

Benchmark: Permanent Benchmarks to be set by Engineer prior to construction.

Existing Structure: None.

ROUTE	SECTION	COUNTY
10-0000(150)		ST. CLAIR
CONTRACT NO. 97500		ILLINOIS
FEDERAL AID PROJECT		

THOUVENOT, WADE & MOERCHEN, INC.
ENGINEERS • SURVEYORS • PLANNERS



- CORPORATE OFFICE
4940 OLD COLLINGSVILLE RD.
SWANSEA, ILLINOIS 62226
TEL (618) 624-4488
FAX (618) 624-6688
info@twm-inc.com
- EDWARDSVILLE OFFICE
10158 CENTURY DRIVE
EDWARDSVILLE, ILLINOIS 62025
TEL (618) 656-4040
FAX (618) 656-4343
info@twm-inc.com
- ST. CHARLES OFFICE
400 NORTH 5th ST., SUITE 101
ST. CHARLES, MISSOURI 63301
TEL (636) 724-8300
FAX (636) 724-8304
info@twm-inc.com
- ST. LOUIS OFFICE
720 OLIVE ST., SUITE 200A
ST. LOUIS, MO 63101
TEL (314) 421-6300
info@twm-inc.com
- WATERLOO OFFICE
113 SOUTH MAIN STREET
WATERLOO, ILLINOIS 62298
TEL (618) 939-5050
FAX (618) 939-3938
info@twm-inc.com

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Pedestrian Truss Superstructure	Sq. Ft.	1080

INDEX OF SHEETS

- 21 General Plan and Elevation
- 22 Abutment & Approach Slab Details
- 23 Pile Details
- 24 Fence Rail Transition Details
- 25 Soil Boring Logs

DESIGN SPECIFICATIONS

2009 AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges

2010 AASHTO LRFD Bridge Design Specifications

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.37g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.80g
Soil Site Class = E

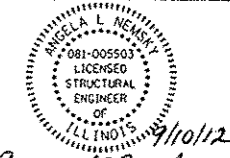
DESIGN STRESSES

f'_c = 3,500 psi
 f_y = 60,000 psi (Reinforcement)

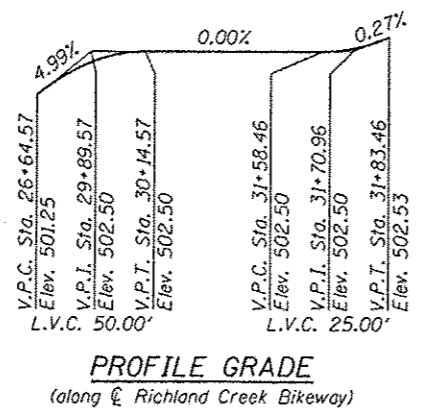
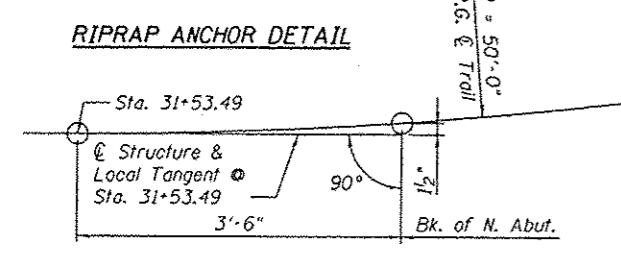
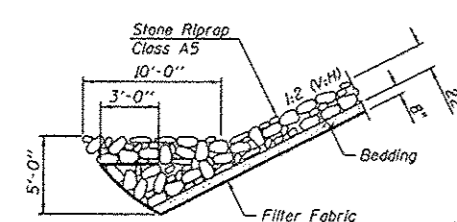
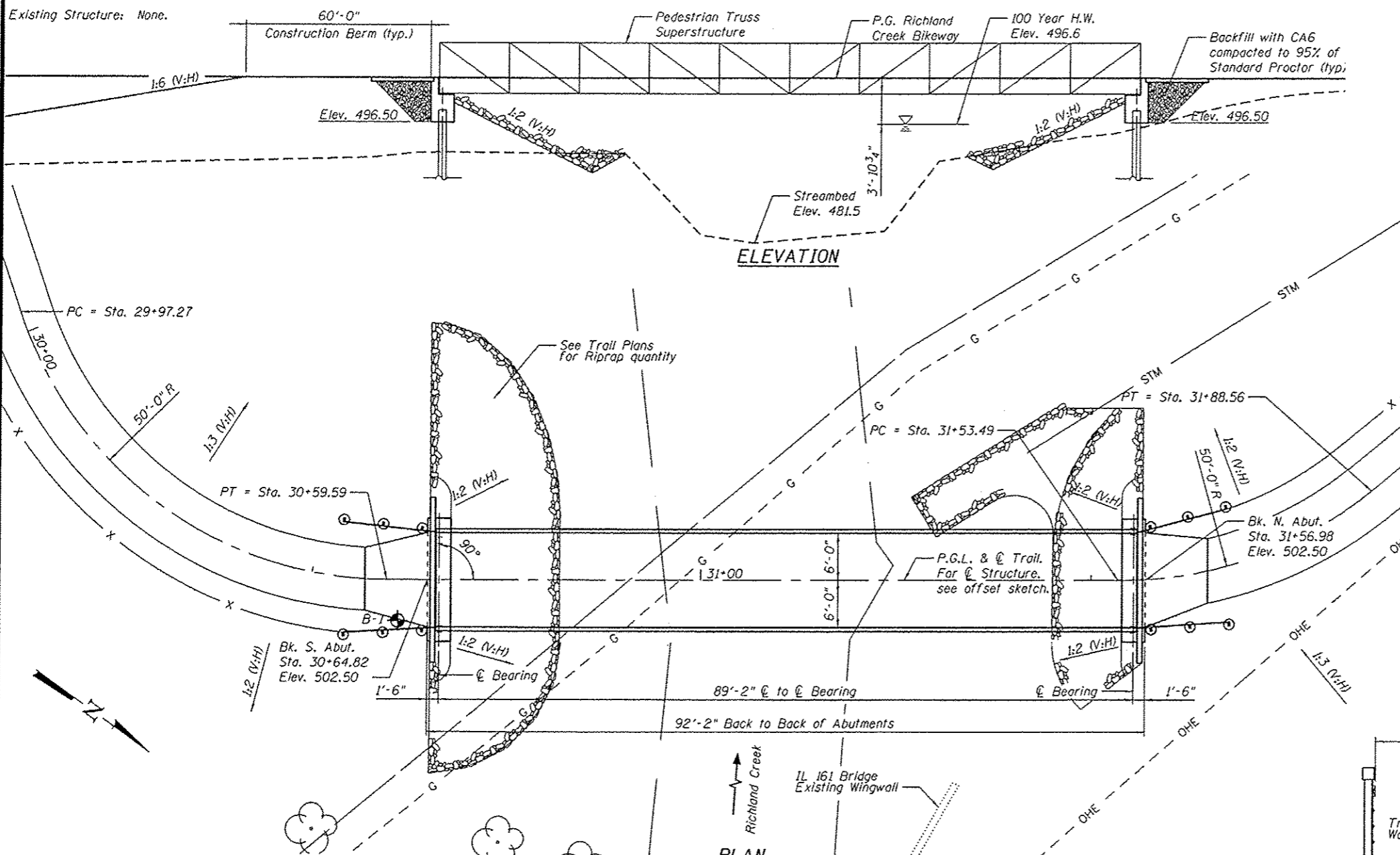
LOADING

