



نگهداشت و افزایش تولید میدان نفتی بینک  
سطح الارض  
احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:  
053 - 073 - 9184

PDMS Model Review Report (60%) - GCS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0004	RT	PI	120	PEDCO	GCS	BK

شماره صفحه: 1 از 13

## طرح نگهداشت و افزایش تولید 27 مخزن

### PDMS Model Review Report (60%) - GCS

#### نگهداشت و افزایش تولید میدان نفتی بینک

D00	JUN.2022	IFC	F.Mosayebnejad	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue/Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class:2

CLIENT Doc. Number: F0Z-708908

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



نگهداشت و افزایش تولید میدان نفتی بینک  
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053-073-9184

PDMS Model Review Report (60%) - GCS



نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D00	0004	RT	PI	120	PEDCO	GCS	BK

شماره صفحه: 2 از 13

### REVISION RECORD SHEET



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 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک																									
شماره پیمان: 053 – 073 – 9184	<table><tr><th colspan="8">PDMS Model Review Report (60%) - GCS</th></tr><tr><th>پروژه</th><th>بسته کاری</th><th>صادر کننده</th><th>تسهیلات</th><th>رشته</th><th>نوع مدرک</th><th>سریال</th><th>نسخه</th></tr><tr><td>BK</td><td>GCS</td><td>PEDCO</td><td>120</td><td>PI</td><td>RT</td><td>0004</td><td>D00</td></tr></table>	PDMS Model Review Report (60%) - GCS								پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	BK	GCS	PEDCO	120	PI	RT	0004	D00	شماره صفحه : 3 از 13
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 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک</p> <p>سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>								
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## 1.0 INTRODUCTION

Binak oilfield in Bushehr province is 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.

As a part of the Project, a New Gas Compressor Station (adjacent to existing Binak GCS) shall be constructed to gather of 15 MMSCFD (approx.) associated gases and compress & transfer them to Siahmakan GIS.



### GENERAL DEFINITION

The following terms shall be used in this document.

CLIENT:	National Iranian South Oilfields Company (NISOC)
PROJECT:	Binak Oilfield Development – Surface Facilities; New Gas Compressor Station
EPD/EPC CONTRACTOR (GC):	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 EPD/EPC CONTRACTOR (GC) and approved by CLIENT (in writing) for the inspection of goods.
SHALL:	Is used where a provision is mandatory.
SHOULD:	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.

## 2.0 SCOPE

This document presents all raised issues and made decisions during 60% model review session

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک</p> <p>سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>								
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of PROJECT which should be followed and performed during continuation of PROJECT.

### 3.0 NORMATIVE REFERENCES

#### 3.1 The Project Documents

- BK-GNRAL-PEDCO-000-PI-PR-0001 3D-Model (PDMS) Review Procedure

#### 3.2 Order of Precedence

In case of any conflict between the contents of this document or any discrepancy between this document and other project documents or reference standards, this issue must be reported to the CLIENT. The final decision in this situation will be made by CLIENT.

### 4.0 KEY OBJECTIVES



The purpose of 60% Model Review is to freeze any detail design of disciplines and to hand over to a production work. In principle, re-study of the comments raised in 30% review should not be executed as far as such comments have properly been followed. The following objectives shall be addressed during the model review:

- Confirm compliance with project specifications with regard to access for equipment, valves, instruments, and other components to be operated.
- Confirm whether sound design has been observed with regard to safety, operability and maintainability.

The model minimum content for the 60% model review shall be:

- Actions resulting from 30% model review.
- Other piping (line sizes equal and greater than 2") with insulation information mostly completed.
- Orientation of major ladders/stairs/platforms on vessels and columns.
- Major platforms for valves and equipment and operation.
- Permanent cranes and hoisting beams.
- Dimensions of table tops, structures and steel construction.
- Secondary steelworks and bracing.
- Eye washer and safety shower locations.
- Firefighting system (hydrants, monitors, water spray systems, deluge valve manifolds).
- Instrument mounting stands, junction boxes, panels and cabinets of field.
- Above ground instrumentation, telecommunication and electrical cable tray routing above 300 mm.

