



**Designing and Managing
Complex Urban Streamway
Projects with Multiple Objectives**
Presented by Chad Johnson, PE, CFM



WHAT IS “SUCCESS”?

- The **accomplishment** of an **aim or purpose** (www.google.com)
- The fact of getting or **achieving wealth, respect, or fame** (Merriam Webster)
- Continued **expansion of happiness** and the **progressive realization** of worthy goals (Deepak Chopra)
- 1% inspiration, 99% perspiration (Thomas Edison)
- A **dandelion?**

Dandelion – Success?



WHO IS A “STAKEHOLDER”?

- Person with an **interest** or **concern** in something (www.google.com)
- **Land owner, resident, neighbor**
- Person or container holding meat (Anonymous)
- **Funding source, government staff, regulator**
- **Utility company** or other **co-located** user

Combining Engineering Design and Public Perceptions

- We all know that **water flows downhill**, **except** when it doesn't.
- There is a **correlation** between **cost** and **level of service**
- **Both need to be addressed**, facts are best

Two Projects, Two Outcomes, Two Successes

Monitor Square Drainage Improvements (Overland Park, KS)

- **13 flooding homes** removed from floodplain
- **Street protection**
- **New bridge crossing**
- **Over 1,700 linear feet channel improved**



Two Projects, Two Outcomes, Two Successes

South Creek Channel Restoration

(Springfield, MO)

- **Improve Water Quality** in stream for macro invertebrates
- Provide **enhanced** public outreach
- Remove approximately 1 mile of **concrete channel lining**



