KANSAS DEPARTMENT OF TRANSPORTATION
513076111 U056-046 KA 2789-01

CONTRACT PROPOSAL

1. The Secretary of Transportation of the State of Kansas [Secretary] will accept only electronic internet proposals from prequalified contractors for construction, improvement, reconstruction, or maintenance work in the State of Kansas, said work known as Project No.:

U056-046 KA 2789-01 [Project].

The general scope of the Project is:

BRIDGE REPAIR & POLYMER OVERLAY. LOCATION IS US-56:
BR.NOS. (270) & (269)0.83 & 1.11 MI W & N OF I-135 OVER
BNSF & INDUSTRIAL PARKWAY IN JOHNSON COUNTY. NET LENGTH IS
0.000 MILES.

2. This is the Proposal of _____ _____ [Contractor] to complete the Project for the amount set out in the accompanying Unit Prices List.

3. The Contractor makes the following ties and riders as part of its Proposal in addition to state ties, if any:

_____
_____
_____
_____

4. Contractors and other interested entities may examine the Bidding Proposal Form/Contract Documents (see paragraph 11 below) at the County Clerk's Office in the County in which the Project is located and at the Kansas Department of Transportation [KDOT] Bureau of Construction and Materials, Eisenhower State Office Building, 700 SW Harrison, Topeka, Kansas 66603. Contractors may examine and print the Bidding Proposal Form/ Contract Documents using KDOT's website:
http://www.ksdot.org/burconsmain/contracts/proposal.asp.

KDOT will not print and mail paper copies of Proposal Forms. Contractors shall notify KDOT of their intent to bid as a prime contractor by identifying themselves as a Bid Holder on the website above. Contractors shall furnish this notice no later than the close of business on the Monday preceding the scheduled Letting Date. For a fee, Contractors and other interested entities may order paper copies of the KDOT Standard Specifications for State Road and Bridge Construction, 2007 Edition, [Standard Specifications] by calling the KDOT Bureau of Construction and Materials or using KDOT's website:
http://www.ksdot.org/burconsmain/specprov/specifications.asp.

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5. Contractors shall use AASHTO's EXPEDITE software in combination with the electronic bidding system file created for the Project with EXPEDITE software [EBS file] to generate an electronic internet proposal. The EXPEDITE software and Project EBS file are available on Bid Express' website at http://www.bidx.com. The Secretary will not accept electronic paper proposals, hand-written proposals, type-written proposals, or proposals created using anything other than the EXPEDITE software.

6. Contractors shall submit an electronic internet proposal to KDOT using the Bid Express website at http://www.bidx.com.

7. The KDOT Bureau of Construction and Materials will only accept electronic internet proposals on-line using Bid Express until 1:00 P.M. Local Time on the Letting Date. KDOT will open and read these proposals at the Eisenhower State Office Building, 700 SW Harrison, Topeka, Kansas 66603 at 1:30 P.M. Local Time on the Letting Date. An Audio Broadcast of the Bid Letting is available at http://www.ksdot.org/burconsmain/audio.asp.

8. The Contractor shall execute a contract for the proposed work within ten (10) business days after notice of the award of the contract.

9. The Contractor shall complete the work within 65 working days and number of cleanup days allowed by the Standard Specifications subsection 108.4 or within the time specified in Project Special Provision "Work Schedule", if applicable.

10. The Contractor shall complete the Project according to the plans, Standard Specifications, provisions identified in the Special Provision List and all other Contract Documents identified in Standard Specifications subsection 101.3.

11. The undersigned declares that the Contractor has carefully examined the Bidding Proposal Form for the Project. The Contractor understands the following:

* The Bidding Proposal Form consists of the following documents: the Project EBS file on the Bid Express website (which includes DOT Form 202, required contract provisions, and the Unit Prices List), special provision list, project special provisions, special provisions, Standard Specifications, plans, exploratory work documents, any additional contract information, any addenda, and any amendments the Secretary provides for the Project. The Contractor can obtain these documents at KDOT's website at http://www.ksdot.org/burconsmain/contracts/proposal.asp and the links contained therein.

* The special provision list identifies all required contract provisions, project special provisions and special provisions that apply to the Project. The EBS file may contain provisions that do not apply to the Project. The Contractor is responsible for consulting the special provision list to determine the applicable provisions.

* The Bidding Proposal Form becomes the Contractor's Proposal after the Contractor completes the EBS file, electronically signs the Proposal where required on DOT Form 202, and submits the completed EBS file documents and bid bond to KDOT using Bid Express. The special provision list, project special provisions, special provisions, Standard Specifications, plans, exploratory work documents, any additional contract information, and any addenda are incorporated by reference into the Proposal. These documents are part of the Contractor's Proposal.

* In electronically signing this Proposal, the Contractor waives the right to claim that the Contractor misunderstood the contents of the Proposal or the procurement process.

12. The Contractor has inspected the actual location of the work. The Contractor has determined the availability of materials. The Contractor has evaluated all quantities and conditions. In electronically signing this Proposal, the Contractor waives the right to claim that the Contractor misunderstood the scope of the work.

13. SPECIAL PROVISIONS REQUIRING INFORMATION. The following Required Contract Provisions (I-XI) require the Contractor to furnish information. The current versions of these provisions are contained in the Project EBS file. Some or all of these apply to the Project as indicated in the Special Provision List. The Contractor shall complete these provisions within the EBS file. When these documents are required, the Secretary will reject proposals that fail to contain completed Provisions I, II, IV or V in the EBS file and may reject proposals that fail to contain completed Provisions III, VI, VII, VIII, IX, X or XI in the EBS file.

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I. 08-10-66 Certification-Noncollusion & History of Debarment
II. 04-30-82 Certification-Financial Prequalification Amount
III. 08-04-92 Certification-Contractual Services with a Current Legislator or a Current Legislator's Firm
IV. 04-26-90 Declaration-Limitations on Use of Federal Funds for Lobbying
V. 07-19-80 DBE Contract Goal
VI. 10-10-00 Price Adjustment for Fuel
VII. 08-08-01 Furnishing and Planting Plant Materials
VIII. 06-01-06 Price Adjustment for Asphalt Material
IX. 05-18-07 Repair (Structures)
X. 08-31-09 Price Adjustment for Emulsified Asphalt
XI. 01-01-11 Kansas Department of Revenue Tax Clearance Certificate

14. The funding source for this Project is STATE.
On Projects involving City or County funds, the Secretary acts as the Agent of the City or County and as the administrator of federal or state funds. Each governmental entity's responsibilities are described in a contract between the entities which is available upon request.

15. FEDERAL AID DOCUMENTS INCLUDED IN PROPOSAL. If the Project is supported in whole or in part by Federal funds, the latest revisions of the following provisions (I - VI) also apply to the Project. These documents are not included in the Project EBS file but are accessible on KDOT's website and incorporated by reference into the proposal like other provisions and the exploratory work documents.

I. 11-03-80 Affirmative Action For EEO
II. 11-15-96 Affirmative Action & EEO Policies
III. 09-06-94 U.S. DOT Fraud Hotline
IV. FHWA-1273 Federal-Aid Required Contract Provisions
V. 03-10-06 Use Of DBE As Aggregate Supplier/Regular Dealer
VI. 07-18-80 Use Of DBE

16. The Secretary reserves the right to reject any and all proposals and to waive any or all technicalities.

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17. SIGNATURE SECTION:

A. Electronic Internet Proposal

The person submitting the electronic internet Proposal, on the Contractor's behalf, shall be the person whose digital identification is used to submit this Proposal. That person shall complete paragraphs B and C. The person whose digital identification is used to electronically sign this Proposal binds the Contractor to this Proposal and binds the named individual to the certification in paragraph B.

B. Certification

> I CERTIFY THAT I AM AUTHORIZED TO REPRESENT THE CONTRACTOR IN PREPARING AND PRESENTING THIS PROPOSAL. I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING (INCLUDING BUT NOT LIMITED TO THE INFORMATION CONTAINED IN THE SPECIAL PROVISIONS REFERENCED IN PARAGRAPH 13) IS TRUE AND CORRECT. EXECUTED ON _____ (DATE IN MM/DD/YYYY FORMAT).

C. Signature

Number of company or joint venture: _____

Name of company or joint venture: _____

Name of person signing: _____

Title of the person signing: _____

Signature: Electronic Internet Proposal

RELEASED FOR CONSTRUCTION:

Date:_____

_____
Chief of Construction and Materials

REQUIRED CONTRACT PROVISION

CERTIFICATION - NONCOLLUSION AND HISTORY OF DEBARMENT
K.A.R. 36-30-4, 49 C.F.R. 29.335, 23 U.S.C. 112(c), 49 U.S.C. 322

Complete the exceptions below if applicable. The Contractor's signature on page 5 of the Contractor's Proposal supplies the necessary signature for this Certification.

NONCOLLUSION
I certify that the Contractor submitting this bid has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid.

HISTORY OF DEBARMENT
I certify that, except as noted below, the Contractor submitting this bid and any person associated with this Contractor in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, or any position involving the administration of federal funds:

1. Are not currently suspended, debarred, voluntarily excluded or disqualified from bidding by any federal or state agency;
2. Have not been suspended, debarred, voluntarily excluded or disqualified from bidding by any federal or state agency within the past three years;
3. Do not have a proposed debarment pending;
4. Within the past three years, have not been convicted or had a civil judgment rendered against them by a court of competent jurisdiction in any matter involving fraud, anti-trust violations, theft, official misconduct, or other offenses indicating a lack of business integrity or business honesty; and
5. Are not currently indicted or otherwise criminally or civilly charged by a federal, state, or local government with fraud, anti-trust violations, theft, official misconduct, or other offenses indicating a lack of business integrity or business honesty; and
6. Have not had one or more federal, state, or local government contracts terminated for cause or default within the past three years.

_____ Answer 'Yes' if there are exceptions to the above described circumstances. Answer 'No' if there are no exceptions. The exceptions, if any, are:

_____
_____
_____
_____

REQUIRED CONTRACT PROVISION

CERTIFICATION - FINANCIAL PREQUALIFICATION AMOUNT

Select the appropriate response below to indicate whether this Proposal exceeds the Contractor's financial prequalification amount. The Contractor's signature on page 5 of the Contractor's Proposal supplies the necessary signature for this Certification.

I understand that I may be required to identify the outstanding contract and subcontract work of my firm, association or corporation on DOT From 284 prior to an award of contract. Unless I obtain prior approval, I understand that the Secretary may reject this Proposal if the dollar value of work on this Contract combined with unearned amounts on our unfinished contract and subcontract work exceeds our prequalification amount.

I certify that the amount of this Proposal plus the total unearned amount of other contracts with the Kansas Department of Transportation plus the unearned amount of all other contracts in this state or other states (exceeds)/(does not exceed) the financial prequalification amount of our firm, association or corporation. I also certify that our firm, association, or corporation has the financial ability to perform the work.

If this Proposal exceeds the financial prequalification amount, I certify that I obtained approval to submit this bid from the KDOT representative I have listed below. (Prior approval to exceed the prequalification limit may be made by telephone or personal contact).

KDOT Approval Granted By: _____

Date: _____

REQUIRED CONTRACT PROVISION

CERTIFICATION - CONTRACTUAL SERVICES WITH A CURRENT LEGISLATOR OR A CURRENT LEGISLATOR'S FIRM

Select the appropriate response below to indicate whether this contract is with a legislator or a firm in which a legislator is a member. The Contractor's signature on page 5 of the Contractor's Proposal supplies the necessary signature for this Certification.

Kansas Law, K.S.A. 46-239(c), requires this agency to report all contracts entered into with any legislator or any member of a firm of which a legislator is a member, under which the legislator or member of the firm is to perform services for this agency for compensation. The Contractor certifies that:

This Contract (is)/(is not) with a legislator or a firm in which a legislator is a member. If this contract is with a legislator, that legislator is:

Name: _____

Address: _____

_____ _____ _____
(City) (State) (Zip Code)

Business Telephone: _____

REQUIRED CONTRACT PROVISION

DECLARATION
LIMITATIONS ON USE OF FEDERAL FUNDS FOR LOBBYING
PURSUANT TO 31 U.S.C. 1352

The Contractor's signature on page 5 of the Contractor's Proposal supplies the necessary signature for this Declaration and the certifications contained therein.

DEFINITIONS:

1. Designated Entity: an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress.
2. Federal Grant: An award of financial assistance by the Federal government. (Federal Aid Highway Program is considered a grant program.)
3. Influencing (or attempt): making, with the intent to influence, any communication to or appearance before any designated entity in connection with the making of a Federal contract or Federal grant.
4. Person: An individual, corporation, company, association, authority, firm, partnership, society, State, or local government.
5. Recipient: All contractors, subcontractors, subgrantees, at any tier, and other persons receiving funds in connection with a Federal grant.

EXPLANATION:

As of December 23, 1989, 31 U.S.C. section 1352 limits the use of appropriated Federal funds to influence Federal contracting. Under this law, recipients of Federal grants shall not use appropriated funds to pay any person for influencing or attempting to influence a designated entity in connection with the making of a Federal grant or the extension, continuation, renewal, amendment or modification of a Federal grant. These restrictions apply to contracts and grants exceeding $100,000.00. Federal law requires submission of this declaration. If a recipient fails to file the declaration or amend a declaration, the recipient shall be subject to a civil penalty of not less than $10,000.00 and not more than $100,000.00 for each failure. If the recipient uses appropriated Federal funds to influence or to attempt to influence a designated entity contrary to this provision, the recipient shall be subject to a civil penalty of not less than $10,000.00 and not more than $100,000.00 for each such payment.

CERTIFICATIONS:

I certify that the Contractor recipient (including its owners, partners, directors, officers, or principals) has not paid and will not pay federally appropriated funds to any person for influencing or attempting to influence a designated entity in connection with the making of a Federal grant, or the extension, continuation, renewal, amendment or modification of a Federal grant.

_____ Answer 'Yes' if a person registered under the Lobbying Disclosure Act of 1995 (Registrant) has made lobbying contacts on the Contractor recipient's behalf with respect to this contract. Answer 'No' if no Registrant has lobbied on the Contractor recipient's behalf with respect to this contract. The Registrants, if any, are:

_____
_____
_____

I certify that the Contractor recipient will report payments made to a person for influencing or attempting to influence a designated entity, that come from funds other than appropriated Federal funds. The Contractor recipient shall report such payments on Form LLL "DISCLOSURE FORM TO REPORT LOBBYING" according to the instructions and may obtain Form LLL from the KDOT Bureau of Construction and Materials.

I certify that, if information contained in this DECLARATION changes, the Contractor recipient will amend the DECLARATION within 30 days of the change(s).

I certify that the Contractor recipient will provide to and require subcontractors to sign a like DECLARATION, if the subcontract work exceeds $100,000.

The Contractor recipient understands that this declaration is a material representation of fact and the Secretary will have relied upon this declaration in entering into a contract with the Contractor recipient.

_____
NOTE: This Reporting requirement does not apply to payments made to the recipient's regular employees and contracts, subcontracts, and grants less than $100,000.

REQUIRED CONTRACT PROVISION
FURNISHING AND PLANTING PLANT MATERIALS

_____ Answer 'Yes' if this provision applies to this Project. Answer 'No' if this provision does not apply.

The Contractor shall comply with Section 907 of the Standard Specifications when furnishing and planting plant materials. Add the following at the end of 907.4 Measurement and Payment.

If the Proposal requires a lump sum price for the bid item "Furnishing and planting plant materials", the Contractor will submit a lump sum price in the Unit Prices List for all plant materials the contract requires. The Contractor will also submit a unit cost in this special provision on the "Plant Material Unit Cost List" below for each plant material the contract requires. Even though the bid item is a lump sum price, the Engineer will adjust the lump sum price by any increases or decreases in the quantities shown in the Summary of Quantities. To calculate the adjustment, the Engineer will determine the overrun or underrun quantity for each plant material. The Engineer will multiply any overrun or underrun quantity by the unit cost the Contractor furnished below. The Engineer will increase the lump sum price by the cost of any overruns and decrease the lump sum price by the cost of any underruns. The Engineer will only negotiate or receive new prices on plant materials if such materials were not identified in the original Summary of Quantities.

The Secretary may reject this Proposal if the Contractor fails to complete the "Plant Material Unit Cost List" and fails to submit this special provision with its Proposal.

Plant Material Unit Cost List

I.D.Number *	Unit Cost	I.D.Number *	Unit Cost	I.D.Number *	Unit Cost

*Refer to the Summary of Quantities sheet in the Plans for the I.D. Number

REQUIRED CONTRACT PROVISION
REPAIR (STRUCTURES)

_____ Answer 'Yes' if this provision applies to this Project. Answer 'No' if this provision does not apply.

For this Project, the structure repairs will comply with SECTION 727. Add the following at the end of subsection 727.4 Measurement and Payment.

If the Proposal requires a lump sum price for the bid item "Bridge Repair", submit a lump sum price in the Unit Prices List for all bridge repairs the contract requires. The Contractor will also submit a unit cost in this required contract provision on the "Bridge Repair Unit Cost List" below for each bridge repair item the contract requires. Even though the bid item is a lump sum price, the Engineer will adjust the lump sum price by any increases or decreases in the quantities shown in the Summary of Quantities. To calculate the adjustment, the Engineer will determine the overrun or underrun quantity for each bridge repair item. The Engineer will multiply any overrun or underrun quantity by the unit cost the Contractor furnished below. The Engineer will increase the lump sum price by the cost of any overruns and decrease the lump sum price by the cost of any underruns. The Engineer will only negotiate or receive new prices on bridge repair if such items were not identified in the original Summary of Quantities.

The Secretary may reject this Proposal if the Contractor fails to complete the "Bridge Repair Unit Cost List" and fails to submit this provision with the Proposal.

Bridge Repair Unit Cost List

I.D.Number *	Unit Cost	I.D.Number *	Unit Cost	I.D.Number *	Unit Cost

*Refer to the Summary of Quantities sheet in the Plans for the I.D. Number

REQUIRED CONTRACT PROVISION
PRICE ADJUSTMENT FOR FUEL

_____ Answer 'Yes' if this provision applies to the Project and you accept this provision. Answer 'No' if this provision does not apply. Answer 'Reject' if this provision applies to the Project, but you reject this provision and the provision will not be part of the contract.

The Contractor may accept or reject the application of Special Provision 07-01008 (latest revision) "Price Adjustment for Fuel". This Required Contract Provision 10-10-00 identifies the items of work on this Project that KDOT has determined are eligible for a fuel price adjustment.

If the Contractor accepts 07-01008 (latest revision), the Contractor shall select 'Yes' in the box(es) below next to those eligible items for which the Contractor desires a fuel price adjustment and select 'No' in the box(es) below next to those eligible items for which the Contractor does not desire a fuel price adjustment.

Eligible Item of Work	Indicate 'Yes' or 'No' for each eligible Item	Description of Eligible Item of Work
_____	_____	Common Excavation
_____	_____	Common Excavation (Contractor Furnished)
_____	_____	Rock Excavation
_____	_____	Rock Excavation (Non-Durable Shale)
_____	_____	Unclassified Excavation
_____	_____	Embankment
_____	_____	Embankment (Contractor Furnished)
_____	_____	Concrete Placement
_____	_____	Bonded Concrete Pavement
_____	_____	Concrete Pavement
_____	_____	Cold Recycled Asphalt Material
_____	_____	Surface Recycled Asphalt Construction
_____	_____	HMA - Construction
_____	_____	HMA - Commercial Grade

The Contractor assumes the risk of any mistakes the Contractor makes in completing the table.

REQUIRED CONTRACT PROVISION
PRICE ADJUSTMENT FOR ASPHALT MATERIAL

_____ Answer 'Yes' if this provision applies to the Project and you accept this provision. Answer 'No' if this provision does not apply. Answer 'Reject' if this provision applies to the Project, but you reject this provision and the provision will not be part of the contract.

The Contractor may accept or reject the application of Special Provision 07-01009 (latest revision) "Price Adjustment for Asphalt Material."

REQUIRED CONTRACT PROVISION
PRICE ADJUSTMENT FOR EMULSIFIED ASPHALT

_____ Answer 'Yes' if this provision applies to the Project and you accept this provision. Answer 'No' if this provision does not apply. Answer 'Reject' if this provision applies to the Project, but you reject this provision and the provision will not be part of the contract.

The Contractor may accept or reject the application of Special Provision 07-01016 (latest revision) "Price Adjustment for Emulsified Asphalt".

REQUIRED CONTRACT PROVISION
TAX CLEARANCE CERTIFICATE

___ Answer 'Yes' if the Contractor has a current Tax Clearance Certificate. Answer 'No' if the Contractor does not have a current Tax Clearance Certificate. Insert the Tax Clearance Confirmation Number if available at the time of bidding:_____

Contractors shall have a current Tax Clearance Certificate from the Kansas Department of Revenue [KDOR] at the time of contract award. The Tax Clearance process is a tax account review by KDOR to determine that the Contractor's account is compliant with Kansas tax laws administered by the Director of Taxation. The Secretary will reject the Contractor's Proposal as non-responsive if the Contractor does not have a current Tax Clearance Certificate at the time of contract award.

To obtain a Tax Clearance Certificate, the Contractor shall complete and submit to KDOR an Application for Tax Clearance obtained from KDOR's website at http://www.ksrevenue.org/taxclearance.htm. The Application Form can be completed and submitted on-line, by mail, or by fax. After the Contractor submits the Application, KDOR will provide the Contractor a Transaction ID number. The Contractor shall use the Transaction ID number to retrieve the Tax Clearance Certificate. Decisions on on-line applications are generally available the following business day.

After the Contractor obtains the Tax Clearance Certificate, the Contractor shall insert on this Required Contract Provision the Confirmation Number contained in the Certificate or the Contractor shall submit a copy of the Tax Clearance Certificate to the KDOT Bureau of Construction and Materials by hand delivery, mail, e-mail or fax. Before awarding a contract, the Bureau of Construction and Materials will authenticate the Certificate through the Confirmation Number inserted on this Required Contract Provision or contained on the Certificate submitted.

If the Contractor is unable to retrieve the Tax Clearance Certificate or if KDOR denies the Contractor's Application for Tax Clearance, the Contractor shall call KDOR's Special Projects Team at 785-296-3199 to determine why KDOR failed to issue the Certificate.

Tax Clearance Certificates are valid for 90 days after issue. To renew a clearance, submit a new Tax Clearance Application. Information pertaining to a Tax Clearance is subject to change for various reasons, including a state tax audit, federal tax audit, agent actions, hearings, and other legal actions. The Tax Clearance Certificate is not "clearance" for all types of taxes the state of Kansas may assess.

Subcontractors also shall have a current Tax Clearance Certificate from KDOR before the Secretary approves them for subcontract work. The Contractor shall submit to the KDOT Field Office the Subcontractor's Tax Clearance Certificate with KDOT Form 259, Request for Approval of Subcontractor.

REQUIRED CONTRACT PROVISION
DBE CONTRACT GOAL

_____ Answer 'Yes' if this provision applies. Answer 'No' if this provision does not apply.

The total dollar goal to be subcontracted to KDOT-Certified DBE firms on this contract is _____.

List all KDOT-Certified DBE subcontractors to be utilized. For each DBE subcontractor, identify the line item(s) of work from the Unit Prices List and the dollar value of the work to be subcontracted to the DBE.

IDENTIFICATION OF DBE PARTICIPATION

Name of KDOT-Certified DBE Subcontractor	Line Item Number	$ Value of Work (including DBE Mobilization, if any)	$ Value of DBE Mobilization (even if $0.00)
_____	_____	$_____	$_____
_____	_____	$_____	$_____
_____	_____	$_____	$_____
_____	_____	$_____	$_____
_____	_____	$_____	$_____
_____	_____	$_____	$_____
_____	_____	$_____	$_____
_____	_____	$_____	$_____
_____	_____	$_____	$_____
_____	_____	$_____	$_____

Total KDOT-Certified DBE $_____

Total KDOT-Certified DBE Mobilization $_____

_____ - _____
(Bidder Number and Name)

(Note: Total Dollar Value of DBE Mobilization, if any, shall equal the bid amount for Bid Item "MOBILIZATION (DBE)". Also include the Dollar Value of DBE Mobilization in the Dollar Value of Work column above. If additional sheets are needed, attach to this sheet. However, show the contract total on this sheet. A list of KDOT-Certified DBEs can be found in the Directory of Disadvantaged Business Enterprises at KDOT's website: http://www.ksdot.org/divAdmin/DBEConstruction/dbedir.aspx.

Rev. 01/11

UNIT PRICES LIST

STATE CONTRACT NO: 513076111 LETTING DATE: 07-17-13

PREPARED DATE: 06-18-13
REVISED DATE:

STATE PROJECT NO: U056-046 KA 2789-01
COUNTY: JOHNSON

THE BIDDER SHALL EXTEND ALL ITEMS AND TOTAL THE BID

SECTION 1 COMMON ITEMS

LINE/ ITEM NUMBER	ITEM DESCRIPTION	UNITS/ ESTIMATED QUANTITY	UNIT BID -IN NUMBERS- DOLLARS	CTS	AMOUNT BID -IN NUMBERS- DOLLARS	CTS
1 025323	MOBILIZATION	LSUM 1.00				
2 070580	FLAGGER (SET PRICE)	HOUR 1.00	25.000		$25.00	
3 025200	REMOVAL OF EXISTING STRUCTURES	LSUM 1.00				

SECTION 2 ROAD ITEMS

LINE/ ITEM NUMBER	ITEM DESCRIPTION	UNITS/ ESTIMATED QUANTITY	UNIT BID -IN NUMBERS- DOLLARS	CTS	AMOUNT BID -IN NUMBERS- DOLLARS	CTS
4 012711	FLUME INLET (CONCRETE)	EACH 2.00				
5 012272	SLOPE DRAIN (CONCRETE)	LNFT 242.00				
6 012420	ROCK EXCAVATION	CUYD 269.00				

SECTION 3 TEMP PRJ WTR POL CTL-SOIL EROS

_____ - _____ CONTRACTOR

STATE CONTRACT NO: 513076111 PREPARED DATE: 06-18-13
STATE PROJECT NO: U056-046 KA 2789-01 REVISED DATE:

SECTION 3 TEMP PRJ WTR POL CTL-SOIL EROS

LINE/ ITEM NUMBER	ITEM DESCRIPTION	UNITS/ ESTIMATED QUANTITY	UNIT BID -IN NUMBERS- DOLLARS	CTS	AMOUNT BID -IN NUMBERS- DOLLARS	CTS
7 011067	TEMPORARY DITCH CHECK (ROCK) (SET PRICE)	CUYD 1.00	85.000		$85.00	
8 072227	TEMPORARY SLOPE BARRIER (SET PRICE)	LNFT 1.00	5.000		$5.00	
9 071291	SEDIMENT REMOVAL (SET PRICE)	CUYD 1.00	35.000		$35.00	
10 070877	MOBILIZATION (EMERGENCY EROSION CONTROL) (SET PRICE)	EACH 1.00	1000.000		$1,000.00	

SECTION 4 BR.NO. 56-46-9.83(270) REPAIR

11 072350	CONCRETE (GRADE 4.0) (AE)	CUYD 27.80				
12 025103	REINFORCING STEEL (GRADE 60) (EPOXY COATED)	LBS. 470.00				
13 025099	REINFORCING STEEL (REPAIR) (GRADE 60) (EPOXY) (SET PRICE)	LBS. 1.00	3.000		$3.00	
14 025522	AREA PREPARED FOR PATCHING	SQYD 10.00				
15 025524	AREA PREPARED FOR PATCHING (FULL DEPTH)	SQYD 5.00				

_____ - _____ CONTRACTOR

STATE CONTRACT NO: 513076111 PREPARED DATE: 06-18-13
STATE PROJECT NO: U056-046 KA 2789-01 REVISED DATE:

SECTION 4 BR.NO. 56-46-9.83(270) REPAIR

LINE/ ITEM NUMBER	ITEM DESCRIPTION	UNITS/ ESTIMATED QUANTITY	UNIT BID -IN NUMBERS- DOLLARS	CTS	AMOUNT BID -IN NUMBERS- DOLLARS	CTS
16 072356	MULTI-LAYER POLYMER CONCRETE OVERLAY	SQYD 2,566.00				
17 014287	EXPANSION JOINT (STRIP SEAL ASSEMBLY)	LNFT 173.00				
18 014286	RESET EXISTING BEARING	EACH 18.00				
19 071055	FLOWABLE FILL (LOW STRENGTH)	CUYD 50.00				

SECTION 5 BR.NO. 56-46-9.56(269) REPAIR

LINE/ ITEM NUMBER	ITEM DESCRIPTION	UNITS/ ESTIMATED QUANTITY	UNIT BID -IN NUMBERS- DOLLARS	CTS	AMOUNT BID -IN NUMBERS- DOLLARS	CTS
20 071495	BRIDGE PAINTING (ORGANIC ZINC W/ ACRYLIC SYSTEM)	LSUM 1.00				
21 025105	REINFORCING STEEL (REPAIR) (GRADE 60) (SET PRICE)	LBS. 1.00	2.000		$2.00	
22 025522	AREA PREPARED FOR PATCHING	SQYD 10.00				
23 025524	AREA PREPARED FOR PATCHING (FULL DEPTH)	SQYD 5.00				
24 072356	MULTI-LAYER POLYMER CONCRETE OVERLAY	SQYD 1,496.00				

_____ - _____ CONTRACTOR

STATE CONTRACT NO: 513076111 PREPARED DATE: 06-18-13
STATE PROJECT NO: U056-046 KA 2789-01 REVISED DATE:

SECTION 6 CONCRETE SURFACING ITEMS

LINE/ ITEM NUMBER	ITEM DESCRIPTION	UNITS/ ESTIMATED QUANTITY	UNIT BID -IN NUMBERS- DOLLARS	CTS	AMOUNT BID -IN NUMBERS- DOLLARS	CTS
25 025509	BRIDGE APPROACH SLAB FOOTING	CUYD 49.80				
26 013606	CONCRETE PAVEMENT (10" UNIFORM) (AE)	SQYD 1,076.00				

SECTION 7 PAVEMENT MARKING ITEMS

27 013019	PAVEMENT MARKING REMOVAL	LNFT 2,300.00				
28 023140	PAVEMENT MARKING (MULTI-COMPONENT) (WHITE) (6")	LNFT 1,784.00				
29 023143	PAVEMENT MARKING (MULTI-COMPONENT) (YELLOW) (4")	LNFT 3,620.00				

SECTION 8 TRAFFIC CONTROL ITEMS

30 025331	WORK ZONE SIGNS (0 TO 9.25 SQ.FT.)	EADA 780.00				
31 025332	WORK ZONE SIGNS (9.26 TO 16.25 SQ.FT.)	EADA 780.00				
32 025333	WORK ZONE SIGNS (16.26 SQ.FT. & OVER)	EADA 175.00				

STATE CONTRACT NO: 513076111 PREPARED DATE: 06-18-13
STATE PROJECT NO: U056-046 KA 2789-01 REVISED DATE:

SECTION 8 TRAFFIC CONTROL ITEMS

LINE/ ITEM NUMBER	ITEM DESCRIPTION	UNITS/ ESTIMATED QUANTITY	UNIT BID -IN NUMBERS- DOLLARS	CTS	AMOUNT BID -IN NUMBERS- DOLLARS	CTS
33 025376	WORK ZONE BARRICADES (TYPE III - 4 TO 12 LIN. FT.)	EADA 90.00				
34 011492	CHANNELIZER (PORTABLE)	EADA 11,070.00				
35 025343	WORK ZONE WARNING LIGHT (TYPE "A" LOW INTENSITY)	EADA 520.00				
36 025364	ARROW DISPLAY	EADA 175.00				
37 070916	PAVEMENT MARKING (TEMP) 4" SOLID (TYPE I TAPE OR PAINT)	STAL 7,800.00				
38 070914	PAVEMENT MARKING (TEMP) 4" BROKEN (8')(TYPE I TAPE OR PAINT)	STAL 900.00				
39 011927	CONCRETE SAFETY BARRIER (TYPE F3) (TEMPORARY)	LNFT 1,320.00				
40 011929	CONCRETE SAFETY BARRIER (TYPE F3) (TEMPORARY - RELOCATE)	LNFT 1,320.00				
41 046015	INERTIAL BARRIER SYSTEM	EACH 2.00				
42 018154	REPLACEMENT MODULES	EACH 7.00				

STATE CONTRACT NO: 513076111 PREPARED DATE: 06-18-13
STATE PROJECT NO: U056-046 KA 2789-01 REVISED DATE:

SECTION 8 TRAFFIC CONTROL ITEMS

LINE/ ITEM NUMBER	ITEM DESCRIPTION	UNITS/ ESTIMATED QUANTITY	UNIT BID -IN NUMBERS- DOLLARS	CTS	AMOUNT BID -IN NUMBERS- DOLLARS	CTS
43 072116	TRAFFIC CONTROL (INITIAL SETUP)	LSUM 1.00				
44 023472	TWORKS SIGN ASSEMBLY (SMALL)	EACH 2.00				
45 070620	TEMPORARY RAISED PAVEMENT MARKER (TYPE II)	EACH 25.00				
46 025365	PORTABLE CHANGEABLE MESSAGE SIGN	EADA 260.00				
47 011491	CHANNELIZER (FIXED)	EADA 500.00				

GRAND TOTAL :

SPECIAL PROVISION LIST DATE: 06/14/13

STATE PROJECT NO: U056-046 KA 2789-01 STATE CONTRACT NO: 513076111

PREPARED DATE: 28MAY13 WAGE AREA: 5
REVISED DATE:

DISTRICT: 1 COUNTY: JOHNSON

DESCRIPTION: BRIDGE REPAIR & POLYMER OVERLAY.
LOCATION IS US-56: BR.NOS. (270) & (269)0.83 & 1.11 MI W & N OF I-135 OVER BNSF & INDUSTRIAL PARKWAY
IN JOHNSON COUNTY.
NET LENGTH IS 0.000 MILES.

NOTE: THE FOLLOWING LIST OF SPECIAL PROVISIONS ARE FOR THIS PROJECT. OMISSION OF ALL OR PART OF A SPECIAL PROVISION IN THE ATTACHED PROPOSAL (CONTRACT) DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR OBTAINING THE COMPLETE PROVISION AS LISTED.

PROVISION NO.	DESCRIPTION
08-10-66-R05	REQUIRED CONTRACT PROVISION-NONCOLLUSION / HISTORY-DEBARMENT
04-30-82-R07	REQUIRED CONTRACT PROVISION-FINANCIAL PREQUALIFICATION
08-04-92-R03	REQUIRED CONTRACT PROVISION-CONTRACTUAL SERVICES-LEGISLATOR
11-15-96-R05	REQUIRED CONTRACT PROVISION-EEO REQUIREMENT
02-01-95-R02	REQUIRED CONTRACT PROVISION-AREA PRACTICE DG-JO-LV-MI-SN-WY
01-01-11-R01	REQUIRED CONTRACT PROVISION-TAX CLEARANCE CERTIFICATE
KS130009	MINIMUM WAGE RATE (AREA 5)
07-ER-1-R23	ERRATA SHEET FOR 2007 STANDARD SPECIFICATION
07-01501	CONCRETE PAVEMENT AND CONCRETE STRUCTURE EQUIPMENT
07-01003	REQUIRED CONTRACT PROVISIONS KS FUNDED CONST CONTRACTS
07-01010	ENVIRONMENTAL CONCERNS-MIGRATORY BIRD TREATY ACT
07-01017-R03	MEASUREMENT AND PAYMENT
07-01018-R03	CONTROL OF MATERIALS
07-01019-R06	BIDDING REQUIREMENTS AND CONDITIONS
07-01020	LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC
07-01021	SCOPE OF WORK
07-01022	PROSECUTION AND PROGRESS
07-02003-R01	EXCAVATION AND EMBANKMENT FOR HIGHWAYS
07-02007	REMOVAL OF EXISTING STRUCTURES
07-04002-R03	CONCRETE
07-05003-R03	PORTLAND CEMENT CONCRETE PAVEMENT (NON-QC/QA)
07-07006	EXPANSION JOINTS
07-07007-R02	PAINTING STRUCTURAL STEEL
07-07011-R02	CONCRETE STRUCTURE CONSTRUCTION
07-07013-R02	MULTI-LAYER POLYMER CONCRETE OVERLAY
07-07014-R02	CONTROLLED DEMOLITION
07-07027	REINFORCING STEEL
07-08001-R06	WORK ZONE TRAFFIC CONTROL AND SAFETY (FOR 1R'S)
07-08002-R02	WORK ZONE TRAFFIC CTRL & SAFETY(MOBILE OPER)(PAV.MRKG.)
07-08004	BRIDGE APPROACH SLAB FOOTING
07-08019-R01	CONCRETE SURFACE REPAIR
07-08024-R04	DURABLE PAVEMENT MARKING
07-08025	REMOVAL OF EXISTING PAVEMENT MARKINGS
07-08030-R04	WORK ZONE TRAFFIC CONTROL AND SAFETY

STATE PROJECT NO: U056-046 KA 2789-01 STATE CONTRACT NO: 513076111

PREPARED DATE: 28MAY13 WAGE AREA: 5
REVISED DATE:

DISTRICT: 1 COUNTY: JOHNSON

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IN JOHNSON COUNTY.
NET LENGTH IS 0.000 MILES.

PROVISION NO.	DESCRIPTION
07-08037-R01	TWORKS SIGNS
07-09002-R06	TEMPORARY EROSION AND POLLUTION CONTROL
07-11004-R08	AGGREGATES FOR ON GRADE CONCRETE
07-11008-R01	GENERAL REQUIREMENTS FOR AGGREGATES
07-11009	AGGREGATES FOR NOT ON GRADE CONCRETE
07-14001	CHEMICAL ADMIXTURES FOR CONCRETE
07-15001-R01	STRIP SEAL ASSEMBLY
07-15002	HOT JOINT SEALING COMPOUND
07-15003	COLD APPLIED CHEMICALLY CURED JOINT SEALANT
07-16001-R03	STEEL BARS FOR CONCRETE REINFORCEMENT
07-16003	REINFORCING STEEL SPLICES
07-16004	STEEL FASTENERS
07-16006	EPOXY COATED STEEL FOR CONCRETE REINFORCEMENT
07-16008	WELDED STEEL WIRE FABRIC FOR CONCRETE REINFORCEMENT
07-16009	HEADED REINFORCING ANCHORS
07-17001	RAPID-SET CONCRETE PATCHING MATERIAL
07-17002-R02	EPOXY-RESIN-BASE BONDING SYSTEMS FOR CONCRETE
07-17005	NON-METALLIC DRUMS AND CONICAL PORTABLE DELINEATORS
07-17006	FIBROUS REINFORCEMENT FOR CONCRETE
07-20001-R02	PORTLAND CEMENT AND BLENDED HYDRAULIC CEMENT
07-20002	FLY ASH FOR USE IN CONCRETE
07-21002	SILT FENCE
07-22001-R01	RETROREFLECTIVE SHEETING
07-22003	IMAGE SYSTEMS FOR RETROREFLECTIVE SHEETING
07-22004	TEMPORARY RAISED PAVEMENT MARKERS
07-25001-R01	PART V
07-26001	MATERIALS CERTIFICATIONS
07-RF0099	RAILROAD FLAGGING REQUIREMENTS

END OF SPECIAL PROVISION LIST

General Decision Number: KS130009 05/17/2013 KS9

Superseded General Decision Number: KS20120009

State: Kansas

Construction Types: Heavy and Highway

Counties: Johnson, Miami and Wyandotte Counties in Kansas.

HEAVY CONSTRUCTION PROJECTS HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/04/2013
1	03/08/2013
2	03/29/2013
3	04/05/2013
4	05/17/2013

BOIL0083-001 01/01/2012

	Rates	Fringes
BOILERMAKER	$ 32.31	25.46

BRKS0015-002 04/01/2012

	Rates	Fringes
Bricklayer, Stonemason	$ 33.40	16.10

CARP0007-013 04/01/2010

HEAVY AND HIGHWAY CONSTRUCTION

JOHNSON AND WYANDOTTE COUNTIES

	Rates	Fringes
CARPENTER	$ 33.70	14.25

CARP0007-014 04/01/2010

HEAVY AND HIGHWAY CONSTRUCTION

MIAMI COUNTY

	Rates	Fringes
CARPENTER	$ 31.53	14.25

ELEC0053-001 09/02/2012

JOHNSON (EAST OF MONTICELLO, OLATHE, AND SPRING HILL TOWNSHIPS)
AND WYANDOTTE COUNTIES

	Rates	Fringes
Line Construction: TELEPHONE AND TELEGRAPH WORK INCLUDING CATV WORK: CABLE SPLICERS; AIR PRESSURE TECHNICIANS; CENTRAL OFFICE EQUIPMENT		

MAN	$ 23.31	20.5%+5.00
EQUIPMENT OPERATOR (TRENCHERS AND ALL OTHER EQUIPMENT)	$ 19.39	20.5%+5.00
GROUNDMAN - WINCH DRIVER	$ 16.76	20.5%+5.00
GROUNDMAN	$ 13.49	20.5%+5.00
TELEPHONE LINEMAN AND INSTALLER REPAIRMAN; CATV TERMINATOR; EQUIPMENT OPERATOR (1/4 YD. BACKHOE AND LARGER AND D-4 CRAWLERS AND LARGER)	$ 22.13	20.5%+5.00

ELEC0053-002 09/02/2012

JOHNSON COUNTY (EAST OF MONTICELLO, OLATHE, AND SPRING HILL TOWNSHIPS) AND WYANDOTTE COUNTIES

	Rates	Fringes
Line Construction:		
LINE CONSTRUCTION:		
GROUNDMAN POWDERMAN	$ 26.84	13.08
GROUNDMAN	$ 25.95	29.5%+6.30
LINEMAN OPERATOR	$ 36.54	29.5%+6.83
LINEMAN	$ 39.17	29.5%+6.96
LINEMEN	$ 38.40	34.5%+5.00
POLE TREATING:		
POLE TREATING GROUNDMAN	$ 23.54	34.5%+5.00
POLE TREATING SPECIALIST	$ 40.18	34.5%+5.00
POLE TREATING TRUCK DRIVER	$ 25.23	34.5%+5.00
TRANSMISSION LINES: (RAILROAD AND CROSS COUNTRY)		
GROUNDMAN, POWDERMAN	$ 25.23	34.5%+5.00
GROUNDMAN	$ 23.54	34.5%+5.00
LINEMAN OPERATOR	$ 33.76	34.5%+5.00
LINEMAN	$ 36.53	34.5%+5.00

ELEC0124-005 12/01/2012

	Rates	Fringes
Communication Technician	$ 34.83	18.73
Electricians, Including Low Voltage	$ 34.83	18.73

ELEC0304-001 07/01/2010

JOHNSON (Except that portion East of Monticello, Olathe, and Spring Hill Townships); MIAMI COUNTY

	Rates	Fringes
Cable Splicer	$ 32.90	4.76+29.75%
Groundman	$ 19.55	4.76+29.75%
Line truck and equipment operators	$ 27.11	4.76+29.75%
Linemen	$ 32.90	4.76+29.75%
Traffic signal technician	$ 32.90	4.76+29.75%

ENGI0101-009 04/01/2013

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 33.88	14.83
GROUP 2	$ 32.84	14.83
OILERS/DRIVERS (ALL TYPES)	$ 31.72	14.83
OILERS	$ 28.37	14.83

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1 - Asphalt roller operator, finish; asphalt paver and spreader; asphalt plant operator; concrete plant operator; la tourneau rooter (all tiller types); concrete mixer paver; slip form paver operator (CMI, Rex, Gomeco or equal); finishing machine operator; auto grader or trimmer or sub-grader; side discharge spreader; concrete pump operator; back hoe; blade operator (all types); bulldozer operator; high loader - fork lift - skid loader (all types); quad track; scraper operators (all types); push cat; ditching machine; boilers - 2; booster pump on dredge; dredge engineman, dredge operator; tow boat operator; hoisting engineer (2 active drums); crane operator; derrick or derrick trucks; drag line operator; pile drive operator; pitman crane or boom truck (all types); shovel operator; truck crane; clamshell operator; drilling or boring machine (rotary - self propelled); boring machine (truck or crane mounted); skimmer scoop operator; mucking machine operator; sideboom cats; locomotive operator (standard gage); drillcat with compressor mounted (self-contained) or similar type self propelled rotary drill (not air tract); mechanics and welders (field andplants); wood and log chippers (all types); greaser

GROUP 2 - A-Frame truck operator, articulated dump truck; hoisting engine (one drum); roller operator (with or without blades); boilers (1); distributor operator; fireman rig; tank car heater operator (combination boiler and booster); chip spreader; back filler operator; farm tractor (all attachments); multiple compactor; concrete mixer operator, skip loader; elevating grader operator; pavement breaker, self-propelled hydra-hammer (or similar type); power shield; churn drill operator; concrete saws (self propelled); conveyor operator; float operator; form grader operator; screening and washing plant; siphons and jets; vibrating machine operator (not hand held); crusher operator; conveyor operator; paymill operator; maintenance operator; welding machine; compressor, pumps; self-propelled street broom or sweeper; stump cutting machine; straw blower.