Substantial review and comments by CLIENT / EPC/EPD CONTRACTOR of the plant model will be completed at the 60% model complete stage. The model will be updated reflecting comments to CLIENT's verification.

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## 5.0 STATISTICS

The followings indicate the number of modeled major items which were reviewed during 60% model review:



- Number of modeled equipment: 68
- Number of modeled A/G and U/G Lines: 330
- Number of hydrant and monitor: 16
- Number of modeled shelter, structure and building: 14
- Electrical main trench
- Instrument main cable trench
- Instrument junction boxes

## 6.0 DESCRIPTION AND CONCLUSIONS

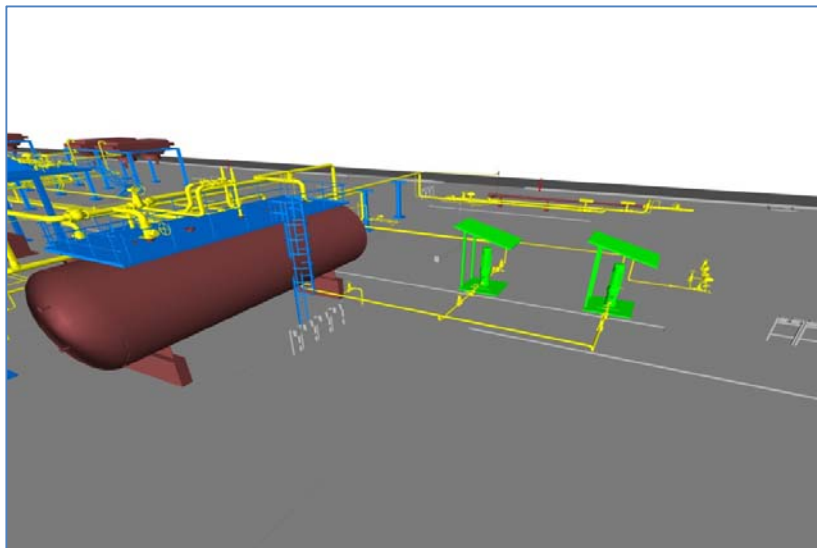
The 60% model review for “Binak Oilfield Development – Surface Facilities; New Gas Compressor Station” was held with representatives of CLIENT, EPD/EPC CONTRACTOR (GC) and EPC CONTRACTOR, on 1401/03/22. The subjects of discussion for the meeting were organized and considered based on the following issues:

- Re-study of the comments raised in 30%
- General layout and arrangement,
- Operation access rooms,
- Maintenance requirements,
- Installing location for instruments, platforms, and access to instruments,
- Lineup of primary lines.
- Instrument cable route and junction boxes location

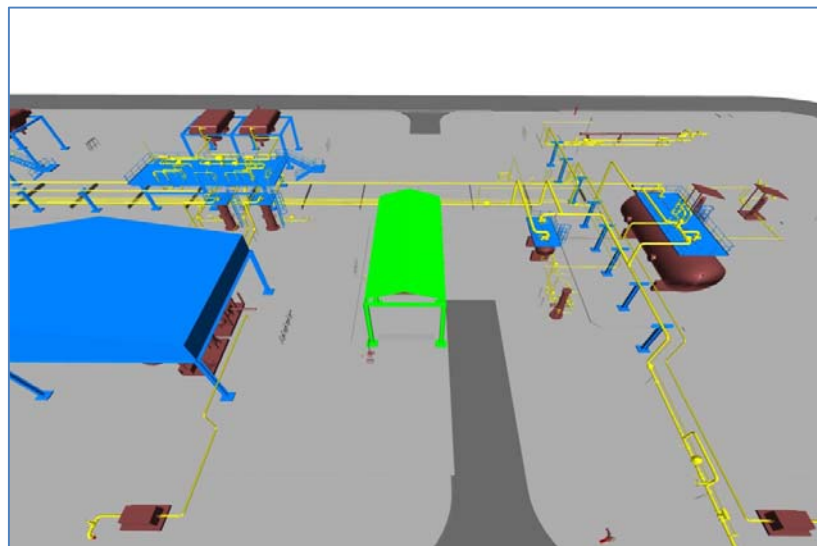
It was stated that following items should be checked and corrected during 90% modeling and would be reviewed in 90% model review meeting:



