

Hildale-Colorado City Utility

Utility Board Manager's Report

11/26/18

Arizona Pipeline Inspection

The week of November 5th we hosted the Arizona Gas Inspector who conducted an annual review of our system. The inspection took the better part of the entire week, where he reviewed manuals, inventory lists, employee records and testing records. We have received a preliminary list of deficiencies and we are awaiting the official report from their office. Once we have the report we will

System Updates

Number of accounts billed in October 2018:

Water base rate	888
Sewer	828
Gas base rate	671
Penalties	688

Total number of shut off notices printed on October 16, 2018 is 197

Total number of final billed account with final bill date in October is 26

Total number of new connect accounts in October is 25

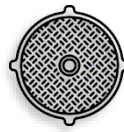
Total number of accounts on auto pay and paperless billing 66

Radium and Water Testing

The Power Plant Well has tested above the limit for Radium contamination as reported to us by the Utah Division of Water Quality. This indicates that for both the Academy Avenue Well and the Power Plant Well, no amount of flushing will alleviate this issue. The next best solution is a blending plan where we take water from shallower sources and blend it with Power Plant Well and Academy Avenue Well to reduce the total amount of radium to acceptable levels.

Additionally, there are treatment options available, carbon filtering and RO filtering could provide cost effective viable solutions. The Department is currently waiting for feedback from Sunrise Engineering on older grant funding that may provide funds to explore these options. The Department also intends to meet with the Utah Department of Drinking Water Quality on the paths to move forward.

This development underscores the need to improve the water quality provided to residents. The Department's new master water plan grant should equip us with the tools and knowledge to develop long-term cost effective solutions.



Having Trouble Paying Your Bill?

These community organizations are here to help!



Cherish Families

Cherish Families provides resources and services that empower our community citizens wholeness and self-determination.

Services Offered- Basic Needs, Housing Assistance, Legal Services, Family Resource Facilitators, Joint Case Management, Community Education Classes, Peer Mentoring, Financial Literacy and much more!

280 W Township Avenue, Colorado City AZ 86021

www.cherishfamilies.org

1-435-277-0969



The Dream Center

The Dream Center motto: "Find a need and fill it, find a hurt and heal it"

Services Offered- Drug, Alcohol and Trauma Recovery, GED Classes, Counseling, Equine Therapy, Reading Programs, Budgeting Assistance, and much more!

980 W. Field Avenue, Hildale UT 84784

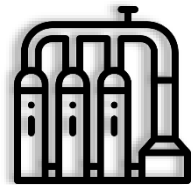
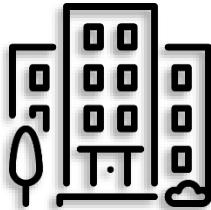
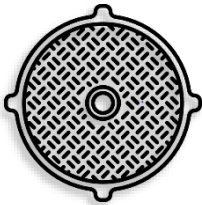
Glyn and Jena Jones, Executive Directors

435-625-1494

jjones@shortcreekdreamcenter.org

www.ShortCreekDreamCenter.org

NOTICE: THE ABOVE ENTITIES ARE NOT ENTITLED TO MAKE ANY STATEMENT, AGREEMENT, CONTRACT ETC. ON BEHALF HILDALE OR COLORADO CITY. AT NO TIME WILL THE HILDALE-COLORADO CITY UTILITY DEPARTMENT MAKE ANY STATEMENT, AGREEMENT, CONTRACT ETC. ON BEHALF THE ABOVE ENTITIES OR THEIR AFFILIATES.



Hildale-Colorado City Utility Department

Water Service Impact Fee Analysis and Recommendation

Authored by:

Harrison Johnson

Utility Business Manager

General

In accordance with the expressed lawful use of impact fees to fund new infrastructure development, the Hildale-Colorado City Utility Department (HCUD) has analyzed the water service impact fee and its continued use. This report will provide an assessment and recommendation.

Background

Water service impact fees have a sordid and difficult past in the Short Creek Community. The impact fee, however, has a singular and specific function when applied to newcomers in a community: “to place the burden of development of new capacity increasing infrastructure onto those who are developing, and not the existing customer.” The process requires that municipalities present specific infrastructure development projects that will be made to accommodate new customers. The municipality must have conducted a thorough analysis that includes demographic trends, engineering specifications, and cost projections. The fee must be then reviewed regularly to determine if continued application is necessary. On top of that, funds raised from the collection of the impact fee must be segregated and cannot be spent on any other project or cost not associated with the outlined projects already justified.

The purpose of the impact fee, which is to help fund public development for Hildale and Colorado City, has been an abject failure. A failure that has not only failed to raise any realizable funds for infrastructure but has likely impeded growth which the Utility Department greatly needs.

Operational Assessment

The Water Department has seen a precipitous decline in usage over the past few years with close to 35% decline in billed usage between 2015 to 2018. This translates to over \$170,000 in drop in revenue over the same period.

Using Source Capacity Estimates from Sunrise Engineering Study in 2014, we are 58.9% below capacity. The Department’s assessment based on additional water sources from the Power Plant well and the incoming Academy Avenue well places our system at 69% under capacity. We estimate that our total source capacity by the end of 2018 will be 925,944,000 gallons per year.

That capacity surplus is likely to increase based on a historical forecast model, we can see the trend continues to suggest a decrease in usage likely from a significant decrease in population.

