Road-Stream Crossing Construction

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Talking Points

- Safety First
  - Personal Safety
  - Public Safety

- STH 21, W. Branch White River
  - Culvert Replacement
  - City of Wautoma, Waushara County

Personal Safety

- Protect Yourself and Coworkers
- OSHA Approved Gear
  - Safety Vest (Pants When Required)
  - Hardhat, Foot, Eye and Hearing Protection, Hand, etc.
  - Clean and Serviceable

Personal Safety

- Contact Diggers Hotline!!
  - Utility Locates
  - Ground Disturbances
  - Fines and Lawsuits

DIGGERS HOTLINE™
Dial 811 or
(800) 242-8511
DiggersHotline.com

WISCONSIN DEPARTMENT OF TRANSPORTATION

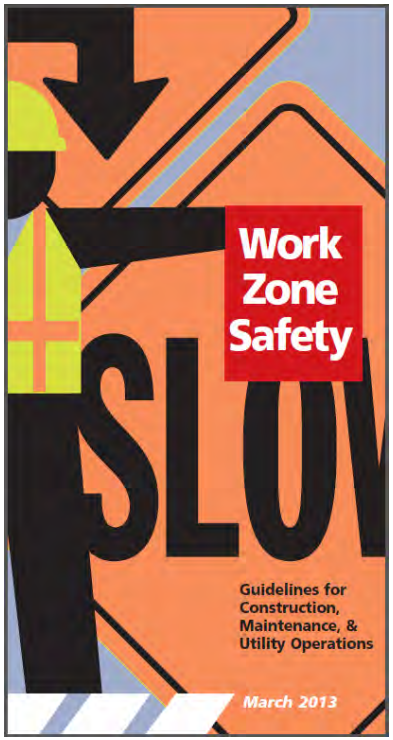
Public Safety

- Location (Urban or Rural)
- Traffic (Daily Traffic, Trucks, etc.)
  - Peak Hour Traffic, Speed, Lane Width, etc.
  - Pedestrian Accommodations
- High Visibility (Vests, Signs, etc.)

WISCONSIN DEPARTMENT OF TRANSPORTATION

Traffic Safety Guides & References

- Work Zone Safety Guidelines
- MUTCD – Manual on Uniform Traffic Control Devices
- Use Caution at Hills or Curves
- Check Work Zone Daily / Night



http://epdfiles.engr.wisc.edu/pdf_web_files/tic/handbooks/WorkZoneSafety.pdf

http://mutcd.fhwa.dot.gov/

WISCONSIN DEPARTMENT OF TRANSPORTATION

Traffic Safety Guides & References

- Be Clear and Concise.
- Is it Confusing?
- Inattentive Driving: Real and Can Kill!

