



## **FIRST AMENDMENT TO GROUND LEASE AND WELL RELOCATION AGREEMENTS FOR A TOTAL PROJECT COST OF \$5,381,653**

**Riverside Public Utilities**

Board of Public Utilities  
September 9, 2019

RiversideCA.gov

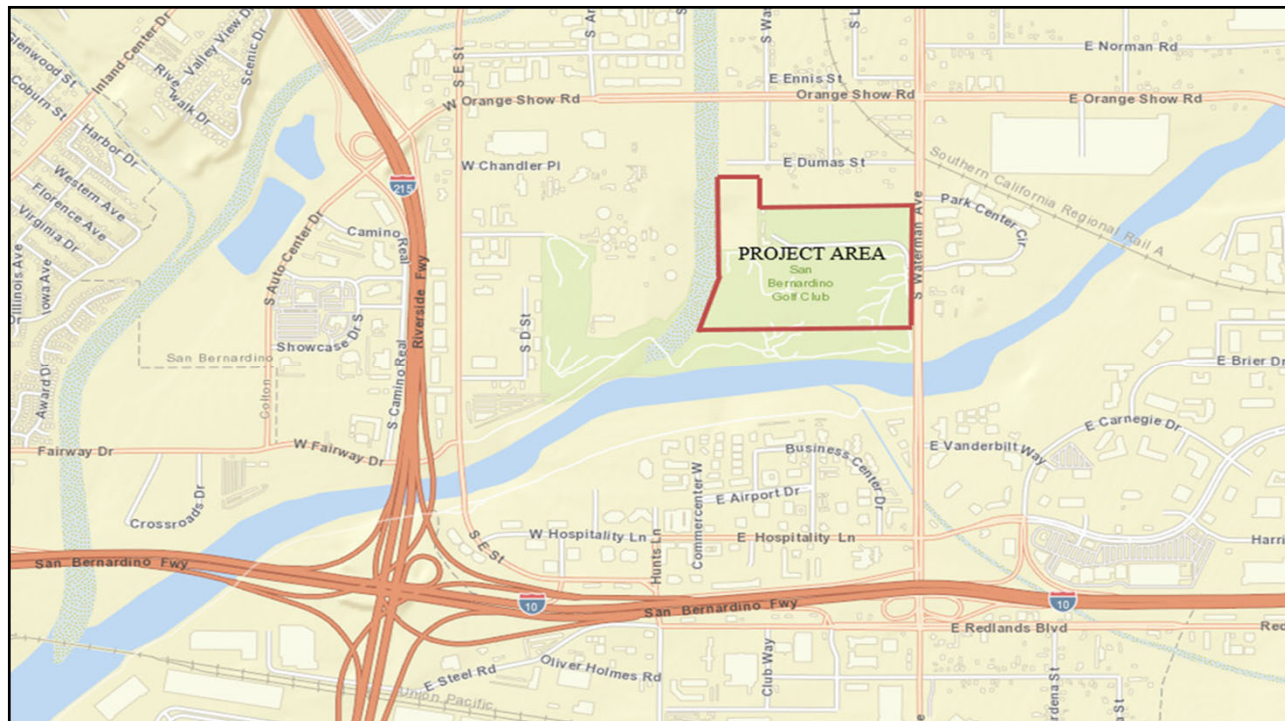
## **BACKGROUND**

1. Ground Lease and Well Relocation Agreements
  - a. Hillwood developers
  - b. 55 years
  - c. Former San Bernardino Golf Course
2. Approved March 7, 2017



2

RiversideCA.gov



## BACKGROUND (con't)

3. Well Relocation Agreement
  - a. Warren 4
  - b. \$4.1 M (includes contingency)
  - c. Rent Credits
  - d. RPU pays directly for Additional Work



## DISCUSSION

1. First relocation site unsuitable
  1. Hot water
  2. Undesirable minerals
  3. Infeasible to treat
2. Second relocation successful



