

This document contains the process of planning and development of projects such as residential subdivisions and business parks that are financed and developed by public or private sources other than Iredell Water Corporation.

Planning Process

The developer will hire a professional engineer to design the water distribution system. The water distribution system must meet the standards of specification of Iredell Water Corporation (IWC), any standards set forth in the Iredell County Land Development Code (*Chapter 10, Article III, see pages 3-5*), and NCDEQ's "Rules Governing Public Water Systems" (*NCAC Title 15A, Chapter 18C*). Iredell Water Corporation will review and have final approval of the water utility plan only. Once all revisions have been made and approved, Iredell Water will sign the "Application for Approval of Engineering Plans & Specifications for Water Supply Systems" for NCDEQ. After the developer has received all other approvals from Iredell County, or the local governing town or city, the developer will submit the water utility plan to NCDEQ to receive approval for construction, along with any associated payment of fees.

- Draft Plans are to be submitted to our office in hard copy on 24" by 36" plats and tied to NC Grid System NAD 83
- Plans should clearly show all valves, water lines with size and type, blow-offs and hydrants if permitted. Plan should also show all roads, lot lines, relation to storm and sewer if applicable, and any easements.
- Any hydraulic modeling or flow tests, including fees, will be responsibility of developer or engineer
- No service taps 2" or smaller shall be shown on plans or installed by developer at time of development. Services ¾" to 2" for each lot will be installed by IWC on an as needed basis after tap fees are received. Services 3" and above should be shown on plan along with backflow devices.
- Well Site Options for New subdivisions or phases greater than 20 lots
 - Any new subdivision or additional phase to an existing subdivision with a total of 20 to 49 lots must provide 1 well site option to IWC.
 - Any new subdivision or additional phases that bring the total of lots to 50 lots or greater, the developer must provide IWC with 2 well site options.
 - Additional phases that bring the total lot number above 20 or above 50 will fall into this policy. (*Example: Phase 1 = 10 lots, Phase 2= 10 lots creates a total of 20 lots under this policy regardless of developer of Phases.*)
 - Well site(s) must be a minimum of 210 feet by 210 ft.
 - The lot(s) must meet the required standards set forth in "15A NCAC 18C .0203 PUBLIC WELL WATER SUPPLIES"
 - Development of well site(s) will be at Iredell Water Corporations expense.
 - If well yield and water quality meet IWC requirements, then developer will donate or gift lot to IWC at no expense to IWC. IWC will be responsible for expense of attorney to prepare deed and the closing costs of the agreed well site lot.
 - If well yield or water quality do not meet IWC requirements, then option on well site(s) will be dissolved and any well(s) drilled will be properly abandoned according to "15A NCAC 02C .0113 ABANDONMENT OF WELLS" unless developer request to keep well. Either option will be at no cost to developer.
 - In the case of subdivisions or additional phases that bring the total of lots to 50 lots or greater, if well yield and water quality on 1st option meets Iredell Water Corporation requirements, the 2nd well site option may be waived.
 - An agreement must be signed by both IWC and developer/landowner before the water utility plan is approved by IWC.

Construction Process

The developer will hire an approved North Carolina Licensed Utility Contractor to perform the construction of the water distribution systems. The engineer of record will be responsible to witness all construction and perform all necessary testing and sampling of the distribution system. The Contractor will be responsible to provide all construction surveying by a registered land surveyor, licensed in North Carolina, to perform all surveying according to IWC Construction Surveying Specifications. IWC staff, engineer, and contractor will schedule a walk-through of project, at or near completion, to create any punch list items and to check location and status of all valves, hydrants, and blow-offs, including the underground utility detection system. IWC will not sign "Applicant Certification Form" for NCDEQ Final Approval until all punch items have been completed and as-builts have been submitted to IWC. Iredell Water Corporation will then take over the project for ownership and maintenance once all required field work and paperwork have been approved (i.e. Final approval from NCDEQ, as-built drawings sealed by a Registered Land Surveyor, both a .pdf and .dxf file of plan view oriented to local grid coordinates, NAD83 horizontal and NAVD 88 vertical, recorded subdivision plats, and any necessary right-of-way agreements). The water distribution system then will become the property of Iredell Water Corporation and customers may begin requesting/utilizing new services. Any backflow prevention inspections for developer installed services greater than 3" should also be approved by a NC Certified Backflow Inspector. Contractor warrants and guarantees to Owner that all work will be in accordance with Iredell Water Corporation's specification and any contract documents and will not be defective for a period of 1 year.

Fees

There currently are no fees by Iredell Water Corporation for subdivision or business park plan reviews. The engineer of record will conduct all inspections. Flow tests fees for hydraulic modeling can be found in our schedule of fees. Iredell Water Corporation will only supervise flow test and flush water accordingly after test for water quality concerns. If engineer does not perform flow test, they should contract with a 3rd party to flow test hydrants. If none are available, then engineer may contact the Iredell County Fire Marshalls Office, for an additional fee, to perform flow test procedure with engineer and IWC onsite.

