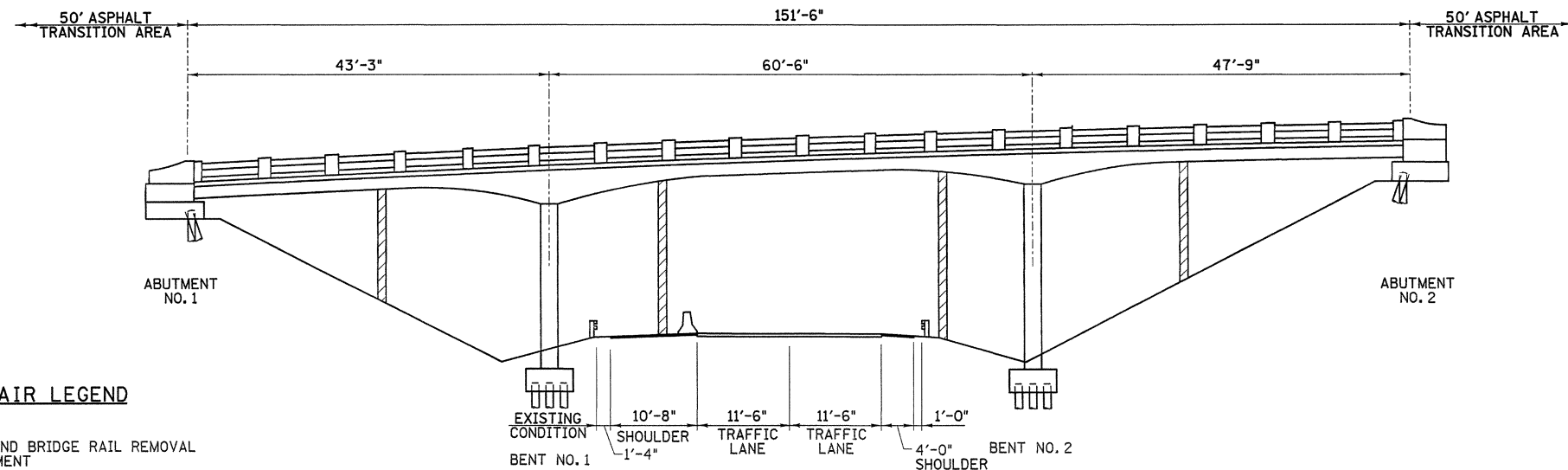


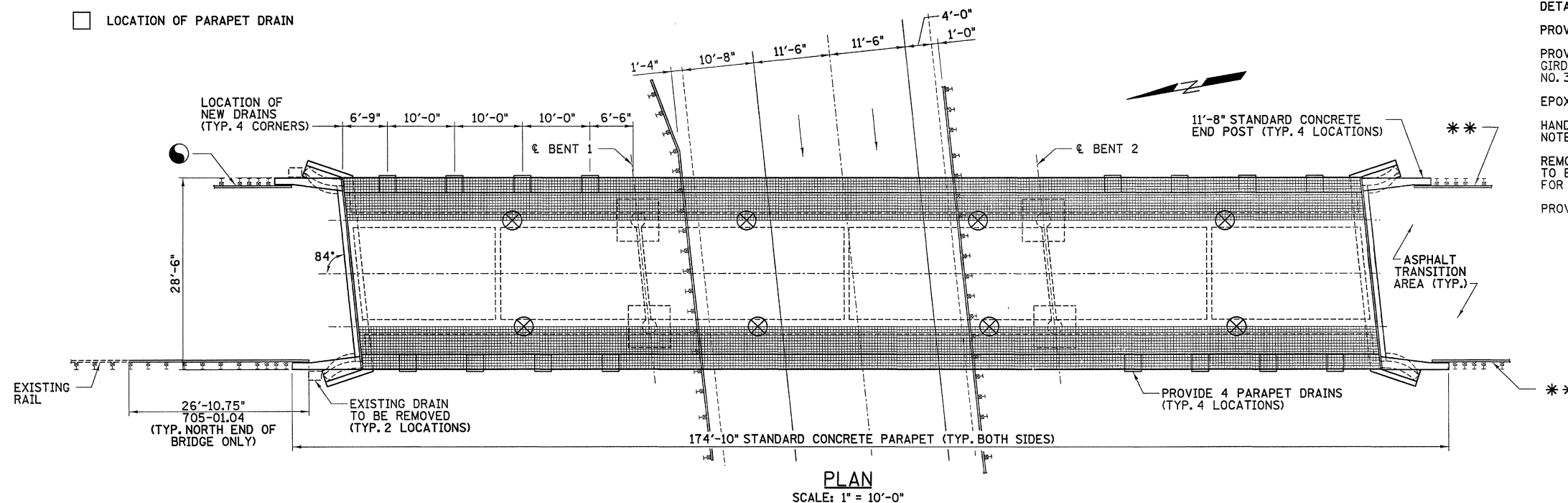
[illegible]

REPAIR LEGEND

-  CANTILEVER AND BRIDGE RAIL REMOVAL
AND REPLACEMENT
-  LOCATION OF TEMPORARY BEAM SUPPORT
-  LOCATION OF PARAPET DRAIN

ELEVATION

SCALE: 1" = 10'-0"



SCOPE OF WORK

REMOVE THE EXISTING CANTILEVER AND BRIDGERAIL, SCARIFY EXISTING SLAB 1" AND PROVIDE A NEW 4 1/2" CONCRETE OVERLAY. SEE DWG. NOS. BR-46-70 AND BR-46-72 FOR NOTES AND DETAILS.

PROVIDE BRIDGE DECK GROOVING WITHIN 1'-0" OF THE TOE OF THE PARAPET FOR FULL LENGTH OF BRIDGE. SEE DWG. NO. BR-46-70.

INSTALL NEW STANDARD STD-1-1 BRIDGERAIL WITH 10'-2" END POSTS, ELIMINATING DRAINS OFF THE ENDS OF THE BRIDGE. PROVIDE PARAPET DRAINS IN END SPANS OVER THE CONCRETE SLOPE PAVING. SEE DWG. NO. BR-46-72 FOR DETAILS.

INSTALL NEW APPROACH GUARDRAIL AT BRIDGE ENDS. SEE THIS DWG. FOR DETAILS.

PROVIDE FOR PARTIAL AND FULL DEPTH DECK REPAIR. SEE DWG. NO. BR-46-69 FOR DETAILS.

PROVIDE SPALL REPAIRS WHERE NEEDED. SEE DWG. NO. BR-46-73 FOR DETAILS.

PROVIDE APPLIED TEXTURE FINISH TO BRIDGE RAILS, SIDES AND BOTTOM OF EXTERIOR GIRDER, END POSTS, ABUTMENTS, ABUTMENT WINGWELLS AND BENTS. SEE SHEET NO. 3 FOR DETAILS.

EPOXY INJECT BEAM CRACKS AS NECESSARY. SEE DWG. NO. BR-46-73 FOR DETAILS.

HAND TOOL CLEAN AND PAINT BEARINGS AT ABUTMENTS 1 AND 2. SEE SHEET NO.3 FOR NOTES.

REMOVE EXISTING ASPHALT WEARING SURFACE ON BRIDGE DECK (3"+/-) AND TRANSITION TO EXISTING ROADWAY GRADE 50' OUTSIDE EACH BRIDGE END. SEE DWG. NO. BR-46-76 FOR DETAILS.

PROVIDE BRACING AT DESIGNATED LOCATIONS. SEE DWG. NO. BR-46-73 FOR DETAILS.

FIRST 35± FEET OF EXISTING APPROACH GUARDRAIL AT NORTH BRIDGE
END TO BE REMOVED. INSTALL NEW GUARDRAIL FROM NEW END POST
AND TRANSITION TO REMAINDER OF EXISTING APPROACH GUARDRAIL. FOR
NOTES AND DETAILS, SEE STD. DWG. S-GR-23.

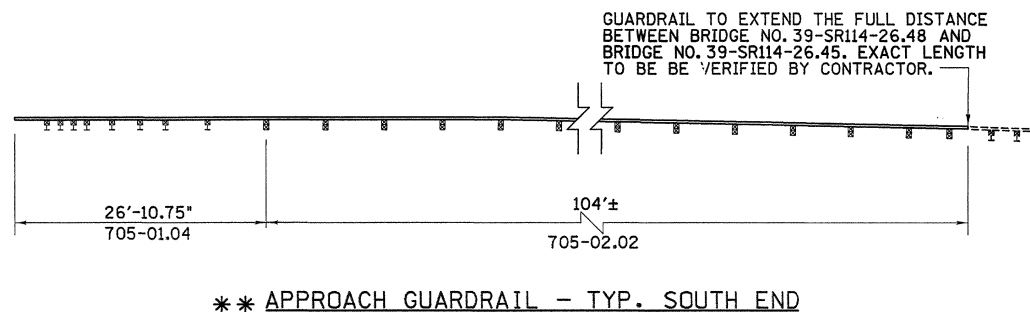
LIST OF DRAWINGS

<u>DWG. NO.</u>	<u>LAST REV. DATE</u>	<u>DRAWING</u>
△ [BR-46-64	6-12-00	LAYOUT OF BRIDGE TO BE REPAIRED (26.45)
BR-46-65	6-12-00	LAYOUT OF BRIDGE TO BE REPAIRED (26.48)
BR-46-66		ESTIMATED QUANTITIES
BR-46-67		GENERAL NOTES
BR-46-68		BRIDGE REPAIR DETAILS
BR-46-69		BRIDGE REPAIR DETAILS
BR-46-70		BRIDGE REPAIR DETAILS
BR-46-71		BRIDGE REPAIR DETAILS
BR-46-72		BRIDGE REPAIR DETAILS
△ [BR-46-73	6-12-00	BRIDGE REPAIR DETAILS
BR-46-74	6-12-00	BRIDGE REPAIR DETAILS
BR-46-75		BRIDGE REPAIR DETAILS
BR-46-76		BRIDGE REPAIR DETAILS

LIST OF REFERENCE DRAWINGS

DWG. NO.	LAST REV. DATE	DRAWING	
K-30-115		LAYOUT OF BRIDGE	BRIDGE NO. 39-SR114-26.45
K-30-116		SUPERSTRUCTURE	
K-30-117		ABUTMENTS 1 AND 2	
K-30-118		BENT NOS. 1 AND 2	
K-30-120		LAYOUT OF BRIDGE	BRIDGE NO. 39-SR114-26.48
K-30-121		SUPERSTRUCTURE	
K-30-122		ABUTMENTS 1 AND 2	
K-30-123		BENT NOS. 1 AND 2	
H-5-110		HANDRAIL	
K-15-60		BEARING DEVICES	

