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| **طرح نگهداشت و افزایش تولید 27 مخزن** | | | | | | | |
| **Standard Detail Drawing for Storage Tanks**  **نگهداشت و افزایش تولید میدان نفتی بینک** | | | | | | | |
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| D01 | | AUG.2022 | IFI | H.Adineh | M.Fakharian | M.Mehrshad |  |
| D00 | | JUL. 2021 | IFI | M.Asgharnejad | M.Fakharian | Sh.Ghalikar | **CLIENT Approval** |
| **Class: 2** | | | **CLIENT Doc. Number: F2D-707124** | | | | |
| **Status:** | | **IDC: Inter-Discipline Check**  **IFC: Issued For Comment**  **IFA: Issued For Approval**  **AFD: Approved For Design**  **AFC: Approved For Construction**  **AFP: Approved For Purchase**  **AFQ:** Approved For Quotation  **IFI: Issued For Information**  **AB-R: As-Built for CLIENT Review**  **AB-A: As-Built –Approved** | | | | | |

**REVISION RECORD SHEET**

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| **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |  | **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |
| **1** | X | X |  |  |  | **66** |  |  |  |  |  |
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| **23** | X | X |  |  |  | **88** |  |  |  |  |  |
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| **49** | X |  |  |  |  | **114** |  |  |  |  |  |
| **50** | X |  |  |  |  | **115** |  |  |  |  |  |
| **51** | X |  |  |  |  | **116** |  |  |  |  |  |
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1. **INTRODUCTION**

Binak oilfield in Bushehr province, a part of the southern oilfields of Iran, is located 20 km northwest of Genaveh city.

With the aim of increasing production of oil from Binak oilfield, an EPC/EPD Project has been defined by NIOC/NISOC and awarded to Petro Iran Development Company (PEDCO). Also PEDCO (as General Contractor) has assigned the EPC-packages of the Project to "Hirgan Energy - Design and Inspection" JV.

**GENERAL DEFINITION**

The following terms shall be used in this document.

|  |  |
| --- | --- |
| CLIENT:  D01 | National Iranian South Oilfields Company (NISOC) |
| PROJECT: | Binak Oilfield Development – General Facilities |
| EPD/EPC CONTRACTOR: | Petro Iran Development Company (PEDCO) |
| EPC CONTRACTOR: | Joint Venture of : Hirgan Energy – Design & Inspection(D&I) Companies |
| VENDOR: | The firm or person who will fabricate the equipment or material. |
| EXECUTOR: | Executor is the party which carries out all or part of construction and/or commissioning for the project. |
| THIRD PARTY INSPECTOR (TPI): | The firm appointed by EPC CONTRACTOR and approved by CLIENT (in writing) for the inspection of goods. |
| SHALL: | Is used where a provision is mandatory. |
| SHOULD:  D01 | Is used where a provision is advisory only. |
| WILL: | Is normally used in connection with the action by CLIENT rather than by an EPC/EPD CONTRACTOR, supplier or VENDOR. |
| MAY: | Is used where a provision is completely discretionary. |

1. **Scope**

The purpose of this document is to provide the standard drawing for the accessories of storage tanks used in this project.

It shall be used in conjunction with data/requisition sheets for present document subject.

1. **NORMATIVE REFERENCES**

## Local Codes and Standards

* IPS-G-ME-100 Iranian Petroleum Standard – General Standard for Atmospheric Above Ground Welded Steel Tanks
* IPS-E-PI-240 Iranian Petroleum Standard – Engineering Standard for Plant Piping Systems
* IPS-G-GN-210 Iranian Petroleum Standard – General Standard for Packing & Packages
* IPS-E-CE-210 Iranian Petroleum Standard – Engineering Standard for Steel Structures
* IPS Standard Drawings
* NIOEC Standard Drawings
* NISOC Standard Drawings

## International Codes and Standards

* ASME American Society of Mechanical Engineers
  + B 31.3 Chemical Plant and Petroleum Refinery Piping
  + B 31.8 Gas Transportation & Distribution Piping Systems
  + B16.47 Large Diameter Steel Flanges NPS 26 Through NPS 60
  + B 16.5 Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24
  + B 16.9 Steel Butt Welding Fitting
  + B 16.11 Forged Steel Fittings
  + B 16.20 Metallic Gaskets for Pipe Flanges – Ring Joint Gaskets, Spiral Wound and Jacketed
  + B 16.21 Non- Metallic Gasket for Pipe Flanges
  + B 16.47 Large Diameter Steel Flanges NPS 26 Through NPS 60
  + B 1.20.1 Pipe Threads, General Purpose
* API 650 Welded Storage Tanks for Oil Storage
* AISC Manual of Steel Construction

