

COMMONWEALTH OF KENTUCKY
THE FISCAL COURT OF CALLOWAY COUNTY, KENTUCKY
REQUEST FOR PROPOSAL AND INVITATION TO SUBMIT SEALED BID
COUNTY ROAD COOK STORE TRAIL (018C00108N) SUBSTRUCTURE
REPAIR

BID OPENING DATE, TIME
AND LOCATION:

November 17, 2025 at 8:00 A.M.

Calloway County, Kentucky
Fiscal Court Room
201 South Fourth Street
Murray, Kentucky 42071

RFP AND BID PURPOSE:

The Fiscal Court of Calloway County, Kentucky (hereafter, County) is soliciting sealed bids that would, if accepted by the County, establish an ultimate contract whereby a bridge is brought back up to the standards for safe passage by commercial and residential traffic, upon the general and detailed terms, conditions, and specifications contained in this Request for Proposal and Invitation to Submit Sealed Bid (hereafter, RFP) and the applicable law of the Commonwealth of Kentucky.

If you believe you are qualified and prepared to propose fair and just consideration for the transaction contemplated by this RFP and submit a sealed bid, please forward the required information and documents noted in this RFP to Judge Executive Kenneth C. Imes, Calloway County, Kentucky, 201 South Fourth Street, Murray, Kentucky 42071.

SCOPE:

Calloway County is upgrading a bridge in the county that is located on Cook Store Trail Bridge Number 018C00108N (36.675489, -88.446081). The scope of work on this project will consist of removing the bridge from its location and replacing the abutments that are located under the superstructure, then placing channel beams that are provided by KYTC for the deck (plus any work to get the decking ready for traffic), and repairing the roadway back to its original state.

See attached paperwork and RFP from state for more information. A pre-construction meeting is required with KYTC District 1 engineers before work is to be started.

All of the foregoing shall be conducted in accordance with the Commonwealth of Kentucky, Transportation Cabinet, Standard Specifications for Road and Bridge

Construction, currently in effect, and in accordance with any applicable standards established by the Subdivision Regulations of Calloway County, Kentucky, as currently in effect (hereafter, Project). To that end, the County seeks to retain the services of a Contractor or Contractors and/or design professional or professionals to complete such project.

All construction of and services performed relative to the Project shall be performed in a competent and workmanlike manner, consistent with the standards utilized for bridge construction, bridge demolition and construction of the approaches to the bridge within the Commonwealth of Kentucky. All such construction and services performed relative to the Project shall be conducted in accordance with the Commonwealth of Kentucky, Transportation Cabinet, Standard Specifications for Road and Bridge Construction currently in effect and which may be obtained from the Kentucky Transportation Cabinet (<https://transportation.ky.gov>). In addition, all such construction and services performed relative for the Project shall be conducted in accordance with all applicable provisions of the Subdivision Regulations of Calloway County, Kentucky, which may be obtained from the Office of the Calloway County Judge-Executive, in a pdf format. Said Subdivision Regulations are incorporated by reference into this RFP, as if fully set forth herein as Schedule B.

GENERAL CONDITIONS AND INSTRUCTIONS FOR BIDDERS:

These General Conditions and Instructions apply to all bids submitted. One (1) original Bid Certification and Proposal Form (hereafter, Proposal) in a sealed envelope Proposal must be received by Fiscal Court of Calloway County, Kentucky; Attention: Judge Executive Kenneth C. Imes, Calloway County, Kentucky, 201 South Fourth Street, Murray, Kentucky 42071, no later than 2:00 PM November 14, 2025. Faxed, emailed or other electronic submissions WILL NOT be accepted. Proposals received after the time designated for the bid opening will be returned to the bidder unopened. The County cannot and does not assume responsibility for any delay as a result of failure of the United States Postal Service or any other delivery service to deliver bids on time. Bid tabulations will be made by designated County representatives.

TERMS AND CONDITIONS:

1. Proposal Forms and Return Instructions: Bidders must return the Bid Certification and Proposal form (hereafter, Proposal) provided with this RFP found within this RFP. Bidders are to complete the Proposal form indicating the bid offered. Each bid should be submitted in a separate sealed envelope clearly marked with CALLOWAY COUNTY, KENTUCKY: COUNTY ROAD COOK STORE TRAIL (018C00108N) SUBSTRUCTURE REPAIR - and the bid opening date printed on the outside of the envelope as same appears on this RFP.

The Bidder is responsible for the delivery of its Proposal in accordance with this RFP. If the Proposal is delivered to the wrong location, by any delivery method, the Bidder bears the responsibility of any such mis-delivery. Delivery of the RFP to the specified location at the established date and time is the sole responsibility of Bidder. The County Judge-Executive, or designee, who is responsible for receiving RFPs will determine whether an RFP has been timely received and whether proposals will thereafter be accepted, in sole discretion of the County Judge-Executive.

The Bidder should retain a duplicate copy. If applicable, an officer or member of the bidding firm who is authorized to legally bind the organization shall sign the bid certification, and which shall contain an original signature. The Proposal forms should be used without alterations. Any modification, addition, or change to the terms and conditions of the Proposal may be a cause for rejection of a bid. By executing the Bid Certification and Proposal Form, it is specifically acknowledged that the Bidder has read this Invitation, understands it, and agrees to be bound by its Terms and Conditions.

2. Correction of Mistakes: Bidders are cautioned to re-check their bid for possible errors. No bid can be corrected, altered, or signed after being opened. All prices and quotations must be in ink or typewritten. No figures made by pencil will be accepted. Mistakes are to be crossed out and corrections inserted adjacent thereto and initialed by the person signing the bid. Errors discovered after public opening cannot be corrected and Bidder will be required to accept the Contract if offered.

3. Error in Bid: No bid will be altered or amended after the specified time and date set for the bid opening.

4. Reservations by County: The County reserves the right to accept the lowest and best bid, most responsible and responsive bid, to reject any and all bids, to waive any informalities, to waive any technical non-compliance or to accept any bid as may be deemed in the best interest of the County, in its sole and unfettered discretion.

5. Withdrawal or Amendment of Proposal: A Proposal may not be amended. However, a Proposal may be withdrawn and resubmitted pursuant to this Section. A Bidder may withdraw its Proposal after it has been submitted only if a written request is submitted and received prior to the expiration of the time during which Proposals may be submitted, without prejudice to itself, by submitting a written request for its withdrawal to County. Thereafter, a Bidder may re-submit a Proposal in accordance with this RFP. All Proposals shall be valid for a period of forty-five (45) days from the bid opening date to allow for tabulation, study, and consideration by the County.

6. Addenda: County reserves the right to issue an addendum or addenda to the bid after the Request for Proposal and Invitation to Bid has been released. In no instance will an addendum be issued within five (5) working days prior to the bid opening. An interested Bidder shall determine prior to submitting their Proposal that it has received all

Addenda issued by County and acknowledgement receipt of such Addenda by the return of the signed Addenda form(s), if any, with its Proposal.

7. Review: After the public opening of Proposals received from the RFP, County will review the results, develop a preliminary tabulation, and may contact bidders for the purpose of clarification, only.

