

SEE DETAILS ON DWG. NOS. BR-26-3 AND BR-26-5.

BR-26-4.

DESIGNED BY R. LOVETT
DRAWN BY J.L. KITTRELL

SUPERVISED BY PETRONE
CHECKED BY WILSON, PETRONE

DRAWN BY\_\_\_\_

DATE 9/96 DATE 9/96

DATE 9/96

DATE 9/96

4. REMOVE EXISTING CURBS AND BRIDGERAILS FOR ENTIRE LENGTH OF

BRIDGE, PLACE EPOXY COATED REINFORCEMENT AND POUR 6 INCH NEW

CONCRETE OVERLAY AND CANTILEVERS. SEE DWG. NOS. BR-26-3 AND

ON SHEET NO. 2A.

ON DWG. NO. BR-26-7.

8. REPAIR FILL SETTLEMENT AREA AT ABUTMENT NO. 2 AS SHOWN IN DETAIL

PR	OJECT	NO.	YEAR	SHEET	NO.
33	004-413	5-04	1996		
			REVISIONS		
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## LIST OF DRAWINGS

DWG. NO.	LAST REV. DATE	DRAWING
BR-26-I		LAYOUT OF BRIDGE TO BE REPAIRED
BR-26-2		GENERAL NOTES AND ESTIMATED QUANTITIES
BR-26-3		SUPERSTRUCTURE
BR-26-4		SUPERSTRUCTURE DETAILS
BR-26-5		SUPERSTRUCTURE DETAILS
BR-26-6	·	PRESTRESSED BEAM DETAILS
BR-26-7		ABUTMENT DETAILS

## LIST OF STANDARD DRAWINGS

DWG. NO.	LAST REV. DATE	DRAWING
STD-I-I	12-18-95	BRIDGE RAILING CONCRETE PARAPET
STD-I-2	9-11-95	STEEL SLIDER PLATE ASSEMBLIES FOR CONCRETE PARAPET AND BRIDGE DECK DRAIN DETAILS
STD-14-3		DETAILS FOR PRESTRESSED BOX BEAMS
S-GR-SERIES	VARIES	STANDARD GUARDRAIL DETAILS

## \*LIST OF REFERENCE DRAWINGS

DWG. NO.	LASI REV. DATE	DRAWING	
H-2-32 THRU H-2-35		EXISTING	BRIDGE PLANS

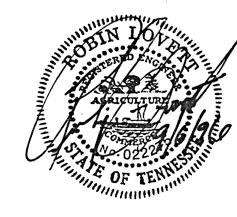
## LIST OF SPECIAL PROVISIONS

NO.	LAST REV. DATE	REGARDING
105A	. **	APPROVAL OF SHOP DRAWINGS

- \* DENOTES: THESE DRAWINGS ARE TO BE PRINTED WITH PLANS.
- \* \* DENOTES: CURRENT REVISION DATE, AS PER CONTRACT DOCUMENTS.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE TO BE REPAIRED INTERSTATE 75 OVER INTERSTATE 24 BRIDGE NO. 33-I75-I.41 HAMILTON COUNTY 1996



#### ESTIMATED BRIDGE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
604-03.09	CLASS "D" CONCRETE (BRIDGE DECK)	C.Y.	136
604-04.02	APPLIED TEXTURE FINISH (EXISTING STRUCTURE)	S.Y.	2 478
604-05.31	BRIDGE DECK GROOVING (MECHANICAL)	S.Y.	3 645
604-10.02	CONCRETE REPAIRS	C.Y.	4 7
604-10.13	CONCRETE SLAB REMOVAL	L.S.	( <u>5</u> )
604-10.14	REMOVE EXISTING WEARING SURFACE	L.S.	(6) I
604-10.18	REINFORCING STEEL (REPAIRS)	LBS.	7 25,304
615-02.05	PRESTRESSED CONCRETE BOX BEAM (33" × 36")	L.F.	8 180
620-03	CONCRETE PARAPET (STD-I-I)	L.F.	9 332

