

Water Connection To Metal Building



Purpose For Water Connection

- Per Fairfield Code Book, **Title 6 Public Utilities Section 6.1.20 G**, we are requesting the Town Council review and approve a proposed water connection from the culinary well to the existing Medal building, both on the Burch Family property.

Provide water and septic service as shown in plans provided in building permit (recreational home).

- Permit and plans for this living space were submitted to Fairfield 8 months ago.

Second option - an Office space with restroom and shop sink. If chosen, Permit and plans will need to be developed.

- Due to the delay in the permitting process, we are revisiting what is needed.

Both options require water connection and a septic system.

Section 6.1.20 (G)

I. Private Systems and Private Wells. Private water systems and the use of private wells to provide water services are not allowed. See exceptions in Section 6.1.10. (J) and **Section 6.1.20. (G)**.

Section 6.1.20.

G. Private Systems and Private Wells. Private water systems and the use of private wells to provide municipal water services are not allowed except at the discretion of the Town Council, in the following instances:

1. The applicant is constructing a home or place of business on a legal lot that lies farther than one thousand (1,000) feet from the current water system regardless of the actual building location on the property;

- The Edge of the property to the existing current water system measures 1,609 feet.
- After the installation of the proposed extension to the McKinney's new construction the distance will still be about 1,300 feet to the edge of the property.

2. Allowance of the private system or private well is more compatible with the land use development goals of the Town Council (i.e. environmental preservation, construction of a necessary public facility significantly removed from the current water system, limitation of the number of dwelling units in a given area where connection to the municipal water system could result in more dwelling units than are desired by the Town Council). The Town Council is under no obligation to approve the use of a private system or private well and no precedent will be established by a previous Town Council decision;

Section 6.1.20 (G) (cont.)

3. The cost is prohibitive to expand the current municipal water system, connect to the current municipal water system, or create facilities capable of linking to the Fairfield Town water system; or

- The estimated cost of this project (recreational home) is less than \$100,000.
- Extrapolating, based on estimated cost for the extension of the water system to the McKinney's new construction (\$65,000 to \$95,000), a system extension of an additional 1,300 feet would cost an estimated \$282,000 to \$412,000.
 - The cost of extending the water system is 3 to 4 times the cost of the project, a prohibitive amount for this project.

4. Property lies within a zone greater than one (1) acre. An existing culinary well exists on the property prior to 2010.

- Property is in an AR-5 zone and the wells proof of appropriation was dated 23 July 1992.

5. If a well is used for a culinary water supply it must reside on the same parcel of land as the structure.

- The well and the structure reside on a contiguous parcel of land owned by the Burch Family

Section 12.1.150. P.

Parcel of Land. Means a contiguous quantity of land in the possession of, or owned by, or recorded as the property of, the same owner.

Section 6.1.20 (E) Who Pays For Extension

Section 6.1.20. Application for New Individual Culinary Water Connection.

E. Once approved, **the owner has the option to hire a contractor or pay the Town to take the requested new service connection from its water main to the property line where the new service meter shall be located. The Town will contract with a certified drinking water system contractor to install the water line from the existing mainline to the owner's property line. The cost of this installation will be borne by the new connection owner.** If Fairfield Town deems the connection is a major extension of the system, **the connection owner will secure the contractor to install the new line with Fairfield Town's approval of said contract, materials, and line size used.**

H. Water Main Line Extensions and Connections. Waterline extensions and connections must adhere to the following:

b. If an applicant installs a water mainline extension to serve a parcel of property, the mainline extension shall originate at the nearest adequate, existing water main and extend completely across the parcel of property being developed along all public street frontages;

This implies the extension would be more than 1300 feet and the cost would be greater to the new connection owner.

