

Description	Check	N/A	Comments
Location of the nearest main line valves for isolation of the site			
Location of the nearest fire hydrants			
Location of all blow-off valves and air release valves			
The following proposed water infrastructure should be shown:			
Location, size, and material of all water mains and service lines			
Location and size of all water meters (place at edge of ROW or easement)			
Location of all isolation valves, blow-off valves, and air release valves			
Location of all fire hydrants			
Location of FDC within 125 ft of a fire hydrant			
Location of all backflow prevention devices, and vaults			
Location of all bends, tees, and fittings (specify type and degree)			
Location and detail of all necessary thrust restraint			
Location of vault drain to grade or to storm sewer			
Show all existing and proposed easements			
Provide a general layout of other utilities (existing and proposed)			
Clearly differentiate between existing and proposed utilities			
Detail all main line connections. Show tap configuration and fittings.			
Provide backflow prevention for all main line connections			
Provide estimated static pressure (normally 820 - FFE / 2.31)			
Use pressure reducing valves where static pressure > 70 psi			
Size pipes to maintain a velocity not to exceed 10 ft/sec			
Provide minimum cover of 30 inches for lines 8 inches and smaller			
Provide minimum cover of 36 inches for lines larger than 8 inches			
Provide minimum 18 inches vertical separation where water & sewer cross			
Provide minimum 10 feet horizontal separation between water & sewer lines			
Provide sprinkler count			
Provide the following notes where applicable:			
"Existing services to be abandoned shall be terminated at the main."			
"Notify AWWB of any scheduled outages 7 days prior to the outage."			
"Only AWWB personnel are authorized to operate AWWB valves."			
Sanitary Sewer Plans			
*Required sewer service submittals prior to or with plan submittal:			
Development Application for Water and Sewer Service			
Grease Trap Sizing Worksheet			
Approved pump station design (coordinated with the WRM Department)			
Include North arrow			
The following existing sewer infrastructure should be shown:			
Location of all manholes with rim, and all invert elevations provided			
Location, sizes, materials, and slopes of all sewer mains and laterals			
Location, and size of grease traps and/or oil & grit separators			
The following proposed sewer infrastructure should be shown:			
Location of all manholes with rim, and all invert elevations provided			
Location, sizes, materials, and slopes of all sewer mains and laterals			
Location and size of grease traps where required			
Location and size of oil & grit separators where required			
Location of cleanouts at the edge of ROW or easement			
If sewer layout requires multiple pages, include an overall plan sheet			
Show all existing and proposed easements			
Provide a general layout of other utilities (existing and proposed)			
Clearly differentiate between existing and proposed utilities			
Label all manholes and pipes (correspond with labels on profile sheets)			
Provide contours or specify finish floor elevations			
Indicate how existing sewer mains or services are to be abandoned			
Manholes shall be locked down if less than 1 foot above the 100-yr BFE			
Public sanitary sewer main requirements:			
Manholes shall be located in the center of the street where possible			
Design sewer lines for maximum capacity at half full			
DIP required where cover is greater than 12 feet or less than 3 feet			
DIP required where less than 2 feet of clearance between utilities			
DIP required within the 100-yr BFE or where buoyancy is a concern			
Provide consistent pipe material between manholes			
Minimum slope requirements:			

