

MANIFA PRODUCING DEPARTMENT MANIFA MAINTENANCE DIVISION

Maintenance Support Unit

Admin Building (Bldg. # 1026), Floor 1, Room # 201, Manifa

Phone: 379-5426

October 08th, 2017

SCOPE OF WORK

1. JOB TITLE:

To install the catch beams at ATM and HP compressors pipelines.

2. WORK LOCATIONS:

Gas Gathering Area Q35.

3. DURATION OF WORK:

Six Months.

4. PAYMENT METHOD:

Lump-Sum.

5. GENERAL SCOPE OF WORK:

- 5.1 Prior to start of work, the Contractor shall secure work permits in accordance with the requirements of GI-2.100 "Work Permit System". A copy of this work permit shall be kept on full display at the job site throughout the duration of the work, as required by this GI.
- 5.2 All data and dimensions shown in this document are for guidance and the Contractor may vary them only after consulting with Saudi Aramco Safaniya Design Unit and getting approval in writing. It is the Contractor responsibility to field verifies all information presented to him.
- 5.3 The Contractor shall coordinate the starting of the job before commencing construction work and shall schedule work activities with Company Representative to minimize shutdown duration.
- 5.4 The Contractor shall provide protection to existing structure, equipment and piping against damage. Should any damage occur, the Contractor shall take immediate measure to inform Aramco representative and repair the damage to return the existing facilities to their original condition.
- 5.5 The Contractor shall observe and follow all requirements of applicable Saudi Aramco Standards and Specifications for the construction and installation of the facilities including "Saudi Aramco Safety, Health and Environmental Requirements", schedule D.
- 5.6 The Contractor shall keep the construction area clean and walkways clear of construction and other debris. Upon completion of work, all debris and waste shall be picked up and properly disposed of in a manner approved by the company representative.

6. DETAILED SCOPE OF WORK:

- 6.1 The contractor shall perform all surveys necessary to enable the construction of the project in accordance with the scope of work and project drawings.
- 6.2 The locations of the additional pipe support beams are given in drawings RA- 849958 sheet 002, RA-849959 sheet 002, RA-849961 sheet 003 and RA-849962 sheet 003.
- 6.3 The Contractor shall fabricate and install the additional pipe support steel beams and bring them to their respective sites in accordance with drawings RA-849958 sheet 002, RA-849959 sheet 002, RA-849961 sheet 003 and RA-849962 sheet 003.
- 6.4 The Contractor shall fire proof the steel beams in accordance with details shown in drawings RA-849958 sheet 002, RA-849959 sheet 002, RA-849961 sheet 003, RA- 849962 sheet 003 and standard drawing AD-036711 sheet 001.
- 6.5 The additional steel beams shall be coated in accordance with the requirements of Painting Specification SAES-H-101 and SAES-H-002, APCS-4 for carbon steel piping.

7. DRAWINGS



8. Contractor RESPONSIBILITIES:

1. Contractor Personnel:

- 1- CONTRACTOR to conduct a site visit to assess the condition and to discuss all the contractor concerns.
- 2- Provide technical advice and procedure for installation, cutting and welding the catch beams.
- 3- CONTRACTOR shall provide a daily report for the project to SAUDI ARAMCO and every shift is 12 hours.
- 4- CONTRACTOR shall work day shift till complete the task.
- 5- CONTRACTOR to mobilize & demobilize manpower, materials and resources to Manifa yard.
- 6- CONTRACTOR to store each removed equipment in dedicated location with supervision from SAUDI ARAMCO.
- 7- CONTRACTOR shall provide required manpower, equipment and transportation to perform the job.
- 8- CONTRACTOR shall ensure to provide required equipment and tools SUIT this job.
- 9- CONTRACTOR shall provide CERTIFIED WORK PERMIT RECEIVER with English speaking.
- 10- CONTRACTOR to ensure all crew are equipped with the safety and hazard PPE including FRC.
- 11- SAUDI ARAMCO to provide safety orientation to the CONTRACTOR crew.