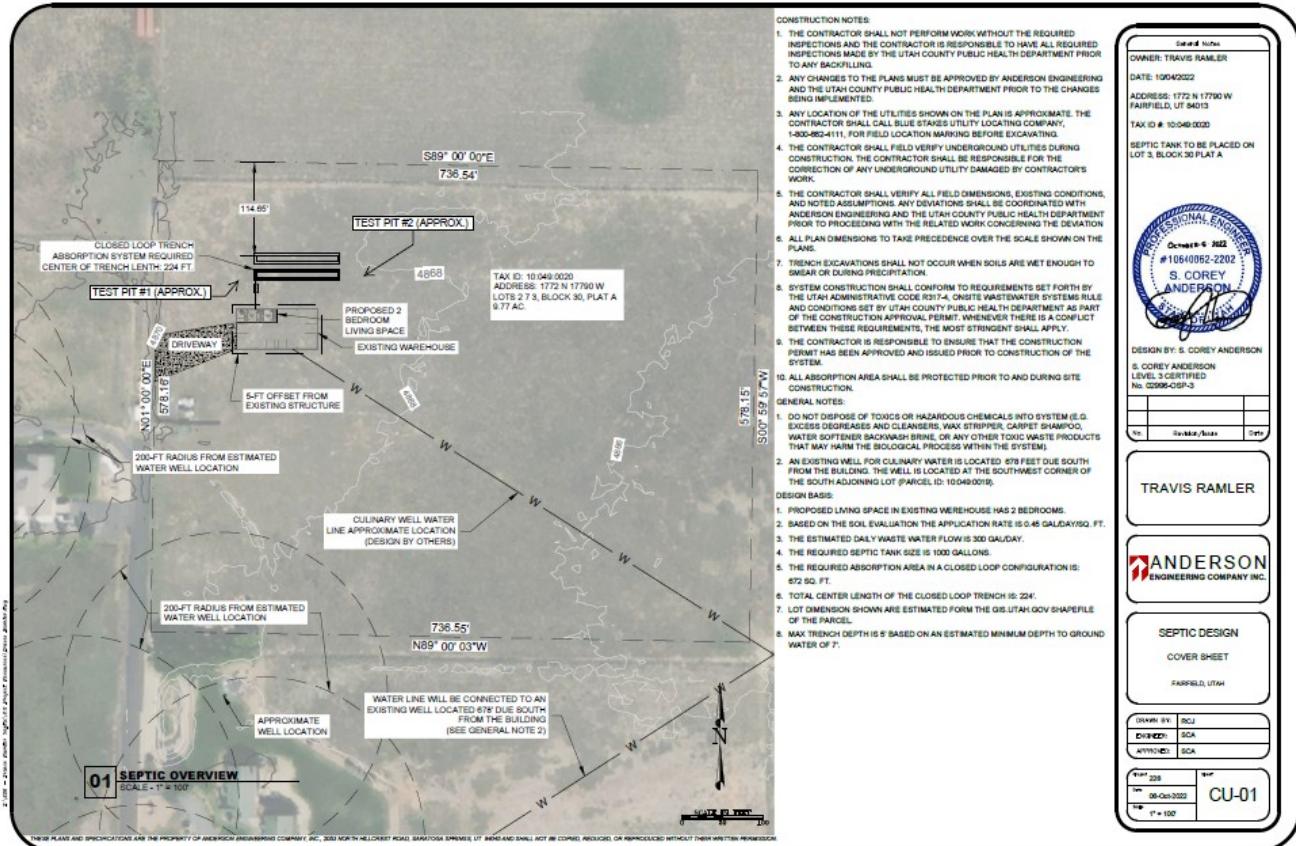
d. The applicable cost of an extension shall include replacement of all road surface damaged or removed for installation of new extensions in accordance with the Design Guidelines and Standard Specifications of Fairfield Town;

These additional requirements Imply Estimated Costs for water system extension on previous page are Low.