	<p>نگهداشت و افزایش تولید میدان نفتی بینک</p> <p>سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>								
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- 6.1** CLIENT stated that considering Shelter for condensate pumps should be checked with contract and responsibilities of Contractor.
- 6.2** Changing type of condensate pumps with considering NPSH and Process conditions should be reviewed by Contractor.

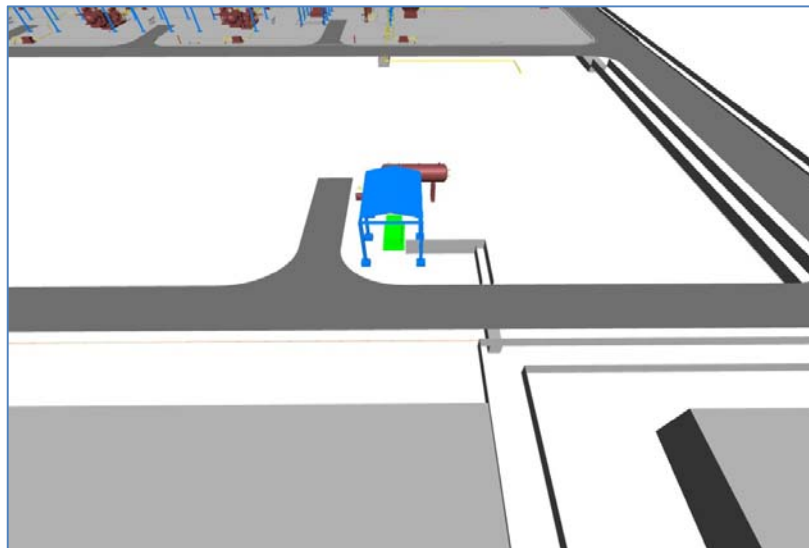


- 6.3** Shelter of Chemical Injection Packages should be rotated 90 degree and access room to be provided by moving Slug Drums to East.

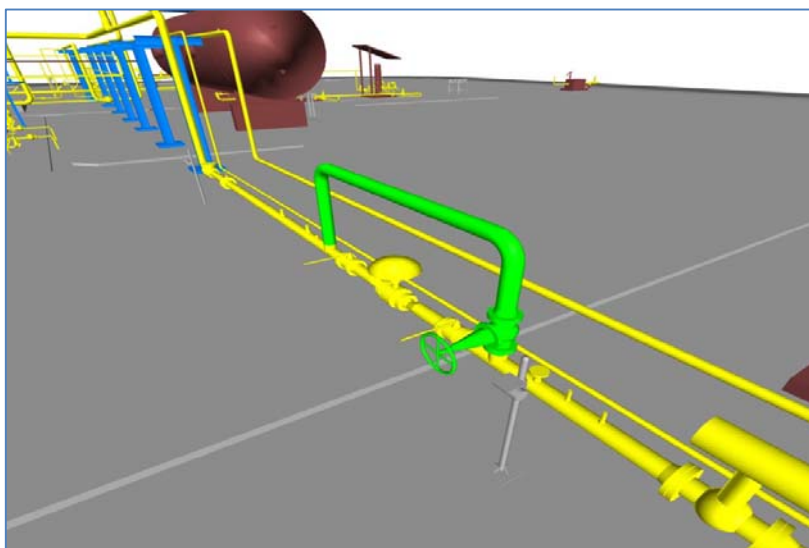


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- 6.4** Regarding new proposed location of Diesel Generator by Contractor, it should be checked and finalized by Site Visit by Contractor.



