

# Dudley Branch Channel Improvements

*Public Meeting*

*August 29, 2019*

*Cesar Molina, P.E., City of Carrollton*

*Matt Brennan, P.E., City of Carrollton*

*Rodrigo Vizcaino, P.E., CFM, HDR Engineering*

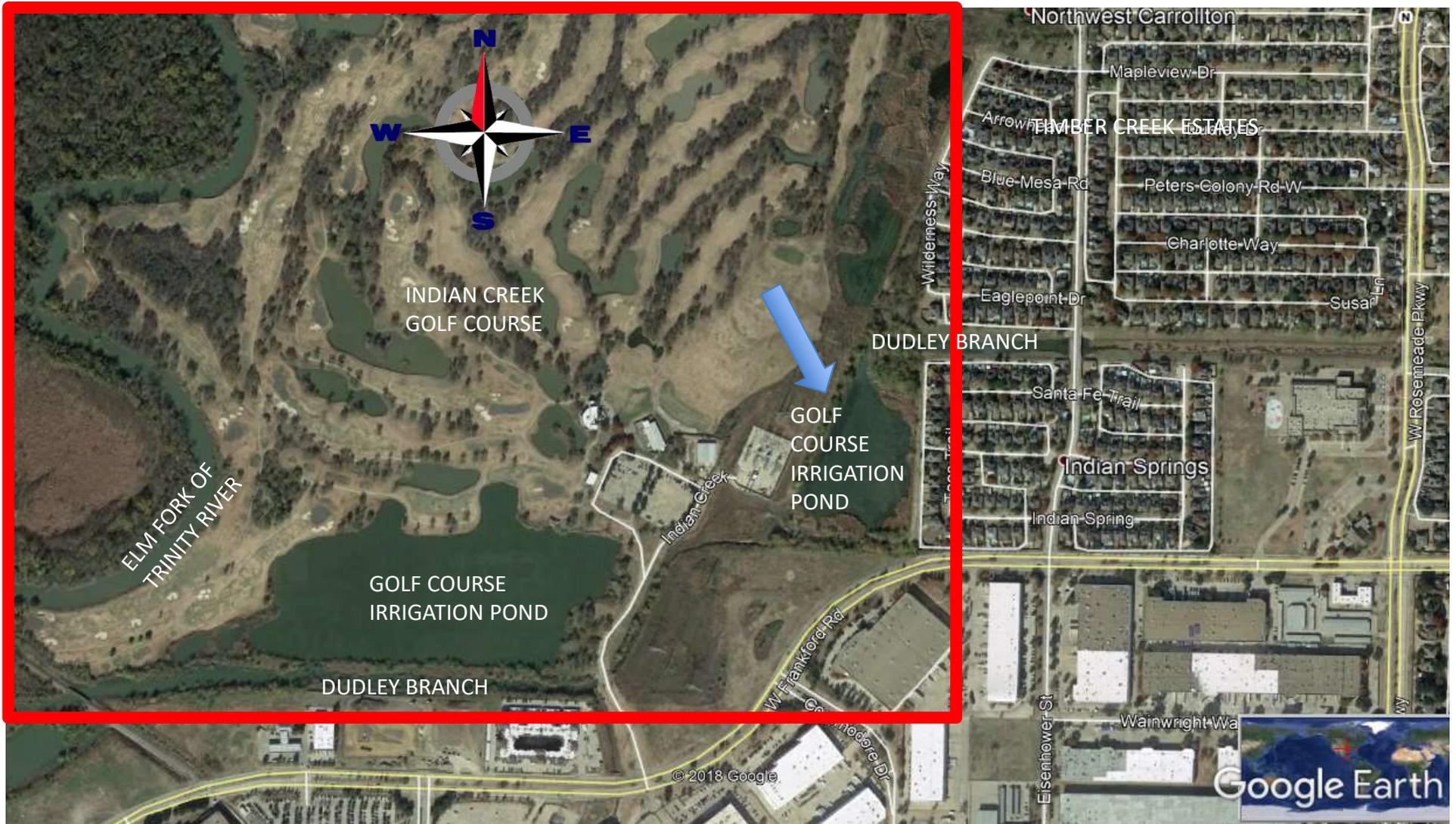
*Where Connections Happen*



# Agenda

- Provide Background and Objectives of Project
- Provide Update on Design Progress and Schedule
- Receive Public Feedback and Comments