- 12- SAUDI ARAMCO will arrange with inspection to inspect prior, during and after completion of the job.
- 13- CONTRACTOR to ensure all logistics, food, accommodation provided to the contractor crew.
- 14- CONTRACTOR to perform housekeeping and ensure area is clean during and after job completion.
- 15- CONTRACTOR to provide all consumable materials and accessories related to the job scope.

2. Contractor Job Site Responsibility:

- a) Contractor shall obtain required Work Permits from SAUDI ARAMCO.
- b) The establishment or construction of all Contractor work related storage areas and temporary structures on or adjacent to SAUDI ARAMCO premises shall be authorized in advance by the COMPANY Representative and shall be confined to areas specified therefore by him. Authorized temporary structures shall be constructed only with labor and material provided by Contractor at its own expense.
- c) Contractor shall protect from damage all existing structures, improvements or utilities at or near the job site, and shall repair any damages there resulting from Contractor failure to exercise reasonable care. All repairs and restorations incurred shall be at Contractor expense.
- d) Contractor shall at all times keep the job site neat, clean and free of waste material or rubbish.
- e) Contractor shall, upon completion of the work, at its expense, remove from the job site all equipment, temporary structures, rubbish and unused materials and leave the job site neat and clean in a satisfactory manner to the COMPANY Representative.
- f) The Contractor shall provide a lay down yard for the storage of materials, tools, and equipment to a place designated by the COMPANY Representative.
- g) CONTRACTOR shall adjust to SAUDI ARAMCO operations requirements.
- h) CONTRACTOR shall conduct all necessary equipment inspection and quality control
- i) Operations and record them on SAUDI ARAMCO approves inspection/quality control record sheet. These operations shall include all necessary checks including measurements, reading, rest, materials, analysis and collection of data
- j) CONTRACTOR shall highlight any items which fall outside acceptable tolerances and standards on inspection/quality control record sheets.
- k) CONTRACTOR shall maintain the site housekeeping on daily basis.
- l) SAUDI ARAMCO has the right to add additional scope or De-scope or cancel the SFC.

3. CONTRACTOR MANPOWER:

- The Contractor shall at all times employ sufficient skilled labor in accordance with Aramco standard; and the proper equipment for completing the required tasks in the manner and time required by the Contract.
- All equipment that is to be used shall be of sufficient size and in such mechanical condition as to produce a satisfactory quality of work.
- Any person employed by the Contractor, who does not perform their work in a proper manner or is intemperate or disorderly shall, at the written request of the Contract, be removed from the work site by the Contractor and shall not be employed again in any portion of the work without the approval of the Contract.

- Should the Contractor fail to remove such person as required above, or fail to furnish suitable and sufficient personnel for the proper execution of the work, the Contractor may suspend the work by written notice until such orders are followed by the Contractor.
- The Contractor shall hold the Department harmless from damages or claims for compensation that may occur in the enforcement of this section.
- The Contractor will supervise and direct all work.
- The Contractor will be solely responsible for the means, methods, and safety practices of the employees, subcontractors, techniques, sequences, and procedures when performing work.
- The Contractor will employ and maintain on the work site a qualified working Supervisor who shall have been designated in writing by the Contractor as the Contractors' representative.
- The Supervisor shall have full authority to act on the behalf of the Contractor and all communications given to the Supervisor shall be binding as if given to the Contractor. The Supervisor shall be present on site at all times as required to perform adequate supervision and coordination of the work.