#### FOOTNOTES:

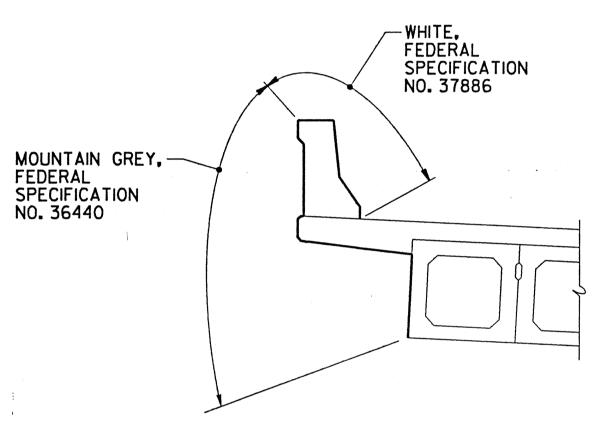
- INCLUDES ALL LABOR AND MATERIALS (EXCEPT REINFORCING STEEL)
  NECESSARY TO PLACE NEW 6 INCH CONCRETE OVERLAY AND
  CANTILEVERS. SEE DWG. NOS. BR-26-3 AND BR-26-4.
- 2 INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR THE APPLICATION OF TEXTURE COATING FOR FULL LENGTH OF BRIDGE AS SHOWN IN DETAIL ON THIS SHEET.
- (3) INCLUDES ALL QUANTITIES FOR GROOVING BRIDGE DECK.
  SEE BRIDGE DECK SURFACE FINISH NOTE ON THIS SHEET.
- 4 INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR THE PLACEMENT OF CLASS "A" CONCRETE AT ABUTMENT NO. 2. SEE DETAIL ON DWG. NO. BR-26-7.
- 5 INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR THE REMOVAL AND DISPOSAL OF EXISTING CURBS AND CONCRETE BRIDGERAILS. SEE DWG. NO. BR-26-3
- 6 INCLUDES COST OF ALL LABOR AND MATERIALS REQUIRED TO REMOVE AND DISPOSE OF THE EXISTING ASPHALT WEARING SURFACE (APPROX. DEPTH = 3°±) WITHIN THE LIMITS OF THE BRIDGE.
- 7 INCLUDES EPOXY COATED REINFORCING STEEL REQUIRED FOR THE NEW 6 INCH CONCRETE OVERLAY AND CANTILEVERS. SEE BILL OF STEEL ON DWG. NO. BR-26-4.
- (8) INCLUDES ALL LABOR AND COST OF NEW BOX BEAMS, SAW CUTTING EXISTING GROUTED KEYWAYS, FIELD CUTTING LATERAL TIE BARS, AND REMOVAL AND DISPOSAL OF EXISTING BEAMS. ALSO INCLUDES SETTING AND GROUTING KEYWAYS OF NEW BOX BEAMS. SEE DETAILS ON DWG. NOS. BR-26-3 AND BR-26-5.
- 9 INCLUDES ALL LABOR AND MATERIALS NECESSARY TO CONSTRUCT NEW CONCRETE PARAPET WITH ENDPOSTS AND PARAPET DRAINS. SEE STANDARD DWG. NOS. STD-I-I AND STD-I-2 AND DWG. NO. BR-26-I.

## GENERAL NOTES

- SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (MARCH I, 1995 EDITION).
- DESIGN SPECIFICATIONS: AASHTO 1992 EDITION WITH ADDENDA.
- CONCRETE FOR ABUTMENT FILL SETTLEMENT REPAIR: SHALL BE CLASS "A" CONCRETE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- BRIDGE DECK CONCRETE: SHALL BE CLASS "D" CONCRETE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH METHOD (C) IN SUBSECTION 604.23 OF THE STANDARD SPECIFICATIONS.
- CONCRETE CURING: ALL CONCRETE IN REPAIR AREAS TO BE CURED ACCORDING TO THE STANDARD SPECIFICATIONS.
- CONCRETE FINISH: SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

  ONLY SURFACES DESIGNATED ON PLANS SHALL RECEIVE AN APPLIED
  TEXTURE FINISH.
- REINFORCING STEEL: SEE THE STANDARD SPECIFICATIONS.
- GROUTED BARS IN DRILLED HOLES: HORIZONTALLY DRILLED HOLES SHALL BE DRILLED 1/2" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH NON-SHRINK GROUT AND BAR DRIVEN TO ITS SEAT. VERTICALLY DRILLED HOLES SHALL BE DRILLED 1/4" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH EPOXY GROUT AND BAR DRIVEN TO ITS SEAT. ALL GROUTING MATERIAL SHALL BE APPROVED BY T.D.O.T. MATERIALS AND TESTS.
- SHOP DRAWINGS: SHALL BE SUBMITTED ACCORDING TO SPECIAL PROVISION NO. 105A, EXCEPT SHOP DRAWINGS SHALL BE SUBMITTED TO THE BRIDGE REPAIR OFFICE OF THE DIVISION OF STRUCTURES.
- MECHANICAL BAR SPLICERS: MUST BE ON THE APPROVED LIST MAINTAINED BY THE DIVISION OF MATERIALS AND TESTS. THE BAR SPLICER SHALL MEET AASHTO STANDARD SPECIFICATIONS FOR MECHANICAL CONNECTION. WHEN EPOXY COATING IS REQUIRED, THE EXPOSED THREADS SHALL BE REPAIRED AFTER SPLICING ACCORDING TO THE STANDARD SPECIFICATIONS, SECTION 907. THE COST OF FURNISHING THE BAR SPLICERS, (AND EPOXY COATING WHEN REQUIRED) INCLUDING ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE INSTALLATION, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 604-10.18, LBS.
- DEMOLITION: THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ANY PARTS OF THE STRUCTURE THAT ARE NOT TO BE REMOVED SPECIFICALLY. THE CONTRACTOR IS NOT ALLOWED TO USE A HYDRAULIC RAM MOUNTED ON A BACKHOE (COMMONLY CALLED A HOE RAM) OR OTHER SIMILARLY HEAVY EQUIPMENT FOR CONCRETE REMOVAL. SAWING OR CUTTING OF THE CONCRETE IS ACCEPTABLE SO LONG AS ANY SPECIFIED PROJECTION OF THE EXISTING REINFORCING STEEL IS MAINTAINED. ALL DEVICES PROPOSED FOR CONCRETE DEMOLITION SHALL MEET APPROVAL OF THE ENGINEER.