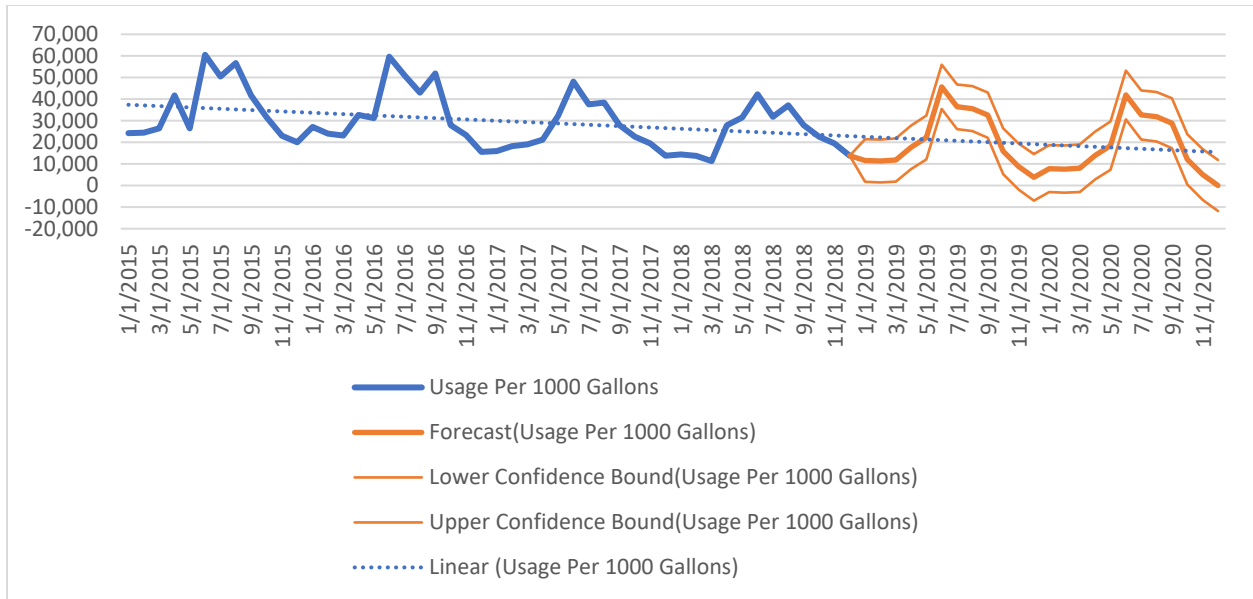


Figure 1 Forecast Analysis of Water Usage; Data provided by Utility Department

The effects of the decline in customers has reduced the base of rate payers meaning less people are required to pay for existing infrastructure that was designed for a higher population.

Sunrise engineering projected that the average usage per connection would fall slowly over the next 20 years to 1,256 gallons per day per connection (GPD/per connection) in 2038. Sunrise also stated that GPD/per connection would be close to 1398 in 2018 with 1011 water service connections. Even by the year of 2015, their data showed that GPD/per connection was to be 1420.

In reality, their projections were far off, with close to 804 GPD/per connection in 2018 representing a precipitous drop from around 1227 GPD/per connection in 2015. The Utah state average for culinary water use is 575 GPD/per connection and we are anticipating continued drop to just above the state average.

The dramatic decrease in usage per connection can be seen below:

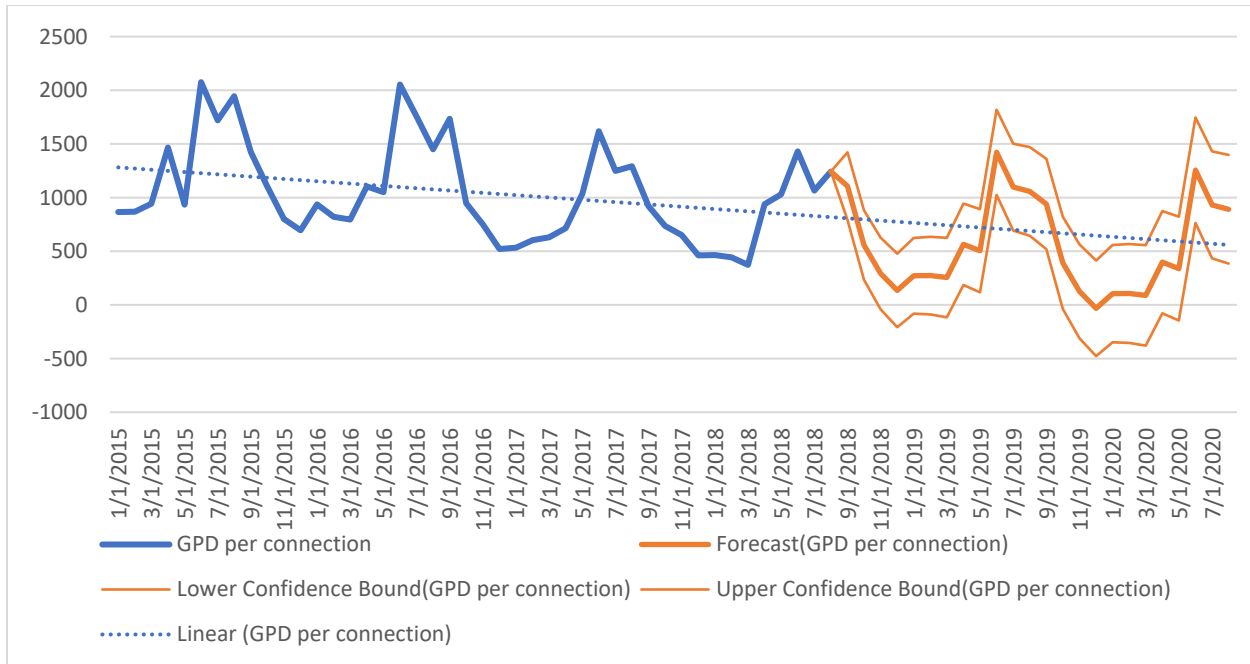


Figure 2 GPD/PER CONNECTION forecast; Data provided by Utility Department

With less rate payers, maintenance and replacement costs will disproportionately require higher water rates.