4. **Contractor Work Responsibilities:**

- a) Ensure that materials and equipment /tools supplied by Contractor and incorporated into the WORK are in accordance and compliance with the latest SAUDI ARAMCO Standards, Industry Standards, specifications and Scope of Work.
- b) Provide Company Representative with access to all information pertaining to the WORK for appraisal of Contractor's performance and when requested by SAUDI ARAMCO. This shall include but not be limited to: providing copies of calculations; working drawings, specifications, purchase requisitions, schedules, procedures and alternative studies.
- c) Contractor shall have a regular Work Schedule of sixty (60) hours per week, ten (10) hours per day from 06:30 to 16:30 including one (1) hour break for lunch, six (6) days per week, excluding Fridays and SAUDI ARAMCO-designated Contractor holidays. Also, Contractor shall establish with the Company Representative the supervisory and management personnel coverage for the WORK prior to commencement of the WORK. For any deviations from the established working hours, Contractor and Company Representative shall jointly agree on the new working hours.
- d) Confirm in writing receipt and understanding of all verbal instruction or operational agreements communicated between SAUDI ARAMCO and Contractor before such instructions or agreements are implemented.
- e) Provide copies of all material specifications, test data, catalogues and vendor drawings to Company Representative for review and approval for a period of three (3) weeks prior to purchase.
- f) Contractor shall submit resumes for proposed candidates for these key personnel positions, described above, to Company Representative for a period of one (1) week for review and written approval prior to their assignment to the WORK. SAUDI ARAMCO has the sole right to reject or accept the resumes submitted by the contractors.

5. **GENERAL REQUIREMENTS:**

- Contractor shall start all the work specified in the scope within one (2) weeks of the awarded date. The duration of the contract is 6 months.
- Prior to commencement of work the contractor shall visit the site to familiarize himself with the site conditions and verify the extent of the work involved. Failure to comply with aforementioned shall be the responsibility of the contractor.
- The contractor shall be aware that the location of this work lies within the confines of the above-mentioned locations. All gate passes for manpower and permission for entry / removal of equipment / material must be obtained from the Operations authorities prior to any movement of plant or material.
- The contractor shall coordinate with Maintenance Representative and plan the work to minimize the disturbance of plant operations.
- Contractor shall not perform any work that will increase the value of the SFC without writing approval from Saudi Aramco.
- Contractor shall submit a quotation in Saudi Riyal under this Short Form Contract.
- Contractor must submit technical and commercial bid proposal separately for this contract.
- The contractor shall follow all safety rules and regulations within the Saudi Aramco and relating to contractor's personnel/equipment shall be adhered to.
- The contractor should submit progress report for the completed assigned job signed off and approved by the authorized person of this contract.
- The contractor shall keep the work area clean and tidy during the work and remove all excess material and debris from the site upon completion of the work to the satisfaction of Saudi Aramco representative.
- The Contractor must invite inspection Unit to the site before and after starting any critical activity.

6. **CONTRACTOR SAFETY AND LOSS PREVENTION REMARKS:**

- a) Contractor shall at all times comply with, and ensure that its employees comply with, all SAUDI ARAMCO Safety and Loss Prevention rules and regulations.
- b) Contractor shall be fully responsible for WORK Site safety, security and implementation of positive accident prevention measures in accordance with SAUDI ARAMCO Construction Safety Manual.
- c) Contractor shall produce a detailed Loss Prevention Program, not only addressing safety in general terms but the specific needs of each phase of WORK including a detailed Hazard Identification Plan.
- d) Contractor shall comply with all safety procedures as per SMS.

7. **SITE RESTORATION**

- a) Contractor shall be responsible for restoring all surfaces to their original condition before the final acceptance by Company Representative.
- b) Within five (5) SAUDI ARAMCO Working Days of Mechanical Completion of all WORK Contractor shall remove all construction debris, environmental harmful materials, and excess soil from the WORK Site to a dumpsite approved by the Company Representative.
- c) Contractor shall restore, to the exact original location, all survey monuments, marks and stakes, which shall be temporarily removed to efficiently perform the WORK as directed by Company Representative.

