

BENCHMARK		
NO.	DESCRIPTION	ELEVATION
327	Cut Square on the Northwest Corner of the West Abutment of Bridge 124 Station 31+592.85, 1.42m Lt.	229.823

CAUTION
OVERHEAD
WIRES

1.829m Straight section of rail from end of Bridge. Cut first post to fit and anchor to back face of abutment wall with two (2) 13mm bolts drill and epoxy according to manufacturer's recommendations.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE 124 GENERAL NOTES

- Refer to "BRIDGE GENERAL NOTES" Sheet for additional Prefabricated Steel Bridge GENERAL NOTES.
- The Contractor shall remove all elements of the existing Superstructure and properly dispose of it off-site. This includes: Transverse Railroad Ties, Reinforced Concrete Ballast Pan, Steel Angle, Plate Girders and Diaphragms, Cable Rail, Sections of Concrete Rear Wall, and any other items as applicable to the existing Superstructure which is necessary to set a new Prefabricated Pedestrian Truss Superstructure. All items to be removed shall be disposed of in conformance with the requirements of Section 202.03 of the IDOT Standard Specifications. All material and labor necessary to complete this item of work shall be included in the Contract Unit Price for REMOVAL OF EXISTING SUPERSTRUCTURE with no additional compensation.
- The Contractor shall remove any loose or deteriorated concrete and perform Structural Repair of Concrete as shown on the plans. This work will be paid for at the Contract Unit Price per Square Meter for Structural Repair of Concrete (Depth ≤ 125mm) and Structural Repair of Concrete (Depth > 125mm).
- All tree removal and selective brush clearing shall be in accordance with the Plans and Special Provisions or as directed by the Engineer. TREE REMOVAL and SELECTIVE CLEARING will be measured and paid for at the Contract Unit Price for the respective individual items.
- The Contractor shall furnish and install a brass Name Plate in accordance with the Section 515 of the IDOT Standard Specifications except that it shall be installed with four (4) tamper resistant screws to the top timber bridge rail on the right hand side of the approach end while looking in the direction of increasing Stationing. The plate shall be made of solid brass 3mm thick with imprinted stamp lettering 6mm high. The Contractor shall provide Name Plate construction details with the Shop Drawing submittal. This item will be measured and paid at the Contract Unit Price EACH for NAME PLATE.
- The vertical surfaces of the existing abutments and wingwalls with cracked, loose, spalled, and deteriorated concrete shall be removed to a minimum depth of 100mm or to sound concrete and replaced with formed concrete repair as shown however, this limit should not be considered as a minimum removal limit. The exact limits will be determined in the field by the engineer with the Contractor and some of the area within the limits shown may not require removal while some areas beyond the limits shown may be added. This work shall be in accordance with IDOT GBSP 53 "Structural Repair of Concrete" except that the new concrete shall be anchored to the existing concrete with 12.7mm Dia. hook bolts spaced at 50mm clear distance to the proposed surface. All material and labor required to complete this work will be paid for at the contract unit price per SQUARE METER FOR STRUCTURAL REPAIR OF CONCRETE of the depth specified. Refer to the Special Provisions for further details.

DESIGN LOADING
Pedestrian 4.07 KN/M² (85 psf)
Vehicular MS9 (H=10)

HIGHWAY CLASSIFICATION
Pecatonica Prairie Path
Functional Class: Multi-Use Path

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications - 17th Edition
AASHTO Guide Specifications for Design of Pedestrian Bridges

DESIGN STRESSES
FIELD UNITS
f_c = 24 MPa
f_y = 420 MPa (Reinforcement)

