



# **Knox County**

**S.R. 62, Western Avenue  
From Texas Ave. to Major Ave.**

**Pre-Bid Meeting**

**September 16, 2016**

# Agenda

1. Presentation of Project
2. Discussion of Critical Areas
  - a) Utilities
  - b) Railroad
  - c) Phase Zero Work
  - d) Structures
  - e) Retaining Walls
  - f) Environmental
  - g) City of Knoxville
  - h) SP 108B
3. Questions

# Project Staff

## TDOT Headquarters

- Jay Norris – Assistant Director, Construction Division
- Adam Price – Civil Engineering Manager 1, Structures Division

## TDOT Region 1 Staff

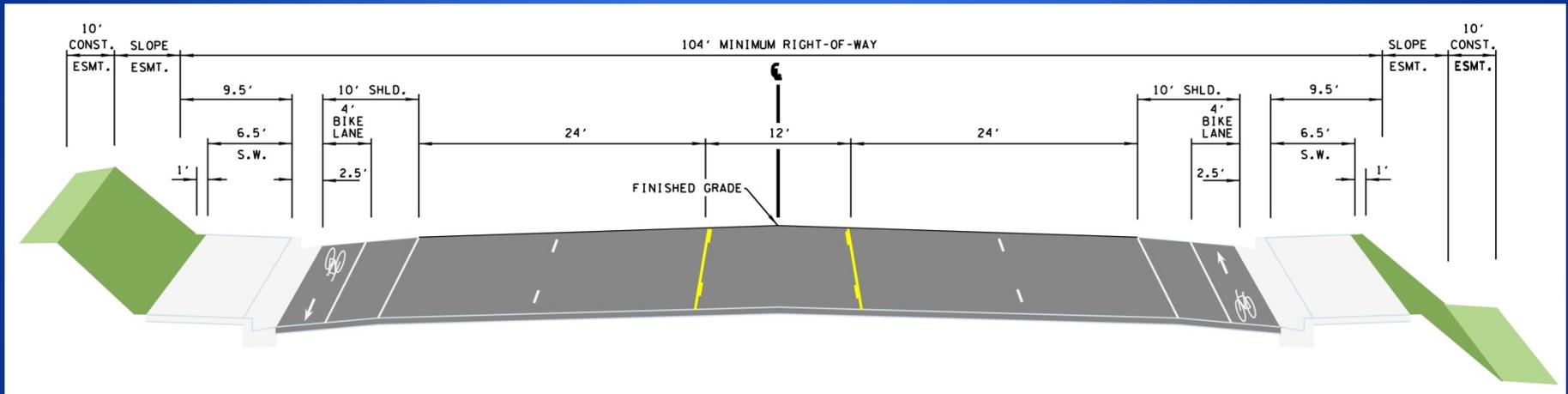
## Design Consultant – Neel-Schaffer, Inc.