# Project Background



# Project Area

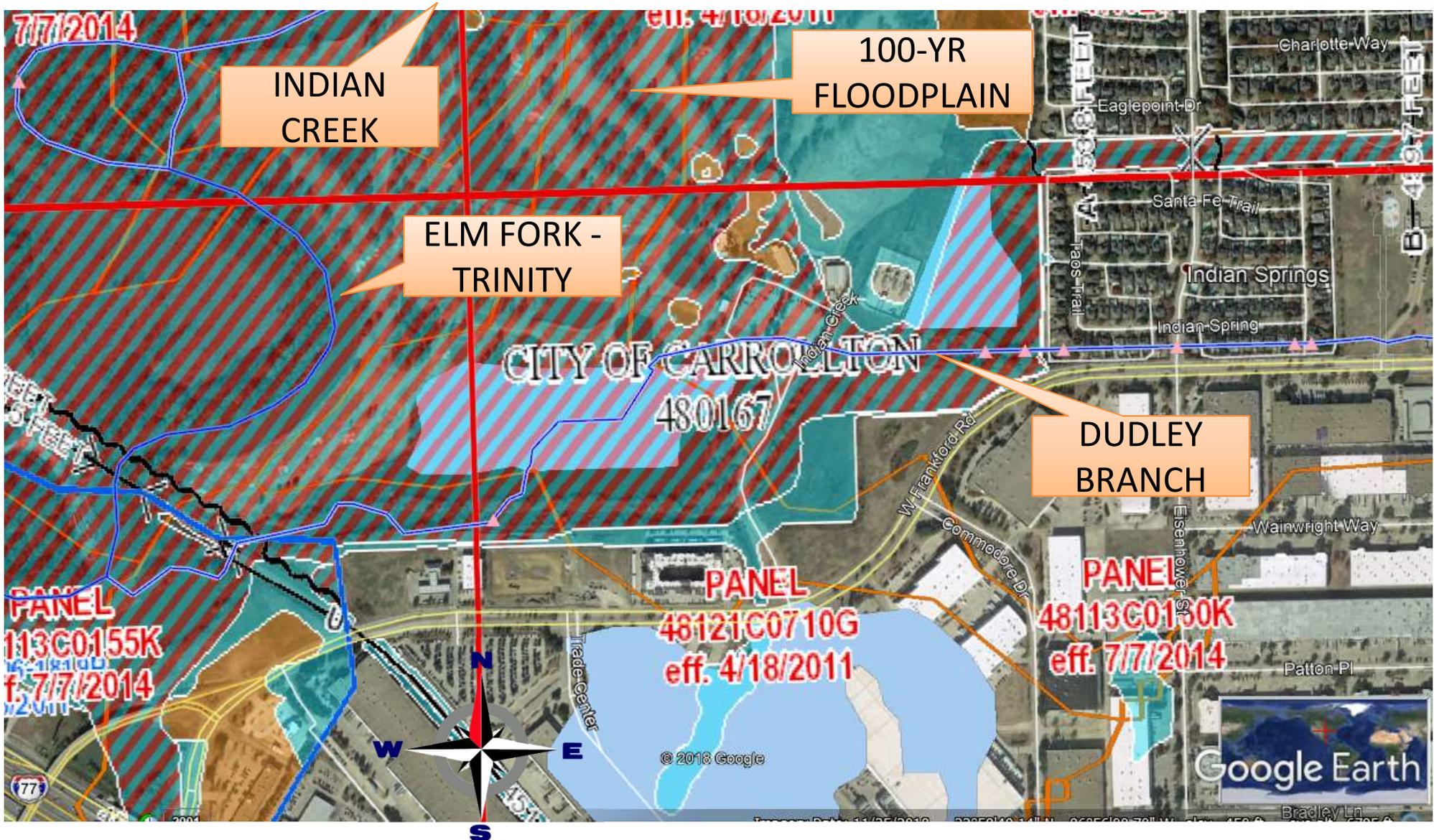


# Project Background

## Indian Creek Golf Course Pond - History and Functionality

- Built originally as an overflow pond for golf course irrigation.  
No longer required per adjacent ponds
- Does not detain water and does not serve as a dam
- Severe sediment build-up
  - Shallow water (1 to 3 foot maximum depth)
  - Limits recreational activities and fishing
- Complicated for City to maintain
- Per 2013 BGE Flood Study – Pond contributes to increases in flood depths

