



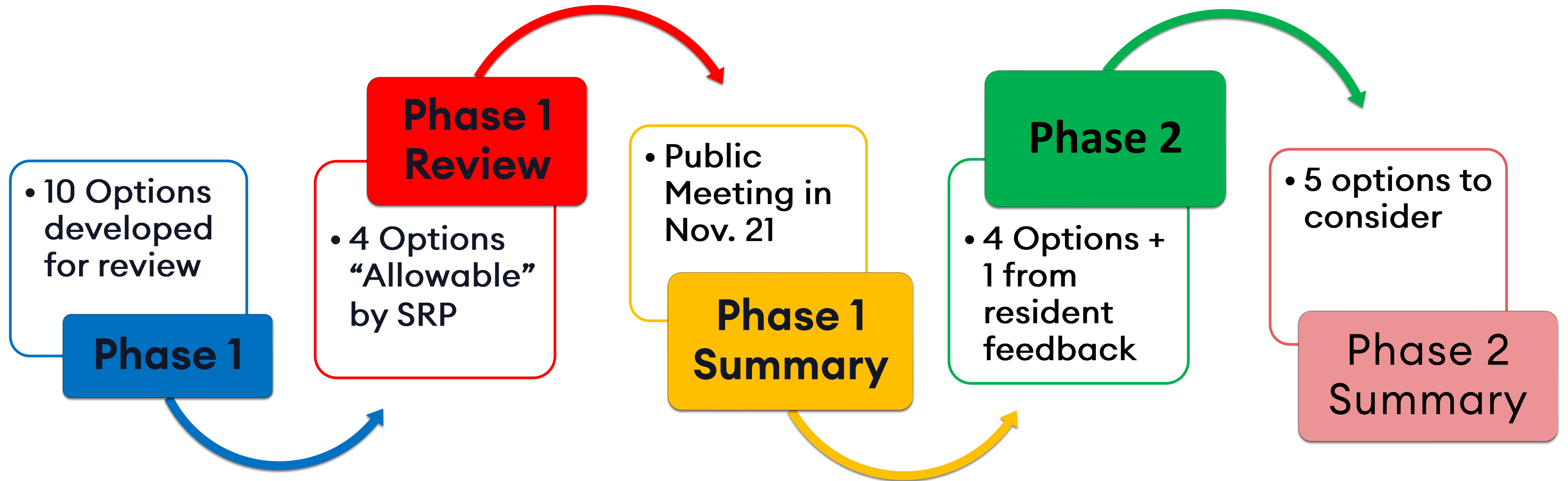
Shaping a new
tomorrow, today.

2022

Western Canal Corridor Analysis (WW1060, WW1246, WA1546)

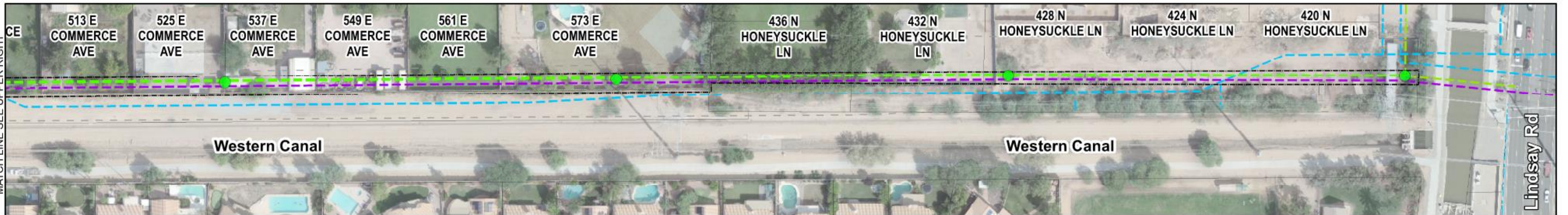
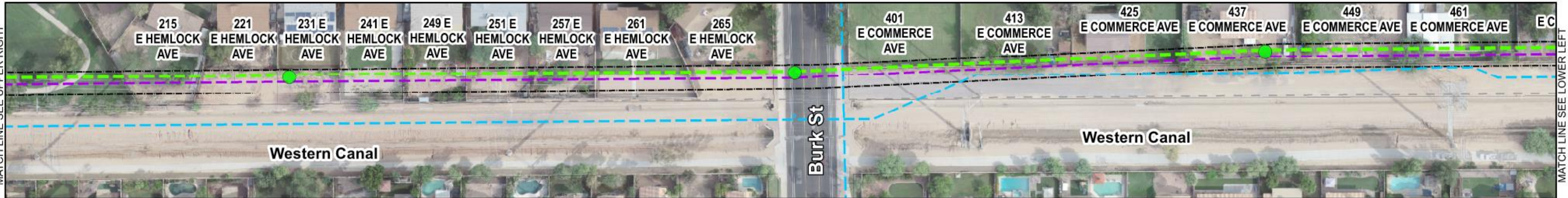
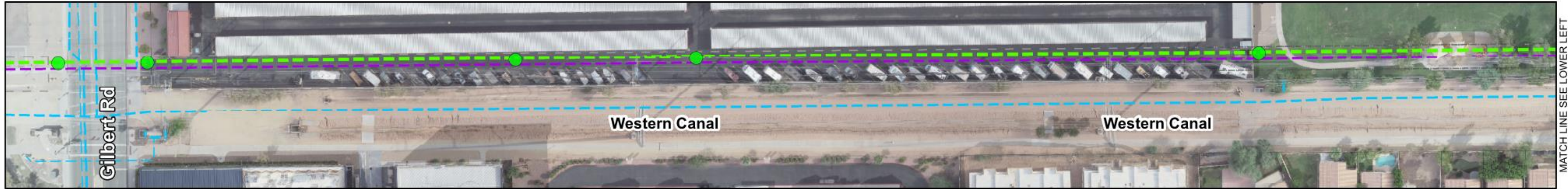
Corridor Analysis Summary







Corridor Analysis Summary



Agenda


- Western Canal Corridor
 - Town Utilities
 - SRP Utilities
- Corridor Options
- Cost Estimates
- Next Steps



Legend			
	Existing 24" Potable Water		TOG Sewer Easement
	Existing 36" Gravity Sewer		SRP Easement
	Existing 18" Reclaimed Water		Parcel Boundaries