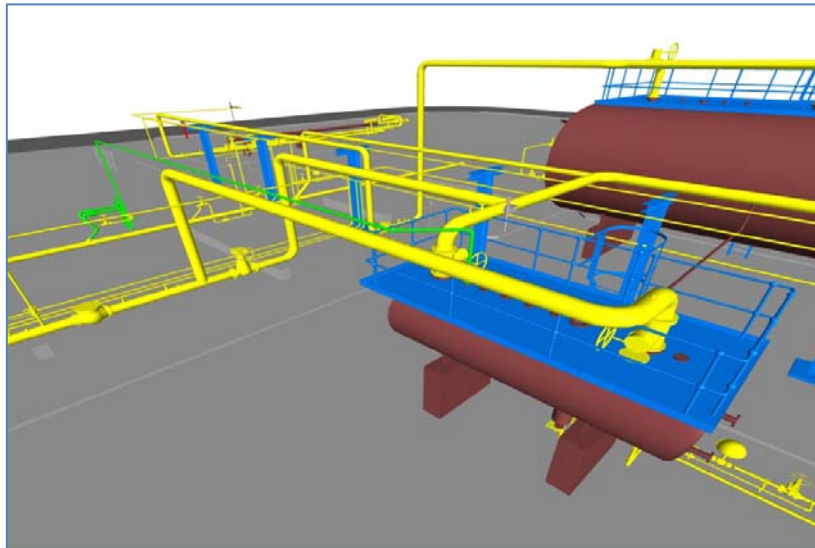
- 6.5** In Inlet Gas Line from existing Binak Cluster, Bypass of Control set to be changed from Vertical to Horizontal position.





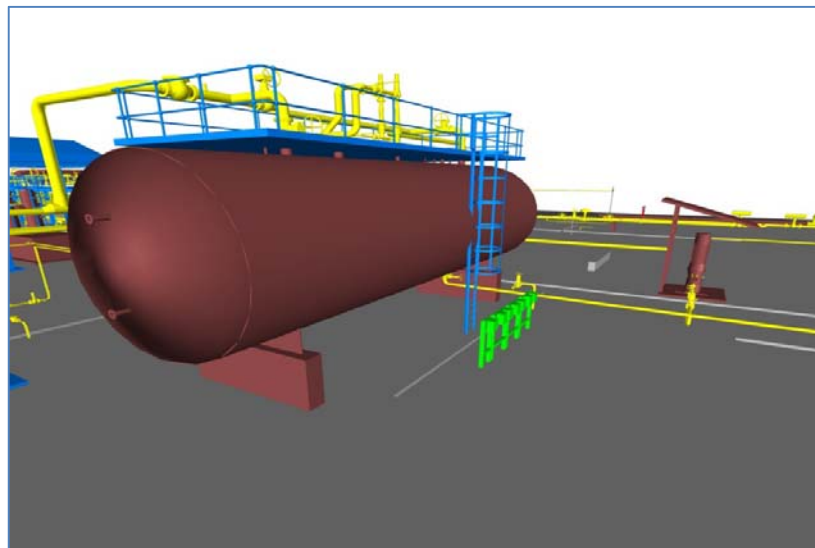
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- 6.6** Pressure Safety Valves of Drum V-2105 should be installed on top of Drum, not with distance from Drum.



- 6.7** On line of Pressure Safety Valves of Drum V-2105, if Removable Spool is needed according to P&ID, it should be considered in 3D Model too.

- 6.8** Location of Junction Boxes around Slug Drum to be replaced to the other place.

