**1. Project Information**

|  |  |
| --- | --- |
| **Application Date:** | **Assessor’s Parcel Number (APN):** |
| **Project Address:** | |
| **Applicant/Property Owner Name:** | **Designer/Contractor Contact Name:** |
| Phone Number: | Phone Number: |
| Email: | Email: |
| **Occupancy Type:** *(choose one)*  Single Family Residential *(one-two dwellings)*  # of potential occupants: \_\_\_\_\_\_ (*# of bedrooms + 1)*  Multi Family Residential *(>two dwellings)* # of potential occupants: \_\_\_\_\_\_ *(# of bedrooms + 1) x (# of units)*  Commercial # of daily occupants: \_\_\_\_\_\_ | |
| **Description of Project:** | |
| **Graywater Source:** *(indicate the type and number of fixture(s) to be diverted to graywater irrigation*  *Shower(s) #\_\_\_\_\_\_\_\_\_\_*  *Clothes Washer(s) #\_\_\_\_\_\_\_\_\_\_*  *Lavatory (bathroom sink) #\_\_\_\_\_\_\_\_\_\_*  *Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ #\_\_\_\_\_\_\_\_\_\_* | |
| **Check All That Apply:**  Yes No This property is served by municipal water/sewer  *If Yes, name of Water Provider:*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Yes No This property contains a well  Yes No This property contains an onsite wastewater treatment system  Yes No This property has high groundwater within 3’ of the soil surface.  Yes No Does the system design include a surge tank or storage of graywater?\* *If Yes,*   * Attach specifications that describe how the storage tank will automatically empty every 24 hours. * Attach specifications showing how graywater overflow will be piped to sewer/septic by gravity.   *\*Note: Storage tanks are not recommended. Best management practice is to direct graywater immediately to irrigation field.* | |
| **Topography of Area to be Irrigated with Graywater:**  Flat  Slightly sloped  More than 30% slope | |

**I certify that I have read and understand the California Plumbing Code requirements for graywater irrigation systems. I understand that if there is a complaint investigation that verifies a violation of the applicable standards, then the property owner will be subject to cost recovery and any fines resulting from the investigation (Calif. Health & Safety Code Section 510).**

Applicant Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Printed Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Estimated Daily Graywater Production – Residential Only**  *(Attach Calculations for Commercial Projects)*

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| **Calculation Method** *(choose one)*  **CPC estimate *(****Assign 2 occupants to master bedroom and 1 occupant to each additional bedroom)*  Laundry: occupants x 15 gallons/daygal/day  Shower/sink: occupants x 25 gallons/day gal/day  ***TOTAL gal/day***  **Estimate of graywater produced from winter (Dec-Feb) water use records***(attach utility bill)*  Laundry: Avg. water use per month ÷ 30 days (gallons/day) x 0.22gal/day  Shower: Avg. water use per month ÷ 30 days (gallons/day) x 0.17gal/day  Sink: Avg. water use per month ÷ 30 days (gallons/day) x 0.03gal/day  ***TOTAL gal/day*** |

**3. Irrigation System Capacity**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **Actual Irrigation Field Area: \_\_\_\_\_\_\_\_\_\_\_\_ft2**  **Minimum Required Irrigation Field Area:**  (gal/day) ÷  gal/ft2/day = **\_\_\_\_\_\_\_\_\_\_\_\_ft2**  *From Section 2**Maximum Absorption Capacity****\** Minimum Required Irrigation Field Area**  *\*Use the table below to find the maximum absorption capacity of your soil*   |  |  |  | | --- | --- | --- | | **DESIGN OF SIX TYPICAL SOILS TYPE OF SOIL** | **MINIMUM SQUARE FEET OF IRRIGATION*/LEACHING* AREA PER 100 GALLONS OF ESTIMATED**  **GRAY WATER**  **DISCHARGE PER DAY** | **MAXIMUM ABSORPTION CAPACITY IN GALLONS PER SQUARE FOOT OF IRRIGATION/LEACHING AREA FOR A 24-HOUR PERIOD** | | Coarse sand or gravel | 20 | 5.0 | | Fine sand | 25 | 4.0 | | Sandy loam | 40 | 2.5 | | Sandy clay | 60 | 1.7 | | Clay with considerable sand or gravel | 90 | 1.1 | | Clay with small amounts of sand or gravel | 120 | 0.8 | |

**4. Irrigation Method** *(Select and complete all that apply to the project)*

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| **Gravity to Mulch Basins (Branched Drain)**  Total mulch basin surge capacity: \_\_\_\_\_\_\_\_\_\_\_\_gal/day ÷ 7.48 gal/ft3 ÷ 0.80 = **\_\_\_\_\_\_\_\_\_\_ft3**  *From Section 2* |
| **Effluent Pump to Mulch Basins**  Make and model of effluent pump (attach specifications):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Total mulch basin surge capacity: \_\_\_\_\_\_\_\_\_\_\_\_gal/day ÷ 7.48 gal/ft3 ÷ 0.80 = **\_\_\_\_\_\_\_\_\_\_ft3**  *From Section 2* |
| **Drip Irrigation System**  Drip emitter flow rate: gal/hour Total number of drip emitters: \_\_\_\_\_\_\_\_\_  Make and model of pump/filtration system (attach specifications): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Make and model of backflow prevention device (attach specifications):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Constructed Wetland (1-day retention time)**  Total capacity: \_\_\_\_\_\_\_\_\_\_\_\_gal/day ÷ 7.48 gal/ft3 ÷ 0.25 = **\_\_\_\_\_\_\_\_\_\_ft3**  *From Section 2* |

