 | 199.84 | 199.77 | 199.81 | 199.79 | 199.80 | 199.80 | 199.82 | 199.86 | 199.93 | 199.93 | 200.00 | 200.13 | 200.26 | 200.26 | 200.25 | 200.25 | 200.27 | 200.17 | 200.12 | 200.05 | | |
| PROJECT ELEVATION | | | | | | | | | | 199.67 | 199.17 | 199.68 | 199.70 | 199.72 | 199.74 | 199.72 | 199.70 | 199.68 | 199.17 | 199.67 | | | | | | | | | |

## 0+720.00



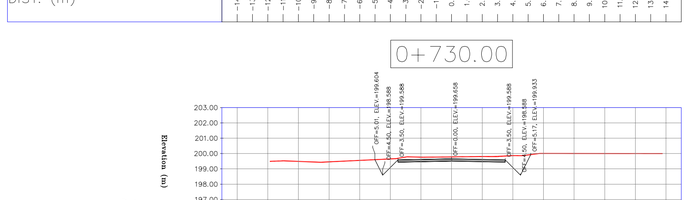

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.47 | 199.52 | 199.56 | 199.61 | 199.65 | 199.70 | 199.74 | 199.79 | 199.84 | 199.81 | 199.79 | 199.80 | 199.80 | 199.81 | 199.85 | 199.90 | 199.91 | 199.99 | 200.12 | 200.18 | 200.18 | 200.17 | 200.17 | 200.16 | 200.16 | 200.18 | 200.11 | | |
| PROJECT ELEVATION | | | | | | | | | | 199.67 | 199.17 | 199.68 | 199.70 | 199.72 | 199.74 | 199.72 | 199.70 | 199.68 | 199.17 | 199.67 | | | | | | | | | |

## 0+720.38



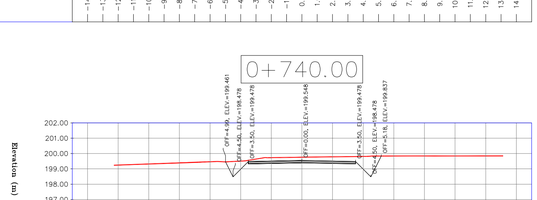

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.46 | 199.51 | 199.55 | 199.60 | 199.64 | 199.69 | 199.73 | 199.78 | 199.84 | 199.81 | 199.79 | 199.80 | 199.80 | 199.85 | 199.90 | 199.91 | 199.98 | 200.11 | 200.17 | 200.17 | 200.17 | 200.16 | 200.16 | 200.16 | 200.15 | 200.20 | 200.11 | | |
| PROJECT ELEVATION | | | | | | | | | | 199.67 | 199.17 | 199.68 | 199.70 | 199.72 | 199.74 | 199.72 | 199.70 | 199.68 | 199.17 | 199.67 | | | | | | | | | |

## 0+730.00



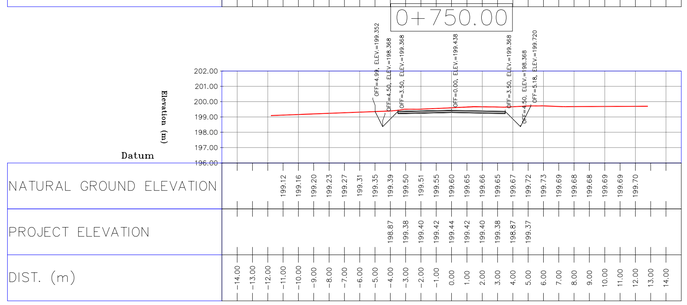

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.52 | 199.49 | 199.45 | 199.46 | 199.51 | 199.56 | 199.60 | 199.65 | 199.77 | 199.77 | 199.76 | 199.77 | 199.78 | 199.79 | 199.80 | 199.81 | 199.86 | 199.91 | 200.01 | 200.01 | 200.01 | 200.01 | 200.00 | 200.00 | 200.00 | 200.00 | 200.00 | | |
| PROJECT ELEVATION | | | | | | | | | | 199.59 | 199.09 | 199.60 | 199.62 | 199.64 | 199.66 | 199.64 | 199.62 | 199.60 | 199.09 | 199.59 | | | | | | | | | |

## 0+740.00



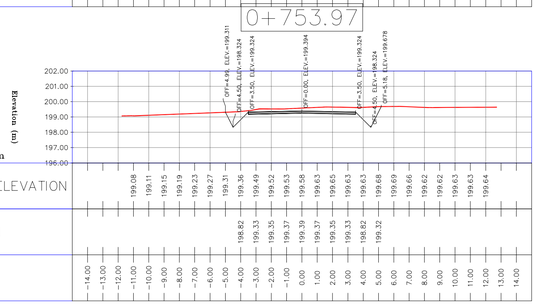

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.24 | 199.28 | 199.32 | 199.35 | 199.39 | 199.43 | 199.46 | 199.51 | 199.64 | 199.73 | 199.76 | 199.77 | 199.78 | 199.80 | 199.81 | 199.84 | 199.84 | 199.84 | 199.84 | 199.84 | 199.84 | 199.84 | 199.84 | 199.84 | 199.85 | 199.85 | 199.85 | | |
| PROJECT ELEVATION | | | | | | | | | | 198.98 | 199.49 | 199.51 | 199.53 | 199.55 | 199.53 | 199.51 | 199.49 | 199.51 | 199.48 | 198.98 | | | | | | | | | |

## 0+750.00



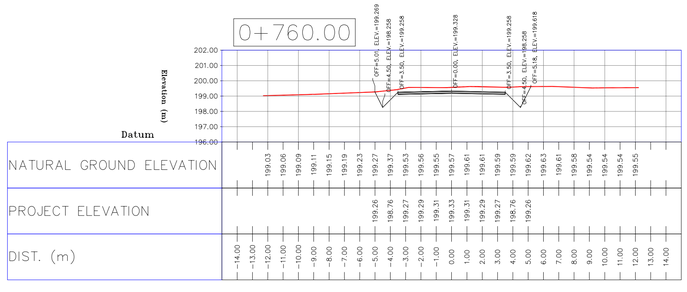

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.12 | 199.16 | 199.20 | 199.23 | 199.27 | 199.31 | 199.35 | 199.39 | 199.50 | 199.51 | 199.55 | 199.60 | 199.65 | 199.68 | 199.67 | 199.72 | 199.73 | 199.69 | 199.68 | 199.68 | 199.69 | 199.69 | 199.69 | 199.70 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 198.87 | 199.38 | 199.40 | 199.42 | 199.44 | 199.42 | 199.40 | 199.38 | 198.87 | 199.37 | | | | | | | | | | |

## 0+753.97



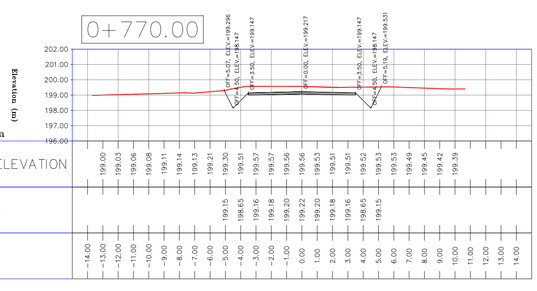

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.08 | 199.11 | 199.15 | 199.19 | 199.23 | 199.27 | 199.31 | 199.36 | 199.49 | 199.52 | 199.53 | 199.58 | 199.63 | 199.63 | 199.63 | 199.68 | 199.69 | 199.66 | 199.62 | 199.62 | 199.63 | 199.63 | 199.63 | 199.64 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 198.82 | 199.33 | 199.35 | 199.37 | 199.39 | 199.37 | 199.35 | 199.33 | 199.63 | 198.82 | 199.32 | | | | | | | | | |

## 0+760.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.03 | 199.06 | 199.09 | 199.11 | 199.15 | 199.19 | 199.23 | 199.27 | 199.37 | 199.53 | 199.56 | 199.55 | 199.57 | 199.61 | 199.61 | 199.59 | 199.59 | 199.62 | 199.63 | 199.61 | 199.58 | 199.54 | 199.54 | 199.54 | 199.55 | | | | |
| PROJECT ELEVATION | | | | | | | | | 199.26 | 198.76 | 199.27 | 199.29 | 199.31 | 199.33 | 199.31 | 199.29 | 199.27 | 198.76 | 199.26 | | | | | | | | | | |

## 0+770.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.00 | 199.03 | 199.06 | 199.08 | 199.11 | 199.14 | 199.13 | 199.21 | 199.50 | 199.51 | 199.57 | 199.57 | 199.56 | 199.56 | 199.53 | 199.51 | 199.51 | 199.52 | 199.53 | 199.53 | 199.49 | 199.45 | 199.42 | 199.39 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 199.15 | 198.65 | 199.16 | 199.18 | 199.20 | 199.22 | 199.20 | 199.18 | 199.16 | 198.65 | 199.15 | | | | | | | | | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

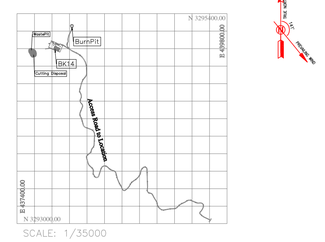
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ∿ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

D01 TOTALLY REVISED

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

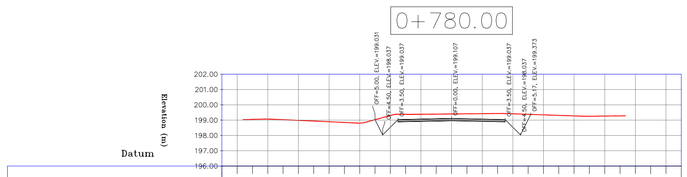
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 30 OF 90 | D01 |

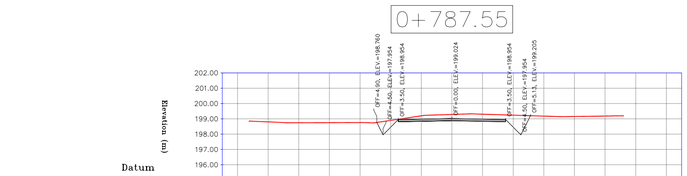
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 30 | D01 |

## 0+780.00



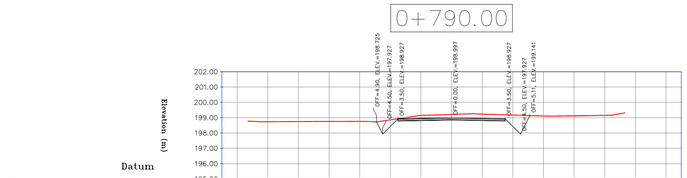

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.05 | 199.08 | 199.03 | 198.98 | 198.94 | 198.89 | 198.85 | 198.80 | 199.03 | 199.31 | 199.38 | 199.38 | 199.39 | 199.39 | 199.40 | 199.41 | 199.42 | 199.43 | 199.41 | 199.38 | 199.35 | 199.31 | 199.28 | 199.25 | 199.27 | 199.28 | | | |
| PROJECT ELEVATION | | | | | | | | | | 198.54 | 199.05 | 199.07 | 199.09 | 199.11 | 199.09 | 199.07 | 199.05 | 198.54 | 199.04 | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 0+787.55



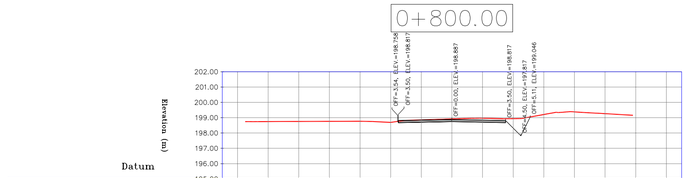

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.84 | 198.80 | 198.76 | 198.74 | 198.75 | 198.76 | 198.76 | 198.75 | 198.90 | 199.05 | 199.20 | 199.25 | 199.29 | 199.32 | 199.30 | 199.27 | 199.24 | 199.21 | 199.18 | 199.15 | 199.15 | 199.17 | 199.18 | 199.19 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 198.45 | 198.96 | 198.98 | 199.00 | 199.00 | 199.00 | 198.98 | 198.96 | 198.45 | 198.95 | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 0+790.00



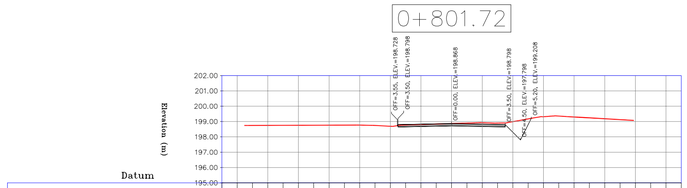

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.76 | 198.74 | 198.74 | 198.75 | 198.75 | 198.76 | 198.76 | 198.73 | 198.86 | 199.01 | 199.15 | 199.18 | 199.21 | 199.25 | 199.23 | 199.20 | 199.17 | 199.14 | 199.11 | 199.11 | 199.12 | 199.14 | 199.15 | 199.26 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 198.43 | 198.94 | 198.96 | 198.98 | 199.00 | 198.98 | 198.96 | 198.94 | 198.43 | 198.93 | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 0+800.00



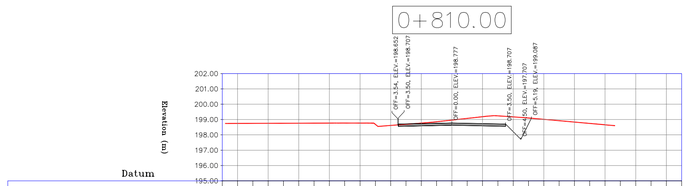

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.74 | 198.75 | 198.75 | 198.75 | 198.76 | 198.76 | 198.77 | 198.74 | 198.69 | 198.83 | 198.86 | 198.89 | 198.92 | 198.95 | 198.97 | 198.94 | 198.94 | 199.03 | 199.21 | 199.34 | 199.38 | 199.32 | 199.26 | 199.20 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 198.83 | 198.85 | 198.87 | 198.89 | 198.87 | 198.85 | 198.83 | 198.32 | 198.82 | | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 0+801.72



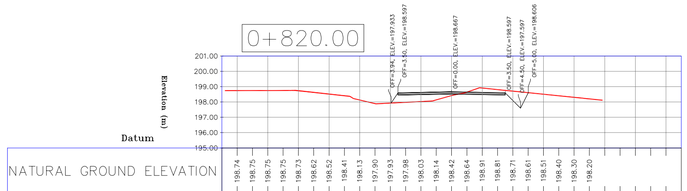

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.75 | 198.75 | 198.75 | 198.76 | 198.76 | 198.77 | 198.74 | 198.78 | 198.81 | 198.84 | 198.87 | 198.90 | 198.92 | 198.90 | 198.99 | 199.17 | 199.32 | 199.30 | 199.24 | 199.18 | 199.13 | | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 198.81 | 198.83 | 198.85 | 198.87 | 198.85 | 198.83 | 198.81 | 198.30 | 198.80 | | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 0+810.00



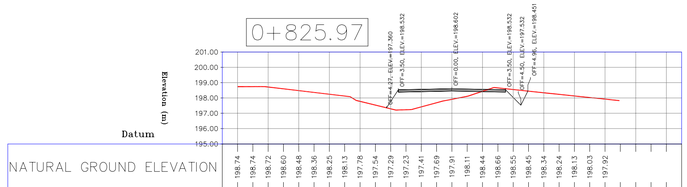

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.74 | 198.75 | 198.75 | 198.76 | 198.76 | 198.77 | 198.77 | 198.77 | 198.69 | 198.62 | 198.69 | 198.72 | 198.77 | 198.86 | 198.97 | 199.08 | 199.19 | 199.24 | 199.18 | 199.10 | 199.01 | 198.92 | 198.83 | 198.75 | 198.66 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 198.72 | 198.74 | 198.76 | 198.76 | 198.74 | 198.72 | 198.71 | 198.71 | | | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 0+820.00



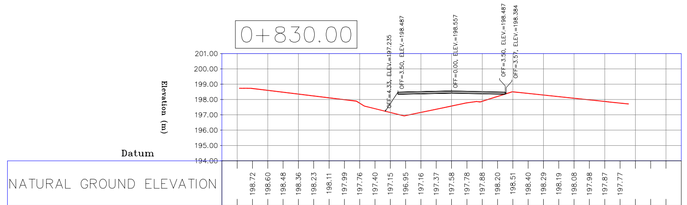

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.74 | 198.75 | 198.75 | 198.75 | 198.73 | 198.62 | 198.52 | 198.41 | 198.13 | 197.90 | 197.93 | 197.98 | 198.03 | 198.14 | 198.42 | 198.64 | 198.91 | 198.81 | 198.71 | 198.61 | 198.51 | 198.40 | 198.30 | 198.20 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 198.61 | 198.63 | 198.65 | 198.67 | 198.65 | 198.64 | 198.63 | 198.61 | 198.10 | 198.60 | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 0+825.97



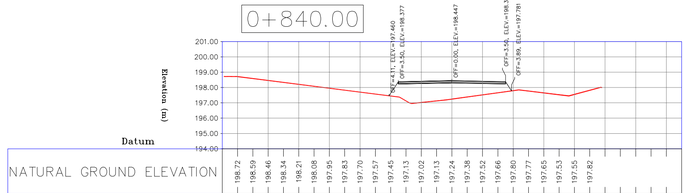

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.74 | 198.74 | 198.72 | 198.60 | 198.48 | 198.36 | 198.25 | 198.13 | 197.78 | 197.54 | 197.29 | 197.23 | 197.41 | 197.69 | 197.91 | 198.11 | 198.44 | 198.66 | 198.55 | 198.45 | 198.34 | 198.24 | 198.13 | 198.03 | 197.92 | | | | |
| PROJECT ELEVATION | | | | | | | | | | | 197.77 | 197.54 | 198.56 | 198.58 | 198.60 | 198.58 | 198.56 | 198.54 | 198.03 | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 0+830.00




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.72 | 198.60 | 198.48 | 198.36 | 198.23 | 198.11 | 197.99 | 197.76 | 197.40 | 197.15 | 196.95 | 197.16 | 197.37 | 197.58 | 197.78 | 197.88 | 198.20 | 198.51 | 198.40 | 198.29 | 198.19 | 198.08 | 197.98 | 197.87 | 197.77 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 197.73 | 198.50 | 198.52 | 198.54 | 198.56 | 198.54 | 198.52 | 198.50 | | | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 0+840.00




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.72 | 198.59 | 198.46 | 198.34 | 198.21 | 198.08 | 197.95 | 197.83 | 197.70 | 197.57 | 197.45 | 197.13 | 197.02 | 197.13 | 197.24 | 197.38 | 197.52 | 197.66 | 197.80 | 197.77 | 197.65 | 197.53 | 197.55 | 197.82 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 197.62 | 198.39 | 198.41 | 198.43 | 198.45 | 198.43 | 198.41 | 198.39 | | | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

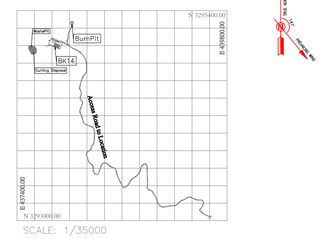
| | | | |
|---|---|---|---|
| | WELL LOCATION | | CANAL |
| | WELL | | RIVER |
| | SITE | | WATER COURSE |
| | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | ** ** | *** **** | ** ** | *** **** |
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت علی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

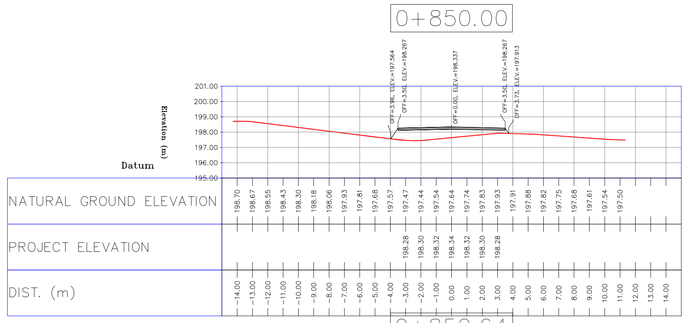
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 31 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 31 | D01 |

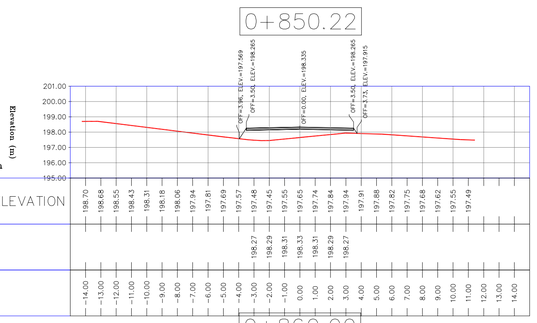
D01 TOTALLY REVISED

## 0+850.00



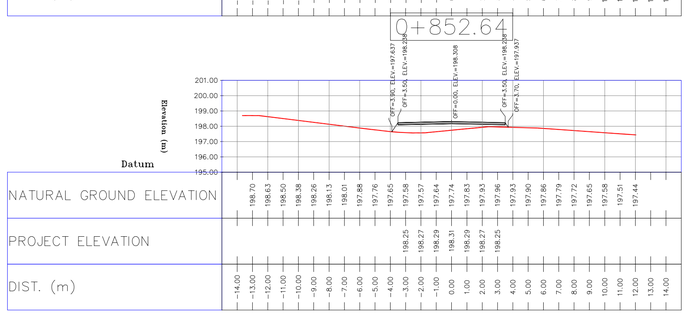

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.70 | 198.67 | 198.55 | 198.43 | 198.30 | 198.18 | 198.06 | 197.93 | 197.81 | 197.68 | 197.57 | 197.47 | 197.44 | 197.54 | 197.64 | 197.74 | 197.83 | 197.93 | 197.91 | 197.88 | 197.82 | 197.75 | 197.68 | 197.61 | 197.54 | 197.50 | | | |
| PROJECT ELEVATION | | | | | | | | | | | 198.28 | 198.30 | 198.32 | 198.34 | 198.32 | 198.30 | 198.28 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+850.22



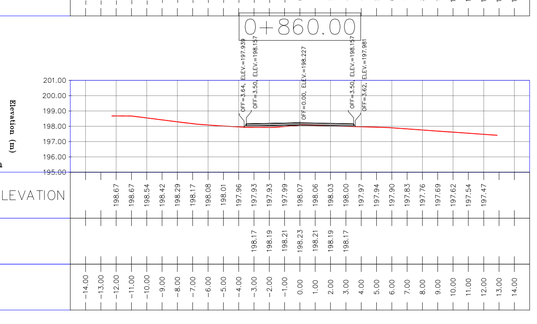

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.70 | 198.68 | 198.55 | 198.43 | 198.31 | 198.18 | 198.06 | 197.94 | 197.81 | 197.69 | 197.57 | 197.48 | 197.45 | 197.55 | 197.65 | 197.74 | 197.84 | 197.94 | 197.91 | 197.88 | 197.82 | 197.75 | 197.68 | 197.62 | 197.55 | 197.49 | | | |
| PROJECT ELEVATION | | | | | | | | | | | 198.27 | 198.29 | 198.31 | 198.33 | 198.31 | 198.29 | 198.27 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+852.64



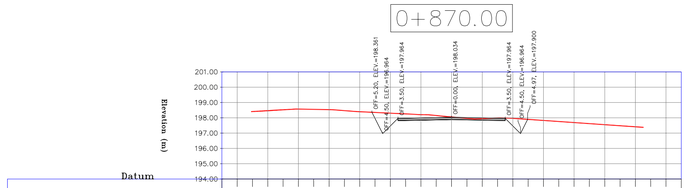

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.70 | 198.63 | 198.50 | 198.38 | 198.26 | 198.13 | 198.01 | 197.88 | 197.76 | 197.65 | 197.58 | 197.57 | 197.64 | 197.74 | 197.83 | 197.93 | 197.96 | 197.93 | 197.90 | 197.86 | 197.79 | 197.72 | 197.65 | 197.58 | 197.51 | 197.44 | | | |
| PROJECT ELEVATION | | | | | | | | | | | 198.25 | 198.27 | 198.29 | 198.31 | 198.29 | 198.27 | 198.25 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+860.00



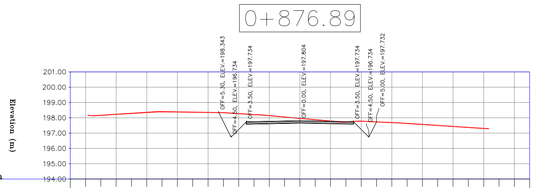

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.67 | 198.67 | 198.54 | 198.42 | 198.29 | 198.17 | 198.08 | 198.01 | 197.96 | 197.93 | 197.93 | 197.99 | 198.07 | 198.06 | 198.03 | 198.00 | 197.97 | 197.94 | 197.90 | 197.83 | 197.76 | 197.69 | 197.62 | 197.54 | 197.47 | | | | |
| PROJECT ELEVATION | | | | | | | | | | | 198.17 | 198.19 | 198.21 | 198.23 | 198.21 | 198.19 | 198.17 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+870.00



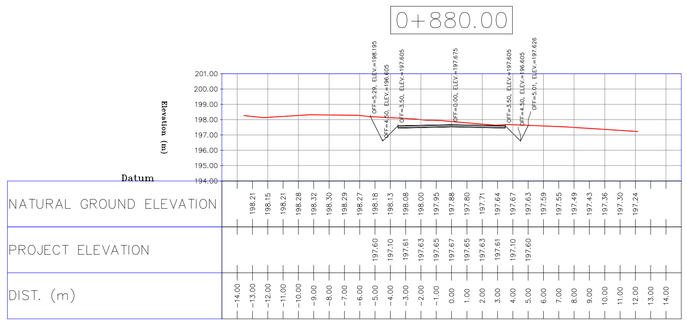

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.41 | 198.46 | 198.52 | 198.57 | 198.55 | 198.53 | 198.47 | 198.40 | 198.35 | 198.31 | 198.26 | 198.20 | 198.15 | 198.06 | 197.96 | 197.94 | 197.99 | 197.97 | 197.90 | 197.83 | 197.76 | 197.69 | 197.62 | 197.55 | 197.48 | 197.41 | | | |
| PROJECT ELEVATION | | | | | | | | | | | 197.96 | 197.97 | 197.99 | 198.01 | 198.03 | 198.01 | 197.99 | 197.97 | 197.46 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+876.89



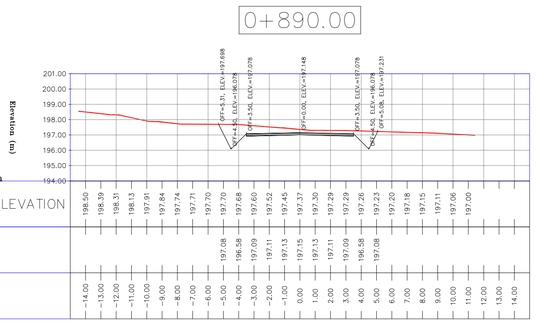

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.16 | 198.22 | 198.29 | 198.35 | 198.39 | 198.38 | 198.37 | 198.35 | 198.34 | 198.27 | 198.20 | 198.14 | 198.05 | 197.96 | 197.88 | 197.79 | 197.73 | 197.77 | 197.73 | 197.69 | 197.63 | 197.57 | 197.50 | 197.44 | 197.37 | 197.30 | | | |
| PROJECT ELEVATION | | | | | | | | | | | 197.73 | 197.23 | 197.74 | 197.78 | 197.80 | 197.78 | 197.76 | 197.74 | 197.23 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+880.00



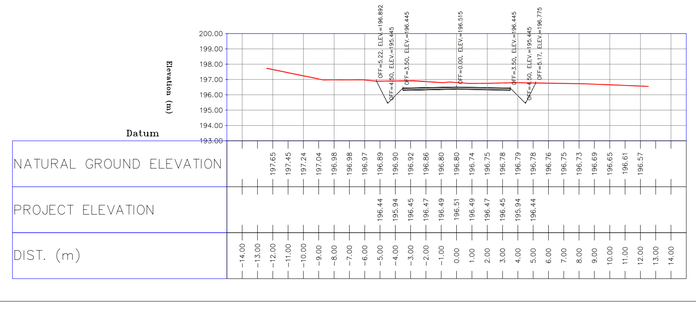

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.21 | 198.15 | 198.21 | 198.28 | 198.32 | 198.30 | 198.29 | 198.27 | 198.18 | 198.13 | 198.08 | 198.00 | 197.95 | 197.88 | 197.80 | 197.71 | 197.64 | 197.49 | 197.43 | 197.36 | 197.30 | 197.24 | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | 197.60 | 197.10 | 197.61 | 197.63 | 197.65 | 197.67 | 197.65 | 197.63 | 197.61 | 197.10 | 197.60 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+890.00



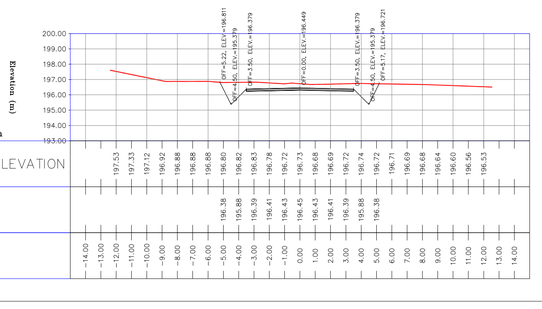

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.50 | 198.39 | 198.31 | 198.13 | 197.91 | 197.84 | 197.74 | 197.71 | 197.70 | 197.70 | 197.68 | 197.60 | 197.52 | 197.45 | 197.37 | 197.32 | 197.29 | 197.29 | 197.26 | 197.23 | 197.20 | 197.18 | 197.15 | 197.11 | 197.06 | 197.00 | | | |
| PROJECT ELEVATION | | | | | | | | | | | 197.08 | 196.58 | 197.09 | 197.11 | 197.13 | 197.13 | 197.11 | 197.09 | 196.58 | 197.08 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+900.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.65 | 197.45 | 197.24 | 197.04 | 196.88 | 196.98 | 196.97 | 196.89 | 196.90 | 196.92 | 196.86 | 196.80 | 196.80 | 196.51 | 196.49 | 196.74 | 196.75 | 196.78 | 196.79 | 196.78 | 196.76 | 196.75 | 196.73 | 196.69 | 196.65 | 196.61 | 196.57 | | |
| PROJECT ELEVATION | | | | | | | | | 196.44 | 195.94 | 196.45 | 196.47 | 196.49 | 196.47 | 196.45 | 195.94 | 196.44 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+901.14




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.53 | 197.33 | 197.12 | 196.92 | 196.88 | 196.88 | 196.88 | 196.80 | 196.82 | 196.83 | 196.78 | 196.72 | 196.73 | 196.68 | 196.69 | 196.72 | 196.74 | 196.72 | 196.71 | 196.69 | 196.68 | 196.64 | 196.60 | 196.56 | 196.53 | | | | |
| PROJECT ELEVATION | | | | | | | | | 196.38 | 195.88 | 196.39 | 196.41 | 196.43 | 196.45 | 196.43 | 196.41 | 196.39 | 195.88 | 196.38 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN

SCALE: 1/35000

| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |
|---|---|---|---|---|---|---|
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| | | CHECKED | | REV. APPR. | |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

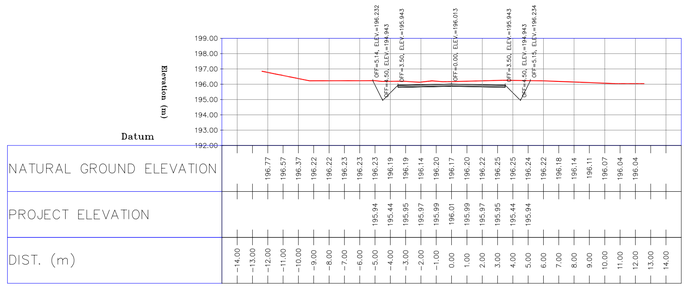
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 32 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 32 | D01 |

## 0+910.00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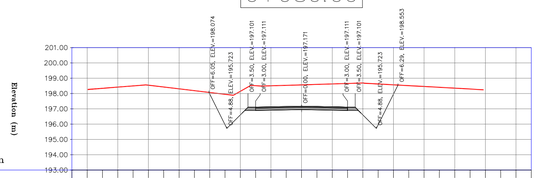
OFF=3.50, ELEV=195.943
OFF=6.00, ELEV=196.013
OFF=3.50, ELEV=195.943
OFF=4.00, ELEV=194.943
OFF=6.15, ELEV=196.234

| | | |

## 0+980.00


Elevation (m)
Datum
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OFF=4.88, ELEV.=195.723
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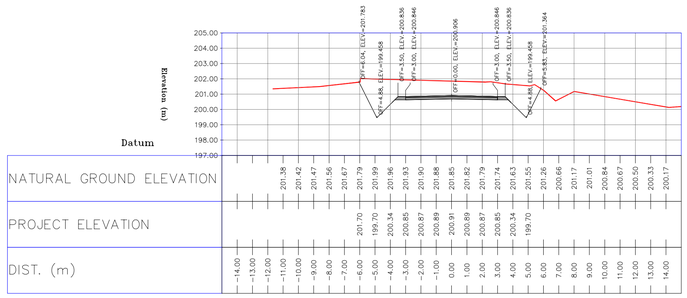
OFF=3.50, ELEV.=197.111
OFF=0.00, ELEV.=197.171
OFF=3.50, ELEV.=197.111
OFF=3.50, ELEV.=197.101
OFF=4.88, ELEV.=195.723
OFF=6.05, ELEV.=198.553

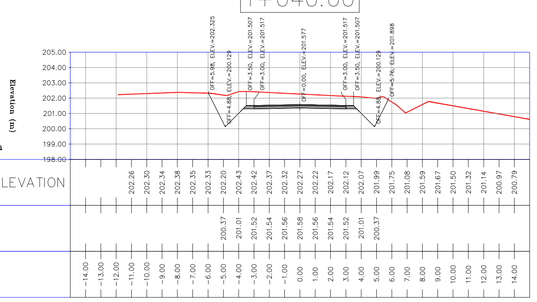
| | | |

## 1+030.86



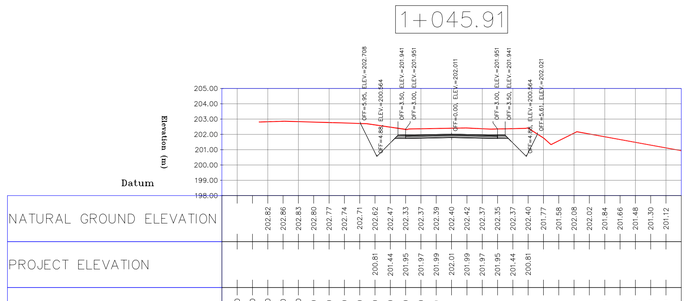

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 201.38 | 201.42 | 201.47 | 201.56 | 201.67 | 201.79 | 201.99 | 201.96 | 201.93 | 201.90 | 201.88 | 201.85 | 201.82 | 201.79 | 201.74 | 201.63 | 201.55 | 201.26 | 200.66 | 201.17 | 201.01 | 200.84 | 200.67 | 200.50 | 200.33 | 200.17 |
| PROJECT ELEVATION | 201.70 | 199.70 | 200.34 | 200.85 | 200.87 | 200.89 | 200.89 | 200.91 | 200.89 | 200.87 | 200.85 | 200.34 | 200.34 | 199.70 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+040.00



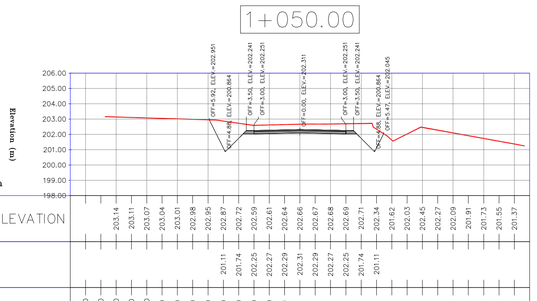

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.26 | 202.30 | 202.34 | 202.38 | 202.35 | 202.33 | 202.20 | 202.43 | 202.42 | 202.37 | 202.32 | 202.27 | 202.22 | 202.17 | 202.12 | 202.07 | 201.99 | 201.75 | 201.08 | 201.59 | 201.67 | 201.50 | 201.32 | 201.14 | 200.97 | 200.79 |
| PROJECT ELEVATION | 200.37 | 201.01 | 201.52 | 201.54 | 201.56 | 201.58 | 201.56 | 201.54 | 201.52 | 201.01 | 200.37 | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+045.91



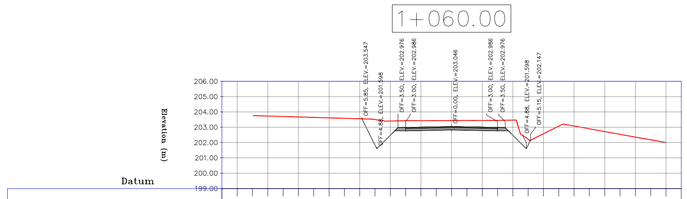

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.82 | 202.86 | 202.83 | 202.80 | 202.77 | 202.74 | 202.71 | 202.62 | 202.47 | 202.33 | 202.27 | 202.39 | 202.43 | 202.42 | 202.37 | 202.35 | 202.37 | 202.40 | 201.77 | 201.58 | 202.08 | 202.02 | 201.84 | 201.66 | 201.48 | 201.30 | 201.12 |
| PROJECT ELEVATION | 200.81 | 201.44 | 201.95 | 201.97 | 201.99 | 202.01 | 201.99 | 201.97 | 201.95 | 201.44 | 200.81 | | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+050.00



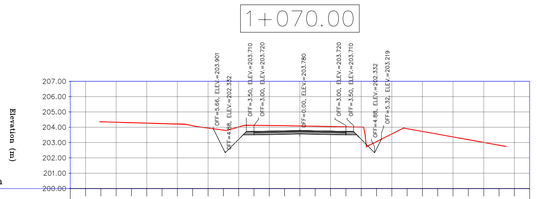

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.14 | 203.11 | 203.07 | 203.04 | 203.01 | 202.98 | 202.95 | 202.87 | 202.72 | 202.59 | 202.61 | 202.27 | 202.29 | 202.64 | 202.66 | 202.67 | 202.67 | 202.68 | 202.69 | 202.71 | 202.34 | 202.03 | 202.45 | 202.27 | 202.09 | 201.91 | 201.73 | 201.55 | 201.37 | |
| PROJECT ELEVATION | 201.11 | 201.74 | 202.25 | 202.27 | 202.29 | 202.31 | 202.29 | 202.27 | 202.25 | 202.25 | 202.25 | 202.27 | 202.29 | 202.29 | 202.27 | 202.27 | 202.25 | 202.25 | 201.74 | 201.11 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+060.00



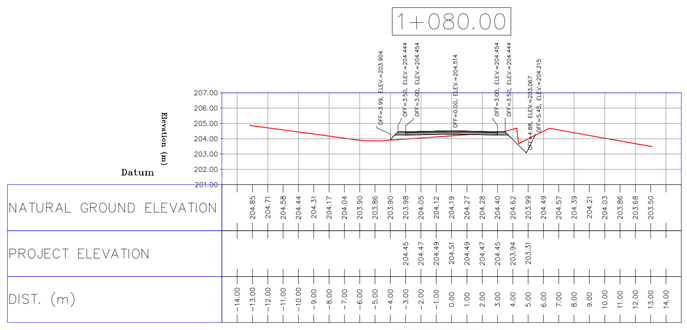

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.73 | 203.70 | 203.67 | 203.64 | 203.61 | 203.58 | 203.55 | 203.50 | 203.40 | 203.43 | 203.43 | 203.44 | 203.44 | 203.44 | 203.45 | 203.45 | 203.47 | 203.22 | 202.57 | 203.07 | 203.08 | 202.90 | 202.72 | 202.54 | 202.36 | 202.18 | 202.00 |
| PROJECT ELEVATION | 201.84 | 202.48 | 202.99 | 203.01 | 203.03 | 203.05 | 203.03 | 203.01 | 202.99 | 203.01 | 202.48 | 201.84 | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+070.00



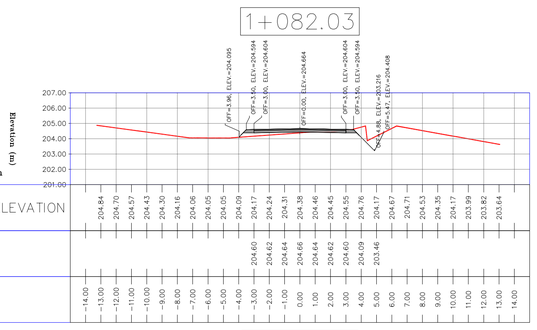

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.36 | 204.33 | 204.30 | 204.27 | 204.24 | 204.21 | 204.10 | 203.95 | 203.81 | 204.02 | 204.12 | 204.12 | 204.10 | 204.09 | 204.07 | 204.05 | 204.03 | 204.01 | 203.06 | 203.56 | 203.90 | 203.73 | 203.55 | 203.37 | 203.19 | 203.01 | 202.83 |
| PROJECT ELEVATION | 202.58 | 203.21 | 203.72 | 203.74 | 203.76 | 203.78 | 203.76 | 203.74 | 203.74 | 203.72 | 203.74 | 203.74 | 203.76 | 203.78 | 203.76 | 203.74 | 203.72 | 203.21 | 202.58 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+080.00



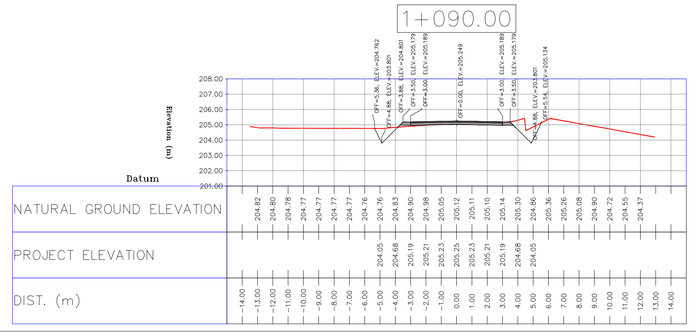

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.85 | 204.71 | 204.58 | 204.44 | 204.31 | 204.17 | 204.04 | 203.90 | 203.90 | 203.98 | 204.05 | 204.12 | 204.19 | 204.27 | 204.28 | 204.40 | 204.62 | 203.99 | 204.49 | 204.57 | 204.39 | 204.21 | 204.03 | 203.86 | 203.68 | 203.50 | |
| PROJECT ELEVATION | 204.45 | 204.47 | 204.49 | 204.49 | 204.51 | 204.49 | 204.47 | 204.45 | 203.94 | 203.31 | | | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+082.03



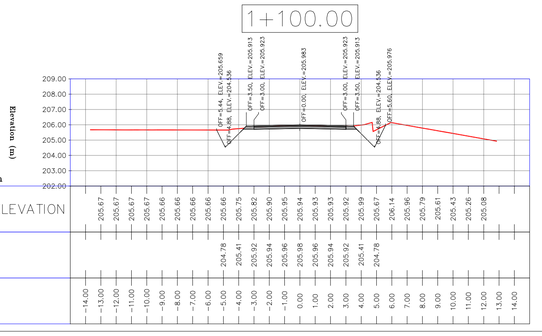

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.84 | 204.70 | 204.57 | 204.43 | 204.30 | 204.16 | 204.06 | 204.05 | 204.09 | 204.17 | 204.24 | 204.31 | 204.38 | 204.46 | 204.45 | 204.55 | 204.76 | 204.17 | 204.67 | 204.71 | 204.53 | 204.35 | 204.17 | 203.99 | 203.82 | 203.64 | |
| PROJECT ELEVATION | 204.60 | 204.62 | 204.64 | 204.64 | 204.66 | 204.64 | 204.62 | 204.60 | 204.09 | 203.46 | | | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+090.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.82 | 204.80 | 204.78 | 204.77 | 204.77 | 204.77 | 204.77 | 204.76 | 204.76 | 204.83 | 204.90 | 204.98 | 205.05 | 205.12 | 205.11 | 205.10 | 205.14 | 204.86 | 205.36 | 205.26 | 205.08 | 204.90 | 204.72 | 204.55 | 204.37 | | |
| PROJECT ELEVATION | 204.05 | 204.68 | 205.19 | 205.21 | 205.23 | 205.25 | 205.23 | 205.21 | 205.19 | 204.68 | 204.05 | | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+100.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 205.67 | 205.67 | 205.67 | 205.66 | 205.66 | 205.66 | 205.66 | 205.75 | 205.82 | 205.90 | 205.95 | 205.94 | 205.98 | 205.96 | 205.93 | 205.94 | 205.92 | 205.99 | 205.67 | 206.14 | 205.96 | 205.79 | 205.61 | 205.43 | 205.26 | 205.08 | |
| PROJECT ELEVATION | 204.78 | 205.41 | 205.92 | 205.94 | 205.96 | 205.98 | 205.96 | 205.94 | 205.92 | 205.92 | 205.94 | 205.92 | 205.94 | 205.96 | 205.94 | 205.92 | 205.94 | 205.41 | 204.78 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

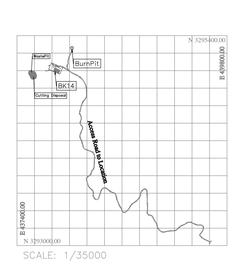
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | | BRIDGE |
| ⌒ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

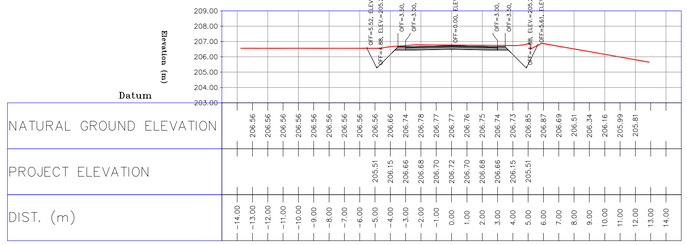
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

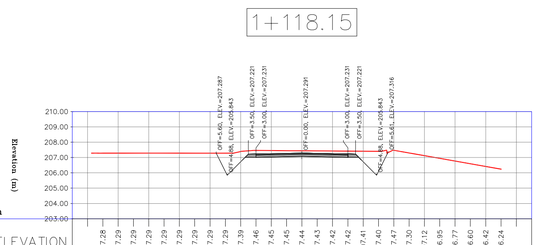
| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 35 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 35 | D01 |

## 1+110.00



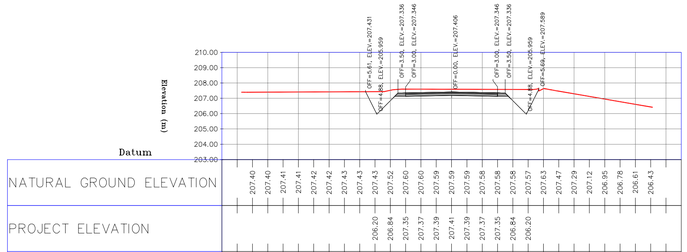

| | |
|---|---|
| NATURAL GROUND ELEVATION | 206.56 206.56 206.56 206.56 206.56 206.56 206.56 206.56 206.56 206.56 206.56 206.66 206.74 206.78 206.77 206.77 206.76 206.75 206.74 206.73 206.85 206.87 206.69 206.51 206.34 206.16 205.99 205.81 |
| PROJECT ELEVATION | 205.51 206.15 206.66 206.68 206.70 206.72 206.70 206.68 206.66 206.15 205.51 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 1+118.15



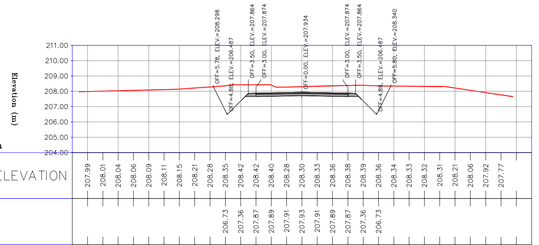

| | |
|---|---|
| NATURAL GROUND ELEVATION | 207.28 207.29 207.29 207.29 207.29 207.29 207.29 207.29 207.39 207.46 207.45 207.45 207.44 207.43 207.42 207.42 207.41 207.40 207.47 207.50 207.12 206.95 206.77 206.60 206.42 206.24 |
| PROJECT ELEVATION | 206.09 206.72 207.23 207.25 207.27 207.29 207.27 207.25 207.23 206.72 206.09 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 1+120.00



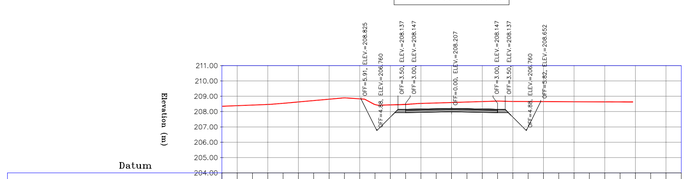

| | |
|---|---|
| NATURAL GROUND ELEVATION | 207.40 207.40 207.41 207.41 207.42 207.42 207.43 207.43 207.52 207.60 207.60 207.59 207.59 207.59 207.58 207.58 207.57 207.63 207.47 207.29 207.12 206.95 206.78 206.61 206.43 |
| PROJECT ELEVATION | 206.20 206.84 207.35 207.37 207.39 207.41 207.39 207.37 207.35 206.84 206.20 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 1+130.00



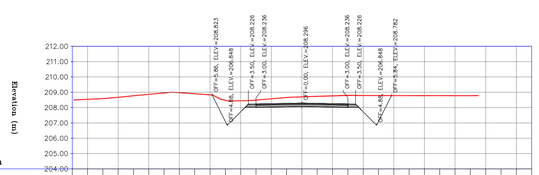

| | |
|---|---|
| NATURAL GROUND ELEVATION | 207.99 208.01 208.04 208.06 208.09 208.11 208.15 208.21 208.28 208.35 208.42 208.42 208.40 208.28 208.30 208.33 208.36 208.38 208.39 208.36 208.34 208.33 208.32 208.31 208.21 208.06 207.92 207.77 |
| PROJECT ELEVATION | 206.73 207.36 207.87 207.89 207.91 207.93 207.91 207.89 207.87 207.36 206.73 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 1+137.09



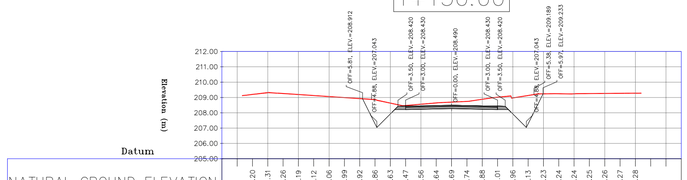

| | |
|---|---|
| NATURAL GROUND ELEVATION | 208.38 208.42 208.46 208.54 208.63 208.72 208.81 208.90 208.83 208.46 208.44 208.47 208.54 208.56 208.59 208.62 208.65 208.68 208.66 208.65 208.65 208.64 208.64 208.64 208.63 |
| PROJECT ELEVATION | 207.00 207.64 208.15 208.17 208.19 208.21 208.19 208.17 208.15 207.64 207.00 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 1+140.00



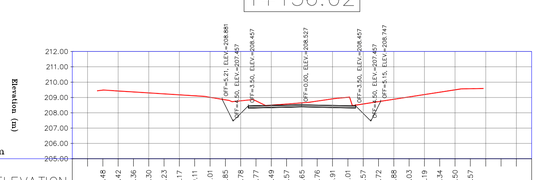

| | |
|---|---|
| NATURAL GROUND ELEVATION | 208.54 208.58 208.67 208.77 208.86 208.96 208.97 208.90 208.83 208.48 208.45 208.49 208.58 208.66 208.70 208.73 208.77 208.80 208.78 208.78 208.78 208.78 208.78 208.78 208.78 |
| PROJECT ELEVATION | 207.09 207.73 208.24 208.26 208.28 208.30 208.28 208.26 208.24 207.73 207.09 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 1+150.00




| | |
|---|---|
| NATURAL GROUND ELEVATION | 209.20 209.31 209.26 209.19 209.12 209.06 208.99 208.92 208.86 208.63 208.47 208.56 208.64 208.69 208.74 208.88 209.01 209.01 208.96 209.13 209.23 209.24 209.24 209.25 209.26 209.27 209.28 |
| PROJECT ELEVATION | 207.68 207.92 208.43 208.45 208.47 208.49 208.47 208.45 208.43 207.92 207.56 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 1+156.02




| | |
|---|---|
| NATURAL GROUND ELEVATION | 209.48 209.42 209.36 209.30 209.23 209.17 209.11 209.01 208.85 208.78 208.77 208.49 208.57 208.65 208.76 208.91 209.01 208.57 208.72 208.88 209.03 209.19 209.34 209.50 209.57 |
| PROJECT ELEVATION | 208.46 208.78 208.47 208.49 208.51 208.53 208.51 208.49 208.47 207.96 208.46 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

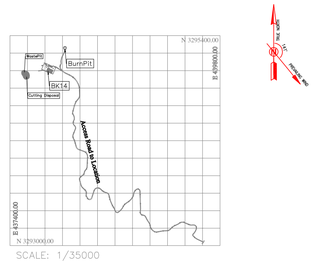
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

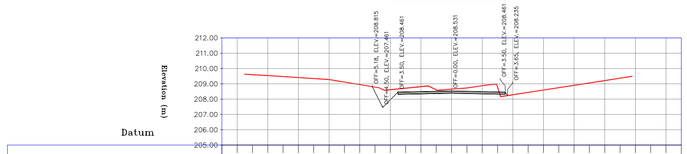
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 36 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 36 | D01 |

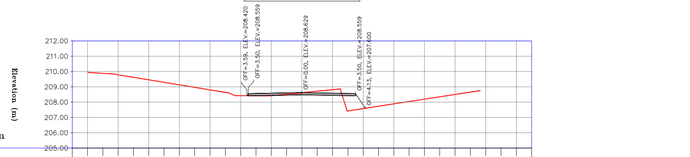
D01 TOTALLY REVISED

## 1+160.00



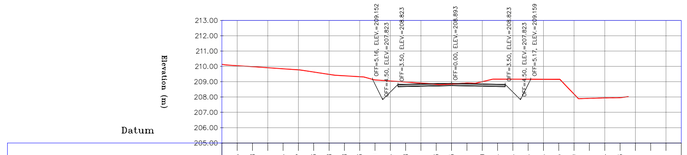

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 209.60 | 209.53 | 209.47 | 209.41 | 209.35 | 209.28 | 209.11 | 208.95 | 208.79 | 208.61 | 208.72 | 208.72 | 208.61 | 208.61 | 208.66 | 208.73 | 208.88 | 208.78 | 208.29 | 208.44 | 208.60 | 208.75 | 208.91 | 209.06 | 209.21 | 209.37 | | | |
| PROJECT ELEVATION | | | | | | | | | | 208.46 | 207.96 | 208.47 | 208.49 | 208.51 | 208.53 | 208.51 | 208.49 | 208.47 | | | | | | | | | | | |

## 1+170.00



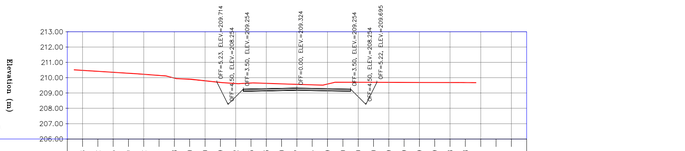

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 209.88 | 209.79 | 209.62 | 209.46 | 209.29 | 209.13 | 208.96 | 208.80 | 208.64 | 208.42 | 208.42 | 208.42 | 208.41 | 208.51 | 208.61 | 208.72 | 208.82 | 207.43 | 207.58 | 207.73 | 207.89 | 208.04 | 208.20 | 208.35 | 208.50 | 208.66 | | | |
| PROJECT ELEVATION | | | | | | | | | | 208.57 | 208.59 | 208.61 | 208.63 | 208.61 | 208.61 | 208.61 | 208.59 | 208.57 | 207.80 | | | | | | | | | | |

## 1+180.00



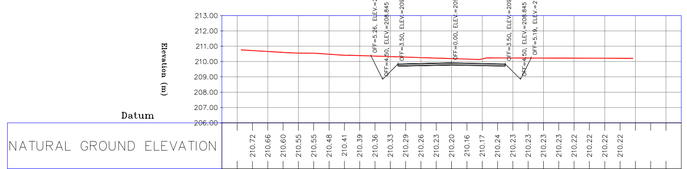

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 210.05 | 209.98 | 209.91 | 209.84 | 209.77 | 209.63 | 209.48 | 209.38 | 209.33 | 209.11 | 209.04 | 208.98 | 208.91 | 208.83 | 208.85 | 208.91 | 209.00 | 209.16 | 209.16 | 209.16 | 209.15 | 208.19 | 207.91 | 207.94 | 207.98 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 208.82 | 208.32 | 208.83 | 208.85 | 208.87 | 208.89 | 208.87 | 208.85 | 208.83 | 208.32 | 208.82 | | | | | | | | | |

## 1+190.00



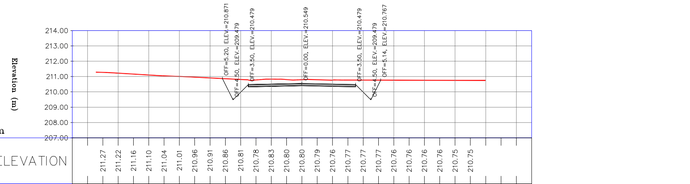

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 210.48 | 210.42 | 210.35 | 210.29 | 210.22 | 210.15 | 209.98 | 209.90 | 209.80 | 209.69 | 209.62 | 209.65 | 209.63 | 209.60 | 209.57 | 209.54 | 209.59 | 209.70 | 209.70 | 209.70 | 209.69 | 209.69 | 209.69 | 209.69 | 209.68 | 209.68 | | | |
| PROJECT ELEVATION | | | | | | | | | | 209.25 | 208.75 | 209.26 | 209.28 | 209.30 | 209.32 | 209.30 | 209.28 | 209.26 | 208.75 | 209.25 | | | | | | | | | |

## 1+200.00



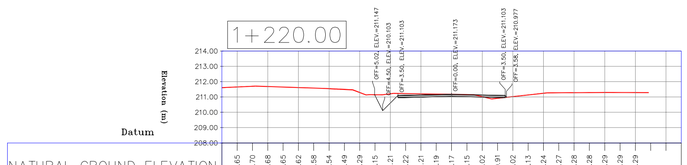

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 210.72 | 210.66 | 210.60 | 210.55 | 210.55 | 210.48 | 210.41 | 210.39 | 210.36 | 210.33 | 210.29 | 210.26 | 210.23 | 210.20 | 210.16 | 210.17 | 210.24 | 210.23 | 210.23 | 210.23 | 210.22 | 210.22 | 210.22 | 210.22 | 210.22 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 209.85 | 209.35 | 209.86 | 209.88 | 209.90 | 209.92 | 209.90 | 209.88 | 209.86 | 209.35 | 209.85 | | | | | | | | | |

## 1+210.00



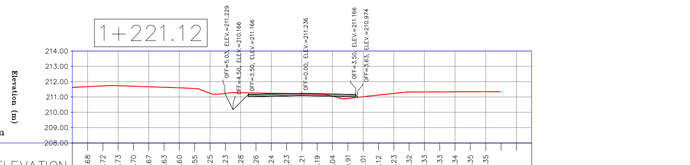

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 211.27 | 211.22 | 211.16 | 211.10 | 211.04 | 211.01 | 210.96 | 210.91 | 210.86 | 210.81 | 210.78 | 210.83 | 210.80 | 210.80 | 210.79 | 210.77 | 210.77 | 210.76 | 210.76 | 210.76 | 210.76 | 210.76 | 210.76 | 210.75 | 210.75 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 210.48 | 209.98 | 210.49 | 210.51 | 210.53 | 210.55 | 210.53 | 210.51 | 210.49 | 209.98 | 210.48 | | | | | | | | | |

## 1+220.00



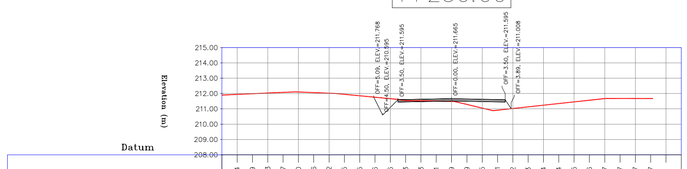

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 211.65 | 211.70 | 211.68 | 211.65 | 211.62 | 211.58 | 211.54 | 211.49 | 211.29 | 211.15 | 211.21 | 211.22 | 211.21 | 211.19 | 211.17 | 211.15 | 211.02 | 210.91 | 211.02 | 211.13 | 211.24 | 211.27 | 211.28 | 211.28 | 211.29 | 211.29 | 211.29 | | |
| PROJECT ELEVATION | | | | | | | | | | 211.10 | 210.60 | 211.11 | 211.15 | 211.15 | 211.17 | 211.15 | 211.13 | 211.11 | | | | | | | | | | | |

## 1+221.12



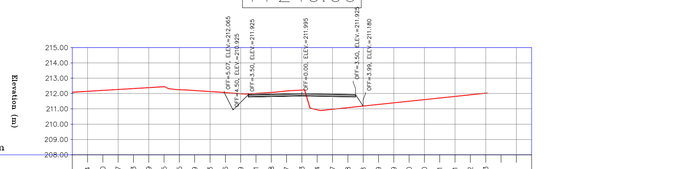

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 211.68 | 211.72 | 211.73 | 211.70 | 211.67 | 211.63 | 211.60 | 211.55 | 211.25 | 211.23 | 211.28 | 211.26 | 211.24 | 211.23 | 211.21 | 211.19 | 211.04 | 210.91 | 211.01 | 211.12 | 211.23 | 211.32 | 211.33 | 211.33 | 211.34 | 211.35 | 211.35 | | |
| PROJECT ELEVATION | | | | | | | | | | 211.17 | 210.67 | 211.18 | 211.20 | 211.22 | 211.24 | 211.23 | 211.22 | 211.20 | 211.18 | | | | | | | | | | |

## 1+230.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 211.94 | 211.99 | 212.03 | 212.07 | 212.10 | 212.06 | 212.02 | 211.95 | 211.85 | 211.76 | 211.66 | 211.53 | 211.53 | 211.51 | 211.49 | 211.29 | 211.05 | 210.91 | 211.02 | 211.13 | 211.24 | 211.34 | 211.45 | 211.56 | 211.67 | 211.67 | 211.67 | | |
| PROJECT ELEVATION | | | | | | | | | | 211.59 | 211.09 | 211.60 | 211.62 | 211.64 | 211.66 | 211.64 | 211.62 | 211.60 | | | | | | | | | | | |

## 1+240.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 212.14 | 212.20 | 212.27 | 212.33 | 212.39 | 212.45 | 212.25 | 212.19 | 212.13 | 212.06 | 211.99 | 212.01 | 212.08 | 212.17 | 212.23 | 210.94 | 210.97 | 211.08 | 211.18 | 211.29 | 211.39 | 211.50 | 211.60 | 211.71 | 211.81 | 211.92 | 212.03 | | |
| PROJECT ELEVATION | | | | | | | | | | 211.92 | 211.42 | 211.93 | 211.95 | 211.97 | 211.99 | 211.97 | 211.95 | 211.93 | | | | | | | | | | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

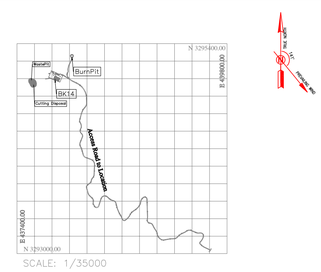
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




| REV. | DESCRIPTION | BY | DATE | CHECKED | DATE | APPR. |
|---|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 37 OF 90 | D01 |

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

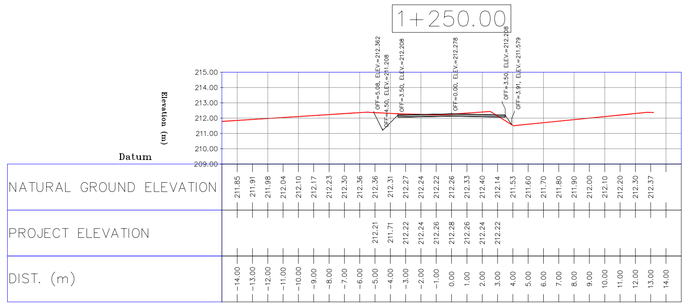
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