## The Project Documents

|  |  |
| --- | --- |
| * BK-GNRAL-PEDCO-000-ME-SP-0002   D01 | Specification for Atmospheric Above Ground Welded Steel Tanks |
| * BK-GNRAL-PEDCO-000-ME-SP-0001 | Specification for Pressure Vessels |
| * BK-GNRAL-PEDCO-000-PI-SP-0019 | Specification for Insulation |
| * BK-GNRAL-PEDCO-000-PI-SP-0006 | Specification for Painting |

1. **Standard drawings**

## DETAILS OF FLANGED & STUD REINFORCED NOZZLES FOR TANKS C:\Users\m.tafazoli\Desktop\Selected Drawing\S1D06601_001A.tif

|  |  |  |
| --- | --- | --- |
| DETAIL OF FLANGED & STUD REINFORCED NOZZLES FOR TANKS | S1D06601\_001A | NISOC STANDARDS |

## STAIRWAYS

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|  |  |  |
| --- | --- | --- |
| STAIRWAYS | S1M00806\_0010 | NISOC STANDARDS |

## PLATFORMS

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|  |  |  |
| --- | --- | --- |
| PLATFORMS | S1M00807\_0020 | NISOC STANDARDS |

## FITTING FOR VERTIVAL TANK ARRANGMENT AT BLENDING & TOOL

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| --- | --- | --- | --- |
| FITTING FOR VERTIVAL TANK  ARRANGMENT AT BLENDING & TOOL |  |  |  |

## FITTING FOR VERTIVAL TANK 24” DIA ROOF MANHOLE

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| FITTING FOR VERTIVAL TANK  24” DIA ROOF MANHOLE | S1X01135\_0010 | NISOC STANDARDS |

## FITTING FOR VERTIVAL TANK DIPPING PLATFORM (1/2)

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| --- | --- | --- |
| FITTING FOR VERTIVAL TANK  DIPPING PLATFORM | S1X01138\_0010 | NISOC STANDARDS |

## FITTING FOR VERTIVAL TANK DIPPING PLATFORM (2/2)

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| --- | --- | --- |
| FITTING FOR VERTIVAL TANK  DIPPING PLATFORM | S1X01138\_0020 | NISOC STANDARDS |

## WELDED VERTICAL STORAGE TANK DRAW OFF SUPPORT (1/2)

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| --- | --- | --- |
| WELDED VERTICAL STORAGE TANK  DRAW OFF SUPPORT | S2D01108\_0010 | NISOC STANDARDS |

## WELDED VERTICAL STORAGE TANK DRAW OFF SUPPORT (2/2)

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| WELDED VERTICAL STORAGE TANK  DRAW OFF SUPPORT | S2D01108\_0020 | NISOC STANDARDS |

## TANKAGE SHELL NOZZLES

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| TANKAGE SHELL NOZZLES | S2L01115\_0010 | NISOC STANDARDS |

## Deleted

D01

## STANDPIPES FOR 12 m HIGH TANKS

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| STANDPIPES FOR 12 m HIGH TANKS | S4D08062\_0010 | NISOC STANDARDS |

