



CITY OF ROLLINGWOOD WATER CAPITAL IMPROVEMENTS PLAN

Rollingwood

City Council Meeting – May 18, 2022



K·FRIESE
+ ASSOCIATES

PUBLIC PROJECT ENGINEERING

By: Greg Blackburn, PE

Agenda

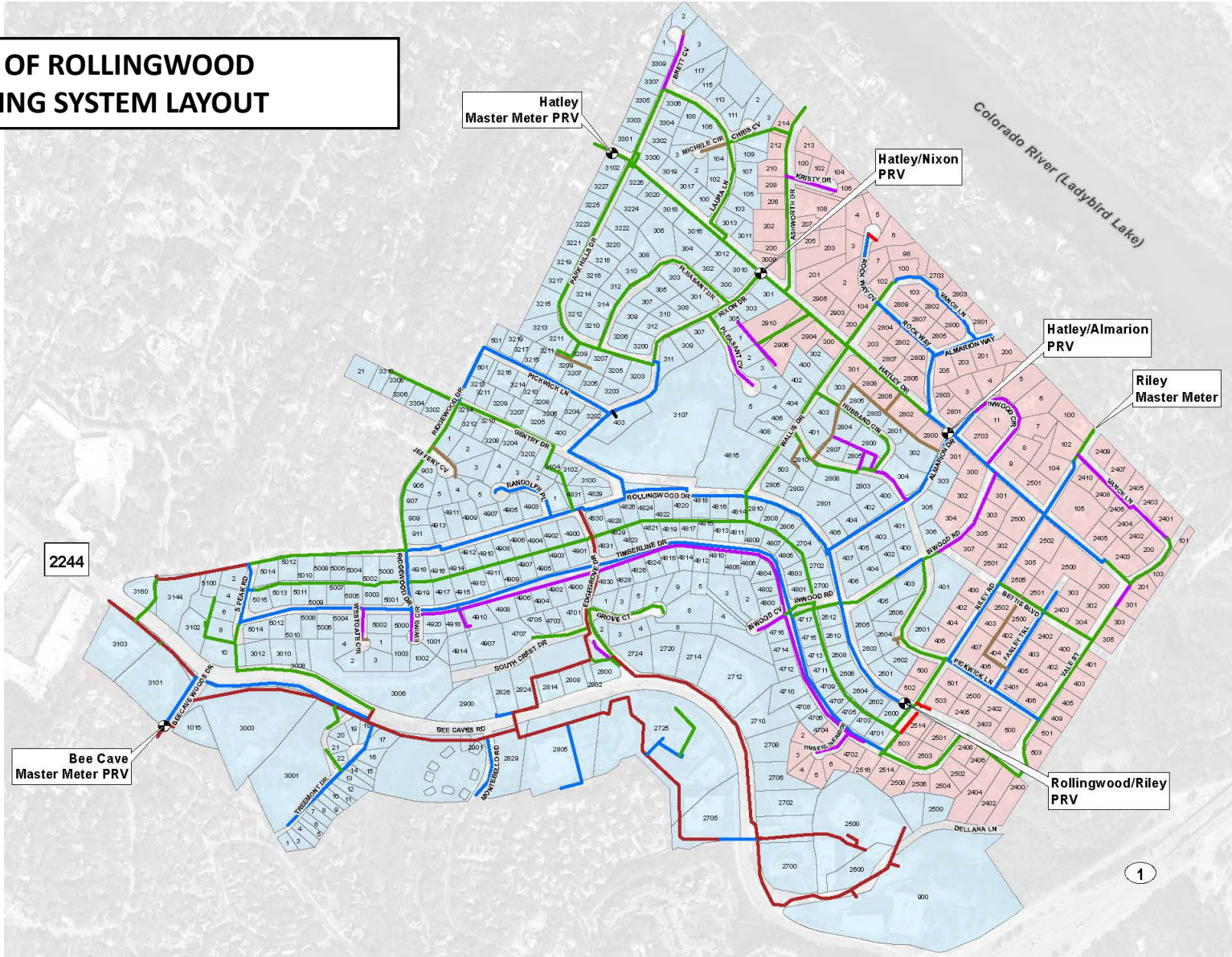
1. Updates since Last Presentation
2. Existing Rollingwood Water System Map
3. Revised CIP List
4. Summary
5. Questions