PREPARED BY: _____

Mohannad Mosa, Maintenance Engineer

REVIEWED BY: _____

Ibrahim Gabgab, Supervisor MSU

APPROVED BY: _____

Abdallah Jamea, Division Head MMD (A)



SAUDI ARABIAN OIL COMPANY			
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DESCRIPTION			
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REV NO			
DISCIPLINE ENGINEER DMS			
DATE: FEB '16			
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CERTIFIED FBA			
DATE: FEB '16			
CONSTRUCTION AGENCY			
DATE:			
OPERATIONS			
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EDSD VERIFICATION			
CONTROL NUMBER			
BY:			
DATE:			
REVISION CERTIFICATION			
THIS INDICATES THAT REV NO 00 OF THIS DRAWING IS COVERED FOR ALL APPROVAL CERTIFICATION REQUIREMENTS BY DRAWING COMPLETION CERTIFICATE			
(DDC) NO. 15F157			
Saudi Aramco: Company General Use			
SCOPE OF WORK		DWG. TYPE	PLANT NO.
INSTALL CATCH BEAMS FOR ATM & HP COMPRESSORS		DOC	INDEX
GAS GATHERING & FLARES		Q35	A
MANIFA		DRAWING NO. RE-865171	
SAUDI ARABIA		SHT. NO. 2 of 4	
JO / EWO: 4040850203		REV. NO. 0	
EDSD/2616-0399.doc			

1.0 PROJECT SUMMARY:

- 1.1 This Scope of Work, together with relevant drawings, applicable Saudi Aramco Engineering Standards and Standard Drawings constitute the basis for the fabrication and installation of catch beams for the ATM & HP compressors at the gas gathering and flares at Manifa Facilities, Plant Q35. This is needed as a safety item highlighted by the I.P.D.

2.0 DRAWINGS AND DOCUMENTATION:

The drawings issued with this scope of work are listed on the Drawing Control RD-865170.

3.0 CODES, STANDARDS, AND SPECIFICATIONS:**3.1 Industry Codes, Standards and Specifications**

The work shall be performed in accordance with the following Industry Standards in concurrence with the Saudi Aramco Standards and Specifications:

Standard Number	Title
ACI	American Concrete Institute
AWS	American Welding Society
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ASCE	American Society of Civil Engineers
ASTM	American Society for Testing Materials
SACSM	Saudi Aramco Construction Safety Manual
SASO	Saudi Arabia Standards Organisation

3.2 Saudi Aramco Standards, Specifications and General Instructions

All work shall be provided in accordance with the latest edition of Saudi Aramco Engineering Standards and Specifications. In case of conflicts with other standards/specifications the more stringent requirement shall prevail.

Standard Number	Title
SAES-H-101	Approved Protective Coating Systems
SAES-H-102	Safety Requirements for Painting
SAES-M-001	Structural Design Criteria for Non-Building Structures
SAES-M-100	Saudi Aramco Building Code
SAES-O-119	Work Permit Procedures
SAEP-321	Performance Qualification Testing and Certification of Saudi Aramco Welders
09-SAMSS-088	Aggregates for Concrete
09-SAMSS-097	Ready-mixed Portland cement Concrete
09-SAMSS-106	Epoxy Coated Steel Reinforcing Bars
GI-2.100	Work Permit System

SAUDI ARABIAN OIL COMPANY																			
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>OPRNS</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>PMT</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>CERT</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>ENGG</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>DESCRIPTION</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>JO/EWO</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>DATE</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>REV NO</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>DISCIPLINE ENGINEER DMS</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>DATE FEB '16</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>PROJECT ENGINEER DMS</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>DATE FEB '16</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>CERTIFIED FBA</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>DATE FEB '16</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>CONSTRUCTION AGENCY</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>DATE</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>OPERATIONS</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>DATE</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>EDSD VERIFICATION</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>CONTROL NUMBER</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>BY:</div> <div></div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div>DATE</div> <div></div> </div> </div>	<div style="text-align: center; font-weight: bold; font-size: 1.2em;">4.0 DETAILED SCOPE OF WORK:</div> <div style="margin-top: 10px;"> <div style="font-weight: bold;">4.1 General</div> <div style="margin-left: 20px;"> <p>4.1.1. 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JO / EWO: 4040850203	SHT. NO. 4 of 4
EDSD/2616-0399.doc	REV. NO. 0

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1. ALL COORDINATES ARE IN METERS
2. ALL ELEVATIONS ARE IN METERS
3. ALL DIMENSIONS ARE IN MILLIMETERS
4. THE DATUM REFERENCE POINT AT PLANT COORDINATES

