

G. PLAN REVIEW CHECKLIST

PROJECT:

ENGINEER: _____

PHONE: _____

REVIEWER: _____

DATE STARTED: _____

GENERAL:

1. ____ Master Plan Requirements/Well sites required
2. ____ Authority detail sheets used
3. ____ Plat showing existing and proposed easements
4. ____ Plat has proper dedication language
5. ____ Easements shown where facilities are on private property
6. ____ Water and sewer separation statement
7. ____ Project in wellfield protection zone
8. ____ Overall Master Utility Plan
9. ____ Pipe crossings shown with clearances
10. ____ Offsite water, sewer and reclaimed appurtenances properly shown
11. ____ Replace ACP, PVC or VCP pipe
12. ____ Proper materials specified
13. ____ Clearance from buildings (15 feet minimum including footers and overhangs and other structures)
14. ____ Connections to existing facilities clearly detailed
15. ____ Operating nut on valves no deeper than 24 inches below finish grade
16. ____ Pipe/service size
17. ____ Necessary water/sewer detail sheets attached
18. ____ Each unit building served
19. ____ Utility plan showing conduit crossings and utility boxes

20. ____ Proper cover over existing water, sewer and reclaimed facilities
21. ____ Existing and proposed easements by instrument shown
22. ____ Existing water, sewer, reclaimed, drainage and large diameter irrigation
23. ____ Water and sewer mains have to be extended to furthest property line
24. ____ Plan elevations in NAVD 1988 Datum
25. ____ Notation for contractor to adjust existing valve boxes, fire hydrants, manholes, etc. to finish grade when impacted by development
26. ____ Provide project phasing plan where applicable. If phased show each phase separated by a valve and/or manhole

WATER:

1. ____ Proper backflow preventer (including auxiliary water supply user and dual backflows required for critical uses)
2. ____ Meter at property line - not in driveway or sidewalk
3. ____ Double services where possible
4. ____ Water mains looped for projects greater than 25 dwelling units and projects which Authority determines are considered critical use.
5. ____ Proper valving - two at each tee, every 1500 feet, greater than 25 dwelling units
6. ____ Double valve point of feed
7. ____ Minimum/Maximum cover 2.5 feet to 4.0 feet
8. ____ Fire hydrant spacing/provision for line flushing
9. ____ Mains in green areas
10. ____ Valve boxes for corporations where tap is under paving
11. ____ Valve & length of pipe for future extension
12. ____ Thrust blocks, tie rods, restrained joints
13. ____ Booster pump > 2 stories for domestic service
14. ____ No services greater than 75 feet long
15. ____ Fire line for building (commercial or multi-family)
16. ____ Fire line for single family home
17. ____ Large meter/backflow assemblies clearly detailed

18. ____ Bypass on meters > 2 inches and all critical installations
19. ____ Velocity less than 10 fps during fire flows
20. ____ Dead ends minimized
21. ____ Mains and services perpendicular to street where possible
22. ____ Valves in accessible locations
23. ____ Sample points shown
24. ____ Air release valves at high points

SEWER:

1. ____ Minimum depth 4 feet invert of terminal manhole
2. ____ C-900 pipe for cuts greater than 12 feet
3. ____ D.I.P. installed at crossings not meeting the separation statement
4. ____ Maximum distance between manholes 400 feet
5. ____ Mains under paving - concrete collars on manholes in green areas and in paver block areas
6. ____ Outside drop if drop is greater than 2 feet
7. ____ Minimum/Maximum slopes
8. ____ No oversized pipe
9. ____ No future stubs - terminate with manhole
10. ____ Entry to existing manhole - core only
11. ____ No services tied to manholes
12. ____ Double services where possible
13. ____ Clean out on service lines at property line and at 75 foot intervals on service laterals
14. ____ Grease trap/oil/sand interceptors
15. ____ Profile of gravity sewer mains including proposed finished grades
16. ____ Profile force main including proposed finished grade
17. ____ Valving on force main at 1,500 intervals, two at each tee
18. ____ Manholes and sewer lines designed to be a minimum of 5 feet to curb and right of way

19. ____ Sanitary sewer crossing elevations with conflicting pipe (including sewer service laterals)
20. ____ Valves and manholes in accessible locations
21. ____ Manhole flow channels 90° or greater
22. ____ Manhole depth less than 18 feet
23. ____ Sewer main from lift station to first manhole to be DR 14 C-900 PVC
24. ____ Air release valve at force main high points
25. ____ 2% maximum slope of sewer lines if connection to an existing manhole requires a steeper slope, a drop manhole must be utilized to minimize slope
26. ____ Collector manhole at lift station shall be located outside of traffic lanes
27. ____ Lift Station depth less than 26 feet
28. ____ Lift Station Calculations - Signed & Sealed by EOR
 - a. average daily flow/peak flow calculations
 - b. force main minimum velocity
 - c. manifolding force main pressures
 - d. pump cycle time
 - e. floatation calculations
 - f. 240/480 volts
 - g. 100-year flood
 - h. System curve plotted on proposed pump curve

LANDSCAPE PLANS:

1. ____ Authority details utilized
2. ____ Root barriers shown on plans
3. ____ Water and sewer lines and appurtenances shown
4. ____ Water and sewer easements shown
5. ____ Screening of backflows required by other governmental agencies