Rollingwood

Updates Since Last Council Presentation

- KFA worked with City and Crossroads to investigate unknowns in the system
 - 2" backyard waterline along Vale found to be abandoned
 - New 2" backyard waterline found to be active along Farley (originally thought to be abandoned)
 - Existing Vale 6" waterline was found to be older PVC material and not replaced recently
- Revised proposed feed into lower pressure plane to increase pressures based on citizen complaints
 - Now being fed through PRVs and not Riley Master Meter
- Ungrouped projects to provide more flexibility for packaging projects based on available funding

CITY OF ROLLINGWOOD EXISTING SYSTEM LAYOUT



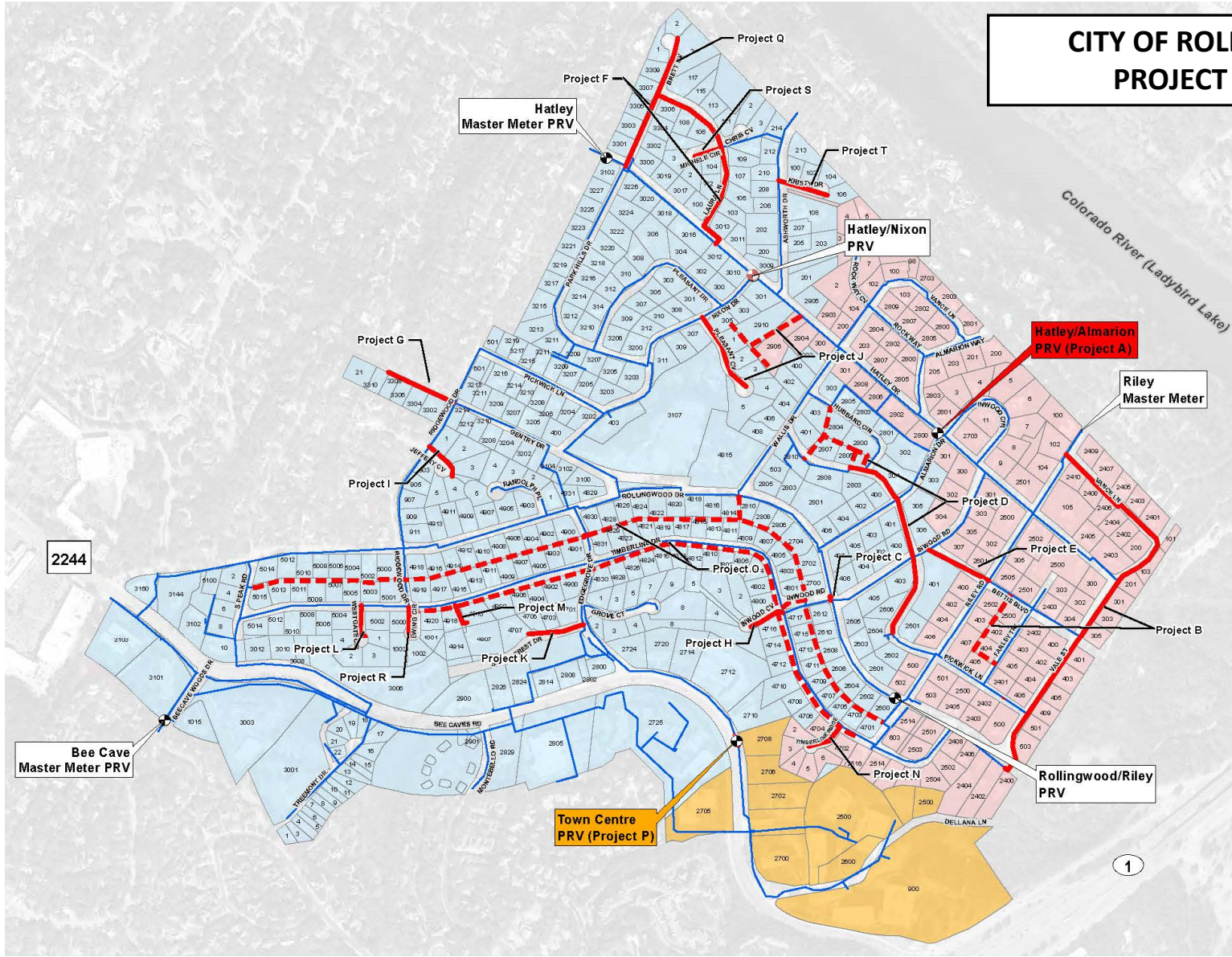
Project Development

- Model used to identify projects in CIP
- Resolve high/low pressure issues and inadequate fire flows
- Remediate maintenance concerns and access issues for City Staff
- Projects assigned priority (high or low)

ID	Proposed Projects	Cost Estimate	Priority
A	Hatley/Almarion PRV Replacement	\$37,000	High
