

# PLAN CHECK CORRECTION SHEET FOR <u>UNTREATED</u> GRAY WATER SYSTEMS 2017 LAPC

This is intended to provide uniform application of the codes by the plan check staff and to help the public apply the codes correctly.

Section: Mechanical Plan Check	
Plan Check/PCIS Application No.:	Date:
Job Address:	
Applicant Name:	
Address:	Phone:
City/State/Zip:	E-mail:
Plan Check Engineer:	
Telephone:	E-mail: firstname.lastname@lacity.org

Your feedback is important; please visit our website to complete a Customer Survey at www.ladbs.org/LADBSWeb/customer-survey.jsf.

If you have any questions or need clarification on any plan check matters, please contact a plan check supervisor or call our Customer Hotline at (213) 482-0056.

Your plans have been examined and the issuance of a permit is withheld for the reasons set forth. The approval of plans and specifications does not permit the violation of any section of the Code, or other local ordinance or state law.

#### **INSTRUCTIONS:**

- Corrections with circled item numbers apply to this plan check.
- Additional corrections are at the end of the list.
- Incomplete or non-legible drawings or calculations will not be accepted.
- Incorporate all comments as marked on the checked set of plans and calculations and this correction sheet.
- For each correction indicate the sheet number and detail or note number on the plans where the corrections are made.
- WHEN YOU HAVE COMPLIED WITH ALL CORRECTIONS, CALL OR EMAIL THE PLAN CHECK ENGINEER TO MAKE AN APPOINTMENT FOR VERIFICATION
- PLEASE BRING THE MARKED UP PLANS AND THE CORRECTIONS SHEET TO THE VERIFICATION APPOINTMENT

SEE MARKED UP PLANS FOR CLARIFICATIONS OF CORRECTIONS.

### **NOTES ON PLANS**

- Plans shall bear, in every sheet, the registration or license number and signature of an architect, contractor, or engineer, registered in the appropriate classification by the State of California. (State of California Business and Professional Code Div. 3, Chap. 7, Art. 3, Sec. 6735.4; LAPC 101.5.2; LAPC 101.5.6; LAPC 103.2.1, LAPC 1501.2)
- 2. Indicate the job address on each sheet of the plans. (LAPC 101.5.1; LAPC 103.2.2)
- 3. Gray water shall not be used in spray irrigation, allowed to pond or runoff and shall not be discharged directly into or reach any storm sewer system. (LAPC 1502.1 (C))
- Water used to wash diapers or similarly soiled or infectious garments or other prohibited contents shall be diverted to the sewer. (LAPC 1502.1 (B))
- 5. Gray water shall not contain hazardous chemicals derived from activities such as cleaning car parts, washing greasy or oily rags, or disposing of waste solutions. (LAPC 1502.1 (F))
- Gray water system and components shall be inspected and maintained in accordance with the manufacturers recommendations. (LAPC 1501.5; LAPC 1502.15)
- An operation and maintenance manual shall be provided to the owner, and is to remain with the building throughout the life of the system and upon change or ownership or occupancy. (LAPC 1501.6)
- 8. Gray water shall not be used to irrigate root crops or food crops intended for human consumption that come in contact with soil. (LAPC 1502.2)

#### PLAN DETAILS

- Prior to approval of plans, provide approval from the County of Los Angeles, Department of Public Health, Cross Connection and Water Pollution Control Program, 5050 Commerce Dr., Baldwin Park, CA 91706, (626) 430-5290. (LAPC 1501.3)
- 2. Provide a plot plan drawn to a minimum 1/8" per foot scale. The plot plan shall be completely dimensioned, show lot lines and structures, direction and slope of surface, location of retaining walls, drainage channels, water supply lines, wells, paved areas, number of bedrooms and plumbing fixtures in each structure, location of private sewage disposal system and building sewer connecting to the public sewer, and location of the proposed gray water system. (LAPC 101.5.4; LAPC 1502.7(1))
- Provide written verification of the soil type from a Professional Engineer for sandy loam, fine sand,