- Michael Agnew
- Steve Lamm

## SWPPP Consultant – Arcadis

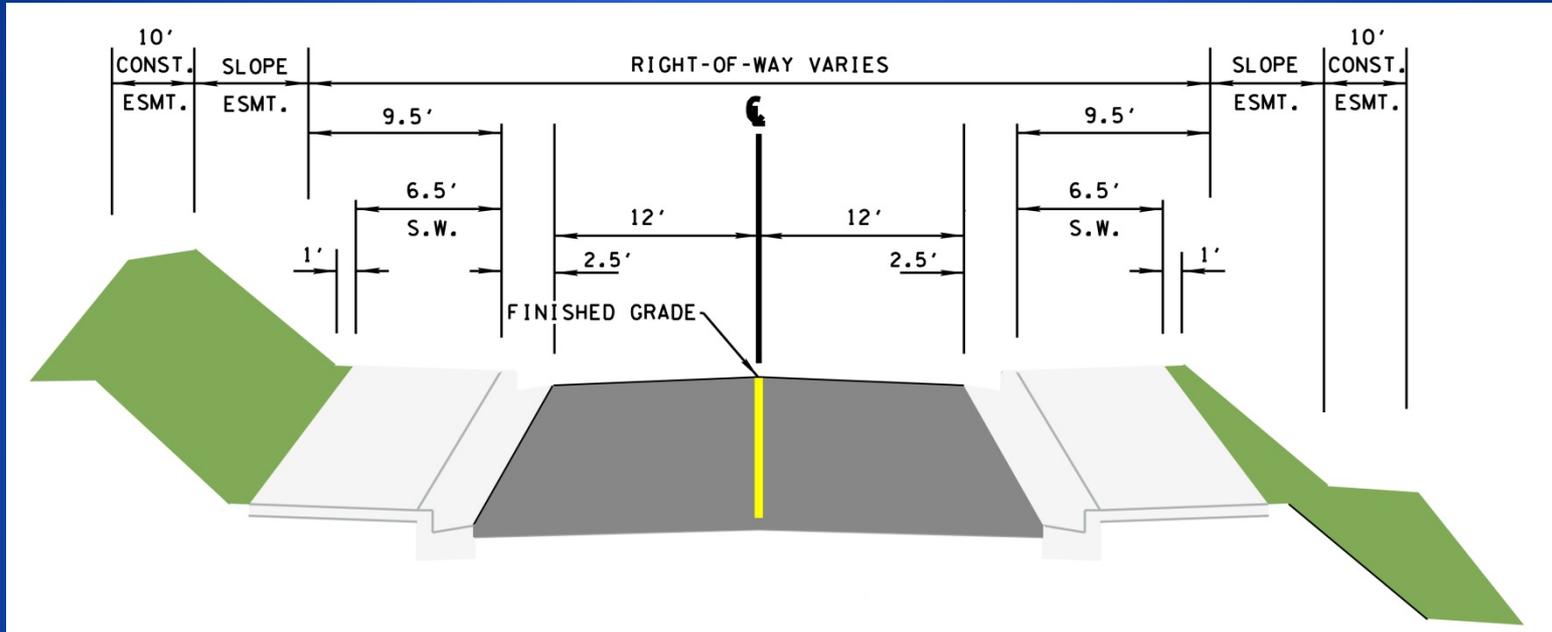
- Jeff Hoilman

# General Overview



SR 62 Western Avenue  
Proposed Typical Section

# General Overview



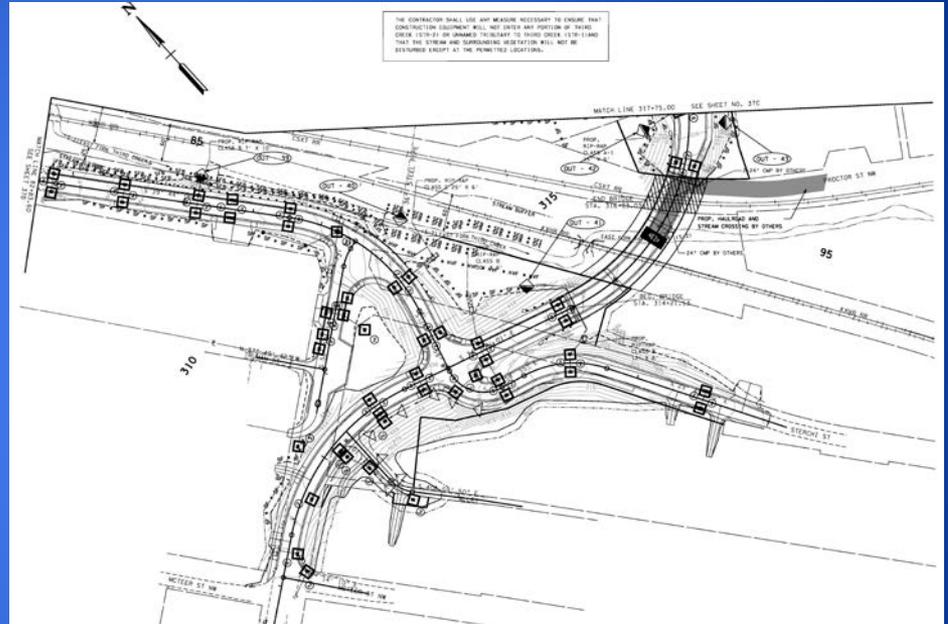
Keith Avenue  
Proposed Typical Section

# Utilities

1. General Overview
  - a. Critical Relocations in Each Phase
2. Gerdau Commitments
3. KUB
  1. Specs (01110 & 01130)
  2. Pre-Order of Poles
4. AT&T
  - a. Temporary Work
  - b. Calendar Days

# Railroad

1. Tunneling
2. Haul Road
3. Additional Work
  - a. Storm Drainage
  - b. Sanitary Sewer



Haul Road Location

1. Flagging

# Railroad

## Schedule of Availability Dates

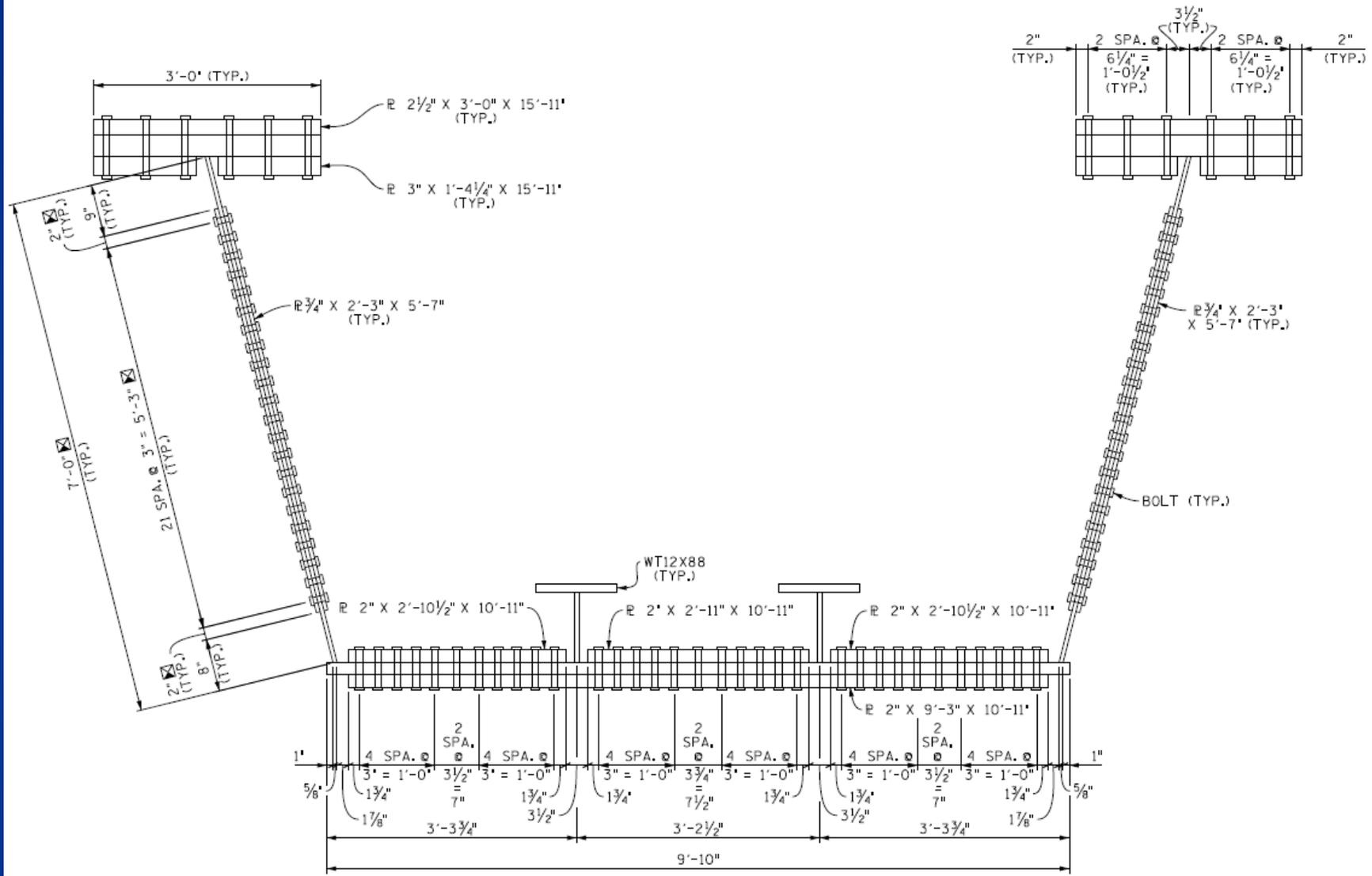
- Phase I Tunneling and Jack & Bore Work Under CSXT and KXHR – August 1, 2017
- Phase II Utility Work within Railroad Right of Way – October 1, 2017
- Phase III Project Clearing Work and Bridge No. 2 Haul Road – May 1, 2017