B	Vance & Vale St Water Improvements	\$1,275,000	High
C	Inwood Rd Interconnect	\$65,000	High
D	Pickwick Dr Fire Flow Improvements	\$718,000	High
E	Bettis Blvd Fire Improvements	\$189,000	High
F	Park Hills Dr/Laura Ln Fire Improvements	\$751,000	High
G	Gentry Dr Fire Improvements	\$232,000	High
H	Inwood Cove Fire Improvements	\$105,000	High
I	Jeffrey Cove Fire Improvements	\$105,000	High
J	Pleasant Cove Fire Improvements	\$268,000	High
K	S. Crest Dr Fire Improvements	\$167,000	High
L	Westgate Circle Fire Improvements	\$105,000	High
M	Ewing Easement Main Fire Improvements	\$84,000	High
N	Timberline Ridge Fire Improvements	\$105,000	High
O	Abandonment Projects	\$494,000	Low
P	Town Centre PRV	\$112,000	Low
Q	Brett Cove Fire Improvements	\$167,000	Low
R	Ewing Circle Fire Improvements	\$105,000	Low
S	Michele Circle Fire Improvements	\$84,000	Low
T	Kristy Dr Fire Improvements	\$148,000	Low
Total		\$5,316,000	

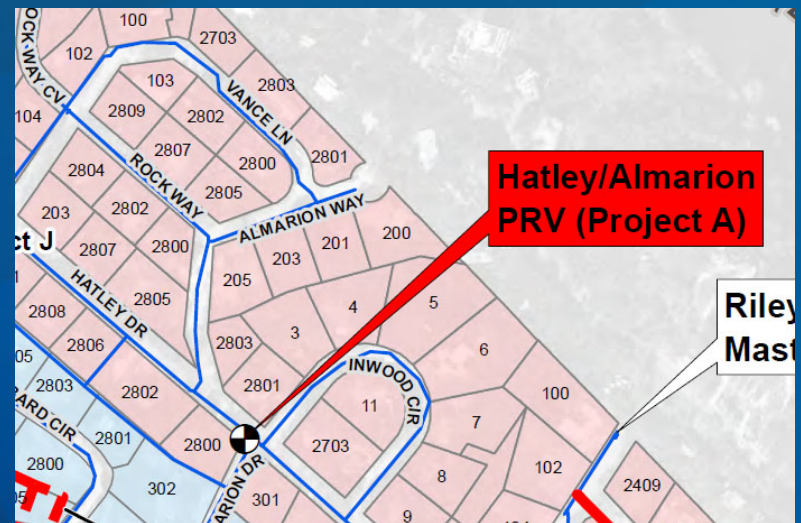
Previous total CIP cost estimate= \$6,224,000