COORDINATES

1+ 100 200
2+ 100 300
3+ 100 400

IS EQUAL TO UTM COORDINATES

4+ 100 500
5+ 100 600
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246+ 100 24700

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REFERENCE DRAWINGS

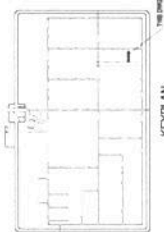
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STEEL STRUCTURAL GENERAL NOTES

DMG, CONTROL FOR J.O. #404050223

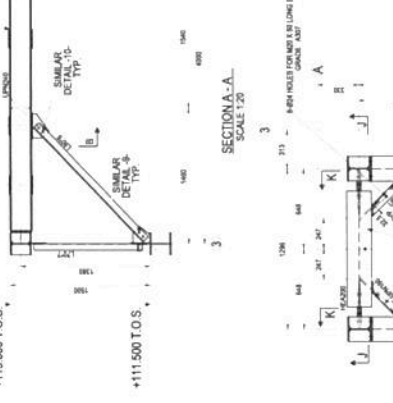
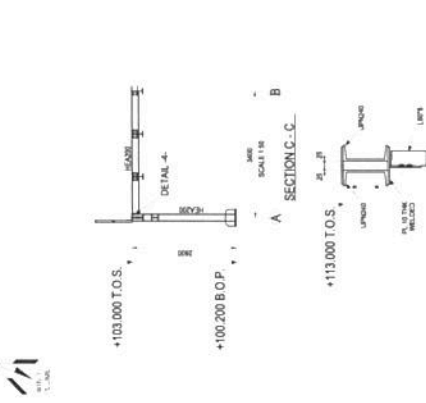
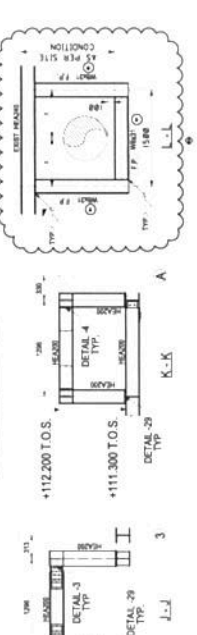
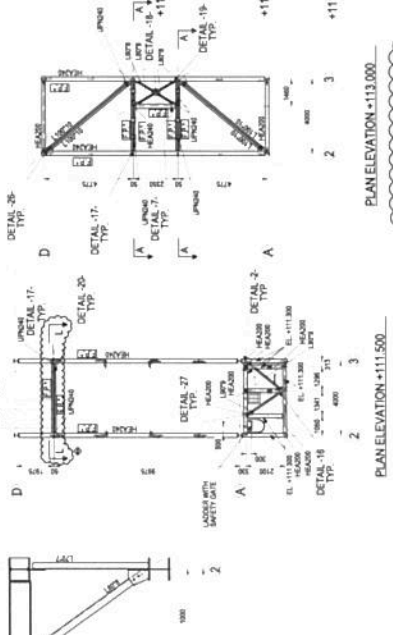
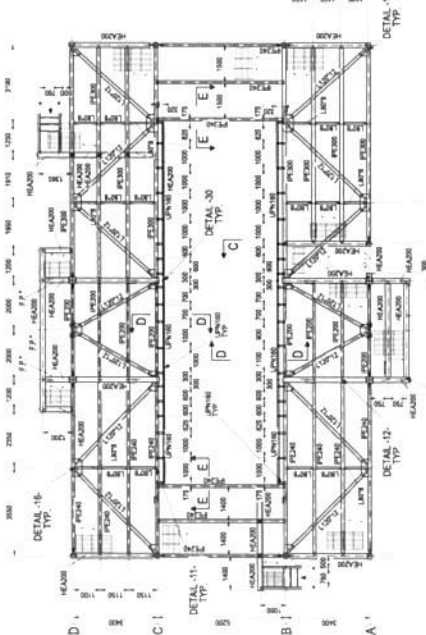
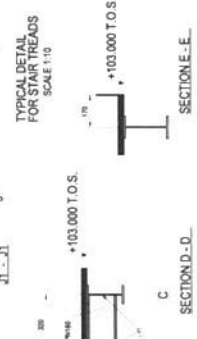
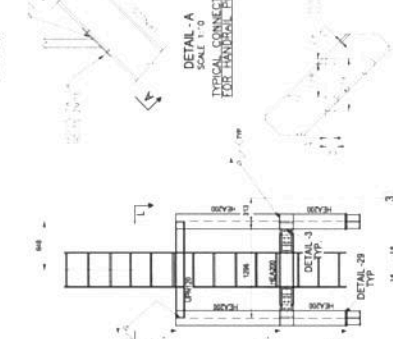
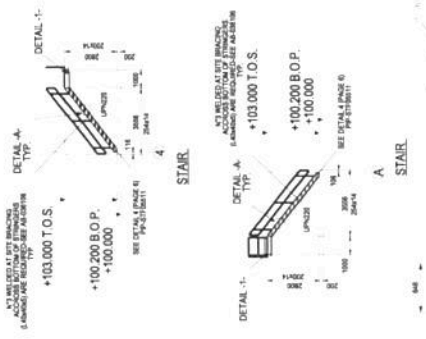
MATERIAL TAKE-OFF LIST