 ALL REFERENCE DRAWINGS TO BE PRINTED WITH THE PLANS



SPECIAL PROVISIONS

<u>NO.</u>	<u>LAST REV. DATE</u>	<u>REGARDING</u>
105A	**	APPROVAL OF SHOP DRAWINGS
108B	**	SPECIAL PROVISION REGARDING PROJECT COMPLETION AND LIQUIDATED DAMAGES
** DENOTES CURRENT REVISION DATE AS PER CONTRACT DOCUMENTS		

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE TO BE REPAIRED

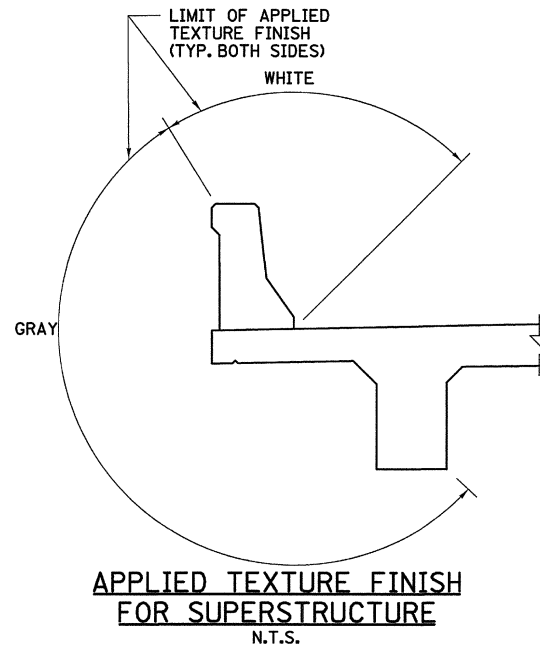
STATE ROUTE 114 OVER
INTERSTATE 40
BRIDGE NO. 39-SR114-26.48

**HENDERSON COUNTY
2000**

DESIGNED BY A. J. KHAIRI DATE APR. 2000
 DRAWN BY K. KYZER DATE APR. 2000
 SUPERVISED BY T. JOHNSON DATE APR. 2000
 CHECKED BY T. JOHNSON DATE APR. 2000 TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

BR-46-65

ITEM	DESCRIPTION	UNIT	39-SR114-26.45	39-SR114-26.48	TOTAL
①	203-03 BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	200	200	400
②	209-08.01 TEMPORARY FILTER BARRIER	L.F.	200	200	400
③	303-01 MINERAL AGGREGATE, TYPE A BASE GRADING D	TON	100	100	200
③	307-03.09 BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING A	TON	20	20	40
③	307-03.16 BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING B-M2	TON	100	100	200
	403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	0.5	0.5	1
	411-01.01 MINERAL AGGREGATE (ACS) GRADING D	TON	20	20	40
	411-01.02 ASPHALT CEMENT (ACS) GRADING D	TON	2	2	4
④	415-01.02 COLD PLANING BITUMINOUS PAVEMENT	S.Y.	270	270	540
⑤	602-10.32 STRUCTURAL STEEL (REPAIRS)	L.B.	575	-	575
⑥	603-02.01 REPAINTING EXISTING STEEL STRUCTURES	L.S.	0.5	0.5	1
⑦	604-04.02 APPLIED TEXTURE FINISH (EXISTING STRUCTURES)	S.Y.	425	400	825
⑧	604-05.31 BRIDGE DECK GROOVING (MECHANICAL)	S.Y.	398	388	786
⑨	604-10.02 CONCRETE REPAIRS	C.Y.	10	10	20
⑩	604-10.09 CONCRETE	C.Y.	96	94	190
⑪	604-10.13 CONCRETE SLAB REMOVAL	L.S.	0.5	0.5	1
⑫	604-10.14 REMOVE EXISTING WEARING SURFACE	L.S.	0.5	0.5	1
⑬	604-10.18 REINFORCING STEEL (REPAIRS)	L.B.	38,880	38,084	76,964
⑭	604-10.26 BRACING	EACH	6	6	12
⑮	604-10.30 BRIDGE DECK REPAIRS (FULL DEPTH OF SLAB)	S.Y.	96	10	106
⑯	604-10.50 BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB)	S.Y.	28	40	68
⑰	604-10.51 SCARIFYING	S.Y.	274	267	541
⑱	604-10.54 CONCRETE REPAIRS	S.F.	45	86	131
⑲	604-10.62 EPOXY INJECTION REPAIR (COMPLETE AND IN PLACE)	L.F.	18	18	36
20	620-03 CONCRETE PARAPET (STD-1-1)	L.F.	358	350	708
21	705-01.04 GUARDRAIL AT BRIDGE ENDS	L.F.	108	108	216
21	705-02.02 SINGLE GUARDRAIL (TYPE 2)	L.F.	104	104	208
22	705-08.65 ENERGY ABSORBING TERMINAL (PORTABLE)	EACH	1	1	2
	706-01 GUARDRAIL REMOVED	L.F.	70	70	140
	712-01 TRAFFIC CONTROL	L.S.	0.5	0.5	1
	712-02.02 INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	180	180	360
	712-04.01 FLEXIBLE DRUMS (CHANNELIZING)	EACH	71	71	142
	712-05.01 WARNING LIGHTS (TYPE A)	EACH	19	19	38
	712-05.03 WARNING LIGHTS (TYPE C)	EACH	53	53	53
23	712-06.01 VERTICAL PANELS	S.F.	10	10	200
	712-06.10 NEW SIGNS (CONSTRUCTION)	S.F.	568	569	1137
	712-07.03 TEMPORARY BARRICADES (TYPE III)	L.F.	20	20	40
	712-08.03 ARROW BOARD (TYPE C)	EACH	1	1	2
	716-05.01 PAINTED PAVEMENT MARKING (4" LINE)	L.M.	0.2	0.2	0.4
	717-01 MOBILIZATION	L.S.	0.5	0.5	1
24	801-01 SEEDING (WITH MULCH)	UNIT	10	10	20
24	801-03 WATER (SEEDING & SODDING)	M.G.	1	1	2

[illegible]

THE CONTRACTOR SHALL CLEAN ALL SURFACES TO RECEIVE APPLIED TEXTURE COATING. ALL CLEANING SHALL BE SATISFACTORY TO THE ENGINEER PRIOR TO APPLYING THE TEXTURE COATING.

THE APPLIED TEXTURE FINISH COLOR FOR BRIDGE SHALL BE SIMILAR TO MOUNTAIN GRAY, FEDERAL SPECIFICATIONS NO. 36440, FEDERAL COLOR STANDARD 595A, EXCEPT THAT THE INSIDE FACE AND TOP OF THE PARAPET SHALL BE WHITE, FEDERAL SPECIFICATION NO. 37886. A COLOR SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. A LIST OF APPROVED TEXTURE COATINGS MAY BE OBTAINED FROM THE TENNESSEE DEPARTMENT OF TRANSPORTATION DIVISION OF MATERIALS AND TESTS.

NO TEXTURE FINISH SHALL BE APPLIED PRIOR TO COMPLETION OF PAVING AND HAULING OPERATIONS AT BRIDGE SITE.

COSTS ASSOCIATED WITH CLEANING, FURNISHING AND APPLYING
TEXTURE COATING AND ALL LABOR AND NECESSARY MATERIALS SHALL
BE INCLUDED IN ITEM NO. 604-04.02, APPLIED TEXTURE FINISH
(EXISTING STRUCTURE), S.Y.