Financial Performance of the Water Service Impact Fee

The institution of the Water Service Impact Fee is primarily designed to help fund projects detailed in a facilities plan. When the most recent water service impact fee was adopted, the total facilities plan called for funding from the fee to total over \$3,000,000. In the five years since the impact fee has been implemented, only one has been collected in Hildale to the sum of \$11,820. This is borne against the estimated amount of capital financing for the following projects, and their listed funding requirements:

Facility	Current Costs	Year	Grant	Inflated Costs	Financed Costs	% Fee Eligible	Fee Eligible
Water rights	\$392,477			\$456,315		100%	\$456,315
Academy Avenue Well	\$516,400	2015	\$300,000	\$222,900		50%	\$111,450
Additional Wells	\$1,549,200	2016		\$1,643,500	\$2,108,516	33.3%	\$702,839
Water Canyon Spring	\$288,500	2017		\$315,300	\$360,258	100%	\$360,258
Additional Treatment Capacity	\$2,271,100	2016		\$2,409,400	\$3,091,122	42.8%	\$1,321,659
Impact Fee Analysis Update	\$120,000			\$176,018		42.7%	\$75,096
Total							\$3,027,616

With only \$11,820 towards the stated funding goal of \$3,027,616 in five years, the obvious conclusion on the financial performance of the impact fee is that it is abysmal. With the lack of performance of the impact fee, updated analysis of the requirements of one will require current rate payers to fund it.

Conclusions and Assessments

- The water system is vastly underutilized and is causing fiscal distortions to our budget.
- The data with which the water impact fee was established is greatly outdated.
- It is likely that average gpd/per connection will likely decline to just above the state average.
- Costs of maintenance and repair spread out to fewer customers will require rates to remain higher than they otherwise would be.
- The current studies completed for our water system are insufficient in giving us information to begin large development projects.
- There is a lack of accurate demographic data to determine future water needs.

Recommendation

The water service impact fee should be entirely removed from both Hildale and Colorado City in order to encourage growth and higher numbers of water customers. The upcoming water study should focus on increasing quality and efficiency of our system instead of the justification of the impact fee. Additionally, the study completed by Sunrise should provide guidance on how to properly monitor growth in order to determine when we may actually need a new impact fee.

Additionally, to prevent large numbers of applications and meter installs that then go unused for years and then are brought online all at once, which could bring us past capacity without a funding mechanism, we suggest adopting lack of service ordinances. An ordinance where connections installed must receive water service within an allotted time or the connection is uninstalled.

Planning and zoning may also want to have notice and be able to react to any development effects that occur as a result of the drop in the impact fee.

Water Impact Fee Facilities Plan Update

Facility	Current Costs	Year	Grant	Inflated Costs	Financed Costs	% Fee Eligible	Fee Eligible
Water rights	\$392,477			\$456,315		100%	\$456,315
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Total							\$3,027,616

Overview

The Impact Fee Facilities Plan will need to be immediately revised as the impact fee has garnered no significant amount of funds to dedicate towards any improvements. Much the need information to determine when, and if, impact fees will ever be necessary will come from the new Water Master Plan provided by Sunrise scheduled within the next few months. However, here is a preliminary assessment of the current standing facilities plan.

Water Rights

The Department may entertain the purchase of additional water rights for spring water within the next year in order to provide sufficient source to our water infrastructure development for improving quality. Funding will simply come from the R&R fund if and when necessary.

Academy Avenue Well

The Academy Avenue Well has already been constructed, but its use is contingent on a radium reduction plan. The funding for any radium reduction will likely come from Rural Water grant already acquired or will be put on the R&R Budget.

Additional Wells

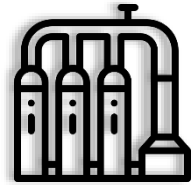
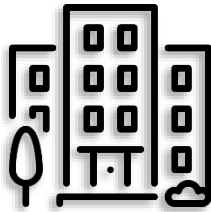
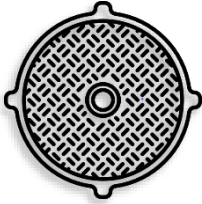
At only 40% of our current capacity and a downward demographic trend, additional wells will not need to be explored for at least five years. Regular reviews of of new impact fees should assess this three years from now at the latest.

Water Canyon Spring

Water Canyon spring sources are our the closest project in terms of immediacy of the need to improve quality, but as a qualitative change only meant for the existing residents impact fee application is not applicable, nor is it available. It should be funded through a mixture of grant funding, bonds and R&R funding and should be under construction in 2020.

Additional Treatment Capacity

Additional treatment capacity is only being explored as qualitative not quantitative improvement as usage and demographics do not require additional capacity at this time. It should be explored in the next five years, and be reliant on usage and growth rates in the community.