FOOTNOTE:
HOURLY PREMIUMS
FOLLOWING CLASSIFICATIONS SHALL RECEIVE ($1.00) ABOVE GROUP 1 RATE: Clamshells - 3 yd. capacity or over - crane or rigs, 80 ft. of boom or over (including jib) - draglines, 3 yd.capacity or over - piledrivers 80 ft. of boom or over (including jib) - shovels & backhoes, 3 yd. capacity or over.

IRON0010-003 04/01/2012

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes

Ironworkers:
JOHNSON, WYANDOTTE COUNTIES.$ 29.00 25.60
MIAMI COUNTY
(All other work).....$ 24.50 21.78
(Only to include major bridge crossings over a body of water, power plants, new major dam or lock projects, major missile site alterations and new television tower projects).....$ 27.50 21.78

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* LABO1290-006 04/01/2013

HEAVY AND HIGHWAY CONSTRUCTION

MIAMI COUNTY

	Rates	Fringes
Laborers:		
GROUP 1	$ 27.86	13.45
GROUP 2	$ 29.07	13.45

LABORERS CLASSIFICATIONS

GROUP 1: General laborer - Carpenter Tenders, Salamander Tenders, Loading Trucks under bins, Hoppers and Conveyors, Track Men and all other General Laborers, Air Tool Operator, Cement Handler (Bulk or Sack), Chain or Concrete Saw, Deck Hands, Dump Man or earth fill, Georgie Buggies Man, Material Batch Hopper Man, Scale Man, Material Mixer Man,(except on Manholes), Coffer Dams, Abatments and Pier Hole Men working below ground, Riprap Pavers Rock, Black or Brick Signal Man, Scaffolds over ten feet not self supported from ground up, Skipmanor concrete, paving, Wire Mash Setters or concrete paving, Pipelayer on all work in connection with Sewer, Water, Gas.Gasoline, Oil, Drainage Pipe, Conduit Pipe, Tile and Duct Lines and all other pipelines whether pressurized or non-pressurized, regardless of type of material, Power Tool Operator, all work in connection with Hydraulic or General Dredging Operatons, Form Setter Helpers Pudlers (paving only), Crusher Feeder, Men handling creosote ties on creosote materials, Men working with and handling epoxy material or materials (where special protection is required), Topper of Standing Trees, Batter Board Man on Pipe and Ditch work, Feeder Man on Wood Pulvarizer Board and Willow Mat Weavers and Cable Tiers on River Work, all Laborers working on underground tunnels where compressed air is not used.

GROUP 2: Spreader or Screed Man on Asphalt Machine, Asphalt Raker, Grade Checker, Mill Setter, Concrete Specialist, Vibrator Man, Concrete Saw over 5 hp., Laser Beam Man, Barco Tamper, Jackson or any other similar Tamp, Wagon Driller, Churn Drills, Air Track Drills and all other similar Drills, Cutting Torch Man, Form Setters, Liners and Stringline Men on Concrete Paving, curb, Gutters and etc., Hot Mastic Kettleman, Hot Tar Applicator, Hand Blade Operators, Manhole Builders Helpers and Mortar Men on Brick or Block Manholes, Sand Blasting and Gunnite Nozzle Men, Rubbing Concrete, Air Tool Operator in Tunnels, Head Pipe Layer on Sewer work, Manhole Builder (Brick or Block), Dynamite and Powder Men, Welder, Hazardous Waste Work.

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* LABO1290-007 04/01/2013

HEAVY AND HIGHWAY CONSTRUCTION

JOHNSON AND WYANDOTTE COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1	$ 27.86	13.45
GROUP 2	$ 29.07	13.45

LABORERS CLASSIFICATIONS

GROUP 1: General laborer - Carpenter Tenders, Salamander Tenders, Loading Trucks under bins, Hoppers and Conveyors, Track Men and all other General Laborers, Air Tool Operator, Cement Handler (Bulk or Sack), Chain or Concrete Saw, Deck Hands, Dump Man or earth fill, Georgie Buggies Man, Material Batch Hopper Man, Scale Man, Material Mixer Man,(except on Manholes), Coffer Dams, Abatments and Pier Hole Men working below ground, Riprap Pavers Rock, Black or Brick Signal Man, Scaffolds over ten feet not self supported from ground up, Skipmanor concrete, paving, Wire Mash Setters or concrete paving, Pipelayer on all work in connection with Sewer, Water, Gas.Gasoline, Oil, Drainage Pipe, Conduit Pipe, Tile and Duct Lines and all other pipelines whether pressurized or non-pressurized, regardless of type of material, Power Tool Operator, all work in connection with Hydraulic or General Dredging Operatons, Form Setter Helpers Pudlers (paving only), Crusher Feeder, Men handling creosote ties on creosote materials, Men working with and handling epoxy material or materials (where special protection is required), Topper of Standing Trees, Batter Board Man on Pipe and Ditch work, Feeder Man on Wood Pulvarizer Board and Willow Mat Weavers and Cable Tiers on River Work, all Laborers working on underground tunnels where compressed air is not used.

GROUP 2: Spreader or Screed Man on Asphalt Machine, Asphalt Raker, Grade Checker, Mill Setter, Concrete Specialist, Vibrator Man, Concrete Saw over 5 hp., Laser Beam Man, Barco Tamper, Jackson or any other similar Tamp, Wagon Driller, Churn Drills, Air Track Drills and all other similar Drills, Cutting Torch Man, Form Setters, Liners and Stringline Men on Concrete Paving, curb, Gutters and etc., Hot Mastic Kettleman, Hot Tar Applicator, Hand Blade Operators, Manhole Builders Helpers and Mortar Men on Brick or Block Manholes, Sand Blasting and Gunnite Nozzle Men, Rubbing Concrete, Air Tool Operator in Tunnels, Head Pipe Layer on Sewer work, Manhole Builder (Brick or Block), Dynamite and Powder Men, Welder, Hazardous Waste Work.

PAIN0003-002 04/01/2013

	Rates	Fringes
Painters:		
Brush & roller	$ 28.58	14.97
Paperhangers	$ 29.08	14.97
Sandblast - base	$ 30.20	14.97
Sandblast: bridge, stage, erected steel, and storage bin and tank	$ 30.20	14.97
Spray storage bin and tanks; Spray elevated		

tanks; Stageman - spray; Bridge - spray; Steelman - spray.....$ 30.20 14.97
Spray.....$ 29.70 14.97
Stepplejack - spray or sandblast.....$ 33.77 14.97
Stepplejack.....$ 33.77 14.97
Storage bin and tanks, elevated takns, stageman, beltman, bridge-man, steelman; elevator shaft.....$ 29.70 14.97

12.90

PLAS0518-012 04/01/2012

HEAVY AND HIGHWAY CONSTRUCTION

JOHNSON AND WYANDOTTE COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	$ 29.24	14.38

PLUM0008-005 06/01/2012

	Rates	Fringes
PLUMBER		
Johnson and Wyandotte.....	$ 37.45	20.41
Miami.....	$ 35.01	20.41

PLUM0533-002 06/01/2012

	Rates	Fringes
PIPEFITTER.....	$ 40.08	19.07

SFKS0669-001 01/01/2013

	Rates	Fringes
SPRINKLER FITTER.....	$ 29.09	17.00

SHEE0002-004 07/01/2012

	Rates	Fringes
Sheet metal worker.....	$ 38.39	17.73

TEAM0541-004 04/01/2012

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
Truck drivers:		
GROUP 1.....	$ 29.61	12.45
GROUP 2.....	$ 29.04	12.45
GROUP 3.....	$ 28.52	12.45

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Mechanics and welders-field; A-frame low boy - boom truck driver.

GROUP 2: Articulated dump truck; insley wagons: dump trucks, excavating, 5 cu. yds. and over, dumpsters, half-tracks, speedace, euclids and similar excavating equipment material trucks; tandem two teams; semi-trailers, winch trucks-fork trucks; distributor drivers and operators; agitator and transit mix; tank wagon drivers, tandem or semi.; one team; station wagons; pickup truck; material trucks, single axle; tank wagon drivers, single axle

GROUP 3: Oilers, greasers-field

TEAM0541-008 03/25/2000

	Rates	Fringes
Traffic control service driver	$ 14.15	2.44+a

a. PAID HOLIDAYS: New Year's Day, Decoration Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day, Employee's birthday and 2 personal days.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material,

etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

PROJECT: 56-46 KA-2789-01

COUNTY: JOHNSON COUNTY

TYPE: BRIDGE REPAIR

BNSF RAILWAY COMPANY
FLAGGING REQUIREMENTS

FOR THE BENEFIT OF PROSPECTIVE BIDDERS, the Kansas Department of Transportation has obtained the requirements of the BNSF Railway Co. in relation to the protection of its traffic, the conditions under which such protection will be required, the rates of pay, working hours, and other information relating to services necessary to protect railroad traffic during the construction operations.

EXHIBIT "C"
CONTRACTOR REQUIREMENTS

1.01 General

1.01.01 The Contractor must cooperate with **BNSF RAILWAY COMPANY**, hereinafter referred to as "Railway" where work is over or under on or adjacent to Railway property and/or right-of-way, hereafter referred to as "Railway Property", during the construction of Project No. 56-46 KA-2789-01 of bridges #269 & #270, US-56 over New Century Parkway and the BNSF Railroad LS 7100 MP 32.80.

1.01.02 The Contractor must execute and deliver to the Railway duplicate copies of the Exhibit “C-1” Agreement, in the form attached hereto, obligating the Contractor to provide and maintain in full force and effect the insurance called for under Section 3 of said Exhibit “C-1”. Questions regarding procurement of the Railroad Protective Liability Insurance should be directed to Rosa Martinez at Marsh, USA, 214-303-8519.

1.01.03 The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains on Railway Property.

1.01.04 The Contractor's right to enter Railway's Property is subject to the absolute right of Railway to cause the Contractor's work on Railway's Property to cease if, in the opinion of Railway, Contractor's activities create a hazard to Railway's Property, employees, and/or operations. Railway will have the right to stop construction work on the Project if any of the following events take place: (i) Contractor (or any of its subcontractors) performs the Project work in a manner contrary to the plans and specifications approved by Railway; (ii) Contractor (or any of its subcontractors), in Railway’s opinion, prosecutes the Project work in a manner which is hazardous to Railway property, facilities or the safe and expeditious movement of railroad traffic; or (iii) the insurance described in the attached Exhibit C-1 is canceled during the course of the Project. The work stoppage will continue until all necessary actions are taken by Contractor or its subcontractor to rectify the situation to the satisfaction of Railway’s Division Engineer or until additional insurance has been delivered to and accepted by Railway. €Any such work stoppage under this provision will not give rise to any liability on the part of Railway. Railway’s right to stop the work is in addition to any other rights Railway may have including, but not limited to, actions or suits for damages or lost profits. In the event that Railway desires to stop construction work on the Project, Railway agrees to immediately notify the following individual in writing:

Kansas Department of Transportation
Coordinating Section
700 SW Harrison Street
Topeka, KS 66603 785.296.3531

1.01.05 The Contractor is responsible for determining and complying with all Federal, State and Local Governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, the Oil Pollution

Act, the Hazardous Materials Transportation Act, CERCLA), and health and safety laws and regulations. The Contractor hereby indemnifies, defends and holds harmless Railway for, from and against all fines or penalties imposed or assessed by Federal, State and Local Governmental Agencies against the Railway which arise out of Contractor's work under this Agreement.

1.01.06 The Contractor must notify the Kansas Department of Transportation at 785-296-3531 and Railway's Manager Public Projects, telephone number (913) 551-4484 at least thirty (30) calendar days before commencing any work on Railway Property. Contractor's notification to Railway must refer to Railroad's file.

1.01.07 For any bridge demolition and/or falsework above any tracks or any excavations **l**ocated with any part of the excavations located within, whichever is greater, twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 2 horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor must furnish the Railway five sets of working drawings showing details of construction affecting Railway Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and two sets of structural calculations of any falsework, shoring or cribbing. For all excavation and shoring submittal plans, the current "BNSF-UPRR Guidelines for Temporary Shoring" must be used for determining the design loading conditions to be used in shoring design, and all calculations and submittals must be in accordance with the current "BNSF-UPRR Guidelines for Temporary Shoring". All submittal drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. All calculations must take into consideration railway surcharge loading and must be designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association) Coopers E-80 live loading standard. All drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. The Contractor must not begin work until notified by the Railway that plans have been approved. The Contractor will be required to use lifting devices such as, cranes and/or winches to place or to remove any falsework over Railway's tracks. In no case will the Contractor be relieved of responsibility for results obtained by the implementation of said approved plans.

1.01.08 Subject to the movement of Railway's trains, Railway will cooperate with the Contractor such that the work may be handled and performed in an efficient manner. The Contractor will have no claim whatsoever against Railroad for any type of damages or for extra or additional compensation in the event his work is delayed by the Railway.

1.02 Contractor Safety Orientation

1.02.01 No employee of the Contractor, its subcontractors, agents or invitees may enter Railway Property without first having completed Railway's Engineering Contractor Safety Orientation, found on the web site www.contractororientation.com. The Contractor must ensure that each of its employees, subcontractors, agents or invitees completes Railway's Engineering Contractor Safety Orientation through internet sessions before any work is performed on the Project on Railroad right of way. Additionally, the Contractor must ensure that each and every one of its employees, subcontractors, agents or invitees possesses a card certifying completion of the Railway Contractor Safety Orientation before entering Railway Property. The Contractor is responsible for the cost of the Railway Contractor Safety Orientation. The Contractor must renew the Railway Contractor Safety Orientation annually. Further clarification can be found on the web site or from the Railway's Representative.

1.03 Railway Requirements

1.03.01 The Contractor must take protective measures as are necessary to keep railway facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from his operations. Any damage to railway facilities resulting from Contractor's operations will be repaired or replaced by Railway and the cost of such repairs or replacement must be paid for by the Agency.

1.03.02 The Contractor must notify the Railway's Division Superintendent at Kansas City, Ks , phone (913) 551-4310 and provide blasting plans to the Railway for review seven (7) calendar days prior to conducting any blasting operations adjacent to or on Railway's Property.

1.03.03 The Contractor must abide by the following temporary clearances during construction:

- 15’ Horizontally from centerline of nearest track
- 21’-6” Vertically above top of rail
- 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts
- 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
- 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
- 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts

1.03.04 Upon completion of construction, the following clearances shall be maintained:

- 25’ Horizontally from centerline of nearest track
- 23’-3 ½” Vertically above top of rail

1.03.05 Any infringement within State statutory clearances due to the Contractor's operations must be submitted to the Railway and to the Kansas Department of Transportation and must not be undertaken until approved in writing by the Railway, and until the Kansas Department of Transportation has obtained any necessary authorization from the State Regulatory Authority for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending Railway approval, and/or the State Regulatory Authority's approval.

1.03.06 In the case of impaired vertical clearance above top of rail, Railway will have the option of installing tell-tales or other protective devices Railway deems necessary for protection of Railway operations. The cost of tell-tales or protective devices will be borne by the Agency.

1.03.07 The details of construction affecting the Railway's Property and tracks not included in the contract plans must be submitted to the Railway by Kansas Department of Transportation for approval before work is undertaken and this work must not be undertaken until approved by the Railway.

1.03.08 At other than public road crossings the Contractor must not move any equipment or materials across Railway's tracks until permission has been obtained from the Railway. The Contractor must obtain a "Temporary Construction Crossing Agreement" from the Railway prior to moving his equipment or materials across the Railways tracks. The temporary crossing must be gated and locked at all times when not required for use by the Contractor. The temporary crossing for use of the Contractor will be constructed and, at the completion of the project, removed at the expense of the Contractor.

1.03.09 Discharge, release or spill on the Railway Property of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify the Railway's Resource Operations Center at 1(800) 832-5452, of any discharge, release or spills in excess of a reportable quantity. Contractor must not allow Railway Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.

1.03.10 The Contractor upon completion of the work covered by this contract, must promptly remove from the Railway's Property all of Contractor's tools, equipment, implements and other materials, whether brought upon said property by said Contractor or any Subcontractor, employee or agent of Contractor or of any Subcontractor, and must cause Railway's Property to be left in a condition acceptable to the Railway's representative.

1.04 Contractor Roadway Worker on Track Safety Program and Safety Action Plan

1.04.01 Each Contractor that will perform work within 25 feet of the centerline of a track must develop and implement a Roadway Worker Protection/On Track Safety Program and work with Railway Project Representative to develop an on track safety strategy as described in the guidelines listed in the on track safety portion of the Safety Orientation. This Program must provide Roadway Worker protection/on track training for all employees of the Contractor, its subcontractors, agents or invitees. This training is reinforced at the job site through job safety briefings. Additionally, each Contractor must develop and implement the Safety Action Plan, as provided for on the web site **www.contractororientation.com**, which will be made available to Railway prior to commencement of any work on Railway Property. During the performance of work, the Contractor must audit its work activities. The Contractor must designate an on-site Project Supervisor who will serve as the contact person for the Railway and who will maintain a copy of the Safety Action Plan, safety audits, and Material Safety Datasheets (MSDS), at the job site.

1.05 Railway Flagger Services:

1.05.01 The Contractor must give Railway's Roadmaster (telephone 913-515-8008) a minimum of thirty (30) calendar days advance notice when flagging services will be required so that the Roadmaster can make appropriate arrangements (i.e., bulletin the flagger's position). If flagging services are scheduled in advance by the Contractor and it is subsequently determined by the parties hereto that such services are no longer necessary, the Contractor must give the Roadmaster five (5) working days advance notice so that appropriate arrangements can be made to abolish the position pursuant to union requirements.

1.05.02 Unless determined otherwise by Railway's Project Representative, Railway flagger will be required and furnished when Contractor's work activities are located over, under and/or within twenty-five (25) feet measured horizontally from centerline of the nearest track and when cranes or similar equipment positioned beyond 25-feet from the track centerline could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto for the following conditions:

1.05.02a When, upon inspection by Railway's Representative, other conditions warrant.

1.05.02b When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's representative, track or other Railway facilities may be subject to movement or settlement.

1.05.02c When work in any way interferes with the safe operation of trains at timetable speeds.

1.05.02d When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.

1.05.02e Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

1.05.03 Flagging services will be performed by qualified Railway flaggers.

1.05.03a Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railway Property and operations, if deemed necessary by the Railways Representative.

1.05.03b Each time a flagger is called, the minimum period for billing will be the eight (8) hour basic day.

1.05.03c The cost of flagger services provided by the Railway will be borne by the contractor. The estimated cost for one (1) flagger is approximately $800.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, vehicle, transportation, meals, lodging, radio, equipment, supervision and other costs incidental to performing flagging services. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. **THE FLAGGING RATE IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL**

BE USED TO CALCULATE THE ACTUAL COSTS OF FLAGGING PURSUANT TO THIS PARAGRAPH.

1.05.03d The average train traffic on this route is 41 freight trains per 24-hour period at a timetable speed 70 MPH. The approximate ratio of the estimated construction cost to the total cost within 50 feet of track is 4.3%.

1.06 Contractor General Safety Requirements

1.06.01 Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by contractors within 25 feet of any track must be in compliance with FRA Roadway Worker Protection Regulations.

1.06.02 Before beginning any task on Railway Property, a thorough job safety briefing must be conducted with all personnel involved with the task and repeated when the personnel or task changes. If the task is within 25 feet of any track, the job briefing must include the Railway's flagger, as applicable, and include the procedures the Contractor will use to protect its employees, subcontractors, agents or invitees from moving any equipment adjacent to or across any Railway track(s).

1.06.03 Workers must not work within 25 feet of the centerline of any track without an on track safety strategy approved by the Railway's Project Representative. When authority is provided, every contractor employee must know: (1) who the Railway flagger is, and how to contact the flagger, (2) limits of the authority, (3) the method of communication to stop and resume work, and (4) location of the designated places of safety. Persons or equipment entering flag/work limits that were not previously job briefed, must notify the flagger immediately, and be given a job briefing when working within 25 feet of the center line of track.

1.06.04 When Contractor employees are required to work on the Railway Property after normal working hours or on weekends, the Railroad's representative in charge of the project must be notified. A minimum of two employees must be present at all times.

1.06.05 Any employees, agents or invitees of Contractor or its subcontractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the Railway's Property and subsequently released to the custody of a representative of Contractor management. Future access to the Railway's Property by that employee will be denied.

1.06.06 Any damage to Railway Property, or any hazard noticed on passing trains must be reported immediately to the Railway's representative in charge of the project. Any vehicle or machine which may come in contact with track, signal equipment, or structure (bridge) and could result in a train derailment must be reported immediately to the Railway representative in charge of the project and to the Railway's Resource Operations Center at 1(800) 832-5452. Local emergency numbers are to be obtained from the Railway representative in charge of the project prior to the start of any work and must be posted at the job site.

1.06.07 For safety reasons, all persons are prohibited from having pocket knives, firearms or other deadly weapons in their possession while working on Railway's Property.

1.06.08 All personnel protective equipment (PPE) used on Railway Property must meet applicable OSHA and ANSI specifications. Current Railway personnel protective equipment requirements are listed on the web site, **www.contractororientation.com,** however, a partial list of the requirements include: a) safety glasses with permanently affixed side shields (no yellow lenses); b) hard hats c) safety shoe with: hardened toes, above-the-ankle lace-up and a defined heel; and d) high visibility retro-reflective work wear. The Railroad's representative in charge of the project is to be contacted regarding local specifications for meeting requirements relating to hi-visability work wear. Hearing protection, fall protection, gloves, and respirators must be worn as required by State and Federal regulations. **(NOTE – Should there be a discrepancy between the information contained on the web site and the information in this paragraph, the web site will govern.)**

1.06.09 THE CONTRACTOR MUST NOT PILE OR STORE ANY MATERIALS, MACHINERY OR EQUIPMENT CLOSER THAN 25'-0" TO THE CENTER LINE OF THE NEAREST RAILWAY TRACK. MATERIALS, MACHINERY OR EQUIPMENT MUST NOT BE STORED OR LEFT WITHIN 250 FEET OF ANY HIGHWAY/RAIL AT-GRADE CROSSINGS OR TEMPORARY CONSTRUCTION CROSSING, WHERE STORAGE OF THE SAME WILL OBSTRUCT THE VIEW OF A TRAIN APPROACHING THE CROSSING. PRIOR TO BEGINNING WORK, THE CONTRACTOR MUST ESTABLISH A STORAGE AREA WITH CONCURRENCE OF THE RAILROAD'S REPRESENTATIVE.

1.06.10 Machines or vehicles must not be left unattended with the engine running. Parked machines or equipment must be in gear with brakes set and if equipped with blade, pan or bucket, they must be lowered to the ground. All machinery and equipment left unattended on Railway's Property must be left inoperable and secured against movement. (See internet Engineering Contractor Safety Orientation program for more detailed specifications)

1.06.11 Workers must not create and leave any conditions at the work site that would interfere with water drainage. Any work performed over water must meet all Federal, State and Local regulations.

1.06.12 All power line wires must be considered dangerous and of high voltage unless informed to the contrary by proper authority. For all power lines the minimum clearance between the lines and any part of the equipment or load must be; 200 KV or below - 15 feet; 200 to 350 KV - 20 feet; 350 to 500 KV - 25 feet; 500 to 750 KV - 35 feet; and 750 to 1000 KV - 45 feet. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

1.07 Excavation

1.07.01 Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems are present and located within the Project work area. The Contractor must determine whether excavation on Railway's Property could cause damage to buried cables resulting in delay to Railway traffic and disruption of service to users. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits. Before commencing excavation, the Contractor must contact **BNSF's Field Engineering Representative (913-551-4172).** All underground and overhead wires will be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. **It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.**

1.07.02 The Contractor must cease all work and notify the Railway immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and the owner of the utility can be identified, then the Contractor must also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work must be performed until the exact location has been determined. There will be no exceptions to these instructions.

1.07.03 All excavations must be conducted in compliance with applicable OSHA regulations and, regardless of depth, must be shored where there is any danger to tracks, structures or personnel.

1.07.04 Any excavations, holes or trenches on the Railway's Property must be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that Railway employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be back filled as soon as possible.

1.08 Hazardous Waste, Substances and Material Reporting

1.08.01 If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway's Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this

Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at 1(800) 832-5452, of such discovery: (b) take safeguards necessary to protect its employees, subcontractors, agents and/or third parties: and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

1.09 Personal Injury Reporting

1.09.01 The Railway is required to report certain injuries as a part of compliance with Federal Railroad Administration (FRA) reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor or Contractor's invitees while on the Railway's Property must be reported immediately (by phone mail if unable to contact in person) to the Railway's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form contained herein is to be completed and sent by Fax to the Railway at 1 (817) 352-7595 and to the Railway's project Representative no later than the close of shift on the date of the injury.

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION
INFORMATION REQUIRED TO BE COLLECTED PURSUANT TO FEDERAL REGULATION. IT SHOULD BE USED FOR COMPLIANCE WITH FEDERAL REGULATIONS ONLY AND IS NOT INTENDED TO PRESUME ACCEPTANCE OF RESPONSIBILITY OR LIABILITY.
1. Accident City/St _____2. Date:_____ Time:
County: _____3. Temperature: _____ 4. Weather
(if non-Railway location)

5. Social Security #

6. Name (last, first, mi)

7. Address: Street: _____City: _____St. _____Zip:

8. Date of Birth: _____and/or Age Gender:
(if available)
9. (a) Injury: _____(b) Body Part: _____
(i.e. (a) Laceration (b) Hand)

11. Description of Accident (To include location, action, result, etc.):

12. Treatment:
? First Aid Only
? Required Medical Treatment
? Other Medical Treatment

13. Dr. Name _____30. Date:

14. Dr. Address:
Street: _____City: _____St: _____Zip:

15. Hospital Name:

16. Hospital Address:

Street: _____City: _____St: _____Zip:

17. Diagnosis:

FAX TO
RAILWAY AT (817) 352-7595
AND COPY TO
RAILWAY ROADMASTER FAX

LAW DEPARTMENT APPROVED

EXHIBIT "C-1"

Agreement
Between
BNSF RAILWAY COMPANY
and the
CONTRACTOR

BNSF RAILWAY COMPANY
Attention: Manager Public Projects

Railway File: Bridge Repair over LS 7100 MP 32.80 DOT# 005791G
Agency Project: 56-46 KA-2789-01

Gentlemen:

The undersigned (hereinafter called, the "Contractor"), has entered into a contract (the "Contract") dated _____ , 2012, with the Kansas Department of Transportation for the performance of certain work in connection with the following project: **Project No. 56-46 KA-2789-01 of bridges #269 & #270, US-56 over New Century Parkway and the BNSF Railroad LS 7100 MP 32.80**. Performance of such work will necessarily require contractor to enter BNSF RAILWAY COMPANY ("Railway") right of way and property ("Railway Property"). The Contract provides that no work will be commenced within Railway Property until the Contractor employed in connection with said work for the **Kansas Department of Transportation** (i) executes and delivers to Railway an Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the Owner, General Partner, President or Vice President of Contractor, Contractor must furnish evidence to Railway certifying that the signatory is empowered to execute this Agreement on behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Contract, has agreed and does hereby agree with Railway as follows:

Section 1. RELEASE OF LIABILITY AND INDEMNITY

Contractor hereby releases, and agrees to indemnify and hold harmless Railroad for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to Contractor's officers, employees, subcontractors, agents, licensees, or invitees (Contractor Agents) or Railroad employees assigned to the project and for loss and damage to property belonging to Contractor Agents or Railroad, arising or alleged to arise in any manner from Contractor Agents' acts or omissions or failure to perform any obligation hereunder. **THE LIABILITY ASSUMED BY CONTRACTOR SHALL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DESTRUCTION, DAMAGE, DEATH, OR INJURY WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILROAD, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR GROSS NEGLIGENCE OF RAILROAD EMPLOYEES ASSOCIATED WITH THIS PROJECT.**

Contractor hereby releases, and agrees to indemnify and hold harmless Railroad for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to any other persons whomsoever, including Railroad's officers and employees not assigned to the project, and for loss and damage to property (including, without limitation, environmental damage) belonging to any other persons whomsoever, including Railroad, but only to extent caused by Contractor Agents' acts or omissions or failure to perform any obligation hereunder.

THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR SHALL INCLUDE ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILROAD UNDER THE FEDERAL EMPLOYER'S LIABILITY ACT OR STATE BASED WORKERS' COMPENSATION LAWS AND REGULATIONS; INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE LOCOMOTIVE INSPECTION ACT, THE OCCUPATIONAL HEALTH AND SAFETY ACT, THE RESOURCE CONSERVATION AND RECOVERY ACT, AND ANY SIMILAR STATE OR FEDERAL STATUTE, WHENEVER SO CLAIMED.

Contractor further hereby agrees, at its expense, in the name and on behalf of Railroad, to adjust and settle all claims made against Railroad, and, at Railroad's discretion, appear and defend any suits or actions, whether at law or in equity, brought against Railroad on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement. Railroad shall give notice to Contractor, in writing, of the receipt or pendency of suits or claims and thereupon Contractor shall proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railroad, Railroad may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railroad's discretion, agrees to defend, adjust, and/or settle such suits and protect, indemnify, and save harmless Railroad from and against all damages, verdicts, judgments, orders, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.

In addition to any other provision of this Agreement, in the event that all or any portion of this Article shall be deemed to be inapplicable for any reason, including without limitation as a result of a decision of an applicable court, legislative enactment or regulatory order, the parties agree that this Article shall be interpreted as requiring Contractor to indemnify Railroad to the fullest extent permitted by applicable law. **THROUGH THIS AGREEMENT THE PARTIES EXPRESSLY INTEND FOR CONTRACTOR TO INDEMNIFY RAILROAD FOR ACTS OF NEGLIGENCE BY RAILROAD EMPLOYEES ASSOCIATED WITH THIS PROJECT.**

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement shall survive any termination of this Agreement.

Section 2. TERM

This Agreement is effective from the date of the Contract until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

Section 3. INSURANCE

Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of $5,000,000 each occurrence and an aggregate limit of at least $10,000,000 but in no event less than the amount otherwise carried by the contractor. Coverage must be purchased on a post 1998 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

- Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Additional insured endorsement in favor of and acceptable to Railroad.

- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to Railroad employees.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy with regard to the work being performed under this agreement.

B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least $1,000,000 per occurrence, and include coverage for, but not limited to the following:

- Bodily injury and property damage
- Any and all vehicles owned, used or hired

The policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Additional insured endorsement in favor or and acceptable to Railroad.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

C. Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

- Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
- Employers' Liability (Part B) with limits of at least $500,000 each accident, $500,000 by disease policy limit, $500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railroad.

D. Railroad Protective Liability insurance naming only the Railroad as the Insured with coverage of at least $5,000,000 per occurrence and $10,000,000 in the aggregate. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:

- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- Endorsed to include the Limited Seepage and Pollution Endorsement.
- Endorsed to remove any exclusion for punitive damages.
- No other endorsements restricting coverage may be added.
- The original policy must be provided to the Railroad prior to performing any work or services under this Agreement

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate in Licensor's Blanket Railroad Protective Liability Insurance Policy available to contractor.

Other Requirements:

Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad related to damages covered by the workers compensation and employers liability obtained by Contractor under this Agreement, where permitted by law. Contractor further waives its right of recovery against Railroad for loss of its owned or leased property or property under contractor's care, custody or control to the extent caused by Contractor's acts or omissions or the acts or omissions of railroad employees associated with the Project.

Contractor is not allowed to self-insure without the prior written consent of Railroad. If granted by Railroad, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by contractor in lieu of insurance. Any and all Railroad liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by contractor's insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing the Work, contractor must furnish to Railroad an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments. The policy(ies) must contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify Railroad in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision must be indicated on the certificate of insurance. Upon request from Railroad, a certified duplicate original of any required policy must be furnished. Contractor should send the certificate(s) to the following address:

BNSF@CERTFOCUS.COM

Any insurance policy must be written by a reputable insurance company acceptable to Railroad or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.

Contractor represents that this Agreement has been thoroughly reviewed by contractor's insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this Agreement. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above. Not more frequently than once every five years, Railroad may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by contractor, contractor must require that the subcontractor provide and maintain the insurance coverages set forth herein, naming Railroad as an additional insured, and requiring that the subcontractor release, defend and indemnify Railroad to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify Railroad herein.

Failure to provide evidence as required by this section will entitle, but not require, Railroad to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section will not operate as a waiver of contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by contractor will not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad will not be limited by the amount of the required insurance coverage.

For purposes of this section, Railroad means "Burlington Northern Santa Fe Corporation", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.

Section 4. EXHIBIT "C" CONTRACTOR REQUIREMENTS

The Contractor must observe and comply with the provisions, obligations, requirements and limitations contained in the Contract and the Contractor Requirements set forth on Exhibit "C" attached to the Contract and this Agreement, including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site.

Section 5. TRAIN DELAY

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train caused exclusively by the Contractor, its subcontractors, Railroad employees assigned to and performing work for the Project, or a combination thereof which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from such unscheduled train delays, whether caused by Contractor, or subcontractors, or by the Railroad employees assigned to and performing work for the Project. Railway agrees that it will not perform any act to unnecessarily cause train delay.

For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. Damages for train delay for certain trains may be as high as $50,000.00 per incident.

Contractor and its subcontractors must give Railway's representative (913-515-8008) 6 weeks advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

Kindly acknowledge receipt of this letter by signing and returning to the Railway two original copies of this letter, which, upon execution by Railway, will constitute an Agreement between us.

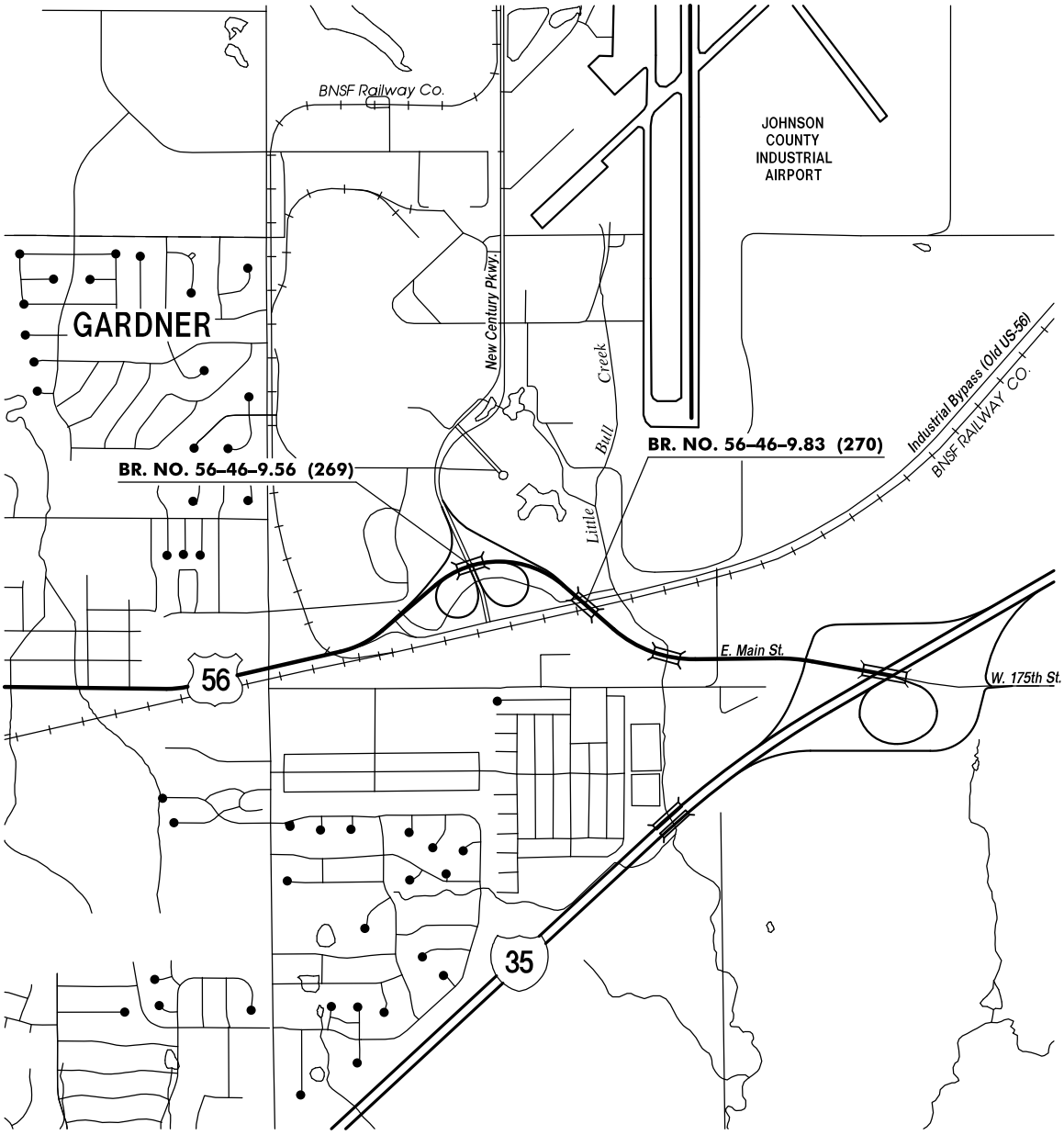
_____	
(Contractor)	**BNSF Railway Company**
By:_____	By:_____
Printed Name:_____	Name:_____
Title:_____	Manager Public Projects
Contact Person: _____	Accepted and effective this ___day of _____2013.
Address: _____	
_____	
City:_____State:___Zip:____	
Fax: _____	
Phone: _____	
E-mail:_____	

STATE OF KANSAS

DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR

KANSAS PROJECT
JOHNSON COUNTY
US–56
PROJ. NO. 56–46 KA–2789–01



Plotted By: mikef | Plot Location: Bridge Design
File: \engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\27890\269270.dgn
Plot Date: 17-JUN-2013 08:58 | Squad: KULSETH / MST

TITLE SHEET	PROJ. NO. 56-46 KA-2789-01	KANSAS DEPARTMENT OF TRANSPORTATION	
	BRIDGE NO. 56-46 (269) (270)	JOHNSON Co.	1

INDEX TO DRAWINGS	
SHEET NO.	DRAWING
1	Title Sheet
2-3	General Notes and Quantities
4	Construction Layout, Bridge (269)
5	Construction Layout, Bridge (270)
6-9	Expansion Joint Details (Concrete Removal)
10-13	Expansion Joint Details (Proposed Construction)
14	Expansion Joint Details (Extrusions)
15	Expansion Joint Details (Installation)
16	Bill of Reinforcing
17-20	Bridge Approach Slab Details
21	Miscellaneous Details for Concrete Bridge Approach Pavement (Standard)
22	Bridge Approach Slab Details, Expansion/Pressure Relief Joint/Bridge Approach Slab Footing (Standard)
23	Flume Inlet and Slope Drain (Concrete/Stone) (Standard)
24	Deck Patching Sequence and Phase Construction (Polymer Concrete Overlay)
25	Deck Patching Details (Polymer Concrete Overlay)
26	Resetting Existing Bearing Devices (Abutment #1)
27	Resetting Existing Bearing Devices and Structural Steel (Abutment #1)
28-30	Bearing Device Repair Details (Abutment #1)
31	Resetting Existing Bearing Devices (Pier #1)
32	Resetting Existing Bearing Devices and Structural Steel (Pier #1)
33	Railroad Protection (Standard)

SUMMARY OF QUANTITIES				
ITEM	UNITS	QUANTITY		TOTAL
		BR. (269)	BR. (270)	
Flagger (Set Price)	Hour	1	1	1
Removal of Existing Structures	Lump Sum	—	Lump Sum	Lump Sum
Flowable Fill (Low Strength)	Cu. Yds.	—	50.0	50.0
Reset Existing Bearing	Each	—	18	18
Rock Excavation	Cu. Yds.	—	269	269
Concrete Pavement (10" Uniform) (AE)	Sq. Yds.	—	1,076	1,076
Bridge Approach Slab Footing	Cu. Yds.	—	49.8	49.8
Flume Inlet (Concrete)	Each	—	2	2
Slope Drain (Concrete)	Lin. Ft.	—	242	242
Expansion Joint (Strip Seal Assembly)	Lin. Ft.	—	173	173
Concrete (Grade 4.0) (AE)	Cu. Yds.	—	27.8	27.8
Reinforcing Steel (Grade 60) (Epoxy Coated)	Lbs.	—	470	470
Bridge Painting (Organic Zinc w/ Acrylic System)	Lump Sum	Lump Sum	—	Lump Sum
Area Prepared for Patching	Sq. Yds.	10	10	20
Area Prepared for Patching (Full Depth)	Sq. Yds.	5	5	10
Multi-Layer Polymer Concrete Overlay	Sq. Yds.	1,496	2,566	4,062
Reinforcing Steel (Repair) (Grade 60) (Epoxy Coated) (Set Price)	Lbs.	1	1	1
Mobilization	Lump Sum	Lump Sum	Lump Sum	Lump Sum

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GENERAL NOTES

EXISTING STRUCTURE: Plans of the existing structure are on file and available for inspection by qualified bidders at the State Bridge Office, KDOT, Eisenhower State Office Building, 700 SW Harrison, Topeka, KS.

