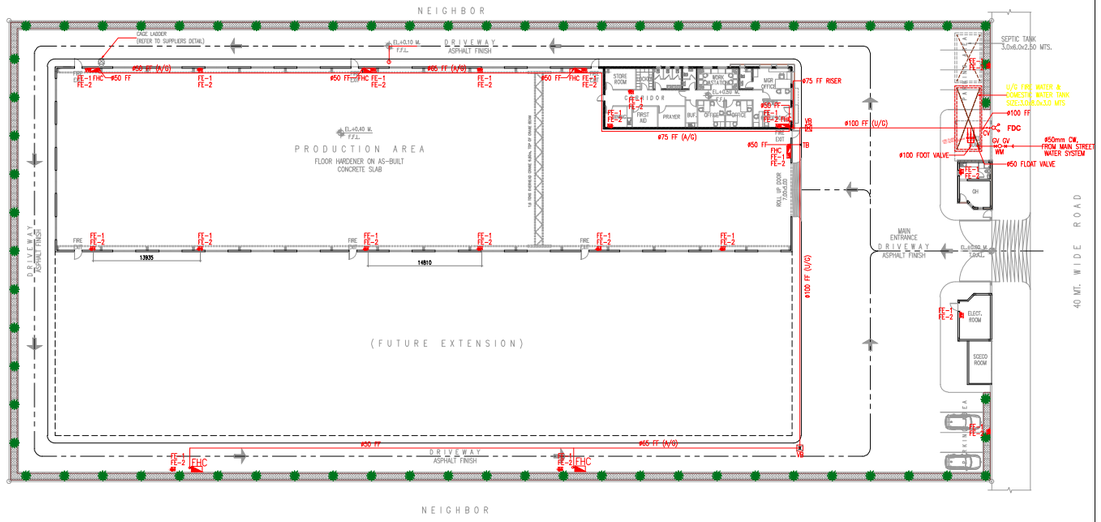
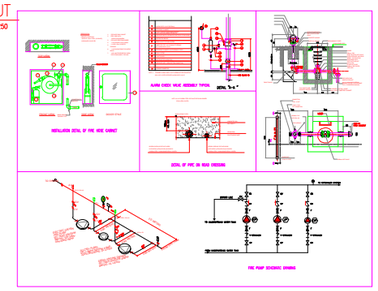


1 SITE FIRE FIGHTING PIPING LAYOUT
FF-01 SCALE : 1:250

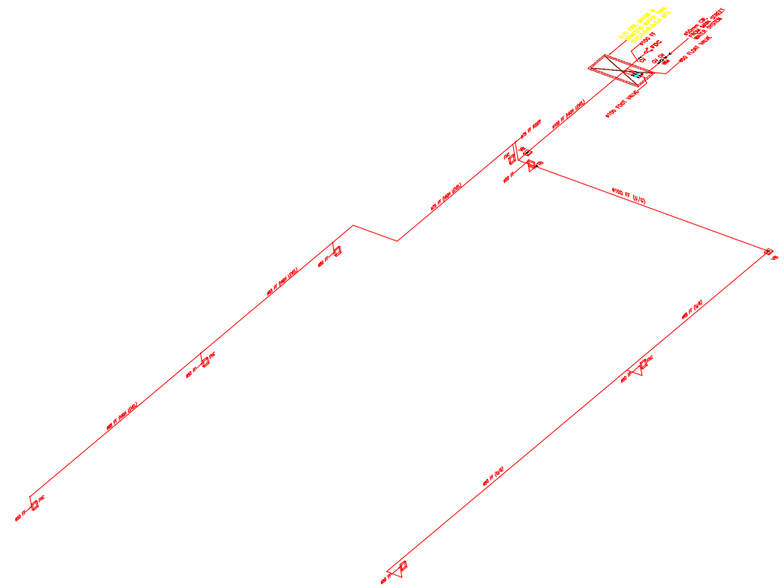
LEGEND:

FW	FIRE WATER LINE
FDC	FIRE DEPARTMENT CONNECTION 4" OUTLET WITH 2#50-2-1/2" SIAMESE CONNECTION AND SIDE-C CONNECTION
GV	GATE VALVE (OS & Y)
CV	CHECK VALVE, FM/UL LISTED
EX.D FP	EXIT DOOR FIRE PROOFED
MH	MANHOLE ACCESS
FHC-1	FIRE HOSE CABINET, 1.5"X#50 MTR. SYNTHETIC HOSE, RECESSED/EXTERNAL MOUNTING
FHC-2	FIRE HOSE CABINET, 1"X#30 MTR. RUBBER HOSE, RECESSED/EXTERNAL MOUNTING
FHHC	FIRE HOSE HOUSE CABINET WITH 2#30, 25 MTR. X 2-1/2" HEAVY DUTY HOSE AND TOOLS, FITTING AND ADJ & 2#25, 3-1/2" NOZZLE (FOG/STRAIGHT SPRAY OFF ADJUSTABLE)
FHW	FIRE HYDRANT WITH ALL VALVE, 4" MAIN SUPPLY WITH 2#65 2-1/2" SIAMESE CONNECTION
F.E-1	PORTABLE FIRE EXTINGUISHER, 9 KG DRY POWDER CHEMICAL, TYPE ABC MINIMUM
F.E-2	PORTABLE FIRE EXTINGUISHER, 4.5 KG, CO2
	PENDANT SPRINKLER K=5.6
	UPRIGHT SPRINKLED K=5.6
ACV	ALARM CHECK VALVE, COMPLETE WITH STANDARD ACCESSORIES, UL/FM APPROVED.

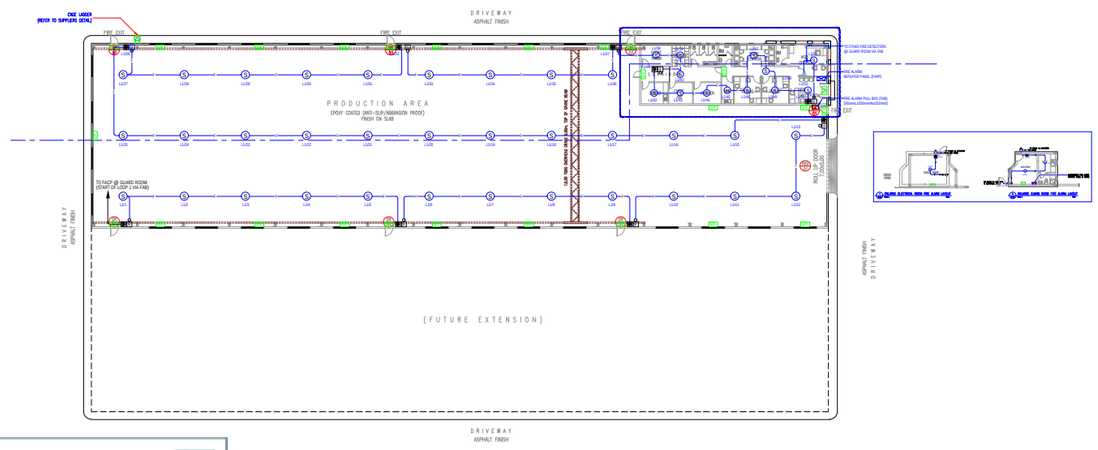


LEGEND

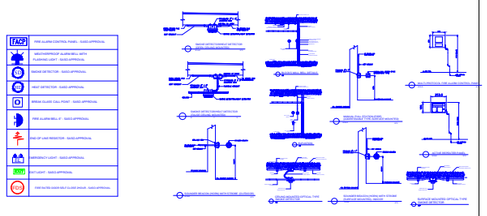
SYMBOL	DESCRIPTION
EP	EJECKIEL PUMP Q= 950 GMPM - 7 BAR
EP	ELEC. PUMP Q= 950GPM-7 BAR
JP	JOCKEY PUMP Q= 100GPM-7.7 BAR
	UPRIGHT SPRINKLER
	FIRE EXTINGUISHER 10 kg. CAPACITY
	FIRE EXTINGUISHER 9 kg. DRY POWDER AND CHEMICAL POWDER 9 kg. CAPACITY
	125 KG WHEEL DRY POWDER FIRE EXT
	FIRE HYDRANT WITH 2 SIAMESE CONNECTION
	FIRE RATED EXIT DOOR SELF CLOSE 1.5 H
	FIRE DEPARTMENT CONNECTION
	FIRE HOSE CABINET WITH FOAM (2-COMBINATION 30 LITERS EACH)
	ALARM CHECK VALVE WITH 4" VALVE
N	CHECK VALVE

