

PUBLIC WORKS

STORM WATER
IMPERVIOUS SURFACES





STORM WATER UTILITY

- City from time to time to establish proper rates and fees.
- Consultant Utility Audit 2018
- In-House Audit in 2020-21
 - Better Aerial Photography
 - Accurate Polygons
 - Correct Internal Billing Process



CODE LANGUAGE CHANGES - JULY 2021

- *“Impervious surface means a parcel’s hard surface area that causes water to run off its surface in quantities or speeds greater than under natural conditions.”*
- Hard Surfaces - 100%
- Gravel Surfaces - 75%





AFFECTS ON COMMERCIAL CUSTOMERS

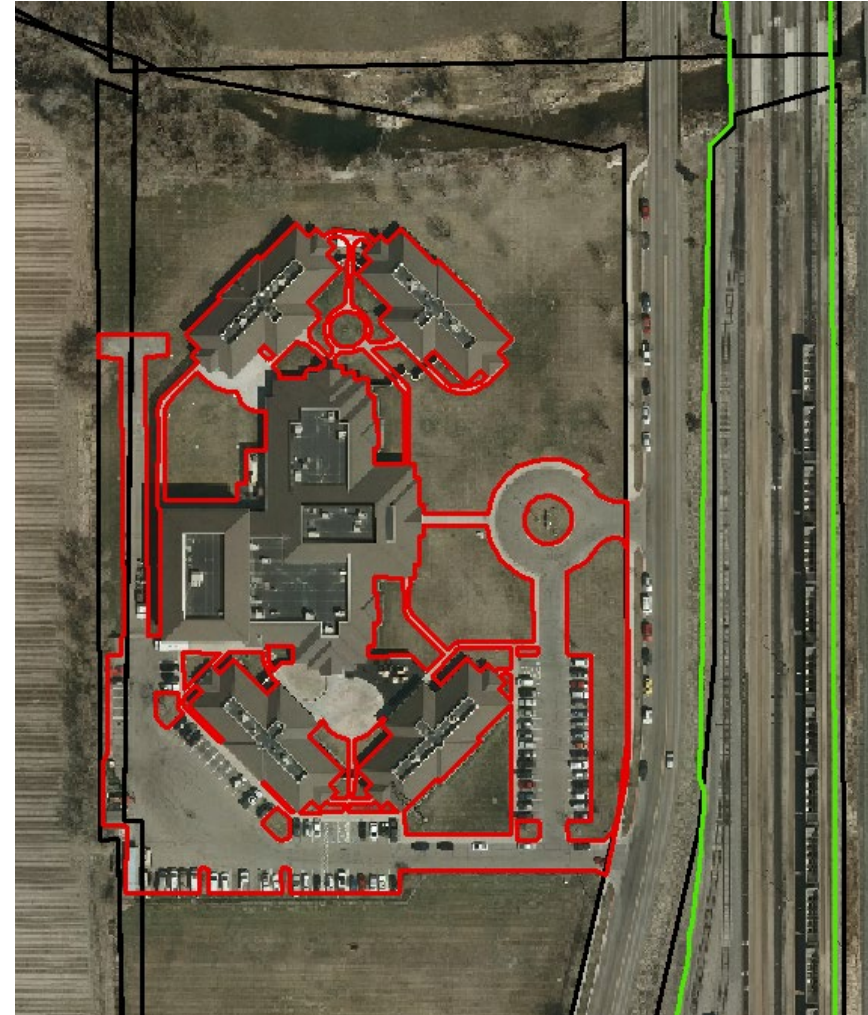
- “Hard Surfaces”
 - No Change in billings - hard surfaces are billed at 100%
- “Gravel Surfaces”
 - A 25% reduction will be incorporated into the gravel surfaces area calculation.





FINDINGS - 451 COMMERCIAL CUSTOMERS

- **Better Aerial Photography**
 - Increase Billing - 254
Avg Monthly = \$ 28
 - Decrease Billing - 100
Avg Monthly = \$ 31