CITY OF ROLLINGWOOD PROJECT LAYOUT



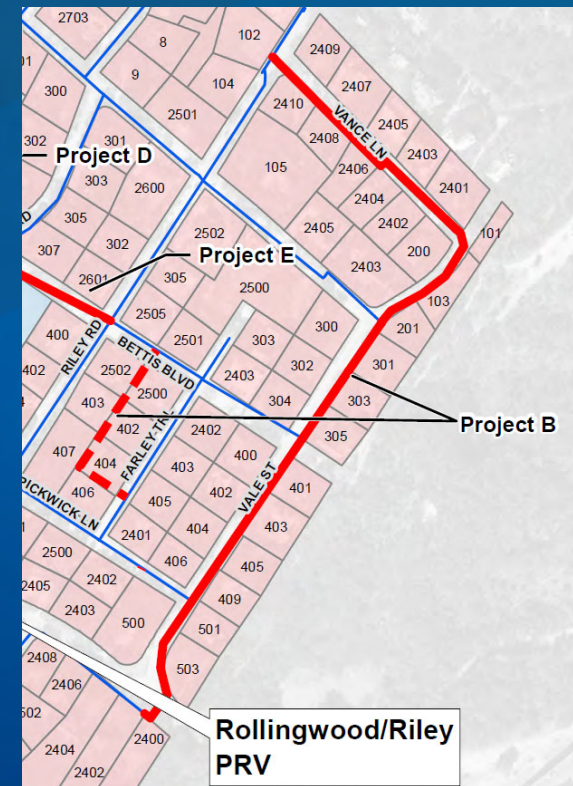
Project A – Hatley/Almarion PRV Replacement

- High priority
- Repair Hatley/Almarion PRV that has been out of service
- Adjust PRV settings to feed lower pressure plane from the higher pressure plane
- Increases pressures in lower zone based on citizen complaints



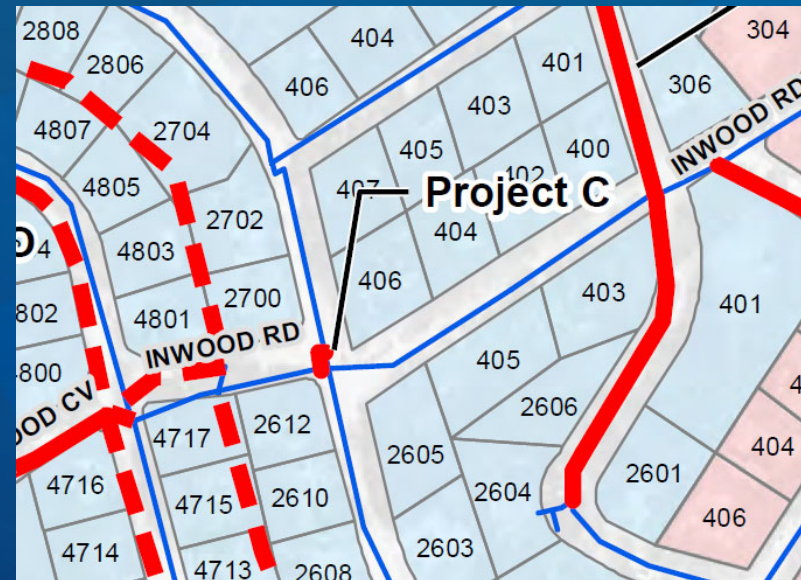
Project B – Vance & Vale Water Improvements

- High priority
- History of repeated main breaks on waterline that was not originally installed correctly:
 - Improper bedding
 - Insufficient cover (less than 4')
 - PVC material does not meet current industry standards for pressure rating
- Updates:
 - Increase scope for 6" Vale St replacement based on field investigation
 - Reduced scope of 2" abandonment



