



**SCHOOL DISTRICT PALM BEACH COUNTY  
BUILDING DEPARTMENT  
PLAN REVIEW CHECK LIST -- PLUMBING**

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PROJECT NAME: \_\_\_\_\_ DATE \_\_\_\_\_  
PROJECT NUMBER: \_\_\_\_\_ REVIEWER \_\_\_\_\_

*The intent of this checklist is to act as a tool for the District Plan Reviewers to review construction plans and specification of projects submitted for permitting by the Building Department. Architects and Engineers are encouraged to use this document as a tool to prepare construction plans and specifications for District projects.*

*The codes references in the checklist are Florida Building Code (FBC), District Design Criteria (DDC), Florida Administrative Code (FAC), Florida Statutes (FS), and National Fire Prevention Association Codes (NFPA).*

**Phase I – Schematic Design (Not Required)**

OK, Comment, or N/A	Item	Code Reference

**Phase II –Design Development (Not Required)**

OK, Comment, or N/A	Item	Code Reference

**PLUMBING– "Phase III" Plans (Final Construction Documents)**

**General**

OK, Comment, or N/A	Item	Code Reference
	Plans are signed and sealed	471, 481 FS
	All documentation submitted	District Requirement
	Index represents what is submitted	District Requirement
	Plans match the specifications	District Requirement
	Plans comply with the District Design Criteria	District Requirement
	Check for junction boxes, valve boxes, etc in and near play fields.	District Requirement
	Check for plumbing in Prohibited Locations.	301.6 FBCP
	Openings for pipes. Openings in structure for pipes are closed and protected.	304.4 FBCP

	Sleeves – Annular spaces between sleeves and pipes are filled and/or tightly caulked in an approved manner and if in fire-rated assemblies are properly sealed.	304.5 FBCP																								
	Water closets in-group facilities have separate compartments with a door and walls or partitions between fixtures to ensure privacy.	310.4 FBCP																								
	Provide Plumbing fixture for type of occupancy in minimum numbers per table p403.1. (Example below). <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td colspan="2">Water Closets</td> <td>Bathtubs/</td> <td>Drinking</td> <td></td> </tr> <tr> <td>Occupancy</td> <td>Male</td> <td>Female</td> <td>Lavatories</td> <td>Showers</td> <td>Fountain</td> </tr> <tr> <td>Educational</td> <td>1 per 50</td> <td>1 per 50</td> <td>1 per 50</td> <td>-</td> <td>1 per 100</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1 Service Sink</td> </tr> </table>		Water Closets		Bathtubs/	Drinking		Occupancy	Male	Female	Lavatories	Showers	Fountain	Educational	1 per 50	1 per 50	1 per 50	-	1 per 100						1 Service Sink	4.3.1 FBCP
	Water Closets		Bathtubs/	Drinking																						
Occupancy	Male	Female	Lavatories	Showers	Fountain																					
Educational	1 per 50	1 per 50	1 per 50	-	1 per 100																					
					1 Service Sink																					

### Accessible Plumbing Fixtures

OK, Comment, or N/A	Item	Code Reference
	Spouts shall be no higher than 36" (915 mm) measured from the floor or ground surfaces to the spout outlet (see figure P404.2.2(a)).	404.2.2 FBCP
	Spouts of drinking fountains and water coolers are in proper location.	404.2.3 FBCP
	The height of water closets meets age appropriate requirements.	404.3.3 FBCP
	The requirements for Accessible children's water closets meet 4.16.1	A4.16.7 ADAAG
	Grab bars are should and are proper size, shape, and location.	404.3.4 DBCP
	Flush controls are hand operated or automatic and comply with P 404.13.	404.3.5 FBCP

### Automatic Clothes Washers

OK, Comment, or N/A	Item	Code Reference
	The water supply to the clothes washer is protected against backflow	406.2 FBCP
	The discharge from an automatic clothes washer is through an air break and connected to a standpipe in accordance with P 802.4.	406.3 FBCP