FINDINGS - 451 COMMERCIAL CUSTOMERS

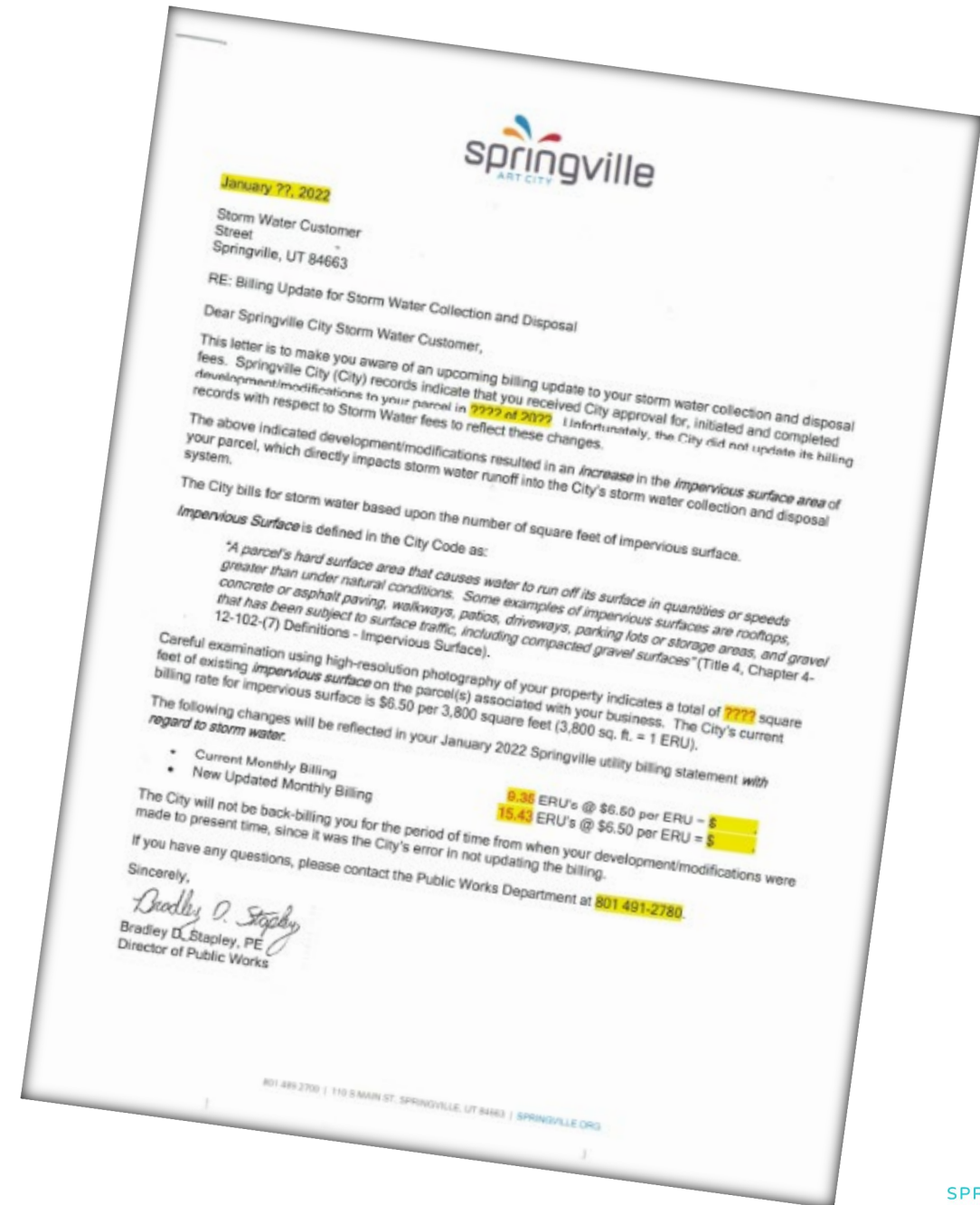
- **Unreported Expansion**
 - Increase Billing - 53
 - Avg Monthly = \$127
 - Decrease Billing - 7
 - Avg Monthly = \$ 22





BILLING UPDATES

- Notification Letter to customers with increase in billing.



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QUESTIONS?



IMPERVIOUS SURFACE RUNOFF COEFFICIENTS

- Engineering Runoff Coefficients
 - Hard Surfaces - Concrete, Asphalt, Stone, Rooftops
Runoff Coefficient = 1.0
 - Gravel Surfaces - Natural Soil or Gravel
subject to Vehicle Traffic
Runoff Coefficient = 0.75



BILLING MECHANISM

Equivalent Residential Unit

- Typical Residential Impervious Surface
 - 3,800 sq.ft.
- Commercial Impervious Surface
 - $\text{Total sq.ft.} \div 3,800 \text{ sq.ft.} = \# \text{ ERU}$



Base Monthly Fee = \$6.50/ERC







WHAT IS UPDES?

Utah version of the National **P**ollution
Discharge **E**limination **S**ystem
(NPDES)

- Mandated by the § 402 of the Clean Water Act to control pollutants in waters of the U.S.
- Including *storm water*.





THE UTAH STORM WATER PROGRAM IS PART OF THE UPDES PROGRAM

The Storm Water Program regulates storm water discharges from three potential sources:

- Industrial & Commercial Activities
- Construction Activities
- Municipal Separate Storm Sewer Systems (MS4's)