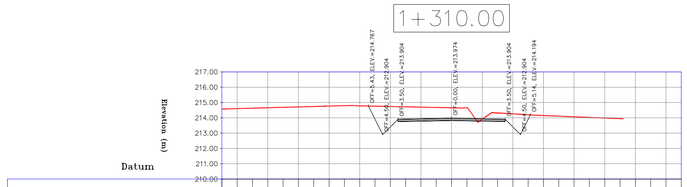
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 37 | D01 |

## 1+250.00


Elevation (m)
Datum
OFF=5.08, ELEV=212.362
PVI=5.00, ELEV=211.208
OFF=3.50, ELEV=212.208
OFF=0.00, ELEV=212.378
OFF=3.50, ELEV=212.208
OFF=3.81, ELEV=211.979

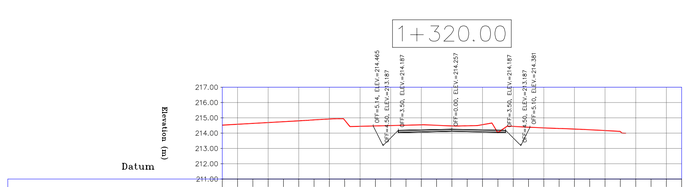
| | | |

## 1+310.00



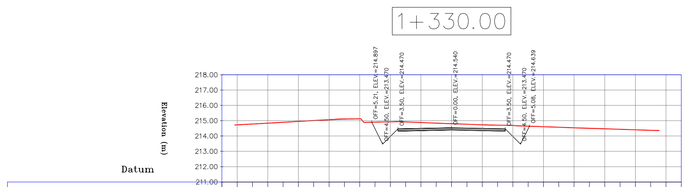

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 214.60 | 214.63 | 214.66 | 214.68 | 214.71 | 214.74 | 214.77 | 214.79 | 214.78 | 214.76 | 214.74 | 214.72 | 214.70 | 214.68 | 214.66 | 214.66 | 213.91 | 214.32 | 214.26 | 214.20 | 214.15 | 214.11 | 214.07 | 214.03 | 213.99 | 213.95 | | | |
| PROJECT ELEVATION | | | | | | | | | | 213.90 | 213.40 | 213.91 | 213.93 | 213.95 | 213.97 | 213.95 | 213.93 | 213.91 | 213.40 | 213.90 | | | | | | | | | |

## 1+320.00



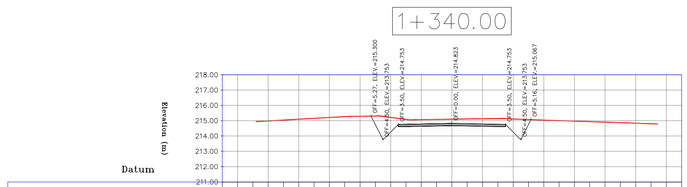

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 214.58 | 214.64 | 214.69 | 214.75 | 214.81 | 214.86 | 214.92 | 214.84 | 214.44 | 214.47 | 214.49 | 214.52 | 214.54 | 214.51 | 214.47 | 214.48 | 214.55 | 214.03 | 214.44 | 214.39 | 214.34 | 214.30 | 214.26 | 214.22 | 214.17 | 214.10 | | | |
| PROJECT ELEVATION | | | | | | | | | | 214.19 | 213.69 | 214.20 | 214.22 | 214.24 | 214.26 | 214.24 | 214.22 | 214.20 | 213.69 | 214.19 | | | | | | | | | |

## 1+330.00



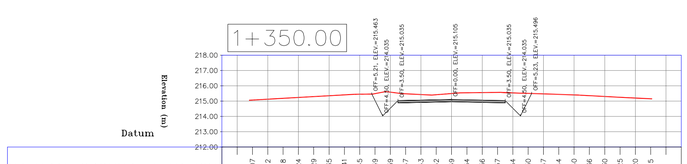

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 214.73 | 214.78 | 214.84 | 214.89 | 214.95 | 215.01 | 215.06 | 215.11 | 215.13 | 214.90 | 214.93 | 214.92 | 214.88 | 214.84 | 214.81 | 214.77 | 214.73 | 214.71 | 214.69 | 214.64 | 214.61 | 214.57 | 214.54 | 214.51 | 214.47 | 214.44 | 214.40 | 214.37 | |
| PROJECT ELEVATION | | | | | | | | | | 214.47 | 213.97 | 214.48 | 214.50 | 214.52 | 214.54 | 214.52 | 214.50 | 214.48 | 213.97 | 214.47 | | | | | | | | | |

## 1+340.00



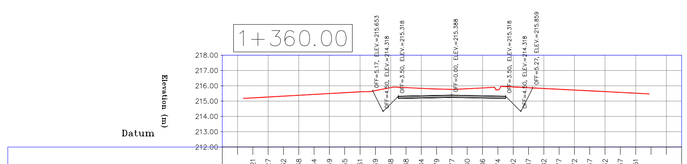

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 214.98 | 215.04 | 215.09 | 215.15 | 215.21 | 215.26 | 215.29 | 215.30 | 215.21 | 215.08 | 215.07 | 215.08 | 215.10 | 215.11 | 215.13 | 215.14 | 215.11 | 215.07 | 215.04 | 215.04 | 214.97 | 214.94 | 214.90 | 214.87 | 214.84 | 214.80 | | | |
| PROJECT ELEVATION | | | | | | | | | | 214.75 | 214.25 | 214.76 | 214.78 | 214.80 | 214.82 | 214.80 | 214.78 | 214.76 | 214.25 | 214.75 | | | | | | | | | |

## 1+350.00



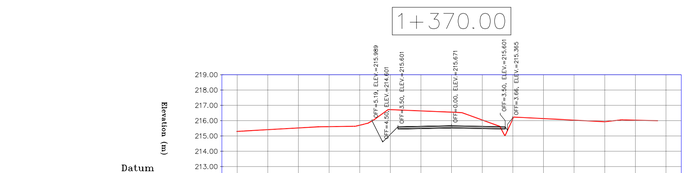

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.07 | 215.12 | 215.18 | 215.24 | 215.29 | 215.35 | 215.41 | 215.45 | 215.49 | 215.59 | 215.47 | 215.43 | 215.42 | 215.49 | 215.54 | 215.56 | 215.57 | 215.54 | 215.50 | 215.47 | 215.44 | 215.40 | 215.36 | 215.30 | 215.25 | 215.20 | 215.15 | | |
| PROJECT ELEVATION | | | | | | | | | | 215.04 | 214.54 | 215.05 | 215.07 | 215.09 | 215.11 | 215.09 | 215.07 | 215.05 | 214.54 | 215.04 | | | | | | | | | |

## 1+360.00



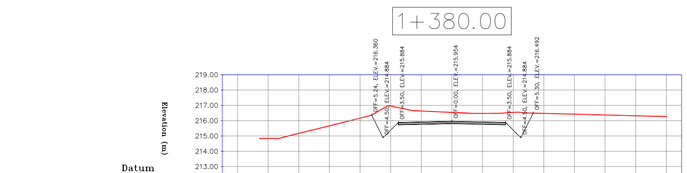

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.21 | 215.27 | 215.32 | 215.38 | 215.44 | 215.49 | 215.55 | 215.61 | 215.69 | 215.88 | 215.88 | 215.85 | 215.84 | 215.79 | 215.77 | 215.80 | 215.86 | 215.74 | 215.92 | 215.87 | 215.82 | 215.77 | 215.72 | 215.67 | 215.62 | 215.57 | 215.51 | | |
| PROJECT ELEVATION | | | | | | | | | | 215.32 | 214.82 | 215.33 | 215.35 | 215.37 | 215.39 | 215.37 | 215.33 | 214.82 | 215.32 | | | | | | | | | | |

## 1+370.00



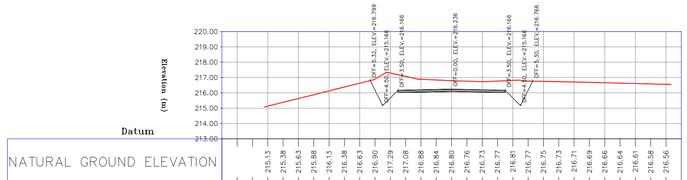

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.30 | 215.36 | 215.41 | 215.47 | 215.52 | 215.58 | 215.61 | 215.62 | 215.70 | 216.11 | 216.72 | 216.67 | 216.63 | 216.59 | 216.55 | 216.41 | 216.05 | 215.68 | 216.12 | 216.19 | 216.13 | 216.08 | 216.03 | 215.98 | 215.93 | 216.04 | 216.03 | 216.01 | |
| PROJECT ELEVATION | | | | | | | | | | 215.60 | 215.10 | 215.61 | 215.63 | 215.65 | 215.67 | 215.65 | 215.63 | 215.61 | 215.10 | 215.61 | | | | | | | | | |

## 1+380.00



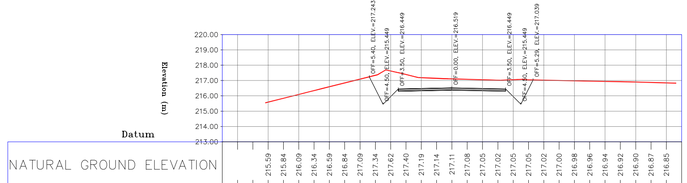

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 214.84 | 214.92 | 215.17 | 215.41 | 215.66 | 215.91 | 216.16 | 216.50 | 216.96 | 216.75 | 216.63 | 216.58 | 216.54 | 216.49 | 216.47 | 216.48 | 216.53 | 216.50 | 216.47 | 216.45 | 216.42 | 216.40 | 216.37 | 216.35 | 216.32 | 216.30 | 216.27 | | |
| PROJECT ELEVATION | | | | | | | | | | 215.88 | 215.38 | 215.89 | 215.91 | 215.93 | 215.95 | 215.93 | 215.91 | 215.89 | 215.38 | 215.88 | | | | | | | | | |

## 1+390.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.13 | 215.38 | 215.63 | 215.88 | 216.13 | 216.38 | 216.63 | 216.90 | 217.29 | 217.08 | 216.88 | 216.84 | 216.80 | 216.76 | 216.73 | 216.71 | 216.77 | 216.77 | 216.75 | 216.73 | 216.71 | 216.69 | 216.69 | 216.66 | 216.64 | 216.61 | 216.58 | 216.56 | |
| PROJECT ELEVATION | | | | | | | | | | 216.17 | 215.67 | 216.18 | 216.20 | 216.22 | 216.24 | 216.22 | 216.20 | 216.18 | 215.67 | 216.17 | | | | | | | | | |

## 1+400.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.59 | 215.84 | 216.09 | 216.34 | 216.59 | 216.84 | 217.09 | 217.34 | 217.62 | 217.40 | 217.19 | 217.14 | 217.11 | 217.08 | 217.05 | 217.02 | 217.05 | 217.02 | 217.00 | 216.98 | 216.96 | 216.94 | 216.92 | 216.90 | 216.87 | 216.85 | | | |
| PROJECT ELEVATION | | | | | | | | | | 216.45 | 215.95 | 216.46 | 216.48 | 216.50 | 216.52 | 216.50 | 216.48 | 216.46 | 215.95 | 216.45 | | | | | | | | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

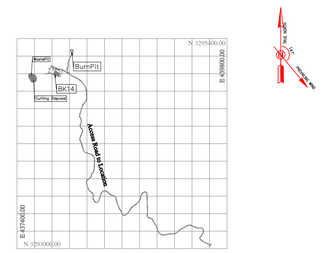
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | △ | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

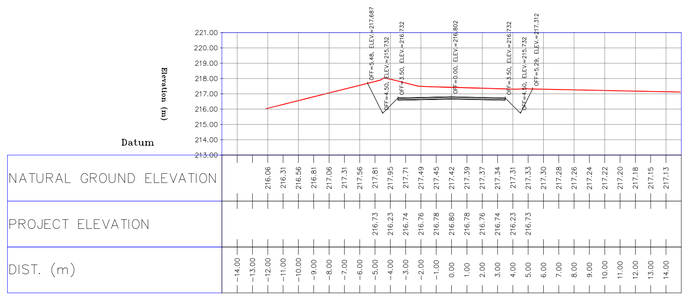
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

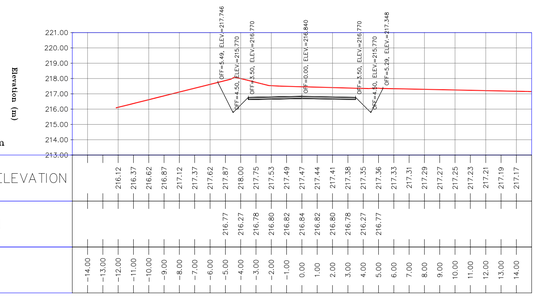
| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 39 OF 90 | D01 | 053–073–9184 | F | 4 | S | 708209 | 39 | D01 |

## 1+410.00



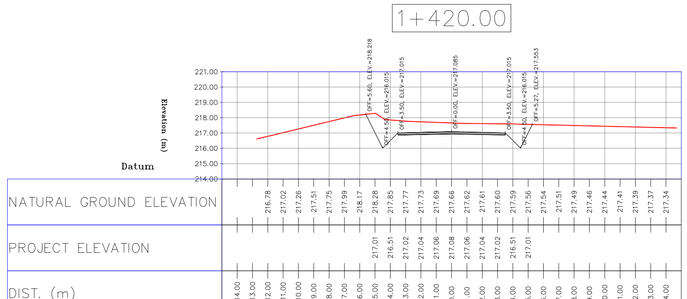

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.06 | 216.31 | 216.56 | 216.81 | 217.06 | 217.31 | 217.56 | 217.81 | 217.95 | 217.71 | 217.49 | 217.45 | 217.42 | 217.39 | 217.37 | 217.34 | 217.31 | 217.33 | 217.30 | 217.28 | 217.26 | 217.24 | 217.22 | 217.20 | 217.18 | 217.15 | 217.13 | | |
| PROJECT ELEVATION | | | | | | | | 216.73 | 216.23 | 216.74 | 216.76 | 216.78 | 216.80 | 216.78 | 216.76 | 216.74 | 216.23 | 216.73 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+411.33



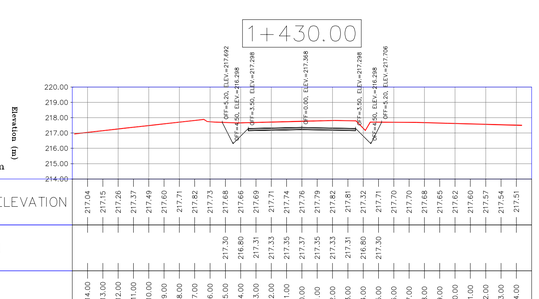

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.12 | 216.37 | 216.62 | 216.87 | 217.12 | 217.37 | 217.62 | 217.87 | 218.00 | 217.75 | 217.53 | 217.49 | 217.47 | 217.44 | 217.41 | 217.38 | 217.35 | 217.36 | 217.33 | 217.31 | 217.29 | 217.27 | 217.25 | 217.23 | 217.21 | 217.19 | 217.17 | | |
| PROJECT ELEVATION | | | | | | | | 216.77 | 216.27 | 216.78 | 216.80 | 216.82 | 216.84 | 216.82 | 216.80 | 216.78 | 216.27 | 216.77 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+420.00



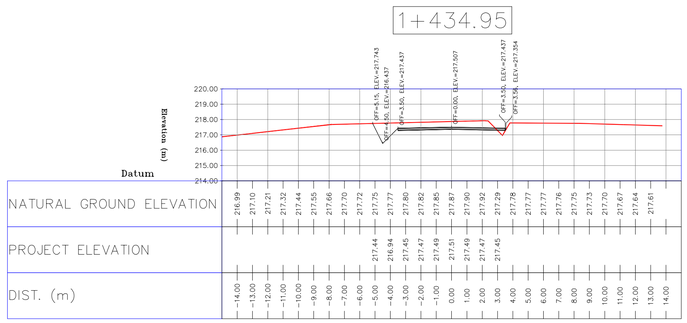

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.78 | 217.02 | 217.26 | 217.51 | 217.75 | 217.99 | 218.17 | 218.28 | 217.85 | 217.77 | 217.73 | 217.69 | 217.66 | 217.62 | 217.61 | 217.60 | 217.59 | 217.56 | 217.54 | 217.51 | 217.49 | 217.46 | 217.44 | 217.41 | 217.39 | 217.37 | 217.34 | | |
| PROJECT ELEVATION | | | | | | | | 217.01 | 216.51 | 217.02 | 217.04 | 217.06 | 217.08 | 217.06 | 217.04 | 217.02 | 216.51 | 217.01 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+430.00



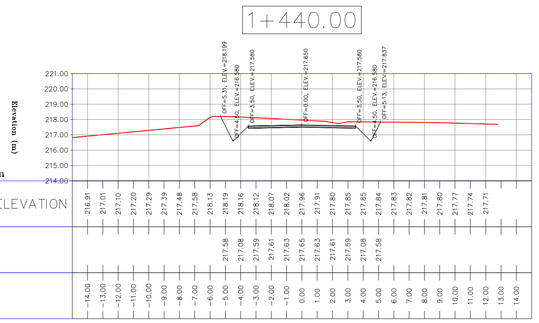

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.04 | 217.15 | 217.26 | 217.37 | 217.49 | 217.60 | 217.71 | 217.82 | 217.73 | 217.68 | 217.66 | 217.69 | 217.71 | 217.74 | 217.76 | 217.79 | 217.82 | 217.81 | 217.32 | 217.71 | 217.70 | 217.70 | 217.68 | 217.65 | 217.62 | 217.60 | 217.57 | 217.54 | 217.51 |
| PROJECT ELEVATION | | | | | | | | 217.30 | 216.80 | 217.31 | 217.33 | 217.35 | 217.37 | 217.35 | 217.33 | 217.31 | 216.80 | 217.30 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+434.95



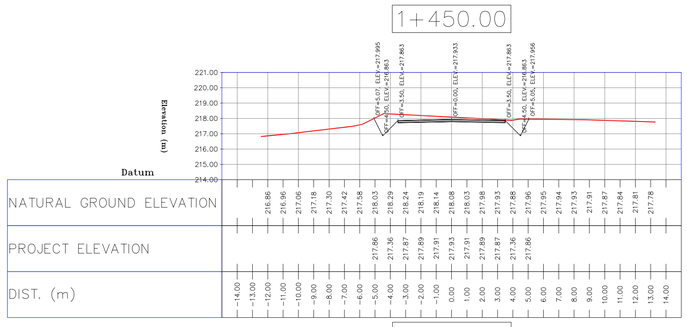

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.99 | 217.10 | 217.21 | 217.32 | 217.44 | 217.55 | 217.66 | 217.70 | 217.72 | 217.75 | 217.77 | 217.80 | 217.82 | 217.85 | 217.87 | 217.90 | 217.92 | 217.29 | 217.78 | 217.77 | 217.77 | 217.76 | 217.75 | 217.73 | 217.70 | 217.67 | 217.64 | 217.61 | |
| PROJECT ELEVATION | | | | | | | | | 217.44 | 216.94 | 217.45 | 217.47 | 217.49 | 217.51 | 217.49 | 217.47 | 217.45 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+440.00



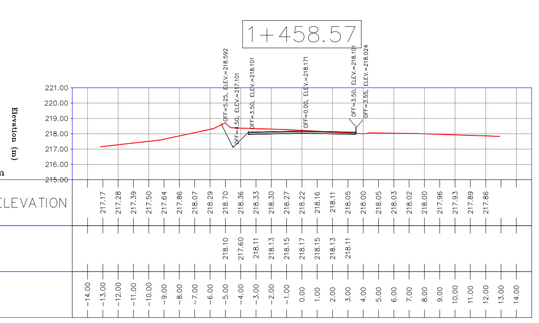

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.91 | 217.01 | 217.10 | 217.20 | 217.29 | 217.39 | 217.48 | 217.58 | 218.13 | 218.19 | 218.16 | 218.12 | 218.07 | 218.02 | 217.96 | 217.91 | 217.80 | 217.85 | 217.84 | 217.83 | 217.82 | 217.81 | 217.80 | 217.77 | 217.74 | 217.71 | | | |
| PROJECT ELEVATION | | | | | | | | 217.58 | 217.08 | 217.59 | 217.61 | 217.63 | 217.65 | 217.63 | 217.61 | 217.59 | 217.85 | 217.08 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+450.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.86 | 216.96 | 217.06 | 217.18 | 217.30 | 217.42 | 217.58 | 218.03 | 218.29 | 218.24 | 218.19 | 218.14 | 218.08 | 218.03 | 218.03 | 218.03 | 217.98 | 217.93 | 217.96 | 217.95 | 217.94 | 217.93 | 217.91 | 217.87 | 217.84 | 217.81 | 217.78 | | |
| PROJECT ELEVATION | | | | | | | | 217.86 | 217.36 | 217.87 | 217.89 | 217.91 | 217.93 | 217.91 | 217.89 | 217.87 | 217.36 | 217.86 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+458.57

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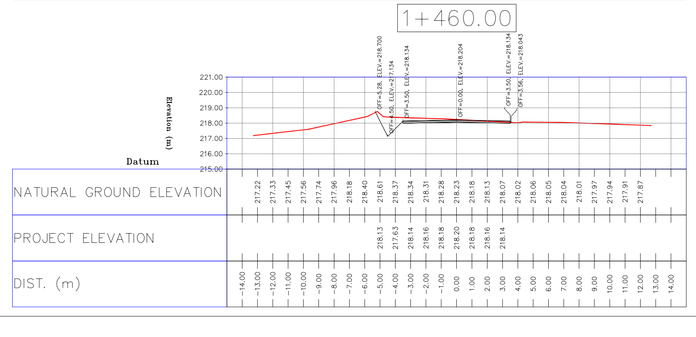
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.17 | 217.28 | 217.39 | 217.50 | 217.64 | 217.86 | 218.07 | 218.29 | 218.70 | 218.36 | 218.33 | 218.30 | 218.27 | 218.22 | 218.16 | 218.11 | 218.05 | 218.00 | 218.05 | 218.03 | 218.02 | 218.00 | 217.96 | 217.93 | 217.89 | 217.86 | | | |
| PROJECT ELEVATION | | | | | | | | 218.10 | 217.60 | 218.11 | 218.13 | 218.15 | 218.17 | 218.15 | 218.13 | 218.11 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+460.00

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.22 | 217.33 | 217.45 | 217.56 | 217.74 | 217.96 | 218.18 | 218.40 | 218.61 | 218.37 | 218.34 | 218.31 | 218.28 | 218.23 | 218.18 | 218.13 | 218.07 | 218.02 | 218.06 | 218.05 | 218.04 | 218.01 | 217.97 | 217.94 | 217.91 | 217.87 | | | |
| PROJECT ELEVATION | | | | | | | | 218.13 | 217.63 | 218.14 | 218.16 | 218.18 | 218.20 | 218.18 | 218.16 | 218.14 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

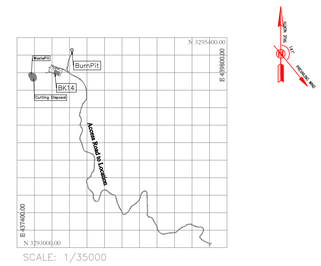
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◁ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | ** ** | *** **** | ** ** | *** **** |
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

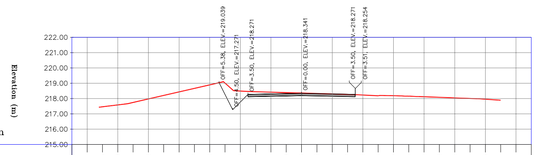
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 40 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 40 | D01 |

## 1+470.00

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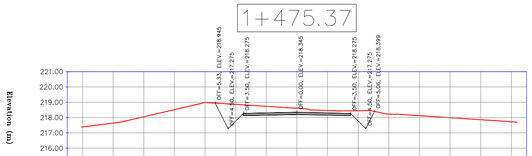
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.46 | 217.59 | 217.74 | 217.98 | 218.21 | 218.44 | 218.67 | 218.90 | 219.01 | 218.49 | 218.44 | 218.41 | 218.39 | 218.36 | 218.33 | 218.30 | 218.27 | 218.23 | 218.18 | 218.19 | 218.16 | 218.12 | 218.08 | 218.05 | 218.01 | 217.96 | | | | |
| PROJECT ELEVATION | | | | | | | | | 218.27 | 217.77 | 218.28 | 218.30 | 218.32 | 218.34 | 218.32 | 218.30 | 218.28 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+475.37

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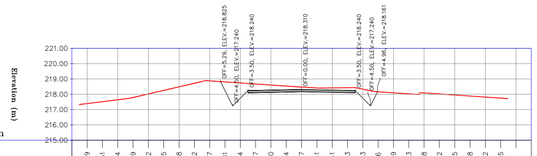
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.39 | 217.51 | 217.64 | 217.82 | 218.05 | 218.28 | 218.52 | 218.75 | 218.99 | 218.92 | 218.86 | 218.80 | 218.73 | 218.67 | 218.60 | 218.49 | 218.45 | 218.43 | 218.45 | 218.41 | 218.23 | 218.19 | 218.12 | 218.06 | 217.99 | 217.92 | 217.86 | 217.79 | 217.73 | |
| PROJECT ELEVATION | | | | | | | | | 218.28 | 217.78 | 218.29 | 218.31 | 218.33 | 218.35 | 218.33 | 218.31 | 218.29 | 217.78 | 218.28 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+480.00

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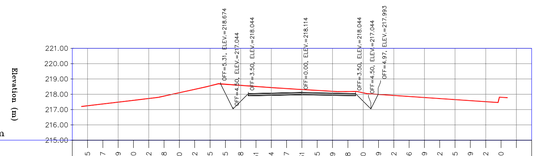
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.39 | 217.51 | 217.64 | 217.79 | 218.02 | 218.25 | 218.48 | 218.72 | 218.87 | 218.81 | 218.74 | 218.67 | 218.60 | 218.54 | 218.47 | 218.41 | 218.41 | 218.43 | 218.33 | 218.16 | 218.09 | 218.03 | 218.08 | 218.02 | 217.95 | 217.88 | 217.82 | 217.75 | | |
| PROJECT ELEVATION | | | | | | | | | 218.24 | 217.74 | 218.25 | 218.27 | 218.29 | 218.31 | 218.29 | 218.27 | 218.25 | 217.74 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+490.00

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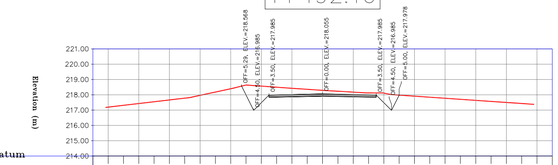
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.25 | 217.37 | 217.49 | 217.60 | 217.72 | 217.88 | 218.10 | 218.32 | 218.55 | 218.65 | 218.58 | 218.51 | 218.44 | 218.37 | 218.31 | 218.25 | 218.19 | 218.18 | 218.10 | 217.99 | 217.92 | 217.86 | 217.79 | 217.72 | 217.65 | 217.59 | 217.52 | 217.80 | | |
| PROJECT ELEVATION | | | | | | | | | 218.04 | 217.54 | 218.05 | 218.07 | 218.09 | 218.11 | 218.09 | 218.07 | 218.05 | 217.54 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+492.16

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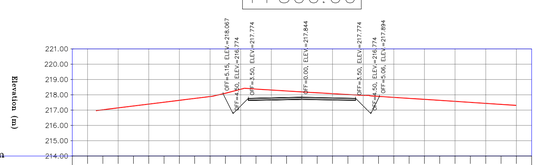
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.19 | 217.31 | 217.43 | 217.54 | 217.66 | 217.78 | 217.96 | 218.18 | 218.40 | 218.64 | 218.57 | 218.49 | 218.42 | 218.36 | 218.29 | 218.23 | 218.17 | 218.12 | 218.11 | 217.98 | 217.91 | 217.84 | 217.77 | 217.71 | 217.64 | 217.57 | 217.50 | 217.43 | | |
| PROJECT ELEVATION | | | | | | | | | 217.99 | 217.49 | 218.00 | 218.02 | 218.04 | 218.06 | 218.04 | 218.02 | 218.00 | 217.49 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+500.00

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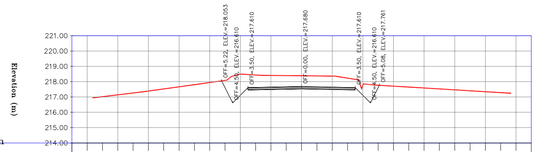
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.02 | 217.14 | 217.27 | 217.39 | 217.52 | 217.64 | 217.76 | 217.89 | 218.10 | 218.36 | 218.37 | 218.37 | 218.25 | 218.19 | 218.13 | 218.07 | 218.02 | 217.96 | 217.90 | 217.83 | 217.77 | 217.70 | 217.64 | 217.57 | 217.51 | 217.44 | 217.38 | | | |
| PROJECT ELEVATION | | | | | | | | | 217.77 | 217.27 | 217.78 | 217.80 | 217.82 | 217.84 | 217.82 | 217.80 | 217.78 | 217.27 | 217.77 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+506.04

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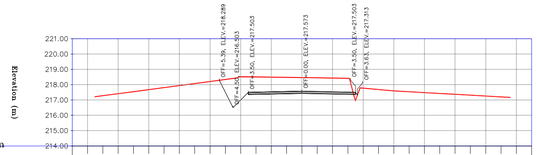
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.01 | 217.14 | 217.26 | 217.39 | 217.52 | 217.66 | 217.80 | 217.94 | 218.08 | 218.50 | 218.44 | 218.41 | 218.39 | 218.38 | 218.37 | 218.36 | 218.23 | 217.77 | 217.77 | 217.71 | 217.65 | 217.58 | 217.52 | 217.46 | 217.40 | 217.34 | 217.28 | | | |
| PROJECT ELEVATION | | | | | | | | | 217.61 | 217.11 | 217.62 | 217.64 | 217.66 | 217.68 | 217.66 | 217.64 | 217.62 | 217.11 | 217.61 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+510.00

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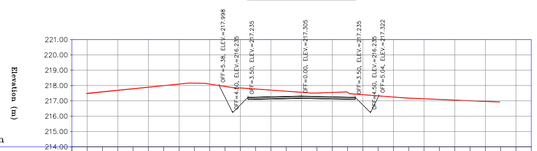
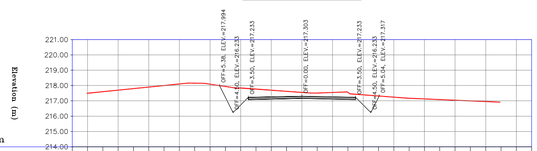
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.28 | 217.41 | 217.54 | 217.68 | 217.81 | 217.94 | 218.08 | 218.21 | 218.34 | 218.52 | 218.50 | 218.49 | 218.48 | 218.46 | 218.45 | 218.43 | 218.41 | 217.77 | 217.68 | 217.59 | 217.54 | 217.48 | 217.42 | 217.37 | 217.31 | 217.25 | 217.20 | | | |
| PROJECT ELEVATION | | | | | | | | | 217.50 | 217.00 | 217.51 | 217.53 | 217.55 | 217.57 | 217.55 | 217.53 | 217.51 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+519.91




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.48 | 217.59 | 217.69 | 217.89 | 217.99 | 218.10 | 218.15 | 218.09 | 217.94 | 217.84 | 217.77 | 217.70 | 217.63 | 217.56 | 217.51 | 217.55 | 217.40 | 217.33 | 217.25 | 217.18 | 217.13 | 217.09 | 217.05 | 217.01 | 216.96 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 217.24 | 216.74 | 217.25 | 217.27 | 217.29 | 217.31 | 217.29 | 217.27 | 217.25 | 216.74 | 217.24 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 1+520.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.49 | 217.59 | 217.70 | 217.80 | 217.90 | 218.00 | 218.11 | 218.16 | 218.09 | 217.94 | 217.84 | 217.77 | 217.70 | 217.62 | 217.55 | 217.51 | 217.55 | 217.40 | 217.32 | 217.25 | 217.17 | 217.13 | 217.09 | 217.04 | 217.00 | 216.96 | | | | |
| PROJECT ELEVATION | | | | | | | | | 217.23 | 216.73 | 217.24 | 217.26 | 217.28 | 217.30 | 217.28 | 217.26 | 217.24 | 216.73 | 217.23 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

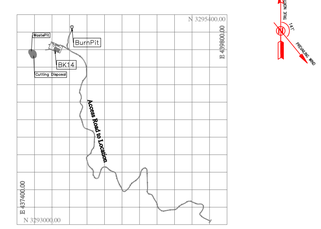
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | △ | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

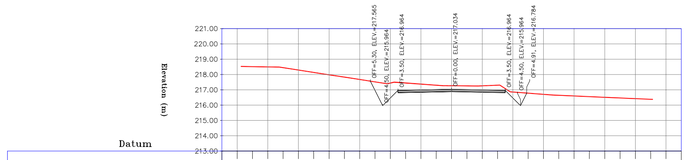
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 41 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 41 | D01 |

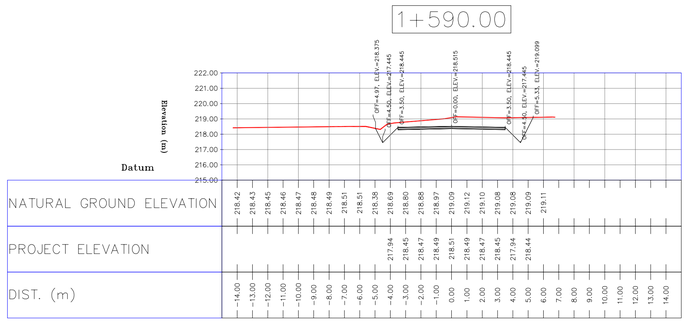
## 1+530.00




Datum

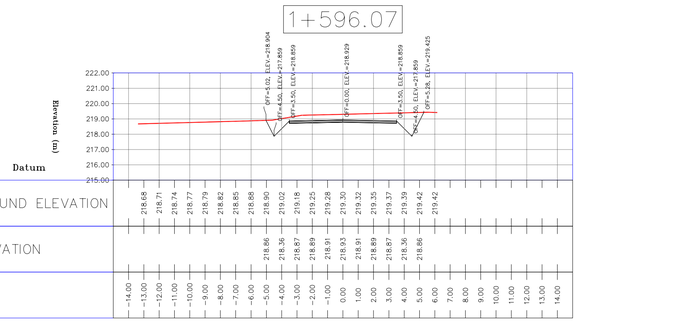
| | | |

## 1+590.00



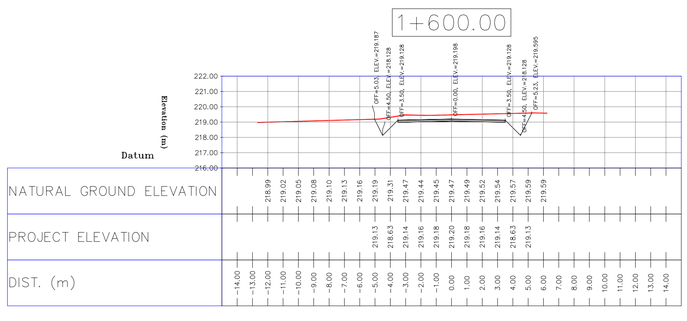

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 218.69 | 218.80 | 218.88 | 218.97 | 219.09 | 219.12 | 219.10 | 219.08 | 219.09 | 219.11 | | | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | 217.94 | 218.45 | 218.47 | 218.49 | 218.51 | 218.49 | 218.47 | 218.45 | 217.94 | 218.44 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 1+596.07



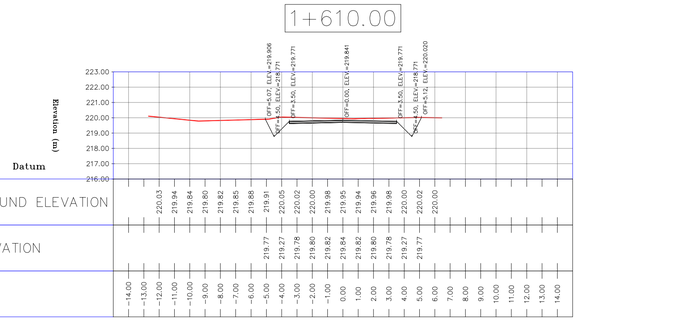

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 218.68 | 218.71 | 218.74 | 218.77 | 218.79 | 218.82 | 218.85 | 218.85 | 218.90 | 219.02 | 219.18 | 219.25 | 219.28 | 219.30 | 219.32 | 219.35 | 219.37 | 219.39 | 219.42 | 219.42 |
| PROJECT ELEVATION | | | | | | | | | | | 218.86 | 218.86 | 218.87 | 218.89 | 218.91 | 218.93 | 218.91 | 218.89 | 218.87 | 218.86 | 218.87 | 218.89 | 218.91 | 218.91 | 218.89 | 218.87 | 218.87 | 218.86 | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 1+600.00



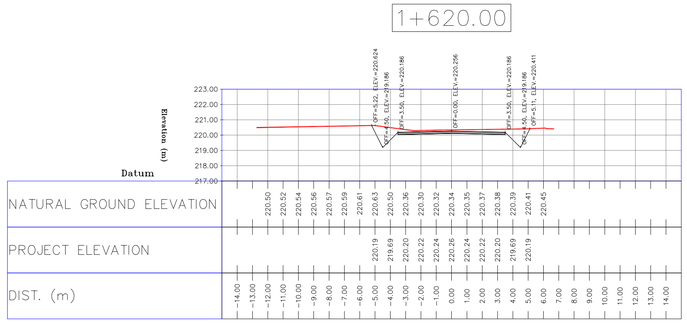

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 218.99 | 219.02 | 219.05 | 219.08 | 219.10 | 219.13 | 219.16 | 219.19 | 219.31 | 219.47 | 219.44 | 219.45 | 219.47 | 219.49 | 219.52 | 219.54 | 219.57 | 219.59 | 219.59 |
| PROJECT ELEVATION | | | | | | | | | | | 219.13 | 218.63 | 219.14 | 219.16 | 219.18 | 219.20 | 219.18 | 219.18 | 219.16 | 219.14 | 218.63 | 219.13 | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 1+610.00



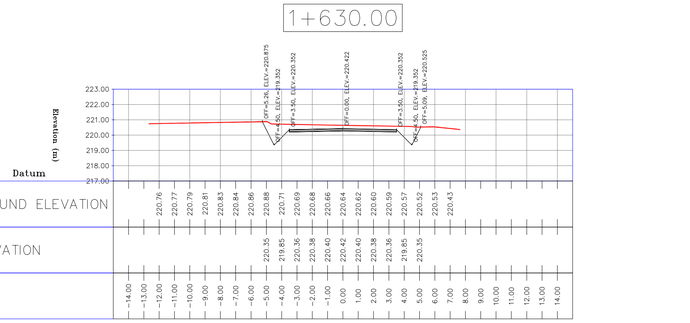

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 220.03 | 219.94 | 219.84 | 219.80 | 219.82 | 219.85 | 219.88 | 219.91 | 220.05 | 220.02 | 220.00 | 219.98 | 219.95 | 219.84 | 219.82 | 219.80 | 219.78 | 220.00 | 220.02 | 220.00 |
| PROJECT ELEVATION | | | | | | | | | | | 219.77 | 219.27 | 219.78 | 219.80 | 219.82 | 219.84 | 219.82 | 219.80 | 219.84 | 219.95 | 219.94 | 219.96 | 219.98 | 220.00 | 220.02 | 219.77 | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 1+620.00



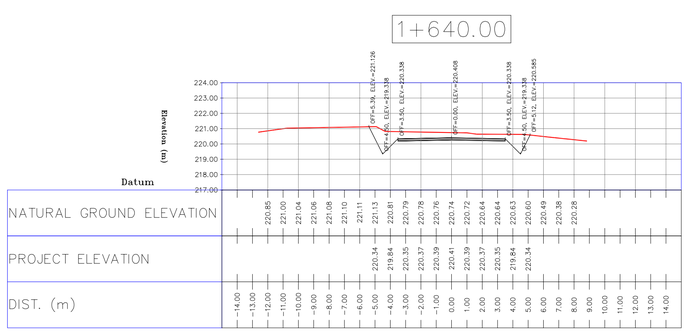

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 220.50 | 220.52 | 220.54 | 220.56 | 220.57 | 220.59 | 220.61 | 220.63 | 220.50 | 220.36 | 220.32 | 220.34 | 220.35 | 220.37 | 220.38 | 220.39 | 220.41 | 220.45 | |
| PROJECT ELEVATION | | | | | | | | | | | 219.69 | 220.19 | 220.20 | 220.22 | 220.24 | 220.26 | 220.24 | 220.22 | 220.20 | 219.69 | 220.19 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 1+630.00



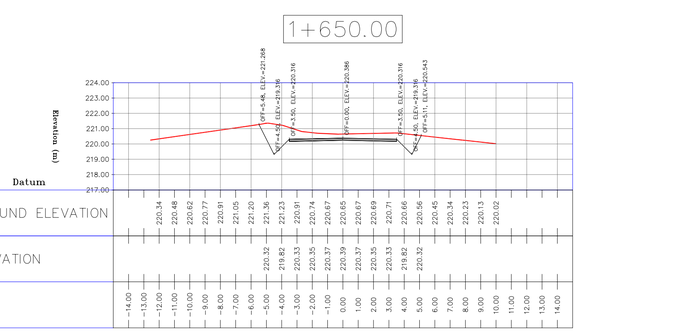

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 220.76 | 220.77 | 220.79 | 220.81 | 220.83 | 220.84 | 220.86 | 220.88 | 220.71 | 220.69 | 220.68 | 220.66 | 220.64 | 220.62 | 220.60 | 220.59 | 220.57 | 220.52 | 220.53 | 220.43 |
| PROJECT ELEVATION | | | | | | | | | | | 220.35 | 219.85 | 220.36 | 220.38 | 220.40 | 220.42 | 220.40 | 220.38 | 220.36 | 219.85 | 220.35 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 1+640.00



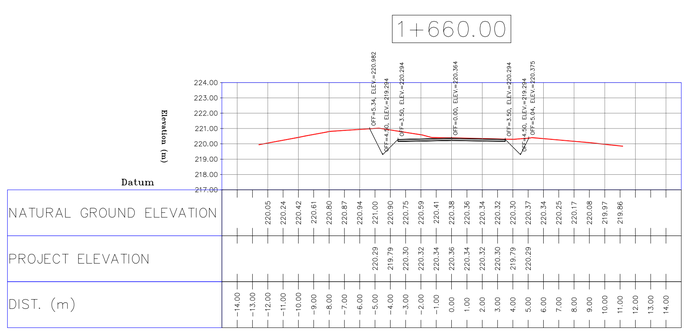

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 220.85 | 221.00 | 221.04 | 221.06 | 221.08 | 221.10 | 221.11 | 221.13 | 220.81 | 220.79 | 220.78 | 220.76 | 220.74 | 220.72 | 220.64 | 220.63 | 220.60 | 220.49 | 220.38 | 220.28 |
| PROJECT ELEVATION | | | | | | | | | | | 220.34 | 219.84 | 220.35 | 220.37 | 220.39 | 220.41 | 220.39 | 220.37 | 220.35 | 219.84 | 220.34 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 1+650.00



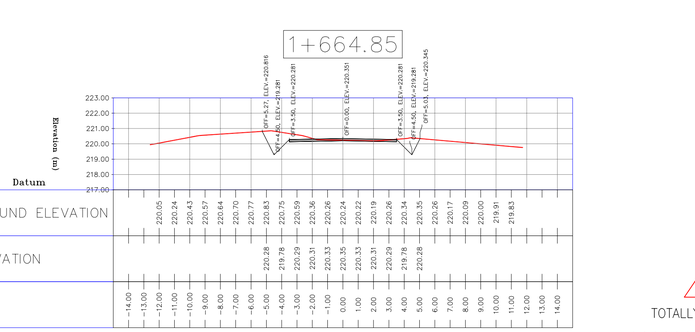

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 220.34 | 220.48 | 220.62 | 220.77 | 220.91 | 221.05 | 221.20 | 221.36 | 221.23 | 220.91 | 220.74 | 220.67 | 220.65 | 220.67 | 220.69 | 220.71 | 220.66 | 220.56 | 220.45 | 220.34 | 220.23 | 220.13 | 220.02 |
| PROJECT ELEVATION | | | | | | | | | | | 220.32 | 219.82 | 220.33 | 220.35 | 220.37 | 220.39 | 220.37 | 220.35 | 220.33 | 219.82 | 220.32 | | | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 1+660.00




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 220.05 | 220.24 | 220.42 | 220.61 | 220.80 | 220.87 | 220.94 | 221.00 | 220.90 | 220.75 | 220.59 | 220.41 | 220.38 | 220.36 | 220.34 | 220.32 | 220.37 | 220.25 | 220.17 | 220.08 | 219.97 | 219.86 | |
| PROJECT ELEVATION | | | | | | | | | | | 220.29 | 219.79 | 220.30 | 220.32 | 220.34 | 220.36 | 220.34 | 220.32 | 220.30 | 219.79 | 220.29 | | | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 1+664.85




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 220.05 | 220.24 | 220.43 | 220.57 | 220.64 | 220.70 | 220.77 | 220.83 | 220.75 | 220.59 | 220.36 | 220.31 | 220.33 | 220.35 | 220.24 | 220.22 | 220.31 | 220.29 | 220.26 | 220.34 | 220.35 | 220.26 | 220.17 | 220.09 | 220.00 | 219.91 | 219.83 |
| PROJECT ELEVATION | | | | | | | | | | | 220.28 | 219.78 | 220.29 | 220.31 | 220.33 | 220.35 | 220.33 | 220.31 | 220.29 | 219.78 | 220.28 | | | | | | | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

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| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | | BRIDGE |
| ⌒ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN

SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

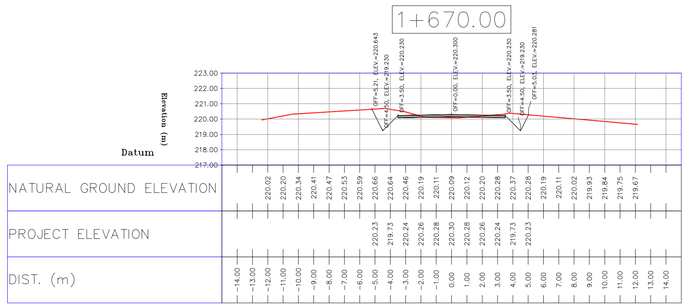
APPROVED FOR CONSTRUCTION BY: DATE:

D01 TOTALLY REVISED

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 43 OF 90 | D01 |

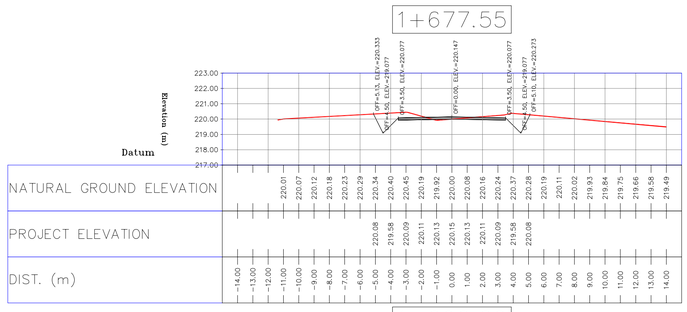
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 43 | D01 |

## 1+670.00



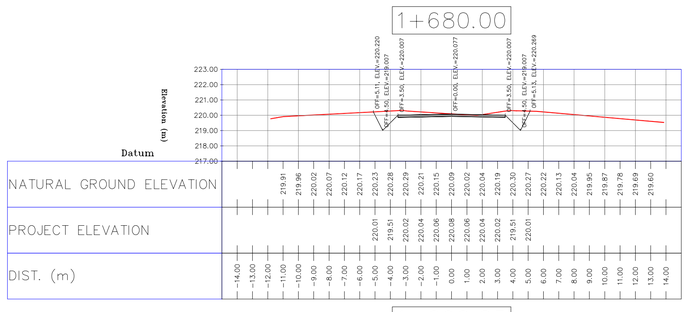

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 220.02 | 220.20 | 220.34 | 220.41 | 220.47 | 220.53 | 220.59 | 220.66 | 220.64 | 220.46 | 220.19 | 220.11 | 220.09 | 220.12 | 220.20 | 220.28 | 220.37 | 220.28 | 220.19 | 220.11 | 220.02 | 219.93 | 219.84 | 219.75 | 219.67 | | | |
| PROJECT ELEVATION | | | | | | | | 220.23 | 219.73 | 220.24 | 220.26 | 220.28 | 220.30 | 220.28 | 220.26 | 220.24 | 219.73 | 220.23 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+677.55



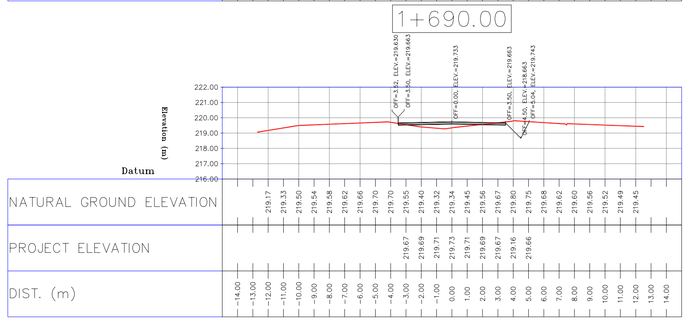

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 220.01 | 220.07 | 220.12 | 220.18 | 220.23 | 220.29 | 220.34 | 220.40 | 220.45 | 220.19 | 219.92 | 220.00 | 220.08 | 220.16 | 220.24 | 220.37 | 220.28 | 220.19 | 220.11 | 220.02 | 219.93 | 219.84 | 219.75 | 219.66 | 219.58 | 219.49 | | |
| PROJECT ELEVATION | | | | | | | | 220.08 | 219.58 | 220.09 | 220.11 | 220.15 | 220.13 | 220.13 | 220.11 | 220.09 | 219.58 | 220.08 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+680.00



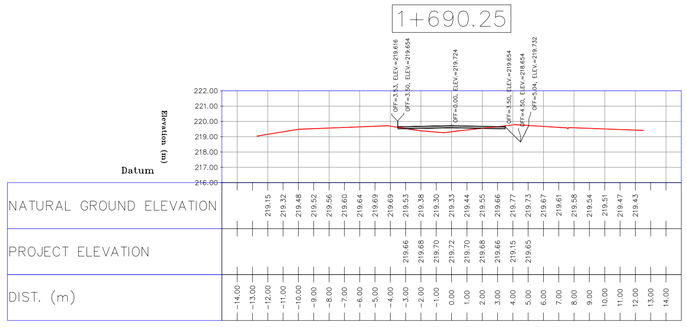

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 219.91 | 219.96 | 220.02 | 220.07 | 220.12 | 220.17 | 220.23 | 220.28 | 220.29 | 220.21 | 220.15 | 220.09 | 220.02 | 220.04 | 220.19 | 220.30 | 220.27 | 220.22 | 220.13 | 220.04 | 219.95 | 219.87 | 219.78 | 219.69 | 219.60 | | | |
| PROJECT ELEVATION | | | | | | | 220.01 | 219.51 | 220.02 | 220.04 | 220.06 | 220.06 | 220.04 | 220.02 | 220.04 | 219.51 | 220.01 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+690.00



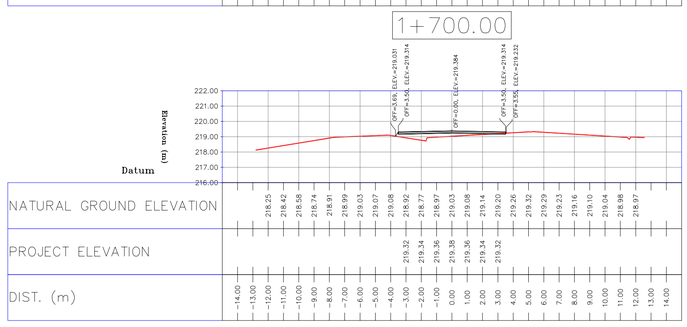

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 219.17 | 219.33 | 219.50 | 219.54 | 219.58 | 219.62 | 219.66 | 219.70 | 219.70 | 219.55 | 219.40 | 219.32 | 219.34 | 219.45 | 219.56 | 219.67 | 219.80 | 219.75 | 219.68 | 219.62 | 219.60 | 219.56 | 219.52 | 219.49 | 219.45 | | | |
| PROJECT ELEVATION | | | | | | | | 219.67 | 219.69 | 219.71 | 219.73 | 219.71 | 219.71 | 219.69 | 219.67 | 219.16 | 219.66 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+690.25



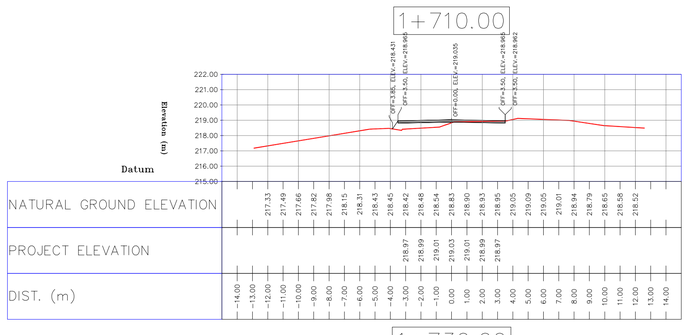

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 219.15 | 219.32 | 219.48 | 219.52 | 219.56 | 219.60 | 219.64 | 219.69 | 219.53 | 219.38 | 219.30 | 219.33 | 219.44 | 219.55 | 219.66 | 219.77 | 219.73 | 219.67 | 219.61 | 219.58 | 219.54 | 219.51 | 219.47 | 219.43 | | | | |
| PROJECT ELEVATION | | | | | | | | 219.66 | 219.68 | 219.70 | 219.72 | 219.70 | 219.68 | 219.66 | 219.15 | 219.65 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+700.00



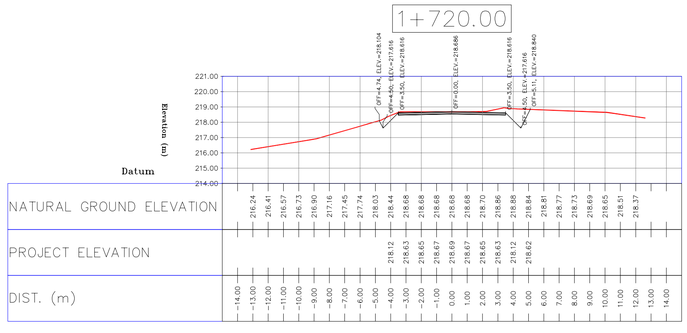

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 218.25 | 218.42 | 218.58 | 218.74 | 218.91 | 218.99 | 219.03 | 219.07 | 219.08 | 218.92 | 218.77 | 218.97 | 219.03 | 219.08 | 219.14 | 219.20 | 219.26 | 219.32 | 219.29 | 219.23 | 219.16 | 219.10 | 219.04 | 218.98 | 218.97 | | | |
| PROJECT ELEVATION | | | | | | | | 219.32 | 219.34 | 219.36 | 219.38 | 219.36 | 219.36 | 219.34 | 219.32 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+710.00



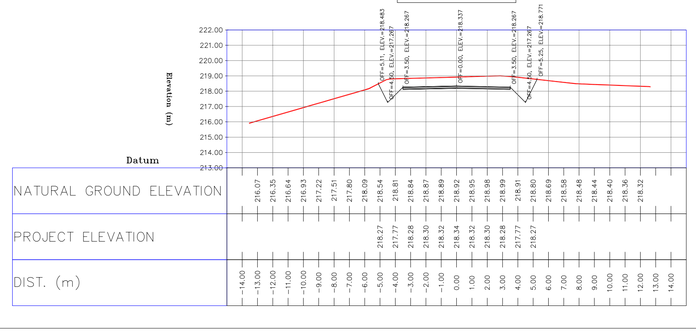

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.33 | 217.49 | 217.66 | 217.82 | 217.98 | 218.15 | 218.31 | 218.43 | 218.45 | 218.42 | 218.48 | 218.54 | 218.83 | 218.90 | 218.93 | 218.95 | 219.05 | 219.09 | 219.05 | 219.01 | 218.94 | 218.79 | 218.65 | 218.58 | 218.52 | | | |
| PROJECT ELEVATION | | | | | | | | 218.77 | 218.99 | 219.01 | 219.03 | 219.01 | 219.01 | 218.99 | 218.97 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+720.00



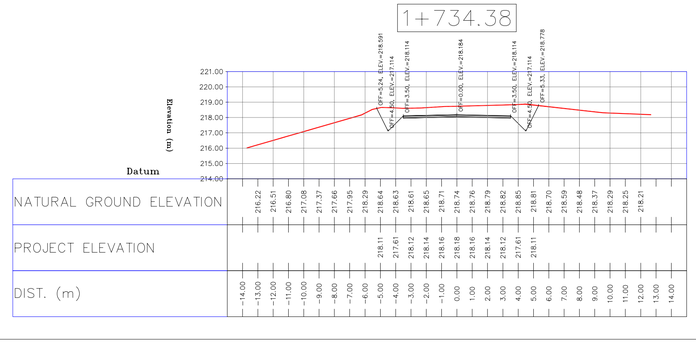

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.24 | 216.41 | 216.57 | 216.73 | 216.90 | 217.16 | 217.45 | 217.74 | 218.03 | 218.44 | 218.68 | 218.68 | 218.68 | 218.68 | 218.68 | 218.70 | 218.86 | 218.88 | 218.84 | 218.81 | 218.77 | 218.73 | 218.69 | 218.65 | 218.51 | 218.37 | | |
| PROJECT ELEVATION | | | | | | | | 218.12 | 218.63 | 218.65 | 218.67 | 218.69 | 218.67 | 218.65 | 218.63 | 218.12 | 218.62 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+730.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.07 | 216.35 | 216.64 | 216.93 | 217.22 | 217.51 | 217.80 | 218.09 | 218.54 | 218.84 | 218.67 | 218.89 | 218.92 | 218.95 | 218.98 | 218.99 | 218.91 | 218.80 | 218.69 | 218.58 | 218.48 | 218.44 | 218.40 | 218.36 | 218.32 | | | |
| PROJECT ELEVATION | | | | | | | | 218.27 | 217.77 | 218.28 | 218.30 | 218.32 | 218.32 | 218.32 | 218.30 | 218.28 | 217.77 | 218.27 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+734.38




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.22 | 216.51 | 216.80 | 217.08 | 217.37 | 217.66 | 217.95 | 218.29 | 218.64 | 218.63 | 218.65 | 218.65 | 218.71 | 218.74 | 218.76 | 218.79 | 218.82 | 218.85 | 218.81 | 218.70 | 218.59 | 218.48 | 218.37 | 218.29 | 218.25 | 218.21 | | |
| PROJECT ELEVATION | | | | | | | | 218.11 | 217.61 | 218.12 | 218.14 | 218.16 | 218.16 | 218.16 | 218.14 | 218.12 | 217.61 | 218.11 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

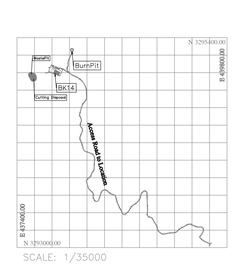
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ═══ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ═══ | GRAVEL ROAD | △ | BENCH MARK |
| - - - | PROPOSED ROAD | | BRIDGE |
| ⌒ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | CHECKED | REV. APPR. |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY — PEDCO

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 44 OF 90 | D01 |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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

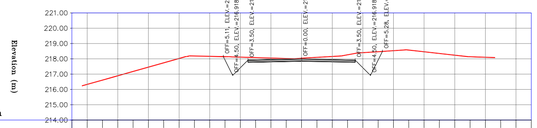
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

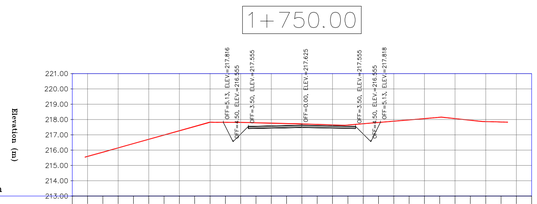
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 44 | D01 |

## 1+740.00



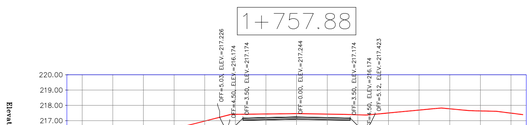

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.33 | 216.61 | 216.89 | 217.18 | 217.46 | 217.74 | 218.02 | 218.18 | 218.16 | 218.14 | 218.11 | 218.08 | 218.05 | 218.02 | 218.04 | 218.09 | 218.15 | 218.26 | 218.40 | 218.47 | 218.53 | 218.57 | 218.46 | 218.35 | 218.24 | 218.14 | 218.10 | | |
| PROJECT ELEVATION | | | | | | | | | | 217.92 | 217.42 | 217.93 | 217.95 | 217.97 | 217.99 | 217.97 | 217.95 | 217.93 | 217.42 | 217.92 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+750.00



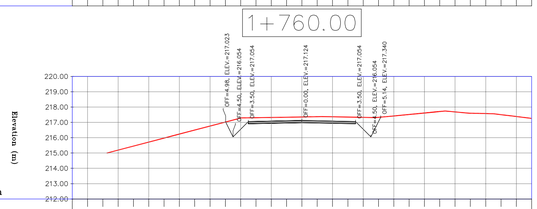

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.59 | 215.87 | 216.15 | 216.43 | 216.71 | 216.99 | 217.27 | 217.55 | 217.82 | 217.82 | 217.81 | 217.79 | 217.76 | 217.74 | 217.71 | 217.68 | 217.65 | 217.64 | 217.72 | 217.81 | 217.89 | 217.97 | 218.06 | 218.14 | 218.06 | 217.95 | 217.86 | 217.84 | |
| PROJECT ELEVATION | | | | | | | | | | 217.55 | 217.05 | 217.56 | 217.58 | 217.60 | 217.62 | 217.60 | 217.58 | 217.56 | 217.05 | 217.55 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+757.88



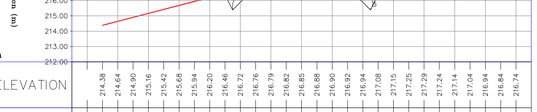

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.18 | 215.43 | 215.69 | 215.95 | 216.21 | 216.46 | 216.72 | 216.98 | 217.23 | 217.42 | 217.43 | 217.43 | 217.44 | 217.45 | 217.47 | 217.45 | 217.43 | 217.41 | 217.39 | 217.41 | 217.50 | 217.60 | 217.69 | 217.79 | 217.78 | 217.68 | 217.64 | 217.62 | 217.49 |
| PROJECT ELEVATION | | | | | | | | | | 217.17 | 216.67 | 217.18 | 217.20 | 217.22 | 217.24 | 217.22 | 217.20 | 217.18 | 216.67 | 217.17 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+760.00



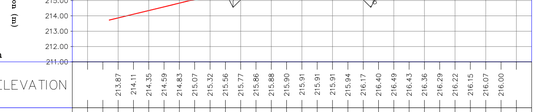

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.19 | 215.45 | 215.71 | 215.97 | 216.23 | 216.50 | 216.76 | 217.02 | 217.28 | 217.31 | 217.32 | 217.34 | 217.36 | 217.37 | 217.36 | 217.35 | 217.33 | 217.33 | 217.42 | 217.52 | 217.61 | 217.71 | 217.68 | 217.59 | 217.58 | 217.50 | 217.38 | | |
| PROJECT ELEVATION | | | | | | | | | | 216.55 | 217.06 | 217.08 | 217.10 | 217.12 | 217.10 | 217.08 | 217.06 | 216.55 | 217.05 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+770.00