8. Method of Award: An award to the successful Bidder relative to this RFP by County will be made following a review of all responsible and responsive Proposals by appropriate representatives of County as designated by the County Judge-Executive, subject to the ultimate approval of said Proposal by the Fiscal Court of Calloway County, Kentucky. The award may be made to the most responsible Bidder whose proposal is determined to be in the best interest of County area and which is considered to be the most responsible and responsive.

Any Bidder whose Proposal is accepted shall herein be referred to as the Retained Contractor. The County will expect to complete and have in place a signed Contract with the Retained Contractor no later than thirty (30) days following the award.

9. Any Bidder submitting a Proposal based on incomplete or inaccurate information resulting from documentation received from any third party shall not have cause for relief from award or completion of a contract with County. County shall not be held responsible for the completeness or accuracy of any documents received by a Bidder that were not directly issued to that Bidder by the County.

By bidding, each Bidder covenants and agrees to protect, defend, and hold harmless the County, the Fiscal Court, its Judge Executive, any administrators, directors, employees, agents and independent contractors from any and all suits, claims, demands, liabilities, judgments, liens, encumbrances, court costs, legal expenses and attorney's fees arising out of, or in connection with, the issuance of this Request for Proposals and Invitation to Bid and the subsequent award of Bid and Contract.

10. Other Conditions:

A. Governing Law and Forum: This RFP, as well as the Contract, shall be governed by, and construed under and in accordance with, the laws of the Commonwealth of Kentucky. Any and all claims or disputes under the terms of those documents or the process utilized hereunder shall be submitted to the jurisdiction of the Calloway Circuit Court, presiding in Murray, Calloway County, Kentucky. A Bidder agrees to or forever waive and agrees not to assert any defense that the court listed in this paragraph lacks personal jurisdiction, that such venue is improper, and that the forum is inconvenient.

B. Retention of Documents: The Retained Contractor agrees to retain all books, records, and other documents incident to this arrangement for a period of no

less than five (5) years after the completion of the Project contemplated by the Contract. County, its authorized agents and/or state/or federal representatives shall have full access to, and the right to examine any or said materials during said period which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts and transcriptions. If the investigator or audit is in progress, records shall be maintained until stated matter is closed.

C. Oral Statements and Modifications: Any oral statement or representation by any representative of the County changing, modifying, interpreting or supplementing the RFP or Contract or any condition thereof, is unauthorized and shall confer no right upon the Bidder or Retained Contractor.

D. Submission of Proposals: Those submitting Proposals do so entirely at their expense. There is no express or implied obligation by County to reimburse any entity or individual for any costs incurred in preparing or submitting proposals.

E. Advertising of Request for Proposals: The solicitation of Requests for Proposal shall be advertised in accordance with KRS 424.130, applicable law and any applicable policy or procedure of County.

**COMMONWEALTH OF KENTUCKY
THE FISCAL COURT OF CALLOWAY COUNTY, KENTUCKY**

**BID FORM - PROPOSAL AND INVITATION TO SUBMIT SEALED BID
COUNTY ROAD COOK STORE TRAIL (018C00108N) SUBSTRUCTURE
REPAIR**

Bridge Reconstruction

**AUTHENTICATION OF BID, STATEMENT OF NON-COLLUSION AND NON-
CONFLICT OF INTEREST AND COMPLIANCE WITH APPLICABLE LAW**

By my signature on this Bid Form, I hereby swear or affirm under penalty of false swearing as provided by KRS 523.040:

1. That I am the bidder (if bidder is an individual), a partner in the bidder (if the bidder is a partnership), or an officer or employee of the bidding legal entity having authority to bind such legal entity on its behalf;
2. That the costs quoted in the attached bid or bids responding to the Request for Proposal and Invitation to Bid are correct and have been arrived at by the Bidder independently and have been submitted without collusion and without agreement, understanding, or planned common course of action, with any vendor of materials, equipment, or services described in the invitation to bid, designed to limit independent bidding or competition;
3. That contents of the bid or bids have not been communicated by the Bidder, or its employees or agents, to any person not an employee or agent of the Bidder or its surety on any bond furnished with the bids and will not communicate to any such person, prior to the official opening of the bid or bids; and
4. That the Bidder is legally entitled to enter into contracts within the Commonwealth of Kentucky and is not in violation of any prohibited conflict of interest, gratuities and kickbacks including those prohibited by Kentucky Law and any applicable policies or procedures of County. That Bidder understands that the bidding process is being conducted consistent with the applicable law of the Commonwealth of Kentucky as applied to its political subdivision, Calloway County, Kentucky, and that the contents of the Proposal and the actions taken by the bidder in preparing and submitting the bid proposal are in compliance with this RFP.

BIDDER: _____

BID AMOUNT: _____

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____

DATE: _____

EMAIL ADDRESS: _____

PHONE NUMBER: _____

MAILING ADDRESS: _____

CITY, STATE, ZIP: _____

SSN/FEIN: _____

Request for Proposal, Calloway County Bridge Replacement (018C00108N)

This document constitutes a Request for Proposals for a Professional Service Contract from qualified individuals and organizations to furnish those services as described herein for Calloway County.

I. PROJECT DESCRIPTION

County: Calloway
Route: Cook Store Trail
Crossing: Clear Creek
Project Description: Full Replacement of Bridge ID 018C00108N
Project Location: Mile Point 2.21

II. PURPOSE

The inspection report and related photos, completed on 06/09/2025, reflect the following condition rating, in compliance with the FHWA SNBI Standards:

Deck: 5 (FAIR)
Superstructure: 6 (SATISFACTORY)
Substructure: 4 (POOR)

KYTC District 1 engineers reviewed these conditions in conjunction with the load rating analysis performed by KYTC Central Office and determined that a full structure replacement would be the most viable and economical solution.

III. SCOPE OF WORK

The existing bridge measurements taken at Bridge ID 018C00108N are as follows:

- 40 ft structure length,
- 26 in. depth of super,
- 16 ft roadway width,
- 19 ft streambed width,
- 4.75 ft tall (measure from streambed to bottom of beams)

KYTC District 1 engineers have determined that the new structure would need to increase to a 42ft L x 20ft W structure to ensure protection of the piles/end bents from scour due to the channel as well as to mitigate the flow of water on the piles/cap by extending the span of the bridge. **Precast Prestressed Box Beams and Bridge Guardrail shall be provided to the selected contractor by KYTC District 1 for this project.** The asphalt surface is estimated to

extend 50 ft from each bridge end to account for the difference in elevation caused by the difference of beams.