Western Canal Corridor Analysis
Existing Facilities

 NORTH



215 E HEMLOCK AVE

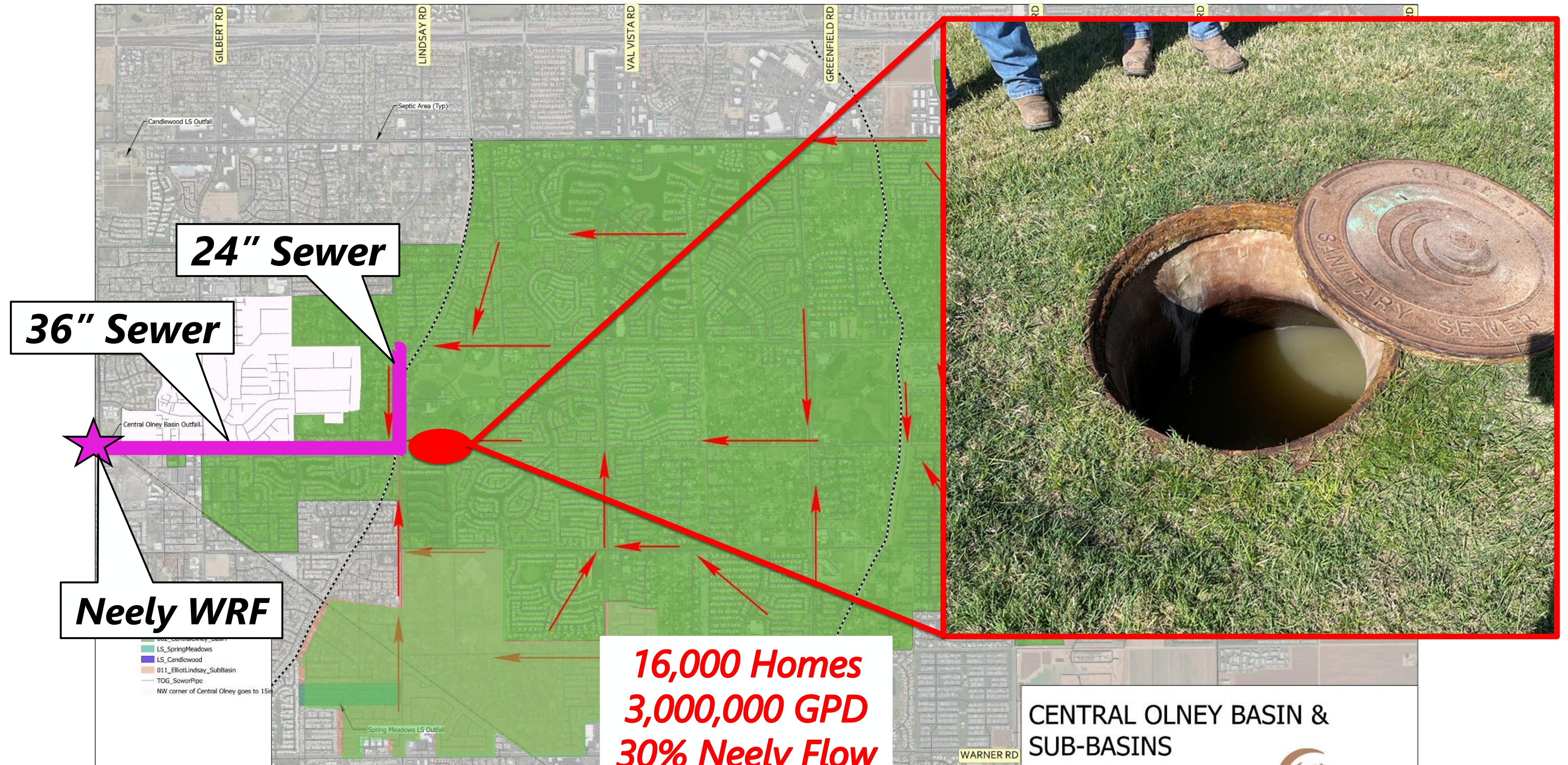
221 E HEMLOCK AVE

231 E HEMLOCK AVE

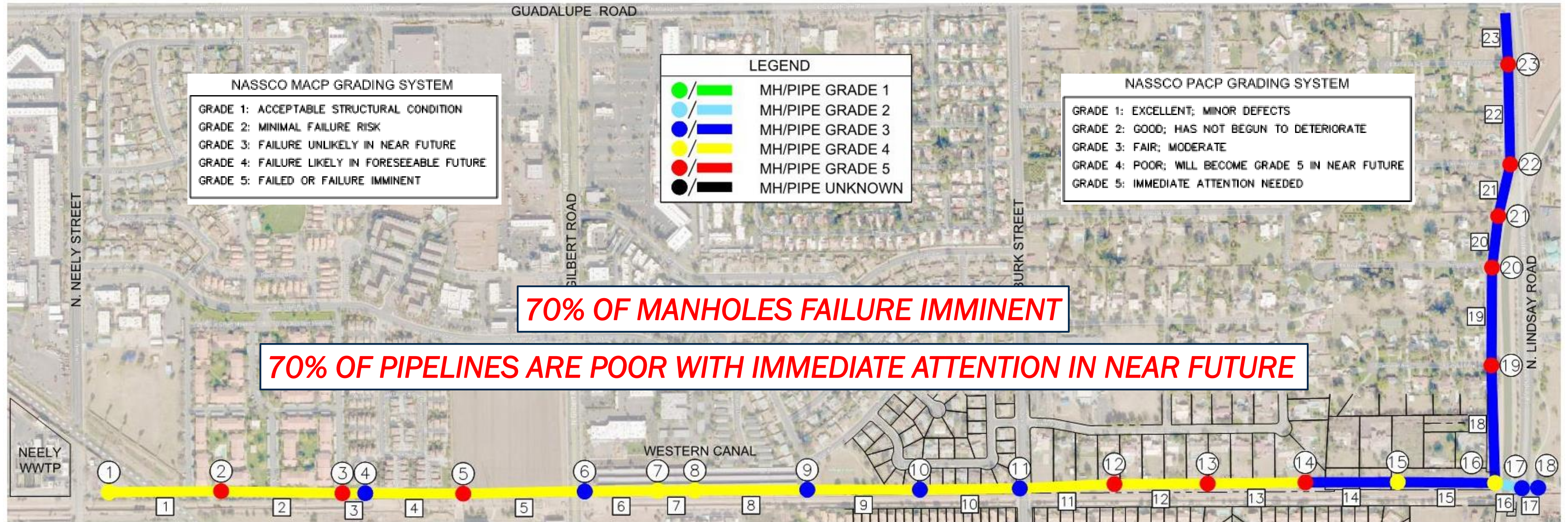
241 E HEMLOCK AVE

249 E HEMLOCK AVE

WW1060 - 36" Sewer



WW1060 - 36" Sewer Condition Assessment



WW1060 - 36" Sewer Rehabilitation Approach



Bypass