COMC FIREPROOFING FOR STRUCT'L MEMBERS AD-DEM

ISSUED FOR CONSTRUCTION



SAUDI ARABIAN OIL COMPANY	SAUDI ARABIAN OIL COMPANY
STRUCTURAL DETAILS/DESIGN/ 305	STRUCTURAL DETAILS/DESIGN/ 305
035-57R-76 - EL103/L 111.5 113.00	035-57R-76 - EL103/L 111.5 113.00
GAS GATHERING & FLARES	GAS GATHERING & FLARES
MANIFA A	MANIFA A
035 M RA-849959 002101	035 M RA-849959 002101



NOTES:

1. ALL COORDINATES ARE IN METERS
2. ALL ELEVATIONS ARE IN METERS
3. ALL DIMENSIONS ARE IN METERS
4. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED
5. COORDINATES
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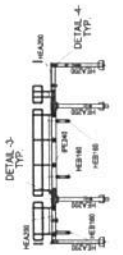
1. GENERAL NOTES
2. STRUCTURAL NOTES
3. MATERIAL SPECIFICATIONS
4. CONNECTIONS
5. FOUNDATIONS
6. ROOFING
7. CLADDING
8. MECHANICAL
9. ELECTRICAL
10. PIPING
11. LIFTING
12. HOISTING
13. CRANES
14. CONVEYORS
15. STORAGE
16. PROCESSING
17. PACKAGING
18. DISTRIBUTION
19. RETAIL
20. WAREHOUSE
21. FACTORY
22. OFFICE
23. LABORATORY
24. RESEARCH
25. DEVELOPMENT
26. MANUFACTURING
27. ASSEMBLY
28. FINISHING
29. PAINTING
30. CLEANING
31. MAINTENANCE
32. REPAIR
33. REPLACEMENT
34. MODIFICATION
35. EXPANSION
36. DEMOLITION
37. DISPOSAL
38. RECYCLING
39. SUSTAINABILITY
40. SAFETY
41. SECURITY
42. ACCESSIBILITY
43. COMPLIANCE
44. REGULATION
45. STANDARD
46. CODE
47. SPECIFICATION
48. REQUIREMENT
49. CONDITION
50. STATE
51. STATUS
52. POSITION
53. LOCATION
54. DIRECTION
55. ORIENTATION
56. ALIGNMENT
57. POSITIONING
58. ORIENTATION
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ISSUED FOR CONSTRUCTION

