



FIRE PREVENTION DIVISION
1600 FIRST STREET, NAPA, CA 94559
707.257.9590

Pre-Construction Resource

Be advised this resource is intended to be an informational guide and is not all inclusive

Pre-Construction:

- All Fire Department access roads shall be completed with all-weather surfaces prior to the stockpiling of combustible materials or beginning combustible construction and shall constantly be kept free of obstructions to allow Fire Department access.
- Emergency access roads shall always be maintained clear of parking, lumber, dumpsters, storage containers and trailers.
- The all-weather road shall be of compacted gravel over soil stabilization fabric or equal and shall meet [Public Works Standards](#). **Note: Failure to comply, may result in a “Stop Work Order” until the approved all-weather access is installed and approved.**
- A 20’ wide fire access road shall be provided that enables access to within 150’ of all buildings under construction. **Exception: Projects where finished access widths are approved with smaller widths. In these instances, the approved width shall also be the fire access width and shall comply with all other conditions stated herein.**
- The Napa Fire Department shall be consulted and approve any proposed security fencing and barricades affecting Fire Department access, prior to installation.
- The Napa Fire Department requires that a fire hydrant be in service within 250 feet of the furthest point of construction prior to be stockpiling of combustible materials or the beginning of combustible construction. **Exception: Combustible materials needed for framing of slabs will be allowed.**
- Hydrants must be installed to within 150’ of multi-family and commercial buildings and 250’ of single-family dwellings.
- Street Name Signage - New streets (public or private) shall have temporary street name signs posted at all intersections, readable from all directions and clearly printed with 3” letters on a contrasting background.
- Private Driveways - Parcels that cannot be seen from public or private streets and are accessed by driveways shall be addressed with (temporary or permanent) numbers at the driveway entrance. Use 4” numbers on a contrasting background. The numbers must be readable from both directions of travel along the main street accessing the driveway.

Inspection Request:

- O** Construction inspection requests can be made 24 hours a day. We strive to schedule your inspection within 24 hours, excluding weekends and holidays. You may request a preferred morning or afternoon time for your inspection. However, please understand, due to the volume of inspections we receive that may not always be possible. You will receive an email from an Inspector confirming the request with a specific date and time of the inspection. All Fire
- O** Prevention inspection requests shall be made by the contractor performing the work. Superintendents and general contractors shall not call to schedule inspections unless for striping or Fire Final. All construction inspections shall be scheduled through the Fire Prevention page on the City of Napa website. Follow the link to schedule a construction inspection. www.cityofnapa.org/ConstructionInspection
- O** An approved stamped set of plans & project permit card shall be furnished to Fire Inspector upon arrival for all inspections.
- O** At the discretion of the Fire Inspector, any field changes deviating from the approved set of plans shall require a revised plan submittal to the City of Napa Building Division. The revised plan submittal will need to be reviewed and approved prior to any further inspections being conducted by the Fire Inspector as it relates to that portion of the project. **Be advised: Turnaround time for as-builts and/or revised plans is 14 business days. Expedited plan service is not available.**
- O** A **Temporary Certificate of Occupancy (TCO)** shall only be granted once ALL Fire and Life safety systems (Sprinkler, Fire Alarm, Fixed Fire Protection Systems etc.) have been inspected and approved by the Fire Inspector. A Certificate of Occupancy (C of O) shall only be granted by the Fire Department upon completion and approval of all required inspections and receipt of all required project documentation.

Fire Service Mains:

- O** No underground piping, fittings or thrust blocks shall be covered before visual inspection and approval by the Fire Inspector. The following inspections are required for underground piping serving fire sprinkler systems and/or private hydrants: 1) ***Pre-pour Inspection***; 2) ***Hydrostatic testing***; 3) ***Flush Inspection***.
- O** **Required IBR Sweep:** shall be installed as per the [Underground IBR Detail](#) on the [Construction Inspection webpage](#).
- O** **Pre-pour Inspection:** Thrust block excavation shall be completed; but thrust blocks shall not be poured. All pipe shall be in place and exposed for visual inspection. Pipe shall be laid on a minimum six-inch bed of clean sand, pea gravel or quarry fines. Trench shall be of a sufficient depth to allow the required cover above the pipe. Ferrous pipe and fittings shall be wrapped and tightly taped to inhibit water infiltration. Bolts and ferrous joints, pipe, and fittings shall be coated with asphaltic sealant or other corrosion retarding material.
- O** **Hydrostatic Testing:** Thrust blocks shall be in place and cured. Pipe shall be center loaded with clean sand to prevent uplift, but all joints shall remain exposed. The system shall be hydrostatically tested at 200 psi (or 50 psi over maximum static pressure, whichever is greater) for a duration of at least two hours.
- O** **Flush Inspection:** Underground piping, from the water supply to the system riser, and lead-in connections to the system riser, including all private hydrants, shall be completely flushed before the connection is made downstream to the fire protection system piping. The minimum flow shall be in accordance with [NFPA 24](#). Hoses shall be restrained to prevent injury or damage.
- O** **The Storm Water Department:** shall be notified of the scheduled flush. See [Underground Fire Service Flush Information](#) for required steps on how to notify the Storm Water Department and schedule an inspection. De-chlorination, water containment and/or discharge shall be the responsibility of the contractor. ***Note: The Flush and Hydrostatic inspections may be scheduled concurrently.***

- O** **Signage:** Prior to fire final project approval, all detector check assemblies, control valves, and fire department connections (FDC) shall be clearly labeled with the address(es) served by the device. Address signs shall be securely attached to the device and be of a durable, fade-resistant material which is clearly visible and legible. FDC and 4 ½ - inch hydrant outlets shall be unobstructed and oriented toward the fire access. Valves shall be locked in the open position with breakaway locks. All valves, backflow assemblies, and private hydrants shall be painted OSHA yellow. Hydrant and FDC caps shall be in place and secured.
- O** **Certification:** A Contractor's Material and Test Certificate for Underground Piping form shall be signed by the installing contractor and owners' representative. Contractors can upload files through the Fire Prevention page on the City of Napa website. Follow the link to upload the required certifications. www.cityofnapa.org/ConstructionInspection
- O** **Inspection Request:** Construction inspection requests can be made 24 hours a day. We strive to schedule your inspection within 24 hours, excluding weekends and holidays. You may request a preferred morning or afternoon time for your inspection. However, please understand, due to the volume of inspections we receive that may not always be possible. You will receive an email from an Inspector confirming the request with a specific date and time of the inspection. All Fire Prevention inspection requests shall be made by the contractor performing the work. Superintendents and general contractors shall not call to schedule inspections unless for striping or Fire Final. All construction inspections shall be scheduled through the Fire Prevention page on the City of Napa website. Follow the link to schedule a construction inspection. www.cityofnapa.org/ConstructionInspection

General Requirements:

- O** Installation, inspection, and testing shall conform to NFPA 13 and NFPA 24. Napa Fire Department jurisdiction starts at the downstream side of the last valve on the detector check assembly. Verify design and installation requirements for the portion of the system preceding this point with the Public Works Department, Water Division.
- O** Water-Related Public Works Standard Plans and Specifications are available on the City of Napa Public Works Department website. ([Public Works Standards.](#))
- O** Vegetation shall be selected and maintained in such a manner as to allow immediate location of and unobstructed access to; all hydrants, control valves, fire department connections, and other devices or areas used for firefighting purposes.

- A minimum three-foot clearance shall be provided around all hydrants. A minimum of three-foot clearance shall be provided on at least one side of a detector check assembly to allow proper operation of the device. The front of the FDC shall be free of any obstructions.
- Any future modification to the approved private underground piping system is subject to review, inspection and approval by the Napa City Fire Department.