EXISTING DIMENSION VERIFICATION: Dimensions of the existing structure are based on old plans. Verify, by field measurement, the as-built dimensions of the existing structure and submit such verification in writing to the Engineer. The verification will include sketches, drawings, photographs and descriptions as needed to clearly define the as-built dimensions that will be incorporated in the new construction.

DIMENSIONS: All dimensions shown on the design plans are horizontal dimensions unless otherwise noted. Make necessary allowances for roadway grade and cross slope.

BROKEN CONCRETE: Waste the broken concrete from the project on sites provided by the Contractor and approved by the Engineer.

DEMOLITION PLANS: This is a Category A Demolition. Submit detailed Demolition Plans to the Field Engineer per KDOT Specifications. No Demolition work will begin without approved Demolition Plans. A Licensed Professional Engineer is not required.

TEMPERATURE: The design temperature for all dimensions is 60° F.

REMOVAL OF EXISTING STRUCTURES: The bid item "Removal of Existing Structures" Lump Sum, includes the removal of concrete to the limits as shown on the plans.

Clearly mark the location of the existing girder top flanges on top of the existing deck concrete within the removal limits before sawing or removing any concrete. Concrete sawing shall be limited to a maximum depth of 3 inches directly above any girder and within 3 inches of either edge of a girder top flange. Do not use drop-type pavement breakers. Do not use a hoe ram directly above any girder or within 1'-0" of either edge of a girder top flange. Use a jackhammer no heavier than 15 lb. to remove concrete above and within 1'-0" of either side of a girder top flange.

Damage to the existing structural steel caused by procedures not conforming to the above recommendations shall be repaired as directed by the Engineer at the Contractor's expense (no cost to the State). Any costs incurred for testing or Engineering evaluations will be included in the Contractor's expense for repair.

All materials removed from the existing structure shall become the property of the Contractor and removed from the site.

TEMPORARY CONSTRUCTION LOADS: The Contractor will not stock pile construction materials, debris/rubble or place equipment weighing more than 20 tons or greater than bridge posted load limits on the bridge without prior written approval by the KDOT Area Engineer. For bridges with highway traffic on or under the bridge the Contractor will provide plans showing the location, quantity and weight of the proposed materials, debris or equipment weighing more than 20 tons or greater than bridge posted load limits. These plans will bear the Seal of the Contractor's Engineer before approval is granted. The Contractor's Engineer will use AASHTO Specifications for limitations on structural capacities, as the structure is found in the field.

CONCRETE: Concrete is bid as Concrete (Grade 4.0) (AE). Bevel all exposed edges of all concrete with a ¾" triangular molding, except as otherwise noted on the plans. Concrete mix shall be designed, using KDOT prequalified materials, to be full strength before the bridge is to be open to traffic.

REINFORCING STEEL: All reinforcing steel dimensions are to the centerline of bars unless otherwise noted. All reinforcing steel shall conform to the requirements of ASTM A615, Grade 60.

EPOXY BONDING AGENT: Prepare all existing concrete surfaces which will be in contact with new concrete with an approved Epoxy Bonding Agent in accordance with the manufacturer's recommendations. This is subsidiary to the bid item "Concrete (Grade 4.0) (AE)".

REPAIR OF EPOXY COATED REINFORCING STEEL: Replace any epoxy coating that is removed from the reinforcing steel during the concrete removal process. Thoroughly clean damaged areas with a stiff wire brush to remove dirt and damaged coating. Apply an approved patching material in accordance with manufacturer's recommendations. Avoid dripping any patching material onto existing concrete that will have new concrete placed against it. See KDOT Specifications.

DESIGN SPECIFICATIONS:
AASHTO Specifications, 2002 Edition and latest Interim Specifications. Load Factor Design

UNIT STRESSES:

Concrete (Grade 4.0) (AE)	f'c = 4 ksi
Reinforcing Steel (Grade 60)	fy = 60 ksi

STRIP SEAL: The strip seal extrusions in the bridge deck shall be a "Wabo" Type "R" steel shape or an approved equivalent. The strip seal extrusions in the barrier rail shall be a "Wabo" Type "E" steel shape or an approved equivalent. Material for the extrusions shall be solid extruded or hot rolled steel. No weathering steel or aluminum will be allowed. The steel extrusions or "grips" shall only be prime-coated with an inorganic zinc vinyl. The gland cavity shall not be prime-coated. The Strip Seal gland shall accommodate a total movement of at least 4". The gland shall be factory molded for horizontal bends of 15° or more.

ROCK EXCAVATION: This item shall include removal of existing 9" concrete approach slabs.

PAINT SYSTEM ON EXISTING STRUCTURE - Bridge (269):
The structural steel has a paint history of:
1) Original paint system: Inorganic Zinc Vinyl, Date: 1987
2) TCLP value is 2.2mg/L, Report Date: 14 June 2013

PAINT SYSTEM ON EXISTING STRUCTURE - Bridge (270):
The structural steel has a paint history of:
1) Original paint system: Inorganic Zinc Vinyl, Date: 1987
2) TCLP value is 4.5mg/L, Report Date: 14 June 2013

PAINTING: The field coats applied to Structural Steel shall conform to an organic zinc primer with a waterborne acrylic finish coat. The finish coat will be Kansas Green. The color shall match Federal Standard #34102.

QUANTITIES: Items not listed separately in the Summary of Quantities are subsidiary to other items in the proposal.

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Kansas Department of Transportation

General Notes

Project No. 56 - 46 KA 2789-01

Note

1 The Contractor shall submit a traffic control plan to KDOT for approval before any work begins.

2 The Contractor will be allowed to close the loop ramp New Century to East Bound US 56 during the patching and polymer overlay on BR 269.

3 The material created by the line items 'Removal of Existing Structures' and 'Rock Excavation" will become the property of the Contractor and will be wasted at a site approved by the Engineer.

4 If the Contractor's operation for the preparation for the paint repair damages the primer the damaged area shall be repaired before the top coat is applied.

5 The bid item 'Flowable Fill (low strength)' is for the Reinforced Concrete Rip Rap repair on Bridge 270. The repairs will consist of drilling holes into the Rip Rap in order to fill the voided areas under the Rip Rap with the flowable fill. This repair will take place is stages as not to damage or heave the existing Rip Rap. This quantity is an estimate.

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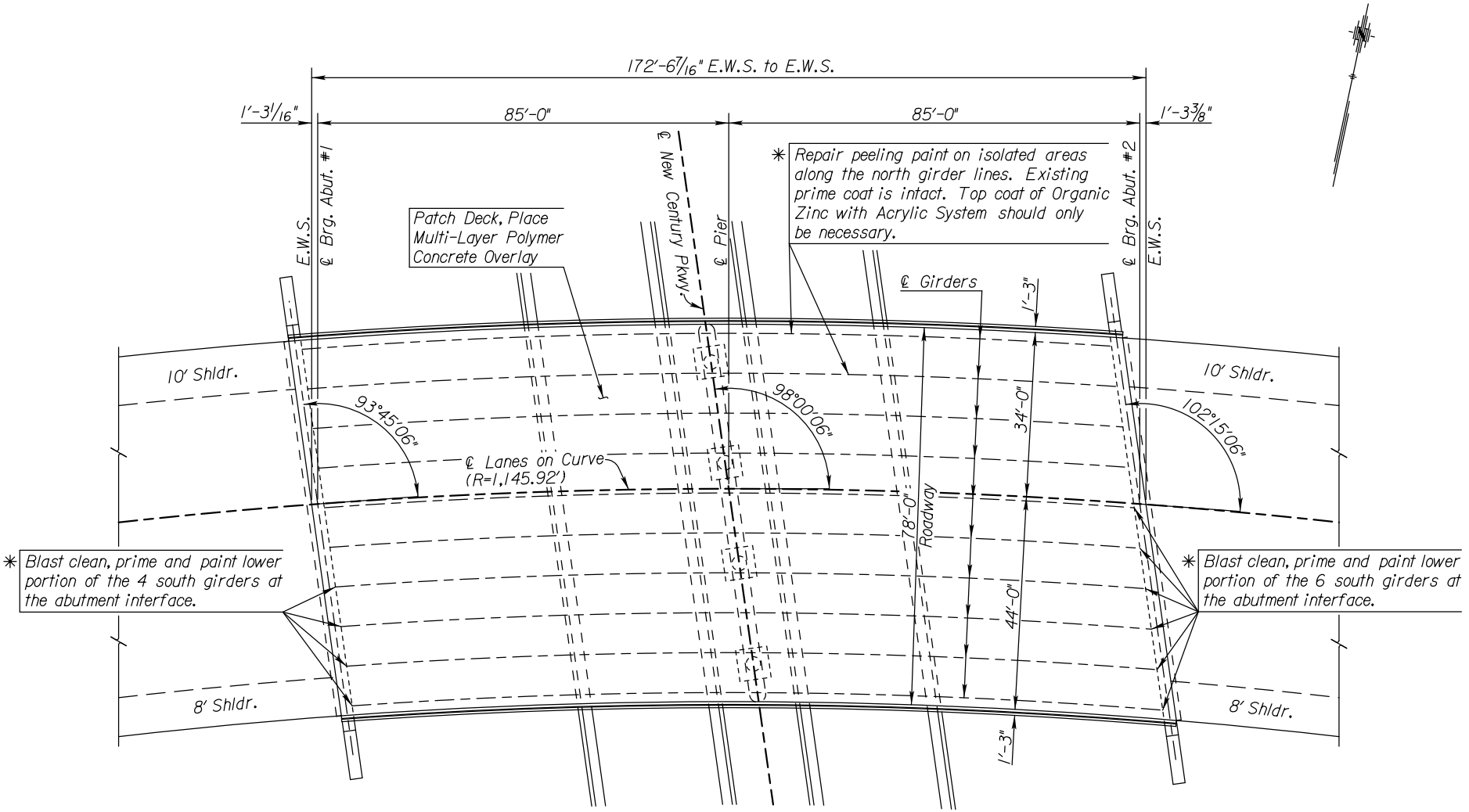
Plot Date: 17-JUN-2013 08:58	**Squad:** KULSETH / MST



PLAN

85'-85' Continuous Composite Welded Steel Plate Girder Spans
Pile Bent Abutments, Column Bent Piers
78'-0" Roadway, Variable Skew Lt.

* Repair other areas of paint as directed by the Engineer.

CONSTRUCTION LAYOUT
BRIDGE (269)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.56 (269)

JOHNSON Co.

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KANSAS DEPARTMENT OF TRANSPORTATION

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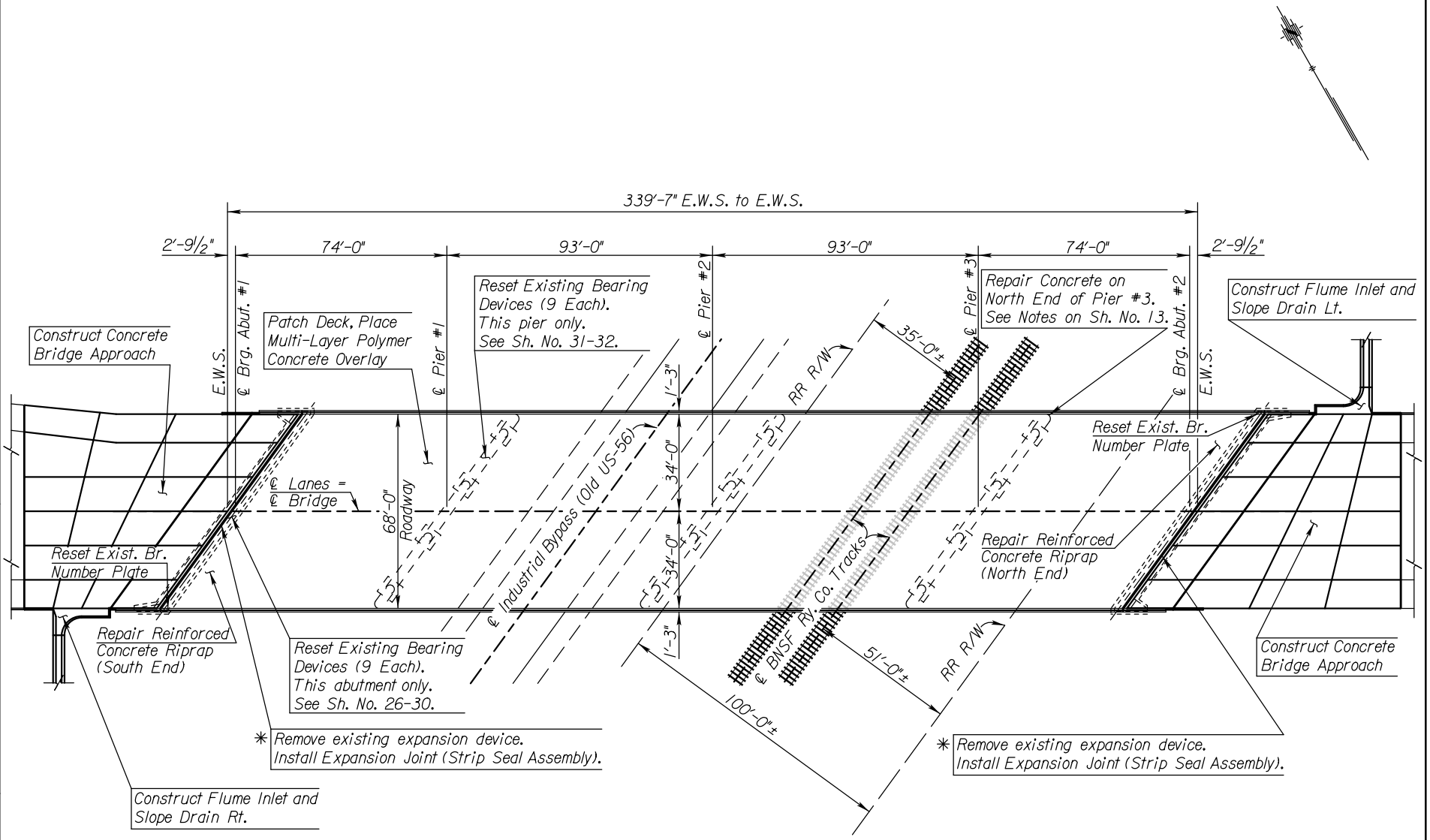
CONSTRUCTION LAYOUT
BRIDGE (270)



PLAN

74'-2@93'-74' Continuous Composite Welded Steel Plate Girder Spans
Pile Bent Abutments, Column Bent Piers
68'-0" Roadway, 36°-03'-52" Skew Rt.

Note: Complete all other work on this project prior to resetting existing bearing devices.

✳ Clean and prime top of exposed structural steel prior to placing new concrete.

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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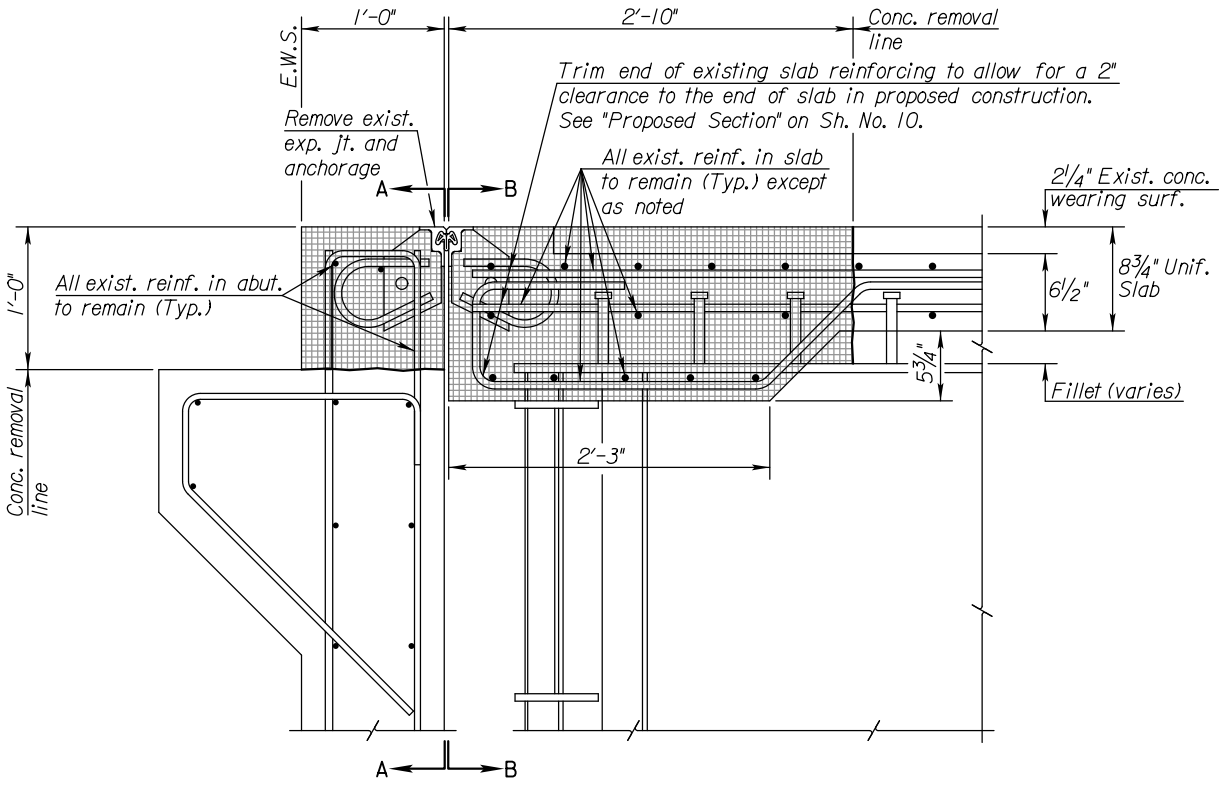
KANSAS DEPARTMENT OF TRANSPORTATION



EXISTING SECTION
(Abut. #1 or Abut. #2)

Note: Thoroughly clean any existing reinforcing that is to remain.

Note: See next sheet for "Section A-A" and "Section B-B".

Concrete removal

EXPANSION JOINT DETAILS
(CONCRETE REMOVAL)

PROJ. NO. 56-46 KA-2789-01	KANSAS DEPARTMENT OF TRANSPORTATION	
BRIDGE NO. 56-46-9.83 (270)	JOHNSON Co.	6

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Plot Date: 17-JUN-2013 08:58	**Squad:** KULSETH / MST

EXPANSION JOINT DETAILS
(CONCRETE REMOVAL)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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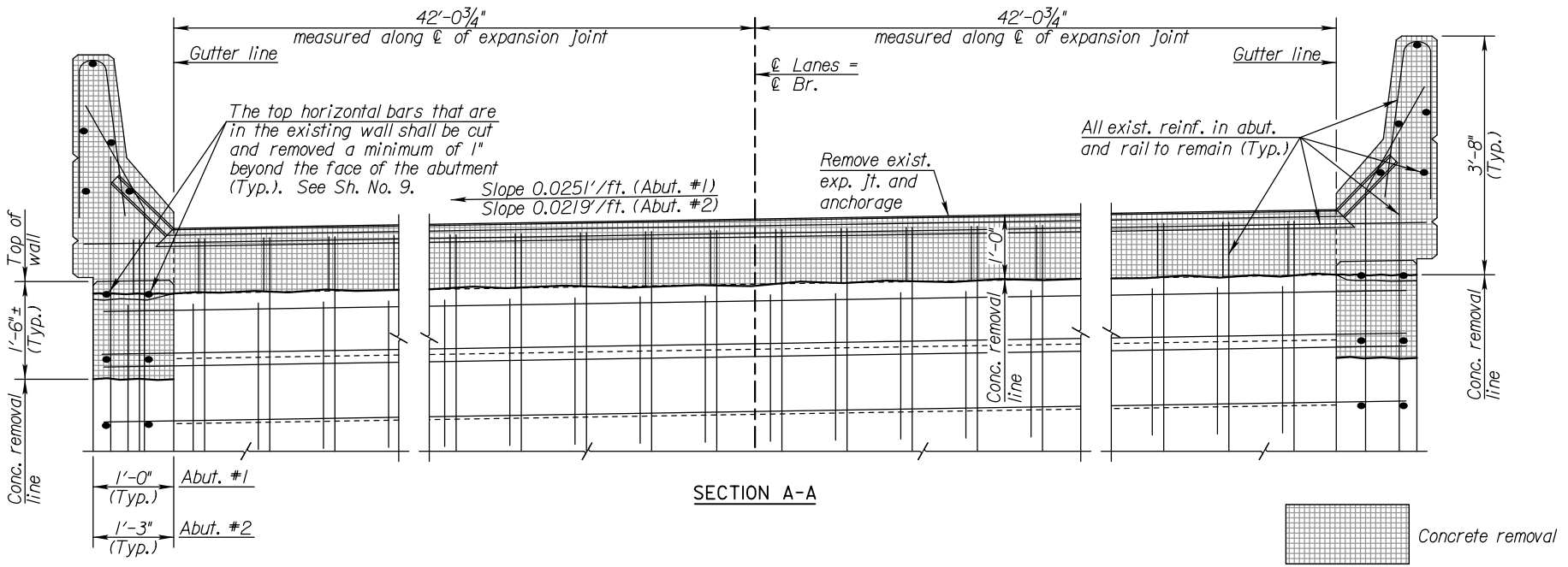
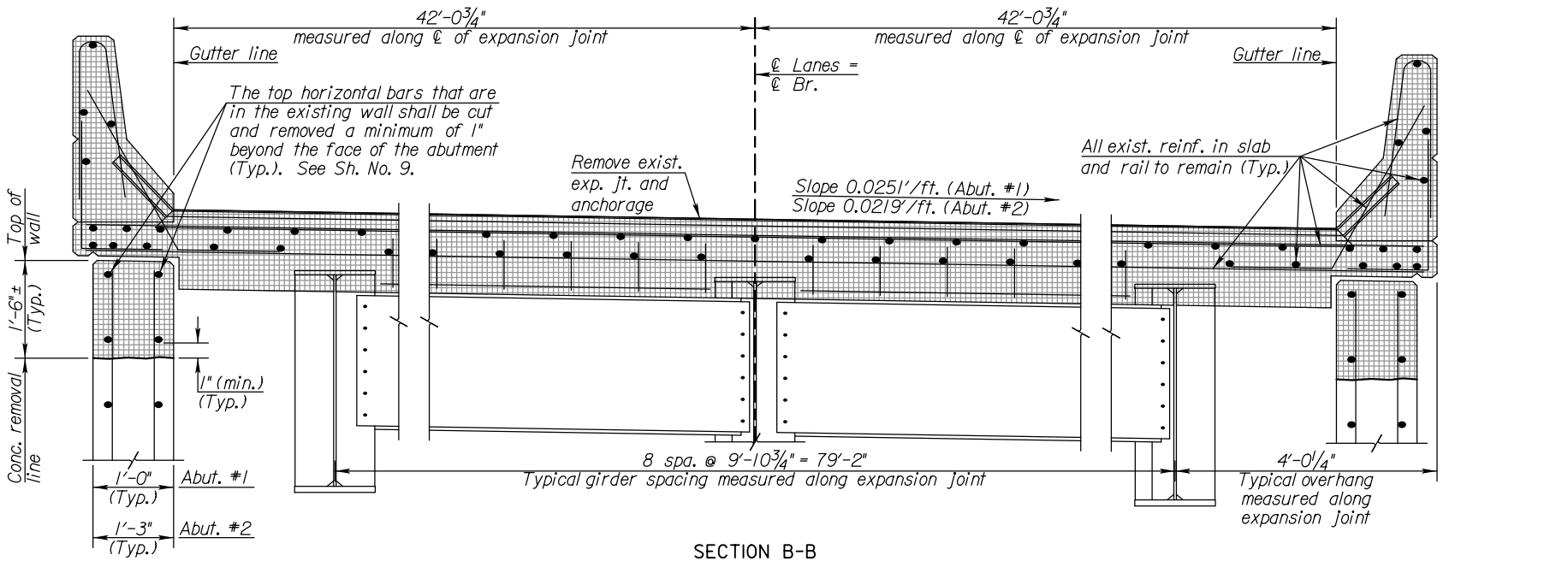
KANSAS DEPARTMENT OF TRANSPORTATION



SECTION A-A

Concrete removal



SECTION B-B

Plotted By: miket	**Plot Location:** Bridge Design
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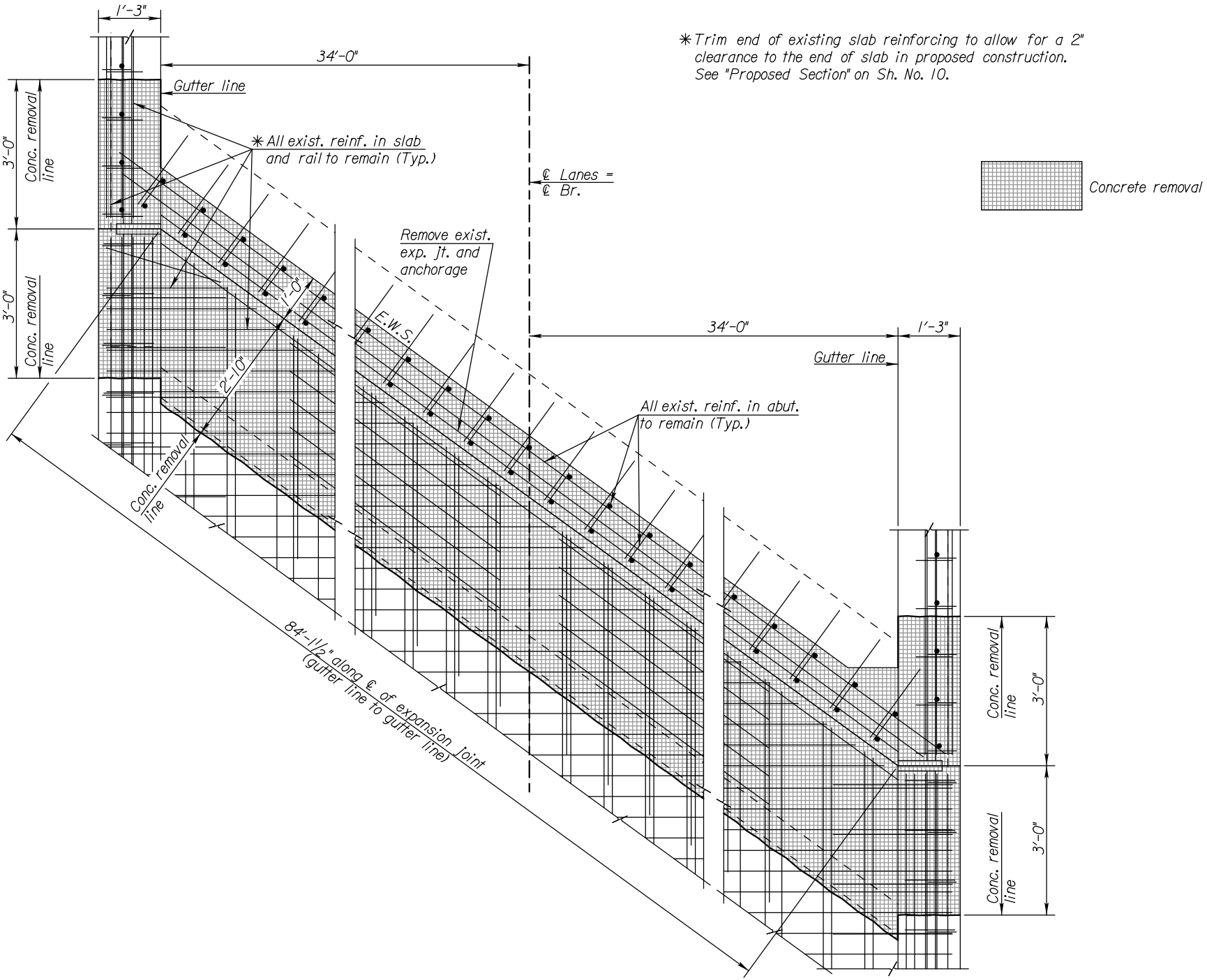
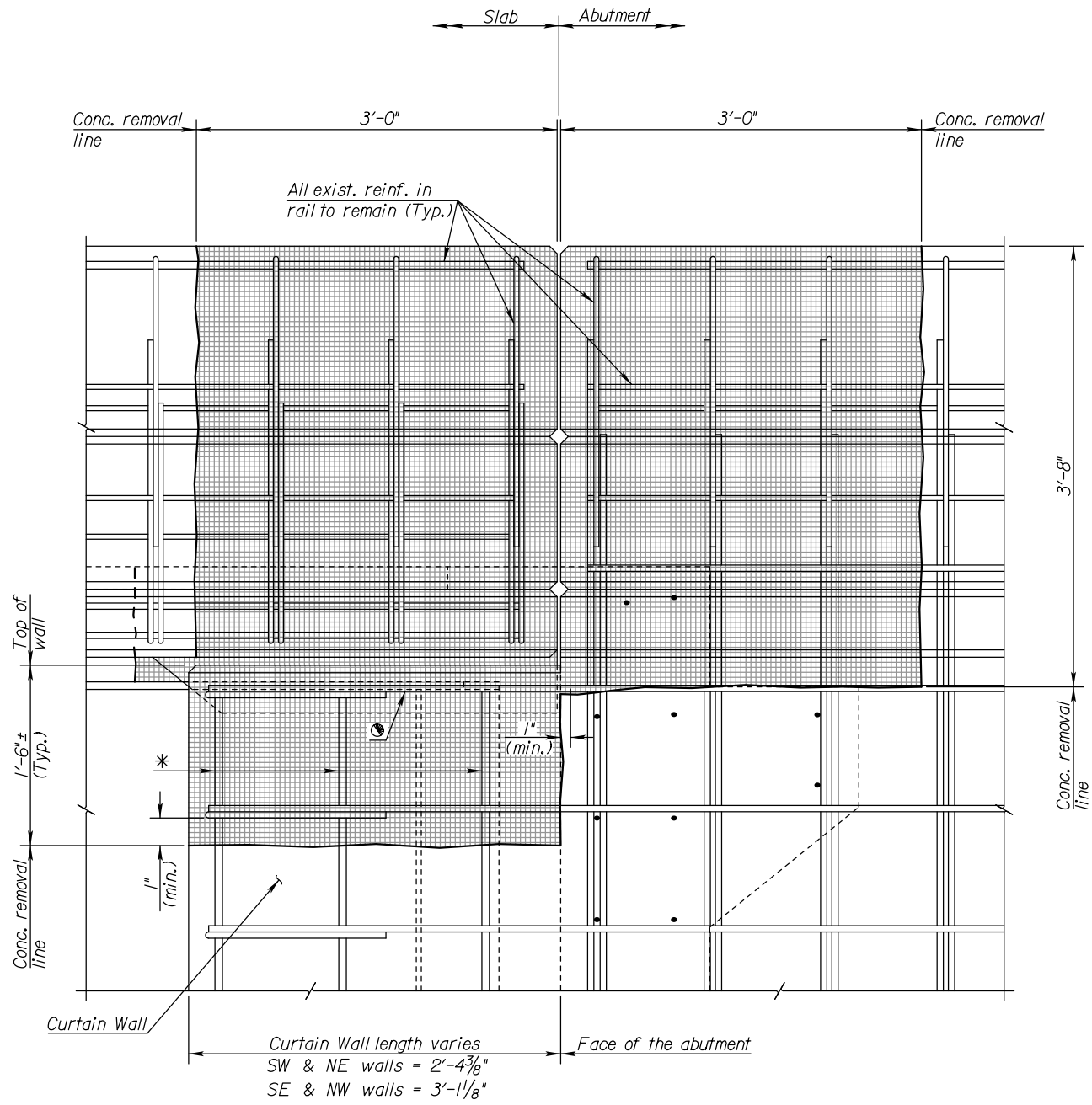
Plot Date: 17-JUN-2013 08:58	**Squad:** KULSETH / MST

EXPANSION JOINT DETAILS (CONCRETE REMOVAL)



PROJ. NO. 56-46 KA-2789-01	BRIDGE NO. 56-46-9.83 (270)	JOHNSON Co.

KANSAS DEPARTMENT OF TRANSPORTATION



EXISTING OUTSIDE FACE OF RAIL

◔ The top horizontal bars that are in the existing curtain wall shall be cut and removed a minimum of 1" beyond the face of the abutment.

✳ Trim end of existing vertical reinforcing to allow for a 2" clearance to the top of curtain wall in proposed construction. See "Proposed Outside Face of Rail" on Sh. No. 13.

Concrete removal

EXPANSION JOINT DETAILS
(CONCRETE REMOVAL)

PROJ. NO. 56-46 KA-2789-01	KANSAS DEPARTMENT OF TRANSPORTATION	
BRIDGE NO. 56-46-9.83 (270)	JOHNSON Co.	9

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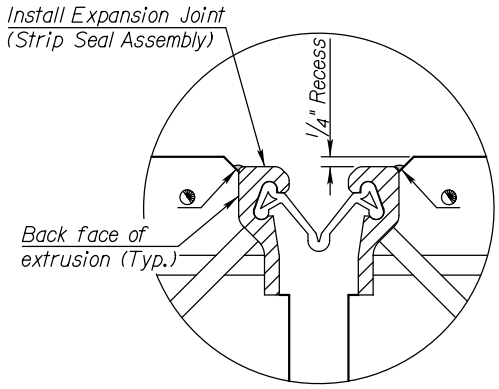


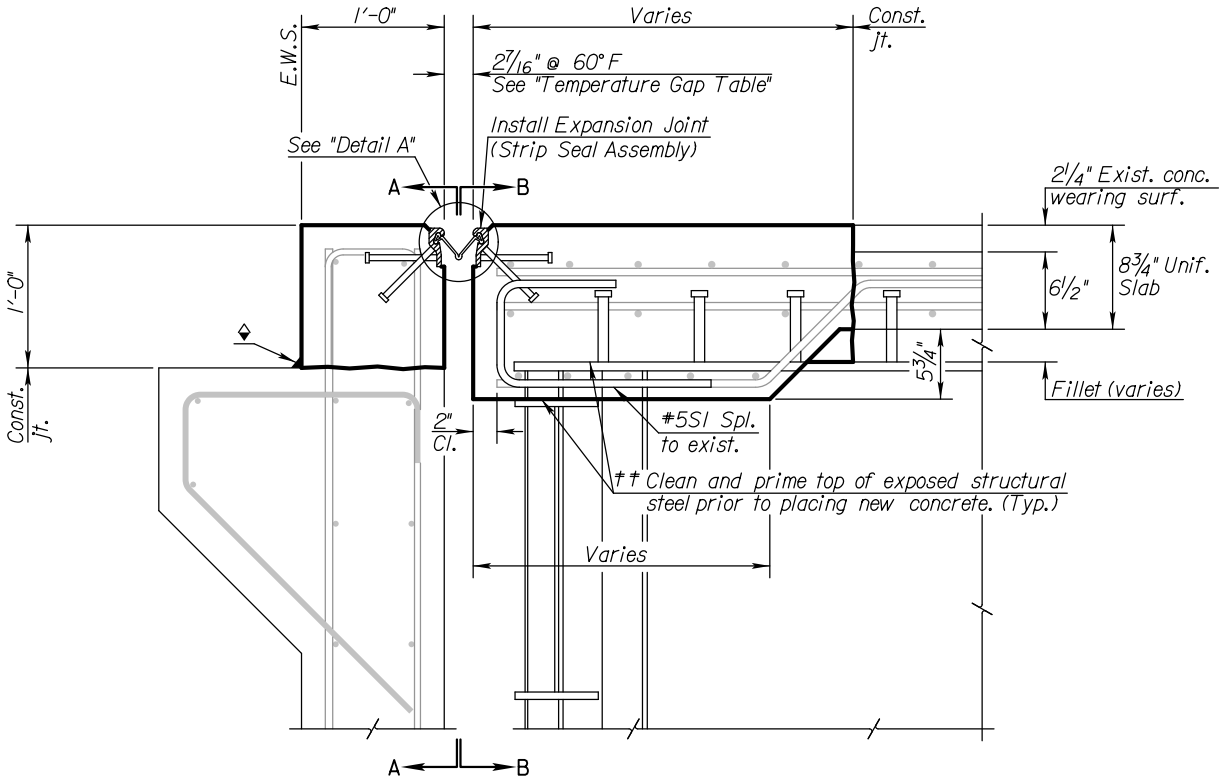
DETAIL A

◔ Form 1/4" recess to the back face at the bottom of the rounded edge of the strip seal extrusions. After concrete has cured, thoroughly clean valley area that has been created and fill with a silicone based sealant (or as directed by the Engineer) for the entire roadway width of the strip seal extrusions. Materials and labor shall be subsidiary to Concrete (Grade 4.0) (AE).

◆ Apply a silicone based sealant (or as directed by the Engineer) along construction joint for the entire roadway width. Materials and labor shall be subsidiary to Concrete (Grade 4.0) (AE).

Note: Cast with Concrete (Grade 4.0) (AE). An epoxy bonding agent shall be used at all construction joints.

†† Remove loose paint and corrosion by hand tools or sandblast on top of girders and end diaphragms where required. Apply an organic zinc primer coat prior to placing concrete. This work shall be subsidiary to other items of the contract.



PROPOSED SECTION
(Abut. #1 or Abut. #2)

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EXPANSION JOINT DETAILS (PROPOSED CONSTRUCTION)	PROJ. NO. 56-46 KA-2789-01	KANSAS DEPARTMENT OF TRANSPORTATION	
	BRIDGE NO. 56-46-9.83 (270)	JOHNSON Co.	10

Plotted By: miket	**Plot Location:** Bridge Design
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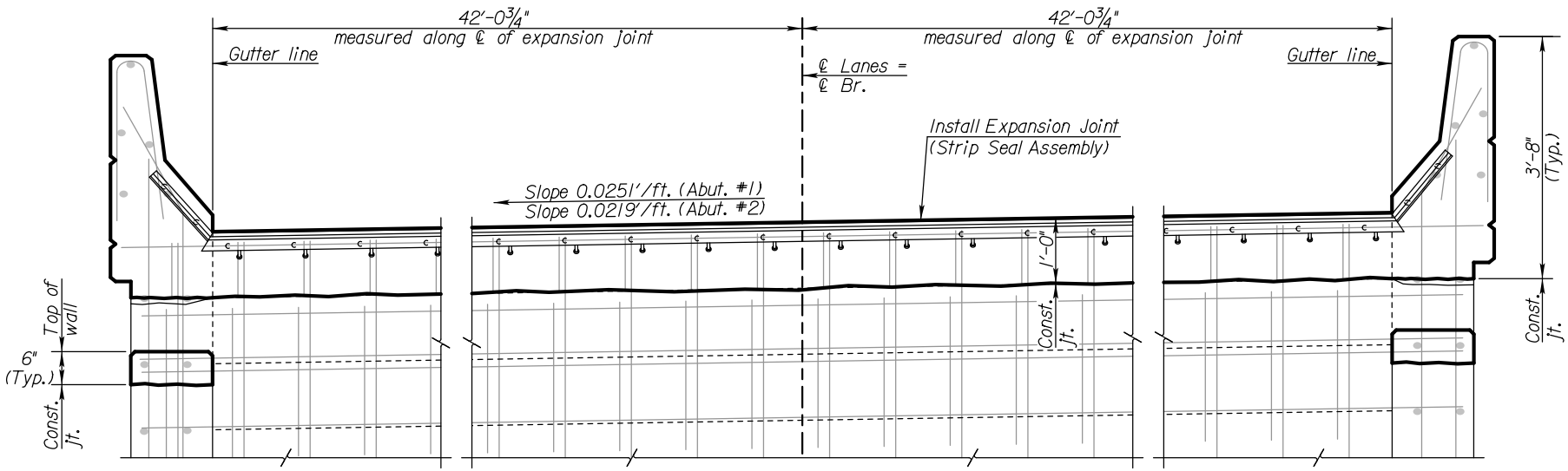
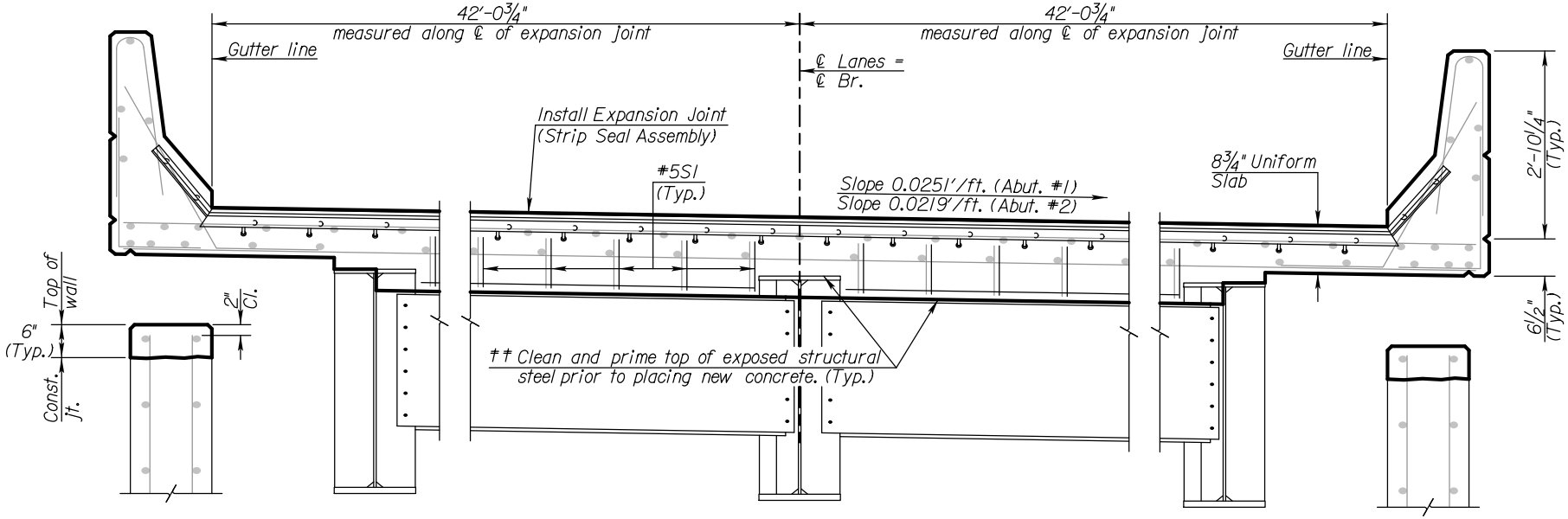
EXPANSION JOINT DETAILS
(PROPOSED CONSTRUCTION)



SECTION A-A



SECTION B-B

Note: Cast with Concrete (Grade 4.0) (AE). An epoxy bonding agent shall be used at all construction joints.

