

BRASELTON WATER AND WASTEWATER DEPARTMENT
CONSTRUCTION PLAN REVIEW CHECKLIST
May 2006

Project Name: _____

Phase: _____ Unit: _____ # Lots: _____

Development Type _____ (residential, commercial, industrial, etc.)

Braselton Project No. _____

GENERAL INFORMATION FOR DEVELOPERS AND DESIGNERS:

1. All water and sewer line construction shall be in accordance with the Town of Braselton Standard Specifications and Details, latest edition.
2. All plans shall be on a maximum of 24" x 36" sheets. Larger sheets shall be rejected for review. The plans shall be suitable for the purposes of construction and technically adequate and competent.
3. All water and sewer facilities shall be installed by a licensed utility contractor in the State of Georgia.
4. Pre-design meetings with the Town Water and/or Wastewater Department are recommended. These meetings are to be scheduled and initiated by the designer if desired.
5. Wastewater Department Phone: 706-654-3144. Water Department Phone: 706-654-3195.
6. All and any submittals must be submitted directly to the Braselton Planning Department. The review engineer cannot accept submittals directly from the developer or engineer.
7. The developer or engineer is required to provide for and conduct their own water pressure and flow tests required for design, including personnel and equipment. All testing shall be scheduled in advance with the Water Department and conducted in their presence.
8. In accordance with the Minimum Standards for Public Water Systems by the Drinking Water and Engineering Program of the Environmental Protection Division; the developer and the developer's engineer are solely responsible for all necessary water system extension design, hydraulic calculations, and analysis which determine the availability of water supply on every project. Submission of waterline plans therefore indicates that the developer and the developer's engineer have indeed conducted the required hydraulic analysis, and the Town of Braselton and Engineering Management, Inc. (EMI) appropriately assume so. The Town and its delegation review agent, EMI, may or may not request evidence and documentation of said design work on a case by case basis at their discretion. The Town's decision not to request this documentation does not relieve the developer and the developer's engineer from their responsibility to perform all necessary water system extension design, hydraulic calculations, and analysis which determine the availability of water supply on every project.
9. Please refer to EMI's General Policies and Procedures for Review and Comment for information relating to the scope of plan review and comment.
10. This checklist serves the designer and plan reviewer as a minimum guideline only, highlighting Braselton's standards. This document in no way represents all requirements of Braselton, Georgia Department of Natural Resources, or sound design practices. All and any necessary permits such as DOT, NPDES, Army Corps, etc., are the responsibility of the developer.
11. Plan review does not imply, grant or constitute wastewater and/or water capacity by the Town of Braselton in any manner. It is the developer's responsibility to address capacity separately with the appropriate Town representatives.

If the Water System Addition and Expansion Form (for water extensions only) and/or the Sanitary Sewer Extension Submittal Form (for sewer connections only) are not submitted with the development plans, the plans are declared as incomplete and ineligible for review until completed forms are received. The forms must be entirely completed for review.