# Phase Zero Work

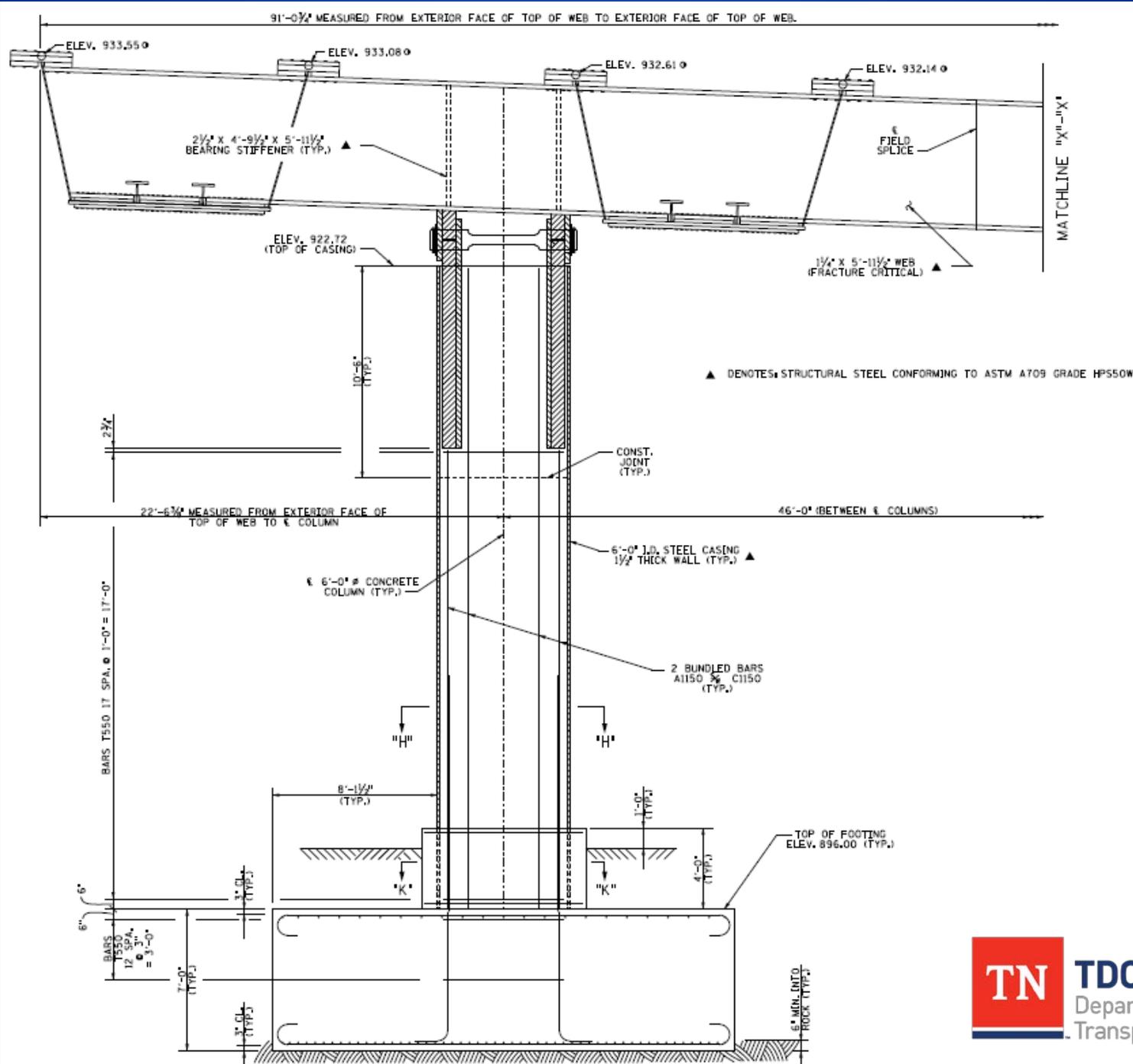
1. Mynderse Ave.
2. Utility Work
3. Temporary Runaround
4. Personal Property Demolition