**5. Irrigation Plan**

Using the attached graph paper (or your own), draw a map and legend of graywater system components that shows the pathway of piping from the fixture(s) inside the building to the landscape/irrigation field. If graywater is directed to the front yard, show the street frontage and your driveway. In your drawing, include the location of all:

* Graywater valves
* Graywater pipes and fittings

*(indicate material and size)*

* Clean-outs
* Pumps and surge tanks *(if applicable)*
* Graywater outlets and mulch basins
* Backflow prevention *(drip only)*
* Setback of graywater outlets to property lines and buildings\*
* Setback of graywater outlets to onsite wastewater treatment system tanks and leachfields\* *(if applicable).*
* Setback of graywater outlets to wells and drainages\* *(if applicable).*

\*S*ee table below for required setbacks. See the California Plumbing Code for additional notes about setbacks.*

**CPC Table 1602.4 - LOCATION OF GRAY WATER SYSTEM**

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| **MINIMUM HORIZONTAL DISTANCE IN CLEAR REQUIRED FROM** | **SURGE TANK (feet)** | **SUBSURFACE AND SUBSOIL IRRIGATION FIELD AND MULCH** **BASIN (feet)** | **DISPOSAL FIELD** |
| Building structures | 5 | 2 | 5 |
| Property line adjoining private property | 5 | 1.5 | 5 |
| Water supply wells | 50 | 100 | 100 |
| Streams and lakes | 50 | 100 | 100 |
| Sewage pits or cesspools | 5 | 5 | 5 |
| Sewage disposal field | 5 | 4 | 4 |
| Septic tank | 0 | 5 | 5 |
| On-site domestic water service line | 5 | 5 | 0 |
| Pressurized public water main | 10 | 10 | 10 |

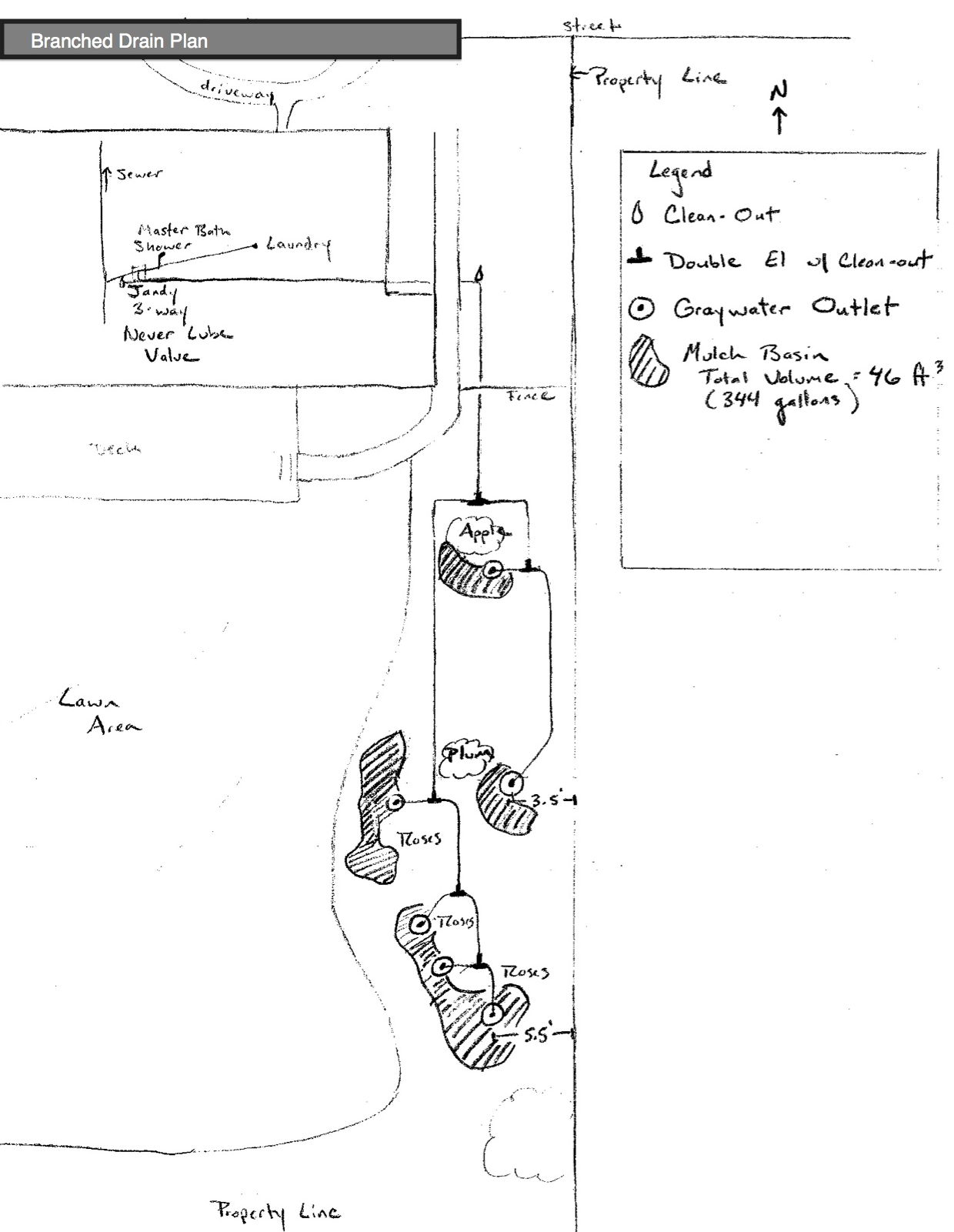
**GRAYWATER IRRIGATION FIELD PLAN Scale = \_\_\_\_\_” = \_\_\_\_\_\_\_’**

**APN #\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**LEGEND:**

**Example Graywater Irrigation Plan**

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