WATER SYSTEM DESIGN

- "Water System Addition and Expansion Form" must be completed and submitted with plans.
- Include plan of current and all future phases of the development, showing streets, street names and lot layout.
- Plans are stamped and signed by PE
- Surveyed and designed in accordance with Town of Braselton Coordinates and Monuments
- All water piping must be DIP, and adequately labeled as such.
- Minimum pipe size is 8-inch, except on dead-end cul-de-sac lanes less than 1000ft., 6-inch may be called for.
- Give the proposed size, location and material of water mains and service laterals.
- No other information should appear on the water plan layout sheet if such information tends to confuse or complicate the plans.
- Show the location and size of vacuum and air release valves (to be installed at highest points in the system). Note: for major developments only
- Show and label every fire hydrant locations (existing and proposed).
- Fire Hydrants must be spaced no greater than 500 feet.
- Waterline Markers shall be installed every 250 L.F., approximately one-half way between each fire hydrant.
- Show and label every existing and proposed valve.
- At every intersection-must be a valve in every direction (i.e. 3 valves at a 3 way intersection, 4 valves at a 4 way
- In line valves must spaced no greater than 1000 feet
- Show and label the location, material and sizes of existing pipe lines surrounding the proposed project.
- Specify methods and tie-in location with existing mains. i.e. tapping sleeve and valve-labeled with the size.
- Show the location of existing and proposed valves and other appurtenances.
- Contours in feet above MSL shall be shown on development plans. The contour interval shall not be greater than ten (10) feet.
- Maximum scale shall be 1' = 100'.
- Show proposed water meter sizes and locations.
- Long side service shall be called to be installed with 2" PVC sleeves under pavement.
- Water Meters shall be installed at the property line, max. 3-feet past the property line.
- Each service shall have its own tap from the distribution line; no double services allowed.
- Clearly label all road right-of-ways (existing and proposed) and easements (existing and proposed).
- Water mains under existing or proposed pavement must be called out to be in steel casing; the length of casing must be noted.
- Clearly show and label existing and proposed topography and existing and proposed features pertinent to design and layout along pipeline route.
- Provide adequate dimensions, stations, and labels to clearly indicate proposed location of pipeline relative to features such as right-of-way, centerlines, edge of roads, coordinates, etc.
- Minor Stream/Creek Crossings are adequately designed: cross these under or beyond culvert piping. These installations require restrained joints. Provide plan view and cross section of the crossing showing the existing ground, vegetative buffer, proposed ground and side slopes, depth of cover, the creek and culvert, elevations, the proposed pipeline and any fittings necessary. Additional easements may necessary for this area.
- Aerial crossings not permitted.
- Show note: "All water and sewer line construction shall be in accordance with the Town of Braselton Standard Specifications and Details, latest edition."
- Show note: "12-gauge, solid strand detection wire is required to be installed above all waterlines with waterproof connectors and connections at every valve and hydrant."
- Show Note: "All water and sewer facilities shall be installed by a licensed utility contractor in the State of Georgia."
- Show Note: "Marking Tape showing "Caution Buried Waterline" shall be installed approximately 18-inches above all waterlines."

- ❑ Show note: "All water and sewer construction is inspected and tested as per Braselton Standards prior to final acceptance by the Town."
- ❑ Show note: "Asbuilts Record Drawings (hard copies and digital format) for this project must be submitted and approved prior to final acceptance by the Town. As-built drawings shall be prepared on the Town of Braselton's Coordinate System"
- ❑ Show note: "The Town of Braselton Water Department shall be notified at a minimum 48 hours (Monday through Friday) prior to commencing any work, testing, and prior to making any connections to existing waterlines.
- ❑ Show note: "Cities are not required to locate water and sewer lines that were installed by a developer or other persons that have not yet been accepted in to the City's ownership (acceptance of Final Plat). The person installing those lines is required to install and maintain visible, permanent markers (i.e. color coded wire flags, valve markers, service stub markers, etc.) in order to identify the water and sewer facilitates at the time the lines are installed. Once the City has taken legal ownership of those water and sewer lines, the City is responsible for locating them when a request is received."
- ❑ Show table of the following information: a column for all waterline sizes, column for corresponding waterline material, a column for corresponding waterline length.

WATER SYSTEM DESIGN-COMMERCIAL/INDUSTRIAL SITES

- ❑ Clearly show and label proposed metering set up.
- ❑ All service connections shall be proposed with a meter and a backflow preventer.
- ❑ Meter size and manufacturer shall be called out.
- ❑ Meter manufacturer shall only be Neptune.
- ❑ Backflow preventer size and manufacturer shall be called out.
- ❑ Higher risk connections must specify a RPZ type backflow preventer (i.e. medical, process manufacturer, etc.)
- ❑ Specify methods and tie-in location with existing mains; i.e. tapping sleeve and valve-labeled with the size.
- ❑ Proposed meters and backflow preventer shall be housed in concrete vaults, together or separately depending on size.
- ❑ All firelines shall have a fireline meter.

WASTEWATER SYSTEM DESIGN

- ❑ Plans are stamped and signed by PE
- ❑ Surveyed and designed in accordance with Town of Braselton Coordinates and Monuments
- ❑ Show all phases of the development. In the event the subdivision is developed in phases, the final construction plans for sewers may be submitted in phases or units. However, at the time the first phase is submitted, the engineer will need to submit one (1) copy of the preliminary layout of the entire sewer system. This layout shall show all lines required to serve any lots to be developed and any surrounding property that may be served through the property. The site plan for each phase or unit shall contain a location drawing showing the relationship of the phase or unit to the total project and to the surrounding streets and sewer outfalls.
- ❑ Plans shall consist of a single master plan view of entire sewer line plan showing lots, lot numbers, laterals, manholes and manhole numbers, etc.
- ❑ No other information should appear on the sewer plan layout sheet if such information tends to confuse or complicate the plans.
- ❑ Show and label the location, material and sizes of existing pipe lines surrounding the proposed project.
- ❑ Maximum plan view scale shall be 1' = 100'.
- ❑ Sewer lines *crossing* perpendicular under existing or proposed pavement (County or State Roads) must be called out to be in steel casing; the size and length of casing must be noted.
- ❑ The maximum allowable distance between manholes is 400 linear feet.
- ❑ Gravity lines must be in the middle of road for new subdivision streets.
- ❑ Min. size = 8-inch, min. slope = 0.50%
- ❑ Clearly label all road right-of-ways (existing and proposed) and easements (existing and proposed).