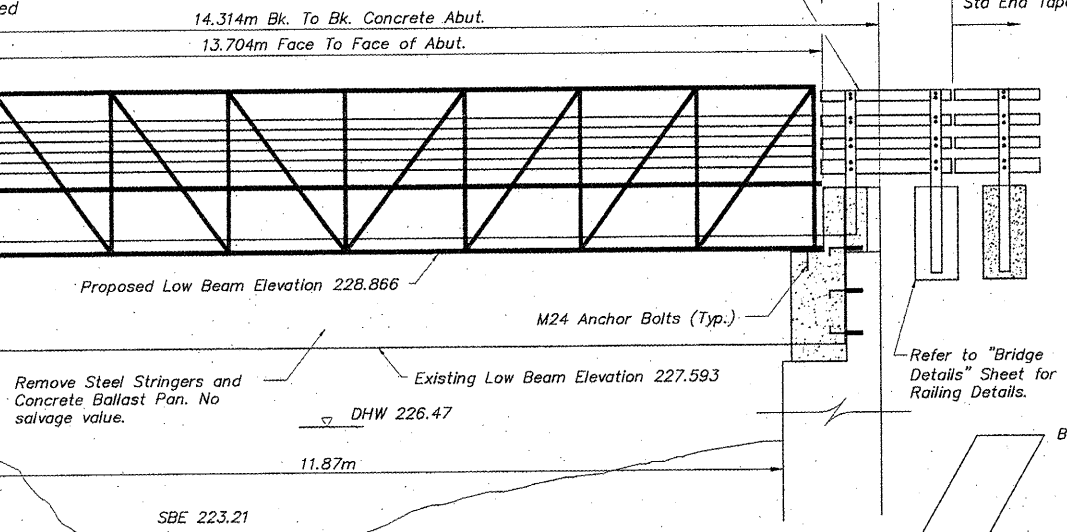
PREFABRICATED BRIDGE UNITS
f_y = 345 MPa (M270W Grade 345W (50W))

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 3.25%
Site Coefficient = 1.0

EXISTING STRUCTURE: Reinforced Concrete Ballast Pan on Steel Plate Girders, set on Massive Reinforced Concrete Abutments.

20mm X 381mm Drilled Expansion Bolts 0.610mm on ctrs. 230mm imbedment.

Existing Concrete Abutments to remain and receive Structural Repairs to facial concrete.

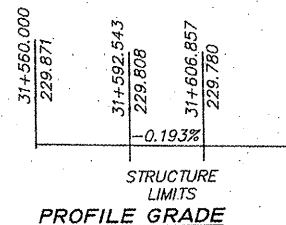


ELEVATION NOT TO SCALE

WATERWAY INFORMATION

Drainage Area = 7 sq.km. Low Grade Elev. = 229.564 @ 31+722.4					
Flood	Freq. Year	Q (cms)	Opening (Sq. M.)		H.W.E. *
			Existing	Proposed	
Design	100	46.75	24.04	24.04	226.47

* Backwater Elevation from the Pecatonica River 100 year HWE



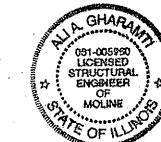
TOTAL BILL OF MATERIALS

ITEM	UNITS	TOTAL
Pedestrian Bridge Superstructure	Sq. M.	49.24
Removal of Existing Superstructure	Each	1
Concrete Structures	Cu. M.	17.91
Reinforcement Bars	Kg	851
Expansion Bolts, M20	Each	48
Structural Repair of Concrete (Depth > 125mm)	Sq. M.	17.9
Structural Repair of Concrete (Depth < 125mm)	Sq. M.	5.7
Drill and Grout Bars	Each	132
Anchor Bolts, M24	Each	8
Structure Excavation	Cu. M.	105.8
Name Plate	Each	1
Monodirectional Prismatic Barrier Reflectors	Each	12
Porous Granular Embankment	Cu. M.	49.2
Wood Rail	Meter	17.1
Pipe Underdrain for Structures 100mm	Meter	32.8
Geocomposite Wall Drain	Sq. M.	11.5
Concrete Headwalls for Pipe Drains	Each	4

