

## MEETING MINUTES

### Willow Creek Tributaries MDP

#### Progress Meeting

Virtual | July 3, 2024 | 2:00PM

#### Attendees:

MHFD – Jen Winters, Candice Owen

SEMSWA – Jon Nelson

SSPRD – Melissa Reese-Thacker

Douglas County – Brad Robenstein

ICON – Craig Jacobson, James Duvall, Jackson Winterrowd

#### 1. Alternatives Development

- a. Alternatives Report
  - i. The MDP report and Story Map will be written through Section 6: Alternatives
  - ii. Section 6 will include an introduction to document all methodology and assumptions for how the alternatives were identified, cost estimated, and scored on the rubric.
  - iii. Section 6 will present the alternatives at the tributary scale. ICON will provide Summary Sheets for each tributary as a deliverable.
    1. An example summary sheet for Fox Hill Park tributary was discussed in the meeting. The FHP summary sheet is attached to these meeting minutes.
    2. There will be one summary sheet for each tributary in the study area included in the report.
    3. Each summary sheet includes a description of each type of alternative present on the tributary, an exhibit displaying each alternative on the tributary, and the rubric.
  - iv. The final selected plan (Section 7) will present the recommendations at the sub-reach scale. Rubric scores will be provided for each alternative along with additional description on the problems and solutions in that specific sub-reach.
- b. Cost Estimating
  - i. ICON reminded the team that during the last progress meeting, the team discussed a number of cost estimating methods would be tested on Fox Hill Park. These methods include: MHFD Cost Components Calculator excel spreadsheet, SEMSWA's cost per linear foot data, and summing the problem points per sub-reach.
  - ii. ICON suggested that a combination of all three methods be used to provide cost estimates for each alternative. The suggested cost methodology includes using the MHFD Cost Component calculator for Culverts and Grade Control Structures. The remaining alternatives were cost estimated by summing the individual problem points within each sub-reach. The SEMSWA cost per linear foot data will be used to cost Vegetation Management and Erosion Control points. All other points were cost using MHFD Bid Tabs.
- c. Rubric
  - i. ICON asked the project team if scoring each alternative on the rubric should be a group effort where everyone can provide input.
    1. MHFD and SEMSWA agreed that ICON should attempt scoring the rubric first and then the project stakeholders will review rubric scoring during the review of Section 6.
- d. Water Quality Rundowns
  - i. ICON confirmed with SEMSWA and MHFD that rundowns are an agreeable solution to add water quality benefit, even though they may not provide formal WQCV treatment.
  - ii. Jon Nelson confirmed that maintenance will be primarily done by SEMSWA.



- iii. ICON requested guidance from the project team on which rundown details are the most favorable for their inclusion in the report. Rundown details and photos are compiled at the following link: [Rundown Typical Details - OneDrive \(sharepoint.com\)](#).
- iv. ICON asked MHFD and SEMSWA to share any past rundown construction costs that ICON can incorporate into the cost estimates.
- v. MHFD asked how the rundowns are being prioritized against each other. ICON noted that for now, the rundowns are being scored all the same in the rubric. Additional guidance on optimized rundown locations is not currently available. ICON will work with MHFD to determine attributes that can be used to further prioritize individual rundown locations in the recommended plan. ICON noted that rundowns could potentially be prioritized by outfall size, tributary area and land use, or by proximity to other proposed alternatives.
- e. Pond Retrofits
  - i. MHFD mentioned that there is a current study looking at retrofits on existing detention facilities and that there could be overlap with the MDP. ICON mentioned if the MHFD study yields relevant findings prior to the alternatives report completion, that information can be incorporated.
- f. New Wetlands and Wetland Enhancement
  - i. ICON asked MHFD and SEMSWA to share any available information regarding cost estimating the proposed wetland improvements areas.