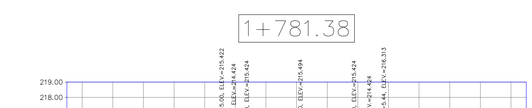

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 214.38 | 214.64 | 214.90 | 215.16 | 215.42 | 215.68 | 215.94 | 216.20 | 216.46 | 216.72 | 216.76 | 216.79 | 216.82 | 216.85 | 216.88 | 216.90 | 216.92 | 216.94 | 217.08 | 217.15 | 217.25 | 217.39 | 217.24 | 217.14 | 217.04 | 216.94 | 216.84 | 216.74 | |
| PROJECT ELEVATION | | | | | | | | | | 216.39 | 215.89 | 216.40 | 216.42 | 216.44 | 216.46 | 216.44 | 216.42 | 216.40 | 215.89 | 216.39 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+780.00



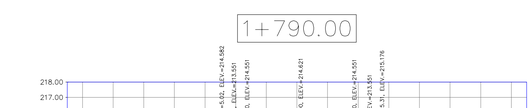

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 213.87 | 214.11 | 214.35 | 214.59 | 214.83 | 215.07 | 215.32 | 215.56 | 215.77 | 215.86 | 215.88 | 215.90 | 215.91 | 215.91 | 215.91 | 215.94 | 216.17 | 216.40 | 216.49 | 216.43 | 216.36 | 216.29 | 216.22 | 216.15 | 216.07 | 216.00 | | | |
| PROJECT ELEVATION | | | | | | | | | | 215.55 | 215.05 | 215.56 | 215.58 | 215.60 | 215.62 | 215.60 | 215.58 | 215.56 | 215.05 | 215.55 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+781.38




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 213.71 | 213.96 | 214.20 | 214.44 | 214.69 | 214.93 | 215.18 | 215.42 | 215.61 | 215.70 | 215.73 | 215.74 | 215.75 | 215.76 | 215.77 | 215.89 | 216.13 | 216.28 | 216.35 | 216.28 | 216.21 | 216.15 | 216.08 | 216.01 | 215.95 | 215.88 | | | |
| PROJECT ELEVATION | | | | | | | | | | 214.92 | 215.43 | 215.45 | 215.47 | 215.47 | 215.45 | 215.43 | 215.42 | 215.42 | | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+790.00




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 213.07 | 213.29 | 213.50 | 213.72 | 213.94 | 214.15 | 214.37 | 214.59 | 214.72 | 214.85 | 214.84 | 214.82 | 214.85 | 214.88 | 215.06 | 215.11 | 215.16 | 215.21 | 215.11 | 215.01 | 214.91 | 214.82 | 214.72 | 214.62 | 214.60 | 214.47 | | | |
| PROJECT ELEVATION | | | | | | | | | | 214.55 | 214.05 | 214.56 | 214.58 | 214.60 | 214.62 | 214.60 | 214.58 | 214.56 | 214.05 | 214.55 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

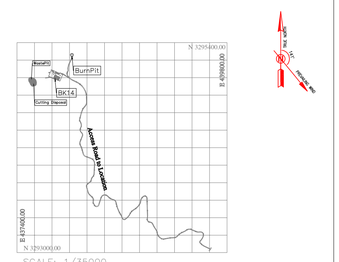
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | △ | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DATE | DESCRIPTION | BY | CHECKED |
|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN |
| REV. | DATE | P.O.I.S | PREP. | CHK. |

| DATE | BY | CHECKED | REV. APPR. |
|---|---|---|---|
| ***.**** | **.** | ***.**** | |
| D01 | M.MEHRSHAD | **.** | |
| D00 | M.MEHRSHAD | **.** | |
| APP. | AUT. | | |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

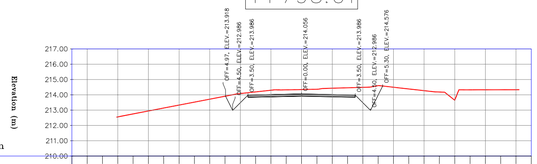
APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 45 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 45 | D01 |

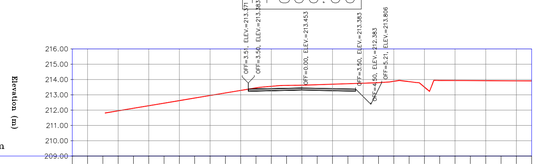
D01 TOTALLY REVISED

## 1+795.01



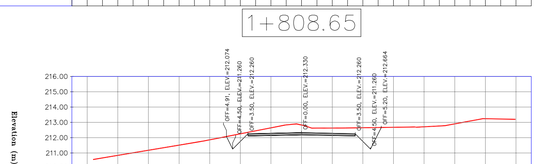

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | 212.56 | 212.75 | 212.95 | 213.14 | 213.33 | 213.53 | 213.72 | 213.91 | 214.08 | 214.19 | 214.30 | 214.32 | 214.34 | 214.36 | 214.43 | 214.46 | 214.49 | 214.60 | 214.50 | 214.38 | 214.27 | 214.18 | 213.65 | 214.33 | 214.33 | 214.33 | 214.34 |
| PROJECT ELEVATION | | | | | | | | | | | 213.49 | 214.00 | 214.02 | 214.04 | 214.05 | 214.04 | 214.02 | 214.00 | 213.49 | 213.99 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+800.00



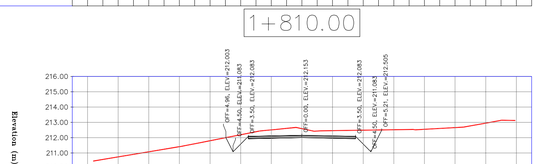

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | 211.96 | 212.12 | 212.29 | 212.46 | 212.62 | 212.79 | 212.96 | 213.12 | 213.29 | 213.46 | 213.55 | 213.61 | 213.61 | 213.63 | 213.66 | 213.69 | 213.73 | 213.76 | 213.79 | 213.88 | 213.86 | 213.50 | 213.94 | 213.93 | 213.93 | 213.92 | 213.91 |
| PROJECT ELEVATION | | | | | | | | | | | 213.39 | 213.41 | 213.43 | 213.45 | 213.43 | 213.43 | 213.41 | 213.39 | 212.88 | 213.38 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+808.65



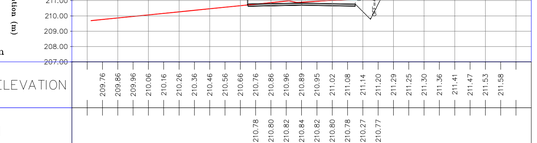

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | 210.68 | 210.85 | 211.02 | 211.18 | 211.35 | 211.52 | 211.68 | 211.86 | 212.06 | 212.25 | 212.45 | 212.64 | 212.83 | 212.83 | 212.63 | 212.63 | 212.63 | 212.65 | 212.66 | 212.68 | 212.69 | 212.71 | 212.77 | 212.90 | 213.09 | 213.24 | 213.22 |
| PROJECT ELEVATION | | | | | | | | | | | 211.76 | 212.27 | 212.29 | 212.31 | 212.31 | 212.31 | 212.29 | 212.27 | 211.76 | 212.26 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+810.00



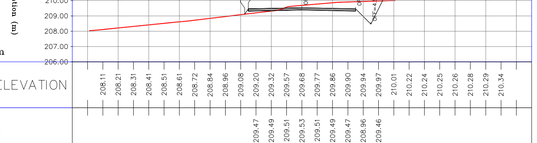

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | 210.58 | 210.74 | 210.91 | 211.08 | 211.25 | 211.41 | 211.60 | 211.80 | 212.00 | 212.19 | 212.39 | 212.51 | 212.61 | 212.59 | 212.43 | 212.46 | 212.47 | 212.49 | 212.50 | 212.52 | 212.54 | 212.60 | 212.66 | 212.77 | 212.95 | 213.13 | |
| PROJECT ELEVATION | | | | | | | | | | | 211.58 | 212.09 | 212.11 | 212.13 | 212.15 | 212.13 | 212.11 | 212.09 | 211.58 | 212.08 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+820.00



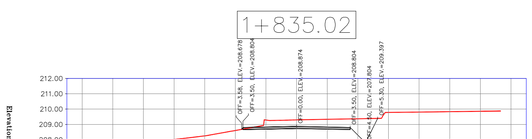

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | 209.76 | 209.86 | 209.96 | 210.06 | 210.16 | 210.26 | 210.36 | 210.46 | 210.56 | 210.66 | 210.76 | 210.86 | 210.96 | 210.89 | 210.95 | 211.02 | 211.08 | 211.14 | 211.20 | 211.29 | 211.25 | 211.30 | 211.36 | 211.41 | 211.47 | 211.53 | 211.58 |
| PROJECT ELEVATION | | | | | | | | | | | 210.78 | 210.80 | 210.82 | 210.84 | 210.82 | 210.80 | 210.78 | 210.77 | | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+830.00



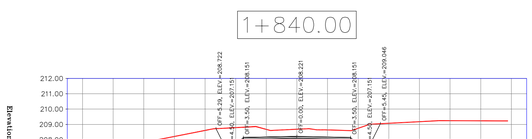

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | 208.11 | 208.21 | 208.31 | 208.41 | 208.51 | 208.61 | 208.72 | 208.84 | 208.96 | 209.08 | 209.20 | 209.32 | 209.57 | 209.68 | 209.77 | 209.86 | 209.90 | 209.94 | 209.97 | 210.01 | 210.22 | 210.24 | 210.25 | 210.26 | 210.28 | 210.29 | 210.34 |
| PROJECT ELEVATION | | | | | | | | | | | 209.47 | 209.49 | 209.51 | 209.53 | 209.51 | 209.49 | 209.47 | 208.96 | 209.46 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+835.02




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | 207.42 | 207.54 | 207.66 | 207.78 | 207.90 | 208.02 | 208.14 | 208.25 | 208.42 | 208.60 | 208.78 | 209.29 | 209.27 | 209.29 | 209.31 | 209.33 | 209.35 | 209.37 | 209.39 | 209.78 | 209.80 | 209.81 | 209.82 | 209.83 | 209.85 | 209.86 | 209.87 |
| PROJECT ELEVATION | | | | | | | | | | | | | 208.81 | 208.83 | 208.85 | 208.87 | 208.85 | 208.83 | 208.81 | 208.80 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+840.00




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | 207.23 | 207.43 | 207.62 | 207.82 | 208.02 | 208.21 | 208.41 | 208.61 | 208.74 | 208.79 | 208.84 | 208.68 | 208.64 | 208.64 | 208.69 | 208.64 | 208.61 | 208.75 | 209.02 | 209.07 | 209.13 | 209.18 | 209.23 | 209.24 | 209.24 | 209.24 | 209.23 |
| PROJECT ELEVATION | | | | | | | | | | | 208.15 | 207.65 | 208.16 | 208.18 | 208.20 | 208.20 | 208.18 | 208.16 | 207.65 | 208.15 | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

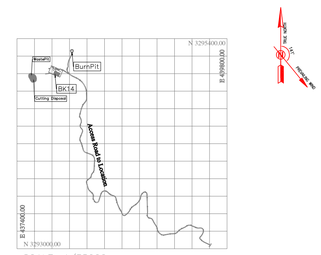
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◁ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | REV. | DESCRIPTION | BY | DATE | BY | DATE |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | | | CHECKED | | REV. APPR. | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | | | | | | |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

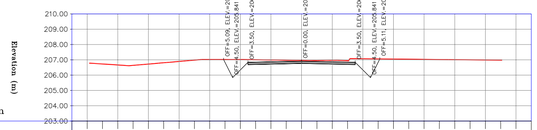
APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 46 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 46 | D01 |

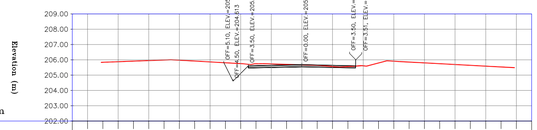
D01 TOTALLY REVISED

## 1+850.00



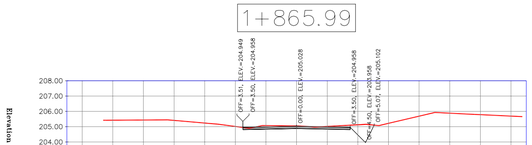

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 206.73 | |
| -13.00 | 206.67 | |
| -12.00 | 206.64 | |
| -11.00 | 206.73 | |
| -10.00 | 206.81 | |
| -9.00 | 206.90 | |
| -8.00 | 206.98 | |
| -7.00 | 207.02 | |
| -6.00 | 207.02 | |
| -5.00 | 207.02 | 206.84 |
| -4.00 | 207.02 | 206.34 |
| -3.00 | 207.01 | 206.85 |
| -2.00 | 206.99 | 206.87 |
| -1.00 | 206.98 | 206.89 |
| 0.00 | 206.98 | 206.91 |
| 1.00 | 206.96 | 206.89 |
| 2.00 | 206.95 | 206.87 |
| 3.00 | 206.97 | 206.85 |
| 4.00 | 206.94 | 206.34 |
| 5.00 | 207.07 | 206.84 |
| 6.00 | 207.06 | |
| 7.00 | 207.05 | |
| 8.00 | 207.04 | |
| 9.00 | 207.03 | |
| 10.00 | 207.02 | |
| 11.00 | 207.01 | |
| 12.00 | 207.00 | |
| 13.00 | 206.99 | |
| 14.00 | 206.98 | |

## 1+860.00




| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 205.84 | |
| -13.00 | 205.88 | |
| -12.00 | 205.91 | |
| -11.00 | 205.95 | |
| -10.00 | 205.99 | |
| -9.00 | 205.97 | |
| -8.00 | 205.92 | |
| -7.00 | 205.86 | |
| -6.00 | 205.81 | |
| -5.00 | 205.75 | 205.61 |
| -4.00 | 205.75 | 205.11 |
| -3.00 | 205.75 | 205.62 |
| -2.00 | 205.74 | 205.64 |
| -1.00 | 205.71 | 205.66 |
| 0.00 | 205.68 | 205.68 |
| 1.00 | 205.65 | 205.66 |
| 2.00 | 205.64 | 205.64 |
| 3.00 | 205.56 | 205.64 |
| 4.00 | 205.61 | 205.62 |
| 5.00 | 205.79 | |
| 6.00 | 205.91 | |
| 7.00 | 205.86 | |
| 8.00 | 205.80 | |
| 9.00 | 205.75 | |
| 10.00 | 205.70 | |
| 11.00 | 205.64 | |
| 12.00 | 205.59 | |
| 13.00 | 205.54 | |
| 14.00 | | |

## 1+865.99

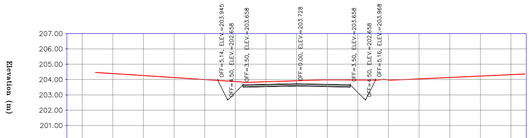



| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 205.43 | |
| -13.00 | 205.43 | |
| -12.00 | 205.44 | |
| -11.00 | 205.44 | |
| -10.00 | 205.41 | |
| -9.00 | 205.32 | |
| -8.00 | 205.24 | |
| -7.00 | 205.14 | |
| -6.00 | 205.01 | |
| -5.00 | 204.91 | 204.97 |
| -4.00 | 205.07 | 204.99 |
| -3.00 | 205.06 | 205.01 |
| -2.00 | 205.05 | 205.03 |
| -1.00 | 204.99 | 205.01 |
| 0.00 | 204.99 | 204.99 |
| 1.00 | 205.02 | 204.99 |
| 2.00 | 205.07 | 204.97 |
| 3.00 | 205.13 | 204.46 |
| 4.00 | 205.11 | 204.96 |
| 5.00 | 205.22 | |
| 6.00 | 205.45 | |
| 7.00 | 205.69 | |
| 8.00 | 205.92 | |
| 9.00 | 205.88 | |
| 10.00 | 205.83 | |
| 11.00 | 205.79 | |
| 12.00 | 205.74 | |
| 13.00 | 205.69 | |
| 14.00 | | |

## 1+870.00

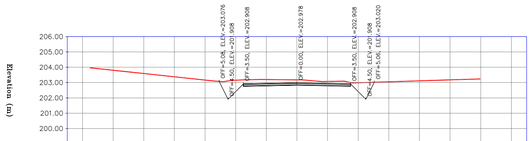
| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 205.12 | |
| -13.00 | 205.10 | |
| -12.00 | 205.09 | |
| -11.00 | 205.07 | |
| -10.00 | 205.06 | |
| -9.00 | 204.97 | |
| -8.00 | 204.87 | |
| -7.00 | 204.75 | |
| -6.00 | 204.60 | |
| -5.00 | 204.49 | 204.56 |
| -4.00 | 204.53 | 204.58 |
| -3.00 | 204.58 | 204.60 |
| -2.00 | 204.60 | 204.62 |
| -1.00 | 204.62 | 204.60 |
| 0.00 | 204.63 | 204.62 |
| 1.00 | 204.68 | 204.60 |
| 2.00 | 204.71 | 204.58 |
| 3.00 | 204.74 | 204.56 |
| 4.00 | 204.78 | 204.05 |
| 5.00 | 204.81 | 204.55 |
| 6.00 | 204.78 | |
| 7.00 | 204.70 | |
| 8.00 | 204.86 | |
| 9.00 | 205.07 | |
| 10.00 | 205.28 | |
| 11.00 | 205.49 | |
| 12.00 | 205.70 | |
| 13.00 | 205.91 | |
| 14.00 | 205.88 | |

## 1+880.00




| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 204.46 | |
| -13.00 | 204.39 | |
| -12.00 | 204.33 | |
| -11.00 | 204.26 | |
| -10.00 | 204.20 | |
| -9.00 | 204.13 | |
| -8.00 | 204.07 | |
| -7.00 | 204.00 | |
| -6.00 | 203.94 | |
| -5.00 | 203.87 | 203.66 |
| -4.00 | 203.82 | 203.16 |
| -3.00 | 203.86 | 203.67 |
| -2.00 | 203.89 | 203.69 |
| -1.00 | 203.89 | 203.71 |
| 0.00 | 203.92 | 203.73 |
| 1.00 | 203.96 | 203.71 |
| 2.00 | 203.98 | 203.69 |
| 3.00 | 203.98 | 203.67 |
| 4.00 | 203.97 | 203.16 |
| 5.00 | 203.97 | 203.66 |
| 6.00 | 204.00 | |
| 7.00 | 204.04 | |
| 8.00 | 204.09 | |
| 9.00 | 204.14 | |
| 10.00 | 204.18 | |
| 11.00 | 204.23 | |
| 12.00 | 204.27 | |
| 13.00 | 204.32 | |
| 14.00 | | |

## 1+890.00

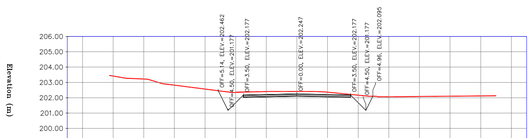



| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 203.91 | |
| -13.00 | 203.80 | |
| -12.00 | 203.69 | |
| -11.00 | 203.48 | |
| -10.00 | 203.37 | |
| -9.00 | 203.27 | |
| -8.00 | 203.16 | |
| -7.00 | 203.07 | |
| -6.00 | 203.15 | 202.91 |
| -5.00 | 203.19 | 202.41 |
| -4.00 | 203.20 | 202.92 |
| -3.00 | 203.19 | 202.94 |
| -2.00 | 203.18 | 202.96 |
| -1.00 | 203.12 | 202.98 |
| 0.00 | 203.08 | 202.96 |
| 1.00 | 203.09 | 202.94 |
| 2.00 | 203.09 | 202.92 |
| 3.00 | 203.02 | 202.99 |
| 4.00 | 203.05 | 202.41 |
| 5.00 | 203.08 | 202.91 |
| 6.00 | 203.11 | |
| 7.00 | 203.14 | |
| 8.00 | 203.18 | |
| 9.00 | 203.21 | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 1+896.96

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 203.75 | |
| -13.00 | 203.51 | |
| -12.00 | 203.39 | |
| -11.00 | 203.26 | |
| -10.00 | 203.13 | |
| -9.00 | 203.01 | |
| -8.00 | 202.88 | |
| -7.00 | 202.75 | |
| -6.00 | 202.63 | 202.40 |
| -5.00 | 202.64 | 201.90 |
| -4.00 | 202.66 | 202.41 |
| -3.00 | 202.67 | 202.43 |
| -2.00 | 202.67 | 202.45 |
| -1.00 | 202.66 | 202.47 |
| 0.00 | 202.66 | 202.45 |
| 1.00 | 202.63 | 202.43 |
| 2.00 | 202.53 | 202.43 |
| 3.00 | 202.44 | 202.41 |
| 4.00 | 202.38 | |
| 5.00 | 202.32 | |
| 6.00 | 202.33 | |
| 7.00 | 202.34 | |
| 8.00 | 202.35 | |
| 9.00 | 202.36 | |
| 10.00 | 202.37 | |
| 11.00 | 202.37 | |
| 12.00 | 202.37 | |
| 13.00 | 202.38 | |
| 14.00 | | |

## 1+900.00




| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 203.41 | |
| -13.00 | 203.26 | |
| -12.00 | 203.22 | |
| -11.00 | 202.89 | |
| -10.00 | 202.82 | |
| -9.00 | 202.70 | |
| -8.00 | 202.57 | |
| -7.00 | 202.44 | |
| -6.00 | 202.35 | |
| -5.00 | 202.38 | 202.18 |
| -4.00 | 202.40 | 201.68 |
| -3.00 | 202.19 | 202.19 |
| -2.00 | 202.21 | 202.21 |
| -1.00 | 202.23 | 202.23 |
| 0.00 | 202.25 | 202.23 |
| 1.00 | 202.23 | 202.21 |
| 2.00 | 202.21 | 202.19 |
| 3.00 | 202.27 | 201.68 |
| 4.00 | 202.17 | |
| 5.00 | 202.09 | |
| 6.00 | 202.07 | |
| 7.00 | 202.07 | |
| 8.00 | 202.08 | |
| 9.00 | 202.09 | |
| 10.00 | 202.10 | |
| 11.00 | 202.11 | |
| 12.00 | 202.12 | |
| 13.00 | 202.13 | |
| 14.00 | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

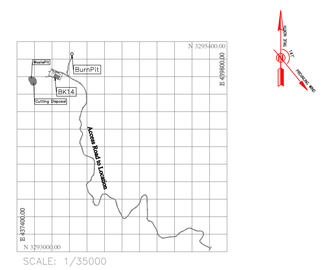
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | △ | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout – BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

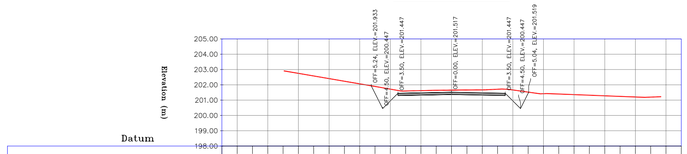
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 47 OF 90 | D01 |

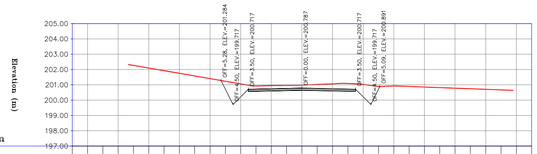
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 47 | D01 |

## 1+910.00




| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.75 | 202.58 | 202.41 | 202.23 | 202.06 | 201.89 | 201.72 | 201.60 | 201.62 | 201.64 | 201.65 | 201.66 | 201.67 | 201.71 | 201.66 | 201.52 | 201.42 | 201.40 | 201.36 | 201.32 | 201.28 | 201.25 | 201.21 | 201.20 | | | | | |
| PROJECT ELEVATION | | | | | | 201.45 | 200.95 | 201.46 | 201.48 | 201.50 | 201.52 | 201.50 | 201.48 | 201.46 | 200.95 | 201.45 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+920.00

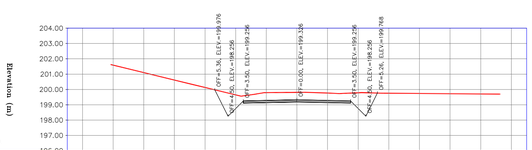



| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.27 | 202.09 | 201.92 | 201.75 | 201.58 | 201.41 | 201.24 | 201.06 | 200.93 | 200.95 | 200.96 | 200.98 | 201.02 | 201.07 | 201.08 | 201.03 | 200.89 | 200.93 | 200.89 | 200.86 | 200.82 | 200.78 | 200.74 | 200.71 | 200.67 | | | | |
| PROJECT ELEVATION | | | | | | 200.72 | 200.22 | 200.73 | 200.75 | 200.77 | 200.79 | 200.77 | 200.75 | 200.73 | 200.22 | 200.72 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+930.00

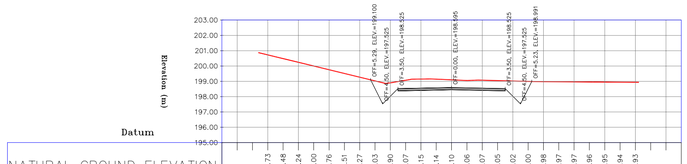
| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 201.95 | 201.71 | 201.47 | 201.22 | 200.98 | 200.75 | 200.58 | 200.41 | 200.26 | 200.29 | 200.02 | 200.04 | 200.06 | 200.38 | 200.43 | 200.47 | 200.44 | 200.39 | 200.40 | 200.39 | 200.35 | 200.31 | 200.28 | 200.24 | 200.20 | 200.16 | | | |
| PROJECT ELEVATION | | | | | | 199.99 | 199.49 | 200.00 | 200.02 | 200.04 | 200.06 | 200.04 | 200.02 | 200.00 | 199.49 | 199.99 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+940.00



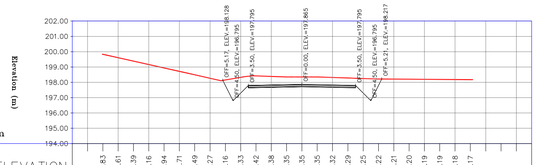

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 201.59 | 201.34 | 201.10 | 200.86 | 200.62 | 200.37 | 200.13 | 199.89 | 199.65 | 199.65 | 199.79 | 199.80 | 199.81 | 199.80 | 199.77 | 199.74 | 199.78 | 199.77 | 199.75 | 199.74 | 199.73 | 199.72 | 199.71 | 199.71 | 199.70 | | | | |
| PROJECT ELEVATION | | | | | | 199.26 | 198.76 | 199.27 | 199.29 | 199.31 | 199.33 | 199.31 | 199.29 | 199.27 | 198.76 | 199.26 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+950.00




| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.73 | 200.48 | 200.24 | 200.00 | 199.76 | 199.51 | 199.27 | 199.03 | 198.90 | 199.07 | 199.15 | 199.14 | 199.10 | 199.06 | 199.07 | 199.05 | 199.02 | 199.00 | 198.98 | 198.97 | 198.97 | 198.96 | 198.95 | 198.94 | 198.93 | | | | |
| PROJECT ELEVATION | | | | | | 198.53 | 198.03 | 198.54 | 198.56 | 198.58 | 198.60 | 198.58 | 198.56 | 198.54 | 198.03 | 198.53 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+960.00

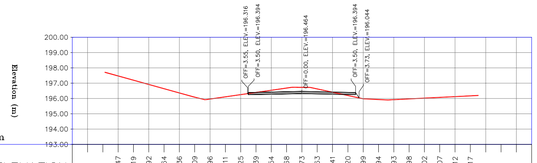



| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.83 | 199.61 | 199.39 | 199.16 | 198.94 | 198.71 | 198.49 | 198.27 | 198.16 | 198.33 | 198.42 | 198.38 | 198.35 | 198.35 | 198.35 | 198.32 | 198.29 | 198.25 | 198.22 | 198.21 | 198.20 | 198.19 | 198.19 | 198.18 | 198.17 | | | | |
| PROJECT ELEVATION | | | | | | 197.79 | 197.29 | 197.80 | 197.82 | 197.84 | 197.86 | 197.84 | 197.82 | 197.80 | 197.29 | 197.79 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+970.00

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.70 | 198.44 | 198.18 | 197.92 | 197.67 | 197.41 | 197.15 | 197.22 | 197.36 | 197.43 | 197.50 | 197.42 | 197.37 | 197.32 | 197.28 | 197.23 | 197.18 | 197.13 | 197.09 | 197.10 | 197.15 | 197.20 | 197.25 | 197.30 | 197.35 | | | | |
| PROJECT ELEVATION | | | | | | 197.05 | 196.56 | 197.07 | 197.09 | 197.11 | 197.13 | 197.11 | 197.09 | 197.07 | 196.56 | 197.06 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 1+980.00




| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.47 | 197.19 | 196.92 | 196.64 | 196.36 | 196.09 | 195.96 | 196.11 | 196.25 | 196.39 | 196.54 | 196.68 | 196.73 | 196.63 | 196.41 | 196.20 | 195.99 | 195.94 | 195.93 | 195.98 | 196.02 | 196.07 | 196.12 | 196.17 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 196.40 | 196.42 | 196.44 | 196.46 | 196.44 | 196.42 | 196.40 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

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3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
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- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

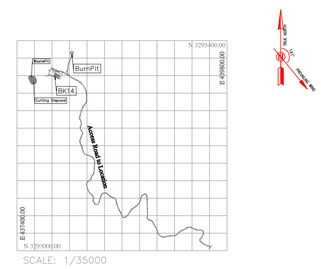
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

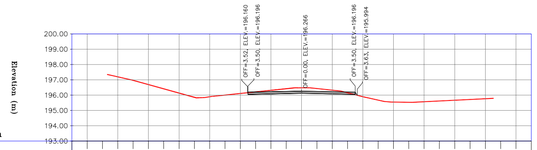
APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 48 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 48 | D01 |

D01 TOTALLY REVISED

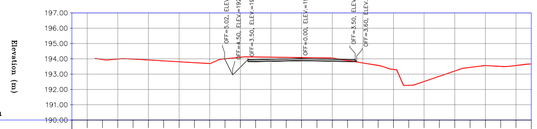
## 1+983.89




Datum

| | | |

## 2+050.00

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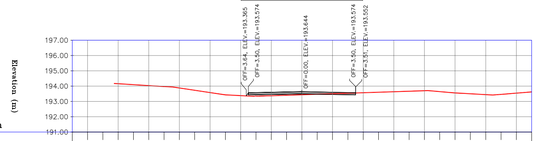
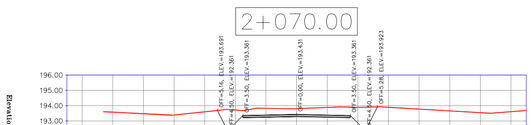
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.96 | 193.98 | 193.98 | 193.92 | 193.87 | 193.81 | 193.75 | 193.69 | 194.00 | 194.11 | 194.12 | 194.00 | 194.11 | 194.10 | 194.08 | 194.07 | 194.05 | 193.89 | 193.73 | 193.57 | 193.31 | 192.28 | 192.52 | 192.86 | 193.21 | 193.44 | 193.56 | 193.51 | 193.57 |
| PROJECT ELEVATION | | | | | | | | | 193.95 | 193.45 | 193.96 | 193.98 | 194.00 | 194.00 | 194.02 | 194.00 | 193.58 | 193.96 | | | | | | | | | | | |

## 2+060.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 194.16 | 194.10 | 194.04 | 193.98 | 193.88 | 193.73 | 193.58 | 193.43 | 193.38 | 193.35 | 193.37 | 193.40 | 193.44 | 193.47 | 193.50 | 193.53 | 193.57 | 193.60 | 193.63 | 193.67 | 193.70 | 193.64 | 193.55 | 193.50 | 193.45 | 193.46 | 193.54 | | |
| PROJECT ELEVATION | | | | | | | | | | 193.58 | 193.60 | 193.62 | 193.64 | 193.62 | 193.60 | 193.58 | | | | | | | | | | | | | |

## 2+070.00

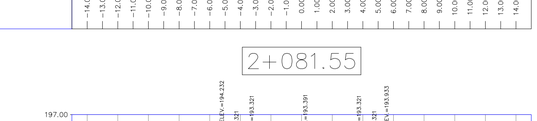



| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.58 | 193.53 | 193.48 | 193.43 | 193.39 | 193.50 | 193.60 | 193.71 | 193.72 | 193.76 | 193.83 | 193.80 | 193.85 | 193.88 | 193.92 | 193.89 | 193.92 | 193.89 | 193.83 | 193.78 | 193.72 | 193.66 | 193.60 | 193.55 | 193.53 | 193.61 | | | |
| PROJECT ELEVATION | | | | | | | | | 193.36 | 192.86 | 193.37 | 193.39 | 193.41 | 193.41 | 193.43 | 193.41 | 193.39 | 193.37 | 192.86 | 193.36 | | | | | | | | | |

## 2+080.00

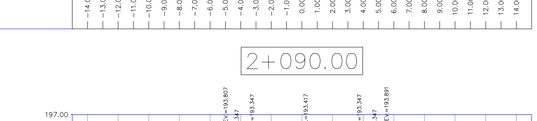
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.75 | 193.84 | 193.93 | 194.02 | 194.11 | 194.20 | 194.29 | 194.24 | 194.16 | 193.88 | 193.60 | 193.78 | 193.75 | 193.73 | 193.70 | 193.77 | 193.84 | 193.90 | 193.96 | 193.90 | 193.84 | 193.79 | 193.73 | 193.67 | 193.61 | 193.66 | 193.73 | 193.80 | |
| PROJECT ELEVATION | | | | | | | | | 193.32 | 192.82 | 193.33 | 193.35 | 193.37 | 193.39 | 193.37 | 193.35 | 193.33 | 192.82 | 193.32 | | | | | | | | | | |

## 2+081.55



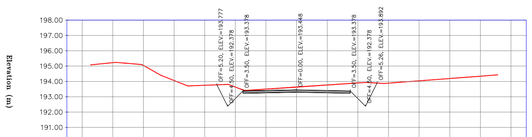

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.91 | 194.00 | 194.09 | 194.17 | 194.26 | 194.35 | 194.37 | 194.28 | 194.13 | 193.86 | 193.77 | 193.74 | 193.72 | 193.70 | 193.71 | 193.78 | 193.84 | 193.90 | 193.95 | 193.84 | 193.78 | 193.72 | 193.66 | 193.63 | 193.70 | 193.77 | 193.84 | | |
| PROJECT ELEVATION | | | | | | | | | 193.32 | 192.82 | 193.33 | 193.35 | 193.37 | 193.39 | 193.37 | 193.35 | 193.33 | 192.82 | 193.32 | | | | | | | | | | |

## 2+090.00



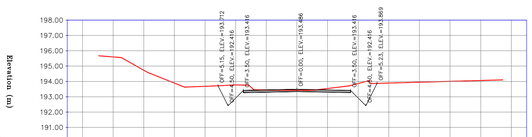

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 194.50 | 194.59 | 194.69 | 194.78 | 194.73 | 194.64 | 194.17 | 193.78 | 193.82 | 193.69 | 193.59 | 193.57 | 193.60 | 193.66 | 193.73 | 193.80 | 193.86 | 193.93 | 193.91 | 193.85 | 193.79 | 193.73 | 193.80 | 193.88 | 193.95 | 194.02 | 194.09 | | |
| PROJECT ELEVATION | | | | | | | | | 193.35 | 192.85 | 193.36 | 193.38 | 193.40 | 193.42 | 193.40 | 193.38 | 193.36 | 192.85 | 193.35 | | | | | | | | | | |

## 2+100.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.13 | 195.23 | 195.18 | 195.04 | 194.48 | 194.06 | 193.70 | 193.74 | 193.78 | 193.63 | 193.43 | 193.50 | 193.57 | 193.63 | 193.71 | 193.77 | 193.83 | 193.80 | 193.50 | 193.91 | 193.89 | 193.96 | 194.04 | 194.11 | 194.19 | 194.26 | 194.34 | 194.42 | |
| PROJECT ELEVATION | | | | | | | | | 193.38 | 192.88 | 193.39 | 193.41 | 193.43 | 193.45 | 193.43 | 193.41 | 193.39 | 192.88 | 193.38 | | | | | | | | | | |

## 2+110.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.60 | 195.29 | 194.73 | 194.29 | 193.89 | 193.64 | 193.68 | 193.72 | 193.77 | 193.77 | 193.62 | 193.44 | 193.43 | 193.43 | 193.47 | 193.43 | 193.54 | 193.66 | 193.86 | 193.89 | 193.92 | 193.95 | 193.97 | 194.00 | 194.03 | 194.06 | 194.09 | | |
| PROJECT ELEVATION | | | | | | | | | 193.42 | 192.92 | 193.43 | 193.45 | 193.47 | 193.49 | 193.47 | 193.45 | 193.43 | 192.92 | 193.42 | | | | | | | | | | |

## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

| | | | |
|---|---|---|---|
| | WELL LOCATION | | CANAL |
| | WELL | | RIVER |
| | SITE | | WATER COURSE |
| | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

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PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN

| REV. | DESCRIPTION | BY | DATE | CHECKED | BY | DATE |
|---|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

TOTALLY REVISED

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14


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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

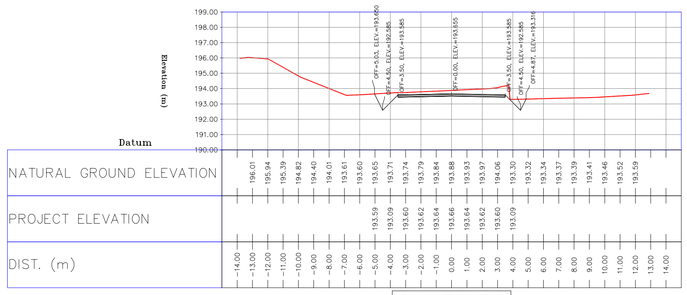
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 50 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 50 | D01 |

## 2+118.45

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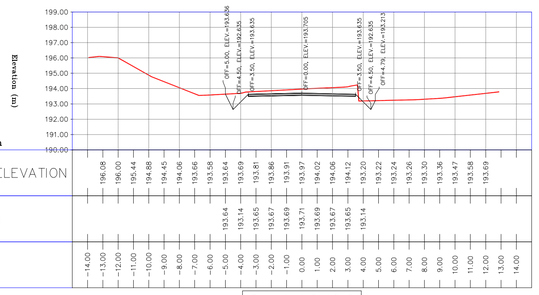
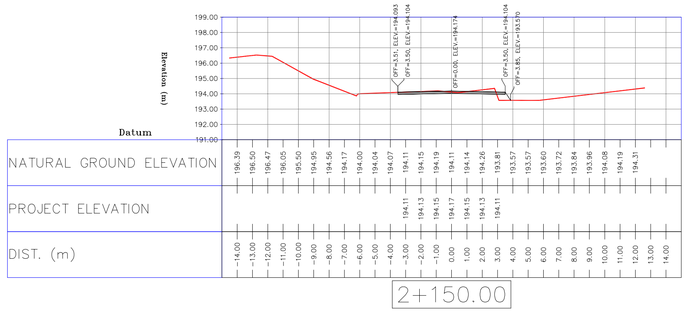
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.01 | 195.94 | 195.39 | 194.82 | 194.40 | 194.01 | 193.61 | 193.60 | 193.65 | 193.71 | 193.74 | 193.79 | 193.84 | 193.88 | 193.93 | 193.97 | 194.06 | 193.30 | 193.32 | 193.34 | 193.37 | 193.39 | 193.41 | 193.46 | 193.52 | 193.59 | | | |
| PROJECT ELEVATION | | | | | | | | | | 193.59 | 193.09 | 193.60 | 193.62 | 193.64 | 193.66 | 193.64 | 193.62 | 193.60 | 193.09 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+120.00



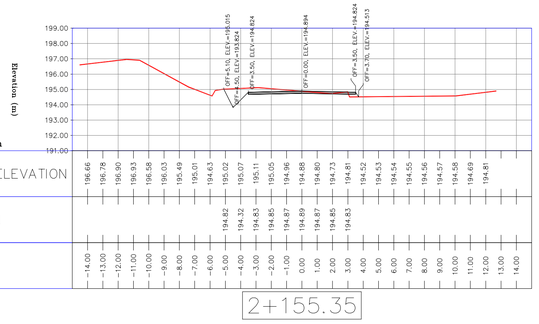

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.08 | 196.00 | 195.44 | 194.88 | 194.45 | 194.06 | 193.66 | 193.58 | 193.64 | 193.64 | 193.69 | 193.81 | 193.86 | 193.91 | 193.97 | 194.02 | 194.06 | 194.12 | 193.20 | 193.22 | 193.24 | 193.26 | 193.30 | 193.36 | 193.47 | 193.58 | 193.69 | | |
| PROJECT ELEVATION | | | | | | | | | 193.64 | 193.14 | 193.65 | 193.67 | 193.69 | 193.71 | 193.69 | 193.67 | 193.65 | 193.14 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+130.00



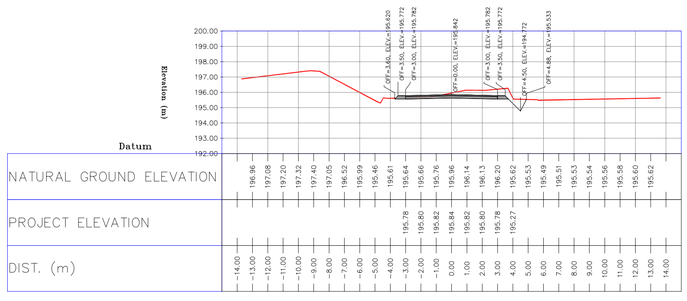

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.39 | 196.50 | 196.47 | 196.05 | 195.50 | 194.95 | 194.56 | 194.17 | 194.00 | 194.04 | 194.07 | 194.11 | 194.11 | 194.15 | 194.17 | 194.15 | 194.14 | 194.26 | 193.81 | 193.57 | 193.57 | 193.60 | 193.72 | 193.84 | 193.96 | 194.08 | 194.19 | 194.31 | |
| PROJECT ELEVATION | | | | | | | | | | | | 194.11 | 194.13 | 194.15 | 194.17 | 194.15 | 194.14 | 194.13 | 194.11 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+140.00



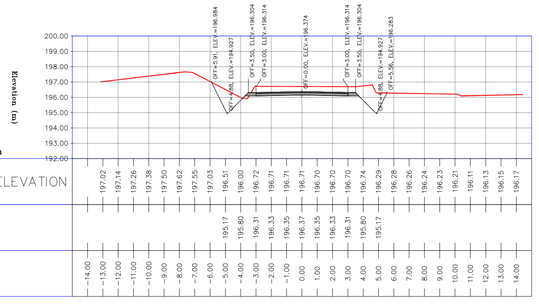

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.66 | 196.78 | 196.90 | 196.93 | 196.58 | 196.03 | 195.49 | 195.01 | 194.63 | 195.02 | 195.07 | 195.11 | 195.05 | 194.96 | 194.88 | 194.80 | 194.73 | 194.81 | 194.52 | 194.53 | 194.54 | 194.55 | 194.56 | 194.57 | 194.58 | 194.69 | 194.81 | | |
| PROJECT ELEVATION | | | | | | | | | | 194.82 | 194.32 | 194.83 | 194.85 | 194.87 | 194.89 | 194.87 | 194.85 | 194.83 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+150.00



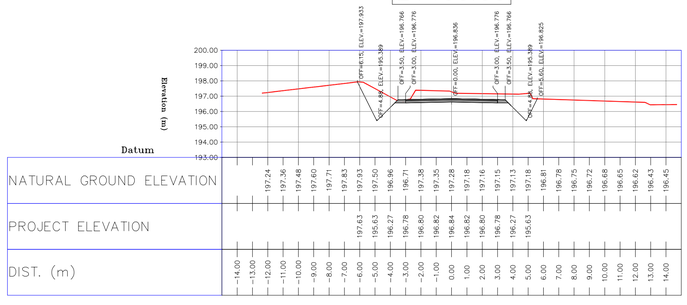

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.96 | 197.08 | 197.20 | 197.32 | 197.40 | 197.05 | 196.52 | 195.99 | 195.46 | 195.61 | 195.64 | 195.66 | 195.76 | 195.96 | 196.14 | 196.13 | 196.20 | 195.62 | 195.53 | 195.49 | 195.51 | 195.53 | 195.54 | 195.56 | 195.58 | 195.60 | 195.62 | | |
| PROJECT ELEVATION | | | | | | | | | | 195.78 | 195.80 | 195.82 | 195.84 | 195.82 | 195.80 | 195.78 | 195.27 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+155.35



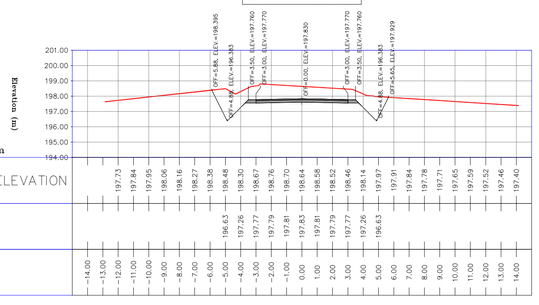

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.02 | 197.14 | 197.26 | 197.38 | 197.50 | 197.62 | 197.55 | 197.03 | 196.51 | 196.00 | 196.72 | 196.71 | 196.71 | 196.71 | 196.70 | 196.70 | 196.70 | 196.74 | 196.29 | 196.28 | 196.26 | 196.24 | 196.23 | 196.21 | 196.11 | 196.13 | 196.15 | 196.17 | |
| PROJECT ELEVATION | | | | | | | | | 195.17 | 195.80 | 196.31 | 196.33 | 196.35 | 196.37 | 196.35 | 196.33 | 196.31 | 195.80 | 195.17 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+160.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.24 | 197.36 | 197.48 | 197.60 | 197.71 | 197.83 | 197.93 | 197.50 | 196.96 | 196.71 | 197.38 | 197.35 | 197.28 | 197.18 | 197.16 | 197.15 | 197.13 | 197.18 | 196.81 | 196.78 | 196.75 | 196.72 | 196.68 | 196.65 | 196.62 | 196.43 | 196.45 | | |
| PROJECT ELEVATION | | | | | | | | 197.63 | 195.63 | 196.27 | 196.78 | 196.80 | 196.82 | 196.84 | 196.82 | 196.80 | 196.78 | 196.27 | 195.63 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+170.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.73 | 197.84 | 197.95 | 198.06 | 198.16 | 198.27 | 198.38 | 198.48 | 198.30 | 198.67 | 198.76 | 198.70 | 198.64 | 198.58 | 198.52 | 198.46 | 198.14 | 197.97 | 197.91 | 197.84 | 197.78 | 197.71 | 197.65 | 197.59 | 197.52 | 197.46 | 197.40 | | |
| PROJECT ELEVATION | | | | | | | | | 196.63 | 197.26 | 197.77 | 197.79 | 197.81 | 197.83 | 197.81 | 197.79 | 197.77 | 197.26 | 196.63 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

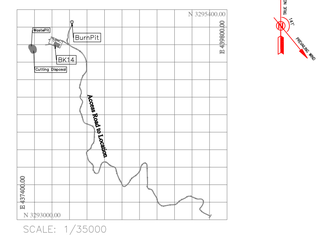
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ——— | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ——— | GRAVEL ROAD | △ | BENCH MARK |
| - - - | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY — PEDCO

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

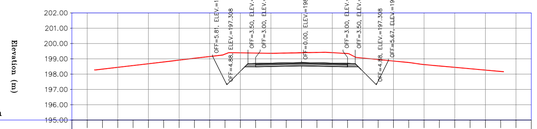
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 51 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 51 | D01 |

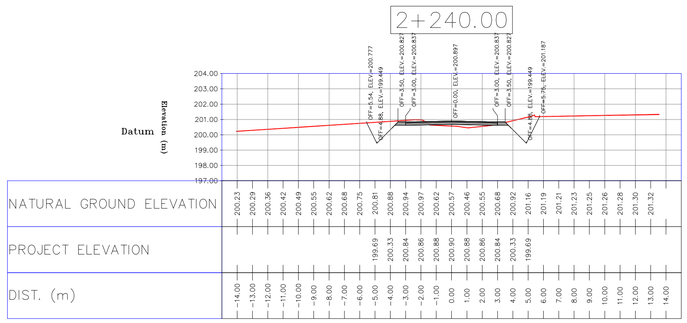
D01
TOTALLY REVISED

## 2+179.32


Elevation (m)
202.00
201.00
200.00
199.00
198.00
197.00
196.00
195.00
Datum
OFF=5.81, ELEV=199.174
OFF=4.85, ELEV=197.348
OFF=3.50, ELEV=198.685
OFF=3.50, ELEV=198.695
OFF=0.00, ELEV=198.705
OFF=3.50, ELEV=198.696
OFF=3.50, ELEV=198.685
OFF=4.85, ELEV=197.326
OFF=5.47, ELEV=198.889

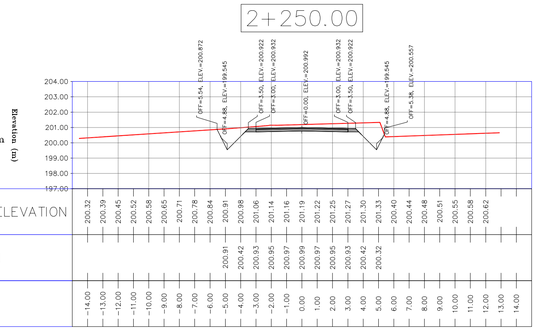
| | | |

## 2+240.00



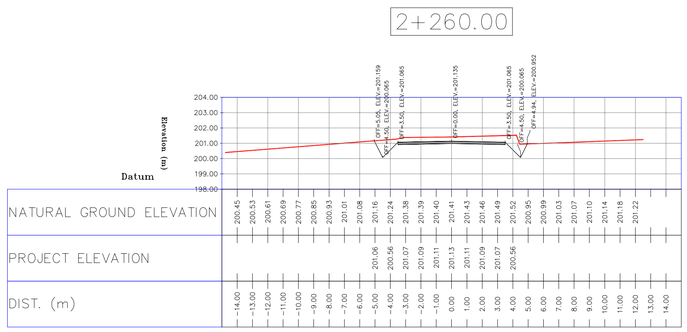

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.23 | 200.29 | 200.36 | 200.42 | 200.49 | 200.55 | 200.62 | 200.68 | 200.75 | 200.81 | 200.88 | 200.84 | 200.97 | 200.62 | 200.57 | 200.46 | 200.55 | 200.68 | 200.92 | 201.16 | 201.19 | 201.21 | 201.23 | 201.25 | 201.26 | 201.28 | 201.30 | 201.32 | | |
| PROJECT ELEVATION | | | | | | | | | | 199.69 | 200.33 | 200.84 | 200.86 | 200.88 | 200.90 | 200.88 | 200.86 | 200.84 | 200.33 | 199.69 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+250.00



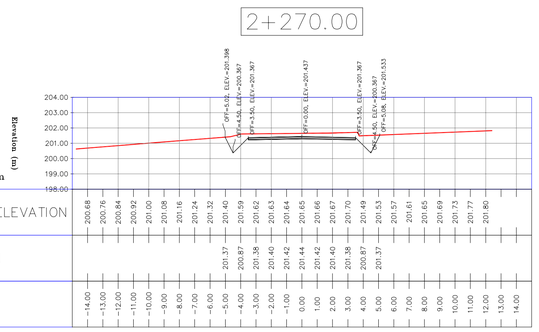

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.32 | 200.39 | 200.45 | 200.52 | 200.58 | 200.65 | 200.71 | 200.78 | 200.84 | 200.91 | 200.98 | 201.06 | 201.14 | 201.19 | 201.22 | 201.25 | 201.27 | 201.30 | 201.33 | 200.40 | 200.44 | 200.48 | 200.51 | 200.55 | 200.58 | 200.62 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 200.91 | 200.42 | 200.93 | 200.95 | 200.97 | 200.99 | 200.97 | 200.95 | 200.93 | 200.42 | 200.32 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+260.00



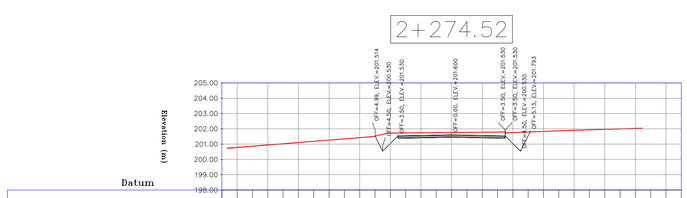

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.45 | 200.53 | 200.61 | 200.69 | 200.77 | 200.85 | 200.93 | 201.01 | 201.08 | 201.16 | 201.24 | 201.32 | 201.38 | 201.39 | 201.40 | 201.41 | 201.43 | 201.46 | 201.49 | 201.52 | 200.95 | 200.99 | 201.03 | 201.07 | 201.10 | 201.14 | 201.18 | 201.22 | | |
| PROJECT ELEVATION | | | | | | | | | | 201.06 | 200.56 | 201.07 | 201.09 | 201.11 | 201.13 | 201.11 | 201.09 | 201.07 | 200.36 | 200.95 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+270.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.68 | 200.76 | 200.84 | 200.92 | 201.00 | 201.08 | 201.16 | 201.24 | 201.32 | 201.40 | 201.59 | 201.62 | 201.63 | 201.64 | 201.65 | 201.66 | 201.67 | 201.70 | 201.49 | 201.53 | 201.57 | 201.61 | 201.65 | 201.69 | 201.73 | 201.77 | 201.80 | | | |
| PROJECT ELEVATION | | | | | | | | | | 201.37 | 200.87 | 201.38 | 201.40 | 201.42 | 201.44 | 201.42 | 201.40 | 201.38 | 200.87 | 201.37 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+274.52

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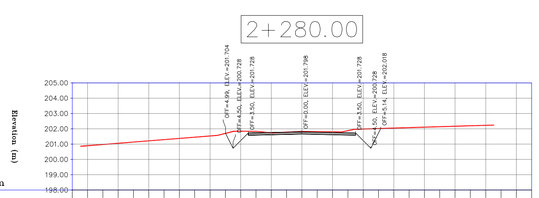
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.78 | 200.86 | 200.94 | 201.02 | 201.10 | 201.18 | 201.26 | 201.34 | 201.42 | 201.51 | 201.71 | 201.72 | 201.74 | 201.75 | 201.76 | 201.77 | 201.78 | 201.79 | 201.75 | 201.79 | 201.83 | 201.87 | 201.90 | 201.93 | 201.96 | 201.99 | 202.02 | | | |
| PROJECT ELEVATION | | | | | | | | | | 201.03 | 201.54 | 201.56 | 201.58 | 201.60 | 201.58 | 201.56 | 201.54 | 201.53 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+280.00

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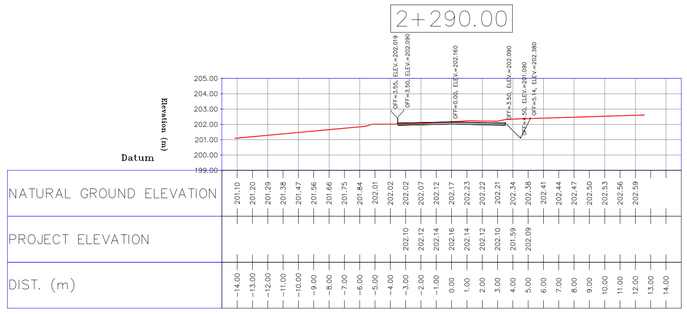
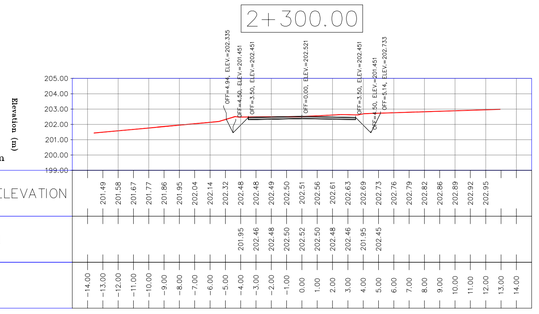
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.90 | 200.97 | 201.05 | 201.13 | 201.21 | 201.29 | 201.37 | 201.45 | 201.53 | 201.70 | 201.84 | 201.83 | 201.74 | 201.78 | 201.83 | 201.81 | 201.78 | 201.80 | 201.88 | 201.98 | 202.01 | 202.04 | 202.07 | 202.10 | 202.14 | 202.17 | 202.20 | 202.23 | | |
| PROJECT ELEVATION | | | | | | | | | | 201.23 | 201.74 | 201.76 | 201.78 | 201.80 | 201.78 | 201.76 | 201.74 | 201.73 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+290.00



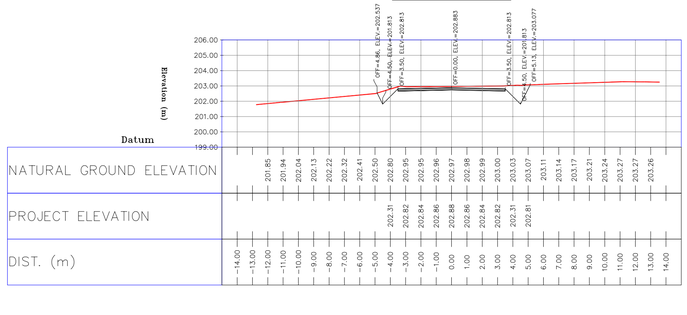

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 201.10 | 201.20 | 201.29 | 201.38 | 201.47 | 201.56 | 201.66 | 201.75 | 201.84 | 202.01 | 202.02 | 202.02 | 202.07 | 202.12 | 202.17 | 202.23 | 202.22 | 202.21 | 202.24 | 202.38 | 202.41 | 202.44 | 202.47 | 202.50 | 202.53 | 202.56 | 202.59 | | | |
| PROJECT ELEVATION | | | | | | | | | | 202.10 | 202.12 | 202.14 | 202.16 | 202.14 | 202.12 | 202.10 | 201.59 | 202.09 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+300.00



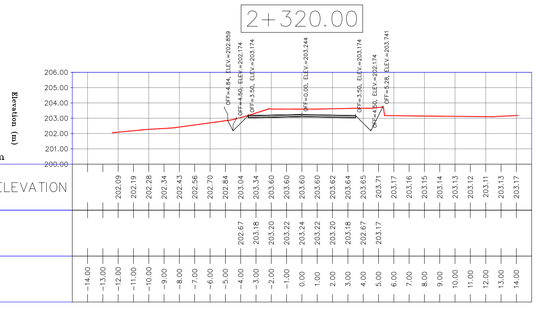

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 201.49 | 201.58 | 201.67 | 201.77 | 201.86 | 201.95 | 202.04 | 202.14 | 202.22 | 202.48 | 202.48 | 202.49 | 202.50 | 202.51 | 202.56 | 202.61 | 202.63 | 202.69 | 202.73 | 202.76 | 202.79 | 202.82 | 202.86 | 202.89 | 202.92 | 202.95 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 201.95 | 202.46 | 202.48 | 202.50 | 202.52 | 202.50 | 202.48 | 202.46 | 201.95 | 202.45 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+310.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 201.85 | 201.94 | 202.04 | 202.13 | 202.22 | 202.32 | 202.41 | 202.50 | 202.80 | 202.95 | 202.95 | 202.96 | 202.97 | 202.98 | 202.99 | 203.00 | 203.03 | 203.07 | 203.11 | 203.14 | 203.17 | 203.21 | 203.24 | 203.27 | 203.27 | 203.26 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 202.31 | 202.82 | 202.84 | 202.86 | 202.88 | 202.86 | 202.84 | 202.82 | 202.81 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+320.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.09 | 202.19 | 202.28 | 202.34 | 202.43 | 202.56 | 202.70 | 202.84 | 203.04 | 203.34 | 203.60 | 203.60 | 203.60 | 203.60 | 203.60 | 203.60 | 203.62 | 203.64 | 203.65 | 203.71 | 203.17 | 203.16 | 203.15 | 203.14 | 203.13 | 203.12 | 203.11 | 203.13 | 203.17 | |
| PROJECT ELEVATION | | | | | | | | | 202.67 | 203.18 | 203.20 | 203.22 | 203.24 | 203.22 | 203.20 | 203.18 | 202.67 | 203.17 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

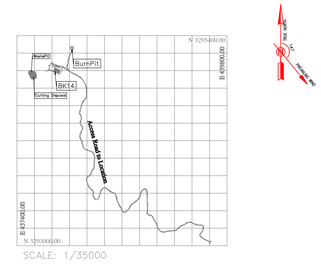
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | △ | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

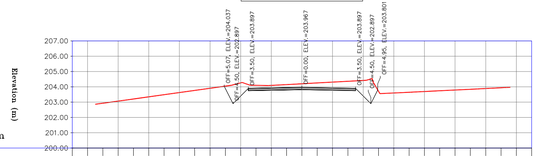
APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 53 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 53 | D01 |

## 2+330.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.36 | 202.49 | 202.63 | 202.77 | 202.91 | 203.05 | 203.18 | 203.32 | 203.46 | 203.68 | 203.94 | 203.96 | 203.94 | 203.92 | 203.89 | 203.87 | 203.84 | 203.93 | 204.23 | 203.21 | 203.26 | 203.30 | 203.35 | 203.40 | 203.44 | 203.49 | 203.54 | | |
| PROJECT ELEVATION | | | | | | | | | | 203.04 | 203.55 | 203.57 | 203.59 | 203.61 | 203.59 | 203.57 | 203.55 | 203.04 | 203.54 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+340.00

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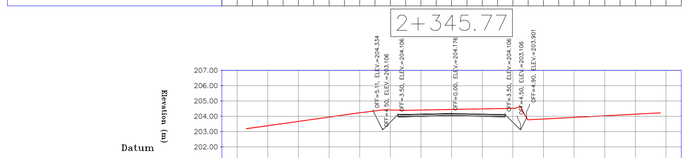
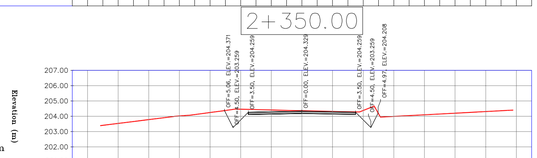
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.93 | 203.07 | 203.21 | 203.35 | 203.49 | 203.63 | 203.77 | 203.91 | 204.05 | 204.26 | 204.10 | 204.09 | 204.14 | 204.20 | 204.25 | 204.31 | 204.36 | 204.42 | 203.72 | 203.60 | 203.65 | 203.69 | 203.74 | 203.79 | 203.84 | 203.89 | 203.94 | | |
| PROJECT ELEVATION | | | | | | | | | | 203.90 | 203.40 | 203.91 | 203.93 | 203.95 | 203.97 | 203.95 | 203.93 | 203.91 | 203.40 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+345.77




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.24 | 203.38 | 203.52 | 203.67 | 203.81 | 203.95 | 204.09 | 204.23 | 204.35 | 204.41 | 204.39 | 204.41 | 204.42 | 204.44 | 204.46 | 204.48 | 204.50 | 204.52 | 203.77 | 203.82 | 203.87 | 203.92 | 203.98 | 204.03 | 204.08 | 204.14 | 204.19 | | |
| PROJECT ELEVATION | | | | | | | | | | 204.11 | 203.61 | 204.12 | 204.14 | 204.16 | 204.18 | 204.16 | 204.14 | 204.12 | 203.61 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+350.00

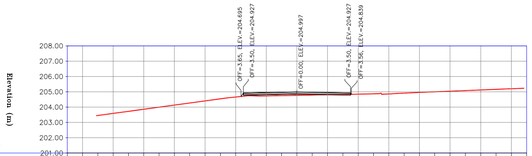



| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.41 | 203.53 | 203.66 | 203.78 | 203.91 | 204.02 | 204.11 | 204.24 | 204.38 | 204.46 | 204.43 | 204.41 | 204.39 | 204.36 | 204.34 | 204.31 | 204.29 | 204.38 | 204.16 | 203.99 | 204.04 | 204.10 | 204.15 | 204.20 | 204.25 | 204.31 | 204.36 | | |
| PROJECT ELEVATION | | | | | | | | | | 204.26 | 203.76 | 204.27 | 204.29 | 204.31 | 204.33 | 204.31 | 204.29 | 204.27 | 203.76 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+360.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.48 | 203.61 | 203.75 | 203.88 | 204.02 | 204.16 | 204.29 | 204.43 | 204.56 | 204.59 | 204.57 | 204.54 | 204.52 | 204.50 | 204.52 | 204.54 | 204.56 | 204.67 | 204.41 | 204.47 | 204.52 | 204.57 | 204.62 | 204.67 | 204.72 | 204.77 | 204.82 | | |
| PROJECT ELEVATION | | | | | | | | | | 204.63 | 204.65 | 204.67 | 204.69 | 204.67 | 204.65 | 204.63 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+370.00

