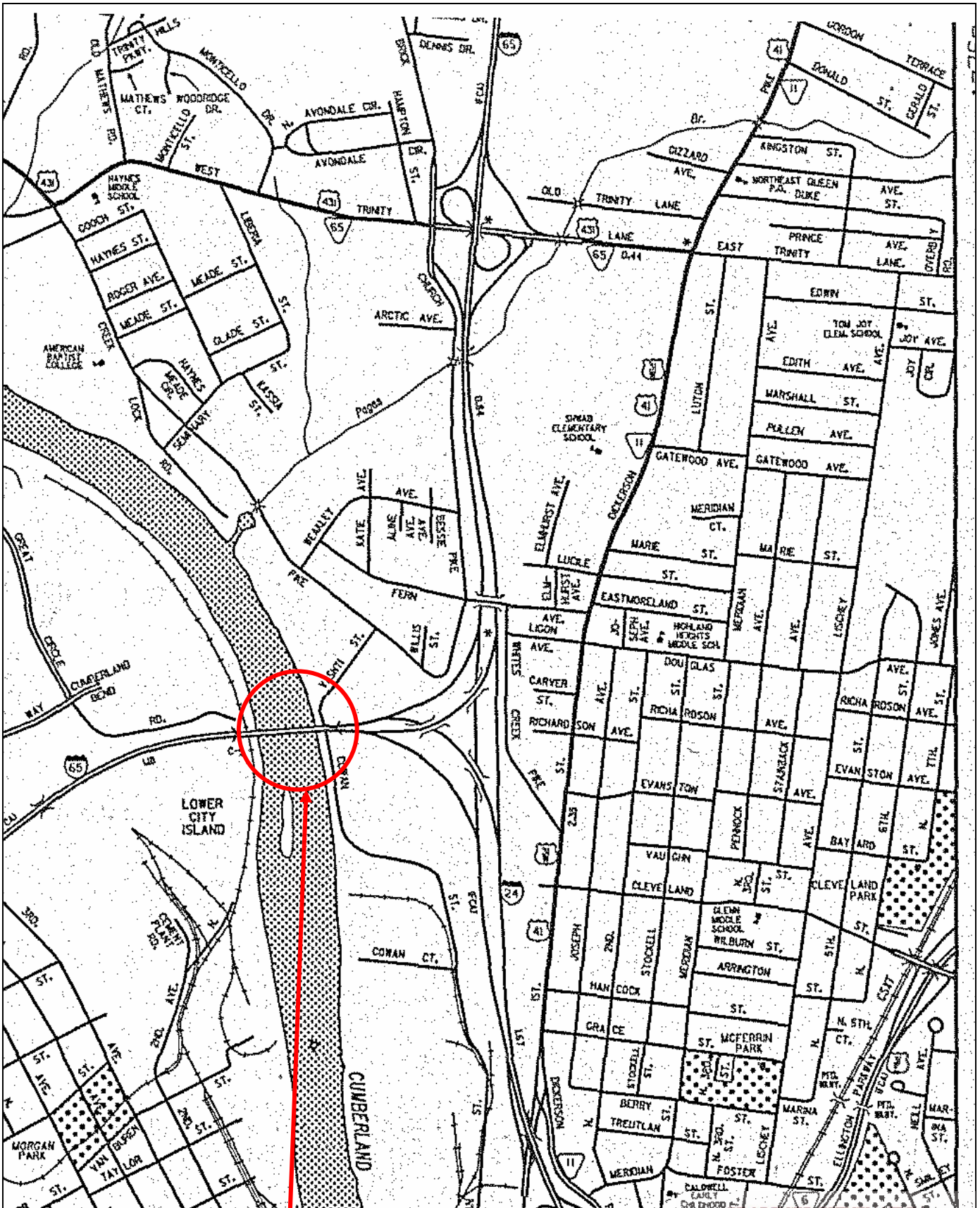


DAVIDSON COUNTY

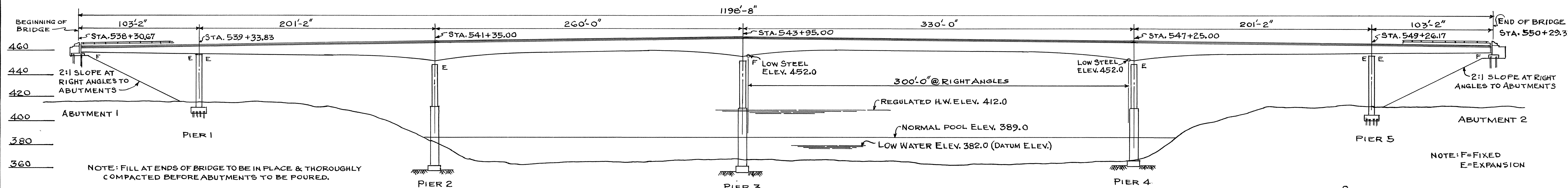


19100650145
19-10065-10.25
10065/CUMBERLAND RVR &
COWAN ST

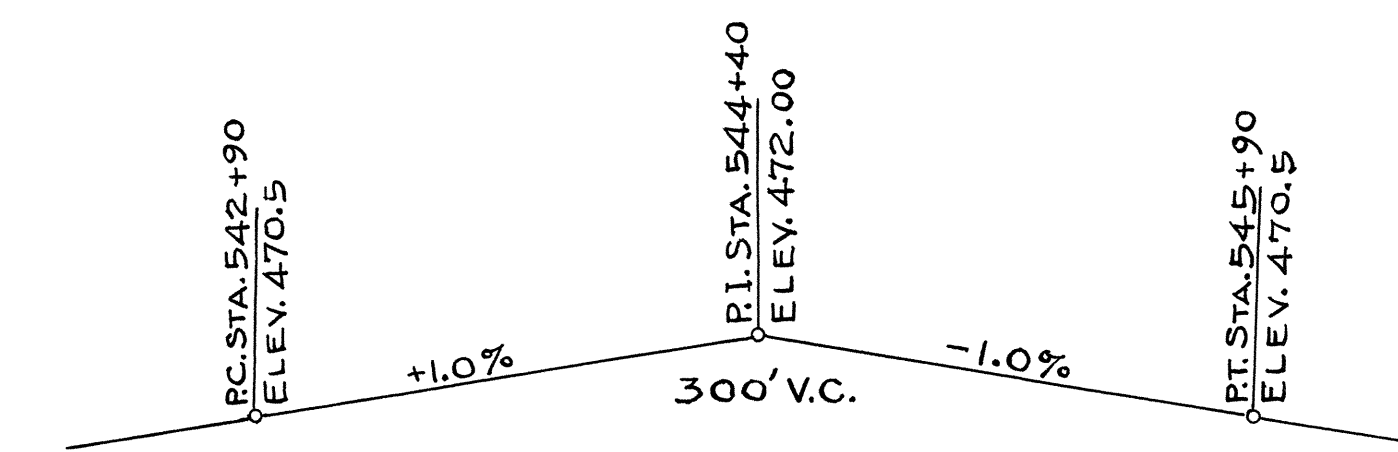
PRODUCED PURSUANT TO
PUBLIC RECORDS REQUEST
This document is covered by 23 USC §409
And its production pursuant to a public
document records request does not
waive the provisions of §409

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

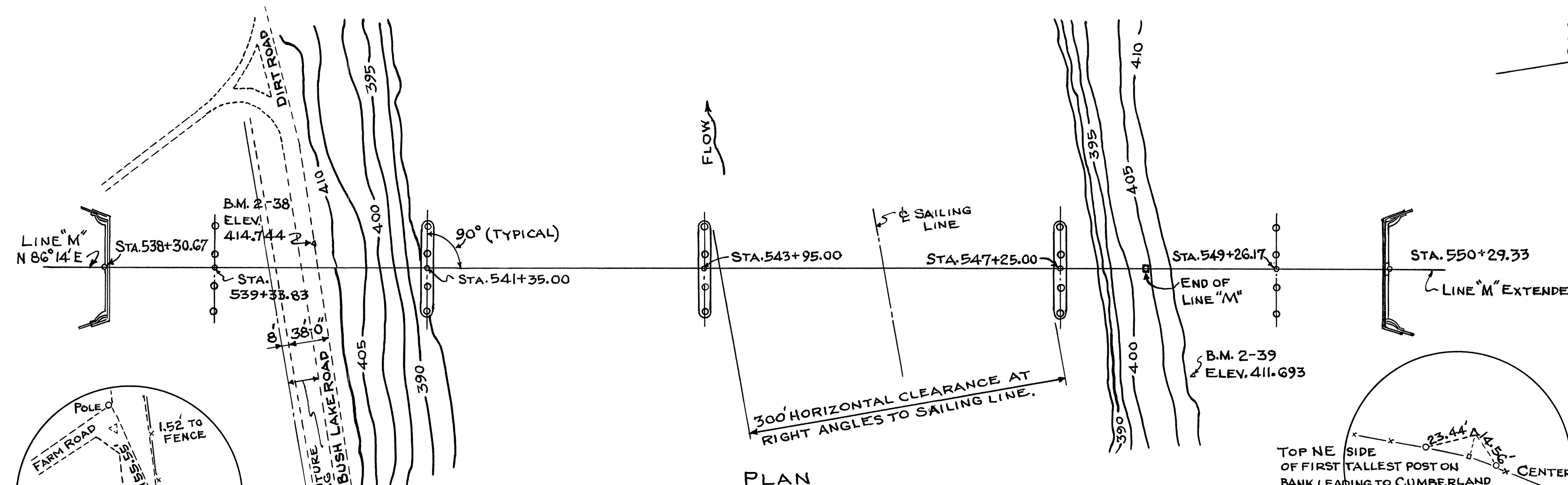
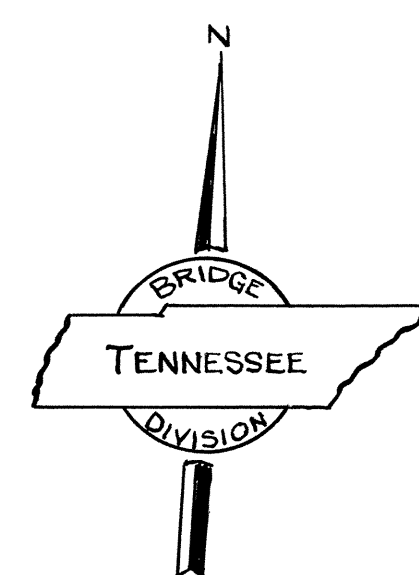
REVISIONS	
NO.	BRIEF DESCRIPTION
4-5-67	R.M.D. STRUCTURAL LIGHTING ADDED TO QUANTITIES & BARRIER RAIL QUANTITIES CHANGED
5-22-67	J.W.S. QUANTITIES
9-21-67	R.M.D. QUANTITIES
6-11-68	J.P.C. QUANTITIES



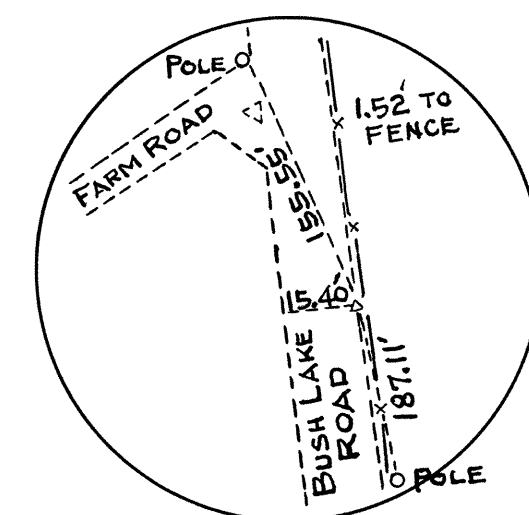
ELEVATION



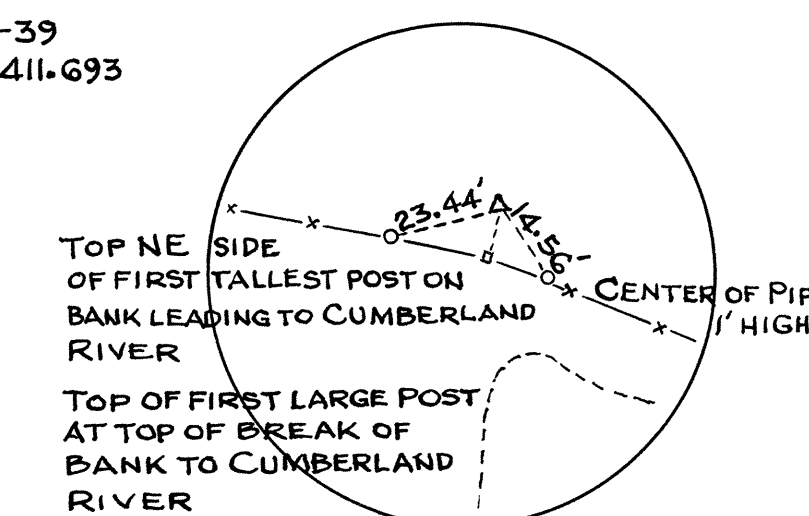
SKETCH OF GRADES
ELEVATIONS SHOWN BASED ON FINISHED GRADE



PLAN



BENCH MARK 2-38
STEEL ROD WITH PUNCH HOLE
N 656,055.44
E 1,768,532.77
ELEV. 414.744



BENCH MARK 2-39
STEEL ROD WITH PUNCH HOLE
N 655,986.71
E 1,769,364.09
ELEV. 411.693

LIST OF DRAWINGS	DRAWING NO.
LAYOUT OF BRIDGE	K-59-37
GENERAL NOTES	K-59-38
BRIDGE RAILING	K-59-38 & K-38-154
BOX BEAM BARRIER RAIL	K-59-38 & K-38-152
SLAB DETAILS & LIGHTING	K-59-39
SLAB DETAILS	K-59-40
SLAB DETAILS	K-59-41
SUPERSTRUCTURE DETAILS	K-59-42
STRUCTURAL STEEL	K-59-43
STRUCTURAL STEEL	K-59-44
ROADWAY EXPANSION & NAVIGATION	K-59-45
LIGHTING DETAILS	K-59-46
LATERAL BRACING & SPLICE DETAILS	K-59-47
BEARINGS	K-59-48
ABUTMENT NO. 1	K-59-49
ABUTMENT NO. 2	K-59-50
ABUTMENT DETAILS	K-59-51
PIER NO. 1	K-59-52
PIERS NO. 2, 3 & 4	K-59-53
PIER NO. 5	K-59-54
LOG OF BORINGS	K-59-55
LOG OF BORINGS	K-59-56
PILE	H-5-111

HYDRAULIC DATA
DRAINAGE AREA --- 12,860 SQ. MI.
DISCHARGE --- 125,000 C.F.S.
APPROXIMATE AREA PROVIDED 28,570 SQ. FT.
VELOCITY --- 4.4 F.P.S.

ESTIMATED QUANTITIES

ITEM	EXCAVATION CU. YDS.		CONCRETE CLASS "A" CU. YDS.	REINFORCING STEEL LBS.	STEEL STRUCTURE *	STEEL PILES LIN. FT. 10BF42	** LINSEED OIL TREATMENT SQ. YDS.	BRIDGE RAILING LIN. FT.	BOX BEAM BARRIER RAIL LIN. FT.	ROCK DRILLING LIN. FT.	STRUCTURAL LIGHTING
	WET	DRY									
SUPERSTRUCTURE			3254.3	1,285,595							
ABUTMENT NO. 1			95.2	9684							
PIER NO. 1		158	272.2	41,616							
PIER NO. 2	893	105	387	1726.1	61,862						
PIER NO. 3	234		415	1734.7	64,089						
PIER NO. 4	43		263	1524.2	69,535						
PIER NO. 5		193		289.5	44,517						
ABUTMENT NO. 2			893.0	102.4	10,257						
TOTAL	1170	516	1065	8998.6	1,578,155	* LUMP SUM	8,265	13,080	2,387	1,345	54

* LUMP SUM FOR STRUCTURAL STEEL INCLUDES 3,037,600 LBS. ASTM A441, 37,700 LBS. ASTM 242 CORROSION RESISTANT STEEL, (RDWY. EXPN. RS.) 1,395,000 LBS. ASTM A36. WEIGHT FOR ASTM A36 INCLUDES SHEAR CONNECTORS, ASTM A235 PINS, HIGH STRENGTH BOLTS & LEAD PLATES FOR BEARING DEVICES.
NOTE: COST OF COFFERDAMS TO BE INCLUDED IN THE COST OF OTHER ITEMS BID ON.
@ LUMP SUM FOR FURNISHING & INSTALLING CONDUIT (WITH PULL WIRES) & ALL NECESSARY MATERIALS (INCLUDING ANCHOR BOLTS FOR LIGHT POLES) FOR LIGHT STANDARDS.
** THE SPECIAL PROVISIONS FOR LINSEED OIL DOES NOT APPLY TO PIERS 2, 3 & 4.

NOTE: FOR GENERAL NOTES SEE DWG. K-59-38.
NOTE: PAYMENT FOR NAVIGATION LIGHTING: SEE DWG. K-59-45.

ROADWAY WIDTH 41' 1/2" WITH SAFETY CURBS & 1'-3" RAISED MEDIAN.
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

LAYOUT OF BRIDGE
I-265 / CUMBERLAND RIVER
STA. 538 + 30.67
DAVIDSON COUNTY
1967

DESIGNED BY: R.M. DISHNER DATE: MAY '66
DRAWN BY: ALBERT LANIER DATE: FEB. '67
TRACED BY: cly DATE: 2-18-70
CHECKED BY: DATE:

CORRECT: Fred Greve
APPROVED: [Signature]
STAT. HIGHWAY ENGINEER

K-59-37

[illegible]