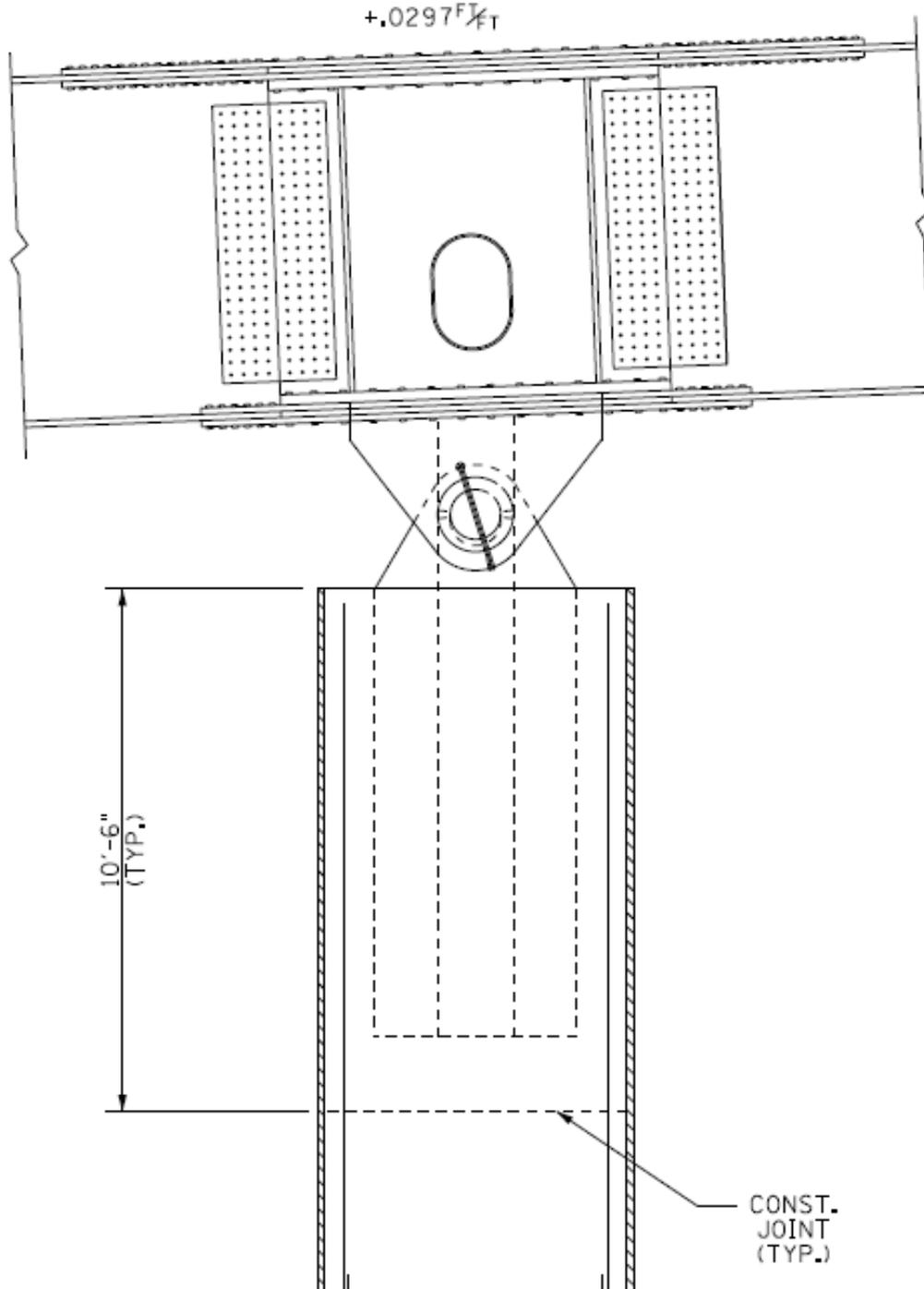
# Structures

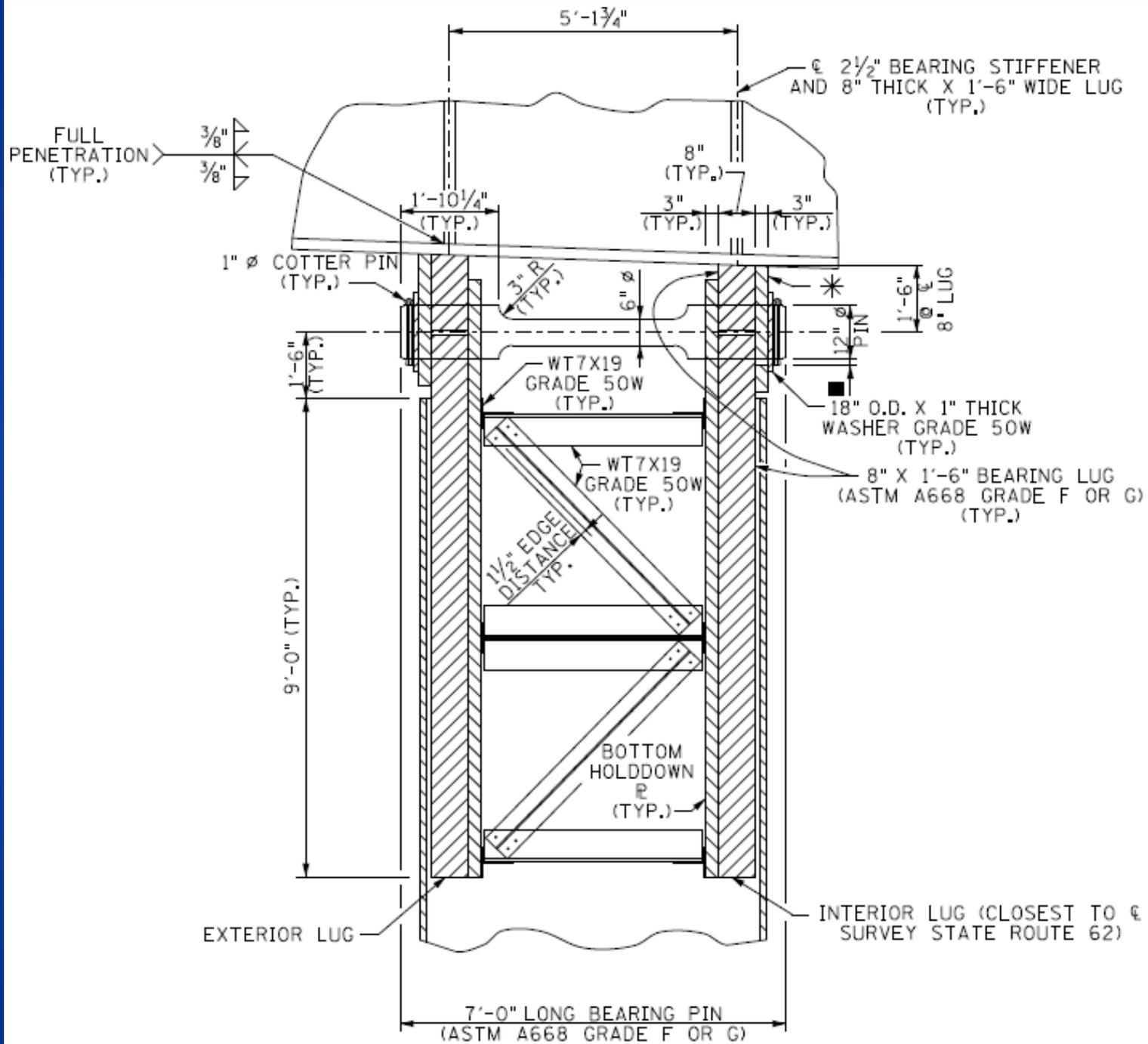




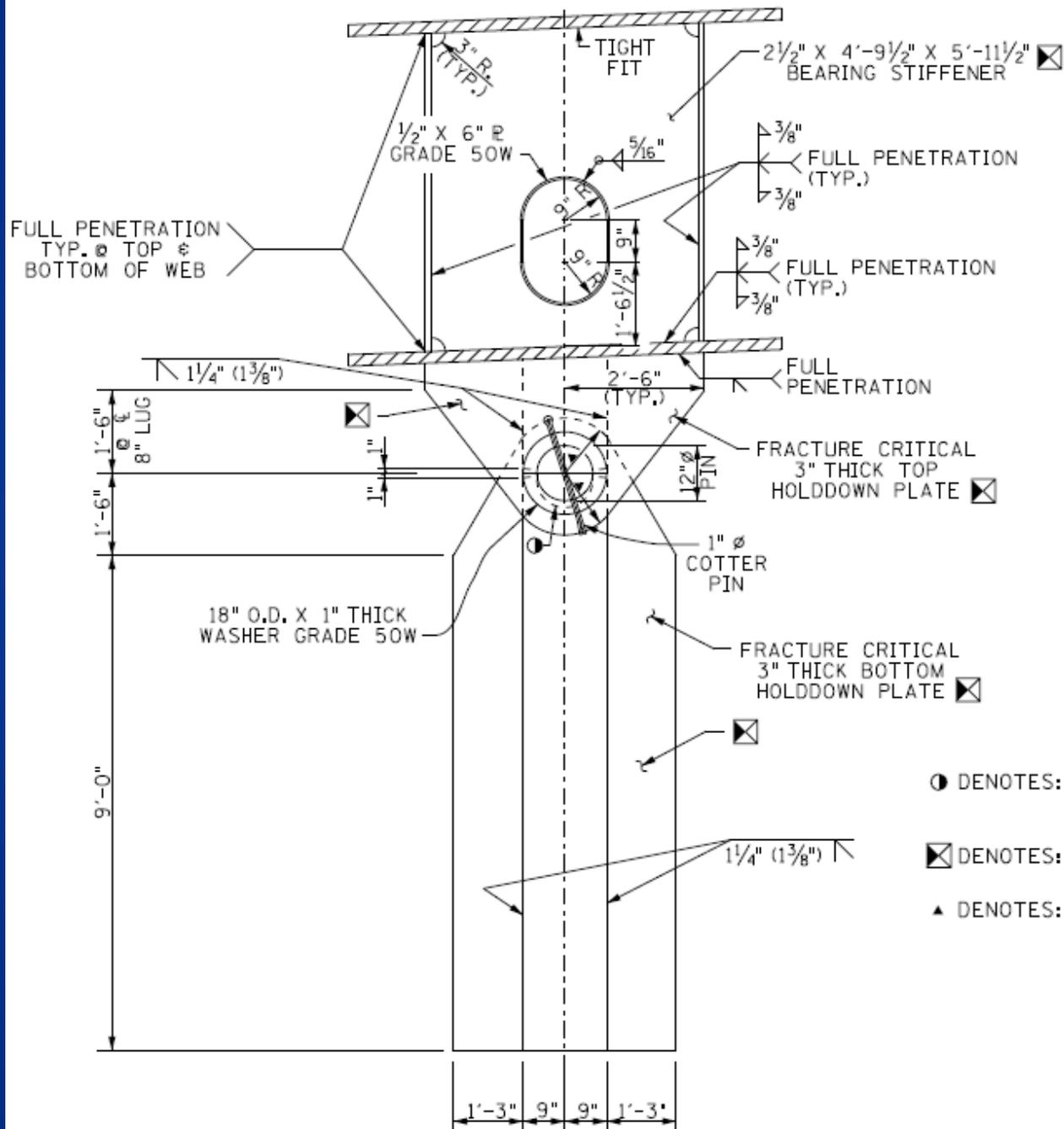
CROSS-SECTION  
(FIELD SPLICE NOS 2 & 5)



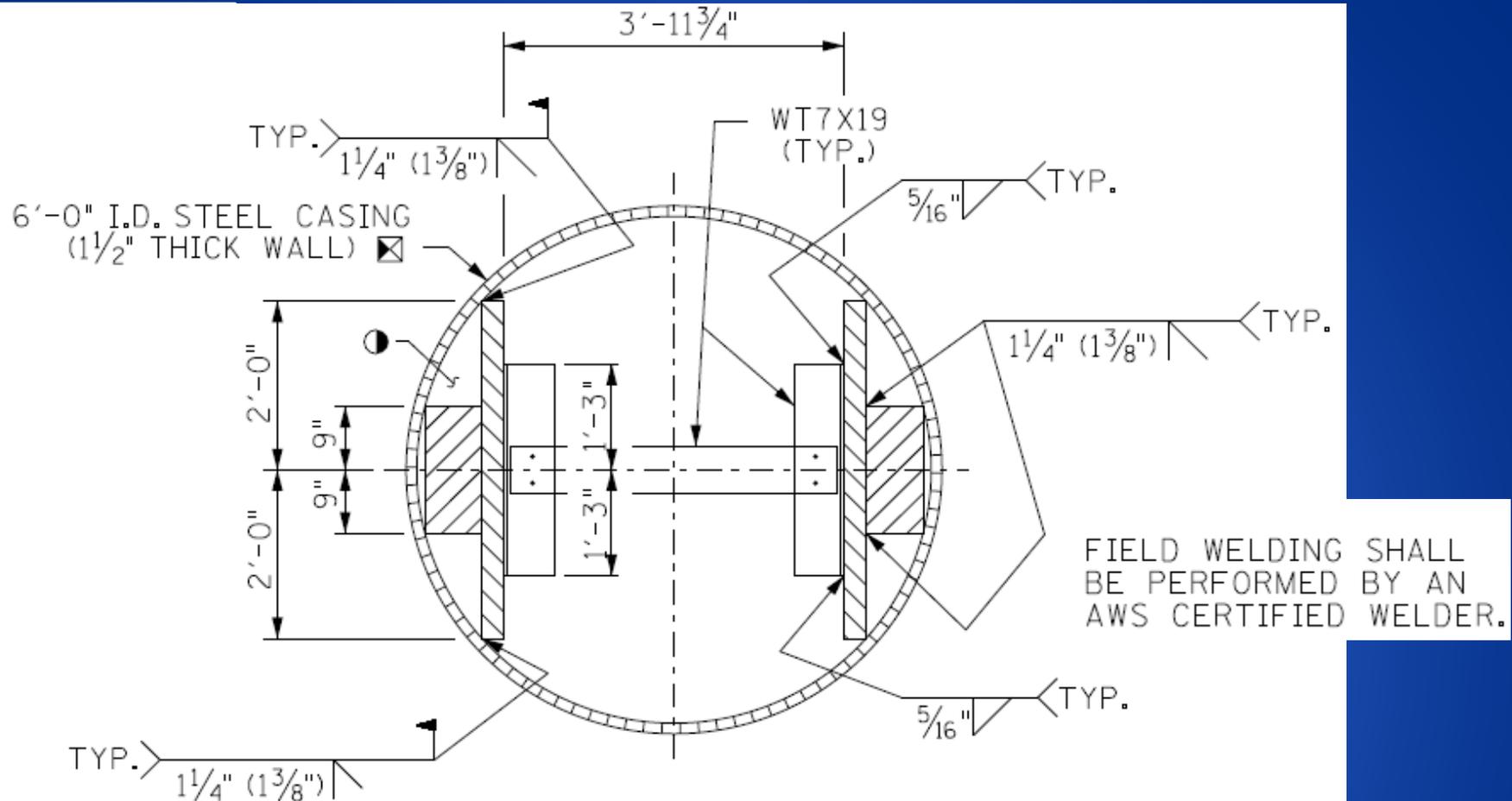




DIRECTION OF SURVEY →



- DENOTES: 1/2" EXTRA SLOT IN BOTTOM OF HOLE FOR TOP HOLDDOWN PLATE OF INTERIOR LUGS. SEE PIN DETAILS.
- ☒ DENOTES: STRUCTURAL STEEL CONFORMING TO ASTM A709 GRADE HPS50W
- ▲ DENOTES: 12" RADIUS



NOTE: REINFORCING STEEL NOT SHOWN FOR CLARITY

- ☒ DENOTES: STRUCTURAL STEEL CONFORMING TO  
ASTM A709 GRADE HPS50W
- DENOTES: AFTER CONCRETE COLUMN IS COMPLETED, ALL  
VOIDS SHALL BE FILLED WITH GROUT (TYP.)

