

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5102	*	WINNEBAGO	18	1
FED. ROAD DIST. NO. 7				
ILLINOIS FED. AID PROJECT BHM-5099(64)				
* 03-00336-00-BR				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED
BRIDGE REHABILITATION PROJECT
F.A.U. ROUTE 5102 (CENTRAL AVENUE)
COUNTY HIGHWAY 13
OVER NORTH FORK OF KENT CREEK**

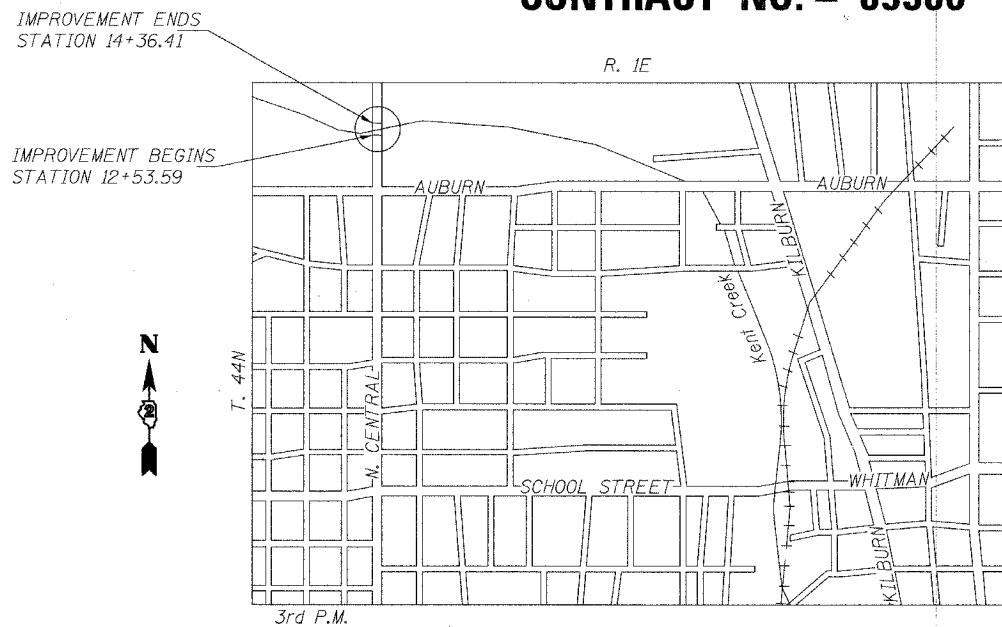
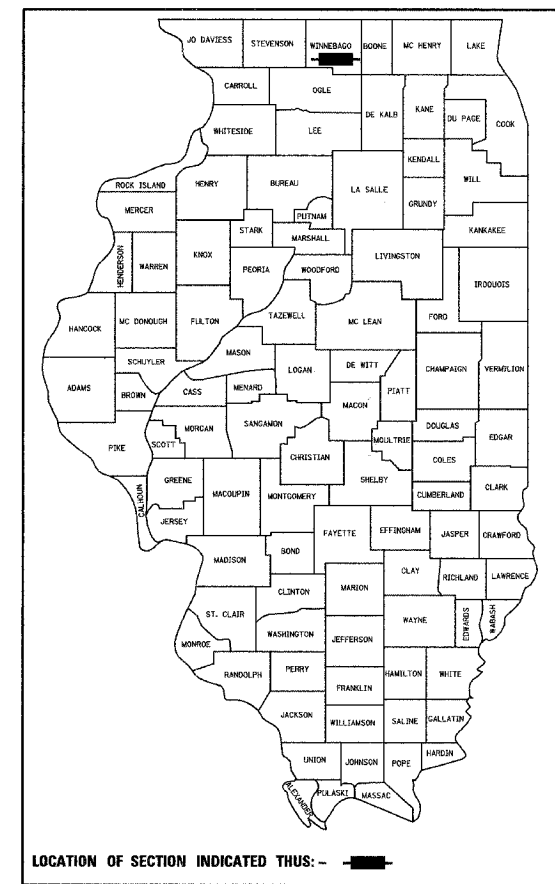
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
PROJECT BHM-5099 (64)
JOB NUMBER - C-92-075-05
CONTRACT NO. - 85380

INDEX OF SHEETS

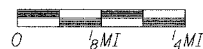
- TITLE SHEET
- GENERAL NOTES & QUANTITIES
- DEMOLITION PLAN
- GENERAL PLAN & PROFILE
- GENERAL PLAN & ELEVATION
- CROSS SECTION, GENERAL NOTES & DETAILS
- SUPERSTRUCTURE REPAIR
- SUBSTRUCTURE DEMOLITION
- SUPERSTRUCTURE DETAILS
- CONCRETE PARAPET & ALUMINUM RAILING
- ALUMINUM RAILING DETAILS
- SUBSTRUCTURE REPAIRS
- SUBSTRUCTURE REPAIRS
- SOUTH PIER COLUMN REPAIR DETAILS
- SLOPEWALL REPAIR DETAILS
- BAR SPLICE ASSEMBLY DETAILS
- TRAFFIC CONTROL PLAN
- TRAFFIC CONTROL PLAN

LIST OF STANDARDS

- 280001-02 TEMPORARY EROSION CONTROL SYSTEMS
- 420001-06 PAVEMENT JOINTS
- 420401-05 BRIDGE APPROACH PAVEMENT
- 420701-01 PAVEMENT FABRIC
- 606001-02 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 630001-06 STEEL PLATE BEAM GUARDRAIL
- 630301-03 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631031-05 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-01 REFLECTOR MARKER AND MOUNTING DETAILS
- 701601-04 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 702001-06 TRAFFIC CONTROL DEVICES
- 780001-01 TYPICAL PAVEMENT MARKINGS



LOCATION PLAN



SCALE OF LAYOUT
NET LENGTH = 182.82 FEET (0.035 MI)

TRAFFIC DATA

HIGHWAY CLASSIFICATION: MINOR ARTERIAL (URBAN)
2006 ADT: 10,400 3% TRUCKS
DESIGN SPEED: 40 MPH
POSTED SPEED: 40 MPH

PROPOSED IMPROVEMENTS

CONCRETE BRIDGE DECK REPAIRS, MICROSILICA CONCRETE OVERLAY, REPLACEMENT OF EXPANSION JOINTS, REPLACEMENT OF ABUTMENT BACK WALLS, REPLACEMENT OF BRIDGE PARAPET, REPLACEMENT OF ABUTMENT BEARINGS, CONCRETE SLOPE WALL REPAIRS, SCOUR REMEDIATION, BRIDGE DECK DRAIN EXTENSIONS, AND BRIDGE APPROACH PAVEMENT REMOVAL AND REPLACEMENT. EXISTING AND NEW STRUCTURE NUMBER 101-3023.

TOLL FREE
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (J.U.L.I.E.) TELEPHONE NUMBER 1-800-892-0123

UTILITY NOTE
THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED AMONG THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS, ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

APPROVED *James E. Zie* 7/20/06
COUNTY ENGINEER

PASSED *Feb 2 20 06*
DISTRICT ENGINEER OF LOCAL ROADS & STREETS

APPROVED FOR BIDDING *Feb 2 20 06*
DISTRICT ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRANCIS L. HANSON
669-04455
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

DATE SIGNED: 1/30/2006
LIC. EXP. DATE: 11/30/2007

Corporate License Number 184-001-084
© Copyright Hanson Professional Services Inc. 2005

HANSON

JOB NO. 03R1809
DATE 4/28/06

12:09:42 PM 11/07/06
 07:25:2206
 R:\03005\03-00336-00-BR\Struct\Sheet\5-001711.dgn
 LAYOUT: F.L.N. 11/07/06
 DRAWN: M.W. 12/09/06
 REVIEWED: F.L.N. 01/20/06

GENERAL NOTES

1. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE LATEST EDITION ISSUED BY ILLINOIS DEPARTMENT OF TRANSPORTATION OR THE COPY OF THE STANDARD INCLUDED IN THESE CONSTRUCTION DOCUMENTS AS DETERMINED BY THE ENGINEER.
2. REMOVAL AND DISPOSAL OF UNSALVAGEABLE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF SECTION 202.03.
3. A NATIONWIDE 404 PERMIT HAS BEEN ISSUED FOR THIS PROJECT, AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO. SEE SPECIAL PROVISIONS.
4. EARTH EXCAVATION AND / OR EMBANKMENT REQUIRED TO INSTALL THE WORK SHALL BE INCLUDED IN THE COST OF THAT WORK. THE EMBANKMENT MATERIAL SHALL BE ACCEPTABLE TO THE ENGINEER AND SHALL BE PLACED AND COMPACTED TO THE SATISFACTION OF THE ENGINEER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPOERTY DURING CONSTRUCTION AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. FOLLOWING IS A LIST OF UTILITY COMPANIES THAT MAY BE LOCATED WITHIN OR ADJACENT TO THE PROJECT LIMITS. THIS INFORMATION IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR, AND REPRESENTS THE INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION.
6. THE CONTRACTOR SHALL LAYOUT THE TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT) PRIOR TO INSTALLING ANY OF THE TRAFFIC BARRIER TERMINAL, TYPE 6 TO VERIFY THAT THERE ARE NO INTERFERENCES BEFORE EITHER TERMINAL IS INSTALLED. CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY IF ANY INTERFERENCE OCCURS.
7. SHOULDER AND SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS PER STANDARD 630301 AND TRAFFIC BARRIER TERMINAL, TYPE 6 PER STANDARD 631031 SHALL BE CONSTRUCTED FOR THIS PROJECT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT) AND TRAFFIC BARRIER TERMINAL, TYPE 6.
8. THE WIDTH OF THE GUTTER FOR THE COMBINATION CURB AND GUTTER SHALL TRANSITION FROM THE PROPOSED BRIDGE CROSS SECTION SHOWN ON SHEET 6 TO TYPICAL APPROACH ROADWAY SECTION SHOWN ON SHEET 2 OVER THE LENGTH OF THE BRIDGE APPROACH (20'-0"). THE COST OF THIS TRANSITION SHALL BE INCLUDED IN THE COST OF THE COMBINATION CURB AND GUTTER INSTALLED.

UTILITY NAME	TYPE	CONTACT	PHONE NUMBER
CITY OF ROCKFORD 425 EAST STATE STREET ROCKFORD, IL	WATER & SEWER	JOHN MARTIN	(815) 961-3766
NICOR GAS 1844 FERRY ROAD NAPERVILLE, IL. 60563-9600	GAS	SCOTT STOGSDILL	(815) 983-8888 EXT. 2362
COMED 123 ENERGY AVENUE ROCKFORD, IL 61109	ELECTRIC	MIKE LENOX	(815) 490-2869

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
5102		WINNEBAGO	18	2
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT BHM-5099(64)		
03-00336-00-BR				

CONSTRUCTION TYPE CODE: X020-2A
SUMMARY OF QUANTITIES

CODE PAY ITEM NO.	ITEM	UNIT	TOTAL QUANTITY
20700220	POROUS GRANULAR EMBANKMENT	CU. YD.	15
28000400	PERIMETER EROSION BARRIER	FOOT	375
* 28100109	STONE RIPRAP, CLASS A5	SQ. YD.	375
* 28200200	FILTER FABRIC	SQ. YD.	375
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B, 4"	SQ. YD.	258
35101800	AGGREGATE BASE COURSE, TYPE B, 6"	SQ. YD.	34
* 42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ. YD.	214
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ. YD.	217
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	323
44000700	APPROACH SLAB REMOVAL	SQ. YD.	428
* 44001800	COMBINATION CURB AND GUTTER REMOVAL (PARTIAL)	FOOT	156
44002020	CONCRETE MEDIAN SURFACE REMOVAL	SQ. FT.	306
50102400	CONCRETE REMOVAL	CU. YD.	29.2
50200100	STRUCTURE EXCAVATION	CU. YD.	27
50300120	PREFORMED JOINT SEAL 2 1/2"	FOOT	144
* 50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	29.3
50300260	BRIDGE DECK GROOVING	SQ. YD.	561
50300300	PROTECTIVE COAT	SQ. YD.	838
50300310	ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	28
50301245	FORMED CONCRETE REPAIR DEPTH < 5"	SQ. FT.	140
50301250	FORMED CONCRETE REPAIR DEPTH > 5"	SQ. FT.	60
50500405	FURNISH AND ERECT STRUCTURAL STEEL	POUND	4,280
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	28
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3220
60618300	CONCRETE MEDIAN SURFACE, 4-INCH	SQ. FT.	306
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)	EACH	2
63200310	GUARDRAIL REMOVAL	FOOT	104
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	3
* 70103700	TRAFFIC CONTROL COMPLETE	L. SUM	1
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2812
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	8
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2
* X0321743	SILICONE JOINT SEALER, 1"	FOOT	100
* Z0006110	BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2.25"	SQ. YD.	607
* Z0006205	BRIDGE DECK HYDRO-SCARIFICATION, 1.5"	SQ. YD.	607
* Z0013798	CONSTRUCTION LAYOUT	L. SUM	1
* Z0015595	DECK DRAIN EXTENSIONS	EACH	24
* XX002053	LANDSCAPE RESTORATION	L. SUM	1
XX004093	CONCRETE SLOPEWALL REMOVAL	SQ. FT.	132
XX004094	CONCRETE SLOPEWALL	SQ. FT.	132
* XX006501	EPOXY MORTAR REPAIR (DEPTH LESS THAN 1.5")	SQ. FT.	933
* Z0013825	CONTROLLED LOW-STRENGTH MATERIAL	CU. YD.	150
* X0301280	PLUG EXISTING DRAINS	EACH	4
* XX006502	PIER COLUMN ENCASEMENT REMOVAL & REPLACEMENT	FOOT	72
* XX006503	CORE DRILL HOLES IN SLOPEWALL	EACH	16
* XX006504	CONCRETE TOEWALL REPAIR	FOOT	76
* 60605805	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.06 (SPECIAL)	FOOT	162
* 60608525	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24 (SPECIAL)	FOOT	81
* 60610800	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.24 (SPECIAL)	FOOT	81
* Z0002600	BAR SPLICERS	EACH	32
67100100	MOBILIZATION	L. SUM	1
* 50900905	REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	200
* X0325152	STRUCTURAL INSPECTION	L. SUM	1
X0324401	PORTABLE TEMPORARY BARRIER SYSTEM, T1-3	FOOT	866

* SEE SPECIAL PROVISIONS, HIGHWAY STANDARDS, GENERAL NOTES, AND/OR DETAILS IN PLANS

Corporate License Number 184-001-084

GENERAL NOTES & QUANTITIES

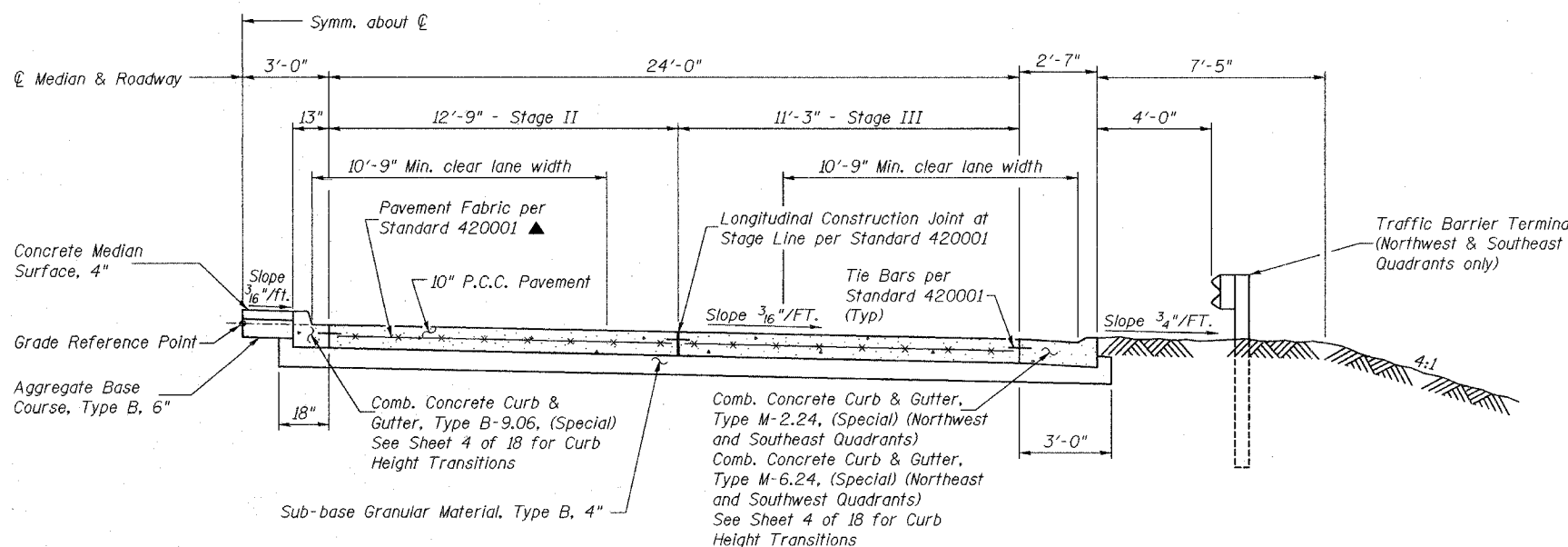
**CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45**

© Copyright Hanson Professional Services Inc. 2005



JOB NO. 03R1809

DATE 4/28/06

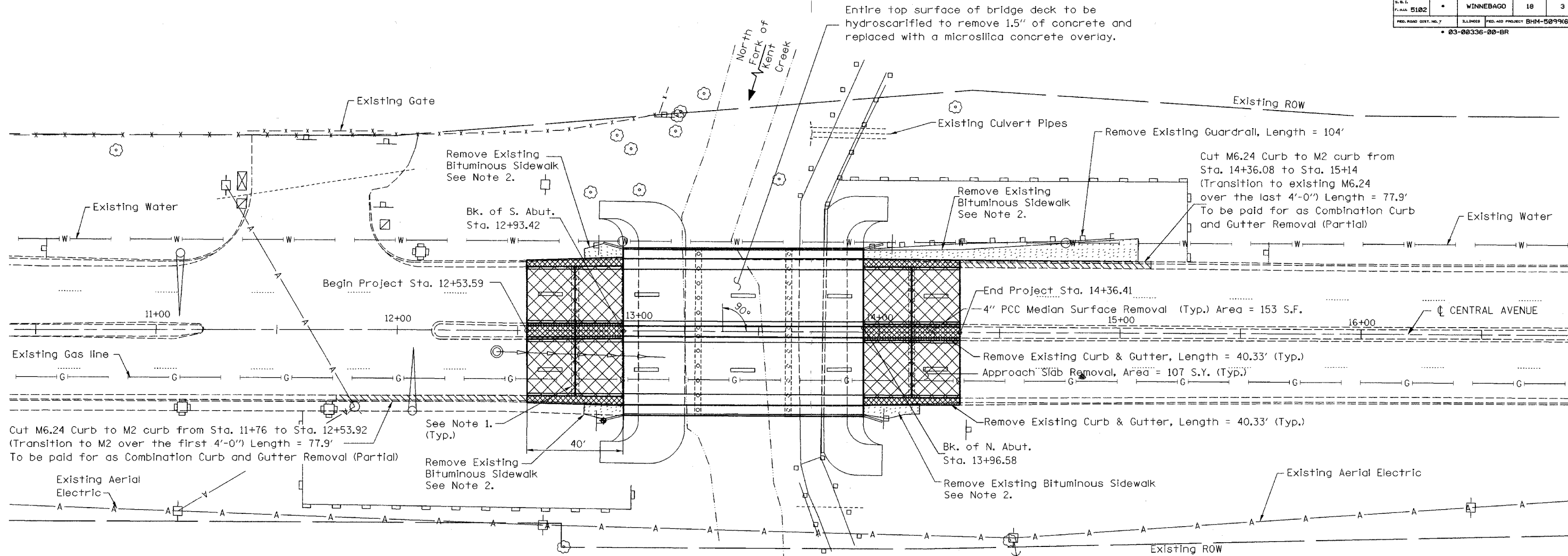


TYPICAL APPROACH ROADWAY SECTION

(Bridge Approach Pavement Connector (PCC))