DESIGNED BY _____ DATE _____
 DRAWN BY _____ DATE _____
 TRACED BY _____ DATE _____
 CHECKED BY _____ DATE _____

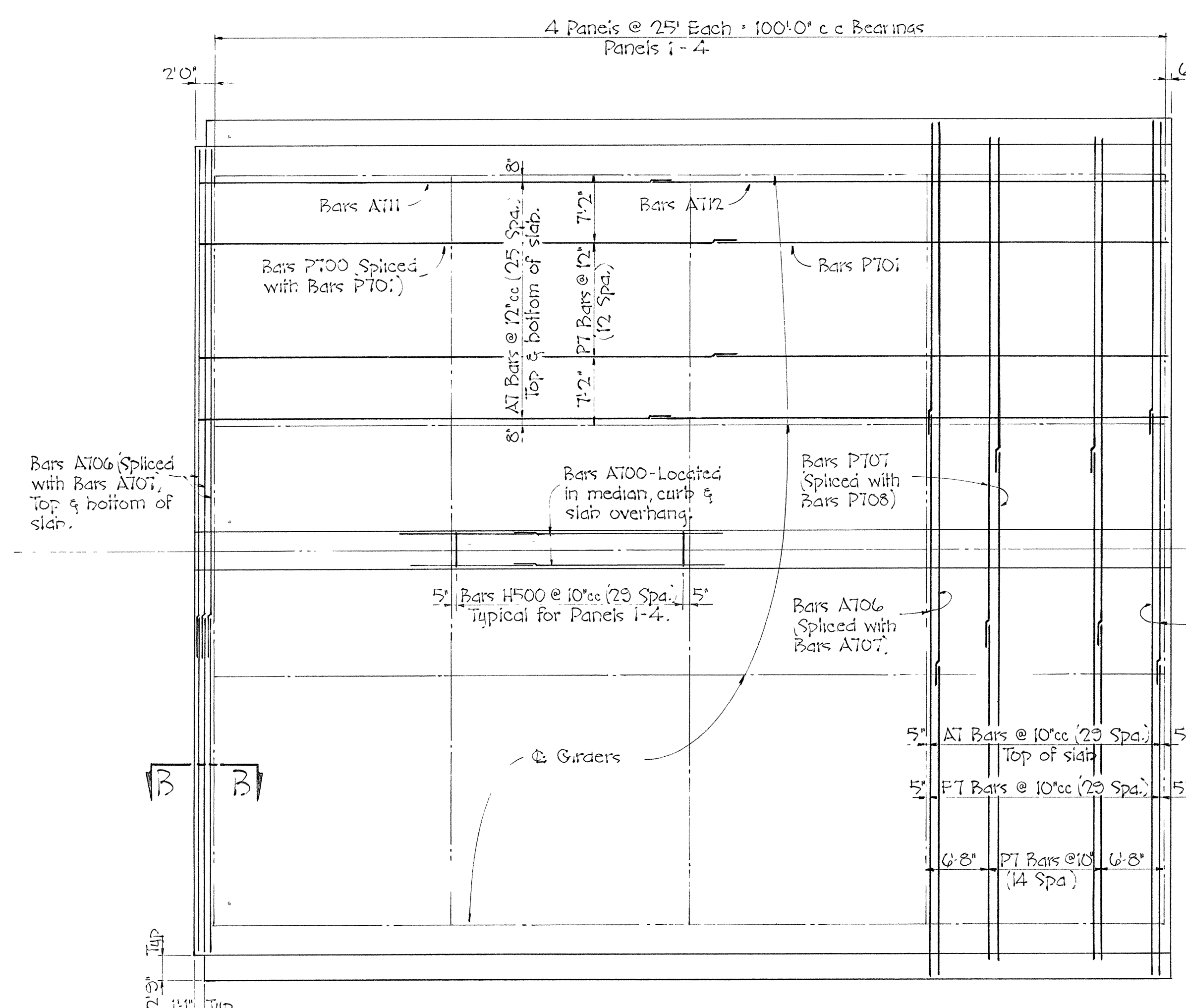
CORRECT Red Pine
BRIDGE ENGINEER

APPROVED _____
STATE HIGHWAY ENGINEER

K-59-38

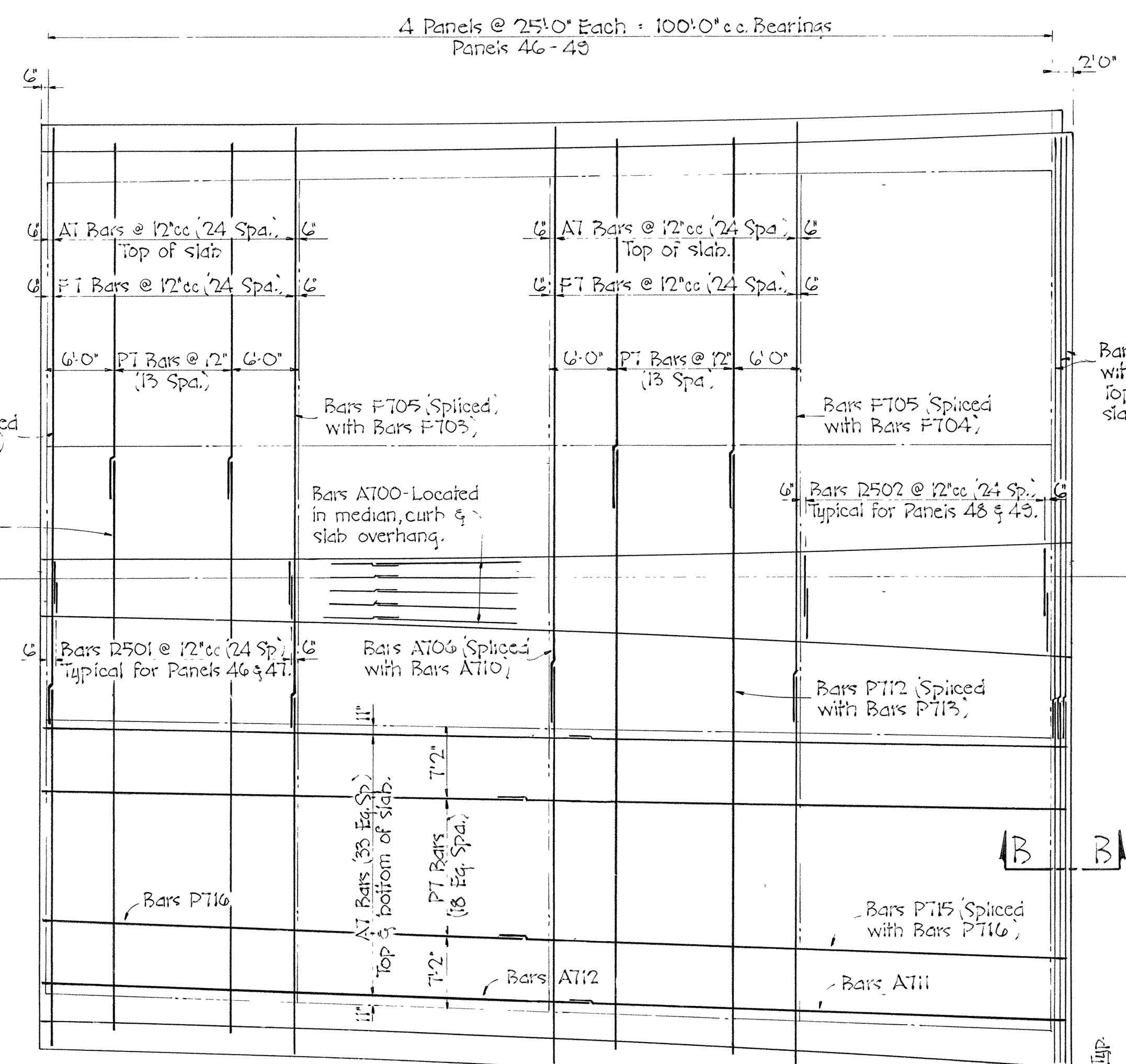
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		19		

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-6-67	QWS	Light Support Dim. & Conduit Detail
2	5-22-67	QWS	Quantities Changed
3	6-17-67	JRC	Quantities
4	7-19-68	QWS	Conduit location



SPAN 1

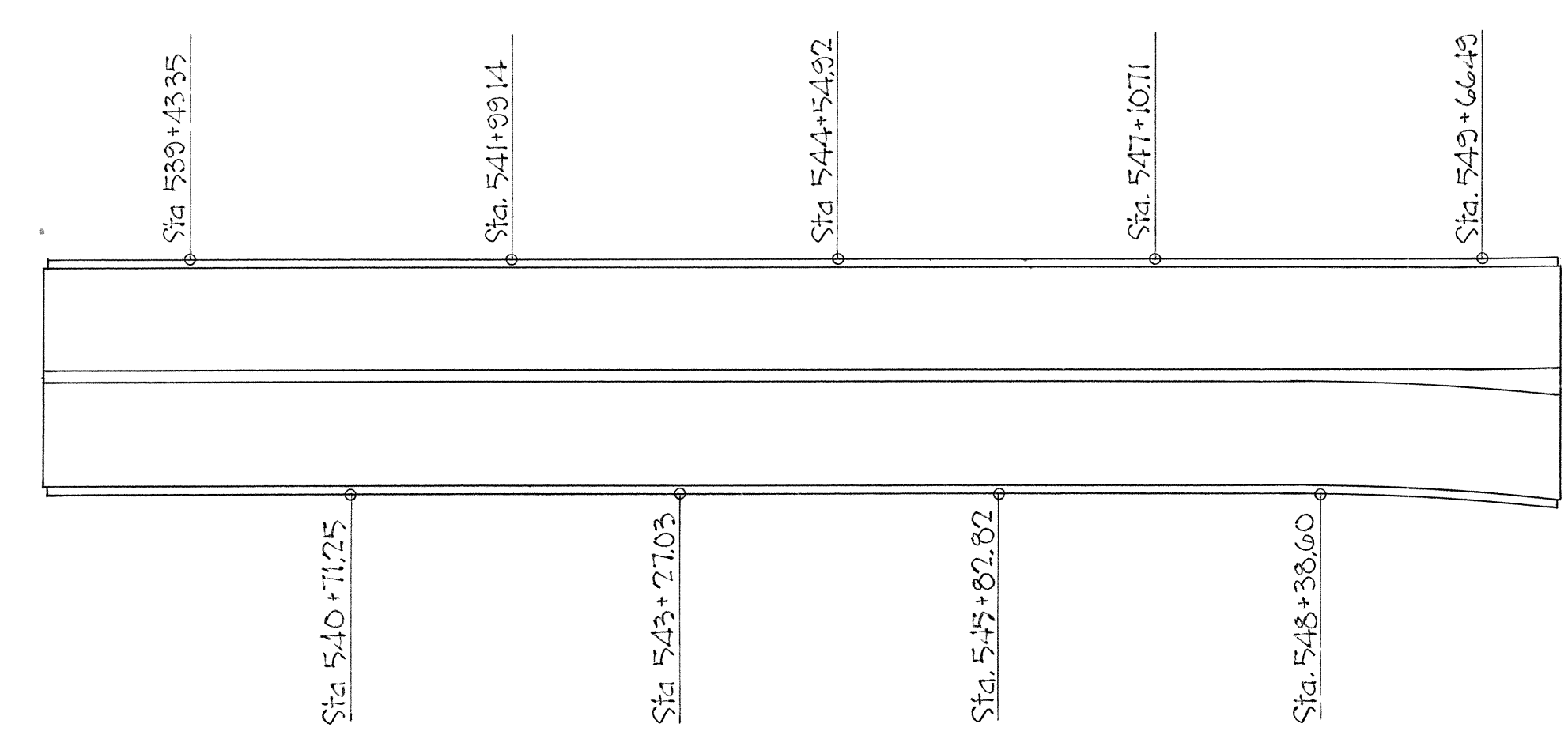
NOTE: For location of Bars A100 in Curb, Slab and Median see Typical Cross Section on dwg. no. K-59-42.



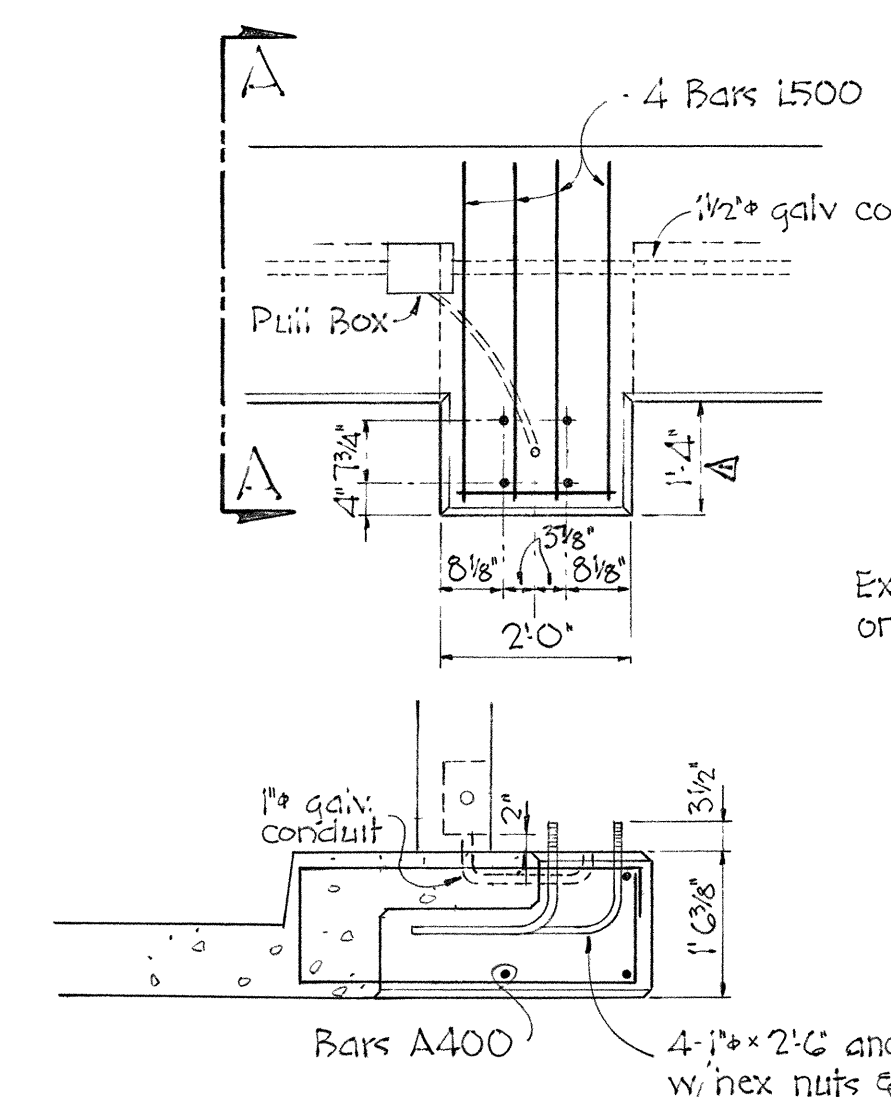
SPAN 6

TRANSVERSE REINFORCEMENT
Reinforcement for Panels 1 thru 4 same as that shown in Panel 4.
Reinforcement for Panels 46 & 47 similar.
Reinforcement for Panels 48 & 49 similar.

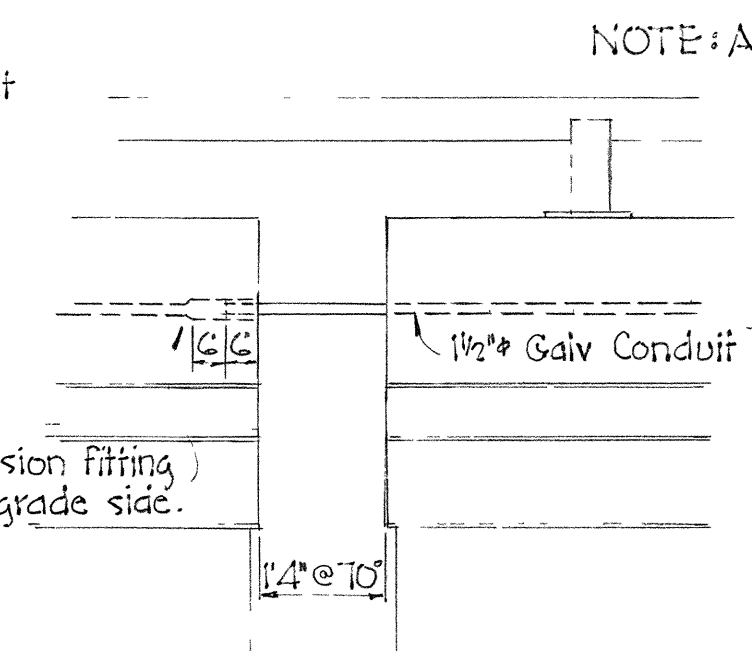
LONGITUDINAL REINFORCEMENT
All reinforcement between girders shall be similar to that shown on Plans this sheet.



LIGHTING STANDARD LOCATION
Stations are along Line M or Line M Extended.



SECTION A-A



SECTION B-B

CONDUIT DETAILS @ PIERS 1 & 5

NOTE: All splices shall be 110" minimum.

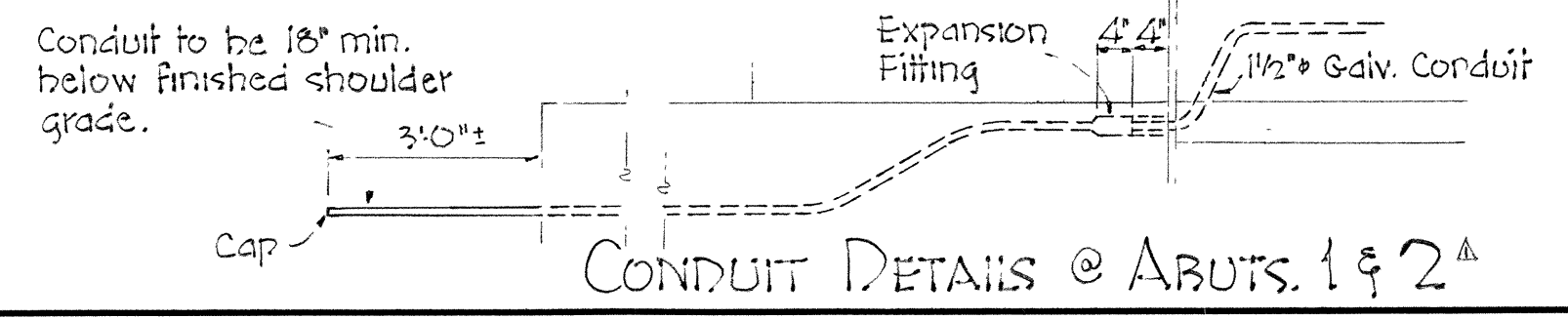
ESTIMATED SLAB QUANTITIES
SPANS 1 THRU 6

Class "A" Concrete	3254.3	Cu Yds.
Reinforcing Steel	1,287,595	Lbs.

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

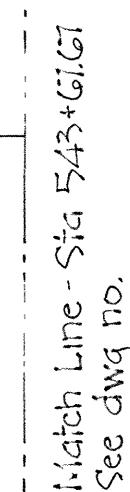
SLAB PLAN
I-265 OVER CUMBERLAND RIVER
STATION 538+30.67
DAVIDSON COUNTY
1967

DESIGNED BY: R. M. Dishner
DRAWN BY: QWS
TRACED BY:
CHECKED BY:



CONDUIT DETAILS @ ABUTS. 1 & 2

CORRECT: Fred Greve
APPROVED: [Signature]
STATE HIGHWAY ENGINEER

[illegible]

NOTE: Contractor may use longitudinal construction joints subject to approval of the Engineer, however all pours must be made in such a way as to keep the bridge loaded symmetrical about Line M.

Reinforcement for Panels 5 thru 15 and 21 thru 26 (25'-0" Panels), same as that shown in Panel 7.

Reinforcement for Panels 16 thru 20 (22'-0" Panels), same as that shown in Panel 18.

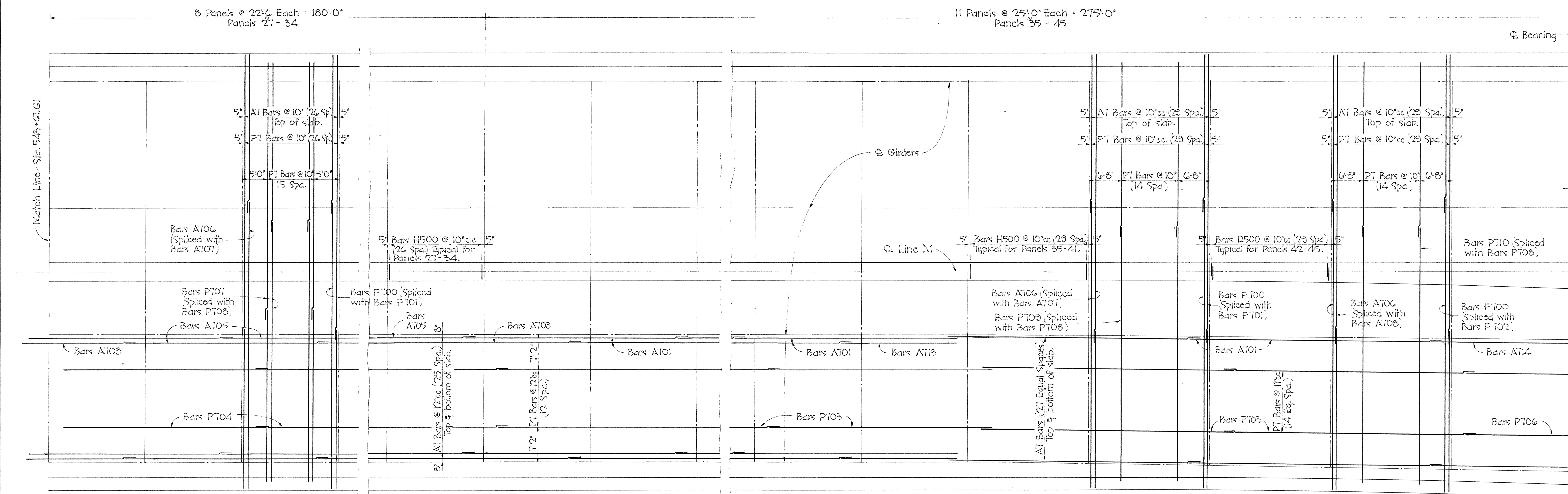
DESIGNED BY R M Dshner DATE _____
 DRAWN BY AMS DATE _____
 TRACED BY _____ DATE _____
 CHECKED BY _____ DATE _____

SLAB PLAN
I-265 OVER CUMBERLAND RIVER
STATION 538+30.67
DAVIDSON COUNTY
1967

CORRECT Fred Greve
BRIDGE ENGINEER

APPROVED [Signature]
DATE: 10/11/11

K-59-40

[illegible]

TRANSVERSE REINFORCEMENT

Reinforcement for Panels 27 thru 34 (22' @ Panels)
 same as first shown in Panel 23.
 Reinforcement for Panels 35 thru 41 (25' 0" Panels)
 same as that shown in Panel 7, dwg. no.
 Reinforcement for Panels 42 & 43 similar.
 Reinforcement for Panels 44 & 45 similar.