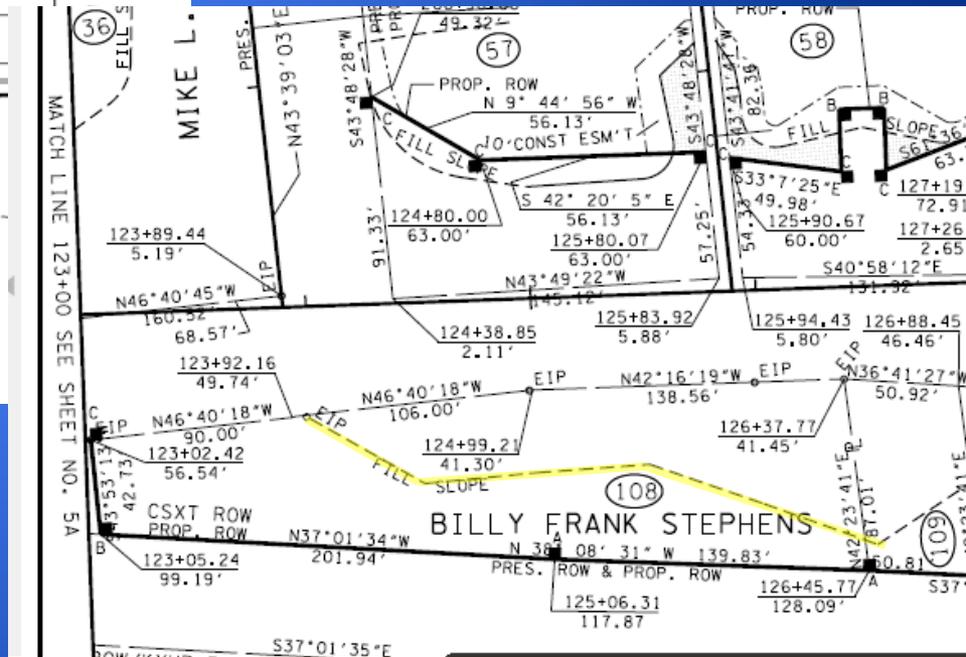
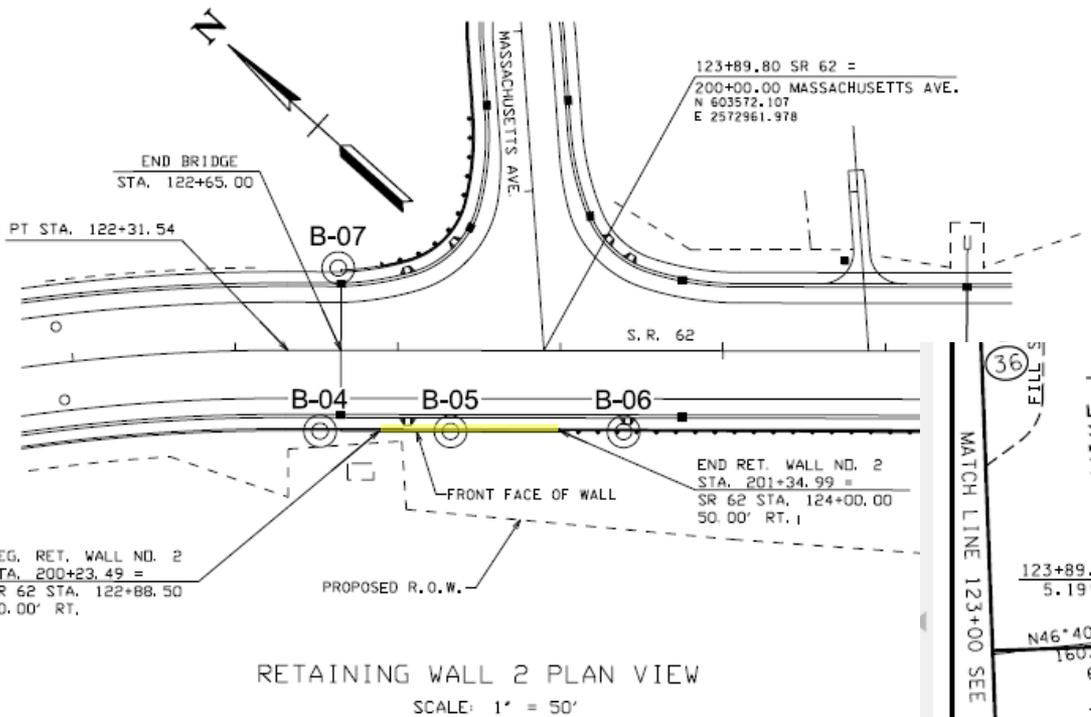
# Retaining Walls