†† Remove loose paint and corrosion by hand tools or sandblast on top of girders and end diaphragms where required. Apply an organic zinc primer coat prior to placing concrete. This work shall be subsidiary to other items of the contract.

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

KANSAS DEPARTMENT OF TRANSPORTATION

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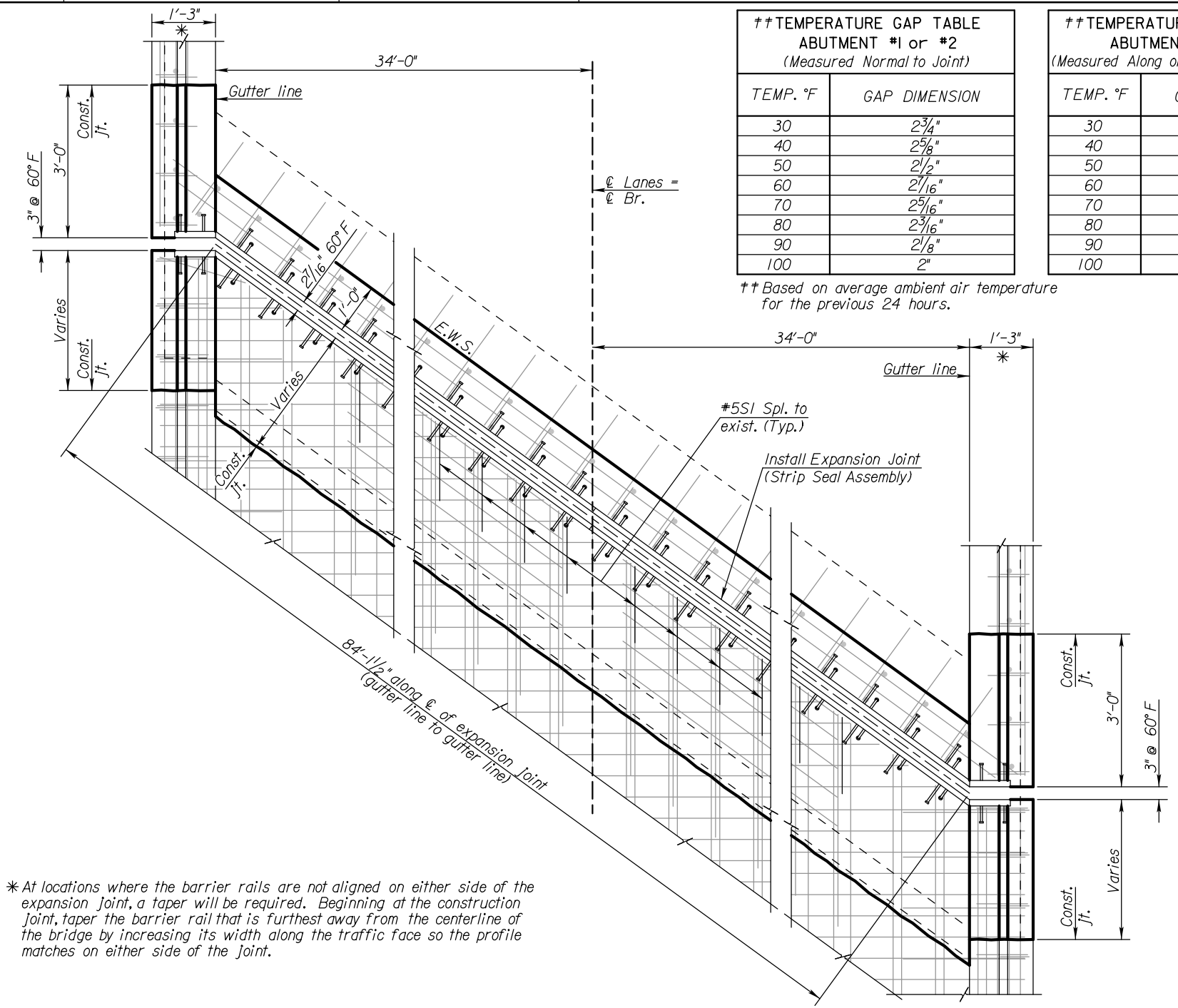
EXPANSION JOINT DETAILS (PROPOSED CONSTRUCTION)



†† TEMPERATURE GAP TABLE
ABUTMENT #1 or #2
(Measured Normal to Joint)

TEMP. °F	GAP DIMENSION
30	2 3/4"
40	2 5/8"
50	2 1/2"
60	2 7/16"
70	2 5/16"
80	2 3/16"
90	2 1/8"
100	2"

†† TEMPERATURE GAP TABLE
ABUTMENT #1 or #2
(Measured Along or Parallel to ℄ Lanes)

TEMP. °F	GAP DIMENSION
30	3 3/8"
40	3 1/4"
50	3 1/8"
60	3"
70	2 7/8"
80	2 3/4"
90	2 5/8"
100	2 1/2"

†† Based on average ambient air temperature for the previous 24 hours.

✳ At locations where the barrier rails are not aligned on either side of the expansion joint, a taper will be required. Beginning at the construction joint, taper the barrier rail that is furthest away from the centerline of the bridge by increasing its width along the traffic face so the profile matches on either side of the joint.

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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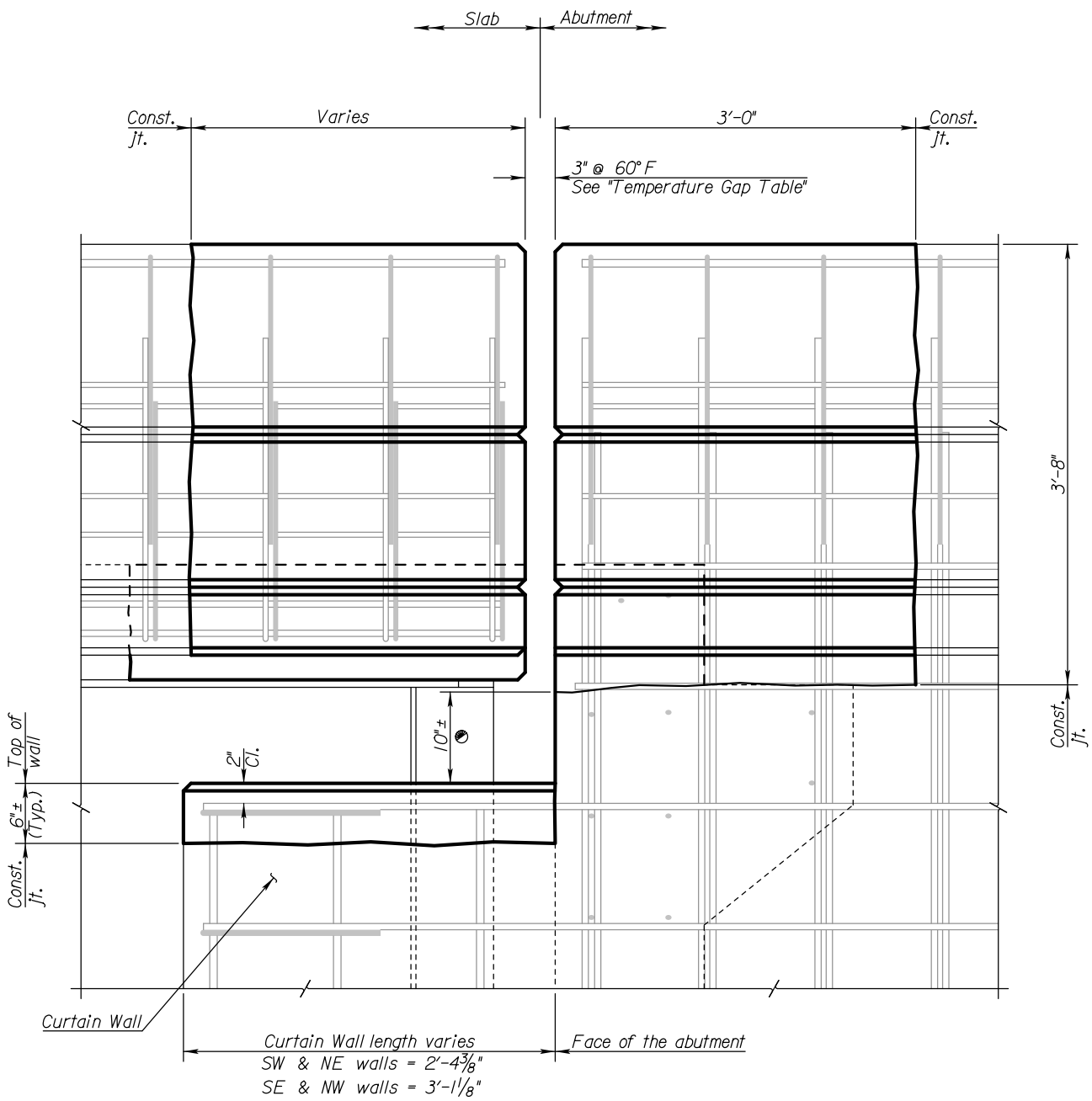
KANSAS DEPARTMENT OF TRANSPORTATION

The rough surface that remains on the face of the abutment after removing the Curtain Wall may either be repaired to a smooth surface or remain rough and covered with a concrete masonry coating as directed by the Engineer.



PROPOSED OUTSIDE FACE OF RAIL

Note: Any remaining concrete surfaces requiring repair adjacent to the scope of work as shown in the "Expansion Joint Details" shall be repaired as noted below. This also applies to the concrete repair to the north end of pier #3.

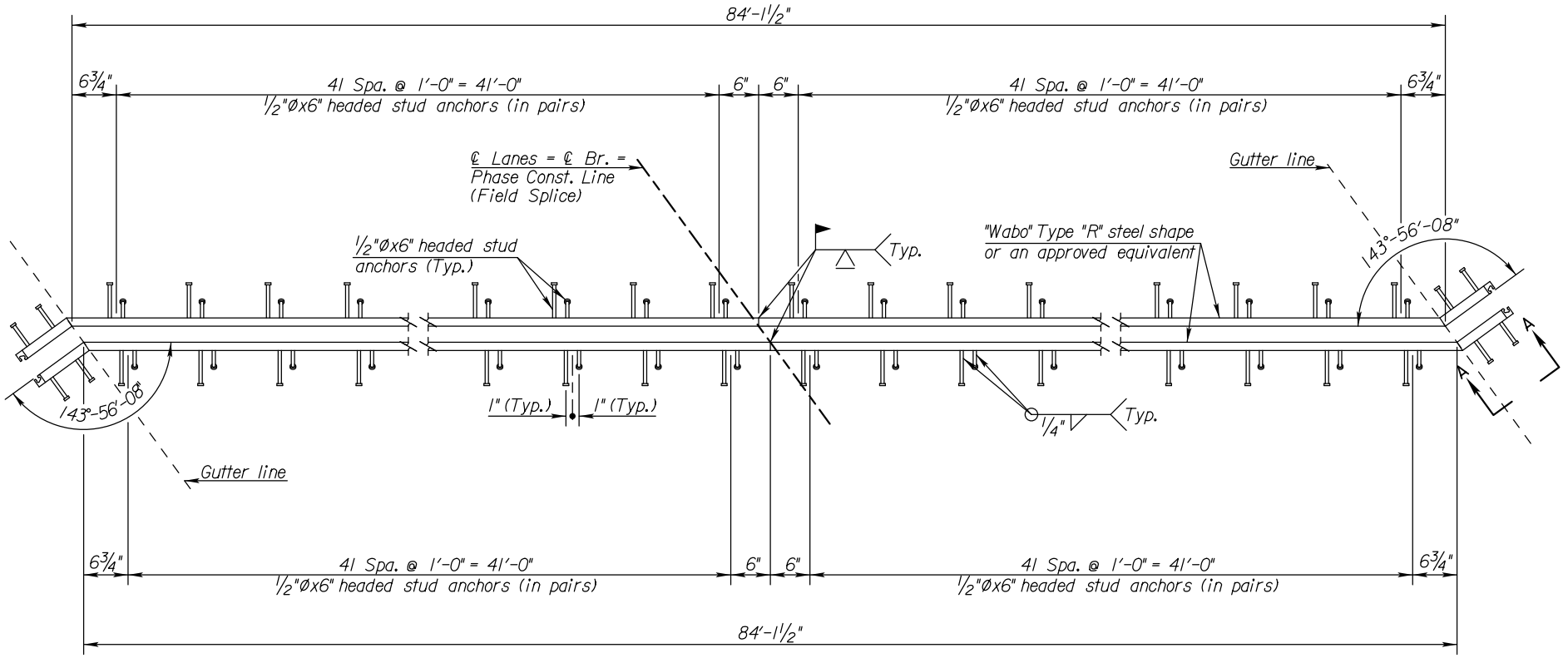
CONCRETE SURFACE REPAIR: The Contractor shall remove all deteriorated or damaged concrete delineated by the Engineer. Additional concrete shall be removed to create a minimum thickness of new concrete of 1 inch. Do not feather edges. At repair locations, the concrete shall be removed from 3/4" around the reinforcing steel near the surface to allow a positive bond of new concrete to the existing structure. On overhead surfaces, provide a minimum of 1" cover over the reinforcing steel. All repair areas are to be sandblasted to remove loose disintegrated concrete, dirt, oil, and any foreign material prior to placing Concrete (Grade 4.0) (AE) or an approved Shotcrete. Prior to its placement, an epoxy resin for bonding new concrete to existing concrete shall be used. The removal of deteriorated or damaged concrete, placement of new concrete, and all labor, materials, equipment, and incidentals necessary to complete the repairs shall be subsidiary to Concrete (Grade 4.0) (AE).

Plotted By: mikef | Plot Location: Bridge Design
File: \engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\27890\269270.dgn
Plot Date: 17-JUN-2013 08:58 | Squad: KULSETH / MST

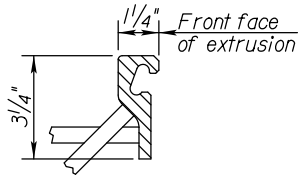
EXPANSION JOINT DETAILS (PROPOSED CONSTRUCTION)	PROJ. NO. 56-46 KA-2789-01	KANSAS DEPARTMENT OF TRANSPORTATION	
	BRIDGE NO. 56-46-9.83 (270)	JOHNSON Co.	13

Plotted By: miket	**Plot Location:** Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692270.dgn	
Plot Date: 17-JUN-2013 08:58	**Squad:** KULSETH / MST

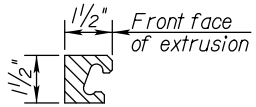
EXPANSION JOINT DETAILS
(EXTRUSIONS)



EXTRUSION PLAN
(Abut. #1 or Abut. #2)

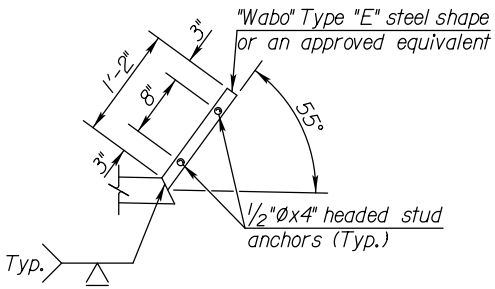


"Wabo" Type "R"



"Wabo" Type "E"

Note: Dimensions shown are along the front face of extrusions.



SECTION A-A

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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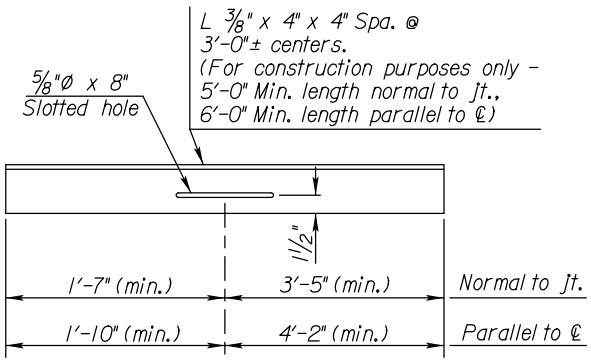
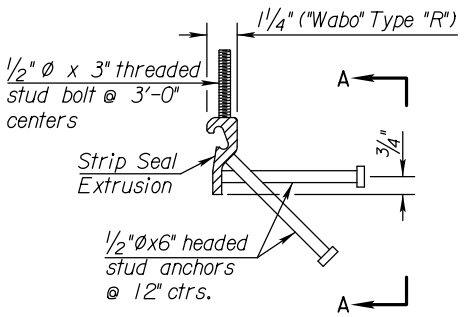
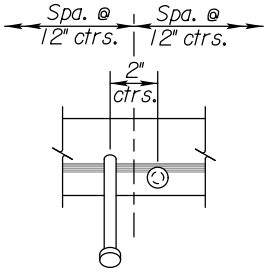
KANSAS DEPARTMENT OF TRANSPORTATION



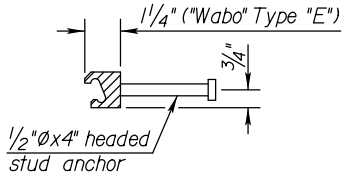
PLAN OF STRIP SEAL ERECTION ANGLE



"Wabo" Type "R"

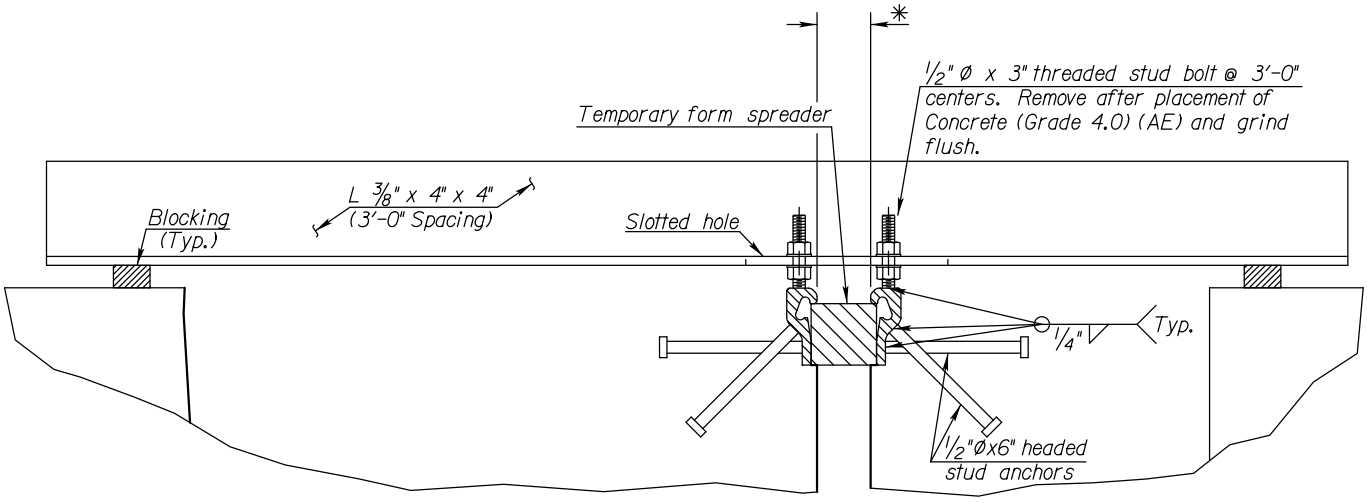


Section A-A



"Wabo" Type "E"

SECTION THRU EXTRUSIONS



TYPICAL SECTION SHOWING ERECTION ANGLE

* See Temperature Gap Table on Page 12.

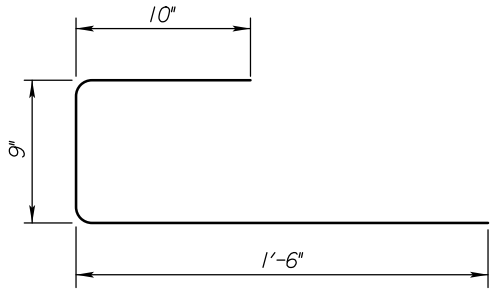
NOTE:
Immediately prior to placing the Concrete (Grade 4.0) (AE) around the Strip Seal Extrusion, the existing concrete surface at the concrete removal line shall be cleaned and roughened. The erection angles shall be securely bolted to the extrusion. The extrusion shall be in the same plane and recessed 1/4" below the top of the roadway. The erection angles shall be removed as soon as the new concrete will support the assembly without allowing any settlement or tilting. Following the removal of the erection angles, remove the stud bolts on the extrusions and grind flush. All labor and materials used to install and remove the erection angles shall be subsidiary to the bid item "Expansion Joint (Strip Seal Assembly)".

NOTE:
The strip seal extrusions in the bridge deck shall be a "Wabo" Type "R" steel shape or approved equivalent as shown in the details. The strip seal extrusions in the barrier rail shall be a "Wabo" Type "E" steel shape or approved equivalent as shown in the details. All items shown on the Expansion Joint Details sheets are included in the bid item "Expansion Joint (Strip Seal Assembly)". All welds on the extrusion shall be 1/4" continuous fillet welds, unless otherwise noted.

Plotted By: miket | Plot Location: Bridge Design
File: \Engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692270.dgn
Plot Date: 17-JUN-2013 08:58 | Squad: KULSETH / MST

EXPANSION JOINT DETAILS (INSTALLATION)	PROJ. NO. 56-46 KA-2789-01	KANSAS DEPARTMENT OF TRANSPORTATION	
	BRIDGE NO. 56-46-9.83 (270)	JOHNSON Co.	15

BILL OF REINFORCING STEEL Grade 60 (Epoxy Coated)							
Straight Bars				*Bent Bars*			
Mark	*Size*	*Number*	*Length*	*Mark*	*Size*	*Number*	*Length*
				S1	5	144	3'-1"



S1

BENDING DIAGRAMS

All dimensions are out to out of bars.

Plotted By: mikel | Plot Location: Bridge Design
File: \Engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692270.dgn
Plot Date: 17-JUN-2013 08:59 | Squad: KULSETH / MST

Plotted By: miket	Plot Location: Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692270.dgn	
Plot Date: 17-JUN-2013 08:59	Squad: KULSETH / MST

BRIDGE APPROACH SLAB DETAILS
(ABUTMENT NO. 1)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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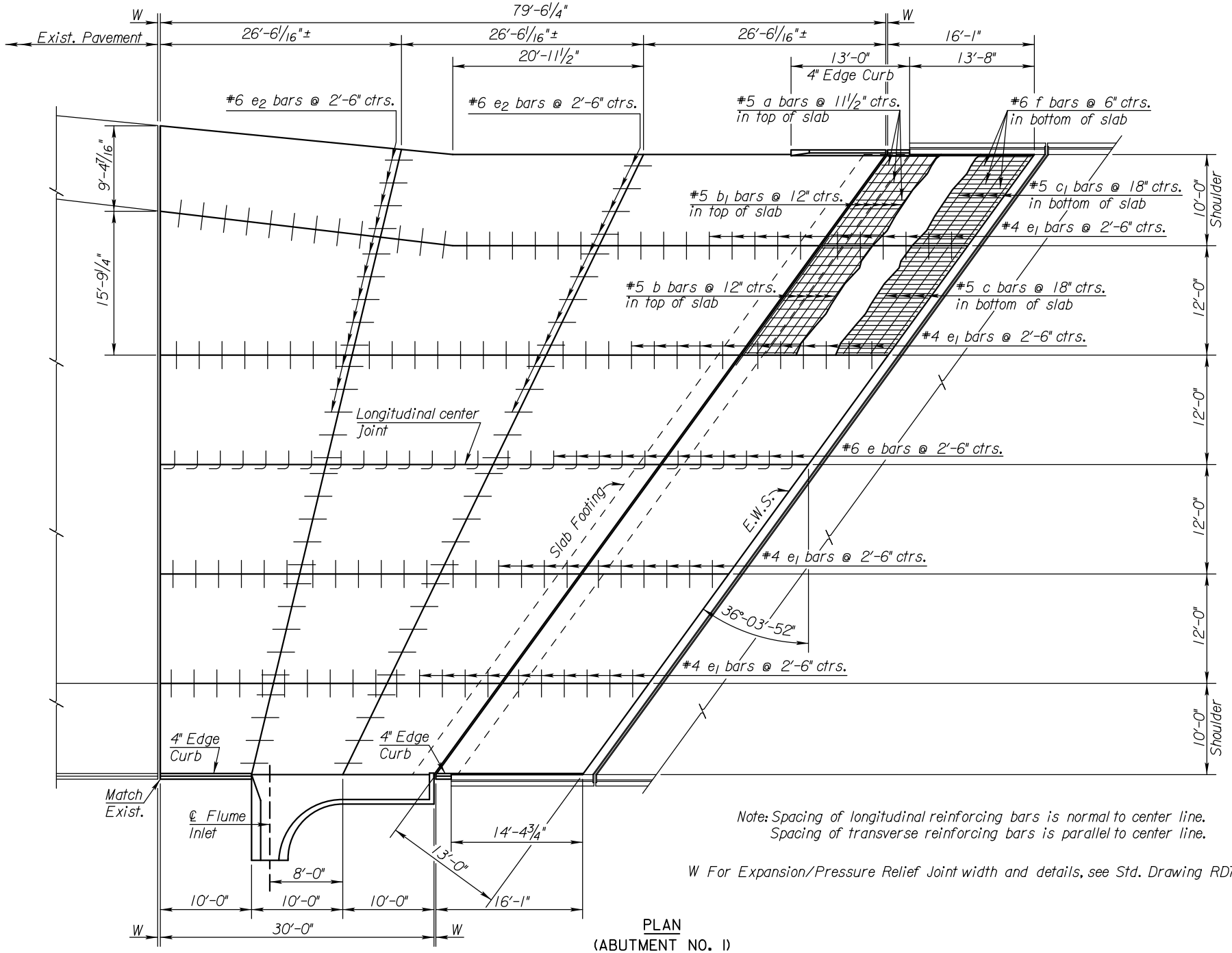
KANSAS DEPARTMENT OF TRANSPORTATION



PLAN
(ABUTMENT NO. 1)

Note: Spacing of longitudinal reinforcing bars is normal to center line.
Spacing of transverse reinforcing bars is parallel to center line.

W For Expansion/Pressure Relief Joint width and details, see Std. Drawing RD712.

Plotted By: miket	Plot Location: Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692 70.dgn	
Plot Date: 17-JUN-2013 08:59	Squad: KULSETH / MST

BRIDGE APPROACH SLAB DETAILS
(ABUTMENT NO. 2)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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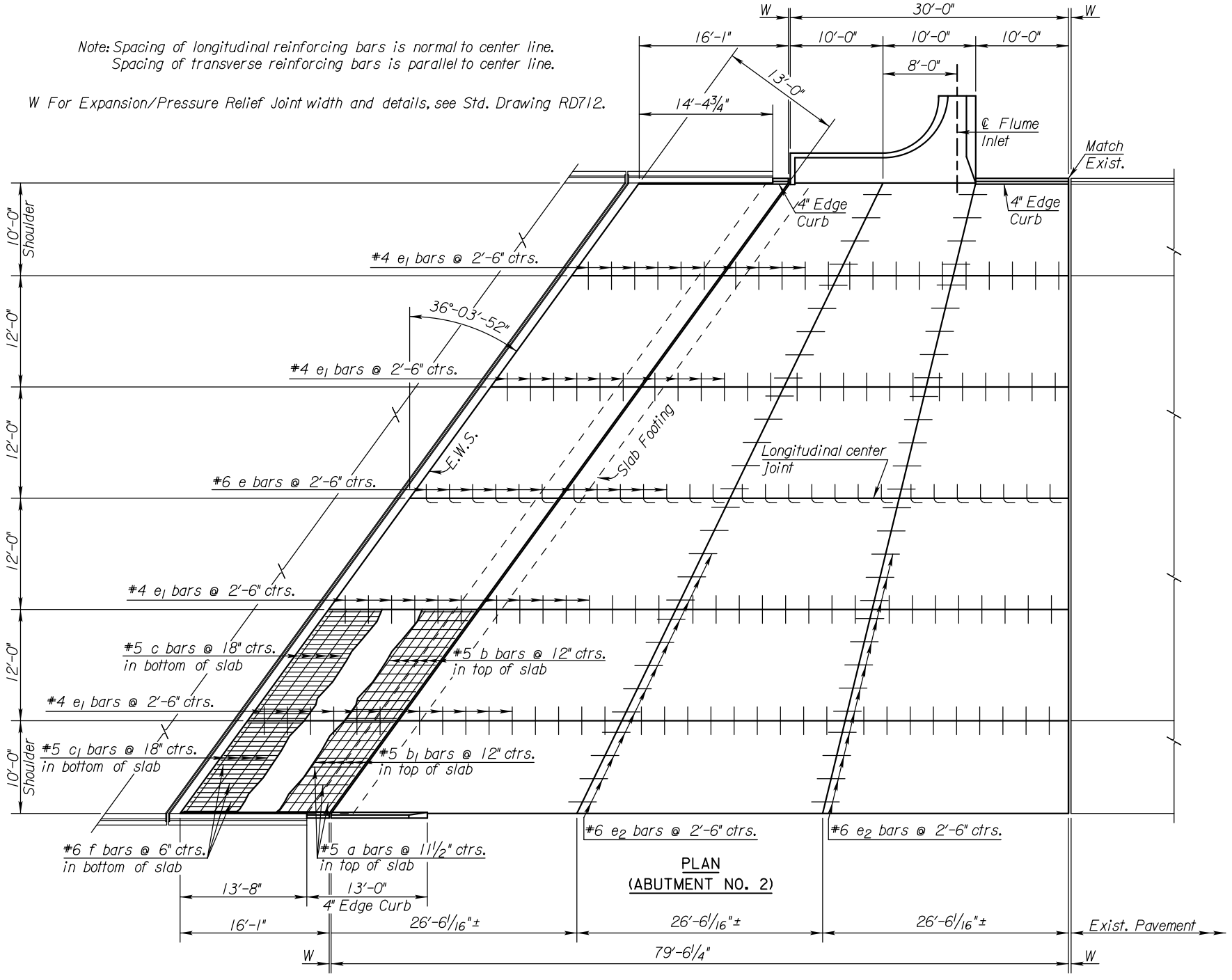
KANSAS DEPARTMENT OF TRANSPORTATION

Note: Spacing of longitudinal reinforcing bars is normal to center line.
Spacing of transverse reinforcing bars is parallel to center line.

W For Expansion/Pressure Relief Joint width and details, see Std. Drawing RD712.



PLAN
(ABUTMENT NO. 2)

Plotted By: miket	**Plot Location:** Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\278901269270.dgn	
Plot Date: 17-JUN-2013 08:59	**Squad:** KULSETH / MST

BRIDGE APPROACH SLAB DETAILS

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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KANSAS DEPARTMENT OF TRANSPORTATION

GENERAL NOTE

Special Concrete Bridge Approach shall be paid for as Sq. Yds. of Concrete Pavement (10" Unif.)(AE) and includes all work and materials required to construct the approach slab as shown on this sheet.

All work and materials required for installation of expansion joints and pressure relief joints shall be subsidiary to this bid item.

At the Contractor's option #4x3'-0" tie bars @ 15" centers may be substituted for the #6 e bars at 2'-6" centers.

All reinforcing steel shall be epoxy coated.

See Standard Drawing RD711 for details of joints, welded wire reinforcement, and edge curb.

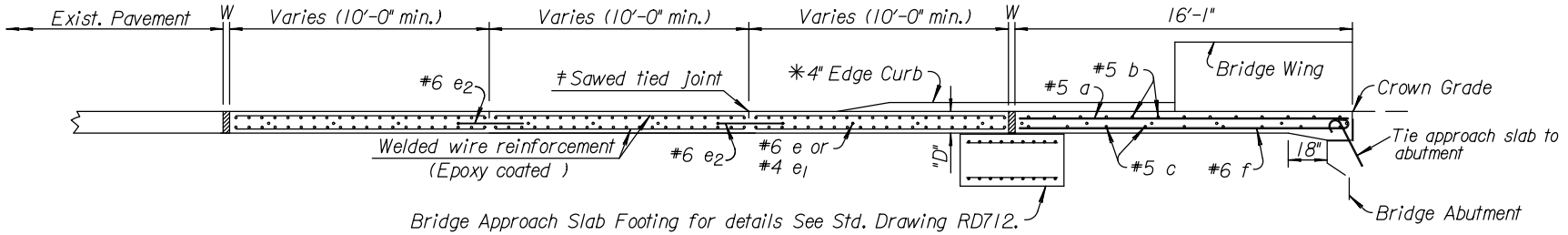
Standard reinforcing bar hooks in accordance with the latest ACI specifications shall be used throughout.

The pressure relief joint shall be omitted when the concrete bridge approach pavement abuts asphalt pavement.

✳ For details of 4" Edge Curb, See Std. Drawing RD711.

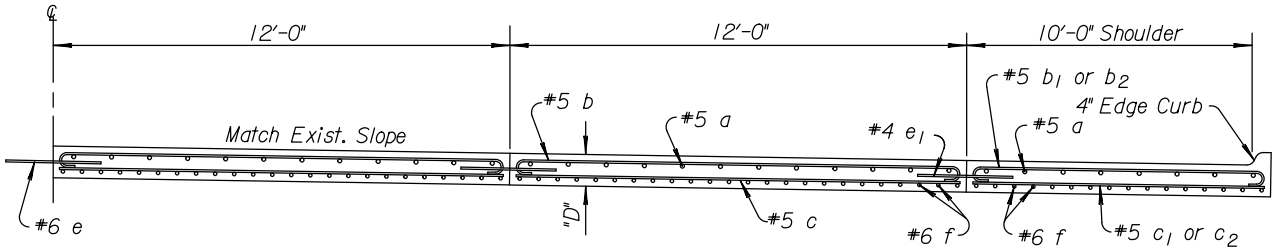
W For Expansion/Pressure Relief Joint width and details, see Std. Drawing RD712.

‡ Contractor has the option of substituting a Tied Keyed Construction Joint.



LONGITUDINAL SECTION

"D" Thickness = Thickness of Project Concrete Pavement (10" minimum).



TYPICAL HALF SECTION

(No Scale)

Plotted By: miket	**Plot Location:** Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692?0.dgn	
Plot Date: 17-JUN-2013 08:59	**Squad:** KULSETH / MST

BRIDGE APPROACH SLAB DETAILS

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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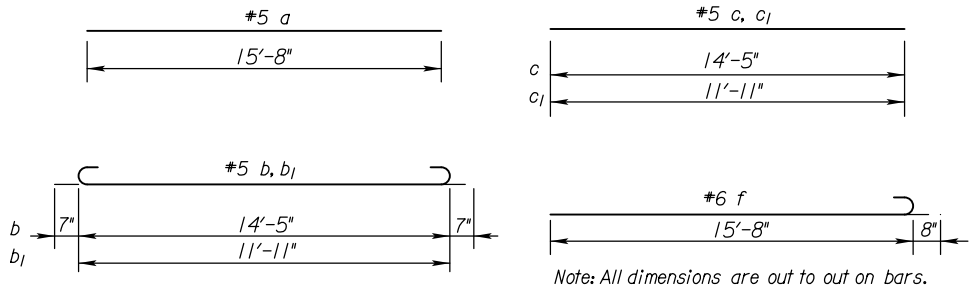
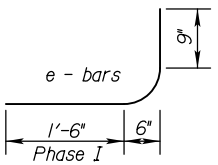
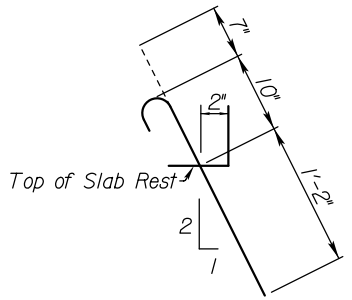
KANSAS DEPARTMENT OF TRANSPORTATION



Note: All dimensions are out to out on bars. unless noted otherwise.

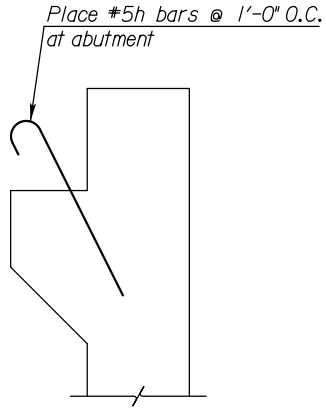




h - bars

BENDING DIAGRAMS

DRILLING & GROUTING: This work shall consist of grouting the #5h bars into the existing abutment concrete with an epoxy grout. Locate each hole with the aid of a pachometer to miss the existing reinforcing steel. Drill the holes to the specifications required by the grout manufacturer and in such a manner as not to damage adjacent concrete or bars. After the hole is drilled, remove all loose material by using a wire brush to free the dust from the side of the hole and then vacuuming to remove material and dust. Fill the hole 30% to 50% full of epoxy grout and insert the bar. Then fill the hole to 1/4" from the top of the hole. Follow the manufacturer's directions for mixing, application and curing. The tools, materials, labor and incidentals necessary to complete the work shall be subsidiary to "Concrete Pavement (10" Unif.) (AE)".



TYPICAL ELEVATION AT ABUTMENT

BILL OF MATERIALS
(ABUTMENT NO. 1)

Bar Schedule

Bar	a	b	b_1		c	c_1		f	e	e_1	e_2	h
No.	74	64	32		44	22		136	27	108	56	83
Size	5	5	5		5	5		6	6	4	4	5
Length	15'-8"	15'-7"	13'-1"		14'-5"	11'-11"		16'-4"	3'-0"	3'-0"	3'-0"	2'-7"

Reinforcing Steel (Grade 60) (Epoxy Coated)	7,630	Lbs.
Concrete Pavement (10" Unif.) (AE)	540.8	Sq. Yds.
Bridge Approach Slab Footing	24.9	Cu. Yds.
Expansion Joint Membrane Sealant	86	Lin. Ft.
Pressure Relief Joint Membrane Sealant	72	Lin. Ft.

BILL OF MATERIALS
(ABUTMENT NO. 2)

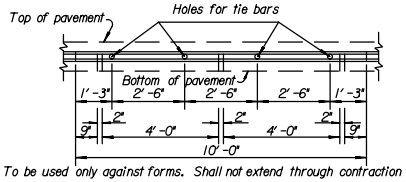
Bar Schedule

Bar	a	b	b_1		c	c_1		f	e	e_1	e_2	h
No.	74	64	32		44	22		136	27	108	56	83
Size	5	5	5		5	5		6	6	4	4	5
Length	15'-8"	15'-7"	13'-1"		14'-5"	11'-11"		16'-4"	3'-0"	3'-0"	3'-0"	2'-7"

Reinforcing Steel (Grade 60) (Epoxy Coated)	7,630	Lbs.
Concrete Pavement (10" Unif.) (AE)	535.3	Sq. Yds.
Bridge Approach Slab Footing	24.9	Cu. Yds.
Expansion Joint Membrane Sealant	86	Lin. Ft.
Pressure Relief Joint Membrane Sealant	69	Lin. Ft.

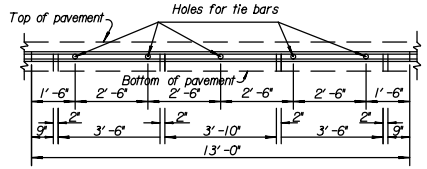
Note: Reinforcing steel and joint lengths shown for information only.

Plotted By: miket	Plot Location: Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692?0.dgn	
Plot Date: 17-JUN-2013 08:59	Squad: KULSETH / MST (STANDARD)



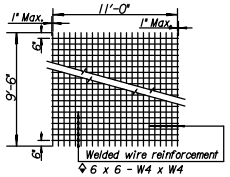
To be used only against forms. Shall not extend through contraction Joints.

METAL STRIP FOR
LONGITUDINAL CONSTRUCTION JOINT (10'-0")



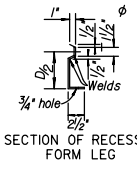
To be used only against forms. Shall not extend through contraction Joints.

METAL STRIP FOR
LONGITUDINAL CONSTRUCTION JOINT (13'-0")



TYPICAL SHEET OF WELDED WIRE REINFORCEMENT
FOR SPECIAL BRIDGE APPROACH PAVEMENT

◆ Note: Epoxy coated #3 bars longitudinally @ 12" ctrs. & #3 bars transversely @ 18" ctrs. may be substituted for each layer of epoxy coated welded wire reinforcement.



ϕ Snap-in leg or other approved designs may be used in lieu of welded leg.

SECTION OF RECESSED
FORM LEG

DETAIL OF LAP FOR WELDED WIRE REINFORCEMENT

The lap shall extend beyond the first transverse or bag wire of each sheet.

The sheet shall be wired securely at the edges and at intervals not to exceed 2'-6" for the full width of the sheet. Approximate weight of welded wire reinforcement = 58 lbs. per 100 sq. ft. Other methods for fastening the sheets of welded wire reinforcement at the laps may be used with the approval of the Engineer.

GENERAL NOTES

All work shall be done in conformity with the Standard Specifications applicable to the project.

The cost of all bars and joint material shown on this sheet is to be included in the bid price for Concrete Pavement.

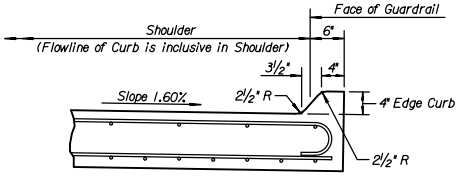
At each planned transverse joint location, a 4 to 6 inch wide strip of the pavement surface shall be protected from the texturing operation to provide a transverse textureless surface centered over the joint sawcut.

All sawed joints on this project shall be filled with sealant in accordance with Standard Specifications.

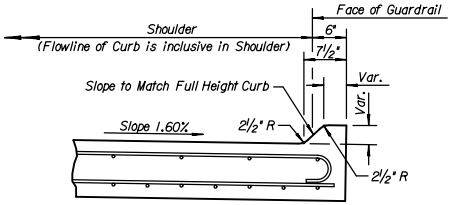
The 4 inch edge curb shall be constructed integral with the approach slab shoulder.

All materials and work required for this construction shall be Subsidiary to the concrete approach slab.