SPANS 2-5

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

SLAB PLAN
I-265 OVER CUMBERLAND RIVER
STATION 538+30.67
DAVIDSON COUNTY
1967

DESIGNED BY R M Disher DATE _____
 DRAWN BY CHS DATE _____
 TRACED BY _____ DATE _____
 CHECKED BY _____ DATE _____

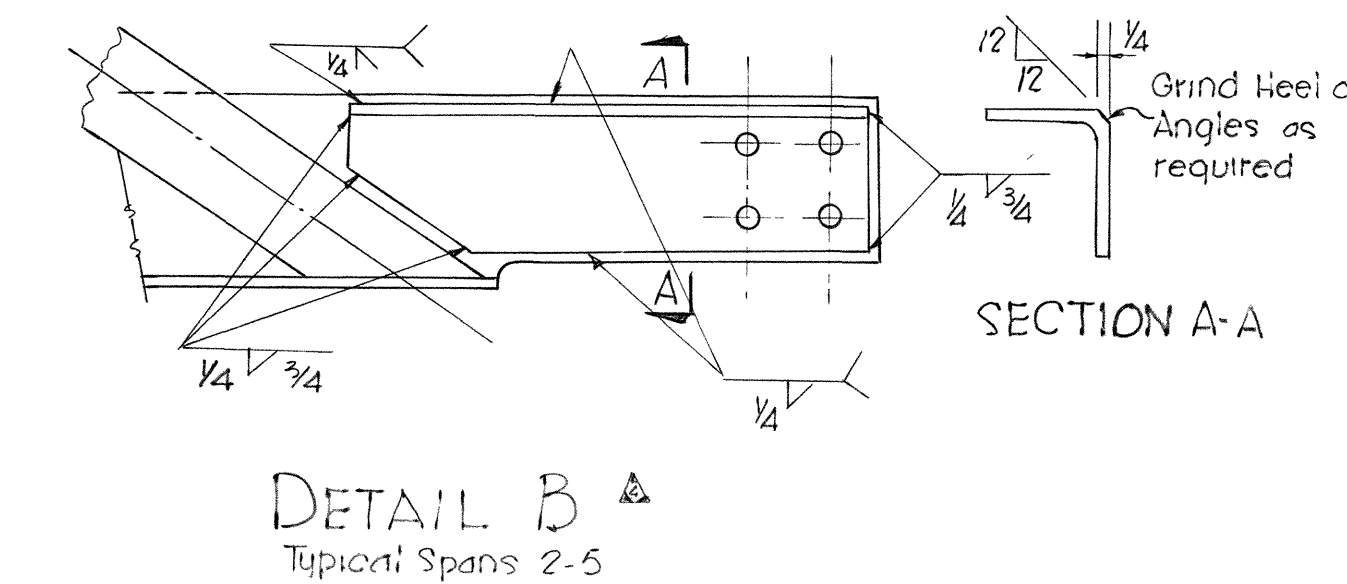
CORRECT. Fred Greve
BRIDGE ENGINEER

APPROVED. ced

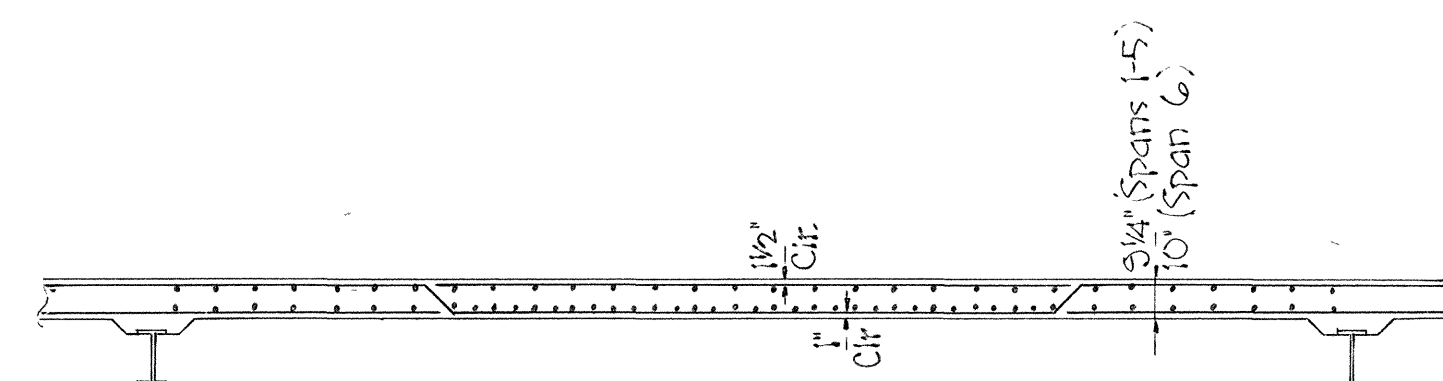
K-59-41

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

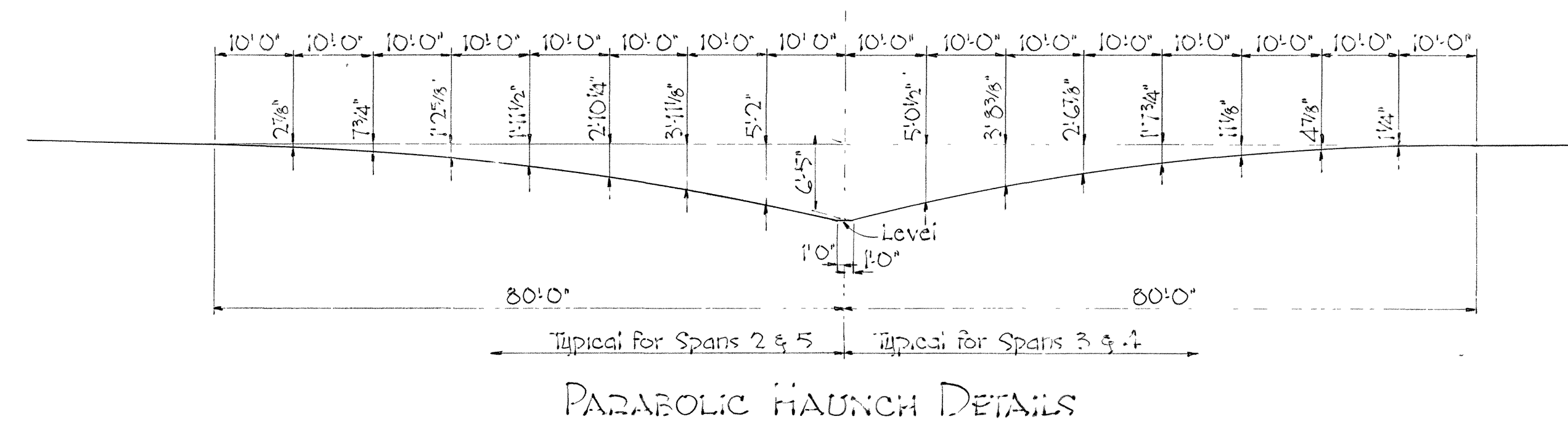
NOTE: When pouring median provisions shall be made for setting anchor bolts for median rail. For location see std. dwg. 12-38-52 & dwg. 12-59-38.



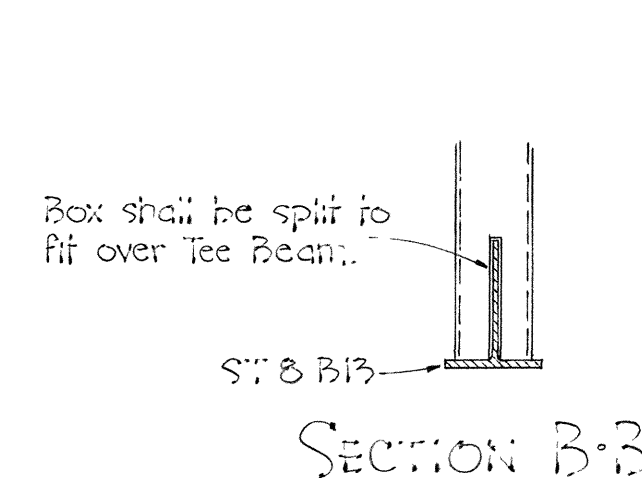
TYPICAL CROSS SECTION
Looking forward on survey.



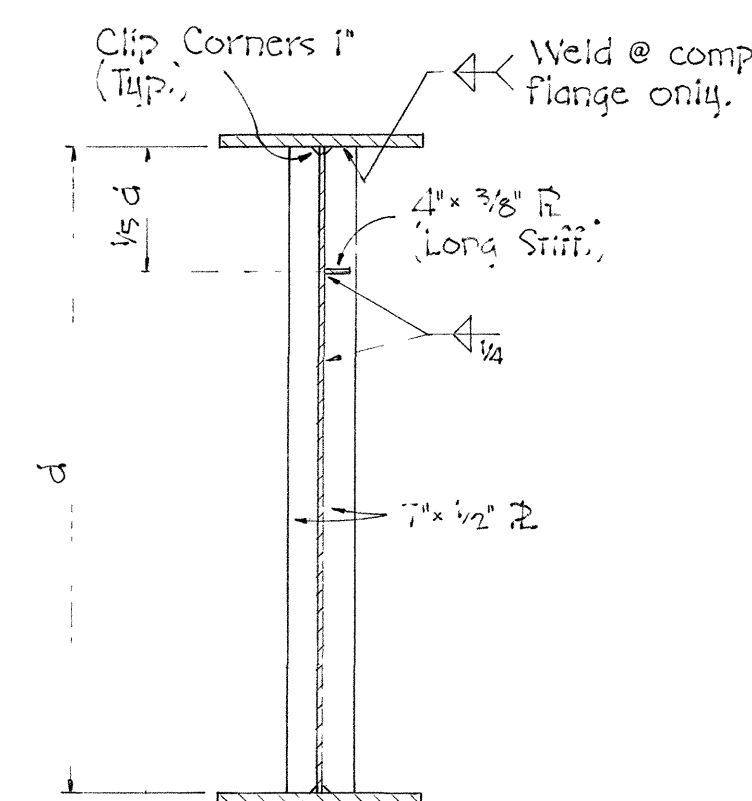
SECTION: A-A



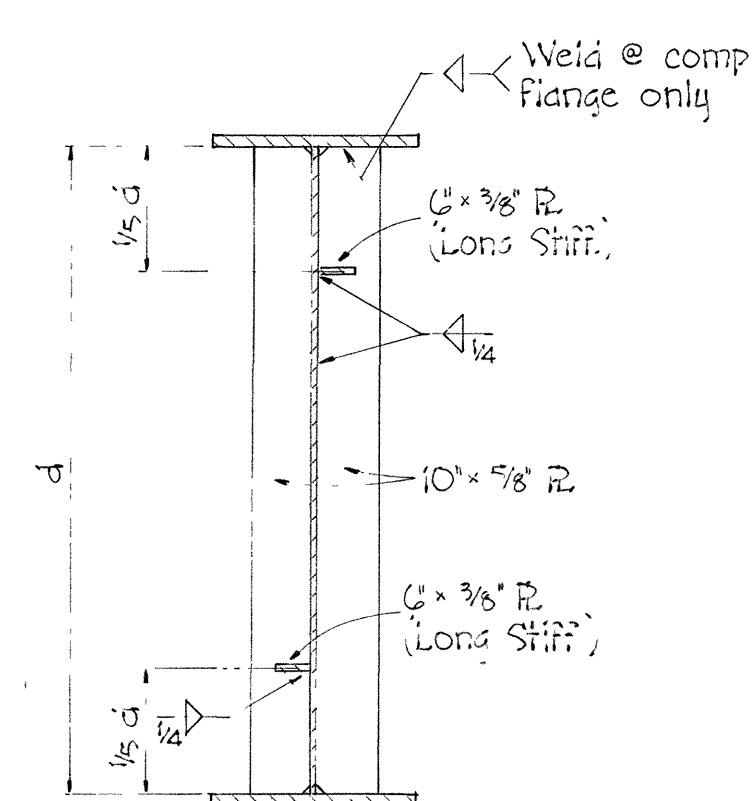
PARABOLIC HAUNCH DETAILS



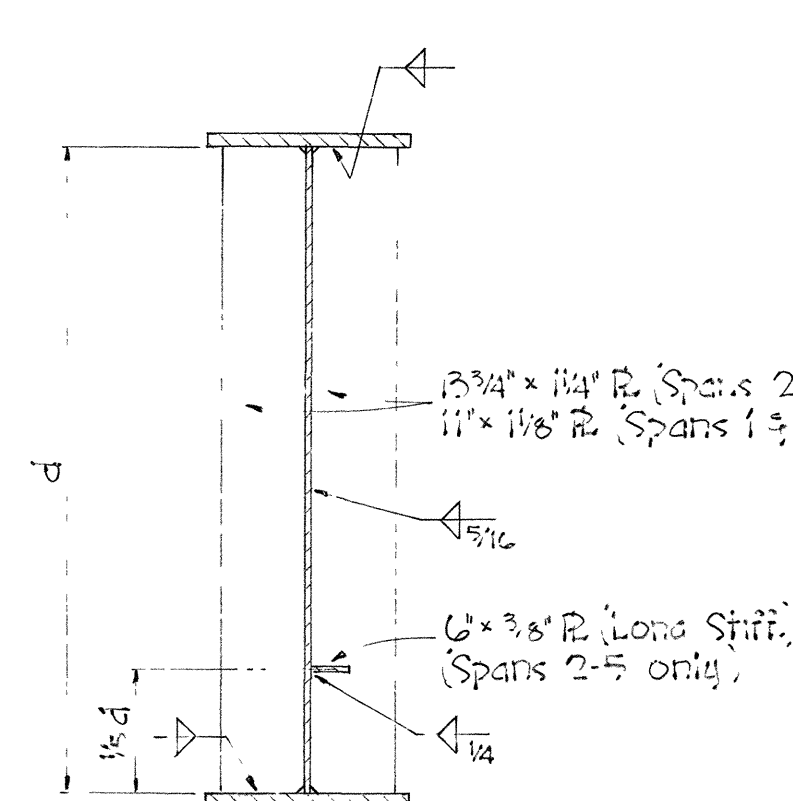
SECTION B-3



INTERMEDIATE STIFFENERS
SPANS 1 & 6

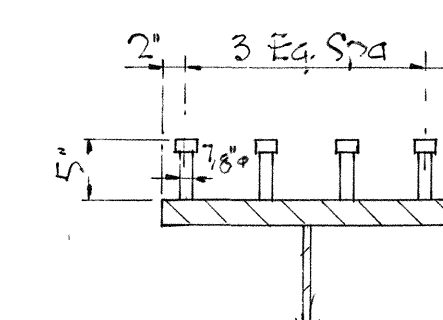


INTERMEDIATE STIFFENERS
SPANS 2-5

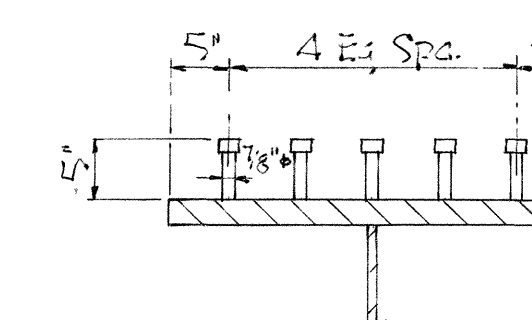


BEADING STIFFENERS

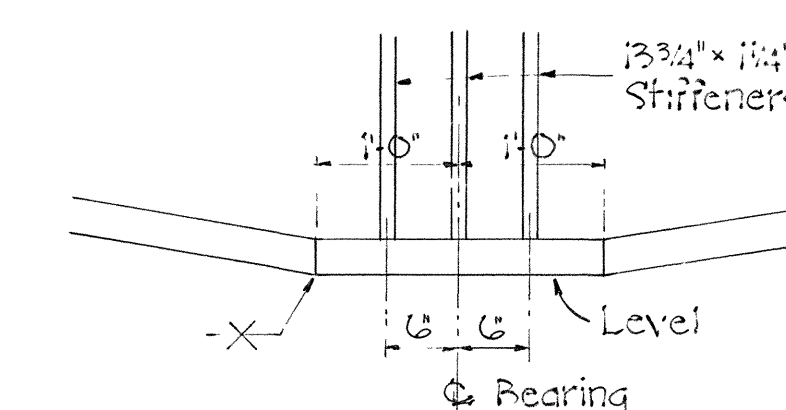
Pier Bearing Stiffeners shall be welded to the bottom flange and have a close fit at the top flange. Abutment Bearing Stiffeners shall be welded to top and bottom flanges and shall be fabricated to be vertical.



TYPICAL @ SPANS 1 & 6



TYPICAL @ SPANS 2-5



DETAIL "A"

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

SUPERSTRUCTURE DETAILS
I-265 OVER CUMBERLAND RIVER
STATION 538+30.67
DAVIDSON COUNTY
1967

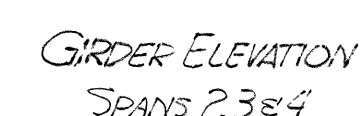
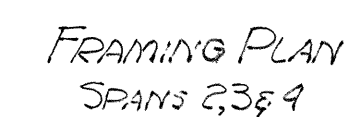
DESIGNED BY R. M. Dishner DATE _____
 DRAWN BY QSS DATE _____
 TRACED BY _____ DATE _____
 CHECKED BY _____ DATE _____

CORRECT

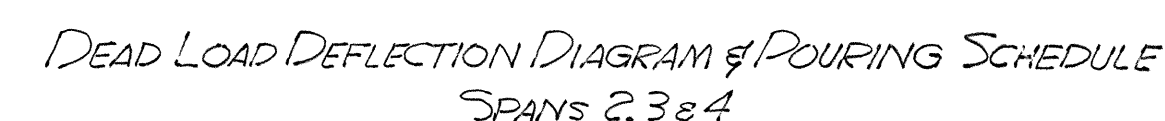
Fred Green
BRIDGE ENGINEER

APPROVED: [Signature]
STATE HIGHWAY ENGINEER

K-59-42

[illegible]

LONGITUDINAL STIFFENERS
Longitudinal Stiffeners to be A36 steel and welded to the inside of the web except put bottom stiffeners on outside of haunch region. See girder cross-section on dwg no. K-59-42 Δ



STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

STRUCTURAL STEEL DETAILS

SPANS 2, 3 & 4
I-265 / CUMBERLAND RIVER
STA. 538+30.67
DAVIDSON COUNTY
1967

DESIGNED BY R.M. Disner DATE Dec '66
DRAWN BY Albert Lerner DATE Jan '67
TRACED BY _____ DATE _____
CHECKED BY _____ DATE _____

CORRECT Karel Greve
BRIDGE ENGINEER

APPROVED W. K. King
SEAL - LICENSED ENGINEER

K-59-43

[illegible]

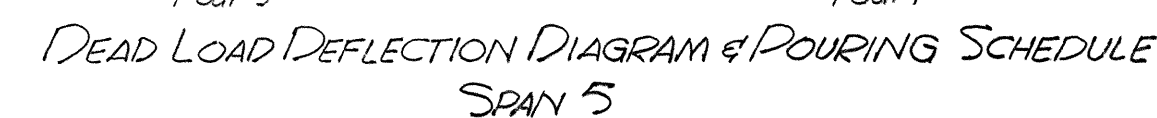
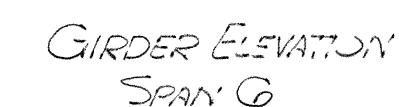
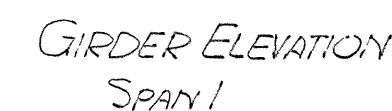
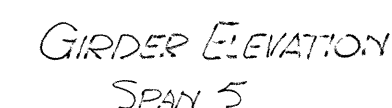
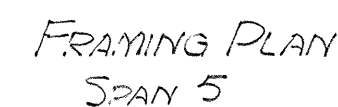
Flange To Web Welds	
Flange Thickness (inches)	Fillet Weld Size
Over 1/2 to 2 1/4	3/8
Over 2 1/4 to 6	1/2

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

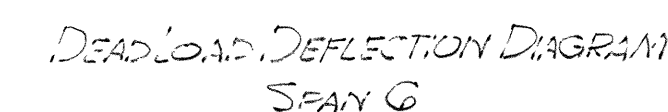
I-265 / CUMBERLAND RIVER
STA. 538+30.67
DAVIDSON COUNTY
1967