## 2. Schedule

- a. Alternatives Development – Report and Story Map Deliverables: Mid-August
- b. Recommended Plan: End of August
- c. Public Meeting (if needed): End of September
  - i. The team considered if the second public meeting would be beneficial given the lack of attendance at the first public meeting and the nature of the study (no houses in the FHAD floodplain, MDP not prescribing specific projects, etc.).
  - ii. MHFD mentioned that because the first public meeting covered FHAD outreach, it would be acceptable to forego the second public meeting if the other project stakeholders are agreeable.
  - iii. SEMSWA noted that they hold public outreach meetings for specific CIP projects anyway. Presenting the MDP alternatives may make it seem like these projects will be implemented and confuse the public.
  - iv. If the team decides to have the public meeting, an all-virtual meeting format could be utilized.
  - v. MHFD posed an option that in-lieu of a second public meeting, notifications could be sent out for the public to review the Alternatives report online and provide comments and ask questions digitally.
  - vi. The team will regroup on this topic at the next progress meeting for a final decision
- d. Selected Plan: End of the Year 2024

## 3. Action items

- a. ICON
  - i. Complete a draft of the “Introduction and Methodology” section of the alternatives report prior to the next progress meeting.
  - ii. Complete alternatives analysis for all tributaries, including summary pages, to present at the next progress meeting.
- b. MHFD and SEMSWA
  - i. Look through the SharePoint link for water quality rundowns and provide input on the preferred conceptual details to include in the alternatives report and if any changes should be made to the details.
    - 1. [Rundown Typical Details - OneDrive \(sharepoint.com\)](#)
  - ii. If available, provide past rundown and wetland project costs for incorporation into the alternative cost estimates.



**- END OF MEETING MINUTES -**

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*To the best of my knowledge, these minutes are a factual account of the business conducted, the discussions that took place, and the decisions that were reached at the subject meeting. Please direct any exceptions to these minutes in writing to the undersigned within ten (10) days of the issue date appearing herein. Failure to do so will constitute acceptance of these minutes as statements of fact in which you concur.*

Minutes prepared by: Jackson Winterrowd | 07/08/2024  
ICON Engineering Inc

# WILLOW CREEK TRIBUTARIES MAJOR DRAINAGEWAY PLAN

## FOX HILL PARK TRIBUTARY

### DESCRIPTION

Fox Hill Park Tributary extends from the Englewood Dam upstream to County Line Rd within the study area. There are problems such as culvert overtopping, erosion, degraded drop structures, outfall deterioration, and vegetation overgrowth present on this tributary.

### STREAM FUNCTION AND MAINTENANCE

#### Adaptive Stream Management

Vegetation management is required in 2 places along the upstream portion of the tributary.

#### Stream Reclamation and Rehabilitation

Outfall structure, erosion, and grade control structure maintenance are required on this tributary.

#### Stream Restoration

No full stream restoration projects are required on this tributary.

### FLOODING

The E Kettle Ave culvert will require upsizing to convey the 100-yr storm event without overtopping.

### WATER QUALITY

#### Retrofit Existing Ponds

The existing Detention Pond just upstream of E Otero Ave can be retrofitted for the WQCV.