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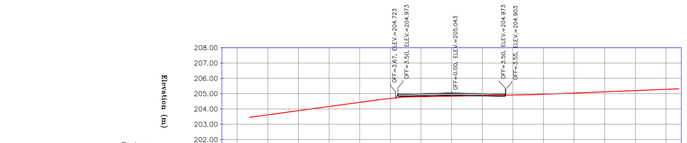
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.45 | 203.59 | 203.72 | 203.86 | 203.99 | 204.13 | 204.27 | 204.40 | 204.54 | 204.66 | 204.74 | 204.73 | 204.75 | 204.77 | 204.79 | 204.81 | 204.83 | 204.85 | 204.87 | 204.86 | 204.91 | 204.96 | 205.00 | 205.04 | 205.08 | 205.12 | 205.16 | 205.20 | |
| PROJECT ELEVATION | | | | | | | | | | 204.94 | 204.96 | 204.98 | 205.00 | 204.98 | 204.96 | 204.94 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+372.25

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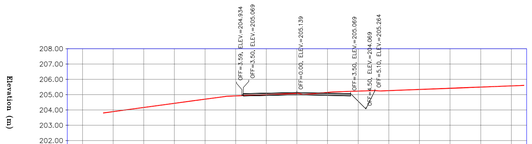
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.48 | 203.62 | 203.76 | 203.89 | 204.03 | 204.16 | 204.30 | 204.43 | 204.57 | 204.69 | 204.78 | 204.80 | 204.82 | 204.84 | 204.85 | 204.87 | 204.89 | 204.91 | 204.93 | 204.96 | 205.00 | 205.04 | 205.08 | 205.12 | 205.16 | 205.20 | 205.24 | 205.28 | |
| PROJECT ELEVATION | | | | | | | | | | 204.98 | 205.00 | 205.02 | 205.04 | 205.02 | 205.00 | 204.98 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+380.00

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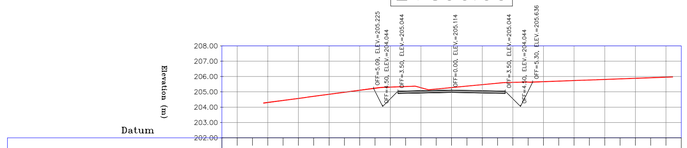
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.89 | 204.03 | 204.16 | 204.30 | 204.43 | 204.57 | 204.70 | 204.84 | 204.92 | 204.96 | 205.00 | 205.04 | 205.08 | 205.10 | 205.12 | 205.14 | 205.15 | 205.20 | 205.23 | 205.27 | 205.26 | 205.30 | 205.34 | 205.38 | 205.42 | 205.46 | 205.49 | 205.53 | 205.57 |
| PROJECT ELEVATION | | | | | | | | | | 205.08 | 205.10 | 205.12 | 205.14 | 205.12 | 205.10 | 205.08 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+390.00

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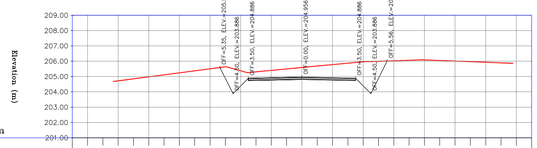
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.31 | 204.44 | 204.57 | 204.71 | 204.84 | 204.97 | 205.10 | 205.24 | 205.31 | 205.35 | 205.27 | 205.18 | 205.28 | 205.37 | 205.47 | 205.56 | 205.62 | 205.64 | 205.66 | 205.70 | 205.74 | 205.77 | 205.81 | 205.85 | 205.89 | 205.92 | 205.96 | | |
| PROJECT ELEVATION | | | | | | | | | | 205.04 | 204.54 | 205.05 | 205.07 | 205.09 | 205.11 | 205.09 | 205.07 | 205.05 | 204.54 | 205.04 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+398.74

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.71 | 204.85 | 204.98 | 205.11 | 205.24 | 205.37 | 205.50 | 205.63 | 205.37 | 205.30 | 205.40 | 205.49 | 205.59 | 205.68 | 205.78 | 205.87 | 205.96 | 205.99 | 206.03 | 206.06 | 206.08 | 206.04 | 206.01 | 205.97 | 205.93 | 205.89 | | | |
| PROJECT ELEVATION | | | | | | | | | 204.89 | 204.90 | 204.92 | 204.94 | 204.96 | 204.94 | 204.92 | 204.90 | 204.89 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

D01
TOTALLY REVISED

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

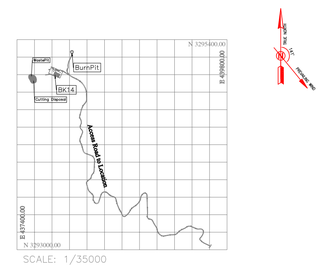
WELL LOCATION
WELL
SITE
CAMP SITE
ASPHALT ROAD
GRAVEL ROAD
PROPOSED ROAD
DAYLIGHT
CANAL
RIVER
WATER COURSE
CONTOURS (60 / 50)
SPOT HEIGHT (99.27)
BENCH MARK
BRIDGE
CULVERT

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

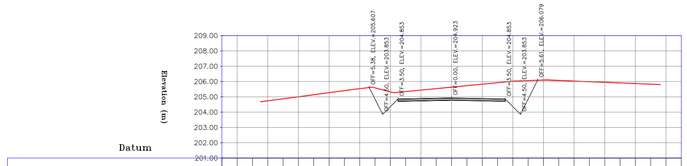
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 54 OF 90 | D01 |

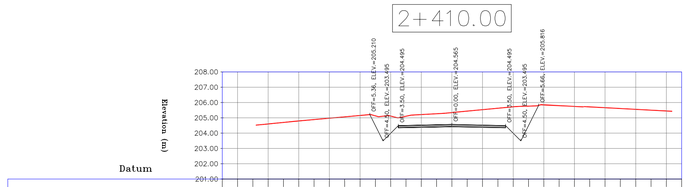
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 54 | D01 |

## 2+400.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.74 | 204.87 | 205.00 | 205.14 | 205.27 | 205.41 | 205.53 | 205.58 | 205.33 | 205.34 | 205.44 | 205.53 | 205.63 | 205.73 | 205.82 | 205.92 | 206.02 | 206.06 | 206.09 | 206.07 | 206.03 | 205.99 | 205.95 | 205.91 | 205.87 | 205.83 | | |
| PROJECT ELEVATION | | | | | | | | 204.85 | 204.35 | 204.86 | 204.88 | 204.90 | 204.92 | 204.90 | 204.88 | 204.86 | 204.35 | 204.85 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+410.00

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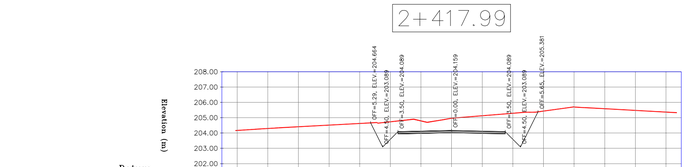
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.60 | 204.70 | 204.80 | 204.88 | 204.97 | 205.06 | 205.15 | 205.13 | 205.12 | 205.10 | 205.21 | 205.27 | 205.34 | 205.44 | 205.53 | 205.63 | 205.72 | 205.77 | 205.85 | 205.80 | 205.75 | 205.72 | 205.66 | 205.61 | 205.56 | 205.50 | 205.45 | |
| PROJECT ELEVATION | | | | | | | | 204.50 | 204.00 | 204.51 | 204.53 | 204.55 | 204.57 | 204.55 | 204.53 | 204.51 | 204.00 | 204.50 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+417.99

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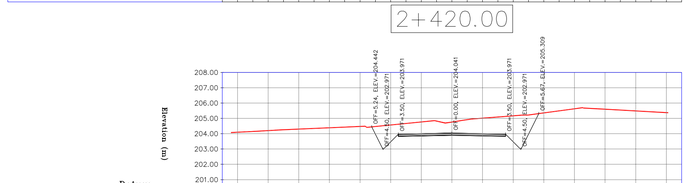
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.17 | 204.23 | 204.29 | 204.36 | 204.41 | 204.46 | 204.52 | 204.57 | 204.63 | 204.68 | 204.73 | 204.84 | 204.79 | 204.80 | 204.96 | 205.04 | 205.13 | 205.21 | 205.29 | 205.36 | 205.43 | 205.57 | 205.71 | 205.64 | 205.59 | 205.53 | 205.48 | 205.42 | 205.36 |
| PROJECT ELEVATION | | | | | | | | 204.09 | 203.59 | 204.10 | 204.12 | 204.14 | 204.16 | 204.14 | 204.12 | 204.10 | 203.59 | 204.09 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+420.00

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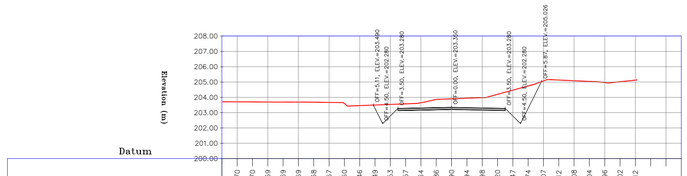
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 204.09 | 204.15 | 204.20 | 204.25 | 204.30 | 204.34 | 204.38 | 204.43 | 204.47 | 204.47 | 204.57 | 204.67 | 204.76 | 204.82 | 204.76 | 204.92 | 205.02 | 205.09 | 205.17 | 205.22 | 205.35 | 205.49 | 205.63 | 205.65 | 205.60 | 205.54 | 205.49 | 205.43 | 205.38 |
| PROJECT ELEVATION | | | | | | | | 203.97 | 203.47 | 203.98 | 204.00 | 204.02 | 204.04 | 204.02 | 204.00 | 203.98 | 203.47 | 203.97 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+430.00

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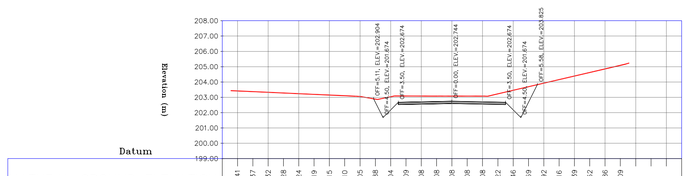
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.70 | 203.70 | 203.69 | 203.69 | 203.68 | 203.67 | 203.60 | 203.49 | 203.53 | 203.57 | 203.64 | 203.86 | 203.90 | 203.94 | 203.98 | 204.20 | 204.47 | 204.74 | 205.07 | 205.12 | 205.08 | 205.04 | 204.96 | 205.02 | 205.12 | | | |
| PROJECT ELEVATION | | | | | | | | 203.28 | 202.78 | 203.29 | 203.31 | 203.33 | 203.35 | 203.33 | 203.31 | 203.29 | 202.78 | 203.28 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+437.25

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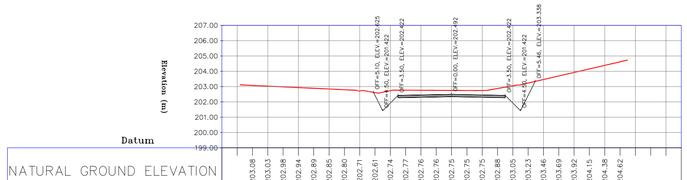
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.41 | 203.37 | 203.32 | 203.28 | 203.24 | 203.19 | 203.15 | 203.10 | 203.05 | 203.04 | 202.88 | 203.04 | 203.09 | 203.08 | 203.08 | 203.08 | 203.08 | 203.08 | 203.22 | 203.46 | 203.69 | 203.92 | 204.16 | 204.39 | 204.62 | 204.86 | 205.09 | | |
| PROJECT ELEVATION | | | | | | | | 202.67 | 202.17 | 202.68 | 202.70 | 202.72 | 202.74 | 202.72 | 202.70 | 202.68 | 202.17 | 202.67 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+440.00

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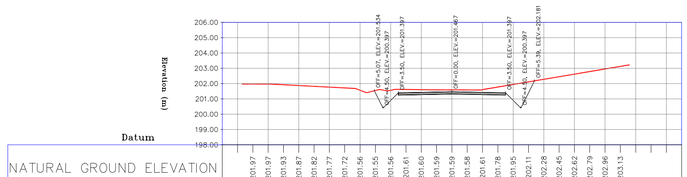
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.08 | 203.03 | 202.98 | 202.94 | 202.89 | 202.85 | 202.80 | 202.71 | 202.61 | 202.74 | 202.77 | 202.76 | 202.76 | 202.75 | 202.75 | 202.75 | 202.88 | 203.05 | 203.23 | 203.46 | 203.69 | 203.92 | 204.15 | 204.38 | 204.62 | | | |
| PROJECT ELEVATION | | | | | | | | 202.42 | 201.92 | 202.43 | 202.45 | 202.47 | 202.47 | 202.47 | 202.45 | 202.43 | 201.92 | 202.42 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+450.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 201.97 | 201.97 | 201.93 | 201.87 | 201.82 | 201.77 | 201.72 | 201.56 | 201.55 | 201.56 | 201.60 | 201.61 | 201.59 | 201.59 | 201.58 | 201.61 | 201.78 | 201.95 | 202.11 | 202.28 | 202.45 | 202.62 | 202.79 | 202.96 | 203.13 | | | |
| PROJECT ELEVATION | | | | | | | | 201.40 | 200.90 | 201.41 | 201.43 | 201.45 | 201.45 | 201.45 | 201.43 | 201.41 | 200.90 | 201.40 | | | | | | | | | | |
| DIST. (m) | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

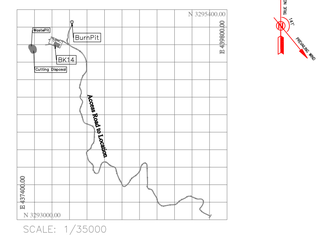
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ~ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| - - - | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

D01
TOTALLY REVISED

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY — PEDCO

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 55 OF 90 | D01 |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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

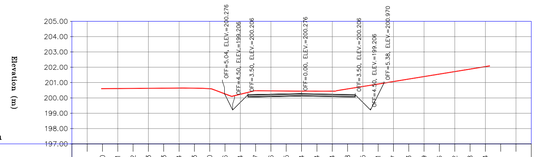
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 55 | D01 |

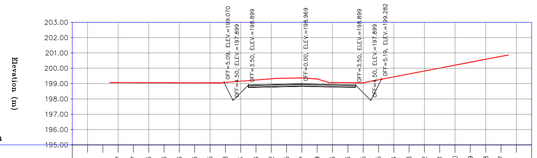
## 2+460.00




Datum

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.60 | 200.61 | 200.62 | 200.63 | 200.63 | 200.64 | 200.63 | 200.60 | 200.26 | 200.24 | 200.47 | 200.46 | 200.45 | 200.44 | 200.44 | 200.44 | 200.58 | 200.75 | 200.91 | 201.07 | 201.23 | 201.39 | 201.56 | 201.72 | 201.88 | 202.04 | | |
| PROJECT ELEVATION | | | | | | | | | 200.21 | 199.71 | 200.22 | 200.24 | 200.26 | 200.28 | 200.26 | 200.24 | 200.22 | 199.71 | 200.21 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

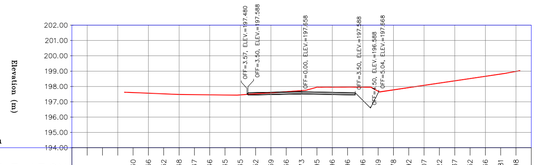
## 2+470.00




Datum

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.07 | 199.07 | 199.06 | 199.06 | 199.06 | 199.06 | 199.05 | 199.08 | 199.16 | 199.24 | 199.32 | 199.35 | 199.37 | 199.29 | 199.06 | 199.06 | 199.05 | 199.25 | 199.44 | 199.63 | 199.82 | 200.01 | 200.20 | 200.39 | 200.58 | 200.77 | | |
| PROJECT ELEVATION | | | | | | | | | 198.90 | 198.40 | 198.91 | 198.93 | 198.95 | 198.97 | 198.95 | 198.93 | 198.91 | 198.40 | 198.90 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

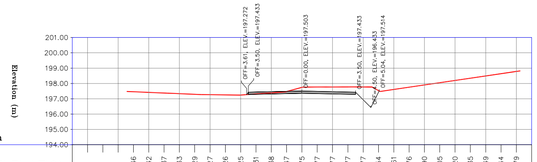
## 2+480.00




Datum

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.60 | 197.56 | 197.52 | 197.48 | 197.47 | 197.46 | 197.45 | 197.52 | 197.59 | 197.66 | 197.73 | 197.95 | 197.86 | 197.86 | 197.69 | 197.78 | 197.92 | 198.07 | 198.22 | 198.37 | 198.52 | 198.66 | 198.81 | 198.95 | | | | |
| PROJECT ELEVATION | | | | | | | | 197.60 | 197.62 | 197.64 | 197.66 | 197.64 | 197.62 | 197.60 | 197.09 | 197.59 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

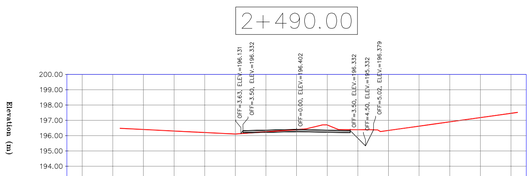
## 2+481.19




Datum

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.46 | 197.42 | 197.37 | 197.33 | 197.29 | 197.27 | 197.26 | 197.25 | 197.31 | 197.38 | 197.47 | 197.75 | 197.77 | 197.77 | 197.77 | 197.77 | 197.77 | 197.54 | 197.61 | 197.76 | 197.90 | 198.05 | 198.20 | 198.35 | 198.49 | 198.64 | 198.79 | |
| PROJECT ELEVATION | | | | | | | | 197.44 | 197.46 | 197.48 | 197.50 | 197.48 | 197.46 | 197.44 | 196.93 | 197.43 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

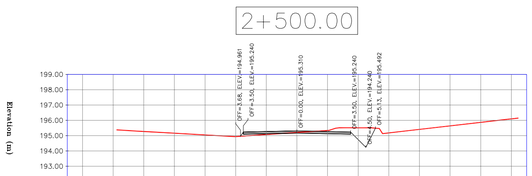
## 2+490.00




Datum

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.45 | 196.40 | 196.35 | 196.30 | 196.25 | 196.20 | 196.15 | 196.11 | 196.18 | 196.25 | 196.32 | 196.40 | 196.53 | 196.69 | 196.39 | 196.38 | 196.34 | 196.48 | 196.62 | 196.76 | 196.90 | 197.04 | 197.18 | 197.32 | 197.46 | | | |
| PROJECT ELEVATION | | | | | | | | 196.34 | 196.36 | 196.38 | 196.40 | 196.38 | 196.36 | 196.34 | 195.83 | 196.33 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

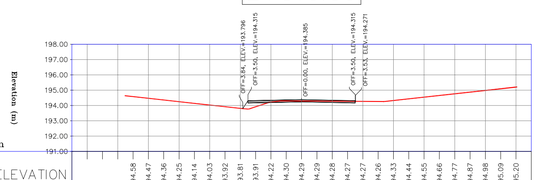
## 2+500.00




Datum

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.33 | 195.27 | 195.22 | 195.16 | 195.11 | 195.05 | 194.99 | 194.94 | 195.01 | 195.07 | 195.14 | 195.21 | 195.27 | 195.34 | 195.51 | 195.51 | 195.50 | 195.18 | 195.29 | 195.41 | 195.52 | 195.64 | 195.75 | 195.87 | 195.98 | 196.09 | | |
| PROJECT ELEVATION | | | | | | | | 195.25 | 195.27 | 195.29 | 195.31 | 195.29 | 195.27 | 195.25 | 194.74 | 195.24 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

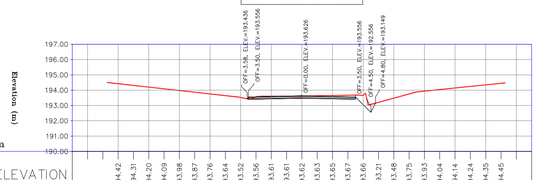
## 2+510.00




Datum

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 194.58 | 194.47 | 194.36 | 194.25 | 194.14 | 194.03 | 193.92 | 193.81 | 193.91 | 194.22 | 194.30 | 194.29 | 194.29 | 194.28 | 194.27 | 194.26 | 194.33 | 194.44 | 194.55 | 194.66 | 194.77 | 194.87 | 194.98 | 195.09 | 195.20 | | | |
| PROJECT ELEVATION | | | | | | | | 194.32 | 194.34 | 194.36 | 194.38 | 194.36 | 194.34 | 194.32 | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+520.00




Datum

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 194.42 | 194.31 | 194.20 | 194.09 | 193.98 | 193.87 | 193.76 | 193.64 | 193.52 | 193.56 | 193.61 | 193.61 | 193.62 | 193.63 | 193.65 | 193.67 | 193.66 | 193.21 | 193.48 | 193.75 | 193.93 | 194.04 | 194.14 | 194.24 | 194.35 | 194.45 | | |
| PROJECT ELEVATION | | | | | | | | 193.57 | 193.59 | 193.61 | 193.61 | 193.63 | 193.61 | 193.59 | 193.57 | 193.06 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

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| | |
|---|---|
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| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

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- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌇ | DAYLIGHT | ⊓ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

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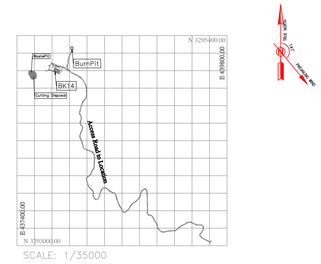
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | ** | *** **** | ** | *** **** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |
| | | | CHECKED | | REV. APPR. | |

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 56 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
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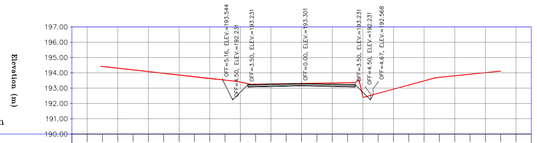
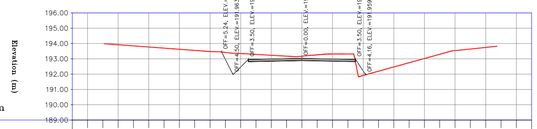
D01
TOTALLY REVISED

## 2+525.12



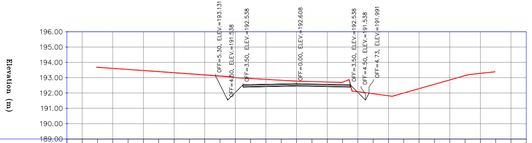

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 194.41 | 194.30 | 194.19 | 194.08 | 193.97 | 193.86 | 193.74 | 193.63 | 193.53 | 193.39 | 193.26 | 193.27 | 193.29 | 193.30 | 193.32 | 193.33 | 193.35 | 192.47 | 192.66 | 192.93 | 193.20 | 193.47 | 193.70 | 193.81 | 193.91 | 194.01 | 194.11 | | | |
| PROJECT ELEVATION | | | | | | | | | 193.23 | 192.73 | 193.24 | 193.26 | 193.28 | 193.30 | 193.28 | 193.26 | 193.24 | 192.73 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+530.00



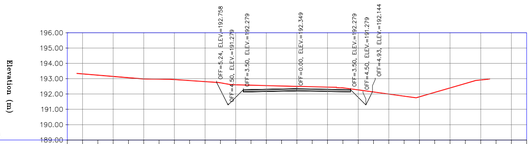

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.92 | 193.85 | 193.77 | 193.70 | 193.62 | 193.55 | 193.48 | 193.42 | 193.35 | 193.29 | 193.24 | 193.18 | 193.17 | 193.26 | 193.31 | 193.31 | 191.91 | 192.19 | 192.47 | 192.74 | 193.02 | 193.30 | 193.54 | 193.64 | 193.75 | | | | | |
| PROJECT ELEVATION | | | | | | | | 192.86 | 192.46 | 192.97 | 192.99 | 193.01 | 193.03 | 193.01 | 192.99 | 192.97 | 192.21 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+540.00



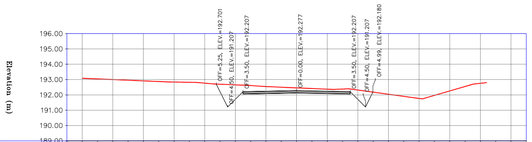

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.68 | 193.61 | 193.54 | 193.47 | 193.39 | 193.32 | 193.25 | 193.18 | 193.11 | 193.01 | 192.95 | 192.89 | 192.84 | 192.78 | 192.75 | 192.72 | 192.70 | 192.09 | 191.95 | 191.82 | 192.00 | 192.29 | 192.57 | 192.86 | 193.14 | 193.28 | | | | |
| PROJECT ELEVATION | | | | | | | | | 192.54 | 192.04 | 192.55 | 192.57 | 192.59 | 192.61 | 192.59 | 192.57 | 192.55 | 192.04 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+550.00



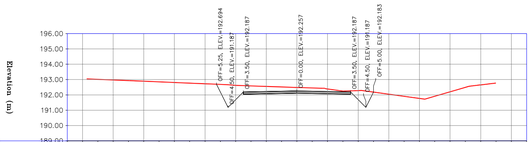

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.31 | 193.23 | 193.15 | 193.06 | 192.98 | 192.97 | 192.94 | 192.88 | 192.81 | 192.73 | 192.60 | 192.58 | 192.55 | 192.53 | 192.50 | 192.48 | 192.45 | 192.41 | 191.27 | 192.13 | 192.00 | 191.86 | 191.82 | 192.11 | 192.40 | 192.69 | 192.92 | | | |
| PROJECT ELEVATION | | | | | | | | | 192.28 | 191.78 | 192.29 | 192.31 | 192.33 | 192.35 | 192.33 | 192.31 | 192.29 | 191.78 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+555.58



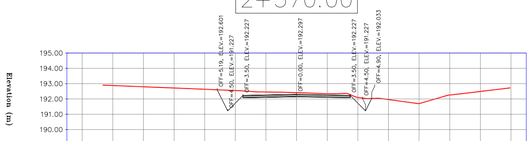

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.04 | 193.00 | 192.96 | 192.92 | 192.87 | 192.84 | 192.82 | 192.76 | 192.70 | 192.66 | 192.61 | 192.54 | 192.50 | 192.46 | 192.42 | 192.38 | 192.38 | 192.32 | 192.18 | 192.04 | 191.90 | 191.77 | 191.96 | 192.26 | 192.55 | 192.76 | | | | |
| PROJECT ELEVATION | | | | | | | | | 192.21 | 191.71 | 192.22 | 192.24 | 192.26 | 192.28 | 192.26 | 192.24 | 192.22 | 191.71 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+560.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.01 | 192.97 | 192.93 | 192.89 | 192.85 | 192.81 | 192.77 | 192.72 | 192.68 | 192.62 | 192.58 | 192.55 | 192.52 | 192.48 | 192.45 | 192.38 | 192.25 | 192.28 | 192.18 | 192.05 | 191.91 | 191.77 | 191.91 | 192.20 | 192.50 | 192.65 | | | | |
| PROJECT ELEVATION | | | | | | | | | 192.19 | 191.69 | 192.20 | 192.22 | 192.24 | 192.26 | 192.24 | 192.22 | 192.20 | 191.69 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+570.00

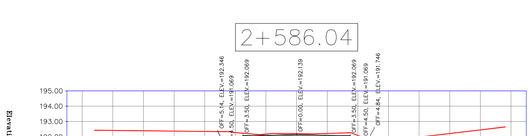



| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 192.88 | 192.84 | 192.79 | 192.75 | 192.71 | 192.67 | 192.63 | 192.59 | 192.55 | 192.49 | 192.46 | 192.44 | 192.41 | 192.38 | 192.35 | 192.36 | 192.10 | 192.04 | 191.96 | 191.82 | 191.69 | 191.98 | 192.25 | 192.37 | 192.49 | 192.61 | | | | |
| PROJECT ELEVATION | | | | | | | | | 192.23 | 191.73 | 192.24 | 192.26 | 192.28 | 192.30 | 192.28 | 192.26 | 192.24 | 191.73 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+580.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 192.73 | 192.69 | 192.66 | 192.62 | 192.58 | 192.54 | 192.50 | 192.46 | 192.42 | 192.35 | 192.31 | 192.30 | 192.30 | 192.28 | 192.25 | 192.28 | 192.20 | 192.20 | 191.82 | 191.75 | 191.75 | 191.96 | 192.08 | 192.20 | 192.32 | 192.44 | 192.56 | 192.68 | | |
| PROJECT ELEVATION | | | | | | | | | 192.18 | 191.68 | 192.19 | 192.21 | 192.23 | 192.25 | 192.23 | 192.21 | 192.19 | 191.68 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+586.04




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 192.43 | 192.42 | 192.41 | 192.40 | 192.39 | 192.38 | 192.37 | 192.36 | 192.34 | 192.28 | 192.19 | 192.18 | 192.21 | 192.21 | 192.20 | 192.22 | 192.25 | 192.09 | 191.68 | 191.74 | 191.86 | 191.88 | 192.10 | 192.22 | 192.34 | 192.46 | 192.58 | | | |
| PROJECT ELEVATION | | | | | | | | | 192.07 | 191.57 | 192.08 | 192.10 | 192.12 | 192.14 | 192.12 | 192.10 | 192.08 | 191.57 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 2+590.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 192.28 | 192.26 | 192.25 | 192.24 | 192.23 | 192.22 | 192.20 | 192.19 | 192.21 | 192.18 | 192.16 | 192.13 | 192.11 | 192.08 | 192.11 | 192.15 | 192.16 | 191.88 | 191.65 | 191.78 | 191.91 | 192.04 | 192.17 | 192.26 | 192.36 | 192.48 | 192.60 | | | |
| PROJECT ELEVATION | | | | | | | | | 191.96 | 191.46 | 191.97 | 191.99 | 192.01 | 192.03 | 192.01 | 191.99 | 191.97 | 191.46 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN

| REV. | DESCRIPTION | BY | DATE | CHECKED | REV. APPR. |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

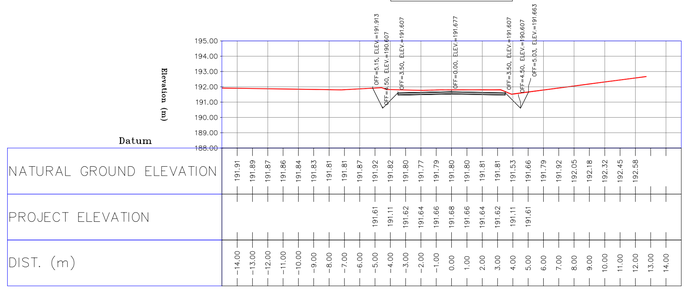
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 57 OF 90 | D01 |

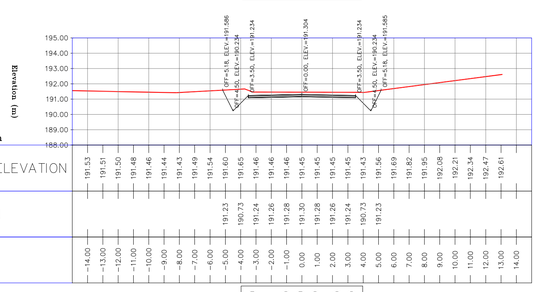
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 57 | D01 |

## 2+600.00



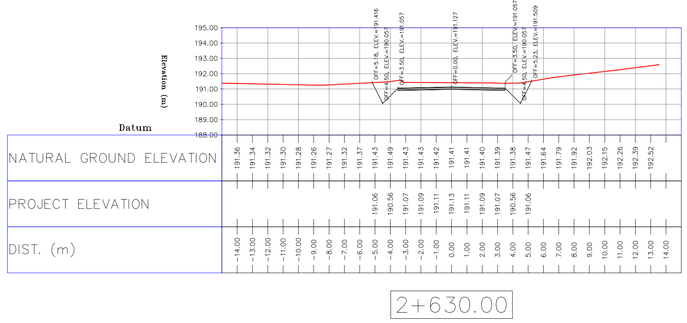

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 191.91 | 191.89 | 191.87 | 191.86 | 191.84 | 191.83 | 191.81 | 191.81 | 191.87 | 191.92 | 191.82 | 191.80 | 191.77 | 191.79 | 191.80 | 191.80 | 191.81 | 191.81 | 191.53 | 191.66 | 191.79 | 192.05 | 192.18 | 192.32 | 192.45 | 192.58 | | | |
| PROJECT ELEVATION | | | | | | | | | 191.61 | 191.11 | 191.62 | 191.64 | 191.66 | 191.68 | 191.66 | 191.64 | 191.62 | 191.11 | 191.61 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+610.00



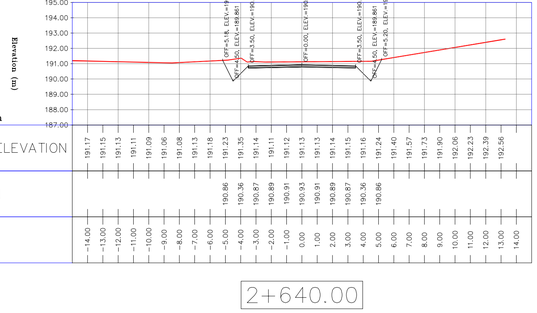

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 191.53 | 191.51 | 191.50 | 191.48 | 191.46 | 191.44 | 191.43 | 191.49 | 191.54 | 191.60 | 191.65 | 191.46 | 191.46 | 191.46 | 191.45 | 191.45 | 191.45 | 191.45 | 191.43 | 191.56 | 191.69 | 191.82 | 191.95 | 192.08 | 192.21 | 192.34 | 192.47 | 192.61 | |
| PROJECT ELEVATION | | | | | | | | | 191.23 | 190.73 | 191.24 | 191.26 | 191.28 | 191.30 | 191.28 | 191.26 | 191.24 | 190.73 | 191.23 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+614.76



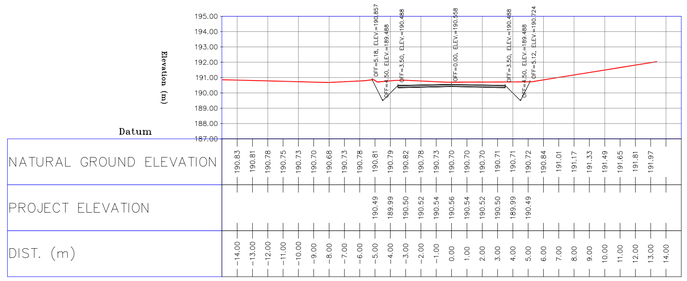

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 191.36 | 191.34 | 191.32 | 191.30 | 191.28 | 191.26 | 191.27 | 191.32 | 191.37 | 191.43 | 191.49 | 191.43 | 191.43 | 191.42 | 191.41 | 191.41 | 191.40 | 191.39 | 191.38 | 191.47 | 191.64 | 191.79 | 191.92 | 192.03 | 192.15 | 192.26 | 192.39 | 192.52 | |
| PROJECT ELEVATION | | | | | | | | | 191.06 | 190.56 | 191.07 | 191.09 | 191.11 | 191.13 | 191.11 | 191.11 | 191.09 | 191.07 | 190.56 | 191.06 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+620.00



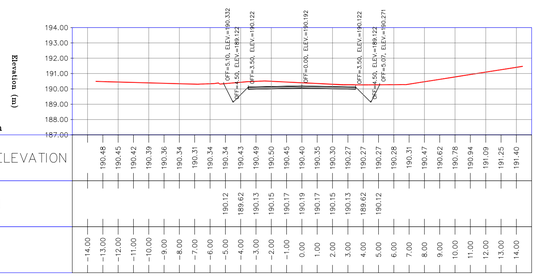

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 191.17 | 191.15 | 191.13 | 191.11 | 191.09 | 191.06 | 191.08 | 191.13 | 191.18 | 191.23 | 191.35 | 191.14 | 191.11 | 191.12 | 191.13 | 191.13 | 191.14 | 191.15 | 191.16 | 191.24 | 191.40 | 191.57 | 191.73 | 191.90 | 192.06 | 192.23 | 192.39 | 192.56 | |
| PROJECT ELEVATION | | | | | | | | | 190.86 | 190.36 | 190.87 | 190.89 | 190.91 | 190.93 | 190.91 | 190.89 | 190.87 | 190.36 | 190.86 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+630.00



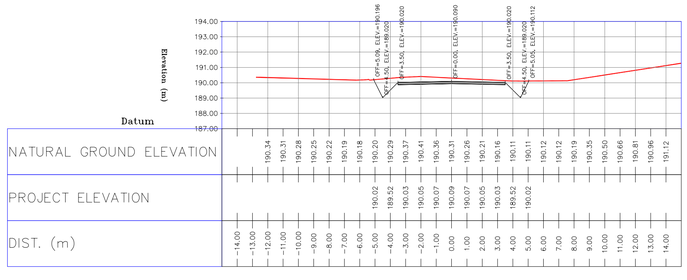

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.83 | 190.81 | 190.78 | 190.75 | 190.73 | 190.70 | 190.68 | 190.73 | 190.78 | 190.81 | 190.79 | 190.82 | 190.78 | 190.73 | 190.70 | 190.70 | 190.70 | 190.70 | 190.71 | 190.72 | 190.84 | 191.01 | 191.17 | 191.33 | 191.49 | 191.65 | 191.81 | 191.97 | |
| PROJECT ELEVATION | | | | | | | | | 190.49 | 189.99 | 190.50 | 190.52 | 190.54 | 190.56 | 190.54 | 190.52 | 190.50 | 189.99 | 190.49 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+640.00



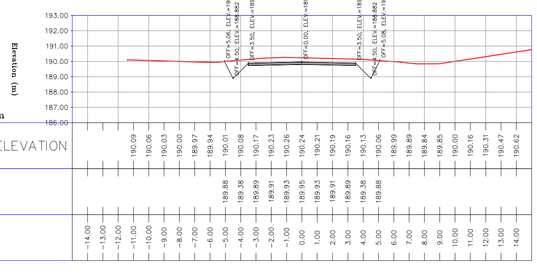

| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.48 | 190.45 | 190.42 | 190.39 | 190.36 | 190.34 | 190.31 | 190.34 | 190.34 | 190.43 | 190.49 | 190.50 | 190.45 | 190.40 | 190.35 | 190.35 | 190.27 | 190.27 | 190.28 | 190.31 | 190.47 | 190.62 | 190.78 | 190.94 | 191.09 | 191.25 | 191.40 | | |
| PROJECT ELEVATION | | | | | | | | | 190.12 | 189.62 | 190.13 | 190.15 | 190.17 | 190.19 | 190.17 | 190.15 | 190.13 | 189.62 | 190.12 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+643.47




| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.34 | 190.31 | 190.28 | 190.25 | 190.22 | 190.19 | 190.18 | 190.20 | 190.20 | 190.29 | 190.37 | 190.41 | 190.36 | 190.31 | 190.26 | 190.21 | 190.16 | 190.11 | 190.11 | 190.12 | 190.12 | 190.19 | 190.25 | 190.50 | 190.65 | 190.81 | 190.96 | 191.12 | |
| PROJECT ELEVATION | | | | | | | | | 190.02 | 189.52 | 190.03 | 190.05 | 190.07 | 190.09 | 190.07 | 190.05 | 190.03 | 189.52 | 190.02 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+650.00




| Datum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.09 | 190.06 | 190.03 | 190.00 | 189.97 | 189.94 | 189.91 | 190.01 | 190.08 | 190.17 | 190.23 | 190.26 | 190.24 | 190.21 | 190.19 | 190.16 | 190.13 | 190.06 | 189.99 | 189.89 | 189.89 | 189.84 | 189.85 | 190.00 | 190.16 | 190.31 | 190.47 | 190.62 | |
| PROJECT ELEVATION | | | | | | | | | 189.88 | 189.38 | 189.89 | 189.91 | 189.93 | 189.95 | 189.93 | 189.91 | 189.89 | 189.38 | 189.88 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

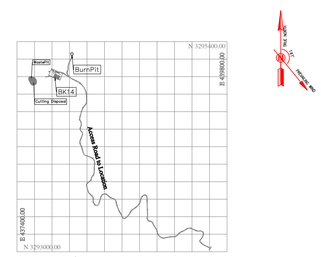
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | | | | |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| | | BY | DATE | BY | DATE |
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

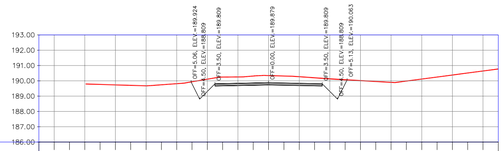
APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 58 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 58 | D01 |

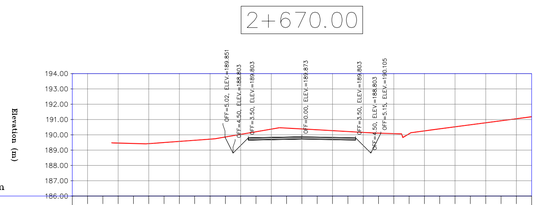
D01
TOTALLY REVISED

## 2+660.00



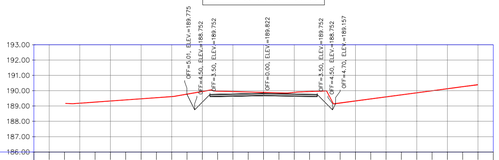

| NATURAL GROUND ELEVATION | 189.76 | 189.73 | 189.70 | 189.67 | 189.74 | 189.81 | 189.93 | 190.11 | 190.24 | 190.25 | 190.31 | 190.34 | 190.32 | 190.27 | 190.20 | 190.13 | 190.07 | 190.01 | 189.96 | 189.90 | 189.98 | 190.12 | 190.25 | 190.38 | 190.51 | 190.64 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | 189.81 | 189.31 | 189.82 | 189.84 | 189.86 | 189.88 | 189.86 | 189.84 | 189.82 | 189.31 | 189.81 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+670.00



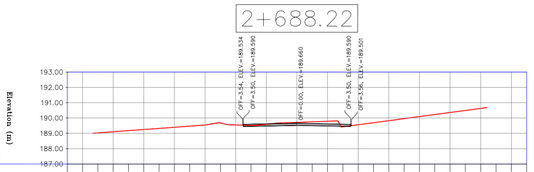

| NATURAL GROUND ELEVATION | 189.46 | 189.43 | 189.42 | 189.50 | 189.57 | 189.64 | 189.72 | 189.86 | 190.03 | 190.20 | 190.37 | 190.44 | 190.38 | 190.33 | 190.27 | 190.22 | 190.16 | 190.11 | 190.08 | 190.07 | 190.26 | 190.39 | 190.52 | 190.65 | 190.78 | 190.92 | 191.05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | 189.80 | 189.30 | 189.81 | 189.83 | 189.85 | 189.87 | 189.85 | 189.83 | 189.81 | 189.30 | 189.80 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+680.00



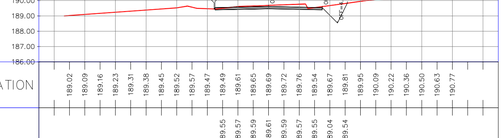

| NATURAL GROUND ELEVATION | 189.18 | 189.25 | 189.33 | 189.40 | 189.47 | 189.55 | 189.62 | 189.78 | 189.95 | 189.97 | 189.94 | 189.91 | 189.89 | 189.86 | 189.88 | 189.95 | 189.99 | 190.20 | 189.33 | 189.46 | 189.59 | 189.73 | 189.86 | 189.99 | 190.13 | 190.26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | 189.75 | 189.25 | 189.76 | 189.78 | 189.80 | 189.82 | 189.80 | 189.78 | 189.76 | 189.25 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+688.22



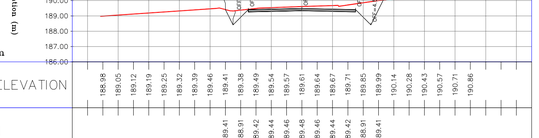

| NATURAL GROUND ELEVATION | 189.03 | 189.10 | 189.17 | 189.25 | 189.32 | 189.39 | 189.47 | 189.54 | 189.68 | 189.55 | 189.52 | 189.59 | 189.68 | 189.71 | 189.75 | 189.79 | 189.43 | 189.56 | 189.69 | 189.83 | 189.96 | 190.09 | 190.22 | 190.36 | 190.49 | 190.62 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | | | | 189.60 | 189.62 | 189.64 | 189.66 | 189.64 | 189.62 | 189.60 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.06 |

## 2+690.00



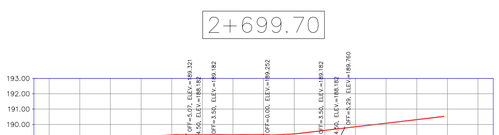

| NATURAL GROUND ELEVATION | 189.02 | 189.09 | 189.16 | 189.23 | 189.31 | 189.38 | 189.45 | 189.52 | 189.57 | 189.47 | 189.49 | 189.61 | 189.65 | 189.69 | 189.72 | 189.76 | 189.54 | 189.67 | 189.81 | 189.95 | 190.09 | 190.22 | 190.36 | 190.50 | 190.63 | 190.77 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | | | | 189.55 | 189.57 | 189.59 | 189.61 | 189.59 | 189.57 | 189.55 | 189.04 | 189.54 | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+693.96




| NATURAL GROUND ELEVATION | 188.98 | 189.05 | 189.12 | 189.19 | 189.25 | 189.32 | 189.39 | 189.46 | 189.41 | 189.38 | 189.49 | 189.54 | 189.57 | 189.61 | 189.64 | 189.67 | 189.71 | 189.85 | 189.99 | 190.14 | 190.28 | 190.43 | 190.57 | 190.71 | 190.86 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | | 189.41 | 188.91 | 189.42 | 189.44 | 189.46 | 189.46 | 189.46 | 189.42 | 188.91 | 189.41 | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+699.70




| NATURAL GROUND ELEVATION | 188.89 | 188.95 | 189.01 | 189.07 | 189.13 | 189.19 | 189.25 | 189.31 | 189.32 | 189.33 | 189.33 | 189.34 | 189.34 | 189.33 | 189.33 | 189.38 | 189.49 | 189.61 | 189.73 | 189.84 | 189.96 | 190.08 | 190.20 | 190.32 | 190.43 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | | 189.18 | 188.68 | 189.19 | 189.21 | 189.23 | 189.25 | 189.23 | 189.21 | 189.19 | 188.68 | 189.18 | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+700.00

| NATURAL GROUND ELEVATION | 188.88 | 188.94 | 189.00 | 189.06 | 189.12 | 189.18 | 189.24 | 189.30 | 189.31 | 189.31 | 189.31 | 189.32 | 189.32 | 189.33 | 189.33 | 189.31 | 189.35 | 189.47 | 189.59 | 189.70 | 189.82 | 189.94 | 190.06 | 190.18 | 190.29 | 190.41 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | | 189.17 | 188.67 | 189.18 | 189.20 | 189.22 | 189.24 | 189.22 | 189.20 | 189.18 | 188.67 | 189.17 | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

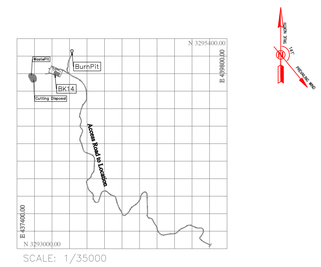
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ═══ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ═══ | GRAVEL ROAD | △ | BENCH MARK |
| - - - | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




| REV. | DESCRIPTION | BY | DATE | CHECKED | REV. APPR. |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

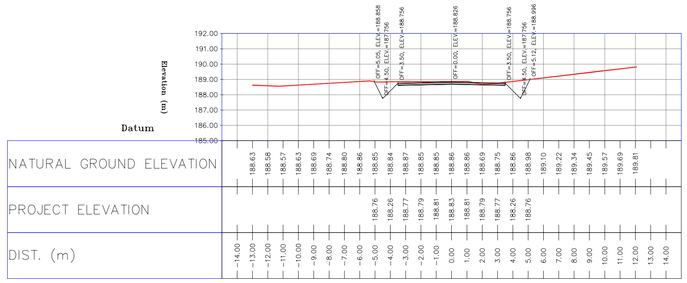
APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 59 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 59 | D01 |

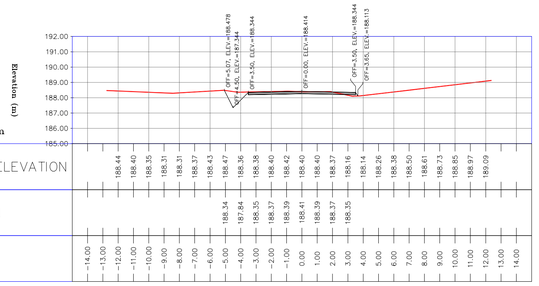
D01 TOTALLY REVISED

## 2+710.00



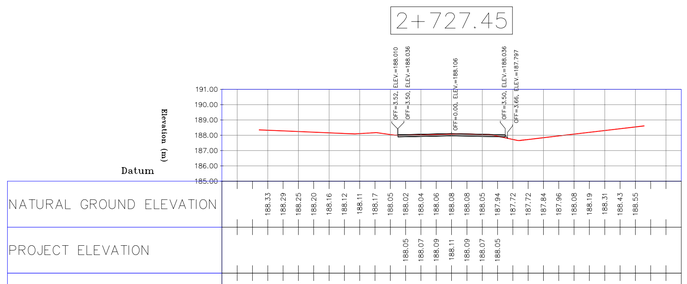

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.63 | 188.58 | 188.57 | 188.63 | 188.69 | 188.74 | 188.80 | 188.86 | 188.85 | 188.84 | 188.87 | 188.85 | 188.85 | 188.86 | 188.86 | 188.69 | 188.75 | 188.86 | 188.85 | 189.10 | 189.22 | 189.34 | 189.45 | 189.57 | 189.69 | 189.81 | | | |
| PROJECT ELEVATION | | | | | | | | 188.76 | 188.26 | 188.77 | 188.79 | 188.81 | 188.83 | 188.81 | 188.79 | 188.77 | 188.26 | 188.76 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+720.00



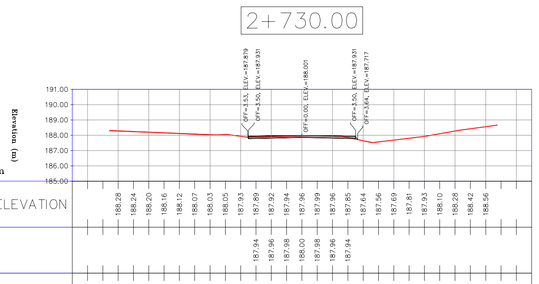

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.44 | 188.40 | 188.35 | 188.31 | 188.37 | 188.43 | 188.47 | 188.36 | 188.35 | 188.40 | 188.42 | 188.40 | 188.40 | 188.37 | 188.16 | 188.14 | 188.26 | 188.38 | 188.50 | 188.61 | 188.73 | 188.85 | 188.97 | 189.09 | | | | | |
| PROJECT ELEVATION | | | | | | | 188.34 | 187.84 | 188.35 | 188.37 | 188.39 | 188.41 | 188.39 | 188.37 | 188.35 | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+727.45



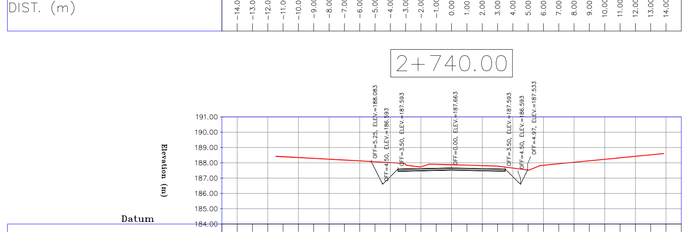

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.33 | 188.29 | 188.25 | 188.20 | 188.16 | 188.12 | 188.11 | 188.17 | 188.05 | 188.02 | 188.04 | 188.06 | 188.08 | 188.08 | 188.05 | 187.94 | 187.72 | 187.84 | 187.96 | 188.08 | 188.19 | 188.31 | 188.43 | 188.55 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 188.05 | 188.07 | 188.09 | 188.11 | 188.09 | 188.07 | 188.05 | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+730.00



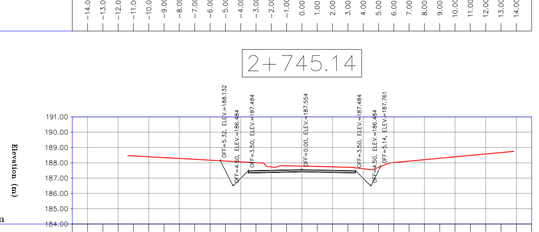

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.28 | 188.24 | 188.20 | 188.16 | 188.12 | 188.07 | 188.03 | 188.05 | 187.93 | 187.89 | 187.92 | 187.94 | 187.96 | 187.99 | 187.98 | 187.96 | 187.85 | 187.64 | 187.56 | 187.69 | 187.81 | 187.93 | 188.10 | 188.28 | 188.42 | 188.56 | | | |
| PROJECT ELEVATION | | | | | | | | | 187.94 | 187.96 | 187.98 | 188.00 | 187.98 | 187.96 | 187.94 | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+740.00



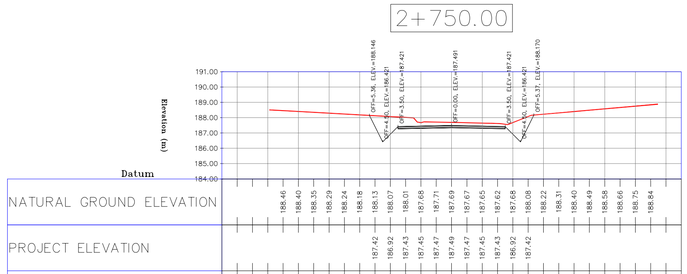

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.40 | 188.34 | 188.29 | 188.23 | 188.18 | 188.12 | 188.07 | 188.02 | 187.89 | 187.74 | 187.90 | 187.87 | 187.64 | 187.85 | 187.82 | 187.78 | 187.53 | 187.84 | 187.94 | 188.03 | 188.13 | 188.23 | 188.33 | 188.42 | 188.52 | | | | |
| PROJECT ELEVATION | | | | | | | 187.59 | 187.09 | 187.60 | 187.62 | 187.64 | 187.66 | 187.62 | 187.85 | 187.82 | 187.60 | 187.09 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+745.14



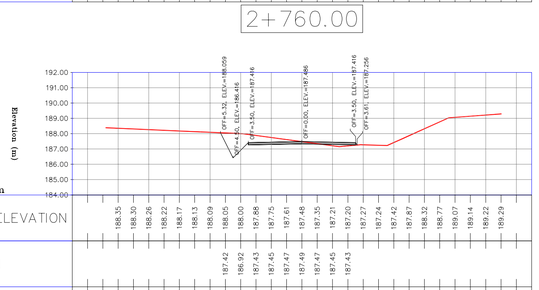

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.45 | 188.39 | 188.33 | 188.28 | 188.22 | 188.17 | 188.11 | 188.06 | 188.00 | 187.73 | 187.81 | 187.78 | 187.76 | 187.74 | 187.71 | 187.61 | 187.70 | 188.02 | 188.11 | 188.20 | 188.30 | 188.39 | 188.48 | 188.57 | 188.67 | | | | |
| PROJECT ELEVATION | | | | | | | 187.48 | 186.98 | 187.49 | 187.51 | 187.53 | 187.55 | 187.53 | 187.51 | 187.49 | 186.98 | 187.48 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+750.00



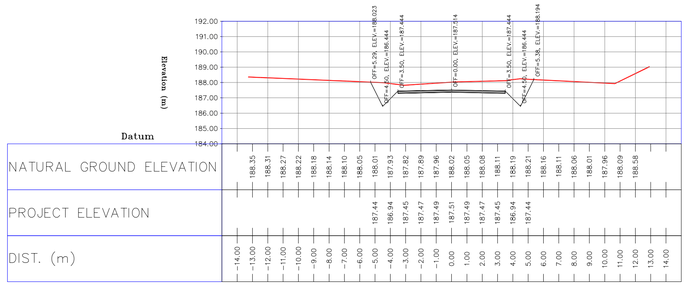

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.46 | 188.40 | 188.35 | 188.29 | 188.24 | 188.18 | 188.13 | 188.07 | 188.01 | 187.68 | 187.71 | 187.69 | 187.67 | 187.65 | 187.62 | 187.68 | 188.08 | 188.22 | 188.31 | 188.40 | 188.49 | 188.58 | 188.66 | 188.75 | 188.84 | | | | |
| PROJECT ELEVATION | | | | | | | 187.42 | 186.92 | 187.43 | 187.45 | 187.47 | 187.49 | 187.47 | 187.45 | 187.43 | 186.92 | 187.42 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+760.00



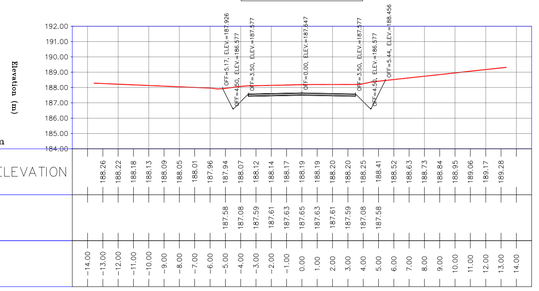

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.35 | 188.30 | 188.26 | 188.22 | 188.17 | 188.13 | 188.09 | 188.05 | 188.00 | 187.85 | 187.75 | 187.61 | 187.48 | 187.35 | 187.21 | 187.20 | 187.27 | 187.24 | 187.42 | 187.87 | 188.32 | 188.77 | 189.07 | 189.14 | 189.22 | 189.29 | | | |
| PROJECT ELEVATION | | | | | | | 187.42 | 186.92 | 187.43 | 187.45 | 187.47 | 187.49 | 187.47 | 187.45 | 187.43 | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+762.82




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.35 | 188.31 | 188.27 | 188.22 | 188.18 | 188.14 | 188.10 | 188.05 | 188.01 | 187.93 | 187.82 | 187.89 | 187.96 | 188.02 | 188.05 | 188.08 | 188.11 | 188.19 | 188.16 | 188.11 | 188.06 | 188.01 | 187.96 | 188.09 | 188.21 | 188.58 | | | |
| PROJECT ELEVATION | | | | | | | | | | 187.44 | 186.94 | 187.45 | 187.47 | 187.49 | 187.51 | 187.47 | 187.45 | 186.94 | 187.44 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+770.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.26 | 188.22 | 188.18 | 188.13 | 188.09 | 188.05 | 188.01 | 187.96 | 187.94 | 188.07 | 188.12 | 188.14 | 188.17 | 188.19 | 188.19 | 188.20 | 188.25 | 188.41 | 188.52 | 188.63 | 188.73 | 188.84 | 188.95 | 189.06 | 189.17 | 189.28 | | | |
| PROJECT ELEVATION | | | | | | | | | | 187.58 | 187.08 | 187.59 | 187.61 | 187.63 | 187.65 | 187.63 | 187.61 | 187.58 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

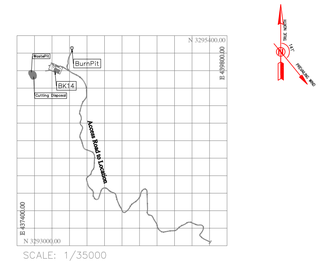
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | | BRIDGE |
| ⌒ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. |

D01 TOTALLY REVISED

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY — PEDCO

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 60 OF 90 | D01 |

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

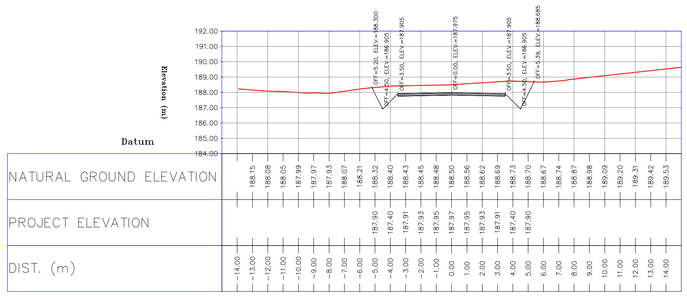
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

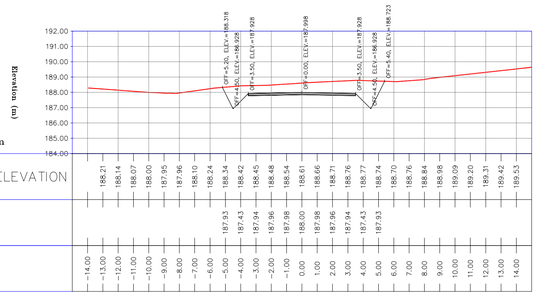
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053–073–9184 | F | 4 | S | 708209 | 60 | D01 |

## 2+780.00



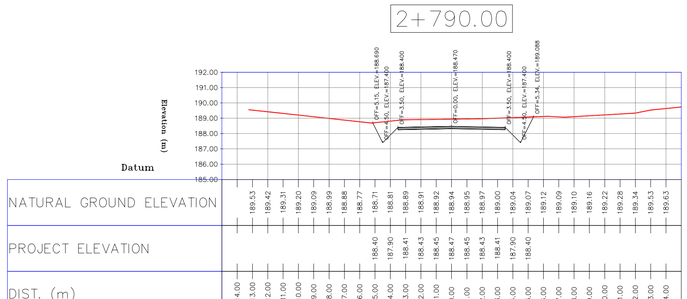

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.15 | 188.08 | 188.05 | 187.99 | 187.97 | 187.93 | 188.07 | 188.21 | 188.32 | 188.40 | 188.43 | 188.45 | 188.48 | 188.50 | 188.56 | 188.62 | 188.69 | 188.73 | 188.70 | 188.67 | 188.74 | 188.87 | 188.98 | 189.09 | 189.20 | 189.31 | 189.42 | 189.53 |
| PROJECT ELEVATION | | | | | | 187.90 | | | | 187.40 | 187.91 | 187.93 | 187.95 | 187.97 | 187.95 | 187.93 | 187.91 | 187.40 | 187.90 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+780.55



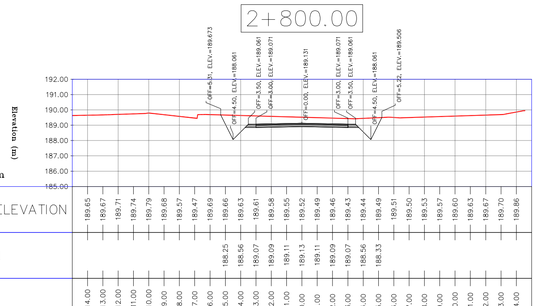

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.21 | 188.14 | 188.07 | 188.00 | 187.95 | 187.86 | 188.10 | 188.24 | 188.34 | 188.42 | 188.45 | 188.48 | 188.54 | 188.61 | 188.66 | 188.71 | 188.76 | 188.77 | 188.74 | 188.70 | 188.76 | 188.84 | 188.98 | 189.09 | 189.20 | 189.31 | 189.42 | 189.53 |
| PROJECT ELEVATION | | | | | | | | | 187.93 | 187.43 | 187.94 | 187.96 | 187.98 | 188.00 | 187.98 | 187.96 | 187.94 | 187.43 | 187.93 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+790.00