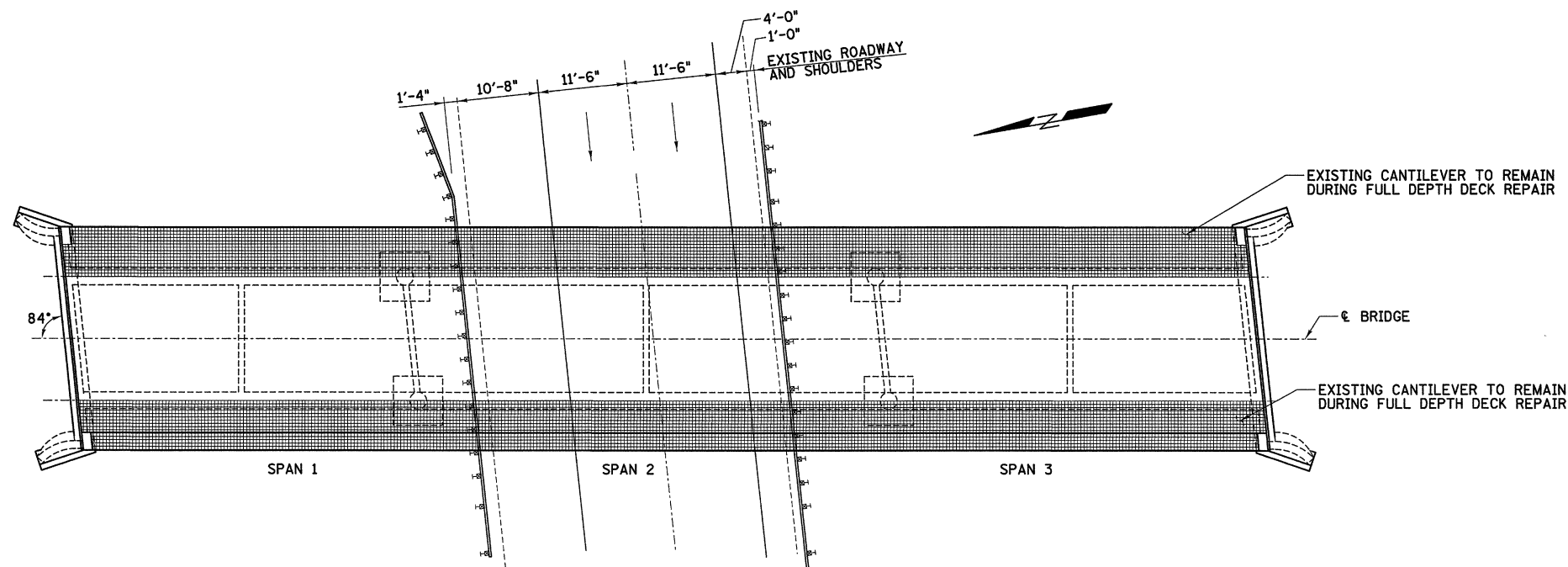
- 14 INCLUDES ALL COSTS FOR TEMPORARY BEAM SUPPORT INCLUDING COSTS TO REPAIR CONCRETE SLOPE PAVING OR OTHER DAMAGE. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-46-73 AND BR-46-74. FOR LOCATIONS, SEE DWG. NOS. BR-46-64 AND BR-46-65.
- 15 INCLUDES ALL COSTS TO PERFORM FULL DEPTH DECK REPAIRS, SEE DECK REPAIR NOTES ON DWG. NOS. BR-46-68 AND BR-46-69. ALSO INCLUDES ALL COSTS ASSOCIATED WITH THE CONCRETE REMOVAL AND NEW CONCRETE IN THE BEAM REPAIR AREA. SEE DWG. NO. BR-46-64 FOR LOCATION OF BEAM REPAIR AREA AND DWG. NO. BR-46-74 FOR DETAILS OF THE BEAM REPAIR.
- 16 INCLUDES ALL COSTS TO PERFORM PARTIAL DEPTH CONCRETE REPAIRS. SEE DECK REPAIR NOTES ON DWG. NOS. BR-46-68 AND BR-46-69.
- 17 INCLUDES THE COST OF ALL LABOR, MATERIALS, EQUIPMENTS, TO SCARIFY EXISTING BRIDGE DECK. SEE DWG. NO. BR-46-73.
- 18 INCLUDES ALL COSTS TO PERFORM SPALL REPAIRS USING CEMENTITIOUS PATCHING MATERIAL. FOR NOTES AND DETAILS, SEE DWG. NO. BR-46-73. THIS ITEM INCLUDES APPROX. 60 S.F. OF COLUMN SPALL REPAIR AT BRIDGE NO. 39-140-23.79.
- 19 INCLUDES ALL LABOR AND MISCELLANEOUS MATERIALS TO COMPLETE THE EPOXY INJECTION OF EXISTING CONCRETE CRACKS. THE ENGINEER WILL DETERMINE THE LOCATION OF CRACKS THAT REQUIRED INJECTION. THE QUANTITY MAY BE INCREASED, DECREASED OR ELIMINATED BY THE ENGINEER. FOR NOTES AND DETAILS, SEE DWG. NO. BR-46-73.
- 20 INCLUDES COST OF ALL LABOR AND MATERIALS FOR CONSTRUCTING NEW STANDARD CONCRETE PARAPET, END POSTS AND DECK DRAINS. FOR LOCATIONS, SEE DWGS. NO. BR-46-64 AND BR-46-65. FOR NOTES AND DETAILS, SEE STD. DWG. STD-1-1 AND STD-1-2, AND DWG. NO. BR-46-75.
- 21 INCLUDES COST OF INSTALLING NEW GUARDRAIL COMPONENTS TO MATCH THE CURVATURE CALLED FOR ON THE DRAWINGS, OR THE STD. S-GR SERIES DRAWINGS, AS APPLICABLE.
- 22 THE CONTRACTOR SHALL BE PAID FOR A MAXIMUM OF TWO (2) ENERGY ABSORBING TERMINALS, NCHRP 350, TL 3 WHICH SHALL BE RELOCATED AS NECESSARY..
- 23 INCLUDES ALL COSTS FOR FURNISHING AND INSTALLING TEN (10) VP-1R VERTICAL PANELS MOUNTED ON THE INTERCONNECTED PORTABLE CONCRETE BARRIER RAIL. FOR NOTES AND DETAILS, SEE STD. DWG. NO. T-PBR-2. FOR LOCATIONS, SEE TRAFFIC CONTROL SHEETS.
- 24 INCLUDES ALL COSTS OF ALL LABOR AND MATERIALS FOR FURNISHING AND INSTALLING THE LISTED ITEM WHERE LOCATED BY THE ENGINEER, IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE ENGINEER MAY INCREASE, DECREASE OR ELIMINATE THE QUANTITY FOR THIS ITEM.

STATE ROUTE 114 OVER
INTERSTATE 40
BRIDGE NO. 39-SR114-26.45
BRIDGE NO. 39-SR114-26.48

HENDERSON COUNTY
2000

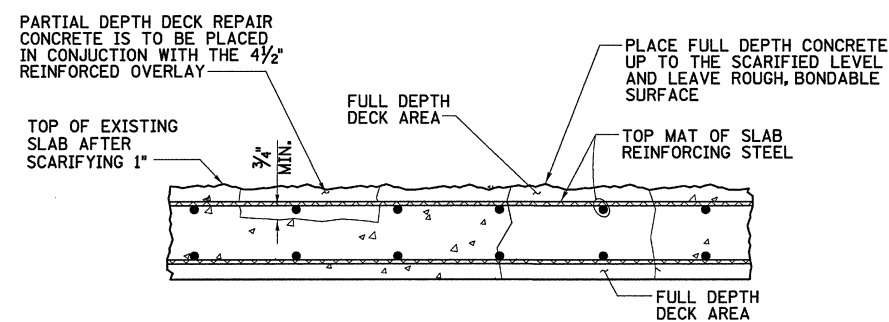
DESIGNED BY A.J. KHAIRI DATE APR. 2000
 DRAWN BY K. KYZER DATE APR. 2000
 SUPERVISED BY T. JOHNSON DATE APR. 2000
 CHECKED BY T. JOHNSON DATE APR. 2000 TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

BR-46-66

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LOCATIONS OF FULL DEPTH DECK REPAIR

SCALE: 1" = 10'-0"



DETAIL SHOWING FULL AND PARTIAL DEPTH DECK REPAIR

REMOVE CONCRETE IN ALL DELAMINATED AREAS TO A DEPTH OF $\frac{3}{4}$ " BELOW THE TOP BAR OF THE TOP MAT OF REINFORCING STEEL. ALL REINFORCING STEEL IN AREAS OF DECK REPAIR SHALL BE COMPLETELY CLEANED. AREAS OF CONCRETE REMOVAL SHALL BE DESIGNATED BY PERSONNEL FROM THE BRIDGE REPAIR OFFICE. INSPECTIONS TO DETERMINE AREAS OF DECK REPAIR SHALL BE SCHEDULED WITH THE BRIDGE REPAIR OFFICE AT LEAST THREE (3) DAYS IN ADVANCE. DECK REPAIR WILL BE PAID FOR UNDER ITEM NO. 604-10.50, BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB), AND ITEM NO. 604-10.30, BRIDGE DECK REPAIR (FULL DEPTH OF SLAB). DURING PARTIAL DEPTH REPAIRS, SHOULD DETERIORATED CONCRETE BE ENCOUNTERED WHICH APPEARS TO RUN FULL DEPTH IN THE SLAB, THE ENGINEER MAY DESIGNATE THESE AREAS TO BE REPAIRED UNDER ITEM NO. 604-10.30. POWER DRIVEN HAND TOOLS USED FOR THE REMOVAL OF UNSOUND CONCRETE IN MAKING PARTIAL AND FULL DEPTH REPAIRS ARE SUBJECT TO THE FOLLOWING RESTRICTIONS: 1) (PARTIAL DEPTH REPAIRS) PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 60 POUND CLASS SHALL NOT BE USED. 2) (FULL DEPTH REPAIRS) PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 90 POUND CLASS SHALL NOT BE USED. ALSO ALL DECK REPAIR OVER BEAMS WILL BE RESTRICTED TO 60 POUND PNEUMATIC HAMMERS. 3) CHIPPING HAMMERS OF THE 15 POUND CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL. 4) TRAFFIC CONTROL SHALL BE PROVIDED FOR TRAFFIC BELOW BRIDGE DURING PARTIAL AND FULL DEPTH DECK REPAIR.

THE CONTRACTOR SHALL USE HIGH EARLY STRENGTH CONCRETE $f'c=4000$ PSI
628 DAIRY STRENGTH OF CLASS "D" BRIDGE DECK CONCRETE. FULL DEPTH DECK
REPAIRS SHALL NOT BE PERMITTED NEXT TO ANY OF THE REPAIRED AREAS
NOR SHALL THE CONCRETE OVERLAY BE PLACED UNTIL TEST SPECIMENS OBTAIN
A COMPRESSIVE STRENGTH OF 3000 PSI MINIMUM AND THE CONCRETE HAS
BEEN IN PLACE FOR A MINIMUM OF TWO (2) DAYS. CONCRETE FOR FULL DEPTH
DECK REPAIRS SHALL BE POURED TO THE SCARIFICATION LEVEL PRIOR TO PLACING
THE 4 1/2" CONCRETE OVERLAY, SHALL BE FINISHED WITH A VERY ROUGH
SURFACE FOR BONDING TO THE OVERLAY, AND IS TO BE INCLUDED UNDER
ITEM NO. 604-10.30.

REPAIR LEGEND

NOTES:

AREAS OF FULL DEPTH DECK REPAIR SHALL BE COORDINATED WITH
THE TRAFFIC CONTROL AS SHOWN ON SHEETS 4, 5, 6 AND 8

LIMITS OF FULL DEPTH DECK REPAIR SHALL BE LOCATED BY THE ENGINEER BUT NOT EXCEED 10'-0" IN LENGTH.

NOTE:

ITEM. NO. 604-10.30 AND 604-10.50 SHALL BE
BID WITH THE CONTINGENCY THAT THESE ITEMS
MAY BE INCREASED, DECREASED, OR ELIMINATED
AS DIRECTED BY THE ENGINEER.