#### Proposed New Ponds

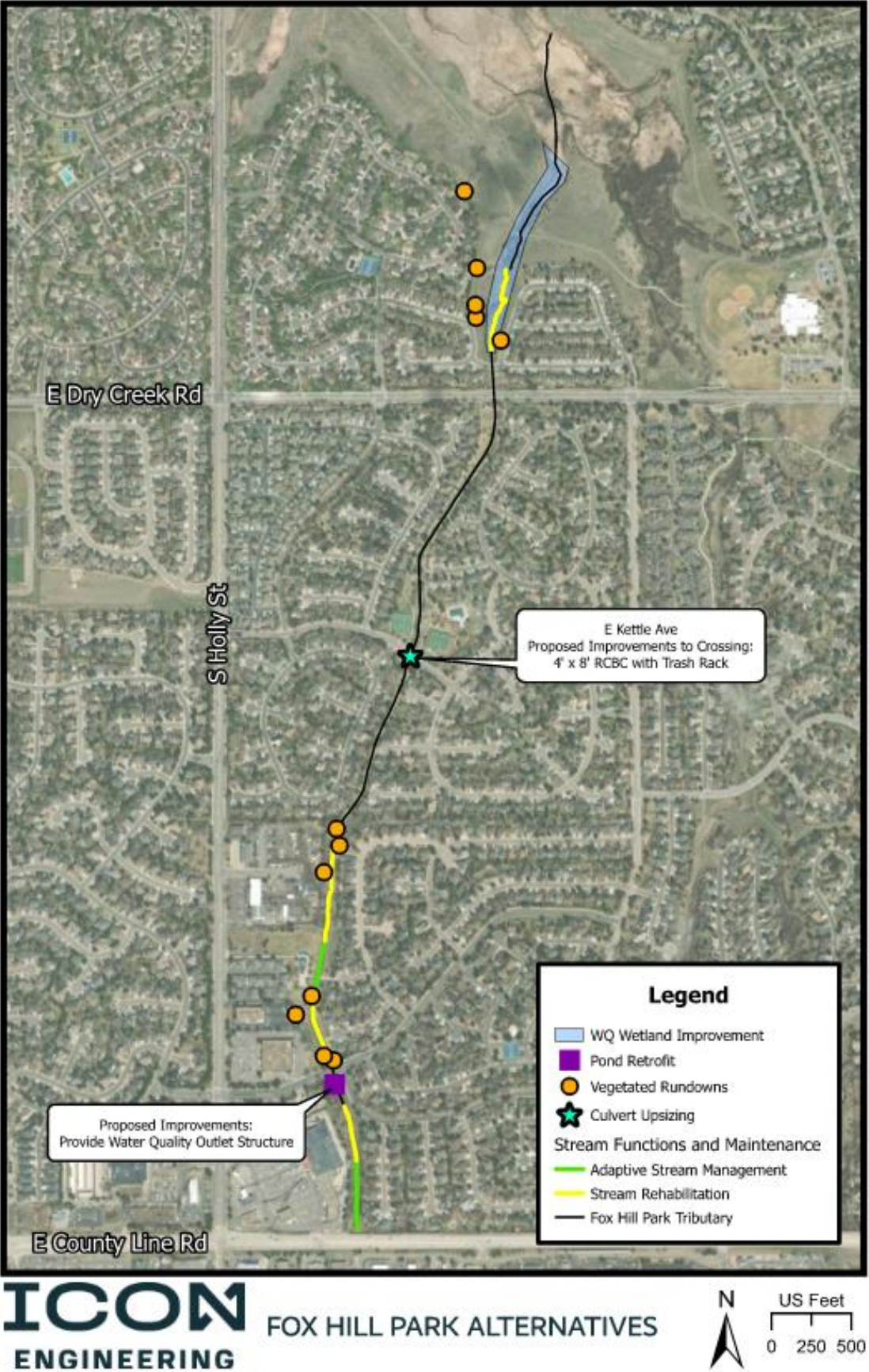
There are no feasible new regional water quality opportunities on this tributary.

#### Rundowns

There are opportunities for vegetated rundowns on publicly owned land along the tributary in the Englewood Dam Open Space and further upstream near the commercial developments.

#### Wetland Improvements

There is also an opportunity for wetland improvements to promote water quality in the Dam Open Space.



FOX HILL PARK ALTERNATIVES RUBRIC

Project Category	Project Type	Complexity	Project Cost	Maintenance Efficiency	Comprehensive Water Quality	WQCV/and EURV Provided	Stream Health	Flood Capacity	Public Safety	Environmental	Total Possible Score	Total Score	Percentage Score
Weight		11	12	9	8	8	10	10	13	8			
Stream Function and Maintenance	Adaptive Stream Management	5	4.5	5	0	0	3	2	3	4	365	275	75%
	Stream Rehabilitation	4	2.75	3.75	2	0	3.75	3	4	3	405	270.25	67%
	Stream Restoration	-	-	-	-	-	-	-	-	-	-	-	-
Flooding	Culvert Upsizing	3	2	5	0	0	4	5	5	2	365	273	75%
Water Quality	Pond Retrofit	2	4	1	5	4	2	2	2	3	445	241	54%
	Rundowns	4	4	2	3	3	3.6	0	0	5	330	233.83	71%
	Wetland Improvements	2	3	2	4	2	3	0	2	4	395	212	54%