Spot Repair

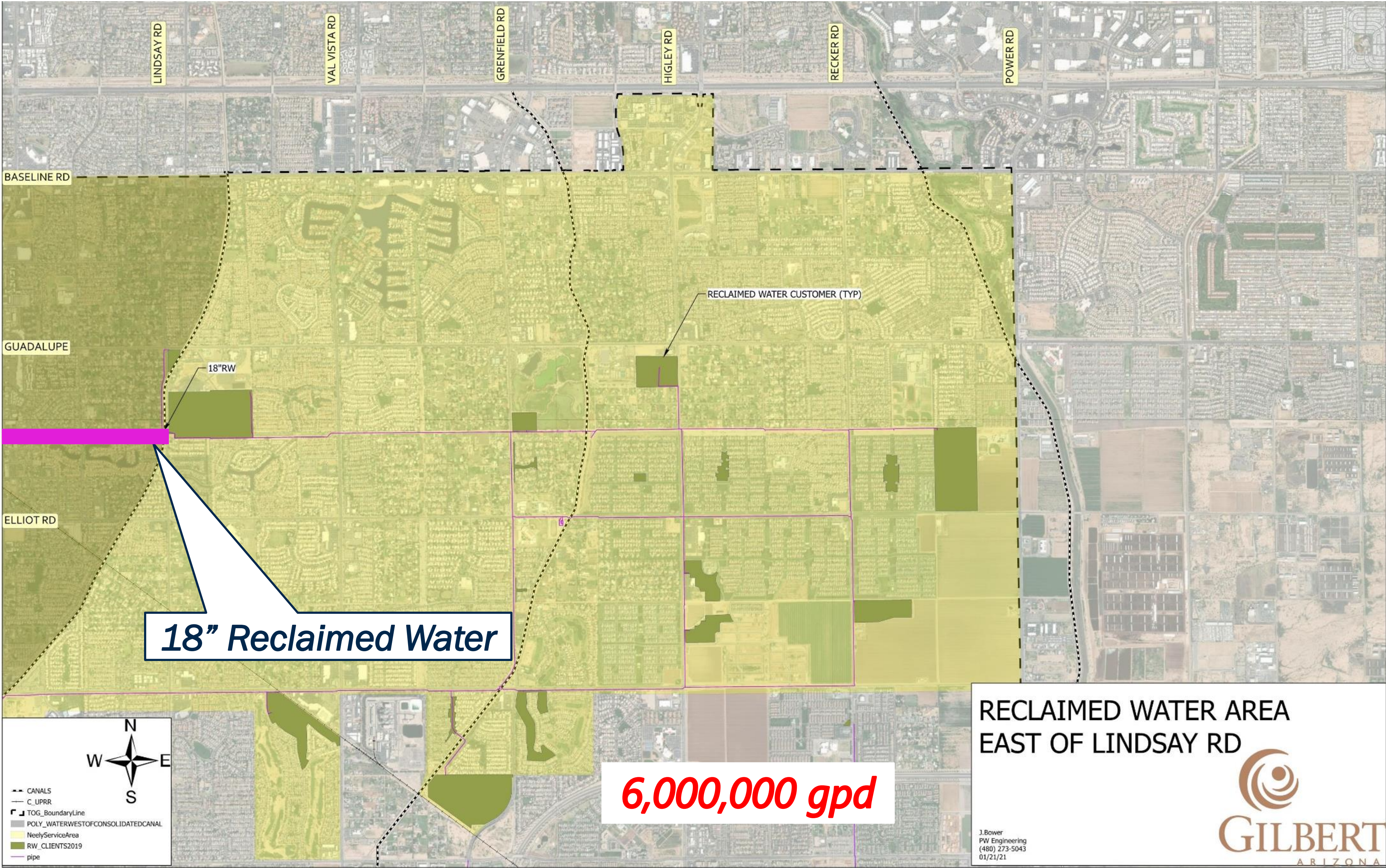


MH Rehab

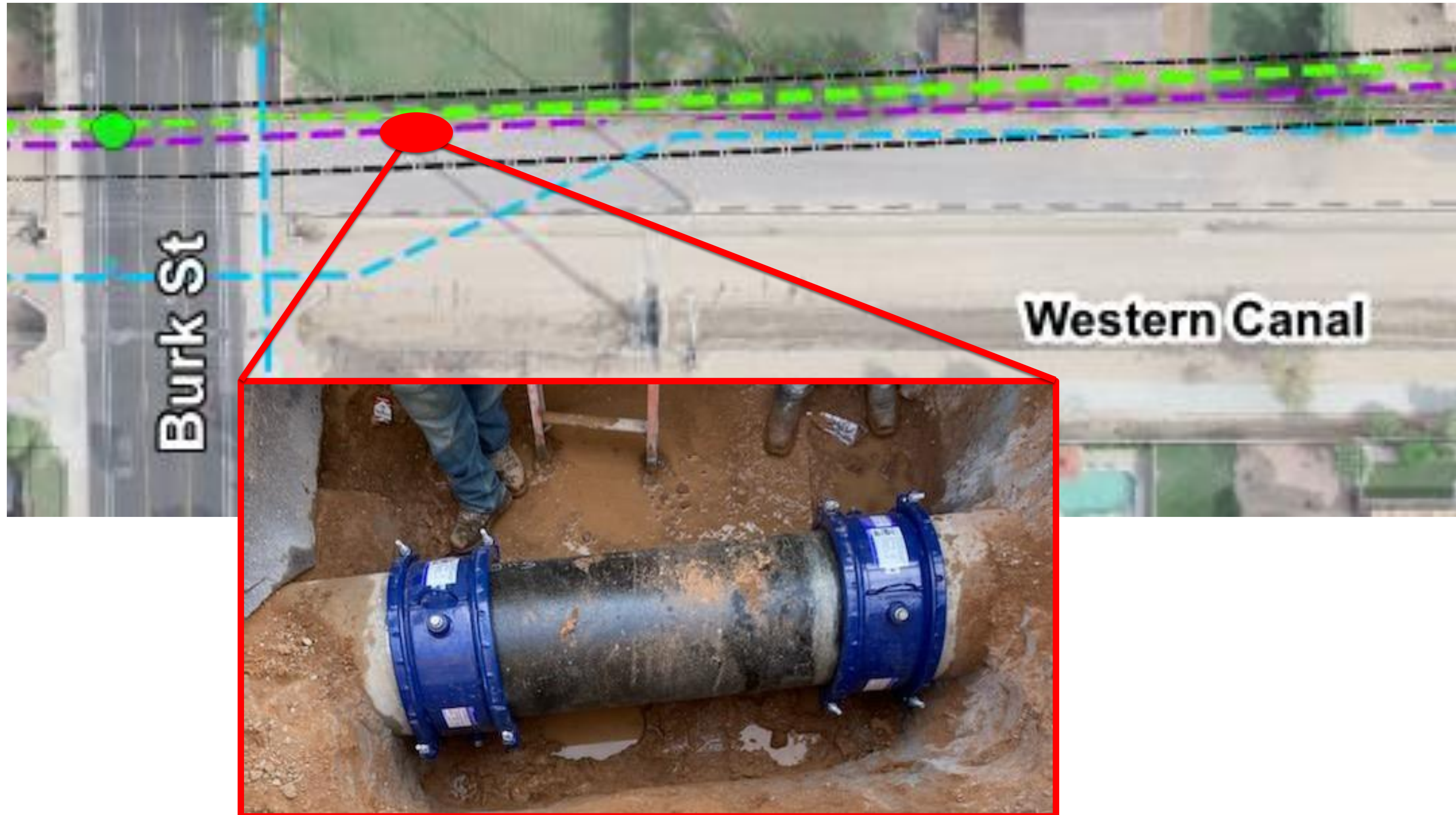


Cured-In-Place Pipe Lining (CIPP)

WW1246 – 18” Reclaimed Water



WW1246 – 18” RW Condition Assessment



WW1246 – 18” RW Condition Assessment



Testing Summary:

- Crush test results within parameters***
- Reassess different section in ~10 years***