CORRECT. Kred Greve
BRIDGE ENGINEER

APPROVED. [Signature]
CHIEF ENGINEER

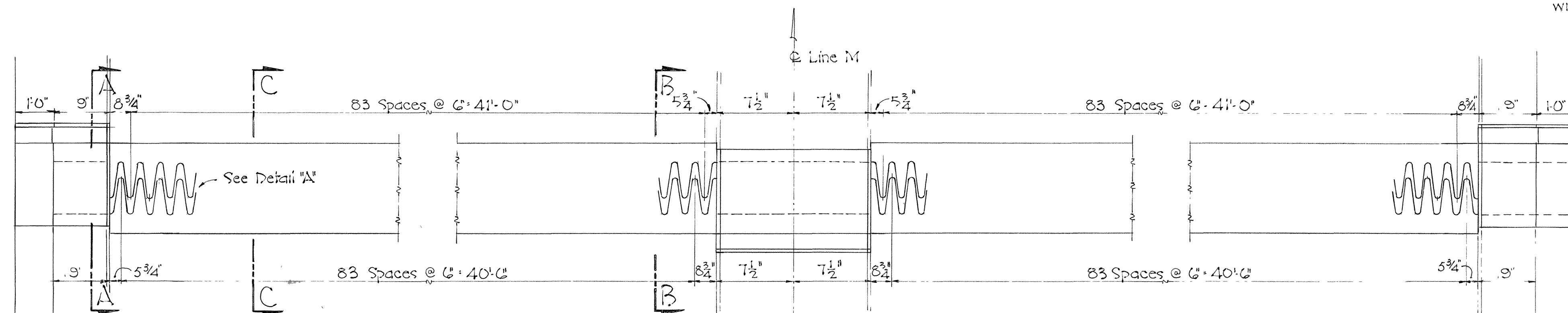


DESIGNED BY: R M D'simer DATE Dec '66
DRAWN BY: Albert Lamer DATE Jan '67
TRACED BY: _____ DATE _____
CHECKED BY: _____ DATE _____

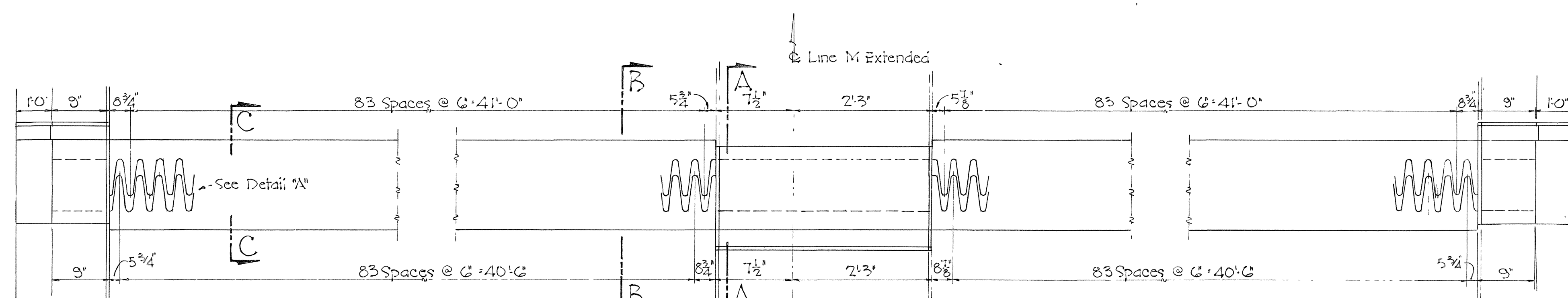


FED ROAD DIST NO	STATE	FED AID PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
3	TENN		19		

REVISIONS					
NO	DATE	BY	BRIEF DESCRIPTION		
1	4-5-67	JWS	Downspout Payment Note.		
2	7-30-67	RMD	Slab Construction Joint Added		
3	11-16-67	JJC	Dimensions revised		

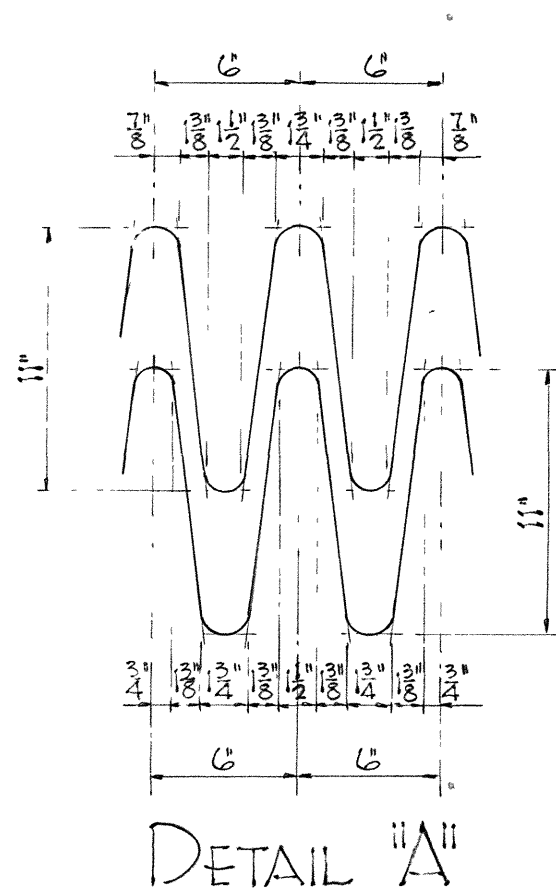


ROADWAY EXPANSION @ PIER No. 1 * Δ

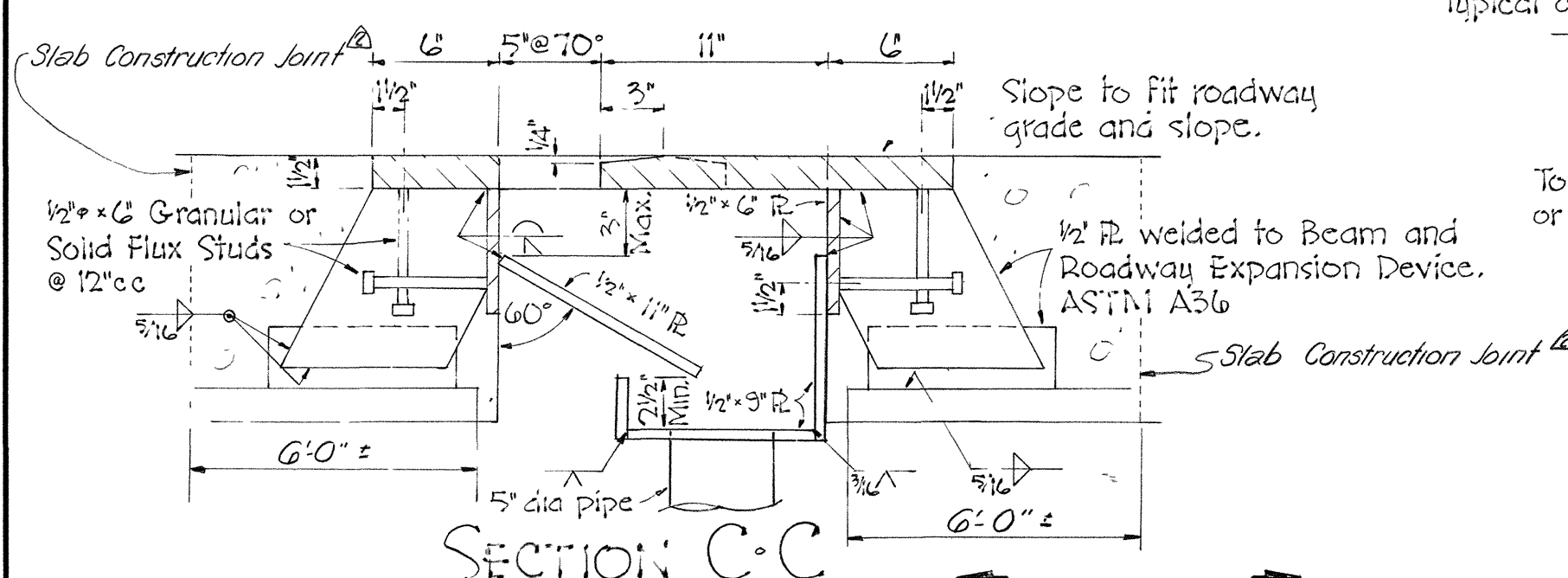


ROADWAY EXPANSION @ PIER No. 5 * Δ

* NOTE: Corrosion Resistant Steel, except as noted, see note on dwg. K-53-38.

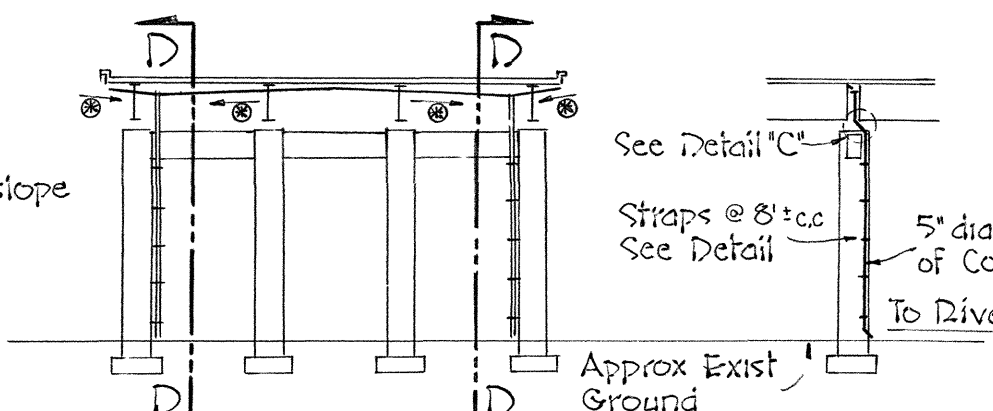


DETAIL A

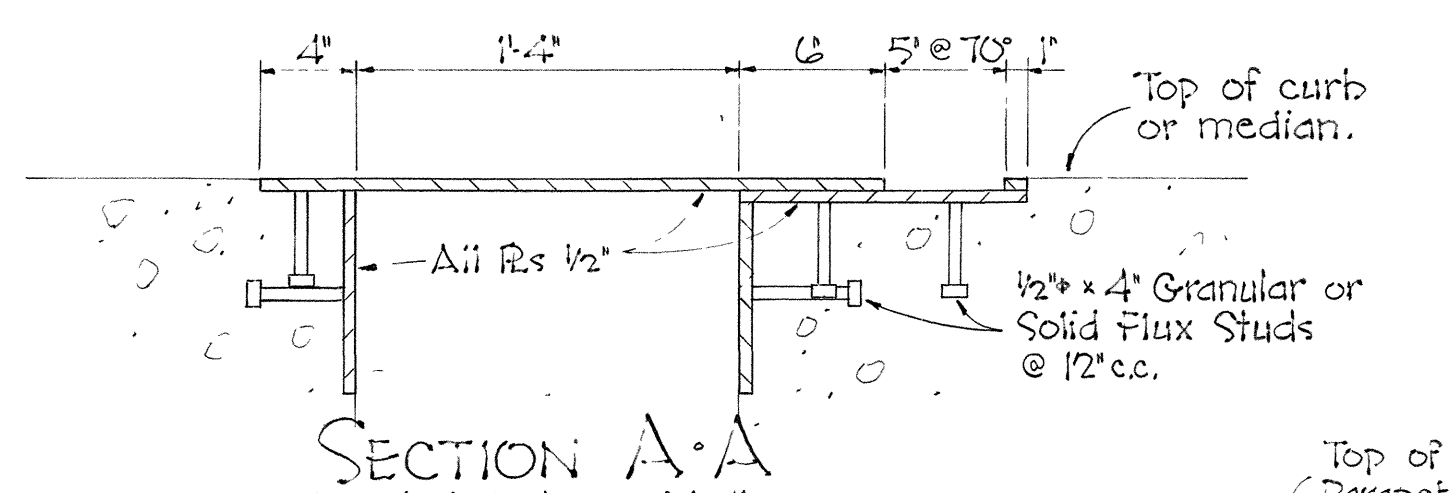


SECTION C-C

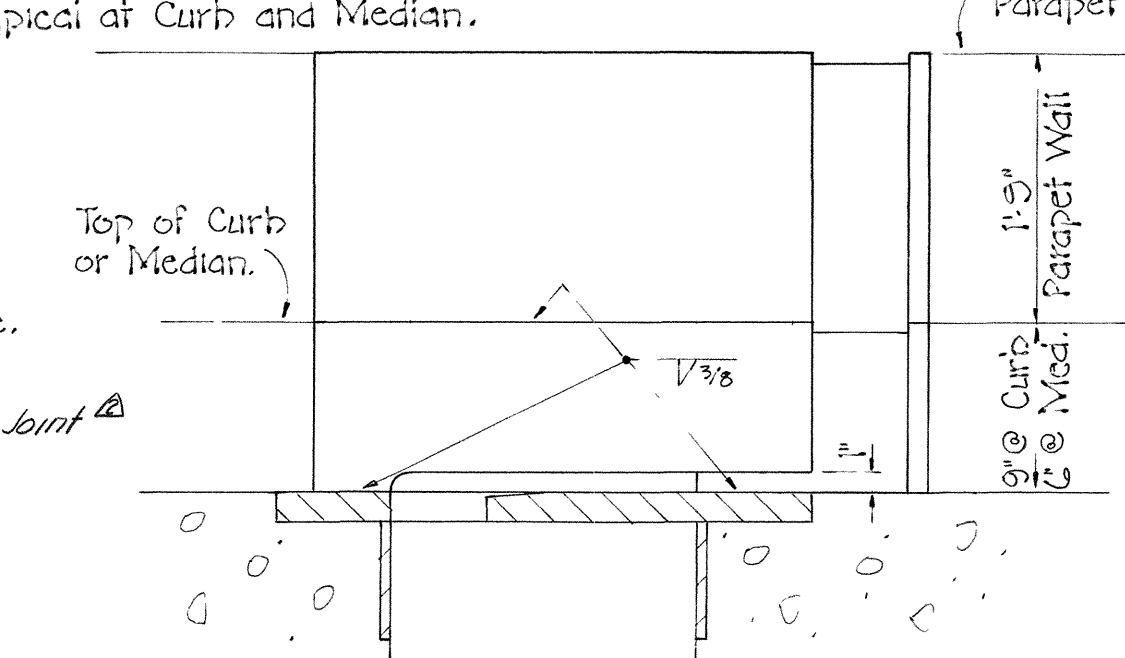
Δ NOTE: Hardware and 3" x 1" x 6" neoprene pads for downspout installation to be included in items bid on.



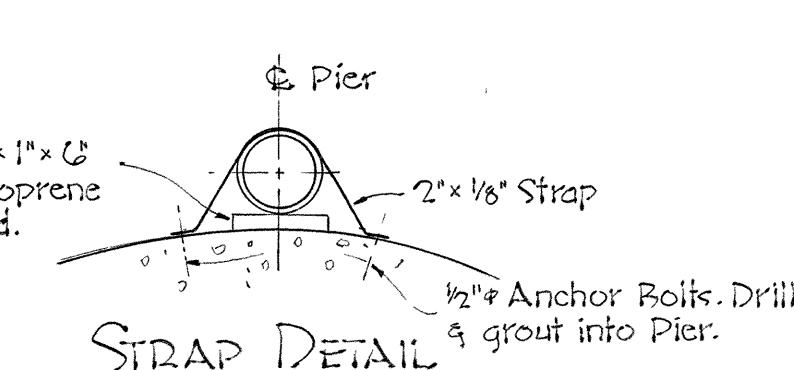
ELEVATION SHOWING DRAIN @ PIER 1 & 5



SECTION A-A
Typical at Curb and Median.



SECTION B-B
Typical at Curb and Median.



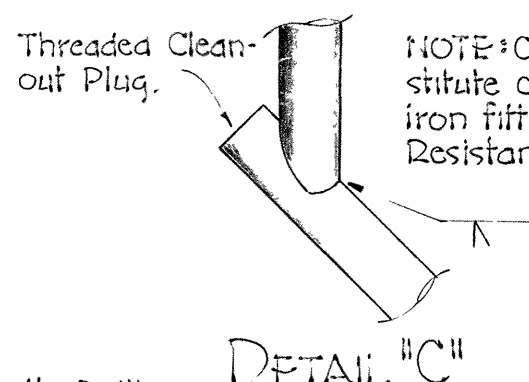
STRAP DETAIL

2" padlock, cast iron case, pin tumblers, with chain (or equal). All padlocks on this bridge to be of a set and operated by the same key. Supply 3 keys for each set of padlocks.

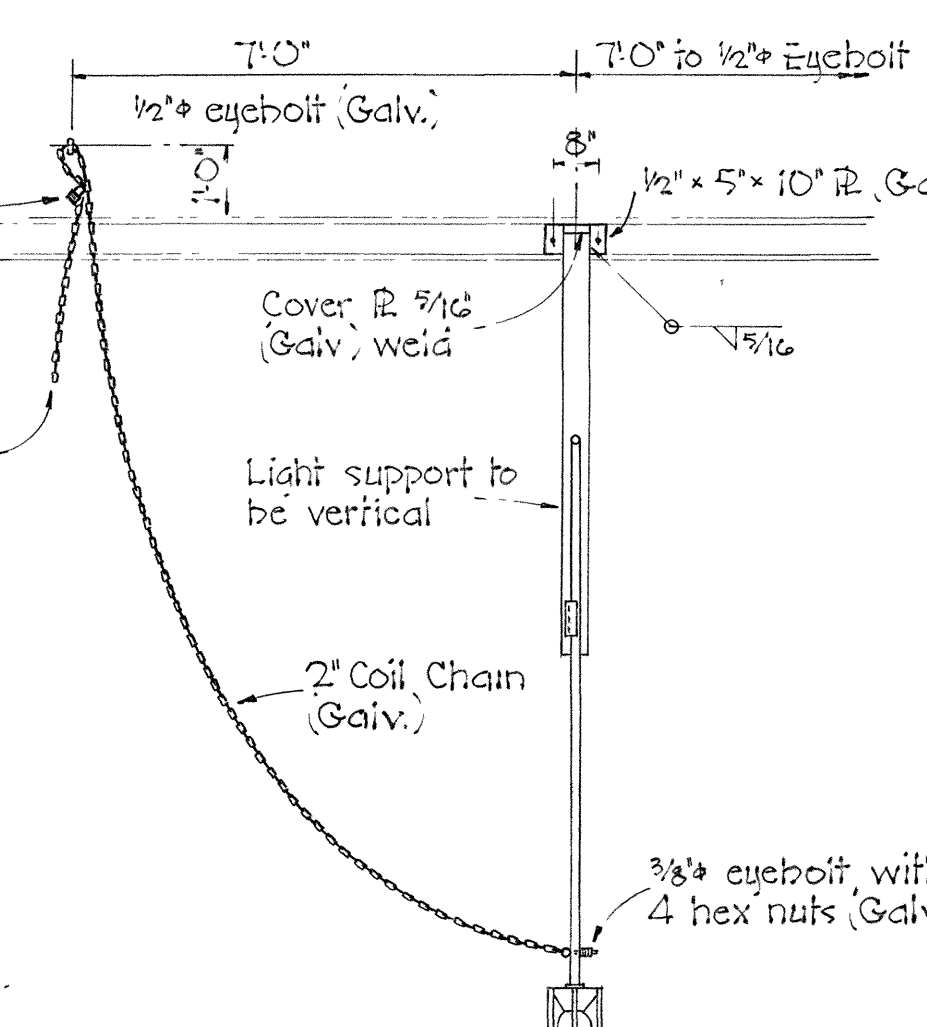
Provide approx. 3' past lock.