WISCONSIN DEPARTMENT OF TRANSPORTATION

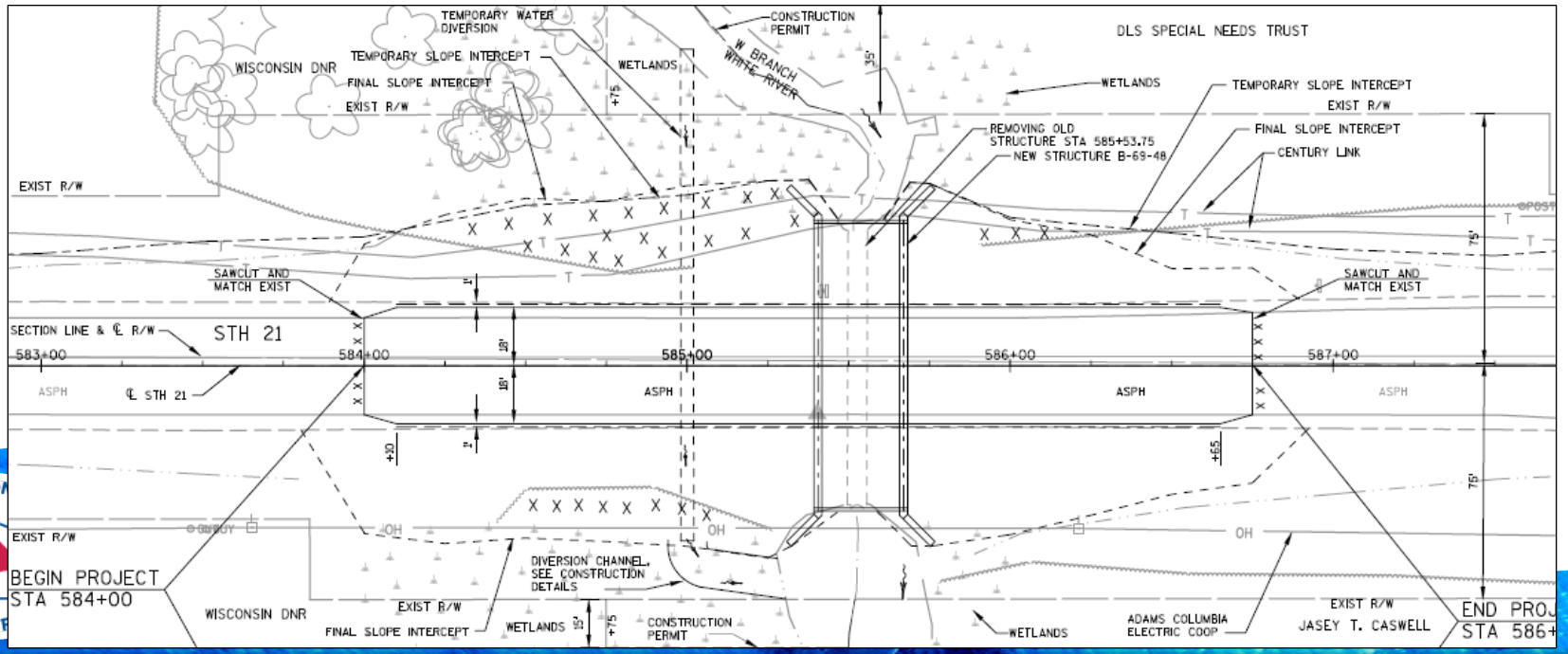
STH 21, Waushara County

West Branch White River

- 7.9 Mile Segment
- Class I Trout Water
  - Natural Reproduction / No Stocking
  - Brook, Brown & Rainbow
- ORW / ERW Listed per NR102
  - Outstanding Resource Water
  - Exceptional Resource Water

STH 21, Waushara County

- Existing: Corrugated Metal Pipe (CMP) - 1949
- 72-Inch Diameter x 84-Foot Long
- Stream Constriction
- Upstream Hydraulic Jump
- Higher Velocities Through Culvert
- Downstream Plunge Pool



STH 21, Waushara County

- Proposed Improvement
  - 29 Foot Span x 90 Foot Wide Bridge
  - Bank Full Width (Instream Work Restrictions)
  - Great Lakes Restoration Initiative Grant
    - Bridge Construction – Completed Fall 2015
      - Design Amount: $62,050
      - Construction Amount: $857,900
      - Cost Reduction Incentive: ($25,800)
    - DNR Habitat Improvement – Proposed 2016
      - DOT / DNR Interagency Agreement: $34,000

STH 21, Waushara County

Upstream Constriction

Downstream Plunge Pool

STH 21, Waushara County

Video

STH 21, Waushara County

Video

STH 21, Waushara County

- During Construction

STH 21, Waushara County

- During Construction

STH 21, Waushara County

- During Construction

STH 21, Waushara County

Video

STH 21, Waushara County

- Before and After Upstream

STH 21, Waushara County

Video

STH 21, Waushara County

Upstream
Water Levels

Downstream Plunge Pool Filling In

STH 21, Waushara County

- Spring 2016 DNR Habitat Improvement

West Branch of the White River
Hwy 21 – Culvert Replacement
Trout Habitat Improvement Project

Legend

- Project Boundary
- Overhead Bankcover
- Rock Weir
- Deflection Log

Plan

Improve trout habitat along 1000 ft
500 ft upstream
500 ft downstream

- Seven overhead bankcovers will be installed
- Two deflections logs will be installed
- Large woody debris structures will be installed throughout project length
- Rock weir will be altered
- Mechanical brushing of stream side woody vegetation to increasing fishability

Note: Structure size is not to scale

STH 21, Waushara County

Dec 2015 Aerial

Questions

Special visitor: 8-27-2015