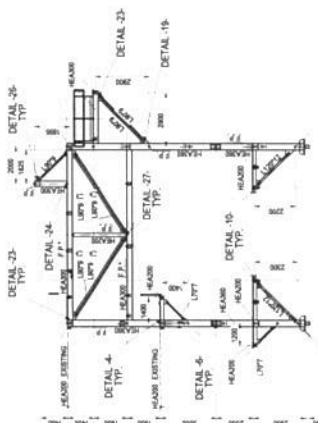


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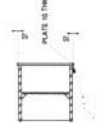
NO.	DESCRIPTION	DATE	BY	CHECKED
1	ISSUED FOR CONSTRUCTION	15/10/2023	SAUDI ARABIAN OIL COMPANY	SAUDI ARABIAN OIL COMPANY
2	STRUCTURAL DETAIL 5/ELEVATION/L	15/10/2023	SAUDI ARABIAN OIL COMPANY	SAUDI ARABIAN OIL COMPANY
3	035-STR-T9 - FRAMES	15/10/2023	SAUDI ARABIAN OIL COMPANY	SAUDI ARABIAN OIL COMPANY
4	GAS GATHERING & FLARES	15/10/2023	SAUDI ARABIAN OIL COMPANY	SAUDI ARABIAN OIL COMPANY
5	MANFA	15/10/2023	SAUDI ARABIAN OIL COMPANY	SAUDI ARABIAN OIL COMPANY
6	RA-849962	15/10/2023	SAUDI ARABIAN OIL COMPANY	SAUDI ARABIAN OIL COMPANY
7	003101A	15/10/2023	SAUDI ARABIAN OIL COMPANY	SAUDI ARABIAN OIL COMPANY



FRAME 4

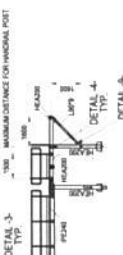
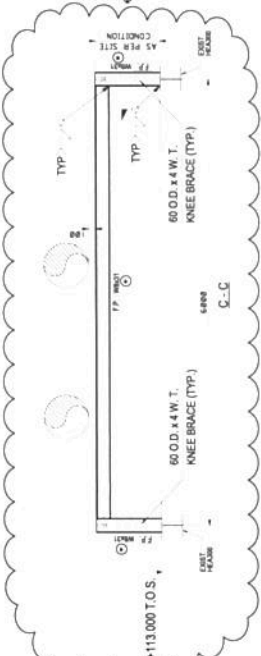


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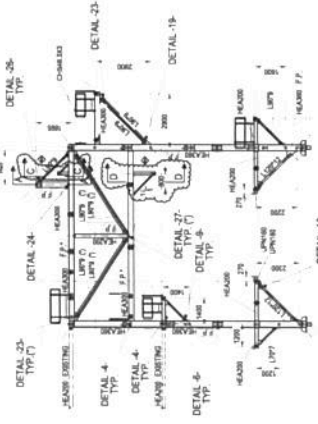


SECTION B-B

SCALE 1:10



FRAME 1

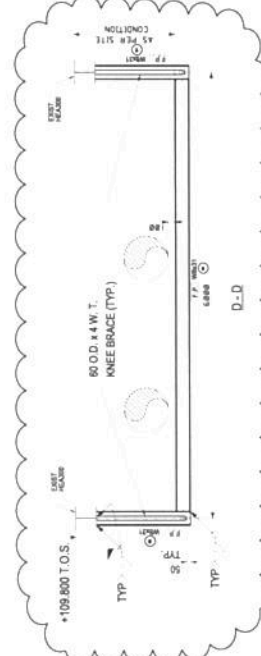


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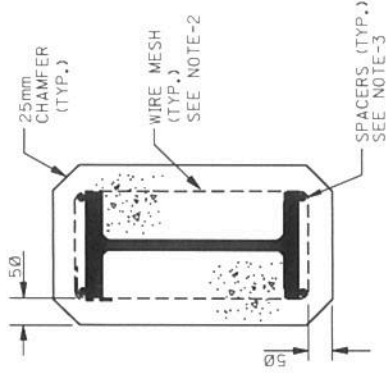