- course sand or gravel. (LAPC 101.5.1; LAPC 103.2.1, LAPC 1502.7 (4))
- Where there is insufficient lot area or inappropriate soil conditions for adequate absorption, no gray water system shall be permitted. (LAPC 1502.6; 1502.10.2)
- Gray water pipe and fitting materials shall comply with the requirements of sanitary building drainage and vent pipe and fittings. (LAPC 1502.9.2; LAPC 701.2; LAPC 903.0)
- Provide a readily accessible diverter valve to allow the user to direct the flow to the sewer and either the irrigation field or disposal field, whichever is used. The direction control shall be clearly labeled. (LAPC 1502.1 (A))
- 7. The point of diversion of gray water to the sewer shall occur downstream of fixture traps and vent connections. (LAPC 1502.2.2)
- 8. Provide a detail showing that the discharge point of the gray water subsoil or subsurface irrigation field is covered by at least two (2) inches of mulch, rock, soil, or a solid shield. (LAPC 1502.1 (D))
- Gray water may be released above the ground surface provided at least two (2) inches of mulch, rock, soil, or a solid shield covers the release point. Provide a detail to demonstrate compliance with this requirement. (LAPC 1502.1 (E))
- An air gap or reduced-pressure principle backflow preventer shall be provided when the potable water system is connected to the gray water system. (LAPC 1502.1(I)
- 11. Where potable, on-site treated nonpotable, reclaimed (recycled) water, or rainwater is used for make-up water for a non-pressurized storage tank, the connection to the gray water system shall be protected by an air gap or reduced-pressure principle backflow preventer. (LAPC 1502.3)
- 12. Provide a backwater valve at the point of connection to the sewer to protect the gray water drains subject to backflow. (LAPC 1502.2.3)
- 13. No gray water system or part thereof shall be located on a lot other than the lot that is the site of the building or structure that discharges the gray water. (LAPC 1502.4)
- 14. Provide dimensions on the plans showing compliance with the minimum distances indicated in Table 1502.4 (LAPC 1502.4)

- 15. Surge tanks shall be constructed of solid, durable materials not subject to excessive corrosion or decay and shall be watertight. Aboveground surge tanks shall be protected from direct sunlight or shall be constructed of UV resistant materials including but not limited to heavily tinted or opaque plastic, fiberglass, lined metal, concrete and wood. (LAPC 1502.9.1)
- 16. Surge tanks shall be vented. Vent shall be sized per Table 703.2 based on the total gray water fixture units. Vent shall terminate not less than 6 inches above the roof, 10 feet from or 3 feet above an operable window, air intake or opening, and 3 feet from lot line. (LAPC 1502.9.1(2); LAPC 904.0; LAPC 906.0)
- 17. Surge tanks shall have an access opening with lockable gasketed cover. (LAPC 1502.9.1(3))
- Surge tanks shall have an overflow drain with a permanent connection to the building drain or sewer. The overflow shall drain by gravity and be equipped with a backwater valve. (LAPC 1502.9.1(5); 1502.9.1(8))
- 19. The surge tank overflow drain pipe shall be of a size greater than or equal to the inlet pipe, and shall not be equipped with a shutoff valve. (LAPC 1502.9.1(5); 1502.9.1(6))
- Irrigation zones shall be designed to include no less than the number of emitters specified in Table 1602.11. The minimum spacing between emitters in any direction shall be sufficient to prevent surfacing or runoff. (LAPC 1502.11.2(3))
- 21. When a pump is used, provide a pressure-reducing valve to maintain the pressure below the maximum operating pressure of the system components. The valve shall be installed on the discharge side of the pump before any emission device. (LAPC 1502.11.2(6))
- 22. When a pump is used, provide a backwater valve on the discharge side of the pump when subject to back siphonage. (LAPC 1502.11.2(7))
- 23. Disposal fields shall be constructed in accordance with Table 1502.11.3. (LAPC 1502.11.3(C))

## **CALCULATIONS**

- Provide calculations showing the total gray water discharge. For residential occupancies, the procedure shown in Section 1502.8.1 may be used. (LAPC 1502.8.1)
- 2. Provide calculations showing the total gray water

- discharge. For commercial, industrial, and institutional occupancies, the procedure shown in Section 1502.8.2 may be used. (LAPC 1502.8.2)
- Provide calculations to determine the minimum effective irrigation area based on the type of soil and the estimated gray water discharge. (LAPC 1502.10.1)
- 4. For gray water systems using tanks, provide calculations demonstrating that the tank is designed to minimize the amount of time gray water is held in the tank and is sized to distribute the total amount of estimated gray water on a daily basis. Excess graywater shall be diverted to the building sewer. (LAPC 1502.8; LAPC 1502.8.3)

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