Hildale-Colorado City Utility Department

Sewer Dredge Project

Harrison Johnson

General

The Utility Department is planning to dredge sludge around its outtake valve on pond one, where it will deposit to a designated hazardous waste area adjacent to the pond. The Department will refill the pond and begin adding a probiotic solution to the pond in order to reduce pond sludge.

Timeline

January

- Acquire Dredging Contractor
- Prepare dump site
- Install Fencing

February

- Dredge Pond Outtake valve
- Close Dump Site
- Begin Refilling Pond One

March through May

- Finish Refilling Pond
- Add Probiotic or Enzyme

Valve Location



Hazardous Waste Site



Project Budget

Dredging Operations	
Extendable Back Hoe Rental 12 hours of labor at \$500/hr	\$ 6,000.00
Dump Truck 12 hours of labor at \$150/hr	\$ 5,400.00
Pit Securing- Back Hoe 2 hours at \$45/hr	\$ 90.00
Technician Labor 12 hours at 45/hr	\$ 540.00
	\$ 12,030.00

Pit Preparation	
Back Hoe 4 hours at \$45/hr	\$ 180.00

Pit Security	
Fencing	\$ 4,200.00
Labor (8 hours)	\$ 360.00
	\$ 4,560.00

Probiotics	
Quote	\$ 5,145.60

Total Project Cost: \$21,915.60

GAS DEPARTMENT COLORADO CITY

General Service - Rate Schedule PGT - 2

APPLICABILITY: Applicable to gas service for residential or commercial uses at one point of delivery.

AVAILABILITY: Available to customers whose gas use does not exceed 1,832 gallons in any one day.

TERRITORY: At any point near Colorado City where Colorado City is authorized to sell gas.

TYPE OF SERVICE: Tank Service.

RATES:

COLORADO CITY GAS DEPARTMENT PROPANE GAS TANK TARIFF
November 2009

=====
=====
Rate #PT20 Municipal - Residential & Commercial

MISCELLANEOUS CHARGES

Returned Check \$15.00

After Hour Delivery Charge \$45.00

Tank Setup Cost At Cost

Small Quantity Delivery Fee \$25.00
This fee will be charged for deliveries that are less than 50 gallons per stop; however, this fee shall not be charged if propane is delivered during a regular delivery route.

Cylinder Filling Fee \$1.00 / Gallon
This fee will be charged for filling any cylinder less than 100 gallons.

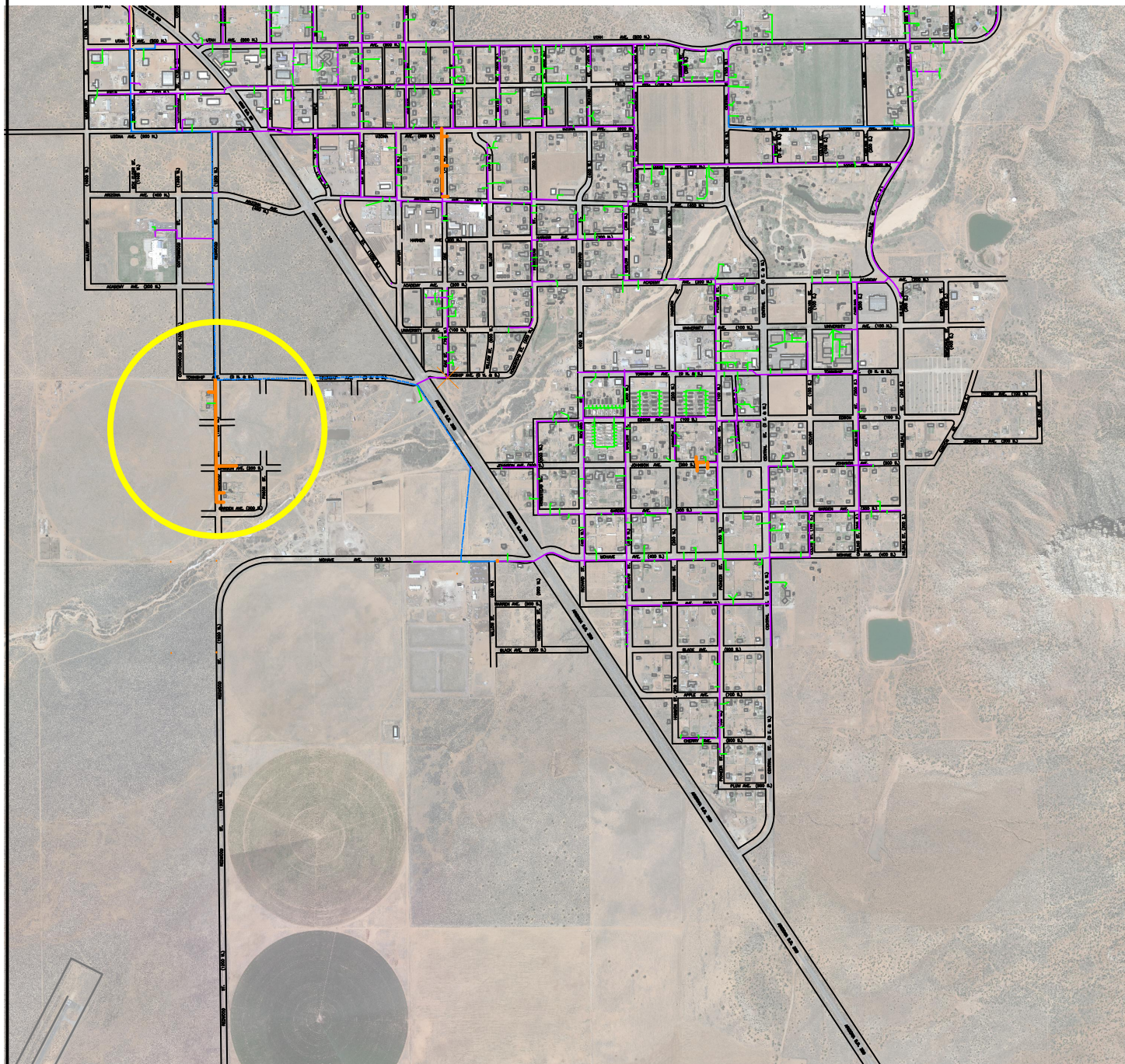
Cash Customer Cost as Determined / Gallon
The Cash Customer Cost shall be the estimated Commodity Cost for the month of service plus the Distribution Non Gas Cost as described in the current approved Rate #PT10 as it is modified from time to time by the City Council. All sales are final and a true up on the month following shall not be charged or collected from the cash customer.