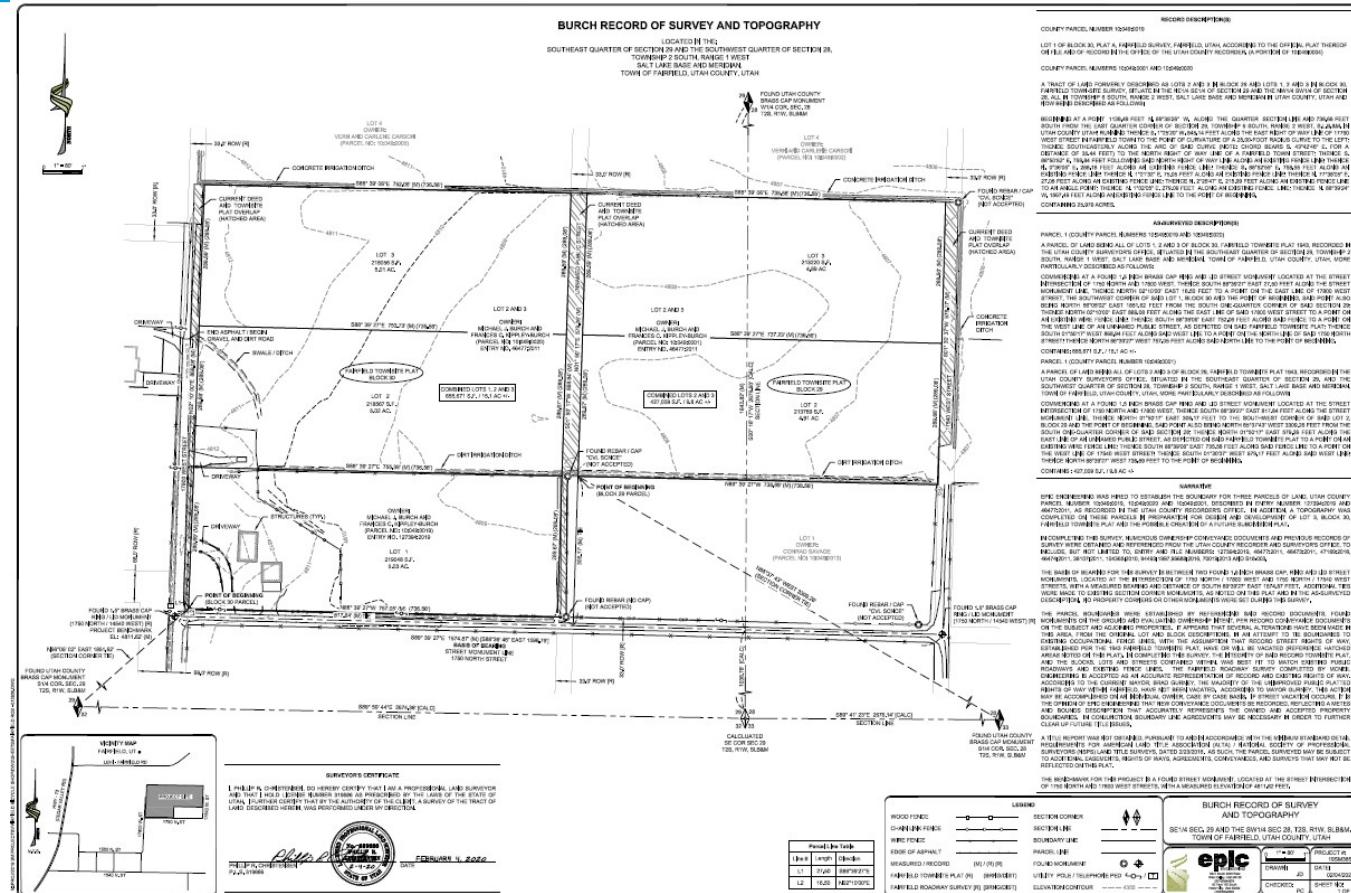
Visual of the Property



Proposed Water Connection Plans.



Burch Property Land Survey



Burch Property Water Right

Water Use Group Number: **400400**

Water Rights Appurtenant to the following use(s): 54-425(CERT).

Irrigation-Beneficial Use Amount: 0.25 acres	Group Total: 0.25	Prd of Use: 04/01-10/31
--	-------------------	-------------------------

Stock Water-Beneficial Use Amount: 56 ELUs	Group Total: 56	Prd of Use: 01/01-12/31
--	-----------------	-------------------------

Domestic-Beneficial Use Amount: 1 EDUs	Group Total: 1	Prd of Use: 01/01-12/31
--	----------------	-------------------------

Place of Use	North West Quarter				North East Quarter				South West Quarter				South East Quarter				Section
	NW	NE	SW	SE													
Sec 29 T 65 R 2W SLBM																0.25	0.25
Group Acreage Total:																	

Place of Use Stock

North West Quarter				North East Quarter				South West Quarter				South East Quarter				Section
NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 29 T 65 R 2W SLBM																X

Use Totals - for 1 group

Use Type	Sole Supply Total	Group Total
Irrigation:	0.25 acres	0.25 acres
Stock Water:	56 ELUs	56 ELUs
Domestic:	1 EDUs	1 EDUs

Extensions

Filed: 01/30/1992 Proof Due: 07/23/1992

Advertising:

Publication Began: 03/11/1992	Publication End:	Newspaper: Lehi Free Press
Protested: Not Protested	Hearing Held:	Protest End Date: 05/01/1992

Approval:

SE Action: Approved	Action Date: 07/23/1992	Memo Decision: No
---------------------	-------------------------	-------------------

Burch Property Water Right (Cont.)

The three most basic beneficial uses of water are domestic, stock watering and irrigation – each with a specific annual requirement or “Duty.” Other beneficial uses include municipal and industrial.