WW1246 – 18” RW Condition Assessment

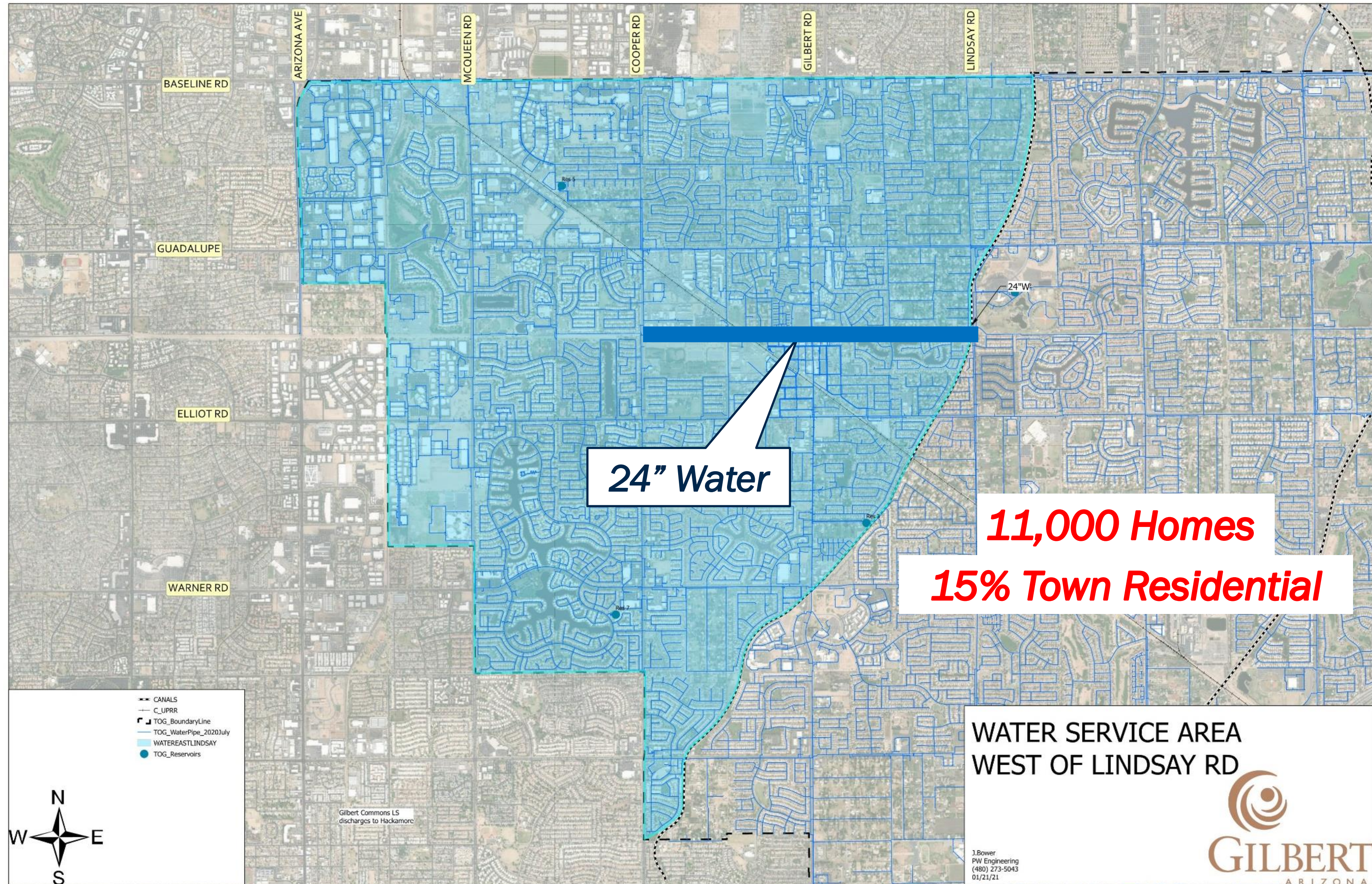


WW1246 – 18” RW Condition Assessment

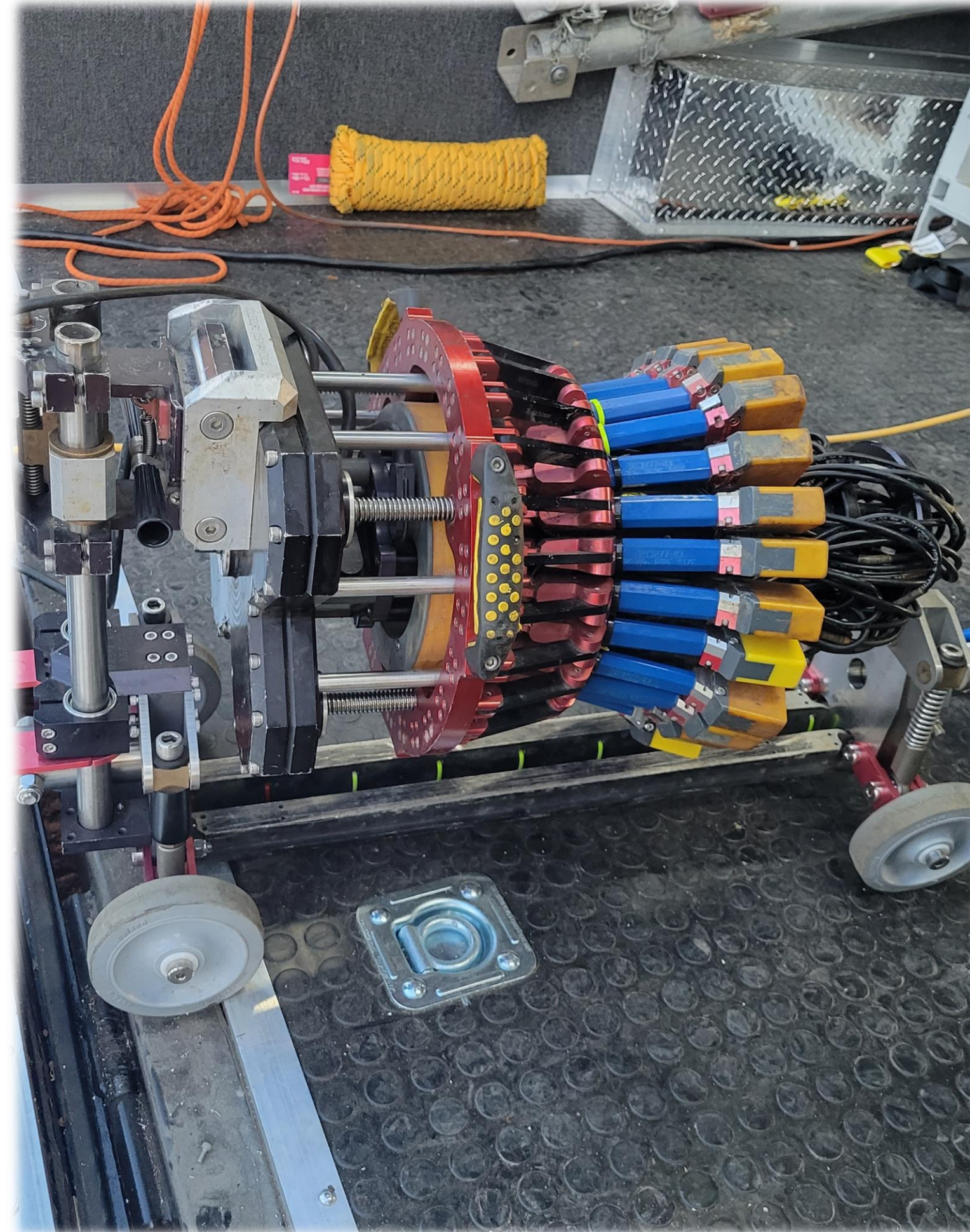
- Immediate Improvements
 - Isolation Valves
 - Drain Valves
 - Air Release/Vacuum Valves

- Future Rehabilitation Replacement
 - FY24 CIP Update

WA1546 – 24” Potable Water



WA1546 – 24” Potable Water Condition Assessment



WA1546 – 24” Potable Water Condition Assessment



WA1546 – 24” Potable Water Condition Assessment



Shaping a new tomorrow, today.

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WA1546 – 24” Potable Water Condition Assessment



Stakeholders

- ① Salt River Project
- ② Union Pacific Railroad
- ③ Private Property Owners
- ④ Higley Grove West HOA & Val Vista Meadows HOA

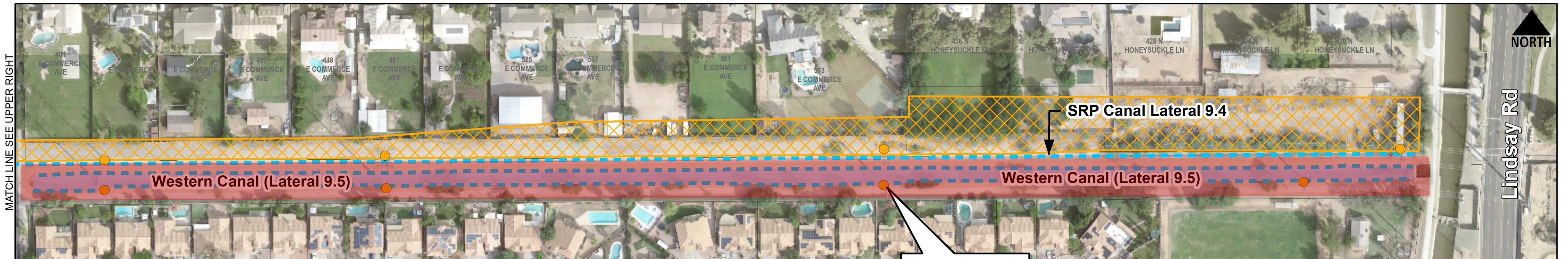
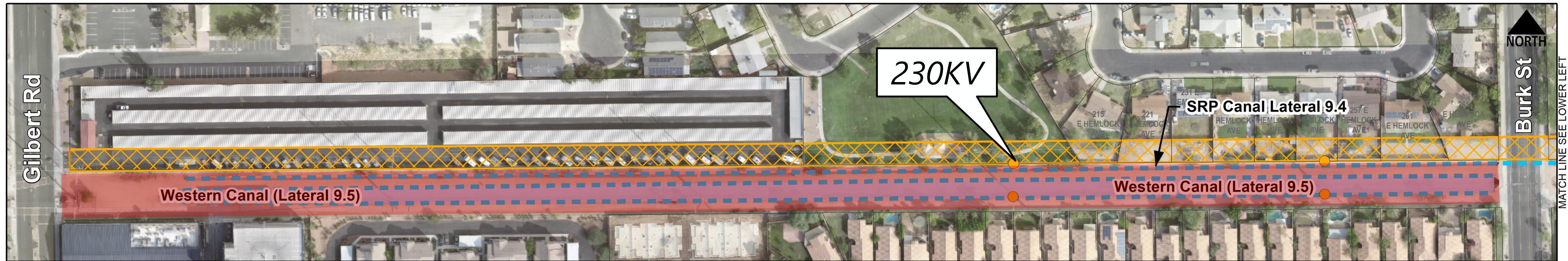
Electromagnetic / CCTV tool



LEGEND

- Zone 1 Transmission Main
- ◇ 24" Butterfly Valves to be Replaced
- ⬡ 36" Butterfly Valves to be Replaced
- 24" Shutdown 1 Construction/Inspection
- 36" Shutdown 2 Construction/Inspection