## STANDPIPES FOR 8, 12.5 AND 20m DIA. TANKS

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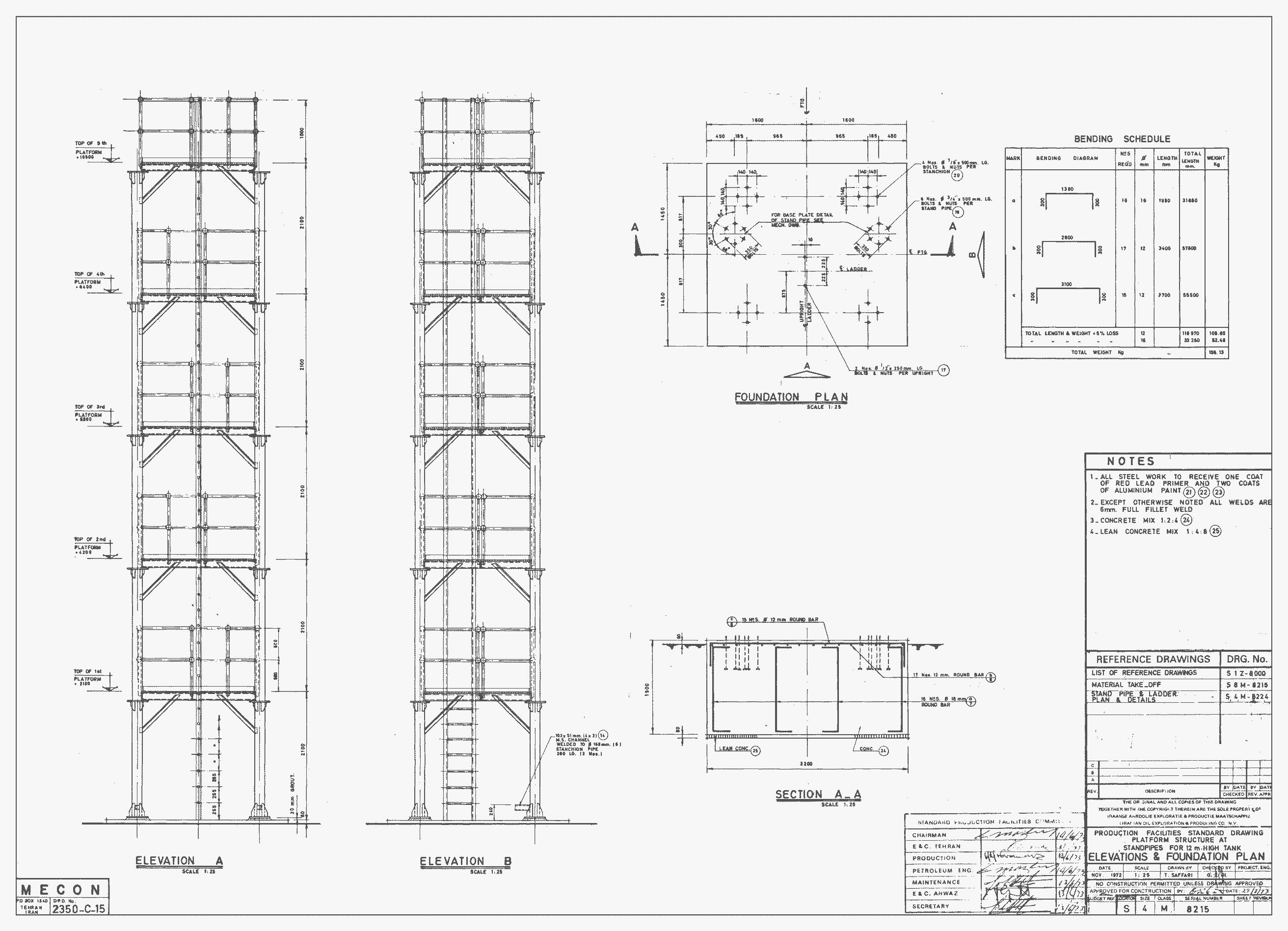
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| STANDPIPES FOR 8, 12.5 AND 20m DIA. TANKS | S4L08063\_0010 | NISOC STANDARDS |