The work to be done for Bridge ID 018C00108N shall include, but not be limited to, the following:

- Mobilization and Demobilization.
- Demolish and remove the existing structure, including all substructure units, from the bridge site.
- Excavate location of the new End Bents
- Install a 1.5:1 slope from the bottom of the bent cap to the stream limits.
- Install new Steel Piles in accordance with the applicable KYTC standards (see below)
- Install new End Bents in accordance with the applicable KYTC standards (see below)
- Install Geotextile Fabric and Channel Protection in accordance with the applicable KYTC standards (see below)
- Install Precast Prestressed Box Beams (provided by KYTC)
 - Bearing Pads, Tension Rods, Grouting of the Shear Keys and Tension Rod Pockets are all incidental to the installation of Box Beams and shall be furnished by the contractor.
 - Bridge Guardrail is supplied by KYTC and installation shall be incidental to Prestressed Box Beam Line Item in the Bid Sheet.
- Install Structure Granular Backfill in accordance with the applicable KYTC standards (see below)
 - 4" Perforated Pipe is incidental to Backfill
- Install Waterproof Membrane and Asphalt Overlay on top face of Box Beams with a maximum Asphalt Surface thickness of 1.5"
- Place 2" Asphalt Surface from Edge of Beams out 50 ft from each end to regrade the elevation difference of the new beams to the roadway

All work performed for this project shall be in accordance with KYTC Standard Specifications and Standard Drawings. This shall include, but not be limited to, the following:

- *Elastomeric Bearing Pads per Drawing BBP-003-02*
- *Precast Prestress Box Beams General Notes per Drawing BDP-001-06*
- *Box Beam Bearing Details per Drawing BDP-002-03*
- *Box Beam Tension Rod Details per Drawing BDP-004-04*
- *HP12x53 Steel Pile per Drawing BPS-003-09*
- *Modified Pile End Bent 0 Degree Skew*
- *Treatment of Embankments at End-Bents – Details per Drawing RGX-105-09*
- *Grout per Section 601.03.03*

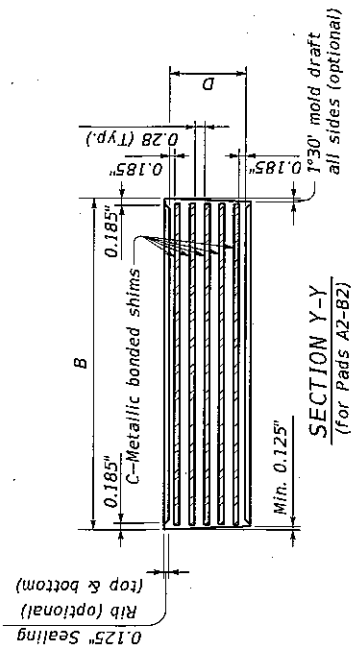
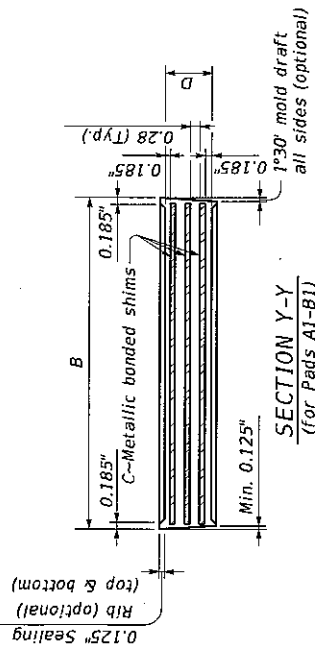
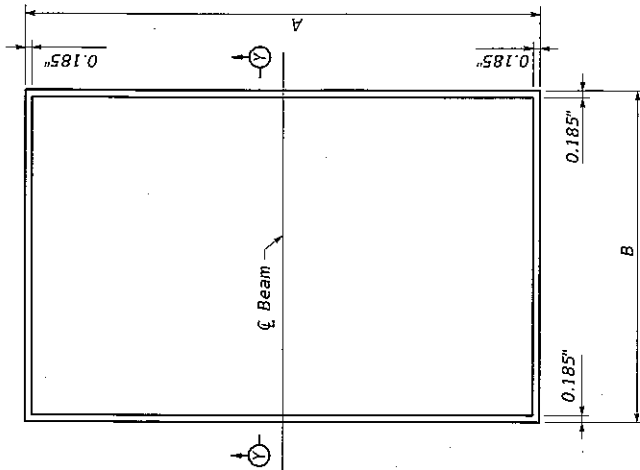
The above Drawings and Specifications related to this project are attached to this bid document for the Bidders convenience. It is the Bidders responsibility to review these documents, as well as

any other KYTC Standard Specifications and Standard Drawings, to ensure their familiarity and compliance with these standards.

Upon awarding, a Pre-Construction Meeting will be scheduled between the awarded contractor and the Kentucky Transportation Cabinet to clarify and outline construction expectations, timeline/scheduling, and any questions between the two parties.

ATTACHMENT A

Standard Specifications & Standard Drawings



DIMENSIONS FOR BOX-BEAM PADS

PAD	A	B	C	D	*MAXIMUM REACTION	MAXIMUM MOVEMENT (One Direction)
A1	1'-10"	7"	3'-0.12" x 21.630" x 6.630"	1.290"	173k	0.500"
A2	1'-10"	7"	5'-0.12" x 21.630" x 6.630"	2.090"	173k	0.750"
B1	11"	7"	3'-0.12" x 10.630" x 6.630"	1.290"	69k	0.500"
B2	11"	7"	5'-0.12" x 10.630" x 6.630"	2.090"	69k	0.750"

* These reactions are based on service loads, use actual reactions to determine anchorage requirements for pads.

GENERAL NOTES

SPECIFICATIONS: Fabricate the Elastomeric Bearing Pads to the design and dimensions as shown on these drawings and to AASHTO LRFD Bridge Construction Specifications, Section 18.

Ensure bearings are low temperature Grade 3 with durometer hardness of 50 and subjected to the load testing requirements corresponding to Design Method A.

Include the price of bearing pads in the bid for the beams.

KENTUCKY DEPARTMENT OF HIGHWAYS
ELASTOMERIC BEARING PADS FOR BOX BEAMS
STANDARD DRAWING NO. BBP-003-02 SUBMITTED BY: <i>B. L. L.</i> APPROVED BY: <i>B. L. L.</i> DATE: 02-26-20 DATE: 02-26-20

PRECAST PRESTRESSED BOX BEAMS

General Notes

SPECIFICATIONS: All references to the standard Specifications are to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, with current supplemental specifications. All references to the AASHTO Specifications are to the current edition of the AASHTO LRFD Bridge Design Specifications, with Interims.

DESIGN LOADS: Beam sections are designed for 1.25*HL93 (KYHL93) Live Load.

DESIGN LOAD DISTRIBUTION: Contrary to AASHTO LRFD Bridge Design Specifications, the design moment and shear distribution for all beams is 0.5 lanes.

FUTURE WEARING SURFACE: These beams are designed for a 15 PSF future wearing surface load.

SUBSTRUCTURE DESIGN LOADS: Unfactored design reaction forces per beam end.

DC (kips): Beam, Slab (if applicable), and Type II railing dead loads.
DW (kips): Future wearing surface.
LL (kips): Beam Live Load reaction per lane x Design load distribution.
LL+I (kips): LL with Dynamic load allowance.

DESIGN DEFLECTIONS:

Δ_d (in.): Sum of the downwards deflections caused by the design 5" deck, railing, and future wearing surface. (Positive Downwards)
 Δ_c (in.): Upwards midspan camber of the beam caused by prestressing minus the downward deflection of the beam due to self weight. (Positive Upwards)

MATERIAL DESIGN SPECIFICATIONS:

for Steel Reinforcement
for Prestressed Girder Concrete (Typ. U.N.O.)
for Class "AA" Concrete
for Prestressing Steel

$F_y = 60000 \text{ PSI}$
 $F_c = 7000 \text{ PSI}$
 $F_{ci} = 5500 \text{ PSI}$
 $F_c = 4000 \text{ PSI}$
 $F_s = 270000 \text{ PSI}$

DESIGN LENGTH: Beam lengths shown in the Standards represent total beam length. Use the next greater designed section for non-standard lengths.