### Dishwashing Machines

OK, Comment, or N/A	Item	Code Reference
	The water supply to a dishwashing machine is protected against backflow	409.2 FBCP
	Discharge from an automatic dishwashing machine is through an air gap or air break into a standpipe or waste receptor in accordance with P802.2.	409.3.2 FBCP

### Commercial Food Waste Grinder

OK, Comment, or N/A	Item	Code Reference
	Commercial food waste grinders are connected to a minimum 2" dia drain and trapped separately from any other fixtures or sink compartments.	413.3 FBCP

### Garbage Can Washer

OK, Comment, or N/A	Item	Code Reference
	The water supply to a garbage can washer is protected against backflow.	414.1 FBCP

### Water Heaters

OK, Comment, or N/A	Item	Code Reference
	A drain valve is installed at the bottom of each tank-type water heater and hot water storage tank.	501.3 FBCP
	Hot water supply system is equipped with automatic temperature controls capable of adjustments from the lowest to the highest acceptable temperature settings for the intended temperature operating range.	501.8 FBCP
	An approved means is provided to prevent siphoning of any storage water heater or tank.	504.1 FBCP
	Bottom fed water heaters and bottom fed tanks connected to water heaters have a vacuum relief valve.	504.2 FBCP
	All automatically controlled water heaters are equipped with an energy cutoff device that cut off the heat energy to the water tank water before the temperature of the water in the tank exceeds 210°F (99°C).	504.3 FBCP
	A separate switch is provided to terminate the energy supplied to hot water supply systems.	504.4 FBCP
	All storage water heaters operating above atmospheric pressure have an approved self-closing (levered) pressure relief valve and temperature relief valve or combination thereof.	504.5 FBCP
	The outlet of a pressure, temperature, or other relief valve is not directly connected to the drainage system.	504.7 FBCP
	The relief valve discharges full size to a safe place such as the floor. Outside the building, or an indirect waste receptor without any trapped sections. Has a visible air gap fitting located in the same room as the water heater. The discharge installation does not cause personal injury to the occupants or structural damage to the building.	504.7.1 FBCP

### Water Supply

OK, Comment, or N/A	Item	Code Reference
	The water service pipe is sized to supply water in the quantities and pressures required by this code.	603.1 FBCP
	Water service pipe and the building sewer are separated by 5' (1524 mm) of undisturbed or compacted earth.	603.2 FBCP
	The maximum water consumption flow rates and quantities for all plumbing fixtures and fixture fittings are in accordance with Table P604.4.	604.4 FBCP
	Sillcocks, hose bibbs, wall hydrants and other openings with a hose connection are protected by an atmospheric-type or pressure-type vacuum breaker or a permanently mounted hose connection vacuum breaker.	608.15.4.2 FBC
	The potable water supply to automatic fire sprinkler and standpipe systems are protected against backflow.	608.16.4 FBCP

	A reduced pressure backflow device protects the potable water connection made to a non-potable line, fixture, tank, vat, pump, or other equipment subject to backpressure.	608.16.6 FBCP

### Sanitary Drainage

OK, Comment, or N/A	Item	Code Reference
	The campus is connected to a public sewer or an approved private sewage disposal system.	701.2 FBCP
	The campus is on a separate connection with the sewer for other properties. Where located on the same lot, multiple buildings may connect to a common building sewer that connects to the public sewer.	701.3 FBCP
	Chemical waste system is completely separated from the sanitary drainage system and treated in accordance with P 803.2 before discharging into the sanitary drainage system.	702.5 FBCP
	The drainage system for chemical waste and vent pipes is of an approved material resistant to corrosion and degradation for the concentration of chemicals involved.	702.5 FBCP
	Horizontal drainage piping is shown in uniform alignment at uniform slopes, with a minimum slope per table P704.1	704.1 FBCP