PR	ROJECT	NO.	YEAR	SHEET NO.
33	004-413	5-04	1996	2
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NO.	DATE	BY	BR	IEF DESCRIPTION
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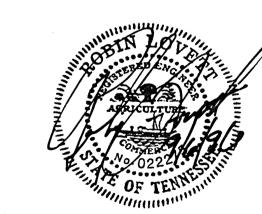


## TEXTURE COATING DETAIL

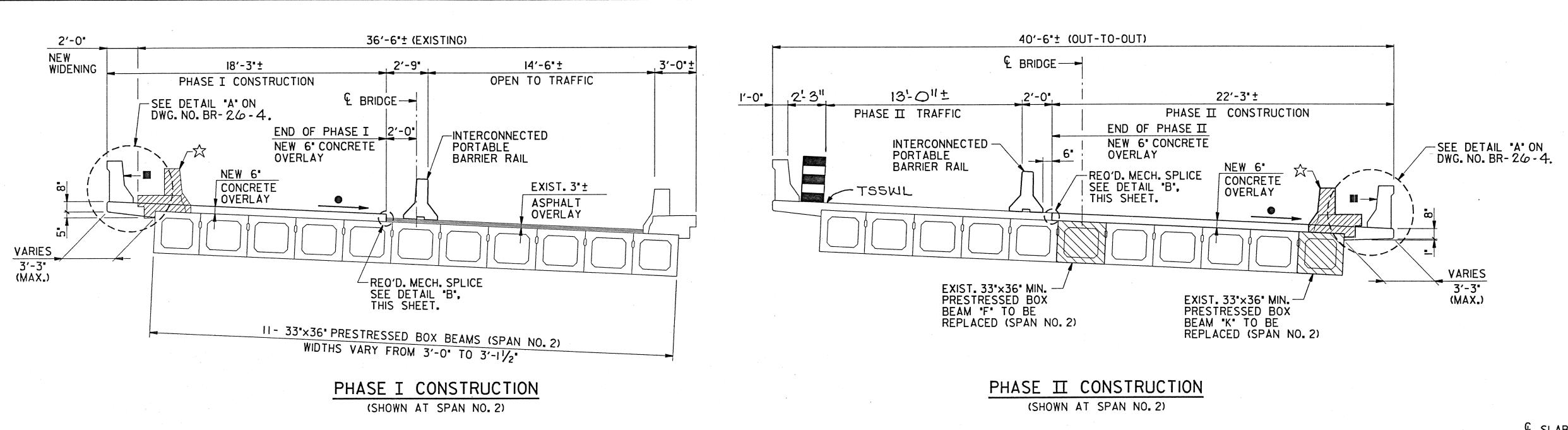
NOTE: COST OF TEXTURE COATING SHALL BE INCLUDED IN ITEM NO. 604-04.02, AND INCLUDES ENDPOSTS AS SHOWN ON STANDARD DWG. NO. STD-I-I.

NOTE: THE CONTRACTOR SHALL USE CONTAINMENT SCREENS OR OTHER MEASURES AS NECESSARY TO PREVENT ANY TEXTURE COATING FROM ENTERING THE ENVIRONMENT.

CONTAINMENT MEASURES SHALL BE APPROVED BY THE ENGINEER AND COST SHALL BE INCLUDED IN ITEMS BID ON.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
GENERAL NOTES AND
ESTIMATED QUANTITIES
INTERSTATE 75
OVER
INTERSTATE 24
BRIDGE NO. 33-I75-I.4I
HAMILTON COUNTY
1996