# Retaining Walls

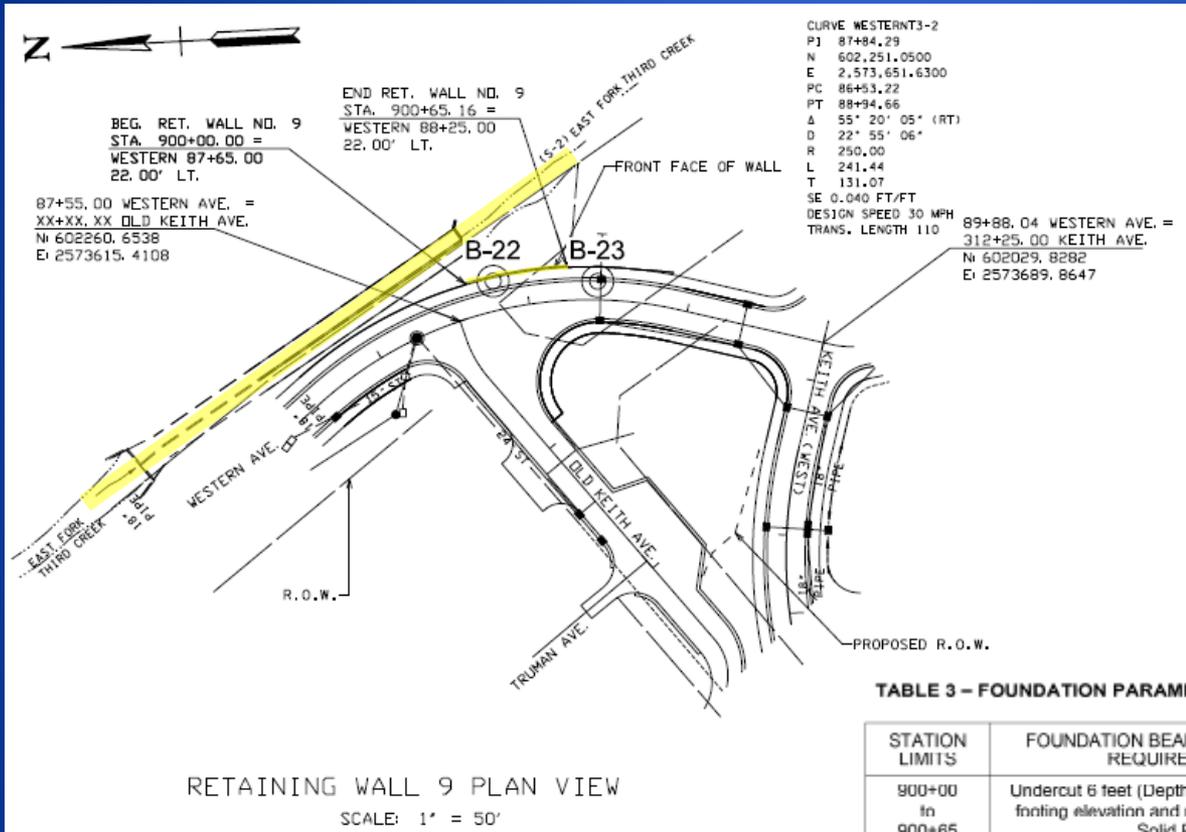
There are a total of 11 Retaining Walls.

- Walls 1, 2, 8, 9 and 10 – require foundation improvement.
- Walls 4, 6 and 7 – there is an option for ground improvement if additional bearing capacity needed.

# Retaining Wall #2



# Retaining Wall #9



**TABLE 3 – FOUNDATION PARAMETERS AND REQUIREMENTS FOR CIP CANTILEVER WALLS**

STATION LIMITS	FOUNDATION BEARING CONDITION REQUIREMENT *	NOMINAL BEARING RESISTANCE (psf)	COEFFICIENT OF SLIDING FRICTION
900+00 to 900+65	Undercut 6 feet (Depth, D) below proposed footing elevation and replace with Graded Solid Rock	10,000	0.5

\* Retaining wall should be located at least 5 feet from the crest of the slope. The footings should bear a minimum of 4 feet below surrounding finish grade. Refer to Typical Details for additional recommendations.



# Environmental

# Water Quality Permits

## Permits received to date:

- TDEC – Individual ARAP/401 Water Quality Certification
- TDEC – Construction NPDES
- COE – Nationwide Section 404
- TVA – Section 26a

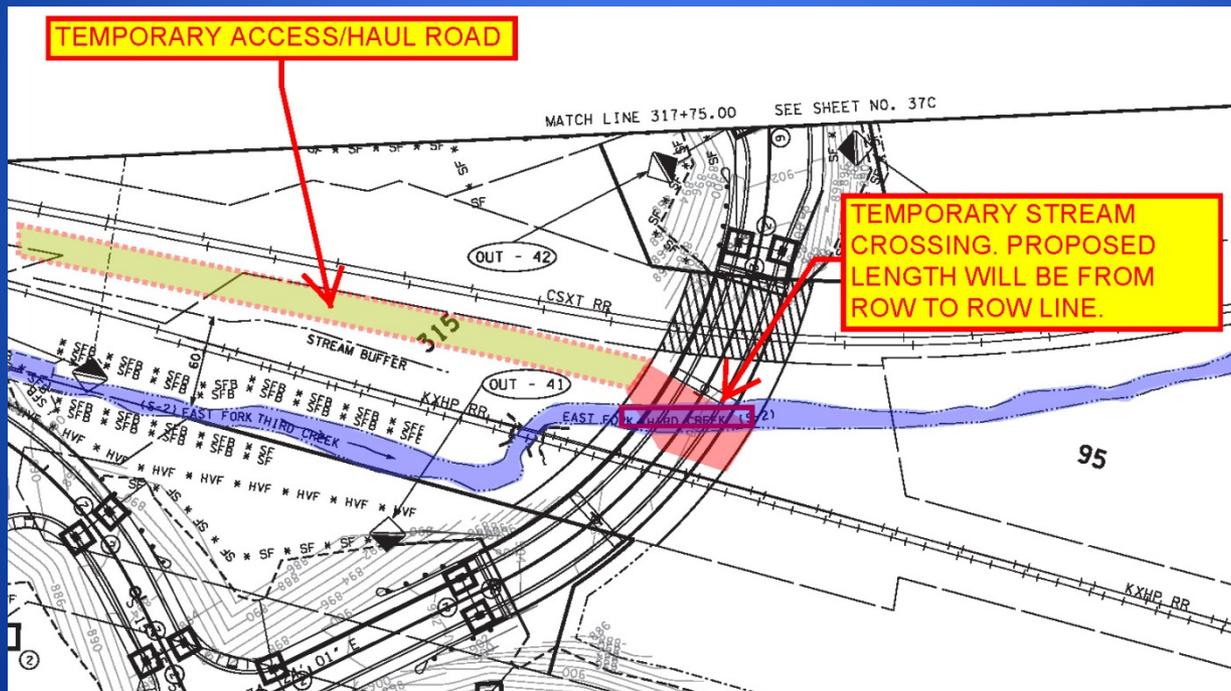
## Permits received for impact associated with:

- STR-1 (Unnamed Trib. to East Fork Third Creek) Box Culvert (STA. 109+27)
- STR-2 (East Fork Third Creek) Box Culvert & Utilities (STA. 12+19.50 Mynderse Ave.)
- STR-2 Span Bridge & Utilities (STA. 120+00±)
- STR-2 Span Bridge, Bank Stabilization & Utilities (STA. 316+00±)

# Water Quality Permits

Permits modifications to be obtained prior to construction:

- STR-2 Span Bridge Temporary Stream Crossing (STA.119+50±)
- STR-2 Span Bridge Temporary Stream Crossing (STA. 316+00±)
- STR-2 (85+25±, LT Western Ave.) Outfall (rip rap apron)