Pipe and Trench Requirements:

- Required IBR sweep shall be installed as per the [Underground IBR Detail](#) on the [Construction Inspection webpage](#).
- A six-inch (6”) bed of clean fill sand, pea gravel or quarry fines shall be provided below the pipe and twelve-inches (12”) shall be provided above the pipe.
- Pipe shall be buried at least 36” where subject to loading (e.g., driveways, parking lots) and at least 30” elsewhere.
- All pipe shall be approved for use in fire service systems. Class 150 will be used at a minimum, and class 200 pipe shall be used where water pressure exceeds 150 psi. The use of galvanized pipe is prohibited when a portion of the pipe is buried.
- All ferrous pipe and fittings shall be protected by wrapping in polyethylene sheeting.
- All bolts and ferrous fittings used for underground connections shall be cleaned and thoroughly coated with asphalt or other corrosion retarding material after assembly and prior to wrapping.
- Thrust blocks, or another approved method of thrust restraint, shall be provided wherever pipe changes direction and shall be as per [NFPA](#) standards not City of Napa Public Works standards.
- A minimum two-inch clearance shall be provided where the pipe passes through slabs or walls. Underground system shall terminate at the riser flange and placed a minimum of 18- inches and a maximum of 24-inches from an exterior wall and 6-inches above the slab.
- Pipe running under a building or building foundation shall be stainless steel and shall not contain mechanical joints.
- The FDC shall contain a minimum of two-2 ½ inch inlets. When the system design demand including interior hose stream demand or a standpipe is a minimum of 500 GPM, four- 2 ½ inch outlets shall be provided.

Fire Hydrant Requirements:

- O** Private fire hydrants shall be listed with two-2 ½ inch outlets and one - 4 ½ - inch outlet. The 4 ½ -inch outlet shall face the fire department access road. All outlets shall be provided with National Standard Threads (NST). Private hydrants shall be painted OSHA yellow.
- O** Fire hydrant supply piping shall be a minimum of six inches in diameter. The lowest outlet cap nut shall be a minimum height of 18-inches above finished grade.
- O** A keyed gate valve shall be provided for each hydrant in an accessible and clearly visible location. Valves shall not be located on parking stalls.
- O** All fire hydrants shall have a “Blue Reflective Pavement Marker” indicating their location. Refer to the City of Napa [Public Works Standards](#).
- O** Private hydrants and marker are to be maintained in good condition by the property owner.
- O** [Water-Related Public Works Standard Plans and Specifications](#) are available on the City of Napa Public Works Department Webpage.

Sprinkler Requirements:

- O** All sprinkler work shall be installed as per the approved set of plans.
- O** A rough/hydro inspection is required at 200 psi for 2 hours.
- O** Any needed “as built” and/or revised plans shall be submitted and approved prior to further inspections by the Fire Inspector.
- O** Where applicable, a standpipe test shall be required for systems that contain a standpipe.
- O** The contractor shall coordinate the standpipe test and furnish a plan to the Fire Department prior to scheduling the standpipe test.
- O** An aboveground contractor’s material & test certificate shall be required prior to final approval.

Fire Alarm Requirements:

- O** A 24-hour battery backup test shall be required.
- O** A live alarm acceptance test shall be required.
- O** Required to provide a separate disconnect, locking of the disconnect, color and signage.
- O** Testing and certification of all smoke curtains, fire doors, duct detectors and related devices/appurtenances (where applicable).
- O** Record of completion, monitoring agreement & 100% pre-test documents shall be required prior to final approval.

Identification Requirements:

- O** All utility rooms and related fire appurtenances shall be labeled and be properly identified as to the purpose they serve.
- O** Signage at HVAC, sprinkler, electrical, and fire alarm control panel location.
- O** All required signs shall be weather resistant and permanently affixed.
- O** All signs shall contain 4-inch characters with a red background and white lettering.
- O** In utility rooms or other areas where combustible storage is not allowed, a permanently affixed sign shall be installed that reads, **“By Order of the Fire Marshal, there shall be no storage in this room”**.
- O** All OS&Y's / Backflow Preventors shall have signage stating the address the device services. (4-inch characters / red background with white lettering / weather resistant, permanently affixed & facing the street)
- O** All FDC's shall be located at the nearest point of access for fire apparatus or in a location that's approved by the local authority.
- O** Building addressing detail and locations shall be installed as per City of Napa Addressing Standard and approved plans.