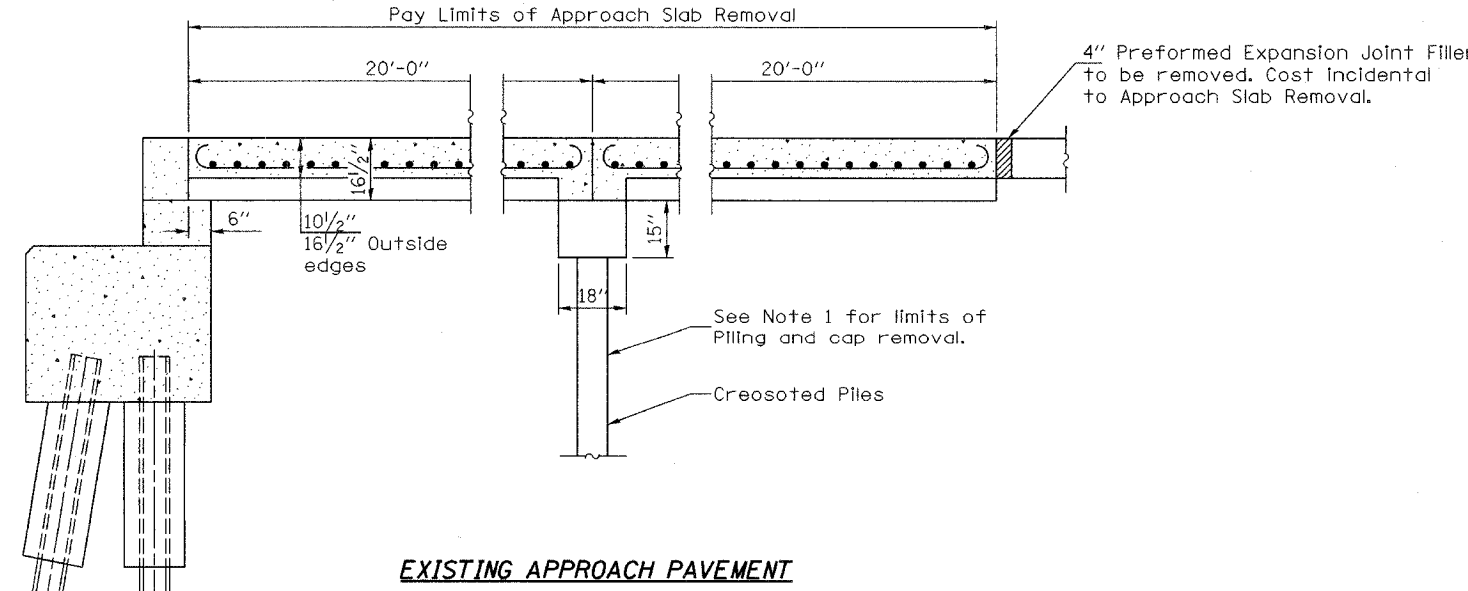
11/5/05 AM
01/30/2006
14031085031809001151000002-NotesQuantities.dgn
LAYOUT
DRAWN
REVIEWED
11/18/05
MGN
12/29/05
FLN
01/09/06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FLA.AA 5102		WINNEBAGO	18	3
FED. ROAD DIST. NO. 7	ILLINOIS FED. AID PROJECT BHM-5099(64)			
03-00336-00-BR				



DEMOLITION PLAN

- NOTES**
- Existing Piling and cap under existing Approach Slabs shall be removed down to a depth of at least 2 ft. below the bottom of the proposed sleeper pads for the new Bridge Approach Pavement. See Standard 420401. Cost Included in Approach Slab Removal.
 - Bituminous Sidewalk Removal next to the four corners of the bridge shall be included in the cost of Combination Curb and Gutter Removal.



Corporate License Number 184-001-084

DEMOLITION PLAN

CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
 F.A.U. ROUTE 5102
 SECTION 03-00336-00-BR
 WINNEBAGO COUNTY
 STRUCTURE NUMBER 101-3023
 STATION 13+45

© Copyright Hanson Professional Services Inc. 2005

JOB NO.



03R1809
DATE
4/28/06

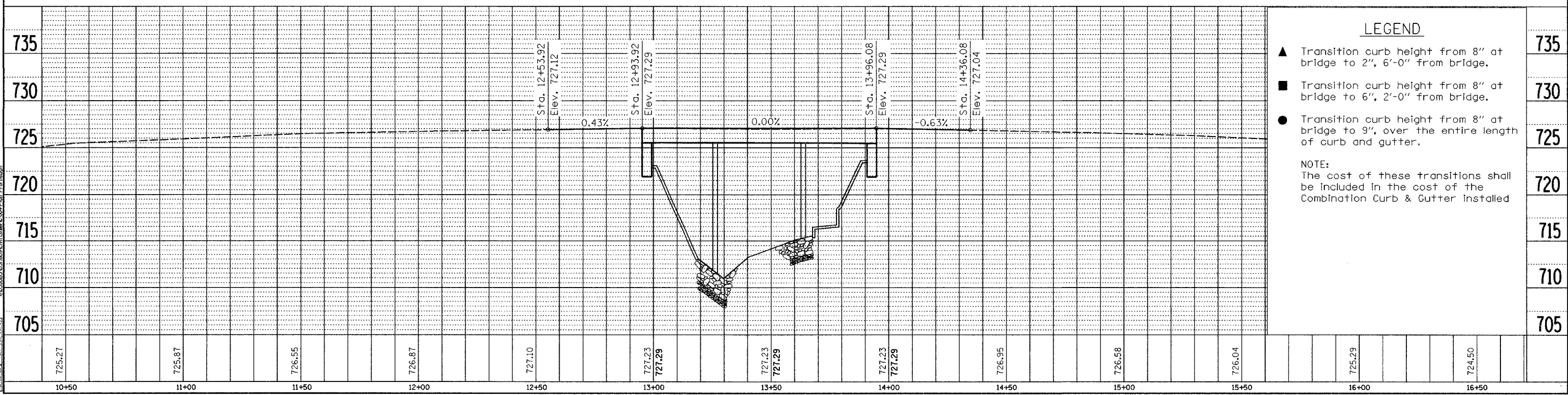
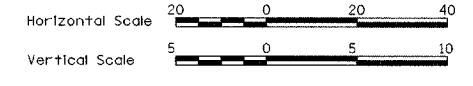
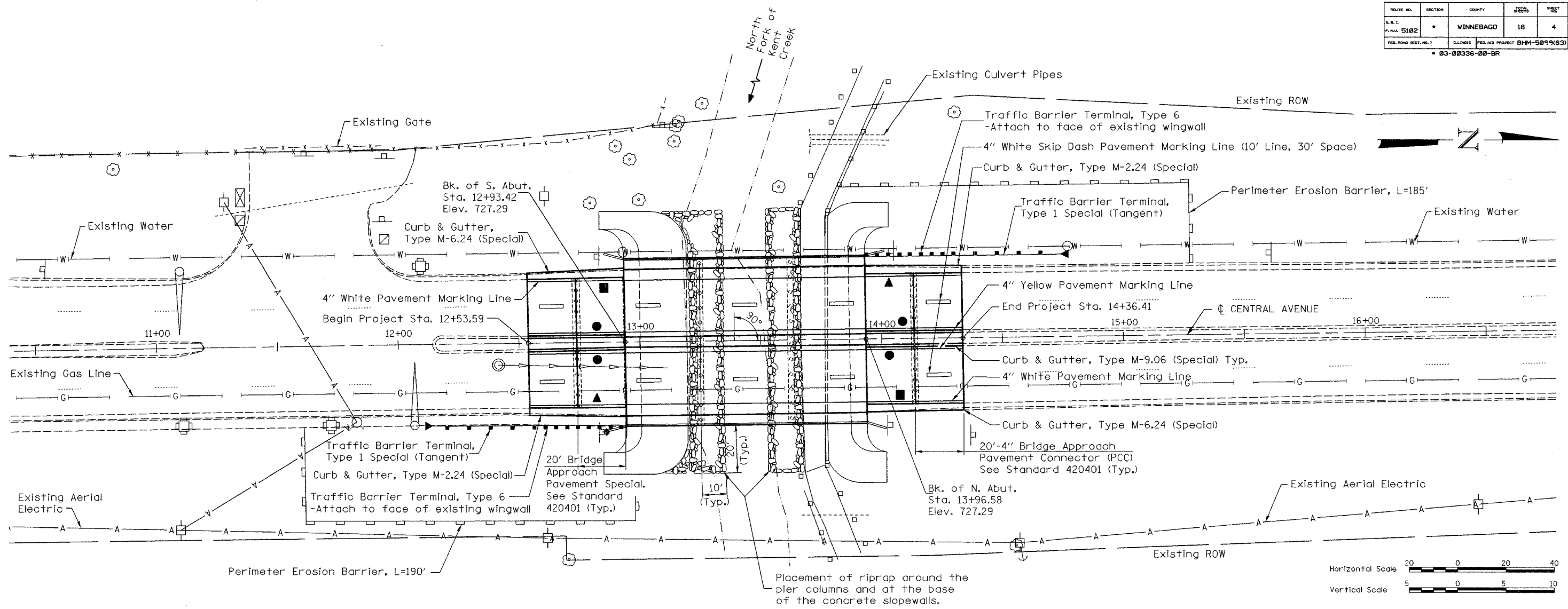
11:33:01 AM
04/20/2006
I:\03\00336\03-00336-00-BR\1809\Civil\Structure\003_Demo_Plan.dgn

LAYOUT	PLN	11/20/05
DRAWN	MDW	12/13/05
REVIEWED	PLN	12/27/05

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5102		WINNEBAGO	18	4
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	BHM-5099(63)	
03-08336-08-BR				

PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO. OF SHEETS	
	NO. OF THIS SHEET	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO. OF SHEETS	
	NO. OF THIS SHEET	
	DATE	



LEGEND

- ▲ Transition curb height from 8" at bridge to 2", 6'-0" from bridge.
- Transition curb height from 8" at bridge to 6", 2'-0" from bridge.
- Transition curb height from 8" at bridge to 9", over the entire length of curb and gutter.

NOTE:
The cost of these transitions shall be included in the cost of the Combination Curb & Gutter installed

LAYOUT: PLAN 10/24/06
 DRAWN: MCM 12/05/06
 CHECKED: PLM 01/09/06
 DATE: 01/30/2006
 PROJECT: 03-08336-08-BR

Bench Mark: Chiseled square on southeast concrete wingwall of the Central Avenue bridge over North Fork of Kent Creek. NGVD 29 Elevation 729.22.

Existing Structure: Structure No. 101-3023 is a three span, continuous reinforced concrete slab bridge that was built in 1966. The existing structure is 103'-2" long, back of abutment to back of abutment and 70'-0" wide, outside of deck to outside of deck. Both abutments are spill through type abutments supported by steel piles. Both piers are pile bent piers supported by steel piles encased in concrete columns.

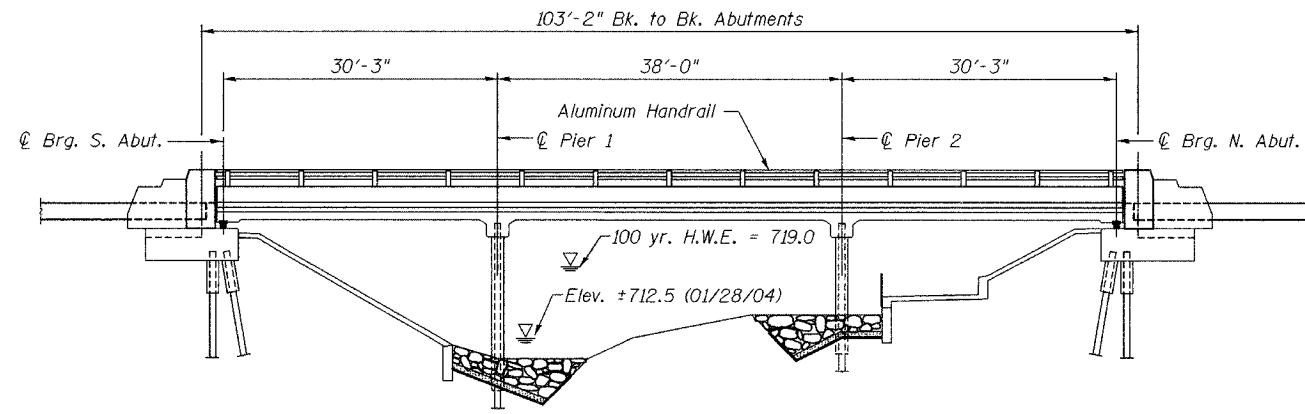
WATERWAY INFORMATION

Drainage Area = 24.4 SQ. MI. Low Grade Elev. 725.45 @ Upstream & Downstream Faces

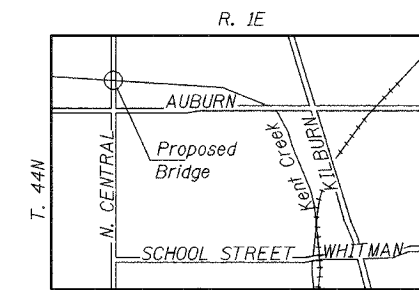
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	30	1320	264.6	264.6	717.9	0.17	0.17	718.1	718.1
Base	100	1800	328.3	328.3	718.8	0.22	0.22	719.0	719.0

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5102		WINNEBAGO	18	5

FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BHM-5099(64)
03-00336-00-BR



ELEVATION
(Looking West)



LOCATION MAP

DESIGN STRESSES

Super: $f'_c = 4,000$ psi (Microsilica Overlay)
 $f'_c = 3,500$ psi
 $f_y = 40,000$ psi (Existing)
 $f_y = 60,000$ psi (Proposed)

Existing $f'_c = 2,500$ psi
 Sub: $f_y = 40,000$ psi (Existing)
 $f_y = 60,000$ psi (Proposed)

LOADING HS20-44

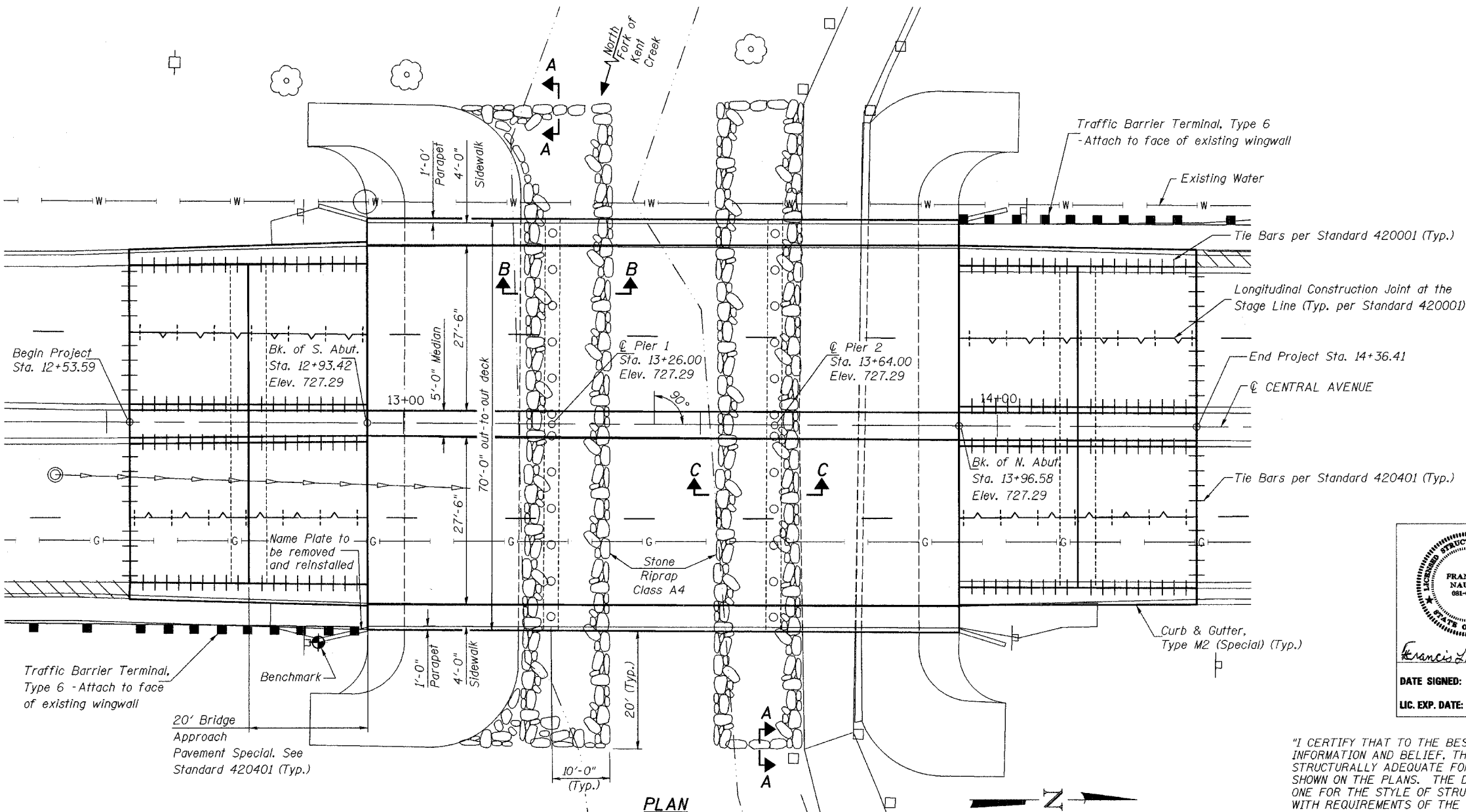
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

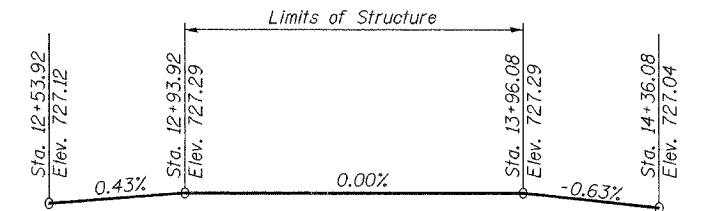
2002 (17th Edition) AASHTO Standard Specifications for Highway Bridges

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.03
 Site Coefficient (S) = 1.0



PLAN



PROPOSED PROFILE GRADE

NOTES

- See Sheet 6 of 18 for Section A-A, Section B-B, and Section C-C.

