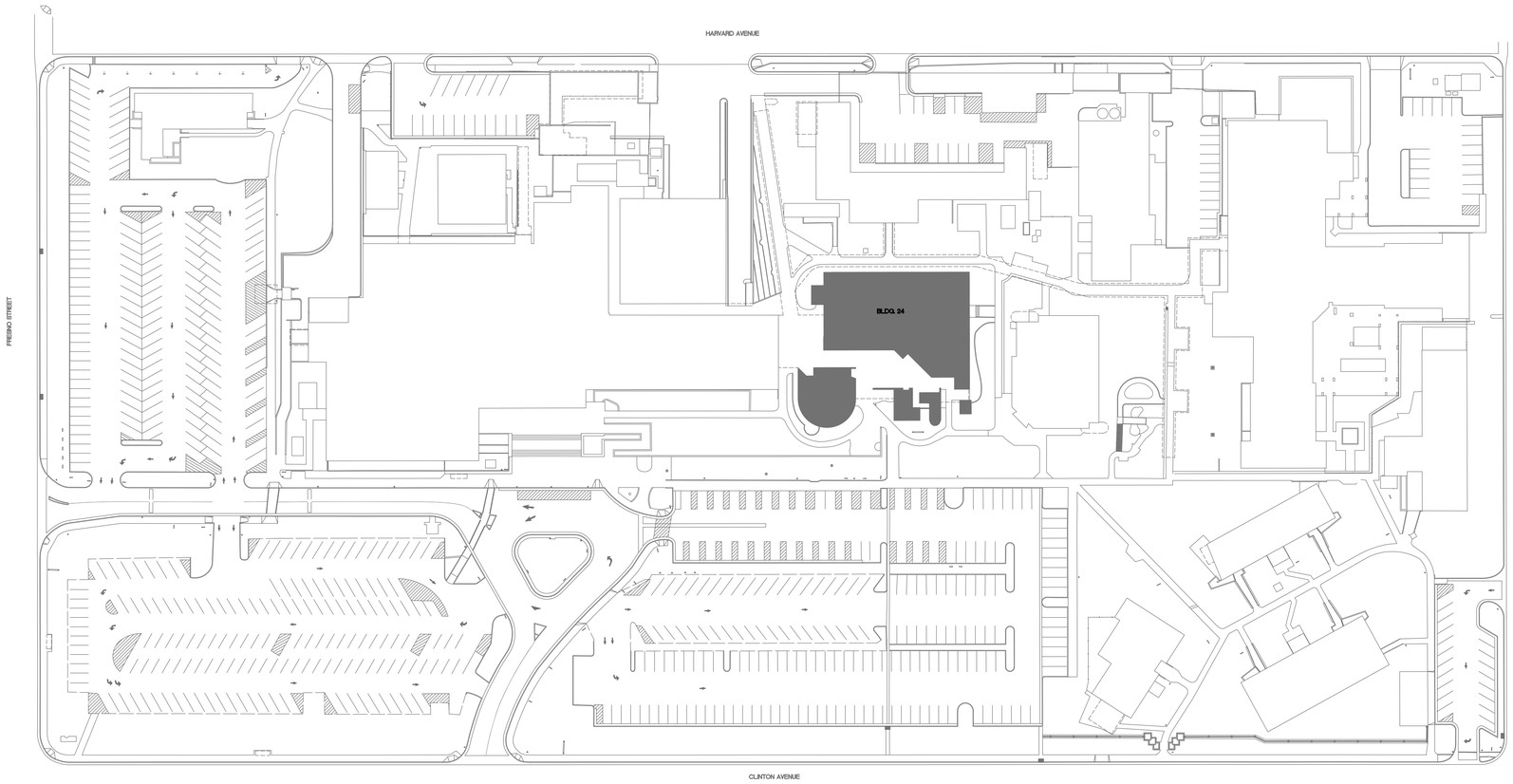

1 FIRE SPRINKLER REFERENCE SITE PLAN
1"=50'-0"

GENERAL NOTES

1. THIS IS A DESIGN BUILD PROJECT. THESE PLANS ARE FOR REFERENCE ONLY TO ADDRESS THE SCOPE OF WORK. THE SYSTEM DESIGN AND INSTALLATION SHALL COMPLY WITH DEPARTMENT OF VETERANS AFFAIRS STANDARDS, NFPA 13, 2010 EDITION, AND THE CITY OF FRESNO FIRE DEPARTMENT REQUIREMENTS.
2. SYSTEM HYDRAULIC DESIGN IS FOR: LIGHT HAZARD OR ORDINARY HAZARD AS REQUIRED.
3. WATER SUPPLY INFORMATION:THIS FACILITY IS PROVIDED WITH A FIRE PUMP RATED AT: 1500 GPM @ 120 PSI
4. ALL THREADED PIPE 2" AND SMALLER SHALL BE SCHEDULE 40, BLACK STEEL ANSI/ASTM A135.
5. ALL GROOVED AND WELDED PIPE 2-1/2" - 6" SHALL BE SCHEDULE 10, BLACK STEEL ANSI/ASTM A795.
6. THREADED FITTINGS SHALL BE CLASS 125 THREADED CAST IRON ANSI B16.4.
7. ALL THREADED PIPE AND FITTINGS SHALL HAVE THREADS CUT TO ANSI/ASME STANDARD B1.20.1.
8. ALL PIPE WELDING SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF AWS D10.9 (STANDARD FOR BUILDING SERVICE PIPING), LEVEL AR-3.
9. ALL PIPE SHALL BE EARTHQUAKE BRACED AS OUTLINED IN NFPA 13, 2010 EDITION, SECTION 9.3.
10. ALL HANGER COMPONENTS AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 13, 2010 EDITION, SECTION 9.1 AND 9.2.
11. ELECTRICAL WIRING TO BE BY ELECTRICAL CONTRACTOR.
12. ANY PAINTING OF THE PIPE THAT MAY BE REQUIRED SHALL BE BY PAINTING CONTRACTOR.
13. ALL NEW PIPING IS TO BE HYDROSTATICALLY TESTED TO CODE FOR A PERIOD NOT LESS THAN TWO HOURS.
14. FLOW AND TAMPER SWITCHES ARE TO BE PROVIDED ON THE FIRE SPRINKLER SYSTEM. ALL ELECTRICAL WIRING TO BE PROVIDED "BY ELECTRICAL CONTRACTOR.
15. MAIN FIRE PANEL, VALVE MONITORING, WATER FLOW ALARM AND TROUBLE SIGNALS SHALL BE DISTINCTLY DIFFERENT AND SHALL BE AUTOMATICALLY TRANSMITTED TO AN APPROVED CENTRAL STATION MONITORING COMPANY. CLASS I, MANUAL WET STANDPIPES ARE EXISTING. A NEW SUPPLY SHALL BE INSTALLED TO SUPPLY THE FIRE SPRINKLER SYSTEMS.
16.

OVERHEAD FIRE SPRINKLER NOTES

1. NFPA 13 (2010) SEC. 10.10.2.1 UNDERGROUND MAINS AND LEAD-IN CONNECTIONS TO SYSTEM RISERS SHALL BE COMPLETELY FLUSHED BEFORE CONNECTION IS MADE TO THE OVERHEAD FIRE SPRINKLER PIPING SYSTEM. (WITNESSED BY THE RESIDENT ENGINEER AS DETERMINED BY THE DEPARTMENT OF VETERANS AFFAIRS.)
2. NFPA 13 (2010) SEC. 9.3.4.2 CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING EXTENDING THROUGH WALLS, FLOORS, PLATFORMS AND FOUNDATIONS INCLUDING DRAINS SUCH THAT THE DIAMETER OF THE HOLES IS 2 INCHES LARGER THAN THE PIPE FOR 1 INCH TO 3-1/2 INCH NOMINAL AND 4 INCHES LARGER THAN THE PIPE FOR PIPE 4 INCH NOMINAL AND LARGER.