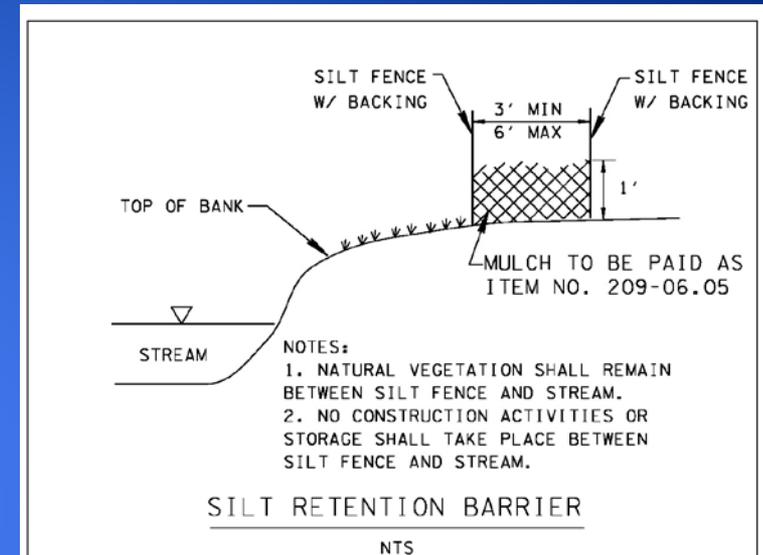
# East Fork Third Creek

TDEC 303d listed for:

- Sedimentation/Siltation
- Habitat Impaired

## Impaired Watershed

- Total Maximum Daily Load (TMDL) for Siltation
- Waste Load Allocation (WLA) for Sediment



TDOT Permits has obtained a TMDL consultation with TDEC for this project.

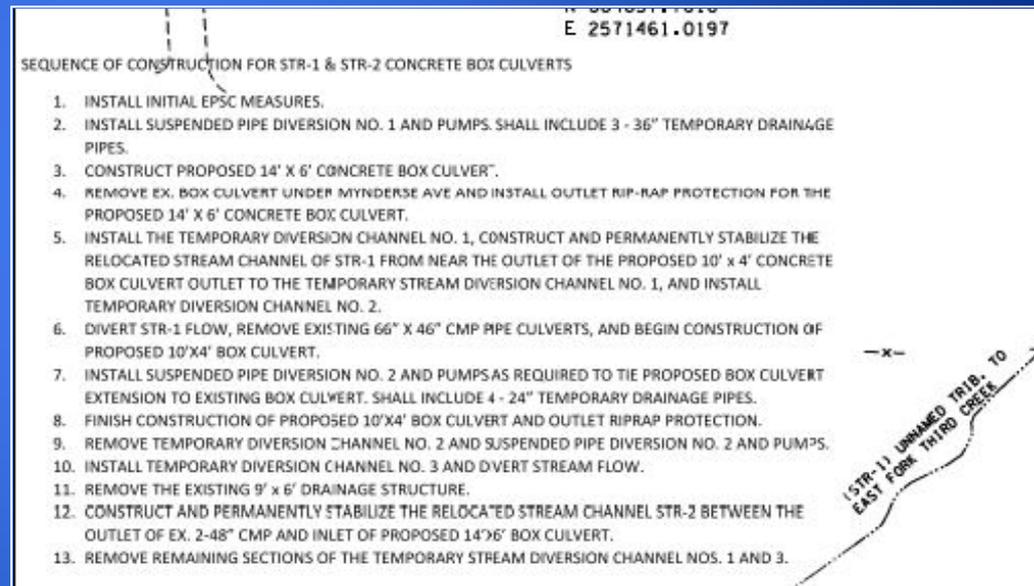
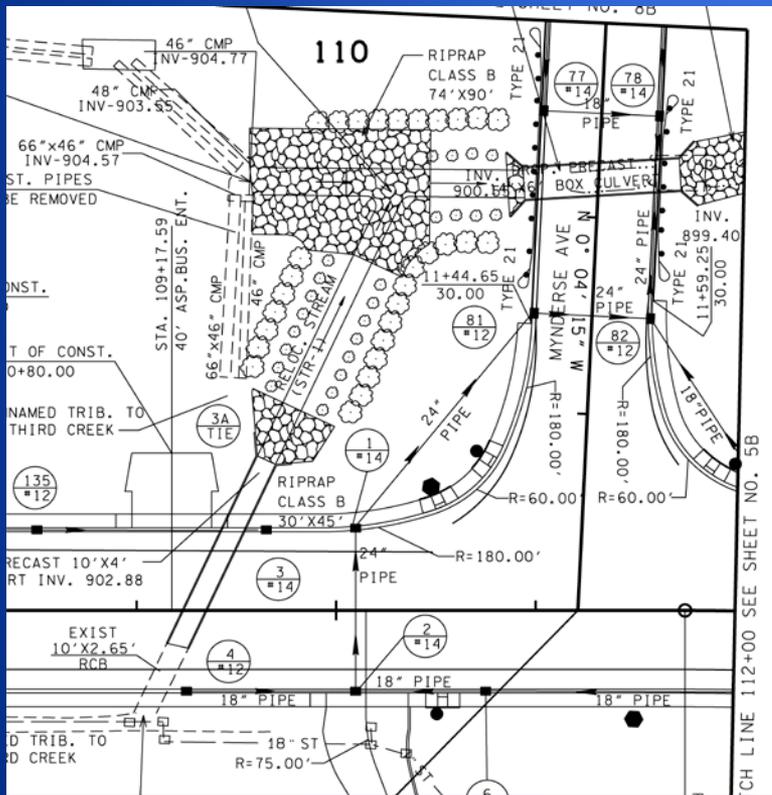
- Special notes/details in the plans regarding impacts, clearing, etc. around streams
- Additional EPSC measures required
- Protect and maintain the natural buffers

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

# East Fork Third Creek Box Construction

## Sequence of Construction for STR-1 & STR-2 Box Culvert Construction

- Erosion Prevention & Sediment Control (EPSC) Plans
  - Stage 2 - SHT. 37



# City of Knoxville

1. Lane Closures on City Streets
2. Noise Ordinance

# SP I08B

- No lane closures will be permitted Monday through Friday 6:00 a.m. – 9:00 a.m. and 3:00 p.m. – 6:00 p.m.
- Prior to Phase 1 Traffic Control, the following shall take place:
  - Mynderse Ave. shall be open to traffic
  - The runaround at Bridge No. 1 constructed
  - Demolition of all structures
- The Contractor shall coordinate and accommodate Gerdau and KUB regarding the power swap over that will occur during the project.

# Questions ?