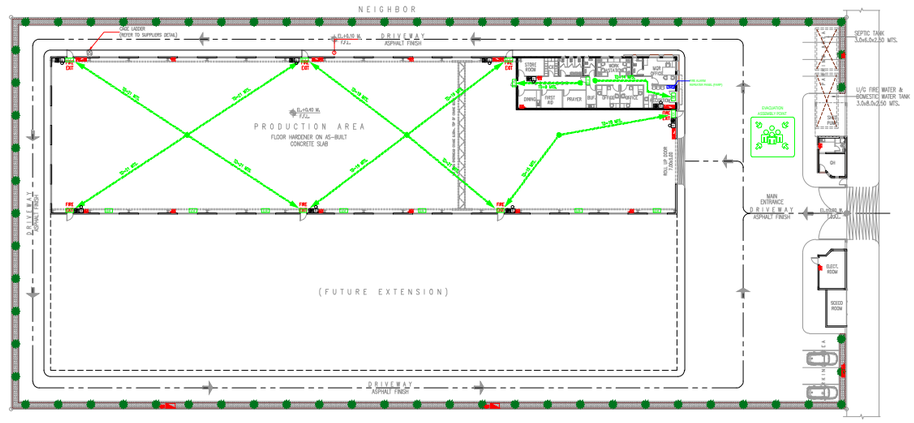


1 ISOMETRIC VIEW FIRE FIGHTING LAYOUT
FF-03 SCALE : NTS



GROUND FLOOR FIRE ALARM LAYOUT
FA-01 SCALE : 1:250





1 SITE EVACUATION PLAN
EP-01 SCALE : 1:250

LEGEND

SYMBOL	DESCRIPTION
	ASSEMBLY POINT
EX	EXIT LIGHT
FDS	FIRE RATED DOOR SELF CLOSE 1.5 HOUR
	MAIN EXIT ROUTE
	ALTERNATIVE EXIT ROUTE
	YOU ARE HERE

MODON
الهيئة السعودية للمدن الصناعية ومناطق التقنية
Saudi Industrial Property Authority
تم إعتماد المخطط
رقم الإعتماد : (104109715) بتاريخ : 1442/7/17 هـ

MODON مدن
الهيئة السعودية للمدن الصناعية ومناطق التقنية
Saudi Authority for Industrial Cities and Technology Zone
المدينة الصناعية الثالثة بالدمام

NOTES:

1. AUTOMATIC CEILING SPRINKLERS, UPRIGHT TYPE SPRINKLER SHALL BE SUITABLE FOR WET SYSTEM LARGE ORIFICE FUSIBLE SOLDER TYPE 13.5 mm. (17/32") ORIFICE SIZE WITH 19mm. (3/4") NPT THREAD BOTH HAVE TEMPERATURE RATING OF 212 °F.
2. THE MAXIMUM DISTANCE BETWEEN THE BRANCH LINE AND SPRINKLER BRANCH LINE SHALL NOT EXCEED 3.7 M. (12 FT.)
3. MATERIALS FOR PIPES AND FITTING ARE AS FOLLOWS: ABOVE GROUND: Ø100mm. (4") LARGER CARBON STEEL ASTM A120 SCH. 40 C.L. Ø75mm. (3") AND SMALLER GALVANIZED ASTM A120 STD WEIGHT WITH APIEL LINE PIPE COUPLING.
4. ALL PIPES PASSING THROUGH WALL SHALL HAVE A PIPE SLEEVE TWO PIPES SIZE LARGER ASTM A 120 STD WT. ZINC COATED AND CAULKED AN ACCEPTABLE CAULKING COMPOUND.
5. FIRE HOSE CABINET SHALL BE WALL MOUNTED, COMPLETE WITH 30.5M. (100 FT.) LONG, SPANNER WRENCH AND OTHER ACCESSORIES FIRE HOSE SHALL BE SINGLE WOVEN JACKET LIGHT WEIGHT COTTON RUBBER LINE 38mm. Ø (11/2") WITH LISTED COMBINATION TYPE NOZZLE ASSEMBLY.
6. ALL PIPING SHALL HYDROSTATIC ALLY TESTED AT 200 PSI (13.8 BARS) FOR 2 HOURS.
7. THREADED FITTINGS SHALL BE MALLEABLE IRON CLASS 150 AND ROUGH STEEL FOR BUTT WELD FITTINGS.
8. ALL ABOVE GROUND PIPING SHALL BE PAINTED WITH 2 COATS OF RED OXIDE PRIMER AND ONE COAT OF FIRE RED FINISHED PAINT.
9. UNDERGROUND PIPING SHALL BE PROVIDED BY BITUMINOUS PAINT AND WRAPPED BY ABACA SACK.
10. UNDER GROUND GATE VALVE SHALL BE PROVIDED WITH ADJUSTABLE CAST IRON VALVE BOX (2 PIECES SLIDING TYPE) OF SUITABLE SIZE.
11. ALL SPECIFICATION AND LAYOUT SHOULD CONSULT TO FIRE PROTECTION ENGINEERING/MANUFACTURER AND ACCORDING TO THEIR RECOMMENDATION.

GENERAL NOTES:

1. CONDUIT SIZE MUST BE MIN. 20mm.Ø.
2. WIRE TYPE-2 CORE/4 CORE SHIELDED 1.5mm.2 FIRE ALARM CABLES
3. SEPARATE CONDUIT FOR FIRE ALARM SYSTEM
4. SHUT DOWN OF FANS DURING FIRE.

FIRE ALARM NOTES:

1. QUANTITIES AND LOCATION OF DETECTORS ARE GIVEN FOR GUIDING ONLY MANUFACTURERS RECOMMENDATIONS SHALL BE FOLLOWED.
2. ALL CABLES SHALL BE TWO CORES PVC IN STEEL GALVANIZED CONDUITS (MICC CABLES WHEN SPECIFIC SITE CONDITION REQUIRE THIS TYPE OF CABLES).
3. THE MINIMUM SIZE OF WIRE SHALL BE 4MM.2 FOR POWER SUPPLY CONNECTION 2.5mm. FOR AUDIBLE SIGNAL CIRCUITS 1.5mm. FOR DETECTION CIRCUITS.

STAMP HERE:

المخططات المقدمة للمصنع حمت المسئولية الكاملة للمكتب المصمم دون أدنى مسئولية على الحديقة

التوقيع الختم

DISCLAIMER : MODON IS NOT LIABLE FOR ANY MISINTERPRETATION REFLECTED HEREIN. CONSULTANT WILL TAKE FULL RESPONSIBILITIES FOR EVERY ACTIONS INTERPRETED IN THE DRAWING.

CONSULTANT :

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KHALID BUSINESS CENTER
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Electrical	ENGR. MOHMAD ALBADAWEE			
Sanitary	ENGR. ELDAW HASSAN			
Mechanical	ENGR. ELDAW HASSAN			
Approved	ENGR. WALIED M. AL SHENAWY			

Date:	Revision:	Description	Checked By:	Approved:

PROJECT LOCATION:
المدينة الصناعية الثالثة بالدمام
3ST INDUSTRIAL CITY - DAMMAM

MODON CONTRACT NUMBER:		CLIENT :	
812474		MASA IRON PRODUCTS FACTORY	
		BLOCK :	H
LOT NO.	4	LOT AREA	7,680.00 Sq.m.
LEASE AGREEMENT NO:		812474	
SHEET CONTENTS		SITE FIRE FIGHTING PIPING LAYOUT	

Scale:	PROJECT NO.	DWG NO.	SHT. NO.
AS SHOWN	155-2021-IND	SL-AR-102	FF-01

MODON/ TECHNICAL SUPPORT ENGINEERING DEPARTMENT ESD 301