- ❑ Clearly show and label existing and proposed topography and existing and proposed features pertinent to design and layout along pipeline route.
- ❑ Provide adequate dimensions, stations, and labels to clearly indicate proposed location of pipeline relative to features such as right-of-way, centerlines, edge of roads, coordinates, etc.
- ❑ Any sewer outside of road right-of-way must be in a 20-foot easement.
- ❑ Aerial crossings not permitted unless there is no other alternative. Aerial line shall be above the 50-year flood line, and shown as such on the plans.
- ❑ Show size and location of all service laterals. Commercial and industrial services must discharge individually into a manhole.
- ❑ Show location and size of grease trap(s); min. size = 1500 gallons.
- ❑ No sewer lines shall be installed through detention ponds.
- ❑ Show size, location and material of proposed force mains.
- ❑ Need to show 100 year flood plain in critical areas
- ❑ "Sanitary Sewer Extension Submittal Form" must be completed and submitted with plans.
- ❑ Show note: "All water and sewer line construction shall be in accordance with the Town of Braselton Standard Specifications and Details, latest edition."
- ❑ Show Note: "All water and sewer facilities shall be installed by a licensed utility contractor in the State of Georgia."
- ❑ Show Note: "Marking Tape showing "Caution Buried Sewer line" shall be installed approximately 18-inches above all sewer lines."
- ❑ Show note: "All water and sewer construction is inspected and tested as per Braselton Standards prior to final acceptance by the Town."
- ❑ Show note: "Asbuilts Record Drawings for this project must be submitted and approved prior to final acceptance by the Town of Braselton. As-built drawings shall be prepared on the Town of Braselton's Coordinate System"
- ❑ Show note: "The Braselton Sewer Department shall be notified at a minimum 48 hours (Monday through Friday) prior to commencing any work, testing, and prior to making any connections to existing sewer lines or manholes."
- ❑ Show note: "Cities are not required to locate water and sewer lines that were installed by a developer or other persons that have not yet been accepted in to the City's ownership (acceptance of Final Plat). The person installing those lines is required to install and maintain visible, permanent markers (i.e. color coded wire flags, valve markers, service stub markers, etc.) in order to identify the water and sewer facilities at the time the lines are installed. Once the City has taken legal ownership of those water and sewer lines, the City is responsible for locating them when a request is received."

ADDITIONAL INFORMATION FOR PLAN AND PROFILES

- ❑ Plan and profile sheets shall be provided for all sewers (except service laterals). Profiles shall have a horizontal scale of not more than one hundred (100) feet to the inch and a vertical scale of not more than twenty (20) feet to the inch. The plan view shall be shown on the same sheet as the profile. Plan and profile views should have line designations, station numbers, manhole numbers and any other indexing necessary to easily correlate the plan and profile views.
- ❑ Show and label the proposed size, location and material of sewer lines on profiles.
- ❑ All off road manholes must be shown with rim elev. 1.5' above ground, unless located in landscaping or close to edge of roadway.
- ❑ Location and names of streets, sewers and drainage easements.
- ❑ Line of existing and proposed ground surface, the grade of the sewer between each two adjacent manholes, invert of sewer in and out of each manhole, surface elevation of each manhole, and length between.
- ❑ Sewer pipe shall be DIP
- ❑ Sewer must have min. 4 foot of cover.
- ❑ All manholes shall be numbered on the plan and correspondingly numbered on the profile.
- ❑ The location and elevation of adjacent streambeds and of adjacent lake/pond surfaces shall be shown on the plan and profile.
- ❑ Sizes, locations and inverts of all special features such as connections to existing sewers, concrete encasement, collar walls, elevated sewers piers, etc.
- ❑ All structures, both above and below ground, which might interfere with the proposed construction, particularly water mains, gas mains, storm drains, utility conduits, etc.

- Minimum drop from invert in to invert out shall be 0.20-feet. Any drop from invert in to invert out equal to or greater than 2.0 feet shall be constructed as an outside-drop manhole.

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