Professional Engineer Seal for Francis L. Nautman, State of Illinois, License No. 081-004900. Includes signature and dates: DATE SIGNED: 1/30/2006, LIC. EXP. DATE: 11/30/2006.

"I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE DESIGN 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 STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES."

Corporate License Number 184-001-084

GENERAL PLAN & ELEVATION

**CENTRAL AVENUE BRIDGE
 OVER NORTH FORK OF KENT CREEK
 F.A.U. ROUTE 5102
 SECTION 03-00336-00-BR
 WINNEBAGO COUNTY
 STRUCTURE NUMBER 101-3023
 STATION 13+45**

© Copyright Hanson Professional Services Inc. 2006



JOB NO. 03R1809
 DATE 4/28/06

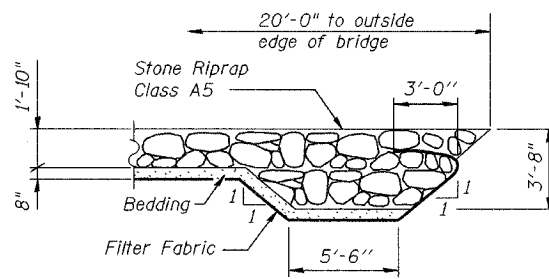
11/22/06 AM
 01/30/2006
 IN:310855.03/1809-Struc/Sheet S-005-GR&E.dgn

LAYOUT	FLN	11/18/05
DRAWN	WGN	12/13/05
REVIEWED	FLN	12/27/05

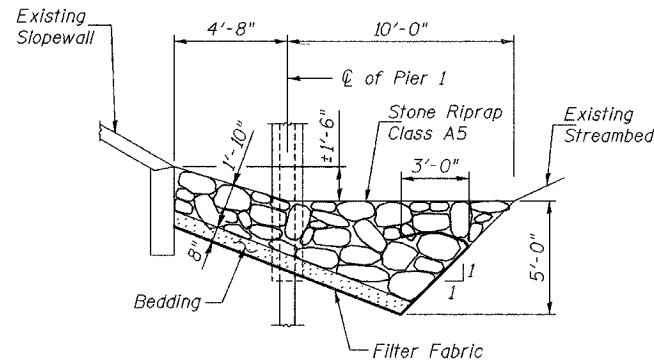
ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL SHEETS
F.A.U. 5102		WINNEBAGO	18	6
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT BHM-5099(64)		
* 03-00336-00-BR				

GENERAL NOTES

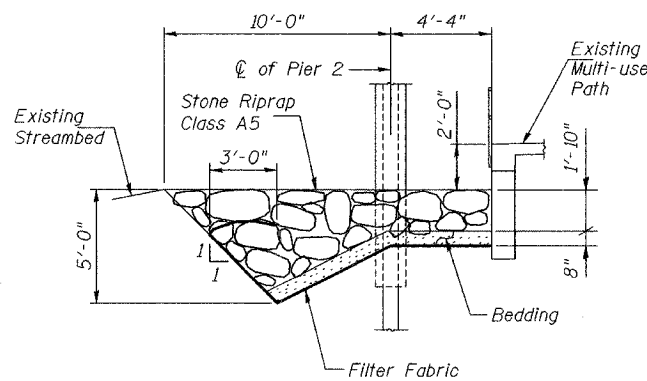
- Fasteners shall be high strength bolts (ASTM A325) unless otherwise noted.
- Calculated weight of Structural Steel = 4280 Lbs.
- All structural steel shall be AASHTO M270 Grade 36.
- The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 36.
- Reinforcement bars shall conform to the requirements of AASHTO M31, M42 or M53 Grade 60.
- Slope wall shall be reinforced with welded wire fabric, 6"x6" - W4.0 x W4.0, weighting 58 lbs. per 100 sq. ft.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- Plan dimension and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- All Construction joints shall be bonded.
- The Name Plate on the inside face of the southeast wingwall shall be removed and reinstalled. The cost of this work shall be included in the cost of Concrete Removal and Concrete Superstructure.
- The new concrete for the wingwalls, abutment back walls and the parapet will be paid for as Concrete Superstructure.
- Protective Coat shall be applied to the entire top surface of the deck, median, sidewalks, vertical faces of median curb and sidewalk curb, and the tops and inside vertical faces of the sidewalk parapets on the bridge.
- The drilling and epoxy grouting of reinforcement bars shall conform to Section 584 of the Standard Specifications unless noted otherwise in this plan set. The drilling of the holes, furnishing of the epoxy grout and setting of the reinforcement bars in the epoxy grout will not be measured or paid for separately, but shall be considered as included in the unit price bid for Reinforcement Bars, Epoxy Coated.
- The bearing reactions at each abutment are as follows:
 Dead Load = 14,000 lbs.
 Live Load = 26,000 lbs.
 Impact = 8,000 lbs.
 These loads do not include weight of any construction equipment or materials.



SECTION A-A



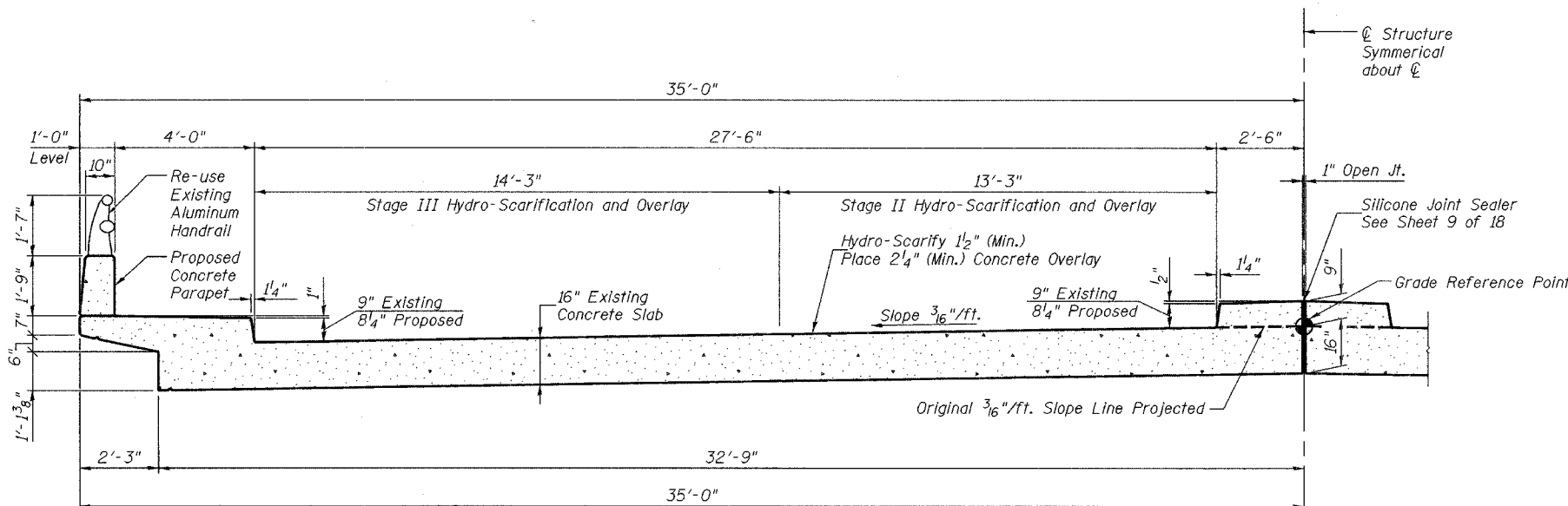
SECTION B-B



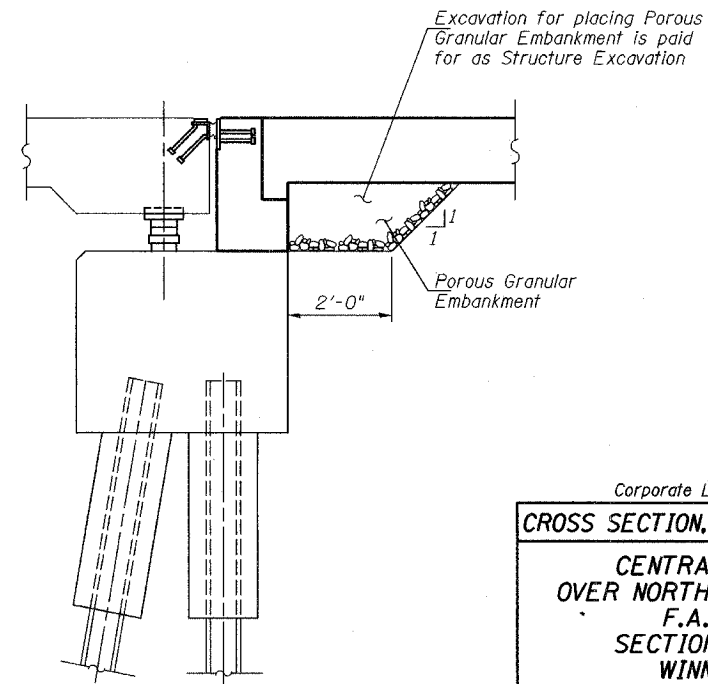
SECTION C-C

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
POROUS GRANULAR EMBANKMENT	CU. YD.		15	15
STONE RIPRAP, CLASS A5	SQ. YD.		375	375
FILTER FABRIC FOR RIPRAP	SQ. YD.		375	375
BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ. YD.	214		214
APPROACH SLAB REMOVAL	SQ. YD.	428		428
CONCRETE REMOVAL	CU. YD.	10.2	19.0	29.2
STRUCTURE EXCAVATION	CU. YD.		27	27
PREFORMED JOINT SEAL 2 1/2"	FOOT	144		144
CONCRETE SUPERSTRUCTURE	CU. YD.	11.8	17.5	29.3
BRIDGE DECK GROOVING	SQ. YD.	561		561
PROTECTIVE COAT	SQ. YD.	836		836
ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	28		28
FORMED CONCRETE REPAIR DEPTH < 5"	SQ. FT.	140		140
FORMED CONCRETE REPAIR DEPTH > 5"	SQ. FT.	60		60
FURNISH AND ERECT STRUCTURAL STEEL	POUND	4280		4280
JACK AND REMOVE EXISTING BEARINGS	EACH	28		28
REINFORCEMENT BARS, EPOXY COATED	POUND	860	2360	3220
SILICONE SEALER JOINT, 1"	FOOT	100		100
BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2.25"	SQ. YD.	607		607
BRIDGE DECK HYDRO-SCARIFICATION, 1.5"	SQ. YD.	607		607
CONTROLLED LOW-STRENGTH MATERIAL	CU. YD.		150	150
DECK DRAIN EXTENSIONS	EACH	24		24
CONCRETE SLOPEWALL REMOVAL	SQ. FT.		132	132
CONCRETE SLOPEWALL	SQ. FT.		132	132
EPOXY MORTAR REPAIR (DEPTH LESS THAN 1.5")	SQ. FT.	933		933
PLUG EXISTING DRAINS	EACH	4		4
PIER COLUMN ENCASEMENT REMOVAL & REPAIR	FOOT		72	72
CORE DRILL HOLES IN SLOPEWALL	EACH		16	16
CONCRETE TOEWALL REPAIR	FOOT		76	76
REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	200		200
BAR SPLICERS	EACH		32	



PROPOSED CROSS SECTION



ABUTMENT SECTION

Corporate License Number 184-001-084

CROSS SECTION, GENERAL NOTES & DETAILS

CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45

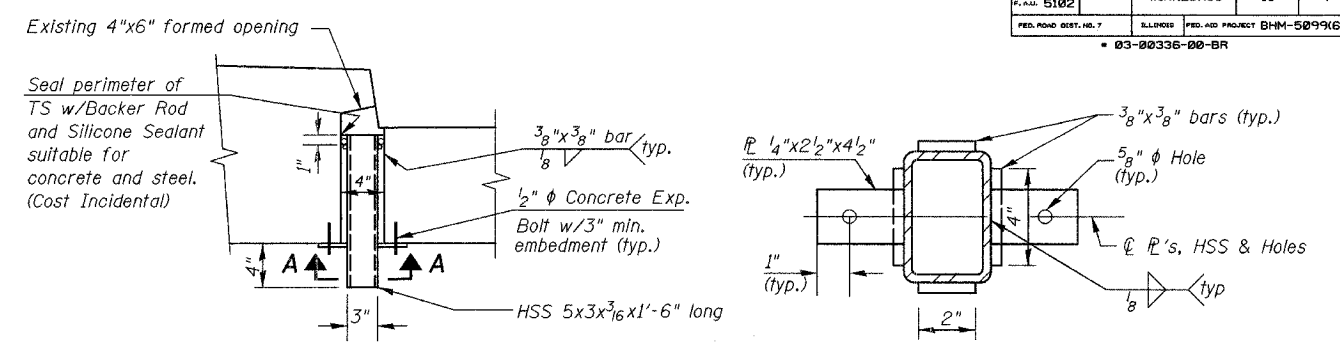
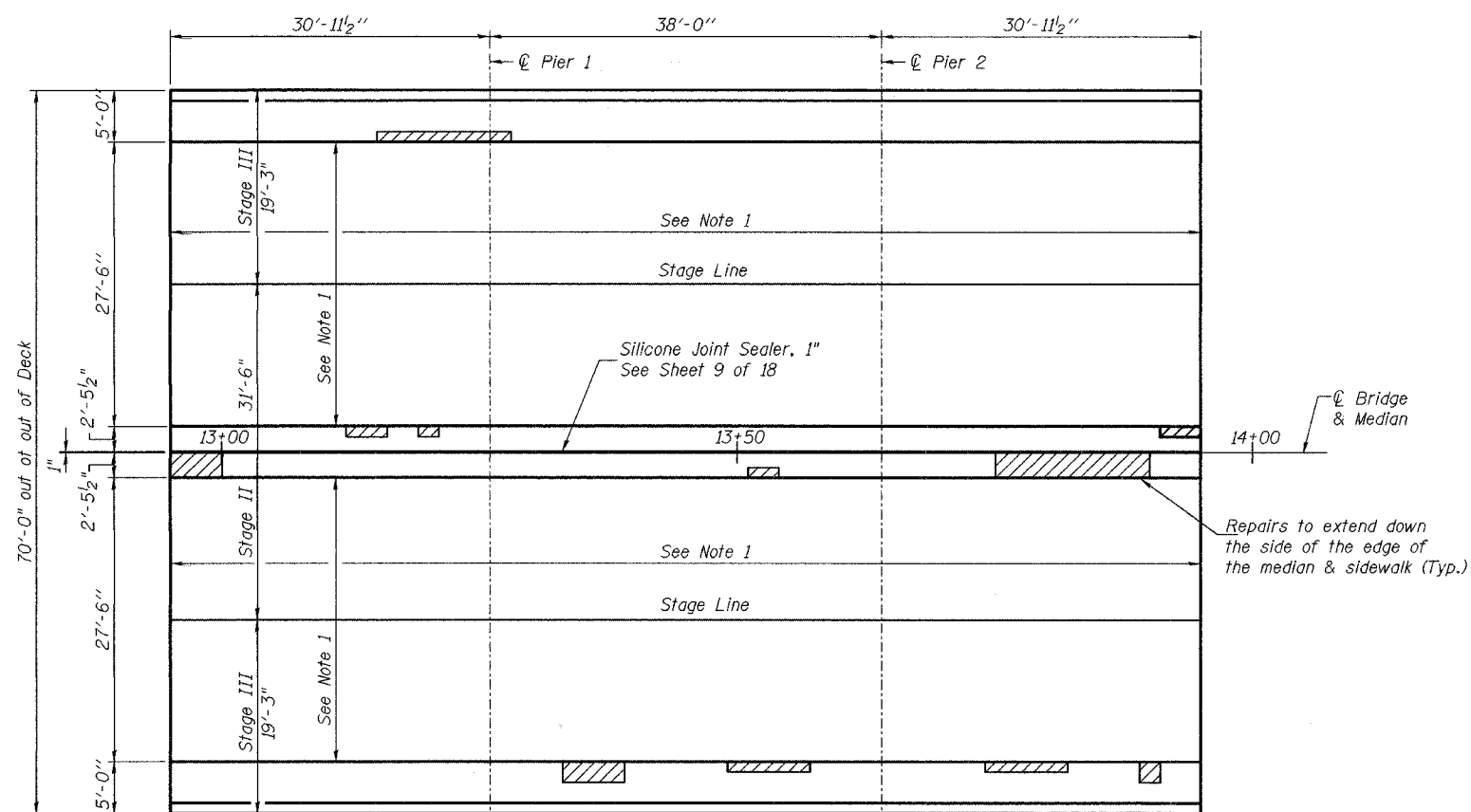
© Copyright Hanson Professional Services Inc. 2005

