

SANTA ROSA FIRE DEPARTMENT
FIRE PREVENTION BUREAU
INSPECTION CHECKLIST

July 1, 2010



PRIVATE FIRE MAIN, HYDRANT
OR AUTOMATIC SPRINKLER SYSTEM UNDERGROUND
INSTALLATIONS

Address:		Permit #:
Inspector:	Date Inspected:	Status:
Inspector:	Date Inspected:	Status:
A-Approved, R-Re-inspection Required		

This Checklist outlines general requirements. Information contained herein applies to typical instances and may not address all circumstances.

FILE REVIEW

- | | | | |
|----|--------------------------|--------------------------|---|
| | Y | N | |
| 1. | <input type="checkbox"/> | <input type="checkbox"/> | Review plans, plan notes and F.D. plan review condition letter. |
| 2. | <input type="checkbox"/> | <input type="checkbox"/> | Review Permits Plus notes and fees prior to final. |
| 3. | <input type="checkbox"/> | <input type="checkbox"/> | Review file – If applicable, is there an alternate method application approved. |
| 4. | <input type="checkbox"/> | <input type="checkbox"/> | Approved plans and permit on site. |
| 5. | <input type="checkbox"/> | <input type="checkbox"/> | Plans match system manufacturer model and size. |

INSPECTION:

VERIFY:

General

- | | | | |
|-----|--------------------------|--------------------------|--|
| 6. | <input type="checkbox"/> | <input type="checkbox"/> | Received Private Fire Service Main Installation Certification from installer. |
| 7. | <input type="checkbox"/> | <input type="checkbox"/> | Approved drawings are on site. |
| 8. | <input type="checkbox"/> | <input type="checkbox"/> | Pipe type, size, configuration and hydrant locations are in compliance with the approved set of plans. |
| 9. | <input type="checkbox"/> | <input type="checkbox"/> | Water flow test results from public water supply are provided. |
| 10. | <input type="checkbox"/> | <input type="checkbox"/> | Depth of the pipe is in compliance with the approved set of plans. The depth of pipe for areas where frost is not a concern is detailed with the minimum depth being at 2.5 feet or 3 feet when the pipe is located under vehicle traffic areas, or 4 feet when the pipe is located under railroad tracks - (<i>NFPA 24 Section 10.4</i>). |
| 11. | <input type="checkbox"/> | <input type="checkbox"/> | Pipe is fully ground supported its entire length, it is especially important for plastic pipe. |
| 12. | <input type="checkbox"/> | <input type="checkbox"/> | Backfill is tamped in layers at least 6 inches under and around the pipe and for trenches cut in rock the backfill is tamped for at least 2 feet above the pipe. |

Dev
Inspection Checklist
Private Fire Main, Hydrant or Automatic Sprinkler System Underground Installations

- | | Y | N | |
|-----|--------------------------|--------------------------|--|
| 13. | <input type="checkbox"/> | <input type="checkbox"/> | All bolted joint components are coated with asphalt or other corrosion-retarding product. |
| 14. | <input type="checkbox"/> | <input type="checkbox"/> | Size, type, and location of the valves are in compliance with the approved set of plans and access is provided if the valves are located underground – access shall be large enough for equipment placement, maintenance, inspection, and testing, and constructed to protect equipment from damage and accumulation of water. |
| 15. | <input type="checkbox"/> | <input type="checkbox"/> | <i>(NFPA 24, Section 7.3.3)</i> Hydrant outlets are not less than 18 inches above final grade and properly oriented for hose connection. |
| 16. | <input type="checkbox"/> | <input type="checkbox"/> | <i>(NFPA 24, Section 7.3.5)</i> Hydrant is protected from mechanical damage. |
| 17. | <input type="checkbox"/> | <input type="checkbox"/> | <i>(NFPA 24, Section 10.8.3)</i> All tees, plugs, caps, bends, and hydrant branches are restrained against movement, pipe clamps and tie rods, thrust blocks, locked mechanical or push on joints or other approved methods are used. |
| 18. | <input type="checkbox"/> | <input type="checkbox"/> | <i>(NFPA 24, Section 10.8.1)</i> When used, thrust blocks are provided at each change of direction, including tees, plugs, caps, and bends, unless another restraining method is used such as rod and clamps. |
| 19. | <input type="checkbox"/> | <input type="checkbox"/> | <i>(NFPA 24 Section 10.8.2, A10.8.2)</i> Thrust blocks are concrete and sized according to the plans, and poured against compacted soil. |
| 20. | <input type="checkbox"/> | <input type="checkbox"/> | Other restraining methods match the approved plans. |
| 21. | <input type="checkbox"/> | <input type="checkbox"/> | <i>(NFPA 24, Section 10.8.3.5)</i> All steel bolted joint assemblies shall be thoroughly coated for corrosion protection. |
| 22. | <input type="checkbox"/> | <input type="checkbox"/> | <i>(NFPA 24, Section 10.10.2.2)</i> The hydrostatic test is witnessed and performed at 200 PSI or 50 PSI greater than the system working pressure for 2 hours with no pressure drop; leakage is limited to 2 quarts per hour per 100 joints. |
| 23. | <input type="checkbox"/> | <input type="checkbox"/> | <i>(NFPA 24, Section 10.10.2.1)</i> Pipe flushing requirements shall be 880 GPM for 6 inch diameter pipe; 1,560 GPM for 8 inch diameter pipe; 2,440 GPM for 10 inch diameter pipe; 3520 GPM for 12 inch diameter pipe. Minimum 4" pipe and fittings. FDC heads are not acceptable. |
| 24. | <input type="checkbox"/> | <input type="checkbox"/> | <i>(NFPA Section 6.3.4.2 and CFC 312)</i> Post Indicator Valves and Fire Department Connections are at least 40 feet from the building unless authorized by the Santa Rosa Fire Department and the top of the posts are 36 inches above grade <i>(NFPA 24 Section 6.3.3.1)</i> and are protected from mechanical damage. |
| 25. | <input type="checkbox"/> | <input type="checkbox"/> | The hydrant flow test was witnessed, graphed, and documented. The results document the static pressure, residual pressure, and available GPM at 20 PSI residual pressure. |