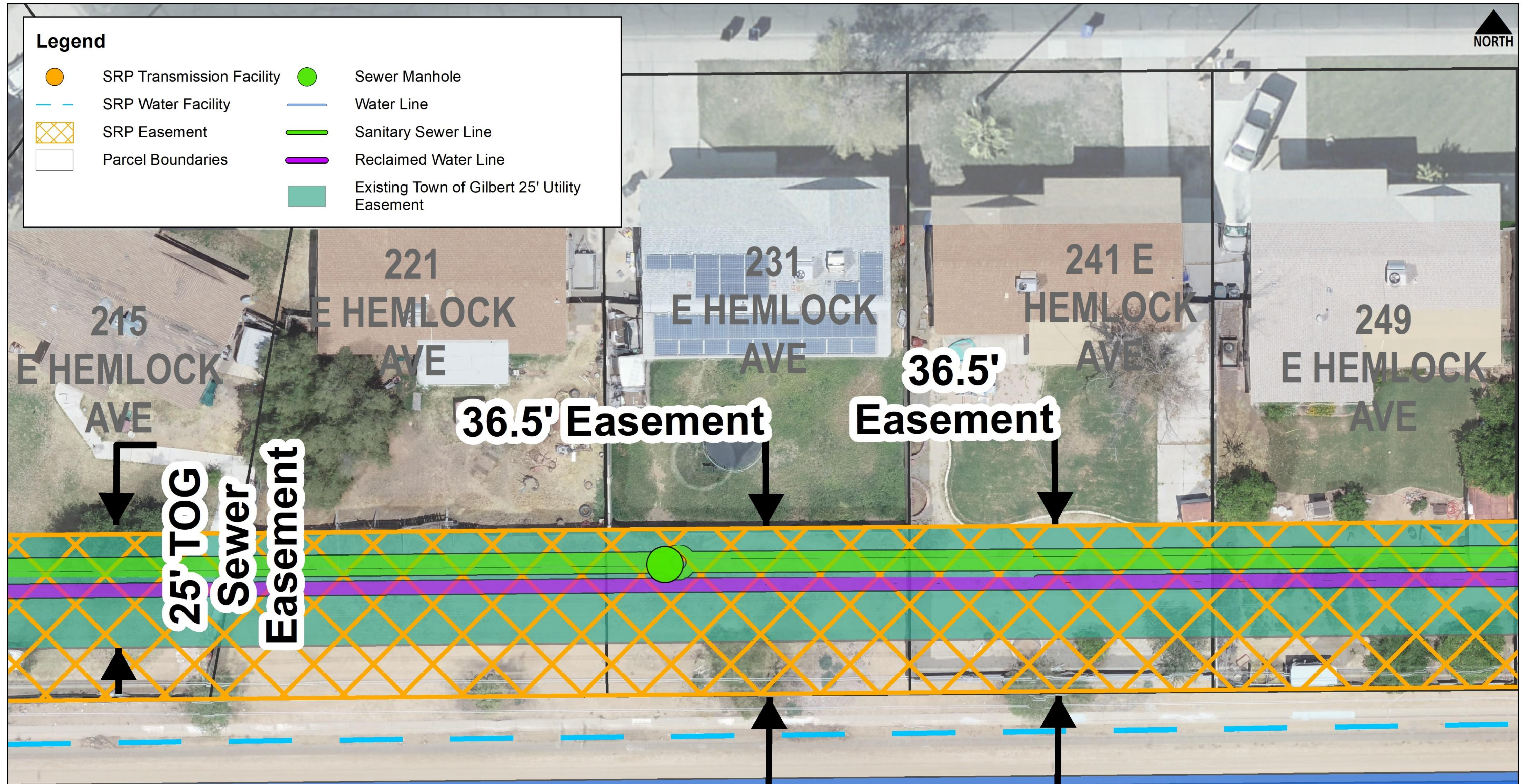
Western Canal Corridor – SRP Facilities



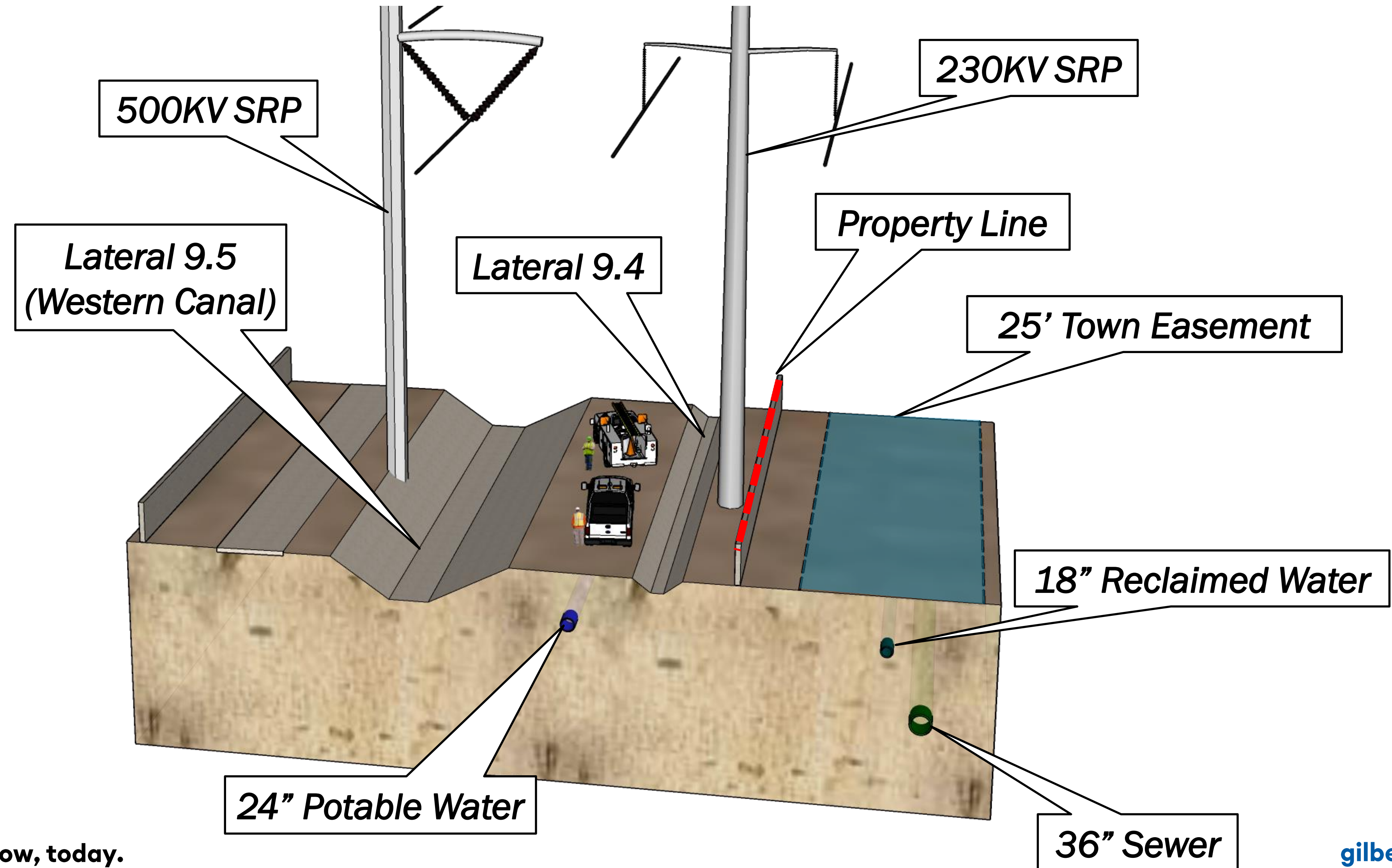
Legend

-  SRP Transmission Facility
-  SRP Water Facility
-  SRP Easement
-  Parcel Boundaries
-  Bureau of Reclamation Property

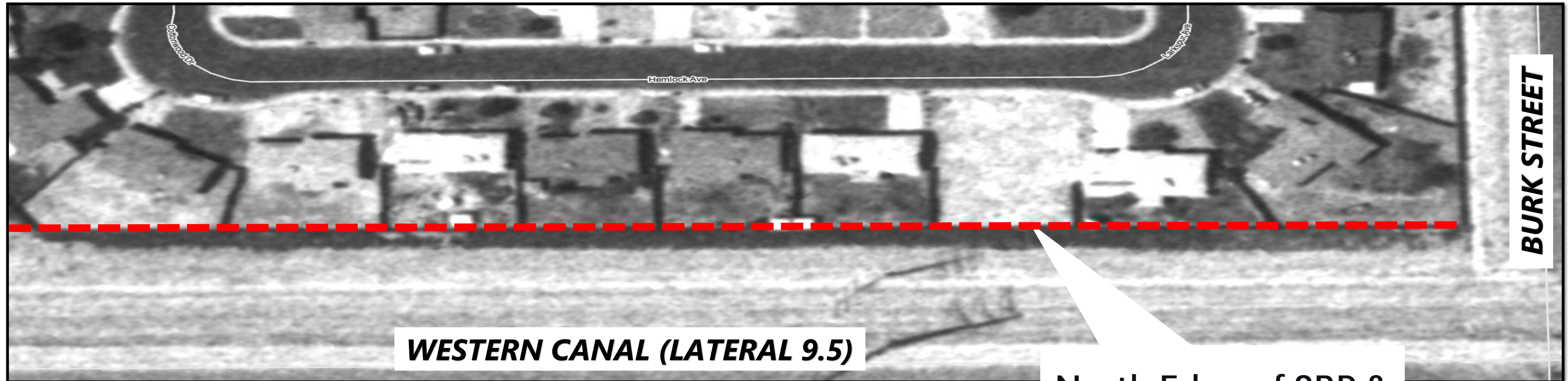
Western Canal Corridor – West of Burk



Western Canal Corridor – West of Burk Cross Section



Western Canal Corridor – West of Burk (1986 vs. 2016)



North Edge of SRP & Town Easement

Western Canal Corridor – West of Burk

GRANT OF EASEMENT

EASEMENT (LS)

DESCRIPTION OF THE PARTS TO BE ACQUIRED:

85 255632

Effective Date: March 12, 1985

County of: Maricopa
State of: Arizona

GRANTOR:

GRANTEE:
Town of Gilbert
119 North Gilbert Road
Gilbert, Arizona 85234

Subject Real Property:

Please refer to legal description on attached Exhibit "A" and plat sketch on attached Exhibit "B".

For Ten Dollars (\$10.00) and other good and valuable consideration, Grantor conveys to Grantee the right to install, repair, maintain, alter, and operate exclusive sanitary sewers and effluent water lines in, into, upon, over, across, and under the Subject Real Property, located in the Town of Gilbert, County of Maricopa, State of Arizona.