5

RiversideCA.gov



## DISCUSSION (con't)

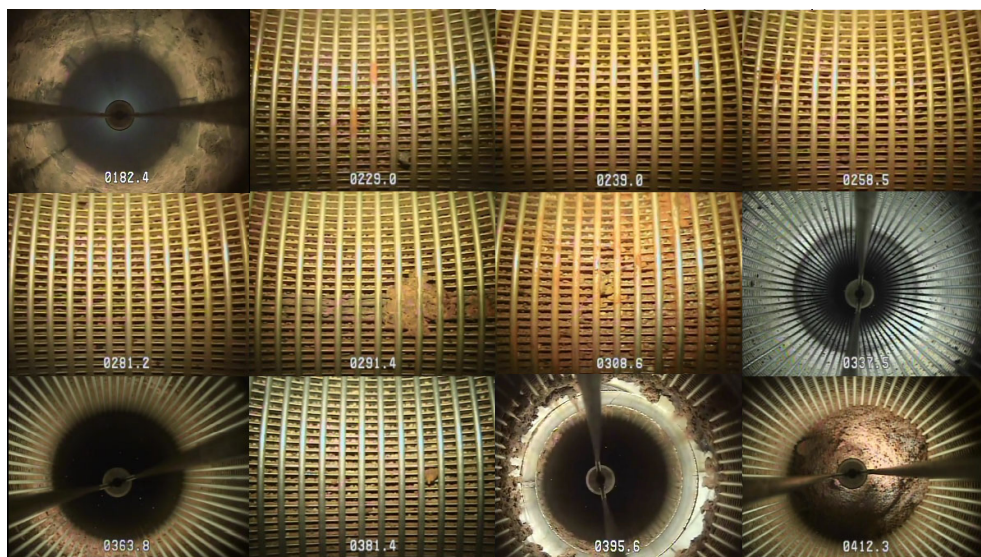
3. Cost increases (\$1.28M)
  - a. Relocation costs (\$0.62M)
    - i. New pilot hole
    - ii. Additional water testing
    - iii. Redesign
  - b. Materials and Design (\$0.49M)
    - i. Inflation
    - ii. Tariffs
  - c. Upgrade (\$0.17M)
    - i. Stainless steel casing and screens



7

RiversideCA.gov

## VAN BUREN 2

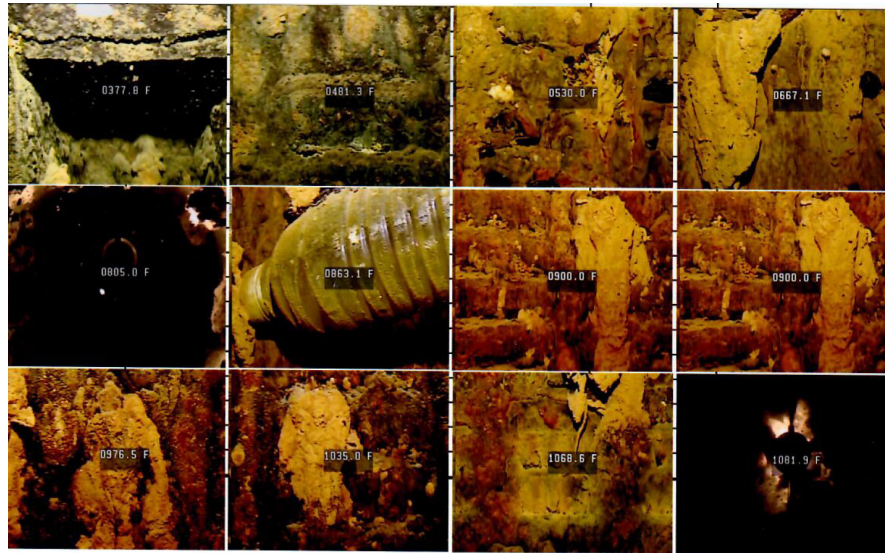


8

RiversideCA.gov



## SCHEUER 2



9

RiversideCA.gov

## FISCAL IMPACTS

Funding (\$1.28M)

1. \$0.49M – Increased rent credits (for 180 months)
  - a. Materials & Design
  - b. Rent credit from \$28 K to ~\$32k per month
2. \$0.79M – Directly funded by RPU
  - a. Relocation & Upgrade



10

RiversideCA.gov

## RECOMMENDATIONS

That the Board of Public Utilities recommend that the City Council approve:

1. Approve the First Amendment to the Ground Lease Agreement with GWS#4 Development, LLC, which redefines property easements and increases to City payments to Lessee as credits to monthly rent totaling \$493,179;
2. Approve the First Amendment to the Well Relocation Agreement with Hillwood Enterprises, L.P. consistent with the redefined property easements in accordance with the amended Ground Lease Agreement; and
3. Approve an increase to Work Order No. 1709464 for additional work to construct Warren 4R potable water well in the amount of \$788,474 for a total project cost of \$5,381,653.