INDEX OF BRIDGE SHEETS

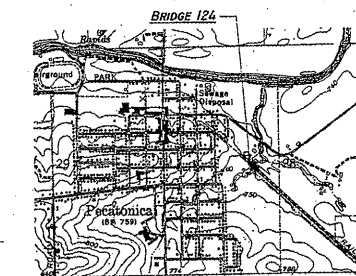
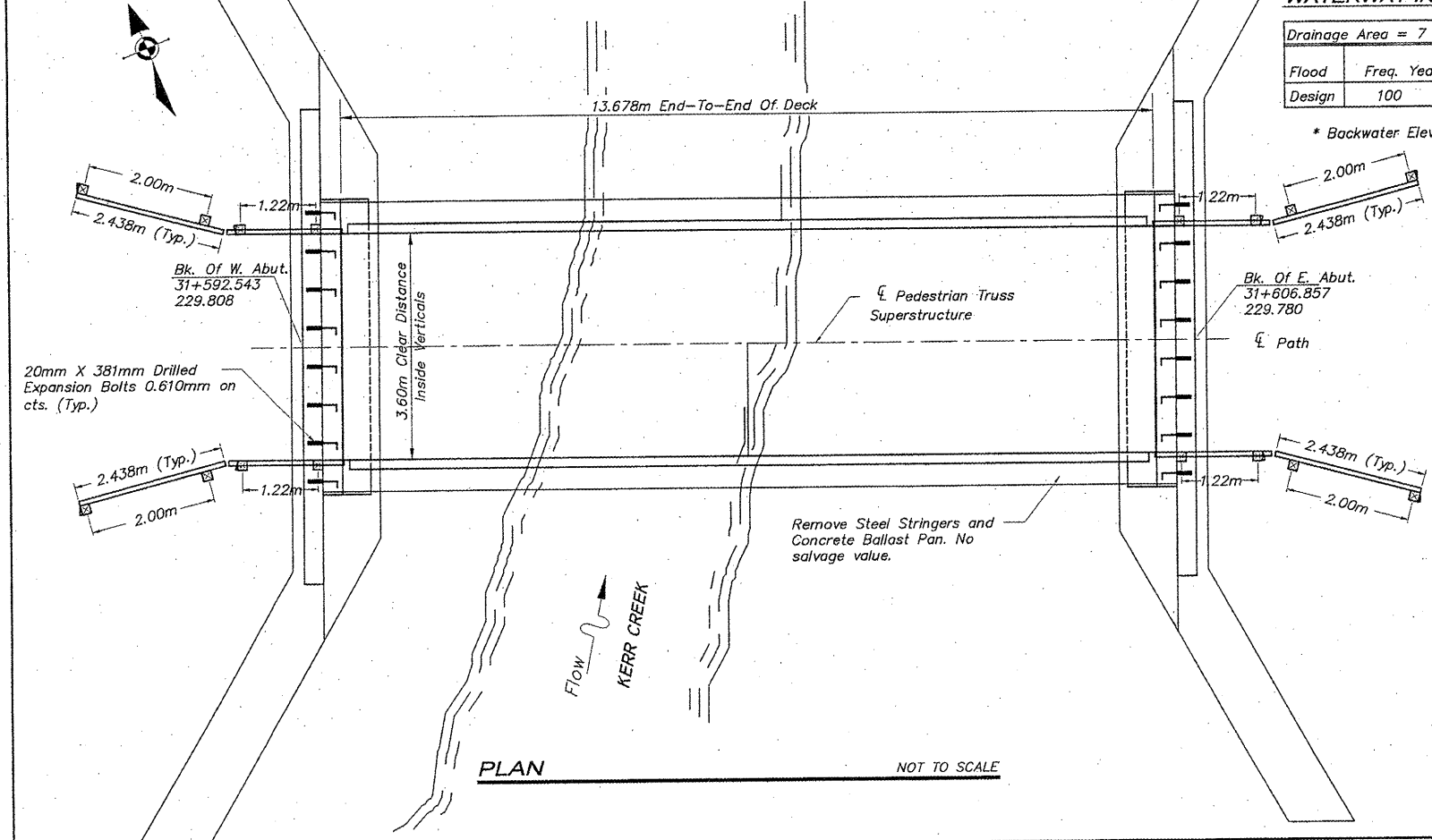
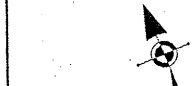
- Bridge NO. 124 GP&E
- Bridge Details
- Bridge Details
- Bridge Details

GENERAL PLAN & ELEVATION
BRIDGE 124
OVER KERR CREEK
WINNEBAGO COUNTY
SECTION NO. 94-00267-00-BT
STATION 31+599.70



Signature: *[Signature]*
Date: 1/9/12
Exp. Date: 1/30/12

SHEET 1 OF 4



R. 11 E.

SHEET REVIEW	
AGENCY	DATE

REVISIONS		
NO.	ITEM	DATE

SCALE:	
DRAWN BY:	REK
CHECKED BY:	JHM
DATE:	DECEMBER 12, 2011

SCALE: N/A
DRAWN BY: REK
CHECKED BY: JHM
DATE: DECEMBER 12, 2011

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BRIDGE NO. 124 GP&E
PECATONICA PRAIRIE PATH
WINNEBAGO COUNTY HIGHWAY DEPARTMENT
SECTION 94-00267-00-BT
FILE:H:\10-042 WINN CO PEC PATH\DESIGN\DRAWINGS\BRIDGES\10-042 8124.DWG
JOB:04-30-10-042

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OF	107