CONSTRUCTION METHOD: Transferring bond stress to the concrete will not be allowed, nor releasing at end anchors until the concrete has attained a minimum compressive strength of 7000 psi. Standard cylinders made and cured identically with the girders, attain FC at 28 days. High early strength concrete is permitted, provided the strength of the concrete at 28 days is not less than 7000 psi. Beams with honeycomb, if such extent to affect the strength or shortening of beams, will not be accepted. The allowance of .00051 (length) is made for shortening of beams due to shrinkage and elastic change. Furnish shop plans showing a detensioning plan by numbering, in sequence, the strand pattern.

PRESTRESSING STRANDS: Ensure prestressing strands to be $\frac{1}{8}$ " oversize (0.167 sq. in.) uncoated seven-wire stress relieved, low-relaxation strands conforming to AASHTO M 203, Grade 270. If an alternate strand arrangement or strand type is preferred by the Contractor, the designer that developed the original plans will provide the design and also revise the original plans to reflect the changes. These design and plan modifications will be done at the Contractor's expense.

CORROSION INHIBITOR: Provide a corrosion inhibitor for B-type (non-composite) beams from the list of approved materials.

BEVELED EDGES: Bevel all exposed edges $\frac{3}{8}$ ".

BEAM SEALER: For composite box beams (CB Beams), seal the full length of the exterior face of all exterior beams with the extent from the top of the beam to 1'-0" underneath the beam. For non-composite box beams (B Beams), seal all faces of all beams, except take care to ensure the grout pockets are not sealed. Use an approved silane sealer as specified by the Division of Structural Design.

REINFORCEMENT: Dimensions shown from the face of concrete to reinforcement are clear distances. Spacing of reinforcement is from center to center of reinforcement. All steel reinforcement is to be epoxy coated in accordance with Section 811.10 of the Specifications. Consider bars marked "C" to be a stirrup for purposes of bend diameters. Non-epoxy reinforcement may be used for fabrication purposes, only, provided that the steel is not used in the top $\frac{5}{16}$ " of the beam and the location of the steel is indicated on the shop drawings.

FABRICATION: Beams shall not be fabricated more than 120 days before the deck is to be poured.

GROUT: Provide non-shrink grout for anchor dowels, shear keys, and tensioning rod block-outs conforming with Section 601.03.03 of the Specifications. When side by side superstructure is utilized, grouting will be completed after lateral tension rods have been fully tightened and before leveling devices have been removed. Include the cost of furnishing and placing grout in the price of beam.

RAILING SYSTEM TYPE II: Furnish this material per these specifications.

ITEM	DESCRIPTION	MATERIAL SPECIFICATION	COATING SPECIFICATION
Post	W6x25	ASTM A36 or A572	A123
Channel	C7x9.8	ASTM A36 or A572	A123
Plate	$\frac{1}{2}$ " x 7"	ASTM A36 or A572	A123
Tubing	8x4x0.1875	ASTM A500 or A501	A123
Bolts	$\frac{5}{8}$ "	ASTM A307	A153
Nuts	for $\frac{5}{8}$ "	ASTM A563, Grade A or better	A153
Washers	for $\frac{5}{8}$ "	ASTM A563, Grade A or better	A153
Stud	1 $\frac{1}{2}$ "	ASTM A108 (1045 C.D. Bar)	B633, Type II, Class 25
Ferrule	2 $\frac{1}{2}$ " x 5"	ASTM A108 (11L17 Steel)	B633, Type II, Class 25
Wire	$\frac{3}{8}$ "	ASTM A510 (1018 Steel)	B633, Type II, Class 25
Nut	for 1 $\frac{1}{2}$ " Bolt	ASTM A108 (12L14 Steel)	B633, Type II, Class 25
Nut	for 1 $\frac{1}{2}$ " Stud	ASTM A325M	B633, Type II, Class 25
Washers	for 1 $\frac{1}{2}$ " Stud	ASTM A325M	B633, Type II, Class 25

Use the current edition of the references listed below with these standards.

STANDARD DRAWINGS

BSP-003 Elastomeric Bearing Pads
BHS-007 Railing System Type II
BJE-001 Armored Edge & Neoprene Joints
RBR-001 Steel Beam Guardrail
RBR-005 Guardrail Components

SPECIAL NOTES

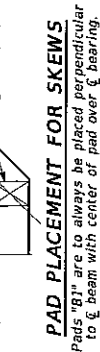
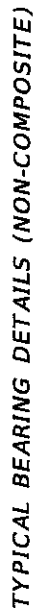
for Corrosion Inhibitors

KENTUCKY
DEPARTMENT OF HIGHWAYS

BOX BEAM
GENERAL NOTES
AND REFERENCES

STANDARD DRAWING NO. BDP-001-06

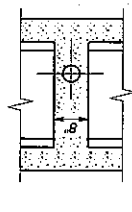
REVISIONS
DATE
02-26-20
APPROVED
DATE
02-26-20



GENERAL NOTES

USE 1/2" x 1'-6" PREFORMED CORK FOR BEAM TYPES B12-B21 & CB12-CB21 FOR BEARING.

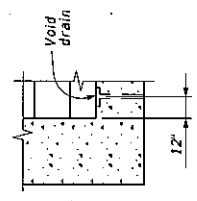
KENTUCKY
DEPARTMENT OF HIGHWAYS
BOX BEAM
BEARING
DETAILS



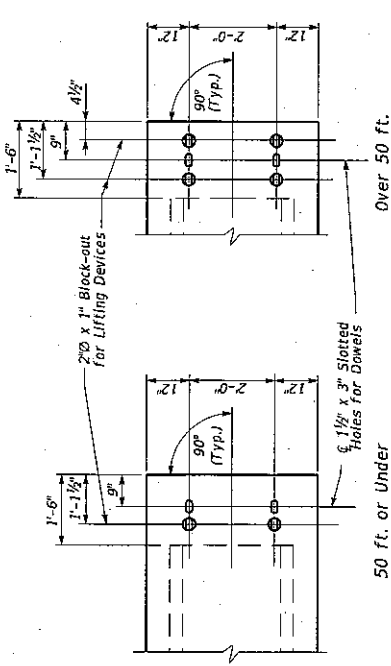
Diaphragms may be omitted if void is cut to allow drain to be encased with a minimum 2" of concrete.

Provide drains on both sides of bridge with normal crown and on low side only for super-elevated bridges. Space drains at minimum 12'-6" on centers with a minimum of one placed each side of the span. Provide drains when span crosses over a highway or railroad. Include the cost of pipe and fittings in the price of beam.

SECTION THRU BEAM



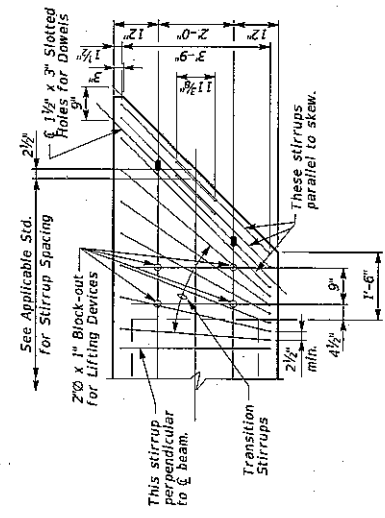
VOID DRAIN DETAIL
Locate two drains at each end of each void. Provide 1/2" drains of a type approved by the Division of Materials.