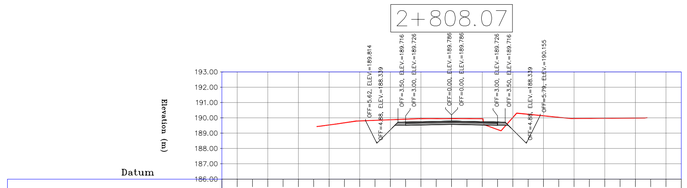

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 189.53 | 189.42 | 189.31 | 189.20 | 189.09 | 188.99 | 188.88 | 188.77 | 188.71 | 188.81 | 188.89 | 188.91 | 188.92 | 188.94 | 188.95 | 188.97 | 189.00 | 189.04 | 189.07 | 189.12 | 189.09 | 189.10 | 189.16 | 189.22 | 189.28 | 189.34 | 189.53 | 189.63 |
| PROJECT ELEVATION | | | | | | | | | 188.40 | 187.90 | 188.41 | 188.43 | 188.45 | 188.47 | 188.45 | 188.43 | 188.41 | 187.90 | 188.40 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+800.00



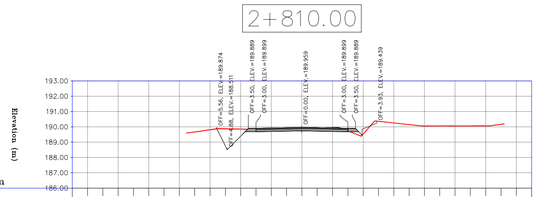

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 189.65 | 189.67 | 189.71 | 189.74 | 189.68 | 189.57 | 189.47 | 189.59 | 189.66 | 189.63 | 189.61 | 189.58 | 189.55 | 189.52 | 189.49 | 189.46 | 189.43 | 189.44 | 189.49 | 189.51 | 189.50 | 189.53 | 189.57 | 189.60 | 189.63 | 189.67 | 189.70 | 189.86 |
| PROJECT ELEVATION | | | | | | | | | 188.25 | 188.56 | 189.07 | 189.09 | 189.11 | 189.13 | 189.11 | 189.09 | 189.07 | 188.56 | 188.33 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+808.07



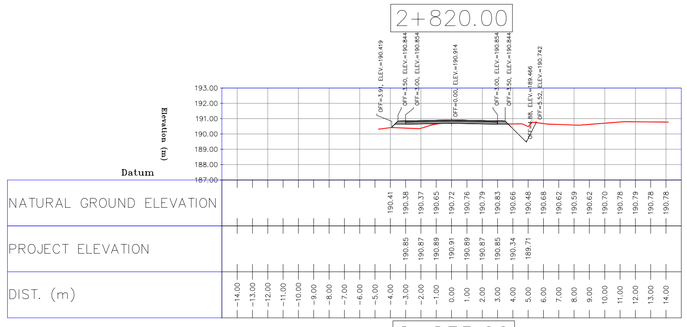

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 189.54 | 189.68 | 189.84 | 189.80 | 189.84 | 189.88 | 189.91 | 189.95 | 189.95 | 189.95 | 189.95 | 189.95 | 189.95 | 189.95 | 189.95 | 189.95 | 189.24 | 190.02 | 190.23 | 190.03 | 189.95 | 189.95 | 189.96 | 189.97 | 189.98 | 189.98 | | |
| PROJECT ELEVATION | | | | | | 188.58 | | 189.22 | 189.73 | 189.75 | 189.77 | 189.79 | 189.77 | 189.79 | 189.77 | 189.75 | 189.73 | 189.22 | 188.58 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+810.00



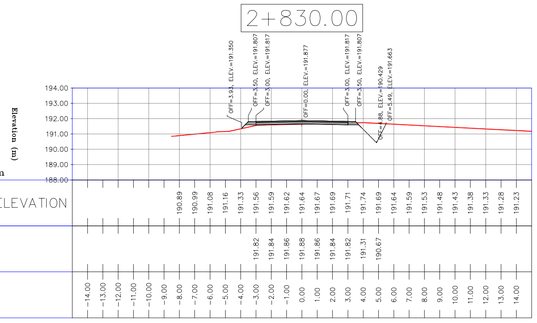

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 185.66 | 185.81 | 185.87 | 185.85 | 185.83 | 185.82 | 185.83 | 185.86 | 185.91 | 185.94 | 185.73 | 185.52 | 190.36 | 190.26 | 190.15 | 190.06 | 190.06 | 190.06 | 190.06 | 190.17 | | | | | | | | |
| PROJECT ELEVATION | | | | 188.76 | 189.39 | 189.90 | 189.92 | 189.94 | 189.96 | 189.94 | 189.92 | 189.90 | | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+820.00



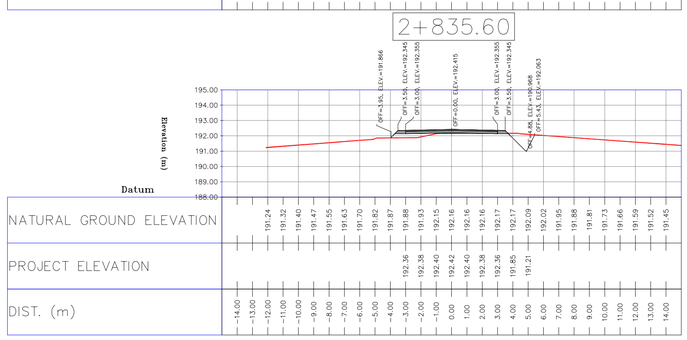

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.41 | 190.38 | 190.37 | 190.65 | 190.72 | 190.76 | 190.79 | 190.83 | 190.66 | 190.48 | 190.68 | 190.62 | 190.59 | 190.62 | 190.70 | 190.78 | 190.79 | 190.78 | 190.78 | 190.78 | | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | 190.85 | 190.87 | 190.89 | 190.91 | 190.89 | 190.87 | 190.85 | 190.84 | 190.34 | 189.71 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+830.00



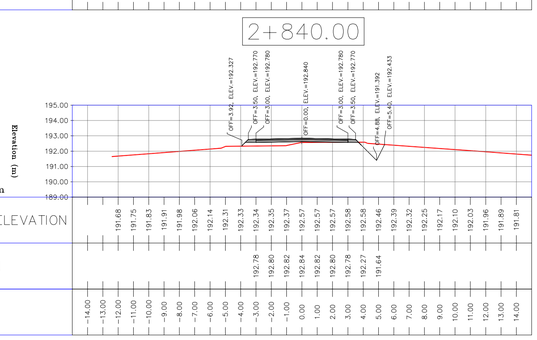

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.89 | 190.99 | 191.08 | 191.16 | 191.33 | 191.56 | 191.59 | 191.62 | 191.64 | 191.67 | 191.69 | 191.71 | 191.74 | 191.69 | 191.64 | 191.59 | 191.53 | 191.48 | 191.43 | 191.38 | 191.33 | 191.28 | 191.23 | | | | | |
| PROJECT ELEVATION | | | | | 191.82 | 191.84 | 191.86 | 191.88 | 191.86 | 191.84 | 191.82 | 191.31 | 190.67 | | | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+835.60




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 191.24 | 191.32 | 191.40 | 191.47 | 191.55 | 191.63 | 191.70 | 191.82 | 191.87 | 191.88 | 191.93 | 192.15 | 192.16 | 192.16 | 192.16 | 192.17 | 192.17 | 192.09 | 191.95 | 191.88 | 191.81 | 191.73 | 191.66 | 191.59 | 191.52 | 191.45 | | |
| PROJECT ELEVATION | | | | | | | | | | 192.36 | 192.38 | 192.40 | 192.42 | 192.40 | 192.38 | 192.36 | 191.85 | 191.21 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 2+840.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 191.68 | 191.75 | 191.83 | 191.91 | 191.98 | 192.06 | 192.14 | 192.31 | 192.33 | 192.34 | 192.35 | 192.37 | 192.57 | 192.57 | 192.57 | 192.58 | 192.58 | 192.46 | 192.39 | 192.32 | 192.25 | 192.17 | 192.10 | 192.03 | 191.96 | 191.89 | 191.81 | |
| PROJECT ELEVATION | | | | | | | | | 192.78 | 192.80 | 192.82 | 192.84 | 192.82 | 192.80 | 192.78 | 192.78 | 192.27 | 191.64 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

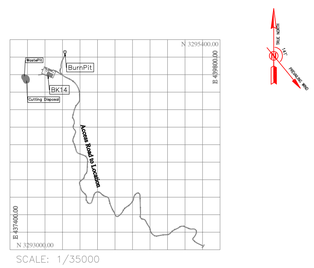
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | | BRIDGE |
| ⌒ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

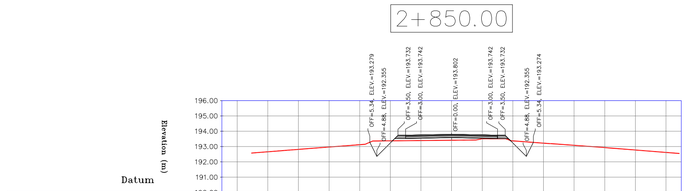
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 61 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 61 | D01 |

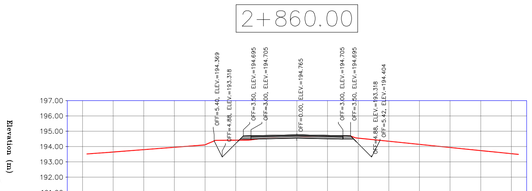
D01 TOTALLY REVISED

## 2+850.00



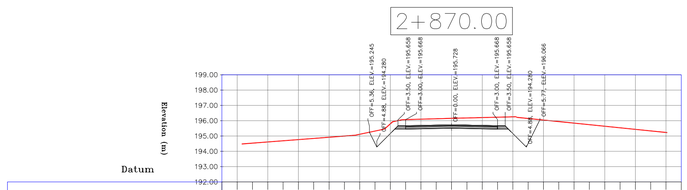

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 192.98 | |
| -13.00 | 192.66 | |
| -12.00 | 192.74 | |
| -11.00 | 192.81 | |
| -10.00 | 192.89 | |
| -9.00 | 192.97 | |
| -8.00 | 193.04 | |
| -7.00 | 193.12 | |
| -6.00 | 193.36 | 192.60 |
| -5.00 | 193.37 | 193.23 |
| -4.00 | 193.38 | 193.74 |
| -3.00 | 193.39 | 193.76 |
| -2.00 | 193.40 | 193.78 |
| -1.00 | 193.41 | 193.80 |
| 0.00 | 193.42 | 193.78 |
| 1.00 | 193.51 | 193.76 |
| 2.00 | 193.51 | 193.74 |
| 3.00 | 193.51 | 193.23 |
| 4.00 | 193.37 | 192.60 |
| 5.00 | 193.30 | 193.23 |
| 6.00 | 193.23 | 193.15 |
| 7.00 | 193.15 | 193.08 |
| 8.00 | 193.08 | 193.01 |
| 9.00 | 193.01 | 192.94 |
| 10.00 | 192.94 | 192.86 |
| 11.00 | 192.86 | 192.78 |
| 12.00 | 192.78 | 192.70 |
| 13.00 | 192.70 | 192.62 |
| 14.00 | 192.62 | |

## 2+860.00



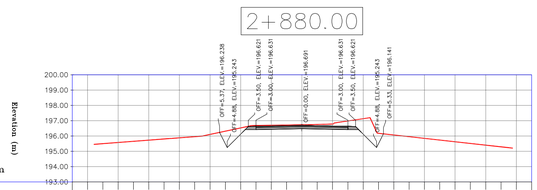

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 193.57 | |
| -13.00 | 193.64 | |
| -12.00 | 193.72 | |
| -11.00 | 193.80 | |
| -10.00 | 193.87 | |
| -9.00 | 193.95 | |
| -8.00 | 194.03 | |
| -7.00 | 194.11 | |
| -6.00 | 194.41 | 193.56 |
| -5.00 | 194.42 | 194.20 |
| -4.00 | 194.44 | 194.71 |
| -3.00 | 194.57 | 194.73 |
| -2.00 | 194.59 | 194.75 |
| -1.00 | 194.62 | 194.77 |
| 0.00 | 194.64 | 194.75 |
| 1.00 | 194.66 | 194.73 |
| 2.00 | 194.69 | 194.71 |
| 3.00 | 194.50 | 194.20 |
| 4.00 | 194.45 | 193.56 |
| 5.00 | 194.35 | 194.20 |
| 6.00 | 194.24 | 194.71 |
| 7.00 | 194.14 | 194.73 |
| 8.00 | 194.04 | 194.75 |
| 9.00 | 193.94 | 194.77 |
| 10.00 | 193.84 | 194.75 |
| 11.00 | 193.74 | 194.73 |
| 12.00 | 193.64 | 194.71 |
| 13.00 | 193.54 | 194.20 |
| 14.00 | | 193.56 |

## 2+870.00



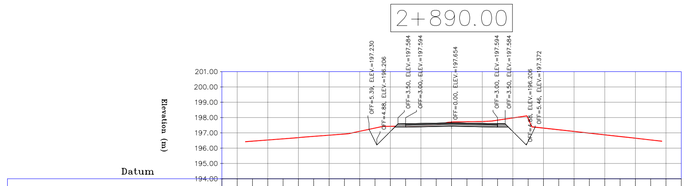

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 194.53 | |
| -13.00 | 194.61 | |
| -12.00 | 194.69 | |
| -11.00 | 194.76 | |
| -10.00 | 194.84 | |
| -9.00 | 194.92 | |
| -8.00 | 195.00 | |
| -7.00 | 195.11 | |
| -6.00 | 195.32 | 194.53 |
| -5.00 | 195.79 | 195.16 |
| -4.00 | 196.07 | 195.67 |
| -3.00 | 196.10 | 195.69 |
| -2.00 | 196.13 | 195.71 |
| -1.00 | 196.15 | 195.73 |
| 0.00 | 196.18 | 195.71 |
| 1.00 | 196.20 | 195.69 |
| 2.00 | 196.23 | 195.67 |
| 3.00 | 196.25 | 195.16 |
| 4.00 | 196.14 | 194.53 |
| 5.00 | 196.04 | |
| 6.00 | 195.94 | |
| 7.00 | 195.84 | |
| 8.00 | 195.74 | |
| 9.00 | 195.64 | |
| 10.00 | 195.54 | |
| 11.00 | 195.44 | |
| 12.00 | 195.33 | |
| 13.00 | 195.23 | |
| 14.00 | | |

## 2+880.00



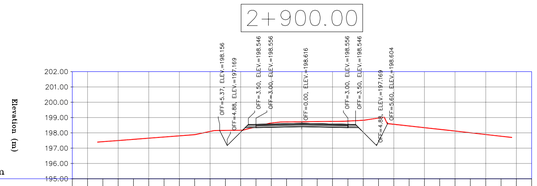

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 195.50 | |
| -13.00 | 195.57 | |
| -12.00 | 195.65 | |
| -11.00 | 195.73 | |
| -10.00 | 195.80 | |
| -9.00 | 195.88 | |
| -8.00 | 195.96 | |
| -7.00 | 196.10 | |
| -6.00 | 196.32 | 195.49 |
| -5.00 | 196.53 | 196.12 |
| -4.00 | 196.69 | 196.63 |
| -3.00 | 196.70 | 196.65 |
| -2.00 | 196.72 | 196.67 |
| -1.00 | 196.73 | 196.69 |
| 0.00 | 196.75 | 196.67 |
| 1.00 | 196.78 | 196.65 |
| 2.00 | 196.98 | 196.63 |
| 3.00 | 197.13 | 196.12 |
| 4.00 | 196.18 | 195.49 |
| 5.00 | 196.07 | |
| 6.00 | 195.96 | |
| 7.00 | 195.85 | |
| 8.00 | 195.73 | |
| 9.00 | 195.62 | |
| 10.00 | 195.51 | |
| 11.00 | 195.40 | |
| 12.00 | 195.29 | |
| 13.00 | | |
| 14.00 | | |

## 2+890.00



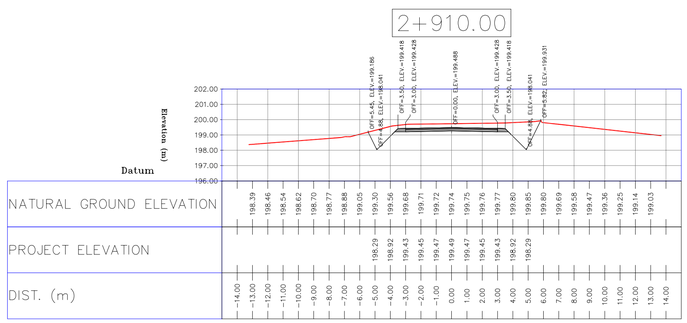

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 196.46 | |
| -13.00 | 196.54 | |
| -12.00 | 196.61 | |
| -11.00 | 196.69 | |
| -10.00 | 196.77 | |
| -9.00 | 196.85 | |
| -8.00 | 196.92 | |
| -7.00 | 197.10 | |
| -6.00 | 197.31 | 196.45 |
| -5.00 | 197.42 | 197.08 |
| -4.00 | 197.44 | 197.59 |
| -3.00 | 197.45 | 197.61 |
| -2.00 | 197.49 | 197.63 |
| -1.00 | 197.71 | 197.65 |
| 0.00 | 197.73 | 197.63 |
| 1.00 | 197.74 | 197.61 |
| 2.00 | 197.82 | 197.59 |
| 3.00 | 197.97 | 197.08 |
| 4.00 | 197.92 | 196.45 |
| 5.00 | 197.20 | |
| 6.00 | 197.09 | |
| 7.00 | 196.98 | |
| 8.00 | 196.87 | |
| 9.00 | 196.76 | |
| 10.00 | 196.65 | |
| 11.00 | 196.54 | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 2+900.00



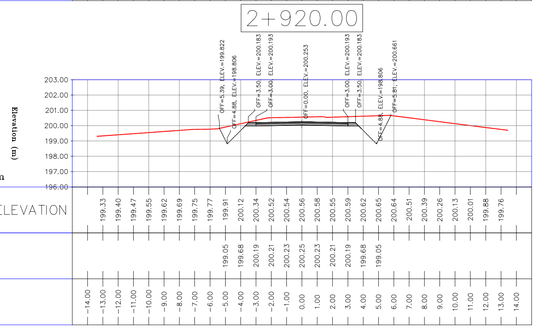

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 197.42 | |
| -13.00 | 197.50 | |
| -12.00 | 197.58 | |
| -11.00 | 197.66 | |
| -10.00 | 197.73 | |
| -9.00 | 197.81 | |
| -8.00 | 197.89 | |
| -7.00 | 198.10 | |
| -6.00 | 198.16 | 197.41 |
| -5.00 | 198.17 | 198.05 |
| -4.00 | 198.40 | 198.56 |
| -3.00 | 198.64 | 198.58 |
| -2.00 | 198.71 | 198.60 |
| -1.00 | 198.73 | 198.62 |
| 0.00 | 198.74 | 198.60 |
| 1.00 | 198.75 | 198.58 |
| 2.00 | 198.77 | 198.56 |
| 3.00 | 198.82 | 198.05 |
| 4.00 | 198.97 | 197.41 |
| 5.00 | 198.56 | |
| 6.00 | 198.45 | |
| 7.00 | 198.34 | |
| 8.00 | 198.23 | |
| 9.00 | 198.12 | |
| 10.00 | 198.01 | |
| 11.00 | 197.89 | |
| 12.00 | 197.78 | |
| 13.00 | | |
| 14.00 | | |

## 2+910.00



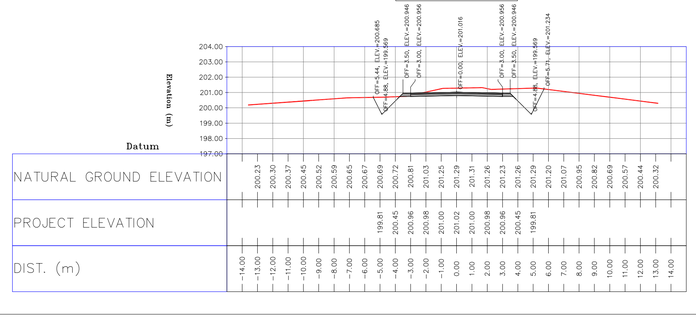

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 198.39 | |
| -13.00 | 198.46 | |
| -12.00 | 198.54 | |
| -11.00 | 198.62 | |
| -10.00 | 198.70 | |
| -9.00 | 198.77 | |
| -8.00 | 198.88 | |
| -7.00 | 199.05 | |
| -6.00 | 199.30 | 198.29 |
| -5.00 | 199.56 | 198.92 |
| -4.00 | 199.68 | 199.43 |
| -3.00 | 199.71 | 199.45 |
| -2.00 | 199.72 | 199.47 |
| -1.00 | 199.74 | 199.49 |
| 0.00 | 199.75 | 199.47 |
| 1.00 | 199.76 | 199.45 |
| 2.00 | 199.77 | 199.43 |
| 3.00 | 199.80 | 198.92 |
| 4.00 | 199.85 | 198.29 |
| 5.00 | 199.80 | |
| 6.00 | 199.69 | |
| 7.00 | 199.58 | |
| 8.00 | 199.47 | |
| 9.00 | 199.36 | |
| 10.00 | 199.25 | |
| 11.00 | 199.14 | |
| 12.00 | 199.03 | |
| 13.00 | | |
| 14.00 | | |

## 2+920.00



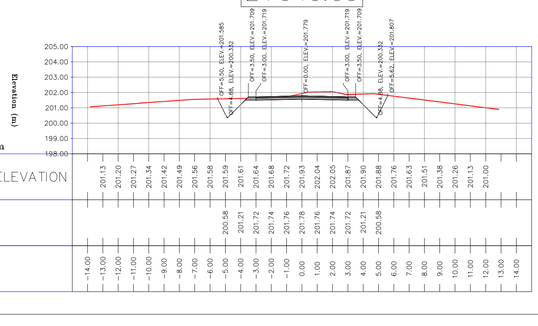

| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 199.33 | |
| -13.00 | 199.40 | |
| -12.00 | 199.47 | |
| -11.00 | 199.55 | |
| -10.00 | 199.62 | |
| -9.00 | 199.69 | |
| -8.00 | 199.75 | |
| -7.00 | 199.77 | |
| -6.00 | 199.91 | 199.05 |
| -5.00 | 200.12 | 199.68 |
| -4.00 | 200.34 | 200.19 |
| -3.00 | 200.52 | 200.21 |
| -2.00 | 200.54 | 200.23 |
| -1.00 | 200.56 | 200.25 |
| 0.00 | 200.58 | 200.23 |
| 1.00 | 200.55 | 200.21 |
| 2.00 | 200.59 | 200.19 |
| 3.00 | 200.62 | 199.68 |
| 4.00 | 200.65 | 199.05 |
| 5.00 | 200.64 | |
| 6.00 | 200.51 | |
| 7.00 | 200.39 | |
| 8.00 | 200.26 | |
| 9.00 | 200.13 | |
| 10.00 | 200.01 | |
| 11.00 | 199.88 | |
| 12.00 | 199.76 | |
| 13.00 | | |
| 14.00 | | |

## 2+930.00




| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 200.23 | |
| -13.00 | 200.30 | |
| -12.00 | 200.37 | |
| -11.00 | 200.45 | |
| -10.00 | 200.52 | |
| -9.00 | 200.59 | |
| -8.00 | 200.65 | |
| -7.00 | 200.67 | |
| -6.00 | 200.69 | 199.81 |
| -5.00 | 200.72 | 200.45 |
| -4.00 | 200.81 | 200.96 |
| -3.00 | 201.03 | 200.98 |
| -2.00 | 201.25 | 201.00 |
| -1.00 | 201.29 | 201.02 |
| 0.00 | 201.31 | 201.00 |
| 1.00 | 201.26 | 200.98 |
| 2.00 | 201.23 | 200.96 |
| 3.00 | 201.26 | 200.45 |
| 4.00 | 201.29 | 199.81 |
| 5.00 | 201.20 | |
| 6.00 | 201.07 | |
| 7.00 | 200.95 | |
| 8.00 | 200.82 | |
| 9.00 | 200.69 | |
| 10.00 | 200.57 | |
| 11.00 | 200.44 | |
| 12.00 | 200.32 | |
| 13.00 | | |
| 14.00 | | |

## 2+940.00




| DIST. (m) | NATURAL GROUND ELEVATION | PROJECT ELEVATION |
|---|---|---|
| -14.00 | 201.13 | |
| -13.00 | 201.20 | |
| -12.00 | 201.27 | |
| -11.00 | 201.34 | |
| -10.00 | 201.42 | |
| -9.00 | 201.49 | |
| -8.00 | 201.56 | |
| -7.00 | 201.58 | |
| -6.00 | 201.59 | 200.58 |
| -5.00 | 201.61 | 201.21 |
| -4.00 | 201.64 | 201.72 |
| -3.00 | 201.68 | 201.74 |
| -2.00 | 201.72 | 201.76 |
| -1.00 | 201.76 | 201.78 |
| 0.00 | 201.93 | 201.76 |
| 1.00 | 202.04 | 201.74 |
| 2.00 | 202.05 | 201.72 |
| 3.00 | 201.87 | 201.72 |
| 4.00 | 201.90 | 201.21 |
| 5.00 | 201.88 | 200.58 |
| 6.00 | 201.76 | |
| 7.00 | 201.63 | |
| 8.00 | 201.51 | |
| 9.00 | 201.38 | |
| 10.00 | 201.26 | |
| 11.00 | 201.13 | |
| 12.00 | 201.00 | |
| 13.00 | | |
| 14.00 | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

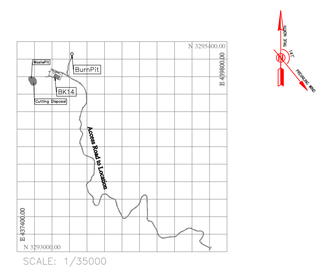
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | △ | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

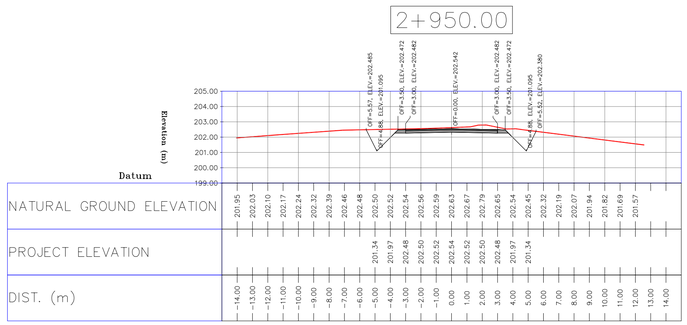
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 62 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 62 | D01 |

## 2+950.00


Elevation (m)
Datum
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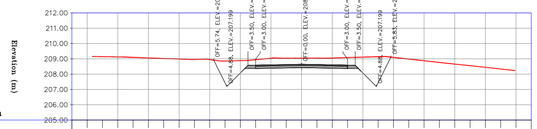
OFF=4.88, ELEV=201.095
OFF=3.50, ELEV=202.472
OFF=3.50, ELEV=202.462
OFF=0.00, ELEV=202.542
OFF=3.50, ELEV=202.482
OFF=3.50, ELEV=202.472
OFF=4.88, ELEV=201.095
OFF=5.55, ELEV=202.380

| | | |

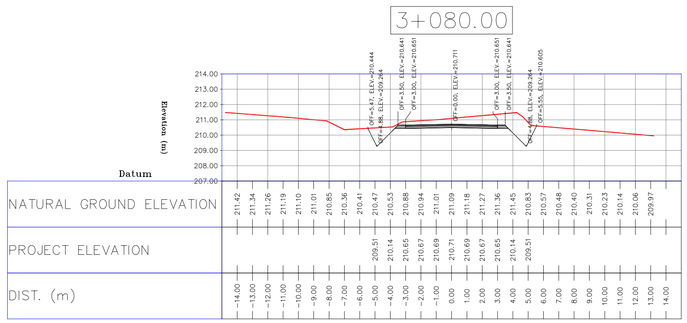
## 3+030.00




Datum

| | | |

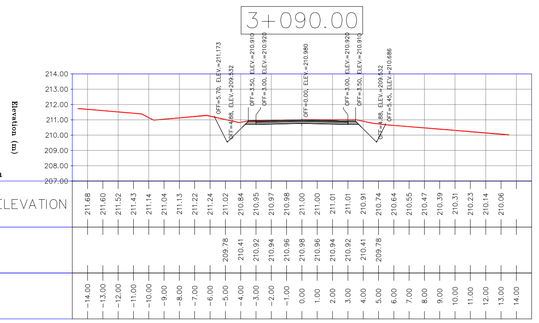
## 3+080.00




Datum

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 211.42 | 211.34 | 211.26 | 211.19 | 211.10 | 211.01 | 210.85 | 210.36 | 210.41 | 210.47 | 210.53 | 210.88 | 210.94 | 211.01 | 211.09 | 211.18 | 211.27 | 211.36 | 211.45 | 210.83 | 210.57 | 210.48 | 210.40 | 210.31 | 210.23 | 210.14 | 210.06 | 209.97 | | |
| PROJECT ELEVATION | | | | | | | | | | 209.51 | 210.14 | 210.65 | 210.67 | 210.69 | 210.71 | 210.69 | 210.67 | 210.65 | 210.14 | 209.51 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+090.00




Datum

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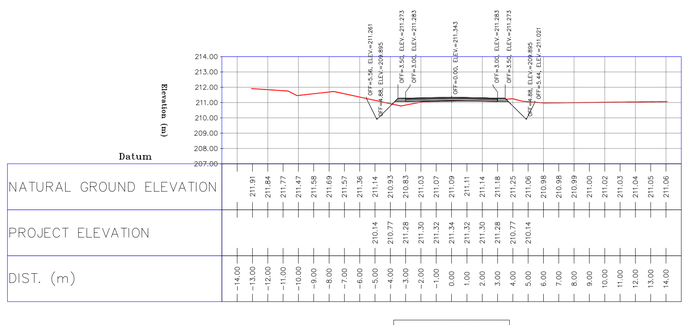
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 211.68 | 211.60 | 211.52 | 211.43 | 211.14 | 211.04 | 211.13 | 211.22 | 211.24 | 211.02 | 210.84 | 210.95 | 210.97 | 210.98 | 210.96 | 210.98 | 211.00 | 211.00 | 211.01 | 210.91 | 210.74 | 210.64 | 210.55 | 210.47 | 210.39 | 210.31 | 210.23 | 210.14 | 210.06 | |
| PROJECT ELEVATION | | | | | | | | | | 209.78 | 210.41 | 210.92 | 210.94 | 210.96 | 210.98 | 210.96 | 210.94 | 210.92 | 210.41 | 209.78 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+098.58




Datum

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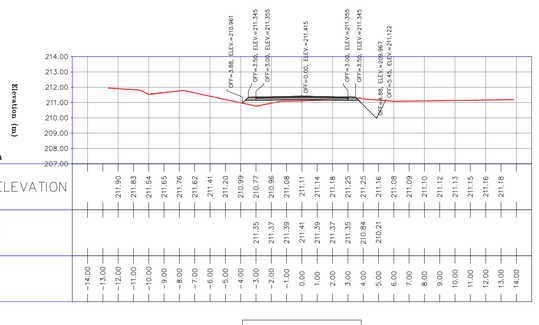
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 211.91 | 211.84 | 211.77 | 211.47 | 211.58 | 211.69 | 211.57 | 211.36 | 211.14 | 210.93 | 210.83 | 211.03 | 211.07 | 211.09 | 211.11 | 211.14 | 211.18 | 211.25 | 211.06 | 210.98 | 210.98 | 210.99 | 211.00 | 211.02 | 211.03 | 211.04 | 211.05 | 211.06 | | |
| PROJECT ELEVATION | | | | | | | | | 210.14 | 210.77 | 211.28 | 211.30 | 211.32 | 211.34 | 211.32 | 211.30 | 211.28 | 210.77 | 210.14 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+100.00




Datum

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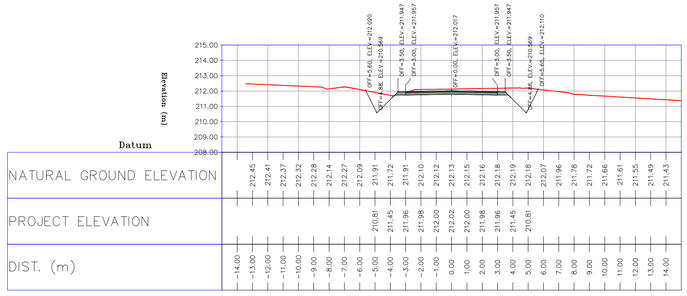
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 211.90 | 211.83 | 211.54 | 211.65 | 211.76 | 211.62 | 211.41 | 211.20 | 210.99 | 210.77 | 210.96 | 211.08 | 211.11 | 211.14 | 211.18 | 211.25 | 211.25 | 211.16 | 211.08 | 211.09 | 211.10 | 211.12 | 211.13 | 211.15 | 211.16 | 211.18 | | | | |
| PROJECT ELEVATION | | | | | | | | | 211.35 | 211.37 | 211.39 | 211.41 | 211.39 | 211.37 | 211.35 | 210.84 | 210.21 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+110.00




Datum

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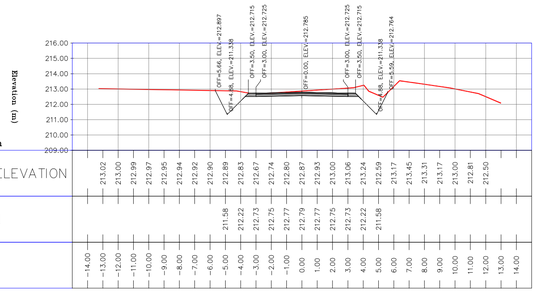
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 212.45 | 212.41 | 212.37 | 212.32 | 212.28 | 212.14 | 212.27 | 212.09 | 211.91 | 211.72 | 211.91 | 212.10 | 212.12 | 212.13 | 212.15 | 212.16 | 212.18 | 212.19 | 212.18 | 212.07 | 211.96 | 211.78 | 211.72 | 211.66 | 211.61 | 211.55 | 211.49 | 211.43 | | |
| PROJECT ELEVATION | | | | | | | | | 210.81 | 211.45 | 211.96 | 211.98 | 212.00 | 212.02 | 212.00 | 211.98 | 211.96 | 211.45 | 210.81 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+120.00




Datum

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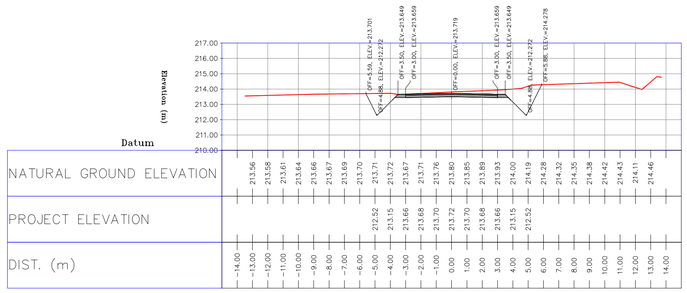
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 213.02 | 213.00 | 212.99 | 212.97 | 212.95 | 212.94 | 212.92 | 212.90 | 212.89 | 212.83 | 212.67 | 212.74 | 212.80 | 212.87 | 212.93 | 213.00 | 213.06 | 213.24 | 212.59 | 213.17 | 213.45 | 213.31 | 213.17 | 213.00 | 212.81 | 212.50 | | | | |
| PROJECT ELEVATION | | | | | | | | | 211.58 | 212.22 | 212.73 | 212.75 | 212.77 | 212.79 | 212.77 | 212.75 | 212.73 | 212.22 | 211.58 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+130.00




Datum

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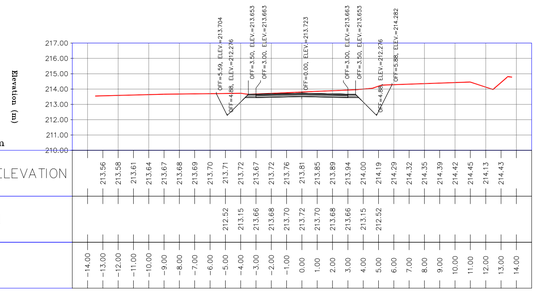
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 213.56 | 213.58 | 213.61 | 213.64 | 213.66 | 213.67 | 213.69 | 213.70 | 213.71 | 213.72 | 213.67 | 213.71 | 213.76 | 213.80 | 213.85 | 213.89 | 213.93 | 214.00 | 214.19 | 214.28 | 214.32 | 214.35 | 214.38 | 214.42 | 214.43 | 214.11 | 214.46 | | | |
| PROJECT ELEVATION | | | | | | | | | 212.52 | 213.15 | 213.66 | 213.68 | 213.70 | 213.72 | 213.70 | 213.68 | 213.66 | 213.15 | 212.52 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+130.04




Datum

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 213.56 | 213.58 | 213.61 | 213.64 | 213.67 | 213.68 | 213.69 | 213.70 | 213.71 | 213.72 | 213.67 | 213.68 | 213.72 | 213.76 | 213.81 | 213.85 | 213.89 | 213.94 | 214.00 | 214.19 | 214.29 | 214.32 | 214.35 | 214.39 | 214.42 | 214.45 | 214.13 | 214.43 | | |
| PROJECT ELEVATION | | | | | | | | | 212.52 | 213.15 | 213.66 | 213.68 | 213.70 | 213.72 | 213.70 | 213.68 | 213.66 | 213.15 | 212.52 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

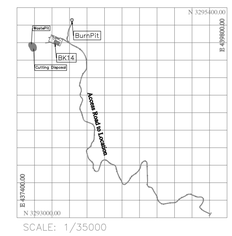
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◁ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

| | | CHECKED | REV. APPR. |
|---|---|---|---|


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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N.I.S.O.C./ FIELDS


PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

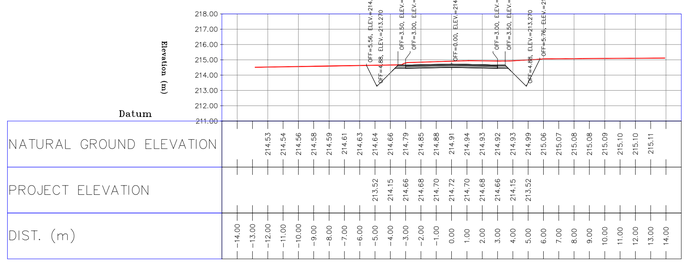
D01
TOTALLY REVISED

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 65 OF 90 | D01 |

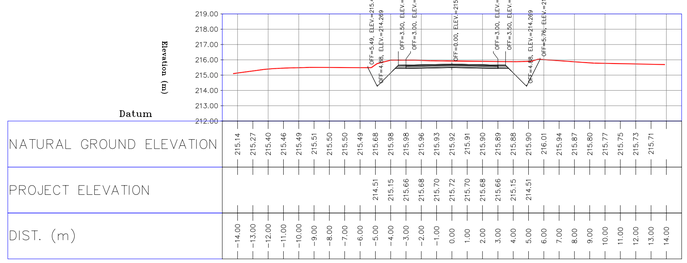
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 65 | D01 |

## 3+140.00



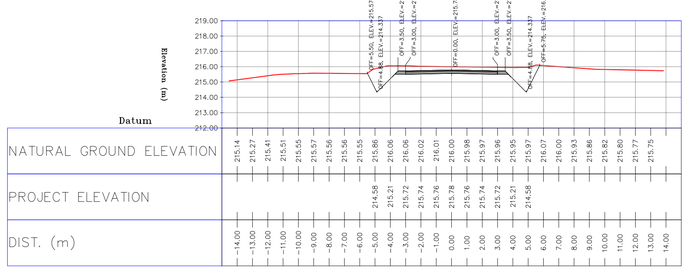

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 214.53 | 214.54 | 214.56 | 214.58 | 214.59 | 214.61 | 214.63 | 214.64 | 214.66 | 214.79 | 214.85 | 214.88 | 214.91 | 214.94 | 214.93 | 214.92 | 214.93 | 214.99 | 215.06 | 215.07 | 215.08 | 215.08 | 215.09 | 215.10 | 215.10 | 215.11 | | |
| PROJECT ELEVATION | | | | | | | | 213.52 | 214.15 | 214.66 | 214.68 | 214.70 | 214.72 | 214.70 | 214.68 | 214.66 | 214.15 | 213.52 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+150.00



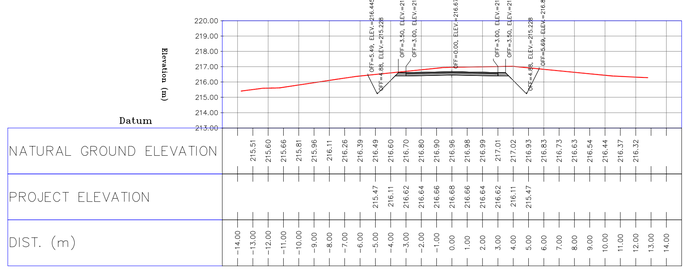

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.14 | 215.27 | 215.40 | 215.46 | 215.49 | 215.51 | 215.50 | 215.49 | 215.68 | 215.98 | 215.98 | 215.96 | 215.93 | 215.92 | 215.91 | 215.90 | 215.89 | 215.88 | 215.90 | 216.01 | 215.94 | 215.87 | 215.80 | 215.77 | 215.75 | 215.73 | 215.71 | |
| PROJECT ELEVATION | | | | | | | | 214.51 | 215.15 | 215.66 | 215.68 | 215.70 | 215.72 | 215.70 | 215.68 | 215.66 | 215.15 | 214.51 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+150.68



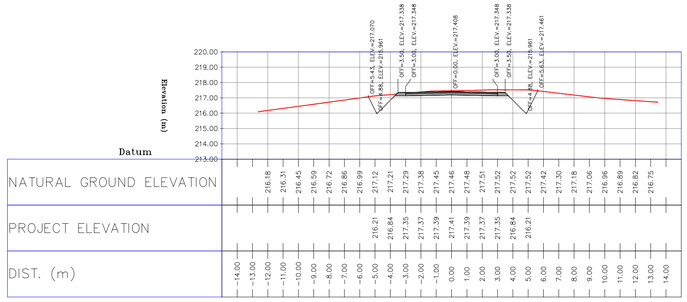

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.14 | 215.27 | 215.41 | 215.51 | 215.55 | 215.57 | 215.56 | 215.55 | 215.86 | 216.06 | 216.06 | 216.02 | 216.01 | 216.00 | 215.98 | 215.97 | 215.96 | 215.97 | 216.07 | 216.00 | 215.93 | 215.88 | 215.82 | 215.80 | 215.77 | 215.75 | | |
| PROJECT ELEVATION | | | | | | | | 214.58 | 215.21 | 215.72 | 215.74 | 215.76 | 215.78 | 215.76 | 215.74 | 215.72 | 215.21 | 214.58 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+160.00



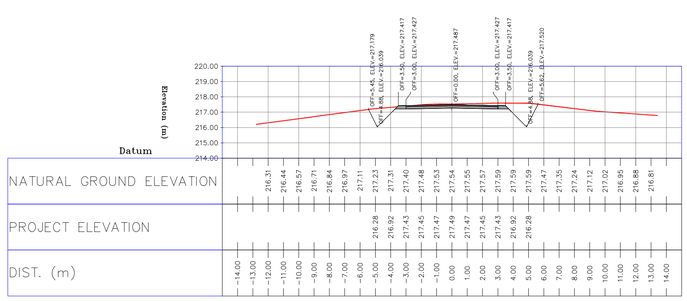

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.51 | 215.60 | 215.66 | 215.81 | 215.96 | 216.11 | 216.28 | 216.39 | 216.49 | 216.60 | 216.70 | 216.80 | 216.90 | 216.96 | 216.98 | 216.99 | 217.01 | 217.02 | 216.93 | 216.83 | 216.73 | 216.63 | 216.54 | 216.44 | 216.37 | 216.32 | | |
| PROJECT ELEVATION | | | | | | | | 215.47 | 216.11 | 216.62 | 216.64 | 216.66 | 216.68 | 216.66 | 216.64 | 216.62 | 216.11 | 215.47 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+170.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.18 | 216.31 | 216.45 | 216.59 | 216.72 | 216.86 | 216.99 | 217.12 | 217.21 | 217.29 | 217.38 | 217.45 | 217.46 | 217.48 | 217.51 | 217.52 | 217.52 | 217.52 | 217.42 | 217.30 | 217.18 | 217.06 | 216.96 | 216.89 | 216.82 | 216.75 | | |
| PROJECT ELEVATION | | | | | | | | 216.21 | 216.84 | 217.35 | 217.37 | 217.39 | 217.41 | 217.39 | 217.37 | 217.35 | 216.84 | 216.21 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+171.32

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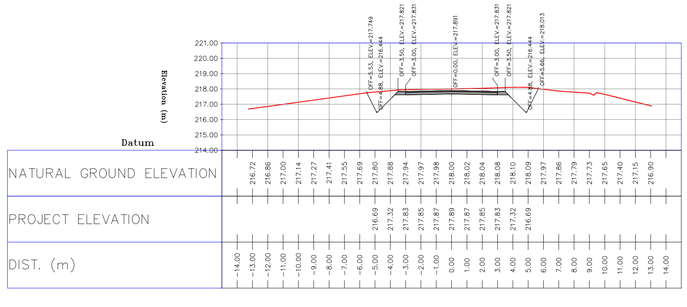
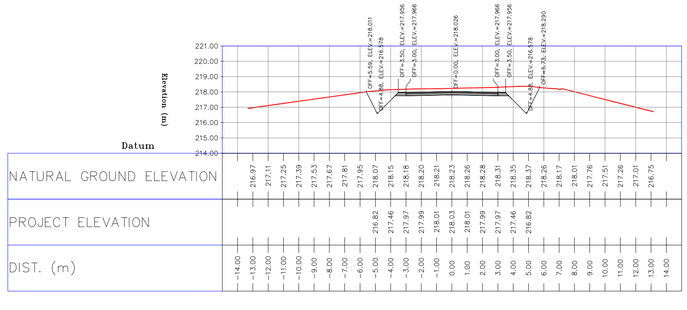
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.31 | 216.44 | 216.57 | 216.71 | 216.84 | 216.97 | 217.11 | 217.23 | 217.31 | 217.40 | 217.48 | 217.53 | 217.54 | 217.55 | 217.57 | 217.59 | 217.59 | 217.59 | 217.47 | 217.35 | 217.24 | 217.12 | 217.02 | 216.95 | 216.88 | 216.81 | | |
| PROJECT ELEVATION | | | | | | | | 216.28 | 216.92 | 217.43 | 217.45 | 217.47 | 217.49 | 217.47 | 217.45 | 217.43 | 216.92 | 216.28 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+180.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.72 | 216.86 | 217.00 | 217.14 | 217.27 | 217.41 | 217.55 | 217.69 | 217.80 | 217.88 | 217.94 | 217.97 | 217.98 | 218.00 | 218.02 | 218.04 | 218.08 | 218.10 | 218.09 | 217.97 | 217.86 | 217.73 | 217.65 | 217.60 | 217.51 | 217.15 | 216.90 | |
| PROJECT ELEVATION | | | | | | | | 216.69 | 217.32 | 217.83 | 217.85 | 217.87 | 217.89 | 217.87 | 217.85 | 217.83 | 217.32 | 216.69 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+184.45




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.97 | 217.11 | 217.25 | 217.39 | 217.53 | 217.67 | 217.81 | 217.95 | 218.07 | 218.15 | 218.18 | 218.20 | 218.21 | 218.23 | 218.26 | 218.28 | 218.31 | 218.35 | 218.37 | 218.26 | 218.17 | 218.01 | 217.78 | 217.51 | 217.26 | 217.01 | 216.75 | |
| PROJECT ELEVATION | | | | | | | | 216.82 | 217.46 | 217.97 | 217.99 | 218.01 | 218.03 | 218.01 | 218.01 | 217.99 | 217.97 | 217.46 | 216.82 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

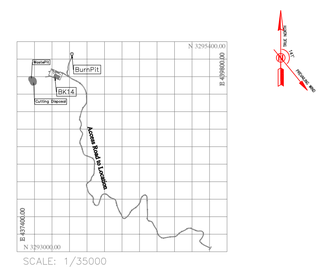
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ═══ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ═══ | GRAVEL ROAD | △ | BENCH MARK |
| - - - | PROPOSED ROAD | | BRIDGE |
| ⌇ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout – BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

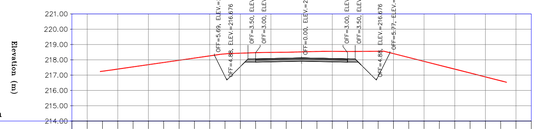
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 66 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 66 | D01 |

D01
TOTALLY REVISED

## 3+190.00

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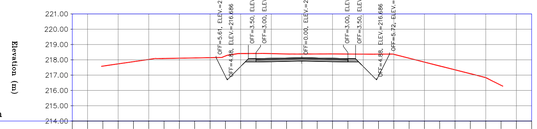
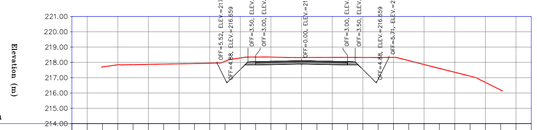
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.26 | 217.40 | 217.54 | 217.68 | 217.83 | 217.97 | 218.11 | 218.26 | 218.38 | 218.43 | 218.47 | 218.48 | 218.50 | 218.52 | 218.54 | 218.55 | 218.55 | 218.56 | 218.40 | 218.15 | 217.90 | 217.64 | 217.39 | 217.14 | 216.89 | 216.64 | | | |
| PROJECT ELEVATION | | | | | | | | | | 216.92 | 217.55 | 218.06 | 218.08 | 218.10 | 218.12 | 218.08 | 218.06 | 217.55 | 216.92 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+197.57



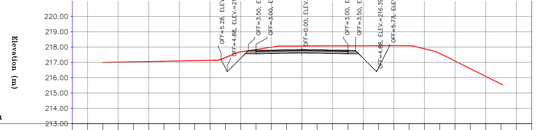

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.59 | 217.74 | 217.88 | 218.03 | 218.09 | 218.12 | 218.14 | 218.25 | 218.41 | 218.42 | 218.41 | 218.38 | 218.38 | 218.38 | 218.38 | 218.38 | 218.38 | 218.37 | 218.37 | 218.36 | 218.11 | 217.85 | 217.60 | 217.35 | 217.10 | 216.84 | 216.34 | | |
| PROJECT ELEVATION | | | | | | | | | | 216.93 | 217.56 | 218.07 | 218.09 | 218.11 | 218.13 | 218.11 | 218.09 | 217.56 | 216.93 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+200.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.70 | 217.84 | 217.85 | 217.87 | 217.89 | 217.91 | 217.93 | 217.94 | 218.07 | 218.29 | 218.35 | 218.34 | 218.32 | 218.32 | 218.32 | 218.33 | 218.33 | 218.32 | 218.31 | 218.32 | 218.11 | 217.86 | 217.61 | 217.35 | 217.10 | 216.69 | 216.19 | | |
| PROJECT ELEVATION | | | | | | | | | | 216.90 | 217.54 | 218.05 | 218.07 | 218.09 | 218.11 | 218.09 | 218.07 | 217.54 | 216.90 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+210.00

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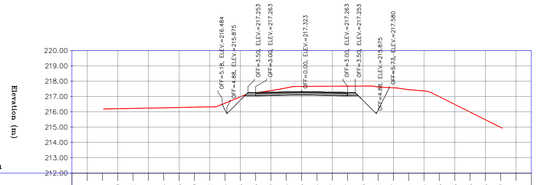
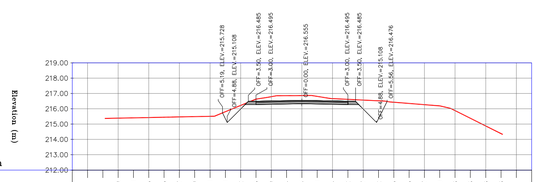
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 217.00 | 217.02 | 217.04 | 217.06 | 217.07 | 217.09 | 217.11 | 217.13 | 217.31 | 217.68 | 217.84 | 217.99 | 217.80 | 217.82 | 217.84 | 218.07 | 218.07 | 217.82 | 217.80 | 218.08 | 218.08 | 218.09 | 218.09 | 217.88 | 217.59 | 217.09 | 216.59 | | |
| PROJECT ELEVATION | | | | | | | | | | 216.64 | 217.27 | 217.78 | 217.80 | 217.82 | 217.84 | 217.82 | 217.80 | 217.78 | 217.27 | 216.64 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+220.00



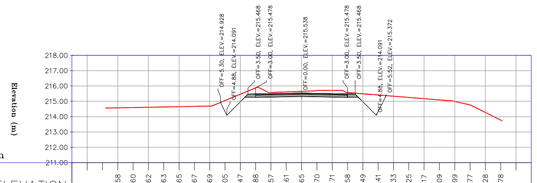

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 216.20 | 216.22 | 216.24 | 216.26 | 216.28 | 216.30 | 216.32 | 216.56 | 216.98 | 217.23 | 217.39 | 217.56 | 217.65 | 217.66 | 217.67 | 217.67 | 217.68 | 217.62 | 217.57 | 217.44 | 217.36 | 216.98 | 216.48 | 215.98 | 215.48 | 214.99 | | | |
| PROJECT ELEVATION | | | | | | | | | | 216.12 | 216.75 | 217.26 | 217.28 | 217.30 | 217.32 | 217.30 | 217.28 | 216.75 | 216.12 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+230.00



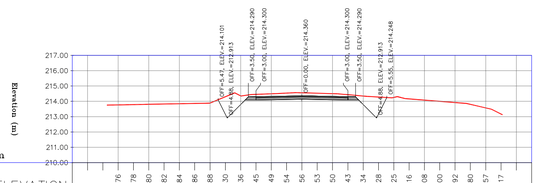

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 215.39 | 215.41 | 215.43 | 215.45 | 215.47 | 215.49 | 215.51 | 215.81 | 216.22 | 216.63 | 216.79 | 216.86 | 216.86 | 216.86 | 216.81 | 216.66 | 216.62 | 216.57 | 216.52 | 216.43 | 216.35 | 216.27 | 216.19 | 215.88 | 215.38 | 214.88 | 214.38 | | |
| PROJECT ELEVATION | | | | | | | | | | 215.35 | 215.99 | 216.50 | 216.52 | 216.54 | 216.56 | 216.54 | 216.52 | 216.50 | 215.99 | 215.35 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+240.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 214.58 | 214.60 | 214.62 | 214.63 | 214.65 | 214.67 | 214.69 | 215.05 | 215.47 | 215.88 | 215.48 | 215.57 | 215.61 | 215.65 | 215.70 | 215.71 | 215.58 | 215.49 | 215.41 | 215.25 | 215.17 | 215.09 | 214.99 | 214.77 | 214.28 | 213.78 | | | |
| PROJECT ELEVATION | | | | | | | | | 214.34 | 214.97 | 215.48 | 215.50 | 215.52 | 215.54 | 215.52 | 215.50 | 215.48 | 214.97 | 214.34 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+250.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 213.76 | 213.78 | 213.80 | 213.82 | 213.84 | 213.86 | 213.88 | 214.20 | 214.36 | 214.30 | 214.45 | 214.49 | 214.54 | 214.54 | 214.56 | 214.53 | 214.50 | 214.43 | 214.34 | 214.28 | 214.25 | 214.16 | 214.08 | 214.00 | 213.92 | 213.80 | 213.57 | 213.17 | |
| PROJECT ELEVATION | | | | | | | | 213.16 | 213.79 | 214.30 | 214.32 | 214.34 | 214.34 | 214.36 | 214.34 | 214.32 | 214.30 | 213.79 | 213.16 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

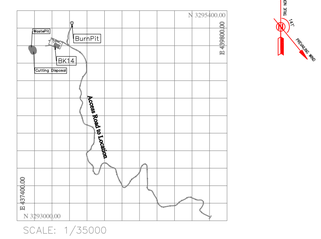
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ═══ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ═══ | GRAVEL ROAD | △ | BENCH MARK |
| - - - | PROPOSED ROAD | | BRIDGE |
| ⌒ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

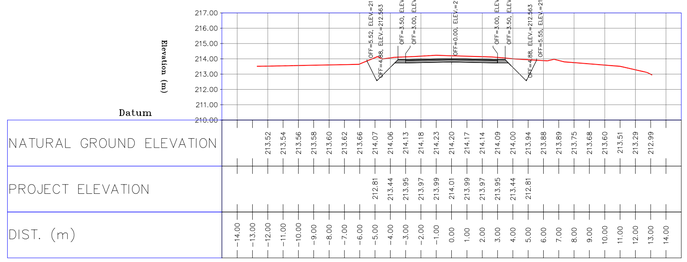
APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 67 OF 90 | D01 |

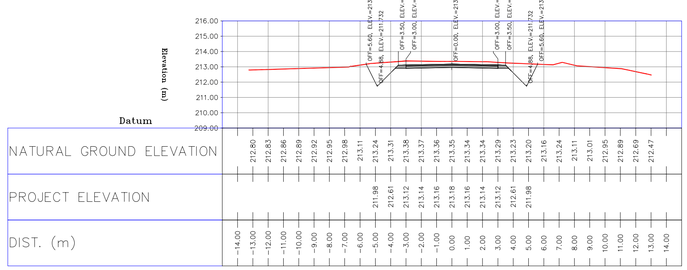
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 67 | D01 |

D01
TOTALLY REVISED

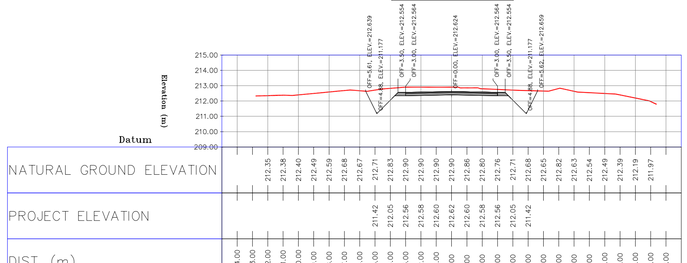
## 3+252.96



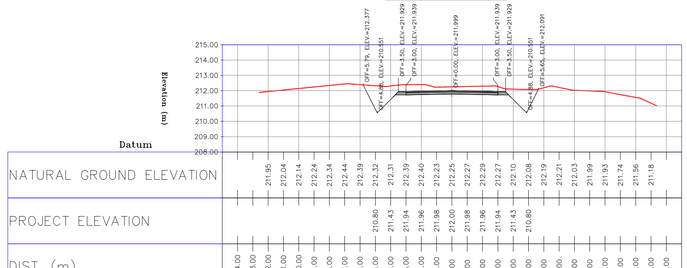

## 3+260.00



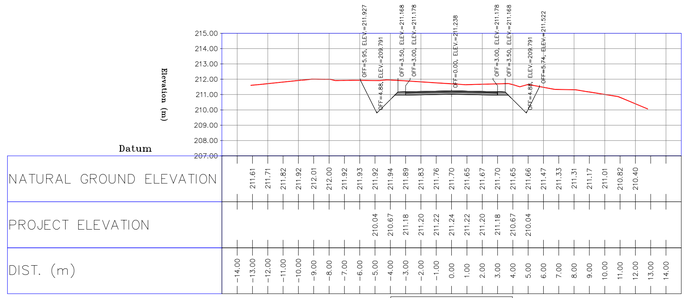

## 3+264.70



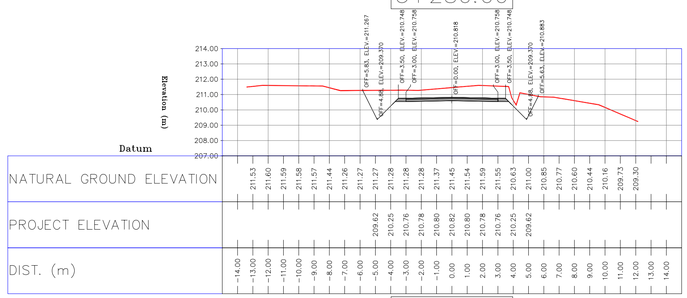

## 3+270.00



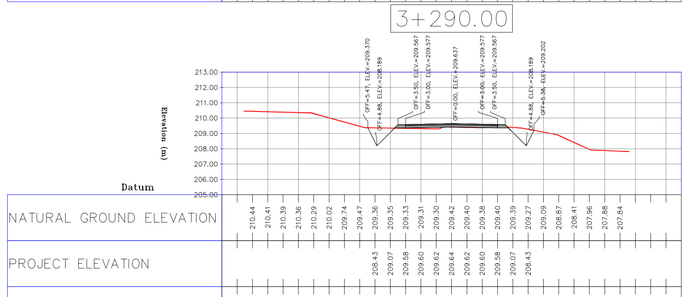

## 3+276.44



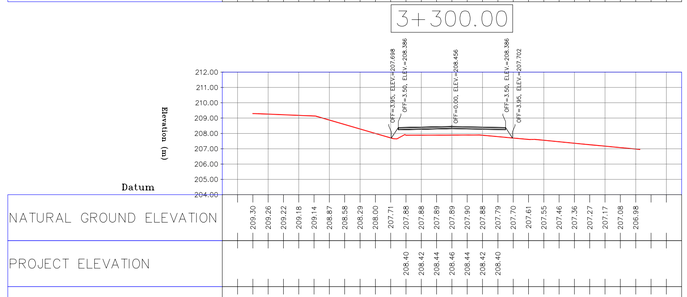

## 3+280.00




## 3+290.00




## 3+300.00

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### LEGEND

| | | | |
|---|---|---|---|
| | WELL LOCATION | | CANAL |
| | WELL | | RIVER |
| | SITE | | WATER COURSE |
| | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
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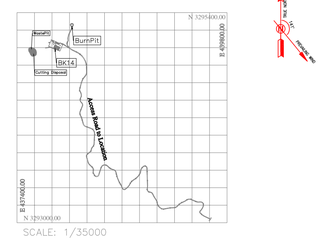
### KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

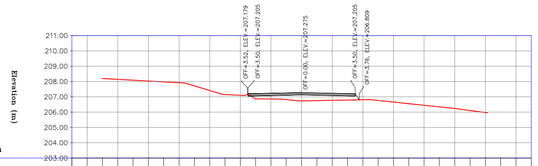
D01
TOTALLY REVISED

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 68 OF 90 | D01 |

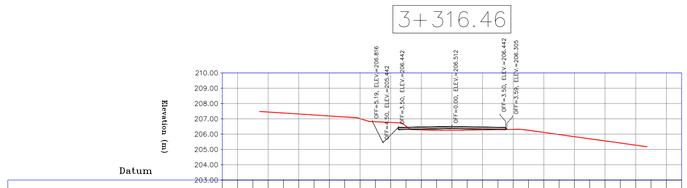
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 68 | D01 |

## 3+310.00



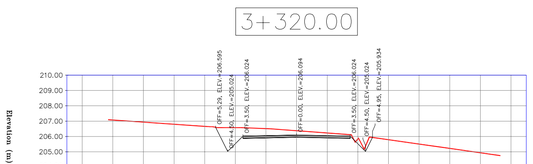

| | |
|---|---|
| NATURAL GROUND ELEVATION | 208.19 208.14 208.08 208.03 207.97 207.92 207.71 207.41 207.14 207.10 206.87 206.86 206.82 206.76 206.74 206.76 206.78 206.79 206.81 206.76 206.66 206.55 206.45 206.35 206.24 206.11 205.98 |
| PROJECT ELEVATION | 207.22 207.24 207.26 207.28 207.26 207.24 207.22 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 3+316.46



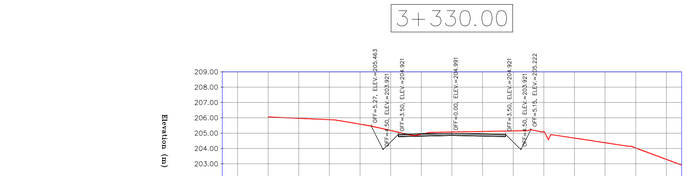

| | |
|---|---|
| NATURAL GROUND ELEVATION | 207.44 207.38 207.31 207.25 207.19 207.12 207.01 206.81 206.76 206.53 206.28 206.26 206.26 206.27 206.28 206.30 206.31 206.25 206.11 205.98 205.84 205.70 205.56 205.42 205.28 |
| PROJECT ELEVATION | 206.44 205.94 206.47 206.49 206.51 206.49 206.47 206.45 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 3+320.00