3. NFPA 13 (2010) SEC. 24.2.1 ALL INTERIOR PIPING AND APPURTENANCES SUBJECTED TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR 2 HOURS. (WITNESSED BY THE INSPECTOR OF RECORD.)
4. NFPA 13 (2010) SEC. 6.2.9.5 PROVIDE SPARE SPRINKLER HEAD CABINET, WRENCH, AND NO FEWER THAN A TOTAL OF 6 SPARE SPRINKLER HEADS MATCHING THE TYPES AND TEMPERATURE RATINGS IN EACH PROTECTED BUILDING FOR SYSTEMS WITH LESS THAN 300 SPRINKLERS AND 12 SPARE SPRINKLERS FOR SYSTEMS WITH 300-1000 SPRINKLERS.
5. NFPA 13 (2010) SEC. 9.3.6 PROVIDE RESTRAINT OF BRANCH LINES BY USING ONE OF THE FOLLOWING:
   A. A LISTED SWAY BRACE ASSEMBLY
   B. A UNDAPAROUND U-HOOK SATISFYING THE REQUIREMENTS OF 6-4.5.3, EXCEPTION NO. 3.
   C. NO. 12, 440-LB WIRE INSTALLED AT LEAST 45 DEGREES FROM THE VERTICAL PLANE AND ANCHORED ON BOTH SIDE OF THE PIPE.
   D. A HANGER NO LESS THAN 45 DEGREES FROM VERTICAL INSTALLED WITHIN 6 INCHES OF THE VERTICAL HANGER ARRANGED FOR RESTRAINT AGAINST UPWARD MOVEMENT, PROVIDED IT IS UTILIZED SUCH THAT L/R DOES NOT EXCEED 300. WHERE THE ROD SHALL EXTEND TO THE PIPE OR HAVE A SURGE CLIP INSTALLED.
6. NFPA 72 (2010) SEC. 5-10.2 SPRINKLER FLOW SWITCHES SHALL BE TESTED BY 10R TO CONFIRM THAT WHEN THE INSPECTORS' TEST VALVE IS ACTIVATED AND ALARM WILL SOUND IN NO LESS THAN 20 SECONDS AND NOT MORE THAN 90 SECONDS.
7. CBC (2007) SEC. 903.4.1 MAIN FIRE ALARM PANEL MONITORING AND WATER FLOW ALARM AND TROUBLE SIGNALS SHALL BE DISTINCTLY DIFFERENT AND SHALL BE AUTOMATICALLY TRANSMITTED TO AN APPROVED CENTRAL STATION MONITORING COMPANY.
8. NFPA 13 (2010) SEC. 6.9 FLOW SWITCHES SHALL BE CONNECTED TO A 10 INCH OUTSIDE ALARM BELL AT THE FIRE SPRINKLER RISER. AN APPROVED IDENTIFICATION SIGN SHALL BE PROVIDED FOR THE OUTSIDE ALARM BELL. THE SIGN IS TO READ: "SPRINKLER FIRE ALART-WHEN BELL RINGS CALL 911/FIRE DEPARTMENT".
9. NFPA 13 (2010) SEC. 24.5 HYDRAULIC CALCULATION DESIGN DATA PLACARD IS TO BE ATTACHED TO THE FIRE SPRINKLER SYSTEM RISER.
10. NFPA 13 (2010) SEC. 24.1 THE FIRE SPRINKLER CONTRACTOR (C-16) SHALL COMPLETE AND SIGN THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR THE OVER-HEAD FIRE SPRINKLER SYSTEM USING THE FORM IN FIGURE 24.1. THIS FORM SHALL BE GIVEN TO THE CONTRACTOR, WHO WILL TURN IT IN FOR DEPARTMENT OF VETERANS AFFAIRS RECORDS.
11. NFPA 13 (2010) SEC. 24.2.3.4 THE MAIN DRAIN VALVE SHALL BE OPENED AND REMAIN OPEN UNTIL THE SYSTEM PRESSURE STABILIZES. THE STATIC AND RESIDUAL PRESSURES SHALL BE RECORDED ON THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE. THE TEST IS TO BE WITNESSED BY THE INSPECTOR OF RECORD - 10R.
12. SPRINKLER UPRIGHTS AND DROPS OVER 4 FEET LONG SHALL BE RESTRAINED TO PREVENT DAMAGE TO PIPING OR TO AND FROM ADJACENT BUILDING ELEMENTS.