TYPICAL STRAIGHT END

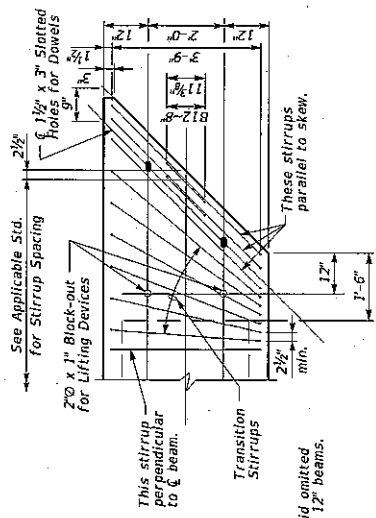
50 ft. or Under

NOTE: Void omitted on 12" beams.



TYPICAL SKEWED END FOR BEAMS OVER 50 FEET

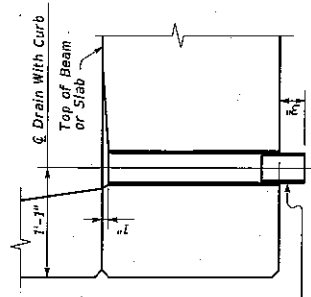
(Right Skew Shown, Left Opposite Hand)



TYPICAL SKEWED END FOR BEAMS 50 FEET OR LESS

(Right Skew Shown, Left Opposite Hand)

NOTE: Void omitted on 12" beams.

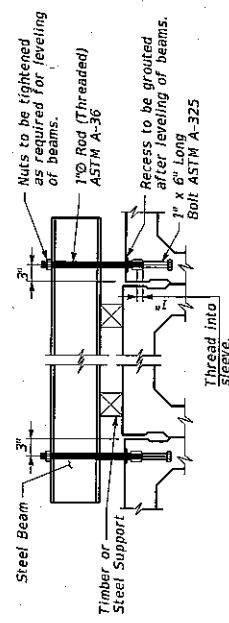
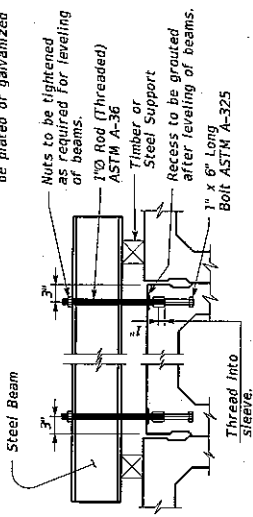


TOP VIEW OF DRAIN
DRAIN DETAILS
(For Spans With Curbs)

SECTION THRU DRAIN
EXTERIOR BOX BEAM
(Showing coupling in barrier)

NPS Designation 4 Standard coupling with 1/2" nipple to be installed in field

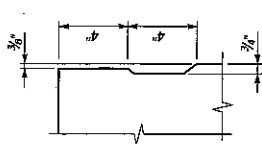
NOTE: Inserts are to be plated or galvanized



LEVELING DEVICE DETAILS

Locate inserts at the center of beams up to 50 ft. and at diaphragm locations of beams over 50 ft. Include the cost of materials and labor involved in leveling beams in the price of beams. Submit alternate leveling devices to the Division of Bridge Design for approval.

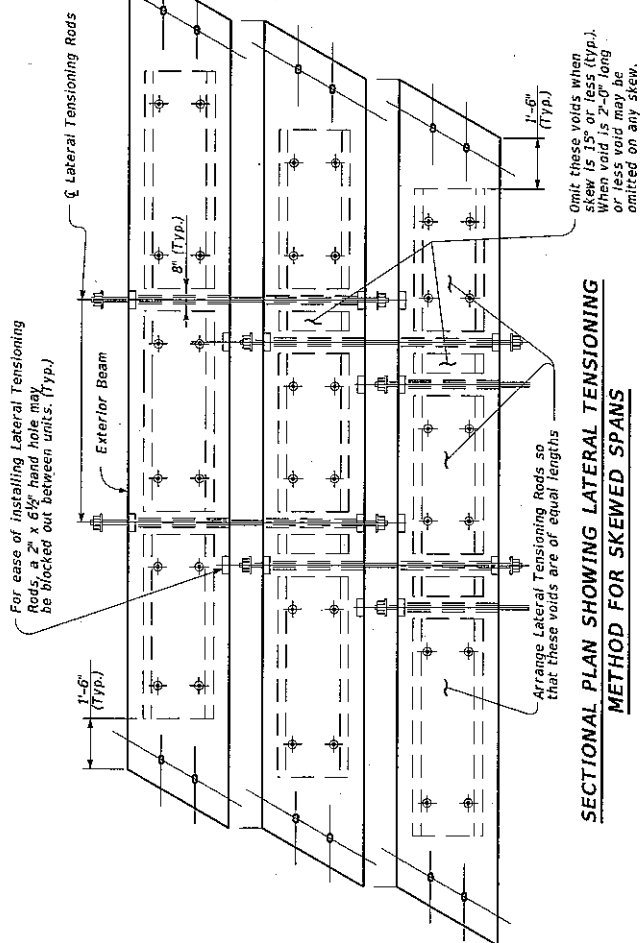
NOTE: Omit shear key recess on exterior face of exterior beam.



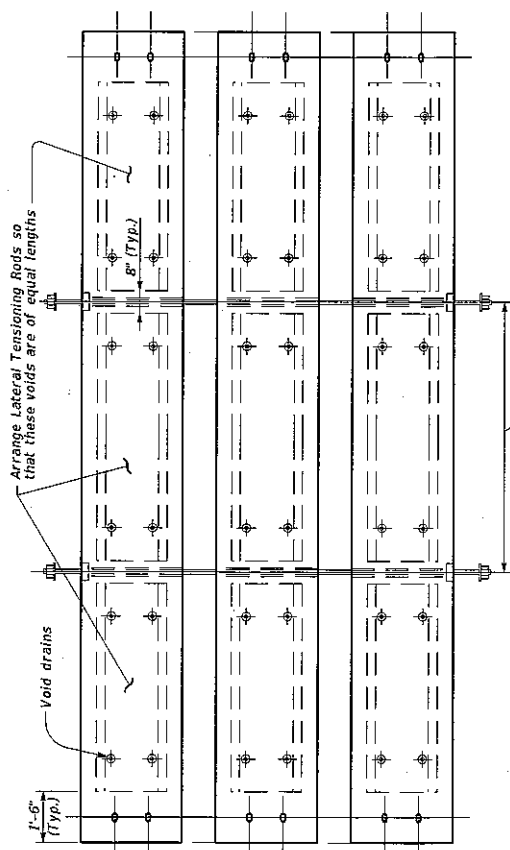
SHEAR KEY DETAIL

GENERAL NOTES

LATERAL TENSIONING RODS: After the deck units are in place, apply a preliminary tension to the lateral tensioning rods. Perform final tensioning that yields 20,000 psi as developed by a torque of 200 ft/lbs. Provide lateral tensioning rods and plates conforming to ASTM A36 with heavy hex nuts conforming to ASTM A307. All tension rods, plates, and nuts to be galvanized in accordance with ASTM A123 or A153 as applicable.