Pedestrian Live Load = 90 psf and applied according to Art. 3.1 of the Guide Specifications

** I certify that to the best of knowledge, information and belief, the substructure design for this bridge is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO LRFD Bridge Design Specifications. This seal applies to sheets 21 thru 25 only.



PROFESSIONAL REGISTRATIONS	LICENSE NO.
ILLINOIS PROFESSIONAL DESIGN FIRM	184-001220
PROFESSIONAL ENGINEERING CORP.	02-053720
PROFESSIONAL STRUCTURAL ENGR. CORP.	01-005202
ILLINOIS PROF. LAND SURVEYING CORP.	048-000029
MISSOURI PROFESSIONAL ENGR. CORP.	MC 001528
MISSOURI LAND SURVEYING CORP.	MC 000346



DESIGN SCOUR ELEVATION TABLE

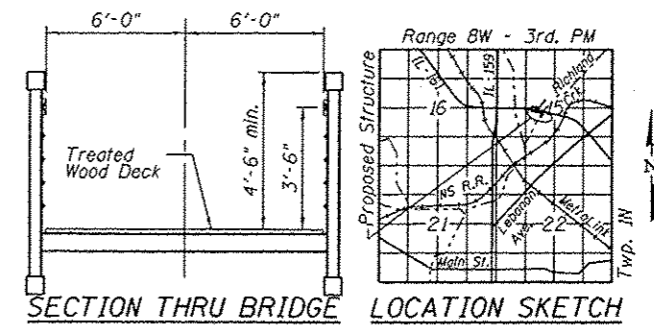
Design Scour Elevation (ft.)	N. Abut.	S. Abut.
	496.50*	496.50*

* Indicated elevation will be coordinated with backwall dimension requirements of bridge fabricator (See Abutment Details)

WATERWAY INFORMATION

Drainage Area = 12.24 sq. mi. Low Grade Elev. 490.76 @ Sta. 27+29.53

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	2128	-	423.4	494.2	-	0.14	-	494.3	
Base	50	4072	-	540.8	495.9	-	0.70	-	496.6	
Overtopping	100	4971	-	592.7	496.6	-	1.18	-	497.8	
Max. Calc.	N/A									



GENERAL NOTES

- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR permit number as shown in the contract plans.
- For approach details, see abutment details, sheet 22.
- The Pedestrian Truss Superstructure shall meet the requirements of the Special Provisions
- Deck: The deck shall be Treated Structural Timber conforming to the requirements of Section 1007.03 of the Standard Specifications.
- Bearings: The bearings shall be specified by the bridge manufacturer.
- Camber: The truss shall be cambered for Dead Load.

TITLE: GENERAL PLAN AND ELEVATION
SECTION 10-00032-00-BT
PROJECT: RICHLAND CREEK BIKEWAY VILLAGE OF SWANSEA ST. CLAIR COUNTY, ILLINOIS

REV	DATE	DESCRIPTION

DRAWN BY: JTH	SHEET 21
DESIGNED BY: JTH	OF 46 SHEETS
CHECKED BY: ALN	PROJECT DESCRIPTION
APPROVED BY: ALN	PROJECT NUMBER 100072A
ISSUED FOR CONSTRUCTION	ISSUED FOR BIDDING
ISSUED FOR RECORD DRAWING	