SWITCH BOX NOTES

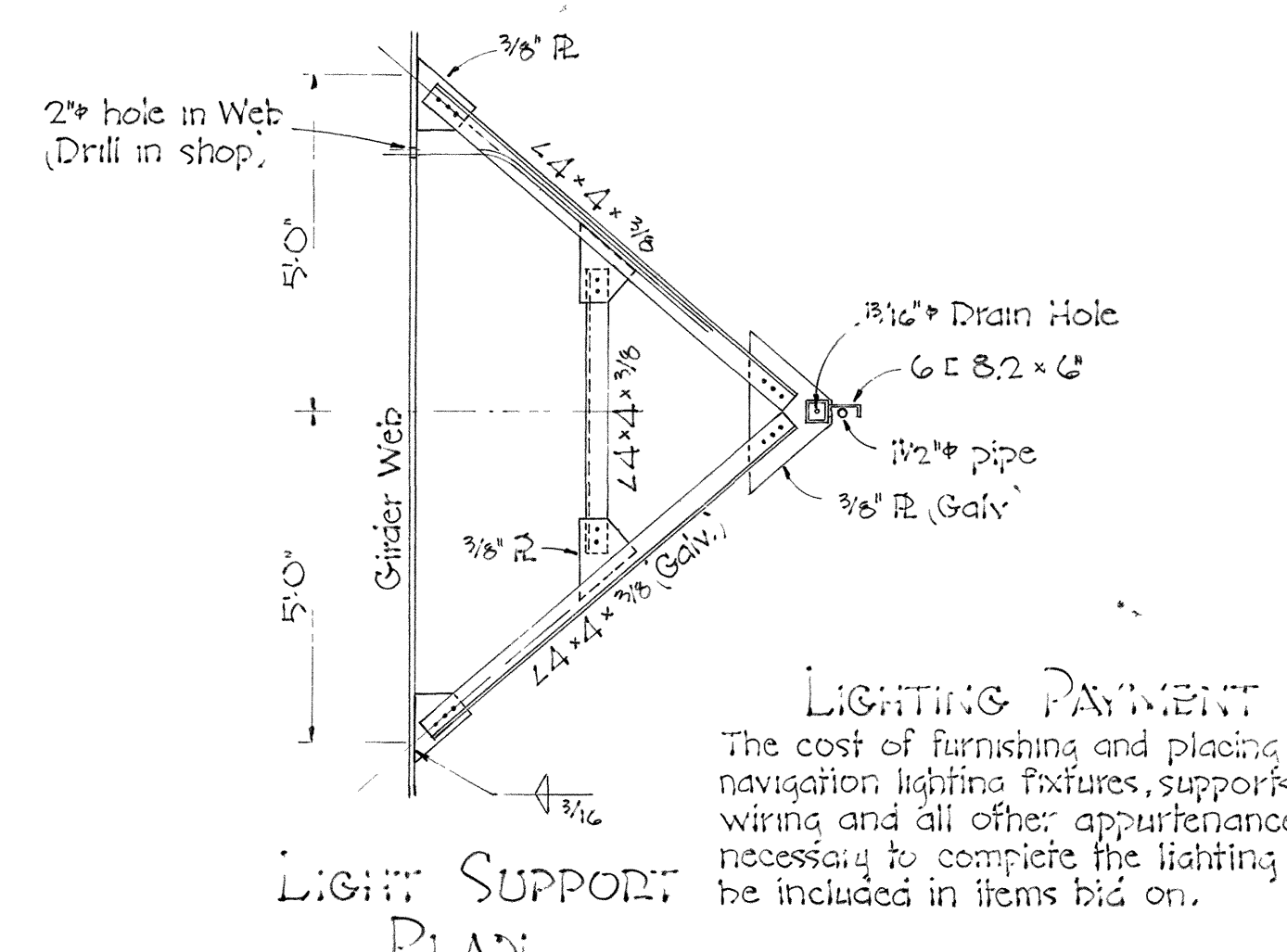
A moisture proof and water tight grounded control box (Galv.) with hinged door, hasp and keeper to accommodate a padlock shall be bolted to north girder web in the vicinity of Abutment No 2. The box shall be for 60 amp service with switch and circuit breaker. Size of box approximately 16" x 16" x 6" to allow for possible future addition of a time switch. All wire within the box to be #14 AWG. Bolt box to girder with galvanized bolts. All lights to be wired in parallel with #12 AWG wire. Splices shall be made in junction boxes or pull boxes. No splices shall be pulled into conduit.



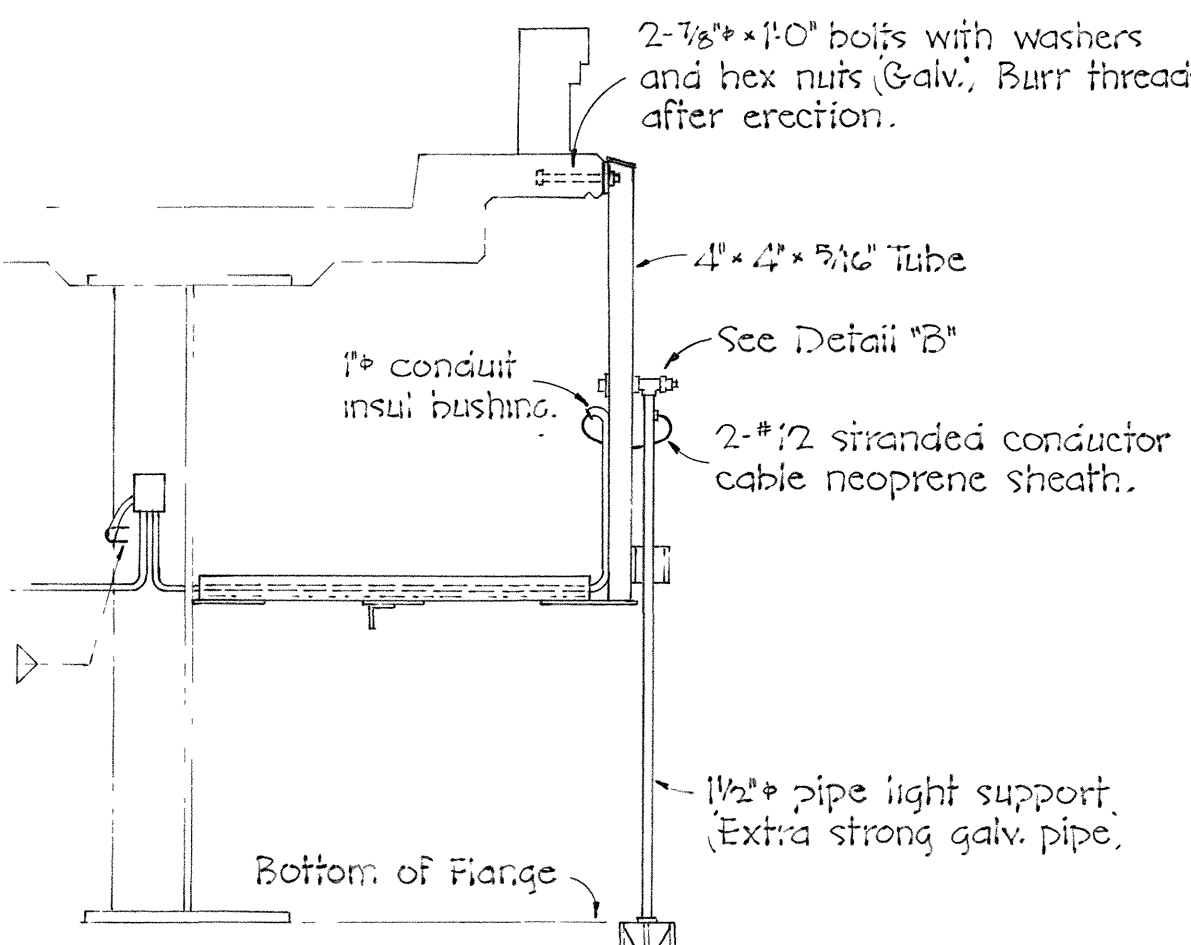
DETAIL C



LIGHT SUPPORT ELEVATION



LIGHT SUPPORT PLAN

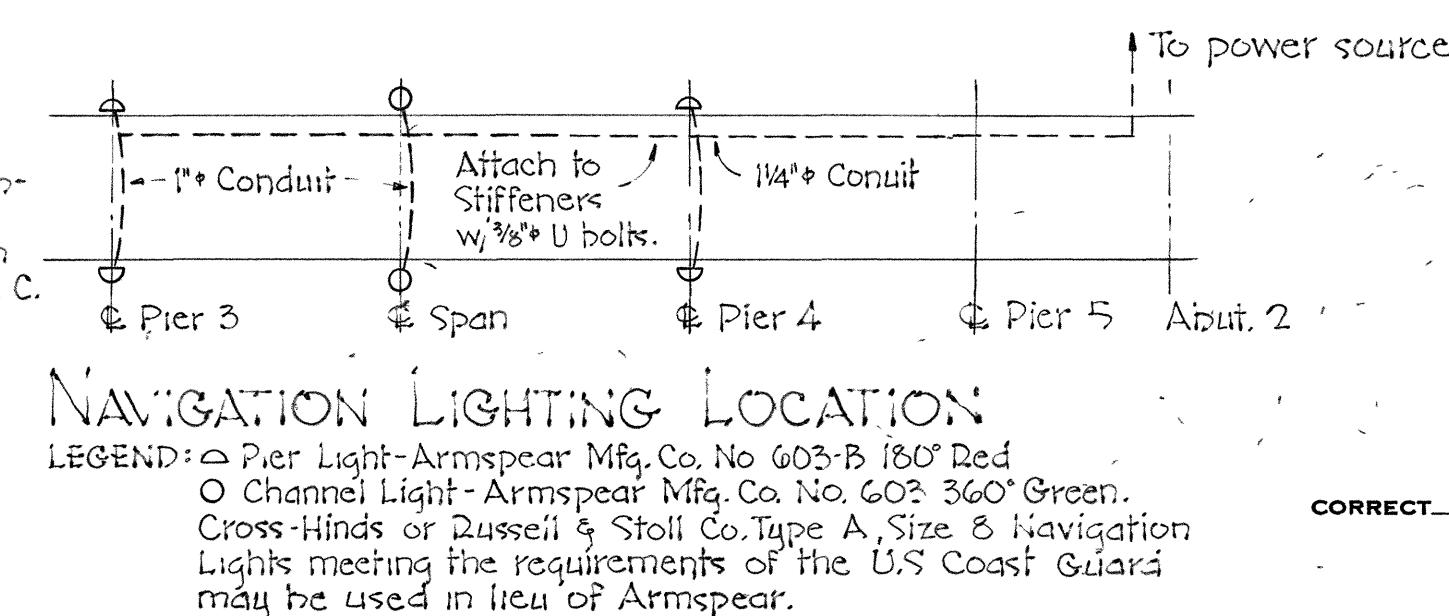


LIGHT SUPPORT SECTION

LIGHTING PAYMENT
The cost of furnishing and placing all navigation lighting fixtures, supports, wiring and all other appurtenances necessary to complete the lighting to be included in items bid on.

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

ROADWAY EXPANSION
& NAVIGATION LIGHTING DETAILS
I-265 OVER CUMBERLAND RIVER
STATION 538+30.67
DAVIDSON COUNTY
1967

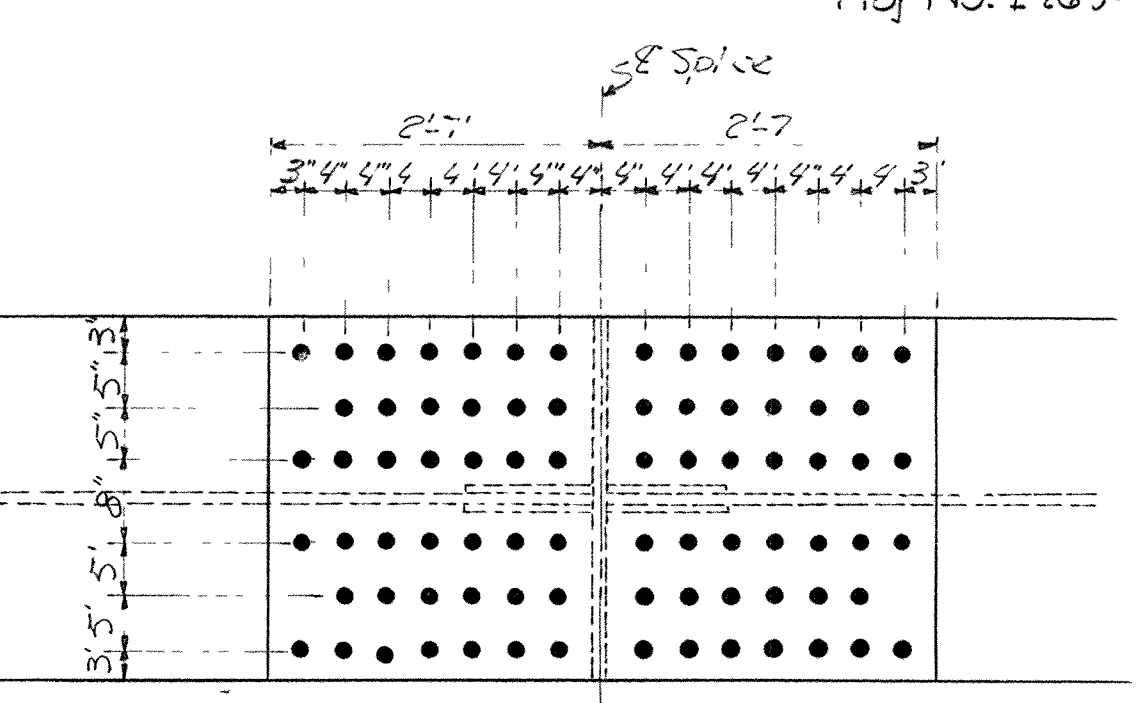
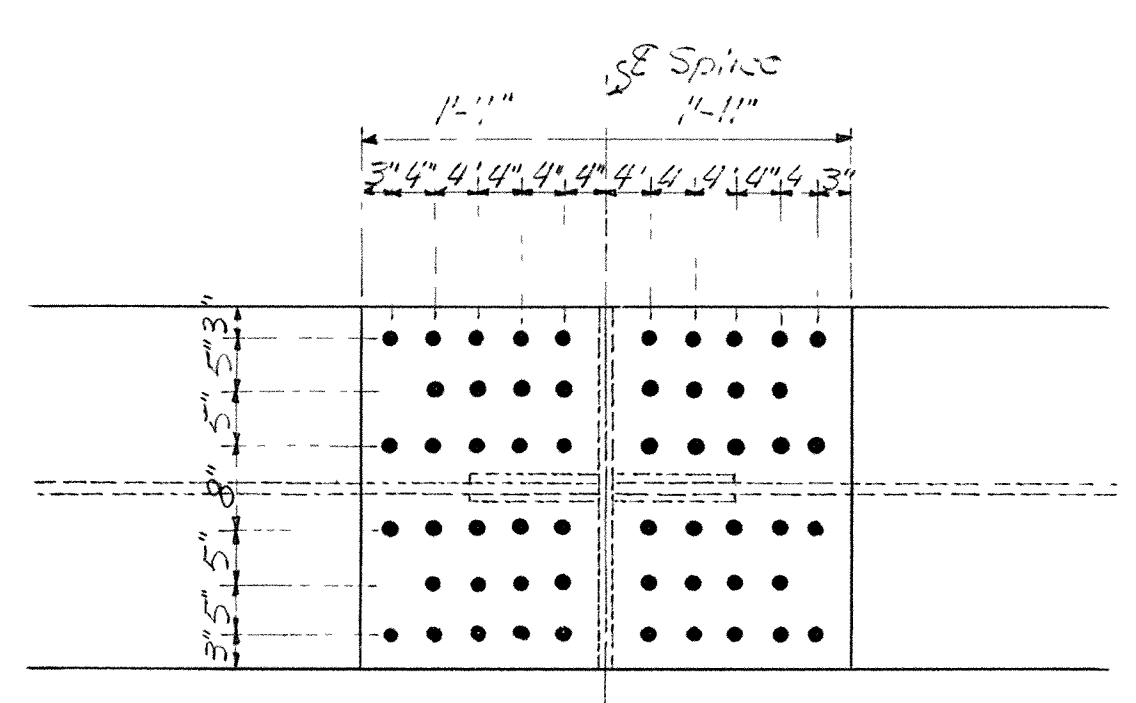
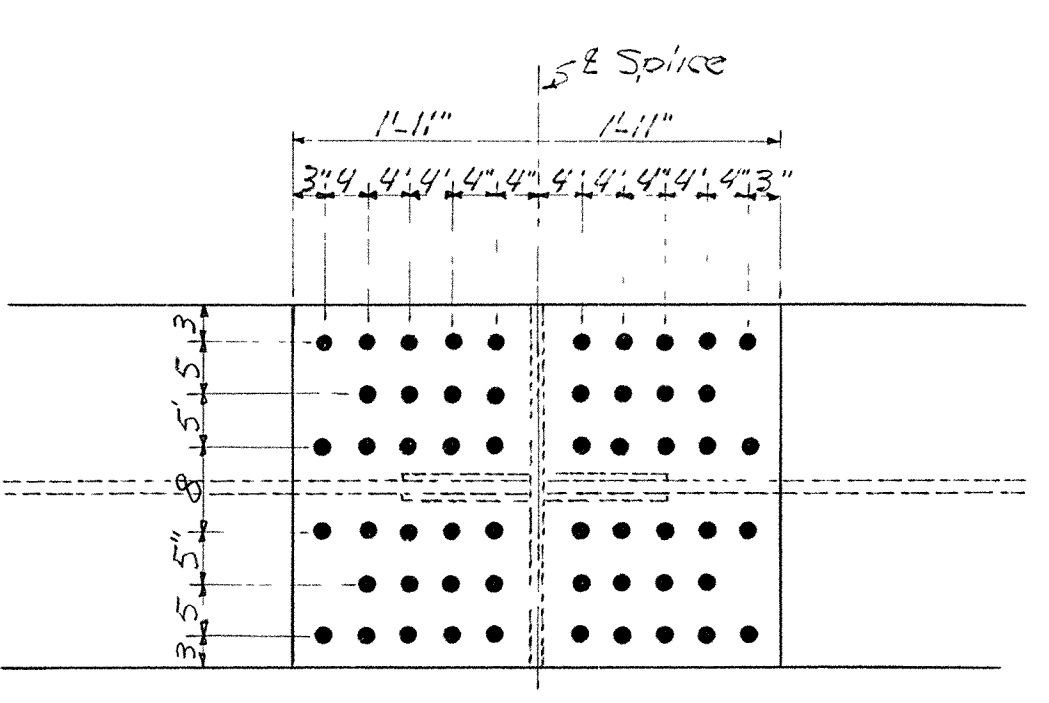
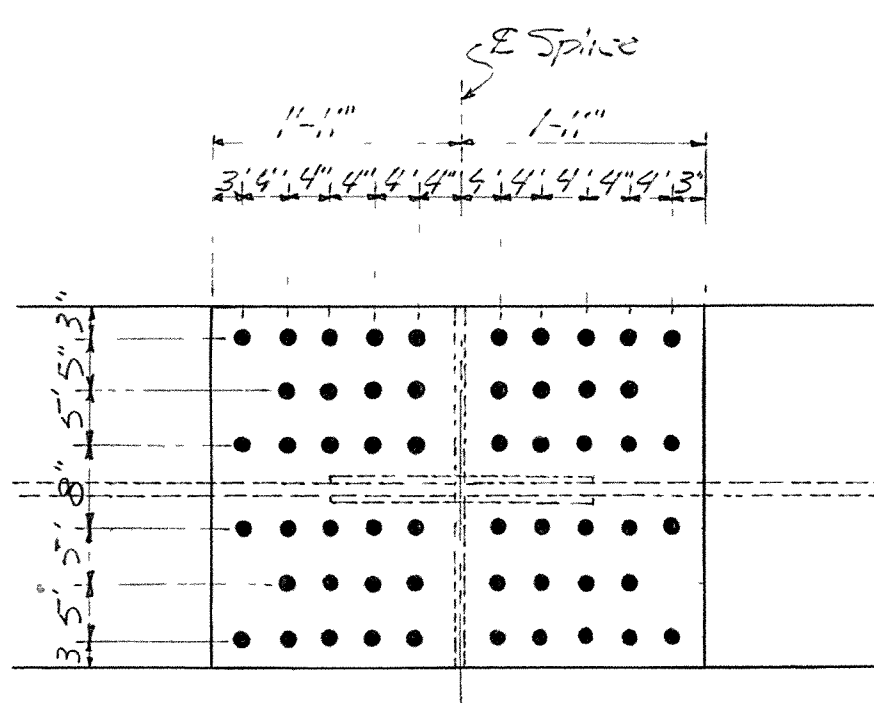


NAVIGATION LIGHTING LOCATION
LEGEND: Δ Pier Light - Armspear Mfg. Co. No. 603-B 180° Red
○ Channel Light - Armspear Mfg. Co. No. 603-360° Green
Cross-Hinds or Russell & Stoll Co. Type A, Size 8 Navigation Lights meeting the requirements of the U.S. Coast Guard may be used in lieu of Armspear.