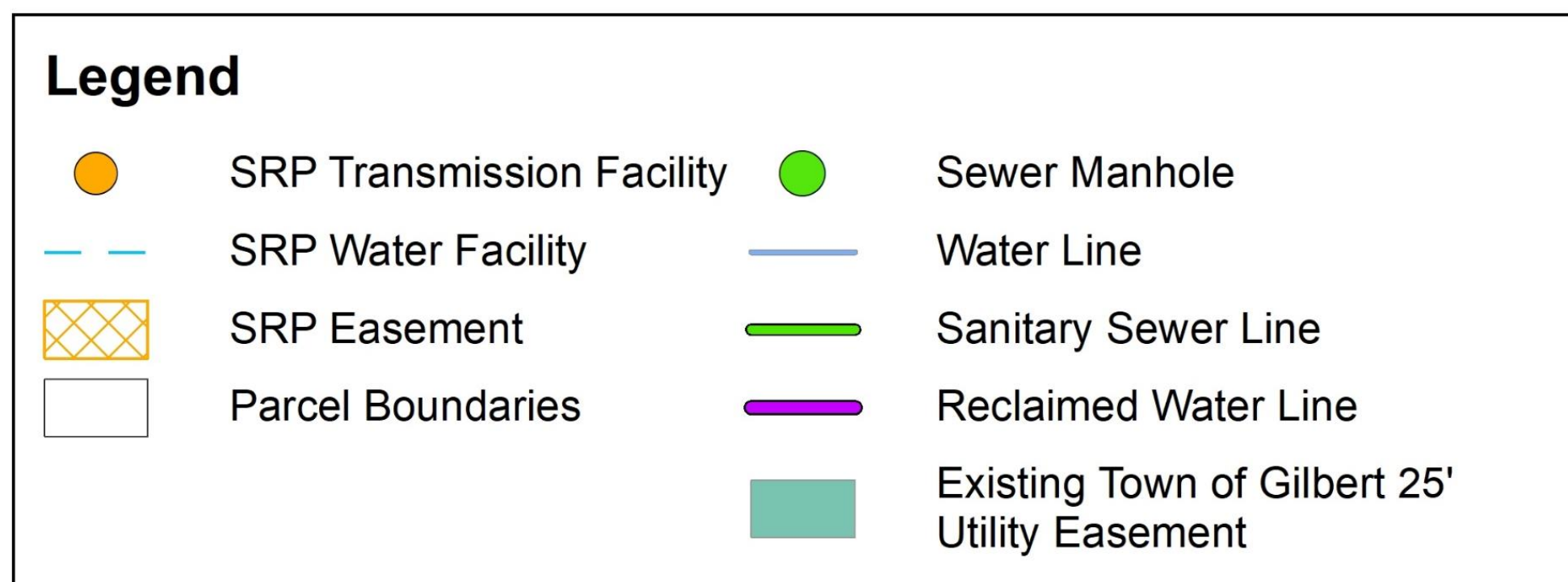
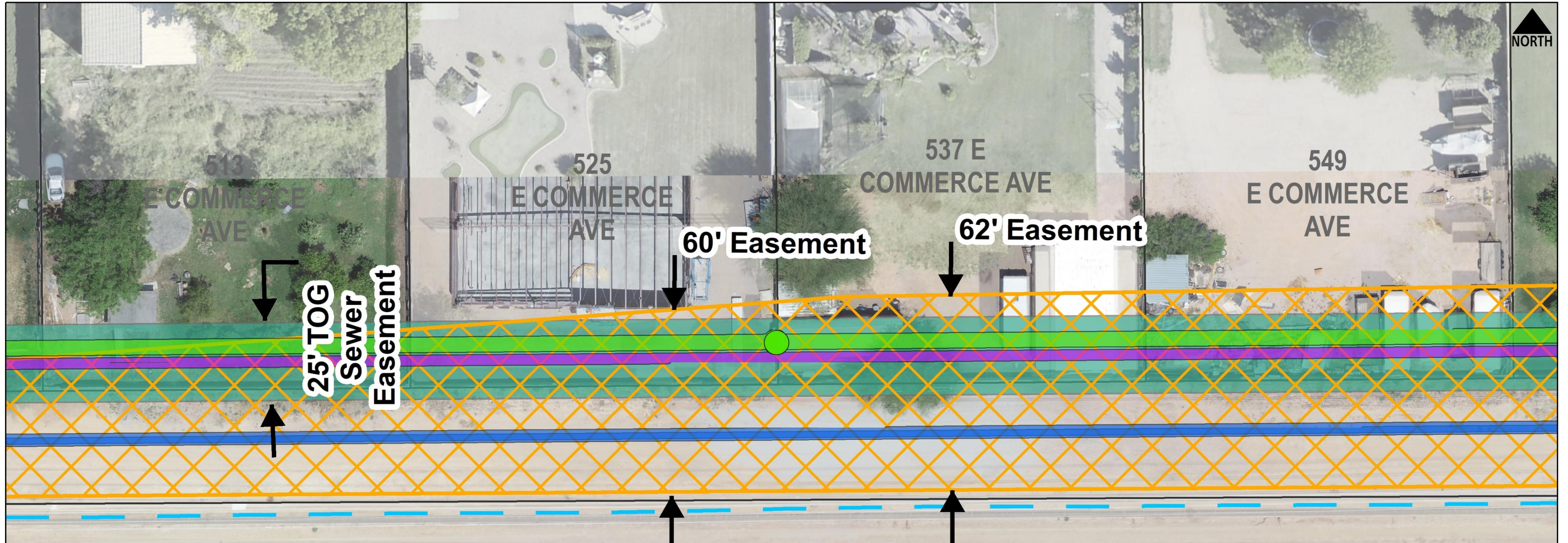
Permanent Utility Easement:

A permanent public utility easement 25 feet wide is to be located approximately 11.5 feet north of the south property line. The proposed take is under an existing S.R.P. power easement, which presently restricts the use of that portion of the site. Only marginal use is available for this portion of the property. The total take area required is 1,700 square feet.

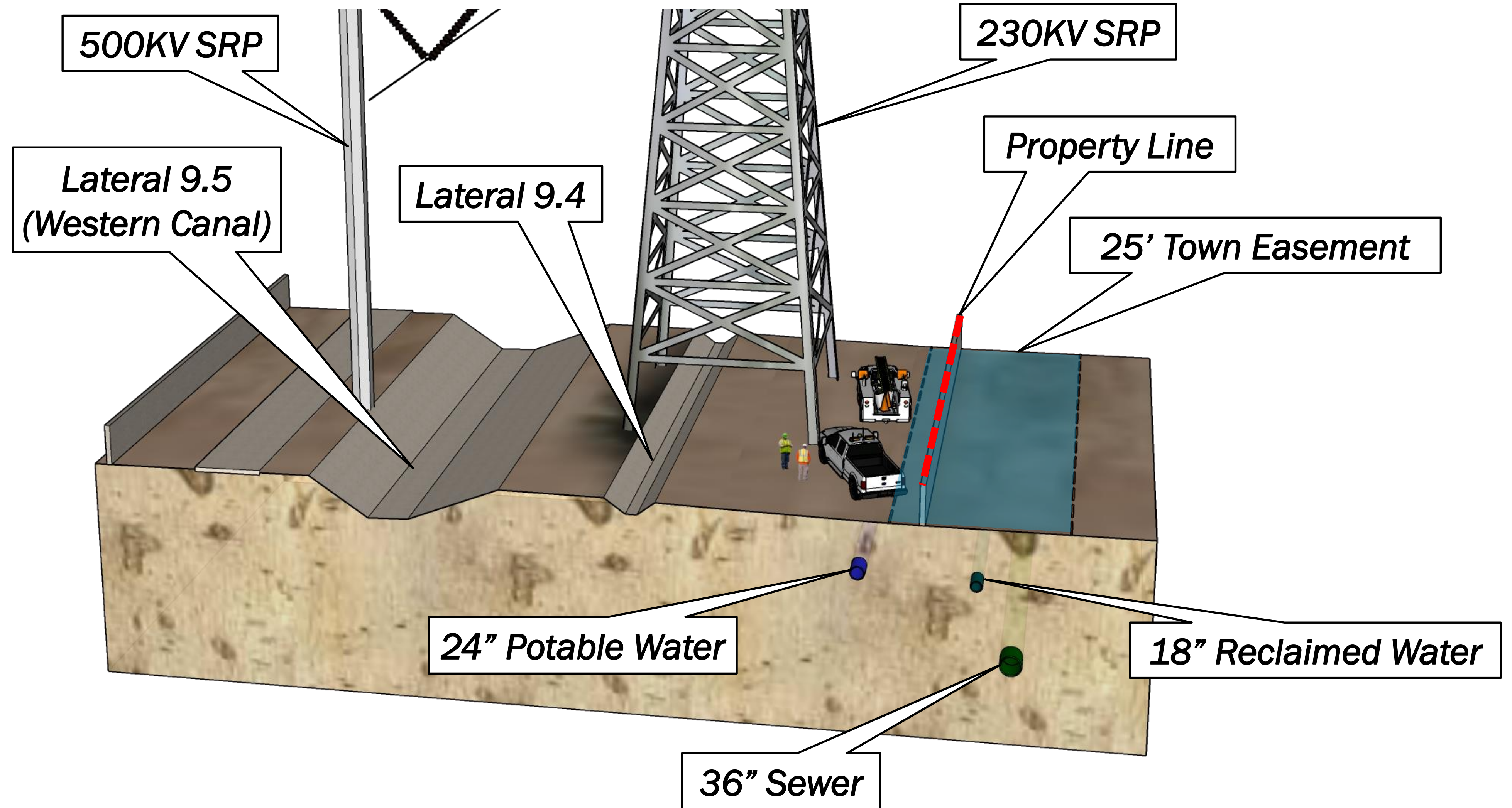
Temporary Construction Easement:

The proposed construction easement is to be located over the south 11.5 feet of the site. The power easement mentioned above also runs over this proposed easement. The total area required is 782 square feet.

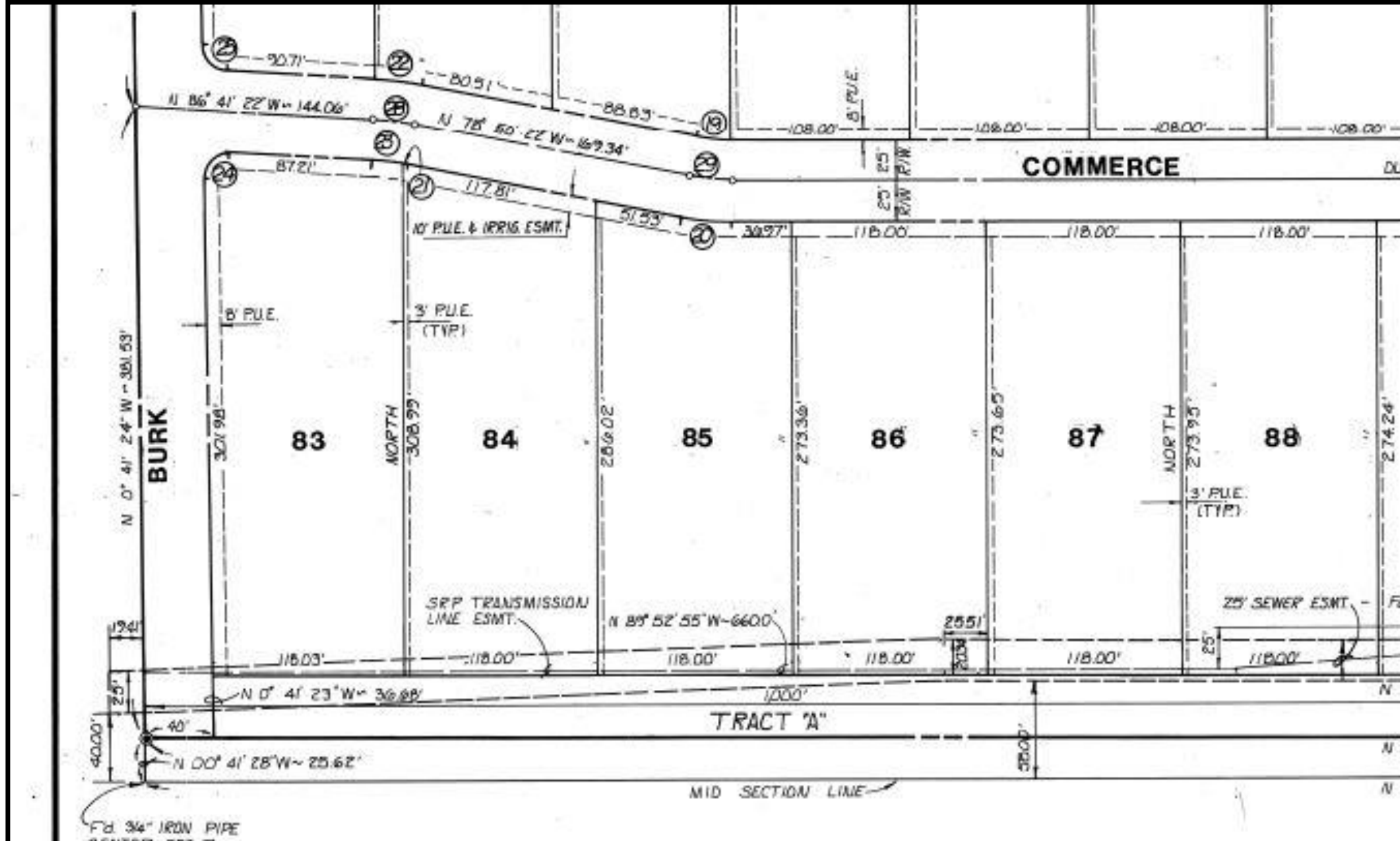
Western Canal Corridor – East of Burk



Western Canal Corridor – East of Burk Cross Section



Western Canal Corridor – East of Burk



GRANT OF EASEMENT

Effective Date: March 12, 1985

County of: Maricopa
State of: Arizona

GRANTOR:

GRANTEE:
Town of Gilbert
119 North Gilbert Road
Gilbert, Arizona 85234

Subject Real Property:

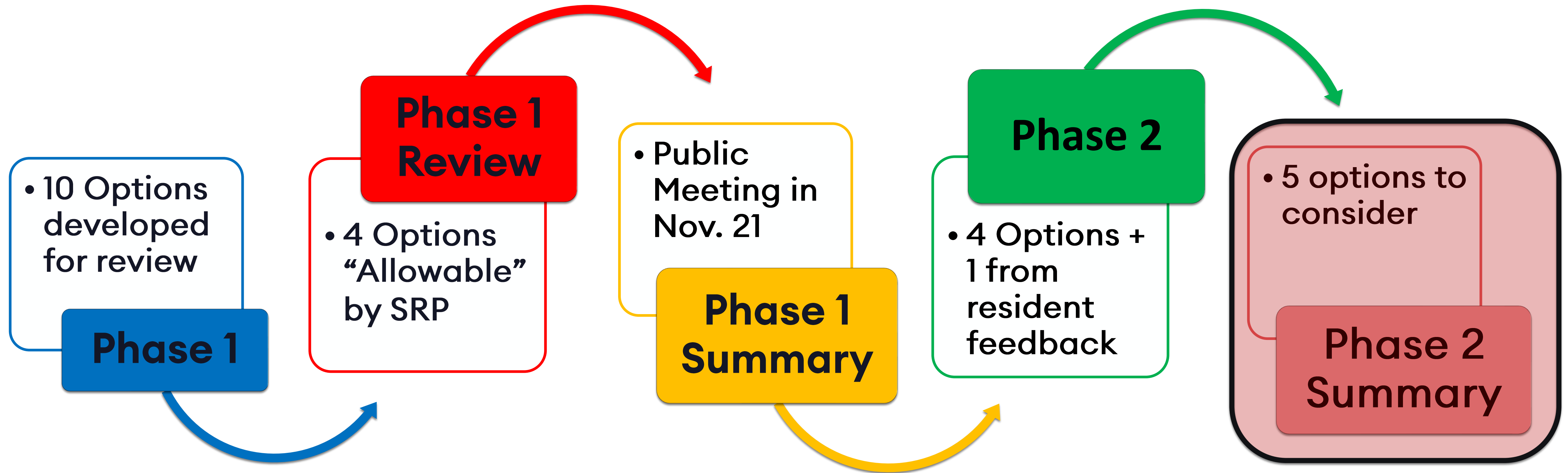
Please refer to legal description on attached Exhibit "A" and plat sketch on attached Exhibit "B".

For Ten Dollars (\$10.00) and other good and valuable consideration, Grantor conveys to Grantee the right to install, repair, maintain, alter, and operate exclusive sanitary sewers and effluent water lines in, into, upon, over, across, and under the Subject Real Property, located in the Town of Gilbert, County of Maricopa, State of Arizona.

GENERAL NOTES

CONSTRUCTION WITHIN EASEMENTS EXCEPT BY PUBLIC AGENCIES AND UTILITY COMPANIES SHALL BE LIMITED TO UTILITIES, AND WOOD, WIRE, OR REMOVEABLE SECTION FENCING.

