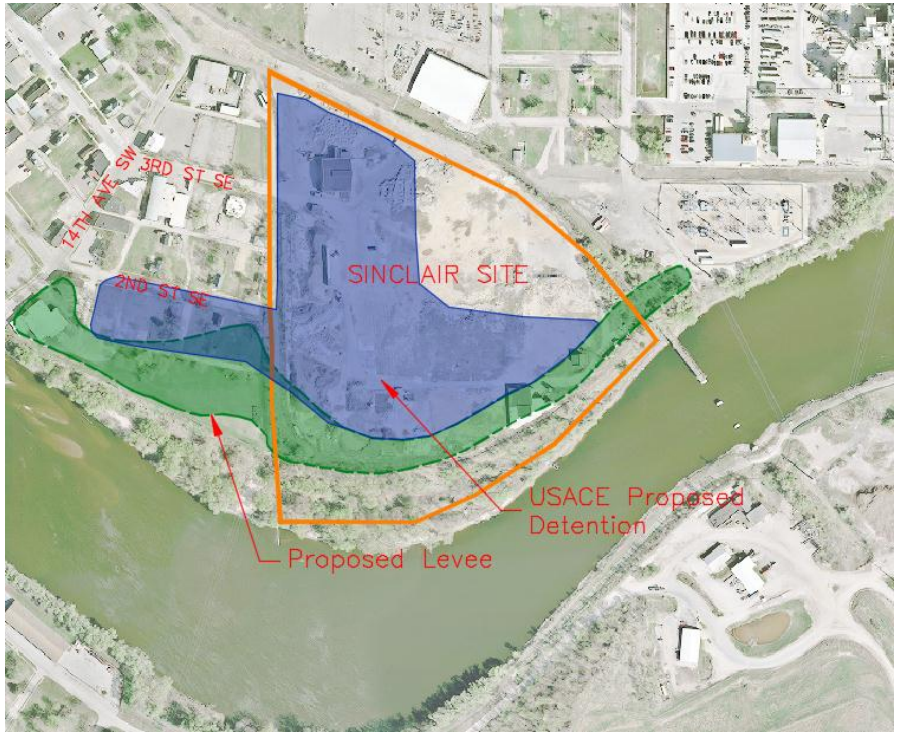
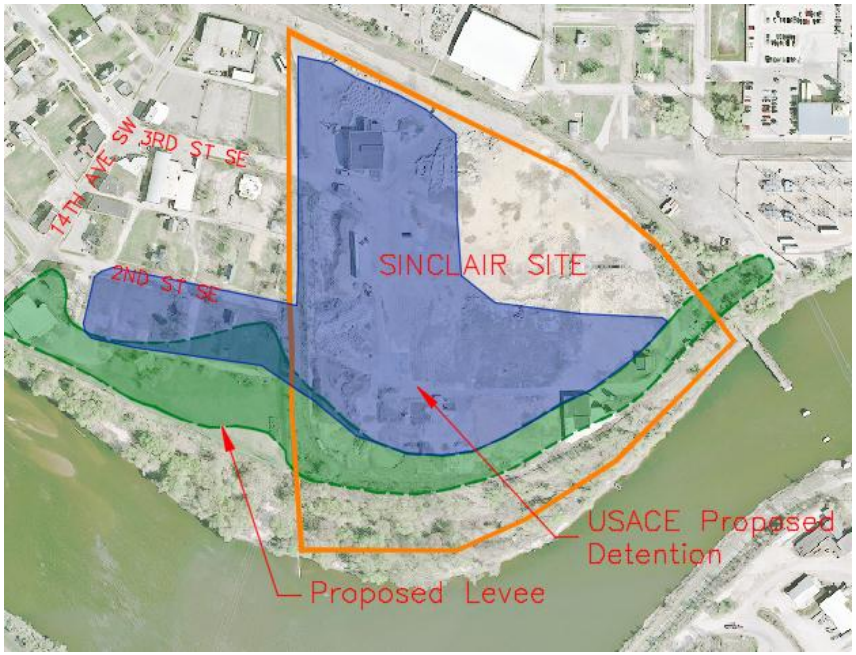
Recap: Sinclair Site

- Lowest Point on East Side
- USACE did not size detention pond using design standards. Preliminary document showed:
  - 17 acres Detention
  - 3.5’ deep
  - 500 gpm pump station (with one 500 gpm spare)
  - 60 acre-feet (volume)



Detention Evaluation

- Corps Standard is a 3 month storm @ NOAA – Avg intensity
- FCS team analyzed 5 and 10 year storm at Nested Atlas – High Intensity
- Combined probability: rainfall event during river flooding
  - 5 yr = 1% per year
  - 10 yr = 0.5% per year
- Benefit/cost analysis considered developable land value vs. pump costs



Dry vs. Wet?

- Dry
  - Drains completely in between storm events
  - Allows for passive, recreational used between storms
- Wet
  - Does not fully drain
  - Allows for deeper, smaller pond
  - More natural condition. Does not allow for any recreational use

Preliminary Evaluation Results

- 28 acre site (includes 2nd St. area)
  - 5 acre levee
  - 9 acre dry detention basin
  - 11 acres available for development
  - 3 acre RACM site

Preliminary Evaluation Results - Details

- 5 year storm (1% combined probability)
- Dry Bottomed detention basin
- 9-10 acre pond at average of 4.5’ deep (area
- 40 acre feet of storage (volume)
- 5000 gpm pump station (two 2,500 gpm pumps with one 2,500 gpm spare pump)
- Pump Station Cost $2.5 million
- Available development land $1.1-1.3 million

Process to Complete

- Presentation to FCS Steering Committee 12/15
- Initial Presentation to Council Committee 1/16
- Incorporate Council Committee input 2/16
- Stakeholder Meetings 2/16 & 3/16
- Return to Council Committee with Stakeholder Feedback 4/16

Guidance Requested

- Dry or wet bottomed detention basin?
  - Wet bottomed pond would have smaller area, leaving more for development, but no recreation
- Resiliency?
  - Confirm 1% combined probability of River Flooding & Interior Flooding
- Process?
  - Confirmation of process to finalize

Interim Pump Station

- Recommendation – One of three pumps installed initially
  - + Combined probability: closed pipes with interior storm exceeding 1 pump capacity
    - Sinclair 10%, Lot 44 @10th Ave 10% per year
    - Balance with temporary pump
  - + Add one pump and one backup pump @ FCS completion
- Consideration 1

  Pump stations that can provide protection prior to completion of the flood structure
    - Lot 44 @ 10th Ave/Sinclair
- Consideration 2

  Pump maintenance and warranties in interim