CANTILEVER AND BRIDGE RAIL REMOVAL
AND REPLACEMENT

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

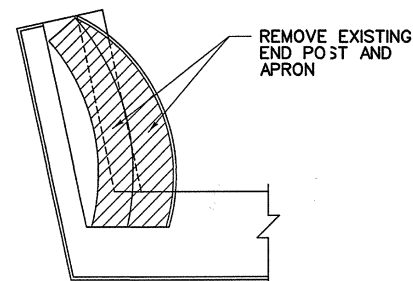
STATE ROUTE 114 OVER
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2000

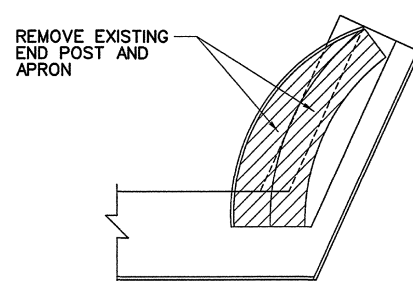
DESIGNED BY A. J. KHAIRI DATE APR. 2000
 DRAWN BY K. KYZER DATE APR. 2000
 SUPERVISED BY T. JOHNSON DATE APR. 2000
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TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

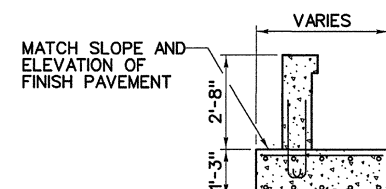
BR-46-69

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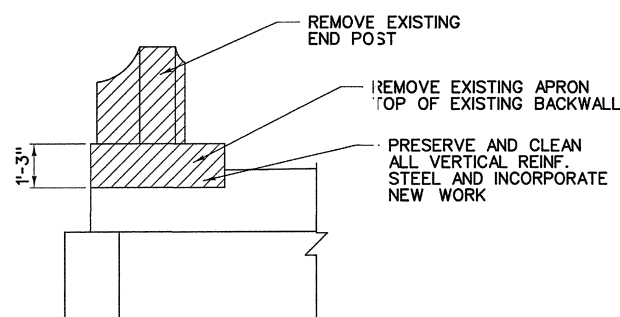
DEMOLITION PLAN
(ABUT. 1 WEST END & ABUT. 2 EAST EN))
SCALE: $\frac{3}{8}" = 1'-0"$



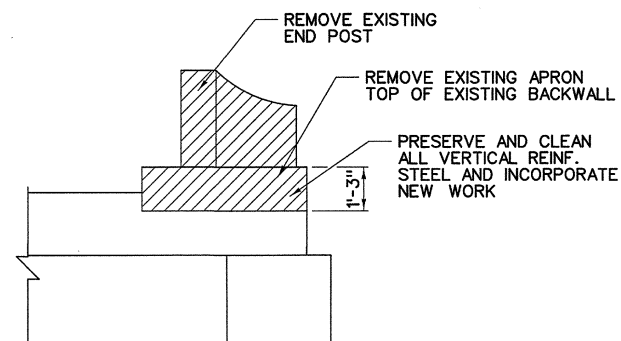
DEMOLITION PLAN
(ABUT. 1 EAST END & ABUT. 2 WEST END)
SCALE: $\frac{3}{8}" = 1'-0"$



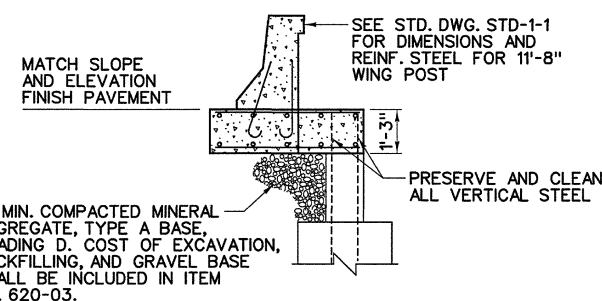
SECTION B-B
SCALE: $\frac{3}{8}" = 1'-0"$



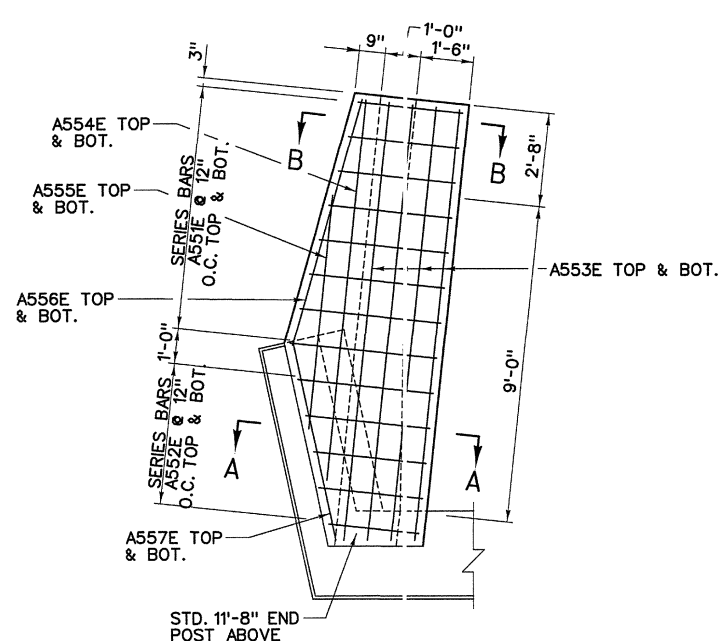
TYPICAL DEMOLITION ELEVATION
(ABUT. 1 WEST END & ABUT. 2 EAST END)
SCALE: $\frac{3}{8}" = 1'-0"$



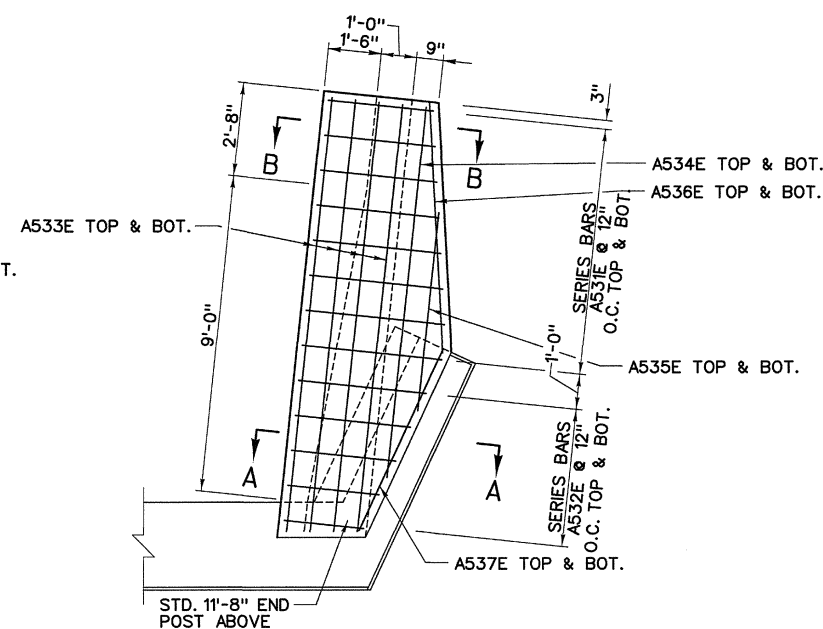
DEMOLITION ELEVATION
(ABUT. 1 EAST END & ABUT. 2 WEST END)
SCALE: $\frac{3}{8}" = 1'-0"$



SECTION A-A
SCALE: $\frac{3}{8}'' = 1'-0''$



CONSTRUCTION PLAN
(ABUT. 1 WEST END & ABUT. 2 EAST END)
SCALE: $\frac{3}{8}" = 1'-0"$



CONSTRUCTION PLAN
(ABUT. 1 EAST END & ABUT. 2 WEST END)
SCALE: $\frac{3}{8}" = 1'-0"$

BILL OF STEEL							
BACKWALL AND END POST FOUNDATION							
BARS	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH
			A	B	C	D	
SERIES	5	2	LENGTH VARIES FROM 2'-11" TO 3'-11" IN INC. OF 2"± (7 BARS)				23'-3"
A531E							
SERIES	5	2	LENGTH VARIES FROM 2'-3" TO 3'-11" IN INC. OF 2"± (6 BARS)				18'-6"
A532E							
A533E	5	8					12'-3"
A534E	5	2					10'-7"
A535E	5	2					5'-8"
A536E	5	2					7'-1"
A537E	5	2					5'-9"
SERIES	5	2	LENGTH VARIES FROM 2'-11" TO 4'-0" IN INC. OF 2"± (7 BARS)				24'-3"
A551E							
SERIES	5	2	LENGTH VARIES FROM 2'-6" TO 4'-2" IN INC. OF 4"± (6 BARS)				20'-0"
A552E							
A553E	5	8					12'-4"
A554E	5	2					10'-10"
A555E	5	2					6'-8"
A556E	5	2					7'-3"
A557E	5	2					5'-9"
THE BILL OF STEEL SHOWN ABOVE IS FOR ONE (1) ABUTMENT, TWO (2) ABUTMENTS REQ'D. PER BRIDGE, FOUR (4) ABUTMENTS TOTAL FOR BRIDGE NOS. 39-SR114-26.45 AND 39-SR114-26.48.							
ALL DIMENSIONS GIVEN ARE OUT-TO-OUT.							

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

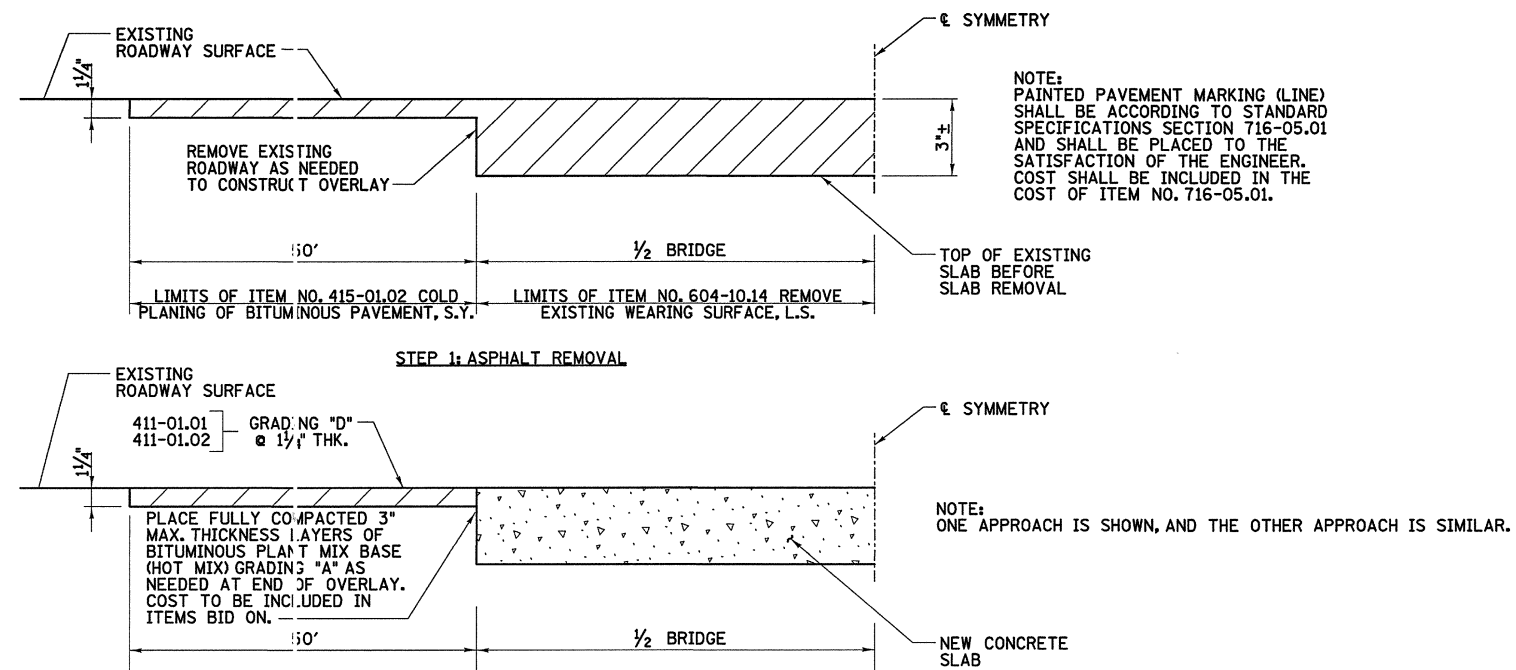
STATE ROUTE 114 OVER
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BRIDGE NO. 39-SR114-26.45
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HENDERSON COUNTY
2000