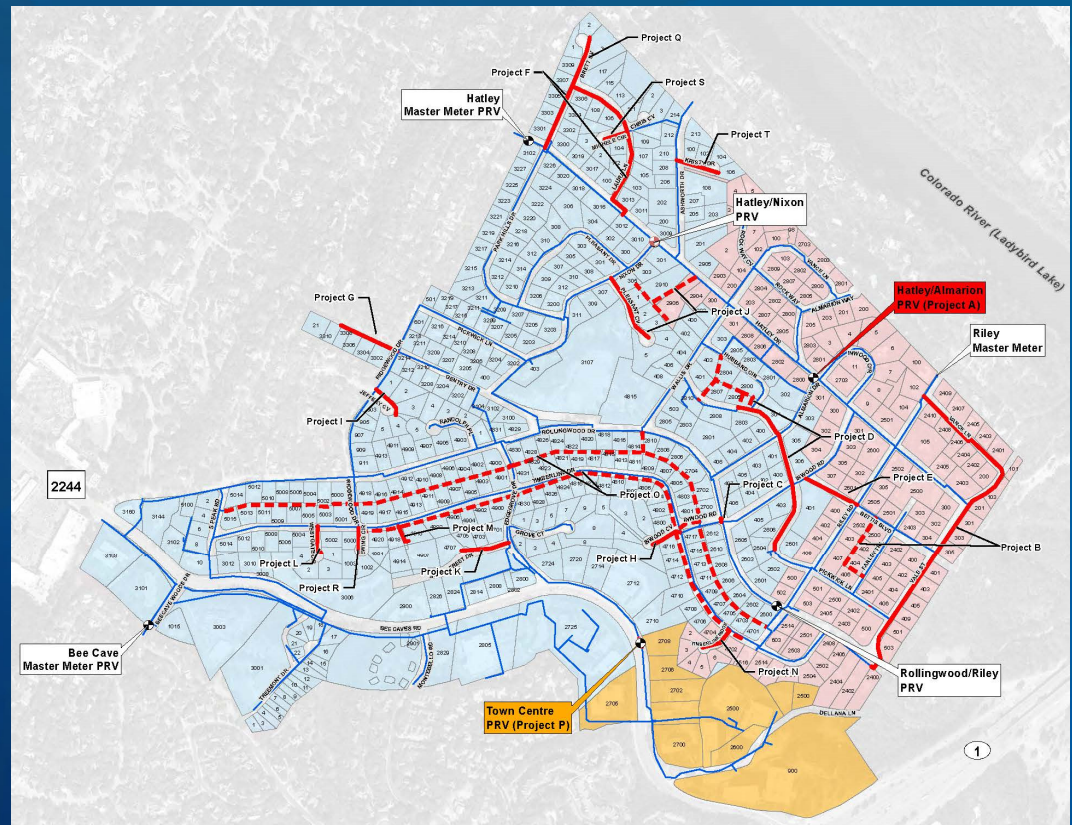
Project C – Inwood Cove Interconnect

- High priority
- Provides interconnected and better looped system
- Improves system pressures and increased available fire flows