HANSON

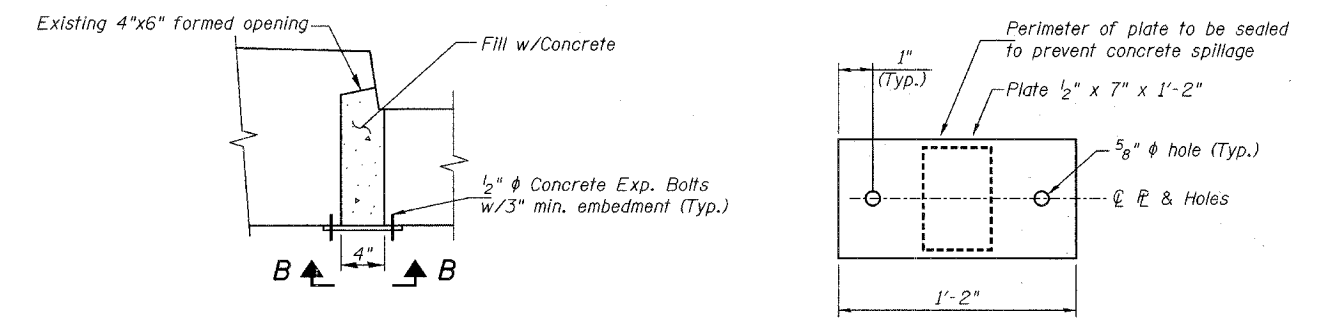
JOB NO.
03R1809
DATE
4/28/06

11/20/02 AM
 01/30/2006
 11/03/05 03:31:09
 11/18/05
 12/13/05
 12/27/05
 LAYOUT
 DRAWN
 REVIEWED

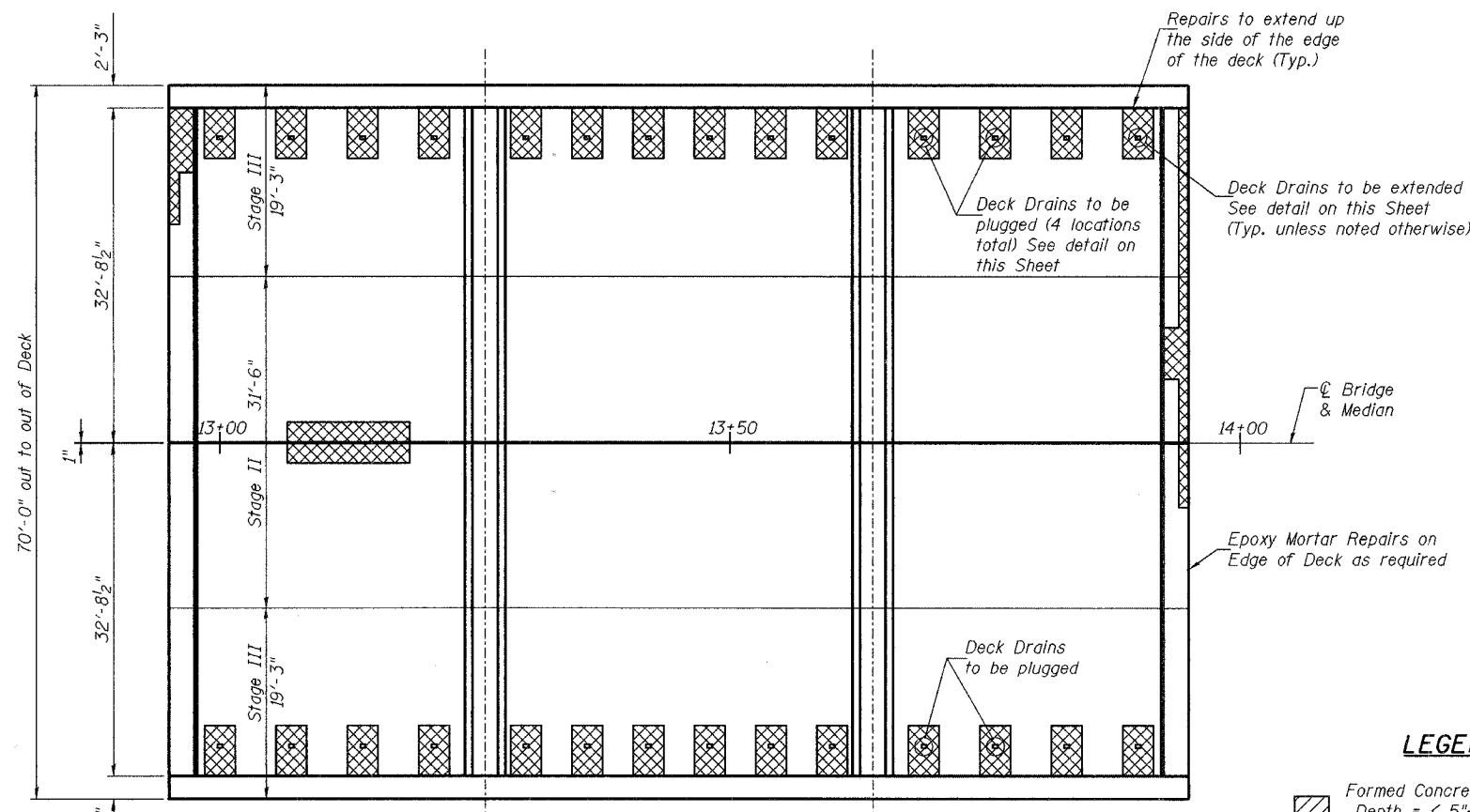
ROUTE NO.	SECTION	COUNTY	SHEETS	TOTAL SHEETS
F.A.U. 5102		WINNEBAGO	18	7
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT BHM-5099(164)	
03-00336-00-BR				



SECTION THRU DECK DRAINS
DECK DRAIN EXTENSION DETAIL
(24 Total)



SECTION THRU DECK DRAINS
PLUG DECK DRAIN DETAIL
(4 Total)



- LEGEND**
- Formed Concrete Repair
Depth = < 5"; Area = 140 Sq. Ft.
Depth > 5"; Area = 60 Sq. Ft.
 - Epoxy Mortar Repair (Depth less than 1/2")
Area = 933 Sq. Ft.

NOTES

1. Pay Limits of Bridge Deck Hydro-Scarification, 1.5" and Bridge Deck Microsilica Concrete Overlay, 2.25".
2. Stage I shall consist of jacking and removing the existing roller bearings and installing the new elastomeric bearing assemblies at both abutments.
3. Epoxy Mortar Repairs at or near the existing roller bearings shall be made prior to the installation of the new elastomeric bearings. The new elastomeric bearings shall not be installed until the epoxy mortar has achieved a compressive strength of 3,500 psi and has cured for 3 days.

Corporate License Number 184-001-084

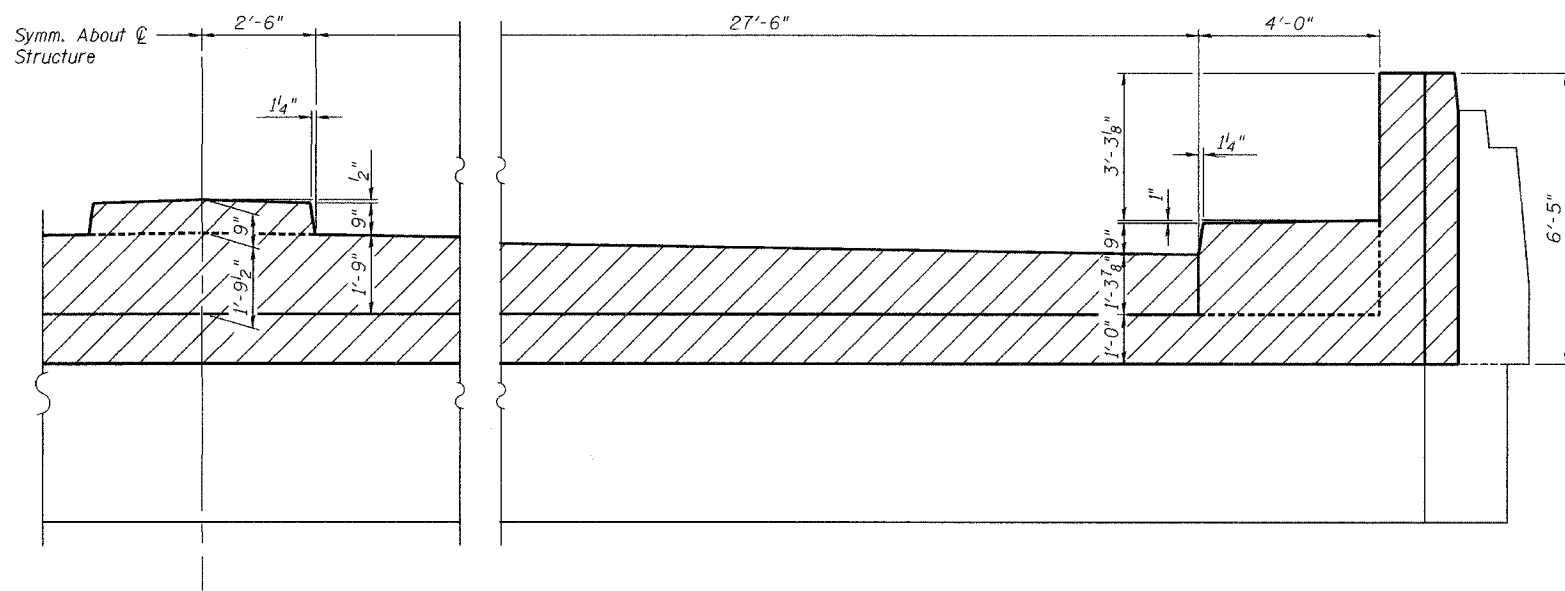
SUPERSTRUCTURE REPAIR
CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45

© Copyright Hanson Professional Services Inc. 2005

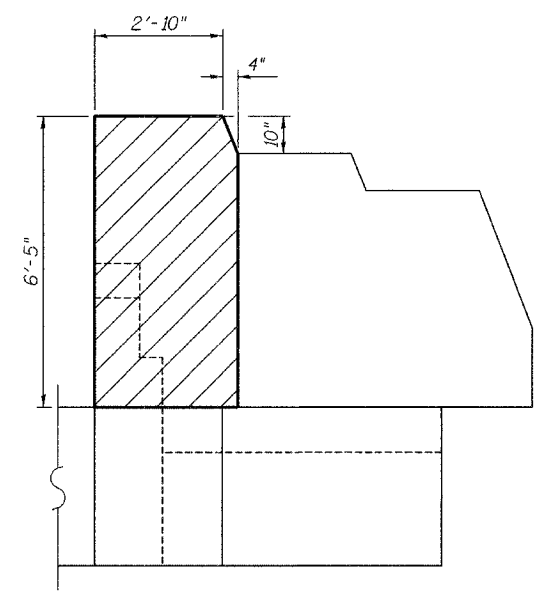
JOB NO. 03R1809
DATE 4/28/06

11/9/05 AM
 01/30/2006
 I:\03\085\03R1809\Struct\Sheet\5-007-SuperStruct-Repairs.dgn
 LAYOUT: FILM 11/18/05
 DRAWN: RHM 12/09/05
 REVIEWED: FILM 12/27/05

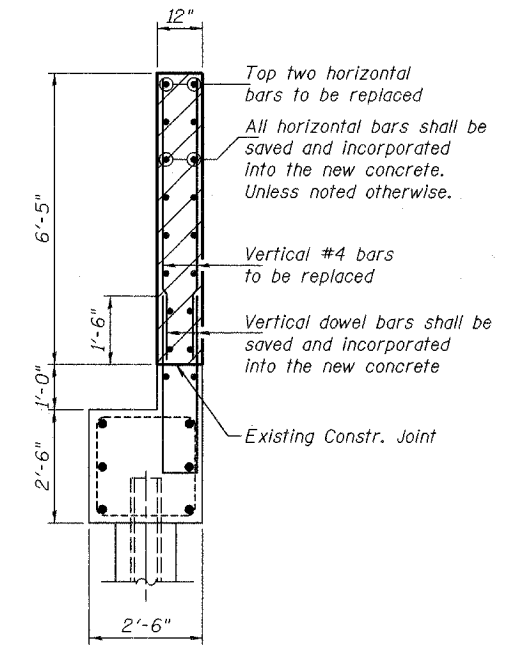
ROUTE NO.	SECTION	COUNTY	TOWN	SHEET
F.A.U. 5102		WINNEBAGO	18	8
FED. ROAD DIST. NO. 7	ILLINOIS FED. AID PROJECT BHM-5099(64)		* 03-00336-00-BR	



ELEVATION



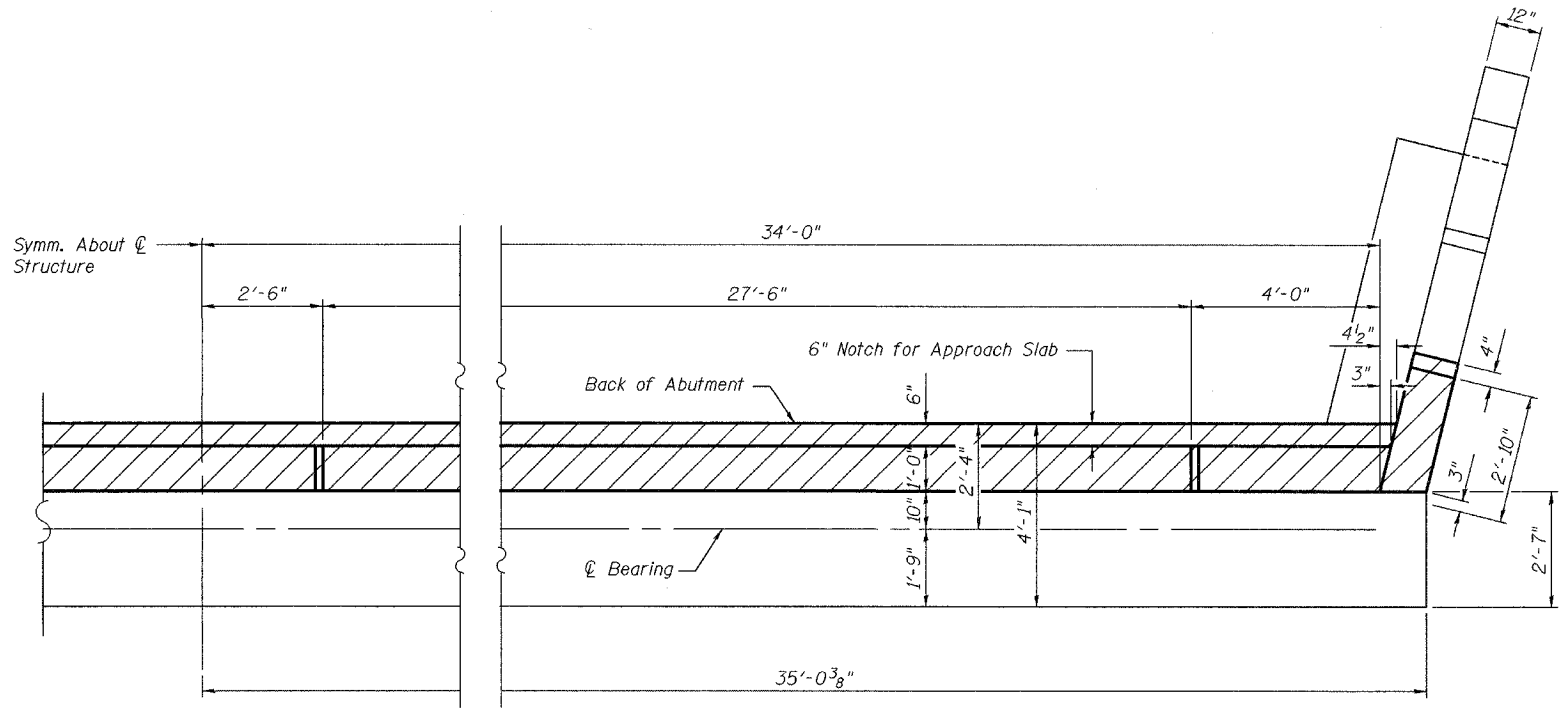
WING WALL ELEVATION



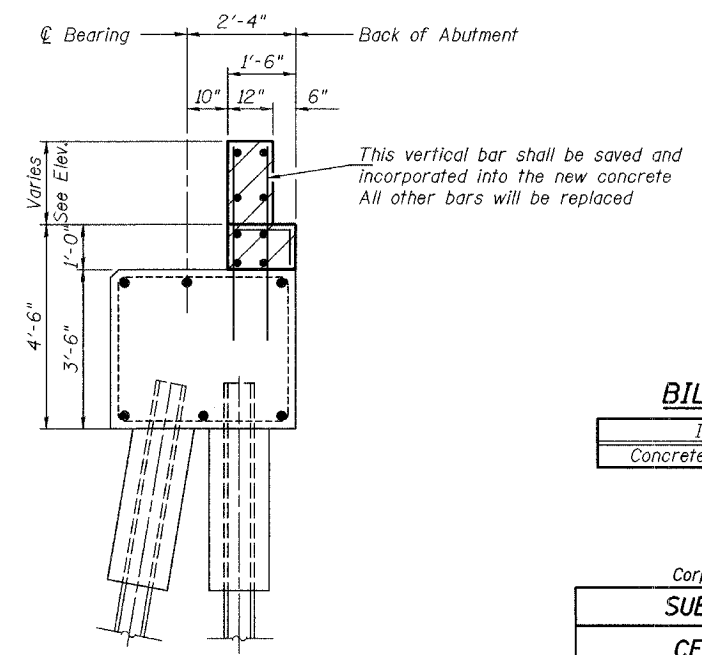
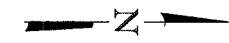
WING WALL SECTION

LEGEND

Concrete Removal Areas



PLAN - TOP VIEW



ABUTMENT SECTION

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	19.0

Corporate License Number 184-001-084

SUBSTRUCTURE DEMOLITION

**CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45**

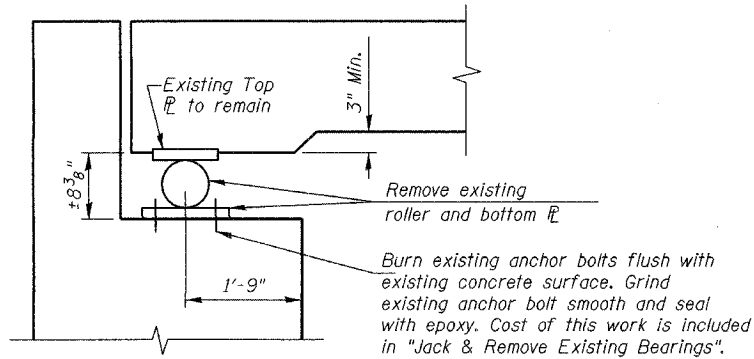
© Copyright Hanson Professional Services Inc. 2005



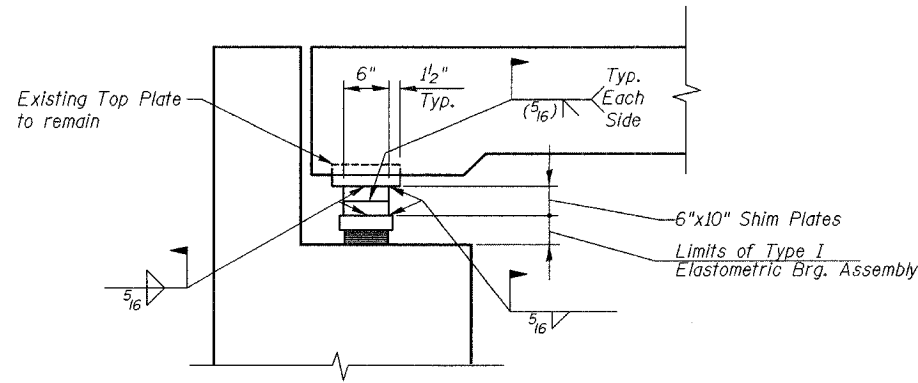
JOB NO.
03R1809
DATE
4/28/06

114827 AM
 01/30/2006
 I:\03\0855\03R1809\Struct\Sheet\AS-009-Substruct-Demo.dgn
 LAYOUT
 DRAWN
 REVIEWED
 FLN 11/19/05
 NSM 12/15/05
 FLN 12/27/05

ROUTE NO.	SECTION	COUNTY	JOB NO.	SHEET NO.
F.A.U. 5102	*	WINNEBAGO	18	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	BHM-5099(64)	
* 03-00336-00-BR				



EXISTING ABUTMENT BEARING

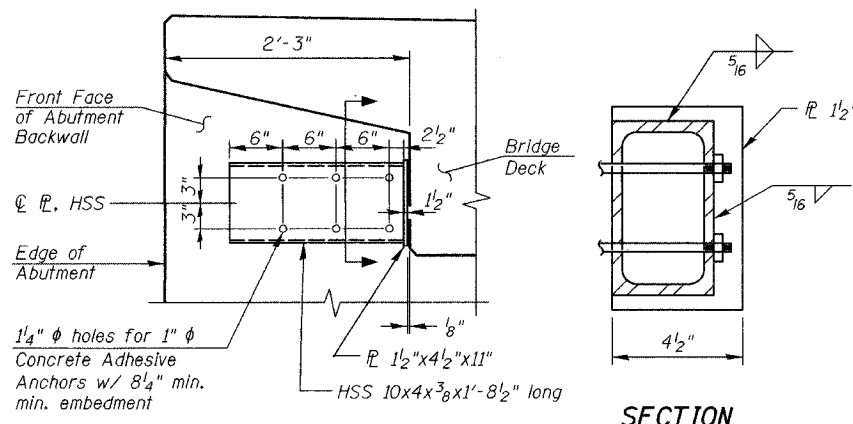


NEW ABUTMENT BEARING
(28 Total)

NOTES:
Prior to ordering any material the Contractor shall field verify all bearing heights and shim thickness dimensions.