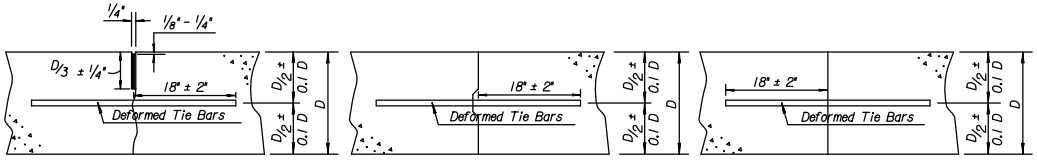
Tie bars shall be evenly spaced along the length of the slab and no tie bars shall be within 12" of contraction joint.



SECTION A-A

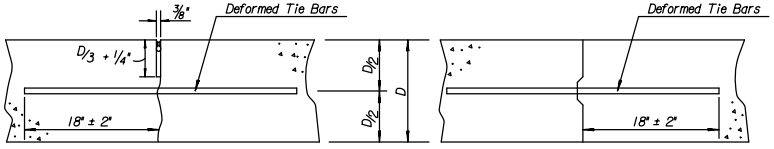


SECTION B-B



LONGITUDINAL JOINTS

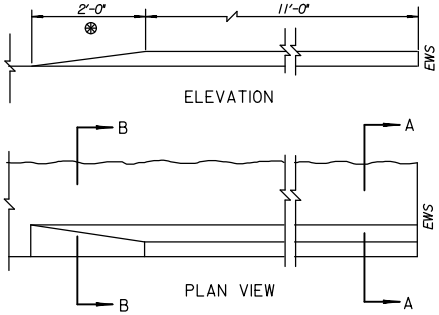
Note: For longitudinal construction joints the contractor has the option of using either the keyed or butt type.



TRANSVERSE JOINTS

Note: A construction joint is required when the concrete placement has been interrupted for a substantial length of time or at the end of a day's placement.

⊛ No 4" Curb transition when adjacent to Flume Inlet.



4" EDGE CURB DETAIL

NO.	DATE	REVISIONS	BY	APP'D
12	5-14-09	Pres. Relief Jt. to RD712/tie bar lab.	S.W.K.	J.O.B.
11	10-23-08	Revised Sec. A-A and Sec. B-B	S.W.K.	J.O.B.
10	10-3-07	Add manufacturer jt. size recom'd.	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS
FOR CONCRETE
BRIDGE APPROACH PAVEMENT

RD711

FHWA APPROVAL	6-9-09	APP'D. James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUANCK.	TRACE CK. King

MISCELLANEOUS DETAILS FOR
CONCRETE BRIDGE APPROACH PAVEMENT

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

KANSAS DEPARTMENT OF TRANSPORTATION

Plotted By: miket	**Plot Location:** Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692?0.dgn	
Plot Date: 17-JUN-2013 08:59	**Squad:** KULSETH / MST (STANDARD)

BRIDGE APPROACH SLAB DETAILS
EXPANSION/PRESSURE RELIEF JOINT /
BRIDGE APPROACH SLAB FOOTING

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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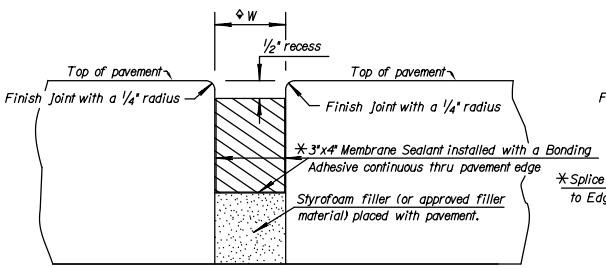
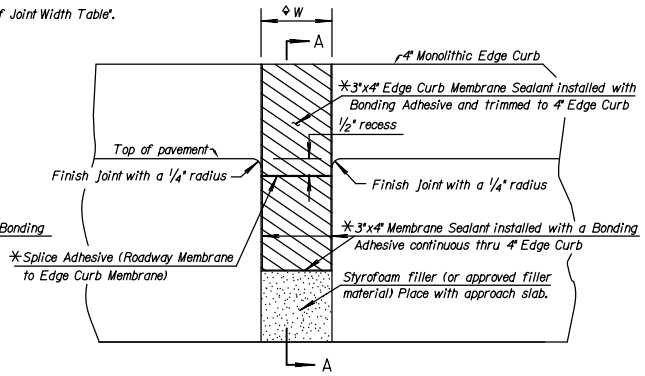
KANSAS DEPARTMENT OF TRANSPORTATION

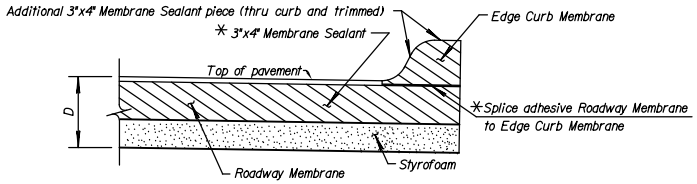
◈ W= Formed Concrete Opening Size - See "Temperature Expansion/Pressure Relief Joint Width Table".



ELEVATION PRESSURE RELIEF JT.

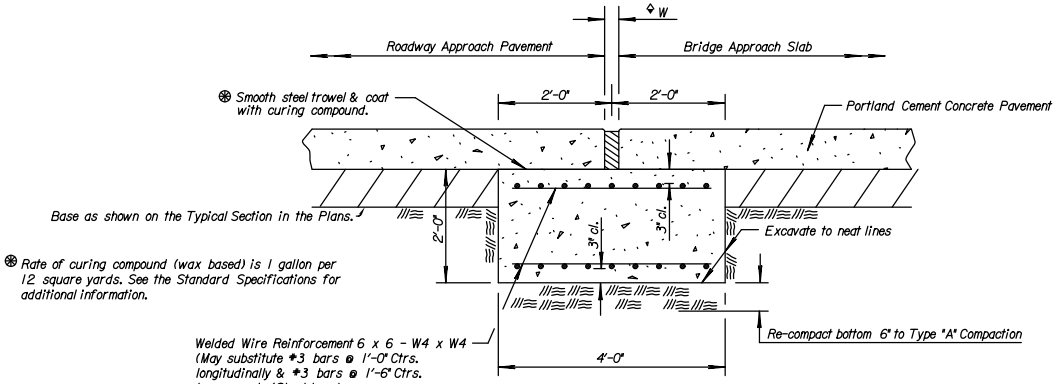


ELEVATION EXPANSION JT.



SECTION A-A

(See Std. Drawing RD711 for details of 4" Edge Curb.)



BRIDGE APPROACH SLAB FOOTING

GENERAL NOTES

EXPANSION/PRESSURE RELIEF JOINTS

See Concrete Bridge Approach Pavement standard drawings for location of expansion and pressure relief joints.

The joint opening shall be formed prior to placement of the pavement approach. The material used to form the joint opening shall be removed after the pavement approach has been in place for a minimum of six days.

Cleaning and construction of the joint shall not begin until the concrete in the approach slab has cured a minimum of 7 days.

The joint shall be thoroughly cleaned by sandblasting and by high pressure air blast to remove all laitance and contaminants from the joint. When any part of the joint is shaped by saw cutting in lieu of forming, a water blast shall preceed sandblasting and air cleaning.

Sandblasting shall be accomplished in two passes to clean each face of the joint (one pass for each face). The nozzle shall be held at an angle to the joint face and within 1 to 2 inches of the face.

Any contaminants such as oil, curing compound, etc. shall be removed by sandblasting to the satisfaction of the Engineer. Solvents, wire brushing, or grinding shall not be permitted.

The joint shall be air blasted just prior to installation of Membrane Sealant. The air compressor used for joint cleaning shall be equipped with trap devices capable of providing moisture-free and oil-free air at a recommended pressure of 90 psi. The joint shall be spot checked to ensure residual dust or dirt has been removed. It is required that the Engineer inspect the joint immediately prior to installation of the joint material.

✳ See KDOT Standard Specifications for Membrane Sealant, Bonding Adhesive and Splice Adhesive.

Traffic shall not be allowed on the joint for a minimum of 3 hours unless otherwise directed by the Engineer.

Splices will use materials & methods recommended by the Manufacturer.

All work and materials necessary for the preparation, construction, and installation of the Joint will be subsidiary to the concrete approach pavement.

BRIDGE APPROACH SLAB FOOTING

Payment for the Bridge Approach Slab Footing shall be at the unit price bid per cubic yard for "Bridge Approach Slab Footing". This price shall be full compensation for furnishing all materials and labor including Concrete Grade 4.0 (AE) Pavement, Reinforcing Steel (Gr. 60) (Epoxy Coated), excavation, Type "A" Compaction and materials used to prevent bonding of concrete. At the contractor's option, the concrete for the slab footing may be concrete Grade 4.0 (AE) or the mix used in the concrete pavement.

EXPANSION JOINT WIDTH							
⊗ Temperature (F°)	40°	50°	60°	70°	80°	90°	100°
◈ Formed Concrete Opening Size	4.0"	3¾"	3½"	3¼"	3.0"	2¾"	2½"

⊗ Average Ambient Temperature over previous 24 hours.

NO.	DATE	REVISIONS	BY	APP'D
7	7-10-09	Adjusted Expansion Joint table	S.W.K.	J.O.B.
6	5-13-09	Therm. width jt. & membrane sealant	S.W.K.	J.O.B.
5	8- 8-07	Added ins. Gap Temp. Corr. table note	S.W.K.	J.O.B.
4	4- 6-05	Rev. reinforcing callout, conc. grade	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
EXPANSION/PRESSURE RELIEF JOINT/
BRIDGE APPROACH SLAB FOOTING

RD712

FHWA APPROVAL	6-9-09	APP'D. James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUANCK.	TRACE CK. King

Plotted By: miket	**Plot Location:** Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\278901269270.dgn	
Plot Date: 17-JUN-2013 08:59	**Squad:** KULSETH / MST (STANDARD)

FLUME INLET and SLOPE DRAIN (CONCRETE/STONE)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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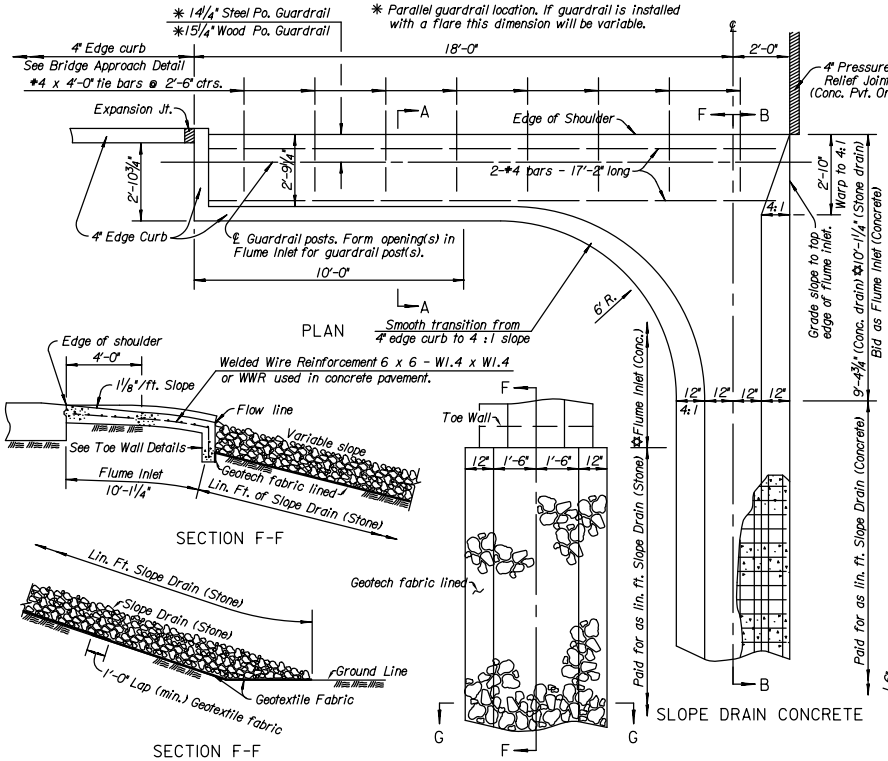
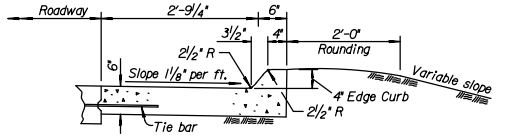
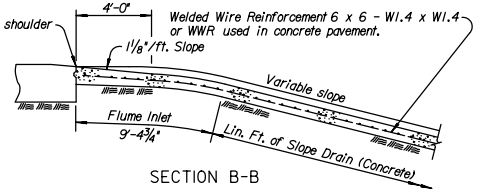
KANSAS DEPARTMENT OF TRANSPORTATION

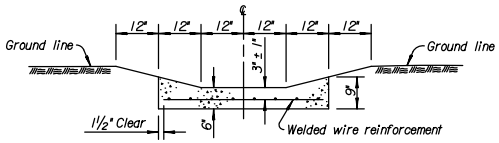




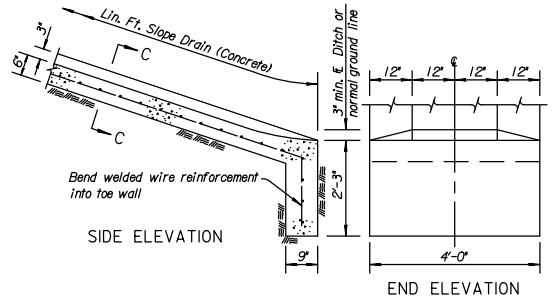
SECTION A-A



SECTION B-B



SECTION C-C



SIDE ELEVATION

END ELEVATION

SLOPE DRAIN & TOE WALL DETAILS

Slope Drain is shown with (STONE) or (CONCRETE) option, type to be determined by the Designer.

GENERAL NOTE

Flume Inlets shall be paid for by unit price per each. Slope Drains (Stone or Concrete) shall be paid for by unit price per linear foot.

Reinforcing steel & welded wire reinforcement are subsidiary to Flume Inlet and Slope Drain.

Flume Inlets will be constructed without Guide Vanes except at locations noted in plans or as directed by the Engineer. Construction of guide vanes, when required, shall be subsidiary to the bid item "Flume Inlet".

The entire area of the Flume Inlet & Slope Drain shall be placed monolithic and struck off with a uniform thickness of 6 inches.

Guide Vanes may be formed monolithic with the Flume Inlet or tied to the Flume Inlet in the manner shown if constructed separately. Alternate methods of constructing Guide Vanes may be used with approval of the Engineer.

Concrete Grade 3.0 (AE) shall be used in Flume Inlet and Slope Drain. On concrete pavement projects, the contractor may substitute the mix used in concrete pavement.

Transverse expansion and contraction Joints of same type in pavement are to extend through the flume inlet and 4" edge curb, omitting load transfer devices. The edge curb section will be made continuous through any expansion Joint by using a filler material approved by the Engineer to fill the void to the full height of the curb. Joints will not extend into the Slope Drain.

All exposed edges shall be finished with an edging tool.

For details of 4" edge curb see Standard Drawing RD711.

No adjustment of guardrail post spacing will be permitted.

Flume Inlet shall only be constructed adjacent to concrete pavement. Flume inlet shall be tied to the pavement with #4 x 4'-0" tie bars at 2'-6" centers. Tie bars shall be subsidiary to the Flume Inlet.

Shape of guide vane shown is approximate and may be altered slightly to simplify construction. Height and width dimension shall be as shown regardless of shape.

Aggregate for the Slope Drain (STONE) shall meet the reqirements of stone for Aggregate Ditch Lining and have a D_{50} of 4" unless otherwise noted on the plans. The Contractor shall place stone from bottom to the top of slope to produce a well graded mass without segregation of material sizes. Placement, measurement, and payment shall conform to KDOT Standard Specifications.

Slope Drain (STONE) shall be underlain with geotextile fabric that meets the KDOT Standard Specification. All work and materials for the geotextile fabric shall be subsidiary to the Slope Drain (STONE).

QUANTITIES (For information only)

SLOPE DRAIN (CONCRETE)

Flume Inlet Concrete:
1.9 cu. yds. Concrete ✻
42 lbs. reinf. steel and WWR

Slope Drain (CONCRETE):
0.0833 cu. yds. Concrete per lin. ft.
0.79 lbs. WWR per lin. ft.
Toe wall shall be paid for as 1.5 lin. ft. of Slope drain.

SLOPE DRAIN (STONE)

Flume Inlet & Toe Wall Concrete:
2.2 cu. yds. Concrete ✻
44 lbs. reinf. steel and WWR

Slope Drain (STONE): 4" Aggregate (D50)
0.25 cu. yds. 4" Agg. (D50) per lin. ft.
0.90 sq. yds. Geotextile fabric per lin. ft.

✻ Does not include guide vanes.

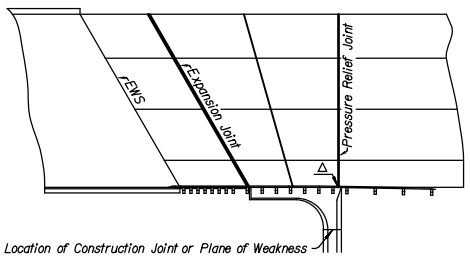
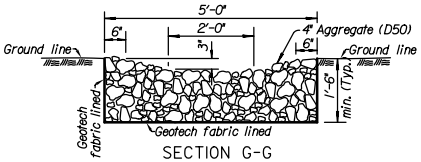
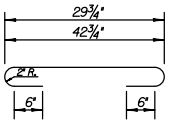


DIAGRAM of FLUME INLET at PRESSURE RELIEF JOINT

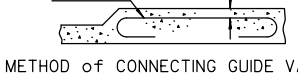
△ On projects with concrete paved shoulders where, due to skew of the bridge, the flume inlet extends beyond the 4" pressure relief joint of the special concrete bridge approach, the portion of inlet or gutter extending beyond the pressure relief joint shall not be tied to the concrete shoulder with tie bars.



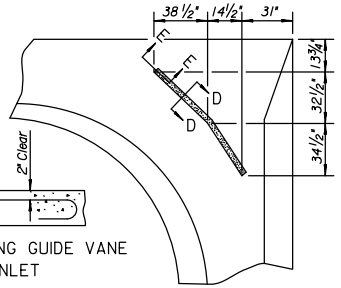
SECTION G-G



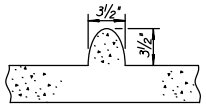
Bending Diagram
(Bend one bar each length)



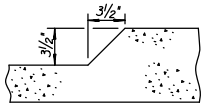
METHOD of CONNECTING GUIDE VANE to FLUME INLET



PARTIAL PLAN with GUIDE VANE



SECTION D-D
(Guide Vane formed monolithic)



SECTION E-E
(Typical both ends of vane)

NO.	DATE	REVISIONS	BY	APP'D
5	9-12-07	Reorg. sheet, add. slope drain stone	S.W.K.	J.O.B.
4	1-28-05	Chg. Class to Grade conc., reinf.	S.W.K.	J.O.B.
3	7-26-04	Revised guard fence to guardrail	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

FLUME INLET and SLOPE DRAIN (CONCRETE/STONE)

RD628

FHWA APPROVAL	1-20-07	APP'D. James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUANTS CK.	TRACE CK. King

Plotted By: miket	**Plot Location:** Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\278901269270.dgn	
Plot Date: 17-JUN-2013 08:59	**Squad:** KULSETH / MST (STANDARD)

DECK PATCHING SEQUENCE AND PHASE CONSTRUCTION
(POLYMER CONCRETE OVERLAY)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46 (269) (270)

JOHNSON Co.

KANSAS DEPARTMENT OF TRANSPORTATION

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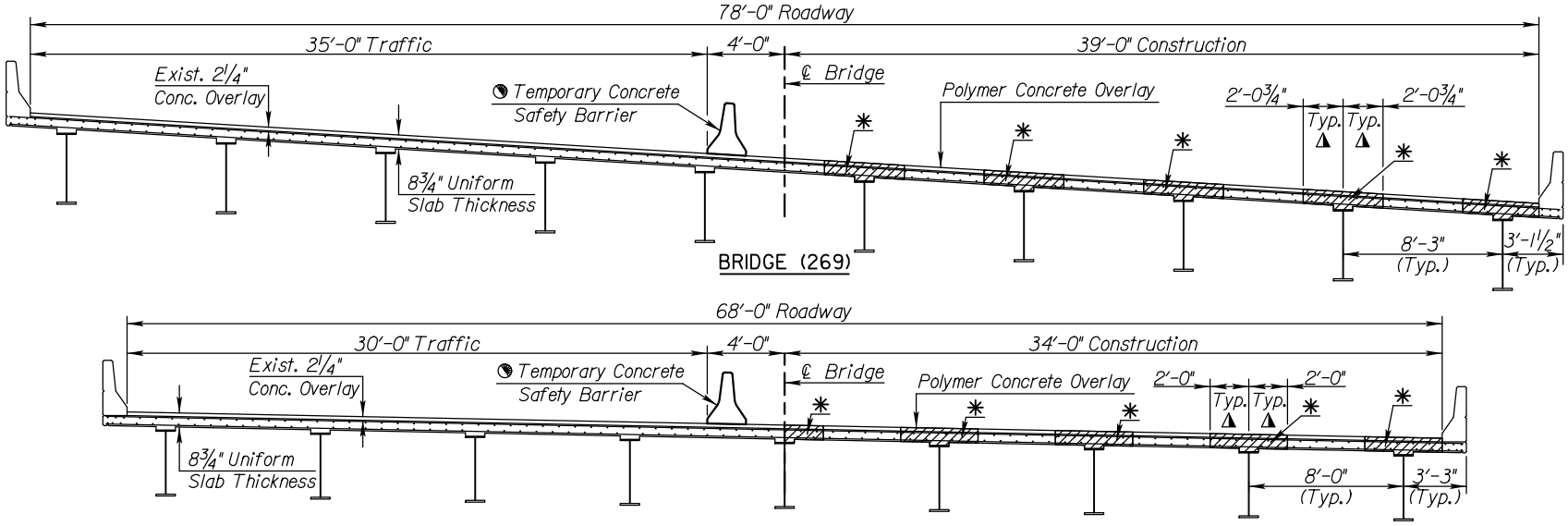


◔ The type of traffic delineator to be used is found in the traffic control sheets.

▲ Girder Spacing /4 or as directed by the Engineer.

Note: Patching for this project is to be limited to the spalled surfaces of the deck or impending spalls, as determined by the Engineer. A significant portion of the existing concrete overlay may be debonded or cracked, but it is not to be removed unless spalling is imminent. No Full Depth patching is expected, but a set quantity price is to be provided in the contract.

✱ PATCHING SEQUENCE: When large areas of full depth patches are needed in this area, they shall be patched in segments. The segments of full depth patch shall be a maximum of 8'-0" in length parallel to the centerline of bridge with a minimum of 8'-0" between segments. After the patches in the initial segments have cured, the areas between the segments shall be patched. The segmental patching will not be required if adequate shoring is provided to support the deck and curbs.

SUMMARY OF QUANTITIES				
ITEM	UNITS	QUANTITY		
		BR. (269)	BR. (270)	TOTAL
Area Prepared for Patching	Sq. Yds.	10	10	20
Area Prepared for Patching (Full Depth)	Sq. Yds.	5	5	10
Multi-Layer Polymer Concrete Overlay	Sq. Yds.	1,496	2,566	4,062
Reinforcing Steel (Repair) (Grade 60) (Epoxy Coated) (Set Price)	Lbs.	1	1	1

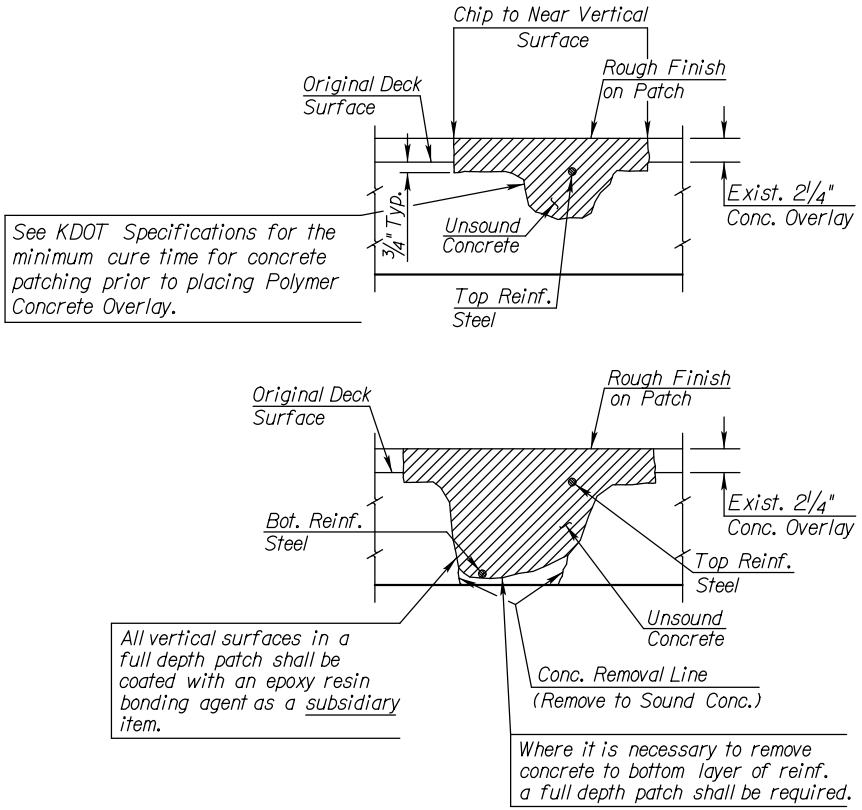
◪ MINIMUM REBAR SPLICE LENGTHS

Existing Bar Size	Minimum Splice Lengths (inches)	
	Existing Gr. 40 ksi Bars	Existing Gr. 60 ksi Bars
#4	12"	16"
#5	13"	20"
#6	16"	24"
#7	20"	30"
#8	26"	39"
#9	33"	49"
#10	42"	62"
#11	51"	77"

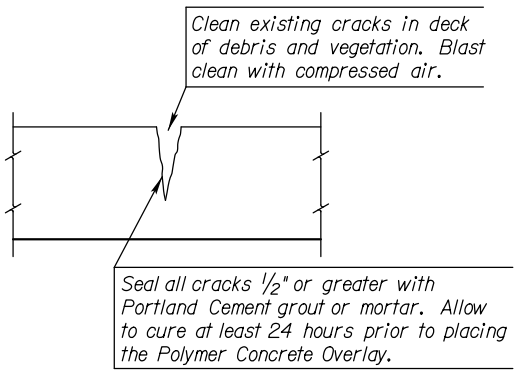
Note: If splicing epoxy coated reinforcing steel, increase the above splice lengths by 20%.

◪ Lap lengths are based on a Class B splice. Use the minimum splice length corresponding to the grade of the existing reinforcing in the deck.

Plotted By: miket	Plot Location: Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692?0.dgn	
Plot Date: 17-JUN-2013 08:59	Squad: KULSETH / MST (STANDARD)



DECK PATCHING DETAILS



CRACK SEALING DETAIL

AREA PREPARED FOR PATCHING: This item shall consist of removing unsound concrete and asphalt patches from the bridge deck, cleaning reinforcing bars, filling the removed patched areas with concrete and preparing the entire area of the deck for Polymer Concrete Overlay. Quantity shown is an estimate of the areas involved. The exact area shall be determined by tapping, before, during and after chipping operation to ensure that all unsound concrete has been removed. See KDOT Specifications. Areas to be patched will be determined by the Engineer.

FULL DEPTH PATCHING: Forms shall be provided to enable placement of concrete in areas of full depth removal of bridge slab. The forms may be suspended from existing reinforcing bars by wire ties or a method approved by the Engineer may be used. See KDOT Specifications for method of measurement and basis of payment.

REINFORCING IN BRIDGE DECK: Care should be exercised to prevent cutting, stretching or damaging exposed reinforcing steel. Extreme care should be exercised to avoid breaking the bond between the reinforcing steel and concrete where bars are partially exposed yet remain anchored in sound concrete. Reinforcing steel damaged, cut or deteriorated shall be replaced as directed by the Engineer. See table for replacement bar size and minimum splice length required. Replacement of bars damaged by the Contractor shall be subsidiary to "Area Prepared for Patching".

MULTI-LAYER POLYMER CONCRETE OVERLAY: Prepare and overlay the bridge roadway surface using a Polymer Concrete Overlay (Two-Coat Broom and Seed).
On bridges with continuous concrete barrier rails, apply the epoxy to the first break in the geometry of the barrier to a minimum height of 6 inches above the deck. Apply epoxy to the barrier as each of the overlay applications are performed.
All work related to applying epoxy to additional areas beyond the bridge roadway surface width shall be subsidiary to the bid item Multi-Layer Polymer Concrete Overlay.

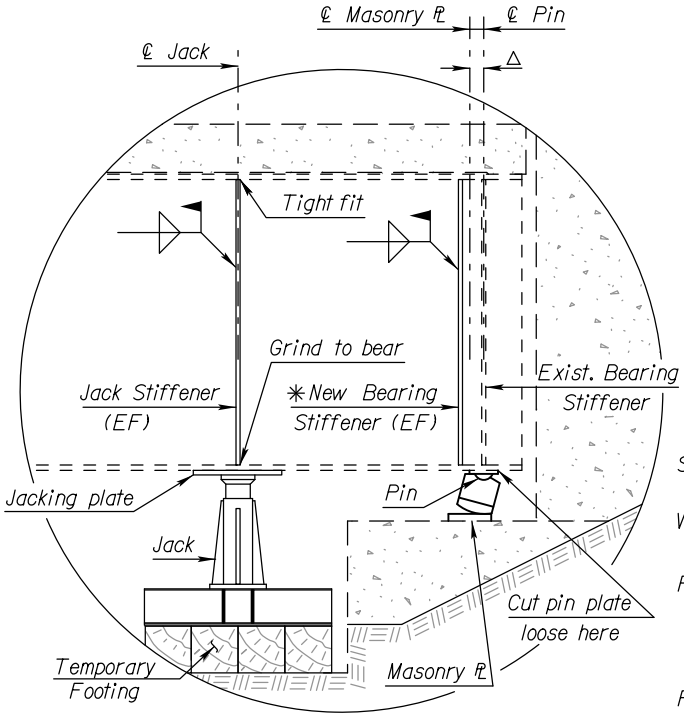
DECK PATCHING DETAILS
(POLYMER CONCRETE OVERLAY)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46 (269) (270)

JOHNSON Co.

KANSAS DEPARTMENT OF TRANSPORTATION

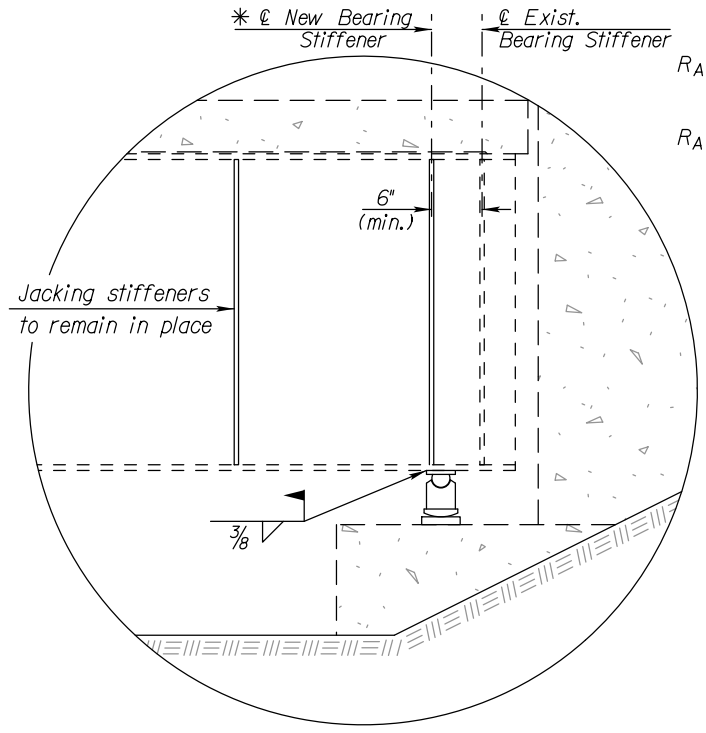


DETAIL A

(Showing Preparatory Work)

NOTE: New bearing stiffeners and jacking stiffeners shall have the same dimensions as existing bearing stiffeners. Welds shall be the same size as those connecting existing bearing stiffeners to web.

✳NOTE: New bearing stiffeners will not be required if △ is less than $12t_w$ ($4\frac{1}{2}$"). If required, weld new bearing stiffener 6 inches from the center of the existing stiffener or on the new ℄ pin, whichever is the greater distance from the existing ℄ pin.



DETAIL A

(Showing Completed Work)

NOTE: Placement of jack is typical only. Jack may be placed on bridge seat, as shown, or as otherwise approved by the Engineer. Jacking plate and Jacking Stiffeners must be provided.

NOTE: Any excavation required in placement of temporary footings for jacks shall be backfilled to its original condition, and any existing rip-rap shall be repaired.

SUMMARY OF QUANTITIES		
Reset Existing Bearing	9	Each

GENERAL NOTES

STRUCTURAL STEEL: Structural steel in stiffeners shall conform to ASTM A709M Gr. 36 unless otherwise noted.

WELDING: Material and construction shall conform to KDOT Specifications. Welding requires approved procedures and welders.

PROCEDURE: Bearing Devices shall be made vertical (for a reference temp. of 60°F) one at a time by supporting the girder with the jack and moving the pin as shown or as approved by the Engineer. See the detail in these plans for temperature corrections.

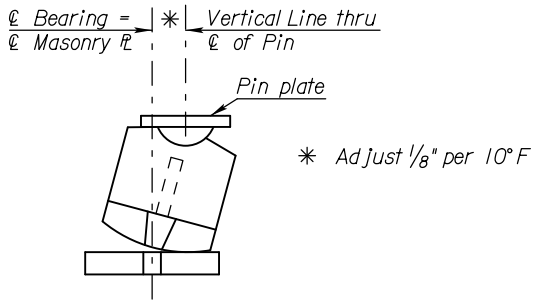
PAINTING: Prepare and paint areas of damaged paint with an approved organic zinc primer with a waterborne acrylic finish coat. (The finish coat will match the existing paint). Painting shall be subsidiary to the bid item "Reset Existing Bearing".

RESET BEARING DEVICES: The bid item "Reset Existing Bearing (Each)" shall include all labor and materials necessary to temporarily support the girder, install stiffeners, remove the bearing pin, and to reset the bearing pin and reweld it to the existing girder. Only air carbon arc cutting will be allowed to remove existing welds. Care shall be taken not to damage the existing bearing pins and girders during removal.

REACTION: In lieu of a more exact analysis, the abutment reaction per girder (R_A) may be estimated as the smallest value obtained from the following formulas. (For existing stiffeners fabricated out of Gr. 36 or Gr. 33 steel)

R_A(Kips) = $19A_G$, where A_G equals the gross cross-sectional area of the existing abutment bearing stiffeners (Sq. In.)

R_A(Kips) = $29A_C$, where A_C equals the cross-sectional area of the existing abutment bearing stiffeners in contact with the bottom flange of the girder (Sq. In.)



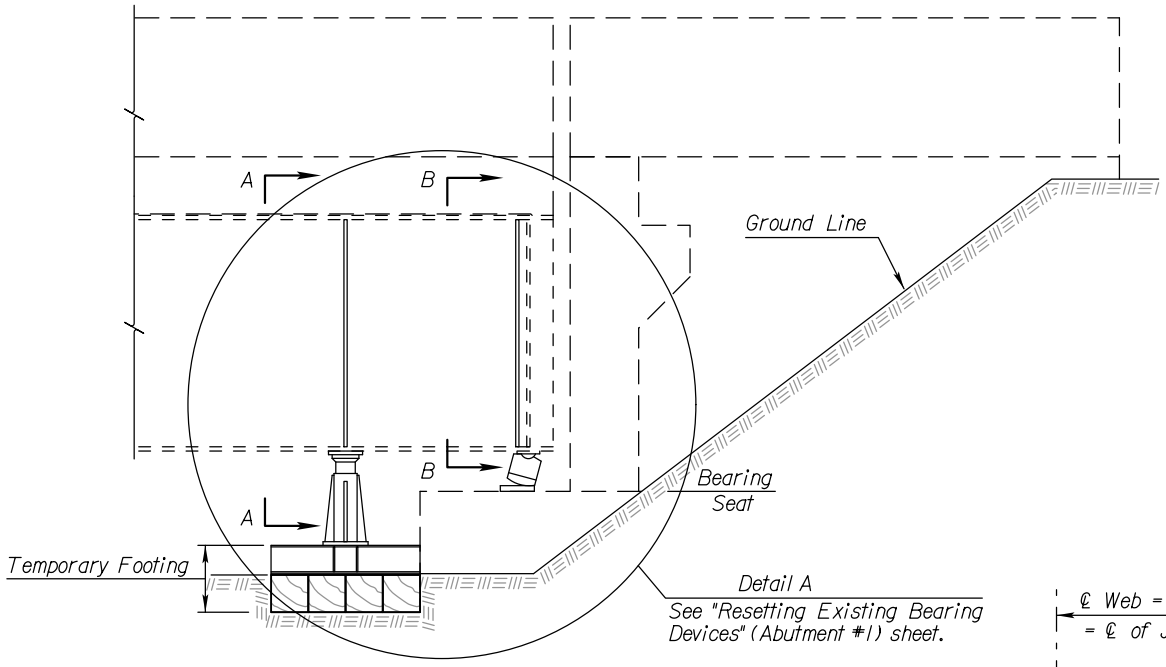
TEMPERATURE CORRECTION DETAIL

NOTE: For a temperature greater than 60°F the rocker should be adjusted (rocked) toward the nearest abutment. For a temperature less than 60°F the rocker should be adjusted (rocked) toward the center of the bridge. Adjust based on the ambient air temperature during the previous 24 hours.

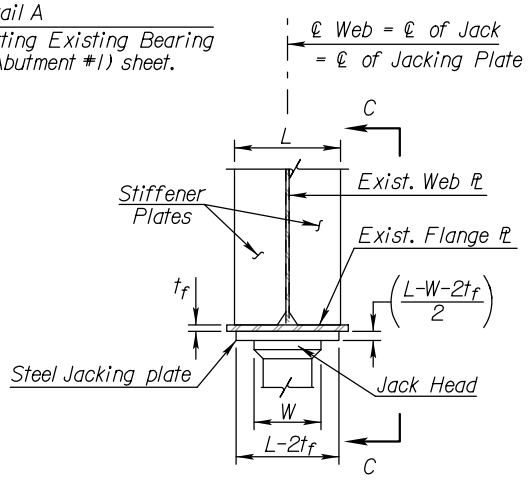
RESETTING EXISTING BEARING DEVICES
(ABUTMENT #1)

PROJ. NO. 56-46 KA-2789-01	KANSAS DEPARTMENT OF TRANSPORTATION	
BRIDGE NO. 56-46-9.83 (270)	JOHNSON Co.	26

Plotted By: miket | Plot Location: Bridge Design
File: \Engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\27890\269270.dgn | Squad: KULSETH / MST (STANDARD)
Plot Date: 17-JUN-2013 08:59

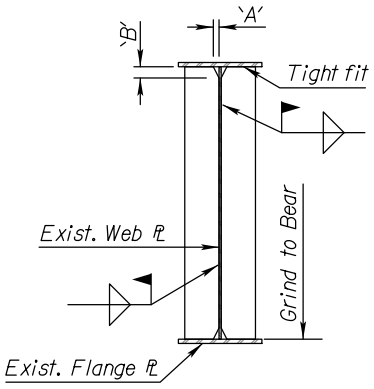


END ELEVATION OF ABUTMENT #1

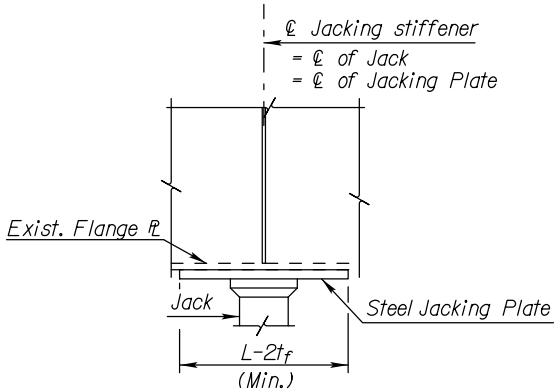


PARTIAL SECTION A-A

Showing Minimum Dimensions of Jacking Pad. The length can be longer than its width.



SECTION A-A or SECTION B-B



SECTION C-C

DIMENSIONS FROM EXISTING PLANS	
Bottom flange thickness (t_f)	1 1/8"
Web thickness (t_w)	3/8"
Bearing stiffener thickness	1/2"
Bearing stiffener width	5 3/4"
Bearing stiffener height	39"
Clip-Dimension 'A'	1 1/2"
Clip-Dimension 'B'	2 1/4"

Plotted By: miket | Plot Location: Bridge Design
File: \Engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\27890\269270.dgn
Plot Date: 17-JUN-2013 08:59 | Squad: KULSETH / MST (STANDARD)

RESETTING EXISTING BEARING DEVICES AND STRUCTURAL STEEL (ABUTMENT #1)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

KANSAS DEPARTMENT OF TRANSPORTATION

JOHNSON Co.