### Cleanouts

OK, Comment, or N/A	Item	Code Reference
	Horizontal drains have cleanouts located not more than 100' apart.	708.3.1 FBCP
	Building sewers have cleanouts located not more than 100' apart measured from the upstream entrance of the cleanout	708.3.2 FBCP
	Cleanouts are installed at each change of direction of the building drain or horizontal waste or soil lines greater than 45°. (When more than one change of direction in a run of piping, only one cleanout is required for each 40' of developed length of drainage piping.)	708.3.3 FBCP
	Cleanouts are shown at the base of each waste or soil stack	708.3.4 FBCP
	There is a cleanout near the junction of the building drain and the building sewer.	708.3.5 FBCP
	Cleanouts are the same nominal size as the pipe they serve up to 4". Pipes >4" nominal size, the minimum size of the cleanout is 4".	708.7 FBCP

### Drainage System Sizing

OK, Comment, or N/A	Item	Code Reference
	The maximum number of drainage fixture units connected to a given size of building sewer, building drain, or horizontal branch meets the requirements of Table P710.1(1).	710.1 FBCP

### Sumps and Ejectors

OK, Comment, or N/A	Item	Code Reference
	Building drains that cannot discharge into the public sewer by gravity shall discharge into a tightly covered and vented sump, and then to a gravity line to the public sewer.	712.1 FBCP
	There is a an accessible gate valve on the discharge side of the check valve in the pump or ejector discharge piping between the pump or ejector and the gravity drainage system.	712.2 FBCP
	The sump pump capacity and head is appropriate for the anticipated use requirements.	712.3.1 FBCP
	The sump pit is not less than 18" in diameter and 24" deep.	712.3.2 FBCP
	The effluent level control is adjustable and maintainable to prevent the effluent in the sump from rising to within 2" of the invert of the gravity drain inlet into the sump.	712.3.4 FBCP

### Indirect Waste

OK, Comment, or N/A	Item	Code Reference
	Equipment and fixtures for storage, preparation and handling of food is discharged through an indirect waste pipe.	802.1.1 FBCP

### Vents

OK, Comment, or N/A	Item	Code Reference
	Every trap and trapped fixture is vented in accordance with one of the venting methods in this chapter.	901.2.1 FBCP
	The vent system for a chemical waste system is independent of the sanitary vent system and terminates separately through the roof to the open air.	901.3 FBCP
	Every sanitary drainage system receiving the discharge of a water closet has a main vent that is either a vent stack or a stack vent running undiminished in size as directly as possible to the open air above the roof.	903.1 FBCP
	There is a vent stack every drainage stack with 5 or more branch intervals.	903.2 FBCP
	Every vent stack or stack vent extends outdoors terminating to the open air.	903.3 FBCP
	Every vent stack connects to the base of the drainage stack.	903.4 FBCP
	Every dry vent connecting to a horizontal drain is connects above the centerline of the horizontal drainpipe.	905.3 FBCP
	Every dry vent rises vertically to a minimum of 6" above the flood level rim of the highest trap or trapped fixture being vented.	905.4 FBCP
	Each fixture trap has a protecting vent located so that the slope and the developed length in the fixture drain from the trap weir to the vent fitting are within the requirements of Table P906.1.	906.4 FBCP

### Waste Stack Vent

OK, Comment, or N/A	Item	Code Reference
	The waste stack is vertical and there are no horizontal or vertical offsets.	910.2 FBCP
	Every fixture drain connects separately to the waste stack and the stack does not receive the discharge of the water closets or urinals	910.2 FBCP
	There is a stack vent for the waste stack; the size of the stack vent is equal to the size of the waste stack. Any offsets in the stack vent are located at least 6" above the flood level of the highest fixture in accordance with P905.2.	910.3 FBCP
	The waste stack size is based on the total discharge to the stack and the discharge within a branch interval per Table P910.4 and the same size throughout the length of the waste stack.	910.4 FBCP

### Circuit Vent

OK, Comment, or N/A	Item	Code Reference
	There is a max of 8-fixtures connected to a horizontal branch drain and each fixture drain connects horizontally to the horizontal branch being circuit vented.	911.1 FBCP
	The circuit vent connection is between the two most upstream fixture drains to the horizontal branch per P905 and does not receive the discharge of any soil or waste.	911.2 FBCP
	There is a relief vent for the circuit-vented horizontal branches receiving the discharge of 4 or more water closets and connecting to a drainage stack that receives the discharge of soil or waste from upper horizontal branches.	911.4 FBCP