Multiple plates (1/2" minimum thickness) may be welded together to obtain total required shim plate thickness.

Cost of shim plates is incidental to Elastomeric Bearing Assembly Type I.

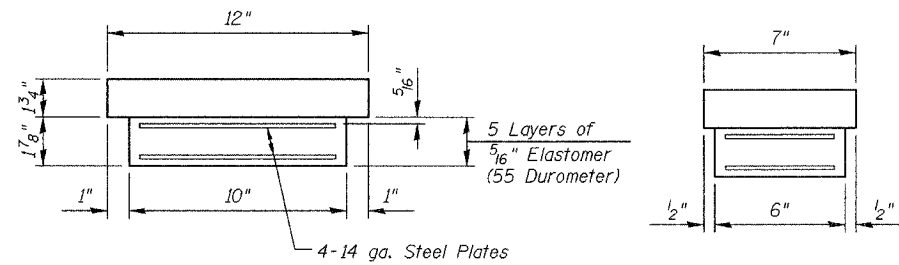


ELEVATION

SECTION

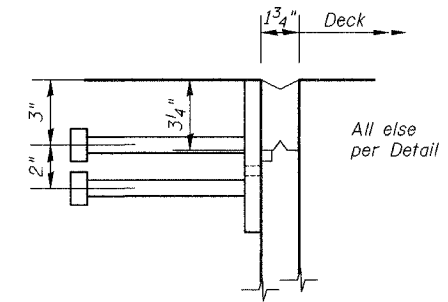
HORIZONTAL SLAB RESTRAINT

(4 Total)
All steel items shall be galvanized

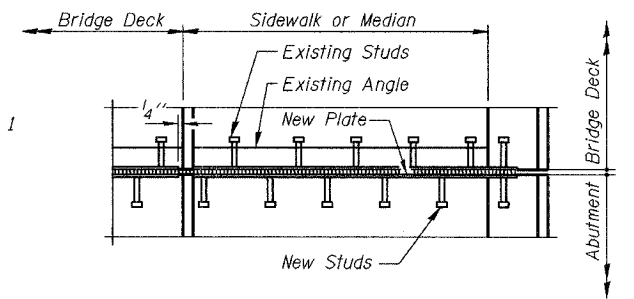


ELASTOMERIC BEARING ASSEMBLY, TYPE I

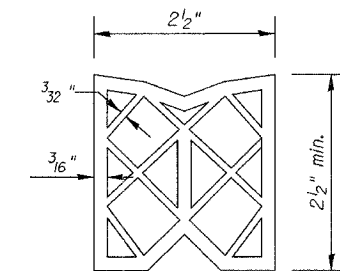
(28 Total)



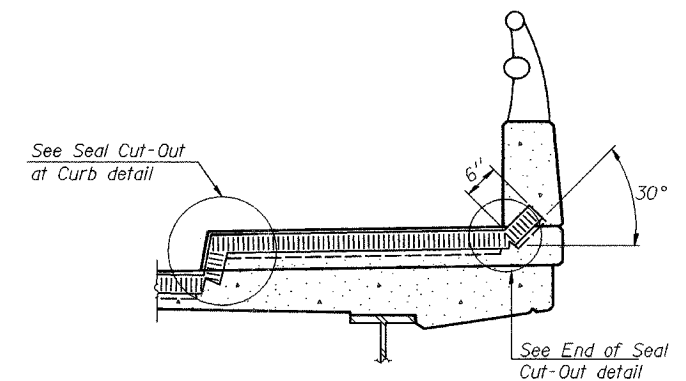
DETAIL 2
(At Median)



PLAN AT SIDEWALK OR MEDIAN



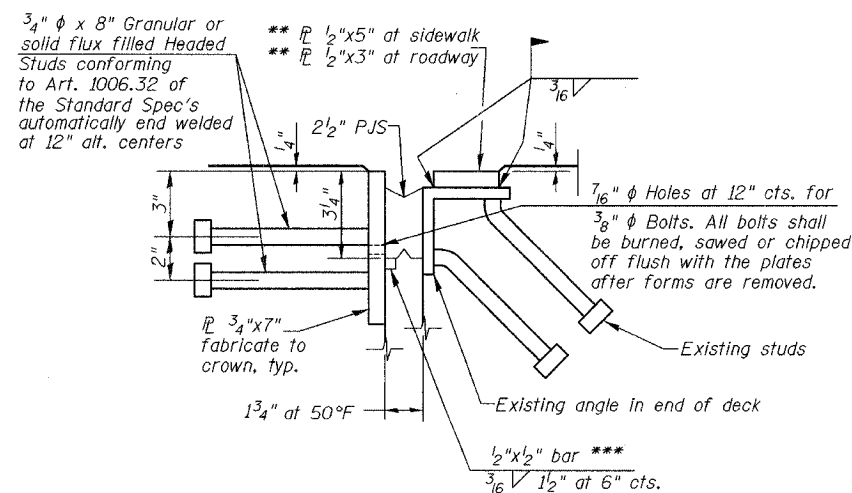
PREFORMED JOINT SEAL



AT SIDEWALK OR MEDIAN*

(Showing plate and seal)

* Shorter plates with a single row of studs at 12" centers may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

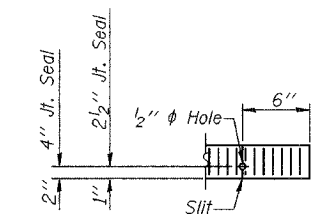


DETAIL 1

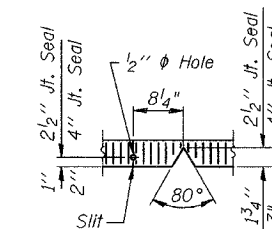
(At Roadway and Sidewalk)

** Cut \bar{P} 1/2" in sidewalk and median 1/4" short of the sidewalk and median faces.

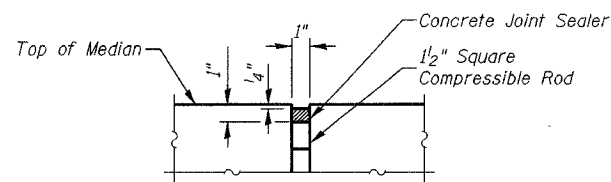
*** Cut retainer bars in sidewalk and median 6" short of the sidewalk and median faces.



END OF SEAL CUT-OUT



SEAL CUT-OUT AT CURB



SILICONE JOINT SEALER

(Longitudinal Joint in median at bridge)

1/18/01 AM 01/30/2006 I:\03\065\03R1809\Struct\Sheet\009-Super\Date-2.dwg

LAYOUT	FLN	11/21/05
DRAWN	MGM	12/09/05
REVIEWED	FLN	12/27/05

Corporate License Number 184-001-084

SUPERSTRUCTURE DETAILS

**CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45**

© Copyright Hanson Professional Services Inc. 2005



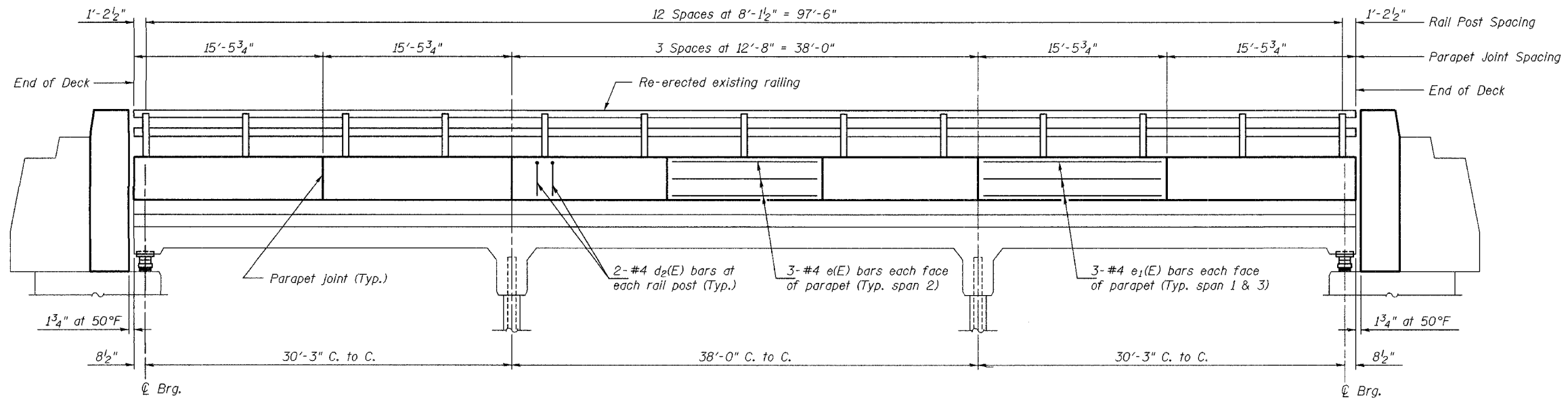
JOB NO.

03R1809

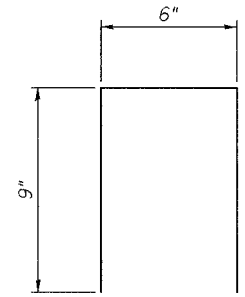
DATE

4/28/06

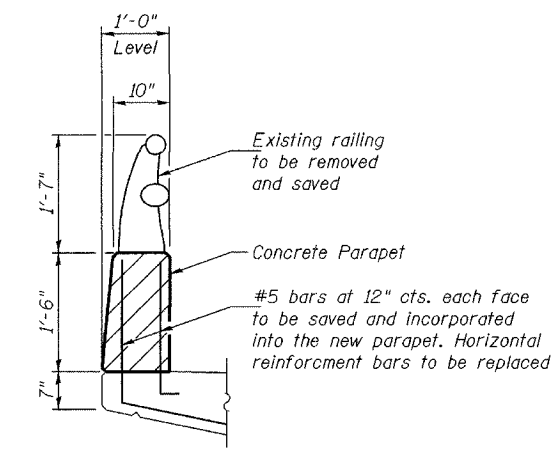
ROUTE NO.	SECTION	COUNTY	STATION	POST
F.A.U. 5102		WINNEBAGO	18	10
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	BHM-5099(6.4)	
* 03-00336-00-BR				



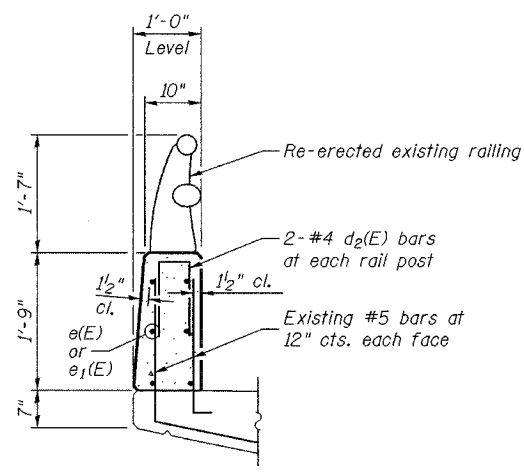
ELEVATION FOR PARAPET JOINT AND RAIL POST SPACING



BAR d₂(E)

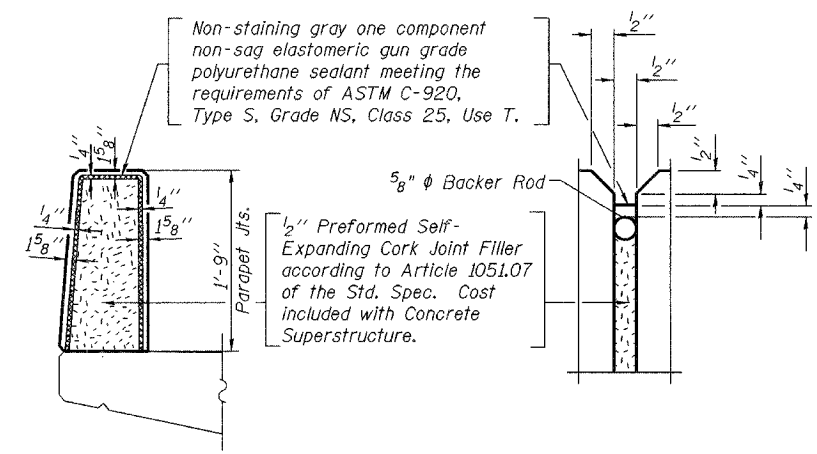
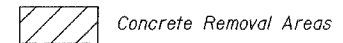


EXISTING PARAPET SECTION



PROPOSED PARAPET SECTION

LEGEND



PARAPET JOINT DETAILS

**BILL OF MATERIAL
PARAPET (BOTH SIDES)**

Bar	No.	Size	Length	Shape
d ₂ (E)	52	#4	2'-0"	□
e(E)	36	#4	12'-5"	—
e ₁ (E)	48	#4	15'-3"	—
Concrete Superstructure			Cu. Yd.	11.8
Reinforcement Bars, Epoxy Coated			Pounds	860
Remove and Re-Erecting Existing Railing			Foot	200
Concrete Removal			Cu. Yd.	10.2

Corporate License Number 184-001-084

CONCRETE PARAPET & ALUMINUM RAILING

**CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45**

© Copyright Hanson Professional Services Inc. 2005

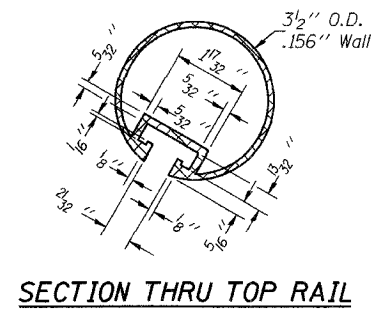


JOB NO.
03R1809
DATE
4/28/06

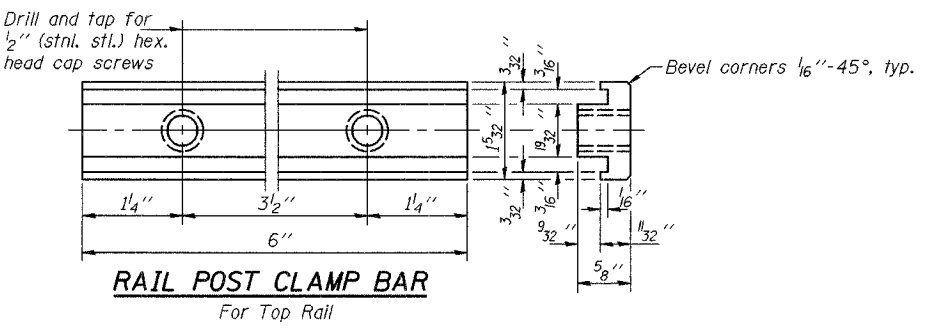
11/17/31 AM
01/30/2006
I:\03\00336\00\Bridges\Struct\Sheet\CS-00-Parapet.dgn

LAYOUT	FLN	12/09/05
DRAWN	MGM	12/12/05
REVIEWED	FLN	12/27/05

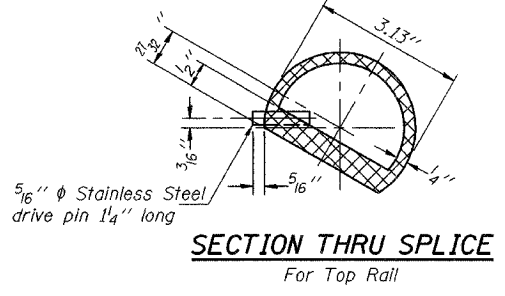
ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL SHEETS
5102		WINNEBAGO	18	11
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT BHM-5099(164)	
* 03-00336-00-BR				



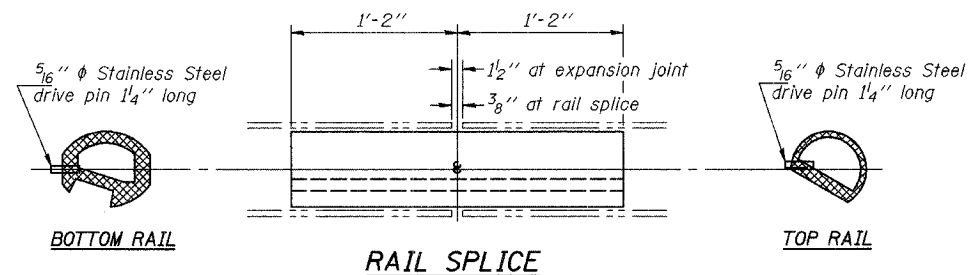
SECTION THRU TOP RAIL



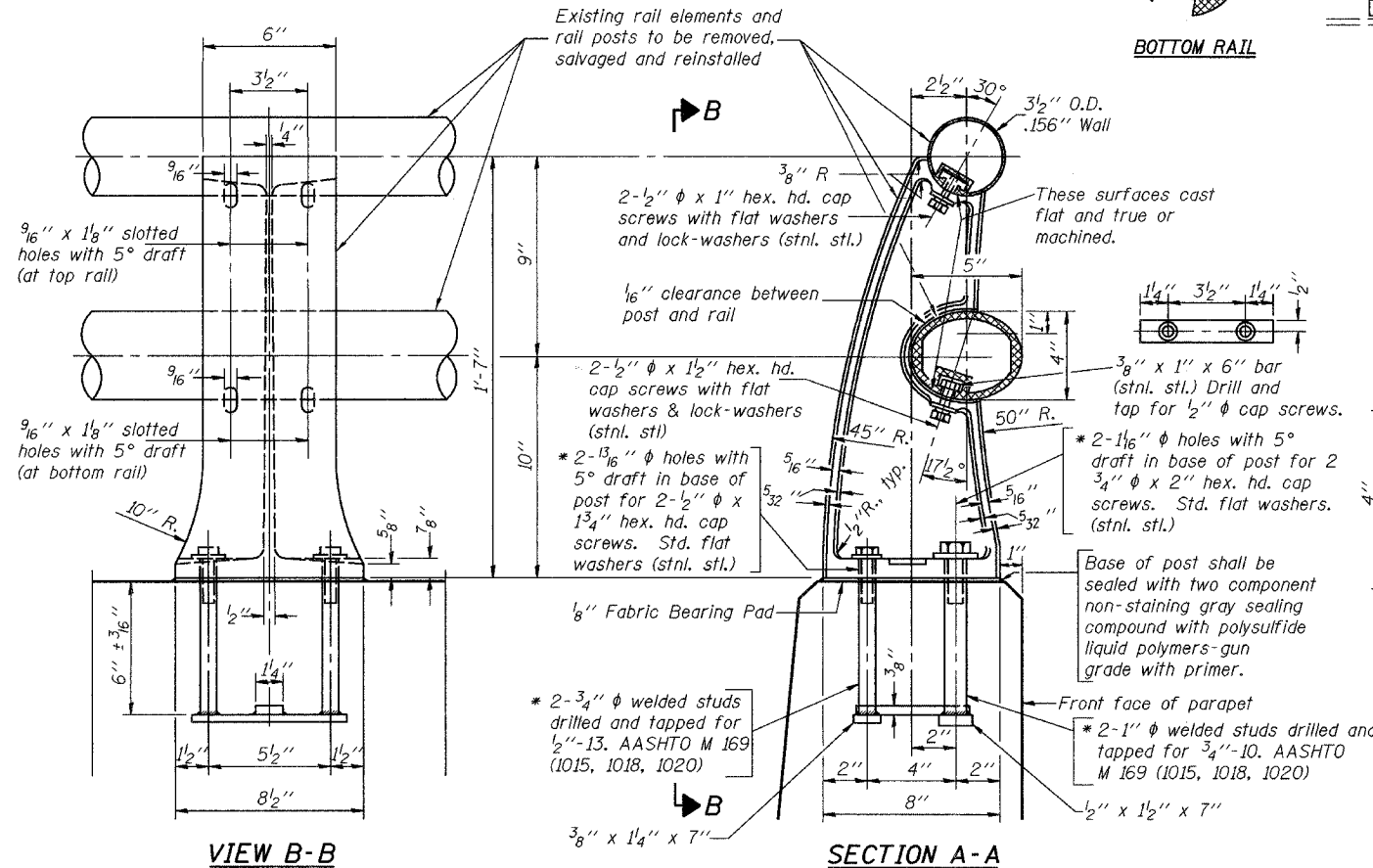
RAIL POST CLAMP BAR
For Top Rail



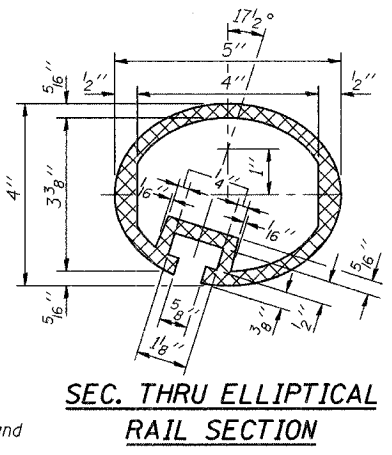
SECTION THRU SPLICE
For Top Rail



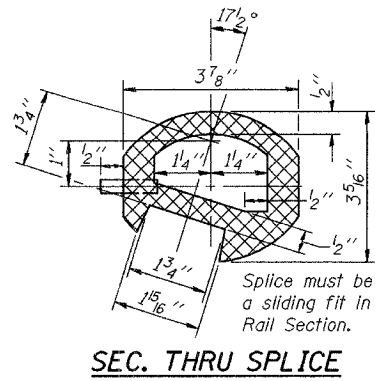
RAIL SPLICE



RAIL POST DETAILS



SEC. THRU ELLIPTICAL RAIL SECTION



SEC. THRU SPLICE

NOTES:

All Posts shall be normal to parapet.
 All joints in rail shall be spliced per detail.
 Provide 1-1/8" and 2-1/16" Aluminum Shims for 25% of the Posts.
 Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.
 Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for REMOVING AND RE-ERECTING EXISTING RAILING.
 Existing rail elements and rail posts to be removed, salvaged and reinstalled. All other items are to be new as indicated in the Special Provisions.

BILL OF MATERIAL

Item	Unit	Quantity
REMOVING AND RE-ERECTING EXISTING RAILING	Foot	200

Corporate License Number 184-001-084

ALUMINUM RAILING DETAILS

CENTRAL AVENUE BRIDGE
 OVER NORTH FORK OF KENT CREEK
 F.A.U. ROUTE 5102
 SECTION 03-00336-00-BR
 WINNEBAGO COUNTY
 STRUCTURE NUMBER 101-3023
 STATION 13+45

© Copyright Hanson Professional Services Inc. 2005



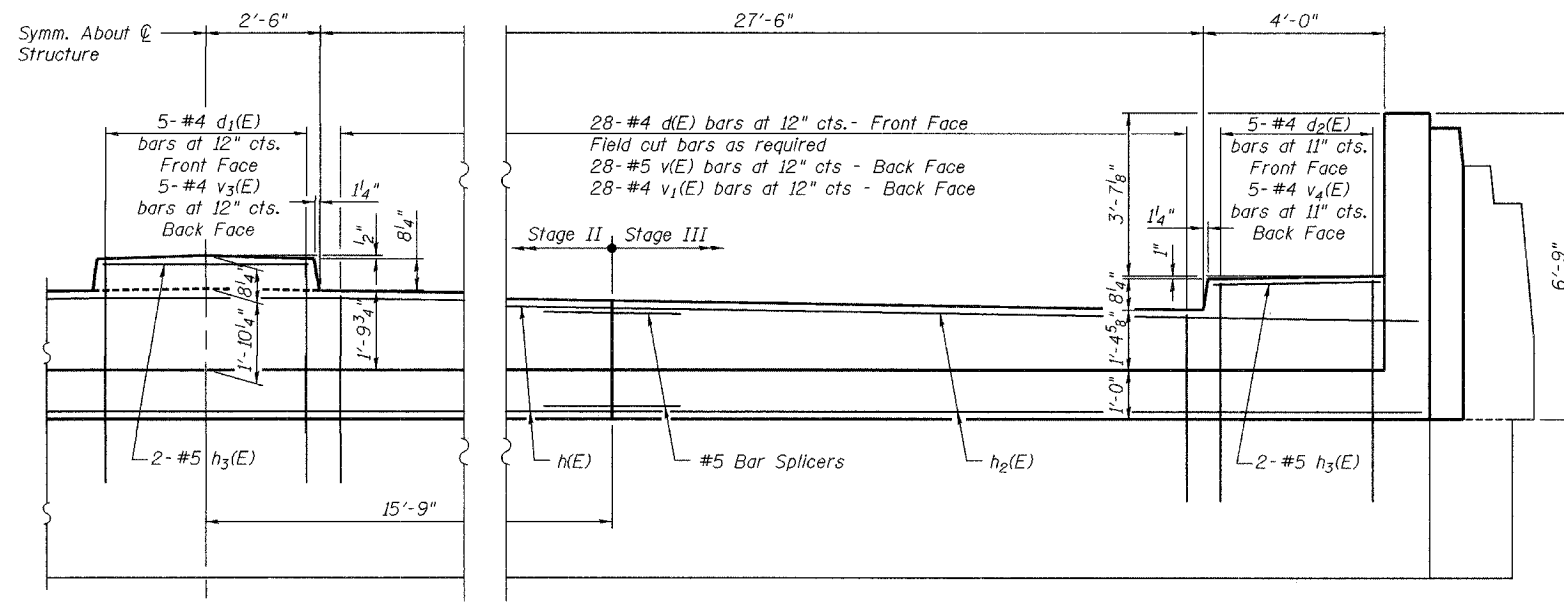
JOB NO.
03R1809
DATE
4/28/06

11/24/05 AM
 01/30/2006
 I:\03\0850\03R1809\Struct\Sheet\03-RAIL DET.MLS.dgn

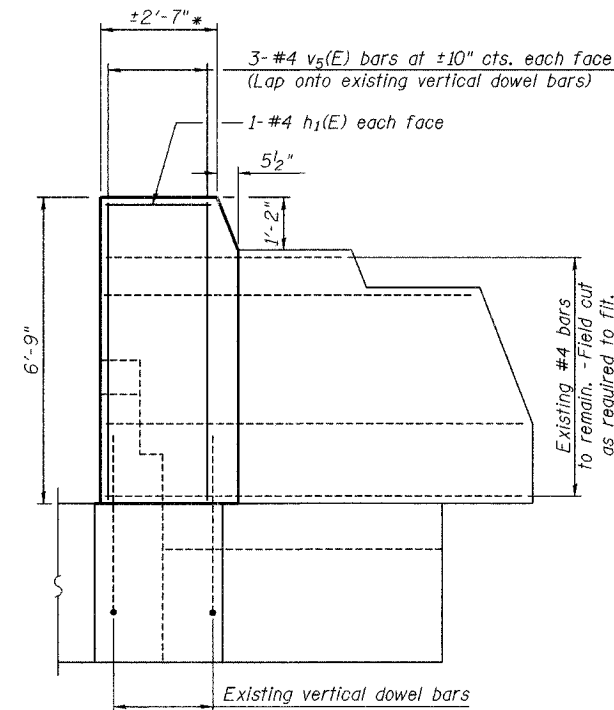
LAYOUT	11/24/05
DRAWN	12/09/05
REVIEWED	12/27/05

* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting stainless steel anchor rods of the same diameter and grade as the specified cap screws. Embedment shall be according to the manufacturer's specifications.

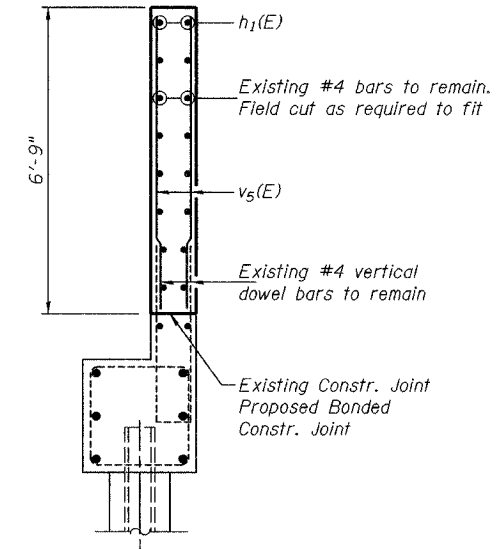
ROUTE NO.	SECTION	COUNTY	TOWN	SHEET
F.A.U. 5102	*	WINNEBAGO	18	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	BHM-5099(64)	
* 03-00336-00-BR				



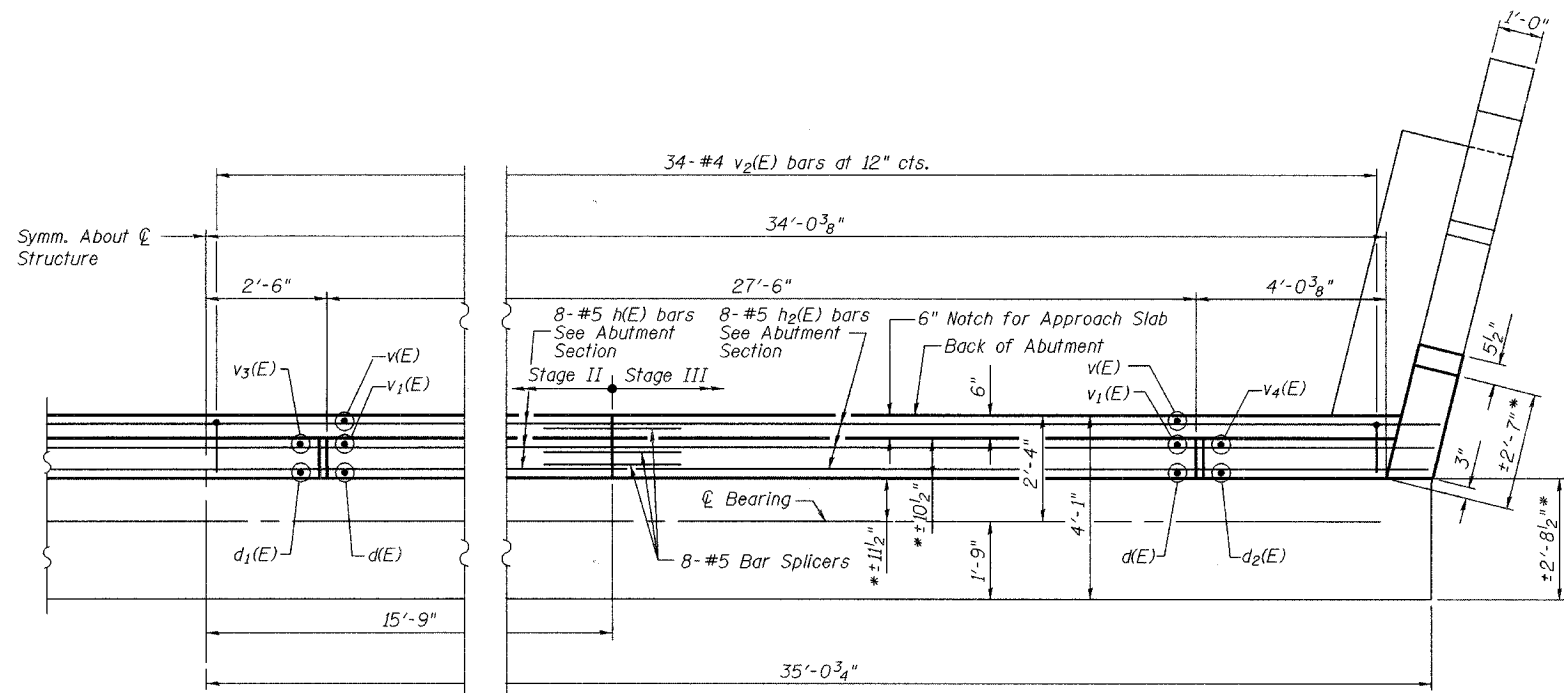
ELEVATION



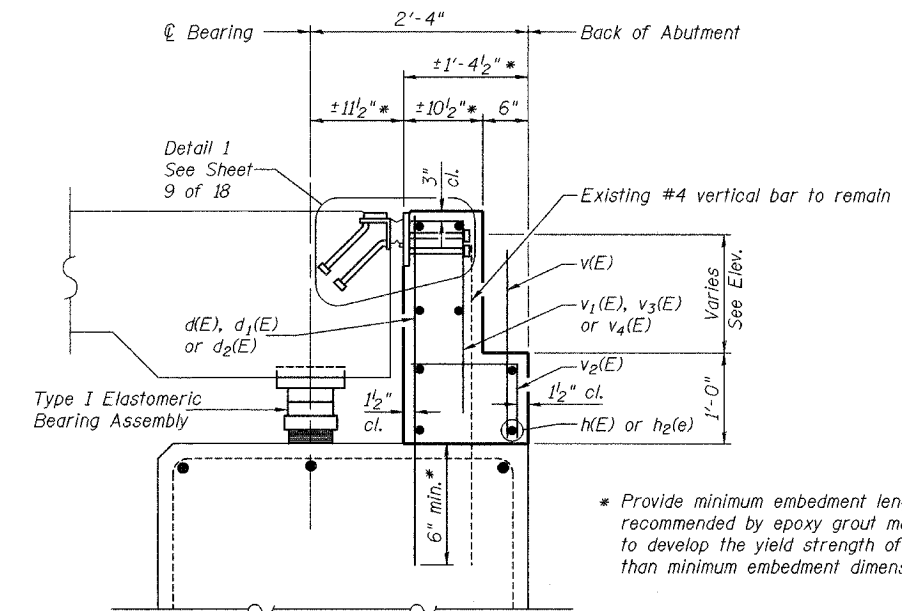
WING WALL ELEVATION



WING WALL SECTION



PLAN - TOP VIEW



ABUTMENT SECTION

MIN. LAP

- #4 bars 1'-4" (Vertical)
- #4 bars 1'-11" (Horizontal)
- #5 bars 1'-8" (Vertical)
- #5 bars 2'-5" (Horizontal)

NOTES

- * Dimensions to be adjusted as required to provide 1 3/4" gap at 50°F. per Detail 1 on Sheet 9 of 18.
- Reinforcement bars designated (E) shall be epoxy coated.
- Work this sheet with sheet 13 of 18.

* Provide minimum embedment length recommended by epoxy grout manufacturer to develop the yield strength of bars, if greater than minimum embedment dimension indicated.

Corporate License Number 184-001-084

SUBSTRUCTURE REPAIRS

**CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45**

© Copyright Hanson Professional Services Inc. 2005

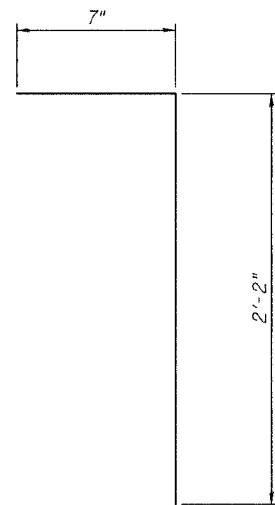


JOB NO.
03R1809
DATE
4/28/06

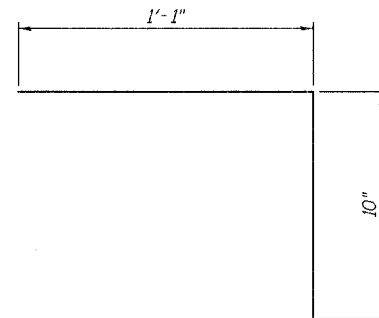
11/18/05
 07/30/2006
 I:\03\085\03R1809\Struct\Sheet\5-02-Substruct-Repair.dgn
 LAYOUT
 DRAWN
 REVIEWED

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET
F.A.U. 5102	*	WINNEBAGO	18	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	DHM-5099(64)	

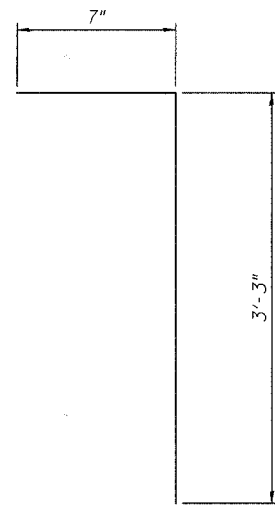
* 03-00336-00-BR



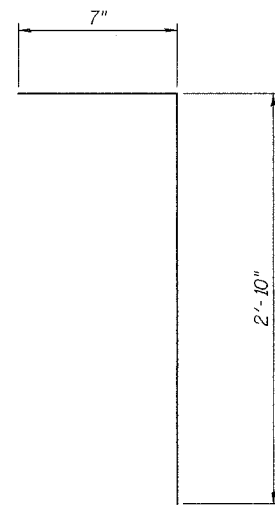
BAR v₁(E)



BAR v₂(E)



BAR v₃(E)



BAR v₄(E)

BILL OF MATERIAL
ABUTMENT & WINGWALL

(Both Abutments)

Bar	No.	Size	Length	Shape
h(E)	16	#5	31'-3"	—
h ₁ (E)	8	#5	2'-4"	—
h ₂ (E)	32	#5	19'-0"	—
h ₃ (E)	12	#5	4'-8"	—
d(E)	112	#4	3'-2"	—
d ₁ (E)	10	#4	3'-10"	—
d ₂ (E)	20	#4	3'-5"	—
v(E)	112	#5	2'-3"	—
v ₁ (E)	112	#4	2'-9"	┌
v ₂ (E)	136	#4	1'-11"	┌
v ₃ (E)	10	#4	3'-10"	┌
v ₄ (E)	20	#4	3'-5"	┌
v ₅ (E)	24	#4	6'-6"	—
Concrete Superstructure			Cu. Yd.	17.5
Reinforcement Bars, Epoxy Coated			Pound	2360
Structure Excavation			Cu. Yd.	27
Porous Granular Embankment			Cu. Yd.	15
Bar Splicers			Each	32

NOTES

* Reinforcement bars designated (E) shall be epoxy coated.

Work this sheet with sheet 12 of 18.