Description	Check	N/A	Comments
4"=2%, 6"=1%, 8"=0.60%, 10"=0.35%, 12"=0.30%			
Provide a minimum 0.10' drop across all straight through manholes			
Provide a minimum 0.25' drop across all turning manholes			
Manhole spacing should not exceed 400 feet			
Services tied into mains shall have a 3 feet minimum separation			
Service lines should connect to manholes where possible			
Use standard 4 inch drop for service lines into manholes			
Service lines angled against the flow use a minimum 6 inch drop			
If angle against the flow >135 degrees connect lateral directly to main			
No more than four laterals connected to a pass through manhole			
No more than five laterals connected to a beginning manhole			
Cleanouts to be located in traffic rated enclosure in paved areas			
Backflow prevention is required when any sewer portion of a building is less than 12 inches above the rim elevation of the nearest upstream manhole. Such lots shall be identified on the plans and the plat.			
Sanitary Sewer Pipe Profiles			
Indicate pipe material, size, slope and length			
Show all utility crossings			
Show existing and proposed grades			
Show all rim and invert elevations			
Show outside drop manhole where drop is 2 feet or greater			
Label all manholes and pipes (correspond with labels on plan sheets)			
Show existing mains and structures at all connection points			
Clearly differentiate between existing and proposed utilities			
Clearly differentiate between material types			
Grading & Drainage Plans			
Include North arrow			
If plans require multiple pages, include at least one overall plan sheet			
Show existing topographic contours			
Maximum 2ft contour intervals with every 10ft line labeled			
Used lighter or dashed line type for existing contour lines			
Show proposed contours			
Maximum 2ft contour intervals with every 10ft line labeled			
Proposed contour lines should tie-in to existing contour lines			
Show streams and other water features			
Show stream & wetland buffers			
Show 100-yr flood plain boundaries			
Indicate minimum FFE's for lots adjacent to water features			
Show all existing structures, utilities, and easements that will remain			
Show mitigation areas			
Indicate steep slopes (City of Auburn Zoning Ordinance)			
Show curb & gutter (2ft City of Auburn Std. C&G)			
Show all storm water inlets			
Max access spacing 500ft for 15in to 48in pipe (for public infrastructure)			
Max access spacing 800ft for 54in or greater (for public infrastructure)			
Double-wing inlets only used in sags (for public infrastructure)			
Show all proposed culverts			
Indicate type and dimensions			
Show headwalls and energy dissipaters			
Show all storm sewer pipe			
Show headwalls at discharge points			
Show all manholes and junction boxes			
Extend discharge points at least 10 ft beyond building lines			
Show rip-rap or other energy dissipators at discharge points			
Show all proposed drainage & utility easement			
Show detention system(s)			
Fencing required around ponds for slopes steeper than 3:1			
Pipes discharge at bottom of pond slopes			
Show outlet structure(s)			
Storm Water Pipe Profiles (for public infrastructure only)			
Indicate pipe size, material, slope and length			
Pipe beneath streets shall be RCP			

	Check	N/A	Comments
Traffic control plan and detour plan			
Proposed street classifications & buildups (for public infrastructure)			
City of Auburn Standard Details			
Include all relevant City of Auburn standard details with the final plans			
Miscellaneous Design & Submittal Requirements			
The following shall be included with the initial DRT submittal, when applicable:			
1. Electrical plans for required pedestrian lighting			
2. Traffic Impact Study			
3. Sight distance analyses			
4. Design standards waiver requests			
No trees shall be within 10ft of center lines of utilities			
The following note should be added to all utility plans and plats ²			
Easements shall be the greater of 20ft or 2 times the depth to the bottom of the utility. Easement widths shall be in increments of 10ft.			
Slope and grades of easements shall be passable by vehicles (maximum easement cross slope of 4:1)			
All topography should be relative to MSL (no assumed datum)			
Utility stub outs for future development should be placed in easements extending to the edge of the property line			
There are no points of storm water discharge from the property that exceed the pre-development conditions at those points			
¹ <ul style="list-style-type: none"> a. Any area that has been disturbed and will remain so for more than 13 days shall be seeded and mulched within 5 days of being disturbed. b. Additional BMPs may be required by the QCP and/or City of Auburn over the course of the project to minimize sediment release from the site. c. All BMPs shall be designed and installed in accordance with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas and the City of Auburn standard erosion and sediment control details. d. The use of flocc-blocks, polyacrylamide (PAM), or other settling enhancement materials may be required by the QCP or City of Auburn during the course of construction to minimize turbidity and sediment release from the site. e. Remove all temporary BMPs upon submittal of Notice Of Termination to ADEM. f. Any dewatering operation must be properly filtered prior to discharge. 			
² <ul style="list-style-type: none"> a. No permanent structures may be constructed or placed on easements. b. Fences may be erected perpendicularly across the easement provided there is a minimum 12-foot wide access gate installed. If the gate is to be locked there must be a City-approved lock installed in conjunction with the owners lock. c. No canopy trees shall be planted within 10 feet of public water or sewer lines. 			

SIGNED: _____
(engineer of record)