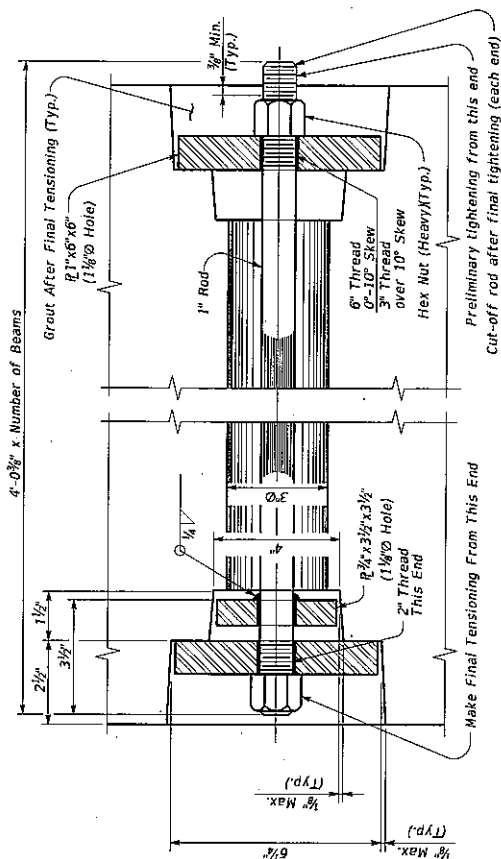


SECTIONAL PLAN SHOWING LATERAL TENSIONING METHOD FOR SKEWED SPANS

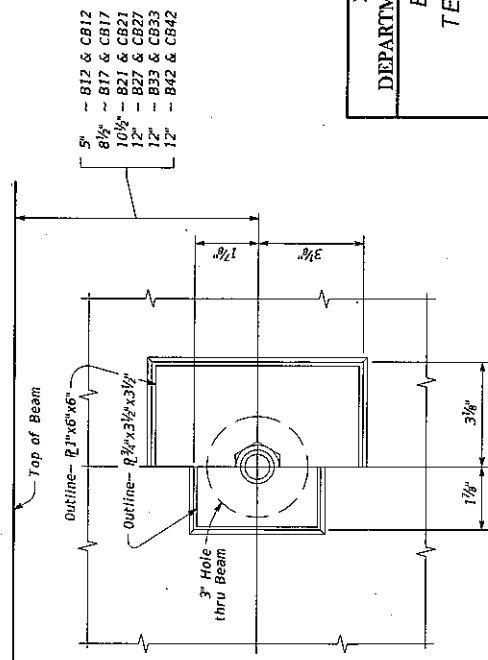


SECTIONAL PLAN SHOWING LATERAL TENSIONING METHOD FOR STRAIGHT SPANS

(The above arrangement is applicable from 0° skew to and including 10° skew.)

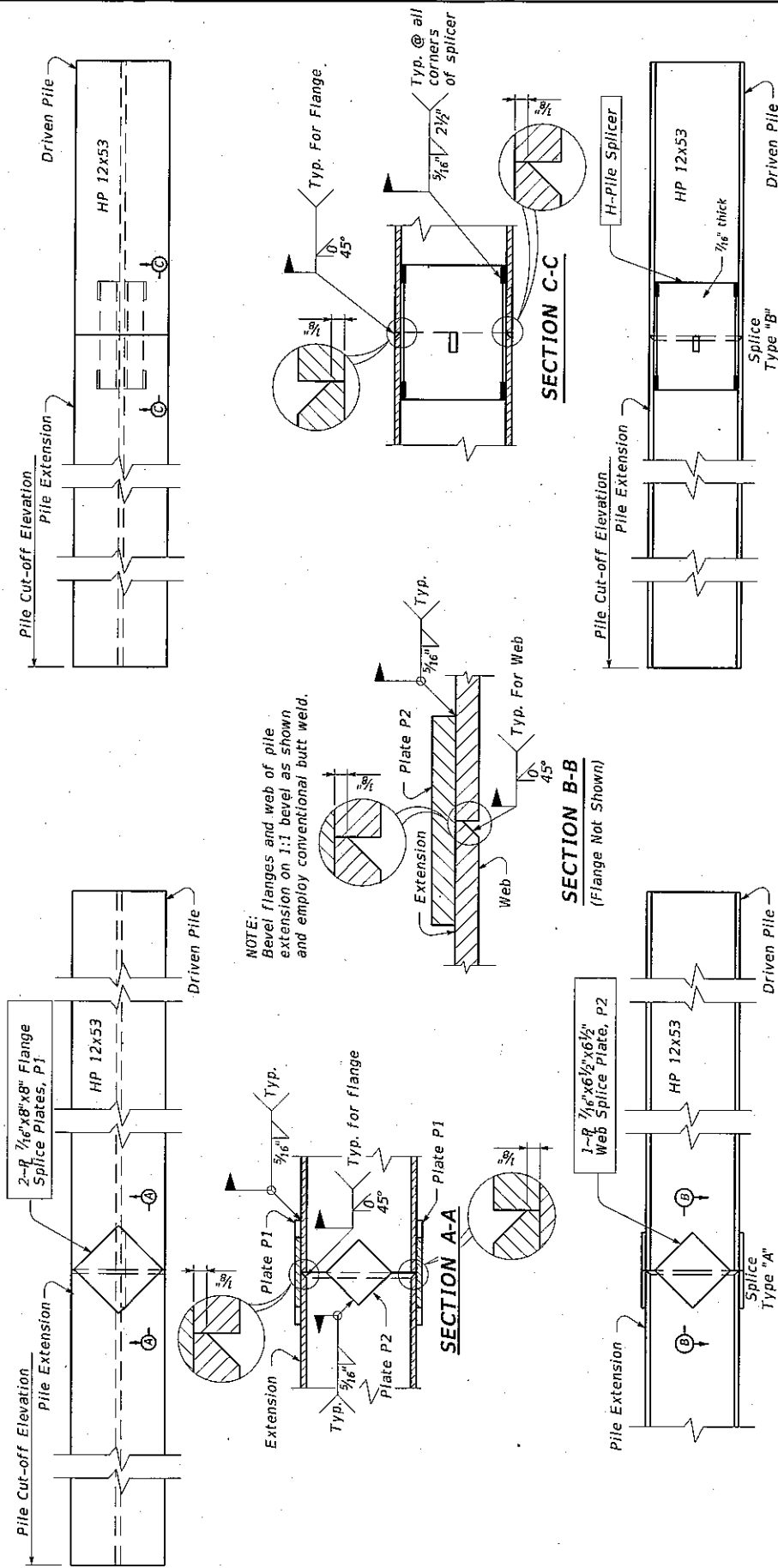


SECTION THRU LATERAL TENSIONING ROD



SECTIONAL END PLAN
(Lateral Tension Rod Details)

KENTUCKY DEPARTMENT OF HIGHWAYS	
BOX BEAM TENSION ROD DETAILS	
STANDARD DRAWING NO. BDP-004-04	
SUBMITTED	DATE
APPROVED	DATE



GENERAL NOTES

SPECIFICATIONS: Kentucky Department of Highways Standard Specifications for Road and Bridge Construction, current edition.

MATERIALS: Ensure structural steel piles conform to A.S.T.M. A709 Grade 50, current Specifications.