Corporate License Number 184-001-084

SUBSTRUCTURE REPAIR DETAILS

CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45

© Copyright Hanson Professional Services Inc. 2005



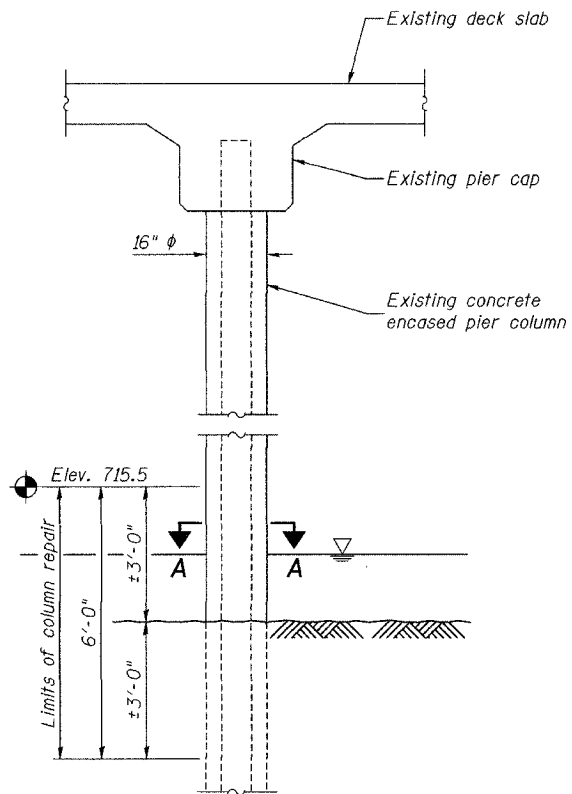
JOB NO.
03R1809

DATE
4/28/06

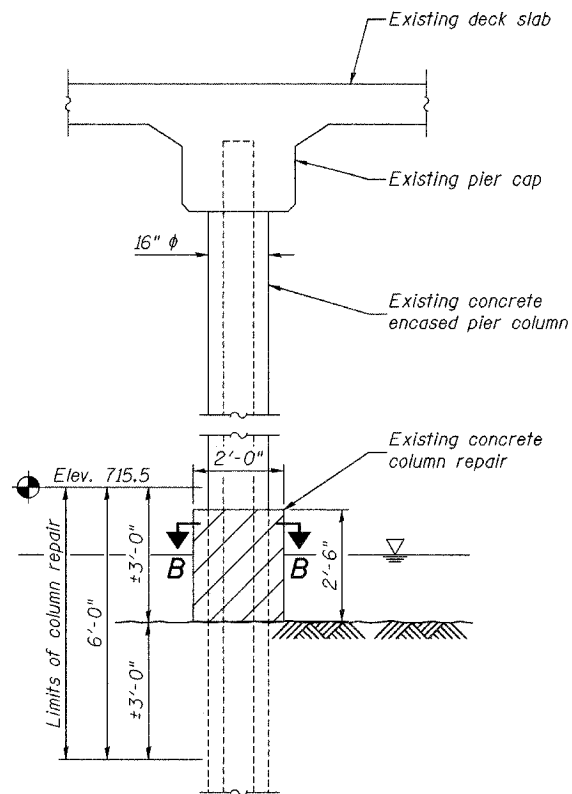
11:02:29 AM
01/30/2006
I:\03\00336\03R1809\Struct\Sheet\03-Substruct-Repair\Detail.dwg

LAYOUT	FLN	12/16/05
DRAWN	MGR	12/19/05
REVIEWED	SJC	12/27/05

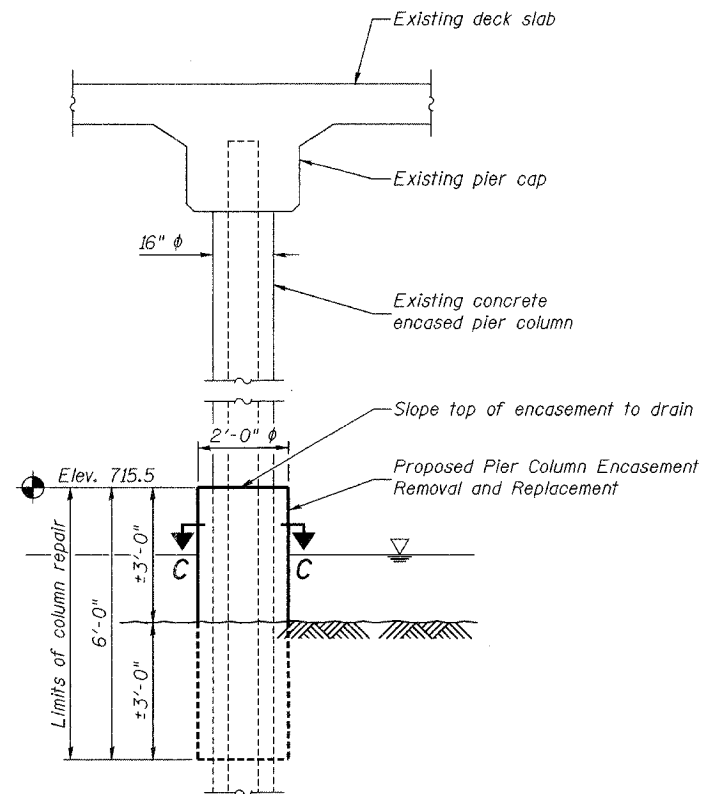
ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL SHEETS
F.A.U. 5102	*	WINNEBAGO	18	14
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	BHM-5099(64)	
* 03-00336-00-BR				



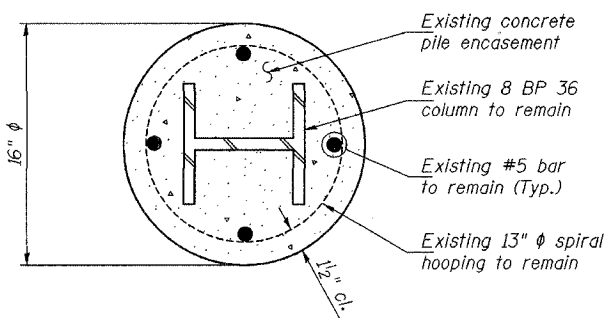
TYPICAL EXISTING SOUTH PIER COLUMN ELEVATION



EXISTING SOUTH PIER EAST COLUMN ELEVATION

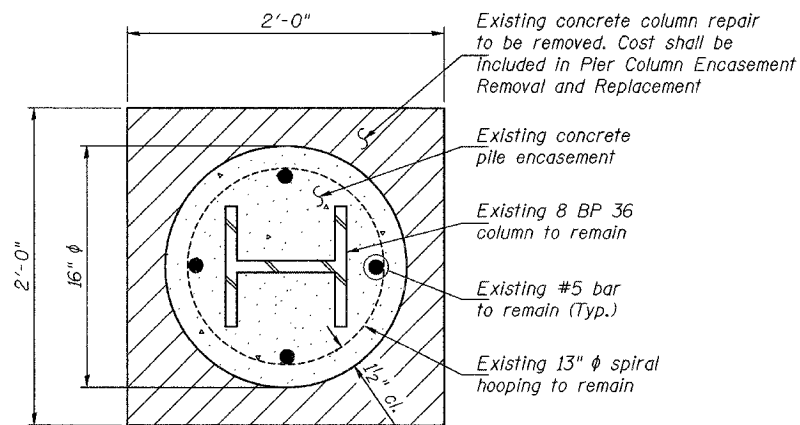


TYPICAL PROPOSED SOUTH PIER COLUMN ELEVATION



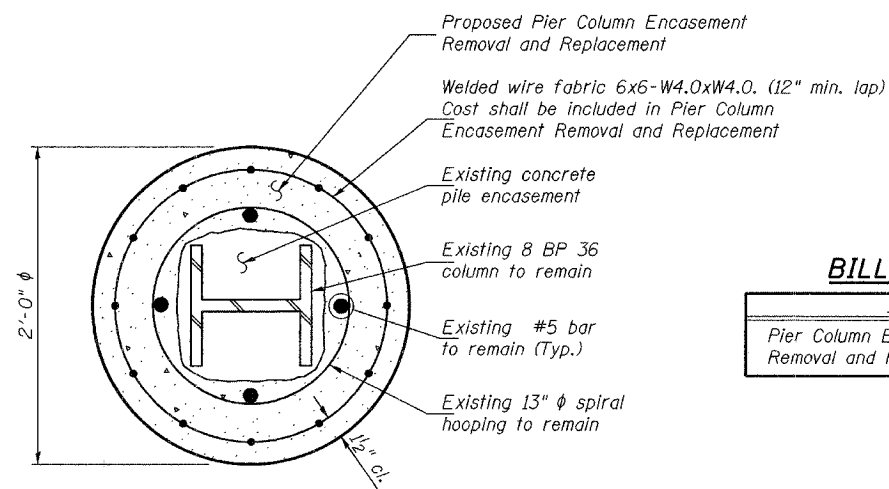
SECTION A-A

Note:
Contractor shall remove all unsound concrete within the column repair limits. Engineer shall verify that all unsound concrete has been removed prior to placement of the proposed encasement. One inch minimum removal is required in all areas.



SECTION B-B

Note:
Contractor shall remove all unsound concrete within the column repair limits. Engineer shall verify that all unsound concrete has been removed prior to placement of the proposed encasement. One inch minimum removal is required in all areas.



SECTION C-C

NOTE:
Staff Gauge on the existing concrete pile encasement shall be removed and reinstalled after repairs are made. The cost for this work shall be included in Pier Column Encasement Removal and Replacement

BILL OF MATERIAL

Item	Unit	Quantity
Pier Column Encasement Removal and Replacement	Foot	72

Corporate License Number 184-001-084

SOUTH PIER COLUMN REPAIR DETAILS

**CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45**

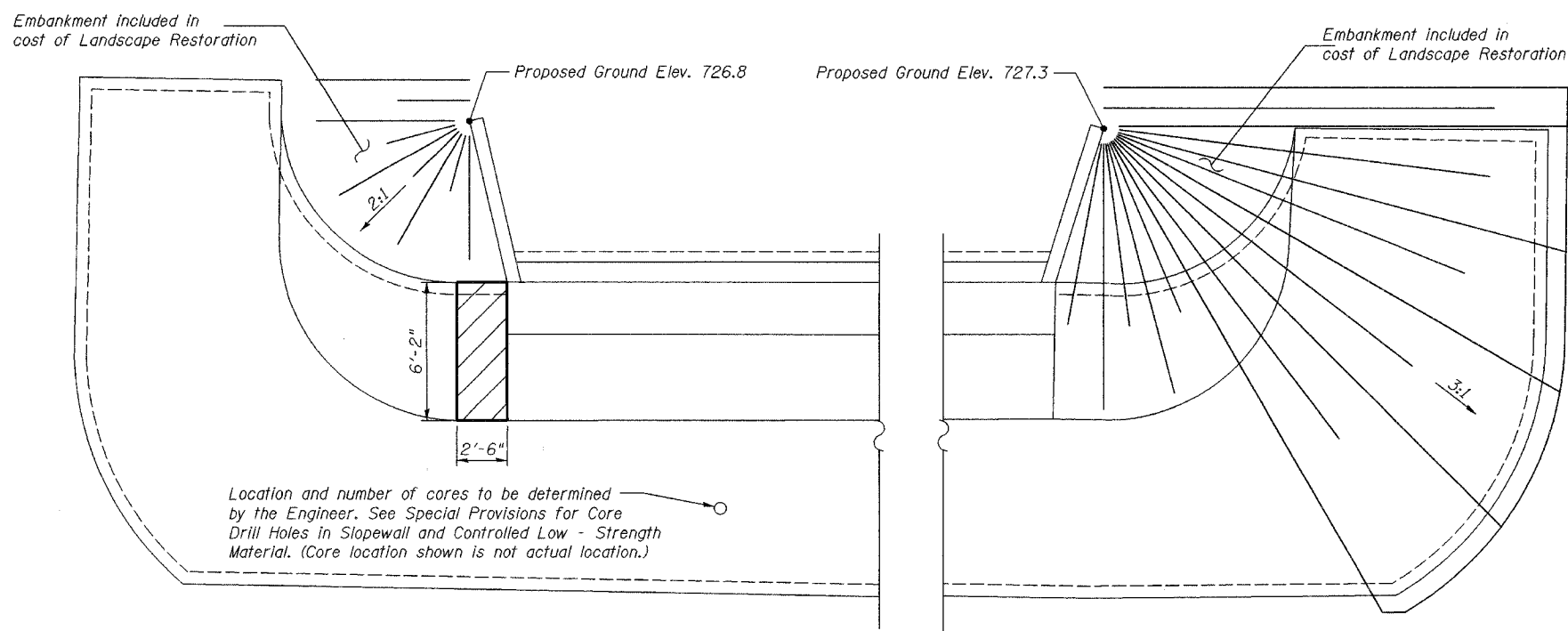
© Copyright Hanson Professional Services Inc. 2005



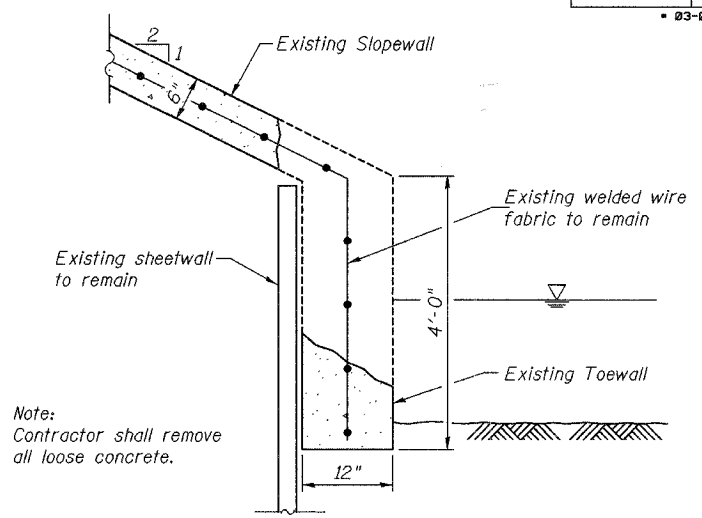
JOB NO.
03R1809
DATE
4/28/06

11/06/03 AM
 01/30/2006
 I:\03\0850\03R1809\Struct\Sheet\AS-04-Pier-Repair.dgn
 LAYOUT MKR 12/05/05
 DRAWN NGM 12/05/05
 REVIEWED FLN 12/27/05

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET
F.A.U. 5102	*	WINNEBAGO	18	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	BHM-5099(164)	
* 03-00336-00-BR				



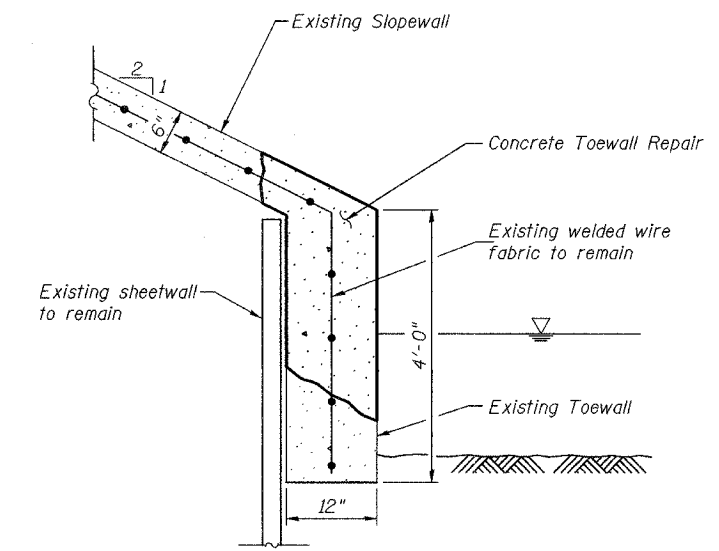
NORTH SLOPEWALL PLAN



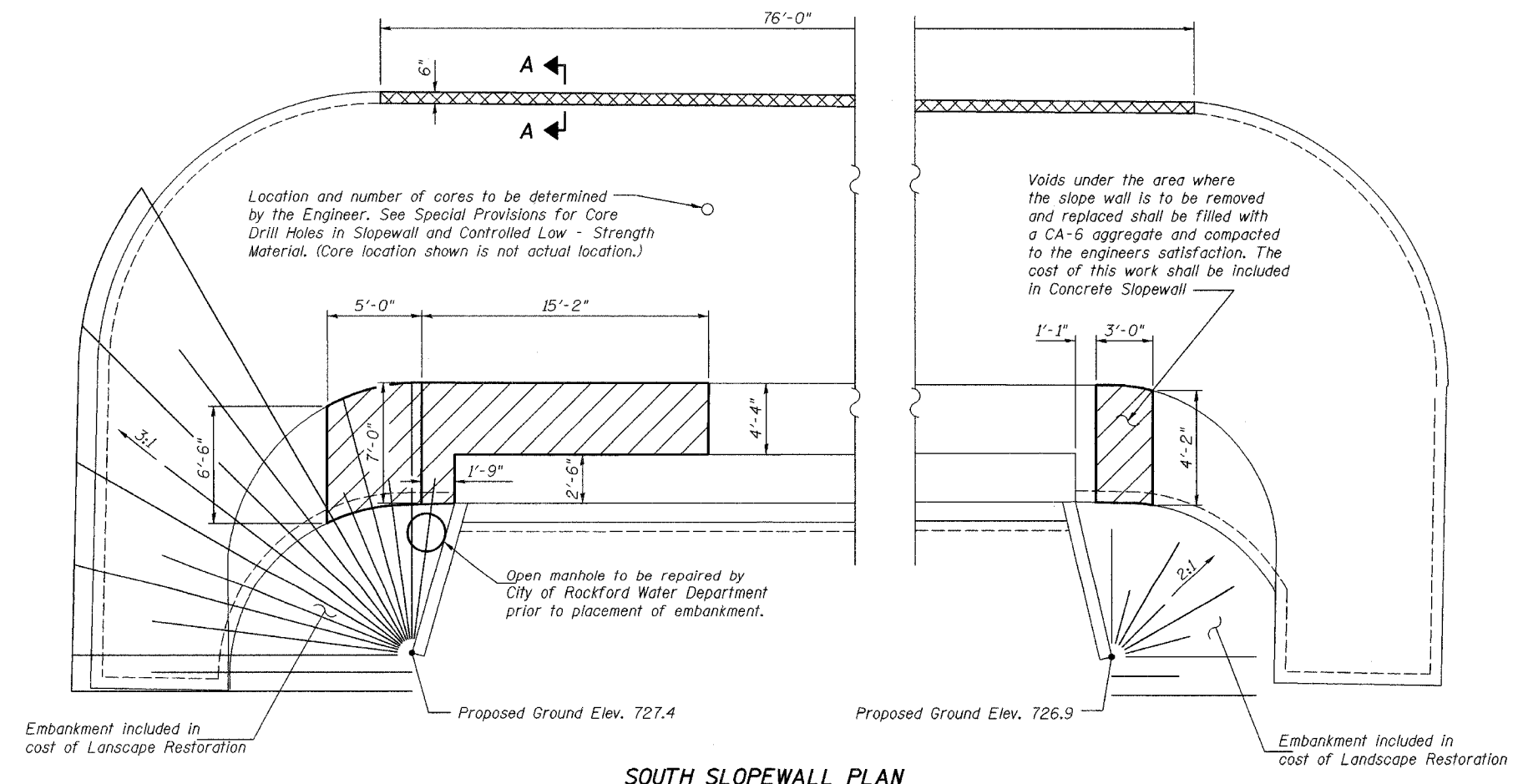
**SECTION A-A
EXISTING TOEWALL CONDITION**

BILL OF MATERIAL

Item	Unit	Quantity
Controlled Low-Strength Material	Cu. Yd.	150
Concrete Slopewall Removal	Sq. Ft.	132
Concrete Slopewall	Sq. Ft.	132
Core Drill Holes in Slopewall	Each	16
Concrete Toewall Repair	Foot	76



**SECTION A-A
CONCRETE TOEWALL REPAIR**



SOUTH SLOPEWALL PLAN

LEGEND

- Remove and Replace Slopewall
- Toe wall repair

Corporate License Number 184-001-084

SLOPEWALL REPAIR DETAILS

CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45

© Copyright Hanson Professional Services Inc. 2005

HANSON

JOB NO.
03R1809

DATE
4/28/06

10:59:32 AM
 01/30/2006
 I:\03\085\03R1809\Struct\Sheet\05-South Slopewall\Repair.dgn
 LAYOUT 12/07/05
 DRAWN MGH 12/08/05
 REVIEWED FLN 12/27/05

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
F.A.U. 5102	*	WINNEBAGO	18	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	BHM-5099(64)	
* 03-00336-00-BR				

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

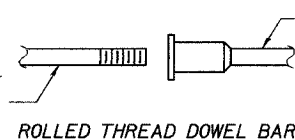
- ① Minimum Capacity = $1.25 \times f_y \times A_t$
(Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{s_{allow}} \times A_t$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

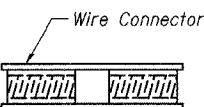
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is the same as the diameter of the bar spliced.