DESIGNED BY: R.M. Dishner
DRAWN BY: GMD
TRACED BY:
CHECKED BY:

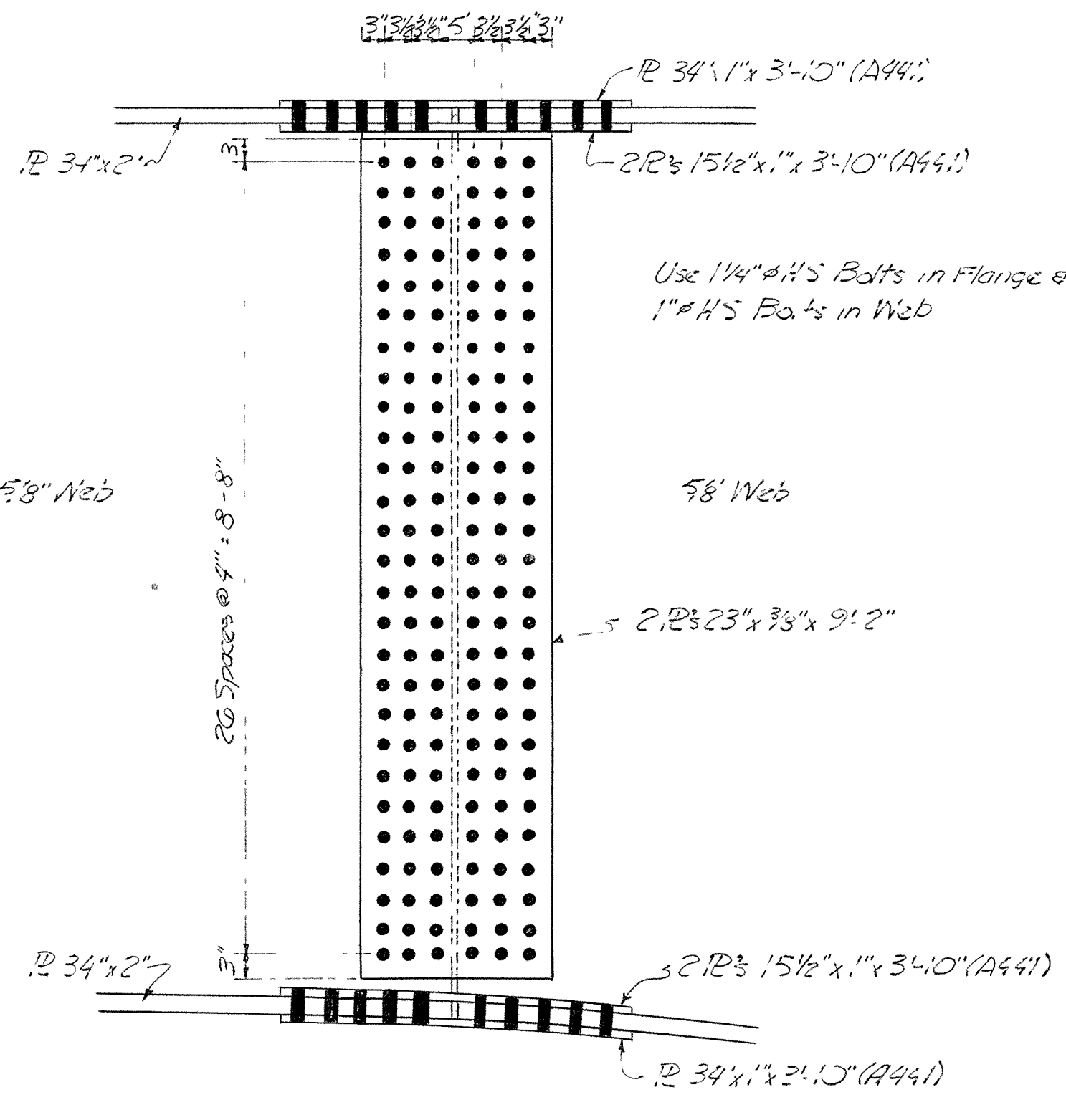
DATE
DATE
DATE
DATE

CORRECT: Fred Greener
APPROVED: [Signature]
STATE HIGHWAY ENGINEER

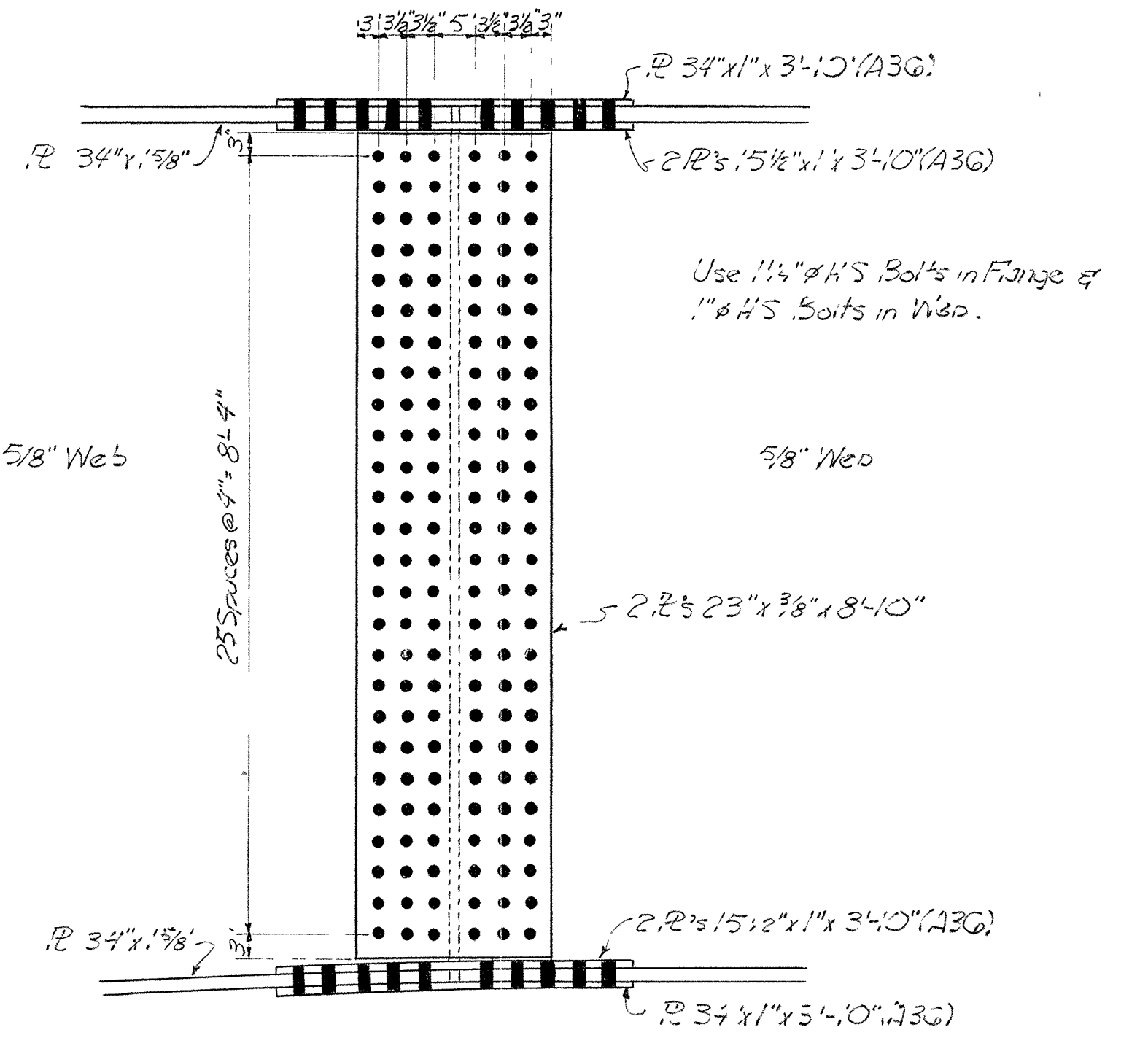


FED. ROAD DIST. NO.	STATE	FED. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		19		

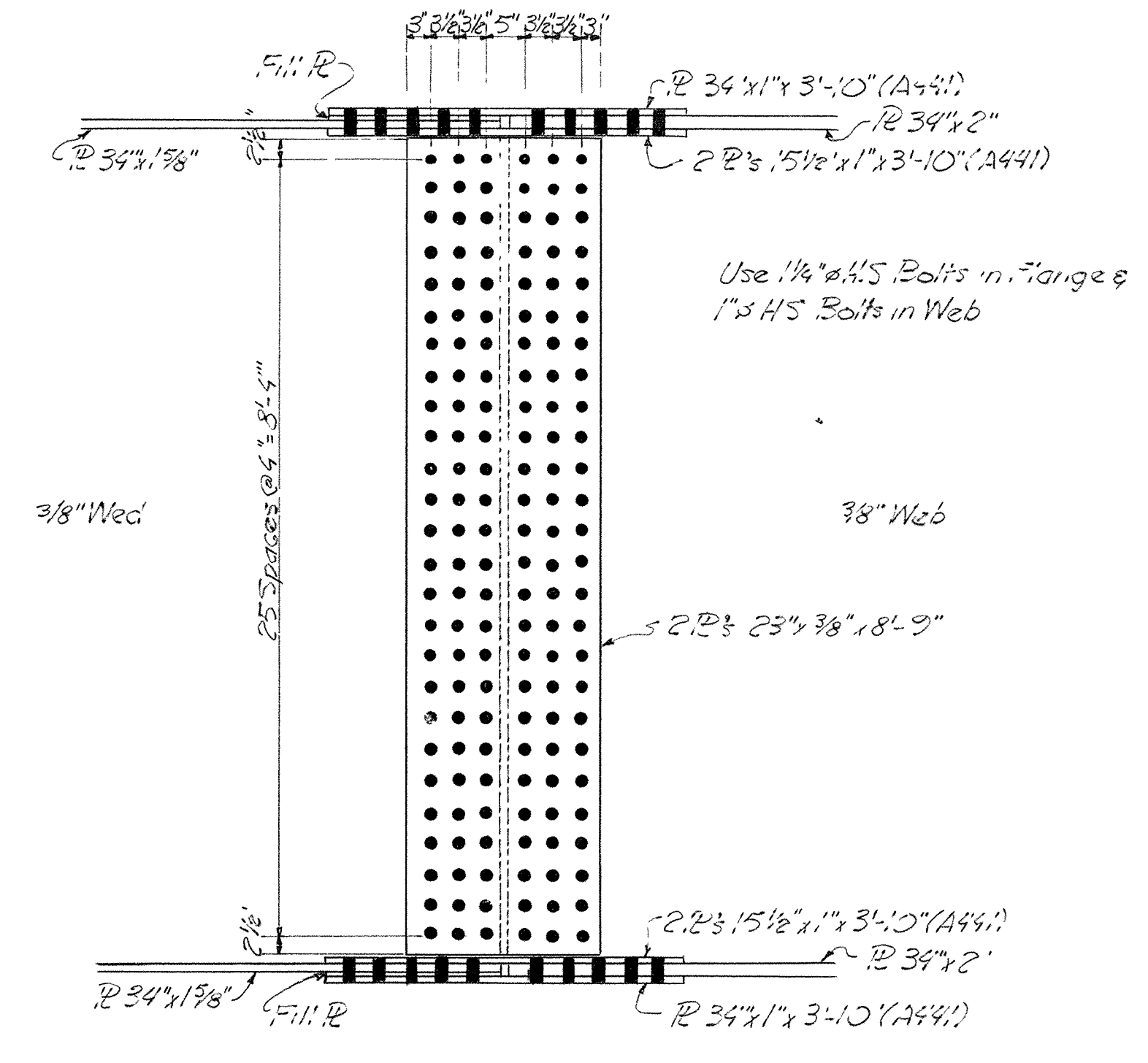
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-9-67	RMD/EAR	Bend Line added & Weld size changed
2	10/Nov/67	RMD	Splice & changed
3	7/22/68	JRC	Added Detail 3