### Combination Drain and Vent System

OK, Comment, or N/A	Item	Code Reference
	Any combination drain and vent systems serve only floor drains, standpipes, sinks and lavatories.	912.1 FBCP

### Vent Pipe Sizing

OK, Comment, or N/A	Item	Code Reference
	The min dia of the stack vent and vent stack installed is in Table P916.1, but in no case less than ½ the dia of the drain served or less than 1¼".	916.1 FBCP

### Traps

OK, Comment, or N/A	Item	Code Reference
	Each plumbing fixture is separately trapped per the plumbing code.	1002.1 FBCP
	Each fixture trap meets the requirement of 1002.4	1002.4 FBCP


### Interceptors and Separators

OK, Comment, or N/A	Item	Code Reference
	Interceptors and separators are provided to prevent the discharge of oil, grease, sand, and other substances harmful or hazardous to the building drainage system, public sewer, or sewage treatment plant/process.	1003.1 FBCP
	Food waste grinders connected to grease traps or grease interceptors are properly sized and rated for the discharge of the food waste grinder.	1003.3.2 FBCP

### Storm Drainage

OK, Comment, or N/A	Item	Code Reference
	Storm water does not drain into sanitary sewers.	1101.1 FBCP
	The size of a drainage pipe is not reduced in the direction of flow.	1101.5 FBCP
	The roof is designed for the maximum possible depth of water that will pond as determined by the relative levels of roof deck and overflow weirs, scuppers, edge, or serviceable drains in combination with the deflected structural elements. In determining the max possible depth of water, all primary roof drainage means shall be assumed blocked.	1101.7 FBCP
	Cleanouts are installed in the storm drainage system and comply with the provisions of this code for sanitary drainage pipe cleanouts.	1101.8 FBCP

### Roof Drains

OK, Comment, or N/A	Item	Code Reference
	Roof drains have strainers extending not less than 4" above the roof surface immediately adjacent to the drain with an inlet area above the roof level not less than 1-1/2 times the area of the conductor to which it is connected.	1105.1 FBCP
	The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers is based on the 100-year hourly rainfall rate in Fig P1106.1 or on other rainfall rates determined from approved local weather data.	1106.1 FBCP
	The building storm drain, storm sewer and their horizontal branches are sized in accordance with table P1106.3, based on slope of pipes.	1106.3
	The roof drains and storm drainage piping sizing is based on 1/2 the area of any vertical wall that diverts rainwater to the roof added to the projected roof area to size the vertical conductors, leaders, and horizontal storm drainage piping.	1106.4 FBCP

### Florida Building Code-Fuel Gas

OK, Comment, or N/A	Item	Code Reference
	Fuel-fired appliances have the required combustion air supply.	303.3 FBCFG
	Air for combustion, ventilation, and dilution of flue gases for gas-fired equipment vented by natural draft are sized per FG 304.3 and FG 304.4.	304.1 FBCFG
	Proper clearance around appliances is provided.	306.1 FBCFG