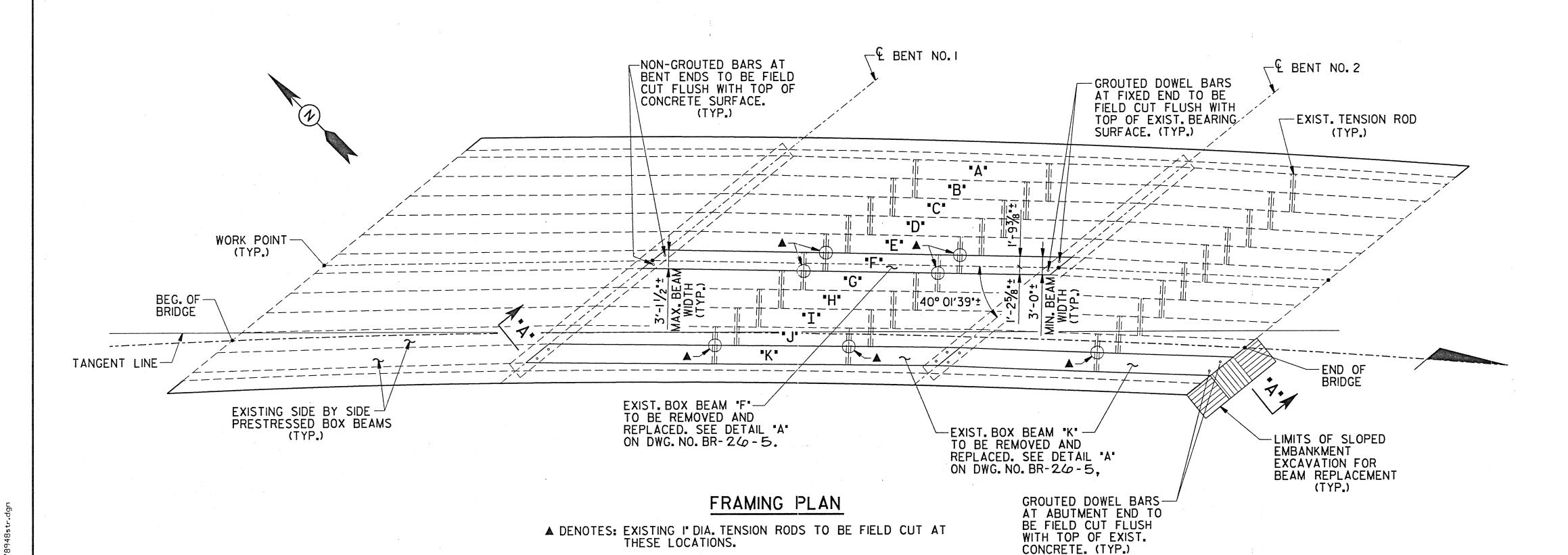


### TYPICAL CROSS SECTIONS (LOOKING FORWARD ON SURVEY)

- DENOTES: NEW CONCRETE PARAPET, SEE STD. DWG. NO. STD-I-I.
- DENOTES: THE NEW 6" CONCRETE OVERLAY SHALL CONFORM TO THE EXISTING CROSS SLOPE. SEE SURFACE FINISH NOTE ON DWG. NO. BR-26-2.
- ☆ DENOTES: PHASED REMOVAL OF EXISTING BRIDGERAIL AND CONCRETE CURBS FOR ENTIRE LENGTH OF BRIDGE, TYPICAL EACH SIDE.

NOTE: CROSS SECTION DIMENSIONS ARE RADIAL TO ROADWAY CURVE.

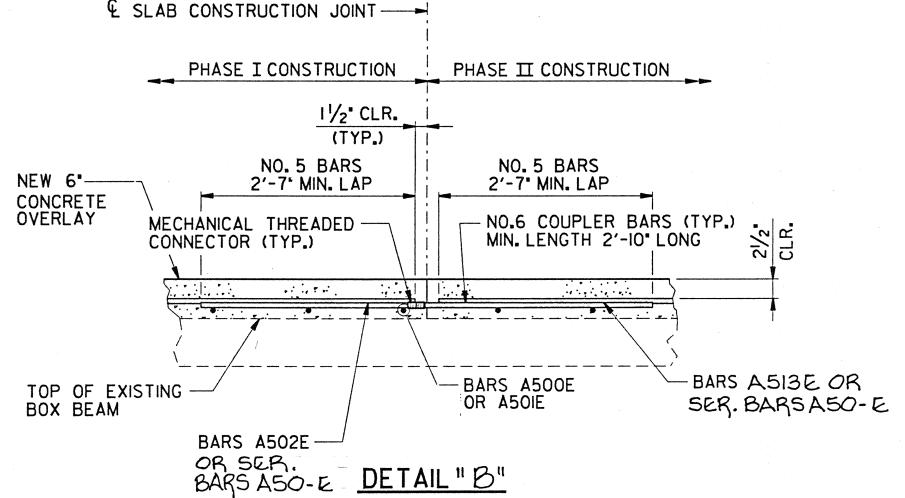
NOTE: THE COST OF REMOVING AND DISPOSING OF THE EXISTING CONCRETE CURBS AND BRIDGERAILS WITHIN THE LIMITS SHOWN IS TO BE INCLUDED IN ITEM NO. 604-10.13, CONCRETE SLAB REMOVAL, L.S.



NOTE: EXISTING TENSION RODS ARE SHOWN IN APPROXIMATE LOCATIONS OF 1/3 SPAN LENGTH IN SPAN NO. 2 AND

RESPONSIBLE FOR FIELD LOCATING TIE RODS.

AT MID SPAN OF SPAN NO. 3. CONTRACTOR SHALL BE



PROJECT NO.

33004-4135-04

NO. DATE BY

YEAR

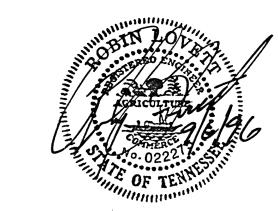
1996

REVISIONS

SHEET NO.