Corridor Analysis Summary



Options Analysis Overview

Option 1

Acquire Easement in Fee

Option 2

Utility Corridor Alley

Option 3

Minimal Acquisition at Manholes

Option 4

Gates to Manhole Properties

Option 5

Gates to Manhole Properties + Relocate Reclaimed Water

OPTION 1



Acquire Easement
in Fee

OPTION 2



Utility Corridor
Alley

OPTION 3



Minimal Acquisition
at Manholes

OPTION 4



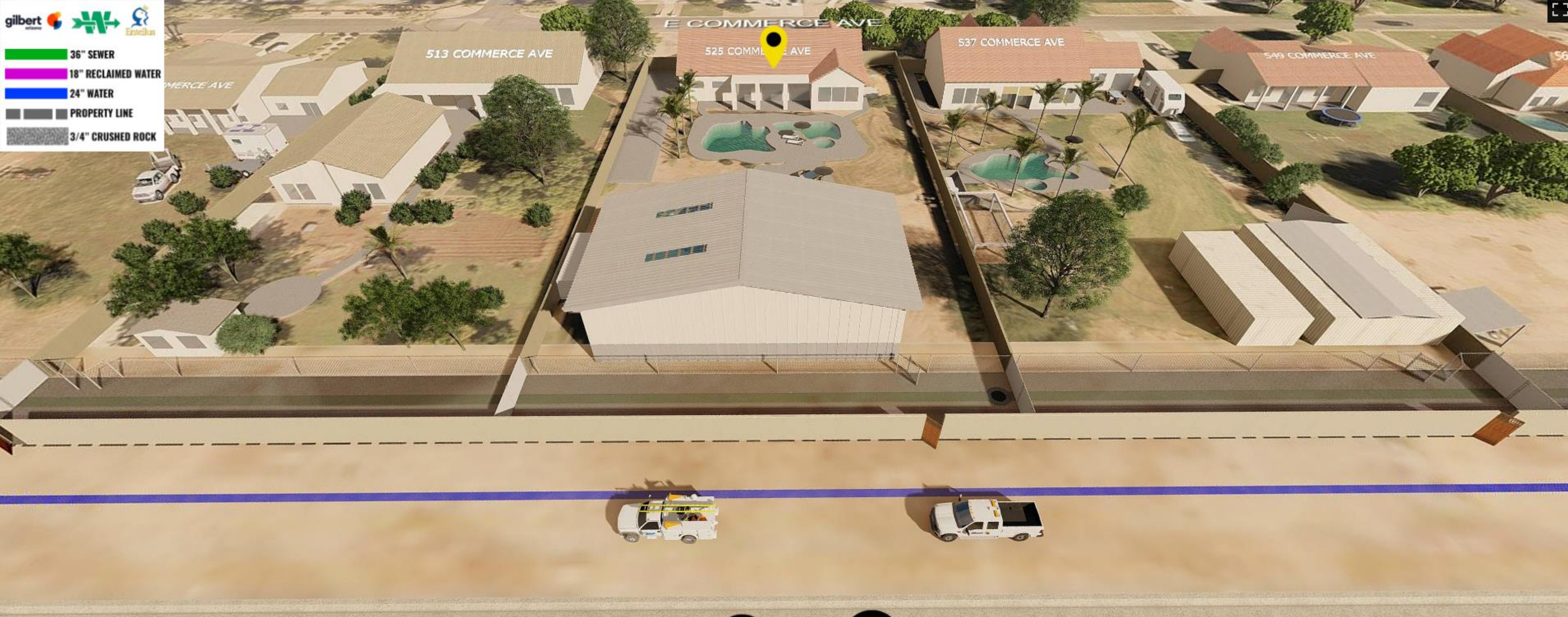
Gates to Manhole
Properties

OPTION 5



Gates to Manhole Properties +
Reclaimed Water Relocated

- 36" SEWER
- 18" RECLAIMED WATER
- 24" WATER
- PROPERTY LINE
- 3/4" CRUSHED ROCK



Scope of Work



Click to return to overview

OPTION 2

Utility Corridor Alley

Chainlink Fence



-  36" SEWER
-  18" RECLAIMED WATER
-  24" WATER
-  PROPERTY LINE
-  3/4" CRUSHED ROCK




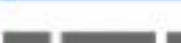

Scope of Work



Click to return to overview

OPTION 2
Utility Corridor Alley
Chainlink Fence



-  36" SEWER
-  18" RECLAIMED WATER
-  24" WATER
-  PROPERTY LINE
-  3/4" CRUSHED ROCK



CLICK THE OPTION BELOW TO VIEW THE CONSTRUCTION SEQUENCE FOR IT



OPTION 1
Acquire Easement in Fee



OPTION 2
Utility Corridor Alley



OPTION 3
Minimal Acquisition at Manholes




OPTION 4 & 5
Gates to Manhole Properties



Click to return to overview



-  36" SEWER
-  18" RECLAIMED WATER
-  24" WATER
-  PROPERTY LINE
-  3/4" CRUSHED ROCK



 Click to return to Options Selection Screen

 Sequence 2 Details

 Click to return to overview

OPTION 1
Acquire Easement in Fee



- 36" SEWER
- 18" RECLAIMED WATER
- 24" WATER
- PROPERTY LINE
- 3/4" CRUSHED ROCK

OPTION 1 – Sequence 2

Sewer Bypass:
The sewer bypass pipelines are installed and placed south of the temporary construction fence.

Sewer Cleaning and Inspection:
The existing 36" sewer line is cleaned to remove sediment and debris prior to rehabilitation work. The line is then video inspected to ensure it is clean and ready for CIPP liner installation.

Manhole Rehabilitation:
The existing manhole is rehabilitated by an insert within the existing manhole and a new frame and cover is installed.

CIPP Rehabilitation:
Following manhole rehabilitation, the CIPP liner is inserted through the existing manhole and into the existing 36" sewer. The liner is conveyed in rollers from a large refrigerator truck and inverted down into the manhole and into the existing pipe. The CIPP liner is then cured by heat using the adjacent boiler truck.



Click to return to
Options Selection Screen



Sequence 2
Details



Click to return
to overview

OPTION 1
Acquire Easement in Fee



Options Cost Estimates

Option	Utility Improvements	Parcel & Site Improvements	Land Acquisition	Total
1	\$16,303,000	\$1,718,000	\$2,463,000	\$20,484,000
2	\$16,303,000	\$2,133,000	\$54,000	\$18,490,000
3	\$16,178,000	\$449,000	\$289,000	\$16,916,000
4	\$16,050,000	\$250,000	\$9,000	\$16,309,000
5	\$21,290,000	\$250,000	\$9,000	\$21,549,000

Note: Cost estimates reflect construction and land acquisition costs. Estimates are based on preliminary plans and will be refined as design progresses and refined cost models are prepared by CMAR.

Options Cost Escalation

Option	Engineer's Estimate (2021)	Contractor's Estimate (2022)	Cost Δ (2021 vs. 2022)
1	\$16,880,000	\$20,484,000	22%
2	\$14,860,000	\$18,490,000	25%
3	\$12,800,000	\$16,916,000	32%
4	\$12,480,000	\$16,309,000	31%
5	N/A	\$21,549,000	N/A

Note: Cost estimates reflect construction and land acquisition costs. Estimates are based on preliminary plans and will be refined as design progresses and refined cost models are prepared by CMAR.

Next Steps

- Project Website
 - www.gilbertaz.gov/cip
 - Review Presentation
 - Review Videos
 - Review Options Viewer
 - Provide Feedback

[Departments](#) » [Public Works](#) » [Engineering Services](#) » [Capital Improvement Projects](#) »

WW1060 Western Canal Corridor Analysis

Font Size:   [+ Share & Bookmark](#)  [Feedback](#)  [Print](#)

Corridor Analysis Summary:

On June 28, the results of the Western Canal Corridor Analysis were shared with Town Council during a Study Session. [Click here](#) if you'd like to view the video of the Council Study Session. The information presented during that Study Session is made available here.

- [Council Study Session PowerPoint presentation \(coming soon\)](#)
- [Video Reviewing 5 Options Being Considered](#)
- [Interactive Options Viewer](#)

How You Can Participate: We welcome your comments related to five options currently being considered. To provide your comments, [click here](#).

Project Hotline: 480.898.4090

Project Background

+

Phase 1 Corridor Analysis Summary

+

Next Steps

- Select Option
Tentative 8/9 Council Meeting
- Develop A/E, CM@R, PM/CM Scope
- Proceed with detailed design
- Proceed with land acquisition/easement process
- Contingency/FY24 CIP Update

Moving Forward



Shaping a new
tomorrow, today.

Questions