# Floodplain Map



# Dudley Branch - Historic Flooding



DURING DRY  
CONDITIONS

**Photo 1: Eisenhower Street Bridge in the October 2007 flood event, after peak flow.**



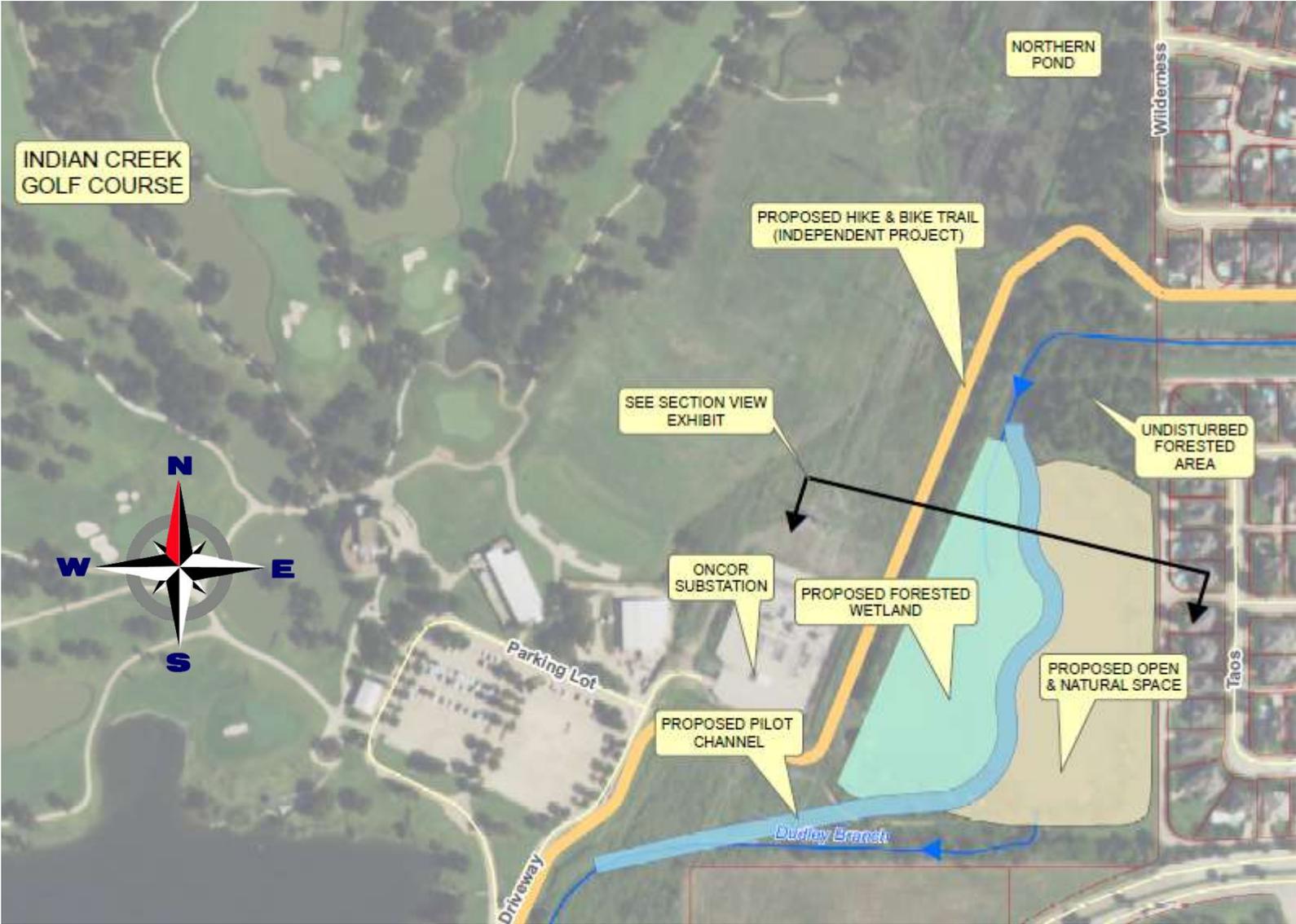
AFTER HEAVY  
RAIN EVENT

# Design Phase – Objectives

**Objective: Enhance the environmental, ecologic and aesthetic value of the pond site**

- Still in the design phase and based on public input, City/HDR will be adjusting design if it warrants a change
- U.S. Corps of Engineers - jurisdiction & required permit approval prior to construction
- Improvements Options:
  1. Pond Dredging (not feasible)
  2. Fill the eastern half of pond, natural channel, and wetland
  3. Other options - hike and bike trail / open areas for recreation