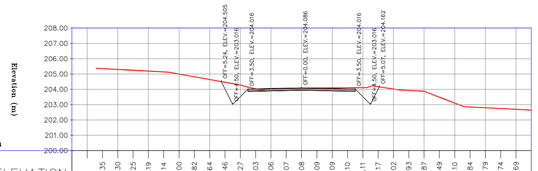

| | |
|---|---|
| NATURAL GROUND ELEVATION | 207.07 207.00 206.93 206.87 206.80 206.73 206.66 206.58 206.58 206.55 206.51 206.45 206.37 206.30 206.23 206.16 205.85 205.83 205.79 205.64 205.50 205.36 205.22 205.08 204.94 204.79 |
| PROJECT ELEVATION | 206.02 205.52 206.03 206.05 206.07 206.09 206.07 206.05 206.03 205.52 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 3+330.00



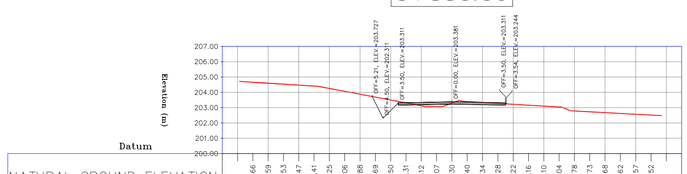

| | |
|---|---|
| NATURAL GROUND ELEVATION | 206.07 206.01 205.97 205.92 205.88 205.76 205.59 205.40 205.17 204.95 204.83 204.95 204.97 204.99 205.07 205.09 205.11 205.13 205.15 205.18 205.13 204.82 204.67 204.52 204.37 204.22 204.03 203.66 203.39 |
| PROJECT ELEVATION | 204.92 204.42 204.93 204.95 204.97 204.99 204.97 204.95 204.93 204.42 204.92 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 3+340.00



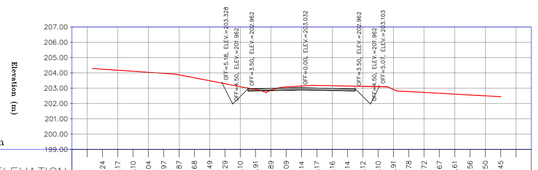

| | |
|---|---|
| NATURAL GROUND ELEVATION | 205.35 205.30 205.25 205.19 205.14 205.00 204.82 204.64 204.46 204.27 204.03 204.06 204.07 204.08 204.09 204.09 204.10 204.11 204.17 204.02 203.93 203.87 203.49 203.10 202.84 202.79 202.74 202.69 |
| PROJECT ELEVATION | 204.02 203.52 204.03 204.05 204.07 204.09 204.07 204.05 204.03 203.52 204.02 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 3+350.00



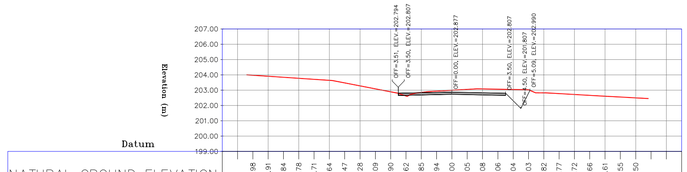

| | |
|---|---|
| NATURAL GROUND ELEVATION | 204.66 204.59 204.53 204.47 204.41 204.25 204.06 203.88 203.69 203.50 203.31 203.12 203.07 203.30 203.40 203.36 203.34 203.28 203.22 203.16 203.10 203.04 202.78 202.73 202.68 202.62 202.57 202.52 |
| PROJECT ELEVATION | 203.31 202.81 203.32 203.34 203.36 203.38 203.36 203.34 203.32 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 3+356.48




| | |
|---|---|
| NATURAL GROUND ELEVATION | 204.24 204.17 204.10 204.04 203.97 203.87 203.68 203.49 203.29 203.10 202.91 202.89 203.09 203.14 203.17 203.16 203.14 203.12 202.91 202.78 202.72 202.67 202.61 202.56 202.50 202.45 |
| PROJECT ELEVATION | 202.96 202.46 202.97 202.99 203.01 203.03 203.01 202.99 202.97 202.46 202.96 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

## 3+360.00




| | |
|---|---|
| NATURAL GROUND ELEVATION | 203.98 203.91 203.84 203.78 203.71 203.64 203.47 203.28 203.09 202.90 202.62 202.85 202.94 203.00 203.05 203.08 203.06 203.04 203.03 202.82 202.77 202.72 202.66 202.61 202.55 202.50 |
| PROJECT ELEVATION | 202.82 202.84 202.86 202.85 202.86 202.84 202.82 202.31 202.81 |
| DIST. (m) | -14.00 -13.00 -12.00 -11.00 -10.00 -9.00 -8.00 -7.00 -6.00 -5.00 -4.00 -3.00 -2.00 -1.00 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 |

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3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:
- HORIZONTAL COORDINATE SYSTEM: WGS84/UTM ZONE 39
- ELLIPSOID : WORLD GEODETIC SYSTEM 1984 (WGS84)
- MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR (UTM)
- VERTICAL DATUM: MSL

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ~ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| - - - | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN

SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 69 OF 90 | D01 |

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

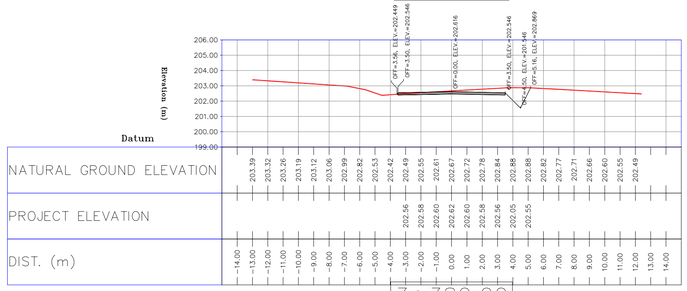
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

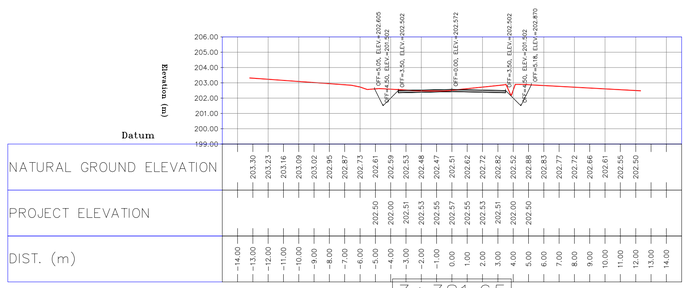
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 69 | D01 |

## 3+368.01



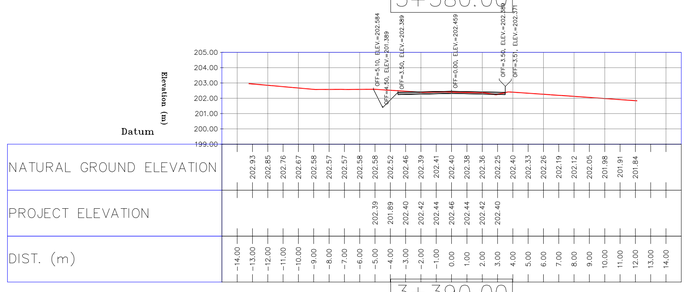

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.39 | 203.32 | 203.26 | 203.19 | 203.12 | 203.06 | 202.99 | 202.82 | 202.53 | 202.42 | 202.49 | 202.55 | 202.58 | 202.61 | 202.67 | 202.72 | 202.78 | 202.84 | 202.88 | 202.88 | 202.82 | 202.77 | 202.71 | 202.66 | 202.60 | 202.55 | 202.49 | |
| PROJECT ELEVATION | | | | | | | | | | 202.56 | 202.58 | 202.60 | 202.62 | 202.60 | 202.72 | 202.58 | 202.96 | 202.05 | 202.55 | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+370.00



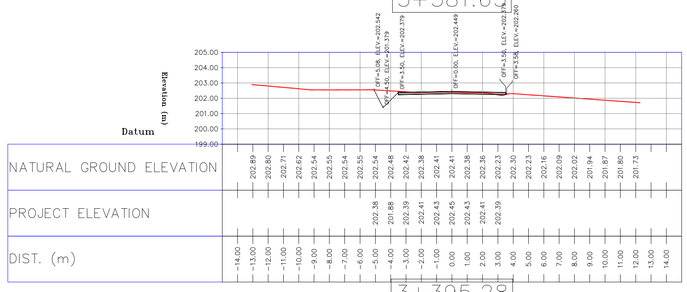

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 203.30 | 203.23 | 203.16 | 203.09 | 203.02 | 202.95 | 202.87 | 202.73 | 202.61 | 202.59 | 202.53 | 202.48 | 202.47 | 202.51 | 202.62 | 202.72 | 202.82 | 202.52 | 202.88 | 202.83 | 202.72 | 202.66 | 202.61 | 202.55 | 202.50 | | | |
| PROJECT ELEVATION | | | | | | | | | 202.50 | 202.00 | 202.51 | 202.53 | 202.53 | 202.55 | 202.57 | 202.55 | 202.53 | 202.51 | 202.00 | 202.50 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+380.00



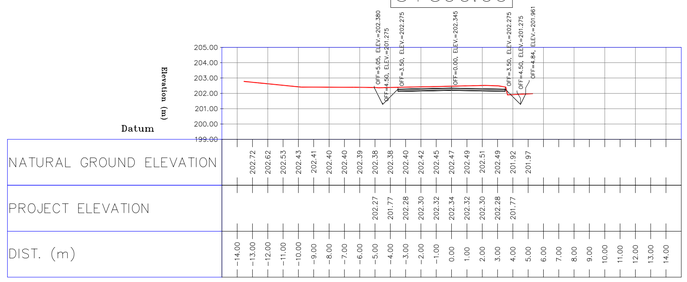

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.93 | 202.85 | 202.76 | 202.67 | 202.58 | 202.57 | 202.57 | 202.58 | 202.58 | 202.52 | 202.46 | 202.39 | 202.41 | 202.40 | 202.38 | 202.36 | 202.25 | 202.40 | 202.33 | 202.26 | 202.19 | 202.12 | 202.05 | 201.98 | 201.91 | 201.84 | | |
| PROJECT ELEVATION | | | | | | | | | 202.39 | 201.89 | 202.40 | 202.44 | 202.42 | 202.46 | 202.44 | 202.42 | 202.40 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+381.65



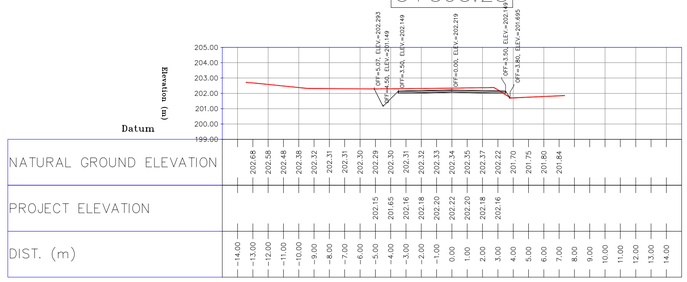

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.89 | 202.80 | 202.71 | 202.62 | 202.54 | 202.55 | 202.54 | 202.54 | 202.48 | 202.42 | 202.38 | 202.41 | 202.41 | 202.38 | 202.36 | 202.23 | 202.30 | 202.23 | 202.16 | 202.09 | 202.02 | 201.94 | 201.87 | 201.80 | 201.73 | | | |
| PROJECT ELEVATION | | | | | | | | | 202.36 | 201.88 | 202.39 | 202.42 | 202.41 | 202.43 | 202.45 | 202.43 | 202.41 | 202.39 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+390.00



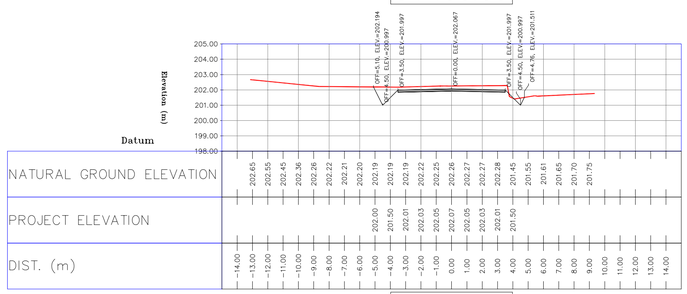

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.72 | 202.62 | 202.53 | 202.43 | 202.41 | 202.40 | 202.40 | 202.39 | 202.38 | 202.38 | 202.40 | 202.42 | 202.45 | 202.47 | 202.49 | 202.51 | 202.49 | 201.92 | 201.97 | | | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 202.27 | 201.77 | 202.38 | 202.40 | 202.30 | 202.32 | 202.34 | 202.32 | 202.30 | 202.28 | 201.77 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+395.20



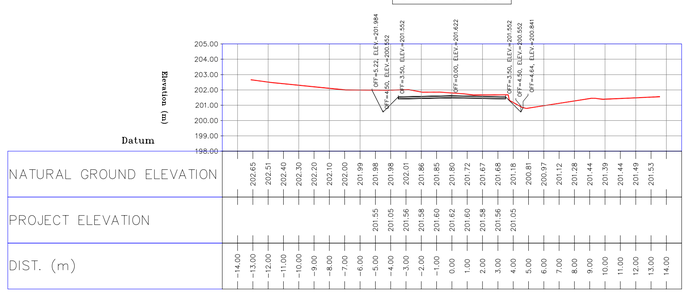

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.68 | 202.58 | 202.48 | 202.38 | 202.32 | 202.31 | 202.31 | 202.30 | 202.29 | 202.30 | 202.31 | 202.32 | 202.33 | 202.34 | 202.35 | 202.37 | 202.22 | 201.70 | 201.75 | 201.80 | 201.84 | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | 202.15 | 201.65 | 202.16 | 202.18 | 202.20 | 202.22 | 202.20 | 202.18 | 202.16 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+400.00



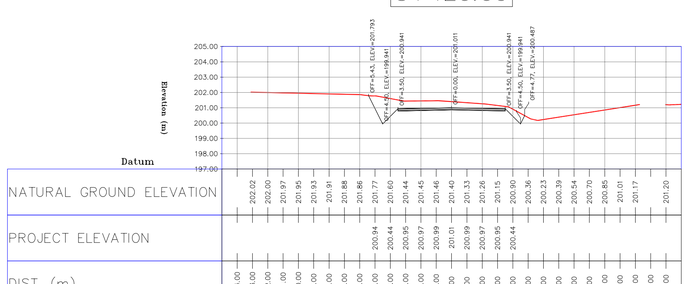

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.65 | 202.55 | 202.45 | 202.36 | 202.26 | 202.22 | 202.20 | 202.19 | 202.19 | 202.19 | 202.22 | 202.25 | 202.26 | 202.27 | 202.27 | 202.28 | 201.45 | 201.55 | 201.61 | 201.65 | 201.70 | 201.75 | | | | | | |
| PROJECT ELEVATION | | | | | | | | | 202.00 | 201.50 | 202.01 | 202.03 | 202.05 | 202.07 | 202.05 | 202.03 | 202.01 | 201.50 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+410.00



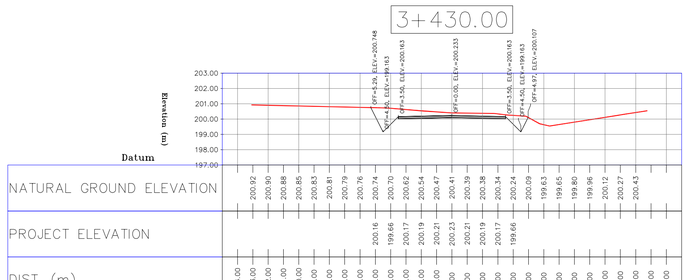

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.65 | 202.51 | 202.40 | 202.30 | 202.20 | 202.10 | 202.00 | 201.99 | 201.98 | 201.98 | 202.01 | 201.86 | 201.85 | 201.62 | 201.72 | 201.67 | 201.68 | 201.18 | 200.81 | 200.97 | 201.12 | 201.28 | 201.44 | 201.39 | 201.44 | 201.49 | 201.53 | |
| PROJECT ELEVATION | | | | | | | | | 201.55 | 201.05 | 201.56 | 201.58 | 201.60 | 201.62 | 201.60 | 201.58 | 201.56 | 201.05 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+420.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 202.02 | 202.00 | 201.97 | 201.95 | 201.93 | 201.91 | 201.88 | 201.86 | 201.77 | 201.60 | 201.44 | 201.45 | 201.46 | 201.40 | 201.33 | 201.26 | 201.15 | 200.90 | 200.36 | 200.23 | 200.39 | 200.54 | 200.70 | 200.85 | 201.01 | 201.17 | 201.20 | |
| PROJECT ELEVATION | | | | | | | | | 200.94 | 200.44 | 200.95 | 200.97 | 200.99 | 201.01 | 200.99 | 200.97 | 200.95 | 200.44 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+430.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.92 | 200.90 | 200.88 | 200.85 | 200.83 | 200.81 | 200.78 | 200.76 | 200.74 | 200.70 | 200.62 | 200.54 | 200.47 | 200.41 | 200.39 | 200.38 | 200.34 | 200.24 | 200.09 | 199.63 | 199.65 | 199.80 | 199.98 | 200.12 | 200.27 | 200.43 | | |
| PROJECT ELEVATION | | | | | | | | | 200.16 | 199.66 | 200.17 | 200.19 | 200.21 | 200.23 | 200.21 | 200.19 | 200.17 | 199.66 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

D01
TOTALLY REVISED

## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
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| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
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- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
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5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

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PVI= POINT OF VRTICAL INTERSECTION
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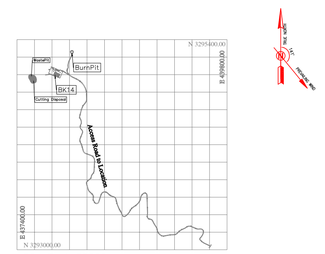
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | CHECKED | BY | DATE | REV. APPR. |
|---|---|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** | | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO – PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

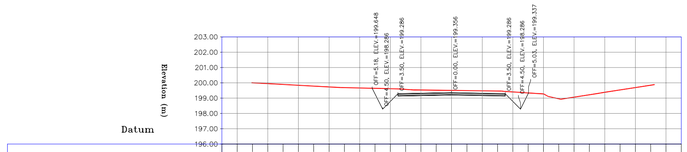
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

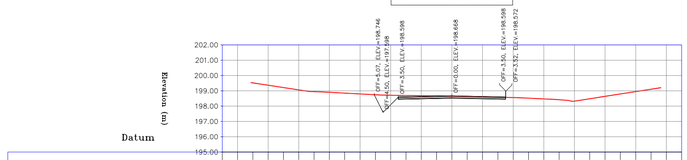
| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 70 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 70 | D01 |

## 3+440.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 200.00 | 199.95 | 199.89 | 199.84 | 199.79 | 199.74 | 199.69 | 199.67 | 199.64 | 199.62 | 199.58 | 199.58 | 199.53 | 199.52 | 199.51 | 199.49 | 199.48 | 199.47 | 199.40 | 199.34 | 199.27 | 198.96 | 199.06 | 199.22 | 199.38 | 199.53 | 199.69 | 199.85 | |
| PROJECT ELEVATION | | | | | | | | | 199.29 | 198.79 | 199.30 | 199.32 | 199.34 | 199.36 | 199.34 | 199.32 | 199.30 | 198.79 | 199.29 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+450.00

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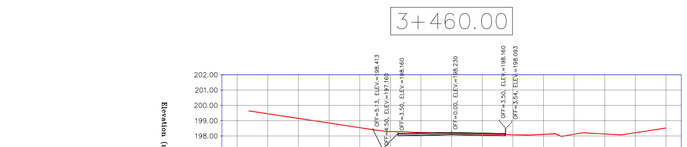
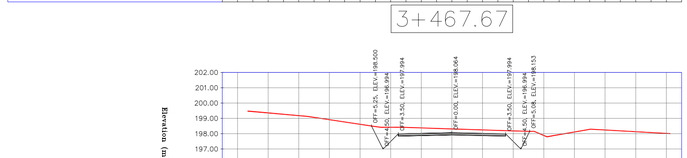
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.52 | 199.37 | 199.21 | 199.06 | 198.95 | 198.90 | 198.85 | 198.80 | 198.74 | 198.71 | 198.70 | 198.68 | 198.67 | 198.66 | 198.65 | 198.63 | 198.61 | 198.58 | 198.56 | 198.52 | 198.47 | 198.42 | 198.33 | 198.48 | 198.64 | 198.80 | 198.95 | 199.11 | |
| PROJECT ELEVATION | | | | | | | | | 198.60 | 198.10 | 198.61 | 198.63 | 198.63 | 198.67 | 198.65 | 198.65 | 198.63 | 198.61 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+460.00



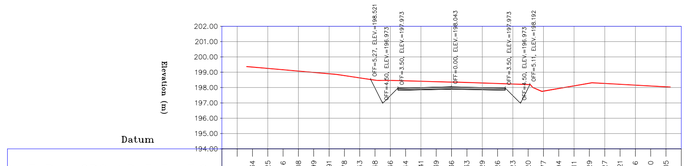

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.61 | 199.45 | 199.30 | 199.15 | 199.00 | 198.85 | 198.70 | 198.55 | 198.39 | 198.30 | 198.27 | 198.23 | 198.20 | 198.18 | 198.15 | 198.13 | 198.11 | 198.08 | 198.06 | 198.11 | 198.05 | 198.11 | 198.19 | 198.13 | 198.08 | 198.21 | 198.37 | | |
| PROJECT ELEVATION | | | | | | | | | 198.16 | 197.66 | 198.17 | 198.19 | 198.21 | 198.23 | 198.21 | 198.19 | 198.17 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+467.67



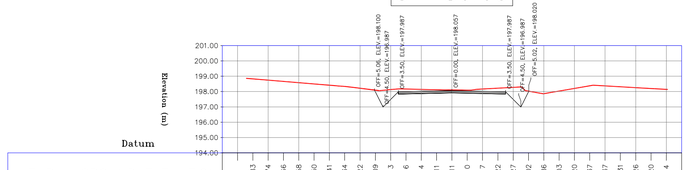

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.44 | 199.36 | 199.27 | 199.18 | 199.07 | 198.92 | 198.76 | 198.61 | 198.46 | 198.42 | 198.41 | 198.38 | 198.34 | 198.31 | 198.28 | 198.25 | 198.21 | 198.18 | 198.15 | 197.89 | 197.94 | 198.11 | 198.28 | 198.24 | 198.18 | 198.13 | 198.07 | 198.02 | |
| PROJECT ELEVATION | | | | | | | | | 197.99 | 197.49 | 198.00 | 198.02 | 198.04 | 198.06 | 198.04 | 198.02 | 198.00 | 197.49 | 197.99 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+470.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 199.34 | 199.25 | 199.16 | 199.08 | 198.99 | 198.91 | 198.78 | 198.63 | 198.48 | 198.46 | 198.44 | 198.41 | 198.39 | 198.36 | 198.33 | 198.29 | 198.26 | 198.23 | 198.20 | 197.77 | 197.94 | 198.11 | 198.29 | 198.27 | 198.21 | 198.16 | 198.10 | 195.05 | |
| PROJECT ELEVATION | | | | | | | | | 197.97 | 197.47 | 197.98 | 198.02 | 198.00 | 198.02 | 198.04 | 198.02 | 198.00 | 197.47 | 197.97 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+480.00

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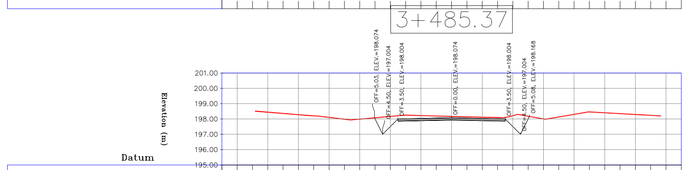
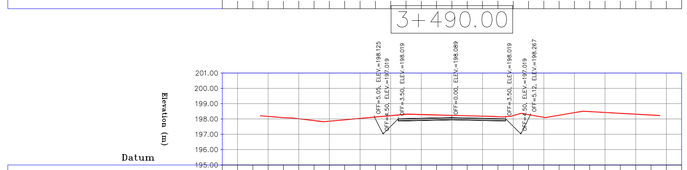
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.83 | 198.74 | 198.66 | 198.58 | 198.50 | 198.41 | 198.34 | 198.22 | 198.09 | 198.13 | 198.16 | 198.14 | 198.11 | 198.11 | 198.10 | 198.17 | 198.22 | 198.27 | 198.02 | 197.86 | 198.03 | 198.20 | 198.37 | 198.37 | 198.31 | 198.26 | 198.20 | 198.14 | |
| PROJECT ELEVATION | | | | | | | | | 197.99 | 197.49 | 198.00 | 198.02 | 198.04 | 198.06 | 198.04 | 198.02 | 198.00 | 197.49 | 197.99 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+485.37



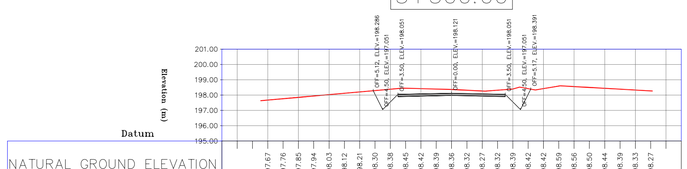

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.44 | 198.36 | 198.28 | 198.20 | 198.11 | 197.99 | 197.99 | 198.08 | 198.17 | 198.25 | 198.22 | 198.20 | 198.17 | 198.14 | 198.12 | 198.09 | 198.21 | 198.18 | 198.01 | 198.13 | 198.30 | 198.46 | 198.40 | 198.35 | 198.29 | 198.24 | | | |
| PROJECT ELEVATION | | | | | | | | | 198.00 | 197.50 | 198.01 | 198.03 | 198.05 | 198.07 | 198.05 | 198.03 | 198.01 | 197.50 | 198.00 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+490.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 198.17 | 198.09 | 198.01 | 197.90 | 197.80 | 197.80 | 198.04 | 198.13 | 198.22 | 198.31 | 198.29 | 198.26 | 198.24 | 198.21 | 198.18 | 198.15 | 198.22 | 198.29 | 198.11 | 198.25 | 198.42 | 198.48 | 198.43 | 198.37 | 198.31 | 198.26 | | | |
| PROJECT ELEVATION | | | | | | | | | 198.02 | 197.52 | 198.03 | 198.05 | 198.07 | 198.09 | 198.07 | 198.05 | 198.03 | 197.52 | 198.02 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+500.00

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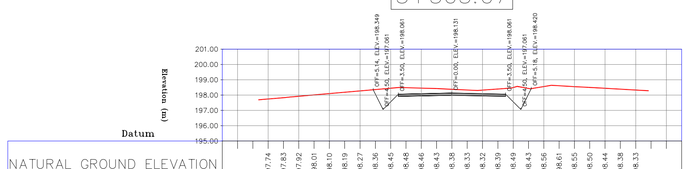
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.67 | 197.76 | 197.85 | 197.94 | 198.03 | 198.12 | 198.21 | 198.30 | 198.38 | 198.45 | 198.42 | 198.39 | 198.36 | 198.32 | 198.27 | 198.32 | 198.42 | 198.59 | 198.50 | 198.44 | 198.39 | 198.33 | 198.27 | | | | | | |
| PROJECT ELEVATION | | | | | | | | | 198.05 | 197.55 | 198.06 | 198.08 | 198.10 | 198.12 | 198.10 | 198.08 | 198.06 | 197.55 | 198.05 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+503.07




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.74 | 197.83 | 197.92 | 198.01 | 198.10 | 198.19 | 198.27 | 198.36 | 198.45 | 198.48 | 198.46 | 198.43 | 198.38 | 198.33 | 198.32 | 198.39 | 198.49 | 198.43 | 198.56 | 198.61 | 198.55 | 198.50 | 198.44 | 198.38 | 198.33 | | | | |
| PROJECT ELEVATION | | | | | | | | | 198.06 | 197.56 | 198.07 | 198.09 | 198.11 | 198.13 | 198.11 | 198.09 | 198.07 | 197.56 | 198.06 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

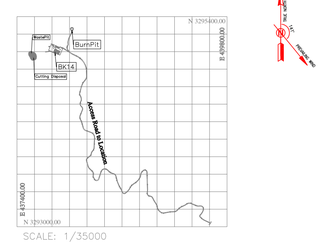
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

| | | | |
|---|---|---|---|
| | | CHECKED | REV. APPR. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

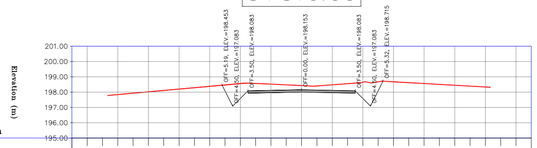
D01 TOTALLY REVISED

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 71 OF 90 | D01 |

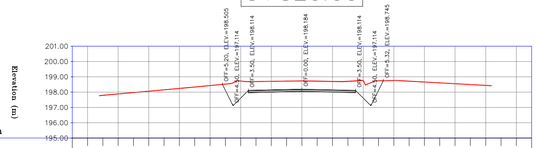
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 71 | D01 |

## 3+510.00



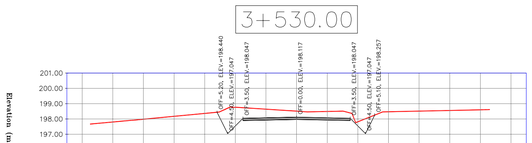

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 197.84 | 197.93 | 198.02 | 198.11 | 198.20 | 198.29 | 198.38 | 198.47 | 198.56 | 198.57 | 198.52 | 198.47 | 198.43 | 198.40 | 198.48 | 198.55 | 198.68 | 198.68 | 198.62 | 198.56 | 198.51 | 198.45 | 198.40 | 198.34 |
| PROJECT ELEVATION | | | | | | | | | | | 198.08 | 197.58 | 198.09 | 198.11 | 198.13 | 198.15 | 198.13 | 198.11 | 198.09 | 197.58 | 198.08 | | | | | | | | | | | | | |

## 3+520.00



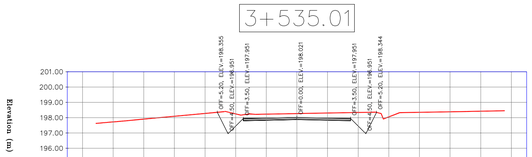

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 197.79 | 197.88 | 197.97 | 198.06 | 198.15 | 198.24 | 198.33 | 198.43 | 198.52 | 198.72 | 198.69 | 198.71 | 198.72 | 198.74 | 198.72 | 198.70 | 198.76 | 198.74 | 198.76 | 198.72 | 198.66 | 198.61 | 198.55 | 198.50 | 198.44 |
| PROJECT ELEVATION | | | | | | | | | | | 198.11 | 197.61 | 198.12 | 198.14 | 198.16 | 198.18 | 198.16 | 198.14 | 198.12 | 197.61 | 198.11 | | | | | | | | | | | | | |

## 3+530.00



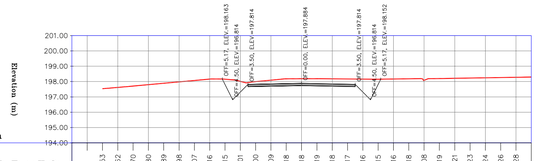

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 197.71 | 197.80 | 197.89 | 197.98 | 198.08 | 198.17 | 198.27 | 198.36 | 198.48 | 198.77 | 198.71 | 198.64 | 198.58 | 198.51 | 198.47 | 198.49 | 198.51 | 198.53 | 198.56 | 198.58 | 198.60 | | | |
| PROJECT ELEVATION | | | | | | | | | | | 198.05 | 197.55 | 198.06 | 198.08 | 198.10 | 198.12 | 198.10 | 198.08 | 198.06 | 197.55 | 198.05 | | | | | | | | | | | | | |

## 3+535.01



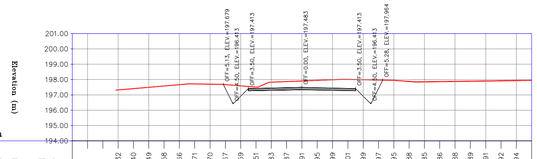

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 197.64 | 197.72 | 197.81 | 197.90 | 198.00 | 198.09 | 198.19 | 198.28 | 198.37 | 198.25 | 198.24 | 198.23 | 198.25 | 198.27 | 198.28 | 198.30 | 198.32 | 198.34 | 198.36 | 198.05 | 198.33 | 198.35 | 198.37 | 198.39 | 198.41 | 198.42 | 198.44 |
| PROJECT ELEVATION | | | | | | | | | | | 197.95 | 197.45 | 197.96 | 197.98 | 198.00 | 198.02 | 198.00 | 198.00 | 197.96 | 197.45 | 197.95 | | | | | | | | | | | | | |

## 3+540.00



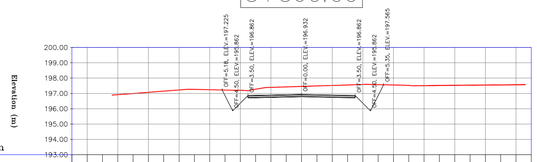

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 197.53 | 197.62 | 197.70 | 197.80 | 197.89 | 197.98 | 198.07 | 198.16 | 198.15 | 198.01 | 198.00 | 198.09 | 198.18 | 198.18 | 198.18 | 198.19 | 198.17 | 198.16 | 198.15 | 198.18 | 198.08 | 198.19 | 198.21 | 198.23 | 198.24 | 198.26 | 198.28 |
| PROJECT ELEVATION | | | | | | | | | | | 197.81 | 197.31 | 197.82 | 197.86 | 197.86 | 197.88 | 197.86 | 197.84 | 197.82 | 197.31 | 197.81 | | | | | | | | | | | | | |

## 3+550.00



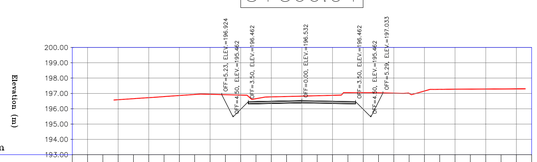

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 197.32 | 197.40 | 197.49 | 197.58 | 197.66 | 197.71 | 197.70 | 197.67 | 197.59 | 197.51 | 197.83 | 197.87 | 197.91 | 197.95 | 197.99 | 198.01 | 197.99 | 197.97 | 197.95 | 197.88 | 197.85 | 197.86 | 197.88 | 197.89 | 197.91 | 197.92 | 197.94 |
| PROJECT ELEVATION | | | | | | | | | | | 197.41 | 196.91 | 197.42 | 197.44 | 197.46 | 197.48 | 197.46 | 197.44 | 197.42 | 196.91 | 197.41 | | | | | | | | | | | | | |

## 3+560.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 196.92 | 197.00 | 197.07 | 197.15 | 197.23 | 197.26 | 197.24 | 197.22 | 197.20 | 197.27 | 197.39 | 197.42 | 197.46 | 197.49 | 197.52 | 197.55 | 197.57 | 197.55 | 197.52 | 197.51 | 197.52 | 197.53 | 197.54 | 197.55 | 197.56 | 197.57 |
| PROJECT ELEVATION | | | | | | | | | | | 196.86 | 196.36 | 196.87 | 196.89 | 196.91 | 196.93 | 196.91 | 196.89 | 196.87 | 196.36 | 196.86 | | | | | | | | | | | | | |

## 3+566.94




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 196.59 | 196.66 | 196.72 | 196.79 | 196.86 | 196.93 | 196.95 | 196.92 | 196.89 | 196.66 | 196.78 | 196.80 | 196.83 | 196.85 | 196.88 | 197.05 | 197.04 | 197.01 | 197.00 | 197.16 | 197.27 | 197.27 | 197.28 | 197.29 | 197.29 | 197.30 |
| PROJECT ELEVATION | | | | | | | | | | | 196.46 | 195.96 | 196.47 | 196.49 | 196.51 | 196.53 | 196.51 | 196.49 | 196.47 | 195.96 | 196.46 | | | | | | | | | | | | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

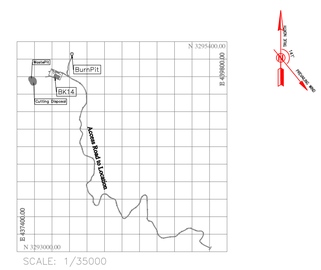
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ~ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

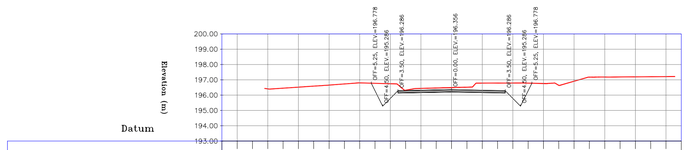
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 72 OF 90 | D01 |

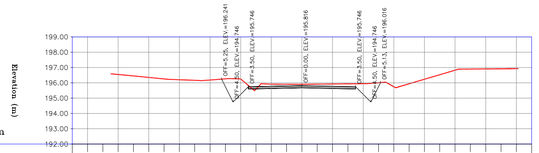
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 72 | D01 |

## 3+570.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.41 | 196.45 | 196.52 | 196.59 | 196.66 | 196.73 | 196.80 | 196.77 | 196.75 | 196.32 | 196.44 | 196.46 | 196.49 | 196.52 | 196.78 | 196.79 | 196.79 | 196.78 | 196.76 | 196.64 | 196.91 | 197.18 | 197.18 | 197.19 | 197.20 | 197.20 | 197.21 | | | |
| PROJECT ELEVATION | | | | | | | | 196.29 | 195.79 | 196.30 | 196.32 | 196.34 | 196.36 | 196.34 | 196.32 | 196.30 | 195.79 | 196.29 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+580.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.54 | 196.45 | 196.35 | 196.26 | 196.17 | 196.19 | 196.26 | 196.25 | 195.58 | 195.91 | 195.91 | 195.80 | 195.82 | 195.92 | 195.93 | 195.94 | 195.92 | 195.93 | 195.94 | 195.95 | 196.00 | 195.75 | 195.84 | 196.23 | 196.53 | 196.82 | 196.90 | 196.91 | 196.92 | 196.93 |
| PROJECT ELEVATION | | | | | | | | 195.75 | 195.25 | 195.76 | 195.78 | 195.78 | 195.82 | 195.82 | 195.80 | 195.78 | 195.76 | 195.94 | 195.25 | 195.75 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

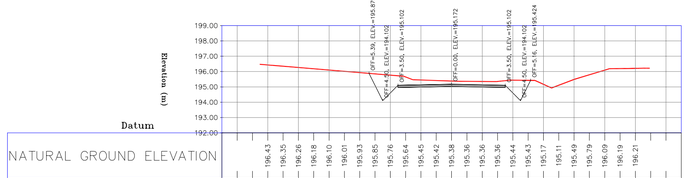
## 3+590.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.67 | 196.59 | 196.50 | 196.42 | 196.33 | 196.25 | 196.17 | 196.08 | 196.00 | 195.74 | 195.45 | 195.46 | 195.51 | 195.55 | 195.59 | 195.63 | 195.68 | 195.72 | 194.71 | 195.09 | 195.47 | 195.77 | 196.07 | 196.37 | 196.62 | 196.63 | 196.64 | 196.65 | | |
| PROJECT ELEVATION | | | | | | | | 195.36 | 194.86 | 195.37 | 195.39 | 195.41 | 195.43 | 195.41 | 195.39 | 195.37 | 194.86 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+600.00

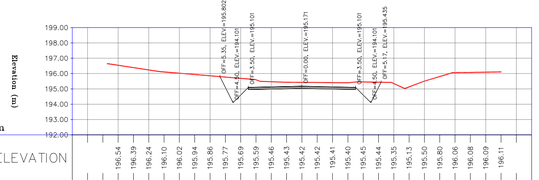
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.50 | 196.42 | 196.34 | 196.25 | 196.17 | 196.09 | 196.00 | 195.92 | 195.83 | 195.63 | 195.43 | 195.39 | 195.36 | 195.33 | 195.29 | 195.33 | 195.42 | 195.31 | 194.86 | 195.16 | 195.53 | 195.83 | 196.13 | 196.34 | 196.35 | | | | | |
| PROJECT ELEVATION | | | | | | | | 195.15 | 194.65 | 195.16 | 195.18 | 195.20 | 195.22 | 195.20 | 195.18 | 195.16 | 194.65 | 195.15 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+605.52



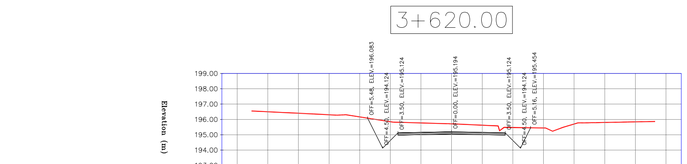

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.43 | 196.35 | 196.26 | 196.18 | 196.10 | 196.01 | 195.93 | 195.85 | 195.76 | 195.64 | 195.45 | 195.42 | 195.38 | 195.36 | 195.36 | 195.36 | 195.44 | 195.43 | 195.17 | 195.11 | 195.49 | 196.09 | 196.09 | 196.19 | 196.21 | | | | | |
| PROJECT ELEVATION | | | | | | | | 195.10 | 194.60 | 195.11 | 195.13 | 195.15 | 195.17 | 195.15 | 195.13 | 195.11 | 194.60 | 195.10 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+610.00



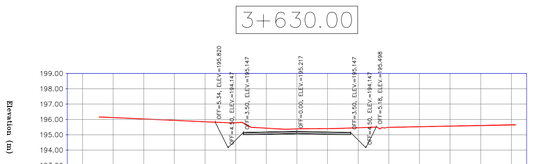

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.54 | 196.39 | 196.24 | 196.10 | 195.94 | 195.86 | 195.77 | 195.69 | 195.59 | 195.46 | 195.43 | 195.42 | 195.42 | 195.41 | 195.40 | 195.42 | 195.44 | 195.35 | 195.13 | 195.50 | 195.80 | 196.06 | 196.08 | 196.09 | 196.11 | | | | | |
| PROJECT ELEVATION | | | | | | | | 195.10 | 194.60 | 195.11 | 195.13 | 195.15 | 195.17 | 195.15 | 195.13 | 195.11 | 194.60 | 195.10 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+620.00



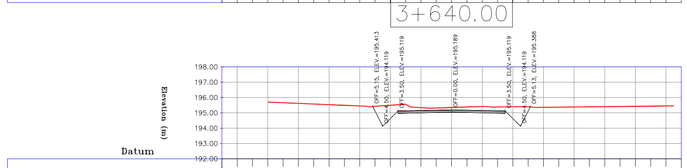

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.55 | 196.50 | 196.45 | 196.40 | 196.35 | 196.31 | 196.30 | 196.16 | 196.01 | 195.85 | 195.80 | 195.77 | 195.74 | 195.71 | 195.67 | 195.62 | 195.58 | 195.47 | 195.46 | 195.38 | 195.70 | 195.78 | 195.92 | 195.94 | 195.96 | | | | | |
| PROJECT ELEVATION | | | | | | | | 195.12 | 194.62 | 195.13 | 195.15 | 195.17 | 195.19 | 195.17 | 195.15 | 195.13 | 194.62 | 195.12 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+630.00



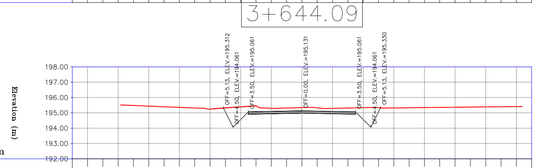

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.12 | 196.07 | 196.03 | 195.98 | 195.94 | 195.89 | 195.85 | 195.81 | 195.78 | 195.49 | 195.43 | 195.37 | 195.38 | 195.40 | 195.40 | 195.42 | 195.46 | 195.49 | 195.48 | 195.50 | 195.52 | 195.54 | 195.56 | 195.58 | 195.60 | 195.62 | 195.64 | | | |
| PROJECT ELEVATION | | | | | | | | 195.15 | 194.65 | 195.16 | 195.18 | 195.20 | 195.22 | 195.20 | 195.18 | 195.16 | 194.65 | 195.15 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+640.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.66 | 195.62 | 195.57 | 195.53 | 195.49 | 195.45 | 195.42 | 195.49 | 195.56 | 195.54 | 195.52 | 195.55 | 195.58 | 195.56 | 195.54 | 195.37 | 195.38 | 195.39 | 195.40 | 195.42 | 195.43 | 195.44 | 195.45 | | | | | | | |
| PROJECT ELEVATION | | | | | | | | 195.12 | 194.62 | 195.13 | 195.15 | 195.17 | 195.19 | 195.17 | 195.15 | 195.13 | 194.62 | 195.12 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+644.09




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.48 | 195.44 | 195.40 | 195.36 | 195.32 | 195.25 | 195.32 | 195.39 | 195.46 | 195.29 | 195.31 | 195.35 | 195.33 | 195.29 | 195.31 | 195.34 | 195.34 | 195.32 | 195.33 | 195.34 | 195.36 | 195.37 | 195.38 | 195.39 | 195.40 | 195.41 | | | | |
| PROJECT ELEVATION | | | | | | | | 195.06 | 194.56 | 195.07 | 195.09 | 195.11 | 195.13 | 195.11 | 195.09 | 195.07 | 194.56 | 195.06 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN

SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | CHECKED | BY | DATE | REV. APPR. |
|---|---|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | **.** | ***.**** | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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N.I.S.O.C./ FIELDS


PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

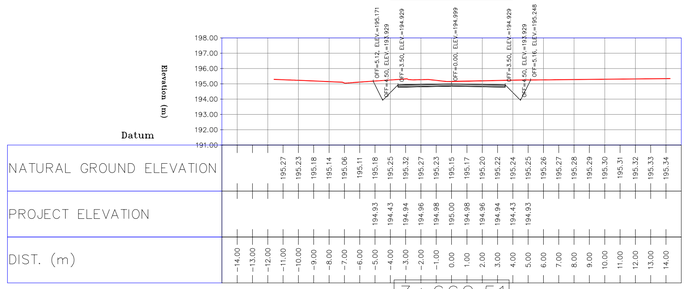
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 73 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 73 | D01 |

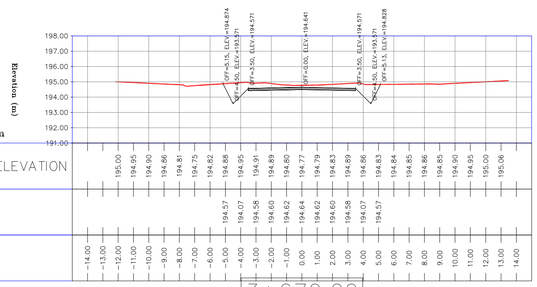
D01 TOTALLY REVISED

## 3+650.00



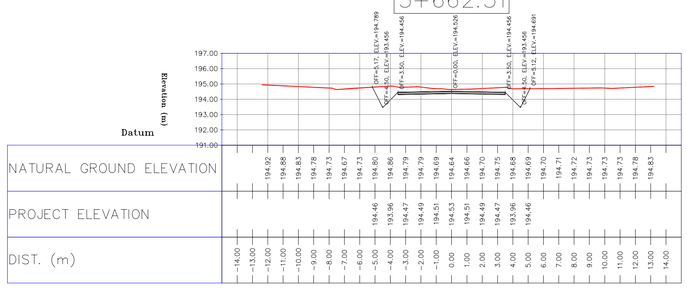

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.27 | 195.23 | 195.18 | 195.14 | 195.06 | 195.11 | 195.18 | 195.25 | 195.32 | 195.27 | 195.23 | 195.15 | 195.17 | 195.20 | 195.22 | 195.24 | 195.25 | 195.26 | 195.27 | 195.28 | 195.29 | 195.30 | 195.31 | 195.32 | 195.33 | 195.34 | | | |
| PROJECT ELEVATION | 194.93 | 194.43 | 194.84 | 194.96 | 194.98 | 195.00 | 194.98 | 194.96 | 194.94 | 194.43 | 194.93 | | | | | | | | | | | | | | | | | | |

## 3+660.00



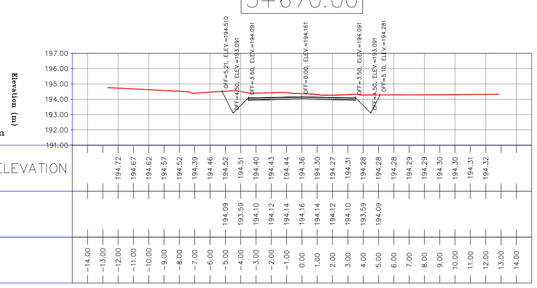

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.00 | 194.95 | 194.90 | 194.86 | 194.81 | 194.75 | 194.82 | 194.88 | 194.95 | 194.91 | 194.89 | 194.80 | 194.77 | 194.79 | 194.83 | 194.89 | 194.86 | 194.83 | 194.84 | 194.85 | 194.86 | 194.85 | 194.90 | 194.95 | 195.00 | 195.06 | | | |
| PROJECT ELEVATION | 194.57 | 194.07 | 194.58 | 194.60 | 194.62 | 194.64 | 194.62 | 194.60 | 194.58 | 194.07 | 194.57 | | | | | | | | | | | | | | | | | | |

## 3+662.51



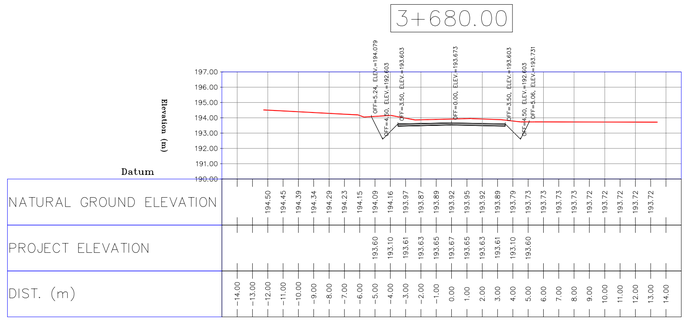

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 194.92 | 194.88 | 194.83 | 194.78 | 194.73 | 194.67 | 194.73 | 194.80 | 194.86 | 194.79 | 194.79 | 194.69 | 194.64 | 194.66 | 194.70 | 194.75 | 194.68 | 194.69 | 194.70 | 194.71 | 194.72 | 194.73 | 194.73 | 194.73 | 194.78 | 194.83 | | | |
| PROJECT ELEVATION | 194.46 | 193.96 | 194.47 | 194.49 | 194.51 | 194.53 | 194.51 | 194.49 | 194.47 | 193.96 | 194.46 | | | | | | | | | | | | | | | | | | |

## 3+670.00



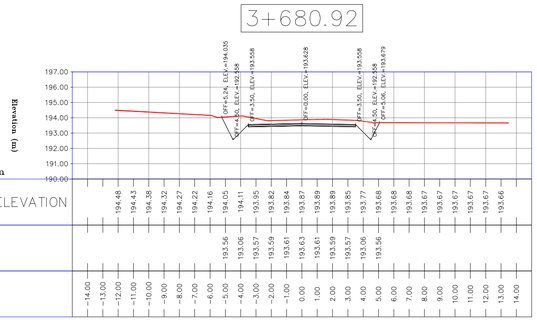

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 194.72 | 194.67 | 194.62 | 194.57 | 194.52 | 194.46 | 194.52 | 194.51 | 194.40 | 194.43 | 194.44 | 194.36 | 194.30 | 194.27 | 194.31 | 194.28 | 194.28 | 194.29 | 194.30 | 194.31 | 194.32 | | | | | | | | |
| PROJECT ELEVATION | 194.09 | 193.59 | 194.10 | 194.12 | 194.14 | 194.16 | 194.14 | 194.12 | 194.10 | 193.59 | 194.09 | | | | | | | | | | | | | | | | | | |

## 3+680.00



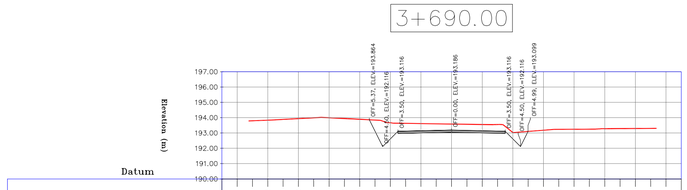

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 194.50 | 194.45 | 194.39 | 194.34 | 194.29 | 194.23 | 194.15 | 194.09 | 194.16 | 193.97 | 193.87 | 193.89 | 193.92 | 193.95 | 193.92 | 193.89 | 193.79 | 193.73 | 193.73 | 193.73 | 193.73 | 193.72 | 193.72 | 193.72 | 193.72 | 193.72 | | | |
| PROJECT ELEVATION | 193.60 | 193.10 | 193.61 | 193.63 | 193.65 | 193.67 | 193.65 | 193.63 | 193.61 | 193.10 | 193.60 | | | | | | | | | | | | | | | | | | |

## 3+680.92



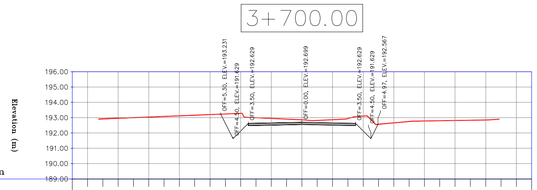

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 194.48 | 194.43 | 194.38 | 194.32 | 194.27 | 194.22 | 194.16 | 194.05 | 194.11 | 193.95 | 193.82 | 193.84 | 193.87 | 193.89 | 193.89 | 193.85 | 193.77 | 193.68 | 193.68 | 193.67 | 193.67 | 193.67 | 193.67 | 193.67 | 193.66 | | | | |
| PROJECT ELEVATION | 193.56 | 193.06 | 193.57 | 193.59 | 193.61 | 193.63 | 193.61 | 193.59 | 193.57 | 193.06 | 193.56 | | | | | | | | | | | | | | | | | | |

## 3+690.00



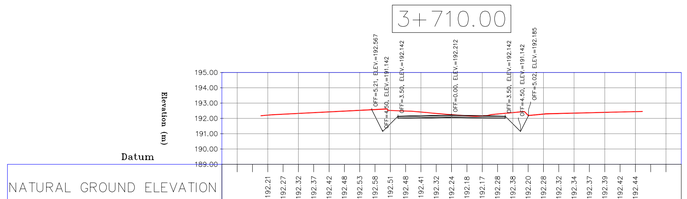

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 193.79 | 193.84 | 193.89 | 193.94 | 193.99 | 193.94 | 193.90 | 193.85 | 193.67 | 193.63 | 193.61 | 193.60 | 193.58 | 193.57 | 193.55 | 193.55 | 193.03 | 193.10 | 193.18 | 193.24 | 193.24 | 193.25 | 193.28 | 193.28 | 193.29 | 193.30 | | | |
| PROJECT ELEVATION | 193.12 | 192.62 | 193.13 | 193.15 | 193.17 | 193.19 | 193.17 | 193.15 | 193.13 | 192.62 | | | | | | | | | | | | | | | | | | | |

## 3+700.00



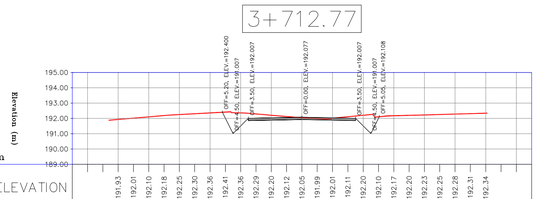

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 192.92 | 192.96 | 193.00 | 193.04 | 193.08 | 193.12 | 193.16 | 193.20 | 193.24 | 193.28 | 193.00 | 192.95 | 192.91 | 192.86 | 192.82 | 192.87 | 192.94 | 193.10 | 192.57 | 192.66 | 192.75 | 192.78 | 192.80 | 192.81 | 192.83 | 192.85 | | | |
| PROJECT ELEVATION | 192.63 | 192.13 | 192.64 | 192.66 | 192.68 | 192.70 | 192.68 | 192.66 | 192.64 | 192.13 | | | | | | | | | | | | | | | | | | | |

## 3+710.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 192.21 | 192.27 | 192.32 | 192.37 | 192.42 | 192.48 | 192.53 | 192.58 | 192.51 | 192.48 | 192.41 | 192.32 | 192.24 | 192.22 | 192.18 | 192.17 | 192.28 | 192.38 | 192.20 | 192.28 | 192.32 | 192.34 | 192.37 | 192.39 | 192.42 | 192.44 | | | |
| PROJECT ELEVATION | 192.14 | 191.64 | 192.15 | 192.17 | 192.19 | 192.21 | 192.19 | 192.17 | 192.15 | 191.64 | 192.14 | | | | | | | | | | | | | | | | | | |

## 3+712.77




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 191.93 | 192.01 | 192.10 | 192.18 | 192.25 | 192.30 | 192.36 | 192.41 | 192.36 | 192.29 | 192.20 | 192.06 | 192.05 | 191.99 | 192.01 | 192.11 | 192.20 | 192.10 | 192.17 | 192.20 | 192.23 | 192.25 | 192.28 | 192.31 | 192.34 | | | | |
| PROJECT ELEVATION | 192.01 | 191.51 | 192.02 | 192.04 | 192.06 | 192.08 | 192.06 | 192.04 | 192.02 | 191.51 | 192.01 | | | | | | | | | | | | | | | | | | |

## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

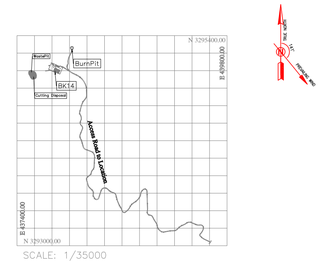
| | | | |
|---|---|---|---|
| | WELL LOCATION | | CANAL |
| | WELL | | RIVER |
| | SITE | | WATER COURSE |
| | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




| REV. | DATE | DESCRIPTION | PREP. | CHK. | APP. | AUT. |
|---|---|---|---|---|---|---|
| | | | *** | ********** | **.** | ***.**** |
| | | | BY | DATE | BY | DATE |
| | | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

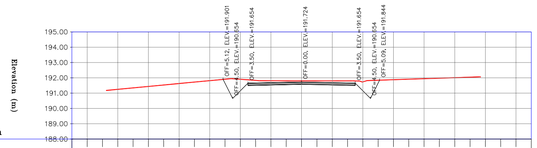
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 74 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 74 | D01 |

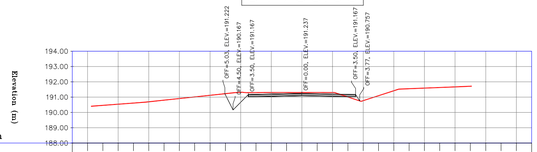
D01 TOTALLY REVISED

## 3+720.00



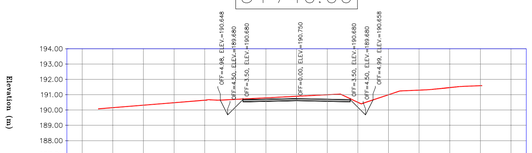

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 191.25 | 191.34 | 191.44 | 191.53 | 191.63 | 191.72 | 191.82 | 191.91 | 191.91 | 191.91 | 191.83 | 191.81 | 191.81 | 191.81 | 191.80 | 191.80 | 191.80 | 191.80 | 191.73 | 191.84 | 191.87 | 191.91 | 191.94 | 191.97 | 192.01 | 192.04 | | | |
| PROJECT ELEVATION | | | | | | | | 191.65 | 191.15 | 191.66 | 191.68 | 191.70 | 191.72 | 191.70 | 191.68 | 191.66 | 191.15 | 191.65 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+730.00



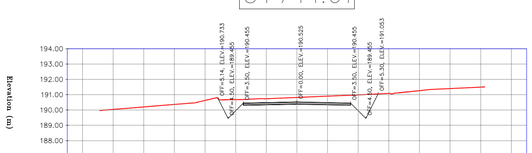

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.46 | 190.54 | 190.61 | 190.69 | 190.80 | 190.91 | 191.01 | 191.12 | 191.22 | 191.31 | 191.30 | 191.30 | 191.30 | 191.30 | 191.30 | 191.30 | 191.30 | 191.30 | 191.01 | 191.01 | 190.77 | 191.09 | 191.42 | 191.55 | 191.59 | 191.63 | 191.67 | 191.71 | |
| PROJECT ELEVATION | | | | | | | | | | 191.17 | 190.67 | 191.18 | 191.20 | 191.22 | 191.24 | 191.22 | 191.20 | 191.18 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+740.00



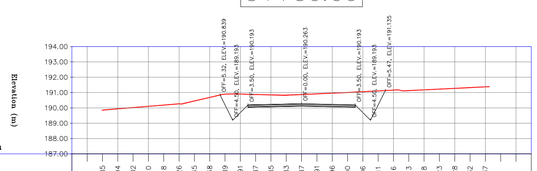

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.16 | 190.24 | 190.32 | 190.40 | 190.48 | 190.56 | 190.64 | 190.65 | 190.69 | 190.74 | 190.80 | 190.85 | 190.90 | 190.95 | 191.00 | 191.03 | 190.97 | 190.50 | 190.66 | 190.99 | 191.25 | 191.30 | 191.36 | 191.46 | 191.54 | 191.59 | | | |
| PROJECT ELEVATION | | | | | | | | 190.18 | 190.69 | 190.71 | 190.73 | 190.75 | 190.73 | 190.71 | 190.69 | 190.18 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+744.61



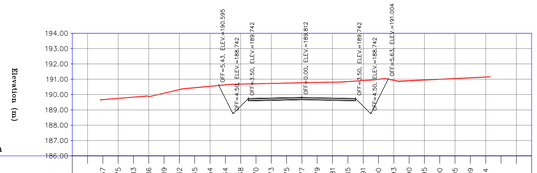

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.03 | 190.12 | 190.20 | 190.28 | 190.36 | 190.44 | 190.62 | 190.67 | 190.68 | 190.71 | 190.74 | 190.78 | 190.82 | 190.86 | 190.91 | 190.95 | 190.99 | 191.04 | 191.09 | 191.16 | 191.26 | 191.35 | 191.40 | 191.45 | 191.50 | | | | |
| PROJECT ELEVATION | | | | | | | | 190.46 | 189.96 | 190.47 | 190.49 | 190.51 | 190.53 | 190.51 | 190.49 | 190.47 | 189.96 | 190.46 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+750.00



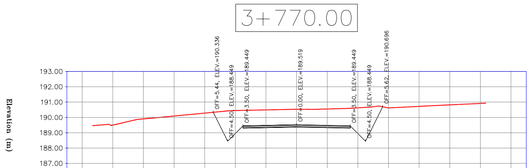

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 189.85 | 189.94 | 190.02 | 190.10 | 190.18 | 190.26 | 190.45 | 190.68 | 190.89 | 190.91 | 190.87 | 190.85 | 190.83 | 190.87 | 190.91 | 190.96 | 191.00 | 191.06 | 191.16 | 191.11 | 191.13 | 191.18 | 191.23 | 191.28 | 191.32 | 191.37 | | | |
| PROJECT ELEVATION | | | | | | | | | 190.19 | 189.69 | 190.20 | 190.22 | 190.24 | 190.26 | 190.24 | 190.22 | 190.20 | 189.69 | 190.19 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+760.00