BRIEF DESCRIPTION

NOTE: THE COST OF MECHANICAL THREADED CONNECTORS AND THE COST OF THREADING THE COUPLER BARS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 604-10.18, REINFORCING STEEL (REPAIRS), LBS.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE INTERSTATE 75 OVER INTERSTATE 24 BRIDGE NO. 33-I75-1.41 HAMILTON COUNTY 1996

R. LOVETT G. GERTH

SUPERVISED BY PETRONE
CHECKED BY WILSON, PETRONE

DATE 9/96

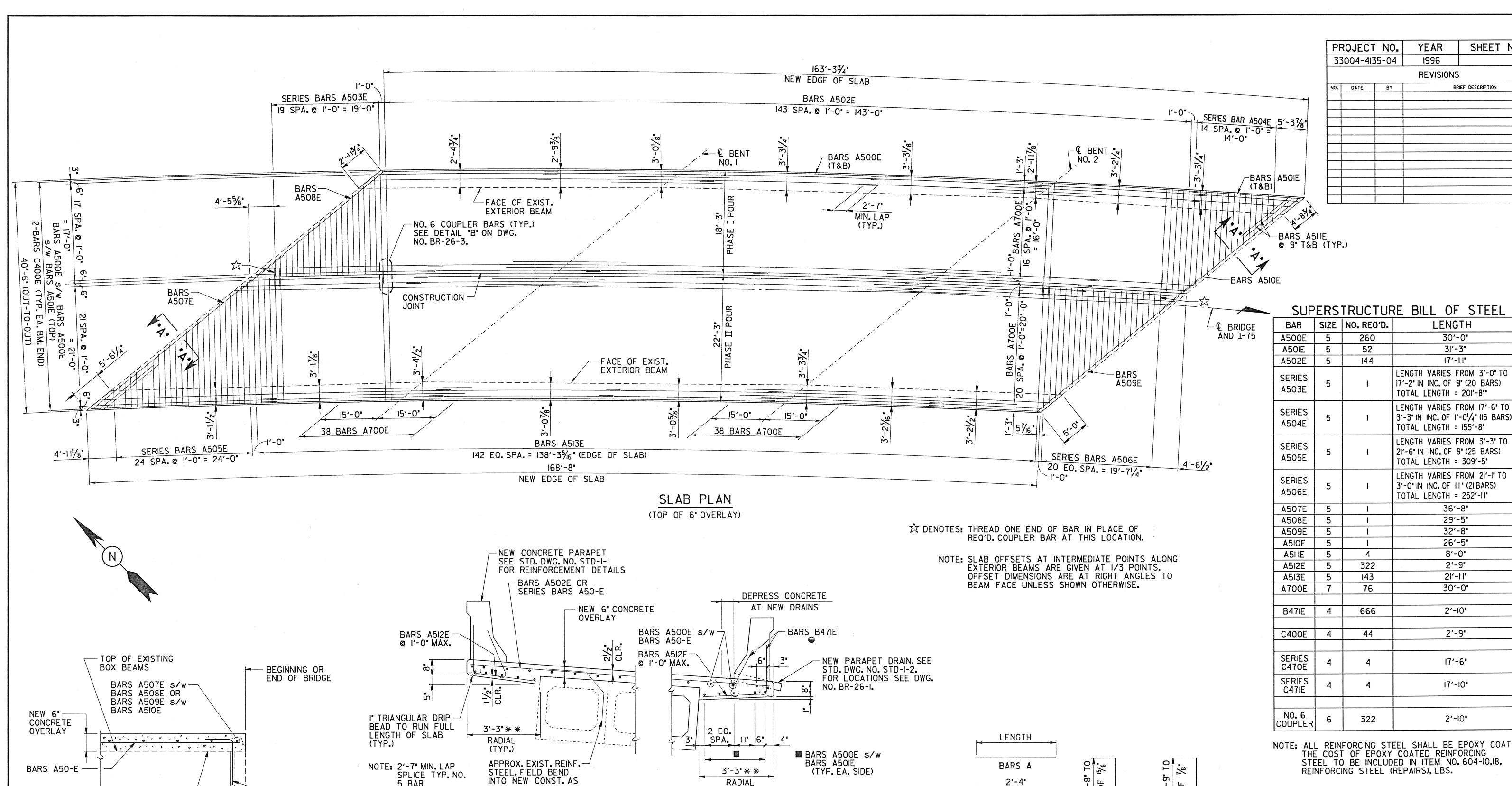
DATE 9/96

DATE 9/96

DESIGNED BY\_

DRAWN BY\_\_\_\_

BR-26-3



(TYP.)

BARS B47IE

1'-6"

BARS C400E

SER. BARS C47IE

SER. BARS

C470E

DETAIL "A"

(SHOWING CANTILEVER REINFORCEMENT)

FROM EXTERIOR FACE OF EXIST. BEAMS.