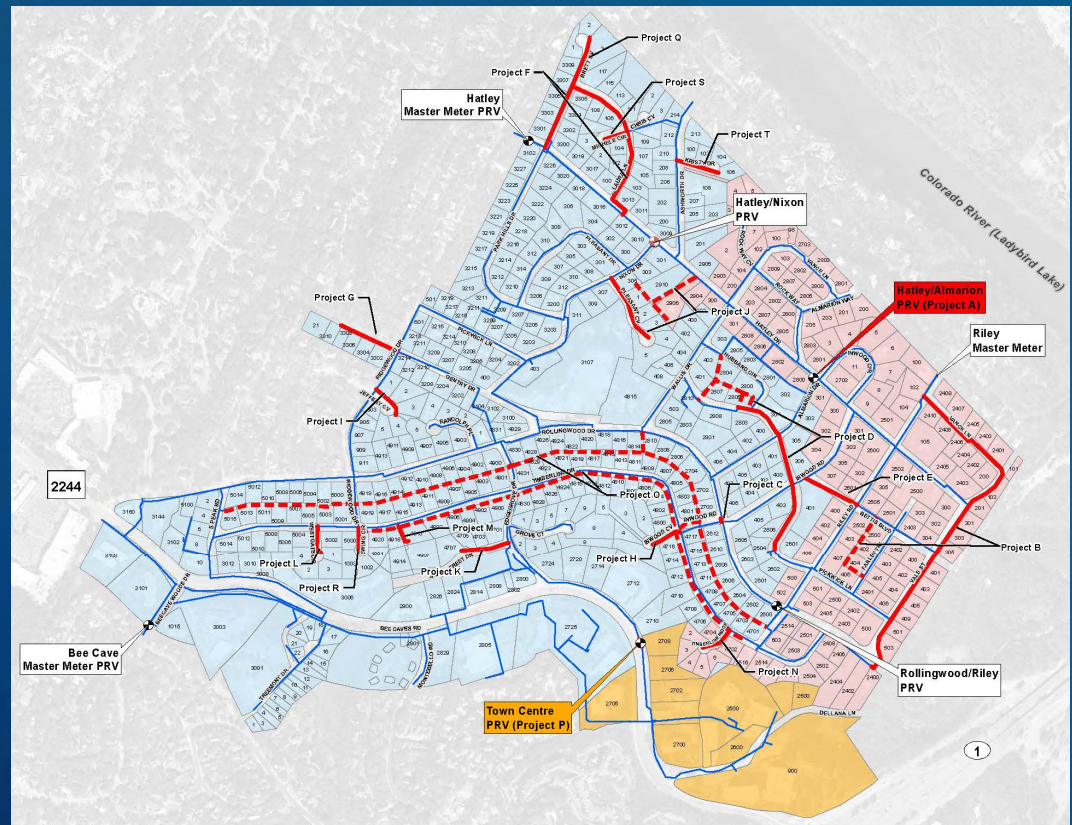
Projects D thru N – Fire Flow Improvements

- High priority
- Looping and upsizing of pipes throughout the City to improve fire flow in various areas
- Projects given high priority based on not having a fire hydrant with sufficient fire flow within 500-ft of each house



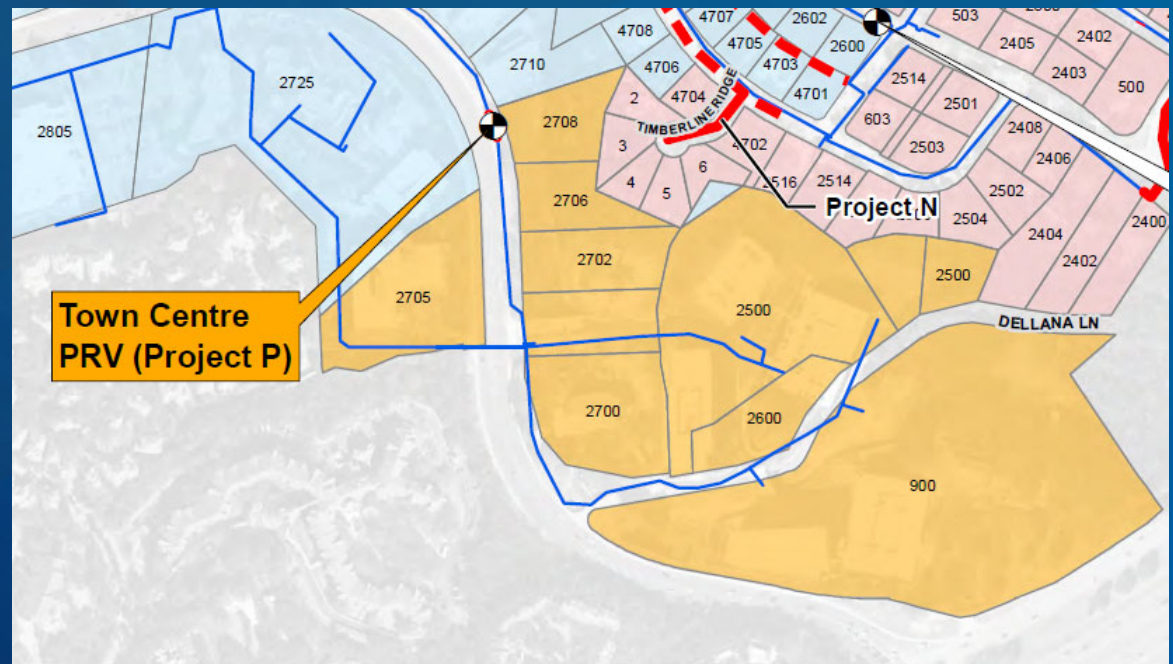
Project O – Abandonment Projects

- Low priority
- Abandon existing waterlines in backyard easements
- Abandon redundant 4-inch in Timberline Dr
- Costly to relocate meters/services to front yard