FIRE PROTECTION SHEET INDEX

SHEET NO.	SHEET TITLE
FP001	FIRE SPRINKLER SITE PLAN, NOTES
FP002	FIRE SPRINKLER CONSTRUCTION PHASING PLAN
FP100	BASEMENT FIRE SPRINKLER PIPING PLAN
FP101	FIRST FLOOR FIRE SPRINKLER PIPING PLAN
FP102	SECOND FLOOR FIRE SPRINKLER PIPING PLAN
FP103	THIRD FLOOR FIRE SPRINKLER PIPING PLAN
FP104	PENTHOUSE FIRE SPRINKELR PIPING PLAN
FP201	FIRST FLOOR FIRE SPRINKLER REFLECTED CEILING PLAN
FP202	SECOND FLOOR FIRE SPRINKLER REFLECTED CEILING PLAN
FP203	THIRD FLOOR FIRE SPRINKLER REFLECTED CEILING PLAN
FP301	FIRE SPRINKLER DETAILS
FP302	FIRE SPRINKLER BUILDING CROSS SECTION

SCOPE OF WORK

INSTALL NEW WET PIPE FIRE SPRINKLER SYSTEM IN EXISTING VETERANS ADMINISTRATION BUILDING 24. WORK TO BEGIN AT CONNECTION TO (E) BUILDING WATER SYSTEM AS NOTED ON FP PLANS.

OWNER:
US DEPT. OF VETERANS AFFAIRS

CODE ANALYSIS:
BUILDING AREA:
FIRST FLOOR: 17,574 SQ. FT.
SECOND FLOOR: 11,242 SQ. FT.
THIRD FLOOR: 13,193 SQ. FT.
TOTAL BUILDING AREA: 43,161 SQ. FT.
BUILDING HEIGHT: 44'-10"
CONSTRUCTION TYPE: II-B
OCCUPANCY TYPE: A-1, A-3, B

Revisions:	Date

CONSULTANTS:

REGISTERED PROFESSIONAL ENGINEER GAREN M. LENCIONI NO. 33360 EXP. 6-30-14 MECHANICAL STATE OF CALIFORNIA

LP Consulting Engineers, Inc.
895 W. Ashlan Ave, Suite 101 Clovis, CA 93612
p 559-348-2130 - f 559-348-2131
www.lpengineers.com
Job #: 10-1096

LICENSED ARCHITECT PORT N. GRIFFITH EXP. 07-31-14 STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

HMC Architects
1827 E. Fir Avenue, Studio 103 / Fresno, CA 93720
T 559 322 2444 / www.hmcarchitects.com

Drawing Title: FIRE SPRINKLER REFERENCE SITE PLAN, NOTES

Approved: Project Director

Project Title: BUILDING 24 SEISMIC CORRECTION AND ADDITION

Location: VAMC FRESNO, CA

Date: March 12, 2013 | Checked: SA | Drawn: ES

Project Number: 570-215

Building Number: 24

Drawing Number: FP001

Dwg. 118 of 180

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231