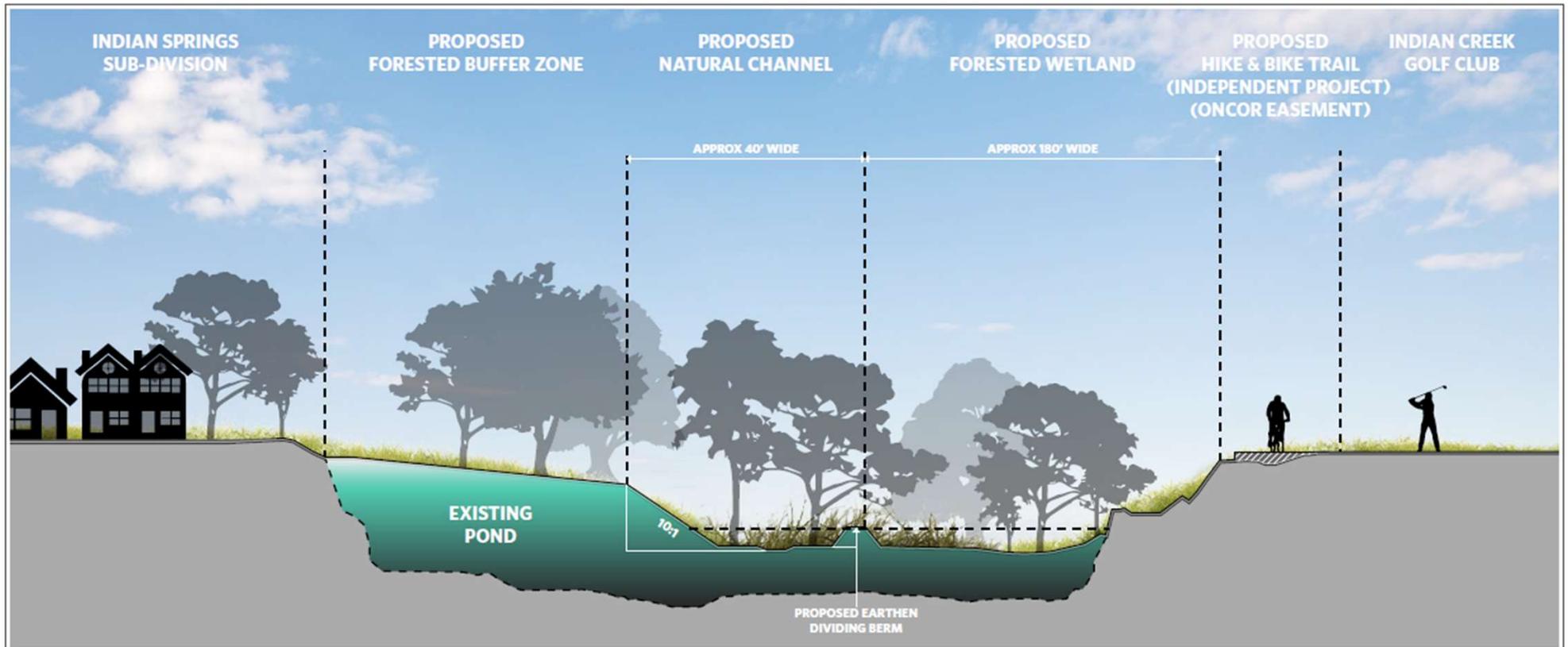
# Design Phase – Proposed Improvements



# Design Phase – Proposed Improvements



## DUDLEY BRANCH SUGGESTED IMPROVEMENTS (SECTION VIEW)

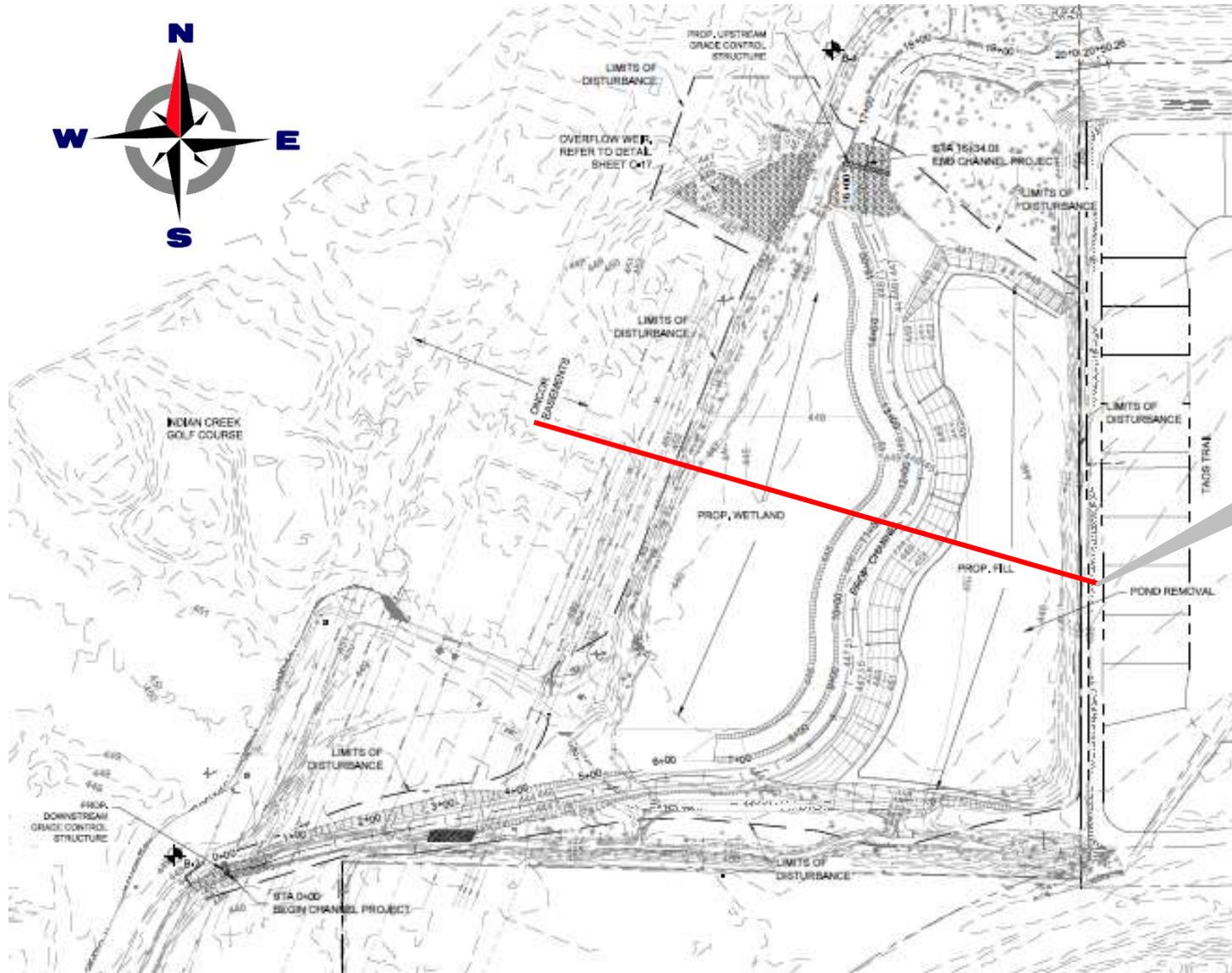


# Design Phase

## **U.S. Corps of Engineers - USACE – Fort Worth District**

- Section 404 of the Clean Water Act of 1977