SPLICE PLATES: Ensure all pile splicing options conform to A.S.T.M. A709 Grade 50, current Specifications. In lieu of Splice Option "A" or Splice Option "B", splice plates may be flame cut from HP12x53 sections. If flange sections are used, the portion cut at the web must be turned outside in order to obtain a tight fit. Grind the edges smooth prior to welding.

SPLICE OPTION "B": The pile splicer shown in the details for Splice Option "B" may be Champion H-Pile Splicer, Model HP 30000, or an approved equal. Ensure the splicer is in accordance to the manufacturer's recommendations and subject to the Engineer's approval.

FIELD WELDS: Ensure field welding material and workmanship for all piling conforms to the current Joint Specifications ANSI/AASHTO/AWS D1.5 Bridge Welding Code. Splice piles as indicated above only when driven below cut-off elevation.

PAYMENT: Payment for the piles in accordance with plans and specifications will be made at the contract price per linear foot.

PAINT: No painting is required on steel piles.

MILL TEST REPORTS: Furnish mill test reports in triplicate to the Department showing that all materials furnished conform to the Specifications.

KENTUCKY

DEPARTMENT OF HIGHWAYS

HP12x53
Steel Pile

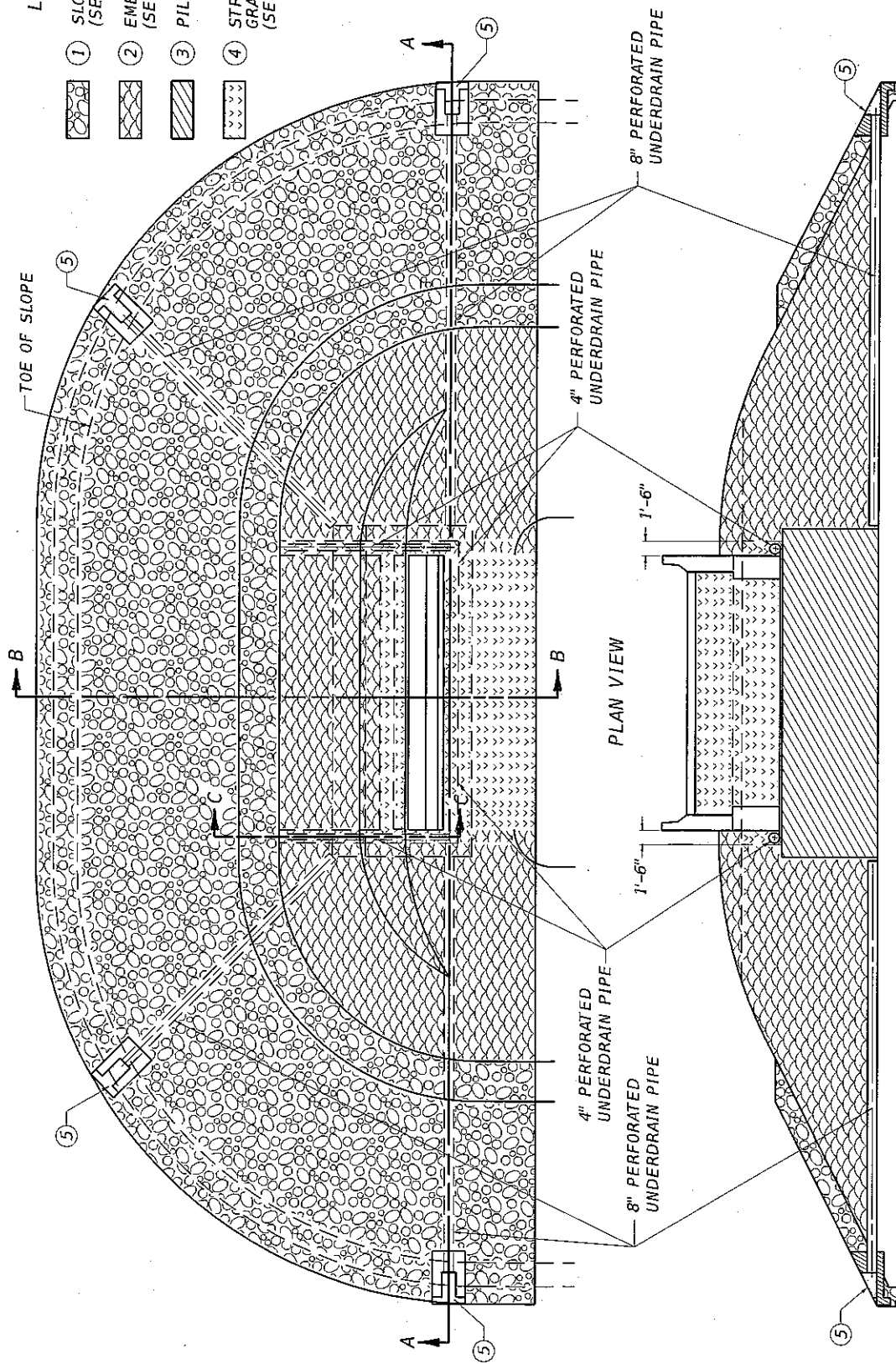
STANDARD DRAWING NO. BPS-003-09

SUBMITTED 02-25-20
DATE

APPROVED 02-25-20
DATE

LEGEND

- ① SLOPE PROTECTION
(SEE BRIDGE PLANS)
- ② EMBANKMENT
(SEE ROADWAY PLANS)
- ③ PILE CORE
- ④ STRUCTURE
GRANULAR BACKFILL
(SEE BRIDGE PLANS)



USE WITH CUR. STD. DWG.
RDP-010 RGX-105

KENTUCKY DEPARTMENT OF HIGHWAYS	
TREATMENT OF EMBANKMENTS AT END-BENTS	
STANDARD DRAWING NO. RGX-100-07	DATE
SUBMITTED	02-26-20
APPROVED	02-26-20
APPROVED	

~ NOTES ~
SECTION A-A

THE PURPOSE OF THIS DRAWING AND CUR. RGX-105 IS TO DEFINE THE LIMITS OF THE FOUR MATERIALS SHOWN. FOR SIMPLICITY PURPOSES, AN END-BENT ON A ZERO DEGREE SKEW IS SHOWN. THE SAME PRINCIPLES WOULD APPLY FOR MORE VARIED STRUCTURES.

