

Arch 464
ECS
Spring 00

Name _____

Quiz #3

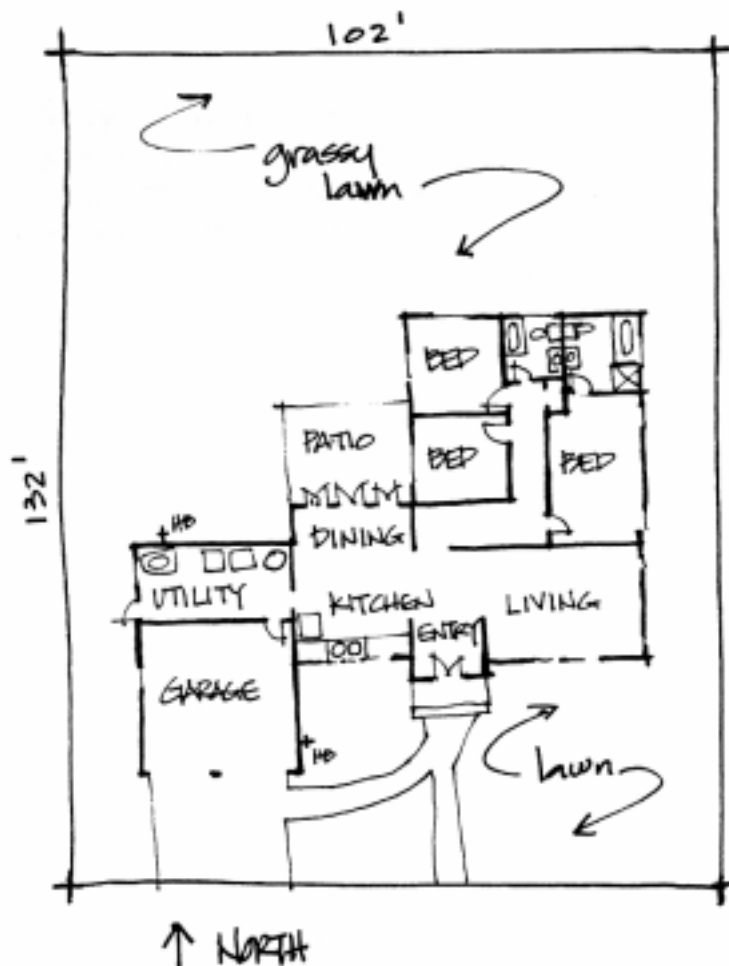
"Setting an Example of Wise Water Use"

For this problem you are the evapo-transpiration consultant to a civic group planning a water conservation demonstration project for a drought-stricken southern Idaho town, which averages 12 inches of rain each year during non-drought times.

The project is a typical 1950s ranch house with two-car garage and grassy lawn which has been donated to the group by a cowboy poet. The civic group wants to remodel the home and site to demonstrate actions typical homeowners can take to save water in their own homes and yards. Since it's a demonstration project, the design goal should be to minimize water use and to show a wide range of conservation strategies.

The site should be improved to include a small amphitheater and a vegetable garden.

The 2700 square foot house is connected to city water and sewer.



Existing Fixtures:

2 Bathrooms–

2 toilets

2 lavatories

2 tubs

shower

Kitchen–

sink

dishwasher

Utility Room–

utility sink

clothes washing machine

hot water heater

Outdoors–

2 hose bibs

2 points

Supply

1. Recommend two strategies for augmenting the city water supply and describe how they can be integrated into the demonstration house.

3 points

Building Water Use

2. Make three recommendations for reducing water use in the building.

3 points

Site Water Use

3. Make three suggestions for water use on site that will either reduce use or improve quality.

2 points

Site Concept

4. On the site plan show the elements of your conceptual design for the demonstration project and explain how all its elements are integrated.