  - Restore and maintain the physical, chemical and biological integrity of the Nation's waters
  - USACE regulates the discharge of dredged or fill material within waters of the United States
- The discharge of dredged or fill material into waters of US is “trigger” that requires some form of authorization under Section 404 from USACE
  - 2 Avenues:
    1. General Permits – Nation Wide Permit, Regional Permit, and Programmatic Permit
    2. Individual Permits – Letters of Permission and Standard Individual Permit

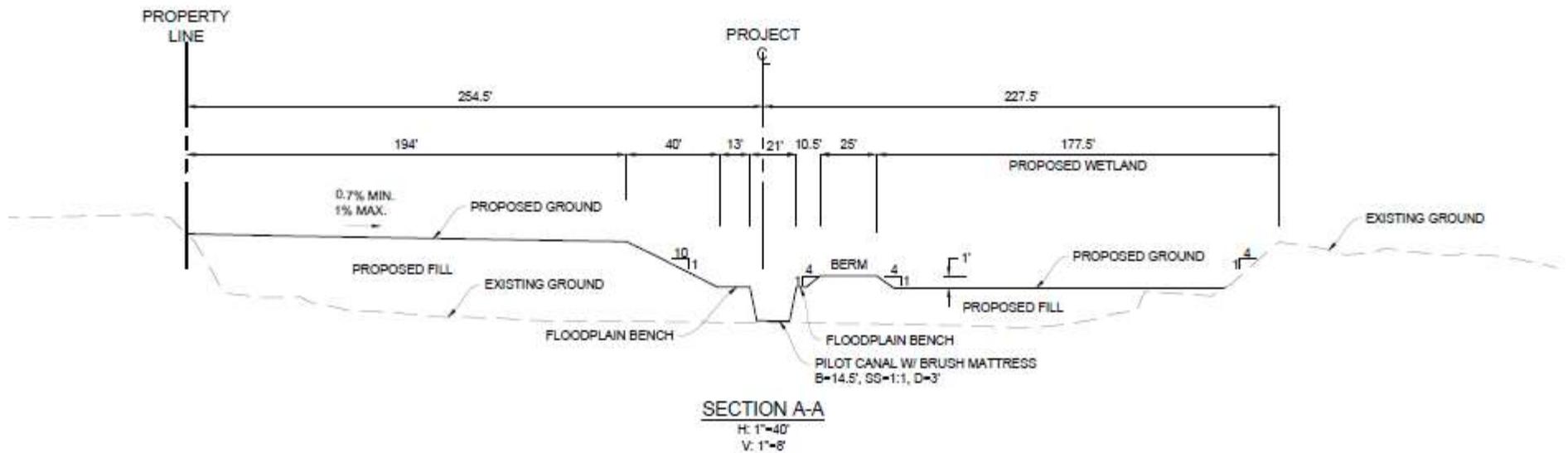
# Design Phase – 30% Engineering Plans



Section View  
(next slide)

