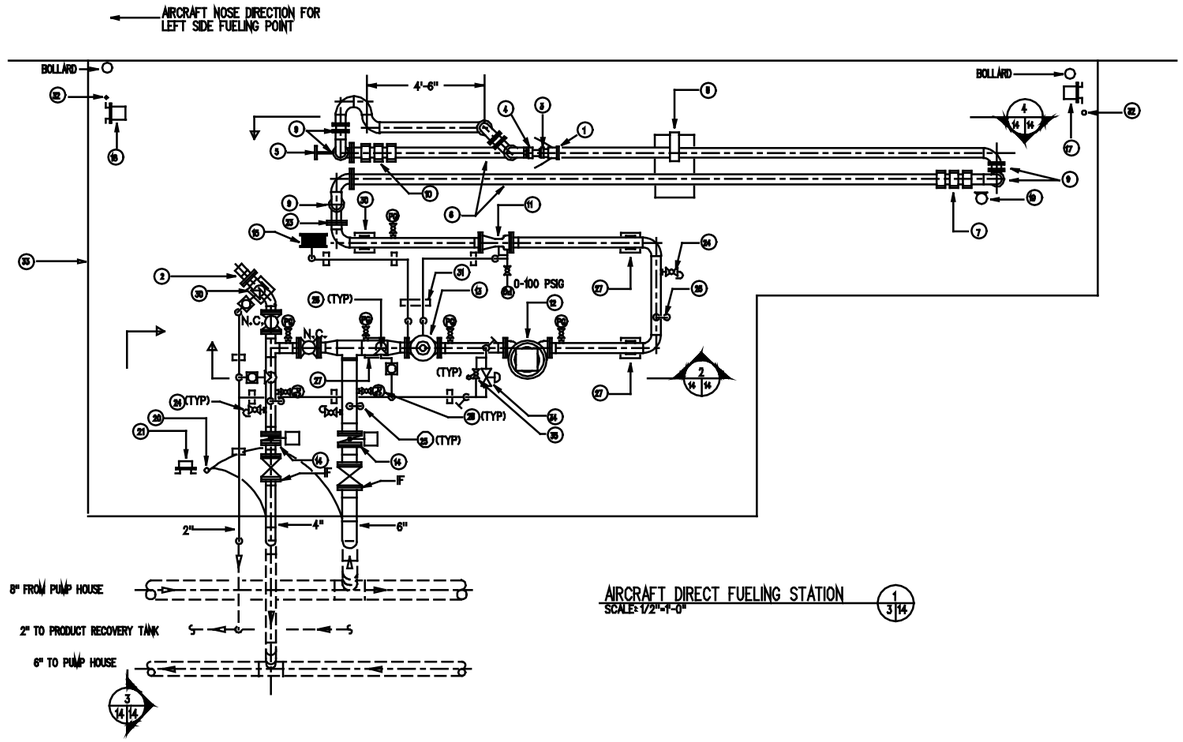
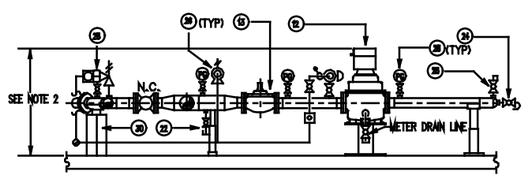
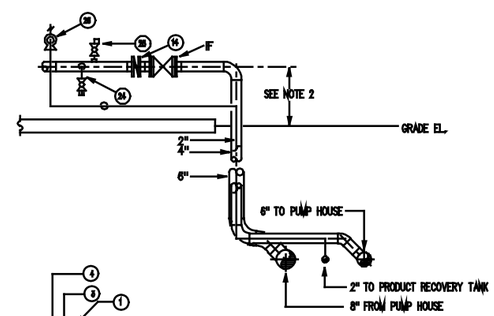


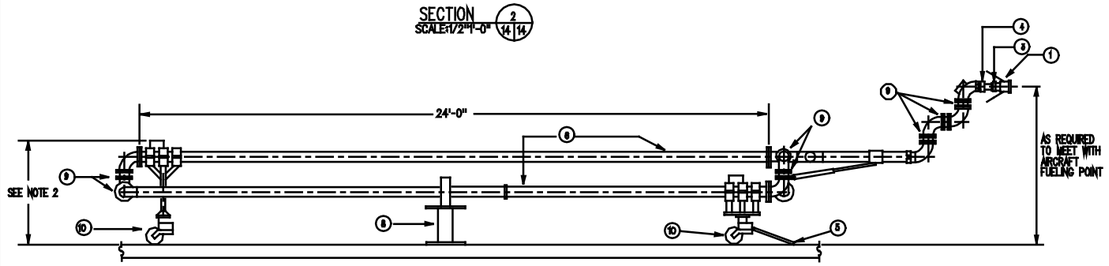
AIRCRAFT DIRECT FUELING STATION (1 / 3|14)
SCALE: 1/2"=1'-0"



SECTION (2 / 14|14)
SCALE: 1/2"=1'-0"



SECTION (3 / 14|14)
SCALE: 1/2"=1'-0"