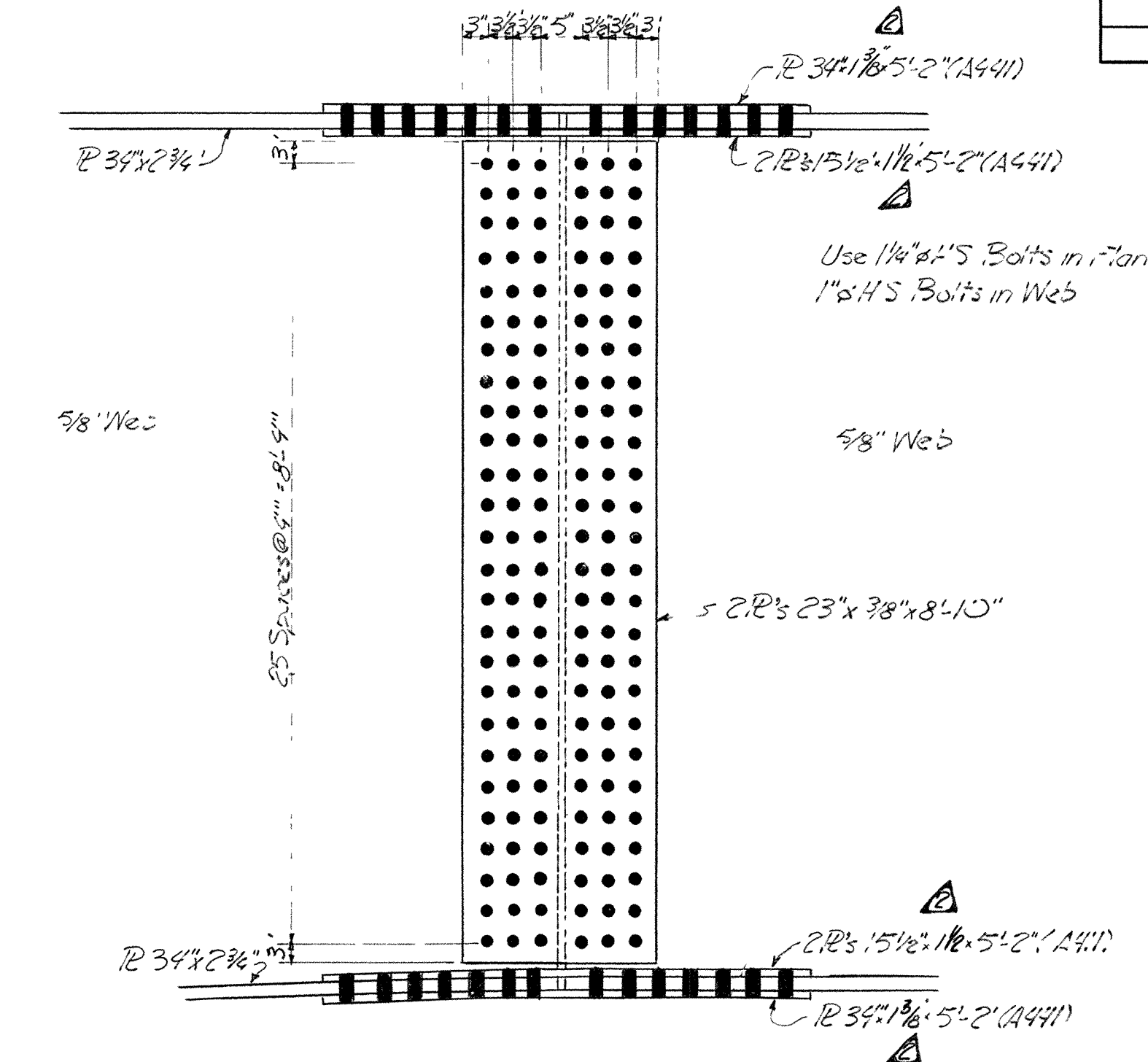
G51



G52



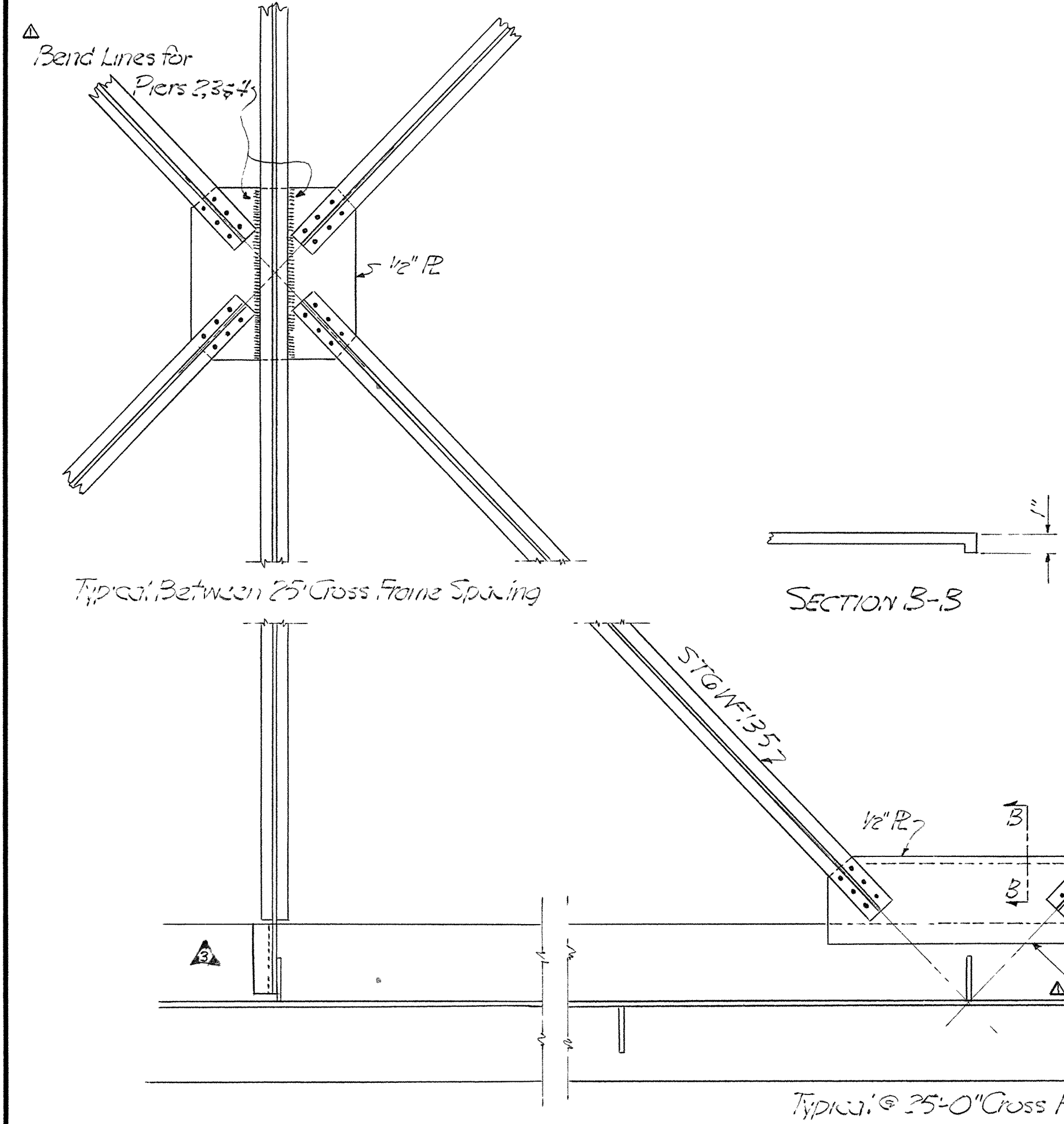
G53



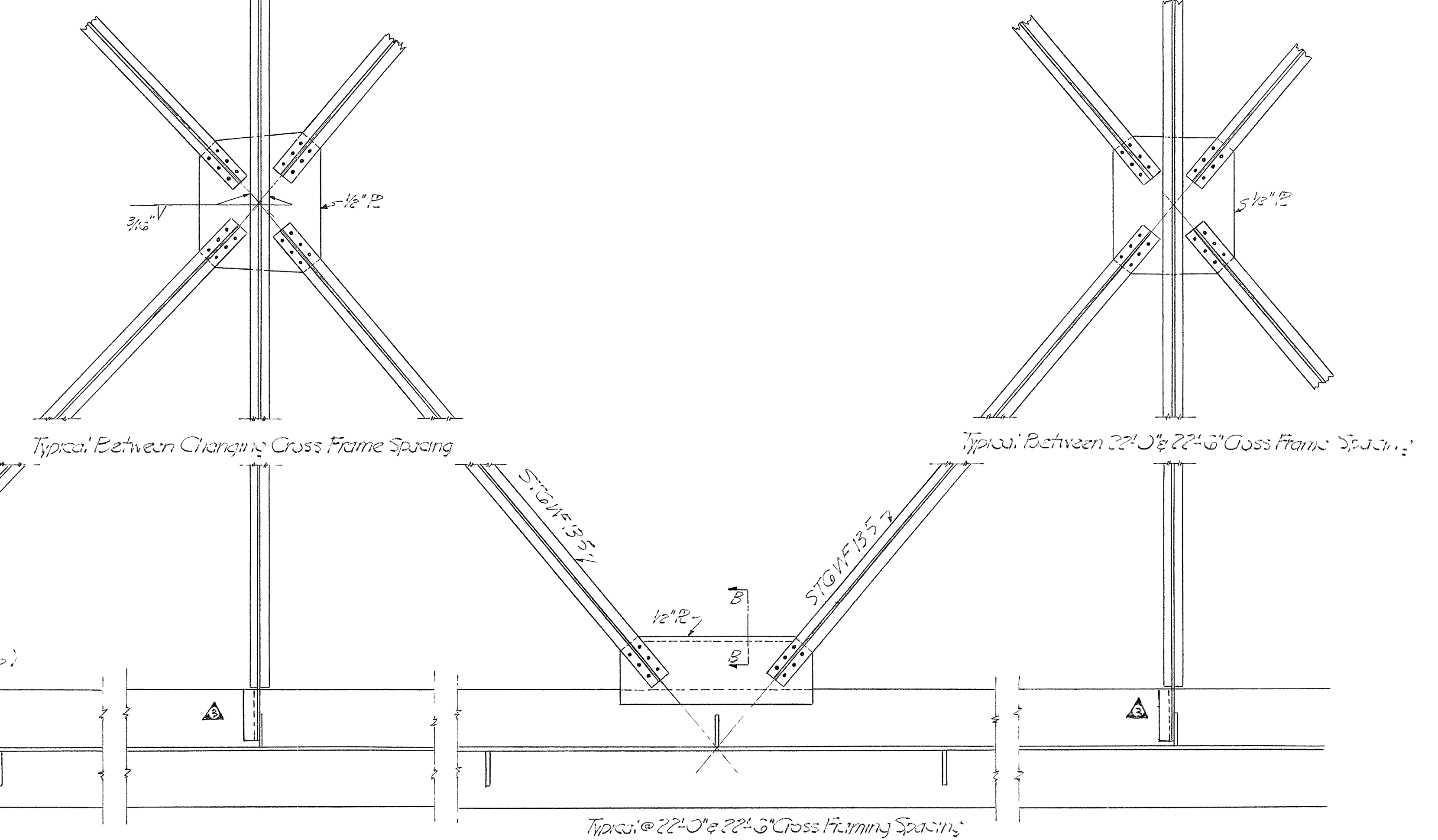
G54

Notes: Splices to be sub-punched or sub-drilled 1/8" smaller and reamed to size and match marked white assemblies in correct cambered position in the shop.

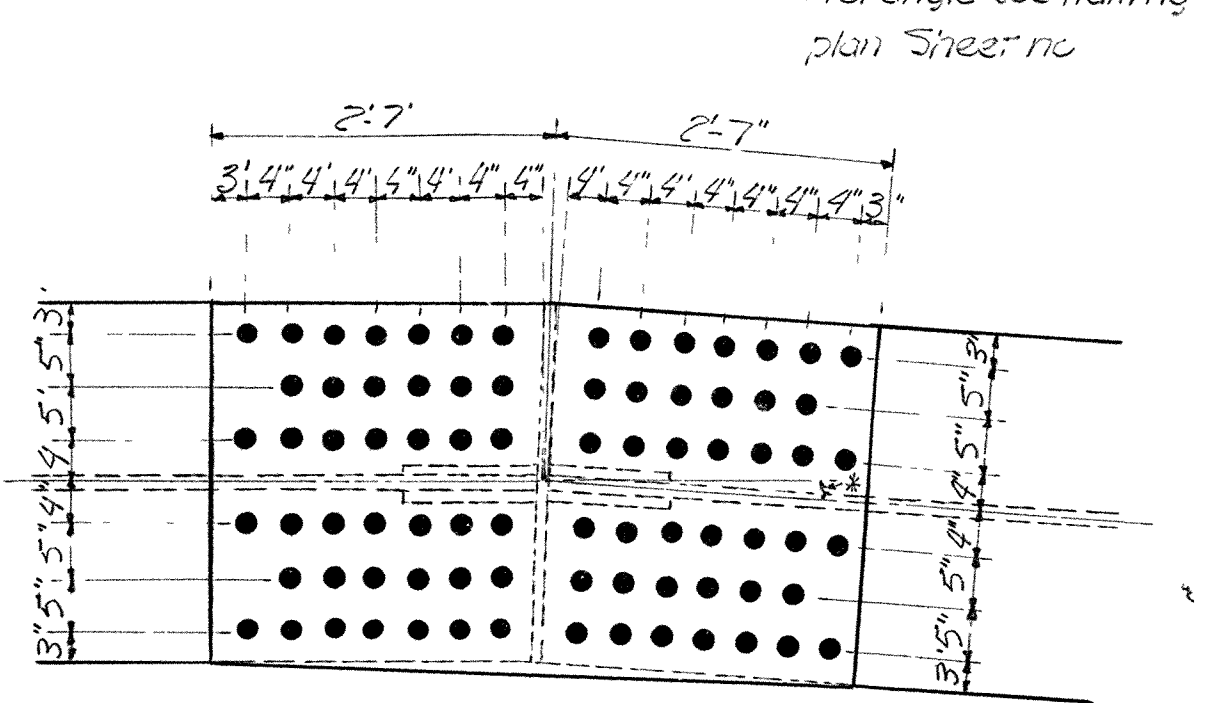
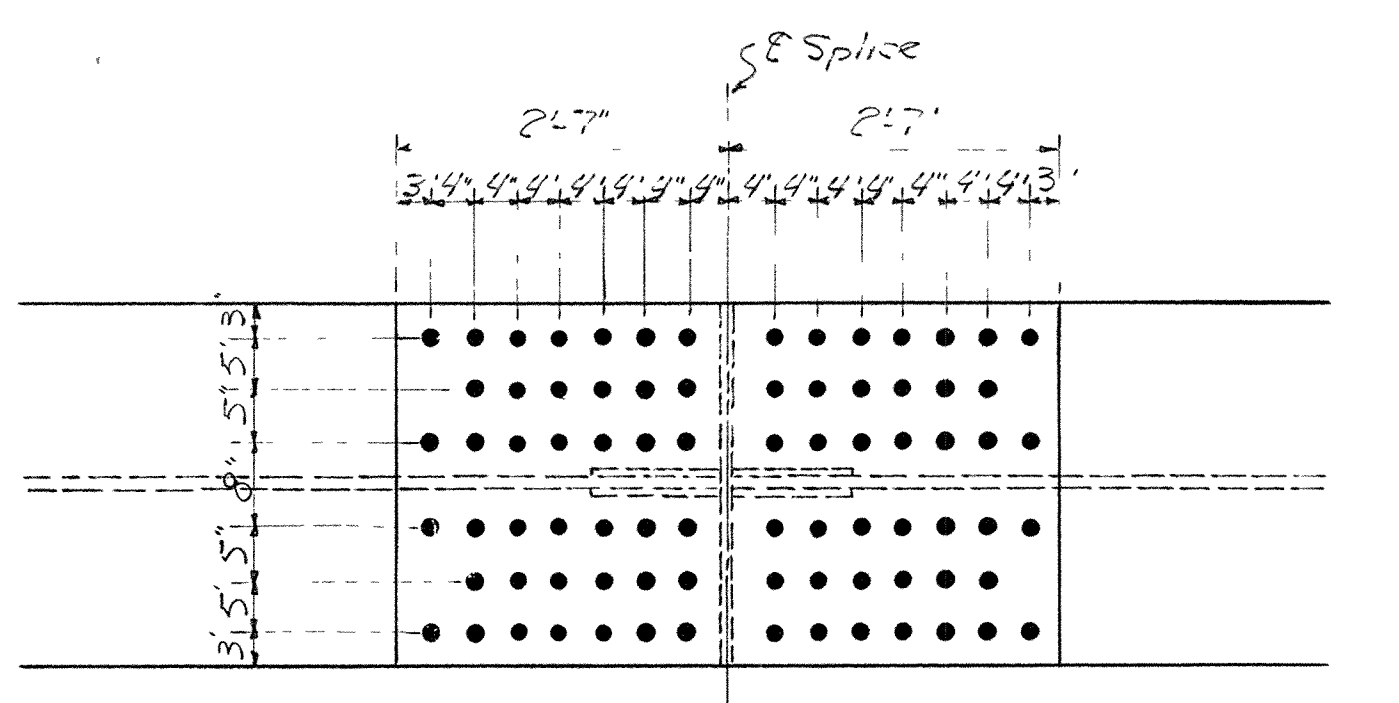
All girder flange splice bolts are High Tensile Strength (size as noted) and are friction type connections.



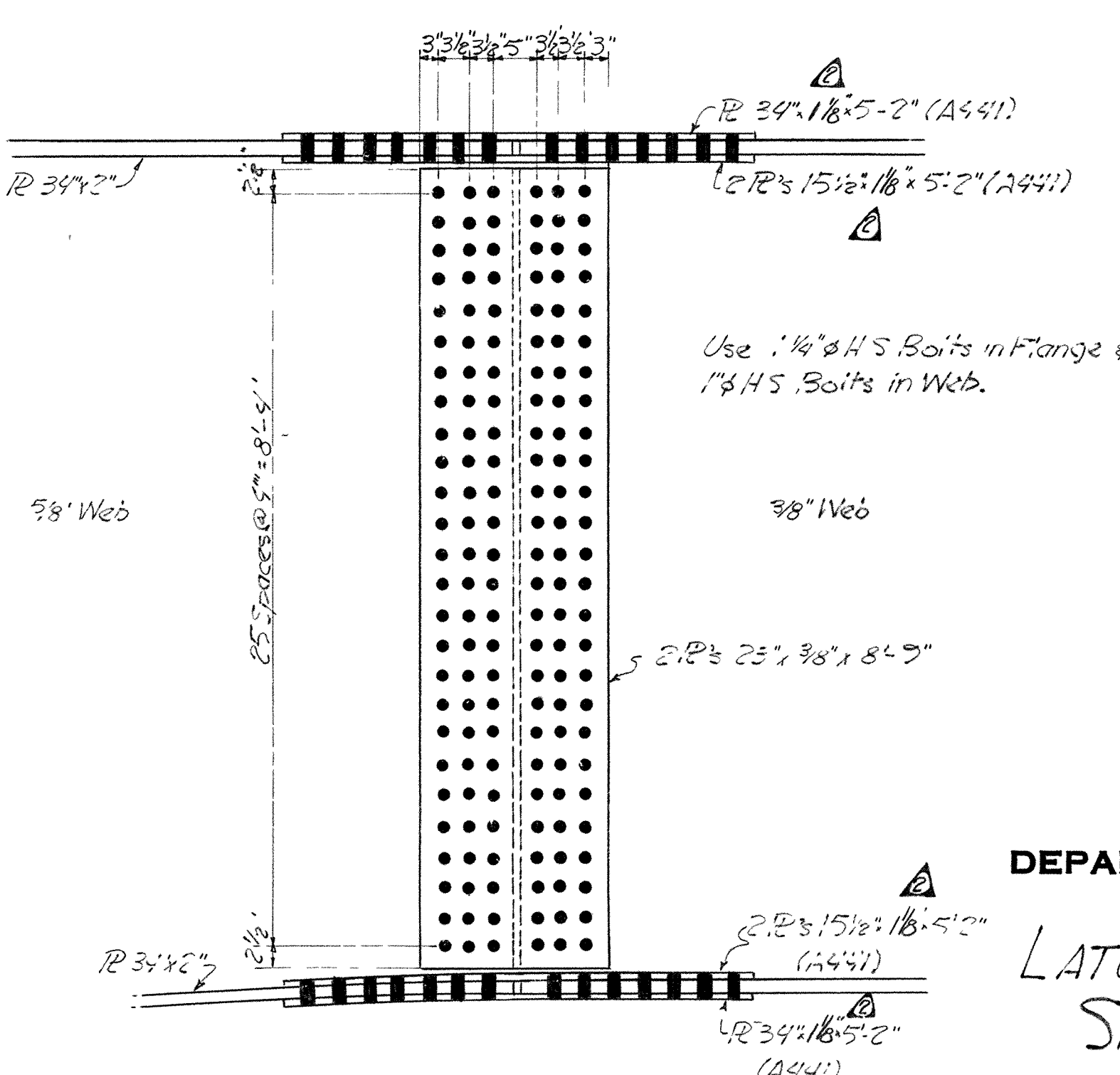
SECTION A-A



DETAIL B



SPlice G56
Girder Lines 38'4" Def'n's Not Shown Same as G55 for Girder < 18'2"



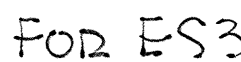
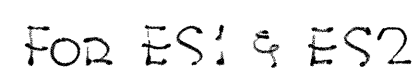
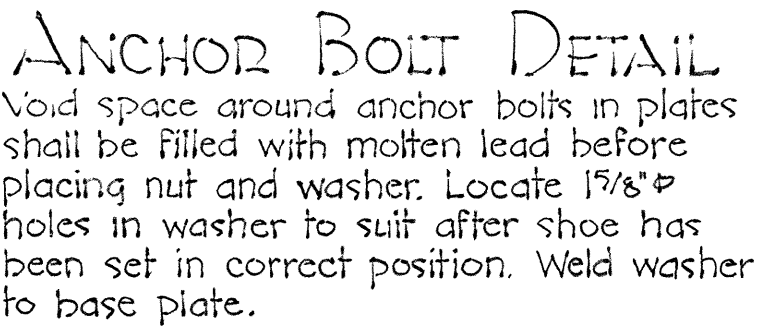
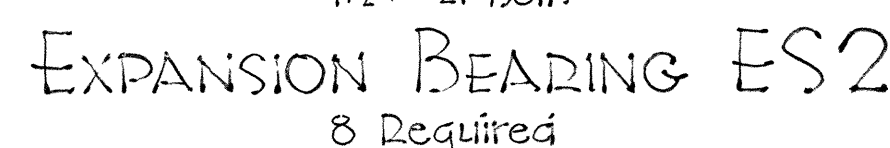
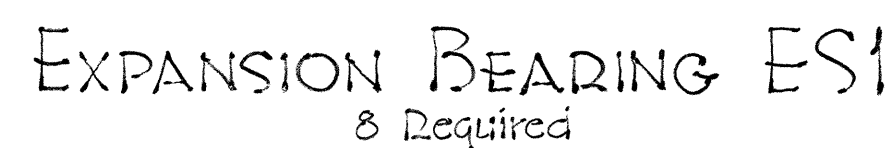
G55

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE
LATERAL BRACING &
SPlice DETAILS
I-265/CUMBERLAND RIVER
STA. 538+30 G1
DAVIDSON COUNTY
1966

DESIGNED BY: R.M. Disher
DRAWN BY: Albert Ganser
TRACED BY:
CHECKED BY:

DATE: Feb. '67
DATE:
DATE:

CORRECT: Fred Grove
BRIDGE ENGINEER
APPROVED: [Signature]
STATE HIGHWAY ENGINEER



BEARING DETAILS
I-265 OVER CUMBERLAND RIVER
STATION 538+30.67
DAVIDSON COUNTY
1967

CORRECT Fred Greer
BRIDGE ENGINEER

APPROVED ced King
STATE HIGHWAY ENGINEER

Plan view of a bridge structure. The drawing shows a long, narrow bridge deck with a central section labeled "2 Bridge & Median". The bridge is flanked by abutments on both sides. Key dimensions and elevations are noted:

- Left Abutment:**
 - Elev. 465.16 (Top of Road)
 - Elev. 466.21 (Top of Curb)
 - Elev. 466.27 (Top of Backwall)
 - Elev. 464.512 (Top of Backwall)
 - Dimensions: 3'-8 3/8" (width), 1'-1 3/8" (height), 45'-3" (length), 42'-8 1/2" (length), 2'-0 1/4" (width), 13'-2" (width), 15'-2" (width), 20'-4" (width), 45'-2 1/2" (length), 3'-8 3/8" (width).
- Central Section:**
 - 2 Bridge & Median
 - Dimensions: 45'-3" (length), 42'-8 1/2" (length), 2'-0 1/4" (width), 13'-2" (width), 15'-2" (width), 20'-4" (width), 45'-2 1/2" (length), 3'-8 3/8" (width).
- Right Abutment:**
 - Elev. 465.46 (Top of Road)
 - Elev. 466.21 (Top of Curb)
 - Elev. 466.27 (Top of Backwall)
 - Elev. 464.512 (Top of Backwall)
 - Dimensions: 3'-8 3/8" (width), 1'-1 3/8" (height), 45'-3" (length), 42'-8 1/2" (length), 2'-0 1/4" (width), 13'-2" (width), 15'-2" (width), 20'-4" (width), 45'-2 1/2" (length), 3'-8 3/8" (width).

Structural details include reinforcement bars (E. Beam) and various dimensions for the bridge deck, abutments, and median.

Hand-drawn structural drawing of a bridge deck cross-section showing reinforcement details. The drawing includes labels for various reinforcement bars (A553, A540, A543, A544, A541), elevations (e.g., Elev. 466.27, Elev. 464.95, Elev. 457.13, Elev. 452.86), and dimensions (e.g., 3'-4 1/2", 14 Spaces @ 6'-0" = 84'-0"). It also shows a 'Pile Cutoff Elev 453.86 (Typical All Piles Abutment No.1)' and a 'Bars 1540 @ 1'-0" cc (88 Spaces)' section at the bottom.

The diagram illustrates the reinforcement layout for a three-span continuous slab. The layout is divided into three rows, each showing the placement of different reinforcement bars and their spacing.