Iredell Water Corporation is not affiliated with Iredell County. IWC is a 501(c)-12 non-profit, membership owned water system. Iredell Water Corporation has outstanding loans funded and/or guaranteed by USDA- Rural Development therefor IWC falls under "§ 306(b) of the Consolidated Farm and Rural Development Act, 7 U.S.C. § 1926(b)" which provides the IWC water system from encroachment of service area from municipal, other public body, or private utility systems, providing similar service.

This institution is an equal opportunity provider. To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992.

Pages 3 - 5 include the most recent revisions as of June 15th, 2020, to the Iredell County Land Development Code that pertain to water utilities and fire hydrant requirements. Please check with Iredell County for any more recent revisions or requirements. The entire plan may be found on the web at <https://www.co.iredell.nc.us/280/Land-Development-Code>

Iredell County Land Development Code

Section 10.10 Water Systems

- A. Any Minor or Major Subdivision with an average lot size less than two (2) acres which has community water system lines available, NOT including municipal systems, shall be required to extend the water system throughout the subdivision to each lot located therein. All required water line extensions shall include appropriate valves, hydrants, taps and service to the property line of each lot as required by the standards or specifications of the water system provider. The term "available" shall mean that:
2. There is an existing line of adequate size, flow, and pressure either crossing the subdivision property or immediately available from an adjacent public right-of way; or
 3. There is an existing line of adequate size, flow, and pressure within the distances shown in Table 10.1 below of the outside boundary line of the subdivision; or
 4. The water authority indicates its commitment to extend such a line within the distances shown in Table 10.1 below of the property line of the subdivision at a cost negotiated by the water system provider and the subdivider; and
 5. There are no legal or topographic problems which prevent the subdivider from connecting onto and extending the existing system to the subdivision.

In the event there are phases to the subdivision or the subdivision is a part of a larger tract of land owned or under the control of the subdivider, then water service shall be deemed to be available if an existing or proposed water system line extends or will be extended within the distances shown on the Table below to the larger tract of land.

Table 10.1 Available Water System Lines

Water is available if the subdivision contains the number of lots listed in column one and public lines are within the distance shown in column two.	
LOTS	DISTANCE
2-10	200 feet
11-20	300 feet
21-50	600 feet
51-100	1000 feet
101 +	1500 feet

- B. For any Subdivision where a community or public water system is NOT available, every lot within the subdivision shall be served by a source of water supply that is adequate to accommodate the reasonable needs of the proposed use and complies with the regulations of the following agencies as applicable:

Table 10.2 Water Systems

System Type	Regulatory Agency
Any well, spring, stream or other source used to supply a single connection, or any water system which serves less than 15 service connections and less than 25 individuals for less than 60 days out of the year.	Iredell County Division of Environmental Health
A system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.	Iredell County Division of Environmental Health
Any water system owned and operated by the county, any municipality or water district.	(1) Governing body operating said system (2) Division of Environmental Health

- C. In addition to meeting all standards and regulations of their respective agencies, water systems must contain water lines a minimum of six (6) inches in diameter, unless this is detrimental to the pressure of the overall system as determined by the water provider, in order to provide for future networking with all other public water systems in Iredell County. This provision shall NOT apply, however, on cul-de-sac roads with lengths of less than 750 feet. In no instance, however, shall water lines be less than two inches in diameter.
- D. All subdivisions shall be accompanied by a written application and/or notice submitted to the appropriate state or local agency responsible for approving the particular system or systems at the time the Preliminary Plat is submitted. Written approval of such systems shall be required when the Final Plat is submitted. In the event that individual wells and/or septic systems will be used, but have NOT yet been inspected or approved by Iredell County Environmental Health, the Private Water/ Statement shall be placed on the plat.

Section 10.15.1 Fire Hydrants

- A. Every subdivision that is served by at least a six (6) inch water line from either a community or public water system with water service that meets the minimum pounds (#) of water pressure required to maintain flow during peak demand (fire flow), according to the North Carolina Administrative Code 15a, Subchapter 18c, (Rules Governing Public Water Systems), shall include a system of fire hydrants sufficient to provide adequate fire protection for the buildings located or intended to be located within such development. The supplying water company must review and approve the proposed fire hydrant location(s) and certify water pressure compliance in writing to the Subdivision Administrator prior to fire hydrant installation.
- B. Fire hydrants shall be located at minimum intervals of 1,000 linear feet along every road serving the development.
- C. Unless no practicable alternative is available, water lines shall NOT be dead-end lines.
- D. These provisions shall NOT apply to subdivisions containing six (6) or fewer lots.