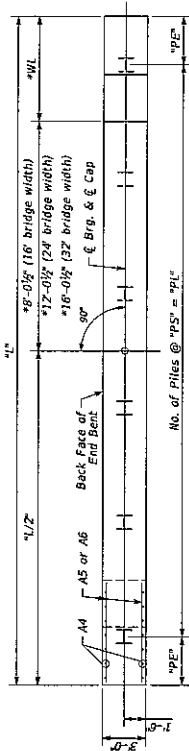
- ① SLOPE PROTECTION REQUIRED WHEN AND AS NOTED ON THE PLANS.
- ② GRANULAR OR ROCK EMBANKMENT REQUIRED WHEN AND AS NOTED ON THE PLANS.
- ③ PILE CORE IN ACCORDANCE WITH SPECIAL PROVISION NO. 69.
- ④ STRUCTURE GRANULAR BACKFILL REQUIRED AT ALL TIMES.
- ⑤ FOR HEADWALL CONSTRUCTION SEE CUR. STD. DWG. RDP-010 (SEE ROADWAY PLANS)

SUPERSTRUCTURE HEIGHT		CAP BILL OF REINFORCEMENT	WING BILL OF REINFORCEMENT
SDH = Beam/Pad Height (+/-inch/centimeter [if applicable])		24'-0" BRIDGE WIDTH	

H1	12' - SDH=27"	A10	14S	28	5	11'-0"	A46	12	5	4'-0"
		A30	14S	28	5	11'-0"	A56	12	5	3'-2"
		A30	14S	28	5	11'-0"	A56	12	5	3'-2"
		A30	14S	28	5	11'-0"	A56	12	5	3'-2"
H2	27' - SDH=53"	A10	14S	28	5	11'-0"	A46	12	5	4'-6"
		A30	14S	28	5	11'-0"	A56	12	5	4'-6"
		A30	14S	28	5	11'-0"	A56	12	5	4'-6"
		A30	14S	28	5	11'-0"	A56	12	5	4'-6"
H3	39' - SDH=80"	A10	14S	28	5	11'-0"	A46	12	5	7'-0"
		A30	14S	28	5	11'-0"	A56	12	5	7'-0"
		A30	14S	28	5	11'-0"	A56	12	5	7'-0"
		A30	14S	28	5	11'-0"	A56	12	5	7'-0"

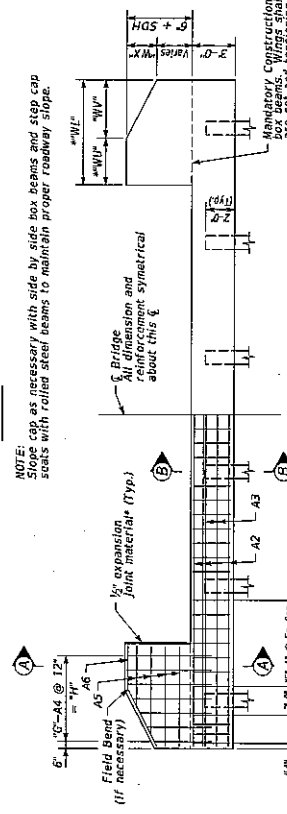
PILE LOAD		DIMENSIONS										QUANTITIES												
		PILES		DIMENSIONS								QUANTITIES												
BRIDGE WIDTH	NO.	SIZE	TONS	NO.	PE	PS	PL	A	B	C	D	E	F	G	H	J	L	WL	WU	WV	WA	CONCRETE (CY)	STEEL (LBS.)	
24	H1	79	5	3'-4 1/2"	6'-0"	24'-0"	36'	4'	9"	2'-3"	5	4'-0"	3	2'-0"	2	3'-1 1/2"	3'-6"	3'-6"	0	0	0	0	12.4	1284
	H2	83	6	2'-10 1/2"	5'-2"	28'-0"	36'	3'	10"	1'-9"	4	3'-0"	3	2'-0"	3	3'-3 1/2"	4'-10"	4'-10"	0	0	0	0	14.8	1422
	H3	100	6	3'-4 1/2"	6'-5"	32'-0"	40'	4'	8"	2'-0"	5	4'-0"	5	7	6'-0"	4	3'-8 1/2"	3'-3"	3'-3"	4'-1"	2'-1"	19.4	1799	
	H3	100	6	3'-4 1/2"	6'-5"	32'-0"	40'	4'	8"	2'-0"	5	4'-0"	5	7	6'-0"	4	3'-8 1/2"	3'-3"	3'-3"	4'-1"	2'-1"	19.4	1799	

*Adjust 9" as necessary for rolled beam superstructure



PLAN

NOTE: Cap as necessary with side box beams and clip cap soaks with rolled steel beams to maintain proper roadway slope.

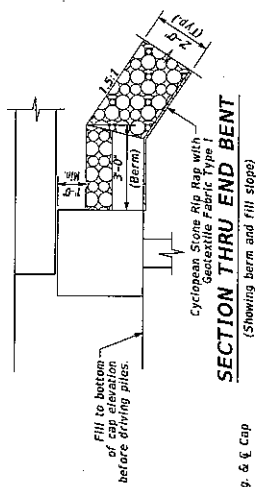


ELEVATION

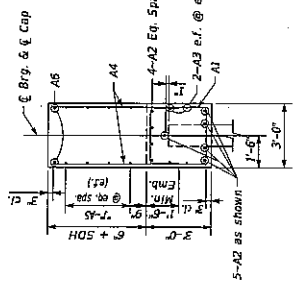
NOTE: Trim A4-A6 bars as necessary.

*Expansion Joint Material:
ASHOTO M153
Type-I Sponge Rubber
Type-II Cork permitted with contractor provided documentation that the Build America Buy America requirements are satisfied.

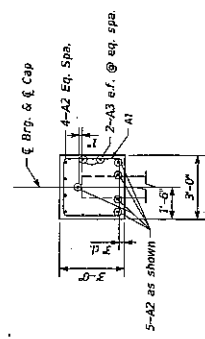
- NOTES:
- 1) Conform to KYTC Standard Specifications, Current Edition.
 - 2) Concrete to be Class 40, 3500 psi.
 - 3) Rebar to be epoxy coated A615, Grade 60.
 - 4) Minimum 2" clear cover to reinforcement unless otherwise noted.
 - 5) Steel beams and designed for the maximum span of the following:
 - H1 - CB12, CB17, CB21 or rolled steel beams up to 16' nominal depth.
 - H2 - CB21, CB27, CB37 or rolled steel beams up to 24' nominal depth.
 - H3 - CB33, CB42 or rolled steel beams up to 36' nominal depth.
 - 6) Piles driven to rock must be driven to refusal. Friction Piles must be driven to (Pile Load/0.4) using the Gates Method.
 - 7) Pile load given is Factored Strength Load.
 - 8) Piles at wet crossings must be driven to 20' below stream bed or to refusal on bedrock. A minimum pile length of 30' is required in all circumstances.
 - 9) Piles at wet crossings must be driven to 20' below stream bed or to refusal on bedrock. A minimum pile length of 30' is required in all circumstances.
 - 10) Circumstances provide a hammer capable of driving the piling to refusal or capacity without encountering excessive blow counts or damaging the pile. Contractor shall be responsible for all damaged piling.



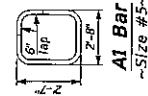
SECTION THRU END BENT



SECTION A-A



SECTION B-B



ATTACHMENT B

Engineers Bid Quantities

Bid Sheet				
Cook Store Trl. MP 2.21				
Item	Plan Quantity	Unit	Cost per Unit	Total Cost
Class A Concrete	18.6	CUYD		
Cyclopean Stone Rip-Rap	100	TONS		
Geotextile Fabric - Slope Protection	96.0	SQYD		
Prestressed Box Beam - Beams Provided	252	LNFT		
Steel Piles HP 12x53	600	LNFT		
Steel Reinforcement - Epoxy Coated	1926	LBS		
Structural Excavation - Common	77.85	CUYD		
Structure Granular Backfill	62.31	CUYD		
Waterproof Membrane	84	SQYD		
Asphalt Overlay - Bridge Beams	7.25	TONS		
Asphalt Approaches	20.5	TONS		
Mobilization	1	LMP		
Demobilization	1	LMP		
Total Cost				