DESIGNED BY W. M. MCENTIRE DATE APR. 2000
 DRAWN BY C. THOMAS DATE APR. 2000
 SUPERVISED BY T. JOHNSON DATE APR. 2000
 CHECKED BY T. JOHNSON DATE APR. 2000

TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

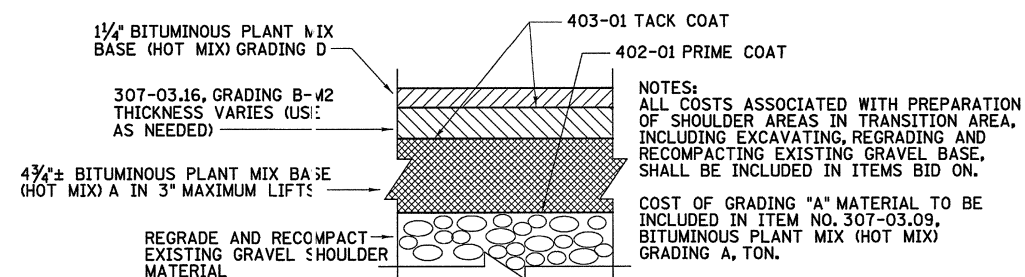
BR-46-75

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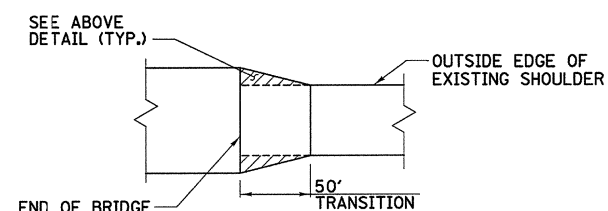
STEP 2: APPLY SURFACE COURSE TO ENTIRE WIDTH OF APPROACHES

ASPHALT PAVING DETAILS

SCALE: NONE



SHOULDER TRANSITION AND SHOULDER STRENGTHENING AREA TYPICAL PAVEMENT SECTION



PLAN SHOWING ASPHALT SHOULDER TRANSITION AT APPROACHES

SCALE: NONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

STATE ROUTE 114 OVER
INTERSTATE 40
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2000

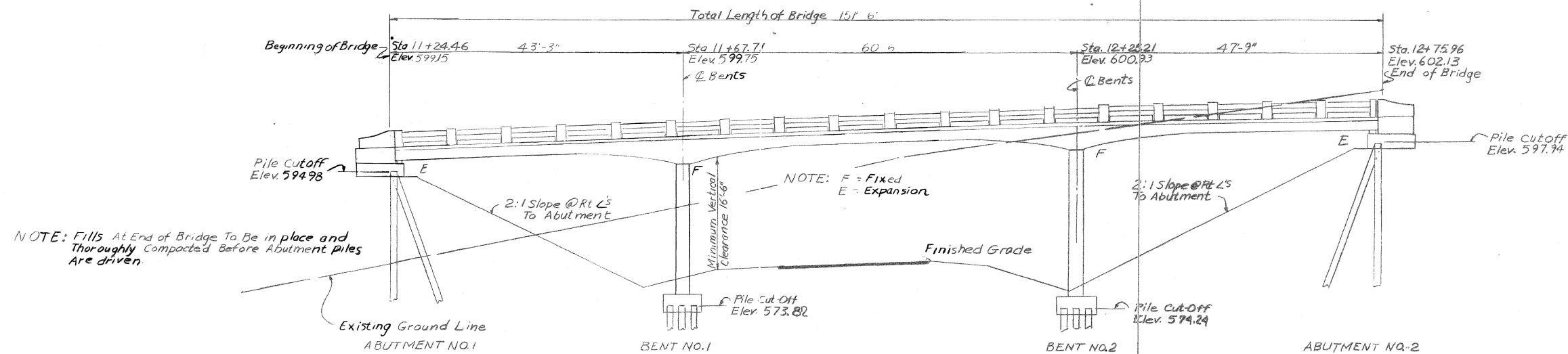
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 DRAWN BY K. KYZER DATE APR. 2000
 SUPERVISED BY T. JOHNSON DATE APR. 2000
 CHECKED BY T. JOHNSON DATE APR. 2000

TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

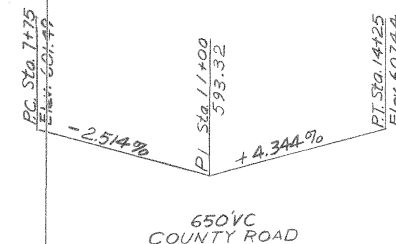
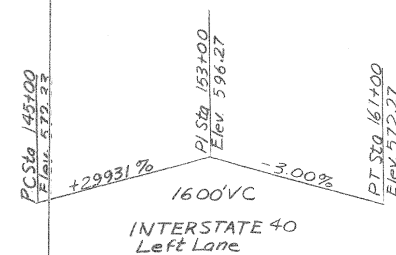
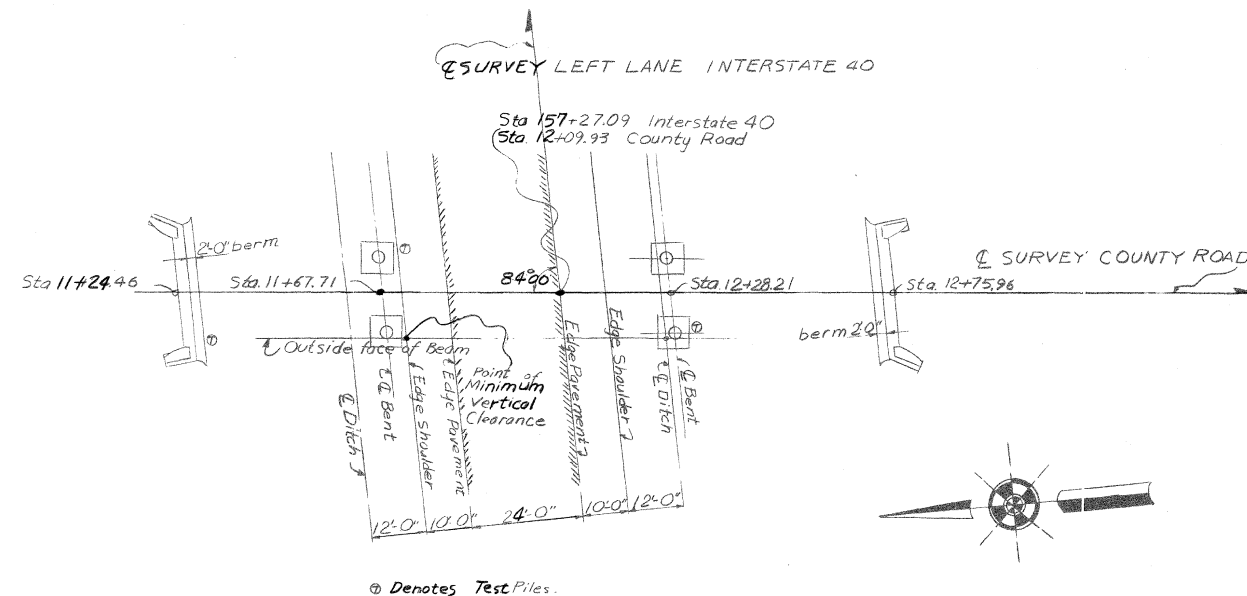
BR-46-76

\\s:\data\1997\972926\DRAWINGS\H-19.DGN 5/18/00

I-40-2(20)114



ELEVATION AT RIGHT ANGLES TO COUNTY ROAD



SKETCH SHOWING GRADES
Elevations Based on finished grade

ESTIMATED QUANTITIES

ITEM	EXCAVATION cu. yds. Dry	CONCRETE Class "A" cu. yds.	STEEL lbs Reinforcing Structural	CONCRETE HANDRAIL lin. ft.	PRECAST** CONCRETE TEST PILES lin. ft.	*BRONZE lbs.	PRECAST CONCRETE Piles Size 1 lin. ft.
Superstructure		157.0	65,639	1600	299	440	
Abutment No. 1		12.8	1491				
Bent No. 1	30	13.6	2421				
Bent No. 2	30	13.8	2482				
Abutment No. 2		12.9	1491				
TOTALS	60	210.1	73,524	1600	299	440	870

* Self Lubricating Plates.
** Contractor may Substitute Prestressed Concrete Piles for Precast Concrete Piles.
NOTE: COST OF NEOPRENE BEARING PADS TO BE INCLUDED IN UNIT PRICE BID FOR CLASS "A" CONCRETE.

GENERAL NOTES

NEOPRENE BEARING PADS: See Special Provisions.
SPECIFICATIONS: Standard Road and Bridge Specifications of the Tennessee Department of Highways.
LOADING: H 15.44
CONCRETE: To be Class "A".
REINFORCING STEEL: To be Intermediate or hard Grade.
Standard Hook Details as Recommended By CRSI Shall Apply.
SELF LUBRICATING PLATES: See Special Provisions.
DESIGN: 1961 AASHTO Specifications.
PRESTRESSED CONCRETE PILES: See Special Provisions.