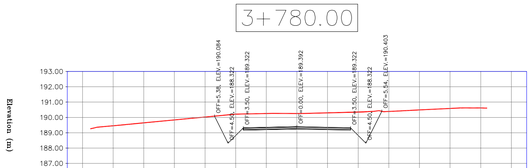

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 189.67 | 189.75 | 189.83 | 189.86 | 190.09 | 190.32 | 190.45 | 190.54 | 190.64 | 190.68 | 190.70 | 190.73 | 190.75 | 190.75 | 190.77 | 190.79 | 190.81 | 190.85 | 190.91 | 191.00 | 190.93 | 190.90 | 190.95 | 191.00 | 191.05 | 191.09 | 191.14 | | |
| PROJECT ELEVATION | | | | | | | | | 189.74 | 189.24 | 189.75 | 189.77 | 189.79 | 189.81 | 189.79 | 189.77 | 189.75 | 189.24 | 189.74 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+770.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 189.49 | 189.50 | 189.73 | 189.90 | 190.00 | 190.09 | 190.19 | 190.28 | 190.38 | 190.45 | 190.47 | 190.49 | 190.51 | 190.54 | 190.53 | 190.55 | 190.58 | 190.63 | 190.70 | 190.62 | 190.67 | 190.72 | 190.77 | 190.82 | 190.87 | 190.91 | | | |
| PROJECT ELEVATION | | | | | | | | | 189.45 | 188.95 | 189.46 | 189.48 | 189.50 | 189.52 | 189.50 | 189.48 | 189.46 | 188.95 | 189.45 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 3+780.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 189.36 | 189.46 | 189.55 | 189.74 | 189.84 | 189.93 | 190.03 | 190.12 | 190.21 | 190.23 | 190.26 | 190.26 | 190.25 | 190.27 | 190.30 | 190.32 | 190.35 | 190.40 | 190.39 | 190.44 | 190.49 | 190.54 | 190.59 | 190.62 | 190.61 | | | | |
| PROJECT ELEVATION | | | | | | | | | 189.32 | 188.82 | 189.33 | 189.35 | 189.37 | 189.39 | 189.37 | 189.35 | 189.33 | 188.82 | 189.32 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

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| | |
|---|---|
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| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

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- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

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BVCE= BEGIN OF VERTICAL CURVE ELEVATION
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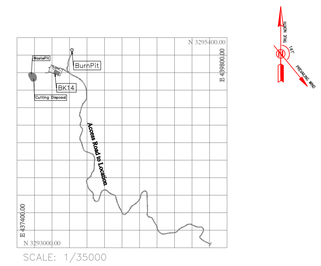
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

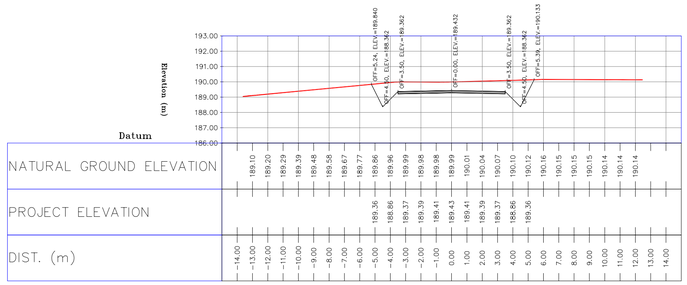
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 75 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 75 | D01 |

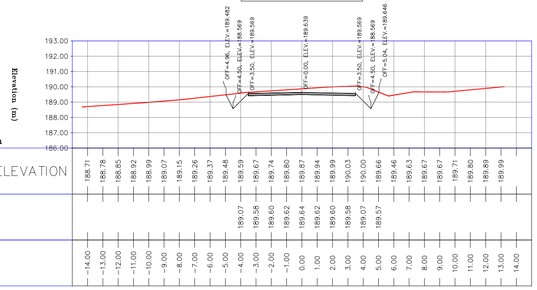
D01
TOTALLY REVISED

## 3+790.00



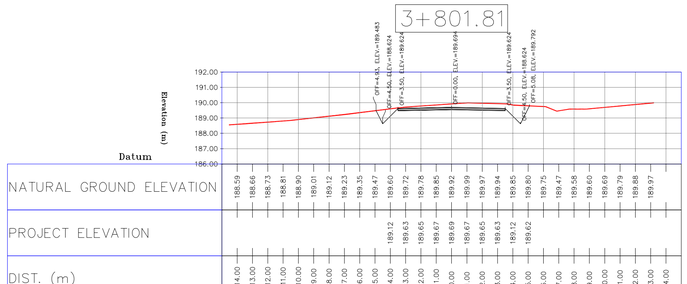

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 189.10 | 189.20 | 189.29 | 189.39 | 189.48 | 189.58 | 189.67 | 189.77 | 189.86 | 189.96 | 189.99 | 189.98 | 189.98 | 189.99 | 190.01 | 190.04 | 190.07 | 190.10 | 190.12 | 190.16 | 190.15 | 190.15 | 190.15 | 190.14 | 190.14 | 190.14 | | | | |
| PROJECT ELEVATION | | | | | | | | | 189.36 | 188.86 | 189.37 | 189.39 | 189.41 | 189.43 | 189.41 | 189.39 | 189.37 | 188.86 | 189.36 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+800.00



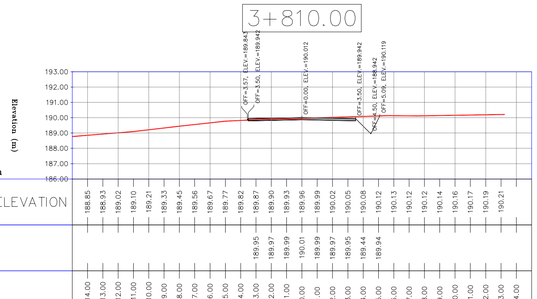

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.71 | 188.78 | 188.85 | 188.92 | 188.99 | 189.07 | 189.15 | 189.26 | 189.37 | 189.48 | 189.59 | 189.67 | 189.74 | 189.80 | 189.87 | 189.94 | 189.99 | 190.03 | 190.00 | 189.66 | 189.46 | 189.63 | 189.67 | 189.67 | 189.71 | 189.80 | 189.89 | 189.99 | | |
| PROJECT ELEVATION | | | | | | | | | | | 189.07 | 189.58 | 189.60 | 189.62 | 189.64 | 189.62 | 189.60 | 189.58 | 189.07 | 189.57 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+801.81



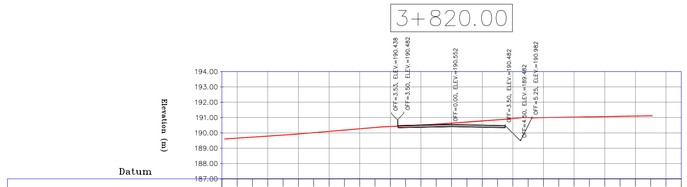

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.59 | 188.66 | 188.73 | 188.81 | 188.90 | 189.01 | 189.12 | 189.23 | 189.35 | 189.47 | 189.60 | 189.72 | 189.78 | 189.85 | 189.92 | 189.99 | 189.97 | 189.94 | 189.85 | 189.80 | 189.75 | 189.47 | 189.58 | 189.60 | 189.69 | 189.79 | 189.88 | 189.97 | | |
| PROJECT ELEVATION | | | | | | | | | | | 189.12 | 189.63 | 189.65 | 189.67 | 189.69 | 189.67 | 189.65 | 189.63 | 189.12 | 189.62 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+810.00



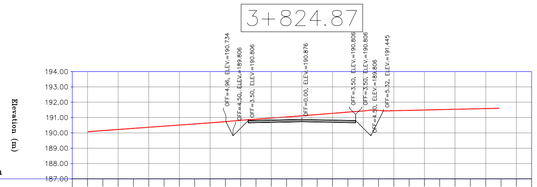

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 188.85 | 188.93 | 189.02 | 189.10 | 189.21 | 189.33 | 189.45 | 189.56 | 189.67 | 189.77 | 189.82 | 189.87 | 189.90 | 189.93 | 189.96 | 189.99 | 190.02 | 190.05 | 190.08 | 190.12 | 190.13 | 190.12 | 190.12 | 190.14 | 190.16 | 190.17 | 190.19 | 190.21 | | |
| PROJECT ELEVATION | | | | | | | | | | | 189.95 | 189.97 | 189.99 | 189.99 | 190.01 | 189.99 | 189.97 | 190.95 | 189.44 | 189.94 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+820.00



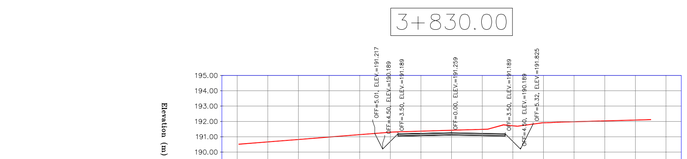

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 189.66 | 189.72 | 189.79 | 189.85 | 189.92 | 190.01 | 190.10 | 190.18 | 190.27 | 190.35 | 190.42 | 190.46 | 190.51 | 190.56 | 190.64 | 190.71 | 190.78 | 190.85 | 190.93 | 190.99 | 191.01 | 191.03 | 191.05 | 191.06 | 191.08 | 191.10 | 191.12 | | | |
| PROJECT ELEVATION | | | | | | | | | | | 190.49 | 190.51 | 190.53 | 190.55 | 190.53 | 190.51 | 190.49 | 189.98 | 190.48 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+824.87



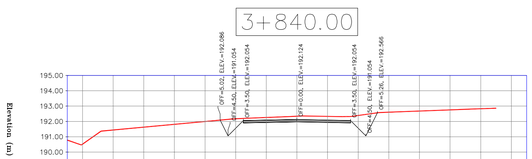

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.15 | 190.22 | 190.30 | 190.37 | 190.44 | 190.51 | 190.59 | 190.66 | 190.73 | 190.82 | 190.89 | 190.96 | 191.04 | 191.12 | 191.20 | 191.28 | 191.35 | 191.44 | 191.47 | 191.45 | 191.47 | 191.49 | 191.52 | 191.54 | 191.56 | 191.59 | | | | |
| PROJECT ELEVATION | | | | | | | | | | 190.31 | 190.82 | 190.84 | 190.86 | 190.88 | 190.86 | 190.84 | 190.82 | 190.31 | 190.81 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+830.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.58 | 190.66 | 190.74 | 190.82 | 190.90 | 190.98 | 191.06 | 191.14 | 191.22 | 191.30 | 191.33 | 191.36 | 191.39 | 191.42 | 191.45 | 191.48 | 191.67 | 191.72 | 191.78 | 191.85 | 191.88 | 192.01 | 192.03 | 192.05 | 192.09 | 192.12 | | | | |
| PROJECT ELEVATION | | | | | | | | | 191.19 | 190.69 | 191.20 | 191.22 | 191.24 | 191.26 | 191.24 | 191.22 | 191.20 | 190.69 | 191.19 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

## 3+840.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 190.51 | 191.22 | 191.44 | 191.53 | 191.62 | 191.72 | 191.81 | 191.90 | 191.99 | 192.09 | 192.17 | 192.22 | 192.26 | 192.30 | 192.34 | 192.34 | 192.33 | 192.32 | 192.39 | 192.53 | 192.60 | 192.64 | 192.68 | 192.72 | 192.75 | 192.79 | 192.83 | 192.87 | | |
| PROJECT ELEVATION | | | | | | | | | | 192.05 | 191.55 | 192.06 | 192.08 | 192.10 | 192.10 | 192.08 | 192.06 | 191.55 | 192.05 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

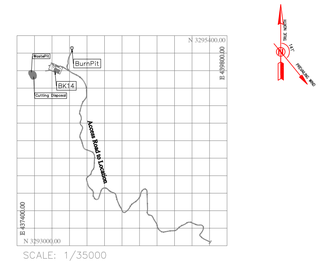
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

| | | | | | | |
|---|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** | |
| REV. | DESCRIPTION | BY | DATE | BY | DATE | |
| | | CHECKED | | REV. APPR. | | |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N.I.S.O.C./ FIELDS


PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

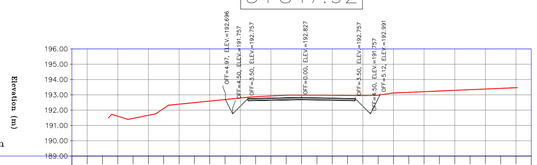
APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 76 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 76 | D01 |

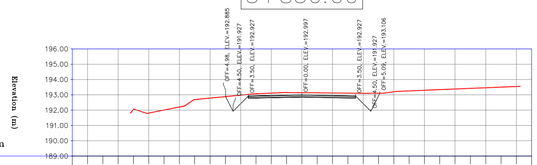
D01 TOTALLY REVISED

## 3+847.92



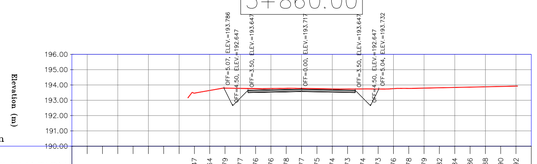

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | 191.60 | 191.46 | 191.67 | 192.11 | 192.39 | 192.49 | 192.59 | 192.69 | 192.79 | 192.88 | 192.93 | 192.98 | 192.98 | 192.97 | 192.97 | 192.96 | 192.97 | 193.12 | 193.16 | 193.20 | 193.25 | 193.29 | 193.34 | 193.38 | 193.43 | 193.47 |
| PROJECT ELEVATION | | | | | | | | | | | 192.26 | 192.77 | 192.79 | 192.81 | 192.83 | 192.81 | 192.79 | 192.77 | 192.26 | 192.76 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 3+850.00



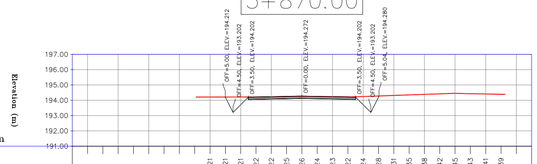

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | 192.05 | 191.81 | 192.01 | 192.21 | 192.69 | 192.79 | 192.88 | 192.98 | 193.07 | 193.12 | 193.15 | 193.14 | 193.13 | 193.12 | 193.11 | 193.10 | 193.11 | 193.21 | 193.26 | 193.30 | 193.34 | 193.38 | 193.42 | 193.46 | 193.50 | 193.54 |
| PROJECT ELEVATION | | | | | | | | | | | 192.43 | 192.94 | 192.96 | 192.98 | 193.00 | 192.98 | 192.96 | 192.94 | 192.43 | 192.93 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 3+860.00



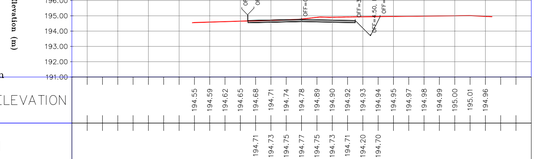

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | 193.47 | 193.64 | 193.79 | 193.77 | 193.76 | 193.76 | 193.78 | 193.77 | 193.75 | 193.74 | 193.73 | 193.74 | 193.73 | 193.76 | 193.78 | 193.79 | 193.82 | 193.84 | 193.86 | 193.88 | 193.90 | 193.92 |
| PROJECT ELEVATION | | | | | | | | | | 193.65 | 193.15 | 193.66 | 193.68 | 193.70 | 193.72 | 193.70 | 193.68 | 193.66 | 193.15 | 193.65 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 3+870.00



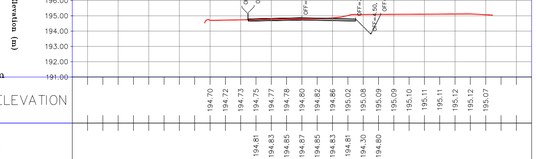

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 194.21 | 194.21 | 194.22 | 194.22 | 194.25 | 194.26 | 194.24 | 194.23 | 194.22 | 194.24 | 194.28 | 194.31 | 194.35 | 194.38 | 194.42 | 194.45 | 194.43 | 194.41 | 194.39 |
| PROJECT ELEVATION | | | | | | | | | | 194.20 | 193.70 | 194.21 | 194.23 | 194.25 | 194.27 | 194.25 | 194.23 | 194.21 | 193.70 | 194.20 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 3+880.00



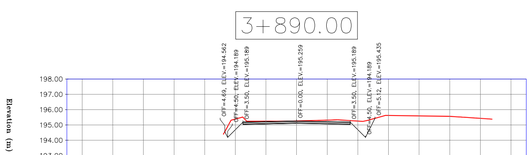

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | 194.55 | 194.59 | 194.62 | 194.65 | 194.68 | 194.71 | 194.74 | 194.78 | 194.89 | 194.90 | 194.92 | 194.93 | 194.94 | 194.95 | 194.97 | 194.98 | 194.99 | 195.00 | 195.01 | 194.96 |
| PROJECT ELEVATION | | | | | | | | | | | | | | | 194.71 | 194.73 | 194.75 | 194.77 | 194.75 | 194.73 | 194.71 | 194.20 | 194.70 | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 3+882.09



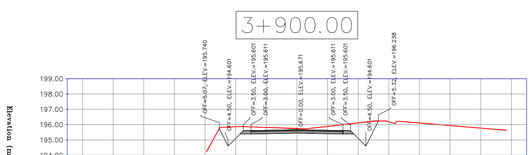

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | | 194.70 | 194.72 | 194.73 | 194.75 | 194.77 | 194.78 | 194.80 | 194.82 | 194.85 | 194.87 | 194.85 | 194.83 | 194.81 | 195.02 | 195.08 | 195.09 | 195.09 | 195.10 | 195.11 | 195.12 | 195.12 | 195.07 |
| PROJECT ELEVATION | | | | | | | | | | | | | | | 194.81 | 194.83 | 194.85 | 194.85 | 194.83 | 194.81 | 194.30 | 194.80 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 3+890.00



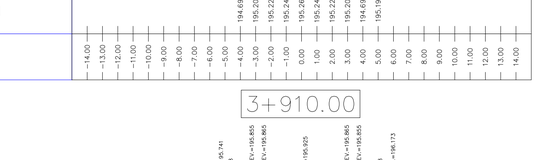

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | 195.39 | 195.24 | 195.24 | 195.25 | 195.26 | 195.28 | 195.24 | 195.31 | 195.31 | 195.25 | 195.40 | 195.62 | 195.61 | 195.59 | 195.58 | 195.57 | 195.50 | 195.43 | | |
| PROJECT ELEVATION | | | | | | | | | | | 194.69 | 195.20 | 195.22 | 195.24 | 195.26 | 195.24 | 195.22 | 195.20 | 194.69 | 195.19 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 3+900.00



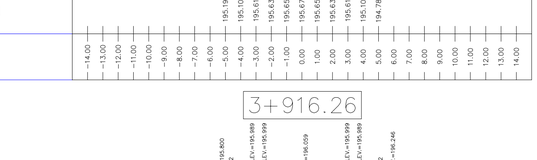

| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | 195.82 | 195.87 | 195.86 | 195.82 | 195.78 | 195.75 | 195.77 | 195.89 | 196.00 | 196.12 | 196.23 | 196.19 | 196.19 | 196.11 | 196.02 | 195.94 | 195.86 | 195.78 | 195.69 | |
| PROJECT ELEVATION | | | | | | | | | | | 195.19 | 195.10 | 195.61 | 195.63 | 195.65 | 195.67 | 195.65 | 195.63 | 195.61 | 195.10 | 194.78 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 3+910.00




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | 195.51 | 195.56 | 195.61 | 195.67 | 195.72 | 195.77 | 195.82 | 195.87 | 195.91 | 195.87 | 195.83 | 195.79 | 195.75 | 195.80 | 195.96 | 196.15 | 196.19 | 196.24 | 196.30 | 196.23 |
| PROJECT ELEVATION | | | | | | | | | | | 194.72 | 195.36 | 195.87 | 195.89 | 195.91 | 195.93 | 195.91 | 195.87 | 195.36 | 194.72 | | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 3+916.26




| | −14.00 | −13.00 | −12.00 | −11.00 | −10.00 | −9.00 | −8.00 | −7.00 | −6.00 | −5.00 | −4.00 | −3.00 | −2.00 | −1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | | | | | | | | | 195.48 | 195.53 | 195.58 | 195.68 | 195.73 | 195.77 | 195.82 | 195.87 | 195.92 | 196.00 | 196.02 | 196.04 | 196.05 | 196.04 | 196.02 | 196.00 | 196.01 | 196.04 | 196.06 | 196.08 |
| PROJECT ELEVATION | | | | | | | | | | | 194.86 | 195.49 | 196.00 | 196.02 | 196.04 | 196.05 | 196.04 | 196.02 | 196.00 | 195.49 | 194.86 | | | | | | | | | |
| DIST. (m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

### NOTES

1–ALL COORDINATES AND ELEVATIONS ARE IN METER.

2–ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3–GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4–THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK–GNRAL–PEDCO–000–CV–SP–0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5–BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

| | | | |
|---|---|---|---|
| | WELL LOCATION | | CANAL |
| | WELL | | RIVER |
| | SITE | | WATER COURSE |
| | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK–BK14–PEDCO–110–CV–PY–0001 |
| Rough Grading Plan–BK14 | BK–BK14–PEDCO–110–CV–PY–0003 |
| Specification For Earth Work | BK–GNRAL–PEDCO–000–CV–SP–0004 |
| Standard Drawing For Slope Protection Details | BK–GNRAL–PEDCO–000–CV–DW–0002 |
| Geotechnical Investigation Report – BK14 | BK–BK14–PEDCO–110–GT–RT–0001 |
| Specification For Road & Paving | BK–GNRAL–PEDCO–000–CV–SP–0002 |
| MTO For Civil Works – BK14 | BK–BK14–PEDCO–110–CV–MT–0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN

SCALE: 1/35000

| REV. | DATE | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|---|
| | | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY — PEDCO

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 77 OF 90 | D01 |

أصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

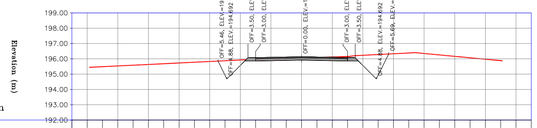
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

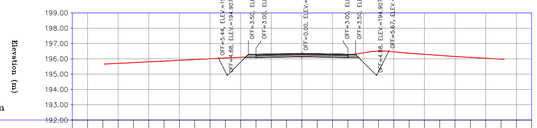
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053–073–9184 | F | 4 | S | 708209 | 77 | D01 |

## 3+920.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.48 | 195.53 | 195.58 | 195.63 | 195.68 | 195.73 | 195.78 | 195.83 | 195.88 | 195.92 | 195.92 | 195.92 | 195.95 | 196.02 | 196.06 | 196.09 | 196.12 | 196.15 | 196.23 | 196.28 | 196.33 | 196.35 | 196.26 | 196.16 | 196.07 | 195.98 | 195.88 | | |
| PROJECT ELEVATION | | | | | | | | | 194.94 | 195.57 | 196.08 | 196.10 | 196.12 | 196.14 | 196.12 | 196.10 | 196.08 | 195.57 | 194.94 | | | | | | | | | | |

## 3+930.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.70 | 195.75 | 195.80 | 195.86 | 195.91 | 195.95 | 196.00 | 196.05 | 196.10 | 196.15 | 196.20 | 196.21 | 196.21 | 196.22 | 196.23 | 196.26 | 196.39 | 196.50 | 196.46 | 196.37 | 196.29 | 196.22 | 196.15 | 196.09 | 196.03 | 195.98 | | | |
| PROJECT ELEVATION | | | | | | | | 195.15 | 195.78 | 196.29 | 196.31 | 196.33 | 196.35 | 196.33 | 196.31 | 196.29 | 195.78 | 195.15 | | | | | | | | | | | |

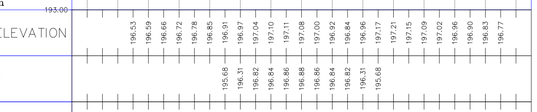
## 3+940.00

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 195.99 | 196.04 | 196.08 | 196.13 | 196.18 | 196.22 | 196.27 | 196.32 | 196.37 | 196.44 | 196.51 | 196.54 | 196.53 | 196.52 | 196.51 | 196.51 | 196.62 | 196.73 | 196.75 | 196.69 | 196.63 | 196.57 | 196.51 | 196.45 | 196.39 | 196.33 | | | |
| PROJECT ELEVATION | | | | | | | 195.37 | 196.00 | 196.51 | 196.53 | 196.55 | 196.57 | 196.55 | 196.53 | 196.51 | 196.00 | 195.37 | | | | | | | | | | | | |

## 3+950.00

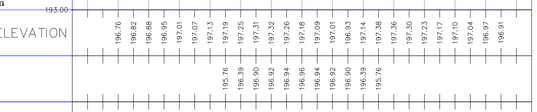
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.30 | 196.36 | 196.43 | 196.49 | 196.56 | 196.62 | 196.69 | 196.75 | 196.82 | 196.88 | 196.93 | 196.92 | 196.91 | 196.83 | 196.75 | 196.86 | 197.01 | 197.02 | 196.95 | 196.89 | 196.83 | 196.77 | 196.70 | 196.64 | | | | | |
| PROJECT ELEVATION | | | | | | | 195.58 | 196.21 | 196.72 | 196.74 | 196.76 | 196.78 | 196.76 | 196.76 | 196.74 | 196.72 | 196.21 | 195.58 | | | | | | | | | | | |

## 3+954.55




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.53 | 196.59 | 196.66 | 196.72 | 196.78 | 196.85 | 196.91 | 196.97 | 197.04 | 197.10 | 197.11 | 197.08 | 197.00 | 196.86 | 196.88 | 196.82 | 196.84 | 196.96 | 197.17 | 197.21 | 197.15 | 197.09 | 197.02 | 196.96 | 196.90 | 196.83 | 196.77 | | |
| PROJECT ELEVATION | | | | | | | | 195.68 | 196.31 | 196.82 | 196.84 | 196.86 | 196.88 | 196.86 | 196.84 | 196.82 | 196.31 | 195.68 | | | | | | | | | | | |

## 3+960.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.76 | 196.82 | 196.88 | 196.95 | 197.01 | 197.07 | 197.13 | 197.19 | 197.25 | 197.31 | 197.32 | 197.26 | 197.18 | 197.09 | 197.01 | 196.93 | 197.14 | 197.38 | 197.36 | 197.30 | 197.23 | 197.17 | 197.10 | 197.04 | 196.97 | 196.91 | | | |
| PROJECT ELEVATION | | | | | | | | 195.76 | 196.39 | 196.90 | 196.92 | 196.94 | 196.96 | 196.94 | 196.92 | 196.90 | 196.39 | 195.76 | | | | | | | | | | | |

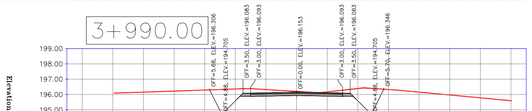
## 3+970.00

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 197.32 | 197.33 | 197.33 | 197.33 | 197.33 | 197.35 | 197.37 | 197.40 | 197.17 | 197.02 | 196.88 | 196.97 | 197.08 | 197.19 | 197.29 | 197.35 | 197.36 | 197.28 | 197.18 | 197.08 | 196.98 | 196.88 | 196.78 | 196.68 | 196.58 | | | | |
| PROJECT ELEVATION | | | | | | | 195.71 | 196.34 | 196.85 | 196.87 | 196.89 | 196.91 | 196.89 | 196.87 | 196.85 | 196.34 | 195.71 | | | | | | | | | | | | |

## 3+980.00

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.65 | 196.68 | 196.72 | 196.75 | 196.78 | 196.81 | 196.84 | 196.87 | 196.88 | 196.69 | 196.70 | 196.80 | 196.88 | 196.81 | 196.75 | 196.79 | 196.89 | 196.84 | 196.75 | 196.65 | 196.55 | 196.46 | 196.36 | 196.26 | 196.17 | 196.07 | | | |
| PROJECT ELEVATION | | | | | | | 195.41 | 196.04 | 196.55 | 196.57 | 196.59 | 196.61 | 196.59 | 196.57 | 196.55 | 196.04 | 195.41 | | | | | | | | | | | | |

## 3+990.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 196.12 | 196.16 | 196.19 | 196.23 | 196.26 | 196.29 | 196.33 | 196.36 | 196.39 | 196.33 | 196.27 | 196.20 | 196.14 | 196.11 | 196.14 | 196.17 | 196.28 | 196.39 | 196.39 | 196.33 | 196.25 | 196.15 | 196.06 | 195.97 | 195.88 | 195.78 | 195.69 | 195.60 | |
| PROJECT ELEVATION | | | | | | | 194.95 | 195.58 | 196.09 | 196.11 | 196.13 | 196.15 | 196.13 | 196.11 | 196.09 | 195.58 | 194.95 | | | | | | | | | | | | |

## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

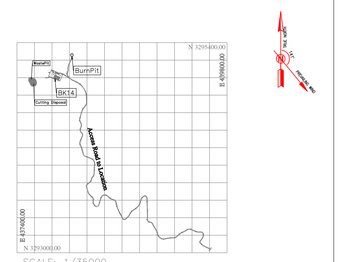
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◁ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




| REV. | DATE | DESCRIPTION | BY | CHECKED | BY | APPR. |
|---|---|---|---|---|---|---|
| *** | ********** | | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS


EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

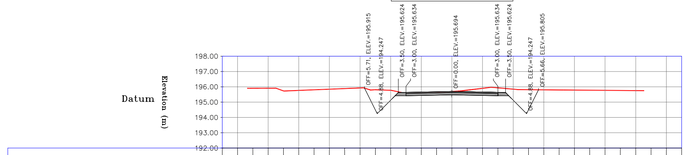
| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 78 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 78 | D01 |

D01 TOTALLY REVISED

## 3+992.85

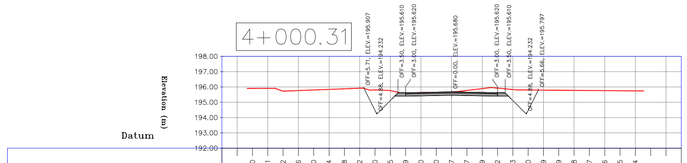
| NATURAL GROUND ELEVATION | 195.87 | 195.90 | 195.94 | 195.98 | 196.01 | 195.97 | 195.97 | 196.04 | 196.11 | 196.17 | 196.06 | 195.93 | 195.96 | 195.95 | 195.96 | 196.00 | 195.96 | 196.07 | 196.18 | 196.30 | 196.24 | 196.17 | 196.09 | 196.00 | 195.91 | 195.82 | 195.72 | 195.63 | 195.55 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | | | 194.82 | 195.45 | 195.96 | 195.98 | 196.00 | 196.02 | 196.00 | 195.96 | 195.88 | 195.96 | 195.45 | 194.82 | | | | | | | | |
| DIST. (m) | -13.39 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 4+000.00



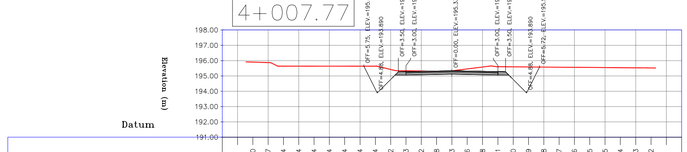

| NATURAL GROUND ELEVATION | 195.90 | 195.91 | 195.73 | 195.81 | 195.85 | 195.89 | 195.93 | 195.81 | 195.78 | 195.60 | 195.63 | 195.65 | 195.61 | 195.61 | 195.67 | 195.69 | 195.78 | 195.67 | 195.65 | 195.90 | 195.93 | 195.63 | 195.12 | 194.49 | 195.81 | 195.80 | 195.79 | 195.78 | 195.77 | 195.76 | 195.75 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | | | 194.49 | 195.12 | 195.63 | 195.65 | 195.67 | 195.69 | 195.67 | 195.65 | 195.63 | 195.12 | 194.49 | | | | | | | | | | | | |
| DIST. (m) | -13.81 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 4+000.31



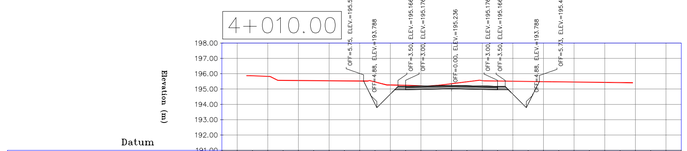

| NATURAL GROUND ELEVATION | 195.90 | 195.91 | 195.72 | 195.80 | 195.84 | 195.88 | 195.92 | 195.80 | 195.75 | 195.59 | 195.60 | 195.60 | 195.67 | 195.77 | 195.89 | 195.92 | 195.83 | 195.80 | 195.79 | 195.79 | 195.78 | 195.77 | 195.76 | 195.75 | 195.74 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | 194.48 | 195.11 | 195.62 | 195.64 | 195.66 | 195.66 | 195.66 | 195.64 | 195.62 | 195.11 | 194.48 | | | | | | | | |
| DIST. (m) | -13.83 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 4+007.77



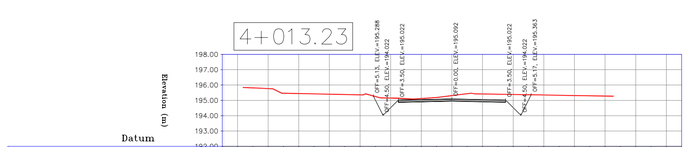

| NATURAL GROUND ELEVATION | 195.90 | 195.87 | 195.64 | 195.64 | 195.64 | 195.64 | 195.64 | 195.42 | 195.33 | 195.32 | 195.33 | 195.33 | 195.46 | 195.58 | 195.61 | 195.60 | 195.59 | 195.58 | 195.57 | 195.56 | 195.55 | 195.54 | 195.53 | 195.52 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | 194.14 | 194.77 | 195.28 | 195.30 | 195.32 | 195.34 | 195.32 | 195.20 | 195.28 | 194.77 | 194.14 | | | | | | | |
| DIST. (m) | -13.45 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 4+010.00



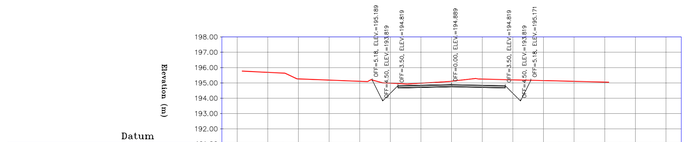

| NATURAL GROUND ELEVATION | 195.86 | 195.83 | 195.57 | 195.56 | 195.55 | 195.54 | 195.53 | 195.53 | 195.46 | 195.26 | 195.25 | 195.21 | 195.24 | 195.35 | 195.47 | 195.55 | 195.52 | 195.51 | 195.49 | 195.48 | 195.47 | 195.46 | 195.45 | 195.43 | 195.42 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | 194.51 | 194.67 | 195.18 | 195.20 | 195.22 | 195.24 | 195.22 | 195.20 | 195.18 | 194.67 | 194.52 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 4+013.23



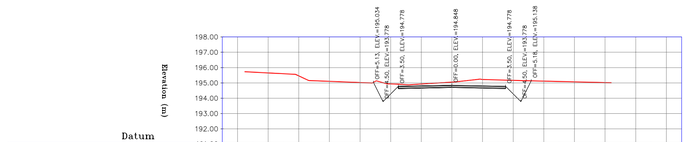

| NATURAL GROUND ELEVATION | 195.81 | 195.77 | 195.46 | 195.44 | 195.42 | 195.40 | 195.38 | 195.36 | 195.25 | 195.15 | 195.11 | 195.12 | 195.19 | 195.31 | 195.44 | 195.42 | 195.40 | 195.38 | 195.37 | 195.35 | 195.33 | 195.31 | 195.30 | 195.28 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | 195.02 | 194.52 | 195.02 | 195.03 | 195.05 | 195.07 | 195.09 | 195.07 | 195.05 | 195.03 | 194.52 | 195.02 | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 4+018.68



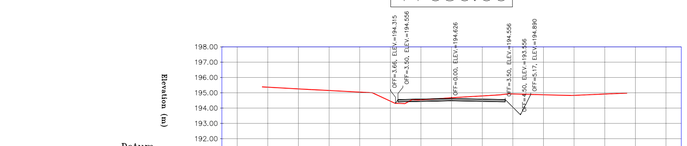

| NATURAL GROUND ELEVATION | 195.74 | 195.69 | 195.64 | 195.26 | 195.22 | 195.18 | 195.15 | 195.11 | 195.14 | 194.98 | 194.93 | 194.98 | 195.04 | 195.11 | 195.22 | 195.25 | 195.23 | 195.20 | 195.18 | 195.15 | 195.13 | 195.10 | 195.07 | 195.05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | 194.82 | 194.32 | 194.83 | 194.85 | 194.87 | 194.89 | 194.87 | 194.85 | 194.83 | 194.32 | 194.82 | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 4+020.00



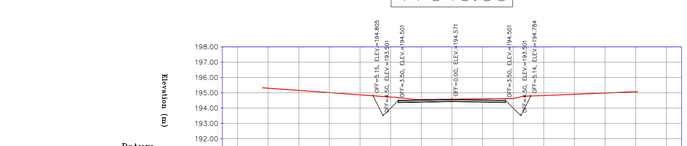

| NATURAL GROUND ELEVATION | 195.70 | 195.65 | 195.60 | 195.46 | 195.14 | 195.10 | 195.06 | 195.03 | 195.11 | 194.94 | 194.89 | 194.93 | 194.99 | 195.05 | 195.15 | 195.22 | 195.19 | 195.17 | 195.14 | 195.12 | 195.09 | 195.07 | 195.04 | 195.02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | 194.78 | 194.28 | 194.79 | 194.81 | 194.83 | 194.85 | 194.83 | 194.81 | 194.79 | 194.28 | 194.78 | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 4+030.00




| NATURAL GROUND ELEVATION | 195.36 | 195.31 | 195.25 | 195.20 | 195.15 | 195.10 | 195.05 | 194.92 | 194.46 | 194.32 | 194.54 | 194.61 | 194.67 | 194.73 | 194.79 | 194.86 | 194.92 | 194.89 | 194.87 | 194.84 | 194.83 | 194.87 | 194.91 | 194.96 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | 194.57 | 194.59 | 194.61 | 194.63 | 194.61 | 194.61 | 194.59 | 194.57 | 194.06 | 194.56 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 4+040.00




| NATURAL GROUND ELEVATION | 195.30 | 195.22 | 195.15 | 195.08 | 195.01 | 194.94 | 194.87 | 194.79 | 194.72 | 194.63 | 194.56 | 194.55 | 194.57 | 194.58 | 194.59 | 194.60 | 194.61 | 194.62 | 194.78 | 194.82 | 194.86 | 194.90 | 194.94 | 194.98 | 195.03 | 195.07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT ELEVATION | | | | | | | 194.50 | 194.00 | 194.51 | 194.53 | 194.55 | 194.57 | 194.55 | 194.53 | 194.51 | 194.00 | 194.50 | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

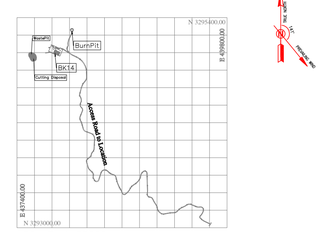
| | | | |
|---|---|---|---|
| | WELL LOCATION | | CANAL |
| | WELL | | RIVER |
| | SITE | | WATER COURSE |
| | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |
|---|---|---|---|---|---|---|
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |

| REV. | DESCRIPTION | CHECKED BY | CHECKED DATE | APPR. BY | APPR. DATE |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

D01 TOTALLY REVISED

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 79 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 79 | D01 |

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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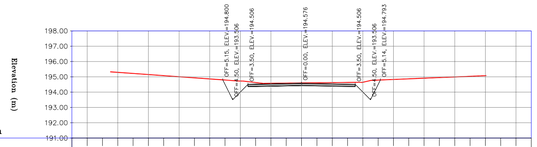
BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

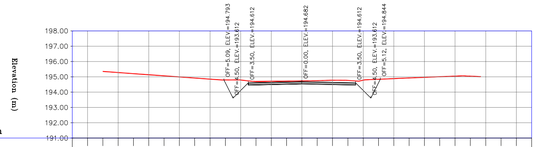
APPROVED FOR CONSTRUCTION BY: DATE:

## 4+041.23



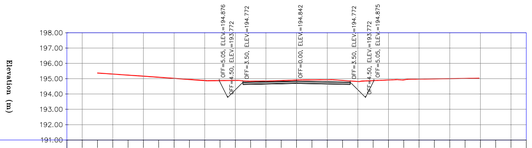

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 195.29 |
| -13.00 | | 195.22 |
| -12.00 | | 195.15 |
| -11.00 | | 195.08 |
| -10.00 | | 195.00 |
| -9.00 | | 194.93 |
| -8.00 | | 194.86 |
| -7.00 | | 194.79 |
| -6.00 | | 194.73 |
| -5.00 | 194.51 | 194.63 |
| -4.00 | 194.01 | 194.58 |
| -3.00 | 194.52 | 194.59 |
| -2.00 | 194.54 | 194.60 |
| -1.00 | 194.56 | 194.61 |
| 0.00 | 194.58 | 194.62 |
| 1.00 | 194.56 | 194.63 |
| 2.00 | 194.54 | 194.65 |
| 3.00 | 194.52 | 194.79 |
| 4.00 | 194.01 | 194.83 |
| 5.00 | 194.51 | 194.87 |
| 6.00 | | 194.91 |
| 7.00 | | 194.95 |
| 8.00 | | 194.99 |
| 9.00 | | 195.03 |
| 10.00 | | 195.08 |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 4+050.00



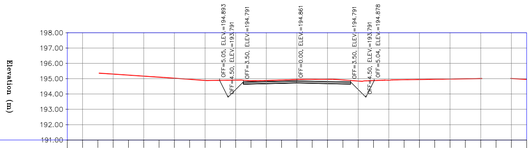

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 195.35 |
| -13.00 | | 195.28 |
| -12.00 | | 195.21 |
| -11.00 | | 195.14 |
| -10.00 | | 195.06 |
| -9.00 | | 194.99 |
| -8.00 | | 194.92 |
| -7.00 | | 194.85 |
| -6.00 | | 194.79 |
| -5.00 | 194.61 | 194.70 |
| -4.00 | 194.11 | 194.72 |
| -3.00 | 194.62 | 194.73 |
| -2.00 | 194.64 | 194.75 |
| -1.00 | 194.66 | 194.78 |
| 0.00 | 194.68 | 194.84 |
| 1.00 | 194.66 | 194.88 |
| 2.00 | 194.64 | 194.92 |
| 3.00 | 194.62 | 194.96 |
| 4.00 | 194.11 | 195.01 |
| 5.00 | 194.61 | 195.05 |
| 6.00 | | 195.04 |
| 7.00 | | |
| 8.00 | | |
| 9.00 | | |
| 10.00 | | |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 4+060.00



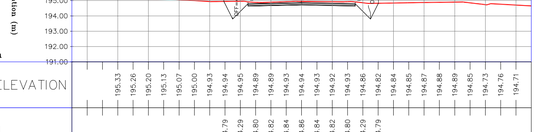

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 195.37 |
| -13.00 | | 195.30 |
| -12.00 | | 195.23 |
| -11.00 | | 195.17 |
| -10.00 | | 195.09 |
| -9.00 | | 195.02 |
| -8.00 | | 194.95 |
| -7.00 | | 194.88 |
| -6.00 | | 194.89 |
| -5.00 | 194.77 | 194.84 |
| -4.00 | 194.27 | 194.85 |
| -3.00 | 194.78 | 194.87 |
| -2.00 | 194.80 | 194.91 |
| -1.00 | 194.82 | 194.93 |
| 0.00 | 194.84 | 194.93 |
| 1.00 | 194.82 | 194.89 |
| 2.00 | 194.80 | 194.78 |
| 3.00 | 194.78 | 194.82 |
| 4.00 | 194.27 | 194.87 |
| 5.00 | 194.77 | 194.91 |
| 6.00 | | 194.92 |
| 7.00 | | 194.97 |
| 8.00 | | 194.99 |
| 9.00 | | 195.00 |
| 10.00 | | 195.02 |
| 11.00 | | |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | |

## 4+062.27



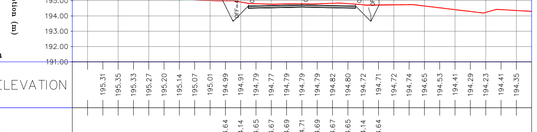

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 195.30 |
| -13.00 | | 195.24 |
| -12.00 | | 195.17 |
| -11.00 | | 195.10 |
| -10.00 | | 195.03 |
| -9.00 | | 194.96 |
| -8.00 | | 194.89 |
| -7.00 | | 194.91 |
| -6.00 | | 194.89 |
| -5.00 | 194.79 | 194.87 |
| -4.00 | 194.29 | 194.88 |
| -3.00 | 194.80 | 194.91 |
| -2.00 | 194.82 | 194.84 |
| -1.00 | 194.84 | 194.86 |
| 0.00 | 194.86 | 194.96 |
| 1.00 | 194.84 | 194.96 |
| 2.00 | 194.82 | 194.92 |
| 3.00 | 194.80 | 194.85 |
| 4.00 | 194.29 | 194.88 |
| 5.00 | 194.79 | 194.90 |
| 6.00 | | 194.94 |
| 7.00 | | 194.95 |
| 8.00 | | 194.97 |
| 9.00 | | 194.98 |
| 10.00 | | 194.99 |
| 11.00 | | 195.01 |
| 12.00 | | |
| 13.00 | | |
| 14.00 | | 195.01 |

## 4+070.00




| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 195.33 |
| -13.00 | | 195.26 |
| -12.00 | | 195.20 |
| -11.00 | | 195.13 |
| -10.00 | | 195.07 |
| -9.00 | | 195.00 |
| -8.00 | | 194.93 |
| -7.00 | | 194.94 |
| -6.00 | | 194.95 |
| -5.00 | 194.79 | 194.89 |
| -4.00 | 194.29 | 194.89 |
| -3.00 | 194.80 | 194.89 |
| -2.00 | 194.82 | 194.93 |
| -1.00 | 194.84 | 194.94 |
| 0.00 | 194.86 | 194.93 |
| 1.00 | 194.84 | 194.93 |
| 2.00 | 194.82 | 194.92 |
| 3.00 | 194.80 | 194.93 |
| 4.00 | 194.29 | 194.86 |
| 5.00 | 194.79 | 194.82 |
| 6.00 | | 194.84 |
| 7.00 | | 194.85 |
| 8.00 | | 194.87 |
| 9.00 | | 194.88 |
| 10.00 | | 194.89 |
| 11.00 | | 194.85 |
| 12.00 | | 194.73 |
| 13.00 | | 194.76 |
| 14.00 | | 194.71 |

## 4+080.00

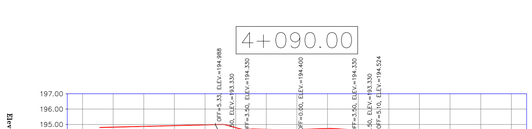



| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 195.31 |
| -13.00 | | 195.35 |
| -12.00 | | 195.27 |
| -11.00 | | 195.20 |
| -10.00 | | 195.14 |
| -9.00 | | 195.07 |
| -8.00 | | 195.01 |
| -7.00 | | 194.99 |
| -6.00 | | 194.91 |
| -5.00 | 194.64 | 194.79 |
| -4.00 | 194.14 | 194.77 |
| -3.00 | 194.65 | 194.79 |
| -2.00 | 194.67 | 194.79 |
| -1.00 | 194.69 | 194.79 |
| 0.00 | 194.71 | 194.79 |
| 1.00 | 194.69 | 194.82 |
| 2.00 | 194.67 | 194.80 |
| 3.00 | 194.65 | 194.72 |
| 4.00 | 194.14 | 194.71 |
| 5.00 | 194.64 | 194.72 |
| 6.00 | | 194.74 |
| 7.00 | | 194.65 |
| 8.00 | | 194.53 |
| 9.00 | | 194.41 |
| 10.00 | | 194.29 |
| 11.00 | | 194.23 |
| 12.00 | | 194.41 |
| 13.00 | | 194.35 |
| 14.00 | | |

## 4+083.31

| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 195.12 |
| -13.00 | | 195.15 |
| -12.00 | | 195.19 |
| -11.00 | | 195.23 |
| -10.00 | | 195.24 |
| -9.00 | | 195.17 |
| -8.00 | | 195.11 |
| -7.00 | | 195.04 |
| -6.00 | | 195.00 |
| -5.00 | 194.56 | 194.90 |
| -4.00 | 194.06 | 194.76 |
| -3.00 | 194.57 | 194.74 |
| -2.00 | 194.59 | 194.74 |
| -1.00 | 194.61 | 194.74 |
| 0.00 | 194.63 | 194.74 |
| 1.00 | 194.61 | 194.76 |
| 2.00 | 194.59 | 194.79 |
| 3.00 | 194.57 | 194.76 |
| 4.00 | 194.06 | 194.69 |
| 5.00 | 194.56 | 194.67 |
| 6.00 | | 194.68 |
| 7.00 | | 194.60 |
| 8.00 | | 194.48 |
| 9.00 | | 194.36 |
| 10.00 | | 194.24 |
| 11.00 | | 194.12 |
| 12.00 | | 194.02 |
| 13.00 | | 194.30 |
| 14.00 | | 194.24 |

## 4+090.00




| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 194.82 |
| -13.00 | | 194.84 |
| -12.00 | | 194.87 |
| -11.00 | | 194.89 |
| -10.00 | | 194.92 |
| -9.00 | | 194.95 |
| -8.00 | | 194.97 |
| -7.00 | | 195.00 |
| -6.00 | | 194.79 |
| -5.00 | 194.33 | 194.69 |
| -4.00 | 193.83 | 194.67 |
| -3.00 | 194.34 | 194.69 |
| -2.00 | 194.36 | 194.65 |
| -1.00 | 194.38 | 194.66 |
| 0.00 | 194.40 | 194.70 |
| 1.00 | 194.38 | 194.73 |
| 2.00 | 194.36 | 194.68 |
| 3.00 | 194.34 | 194.62 |
| 4.00 | 193.83 | 194.54 |
| 5.00 | 194.33 | 194.41 |
| 6.00 | | 194.29 |
| 7.00 | | 194.17 |
| 8.00 | | 194.05 |
| 9.00 | | 193.93 |
| 10.00 | | 193.81 |
| 11.00 | | 193.69 |
| 12.00 | | 193.91 |
| 13.00 | | 194.05 |
| 14.00 | | |

## NOTES

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| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

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- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

| | | | |
|---|---|---|---|
| | WELL LOCATION | | CANAL |
| | WELL | | RIVER |
| | SITE | | WATER COURSE |
| | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

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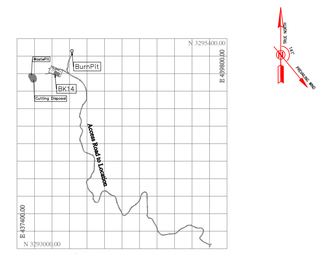
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | CHECKED BY | DATE | REV. APPR. BY | DATE |
|---|---|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** | | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

D01 TOTALLY REVISED

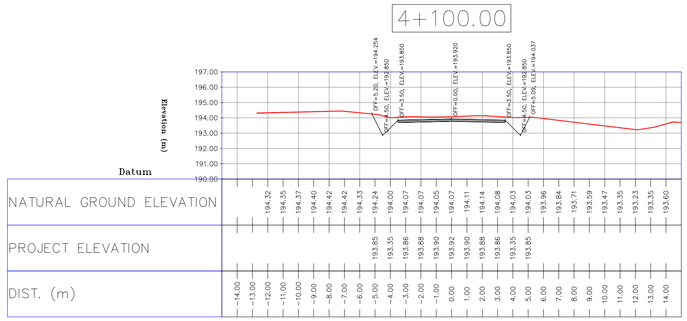
DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

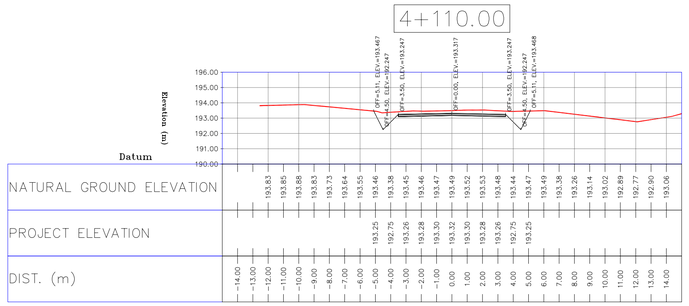
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

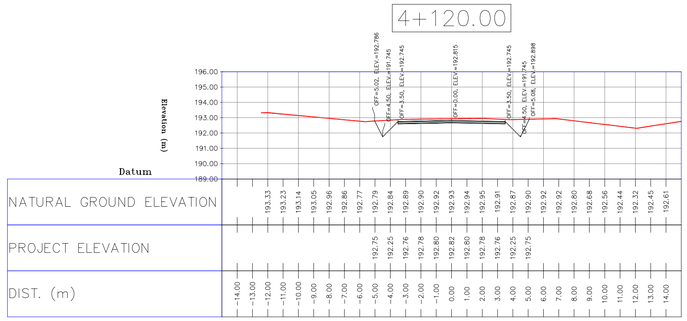
APPROVED FOR CONSTRUCTION BY: DATE:

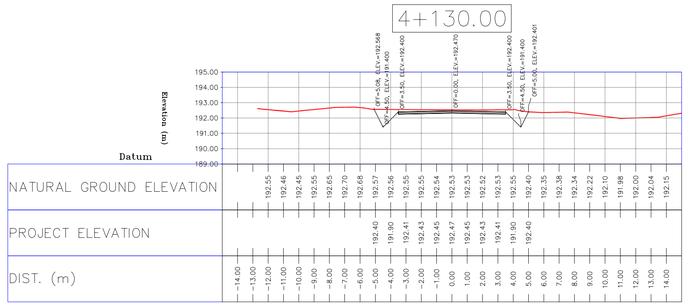
| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 80 OF 90 | D01 |

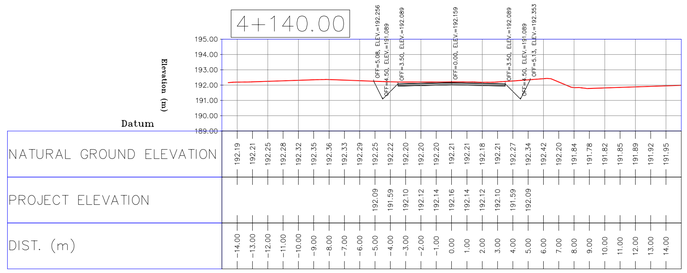
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 80 | D01 |




## NOTES

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| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

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- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK–GNRAL–PEDCO–000–CV–SP–0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5–BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | | BRIDGE |
| ∿ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK–BK14–PEDCO–110–CV–PY–0001 |
| Rough Grading Plan–BK14 | BK–BK14–PEDCO–110–CV–PY–0003 |
| Specification For Earth Work | BK–GNRAL–PEDCO–000–CV–SP–0004 |
| Standard Drawing For Slope Protection Details | BK–GNRAL–PEDCO–000–CV–DW–0002 |
| Geotechnical Investigation Report – BK14 | BK–BK14–PEDCO–110–GT–RT–0001 |
| Specification For Road & Paving | BK–GNRAL–PEDCO–000–CV–SP–0002 |
| MTO For Civil Works – BK14 | BK–BK14–PEDCO–110–CV–MT–0001 |

## ABBREVIATION

PT= POINT
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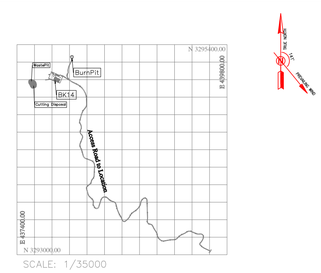
## KEY PLAN




| REV. | DESCRIPTION | BY | DATE | CHECKED | REV. APPR. |
|---|---|---|---|---|---|
| | | | | BY | DATE |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

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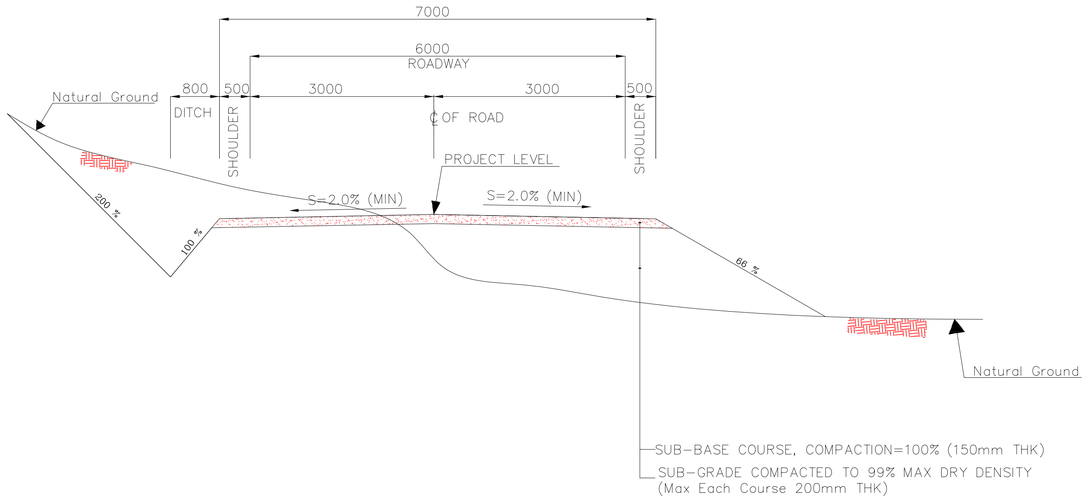
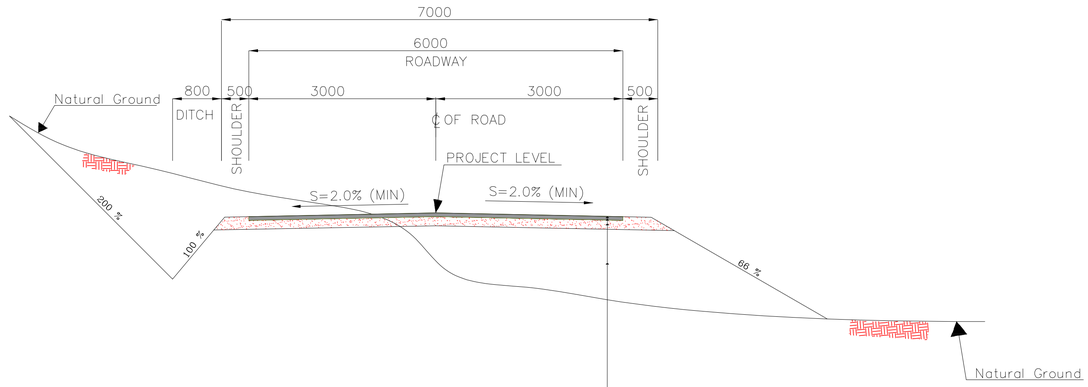
| H=1:200 V=1:200 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 81 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053–073–9184 | F | 4 | S | 708209 | 81 | D01 |

D01
TOTALLY REVISED




N.T.S. 1 TYPICAL CROSS SECTIONS (Access Road)-Regular Area




N.T.S. 2 TYPICAL CROSS SECTIONS (Access Road)-Asphalt Area (Refer to Table1)

TABLE 1-ASPHALT AREA SPECIFICATION

| NAME | KM START | KM END | LENGTH(m) |
|---|---|---|---|
| AREA1 | 0+430.00 | 0+550.00 | 120 |
| AREA2 | 0+970.00 | 1+150.00 | 180 |
| AREA3 | 2+150.00 | 2+250.00 | 100 |
| AREA4 | 2+800.00 | 3+290.00 | 490 |
| AREA5 | 3+900.00 | 4+010.00 | 110 |
| | | TOTAL | 1000 |

## NOTES

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|---|---|
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| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

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## LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| | GRAVEL ROAD | △ | BENCH MARK |
| | PROPOSED ROAD | | BRIDGE |
| | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout -BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report - BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |

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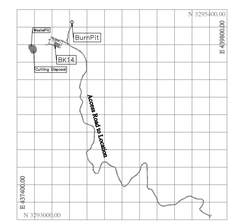
## KEY PLAN

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|---|---|---|---|---|---|
| *** | ********** | ** ** | *** **** | ** ** | *** **** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | ** ** |
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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WELLHEAD FACILITIES

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WELLHEAD FACILITIES

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS - BK14

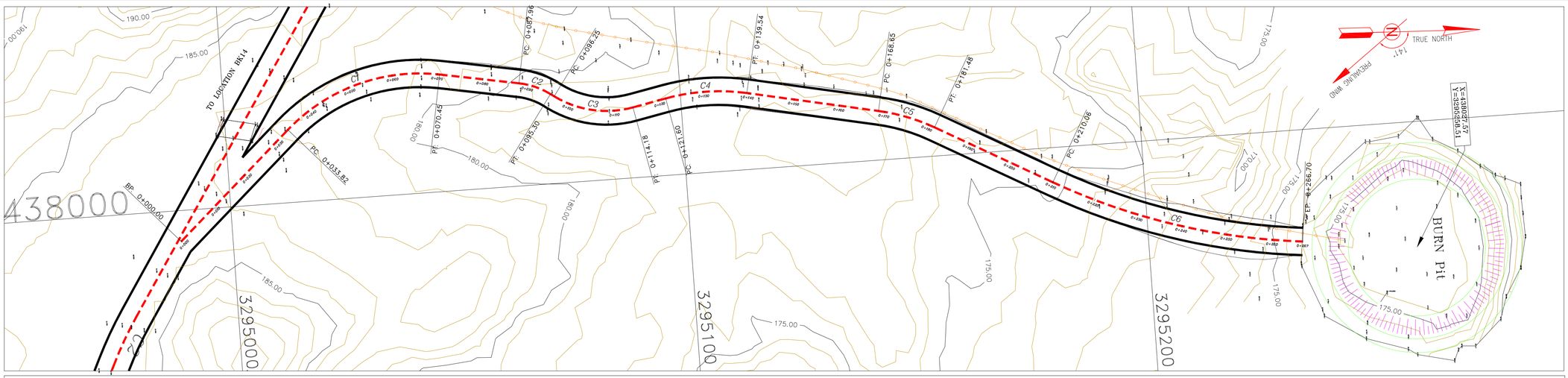
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

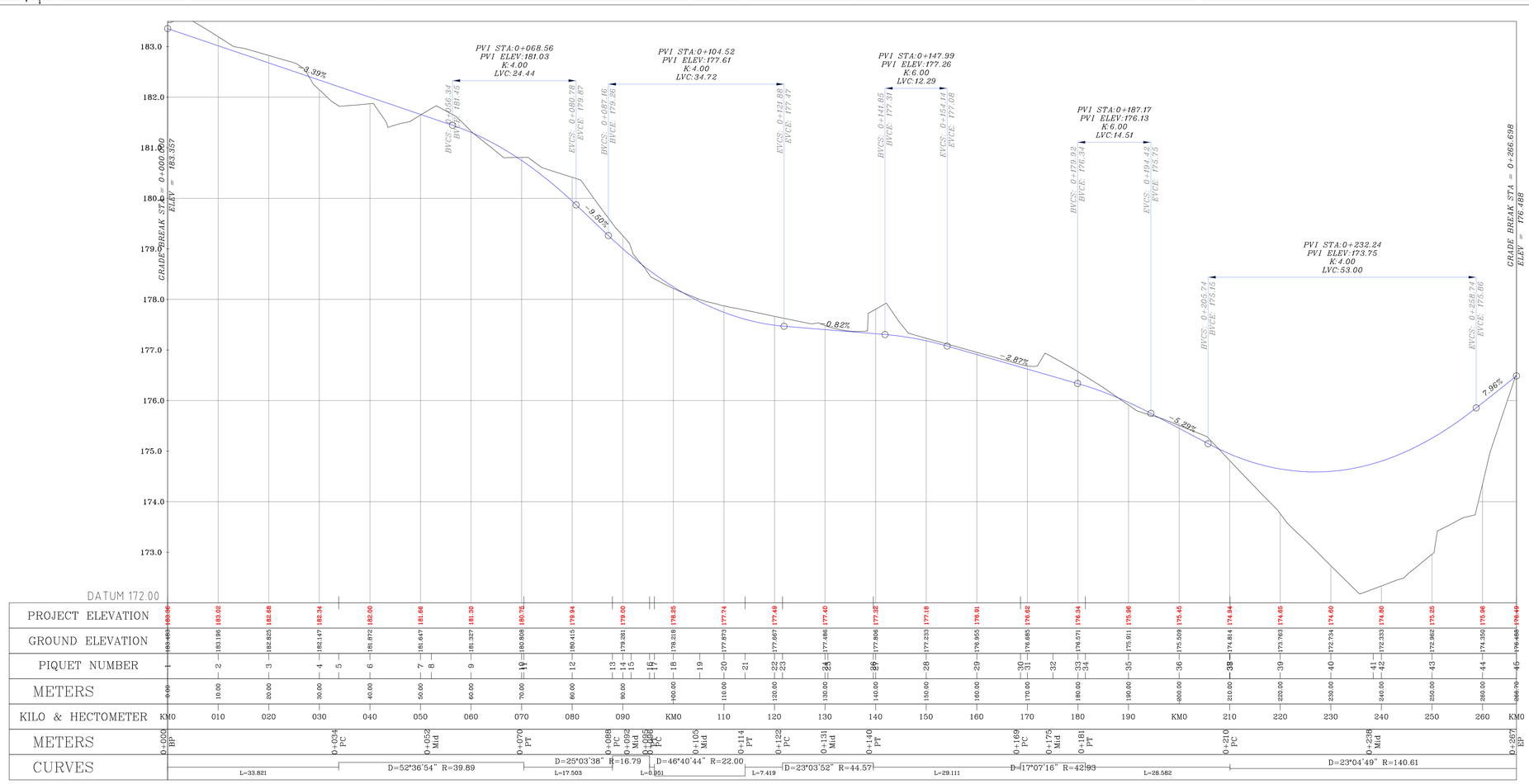
APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| N.T.S. | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 82 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 82 | D00 |