11

RiversideCA.gov

## STEEL AND ALUMINUM TARIFFS

- Section 232 Tariffs
  - Rate increase on imported raw Steel and Aluminum

Action	Covered Products	Rate Increase	Effective Date
Section 232	Steel and Aluminum	Steel - 25% Aluminum - 10%	March 23rd, 2018 (initial) June 1st, 2018 (extending country exemptions)



12

RiversideCA.gov

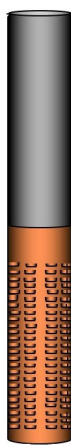
## WELL CASING MATERIAL SELECTION

### Low Carbon Steel Screen



- 25% efficiency loss every 5 years
- Well cleaning every 5 years improves the well efficiency to 88% of previous value
- Well life expectancy is 25 years
- For new well, specific capacity increased 40%

### High Strength Low Alloy Steel Screen



- 25% efficiency loss every 6 years
- Well cleaning every 6 years improves the well efficiency to 90% of previous value
- Well life expectancy is 40 years
- For new well, specific capacity increased 40%

### Stainless Steel Screen



- ✓ 25% efficiency loss every 30 years
- ✓ Well cleaning every 30 years improves the well efficiency to 95% of previous value
- ✓ Well life expectancy is 75 years

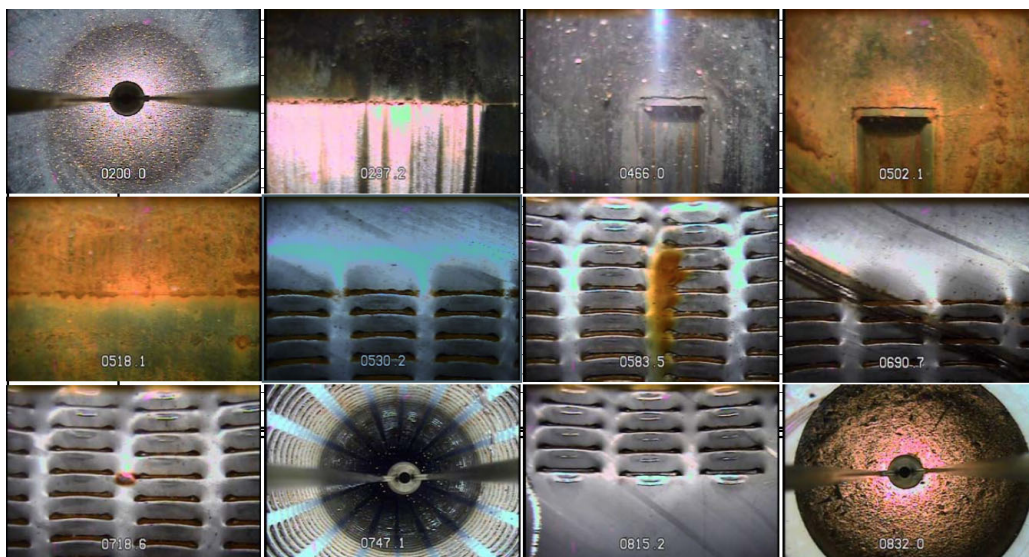


Glottelty, 2012

13

RiversideCA.gov

## RAUB 4R

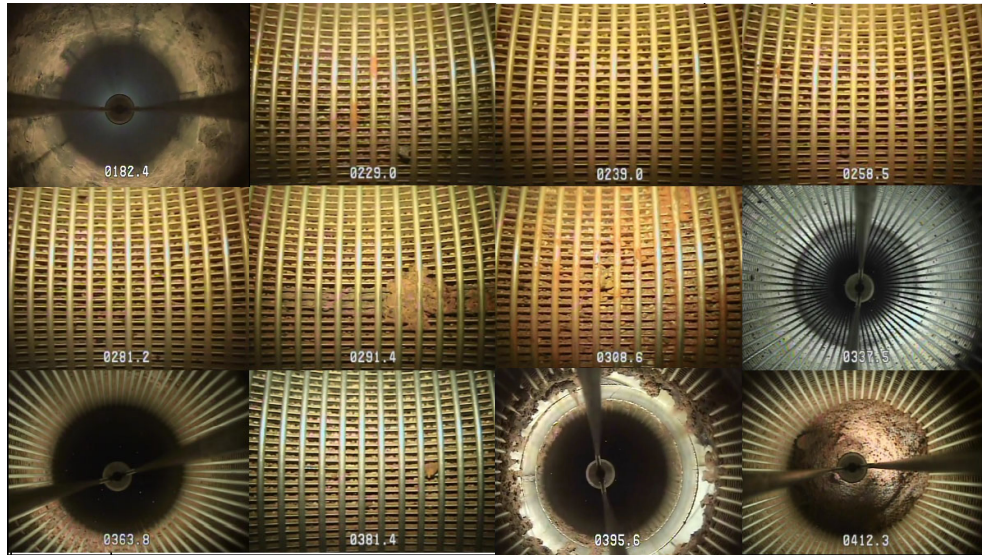


14

RiversideCA.gov



## VAN BUREN 2



15



RiversideCA.gov

## SCHEUER 2 (PRE-REHAB)



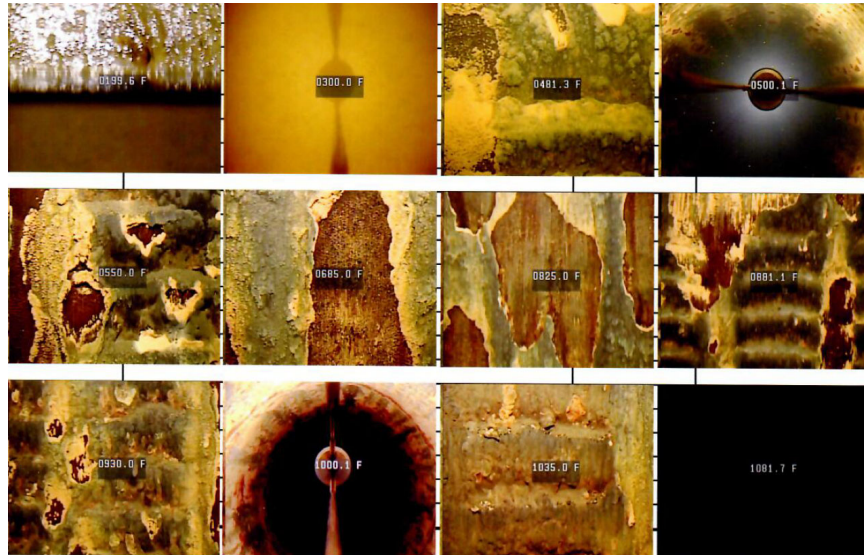
16



RiversideCA.gov



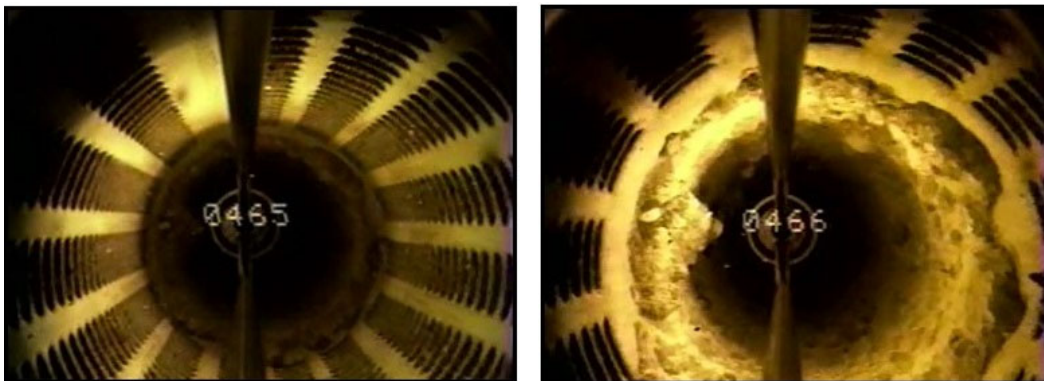
## SCHEUER 2 (POST-REHAB)



17

RiversideCA.gov

## WELL CASING MATERIAL SELECTION (CONT.)



18

RiversideCA.gov

## BENEFITS OF STAINLESS STEEL CASING

1. Longevity

Well is projected to have a service life of 75 years

2. Less frequent rehabilitation required

Projected to go 10+ years without requiring rehabilitation

3. Greater resistance to pitting from shock chlorination and high resistance to corrosion

4. Long term cost effectiveness!



19

RiversideCA.gov