HANDRAIL NOTE

Build Handrail According to Standard Drawing H-5-110 Except Use Endpost as shown on dwg. K-30-122.
Dimension "X" "P": Q = 149-3 1/2" (-) L = 6-9 1/8" + 18 Spaces

BEARING DEVICE NOTE

Use Standard Expansion Bearing Device, Type E.5 As Shown on K-15-60. Fixed Bearings To Be 1" Neoprene Bearing Pads.
Required: 4 Expansion Devices And 4 Neoprene pads.

SPECIAL NOTE TEST PILES

Before Any Piles Are Ordered, A Precast Concrete test Pile 40' Long Shall be driven in its final location in the footing of the Bents And in the Abutments At Points designated on the "PLAN" this sheet. From the results obtained, Precast Concrete piles Shall be ordered of such lengths as to provide A Minimum Bearing of 30 TONS.

LIST OF DRAWINGS

	DWG NO.
Handrail- See note this sheet	H-5-110
Superstructure	K-30-121
Abutments No. 1 & 2	K-30-122
Bents No. 1 & 2	K-30-123
Bill of Steel	K-30-124
Piles	H-5-111
Bearing Devices (See Note this sheet)	K-15-60

EST 1975 ADT = 246

24' ROADWAY WITH 1'-0" CURBS

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

LAYOUT OF BRIDGE
COUNTY ROAD OVER INTERSTATE 40
LEFT LANE
STATION 157+27.09
HENDERSON-CARROLL COUNTIES
1963

CORRECT: Fred Gene
BRIDGE ENGINEER
APPROVED: H. D. Dumas
STATE HIGHWAY ENGINEER

K-30-120

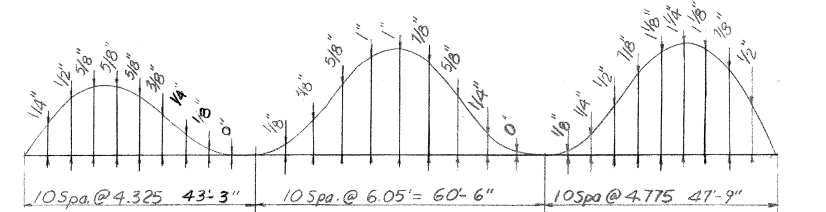
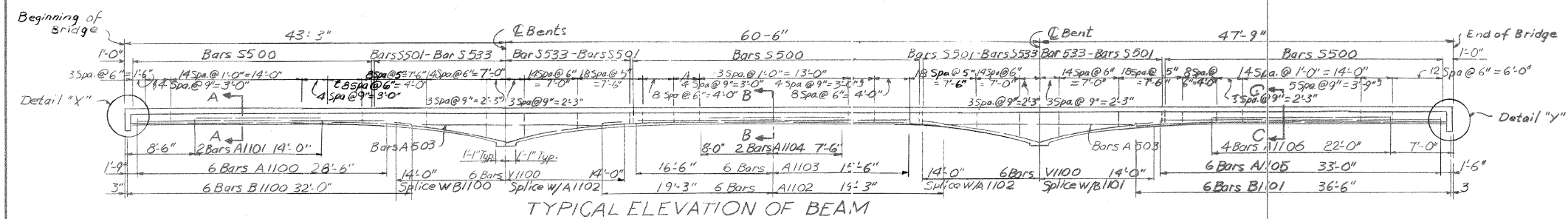
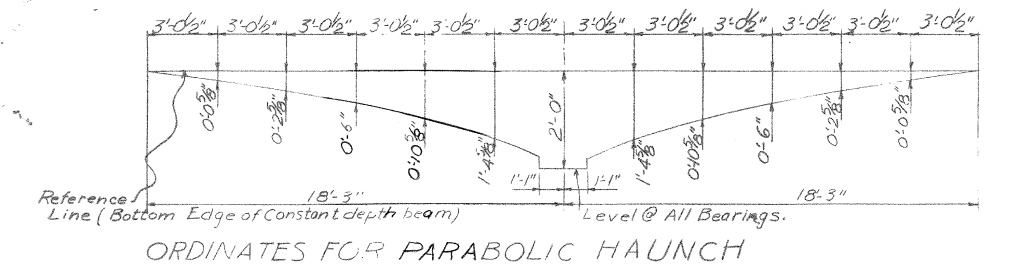
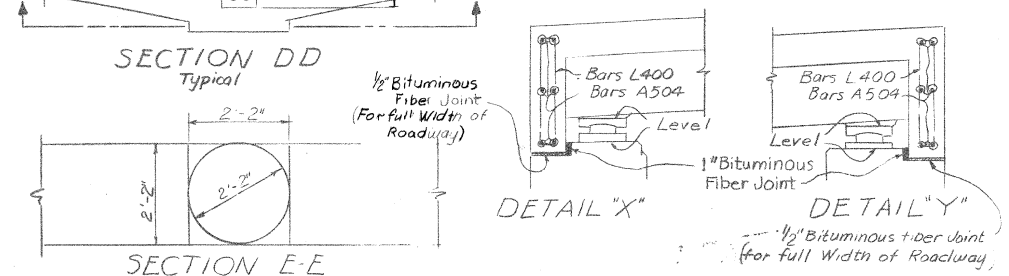
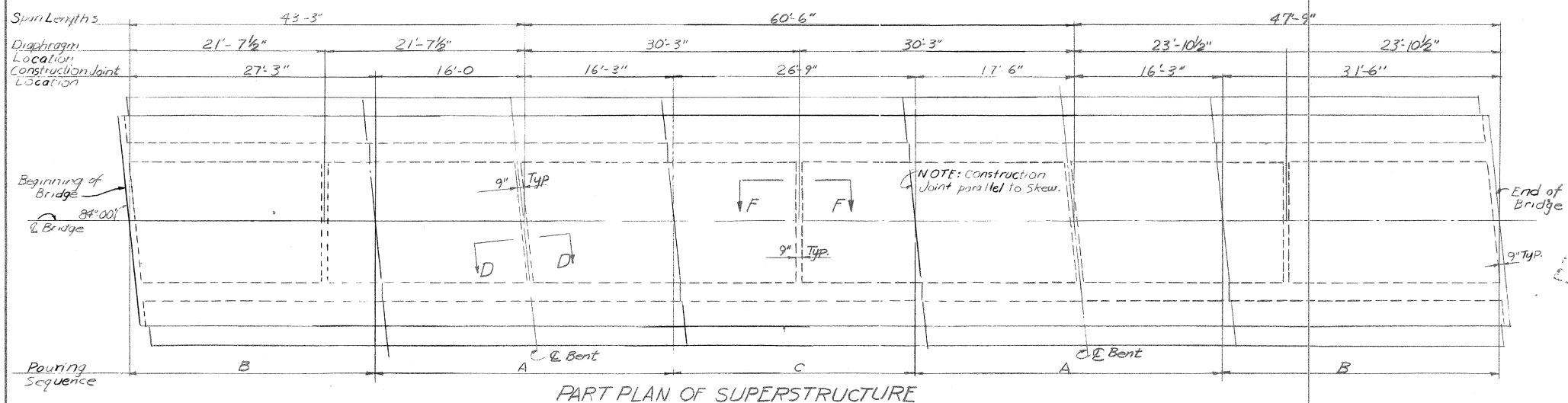
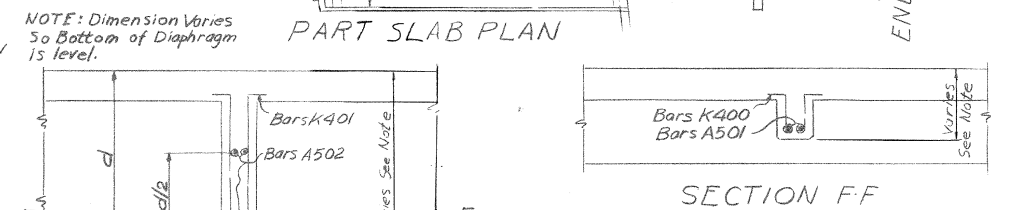
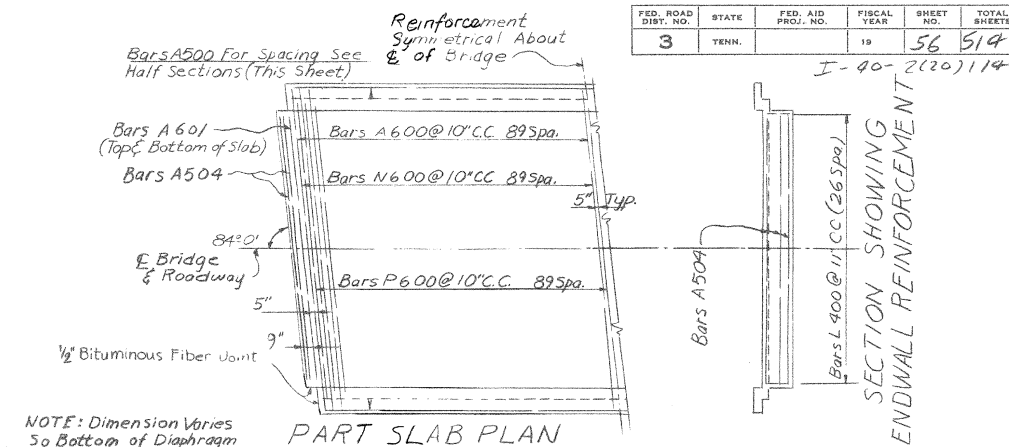
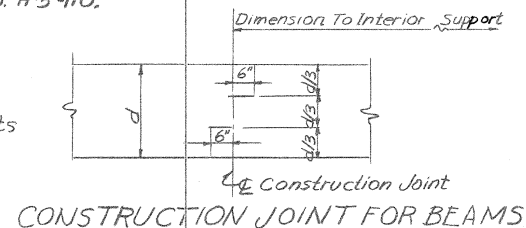
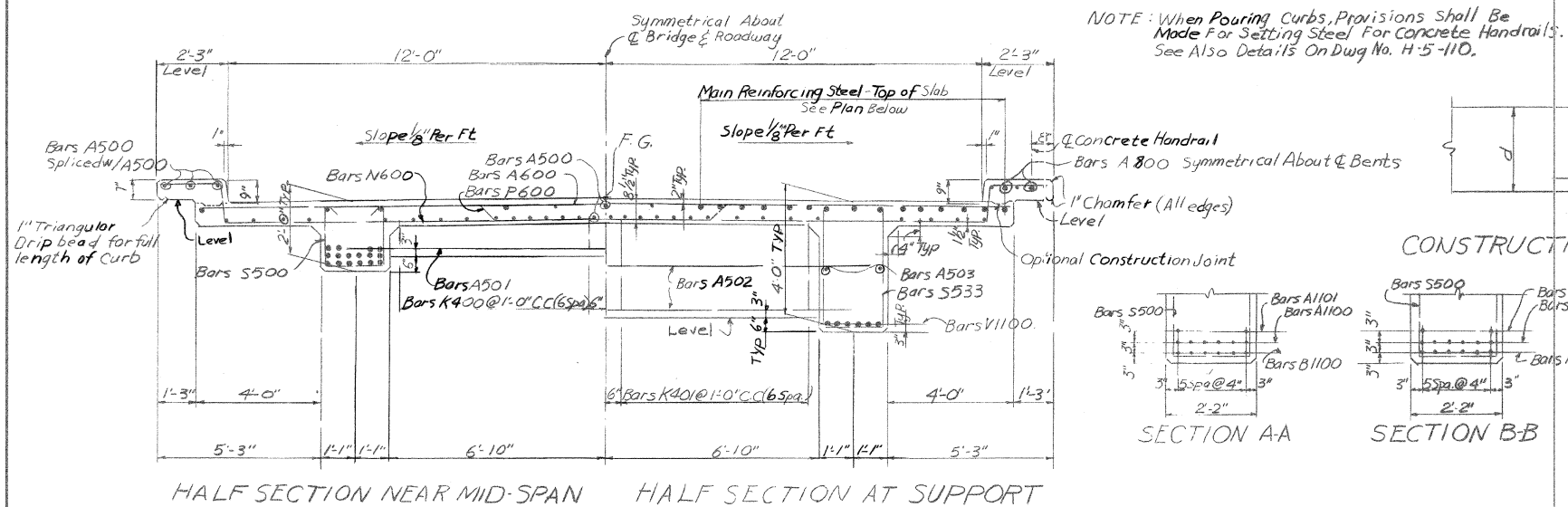
DESIGNED BY: Bobby Holland DATE: July 1963
DRAWN BY: Kenneth Litton DATE: July 1963
TRACED BY: DATE:
CHECKED BY: Bobby H. Holland DATE: July 1963