Monitor Square



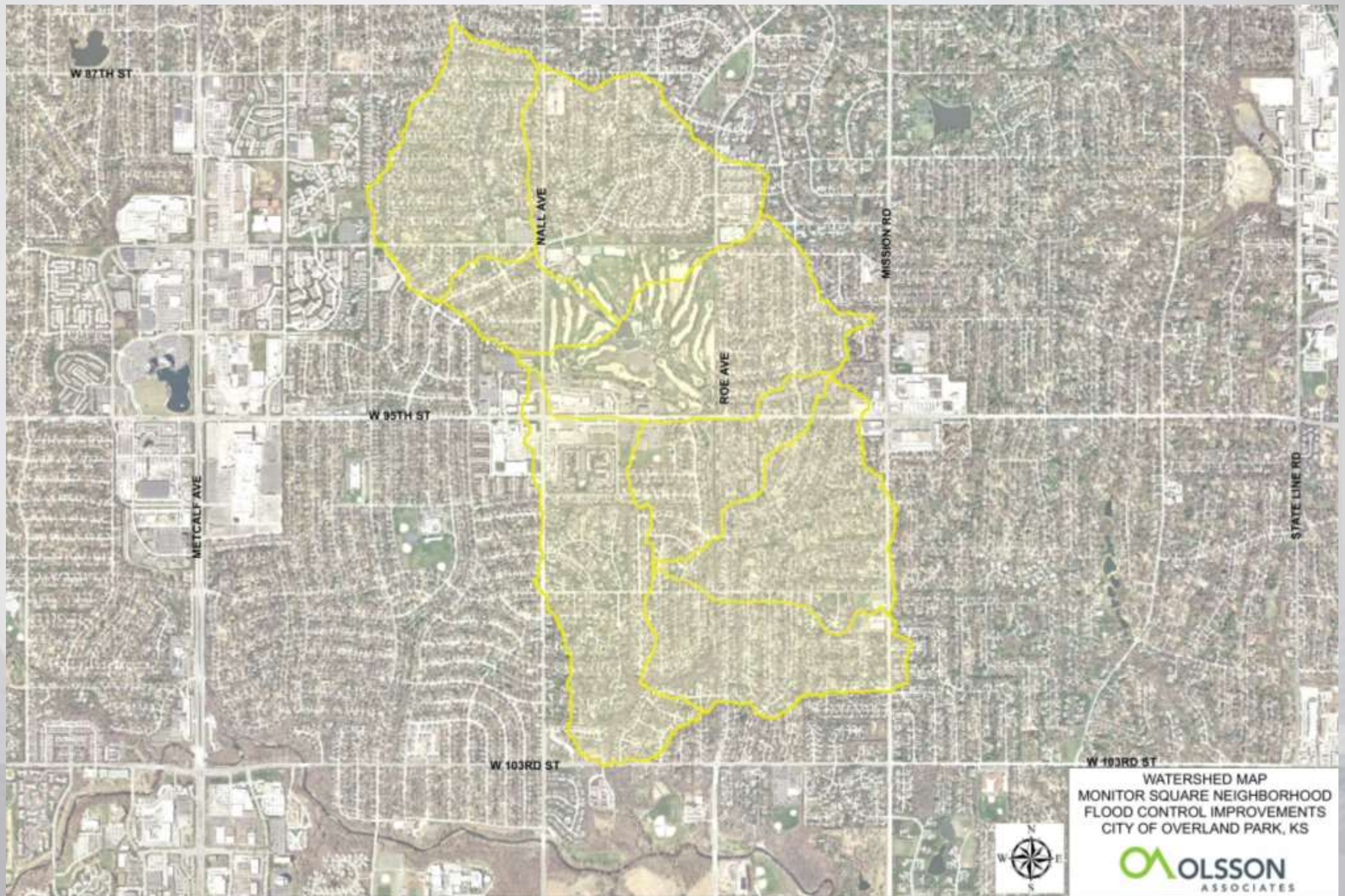
Monitor Square



Monitor Square







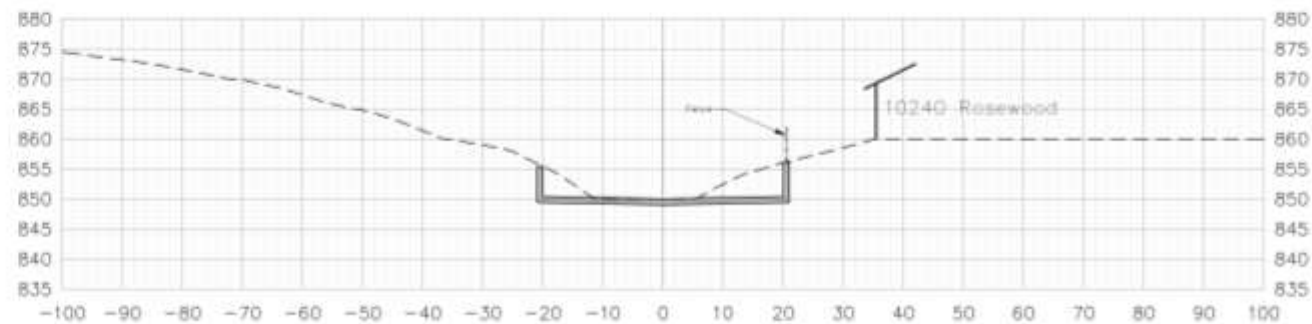
WATERSHED MAP
MONITOR SQUARE NEIGHBORHOOD
FLOOD CONTROL IMPROVEMENTS
CITY OF OVERLAND PARK, KS





LEGEND

- CONCEPTUAL SANITARY SEWER RELOCATION
- STREAM CENTERLINE
- REMOVED FROM 100YR FLOODPLAIN
- GRADING LIMITS



TYPICAL CHANNEL SECTION
ADJACENT TO HOUSE



CONCRETE CHANNEL OPTION
MONITOR SQUARE STORM DRAINAGE
IMPROVEMENTS
CITY OF OVERLAND PARK, KS.









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Keys to Success

- **Clear Measures of Success**
- **Comprehensive, Fact Based Design**
- **Picture the Project to sell the Public**
- **Persistence**

Questions



"Failure is only the opportunity to more intelligently begin again."

-Henry Ford