Utah State Administrative Rule R309-510 sets a minimum standard of 0.454 ac-ft for indoor water use of a single-family residential connection, including recreational homes of more than 1,000 square-feet.

$$1 \text{ EDU} \times 0.454 \text{ AF/EDU} = \mathbf{.454 \text{ AF}}$$

Stock watering is quantified as 0.028 AF (acre feet) per ELU (equivalent livestock unit). An ELU is one horse and foal or cow and calf, or equivalent number of sheep, goats, pigs, chickens etc.

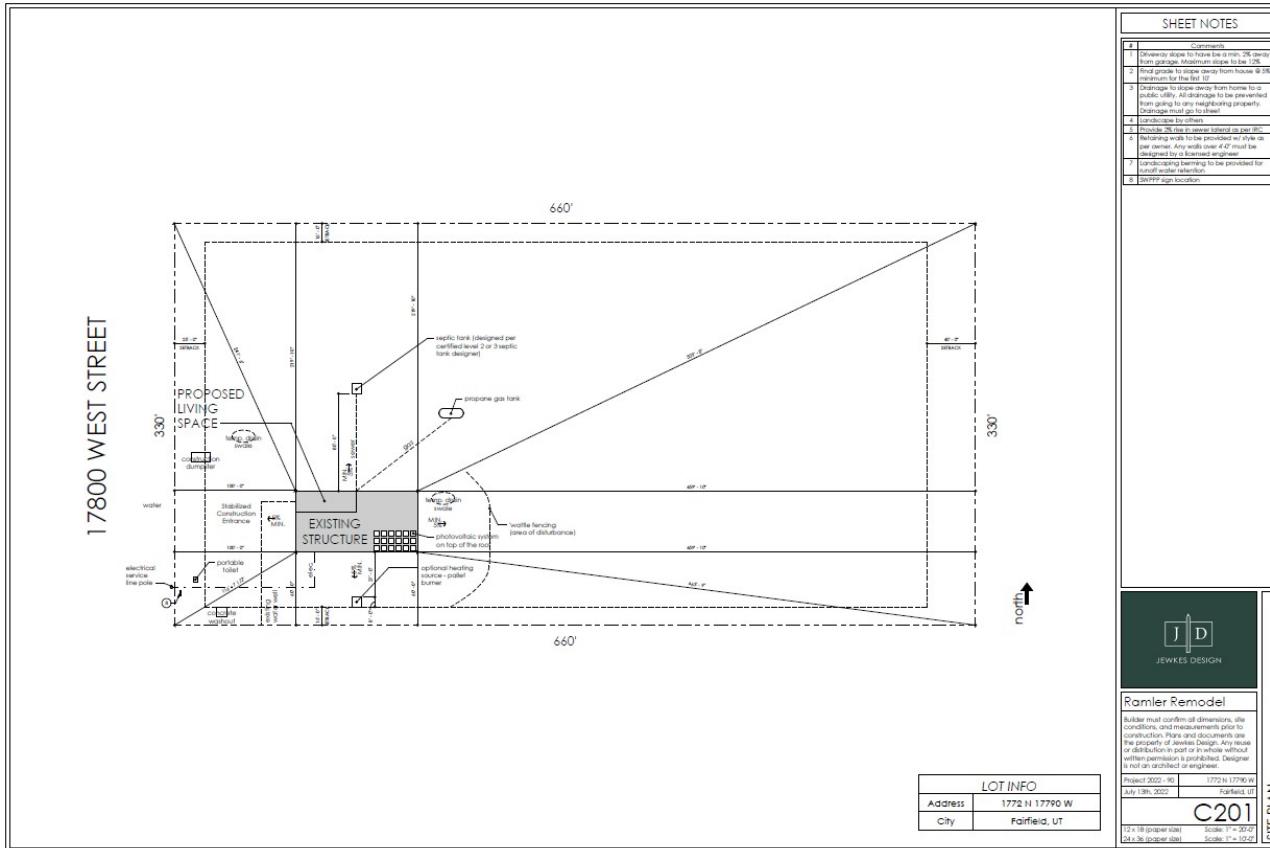
$$56 \text{ ELU} \times 0.028 \text{ AF/ELU} = \mathbf{1.568 \text{ AF}}$$

Irrigation is the act of applying water to any plant to obtain optimal growth and maintenance of that plant. Lawns, gardens, shrubs, pastures and non-native trees and plants are all considered as irrigation, even though not all are harvested as crops. The duty for irrigation ranges from 6.0 AF per irrigated acre in parts of the Virgin River drainage to 3.0 AF per irrigated acre in high mountain areas. The average diversion duty is 4.0 AF per acre. This “duty” is based on the highest water consuming crop, which is alfalfa, during the growing season of the region and surface irrigation practices.