### Florida Building Code- Building Chapter 423

OK, Comment, or N/A	Item	Code Reference
	The fire alarm system properly shuts off gas and fuel oil supplies.	423.7.6 FBCB
	<b>Boiler Rooms:</b> <ul style="list-style-type: none"> <li>• Each boiler room has an out-swinging door opening to the exterior and is separated from the remainder of the building by at least 1-hour fire rated construction or a separate building at least 60' from other buildings.</li> <li>• There is a fire rated door swinging into the boiler room for any openings into the interior of the building.</li> <li>• There is no opening into any corridor or space used by students.</li> </ul>	423.7.8 FBCB
	<b>Concealed Piping:</b> Piping systems for flammable liquids or gases are not be installed in or above interior corridors or stairwells	423.15.1
	<b>Floor Drains and Hose Bibbs:</b> <ul style="list-style-type: none"> <li>• All group toilet rooms have at least one floor drain with trap primer and one easily accessible hose bibb with removable key.</li> <li>• The floor slopes to the floor drain.</li> <li>• Stall urinals cannot be used as required floor drain.</li> </ul>	423.16.5 FBCB
	<b>Hot Water:</b> Any fixtures with hot water supplied in showers, hand wash sinks, or lavatories in the toilet rooms, are equipped with a mixing valve to limit the temperature not to exceed 110°F.	423.16.7 FBCB
	<b>Delayed Closing Valves:</b> Water supply at toilet room lavatories are controlled by delayed-closing valves.	423.16.8 FBCB
	<b>Floor Drains:</b> Floor drains are provided in the food serving areas, kitchen area, scullery, garbage and rubbish rooms, and can wash area.	423.16.10.2 FBCB
	<b>Dousing Shower and Eyewash:</b> Every science room lab or shop where students handle materials or chemicals potentially dangerous to human tissue shall have a dousing shower and eye-wash, with floor drain under the shower/eye wash, for emergency use.	423.16.11

### NFPA - Installation of Sprinkler Systems

OK, Comment, or N/A	Item	Code Reference
	<b>Level of Protection:</b> Buildings with automatic sprinkler systems have sprinkler coverage in all areas except where specific sections of this standard permit omission of the sprinkler coverage.	4.1 NFPA 13



	<p><b>Classifications:</b></p> <ul style="list-style-type: none"> <li>• Classrooms are light hazard occupancy 0.10-gpm/sq ft.</li> <li>• Kitchen is ordinary hazard group I 0.15-gpm/sq ft.</li> <li>• Storage Areas and Wooden Stages are ordinary hazard group II 0.20-gpm/sq ft.</li> <li>• Emergency Generator Room coverage is 0.3-gpm/sq ft</li> </ul>	<p>11.2.3.1.5 NFPA 13 11.4.5.1 NFPA 37</p>
	<p><b>Water Flow Detecting Devices Wet Pipe Systems:</b> The alarm apparatus for a wet pipe system shall consist of a listed check valve or other listed water flow-detecting alarm device with the necessary attachments to sound an alarm.</p>	<p>6.9.2.1 NFPA 13</p>
	<p><b>Pressure Gauges:</b></p> <ul style="list-style-type: none"> <li>• A listed pressure gauge conforming to 8.16.3 is shown in each system riser.</li> <li>• Pressure gauges are installed above and below each alarm check valve or riser check valve where such devices are present.</li> </ul>	<p>7.1.1.1 NFPA 13 7.1.1.2 NFPA 13</p>
	<p>If the requirements of 7.1.2.2 are not meet, there is a gridded wet pipe system with a relief valve not less than ¼" (6.4 mm) in size set to operate at 175-psi (12.1-bar) or 10-psi (0.7-bar) in excess of the max system pressure, whichever is greater.</p>	<p>4.1.2.1 NFPA 13</p>
	<p>The maximum floor area on any one floor protected by sprinklers supplied by any one sprinkler system riser or combined system riser is:</p> <ol style="list-style-type: none"> <li>1. Light Hazard - 52,000 ft<sup>2</sup>. (4831 m<sup>2</sup>)</li> <li>2. Ordinary Hazard - 52,000 ft<sup>2</sup>. (4831 m<sup>2</sup>)</li> </ol>	<p>8.2.1 NFPA 13</p>
	<p>Where maximum ceiling temperatures exceed 100°F (38°C), sprinklers with temperature ratings in accordance with the maximum ceiling temperatures of Table 6.2.5.1 are used.</p>	<p>8.3.3.3 NFPA 13</p>
	<p>Extended coverage sprinklers are limited to an unobstructed construction type consisting of a flat smooth ceiling with a slope not exceeding 1:6.</p>	<p>8.4.3 NFPA 13</p>
	<p>The maximum area of coverage of any sprinkler does not exceed 400 ft<sup>2</sup></p>	<p>8.5.2.2.2 NFPA 13</p>
	<p>The maximum distance between sprinklers is based on the centerline distance between sprinklers on the branch line or on adjacent branch lines.</p>	<p>8.5.3.1.1 NFPA 13</p>
	<p>The distance from sprinklers to walls does not exceed ½ of the allowable maximum distance between sprinklers.</p>	<p>8.5.3.2.1 NFPA 13</p>
	<p>Drain size is at least 2" for systems riser of 4" or more.</p>	<p>8.15.2.4.2 NFPA 13</p>
	<p>Local water flow alarms are provided on all sprinkler systems having more than 20 sprinklers</p>	<p>8.16.1.1 NFPA 13</p>
	<p>A retarding device is shown on each alarm check valve using variable water pressure.</p>	<p>8.16.1.2.1 NFPA 13</p>
	<p>Each fire department connection to the sprinkler system has a sign with raised or engraved letters at least 1" (25.4 mm) in height on a plate or fitting reading service design – i.e. AUTOSPKR., OPEN SPRKR., AND STANDPIPE.</p>	<p>8.16.2.4.7.1 NFPA 13</p>
	<p>Fire department connections are not connected on the suction side of fire pumps</p>	<p>8.16.2.4.8 NFPA 13</p>
	<p>A listed check valve is installed in each fire department connection</p>	<p>8.16.2.5.1 NFPA 13</p>
	<p>There are no shutoff valves in the fire department connection piping.</p>	<p>8.16.2.5.2 NFPA 13</p>
	<p>A pressure gauge with a connection not less than ¼" (6.4 mm) is shown at the system main drain, each main drain associated with a floor valve, and on the inlet and outlet side of each pressure reducing valve.</p>	<p>8.16.3.1 NFPA 13</p>
	<p>Each gauge connection is equipped with a shutoff valve and provisions for draining.</p>	<p>8.16.3.2 NFPA 13</p>
	<p>The required pressure gauges are listed and have a maximum limit not less than twice the normal system working pressure at installation points.</p>	<p>8.16.3.3 NFPA 13</p>