ck. by J.R.M.

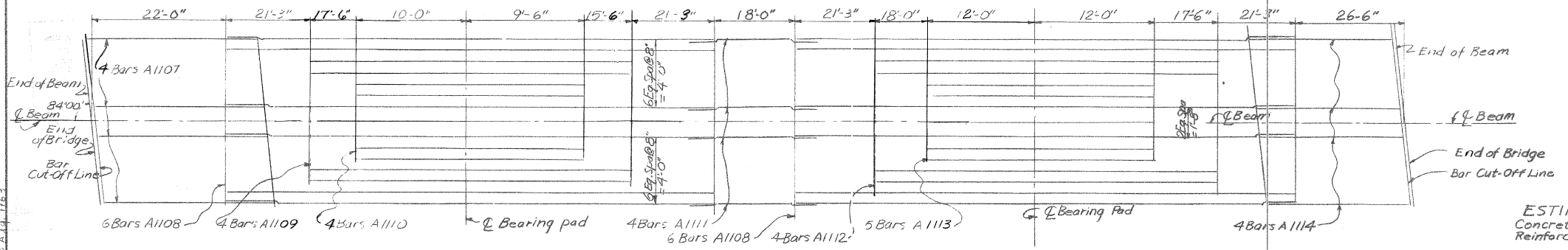
MICROFILM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		19	56	514

T-40-7(20)114



DEAD LOAD CAMBER CURVE
NOTE: This Curve Shows The Dead Load Camber only And Should Be increased By The Anticipated Take up in the falsework.



ESTIMATED QUANTITIES
Concrete Class "A" - 157.0 - Cu. Yds.
Reinforcing Steel - 65.639 - Lbs

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE
SUPERSTRUCTURE DETAILS
LEFT LANE
COUNTY ROAD OVER INTERSTATE 40
STATION 157+27.09
HENDERSON- CARROLL COUNTIES
1963

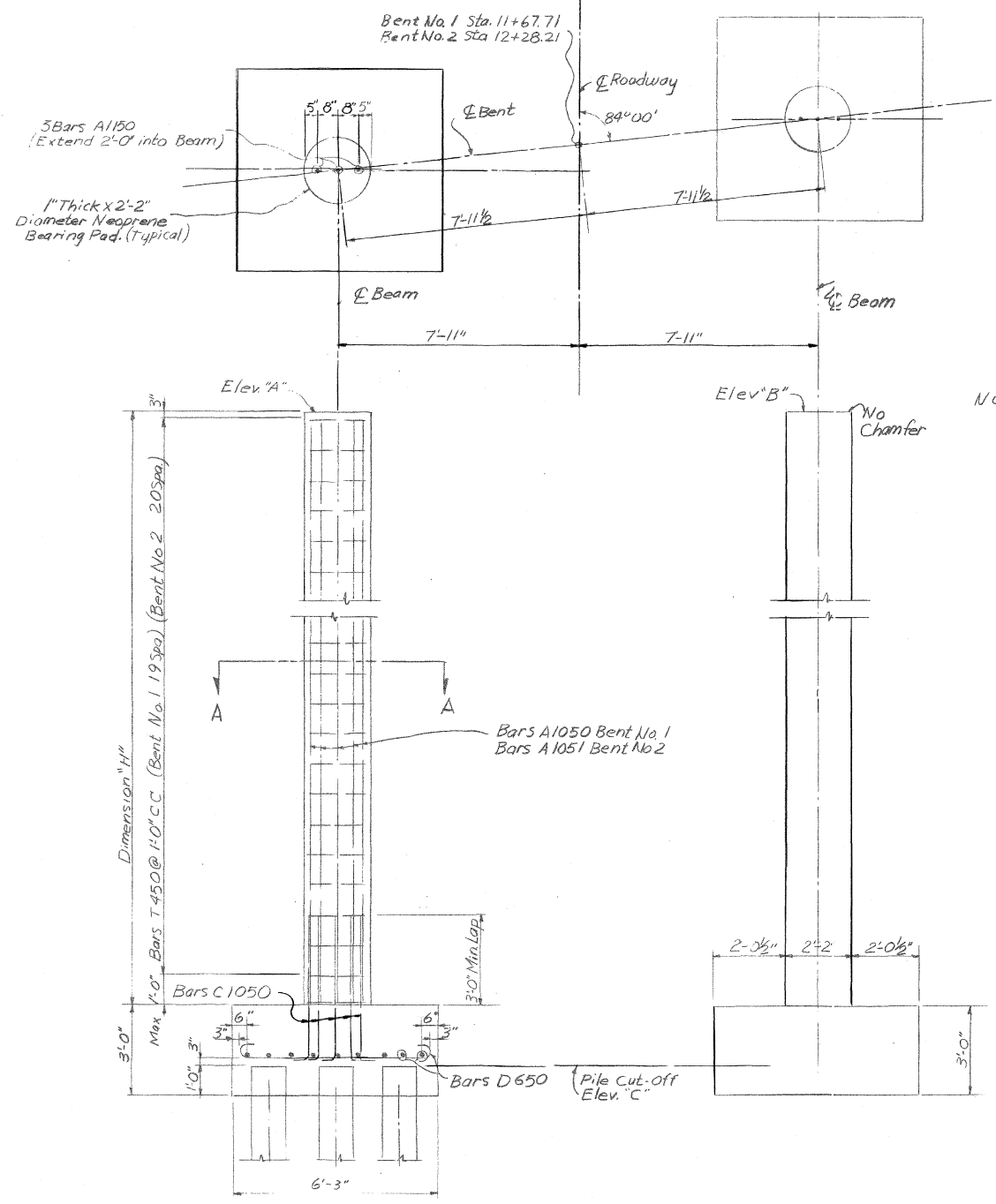
DESIGNED BY Bobby Holland DATE July 1963
DRAWN BY Kenneth Litten DATE July 1963
TRACED BY _____ DATE _____
CHECKED BY Bobby Holland DATE July 1963

PLAN-MAIN REINFORCING STEEL - TOP OF SLAB

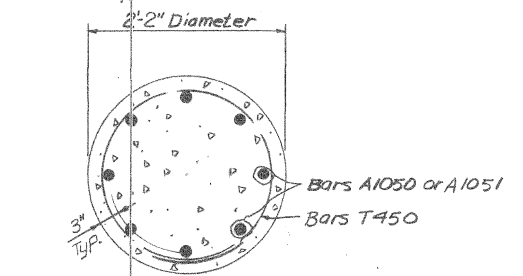
Typical (For Both Beams)

CORRECT Fred Grove
BRIDGE ENGINEER
APPROVED W. Dunlap
STATE HIGHWAY ENGINEER

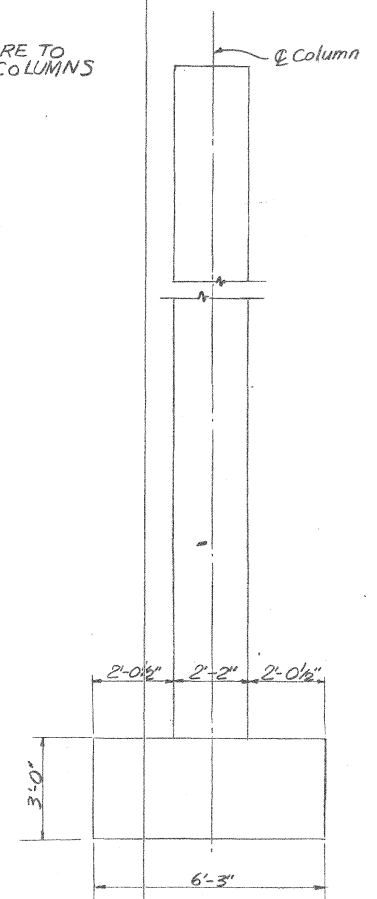
K-30-121



ELEVATION-BENTS NO 1&2
Looking Forward On Survey



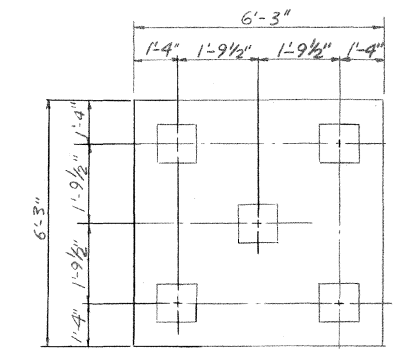
SECTION A-A
Typical Column Steel Arrangement