Commented [HJ1]: The Cylinder Rate will be commodity plus \$1.00/gallon

Hildale/Colorado City Utilities

Mapping and Engineering Department

Gas Line Extension and Meter Set



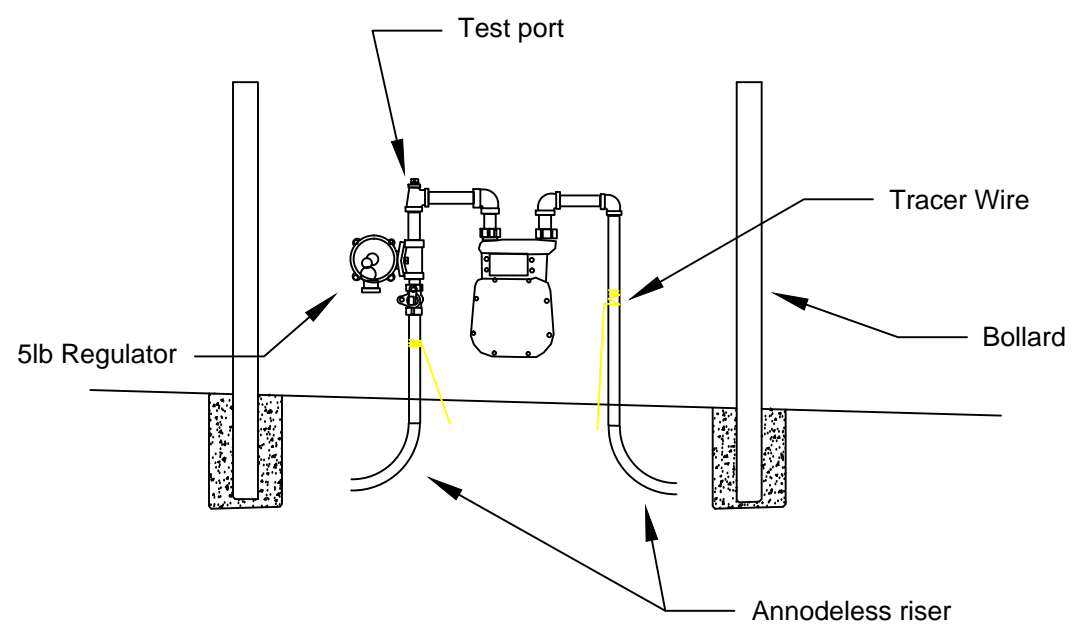
For Review

Description:

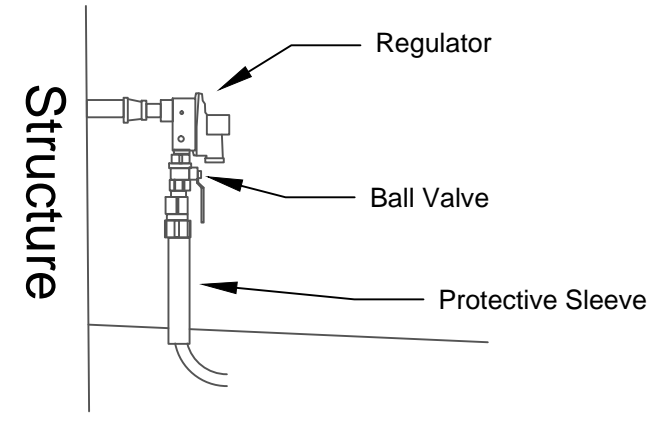
Extend 2" PE gas main along west side of Redwood Street from Township Ave to 65 South Redwood Street. Set meter assemblies at street and connect 3/4' poly to existing lines.

November 19, 2018

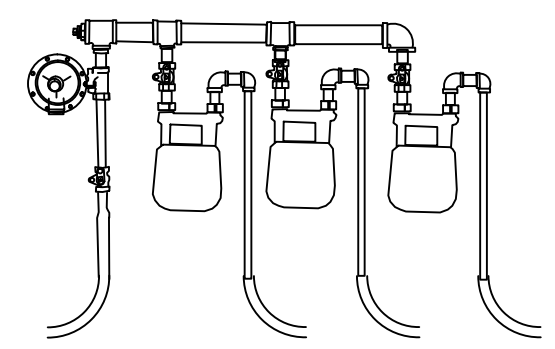
Tracer wire shall be installed along all gas lines. Wire shall be insulated, solid copper, not less than 14 gauge. It shall be installed by being pulled tight along the bottom of the pipe or conduit. It shall extend up at valves and risers. It shall be pig-tailed, not looped. Tracer wire ends and pig tails shall be spliced together with grease filled wire nuts.