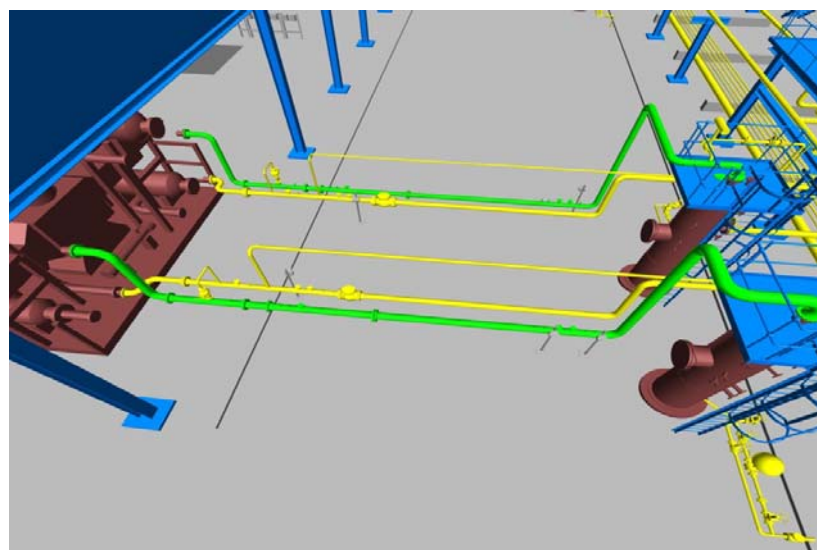




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- 6.9** Because of changing the destination of outlet Condensate Line to Binak Cluster, Location of Condensate Pumps to be relocated to South area of Slug Drum and close to it.



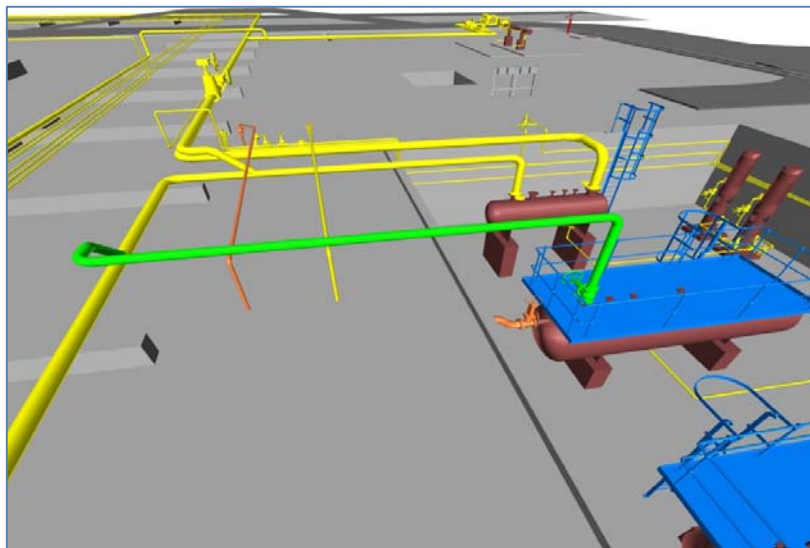
- 6.10** After receiving vendor data, Piping route of Inlet Lines of Gas Compressors for avoiding any pocket to be reviewed and if required to be modified.



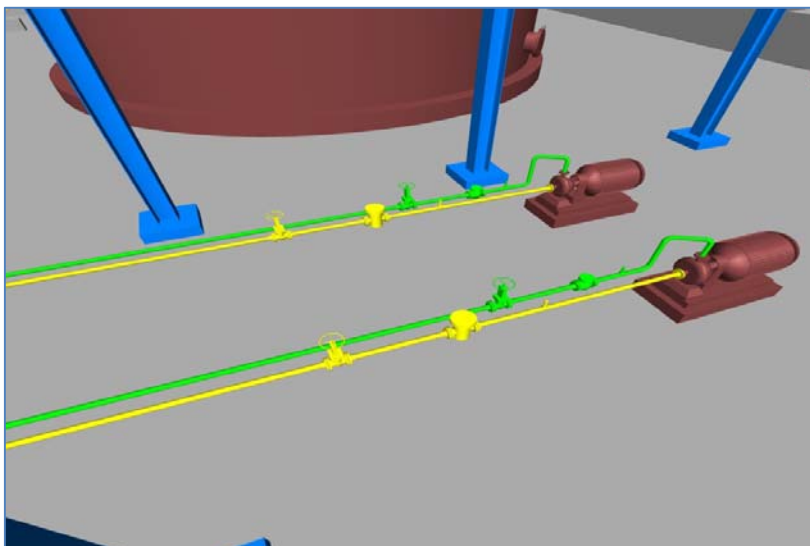
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**6.11** It was stated that for all equipment access rooms to be reviewed and if required to be modified in 3D Model 90%.