D01 TOTALLY REVISED

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| | | | |
|---|---|---|---|
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| SITE | | WATER COURSE | |
| CAMP SITE | 60 / 50 | CONTOURS | |
| ASPHALT ROAD | 99.27 | SPOT HEIGHT | |
| GRAVEL ROAD | | BENCH MARK | |
| PROPOSED ROAD | | BRIDGE | |
| DAYLIGHT | | CULVERT | |
| | | FLOWLINE | |

| REFERENCE DRAWING | DRG. No. |
|---|---|
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| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
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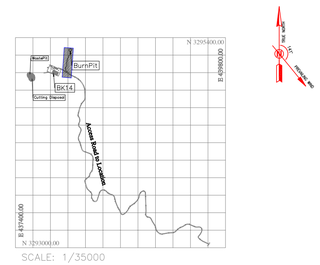


## Curve Table: Alignments

| Curve # | Radius | Length | Chord Direction | Start Point | End Point |
|---|---|---|---|---|---|
| C1 | 39.89 | 36.63 | N15° 52' 54.99"W | (437984.06,3295013.70) | (437974.39,3295047.71) |
| C2 | 16.79 | 7.35 | N22° 57' 21.19"E | (437977.55,3295064.92) | (437980.40,3295071.63) |
| C3 | 22.00 | 17.92 | N12° 08' 48.53"E | (437980.95,3295072.41) | (437984.62,3295089.45) |
| C4 | 44.57 | 17.94 | N0° 20' 22.78"E | (437983.18,3295096.73) | (437983.28,3295114.55) |
| C5 | 42.93 | 12.83 | N20° 25' 56.95"E | (437989.27,3295143.04) | (437993.73,3295155.01) |
| C6 | 140.61 | 56.64 | N17° 27' 10.51"E | (438007.59,3295180.01) | (438024.46,3295233.68) |

| Station | Northing | Easting |
|---|---|---|
| 0+000.00 | 3294988.64 | 438006.78 |
| 0+010.00 | 3294996.05 | 438000.06 |
| 0+020.00 | 3295003.46 | 437993.34 |
| 0+030.00 | 3295010.87 | 437986.63 |
| 0+040.00 | 3295018.58 | 437980.28 |
| 0+050.00 | 3295027.53 | 437975.89 |
| 0+060.00 | 3295037.30 | 437973.86 |
| 0+070.00 | 3295047.26 | 437974.31 |
| 0+080.00 | 3295057.10 | 437976.11 |
| 0+090.00 | 3295066.91 | 437978.04 |
| 0+100.00 | 3295075.63 | 437982.85 |
| 0+110.00 | 3295085.30 | 437985.03 |
| 0+120.00 | 3295095.16 | 437983.49 |
| 0+130.00 | 3295105.08 | 437982.33 |
| 0+140.00 | 3295115.00 | 437983.38 |
| 0+150.00 | 3295124.79 | 437985.43 |
| 0+160.00 | 3295134.57 | 437987.49 |
| 0+170.00 | 3295144.35 | 437989.57 |
| 0+180.00 | 3295153.71 | 437993.04 |
| 0+190.00 | 3295162.47 | 437997.86 |
| 0+200.00 | 3295171.21 | 438002.71 |
| 0+210.00 | 3295179.96 | 438007.56 |
| 0+220.00 | 3295188.87 | 438012.09 |
| 0+230.00 | 3295198.08 | 438015.98 |
| 0+240.00 | 3295207.54 | 438019.21 |
| 0+250.00 | 3295217.21 | 438021.76 |
| 0+260.00 | 3295227.04 | 438023.61 |
| 0+266.70 | 3295233.68 | 438024.46 |

| PI Station | Northing | Easting |
|---|---|---|
| 0+000.00 | 3294988.64 | 438006.78 |
| 0+053.54 | 3295028.31 | 437970.82 |
| 0+091.69 | 3295068.59 | 437978.23 |
| 0+105.75 | 3295080.14 | 437986.46 |
| 0+130.69 | 3295105.65 | 437981.41 |
| 0+175.11 | 3295149.36 | 437990.60 |
| 0+238.77 | 3295205.12 | 438021.50 |
| 0+266.70 | 3295233.68 | 438024.46 |

Coordinate of Bench Marks (UTM–ZONE 39N)

| NAME | Easting(m) | Northing(m) | Elevation(m) |
|---|---|---|---|
| GPS2 | 437770.8593 | 3295060.1065 | 171.4186 |
| GPS3 | 437770.7943 | 3295060.0960 | 171.4184 |

| REV. | DESCRIPTION | CHECKED BY | CHECKED DATE | APPR. BY | APPR. DATE |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
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| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB–SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| 1/500 | A1 | BK–BK14–PEDCO–110–CV–DW–0001 | 83 OF 90 | D01 |

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BINAK OILFIELD DEVELOPMENT
SUB–SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

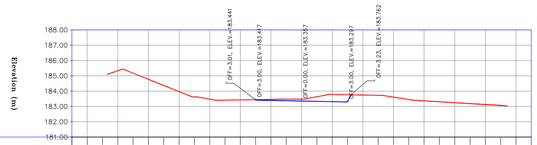
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053–073–9184 | F | 4 | S | 708209 | 83 | D00 |

## 0+000.00

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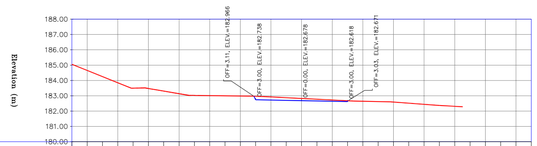
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | 185.33 | 185.17 | 184.77 | 184.37 | 183.97 | 183.62 | 183.48 | 183.41 | 183.43 | 183.44 | 183.46 | 183.48 | 183.48 | 183.64 | 183.78 | 183.77 | 183.75 | 183.73 | 183.61 | 183.45 | 183.36 | 183.30 | 183.25 | 183.19 | 183.13 | 183.07 | | |
| PROJECT ELEVATION | | | | | | | | | | | 183.42 | 183.40 | 183.38 | 183.36 | 183.34 | 183.32 | 183.30 | | | | | | | | | | | | |

## 0+010.00

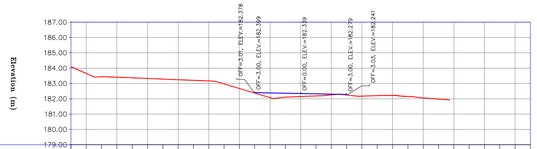
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | 185.52 | 185.11 | 184.71 | 184.31 | 183.91 | 183.56 | 183.48 | 183.30 | 183.13 | 183.15 | 183.19 | 183.24 | 183.23 | 183.21 | 183.20 | 183.17 | 183.15 | 183.14 | 183.12 | 183.10 | 183.03 | 182.95 | 182.89 | 182.84 | 182.78 | 182.72 | | |
| PROJECT ELEVATION | | | | | | | | | | | | | 183.08 | 183.06 | 183.04 | 183.02 | 183.00 | 182.98 | 182.96 | | | | | | | | | | |

## 0+020.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | 184.65 | 184.25 | 183.85 | 183.50 | 183.47 | 183.30 | 183.14 | 183.03 | 183.01 | 183.00 | 182.98 | 182.96 | 182.93 | 182.88 | 182.82 | 182.77 | 182.72 | 182.67 | 182.62 | 182.52 | 182.44 | 182.37 | 182.31 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | | | | | 182.74 | 182.72 | 182.70 | 182.68 | 182.66 | 182.64 | 182.62 | | | | | | | | |

## 0+030.00

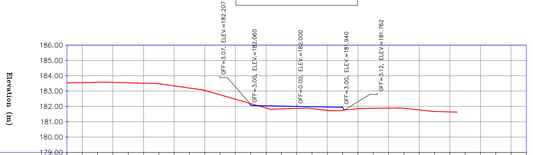



| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | 183.65 | 183.44 | 183.41 | 183.37 | 183.33 | 183.29 | 183.25 | 183.21 | 183.17 | 182.97 | 182.67 | 182.37 | 182.08 | 182.11 | 182.15 | 182.19 | 182.25 | 182.24 | 182.17 | 182.21 | 182.22 | 182.15 | 182.05 | 181.88 | | | | |
| PROJECT ELEVATION | | | | | | | | | | | | | | | 182.40 | 182.38 | 182.36 | 182.34 | 182.32 | 182.30 | 182.28 | | | | | | | | |

## 0+033.82

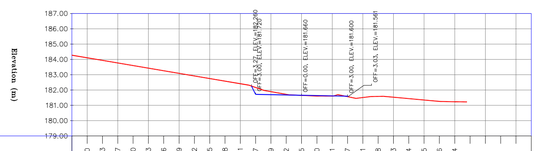
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | 183.41 | 183.41 | 183.37 | 183.33 | 183.29 | 183.28 | 183.28 | 183.12 | 182.88 | 182.63 | 182.39 | 182.14 | 181.89 | 181.83 | 181.92 | 182.01 | 182.10 | 182.06 | 182.07 | 182.04 | 181.94 | 181.90 | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | | | 182.27 | 182.25 | 182.23 | 182.21 | 182.19 | 182.17 | 182.15 | | | | | | | | | | |

## 0+040.00



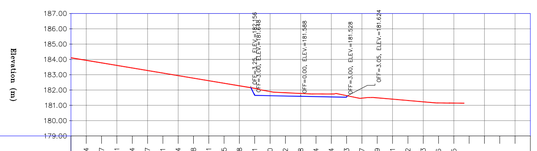

| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | 183.55 | 183.57 | 183.56 | 183.54 | 183.51 | 183.48 | 183.34 | 183.20 | 183.04 | 182.76 | 182.47 | 182.19 | 181.90 | 181.84 | 181.87 | 181.86 | 181.74 | 181.75 | 181.86 | 181.87 | 181.89 | 181.87 | 181.77 | 181.67 | 181.64 | | | |
| PROJECT ELEVATION | | | | | | | | | | | | | 182.26 | 182.04 | 182.02 | 182.00 | 181.98 | 181.96 | 181.94 | | | | | | | | | | |

## 0+050.00




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | 184.10 | 183.93 | 183.77 | 183.60 | 183.43 | 183.26 | 183.09 | 182.92 | 182.75 | 182.58 | 182.41 | 182.17 | 181.89 | 181.72 | 181.66 | 181.65 | 181.64 | 181.60 | 181.61 | 181.57 | 181.51 | 181.58 | 181.53 | 181.44 | 181.35 | 181.26 | 181.24 | |
| PROJECT ELEVATION | | | | | | | | | | | | | | | 181.72 | 181.70 | 181.68 | 181.66 | 181.64 | 181.62 | 181.60 | | | | | | | | |

## 0+052.14




| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | | 183.84 | 183.77 | 183.61 | 183.44 | 183.27 | 183.11 | 182.94 | 182.78 | 182.61 | 182.45 | 182.28 | 182.11 | 181.95 | 181.82 | 181.78 | 181.74 | 181.74 | 181.63 | 181.47 | 181.49 | 181.41 | 181.32 | 181.23 | 181.16 | 181.15 | | | |
| PROJECT ELEVATION | | | | | | | | | | | | | | | 181.65 | 181.63 | 181.61 | 181.59 | 181.57 | 181.55 | 181.53 | | | | | | | | |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

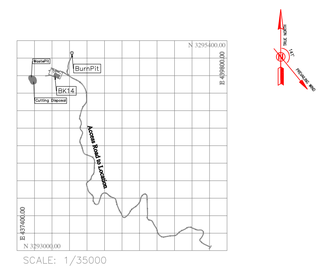
WELL LOCATION
WELL
SITE
CAMP SITE
ASPHALT ROAD
GRAVEL ROAD
PROPOSED ROAD
DAYLIGHT
CANAL
RIVER
WATER COURSE
CONTOURS (60 / 50)
SPOT HEIGHT (99.27)
BENCH MARK
BRIDGE
CULVERT

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | ***.** | **********.** | ***.**** | **.** | ***.**** |
|---|---|---|---|---|---|---|
| | | BY | DATE | BY | DATE | BY | DATE |
| | | CHECKED | | REV. APPR. | | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 84 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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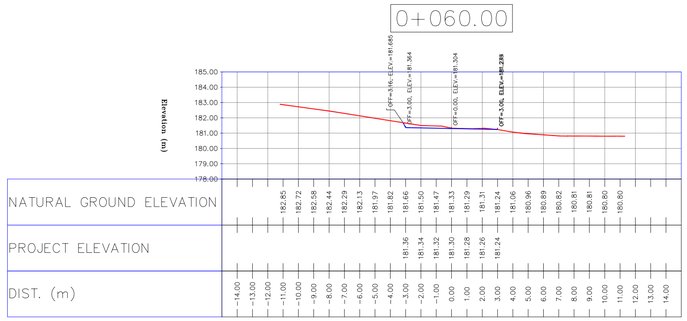


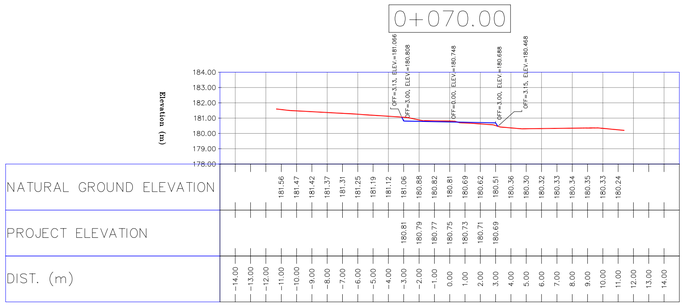


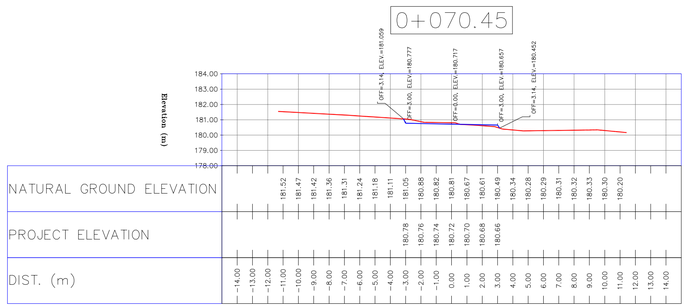


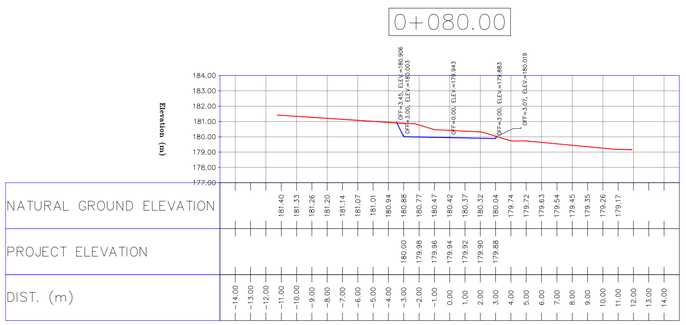


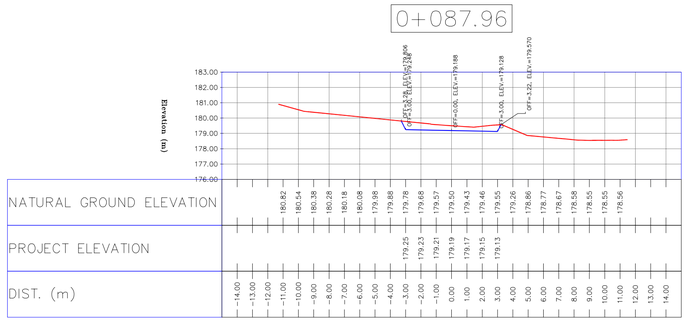


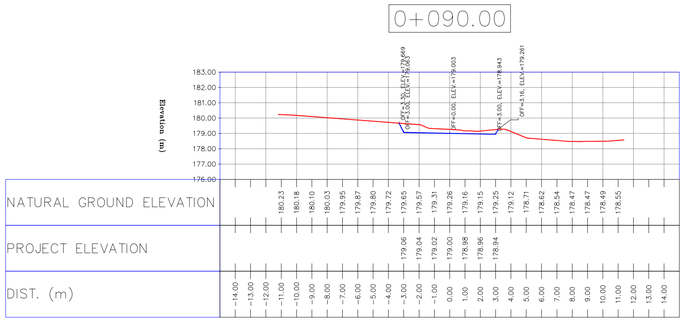


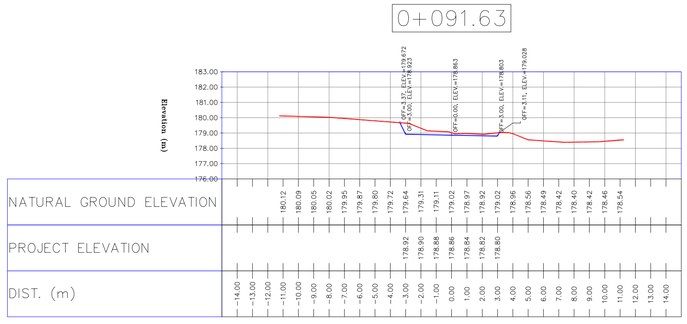


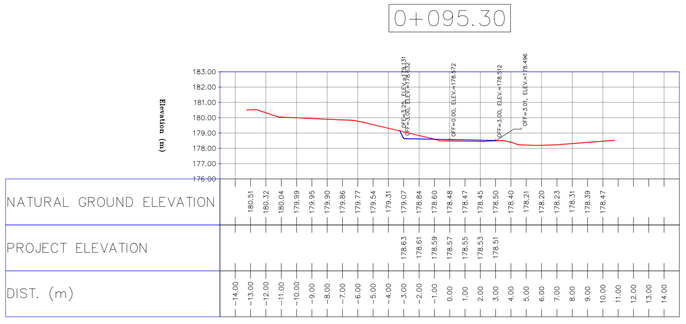


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| | |
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## LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | | CANAL |
| ● | WELL | | RIVER |
| ▭ | SITE | | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | | BRIDGE |
| ▬ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

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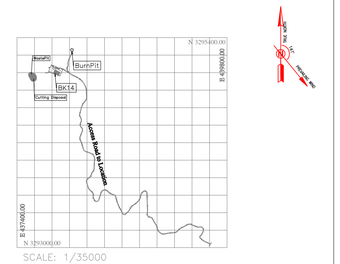
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | REV. | DESCRIPTION | BY | DATE | BY | DATE |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** | | | CHECKED | | REV. APPR. | |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. | | | | | | |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

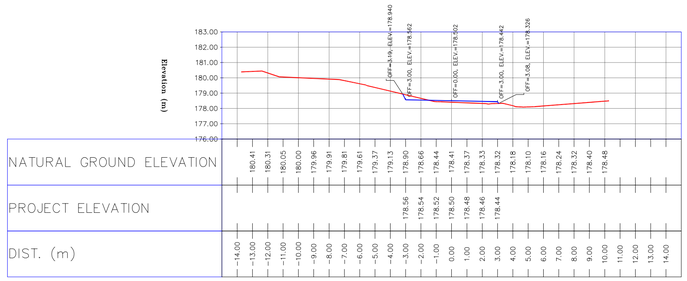
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

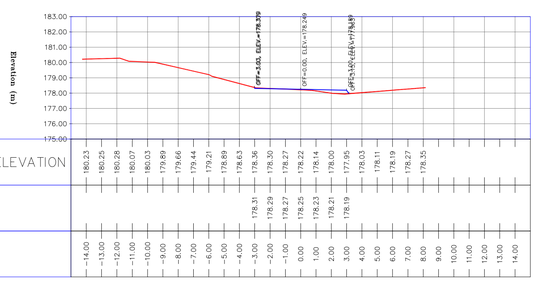
| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 85 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 85 | D01 |

## 0+096.25



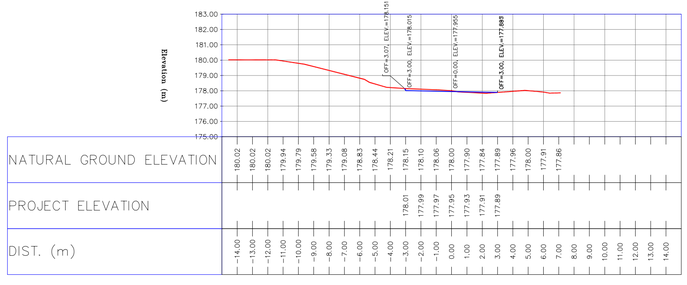

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 180.41 | 180.31 | 180.05 | 180.00 | 179.96 | 179.91 | 179.81 | 179.61 | 179.37 | 179.13 | 178.90 | 178.66 | 178.44 | 178.41 | 178.37 | 178.33 | 178.32 | 178.18 | 178.10 | 178.16 | 178.24 | 178.32 | 178.40 | 178.48 | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | 178.56 | 178.54 | 178.52 | 178.50 | 178.48 | 178.46 | 178.44 | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+100.00



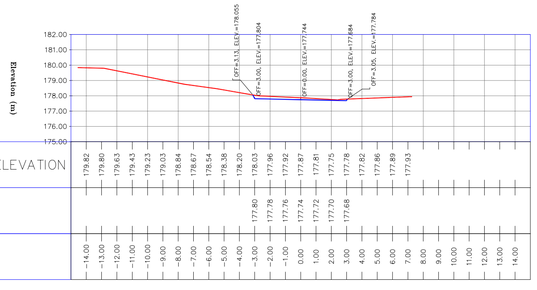

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 180.23 | 180.25 | 180.28 | 180.07 | 180.03 | 179.89 | 179.66 | 179.44 | 179.21 | 178.89 | 178.63 | 178.36 | 178.30 | 178.27 | 178.22 | 178.14 | 178.00 | 177.95 | 178.03 | 178.11 | 178.19 | 178.27 | 178.35 | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | | 178.31 | 178.29 | 178.27 | 178.25 | 178.23 | 178.21 | 178.19 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+105.21



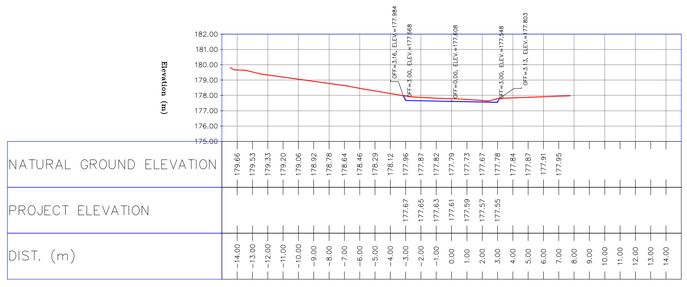

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 180.02 | 180.02 | 180.02 | 179.94 | 179.79 | 179.58 | 179.33 | 179.08 | 178.83 | 178.44 | 178.21 | 178.15 | 178.10 | 178.06 | 178.00 | 177.90 | 177.84 | 177.89 | 177.96 | 178.00 | 177.91 | 177.86 | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | | 178.01 | 177.99 | 177.97 | 177.95 | 177.93 | 177.91 | 177.89 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+110.00



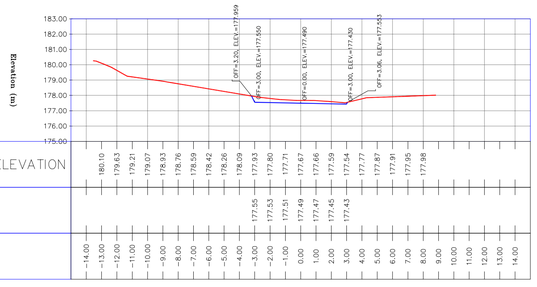

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 179.82 | 179.80 | 179.63 | 179.43 | 179.23 | 179.03 | 178.84 | 178.67 | 178.54 | 178.38 | 178.20 | 178.03 | 177.96 | 177.92 | 177.87 | 177.81 | 177.75 | 177.78 | 177.82 | 177.86 | 177.89 | 177.93 | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | | 177.80 | 177.78 | 177.76 | 177.74 | 177.72 | 177.70 | 177.68 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+114.18



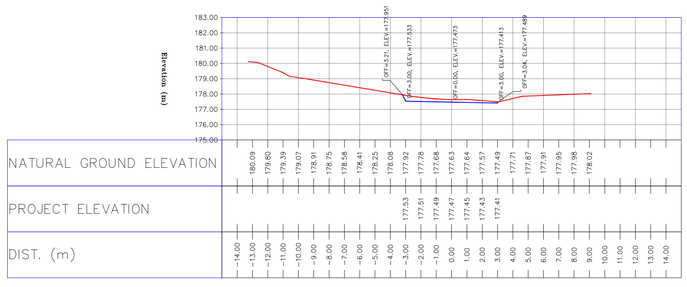

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 179.66 | 179.53 | 179.33 | 179.20 | 179.06 | 178.92 | 178.78 | 178.64 | 178.46 | 178.29 | 178.12 | 177.96 | 177.87 | 177.82 | 177.79 | 177.73 | 177.67 | 177.78 | 177.84 | 177.87 | 177.91 | 177.95 | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | | 177.67 | 177.65 | 177.63 | 177.61 | 177.59 | 177.57 | 177.55 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+120.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 180.10 | 179.83 | 179.21 | 179.07 | 178.83 | 178.76 | 178.59 | 178.42 | 178.26 | 178.09 | 177.93 | 177.80 | 177.71 | 177.67 | 177.66 | 177.59 | 177.54 | 177.77 | 177.87 | 177.91 | 177.95 | 177.98 | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | | 177.55 | 177.53 | 177.51 | 177.49 | 177.47 | 177.45 | 177.43 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+121.60

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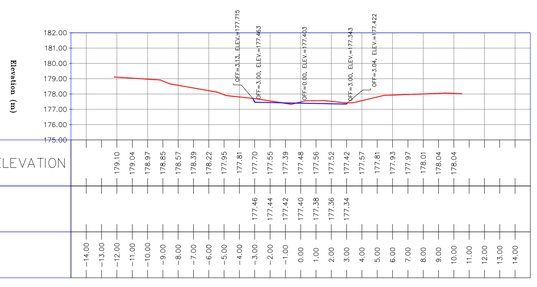
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 180.09 | 179.80 | 179.39 | 179.07 | 178.91 | 178.75 | 178.58 | 178.41 | 178.25 | 178.08 | 177.92 | 177.78 | 177.68 | 177.63 | 177.64 | 177.57 | 177.49 | 177.71 | 177.87 | 177.91 | 177.95 | 177.98 | 178.02 | | | | | | |
| PROJECT ELEVATION | | | | | | | | | | | | 177.53 | 177.51 | 177.49 | 177.47 | 177.45 | 177.43 | 177.41 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+130.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 179.10 | 179.04 | 178.97 | 178.85 | 178.57 | 178.39 | 178.22 | 177.95 | 177.81 | 177.70 | 177.55 | 177.39 | 177.44 | 177.42 | 177.40 | 177.48 | 177.56 | 177.52 | 177.42 | 177.57 | 177.81 | 177.93 | 177.97 | 178.01 | 178.04 | 178.04 | | | |
| PROJECT ELEVATION | | | | | | | | | | | | | 177.46 | 177.44 | 177.42 | 177.40 | 177.38 | 177.36 | 177.34 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

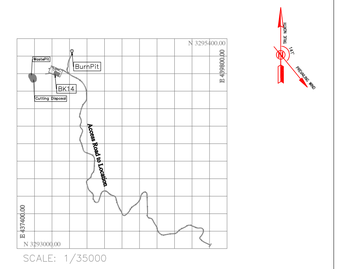
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌇ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY — PEDCO

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14


أصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

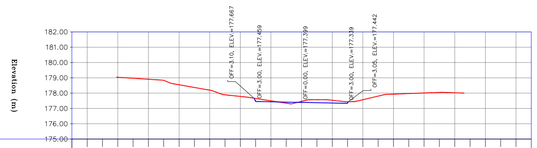
| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

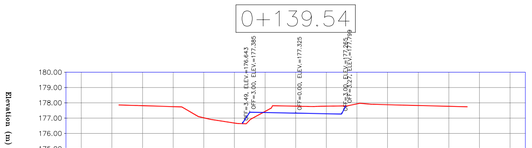
| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. | BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 86 OF 90 | D01 | 053-073-9184 | F | 4 | S | 708209 | 86 | D01 |

## 0+130.57



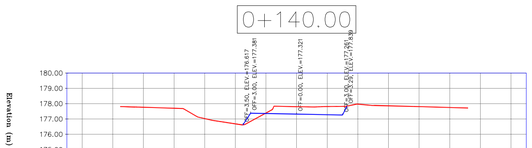

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 179.04 | 178.97 | 178.91 | 178.84 | 178.55 | 178.37 | 178.20 | 177.89 | 177.78 | 177.65 | 177.50 | 177.34 | 177.46 | 177.57 | 177.53 | 177.44 | 177.57 | 177.81 | 177.93 | 177.97 | 178.01 | 178.05 | 178.03 | | | |
| PROJECT ELEVATION | | | | | | | | | | 177.46 | 177.44 | 177.42 | 177.40 | 177.38 | 177.36 | 177.34 | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+139.54



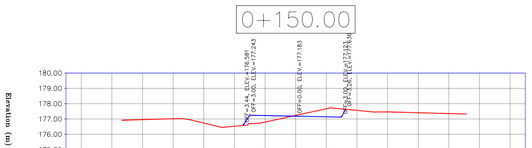

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.84 | 177.81 | 177.78 | 177.75 | 177.48 | 177.02 | 176.84 | 176.68 | 176.87 | 177.44 | 177.80 | 177.78 | 177.76 | 177.78 | 177.79 | 177.93 | 177.90 | 177.88 | 177.85 | 177.82 | 177.80 | 177.77 | 177.74 | | | |
| PROJECT ELEVATION | | | | | | | | | 177.38 | 177.36 | 177.34 | 177.32 | 177.30 | 177.28 | 177.26 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+140.00



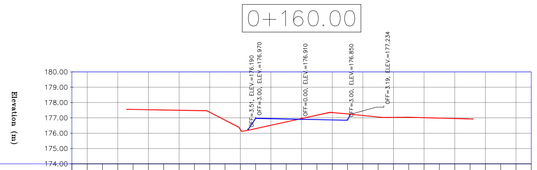

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.80 | 177.76 | 177.73 | 177.70 | 177.44 | 177.03 | 176.84 | 176.69 | 176.85 | 177.39 | 177.83 | 177.81 | 177.79 | 177.81 | 177.83 | 177.97 | 177.88 | 177.83 | 177.81 | 177.78 | 177.75 | 177.73 | | | | |
| PROJECT ELEVATION | | | | | | | | | 177.38 | 177.36 | 177.34 | 177.32 | 177.30 | 177.28 | 177.26 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+150.00



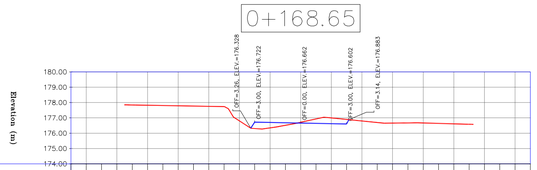

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 176.93 | 176.96 | 176.99 | 177.01 | 176.97 | 176.74 | 176.49 | 176.53 | 176.70 | 176.80 | 177.02 | 177.23 | 177.45 | 177.67 | 177.66 | 177.57 | 177.47 | 177.46 | 177.43 | 177.41 | 177.38 | 177.35 | 177.33 | | | |
| PROJECT ELEVATION | | | | | | | | | 177.24 | 177.22 | 177.20 | 177.18 | 177.16 | 177.14 | 177.12 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+160.00



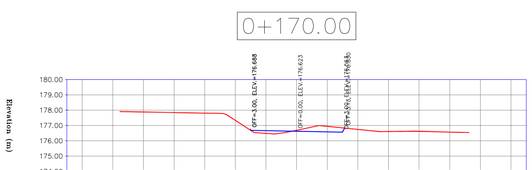

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.55 | 177.53 | 177.51 | 177.49 | 177.48 | 177.37 | 176.85 | 176.25 | 176.30 | 176.52 | 176.74 | 176.95 | 177.17 | 177.35 | 177.25 | 177.15 | 177.05 | 177.03 | 177.04 | 177.01 | 176.98 | 176.96 | 176.93 | | | |
| PROJECT ELEVATION | | | | | | | | | 176.97 | 176.95 | 176.93 | 176.91 | 176.89 | 176.87 | 176.85 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+168.65



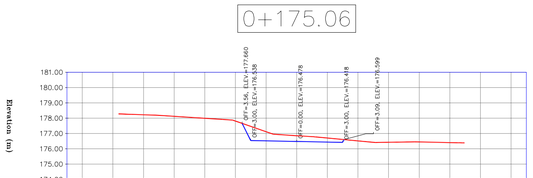

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.84 | 177.82 | 177.81 | 177.79 | 177.77 | 177.75 | 177.73 | 176.80 | 176.30 | 176.35 | 176.51 | 176.71 | 176.93 | 177.00 | 176.90 | 176.80 | 176.70 | 176.66 | 176.67 | 176.67 | 176.64 | 176.61 | 176.59 | | | |
| PROJECT ELEVATION | | | | | | | | | 176.72 | 176.70 | 176.68 | 176.66 | 176.64 | 176.62 | 176.60 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+170.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.90 | 177.88 | 177.86 | 177.84 | 177.82 | 177.80 | 177.79 | 177.34 | 176.69 | 176.49 | 176.51 | 176.68 | 176.90 | 176.84 | 176.84 | 176.74 | 176.65 | 176.61 | 176.62 | 176.60 | 176.57 | 176.55 | | | | |
| PROJECT ELEVATION | | | | | | | | | 176.68 | 176.66 | 176.64 | 176.62 | 176.60 | 176.58 | 176.56 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+175.06




| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 178.26 | 178.22 | 178.18 | 178.12 | 178.06 | 177.99 | 177.93 | 177.81 | 177.46 | 177.12 | 176.92 | 176.86 | 176.79 | 176.70 | 176.61 | 176.51 | 176.42 | 176.42 | 176.44 | 176.45 | 176.43 | 176.41 | | | | |
| PROJECT ELEVATION | | | | | | | | | 176.54 | 176.52 | 176.50 | 176.48 | 176.46 | 176.44 | 176.42 | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

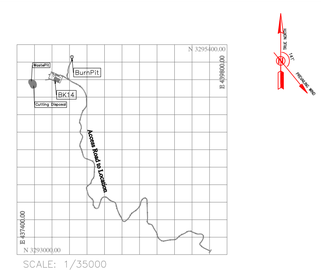
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◣ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | CHECKED BY | CHECKED DATE | REV. APPR. BY | REV. APPR. DATE |
|---|---|---|---|---|---|
| *** | ********** | ** ** | *** **** | ** ** | *** **** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | ** ** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | ** ** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

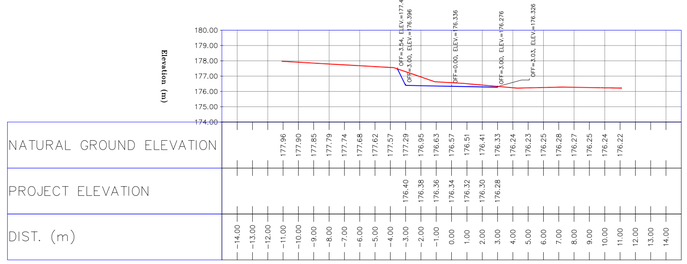
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 87 OF 90 | D01 |

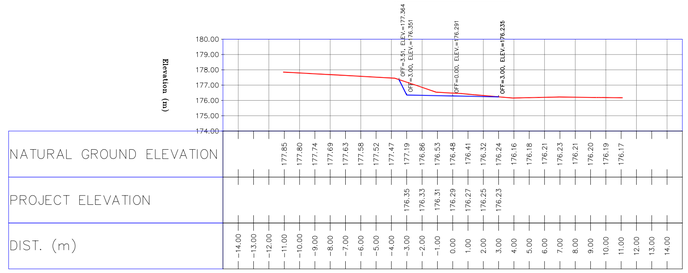
| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 87 | D01 |

## 0+180.00



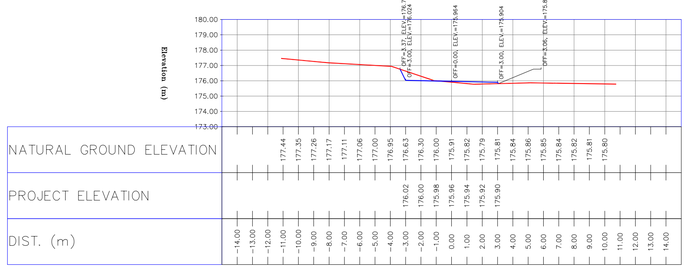

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.96 | 177.90 | 177.85 | 177.79 | 177.74 | 177.68 | 177.62 | 177.57 | 177.29 | 176.95 | 176.63 | 176.57 | 176.51 | 176.41 | 176.33 | 176.24 | 176.23 | 176.25 | 176.28 | 176.27 | 176.25 | 176.24 | 176.22 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 176.40 | 176.38 | 176.36 | 176.34 | 176.32 | 176.30 | 176.28 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+181.48



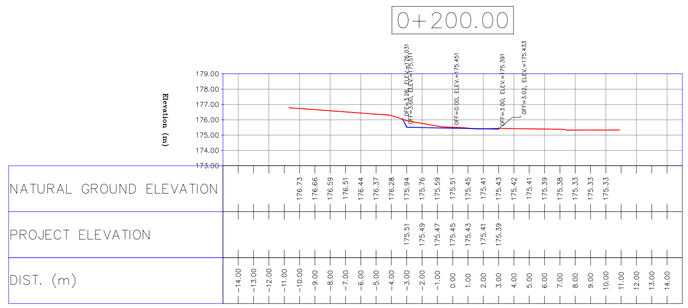

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.85 | 177.80 | 177.74 | 177.69 | 177.63 | 177.58 | 177.52 | 177.47 | 177.19 | 176.86 | 176.53 | 176.48 | 176.41 | 176.32 | 176.24 | 176.16 | 176.18 | 176.21 | 176.23 | 176.21 | 176.20 | 176.19 | 176.17 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 176.35 | 176.33 | 176.31 | 176.29 | 176.27 | 176.25 | 176.23 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+190.00



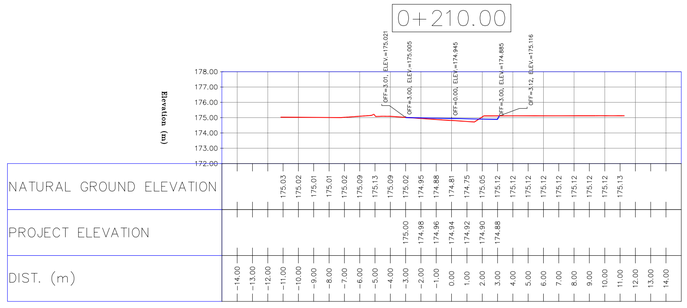

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 177.44 | 177.35 | 177.26 | 177.17 | 177.11 | 177.06 | 177.00 | 176.95 | 176.63 | 176.30 | 176.00 | 175.91 | 175.82 | 175.79 | 175.81 | 175.84 | 175.85 | 175.84 | 175.82 | 175.81 | 175.80 | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | 176.02 | 176.00 | 175.98 | 175.96 | 175.94 | 175.92 | 175.90 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+200.00



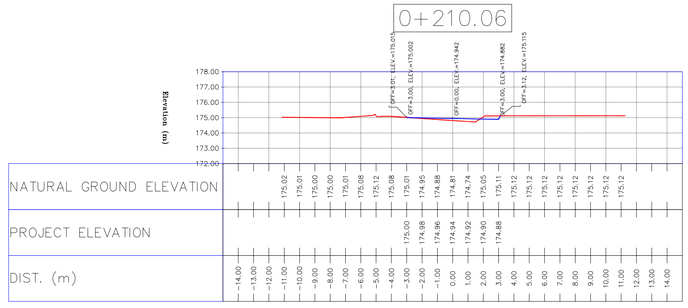

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 176.73 | 176.66 | 176.59 | 176.51 | 176.44 | 176.37 | 176.28 | 175.84 | 175.76 | 175.59 | 175.51 | 175.45 | 175.43 | 175.41 | 175.39 | 175.42 | 175.41 | 175.39 | 175.38 | 175.33 | 175.33 | 175.33 | | | | | | |
| PROJECT ELEVATION | | | | | | | | | 175.51 | 175.49 | 175.47 | 175.45 | 175.43 | 175.41 | 175.39 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+210.00



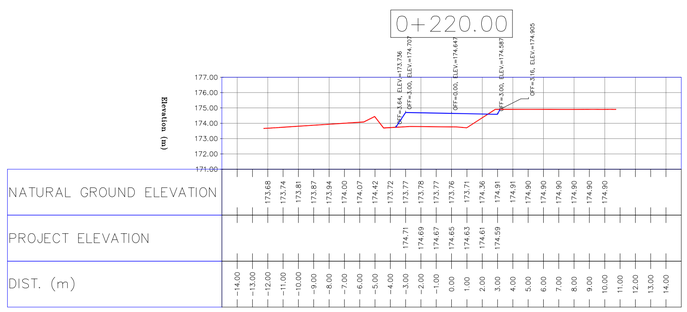

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 175.03 | 175.02 | 175.01 | 175.01 | 175.02 | 175.09 | 175.13 | 175.09 | 175.02 | 174.95 | 174.88 | 174.81 | 174.75 | 175.05 | 175.12 | 175.12 | 175.12 | 175.12 | 175.12 | 175.12 | 175.12 | 175.12 | 175.13 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 175.00 | 174.98 | 174.96 | 174.94 | 174.92 | 174.90 | 174.88 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+210.06



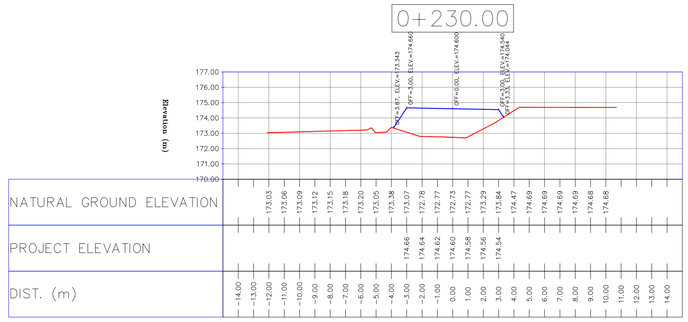

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 175.02 | 175.01 | 175.00 | 175.00 | 175.01 | 175.08 | 175.12 | 175.08 | 175.01 | 174.95 | 174.88 | 174.81 | 174.74 | 175.05 | 175.11 | 175.12 | 175.12 | 175.12 | 175.12 | 175.12 | 175.12 | 175.12 | 175.12 | | | | | |
| PROJECT ELEVATION | | | | | | | | | 175.00 | 174.98 | 174.96 | 174.94 | 174.92 | 174.90 | 174.88 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+220.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 173.68 | 173.74 | 173.81 | 173.87 | 173.94 | 174.00 | 174.07 | 174.42 | 173.72 | 173.77 | 173.78 | 173.77 | 173.76 | 173.71 | 174.36 | 174.91 | 174.90 | 174.90 | 174.90 | 174.90 | 174.90 | | | | | | | |
| PROJECT ELEVATION | | | | | | | | | 174.71 | 174.69 | 174.67 | 174.65 | 174.63 | 174.61 | 174.59 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

## 0+230.00




| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NATURAL GROUND ELEVATION | 173.03 | 173.06 | 173.09 | 173.12 | 173.15 | 173.18 | 173.20 | 173.05 | 173.38 | 173.07 | 172.78 | 172.77 | 172.73 | 172.77 | 173.29 | 173.84 | 174.47 | 174.69 | 174.69 | 174.69 | 174.68 | 174.68 | | | | | | |
| PROJECT ELEVATION | | | | | | | | | 174.66 | 174.64 | 174.62 | 174.60 | 174.58 | 174.56 | 174.54 | | | | | | | | | | | | | |
| DIST. (m) | -14.00 | -13.00 | -12.00 | -11.00 | -10.00 | -9.00 | -8.00 | -7.00 | -6.00 | -5.00 | -4.00 | -3.00 | -2.00 | -1.00 | 0.00 | 1.00 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |

### NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

### LEGEND

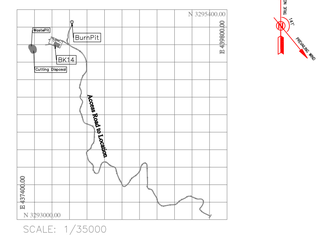
| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⌒ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

### ABBREVIATION

PT= POINT
PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
BVCE= BEGIN OF VERTICAL CURVE ELEVATION
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

### KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 88 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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| 053-073-9184 | F | 4 | S | 708209 | 88 | D01 |

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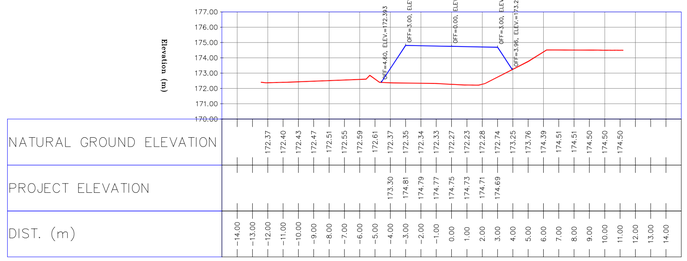


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| -12.00 | | 172.43 |
| -11.00 | | 172.47 |
| -10.00 | | 172.51 |
| -9.00 | | 172.55 |
| -8.00 | | 172.59 |
| -7.00 | | 172.61 |
| -6.00 | | 172.37 |
| -5.00 | | 172.35 |
| -4.00 | 173.30 | 172.34 |
| -3.00 | 174.81 | 172.33 |
| -2.00 | 174.79 | 172.27 |
| -1.00 | 174.77 | 172.23 |
| 0.00 | 174.75 | 172.28 |
| 1.00 | 174.73 | 172.24 |
| 2.00 | 174.71 | 173.25 |
| 3.00 | 174.69 | 173.76 |
| 4.00 | | 174.39 |
| 5.00 | | 174.51 |
| 6.00 | | 174.51 |
| 7.00 | | 174.50 |
| 8.00 | | 174.50 |
| 9.00 | | 174.50 |
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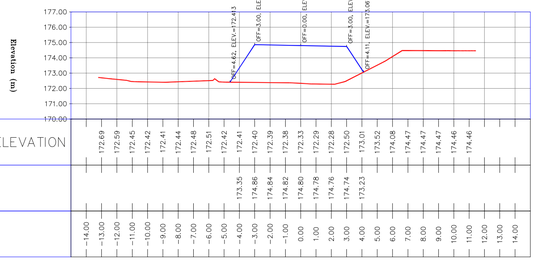


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| -11.00 | | 172.42 |
| -10.00 | | 172.41 |
| -9.00 | | 172.44 |
| -8.00 | | 172.48 |
| -7.00 | | 172.51 |
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| -3.00 | 174.86 | 172.39 |
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| 1.00 | 174.78 | 172.28 |
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| 3.00 | 174.74 | 173.01 |
| 4.00 | 173.23 | 173.52 |
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| 6.00 | | 174.47 |
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| 9.00 | | 174.46 |
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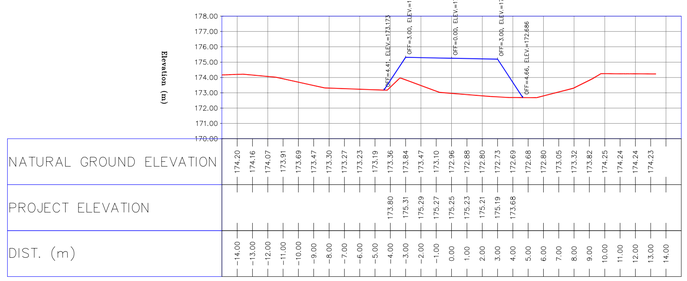


| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
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| -13.00 | | 174.16 |
| -12.00 | | 174.07 |
| -11.00 | | 173.91 |
| -10.00 | | 173.69 |
| -9.00 | | 173.47 |
| -8.00 | | 173.30 |
| -7.00 | | 173.27 |
| -6.00 | | 173.23 |
| -5.00 | | 173.19 |
| -4.00 | | 173.36 |
| -3.00 | 173.80 | 173.84 |
| -2.00 | 175.31 | 173.47 |
| -1.00 | 175.29 | 173.10 |
| 0.00 | 175.27 | 172.96 |
| 1.00 | 175.25 | 172.88 |
| 2.00 | 175.23 | 172.80 |
| 3.00 | 175.21 | 172.73 |
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| 6.00 | | 172.80 |
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| 9.00 | | 173.82 |
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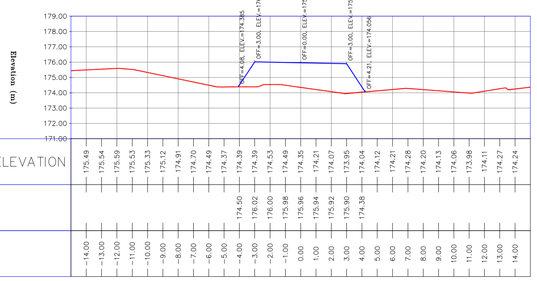


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| -12.00 | | 175.59 |
| -11.00 | | 175.53 |
| -10.00 | | 175.33 |
| -9.00 | | 175.12 |
| -8.00 | | 174.91 |
| -7.00 | | 174.70 |
| -6.00 | | 174.49 |
| -5.00 | | 174.27 |
| -4.00 | 174.50 | 174.39 |
| -3.00 | 176.02 | 174.39 |
| -2.00 | 176.00 | 174.53 |
| -1.00 | 175.98 | 174.49 |
| 0.00 | 175.96 | 174.35 |
| 1.00 | 175.94 | 174.21 |
| 2.00 | 175.92 | 174.07 |
| 3.00 | 175.90 | 173.95 |
| 4.00 | 174.38 | 174.04 |
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| 8.00 | | 174.20 |
| 9.00 | | 174.13 |
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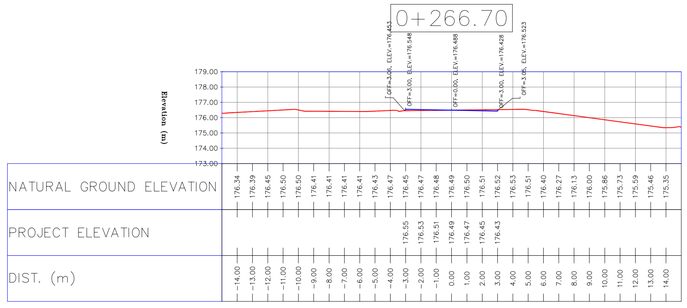


| DIST. (m) | PROJECT ELEVATION | NATURAL GROUND ELEVATION |
|---|---|---|
| -14.00 | | 176.34 |
| -13.00 | | 176.39 |
| -12.00 | | 176.45 |
| -11.00 | | 176.50 |
| -10.00 | | 176.50 |
| -9.00 | | 176.41 |
| -8.00 | | 176.41 |
| -7.00 | | 176.41 |
| -6.00 | | 176.43 |
| -5.00 | | 176.47 |
| -4.00 | | 176.45 |
| -3.00 | 176.55 | 176.47 |
| -2.00 | 176.53 | 176.48 |
| -1.00 | 176.51 | 176.49 |
| 0.00 | 176.49 | 176.47 |
| 1.00 | 176.47 | 176.50 |
| 2.00 | 176.45 | 176.51 |
| 3.00 | 176.43 | 176.52 |
| 4.00 | | 176.53 |
| 5.00 | | 176.51 |
| 6.00 | | 176.40 |
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| 8.00 | | 176.13 |
| 9.00 | | 176.00 |
| 10.00 | | 175.86 |
| 11.00 | | 175.73 |
| 12.00 | | 175.59 |
| 13.00 | | 175.46 |
| 14.00 | | 175.35 |

## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

3- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

| | |
|---|---|
| HORIZONTAL COORDINATE SYSTEM: | WGS84/UTM ZONE 39 |
| ELLIPSOID : | WORLD GEODETIC SYSTEM 1984 (WGS84) |
| MAP PROJECTION: | UNIVERSAL TRANSVERSE MERCATOR (UTM) |
| VERTICAL DATUM: | MSL |

4- THE SUITABLE MATERIAL FOR FILLING SHALL BE COLLECTED BASED ON TO THE BELOW RULES:
- PROJECT GEOTECHNICAL INVESTIGATION REPORT, BORROW MATERIALS AND SPECIFICATION STUDY PART.
- "GENERAL SPECIFICATION FOR ROAD" NO. 101, SECTION 207, IRAN PLANNING AND BUDGET ORGANIZATION.
- PROJECT GENERAL SPECIFICATION "SPECIFICATION FOR EARTH WORK" DOCUMENT NUMBER "BK-GNRAL-PEDCO-000-CV-SP-0004".
- GEOTECHNICAL REPORTS AND CLIENT'S SITE SUPERVISORY BODY RECOMMENDATIONS AND APPROVALS.

5- BEFORE ANY EARTH WORK ACTIVITIES (CUT OR FILL), TOP AND UNSUITABLE SOIL (MARN,...) SHALL BE REMOVED AS GEOTECHNICAL RECOMMENDATION AND SUPERVISOR'S REQUIREMENTS.

## LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| ▬ | PROPOSED ROAD | | BRIDGE |
| ⌒ | DAYLIGHT | | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan–BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
| Specification For Earth Work | BK-GNRAL-PEDCO-000-CV-SP-0004 |
| Standard Drawing For Slope Protection Details | BK-GNRAL-PEDCO-000-CV-DW-0002 |
| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
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## ABBREVIATION

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PVI= POINT OF VRTICAL INTERSECTION
LVC= LENGTH OF VERTICAL CURVE
BVCS= BEGIN OF VERTICAL CURVE STATION
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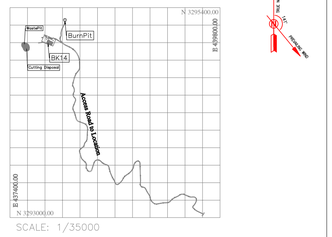
EVCS= END OF VERTICAL CURVE STATION
EVCE= END OF VERTICAL CURVE ELEVATION

## KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | BY | DATE | BY | DATE |
|---|---|---|---|---|---|
| | | CHECKED | | REV. APPR. | |
| *** | ********** | **.** | ***.**** | **.** | ***.**** |
| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 89 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
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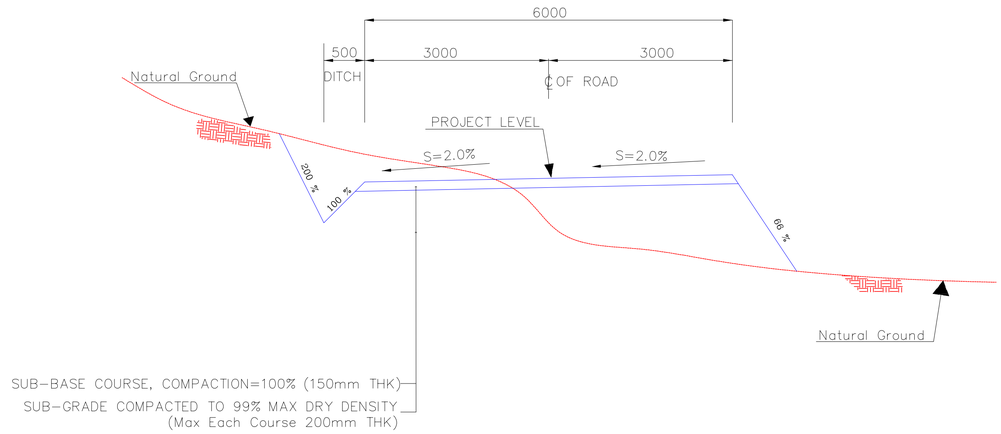


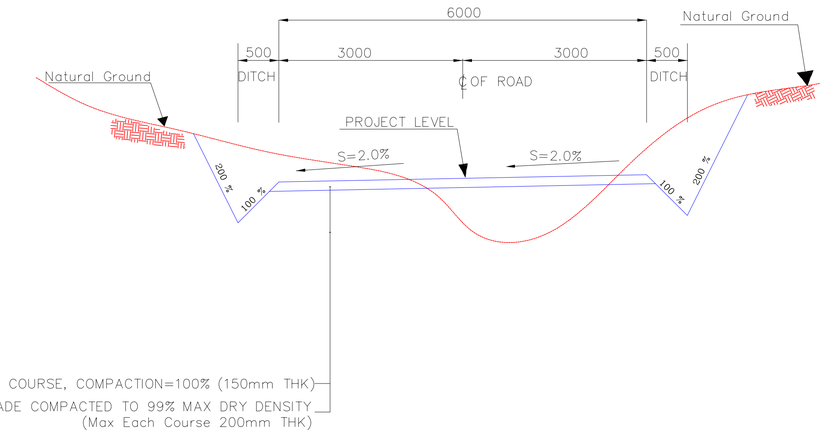


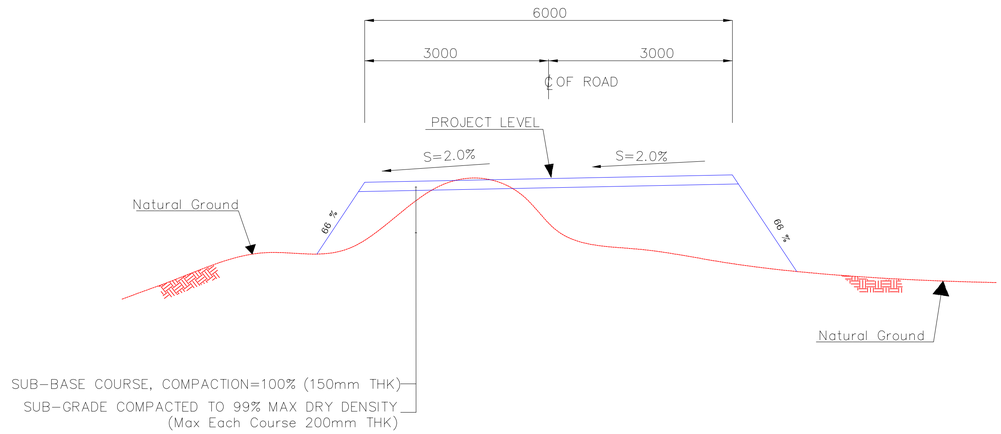


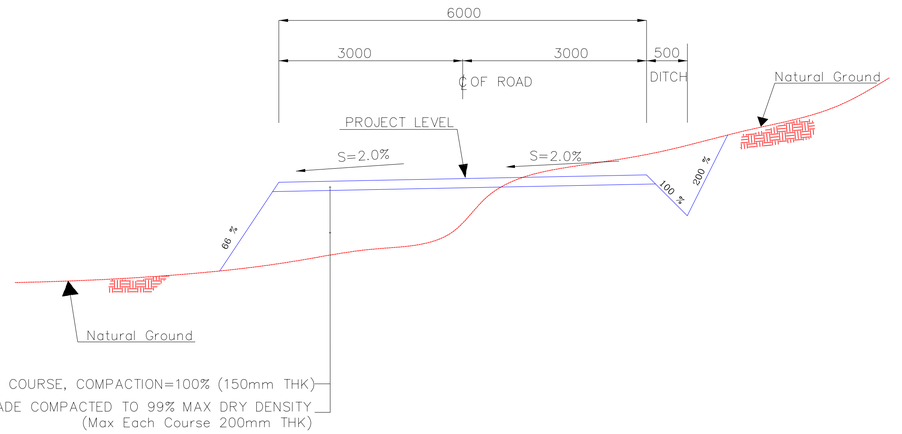


N.T.S. 1 TYPICAL CROSS SECTIONS (BURN PIT Road)

## NOTES

1- ALL COORDINATES AND ELEVATIONS ARE IN METER.

2- ALL DRAWINGS SHALL BE CHECKED BY CONTRACTOR WITH RELATIVE DRAWINGS BEFORE CONSTRUCTION.

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| | |
|---|---|
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## LEGEND

| | | | |
|---|---|---|---|
| ⊙ | WELL LOCATION | → | CANAL |
| ● | WELL | ~ | RIVER |
| ▭ | SITE | ◀ | WATER COURSE |
| ▭ | CAMP SITE | 60 / 50 | CONTOURS |
| ▬ | ASPHALT ROAD | 99.27 | SPOT HEIGHT |
| ▬ | GRAVEL ROAD | △ | BENCH MARK |
| - - - | PROPOSED ROAD | ⌒ | BRIDGE |
| ⌒ | DAYLIGHT | ⊏⊐ | CULVERT |

| REFERENCE DRAWING | DRG. No. |
|---|---|
| General Civil Layout –BK14 | BK-BK14-PEDCO-110-CV-PY-0001 |
| Rough Grading Plan-BK14 | BK-BK14-PEDCO-110-CV-PY-0003 |
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| Geotechnical Investigation Report – BK14 | BK-BK14-PEDCO-110-GT-RT-0001 |
| Specification For Road & Paving | BK-GNRAL-PEDCO-000-CV-SP-0002 |
| MTO For Civil Works – BK14 | BK-BK14-PEDCO-110-CV-MT-0001 |

## ABBREVIATION

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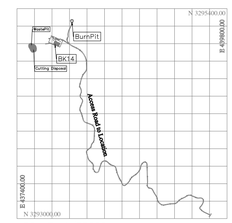
## KEY PLAN




SCALE: 1/35000

| REV. | DESCRIPTION | CHECKED BY | CHECKED DATE | REV. APPR. BY | REV. APPR. DATE |
|---|---|---|---|---|---|
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| D01 | NOV.2022 | IFA | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| D00 | OCT.2022 | IFC | R.BERLOUEI | M.FAKHARIAN | M.MEHRSHAD | **.** |
| REV. | DATE | P.O.I.S | PREP. | CHK. | APP. | AUT. |


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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES BK14 WHF MODIFICATIONS

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR(GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
BK14 WHF MODIFICATIONS

| DATE | SCALE | DRAWING BY | CHECKED BY | PROJECT ENG. |
|---|---|---|---|---|
| | | | | |

DRAWING TITLE: CIVIL AND STRUCTURAL DRAWINGS – BK14

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION | BY: | DATE:

| SCALE | SIZE | DRAWING NO. | SHEET NO. | REV. |
|---|---|---|---|---|
| H=1:200 V=1:200 | A1 | BK-BK14-PEDCO-110-CV-DW-0001 | 90 OF 90 | D01 |

| BUDGET REF. | LOCATION | SIZE | CLASS | SERIAL NO. | SHEET | REVISION |
|---|---|---|---|---|---|---|
| 053-073-9184 | F | 4 | S | 708209 | 90 | D01 |