## PLATFORM STRUCTURE AT STANDPIPES FOR 10 m HIGH TANKS

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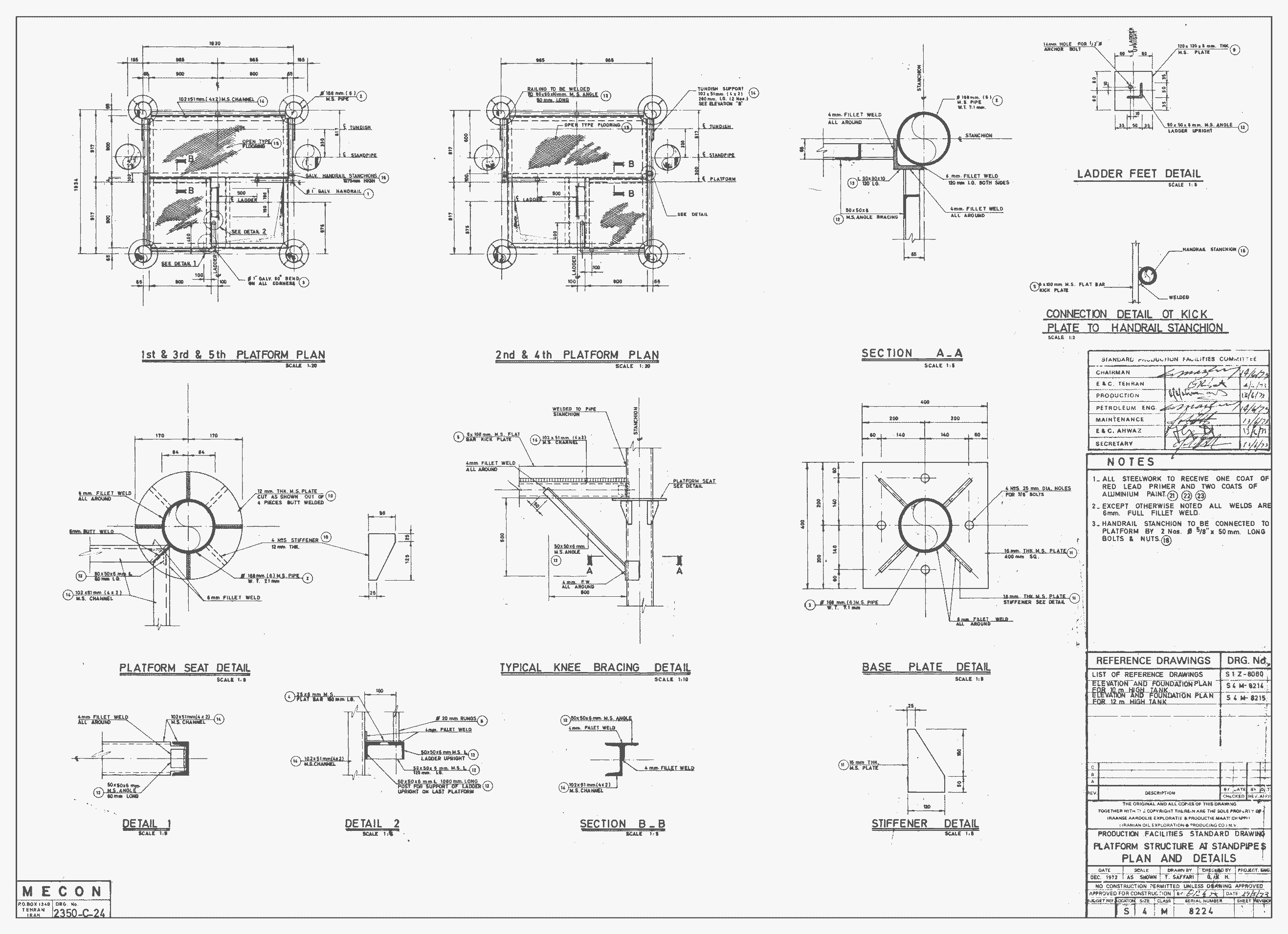
|  |  |  |
| --- | --- | --- |
| PLATFORM STRUCTURE AT STANDPIPES FOR 10 m HIGH TANKS | S4M08214\_0010 | NISOC STANDARDS |

## PLATFORM STRUCTURE AT STANDPIPES FOR 12 m HIGH TANKS



|  |  |  |
| --- | --- | --- |
| PLATFORM STRUCTURE AT STANDPIPES FOR 12 m HIGH TANKS | S4M08215\_0010 | NISOC STANDARDS |

## PLATFORM STRUCTURE AT STANDPIPES PLAN AND DETAILS



|  |  |  |
| --- | --- | --- |
| PLATFORM STRUCTURE AT STANDPIPES PLAN AND DETAILS | S4M08224\_0010 | NISOC STANDARDS |

## STRUCTURE WATER AND FUEL TANK

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| STRUCTURE WATER AND FUEL TANK | S4X04231\_001A | NISOC STANDARDS |

## DETAILS OF SHELL PLATE

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| DETAIL OF SHELL PLATE |  |  |

## DETAILS OF OBSERVATION WINDOW

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| DETAIL OF OBSERVATION WINDOW |  |  |

## DETAILS OF PIPE SUPPORT

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| DETAIL OF PIPE SUPPORT |  |  |

## TANK ASSEMBLY

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| TANK ASSEMBLY |  |  |

## LOCATION OF APPURTENANCES

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|  |  |  |
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| LOCATION OF APPURTENANCES |  |  |

## DETAILS OF BOTTOM AND ROOF PLATE

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| DETAIL OF BOTTOM AND ROOF PLATE |  |  |

## DETAILS OF ROOF STAGE

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| DETAIL OF ROOF STAGE |  |  |

## DETAILS OF INLET NOZZLE

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| DETAIL OF INLET NOZZLE |  |  |

## DETAILS OF OUTLET NOZZLE

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| DETAIL OF OUTLET NOZZLE |  |  |