Indian Springs

# Design Phase – 30% Engineering Plans

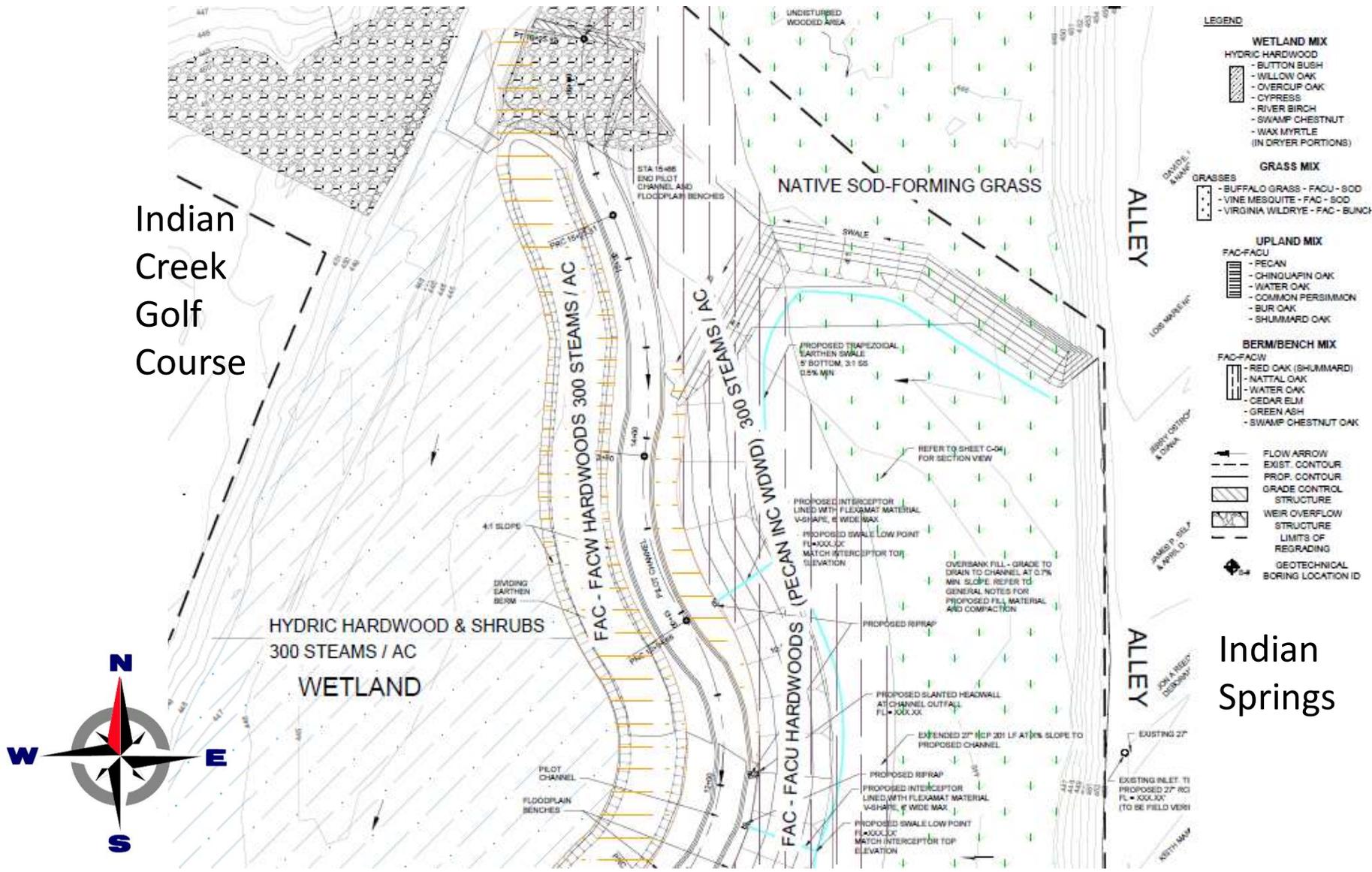


# Design Phase – Completion

Sample photo - reference natural channel - fully vegetated



# Design Phase – Revegetation Plan



# Next Steps - Schedule

1. Project Design – Ongoing (70% engineering plans finished by fall of 2019)
2. USACE Permitting – Begin review end of 2019
  - a) Permit tentatively awarded by April-May 2020
  - b) Schedule delay if a more complex permit is required (Example: Individual Permit)
3. Bidding & Construction
  - a) After USACE permit and engineering plans finished
  - b) Construction start - Mid to late 2020 (12 months to build)
  - c) Finish by mid to late-2021

# Design Phase – Future Considerations

- Enhance ecological area for the community
- Opportunity for more trees and recreational areas
- Property value enhancement

# Public Feedback & Comments

- Comment Cards
- Email:  
Matthew Brennan, Project Manager  
[Matthew.Brennan@cityofcarrollton.com](mailto:Matthew.Brennan@cityofcarrollton.com)
- Please provide comments by **9/20/2019**