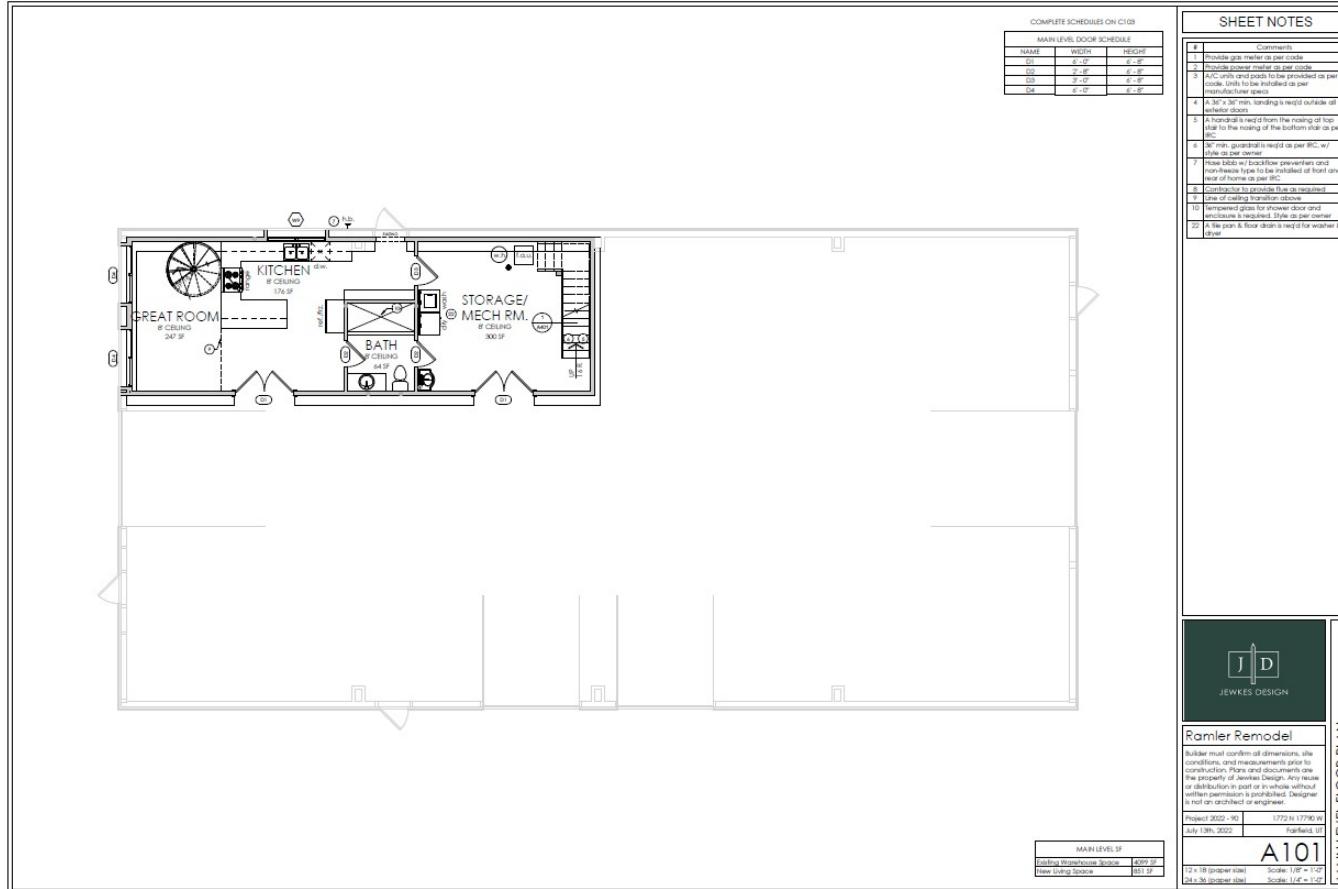
$$0.25 \text{ acre} \times 4.0 \text{ AF/acre} = \mathbf{1.0 \text{ AF}}$$

Water Right at Burch property has sufficient water allocation to provide for both existing and proposed residences.

Office or Residence Layout



Residence Downstairs



Residence Upstairs