SECTION (4 / 14|14)
SCALE: 1/2"=1'-0"

NUMBERED NOTES:

1. PRESSURE FUELING NOZZLE
2. 2-1/2" D-2 NOZZLE ADAPTER W/DUST CAP.
3. COMPACT SWIVEL JOINT (TYP. FOR 1)
4. SHUT-OFF VALVE 40 MESH STRAINER
5. DRAW BAR
6. TWO PIPE SECTION SS PANTOGRAPH. NORMAL LENGTH= 24' PER PIPE SECTION. DIAMETER OF PANTOGRAPH SHALL BE AS SPECIFIED.
7. SUPPORTING STRUCTURE.
8. HINGED HOLDING BRACKET W/HASP AND LOCK. TO FOLD AND ALLOW PANTOGRAPH PIPE SECTIONS TO PASS WHEN EXTENDING
9. FLANGED SWIVEL JOINTS (TYP).
10. SPRING LOADED CASTERS.
11. FUELING STATION VENTURI.
12. 600 GPM FUELING STATION METER.
13. 4" REFUELING CONTROL VALVE.
14. BUTTERFLY VALVE W/FUSIBLE LINK.
15. HYDRAULIC DEADMAN HOSE REEL.
16. PANTOGRAPH VENTING ASSEMBLY.
17. EMERGENCY STOP PUSHBUTTON STATION. SEE DETAIL (7 / 14|27)
18. CONTROL STATION WITH PUSHBUTTONS FOR START/STOP AND LIGHT FOR INDICATING STATION CONDITION (SCHEME A ONLY). SEE DETAIL (9 / 14|27)
19. STEEL POST W/RESILIENT BUMPER.
20. PANTOGRAPH SAMPLING & DRAIN ASSEMBLY.
21. CATHODIC PROTECTION TEST STATION.
22. 2" LOW POINT DRAIN.
23. PANTOGRAPH CONNECTION POINT. DIRECTION AND/OR ELEVATION FOR POINT OF CONNECTION MAY VARY BASED ON PANTOGRAPH TYPE AND MAXIMUM ALLOWABLE HEIGHT RESTRICTIONS.
24. SAMPLE CONNECTION. SEE DETAIL (6 / 14|12)
25. MANUAL AIR VENT
26. RELIEF VALVE. SEE DETAIL (3 / 14|12)
27. PIPE SUPPORT. SEE DETAIL (6 / 14|12)
28. PRESSURE GAGE. SEE DETAIL (8 / 14|12)
29. PANTOGRAPH PRESSURE GAGE ASSEMBLY.
30. PIPE ANCHOR.
31. CHANNEL TYPE PIPE SUPPORT.
32. GROUND ROD. SEE DETAIL (5 / 14|13)
33. CONCRETE PAD, SEE NOTE 4
34. PANTOGRAPH PRESSURE CONTROL VALVE (PPCV).
35. BALL VALVE WITH DEADMAN SPRING RETURN HANDLE.

NOTE:

1. THE PANTOGRAPH ILLUSTRATED IS NOT AN AIR FORCE DESIGN BUT IS REPRESENTATIVE OF ONE MANUFACTURER, AND IS NOT INTENDED TO RESTRICT PRODUCTS OF OTHER MANUFACTURERS THE PANTOGRAPH MUST BE CERTIFIED BY THE AIR FORCE SYSTEM SAFETY ENGINEERING ANALYSIS (AFSSEA) TEAM.
2. DESIGNER MUST COORDINATE MAXIMUM ALLOWABLE HEIGHT OF PANTOGRAPH AND AIRCRAFT DIRECT FUELING STATION EQUIPMENT, VALVES AND PIPING WITH COMMAND FUEL FACILITIES ENGINEER.
3. CONSULT WITH COMMAND FUEL FACILITIES ENGINEER FOR DIRECTIONS ON USE OF FUSIBLE LINK BUTTERFLY VALVES.
4. CONTAINMENT IN AREA OF PANTOGRAPH SHALL BE IN ACCORDANCE WITH CURRENT STATE, FEDERAL AND LOCAL ENVIRONMENTAL REGULATIONS.

REVISION	DESCRIPTION	DATE	APPROVED

SUPERSEDES PREVIOUS EDITIONS OF THIS DRAWING

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SUBMITTED BY: DATE: 30-1-80
EIC:
BR.HD.:
FYE:
APPROVED: DATE: 1/8/81
EFD FOR COMMANDER NAVFAC

DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF ENGINEERS AIR FORCE
WASHINGTON, D.C.

ACCEPTED: DATE: 1-22-81
USAF FUEL FACILITIES ENGINEER

APPROVED FOR CHIEF OF STAFF, U.S. AIR FORCE

CHIEF, ENGINEERING DIVISION
DATE: 1-22-81

AIR FORCE STANDARDS
AIRCRAFT DIRECT FUELING SYSTEM
TYPE IV

UNVERIFIED DRAFT
PANTOGRAPH-
HOSELESS TYPE

SCALE: As NOTED
SPEC. NO. 78-24-29-88-AF
SHEET 14
DRAWING NO. AN 78-24-29