Plotted By: miket	**Plot Location:** Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692?0.dgn	
Plot Date: 17-JUN-2013 08:59	**Squad:** KULSETH / MST (STANDARD)

BEARING DEVICE REPAIR DETAILS
(ABUTMENT #1)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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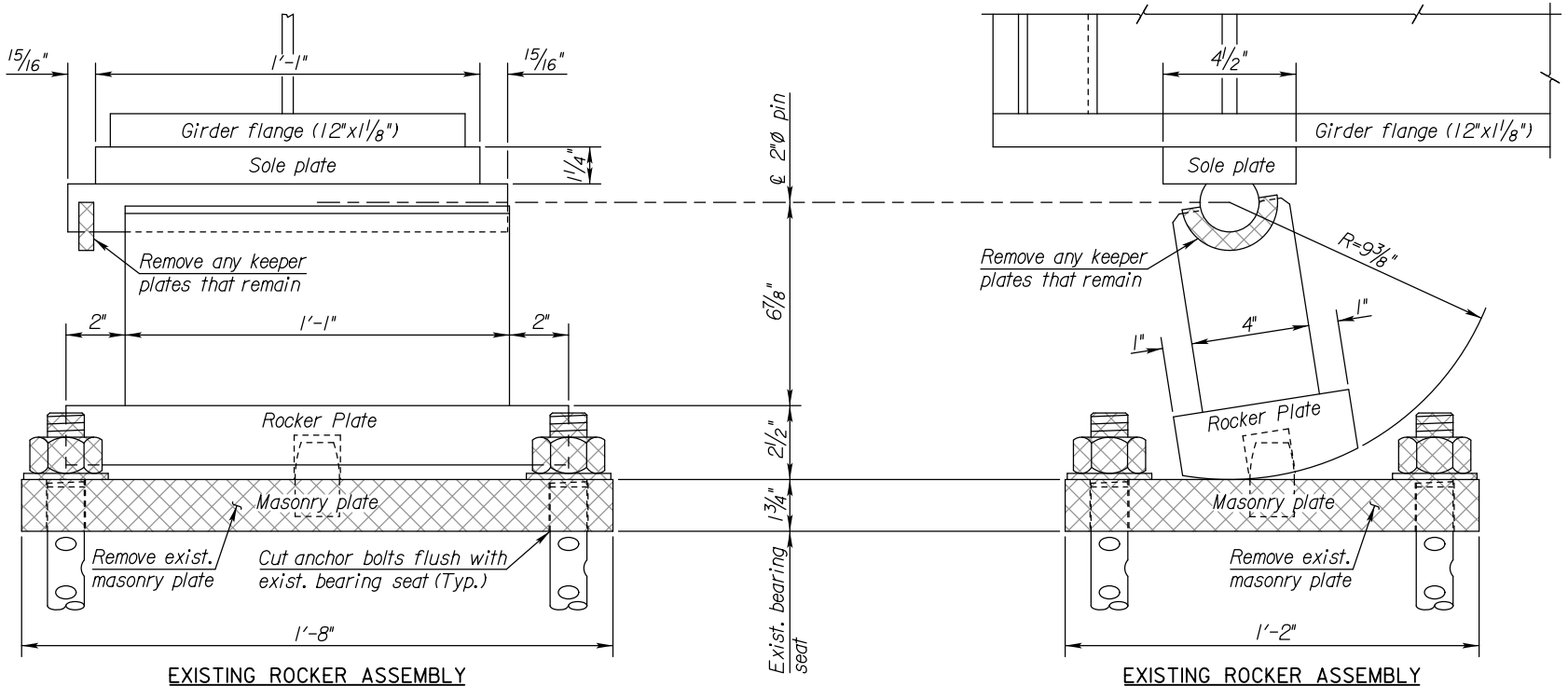
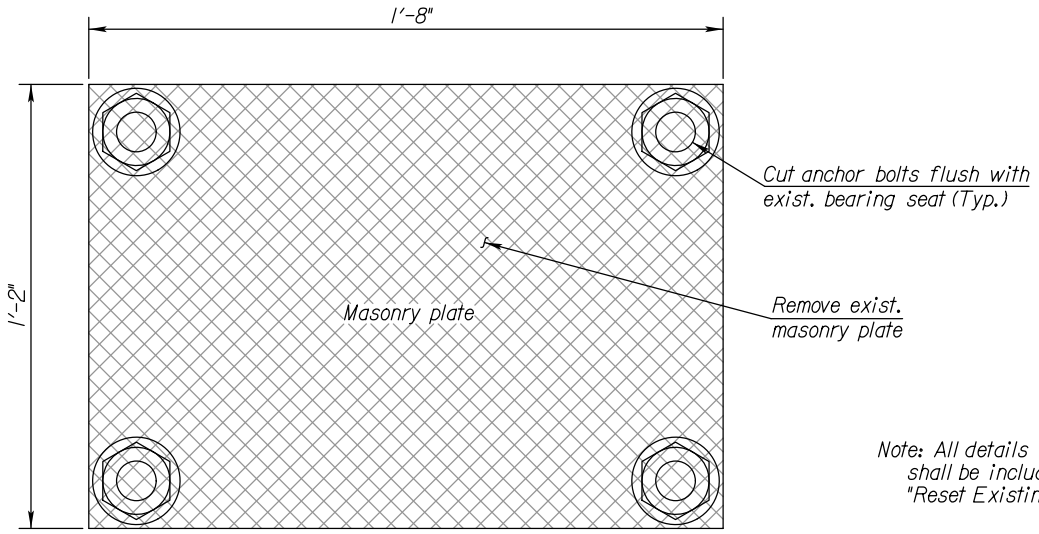
KANSAS DEPARTMENT OF TRANSPORTATION



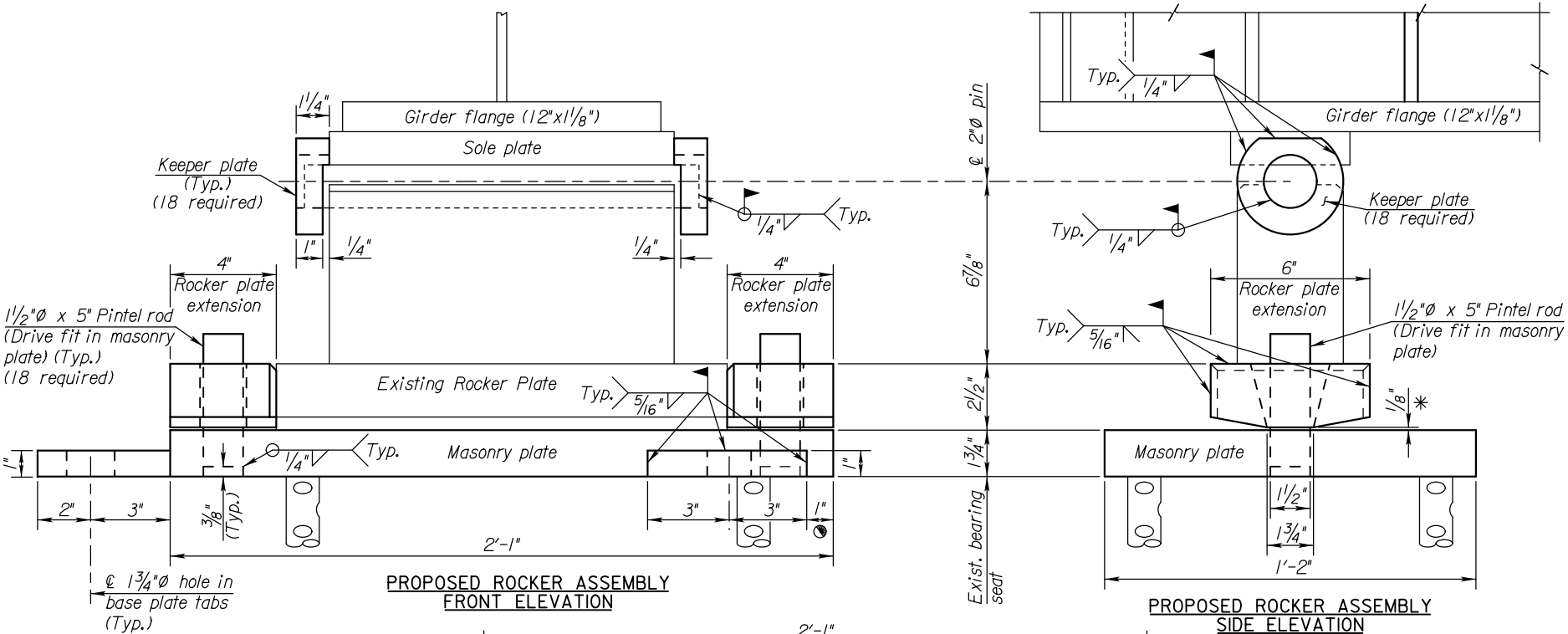


EXISTING ROCKER MASONRY PLATE
PLAN

Note: All details shown on this sheet shall be included in the bid item "Reset Existing Bearing" (Each).

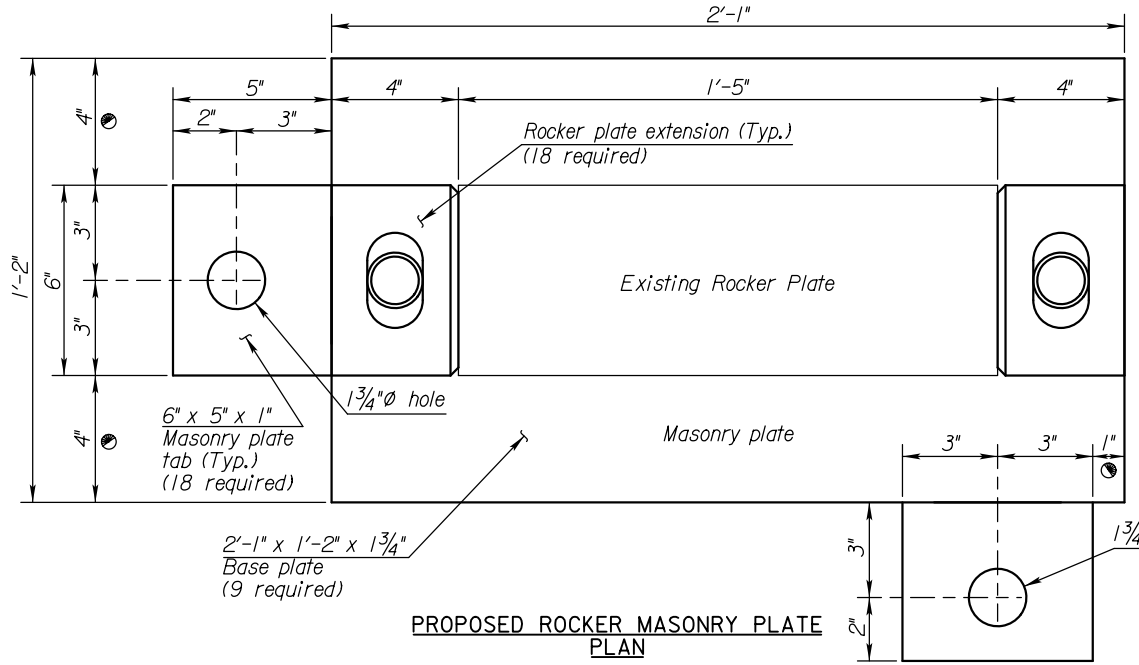
Plotted By: miket	Plot Location: Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692270.dgn	
Plot Date: 17-JUN-2013 08:59	Squad: KULSETH / MST (STANDARD)

BEARING DEVICE REPAIR DETAILS
(ABUTMENT #1)



PROPOSED ROCKER ASSEMBLY
FRONT ELEVATION

PROPOSED ROCKER ASSEMBLY
SIDE ELEVATION



PROPOSED ROCKER MASONRY PLATE
PLAN

*When the new rocker plate extension is installed, the entire bottom surface must be above radiused bottom surface of the existing rocker.

◔ Adjust as needed for clearance to avoid existing reinforcing steel when drilling core holes for Swedge Anchor Bolts.

STRUCTURAL STEEL: Structural steel in rocker plate extensions, pintel rods and keeper plates shall conform to ASTM A709 Gr. 50.

Note: All details shown on this sheet shall be included in the bid item "Reset Existing Bearing" (Each).

PROJ. NO. 56-46 KA-2789-01
BRIDGE NO. 56-46-9.83 (270)
JOHNSON Co.
29

KANSAS DEPARTMENT OF TRANSPORTATION

Plotted By: miket	Plot Location: Bridge Design
File: \\engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692?0.dgn	
Plot Date: 17-JUN-2013 08:59	Squad: KULSETH / MST (STANDARD)

BEARING DEVICE REPAIR DETAILS
(ABUTMENT #1)

PROJ. NO. 56-46 KA-2789-01

BRIDGE NO. 56-46-9.83 (270)

JOHNSON Co.

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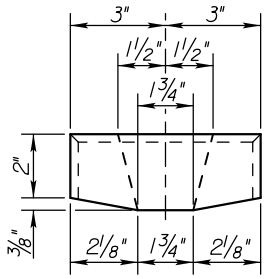
KANSAS DEPARTMENT OF TRANSPORTATION



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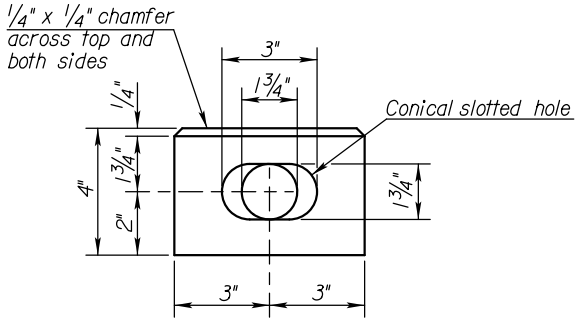
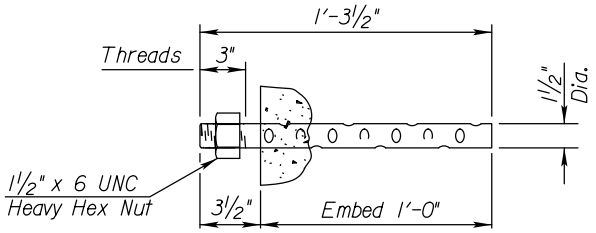


PLAN

ROCKER PLATE EXTENSION

(18 required)

Note: In lieu of beveling the bottom of the rocker plate extension, it may be rounded with a 9⅜" radius. Maintain the minimum end thickness of 2".

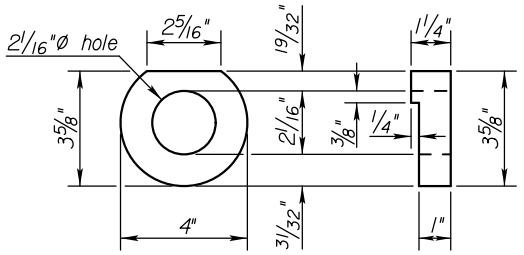


SWEDGE ANCHOR BOLT DETAIL

(18 required)

STRUCTURAL STEEL: Structural steel in rocker plate extensions, pintel rods and keeper plates shall conform to ASTM A709 Gr. 50.

Note: The Contractor shall provide a written procedure of how all of the bearing work on this project will be completed.

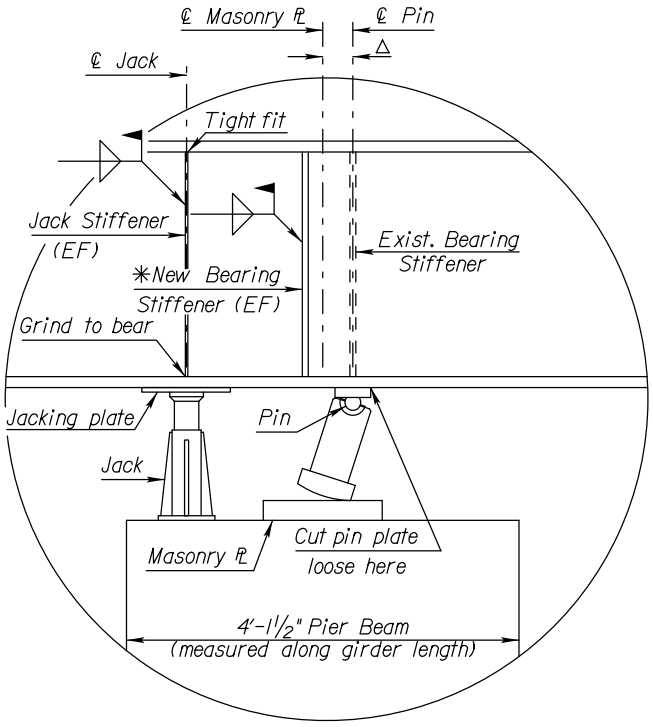


FRONT END

KEEPER PLATE

(18 required)

Note: All details shown on this sheet shall be included in the bid item "Reset Existing Bearing" (Each).

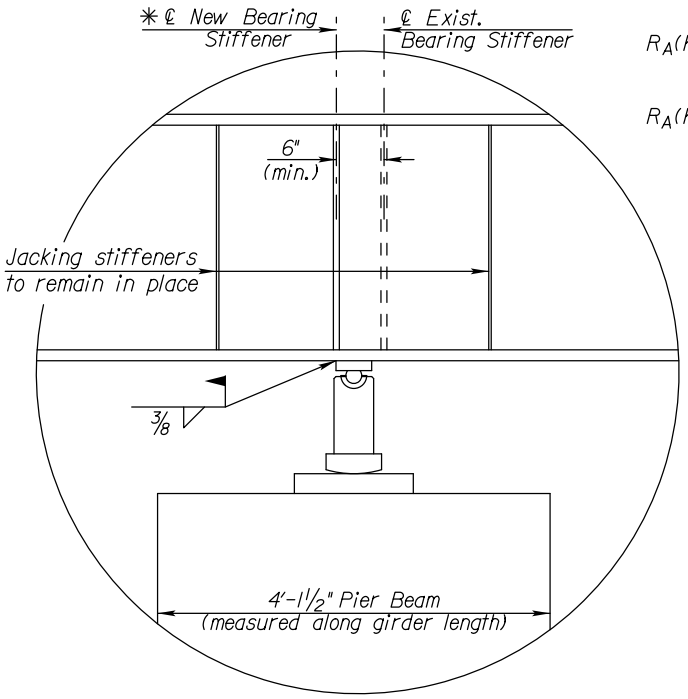


DETAIL A

(Showing Preparatory Work)

NOTE: New bearing stiffeners and jacking stiffeners shall have the same dimensions as existing bearing stiffeners. Welds shall be the same size as those connecting existing bearing stiffeners to web.

✳NOTE: New bearing stiffeners will not be required if Δ is less than $12t_w$ ($4\frac{1}{2}$"). If required, weld new bearing stiffener 6 inches from the center of the existing stiffener or on the new ℄ pin, whichever is the greater distance from the existing ℄ pin.



DETAIL A

(Showing Completed Work)

NOTE: Placement of jack is typical only. Jack may be placed as shown or as otherwise approved by the Engineer. Jacking plate and Jacking Stiffeners must be provided.

SUMMARY OF QUANTITIES		
Reset Existing Bearing	9	Each

GENERAL NOTES

STRUCTURAL STEEL: Structural steel in stiffeners shall conform to ASTM A709M Gr. 36 unless otherwise noted.

WELDING: Material and construction shall conform to KDOT Specifications. Welding requires approved procedures and welders.

PROCEDURE: Bearing Devices shall be made vertical (for a reference temp. of 60°F) one at a time by supporting the girder with the jack and moving the pin as shown or as approved by the Engineer. See the detail in these plans for temperature corrections.

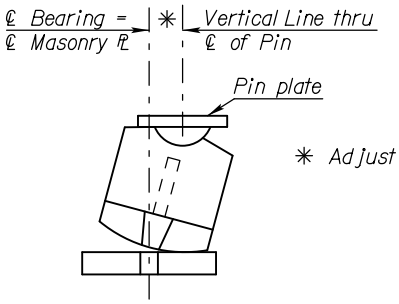
PAINTING: Prepare and paint areas of damaged paint with an approved organic zinc primer with a waterborne acrylic finish coat. (The finish coat will match the existing paint). Painting shall be subsidiary to the bid item "Reset Existing Bearing".

RESET BEARING DEVICES: The bid item "Reset Existing Bearing (Each)" shall include all labor and materials necessary to temporarily support the girder, install stiffeners, remove the bearing pin, and to reset the bearing pin and reweld it to the existing girder. Only air carbon arc cutting will be allowed to remove existing welds. Care shall be taken not to damage the existing bearing pins and girders during removal.

REACTION: In lieu of a more exact analysis, the pier reaction per girder (R_A) may be estimated as the smallest value obtained from the following formulas. (For existing stiffeners fabricated out of Gr. 36 or Gr. 33 steel)

R_A(Kips) = $19A_G$, where A_G equals the gross cross-sectional area of the existing pier bearing stiffeners (Sq. In.)

R_A(Kips) = $29A_C$, where A_C equals the cross-sectional area of the existing pier bearing stiffeners in contact with the bottom flange of the girder (Sq. In.)

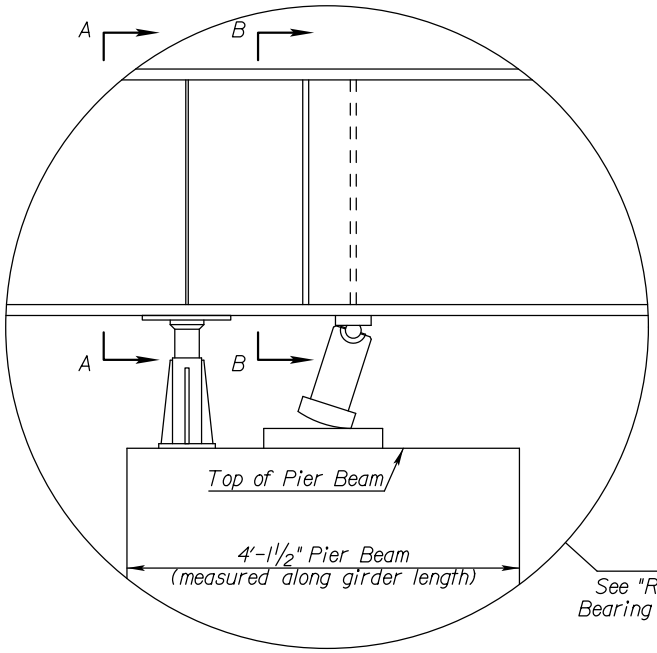


TEMPERATURE CORRECTION DETAIL

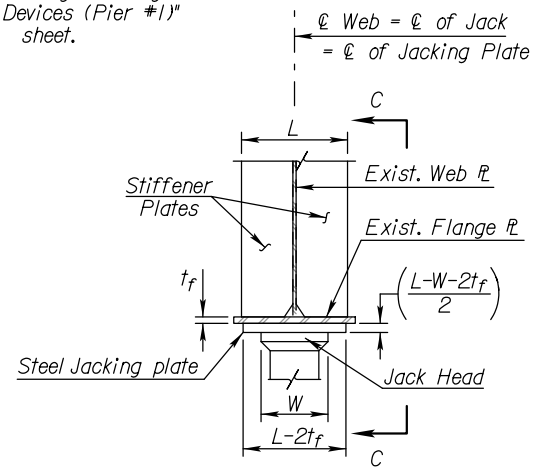
NOTE: For a temperature greater than 60°F the rocker should be adjusted (rocked) toward the nearest abutment. For a temperature less than 60°F the rocker should be adjusted (rocked) toward the center of the bridge. Adjust based on the ambient air temperature during the previous 24 hours.

Plotted By: miket | Plot Location: Bridge Design
File: \Engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\27890\269270.dgn | Squad: KULSETH / MST (STANDARD)
Plot Date: 17-JUN-2013 08:59

RESETTING EXISTING BEARING DEVICES (PIER #1)	PROJ. NO. 56-46 KA-2789-01	KANSAS DEPARTMENT OF TRANSPORTATION	
	BRIDGE NO. 56-46-9.83 (270)	JOHNSON Co.	31

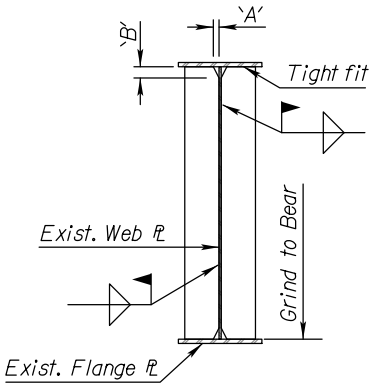


END ELEVATION OF PIER #1

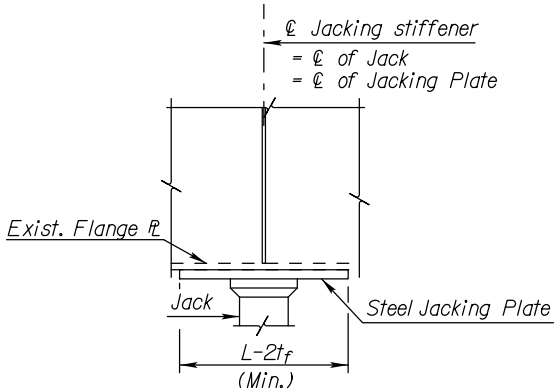


PARTIAL SECTION A-A

Showing Minimum Dimensions of Jacking Pad.
The length can be longer than its width.



SECTION A-A or SECTION B-B



SECTION C-C

DIMENSIONS FROM EXISTING PLANS	
Bottom flange thickness (t_f)	1 3/8"
Web thickness (t_w)	3/8"
Bearing stiffener thickness	3/4"
Bearing stiffener width	6 3/4"
Bearing stiffener height	39"
Clip-Dimension 'A'	1 1/2"
Clip-Dimension 'B'	2 1/4"

Plotted By: miket | Plot Location: Bridge Design
File: \Engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\27890\269270.dgn
Plot Date: 17-JUN-2013 08:59 | Squad: KULSETH / MST (STANDARD)

RESETTING EXISTING BEARING DEVICES AND STRUCTURAL STEEL
(PIER #1)

PROJ. NO. 56-46 KA-2789-01

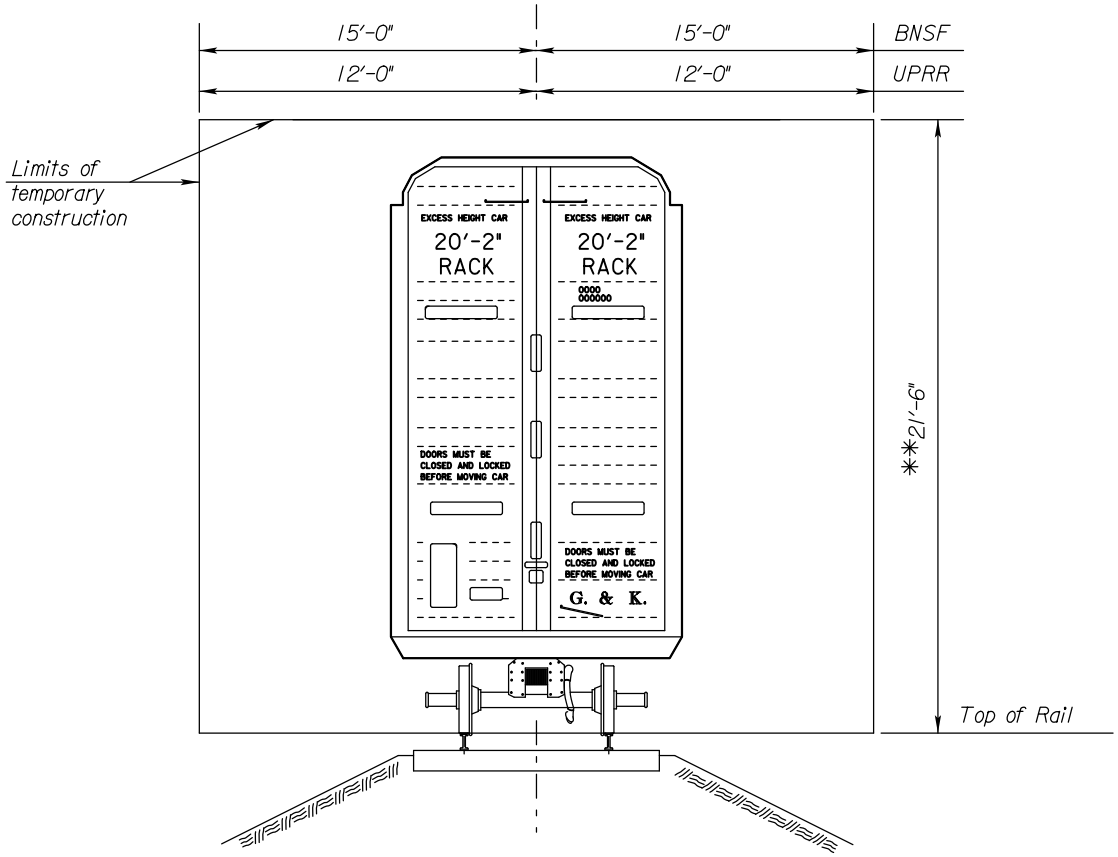
BRIDGE NO. 56-46-9.83 (270)

KANSAS DEPARTMENT OF TRANSPORTATION

JOHNSON Co. | 32

NO.	DATE	REVISIONS	BY	APP'D
3	2/27/13	Updated Title Block	PAK	TLF
2	8/2/12	Added Notes and Dimensions	PAK	TLF
1	4/25/12	CURRENT RELEASE	PAK	TLF

Plotted By: mikel | Plot Location: Bridge Design
File: \Engineering\Bridge Maint Projects\Projects\FY 2014\KA-2789-01\2789012692270.dgn
Plot Date: 17-JUN-2013 08:59 | Squad: KULSETH / MST (STANDARD)



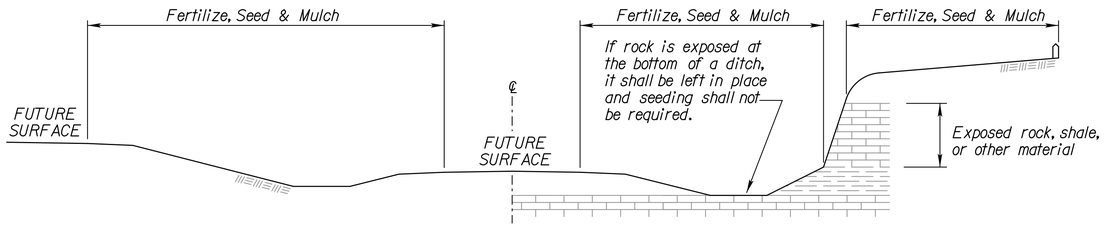
CONSTRUCTION CLEARANCE DETAILS

* *Clearances may not be attainable at all locations. If the clearances cannot be met, see the Construction Layout sheet for a sketch of Railroad approved clearances.*

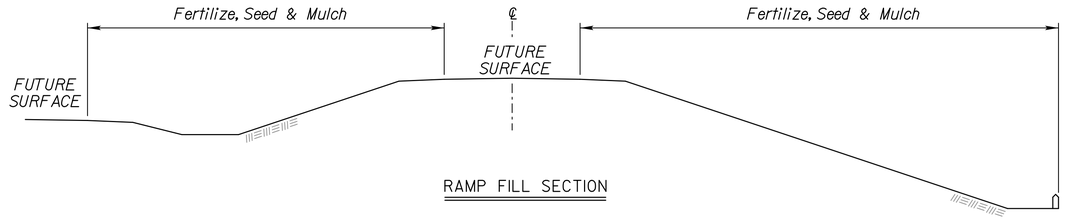
** *21'-6" is preferred 21'-0" is the Railroad Minimum*

RAILROAD PROTECTION: If removal of concrete is required through the full thickness of the deck (i.e. full depth patching, edge of slab removal, or complete deck replacement), then the Contractor shall execute the work in such a manner and take any precautions necessary to prohibit broken concrete and other debris from falling on and damaging the rails, ties, ballast or other railroad property. As much as possible, do the work so as not to interfere with the normal use of the tracks. The Railroad Company and the Engineer shall approve the methods of protection proposed by the Contractor before any work begins.

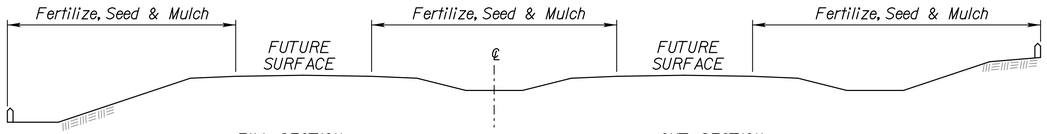
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	56-46 KA 2789-01	2013		



RAMP CUT SECTION



RAMP FILL SECTION



TYPICAL SECTION - DUAL PAVEMENT

SOIL EROSION MIX

PLS RATE	NAME	QTY (lb)
	Total (lb)	

FERTILIZER: A ratio and application rate that equals or exceeds the required minimum rate per acre of N, P_2O_5, K_2O listed in Summary of Quantities will be acceptable.

x - N = Nitrogen Rate of Application

xx - P_2O_5 = Phosphorous Rate of Application

xxx - K_2O = Potassium Rate of Application

The Contractor will be required to finish areas of excavation, borrow and embankment in accordance with the specifications. Areas that require installation or construction of temporary water pollution control items will be finished in reasonable close conformity to the alignment, grade and cross section shown on the plans or as established by the Engineer.

NOTE: Projects of less than 1 acre shall be bid as "Seeding" by the lump sum. All disturbed areas shall be seeded, fertilized and mulched at the listed rate per acre. The acres are estimated.
CLT = Construction Limit Tract. This area does not include the channel/slope area and shall be seeded in accordance with the chart to the right.
Channel = This is the area that shall be seeded prior to placement of the Erosion Control. Broadcasting seed is preferred, however, drilling is acceptable
Slope = This is the area that shall be seeded prior to placement of the Erosion Control. Broadcasting seed is preferred, however, drilling is acceptable.

GENERAL NOTES

The entire disturbed area, excepting the paved or surfaced areas, steep rocky slopes and areas of undisturbed native sod or other desirable vegetation shall be fertilized (limed when required), seeded, and mulched. Soil preparation shall conform to the Standard Specifications.

Temporary seeding shall be done during any time of the year that the soil can be cultivated. After the temporary seeding has been completed on the entire project, a permanent seeding shall be done by another project during the normal seeding season.

MULCHING: Mulch shall be spread uniformly over all disturbed areas and punched in the soil, unless otherwise noted on the plans. The rate of application per acre, thickness in place, for the mulching materials is as follows:

1¾ - 2¼ Tons per Acre = 1½" loose depth spread uniformly over acre.

Agricultural products, such as native prairie hay, used for mulching and erosion control practices, excluding wood based mulch, shall meet the North American Weed Free Forage Standards.
Other vegetative mulches acceptable only with the Engineer's concurrance.

The above rate is a guide. It will be at the discretion of the Engineer to determine what rate is sufficient for adequate protection of newly seeded areas.
The amount of mulch and mulch tacking slurry in the bid quantities is estimated. The total mulch and mulch tacking slurry required shall be determined in the field. The bid item for mulching and mulch tacking slurry shall be paid for by one of the following ways: A) Plan quantity as shown on Summary of Quantities, Seeding Sheet or Water Pollution Control Sheet, B) Slope measurement as measured in field, or C) Drill measurement less 5% as measured at the time of seeding.

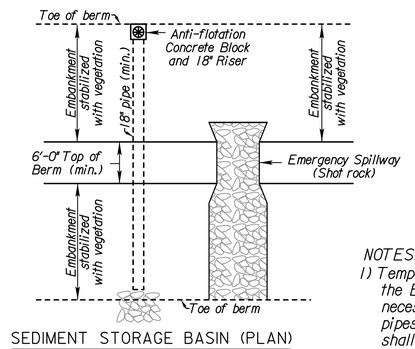
SUMMARY OF SEEDING QUANTITIES: PROJECTS OF 1 ACRE OR MORE

P.L.S. RATE/ ACRE		ACRES		BID ITEM	QUANTITY	UNIT
CLT	Slope	CLT	Slope			
				Temporary Fertilizer (xx - xx - x)		Lb
				Temporary Seed (Canada Wildrye Grass Seed)		Lb
				Temporary Seed (Sterile Wheatgrass)		Lb
				Soil Erosion Mix		Lb
				Agricultural Limestone		Tons
				Temporary Berm		LF
				Temporary Ditch Check (Rock) (Set Price)		Cu Yd
				Temporary Ditch Check		LF
				Temporary Inlet Sediment Barrier		Each
				Curb Inlet Protection		LF
				Temporary Sediment Basin		Cu Yd
				Temporary Slope Barrier (Set Price)		LF
				Temporary Slope Drain		LF
				Temporary Stream Crossing		Each
				Sediment Removal (Set Price)		Cu Yd
				Mobilization, Emergency Erosion Control (Set Price)		Each
				Erosion Control (Class X, Type Y)		Sq Yd
				Mulch Tacking Slurry		Ac
				Mulching (Temporary)		Ac

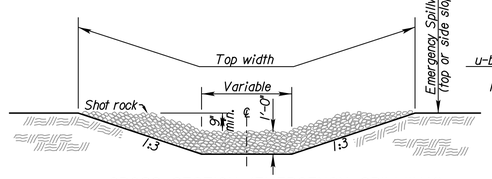
SUMMARY OF SEEDING QUANTITIES: PROJECTS LESS THAN 1 ACRE

P.L.S. RATE/ ACRE		ACRES		BID ITEM	QUANTITY	UNIT
CLT	Slope	CLT	Slope			
				Temporary Fertilizer ( )		Lb
				Temporary Seed (Canada Wildrye Grass Seed)		Lb
				Temporary Seed (Sterile Wheatgrass)		Lb
				Soil Erosion Mix		Lb
				Agricultural Limestone		Tons
				Temporary Seeding		LS
				Temporary Ditch Check (Rock) (Set Price)	1	Cu Yd
				Temporary Ditch Check		LF
				Temporary Slope Barrier (Set Price)	1	LF
				Sediment Removal (Set Price)	1	Cu Yd
				Mobilization, Emergency Erosion Control (Set Price)	1	Each
				Erosion Control (Class X, Type Y)		Sq Yd
				Mulch Tacking Slurry		Ac
				Mulching (Temporary)		Ac

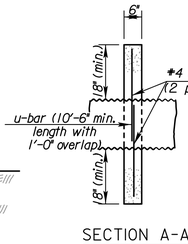
Regreen and Quick Guard are the approved sterile wheatgrass products.



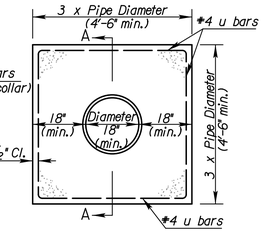
SEDIMENT STORAGE BASIN (PLAN)



CROSS SECTION (EMERGENCY SPILLWAY)



SECTION A-A

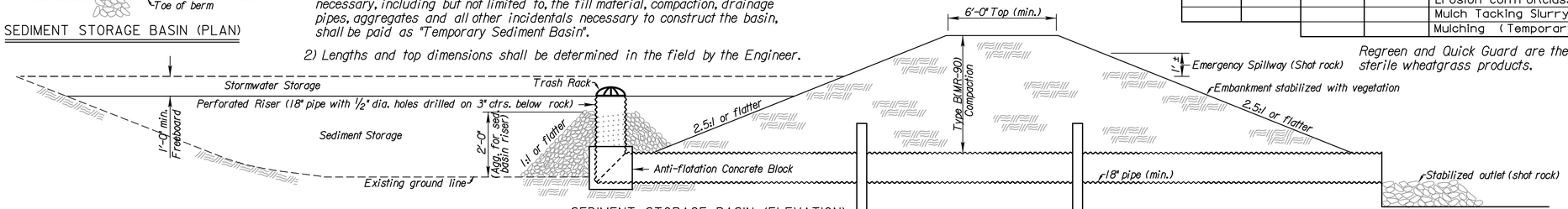


CONCRETE ANTI-SEEP COLLAR

NOTES:

1) Temporary Sediment Basins shall be constructed at locations as directed by the Engineer or as approved in the SWPPP Schedule. All work and materials necessary, including but not limited to, the fill material, compaction, drainage pipes, aggregates and all other incidentals necessary to construct the basin, shall be paid as "Temporary Sediment Basin".

2) Lengths and top dimensions shall be determined in the field by the Engineer.



SEDIMENT STORAGE BASIN (ELEVATION)

NO.	DATE	REVISIONS	BY	APP'D
3	3/01/10	Revised Standard	MRM	SHS
2	7/08/09	Revised Standard	MRM	SHS
1	5/29/07	Revised Standard	MRM	SHS

KANSAS DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION AND POLLUTION CONTROL

LA852A

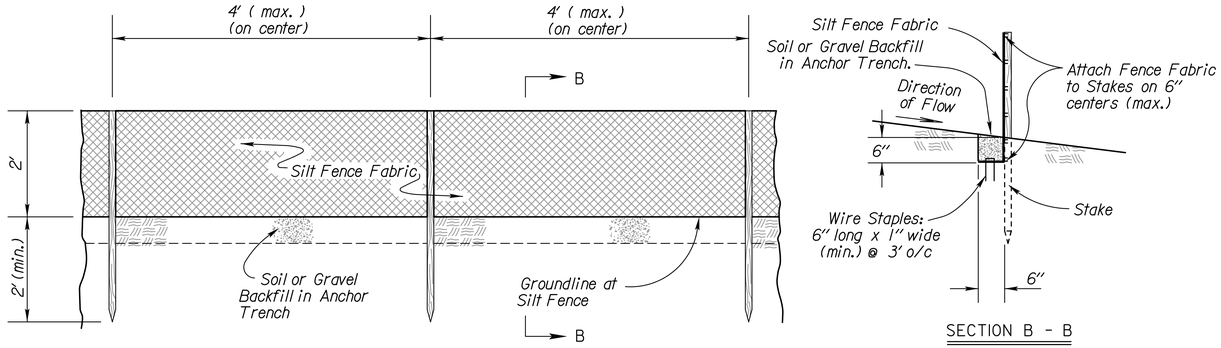
FHWA APPROVAL		11/02/2009	APP'D	Scott H. Shields	
DESIGNED	BB	DETAILED BB	QUANTITIES	CADD	BB
DESIGN CK.	SHS	DETAIL CK. SHS	QUAN.CK.	CADD CK.	SHS

KDOT Graphics Certified 02-28-2013

KDOT Graphics Certified

Std. Base File:
Plotted By: melissa | Plot Location: Landscape
File: la852a.dgn
Plot Date: 28-FEB-2013 14:26

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				



TYPICAL ELEVATION

SECTION B - B

SILT FENCE SLOPE BARRIER

NO SCALE

INSTALLATION NOTES

STRAW OR HAY BALES:

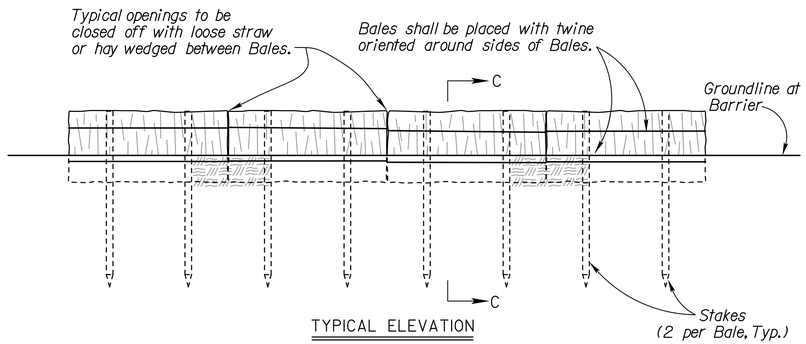
1. Place bales tightly together, with loose straw or hay wedged between bales to close off openings.
2. Wood stakes shall be 2" x 2" (nom.) x 4' (min.) long.
3. Refer to plans sheets to estimate the length of bales required.
4. Use only twine to bind bales. The use of wire binding is prohibited because it does not readily biodegrade.