SECTION A-A

SCALE 1:10

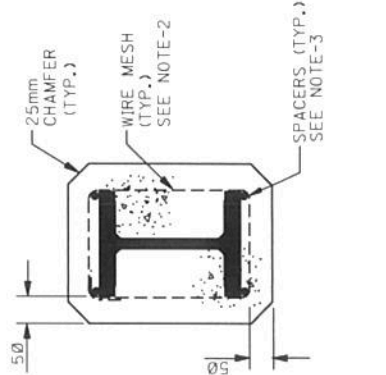


60	100	111930-0V	Q	066
NO. 1	NO. 2	NO. 3	NO. 4	NO. 5



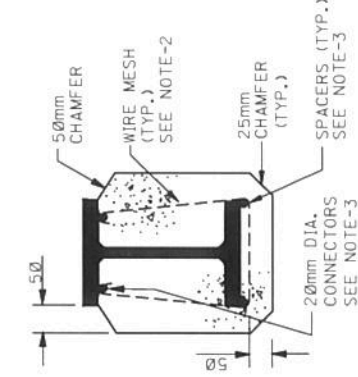
BEAMS

(EXCEPT ANGLES, AND
PIPE SUPPORTS)

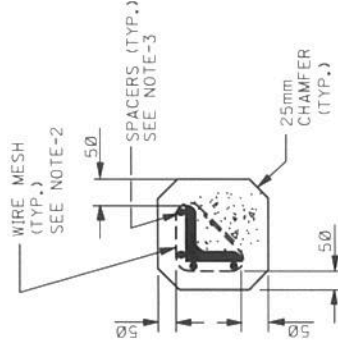


COLUMNS

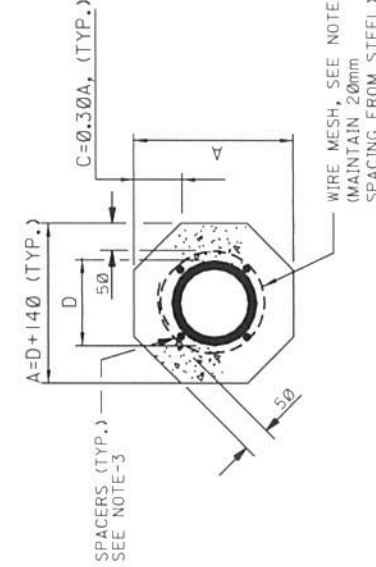
(EXCEPT PIPES)



PIPE SUPPORTS



ANGLES



PIPE COLUMNS

WIRE MESH, SEE NOTE-2
(MAINTAIN 20mm
SPACING FROM STEEL)

NOTES:

1. ALL FIREPROOFING SHALL BE IN ACCORDANCE WITH SAES-B-006. THIS DRAWING SHOWS THE ACCEPTABLE DETAILS FOR CONCRETE FIREPROOFING ONLY. FOR OTHER MATERIALS, ETC., REFER TO SAES-B-006, SECTION 7.
2. ALL WIRE MESH SHALL BE 4"x4"-10 GA.x10 GA., (SAMS NO. 12-743-625) OR 2"x2"-14 GA.x14 GA., (SAMS NO. 12-743-620)
3. 20mm DIA.x125mm SPACERS (AND CONNECTORS) TACK-WELDED AT 600mm CTRS. (SAMS NO. 12-720-570)
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

MANDATORY DRAWING

NO.	DATE	BY	DESCRIPTION	CHKD.	CERT.	APPD.
01	MAY/95	PLD	GENERAL REVISION.			
02	MAY/95	AMS	REVISED & CHANGED INDEX FROM "5" TO "10".			
03	MAY/95	LAL	COMPLETELY REDRAWN, REVISED & CHANGED DIM. SIZE FROM E TO D.			

SAUDI ARABIAN OIL COMPANY

DRAWN BY: _____ CHECKED BY: _____ SCALE: NONE
DATE STARTED: _____ DATE COMPLETED: 04-28-56
ORIG. DEPT.: _____ ENG. DEPT.: 06-07-56
APPD. FOR CONSTR.: _____

CERTIFIED BY: _____ DATE: _____

CONCRETE FIREPROOFING FOR STRUCTURAL MEMBERS

STD. DWG.	INCH	DRAWING NUMBER	SHEET NO.	REV. NO.	METRIC
990	Q	AD-036711	001	09	