Typical Single Meter Set



Typical House Connection



Typical Multiple Meter Set

System will be pressure tested at 150% of the MAOP for 4 hrs with a non-combustible gas prior to being charged with propane or natural gas.

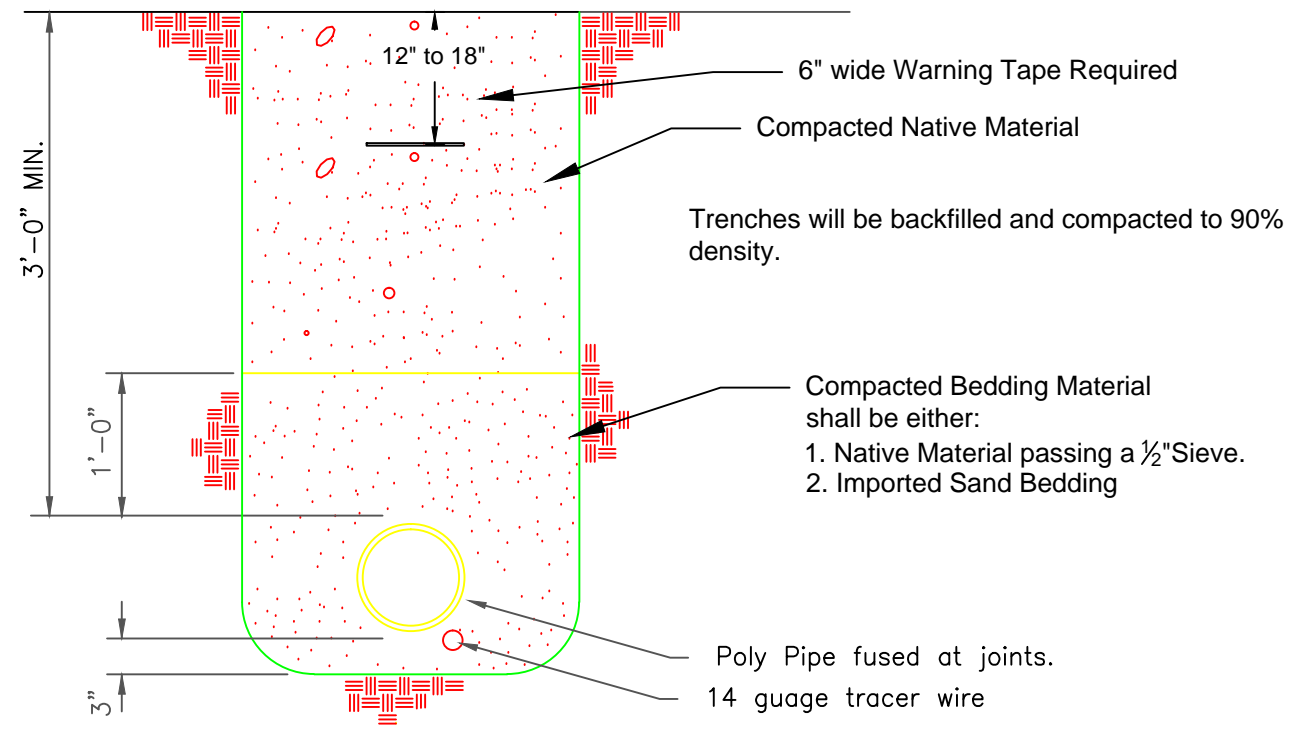
3/4" Poly Pipe Specifications:
3/4" IPS DR11.0 Driscoplex 6500 Gas PE2406/2708
CEE ASTM D2513 RN 646A ==P NR==NSF U.P. Code