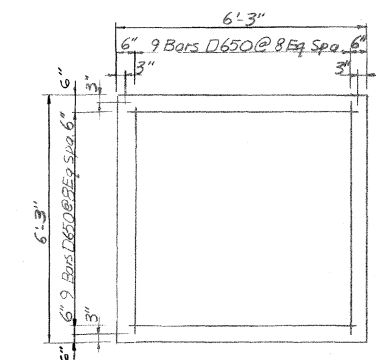
END ELEVATION
Column Typical

ESTIMATED QUANTITIES

ITEM	Concrete Class "A" C.Yds.	Reinforcing Steel Lbs.
Bent No. 1	13.6	2421
Bent No. 2	13.8	2482



PLAN SHOWING PILE ARRANGEMENT



PLAN-FOOTING REINFORCEMENT

TABLE OF DIMENSIONS & ELEVATIONS

ITEM	DIMENSIONS H	Elevations		
		A	B	C
Bent No. 1	19'-9"	595.57	595.60	573.82
Bent No. 2	20'-6"	596.74	596.78	574.24

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE
BENTS NO 1 & 2
LEFT LANE
COUNTY ROAD OVER INTERSTATE 40
STATION 157+27.09
HENDERSON-CARROLL COUNTIES
1963

CORRECT *Kud Jones*
BRIDGE ENGINEER
APPROVED *W.D. Dunlap*
STATE HIGHWAY ENGINEER

DESIGNED BY Bobby Holland DATE July 1963
DRAWN BY Kenneth Litton DATE July 1963
TRACED BY DATE
CHECKED BY Bobby Holland DATE July 1963

checked by J.R.M.

BILL OF STEEL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		19	59	514

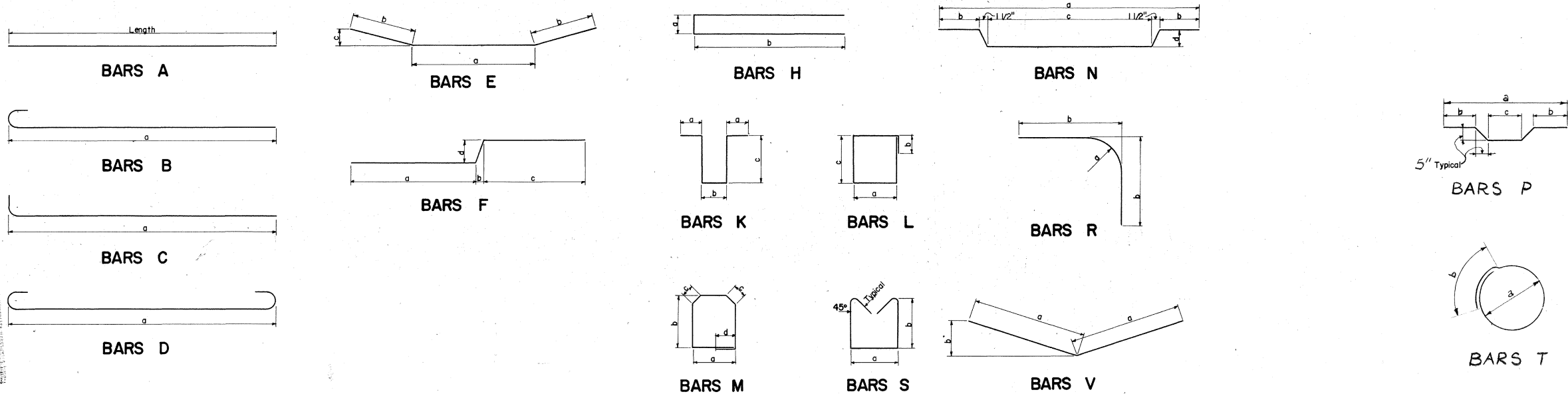
I-40-2070114

SUPERSTRUCTURE										SUPERSTRUCTURE (CON'T.)										ABUTMENTS										BENTS No. 1 & 2									
BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH				
				a	b	c	d						a	b	c	d						a	b	c	d						a	b	c	d					
A500	SLAB & CURBS	5	195					31'-11"	S515	BEAM	5	8	1'-10"	2'-11"			6'-10"	A440	ABUT. BEAM	4	10					28'-9"	A1050	COLUMN BENT 1	10	16					19'-6"				
A501	INT. DIAPH.	5	6					16'-8"	S516	"	5	8	1'-10"	2'-2"			7'-0"	A441	"	4	10					6'-10"	A1051	COLUMN BENT 2	10	16					20'-3"				
A502	DIAPH. @ BENTS	5	8					16'-9"	S517	"	5	8	1'-10"	2'-3"			7'-2"	A442	ABUT. BEAM	4	10					6'-8"	A1150	TOP OF COLUMN	11	12					4'-0"				
A503	BEAMS	5	8					22'-0"	S518	"	5	8	1'-10"	2'-3"			7'-2"	A443	WINGWALL & CURB	4	64					3'-1"	C1050	FOOTING & COLUMN	10	32	4'-10"				5'-6"				
A504	ENDWALL	5	12					23'-7"	S519	"	5	8	1'-10"	2'-4"			7'-4"	A444	WINGWALL	4	16					6'-6"	D650	FOOTING	6	72	5'-9"				7'-1"				
A600	SLAB	6	180					25'-8"	S520	"	5	8	1'-10"	2'-5"			7'-6"	A445	"	4	32					2'-0"	T450	COLUMNS	4	86	1'-10"	1'-0"			6'-9"				
A601	SLAB	6	4					23'-8"	S521	"	5	8	1'-10"	2'-6"			7'-8"	A446	WINGWALL	4	16					6'-8"													
A800	CURB	8	8					15'-0"	S522	"	5	8	1'-10"	2'-6"			7'-8"	A447	CURB	4	4					5'-4"													
A1100	BEAM	11	12					28'-6"	S523	"	5	8	1'-10"	2'-7"			7'-10"	A448	"	4	4					5'-6"													
A1101	"	11	4					14'-0"	S524	"	5	8	1'-10"	2'-8"			8'-0"	A449	CURB	4	8					6'-9"													
A1102	"	11	12					38'-6"	S525	"	5	8	1'-10"	2'-9"			8'-2"	A450	WING POST	4	16					5'-2"													
A1103	"	11	12					32'-0"	S526	"	5	8	1'-10"	2'-10"			8'-4"	A451	"	4	8					1'-6"													
A1104	"	11	4					15'-6"	S527	"	5	8	1'-10"	2'-11"			8'-6"	A452	"	4	8					1'-9"													
A1105	"	11	12					33'-0"	S528	"	5	8	1'-10"	3'-0"			8'-8"	A453	"	4	8					2'-0"													
A1106	BEAM	11	8					22'-0"	S529	"	5	8	1'-10"	3'-1"			8'-10"	A454	"	4	8					2'-3"													
A1107	SLAB	11	8					24'-9"	S530	"	5	8	1'-10"	3'-2"			9'-0"	A455	WING POST	4	16					2'-6"													
A1108	"	11	24					42'-6"	S531	"	5	8	1'-10"	3'-4"			9'-4"	A740	ABUT. BEAM	7	18					28'-9"													
A1109	"	11	8					33'-0"	S532	"	5	8	1'-10"	3'-6"			9'-8"	A741	"	7	10					6'-10"													
A1110	"	11	8					19'-6"	S533	BEAM	5	4	1'-10"	3'-8"			10'-0"	A742	ABUT. BEAM	7	10					6'-8"													
A1111	"	11	8					24'-0"										H440	ABUT. BEAM, WINGWALL CURB, WING POST	4	56	6"	2'-0"		4'-6"														
A1112	"	11	8					35'-6"										L440	CURB	4	4	1'-9"	6"	11"	5'-10"														
A1113	"	11	10					24'-0"										L441	"	4	12	2'-3"	6"	11"	6'-10"														
A1114	SLAB	11	8					29'-3"										L442	CURB	4	4	2'-6"	6"	11"	7'-4"														
B1100	BEAM	11	12	32'-0"				33'-7"										L540	ABUT. BEAM	5	60	2'-2"	1'-0"	2'-2"	9'-8"														
B1101	BEAM	11	12	36'-6"				38'-1"																															
K400	INT. DIAPH.	4	42	6"	5"	9"		2'-11"																															
K401	DIAPH. @ BENTS	4	28	6"	5"	2'-9"		6'-11"																															
L400	ENDWALL	4	54	5"	6"	2'-1"		5'-6"																															
N600	SLAB	6	180	28'-2"	1'-9"	24'-4"	1'-2"	30'-3"																															
P600	SLAB	6	179	25'-7"	8'-11"	6'-10"		26'-0"																															
V1100	BEAM	11	24	14'-2"	3'-0"			28'-4"																															
S500	"	5	246	1'-10"	1'-8"			6'-0"																															
S501	"	5	8	1'-10"	1'-9"			6'-2"																															
S502	"	5	8	1'-10"	1'-9"			6'-2"																															
S503	"	5	8	1'-10"	1'-9"			6'-2"																															
S504	"	5	8	1'-10"	1'-9"			6'-2"																															
S505	"	5	8	1'-10"	1'-9"			6'-2"																															
S506	"	5	8	1'-10"	1'-10"			6'-4"																															
S507	"	5	8	1'-10"	1'-10"			6'-4"																															
S508	"	5	8	1'-10"	1'-10"			6'-4"																															
S509	"	5	8	1'-10"	1'-11"			6'-6"																															
S510	"	5	8	1'-10"	1'-11"			6'-6"																															
S511	"	5	8	1'-10"	1'-11"			6'-6"																															
S512	"	5	8	1'-10"	2'-0"			6'-8"																															
S513	"	5	8	1'-10"	2'-0"			6'-8"																															
S514	BEAM	5	8	1'-10"	2'-1"			6'-10"																															

REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

NOTE: Dimensions shown on this sheet are center to center of Bar.



DESIGNED BY J.L. DATE 7-15-63
DRAWN BY J.L. DATE 7-15-63
TRACED BY J.L. DATE 11-14-60
CHECKED BY E. H. HOLLAND DATE 7-18-63

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE
BILL OF STEEL
LEFT LANE
COUNTY ROAD OVER INTERSTATE 40
STATION 157+27.09
HENDERSON-CARROLL COUNTIES
1963
CORRECT J. H. Greene
APPROVED J. H. Greene
K-30-124