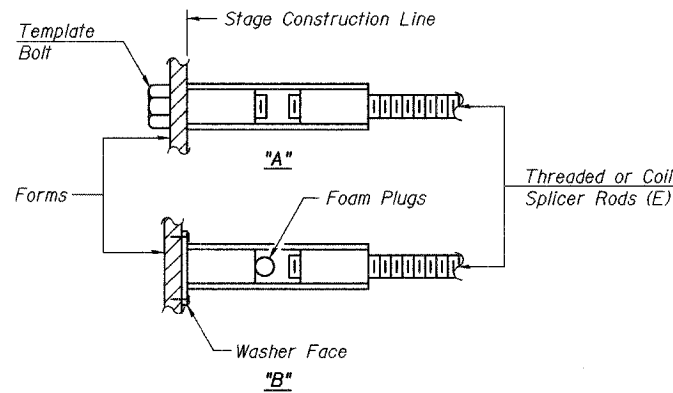
** ONE PIECE



WELDED SECTIONS

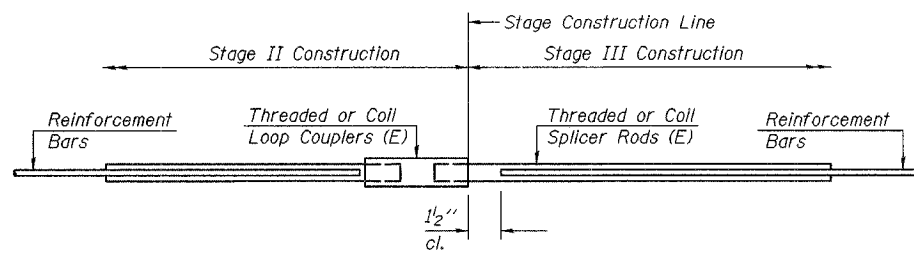
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD

Bar Size	No. Assemblies Required	Location
#5	16	North Abutment
#5	16	South Abutment

Corporate License Number 184-001-084

BAR SPLICER ASSEMBLY DETAILS

CENTRAL AVENUE BRIDGE
 OVER NORTH FORK OF KENT CREEK
 F.A.U. ROUTE 5102
 SECTION 03-00336-00-BR
 WINNEBAGO COUNTY
 STRUCTURE NUMBER 101-3023
 STATION 13+45

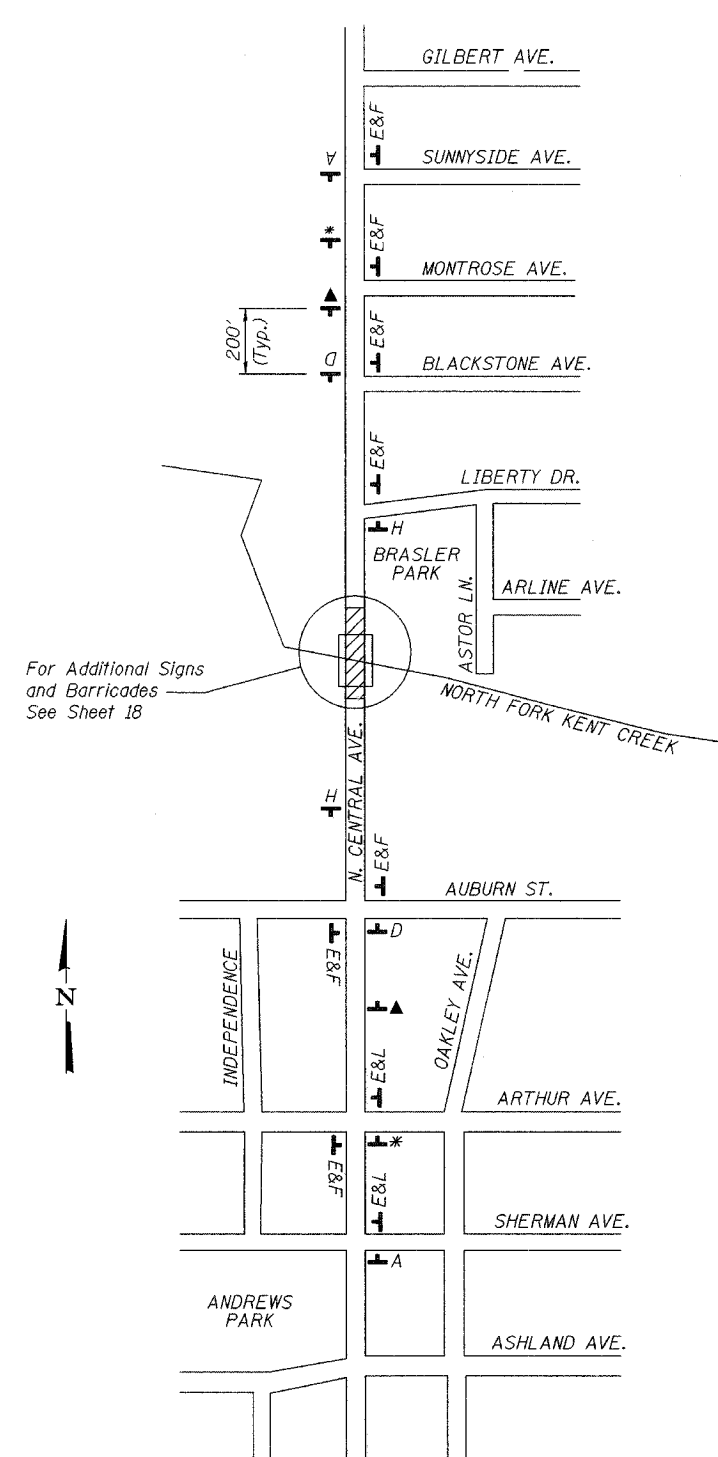
© Copyright Hanson Professional Services Inc. 2005



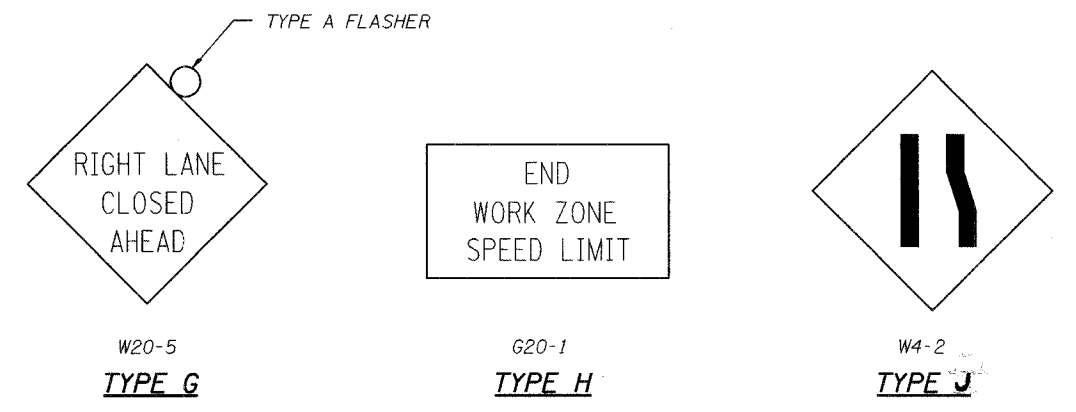
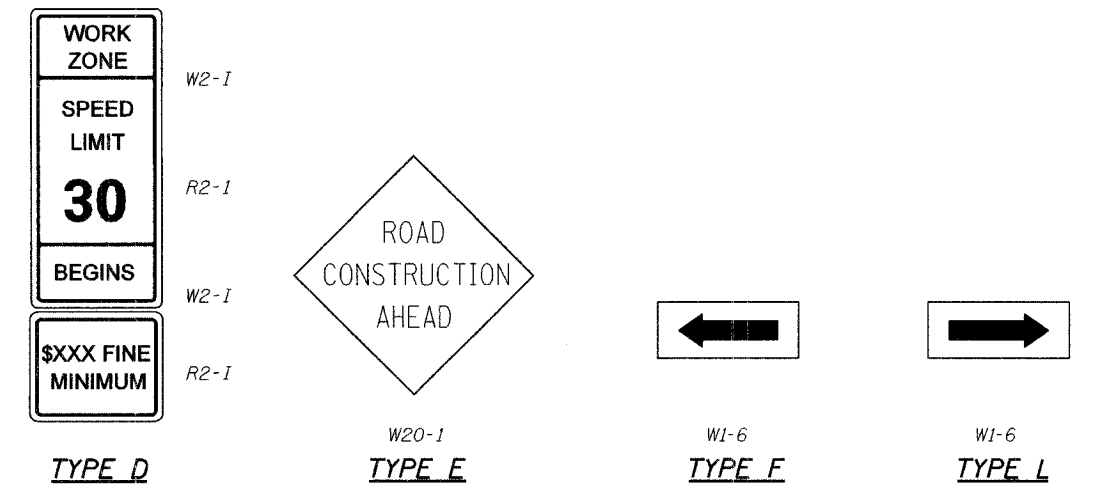
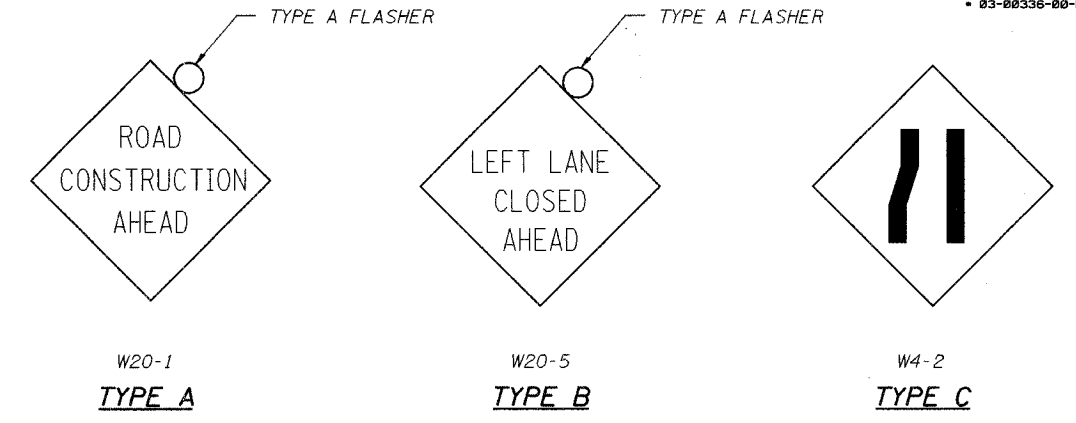
JOB NO.
03R1809
DATE
4/28/06

10:59:07 AM
 01/30/2006
 I:\03\085\03R1809\Struct\Sheet\03-00336-00-BR-Splicer.dgn
 LAYOUT: 01/23/06
 DRAWN: MGH 01/23/06
 REVIEWED: FLN 01/23/06

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET
F.A.U. 5102	*	WINNEBAGO	18	17
FED. ROAD DIST. NO. 7	SL. LINE	FED. AID PROJECT	BHM-5099(G4)	
* 03-00336-00-BR				



TRAFFIC CONTROL PLAN
Stage II & III



- * Type B Stage II
- ▲ Type C Stage II
- Type G Stage III
- Type J Stage III

NOTES

1. Stage I shall consist of jacking and removing the existing roller bearings and installing the new elastomeric bearing assemblies at both abutments. Lane closures will not be allowed during this stage.

Corporate License Number 184-001-084

TRAFFIC CONTROL PLAN

CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45

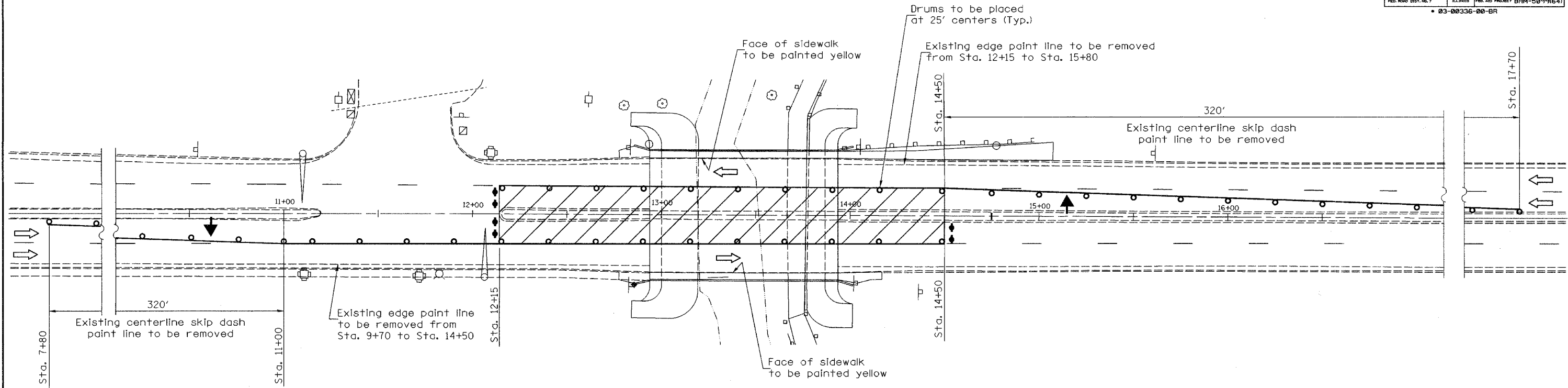
© Copyright Hanson Professional Services Inc. 2005

HANSON

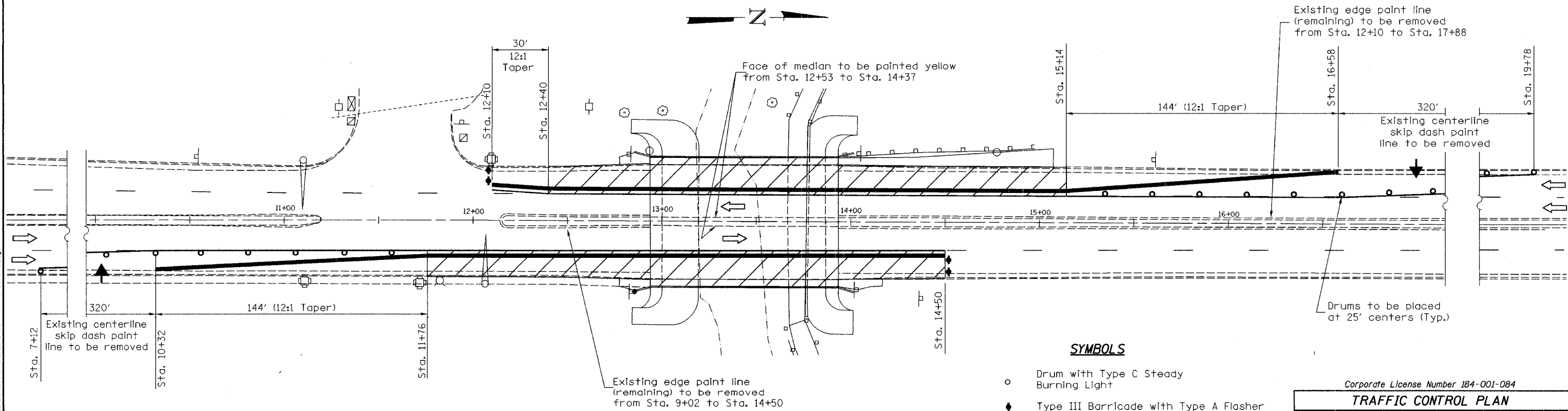
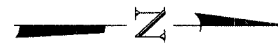
JOB NO.
03R1809
DATE
4/28/06

10/26/05 AM
 04/20/06
 10/30/05
 01/23/06
 01/23/06
 01/23/06
 LAYOUT
 DRAWN
 REVIEWED

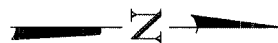
PRIVATE NO.	SECTION	COUNTY	2005 STREETS	SHEET
F.A.U. 5102		WINNEBAGO	18	18
FED. ROAD DIST. NO. 7	3.03336	FED. AID PROJECT	BHM-5099164	



TRAFFIC CONTROL PLAN - STAGE II



TRAFFIC CONTROL PLAN - STAGE III



SYMBOLS

- Drum with Type C Steady Burning Light
- ◆ Type III Barricade with Type A Flasher
- ▲ Arrow Board
- ▨ Work Zone Area
- Water-Filled Barrier with Type C Steady Burning Light at 25' centers.
- Temporary pavement marking tape (4")
Yellow (Stage II)
White (Stage III)

Note:
The cost of paint removal, temporary pavement marking tape, painting faces of sidewalks and median, and removal of temporary pavement marking tape (Stages II & III) shall be included in Traffic Control Complete.

Corporate License Number 184-001-084

TRAFFIC CONTROL PLAN

**CENTRAL AVENUE BRIDGE
OVER NORTH FORK OF KENT CREEK
F.A.U. ROUTE 5102
SECTION 03-00336-00-BR
WINNEBAGO COUNTY
STRUCTURE NUMBER 101-3023
STATION 13+45**

© Copyright Hanson Professional Services Inc. 2005



NO. 03R1809

DATE 4/28/06

LAYOUT: ELN 11/07/05
 DRAWN: MGA 12/27/05
 REVIEWED: ELN 01/09/06
 03:045 PM 01/27/2006
 I:\03\00336-00-BR\TRAFFIC CONTROL.dgn