	Main drain test connection is at locations that will permit flow tests of water supplies and connections	8.16.4.1.1 NFPA 13																
	An alarm test connection is present and not less than 1" (25.4 mm) diameter, terminating in a smooth bore corrosion-resistant orifice, giving a flow equivalent to one sprinkler of a type having the smallest orifice installed on the particular system, to test each water flow alarm device for each system.	8.16.4.2.1 NFPA 13																
	The trip test connection is located on the end of the most distant sprinkler pipe in the upper story and has a readily accessible shutoff valve and plug not less than 1" (25.4 mm) with at least one being brass.	8.16.4.3.2 NFPA 13																
	The minimum water supply requirements for a hydraulically designed occupancy hazard fire control sprinkler system is determined by adding the hose stream demand from table 11.2.3.1.1 to the water supply sprinklers determined in 11.2.3.1.5.	11.2.3.1.1 NFPA 13																
	Hose stream demand and water supply duration requirements for Hydraulically calculated systems: <table border="1" data-bbox="321 636 1211 877"> <thead> <tr> <th>Occupancy</th> <th>Inside Hose</th> <th>Total Combined Inside and Outside Hose (gpm)</th> <th>Duration (minutes)</th> </tr> </thead> <tbody> <tr> <td>Light hazard</td> <td>0, 50, or 100</td> <td>100</td> <td>30</td> </tr> <tr> <td>Ordinary hazard</td> <td>0, 50, or 100</td> <td>250</td> <td>60-90</td> </tr> <tr> <td>Extra hazard</td> <td>0, 50, or 100</td> <td>500</td> <td>90-120</td> </tr> </tbody> </table> <p>For SI units, 1 gpm = 3.785 L/min</p>	Occupancy	Inside Hose	Total Combined Inside and Outside Hose (gpm)	Duration (minutes)	Light hazard	0, 50, or 100	100	30	Ordinary hazard	0, 50, or 100	250	60-90	Extra hazard	0, 50, or 100	500	90-120	11.2.3.1.1 NFPA 13
Occupancy	Inside Hose	Total Combined Inside and Outside Hose (gpm)	Duration (minutes)															
Light hazard	0, 50, or 100	100	30															
Ordinary hazard	0, 50, or 100	250	60-90															
Extra hazard	0, 50, or 100	500	90-120															
	Pumps taking suction from a private fire service main supply sprinklers only, the pump does not have to be sized to accommodate inside and outside hose. Use such hose allowance in evaluating the available water supplies.	11.2.3.1.4 NFPA 13																
	When using Figure 11.2.3.1.5, the calculations shall satisfy any single point on the appropriate density/area curve. Example: <ul style="list-style-type: none"> <li>• Light hazard 1500 sq ft. x .10 gpm/sq ft.= 150</li> <li>• Ordinary hazard Class 1 1500 sq ft x .15 gpm/sq ft. = 225</li> <li>• Ordinary hazard Class 2 1500 sq ft x .20 gpm/sq ft. = 300</li> </ul>	11.2.3.2.1.2 NFPA 13																
	Capacity: Water supplies are capable of providing the required flow and pressure for the required duration as specified in Chapter 11, Chapter 12, and Chapter 13.	15.1.2 NFPA 13																
	Piping for the private service main is at least 6" (152.4 mm) in diameter.	15.1.3.1 NFPA 13																
	The connection between the system piping and the underground piping has a suitable transition piece and is properly fastened by an approved device.	15.1.6.1.1 NFPA 13																
	The fire department connection is located not less than 18" (457 mm) or more than 48" (1219 mm) above the level of the adjoining ground, sidewalk, or grade.	4-3.6 NFPA 14																
	All valves controlling connections to water supplies and to supply pipes to sprinklers are listed indicating valves.	6.1.1 NFPA 24																
	At least one listed indicating valve is installed in each water source supply	6.2.1 NFPA 24																
	In a connection serving as one source of supply, a listed indicating valve or post indicator valve is installed on both sides of all check valves required by 6.2.3.	6.2.5 NFPA 24																
	Post Indicator Valves: Every connection from the private fire service main to a building has a listed post indicator valve located to control all water source supplies. The AHJ may waive the requirement for the post indicator valve(s) required in 6.3.1 where provisions of 6.1 and 6.4 are met.	6.3.1* NFPA 24 6.3.2 NFPA 24																