SILT FENCE:

1. Stakes shall be 4' (min.) long and of one of the following materials:
   a. Hardwood - 1 3/16" x 1 3/16";
   b. Southern Pine (No. 2) - 2 5/8" x 2 5/8";
   c. Steel U, T, L, or C Section - 1.33 lbs. per 1'-0"; or
   d. Synthetic - same strength as wood stakes.
2. Attach fence fabric to stakes with staples, wire or nails.
3. Refer to plan sheets to estimate the length of Silt Fence required.

BIODEGRADABLE LOG BARRIERS

1. Place biodegradable logs tightly together.
2. Wood stakes shall be 2" x 2" (nom.).
3. Wire staples shall be 6" long x 1" wide (min.) and placed on 3' (max.) centers.
4. Refer to plan sheets to estimate length of biodegradable log barriers required.
5. Logs should be keyed into the ground at a minimum of 25% of its height.
6. Length of stakes should be 2 times the height of the log at a minimum.



TYPICAL ELEVATION

SECTION C - C

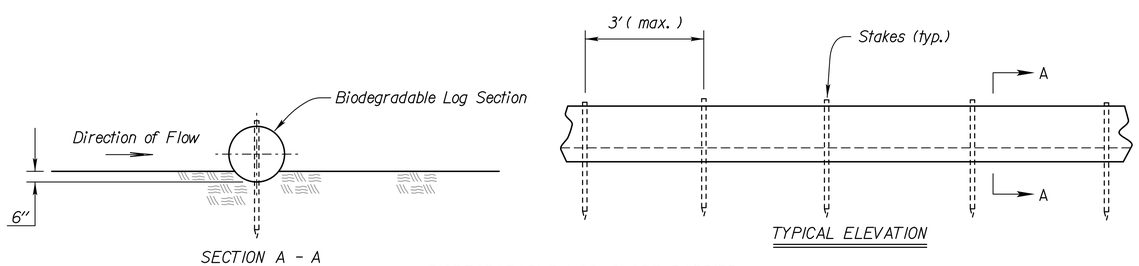
STRAW BALE SLOPE BARRIER

NO SCALE

Biodegradable Logs, Straw Wattles & Sediment Logs

		PRODUCT		
		9" Sediment Log & 9" Straw Wattle (ft)	12" Sediment Log & 12" Straw Wattle (ft)	20" Sediment Log & 20" Straw Wattle (ft)
Slope Gradient	≤4H:1V	40	60	80
	3H:1V	30	45	60
	2H:1V	20	30	40
	1H:1V	10	15	20

9" and 12" material should only be used in areas which have been seeded and mulched. 20" material should be used in all other areas. Deviations should be approved by the Field Engineer.



SECTION A - A

TYPICAL ELEVATION

BIODEGRADABLE LOG SLOPE BARRIER

NO SCALE

GENERAL NOTES

1) The use of Straw or Hay Bales, Silt Fence or Biodegradable Logs is at the option of the Contractor.
2) The slope barriers shall be placed along contour lines, with a short section turned upgrade at each end of the barrier. The maximum length of the slope barrier shall not exceed 250 feet, and the barrier ends need to be staggered.
3) At culverts, the Straw or Hay Bales or Silt Fence shall be placed over the culvert, not through the streambed flowline.
4) Barriers damaged by Contractor's negligence, including improper maintenance or lack of maintenance, shall be repaired immediately by Contractor at no additional cost to KDOT.
5) Agricultural products, such as native prairie hay, used for mulching and erosion control practices, excluding wood based mulch, shall meet the North American Weed Free Forage Standards.

NO.	DATE	REVISIONS	BY	APP'D
3	9/01/10	Edited Biodegradable Log Notes	MRM	SHS
2	8/26/09	Revised Standard	MRM	SHS
1	5/11/09	Revised Standard	MRM	SHS

KANSAS DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION AND POLLUTION CONTROL
STRAW OR HAY BALE SLOPE BARRIERS
SILT FENCE SLOPE BARRIERS
BIODEGRADABLE LOG SLOPE BARRIERS

LA852D

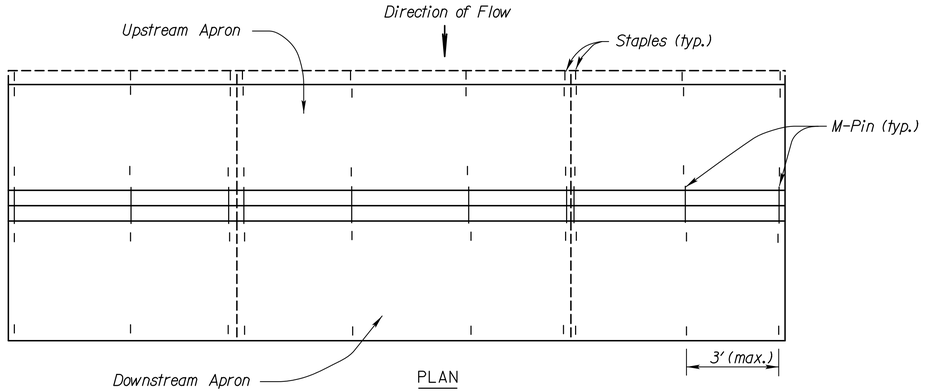
FHWA APPROVAL		9/21/2010	APP'D	Scott H. Shields	
DESIGNED	MRM	DETAILED	MRM	QUANTITIES	CADD
DESIGN CK.	SHS	DETAIL CK.	SHS	QUAN.CK.	CADD CK.

KDOT Graphics Certified 02-28-2013

KDOT Graphics Certified

Std. Base File:
Plotted By: melissa | Plot Location: Landscape
File: la852d.dgn
Plot Date: 28-FEB-2013 14:26

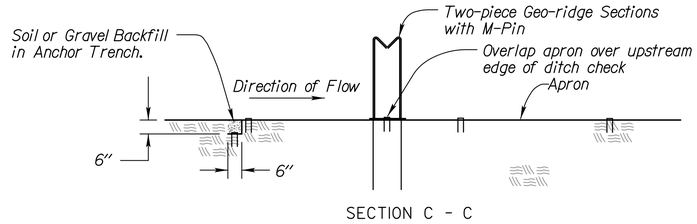
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				



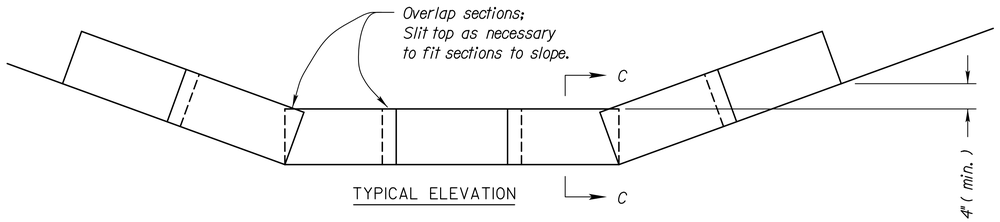
PLAN

GEO-RIDGE PERMEABLE BERM NOTES

1. Overlap Geo-ridge Berm sections and apron material by 6".
2. Use M-Pins supplied by manufacturer to secure geo-ridge Berm sections.
3. Use as many Geo-ridge Berm sections as necessary to insure water does not flow around end of ditch check.
4. Use silt fence material as the apron to prevent scour above and below the ditch check.
5. Wire Staples shall be 6" long by 1" wide, minimum.



SECTION C - C



TYPICAL ELEVATION

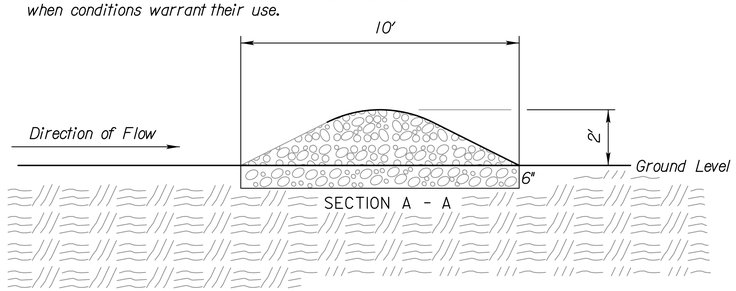
GEO-RIDGE PERMEABLE BERM DITCH CHECK

NO SCALE

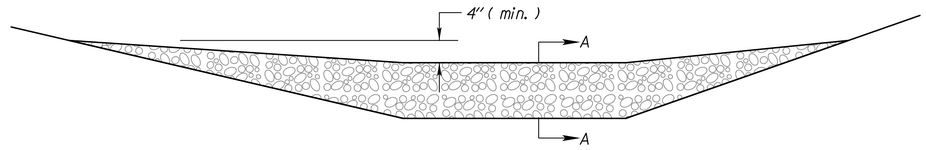
ROCK DITCH CHECK NOTES

1. Rock shall be clean aggregate, D50 = 6".
2. Place rock in such manner that water will flow over, not around ditch check.
3. Do not use rock ditch checks in clear zone.
4. Excavation: The ditch area shall be reshaped to fill any eroded areas. Prior to placement of the rock, the ditch shall be excavated to the dimensions of the Rock Ditch Check and to a minimum depth of 6" (150mm). After placement of the rock, backfill and compact any over excavated soil to ditch grade. This work shall be subsidiary to the bid item Temporary Ditch Check (Rock) (Set Price).
5. Aggregate excavated on site may be used as an alternate to the 6" rock, if approved by the Engineer.
6. The Engineer may approve the use of larger aggregates when conditions warrant their use.

TEMPORARY ROCK DITCH CHECK SPACING	
DITCH ℄ SLOPE (%)	SPACING INTERVAL (FEET)
5.0	60
6.0	50
7.0	43
8.0	36
9.0	33
10.0	29
NOTE: Use this spacing only for Rock Ditch Checks.	



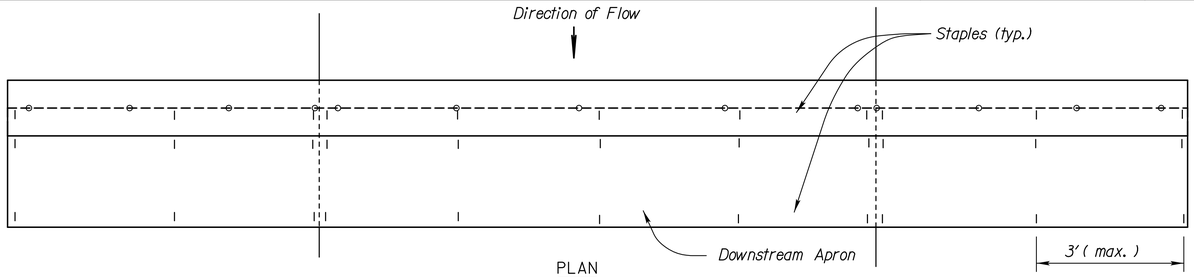
SECTION A - A



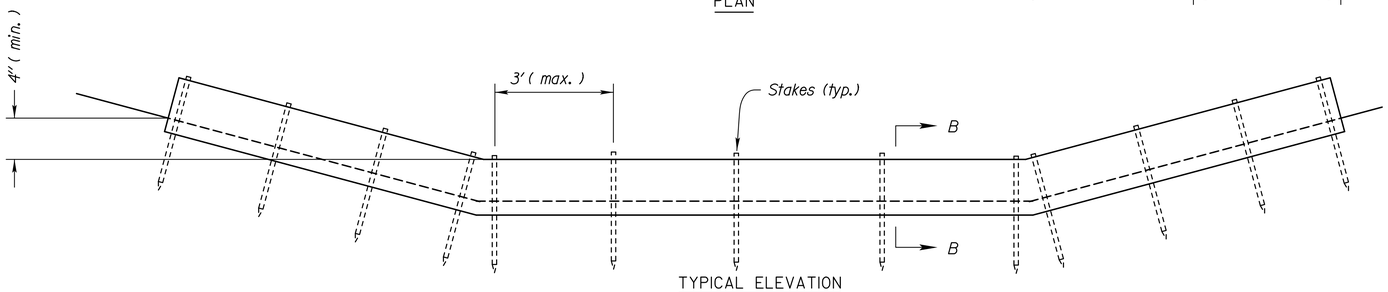
TYPICAL ELEVATION

ROCK DITCH CHECK

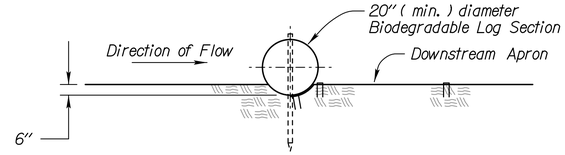
NO SCALE



PLAN



TYPICAL ELEVATION



SECTION B - B

BIODEGRADABLE LOG DIKE NOTES

1. Place biodegradable logs tightly together, with apron material overlapping end-to-end by 6".
2. Wire staples shall be 6" long by 1" wide, minimum.
3. Use as many biodegradable log sections as necessary to insure water does not flow around end of ditch check.
4. Wood stakes shall be 2" x 2" (nom.) x 4' (min.) long.
5. Use silt fence material as the downstream apron to prevent scour below the ditch check.

BIODEGRADABLE LOG DITCH CHECK

NO SCALE

NO.	DATE	REVISIONS	BY	APP'D
	9/01/10	Revised Standard	MRM	SHS
2	12/31/09	Revised Standard	MRM	SHS
1	5/03/06	Revised Standard	MRM	SHS

KANSAS DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION AND POLLUTION CONTROL
ROCK DITCH CHECKS
BIODEGRADABLE LOG DITCH CHECKS
GEO-RIDGE PERMEABLE BERM DITCH CHECKS

LA852G

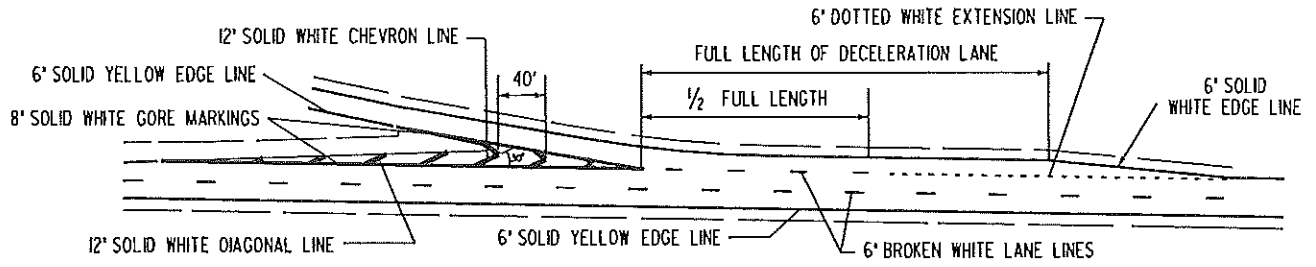
FHWA APPROVAL		9/21/2010	APP'D	Scott H. Shields
DESIGNED	MRM	DETAILED	MRM	QUANTITIES	CADD
DESIGN CK.	SHS	DETAIL CK.	SHS	QUAN.CK.	CADD CK.

KDOT Graphics Certified 02-28-2013

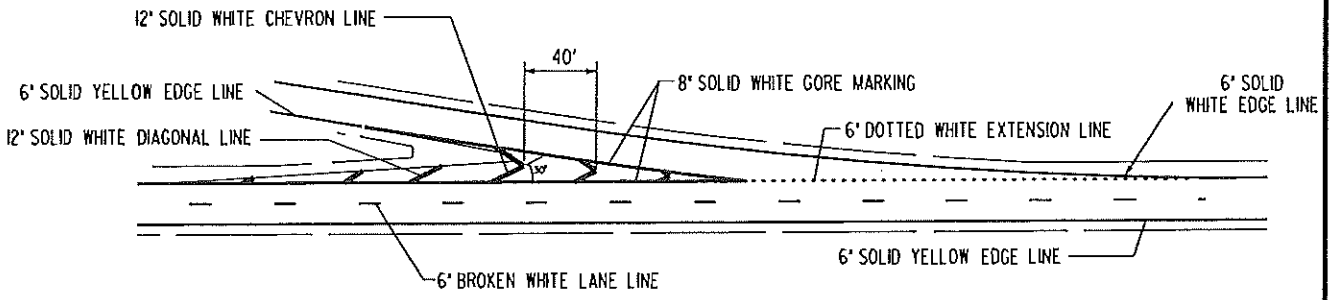
Sheet No. 67

Std. Base File: la852g.dgn
Plotted By: melissa
File: la852g.dgn
Plot Date: 28-FEB-2013 14:26
Plot Location: Landscape

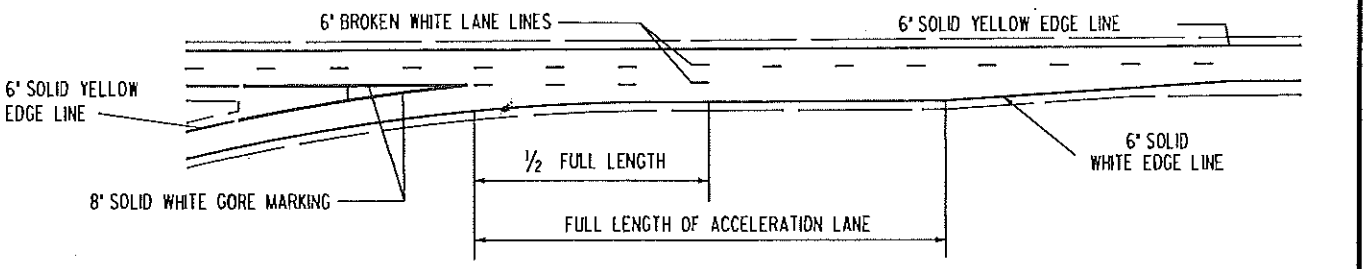
KDOT Graphics Certified



TYPICAL DECELERATION EXIT RAMP

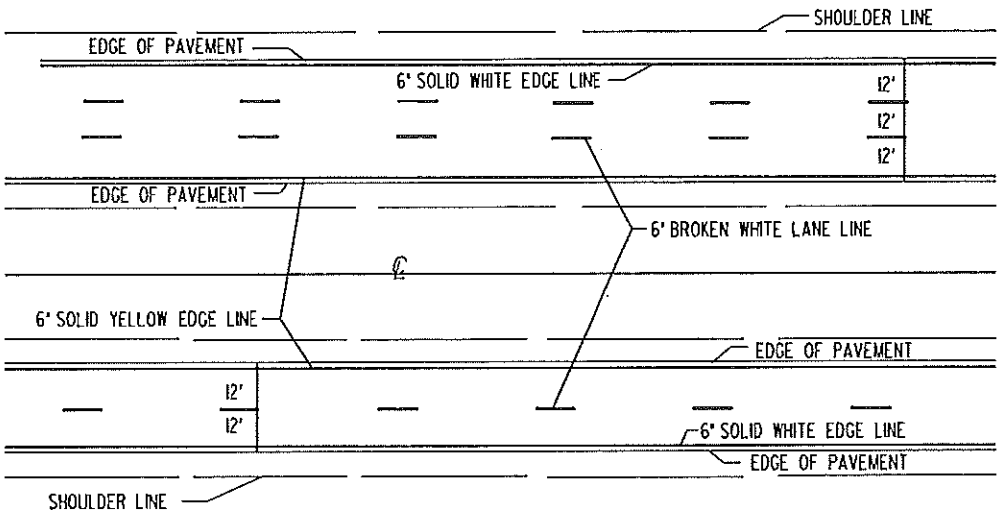


TYPICAL TAPERED EXIT RAMP

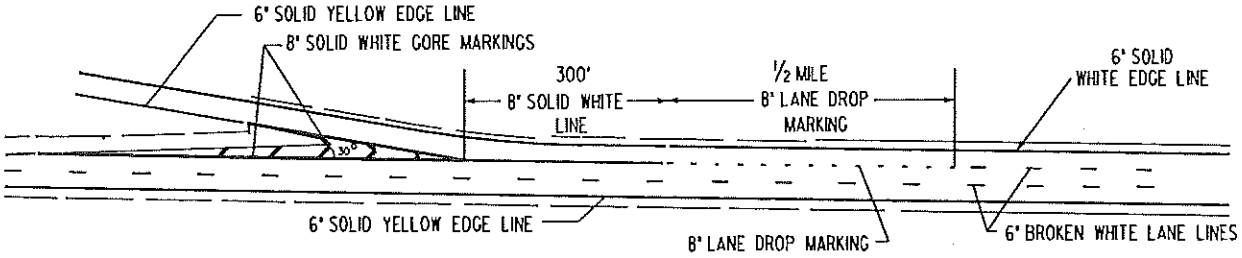


TYPICAL ACCELERATION RAMP

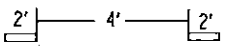
TYPICAL PAVEMENT MARKING DETAILS FOR MULTI-LANE DIVIDED ROADWAYS (1OF2)	TE 307		



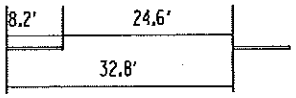
TYPICAL LANE LINE AND EDGE LINE MARKINGS
FOR FOUR LANE AND SIX LANE DIVIDED HIGHWAYS



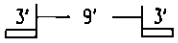
TYPICAL LANE DROP



TYPICAL SPACING
FOR DOTTED EXTENSION
LINES, UNLESS OTHERWISE
NOTED ON PLANS.



TYPICAL SPACING
FOR BROKEN LINES
UNLESS OTHERWISE
NOTED ON PLANS.

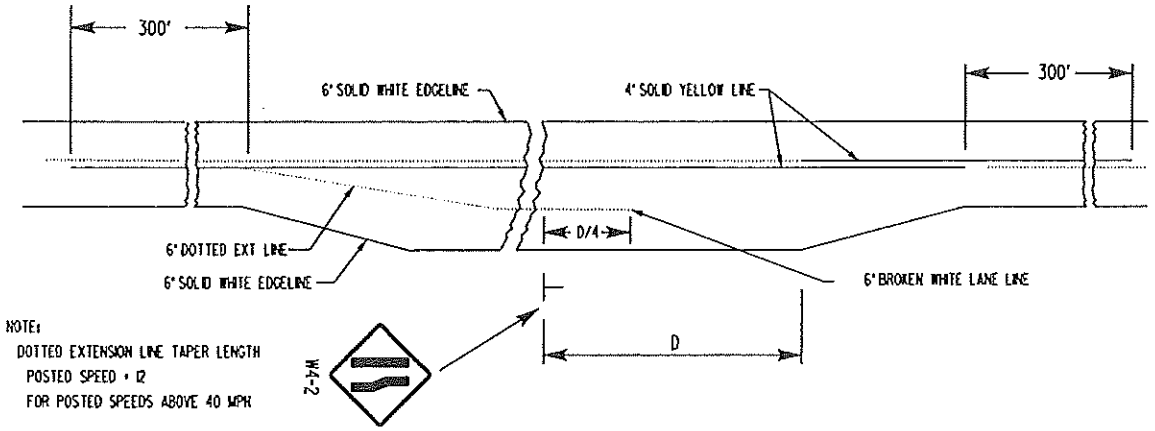


TYPICAL SPACING
FOR LANE DROP.
UNLESS OTHERWISE
NOTED ON PLANS.

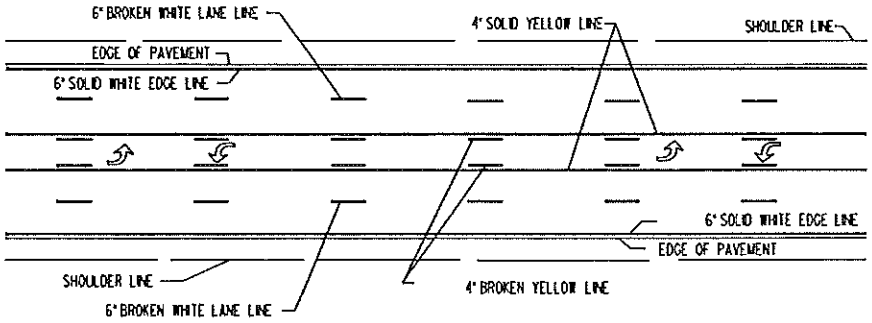
NOTE:
LONGITUDINAL PAVEMENT MARKING LINES SHALL BE OFFSET A MINIMUM OF 2' FROM LONGITUDINAL PAVEMENT JOINTS.

NOTE:
AT RAMP TERMINALS WITH CROSS-ROADS, WRAP 6" EDGE LINES ARDUND RADII.

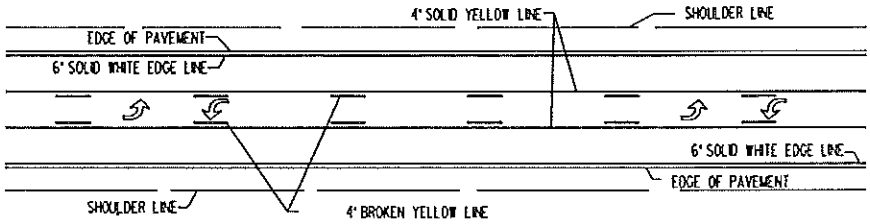
NOTE:
ON NON I, US, AND K ROUTES, 4" EDGE LINES MAY BE INSTALLED. 6" EDGE LINES ARE NOT REQUIRED ON NON I, US, AND K ROUTES.



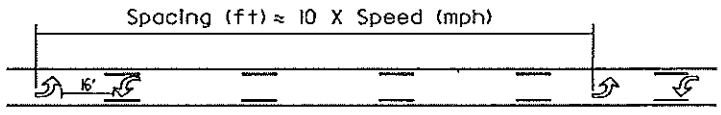
TYPICAL MARKING FOR AUXILIARY PASSING LANE



TWO-WAY LEFT TURN DETAIL FOR FIVE LANE ROADWAY

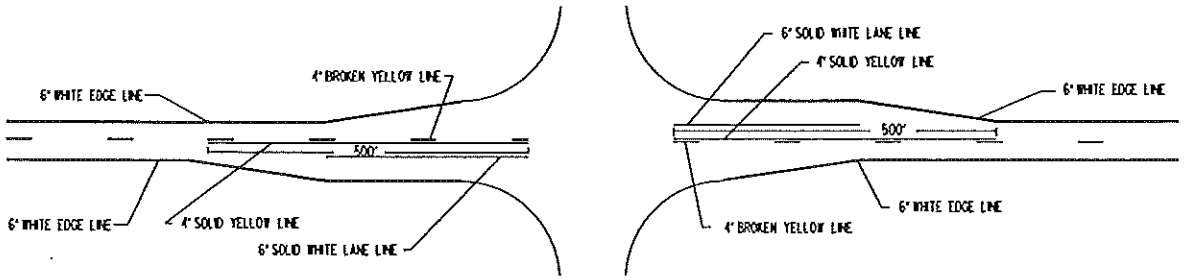


TWO-WAY LEFT TURN DETAIL FOR THREE LANE ROADWAY

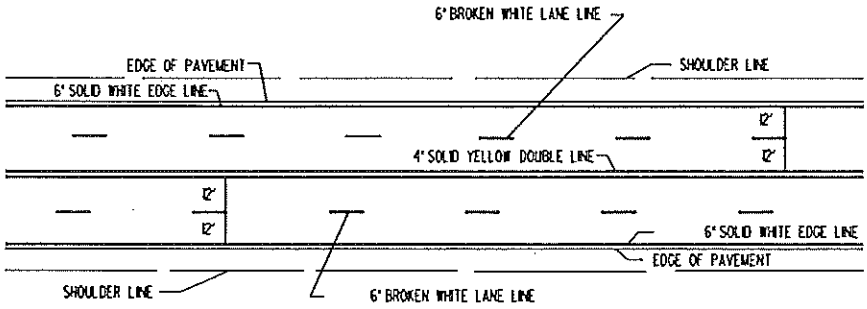


TWO-WAY LEFT TURN ARROW SPACING DETAIL

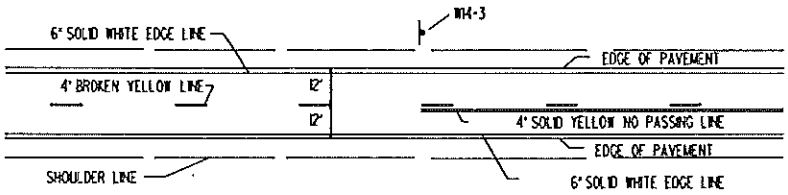
NOTE: If arrows are used space the arrows as shown in the spacing detail



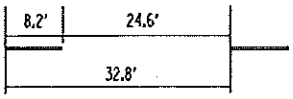
TYPICAL ROAD JUNCTION MARKINGS WITH BYPASS LANES



TYPICAL MARKINGS FOR FOUR LANE ROADWAY



TYPICAL TWO LANE MARKINGS



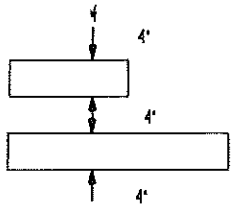
TYPICAL SPACING FOR BROKEN LINES UNLESS OTHERWISE NOTED ON PLANS

NOTE: ALL PAVEMENT MARKINGS SHALL BE BROKEN AT CROSS ROADS.

FOR HIGHWAY JUNCTIONS THE NO PASSING ZONE WILL EXTEND 1000' FROM INTERSECTION

NOTE:
LONGITUDINAL PAVEMENT MARKING LINES SHALL BE OFFSET A MINIMUM OF 2" FROM LONGITUDINAL PAVEMENT JOINTS.

NOTE:
ON NON I, US, AND K ROUTES, 4" EDGE LINES MAY BE INSTALLED. 6" EDGE LINES ARE NOT REQUIRED ON NON I, US, AND K ROUTES.



TYPICAL SPACING FOR NO PASSING LINES UNLESS OTHERWISE NOTED ON PLANS

SUMMARY OF PAVEMENT MARKINGS

LOCATION	6" Solid WHITE Edge Line	6" Broken WHITE Lane Line	6" Dotted WHITE Extension Line	6" Solid WHITE Lane Line	8" Solid WHITE Gore Line	12" Solid WHITE Diagonal Line	12" Solid WHITE Chevron Line	12" Solid WHITE Type I Crosswalk Line	24" Solid WHITE Type II Crosswalk Line	24" Solid WHITE Stop Line	4" Solid YELLOW Double Line	4" Solid YELLOW Line	4" Broken YELLOW Line	6" Solid YELLOW Edge Line	12" Solid YELLOW Diagonal Line
East Bound 56 - BR 269	180	48									180				
West Bound 56 - BR 269	180	96													
East Bound 56 - BR 270	480	160													
West Bound 56 - BR 270	480	160									480				
											1150				
Bewteen Bridges															
TOTALS	1320	464	0	0	0	0	0	0	0	0	3620	0	0	0	0

NOTE: For Specific pavement marking details and dimensions see plan sheets

NOTE: ALL TOTALS REFLECT ACTUAL QUANTITY OF
PAVEMENT MARKING MATERIALS REQUIRED

Project No. 56-46 KA 2789-01

Project No. 56-46 KA 2789-01

RECAPITULATION OF QUANTITIES

ITEMS	TOTAL	UNITS
PAVEMENT MARKING (MULTI-COMPONENT)(WHITE)(4")		lnft
PAVEMENT MARKING (MULTI-COMPONENT)(WHITE)(6")	1784	lnft
PAVEMENT MARKING (MULTI-COMPONENT)(WHITE)(8")		lnft
PAVEMENT MARKING (MULTI-COMPONENT)(WHITE)(12")		lnft
PAVEMENT MARKING (MULTI-COMPONENT)(YELLOW)(4")	3620	lnft
PAVEMENT MARKING (MULTI-COMPONENT)(YELLOW)(6")		lnft
PAVEMENT MARKING (MULTI-COMPONENT)(YELLOW)(12")		lnft
PAVEMENT MARKING (EPOXY)(WHITE)(4")		lnft
PAVEMENT MARKING (EPOXY)(WHITE)(6")		lnft
PAVEMENT MARKING (EPOXY)(WHITE)(8")		lnft
PAVEMENT MARKING (EPOXY)(WHITE)(12")		lnft
PAVEMENT MARKING (EPOXY)(YELLOW)(4")		lnft
PAVEMENT MARKING (EPOXY)(YELLOW)(6")		lnft
PAVEMENT MARKING (EPOXY)(YELLOW)(12")		lnft
PAVEMENT MARKING (INTERSECTION GRADE) (WHITE) (12")		lnft
PAVEMENT MARKING (INTERSECTION GRADE)(WHITE)(24")		lnft
PAVEMENT MARKING (INTERSECTION GRADE)(YELLOW)(12")		lnft
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE) (WHITE) (R/R XING)		EACH
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE) (WHITE) (Lt Turn Arrow)		EACH
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE) (WHITE) (Rt Turn Arrow)		EACH
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE) (WHITE) (ONLY)		EACH
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE) (WHITE) (Rt/Thru Arrow)		EACH
PAVEMENT MARKING REMOVAL	2,300	lnft

NOTE:

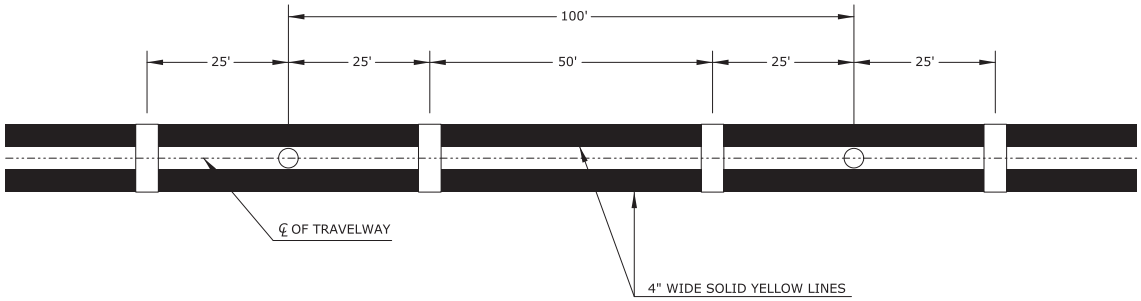
WORDS & SYMBOLS SHALL CONFORM TO THE LATEST EDITION OF "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" PRINTED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.

PRIOR TO COMMENCEMENT OF PAVEMENT MARKING WORK THE ENGINEER WILL ESTABLISH THE LIMITS FOR "NO PASSING" ZONES. THESE LIMITS SHALL BE USED FOR THE LOCATION OF " NO PASSING" LINES AND FOR THE COMPUTATION OF ACTUAL MARKING QUANTITIES FOR THIS LINE TYPE

REFER TO STD. TE702 FOR INFORMATION ON CHANNELIZING DEVICES.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	XX-XX XX-XXXX-XX	XXXX	XXX	XXX

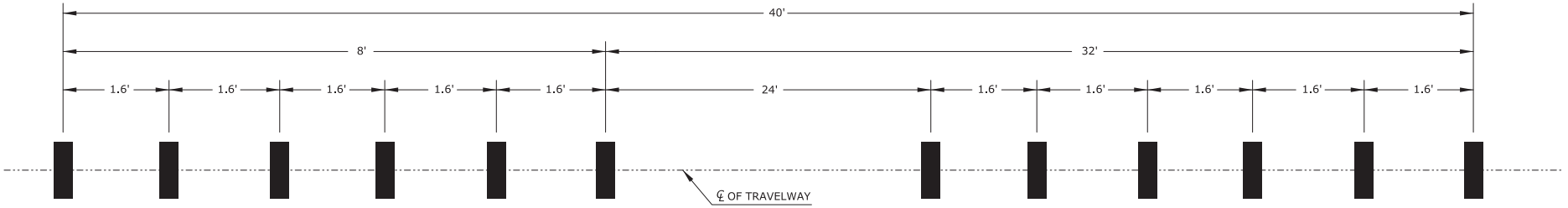
TUBULAR MARKER - TEMPORARY RAISED PAVEMENT MARKERS (TYPE II)
TWO-LANE, TWO WAY TRAFFIC ON
INTERSTATE ROADS & OTHER FREEWAYS



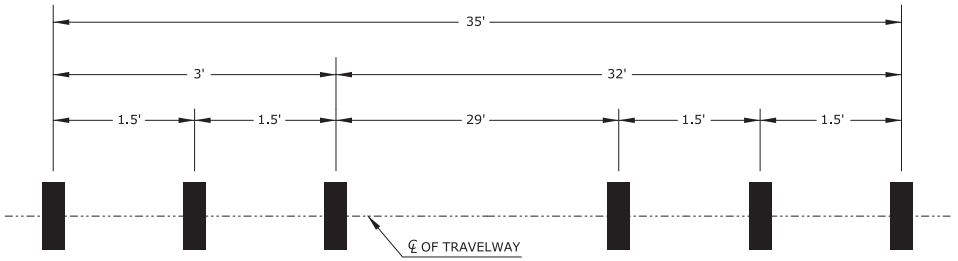
- TUBULAR MARKER

- TEMPORARY RAISED PAVEMENT MARKER (TYPE II)

FLEXIBLE RAISED PAVEMENT MARKERS
(INTERSTATE)



FLEXIBLE RAISED PAVEMENT MARKERS
(NON-INTERSTATE)



- FLEXIBLE RAISED PAVEMENT MARKER

NO.	DATE	REVISIONS	BY	APP'D
3				
2	10/16/12	Adjusted Flexible RPM Spacing	J.A.M.	K.P.
1	10/4/11	Added RPM Detail For Interstate	J.A.M.	K.P.

KANSAS DEPARTMENT OF TRANSPORTATION

TYPICAL TRAFFIC CONTROL
TEMPORARY RAISED
PAVEMENT MARKERS (TYPE II)
& FLEXIBLE RAISED PAVEMENT
MARKERS SPACING

TE743

FHWA APPROVAL		10/16/12	APP'D	Kristina Pyle	
DESIGNED	J.A.M.	DETAILED	J.A.M.	QUANTITIES	TRACED
DESIGN CK.		DETAIL CK.		QUAN. CK.	TRACE CK.

KDOT Graphics Certified 10-23-2012

Sh. No. XXX

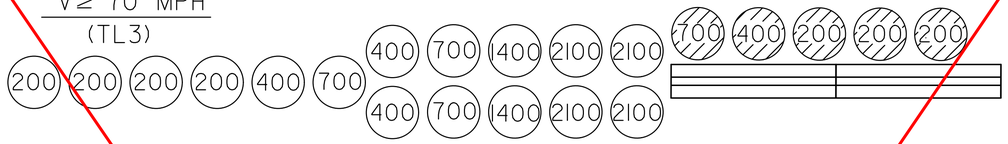
KDOT Graphics Certified

Plotted : 24-OCT-2012 07:54
Traffic

Drawn By : jmadrid
File : te743.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	56-46 KA 2789-01			

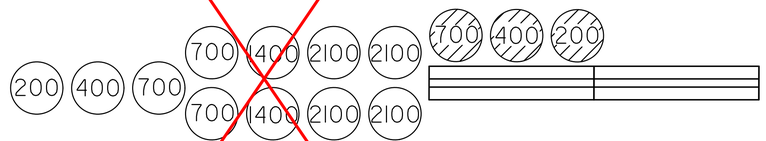
V≥ 70 MPH
(TL3)



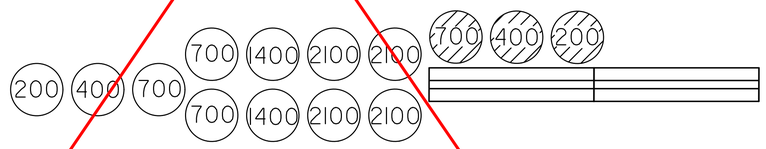
V= 65 MPH
(TL3)

V= 60 MPH
(TL3)

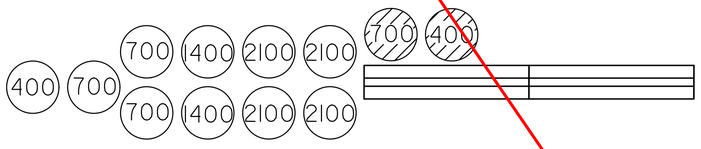
V= 55 MPH
(TL3)



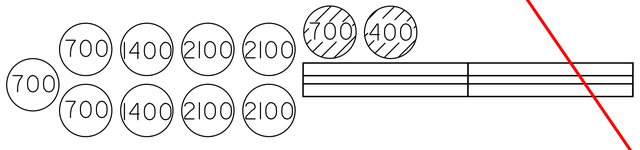
V= 50 MPH
(TL3)



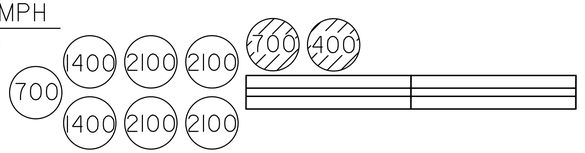
V= 45 MPH
(TL2)



V= 40 MPH
(TL2)



V= 35 MPH
(TL2)



INERTIAL BARRIER SYSTEM			
Station	*Side*	*Design Speed*	*Comments*
		35MPH	

GENERAL NOTE

This drawing details general configurations for Inertial Barrier Systems. Some project specific conditions may require variations which are designed to meet prevailing criteria.

Use Inertial Barrier System consisting of the units as shown for the specified design speed, all hardware and attachments.

Install Inertial Barrier System on a flat, stable base with cross-slope no steeper than 10:1. See Manufacturer's recommendations for module materials and method of installation.

See standard specifications for mixture to fill modules requirements.

Provide a 6" spacing between modules and one foot between the end of concrete barrier or other rigid object.

When installed as part of project traffic control, the bid item "Inertial Barrier" includes the original installation and required relocations.

Keep available replacement modules to replace any size module used on site, Engineer's direction.

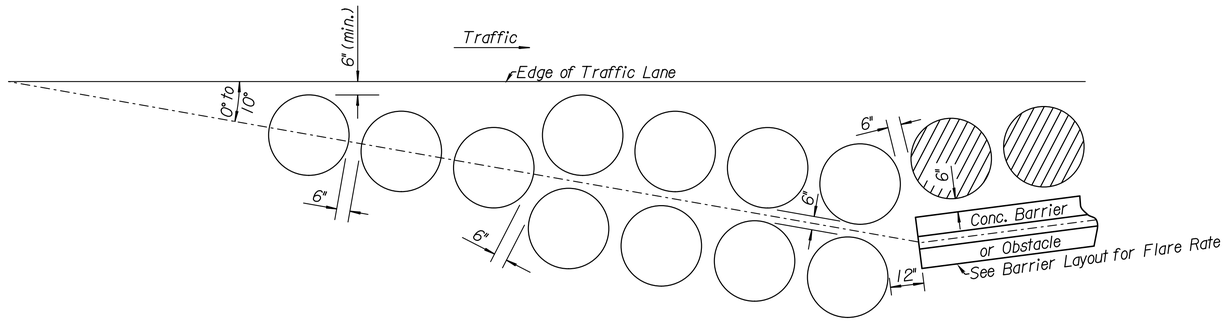
Inertial Barrier System modules damaged by the Contractor during relocation of Inertial Barrier System are replaced at the Contractor's expense.

Module weights shown are in pounds.