AND CURED. SEE STD. DWG. NO. STD-I-I.

BE MADE FOR SETTING REINFORCING STEEL

FOR PARAPET. THE PARAPET SHALL NOT BE

POURED UNTIL THE CANTILEVERS ARE POURED

CURVE WITH VARYING OFFSETS (SHOWN THIS SHEET)

\* \* DENOTES: NEW CANTILEVER TO BE FORMED TO HORIZONTAL

O DENOTES: WHEN POURING CANTILEVERS, PROVISIONS SHALL

SHOWN. MIN. STRAIGHT

LENGTH OF I'-O".

BARS C400E

WITH I'-O" MIN.

DRILL AND GROUT

EMBEDMENT INTO EXISTING DOWEL

BAR HOLES. AT NEW

BEAM "K" SPAN NO. 3,

EMBED BARS AFTER

WITH FRESH GROUT.

FILLING DOWEL HOLES

2'-10" NOTE: ALL REINFORCING STEEL SHALL BE EPOXY COATED. THE COST OF EPOXY COATED REINFORCING STEEL TO BE INCLUDED IN ITEM NO. 604-10.18, REINFORCING STEEL (REPAIRS), LBS.

> STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS INTERSTATE 75 OVER INTERSTATE 24 HAMILTON COUNTY 1996

BRIDGE NO. 33-175-1.41

EXISTING -

CONCRETE BEAM

DESIGNED BY R. LOVETT
DRAWN BY G. GERTH

CHECKED BY WILSON, PETRONE

SUPERVISED BY PETRONE

LIMITS OF REMOVAL

SECTION "A-A"

(SHOWING END OF OVERLAY AT

EXISTING AND NEW BEAM ENDS.)

DATE 9/96

DATE 9/96

DATE 9/96

AND REPOURING

BR-26-4

SHEET NO.

BRIEF DESCRIPTION

LENGTH

30'-0"

31'-3"

17'-11"

36'-8"

29'-5"

32'-8"

26'-5"

8'-0"

2'-9"

21'-11"

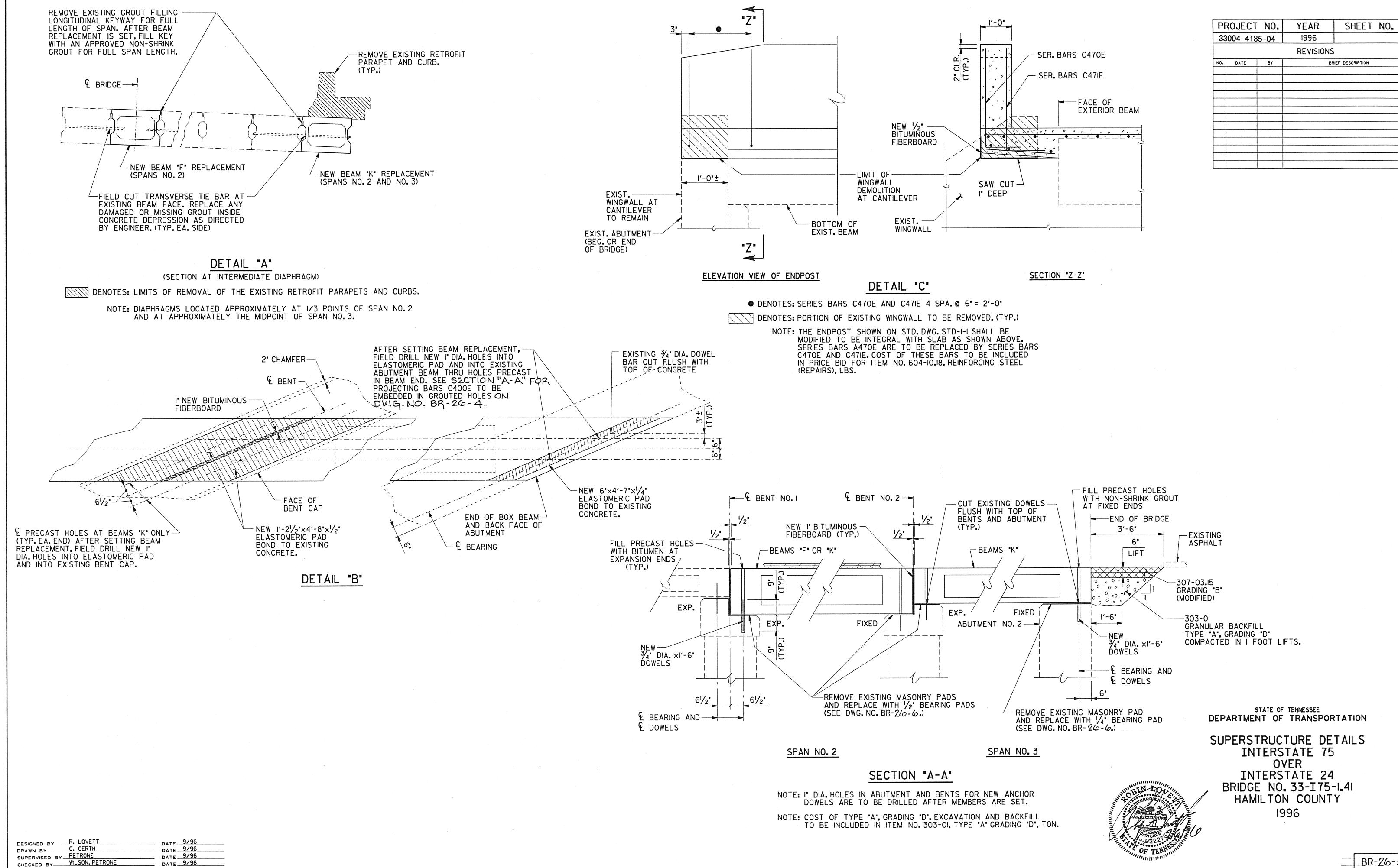
30'-0"