	Post indicator valve(s) are 40' or more from building. If site does not allow 40' distance, AHJ may approve closer distance under the conditions in 6.3.3.2.	6.3.3.1 NFPA 24
	Post indicator valve(s) are set so the post is 36" above final grade.	6.3.4.1 NFPA 24
	Post indicator valve(s) are protected against mechanical damage as necessary.	6.3.4.2 NFPA 24
	If impractical to provide post indicator valve, with the approval of the AHJ, the valve(s) maybe located in pits.	6.4.1 NFPA 24
	Large private fire service main systems have sectional controlling valves at appropriate points to isolate the system in the event of breaks, make repairs, or extend the system.	6.5.1 NFPA 24
	<b>Hydrants</b>	
	Approved hydrant is indicated with at least 6" connection to the mains.	7.1.1 NFPA 24
	A valve is shown at the hydrant connection.	7.1.1.1 NFPA 24
	Hydrants are spaced with the Fire AHJ.	7.2.1* NFPA 24
	Hydrant is indicated not less than 40' of the building(s) it servers.	7.2.3 NFPA 24
	If site does not allow 40' distance, AHJ may approve a closer distance.	7.2.4 NFPA 24
	Steel pipe is not indicated for general underground service unless specifically listed for such use.	10.1.2 NFPA 24

### Specifications

OK, Comment, or N/A	Item	Code Reference
	Specifications match the District Master Specs	District Requirement
	Specifications match the plans	District Requirement
	Specifications follow the District Design Criteria	District Requirement
	Specification follow the Educational Specifications	District Requirement