**6.12** Outlet Line of CDH Drum to be relocated to opposite side of Inlet line.

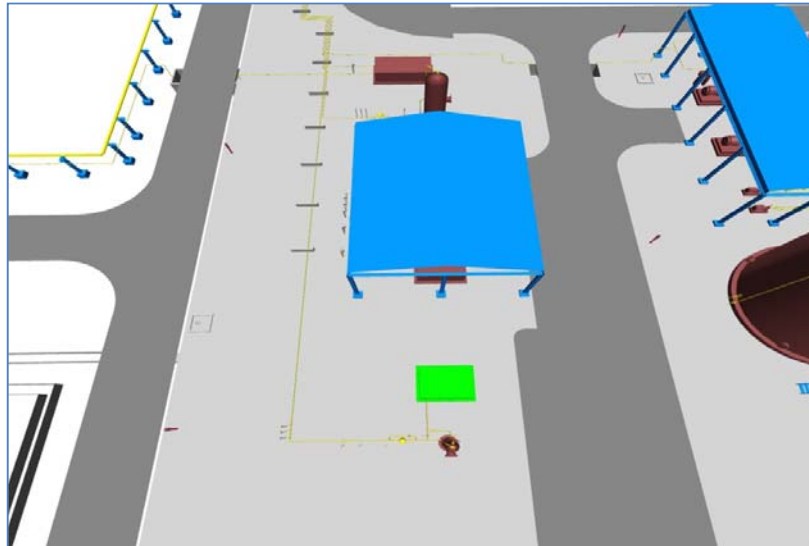


**6.13** Regarding Fire Water Jockey Pumps, it was stated that Water Hammer of fluid to be considered in piping Stress Analysis and if required suitable support to be considered for it.

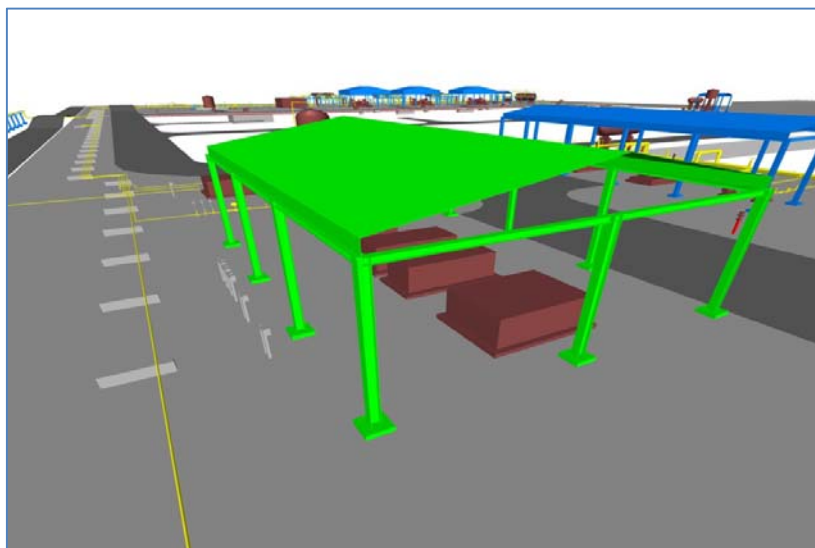




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- 6.14** It was stated that considering Shelter and Roof Crane for Nitrogen package to be reviewed and provided according to project Standard and Spec in 3D Model.



- 6.15** Regarding Shelter of Air Compressor and Diesel Generator, Client emphasises on considering wall on 3 sides of shelter and it was stated to be reviewed and the result to be reported.



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**6.16** All Electrical System Devices including Lighting Towers & Poles and Paging System to be shown in 3D Model Review 90% according to last revision of engineering documents.

**7.0 ATTACHEMENT 1**

**8.0 ATTACHEMENT 2**