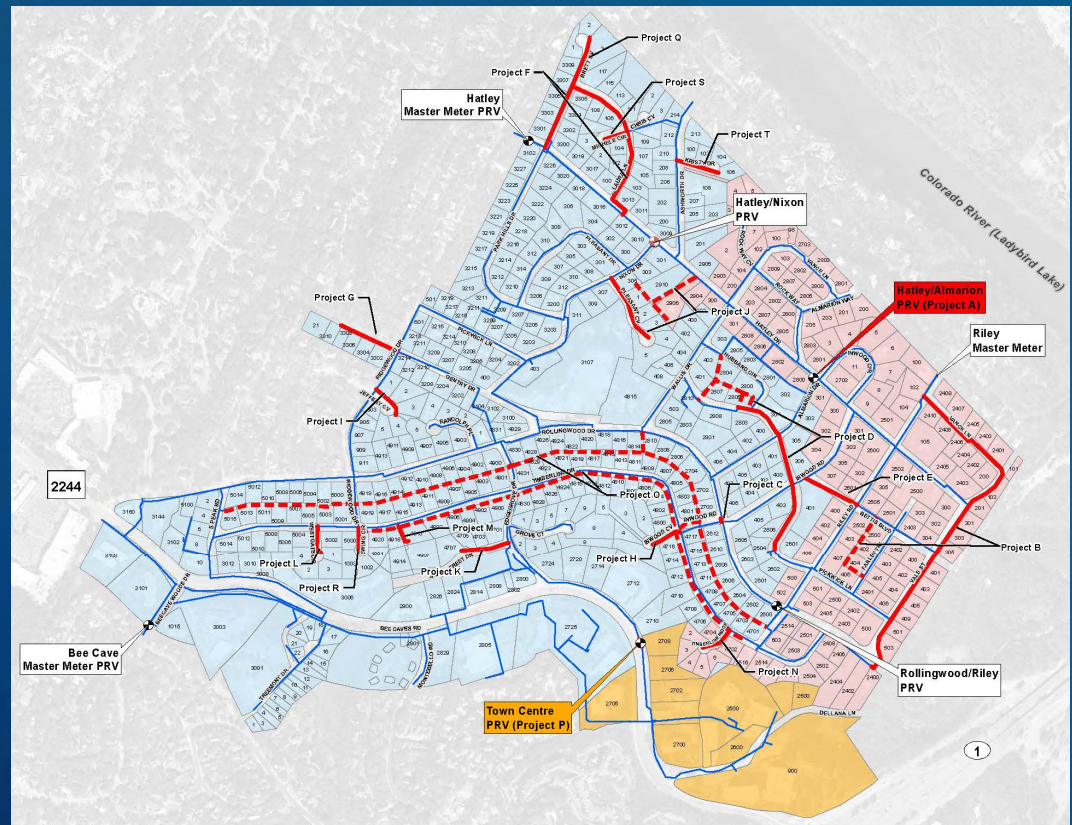
Project P – Town Centre PRV

- Low priority
- Install PRV to serve commercial properties along southeast Bee Caves
- Relieves high pressures
- Unknown if properties have individual PRVs



Projects Q thru T – Fire Flow Improvements

- Low priority
- Upsizing of small diameter pipes in cul-de-sacs to improve fire flow in various areas
- Projects given low priority as these are short waterlines in cul-de-sacs, but there is existing hydrants within 500-ft of each house



Summary

- Projects separated to allow City to package as needed based on available funding
- Total CIP cost estimate reduced from \$6,224,000 to \$5,316,000
- Continue to update water system mapping and field investigations

Questions?