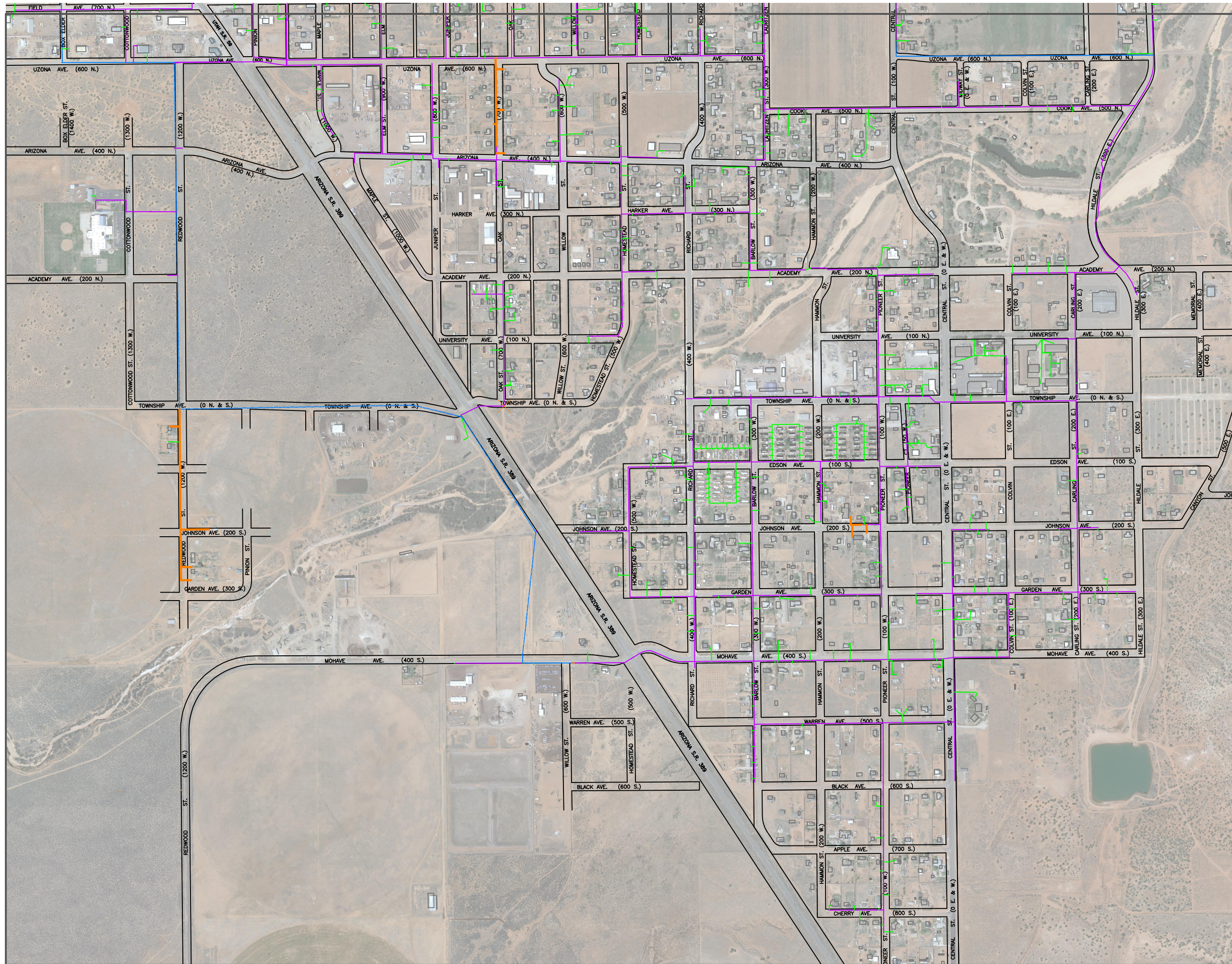
2" Poly Pipe Specifications:
2" IPS DR11.0 Driscoplex 6500 Gas PE2406/2708 CEE
ASTM D2513 RN 640 ==p==NSF Gas U.P. Code

4" Poly Pipe Specifications:
4" IPS SDR11.5 Driscoplex 6500 Gas PE2406/2708
CEE ASTM D2513 -11C RN 646OP NSF U.P. Code

Excess flow Valve Specification:
UMAC Series 700
P41MC2612AT
Design Pressure: 79PSI

Trenching Detail:





Hildale/Colorado City Utility
Mapping and Engineering Department

Sheet
Propane Gas
Distribution



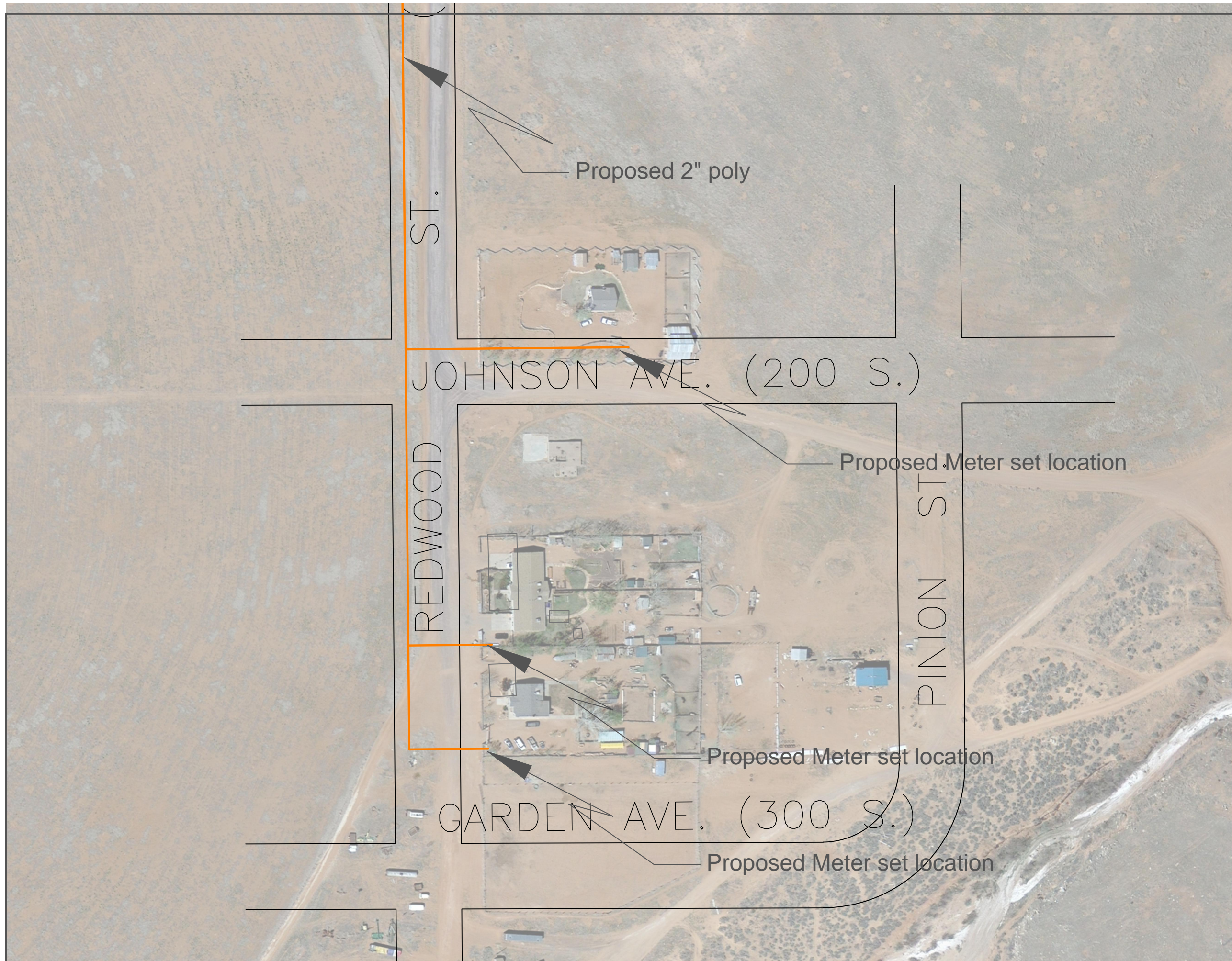
Connect to existing 4" poly

Proposed 2" poly

Connect to existing pipe

Proposed Meter set location

Proposed Meter set location





P.O. Box 840490 ~ 320 E Newel Ave ~ Hildale, UT 84784 ~

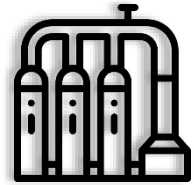
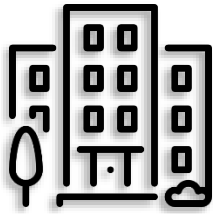
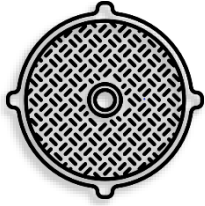
Phone: 435-874-1160 Fax: 435-874-2603

Date: 11/26/2018 pricing good for 30 days

Price Proposal For 2" gas main extension on Redwood Street

Price	Quantity	Description	Total
\$ 1.53	2062	2" Poly Main	\$ 3,154.86
\$ 0.43	350	3/4" Poly From Main	\$ 150.50
\$ 1.95	24	3/4" poly coupling	\$ 46.80
\$ 42.45	12	Risers	\$ 509.40
\$ 55.00	1	Pressure Testing	\$ 55.00
\$ 30.00	6	Excess Flow Valve	\$ 180.00
\$ 9.75	6	Tapping Tee	\$ 58.50
\$ 50.00	0	2nd Stage Regulator	\$ -
\$ 13.46	12	Union	\$ 161.52
\$ 13.50	0	3/4" valve	\$ -
\$ 20.00	6	Meter Bar	\$ 120.00
\$ 3.30	24	3/4" 90s	\$ 79.20
\$ 3.50	28	3/4" BIP nipple	\$ 98.00
\$ 1.13	24	3/4" BIP	\$ 27.12
\$ 75.00	6	Meter Regulator	\$ 450.00
\$ 4.50	2412	Trenching	\$ 10,854.00
\$ 1.00	2412	pipe bedding	\$ 2,412.00
\$ 0.38	2412	Tracer Wire	\$ 916.56
\$ 0.35	2412	Caution Tape	\$ 844.20
\$ 2.00	200	surface restoration	\$ 400.00
\$ 5.55	0	Boring	\$ -
\$ 17.62	6	Meter Valve	\$ 105.72
\$ 45.00	145	Install, truck & tools	\$ 6,525.00
\$ 30.00	0	Service head adapter	\$ -
\$ 3.50	0	Seal tight	\$ -
\$ 150.00	6	Meter Fee	\$ 900.00
\$ 50.00	6	Engineering	\$ 300.00
		total	<u>\$ 28,348.38</u>

Note: This is to extend a 2" gas Main south on Redwood street from Township Ave.
Connecting 6 existing tank customers to the gas meter system.



Hildale-Colorado City Utility

Ordinance Recommendation to the City Councils of Hildale and Colorado City

Background

When the removal of the water service impact fees for both Colorado City and Hildale comes into effect, new development may begin to increase rapidly. In order to accommodate that growth, the Utility Department will only need to maintain the current infrastructure levels to continue to provide water. However, in foreseeing a scenario where a new development installs a large number of water meters while the impact fee is dropped but does not bring them into service for several years only to begin service and cause a large unanticipated use of water, the Utility Department believes that an inactivity ordinance is appropriate.

Proposed Amendment to the Water Service Regulations

To be added in separate section under Chapter 40.

40.100 Inactive Service Disconnection

“Accounts that have been declared vacant, and/or not received meter water service bill for nine continuous months may be subject to water meter removal. If the account is not active, they will be final billed and the deposit, if any, refunded less the final bill. In order to return to service, the account will be treated as new account with all applicable connection and impact fees applied.”

Recommendation

The Utility Department Proposes that each city administration be review and revise the proposed amendment before presentation to their city councils. Notification to the Department of Justice should be made once a final draft has been decided on. Once the Department of Justice has been notified and has reviewed it, the proposed amendment should go before each respective city council for approval and ratification.

Implementation should include a customer notification to any new applicants and to all existing customers.