2'-10"

2'-9"

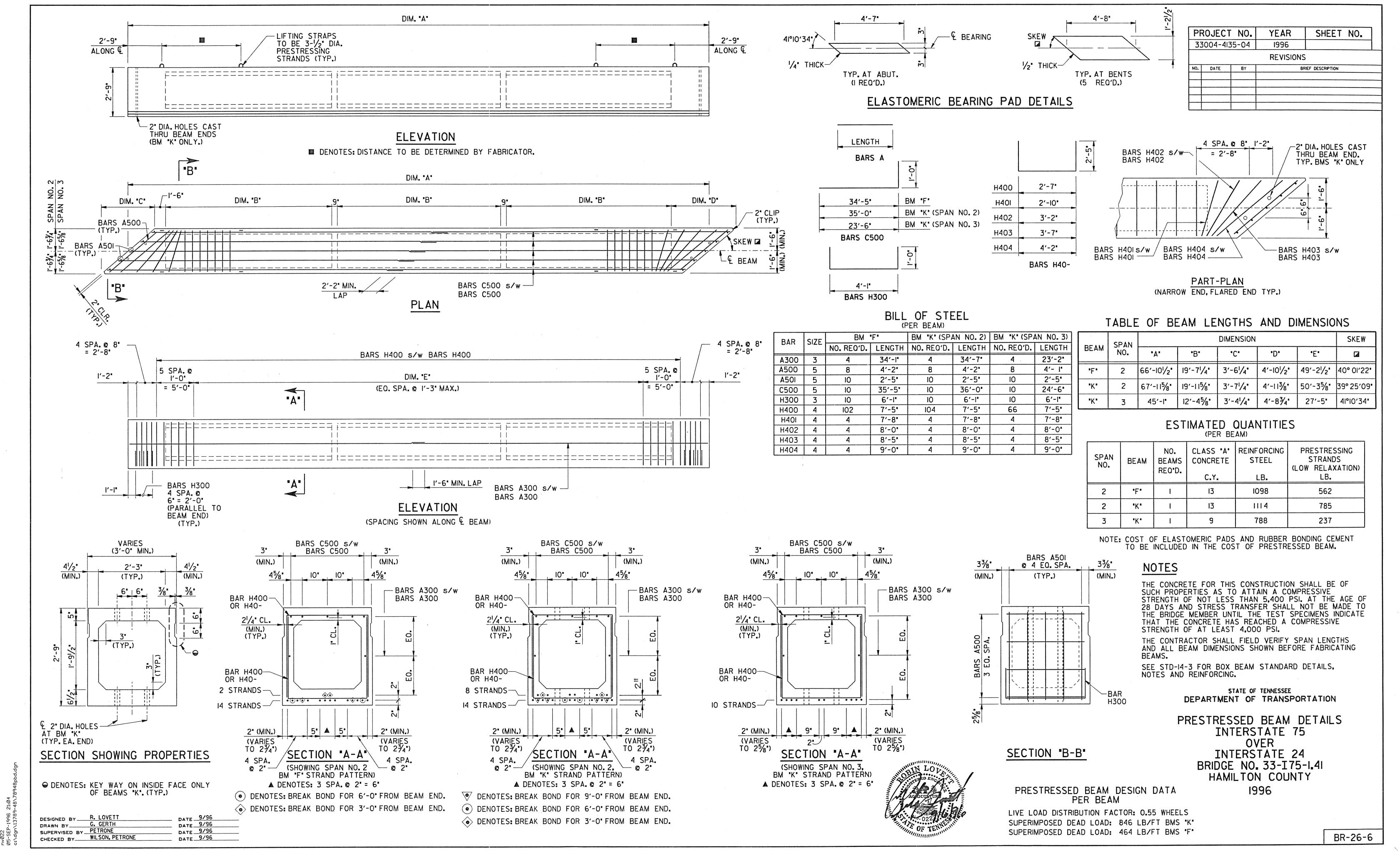
17'-6"