Install 270 square inches of Type II High Performance (vertical, rectangular or diamond shape) reflective sheeting on first module of Inertial Barrier System facing traffic.

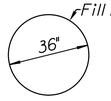
Where sufficient space is available the Inertial Barrier System may be aligned at an angle, not to exceed 10°, in the direction of approach traffic.

No portion of the system shall encroach into the approach traffic lane.



TYPICAL PLAN of INERTIAL BARRIER

When two-way traffic is adjacent to only one side of Concrete Barrier or Obstacle, these additional modules will be placed on the Traffic Side of Concrete Barrier or Obstacle. Traffic adjacent to both sides of the Concrete Barrier or Obstacle require an additional set of modules each side if approach traffic is exposed to the back portion of the Inertial Barrier. These additional modules are not required along the sides of Concrete Barrier or Obstacle when it's location is outside the Clear Zone or one-way directional traffic.



PLAN
Replacement Module

NO.	DATE	REVISIONS	BY	APP'D
6	2-3-12	Revised General Note	S.W.K.	J.O.B.
5	6-27-11	Rdvised notes & Typical Plan detail	S.W.K.	J.O.B.
4	9-10-09	Impact Attenuator to Inertial Barrier	S.W.K.	J.O.B.
3	12-10-08	Add. modules, replacement, std. title	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

INERTIAL BARRIER (TL2 or TL3)

RD620

FHWA APPROVAL	4-25-12	APP'D. James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK. King

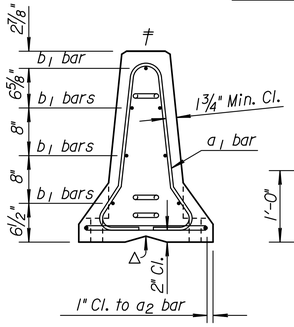
KDOT Graphics Certified 04-26-2012

KDOT Graphics Certified

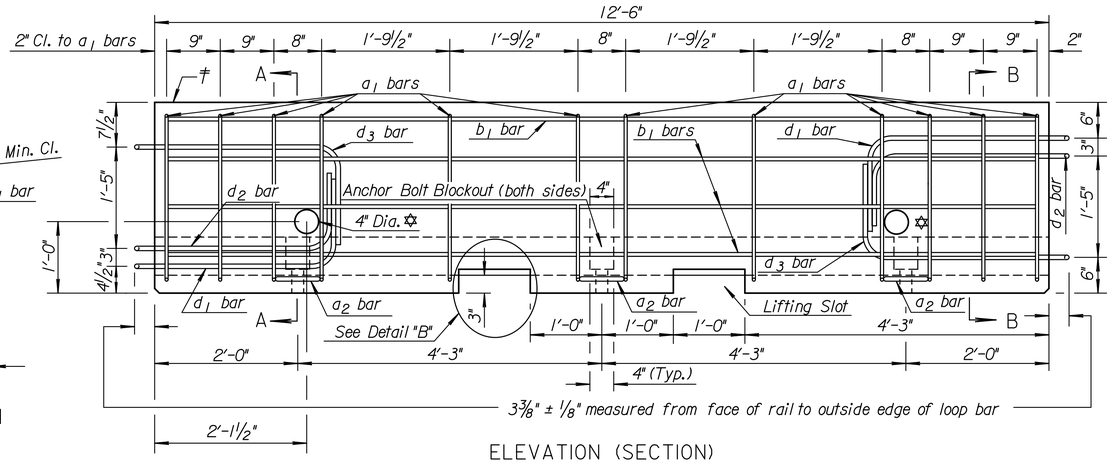
Plotted : 26-APR-2012 16:42

Drawn By : trhoads
File : rd620.dgn (rd620)

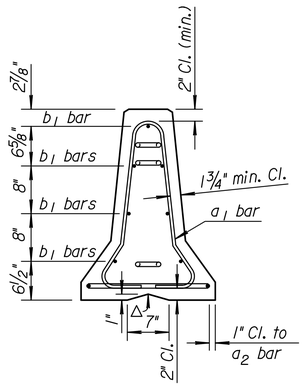
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				



SECTION A-A
TYPICAL SECTION
(Stirrup Placement)

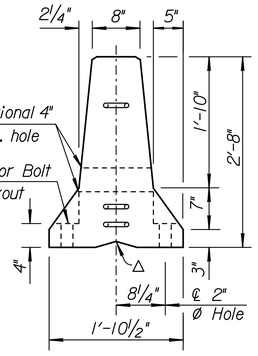


ELEVATION (SECTION)

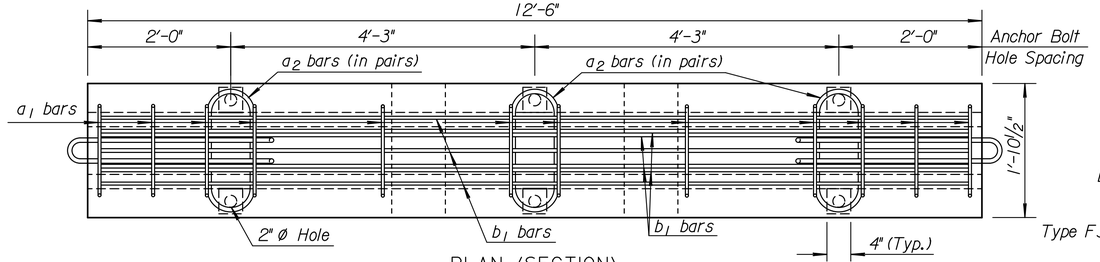


SECTION B-B
TYPICAL SECTION
(Stirrup Placement)

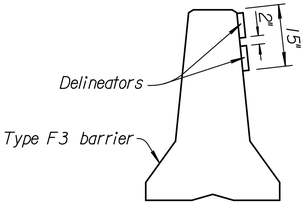
‡ *Marked End*
✡ *4" diameter - 11 gauge steel round mechanical tubing sleeve. These holes are optional.*
△ *V Notch is optional*



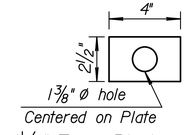
END VIEW



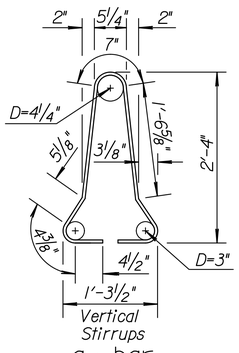
PLAN (SECTION)

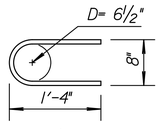


DELINEATOR DETAILS

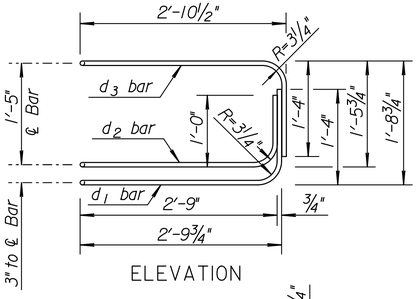


(1/2" Top Plate Detail)

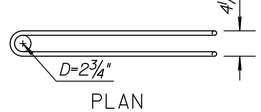




a2 bar



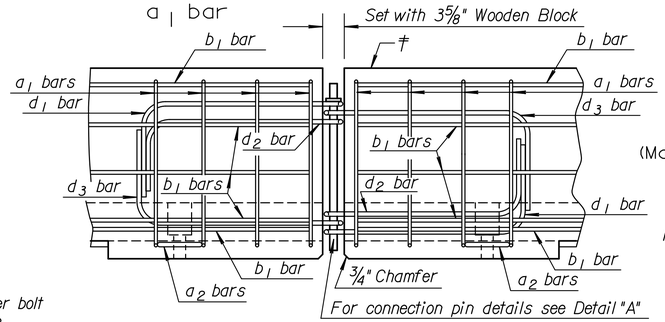
ELEVATION



PLAN

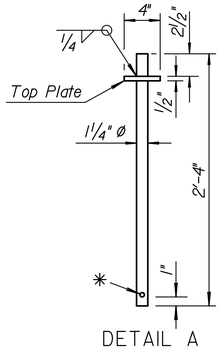
LOOP BAR ASSEMBLY

(Marked end shown, invert for other end)
(Material as stated in General Notes)



For connection pin details see Detail "A"

DETAILS OF BARRIER CONNECTION



DETAIL A
CONNECTION PIN
(A36 Steel) 10.9 lbs. each

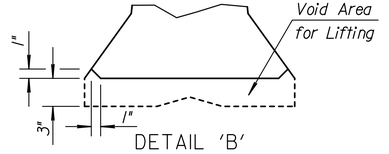
✳ *5/8" Ø hole for retainer bolt. The retainer bolt & nut are installed at Contractor's option.*
Note: Retainer bolt & nut required with Tie Down Strap.

NOTE: At no time shall the barriers be lifted, moved, etc. by use of the loop bars: d_1, d_2 or d_3.

Per 12'-6" Barrier Section

REINFORCING A615 Gr. 60					
Bar	*Bar Size*	*Shape*	*No. of Bars*	*Length Ft.*	*Weight Lbs.*
a_1	#4		12	6'-0"	48.1
a_2	#6		6	2'-11"	26.3
b_1	#5		7	12'-2"	88.8
LOOP ASSEMBLY					
d_1	#6		2	8'-5"	25.3
d_2	#6		2	7'-7"	22.8
d_3	#6		2	8'-6"	25.5

Concrete Quantity = 1.3 C.Y.
(Dimensions are out to out of bars unless otherwise noted.)



DETAIL 'B'
LIFTING SLOT DETAIL
(1" Chamfer to prevent spalling)

GENERAL NOTES:

MATERIAL: Use ASTM A615, Grade 60 reinforcing bars, except for the loop bars (d_1, d_2 and d_3).
The loop bars (d_1, d_2 and d_3) shall be 3/4" smooth steel bars with a minimum yield of 60 ksi, a tensile strength of not less than 1.25 times the yield strength but a minimum of 80 ksi, a minimum 14% elongation in 8 inches, and passing a 180 degree bend test using a 3.5 D pin bend diameter. The loops shall be installed within 1/8" of the plan dimensions.
Use air-entrained concrete with f'c = 5,000 p.s.i.

SECTION: The section furnished must generally comply with dimensions shown. Requests for minor variations in section geometry and attachments may be submitted to the Engineer for approval.

LIFTING SLOTS: Lifting slots shall be constructed where specified on the plans to facilitate the drainage of water after installation on the roadway.

TEMPORARY CONCRETE SAFETY BARRIER: Furnishing and placing of all materials when required and all labor and equipment required to position the temporary barrier shall be included in the Contract unit price bid for "Concrete Safety Barrier (Type F3)(Temporary)". Any relocation of the barrier required for the project shall be paid in accordance with the Special Provisions under the bid item "Concrete Safety Barrier (Type F3) (Temporary-Relocate)". Unless otherwise noted on the Plans, the Temporary Concrete Safety Barrier shall become the property of the Contractor and shall be removed from the site upon acceptance of the completed project. Approximate weight of one unit equals 2.7 tons.

SURFACE PREPARATION: Barrier shall be placed on a paved surface. All loose dirt and sand shall be removed from the roadway surface just prior to placement of the barrier.

MARKING: The left end (‡) of each barrier shall be permanently marked by stamping or forming into the barrier the following information:
- *Type F3*
- *Manufacturer code (as specified by KDOT Bureau of Const. & Maint.)*
- *Date manufactured (month and year)*

DELINEATION: Delineators shall be spaced on 50' centers, except through curves having 1900' or greater curvature where they shall be spaced on 25' centers.
The delineation shall be mounted on the side of the Temporary Concrete Safety Barrier with two delineators at each location. Each delineator shall have a minimum height-to-width ratio of 1.75, and a minimum reflective surface area of 7 sq. in.. The delineators shall be affixed to the Temporary Concrete Safety Barrier as recommended by the manufacturer.
Delineators shall be attached to bridge rail or other structures in construction zones when roadway is narrowed and traffic is adjacent to the structure. The method and location of placement shall be similar to permanent barrier delineation.
When traffic flow is in one direction, the delineators shall be yellow when used on the left, white when used on the right. When traffic flow is in both directions delineators shall be placed back-to-back, and shall correspond to the color of the edge line.
The work and materials required for the installation of delineators as mentioned shall be subsidiary to the bid item "Concrete Safety Barrier (Type F3) (Temporary).

Note: If necessary, include Standard Drawing RD622A for Taper Section, Standard drawing RD622B for anchor and tie down details, Standard Drawing RD622C for Bridges with thermal expansion of 1 1/2" or greater and Standard Drawing RD622D for Barrier Layouts.

Note: The Contractor shall be responsible for maintaining a clear area, shown as dimension "A" on Standard Drawing RD622B. The clear area is located behind the Temporary Concrete Safety Barrier and shall be kept free of any equipment, material stockpiles or other obstacles.

NO.	DATE	REVISIONS	BY	APP'D
3	06-03-12	Revised General Note, Clear Area	S.W.K.	J.O.B.
2	02-06-07	Revised additional sheets note	S.W.K.	J.O.B.
1	01-10-07	Rev. layout & notes, add. Delineation	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE SAFETY BARRIER TYPE F3

RD622

FHWA APPROVAL	08-01-12	APP'D. James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK. King

KDOT Graphics Certified 08-02-2012

Plotted :02-AUG-2012 08:01
Drawn By : thoads
File : rd622.dgn (rd622)

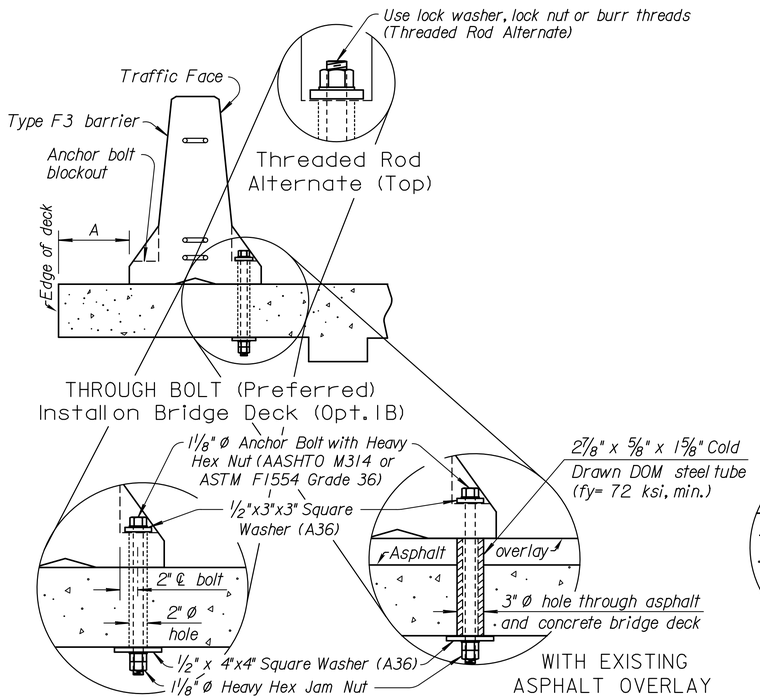
KDOT Graphics Certified

Option	BRIDGE DECK APPLICATION	
1 B	0" ≤ A < 2'	Anchor each barrier with 3 bolts on traffic face
2 B	△2' ≤ A < 4'	Anchor with Tie-down strap connector
3 B	A ≥ 4'	No anchorage required unless shown on plans

Option	ROAD PAVEMENT APPLICATION	
1 R	0" ≤ A < 2'	Anchor each barrier with 3-bolts on traffic face
2 R	6" ≤ A < 2'	Anchor with Tie-down Strap or Staked Down (flexible)
3 R	A ≥ 2'	No anchorage required

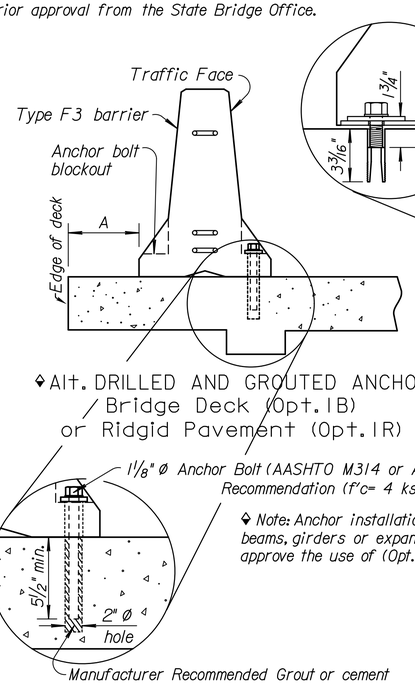
△ *This dimension may be reduced to 1' on a newly constructed Bridge Deck.*

Note: BRIDGE APPLICATION (Opt. 1 B) may be used in lieu of (Opt. 2 B) with prior approval from the State Bridge Office.



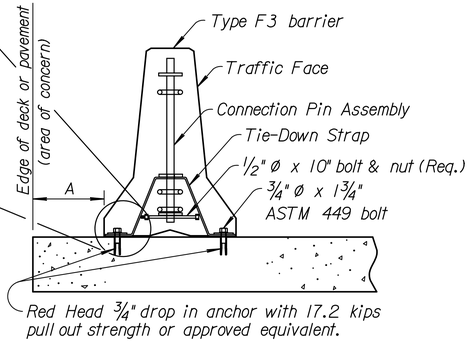
THROUGH BOLT (Preferred) Install on Bridge Deck (Opt. 1B)

WITH EXISTING ASPHALT OVERLAY

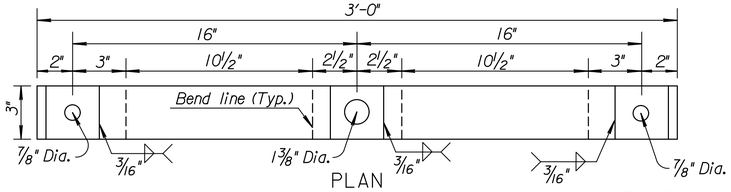


◆ Alt. DRILLED AND GROUTED ANCHOR Bridge Deck (Opt. 1B) or Ridgid Pavement (Opt. 1R)

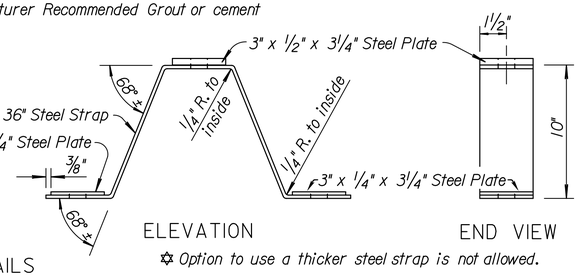
◆ *Note: Anchor installation (Opt. 1 B) avoids damage to the support beams, girders or expansion joint. The State Bridge Office shall approve the use of (Opt. 1 B).*



TIE-DOWN STRAP Rigid Pavement (Opt. 2 R) or Bridge Deck (Opt. 2 B)



PLAN

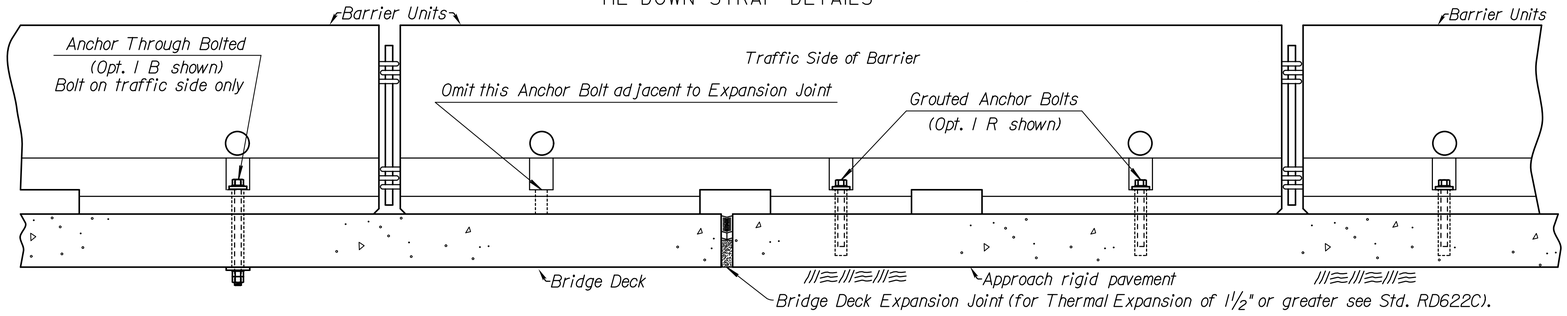


ELEVATION

END VIEW

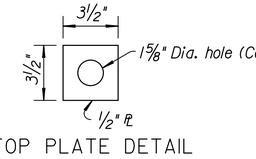
✡ *Option to use a thicker steel strap is not allowed.*

TIE-DOWN STRAP DETAILS

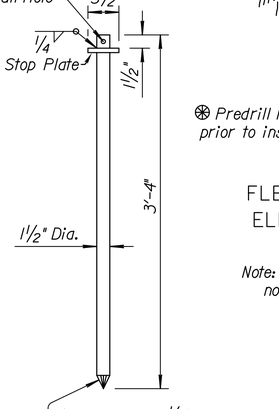


ELEVATION

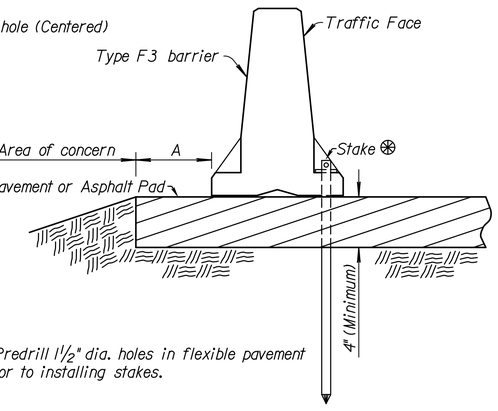
TREATMENT AT BRIDGE DECK EXPANSION JOINT SCHEMATIC (Expansion < 1½")



STOP PLATE DETAIL



STAKE DETAIL



⊛ *Predrill 1½" dia. holes in flexible pavement prior to installing stakes.*

FLEXIBLE PAVEMENT ROAD APPLICATION ELEVATION - STAKED DOWN (Opt. 2 R)

Note: See Std. Drawing No. RD622 for details and quantities not shown on this sheet.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				

GENERAL NOTES:

INSTALLATION: Holes into the pavement to anchor the concrete safety barrier may be drilled after positioning barrier. Install barrier with through anchor bolt where possible, use grouted anchor bolts where through bolt can't be used. Do not drill into or otherwise damage support beams, girders, or or expansion joints. All work and materials required for the installation of the anchors are subsidiary to the bid item "Concrete Safety Barrier".

UTILITIES & STRUCTURES (Stakes) Verify buried utilities and structures within stake depth. If conflicts between stake and buried elements exist, up to 2 stakes maximum in a single barrier may be omitted if adjacent barriers have 3 stakes each.

ANCHORAGE: Use galvanized grouted anchor bolts, through anchor bolts, nuts & washers that meet standard specifications.

Install three anchor bolts or asphalt pins per barrier on the traffic side except on transition barrier as shown.

BARRIER REMOVAL: Remove grouted or wedge anchor system by drilling the anchor with a core barrel 2x the diameter of the insert. Core to a depth equal to the installed depth and remove the core, prepare the hole by removing any dust and debris. Fill hole with material that meets KDOT Prequalified "Non-shrink grouts for grouting anchor bolts and reinforcing into previously poured concrete". Follow the manufacturer's procedures for mixing, hole preparation and curing.

To fill through bolt anchor, remove and completely fill the hole using instructions for drop-in anchors except no coring is required.

For removed or relocated barrier on flexible pavement, fill stake holes completely with hot or cold asphalt patch material.

Work and materials required to remove and patch anchor holes is subsidiary to the bid item "Concrete Safety Barrier".

SIGNING: For sign spacing, traffic control device details and reference notes, see Index of Sheets.

TEMPORARY BARRIERS: Temporary Barriers shown in the details of this drawing are not allowed for permanent installations.

See RD622D for transition details between anchored and free-standing barriers.

NO.	DATE	REVISIONS	BY	APP'D
5	6-27-11	Revised General Note	S.W.K.	J.O.B.
4	9-14-10	Add. through bolt with asphalt over.	S.W.K.	J.O.B.
3	2-2-10	Rev. Anchor to Tie-down callout	S.W.K.	J.O.B.
2	10-2-07	Rev. anchor bolt call-out	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE SAFETY BARRIER TYPE F3 ANCHORAGE

RD622B

FHWA APPROVAL	8-30-2011	APP'D. James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK. King

KDOT Graphics Certified 08-31-2011

KDOT Graphics Certified

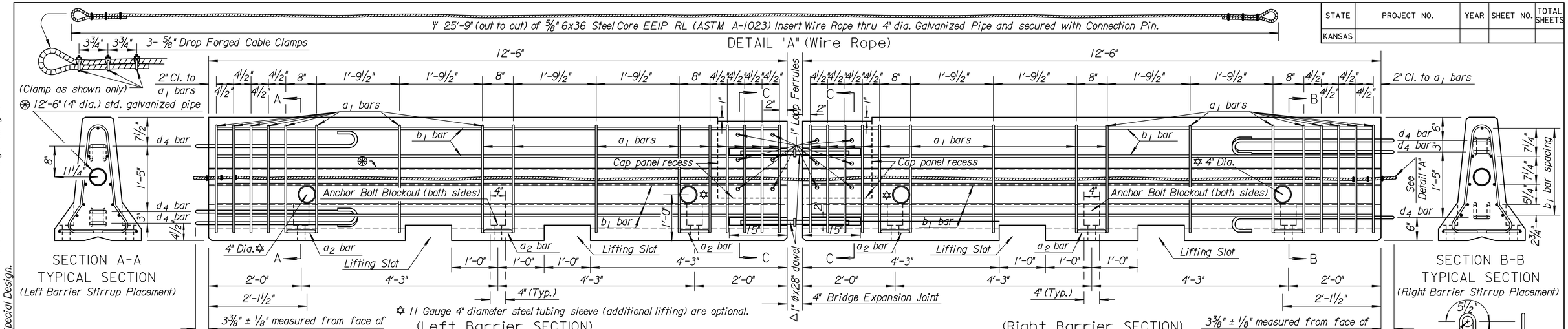
Note to Designer: For use on Haunched slab bridges, the Road Designer shall coordinate with the Bridge Designer for "corridor in the reinforcing steel layout to accommodate barrier anchoring". Road Designer shall coordinate barrier layout with Bridge Designer to accomodate for expansion during construction.

Plotted : 31-AUG-2011 08:58

Drawn By : bert
File : rd622b.dgn (rd622b)

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				

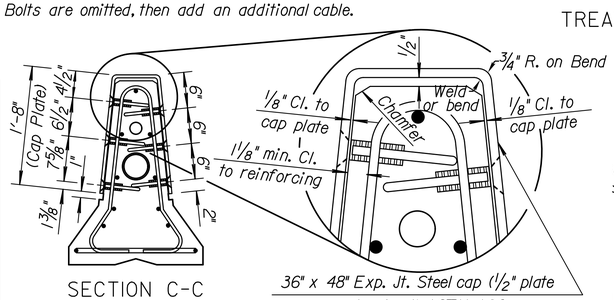
Note to Designer: This F3 Barrier Anchorage at Expansion Joint is only for use on bridges with thermal expansion of 1½" or greater at the recommendation and review of Bridge Designer.
Bridges longer than 1,000 feet require a Special Design.

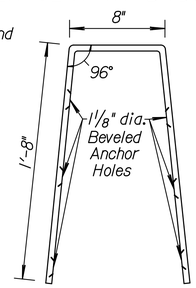


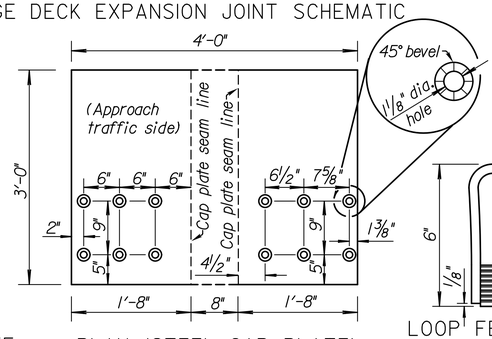
Per 12'-6" Barrier Section

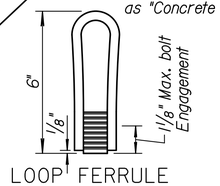
REINFORCING A615 Gr. 60					
Bar	Bar Size	Shape	No. of Bars	Length Ft.	Weight Lbs.
a_1	#4		16	6'-0"	64.1
a_2	#6		6	2'-11"	26.3
b_1	#5		9	12'-2"	114.2
LOOP ASSEMBLY					
d_4	#6		3	8'-2"	36.8
½" Structural Steel Cap Plate					201.3

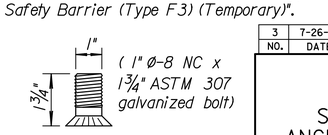
Concrete Quantity = 1.3 C.Y.
(Dimensions are out to out of bars unless otherwise noted.)
Reinf., Struct. and Concrete quantities are for "Information Only".











GENERAL NOTES

Installation of F3 Barrier with Steel Cap Plate is for thermal expansion joint with ≥ 1½". This two barrier system (25'-0") is reversible to match with regular F3 Barrier layout. The Cap Plate sections are installed with no greater than 4" gap and pinned as shown in Expansion Jt. schematic. Install Cap Plate flush to recess on Traffic Approach side and bolt in place front and back of barrier with attachment types shown.

See Standard Drawing RD622 for reinforcing bending diagrams and additional details not shown on this sheet.

The State Bridge Office will review shop details before fabrication begins.

All materials, labor and equiptment needed for (Type F3) (25' Expansion Joint Unit) shall be bid as "Concrete Safety Barrier (Type F3) (Temporary)".

NO.	DATE	REVISIONS	BY	APP'D
3	7-26-07	Chg. flat head screw & ferrul to 1" ø	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE SAFETY BARRIER TYPE F3 ANCHORAGE at EXPANSION JT.

RD622C

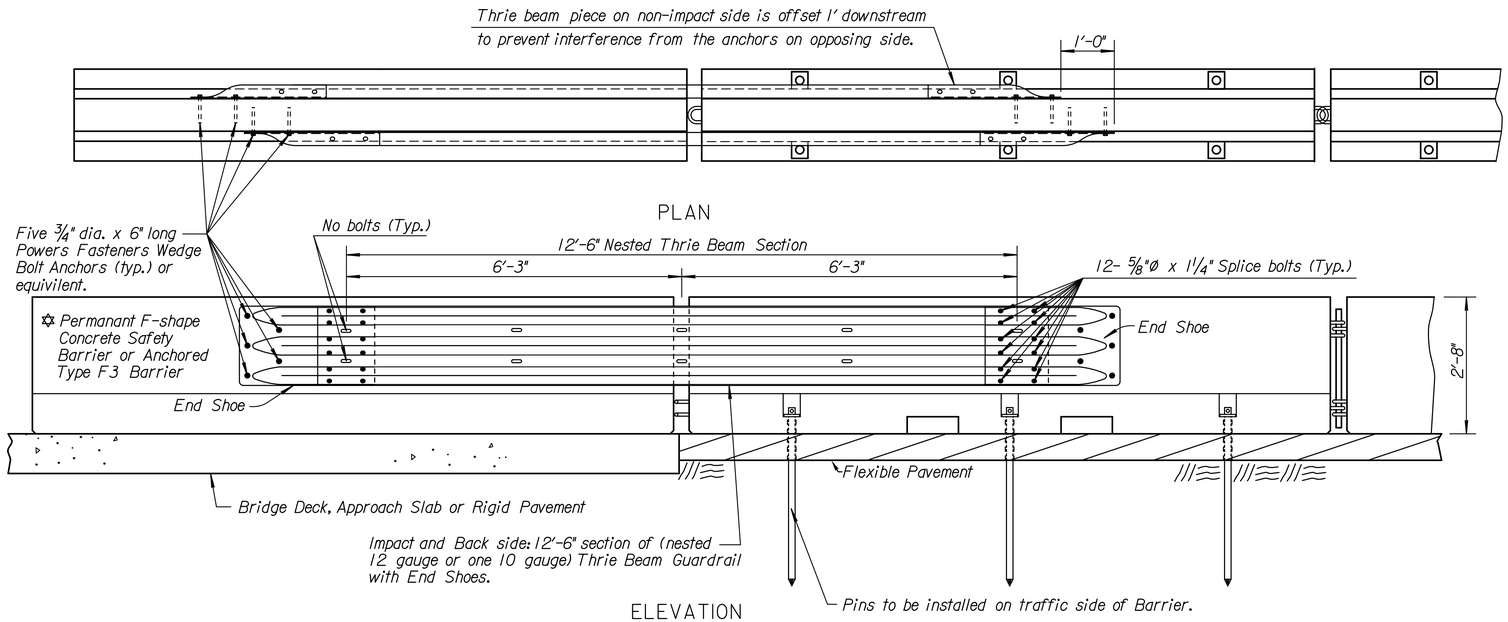
FHWA APPROVAL	10-05-07	APP'D. James O. Brewer	
DESIGNED J.P.J.	DETAILED	QUANTITIES	TRACED B.N.B.
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK. S.W.K.

KDOT Graphics Certified 04-11-2011

KDOT Graphics Certified

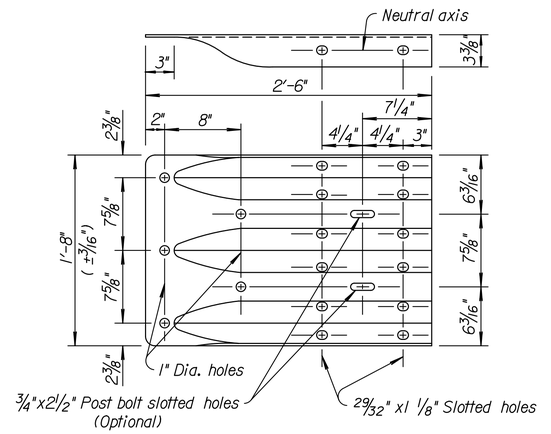
Plotted : 11-APR-2011 14:58
Drawn By : bert
File : rd622c.dgn (rd622c)

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				

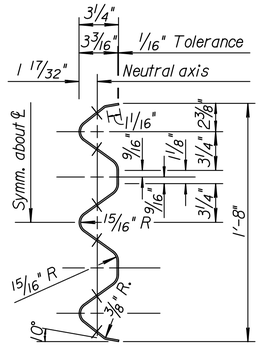


GENERAL NOTES:

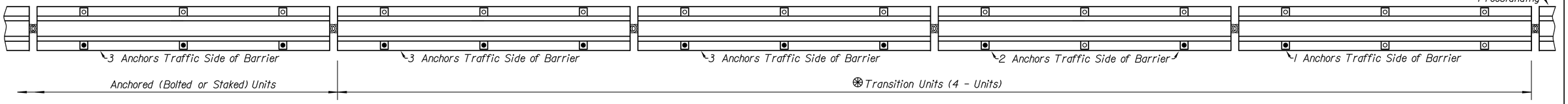
The work and materials required for the installation & removal of the guardrail connection and barrier anchors as shown on this sheet shall be subsidiary to the "Concrete Safety Barrier" bid item.



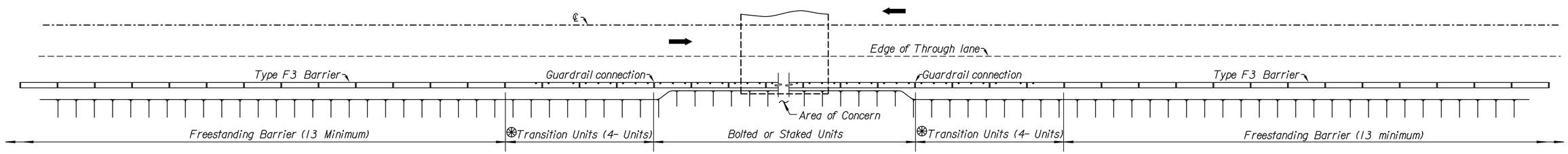
TERMINAL CONNECTOR



THRU RAIL ELEMENT
TYPICAL THRIE BEAM



PLAN (Transition Units)



✡ APPROACH TRANSITION FROM FREESTANDIING TO ANCHORED (BOLTED OR STAKED) TYPE F-3 CONCRETE BARRIER

✡ TYPICAL INSTALLATIONS

1) Type F3 barrier anchored to rigid pavement with bolted connection or bolted to a bridge deck.
   -the transtion between this anchored barrier and the freestanding needs the transition barriers plus guardrail as shown above.
2) Permanent F-shape barrier
   -the transtion between this permanent barrier and the freestanding Type F3 needs the transition barriers plus guardrail as shown above.
3) Type F3 barrier anchored with straps on rigid pavement or a bridge deck
   -the transtion between this anchored barrier and the freestanding needs NO transition barriers or NO guardrail.
4) Type F3 barrier pinned/staked to asphalt pavement
   -the transtion between this anchored barrier and the freestanding needs the transition barriers but NO guardrail.

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1	1-30-07	Rem. temp. details from perm. barrier	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE SAFETY BARRIER TYPE F3 TRANSITION LAYOUTS

RD622D

FHWA APPROVAL	01-19-07	APP'D. James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK. King

KDOT Graphics Certified 07-22-2010

KDOT Graphics Certified

Plotted : 22-JUL-2010 18:24

Drawn By : marks
File : rd622d.dgn (rd622d)

SUMMARY OF TRAFFIC CONTROL DEVICES (EACH PER DAY)

* QUANTITY MOST USED ON THE PROJECT AT ANY ONE TIME

WORK ZONE SIGNS *			
SIGN NO.	SIZE – SQ. FT.		
	0-9.25	9.26-16.25	16.26 & OVER
W20-1		2	
W3-5		2	
R2-1			2
W4-2r		2	
W1-4L		2	
G20-2a	2		
M4-8	1		
M4-8A	1		
M4-9S	5		
R11-2		1	

LIGHTED DEVICES *	
WORK ZONE WARNING LIGHT (TYPE "A" LOW INTENSITY)	6
WORK ZONE WARNING LIGHT (RED TYPE"B" HIGH INTENSITY)	
ARROW DISPLAY	2
PORTABLE CHANGEABLE MESSAGE SIGN	3

BARRICADES *	CHANNELIZING DEVICES *	
TYPE III (4' TO 12')	FIXED	PORTABLE
8	20	128

SUMMARY OF TRAFFIC CONTROL DEVICES (EACH)

WORK ZONE SIGN (SPECIAL)		
SIGN NO.	16.25 SQ. FT. & LESS	16.26 SQ. FT. & OVER

REPLACEMENT MODULES (FOR INFO ONLY)	
F-200	
F-400	
F-700	1
F-1400	2
F-2100	4

RECAPITULATION OF QUANTITIES

ITEM	QUANTITY	UNIT
WORK ZONE SIGNS (0 TO 9.25 SQ. FT.)	780	EADA
WORK ZONE SIGNS (9.26 TO 16.25 SQ. FT.)	780	EADA
WORK ZONE SIGNS (16.26 SQ. FT. & OVER)	175	EADA
WORK ZONE BARRICADES (TYPE III – 4' TO 12')	90	EADA
CHANNELIZER (FIXED)	500	EADA
CHANNELIZER (PORTABLE)	11070	EADA
WORK ZONE WARNING LIGHT (TYPE "A" LOW INTENSITY)	520	EADA
WORK ZONE WARNING LIGHT (RED TYPE "B" HIGH INTENSITY)		EADA
ARROW DISPLAY	175	EADA
PORTABLE CHANGEABLE MESSAGE SIGN	260	EADA
PAVEMENT MARKING (TEMPORARY)		
4" SOLID (TYPE I TAPE OR PAINT)	7800	STA./LINE
4" SOLID (TYPE II TAPE OR PAINT)		STA./LINE
4" BROKEN(8')(TYPE I TAPE OR PAINT)	900	STA./LINE
4" BROKEN(8')(TYPE II TAPE OR PAINT)		STA./LINE
4" BROKEN(8')(FLEX RAISED)		STA./LINE
4" BROKEN(3')(TYPE I TAPE OR PAINT)		STA./LINE
4" BROKEN(3')(TYPE II TAPE OR PAINT)		STA./LINE
4" BROKEN(3')(FLEX RAISED)		STA./LINE
4" DOTTED EXTENSION(TYPE I TAPE OR PAINT)		STA./LINE
4" DOTTED EXTENSION(TYPE II TAPE OR PAINT)		STA./LINE
SOLID (LINE MASKING TAPE)		STA./LINE
BROKEN (LINE MASKING TAPE)		STA./LINE
PAVEMENT MARKING REMOVAL		LIN. FT.
CONCRETE SAFETY BARRIER (TYPE F3) (TEMPORARY)	1320	LIN. FT.
CONCRETE SAFETY BARRIER (TYPE F3) (TEMP.-INSTALL ONLY)		LIN. FT.
CONCRETE SAFETY BARRIER (TYPE F3) (TEMP.-RELOCATE)	1320	LIN. FT.
INERTIAL BARRIER SYSTEM	2	EACH
REPLACEMENT MODULES	7	EACH
WORK ZONE SIGN (SPECIAL) (16.25 SQ. FT. & LESS)		EACH
WORK ZONE SIGN (SPECIAL) (16.26 SQ. FT. & OVER)		EACH
TEMPORARY RAISED PAVEMENT MARKER (TYPE I)		EACH
TEMPORARY RAISED PAVEMENT MARKER (TYPE II)		EACH
TRAFFIC SIGNAL INSTALLATION (TEMPORARY)		LUMP SUM
TRAFFIC CONTROL (INITIAL SET UP)	LUMPSUM	LUMP SUM
TRAFFIC CONTROL		LUMP SUM
FLAGGER (SET PRICE)	1	HOUR
TWORKS SIGN ASSEMBLY (SMALL)	2	EACH
TWORKS SIGN ASSEMBLY (LARGE)		EACH
TWORKS SIGN ASSEMBLY (INSTALL ONLY)		
Temporary Raise pavement Marking (Type II)	25	EACH

NOTES:

NO.	DATE	REVISIONS	BY	APP'D
3	8-8-07	2007 SPEC REVISION	M.B.	A.A.A.
2	12-29-05	ADDED TYPE A & RED TYPE B LIGHTS	B.H.	A.A.A.
1	2-1-05	CONSTR. SIGN SPECIAL CHART	B.H.	A.A.A.

KANSAS DEPARTMENT OF TRANSPORTATION

SUMMARY OF DEVICES AND RECAPITULATION OF QUANTITIES

~~TE795~~ **9/1/00**

FHWA APPROVAL 8-8-07		**APP'D** Anthony A. Alrobaire	
DESIGNED B.A.H.	**DETAILED** B.A.H.	**QUANTITIES**	**TRACED**
DESIGN CK.	**DETAIL CK.**	**QUANT. CK.**	**TRACE CK.**