

**WATER SYSTEM PLAN CHECK
COMPLIANCE LIST**

Parcel Map/Tract No. _____
 Engineer _____

| | | |
|------------|-------------------|-------------|
| First | Checked By: _____ | Date: _____ |
| Second | Checked By: _____ | Date: _____ |
| Third | Checked By: _____ | Date: _____ |
| Telephone: | (661) _____ | |
| E-Mail: | _____ | |

Please provide compliance with all items circled below. Return a copy of this compliance list with your re-submittal. Provide your initials to the left of each circled item to indicate its completion and, where appropriate, indicate where the correction is addressed in your re-submittal. If you do not believe the item circled is applicable, provide your justification. Failure to return this list or address all items will result in the submittal being returned without review.

ADDITIONAL TIME & MATERIALS CHARGES (\$105/HOUR) WILL APPLY AFTER THE THIRD PLAN REVIEW IF COMMENTS ARE NOT ADEQUATELY ADDRESSED!

A. APPROVALS

- _____ 1) Provide water purveyor’s signature for approval on cover sheet.
- _____ 2) Provide signature of water purveyor’s engineer for approval, with seal and expiration date.
- _____ 3) Provide signature of developer’s engineer for approval, with seal and expiration date. (All sheets)
- _____ 4) Provide signature block for Public Works Department Director, Craig Pope, P.E.
- _____ 5) Provide certification by water purveyor’s engineer that these plans meet or exceed Kern County Development Standards. (Plan check wavier)

B. FEES

- _____ 1) Provide an engineer’s estimate and fee calculations for plan review and inspection in accordance with the department’s current fee resolution. The engineer’s estimate shall be based on the unit costs shown in Division VII of the Development Standards, and include a 20% contingency factor.

- _____ 2) The plan review fee shall be based on all proposed items of work. The plan review fees shall be submitted prior to review of the second submittal of improvement plans. Resubmitted plans will not be reviewed until the fees are received.
- _____ 3) The inspection fees shall be based on all proposed work that will be inspected by county staff and/or maintained by the county or overlaid by a County Service Area (CSA). Facilities/utilities that are inspected by others, but are within the county roadway, must also be included. The inspection fee shall be submitted prior to issuance of a grading permit or commencement of any work on the project, whichever occurs first.
- _____ 4) Additional fees are due because plan review comments were not adequately addressed by the third submittal. _____ additional hours were spent on the latest review, and additional fees of \$_____ (\$105/hour) shall be submitted prior to performing the next review.

C. GENERAL

- _____ 1) Provide vicinity map.
- _____ 2) Provide key map.
- _____ 3) Provide north arrow.
- _____ 4) Provide scale.
- _____ 5) Note on all sheets "Exhibit C/Water Plans" in lower right-hand margin.
- _____ 6) Provide tract or parcel map number in lower right-hand margin.
- _____ 7) Provide Standard Notes _____. (Per attachment)
- _____ 8) Provide engineer's estimate and quantity calcs. (After plans are approved)

D. WATER MAIN SIZE, LOCATION, ALIGNMENT AND COVER

- _____ 1) Provide minimum pipe size of 6 inch ID.
- _____ 2) Hydraulically qualify 6-inch diameter main lines more than 800 feet long or serving more than one hydrant.
- _____ 3) Provide 6 inches clear to all existing and proposed utilities.

- _____ 4) Show existing and proposed sewer lines with separation distances shown also.
- _____ 5) Provide mainline utility crossing details at _____.
- _____ 6) Provide minimum water easement width of 10 feet.
- _____ 7) Provide curve data (on the plans) and manufacturer's certification for curved pipe.
- _____ 8) Provide minimum cover of 30 inches for mains less than 12 inches in diameter or minimum cover of 36 inches for mains 12 inches or larger in diameter.

E. HEALTH REQUIREMENTS

- _____ 1) Water lines shall be as far as possible from sewer lines. (10 feet minimum)
- _____ 2) Water lines shall be laid higher than sewer lines.
- _____ 3) Water lines shall be 12 inches minimum above sewer lines.
- _____ 4) Provide compliance with State Health Department Standards. (See attached)

F. SYSTEM REQUIREMENTS

- _____ 1) Provide minimum Class 150 pipe.
- _____ 2) Provide air release and vacuum release valves (150 psi operating pressure), or other approved device, where air pockets may form.
- _____ 3) Provide check valves designed for 175 psi (cold water working pressure).
- _____ 4) Provide a flushout (blowoff) or fire hydrant at the terminus of all dead-end water mains or non-circulating-flow water mains.
- _____ 5) Provide dry-barrel hydrants when above the elevation of 2,000 feet (except Rosamond CSD).
- _____ 6) Provide fire hydrants on each side of a major highway.
- _____ 7) Provide fire hydrant spacing per Table No. 1-W of the Kern County Development Standards.
- _____ 8) Provide fire hydrants at intersections, except where this would provide excessive coverage.

- _____ 9) Provide last fire hydrant not more than one-half maximum spacing from the end of the stub street or cul-de-sac.
- _____ 10) Provide less than one and one-half times the maximum hydrant spacing from a working hydrant to a lot in the event of a single break. (Tanks and booster station or hydrants at maximum spacing of 660 feet)
- _____ 11) Provide detail for backfill in easements.
- _____ 12) Provide fire hydrant barricades and details (See Detail W-6 Guard Post Installation).

G. WATER SUPPLY REQUIREMENTS

- _____ 1) Provide name of a service entity to maintain system, hydrants and fire flows in accordance with State law on plans.
- _____ 2) Provide closed-loop system.
- _____ 3) Provide number-of-customers analysis.
- _____ 4) Provide water system source and storage analysis.
- _____ 5) Provide water supply requirements analysis.
- _____ 6) Provide maximum hour demand (minimum fire flow plus one-half peak hourly) hydraulic analysis.
- _____ 7) Provide minimum demand hydraulic analysis.
- _____ 8) Provide normal operating pressure hydraulic analysis (not less than 20 PSIG and not to exceed 150 PSIG). Variation in pressures under normal operations shall not exceed 50 percent of the average operating pressures.
- _____ 9) Summarize design flows and storage on plans.

H. STORAGE FACILITIES

- _____ 1) Provide AWWA Standards for steel tanks, stand pipe, reservoirs and elevated tanks notes (where applicable).
- _____ 2) Provide ASME notes for hydrostatic tanks exceeding 1,000 gallons.

- _____ 3) Provide "AWWA D102" notes for inspection, repairing and painting.
- _____ 4) Provide pump specifications/notes.

I. STANDARD PLATES

Provide details or note reference as required below:

- _____ 1) W-1 Fire Hydrant Detail
- _____ 2) W-2 Valve Installation Detail
- _____ 3) W-3 Thrust Block Detail
- _____ 4) W-4 PVC Pipe Trench Detail

NOTE: "W" refers to the plate number in the Kern County Development Standards

ADDITIONAL COMMENTS: _____