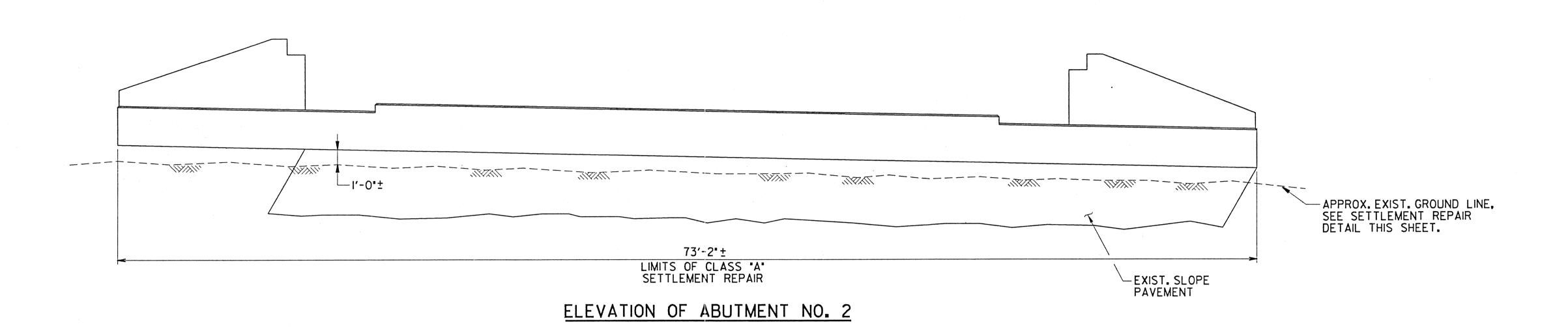
17'-10"

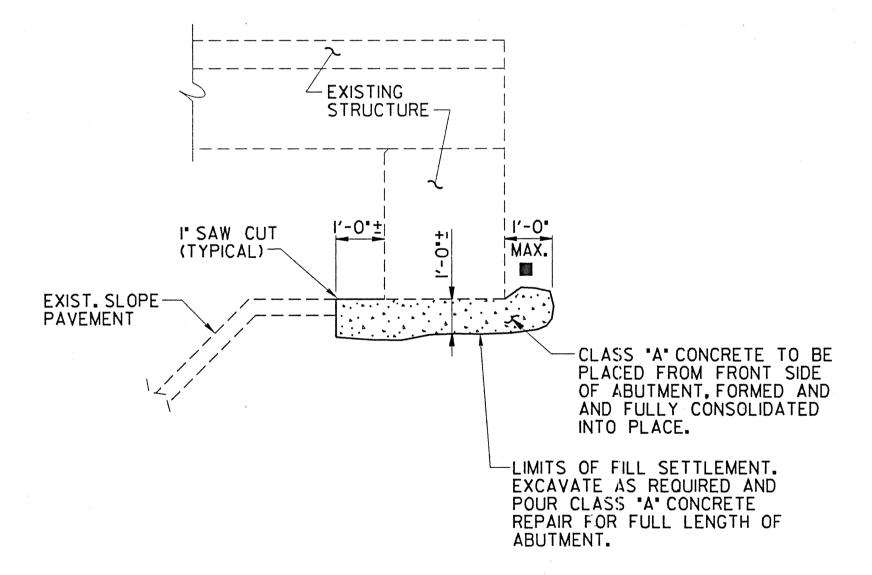


DATE 9/96

BR-26-5







# FILL SETTLEMENT REPAIR DETAIL

DENOTES: WHEN THE SURFACE OF FILL SETTLEMENT EXTENDS FURTHER THAN I'-O" BEHIND THE ABUTMENT, OR A VISUAL INSPECTION REVEALS THAT PORTIONS OF FILL SETTLEMENT ARE INACCESIBLE AND CANNOT BE ADEQUATELY FILLED FROM THE FRONT SIDE OF ABIJTMENT; THE CONTRACTOR WILL BE REQUIRED TO EXCAVATE TO THE EROSION POCKET FROM BEHIND THE EXISTING ABUTMENT PRIOR TO PLACEMENT OF CLASS "A" CONCRETE. THE NECESSITY FOR EMBANKMENT EXCAVATION WILL BE AT THE DISCRETION OF THE ENGINEER.

NOTE: THE COST OF SAW-CUTTING, EXCAVATION (IF REQUIRED) AND CLASS "A" CONCRETE, COMPLETE AND IN PLACE AS SHOWN IN FILL SETTLEMENT REPAIR DETAIL WILL BE PAID FOR UNDER ITEM NO. 604-10.02, CONCRETE REPAIRS, C.Y.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS
INTERSTATE 75
OVER
INTERSTATE 24
BRIDGE NO. 33-I75-I.4I
HAMILTON COUNTY
1996

BWSC¢USER\$A4-SEP-1996 16:10

DESIGNED BY R. LOVETT
DATE 9/96
DRAWN BY G. GERTH
DATE 9/96
SUPERVISED BY PETRONE
DATE 9/96
CHECKED BY WILSON, PETRONE
DATE 9/96