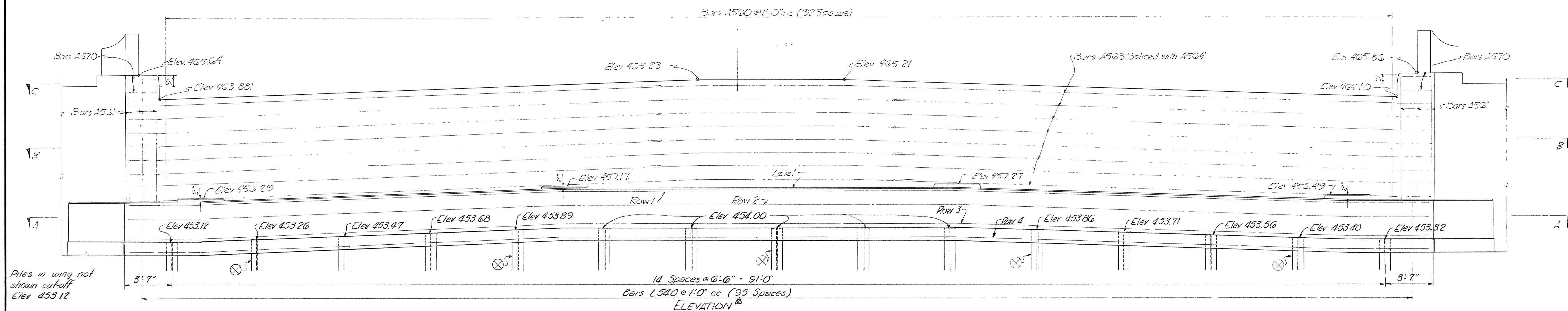
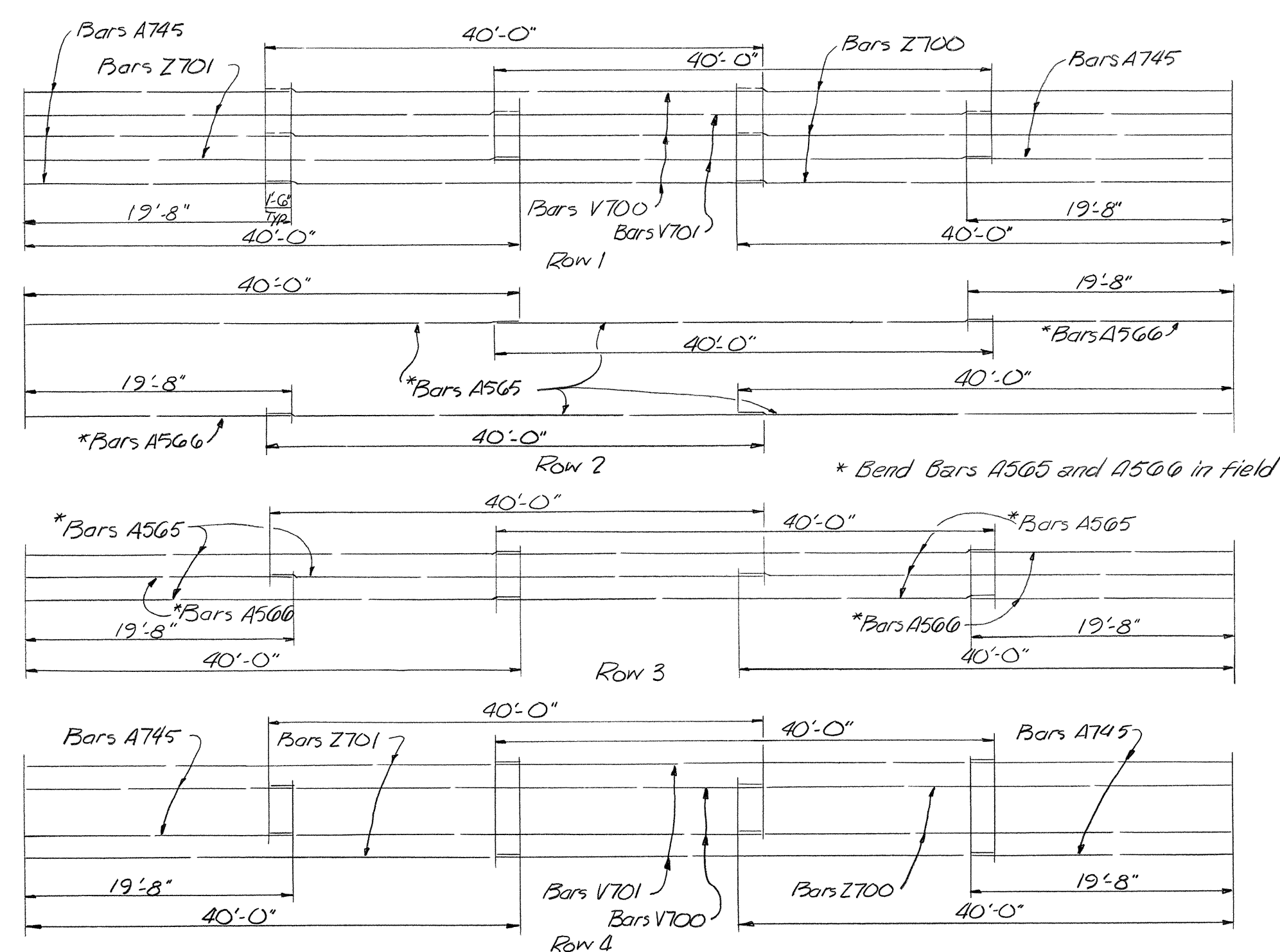
- Row 1:** Shows bars A741, A740, and A741. The spacing between bars is 40'-0" and 40'-5". The total length of the slab is 13'-3" + 40'-0" + 40'-5" + 13'-3" = 107'-1".
- Row 2:** Shows bars A545 and A546. The spacing between bars is 40'-0" and 40'-5". The total length of the slab is 13'-3" + 40'-0" + 40'-5" + 13'-3" = 107'-1".
- Row 3:** Shows bars A741, A740, and A741. The spacing between bars is 40'-0" and 40'-5". The total length of the slab is 13'-3" + 40'-0" + 40'-5" + 13'-3" = 107'-1".

The diagram also includes dimensions for the spans and the total length of the slab. The spans are 40'-0" and 40'-5". The total length of the slab is 13'-3" + 40'-0" + 40'-5" + 13'-3" = 107'-1".

[illegible]

DESIGNED BY RM Dishner DATE April '66
DRAWN BY Aiber, Lonier DATE Jan '67
TRACED BY _____ DATE _____
CHECKED BY _____ DATE _____

CORRECT Fred Grove
BRIDGE ENGINEER
APPROVED W B Dunlap

[illegible][illegible]

ESTIMATED QUANTITIES

Concrete Class "A" _____ 102.4 Cu.Yds.

Reinforcing Steel _____ 10,257 Lbs

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

ADJUTMENT NO. 2 RT. & LT. LANES
I-265, CUMBERLAND RIVER
STA. 538+30.67
DAVIDSON COUNTY
1967

DESIGNED BY R.M. Dishner DATE April '66
DRAWN BY Aibert Lahier DATE Jan '67
TRACED BY _____ DATE _____
CHECKED BY _____ DATE _____

1567

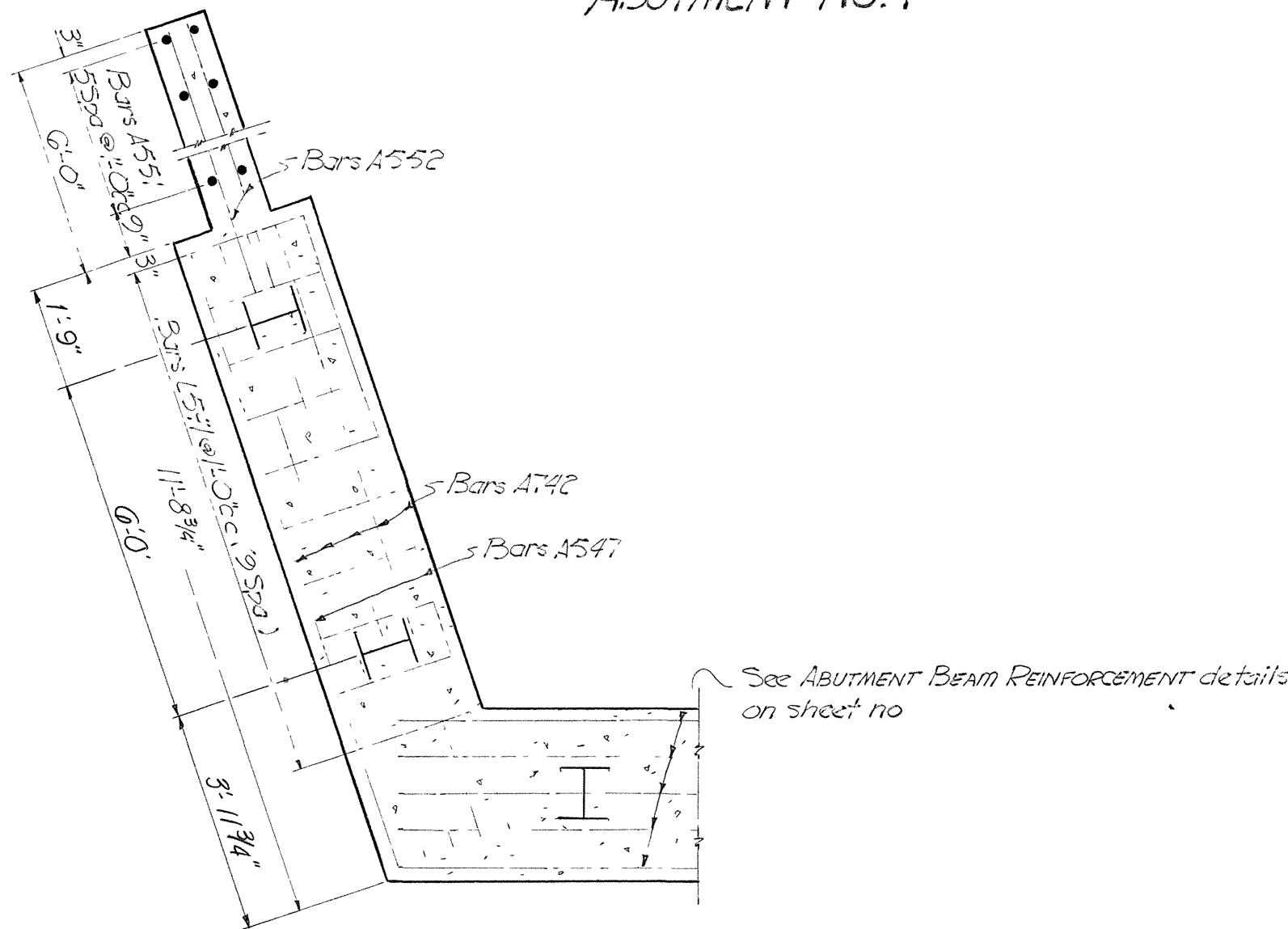
CORRECT Fred Greve
BRIDGE ENGINEER

APPROVED W. B. Dunlap
STATE HIGHWAY ENGINEER

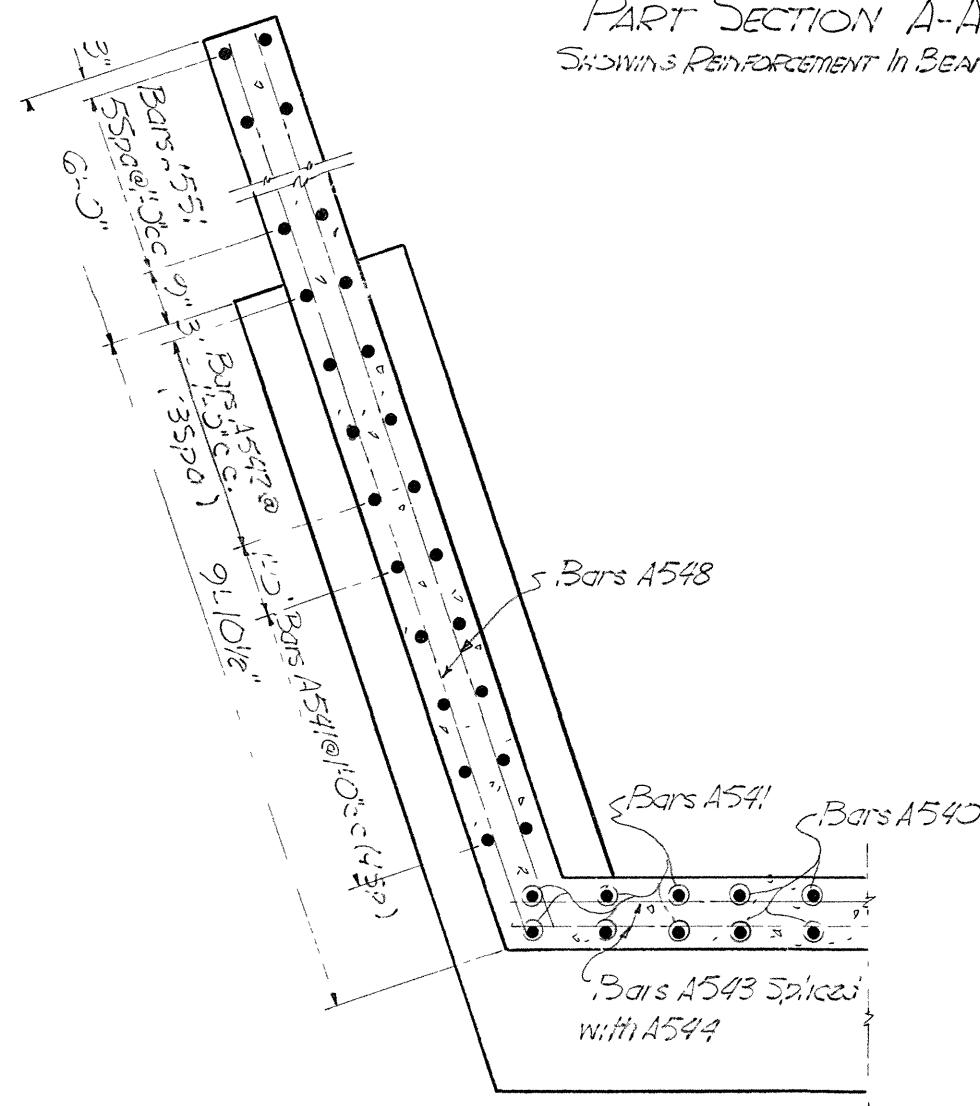
ABUTMENT BEAM REINFORCEMENT ²

659-49

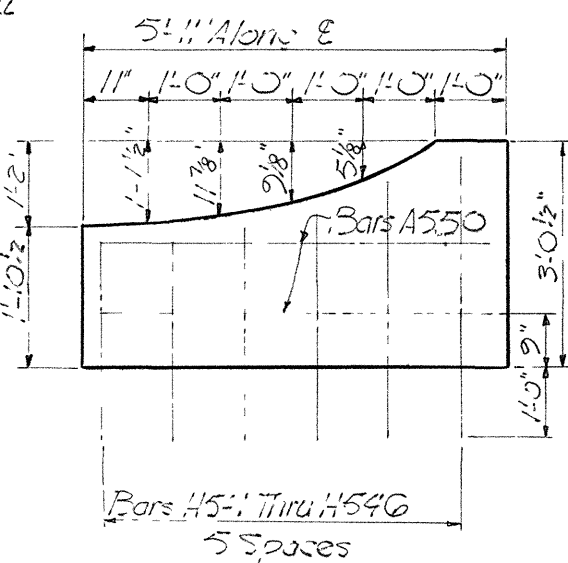
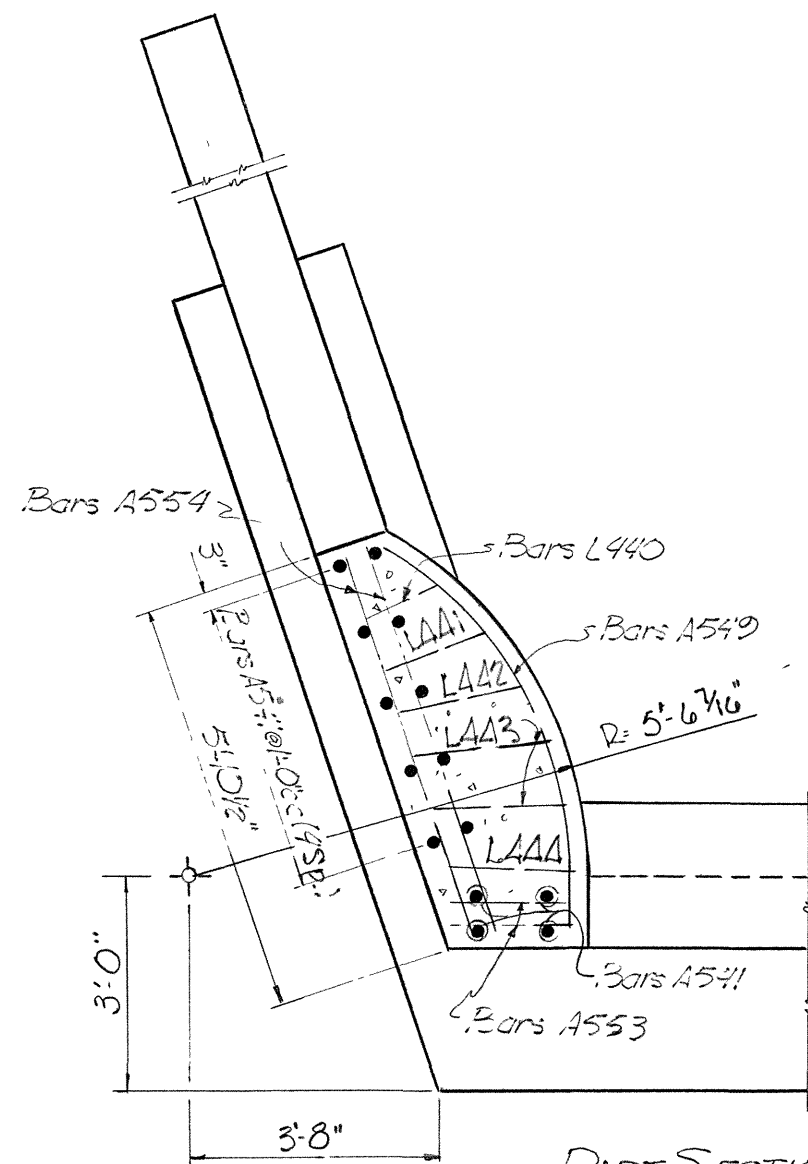
ABUTMENT No. 1



PART SECTION A-A
SHOWING REINFORCEMENT IN BEAM



PART SECTION B-B
SHOWING REINFORCEMENT IN WINGWALL



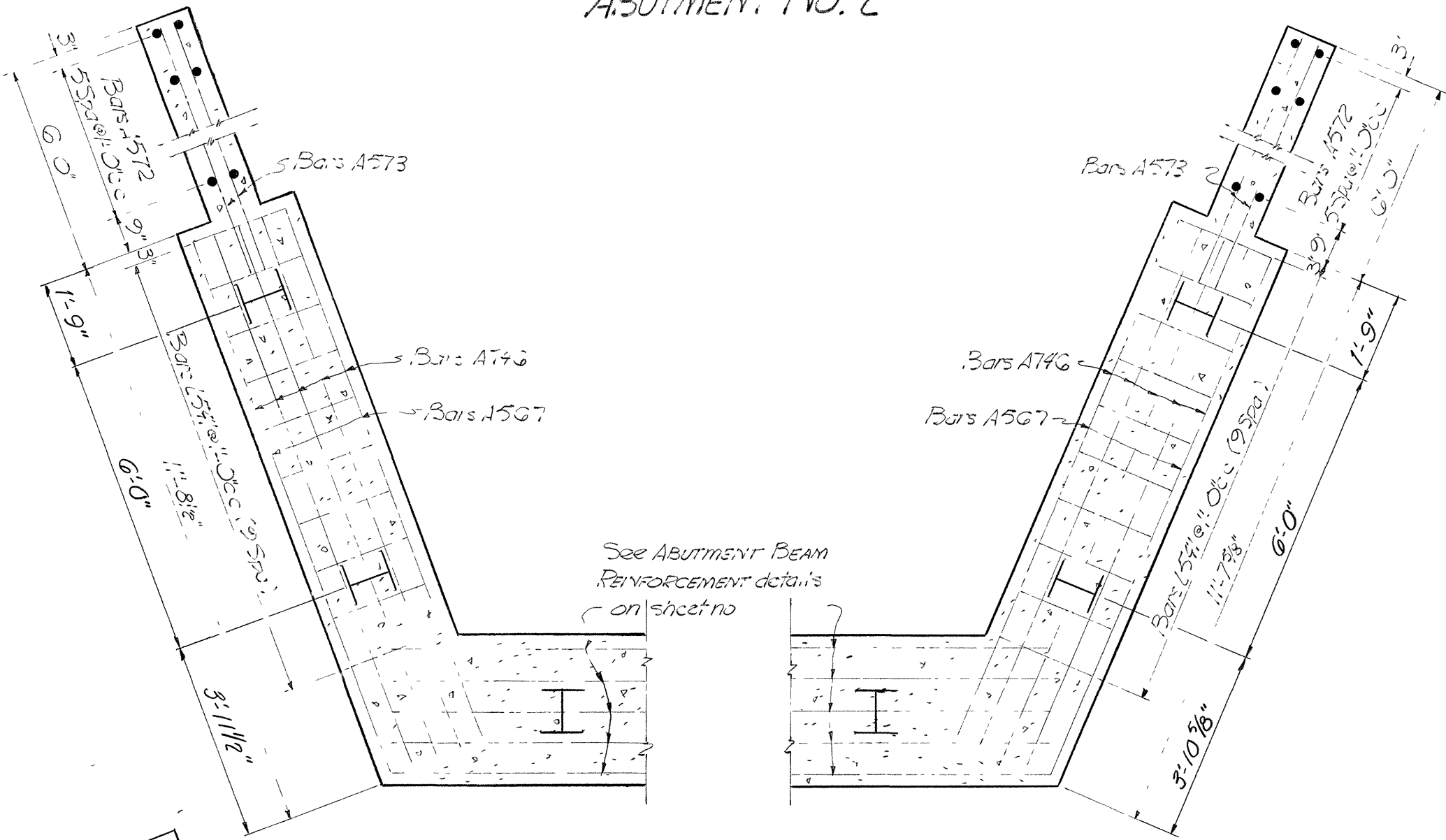
WINGPOST DEVELOPMENT

PART SECTION C-C
SHOWING REINFORCEMENT IN CURB

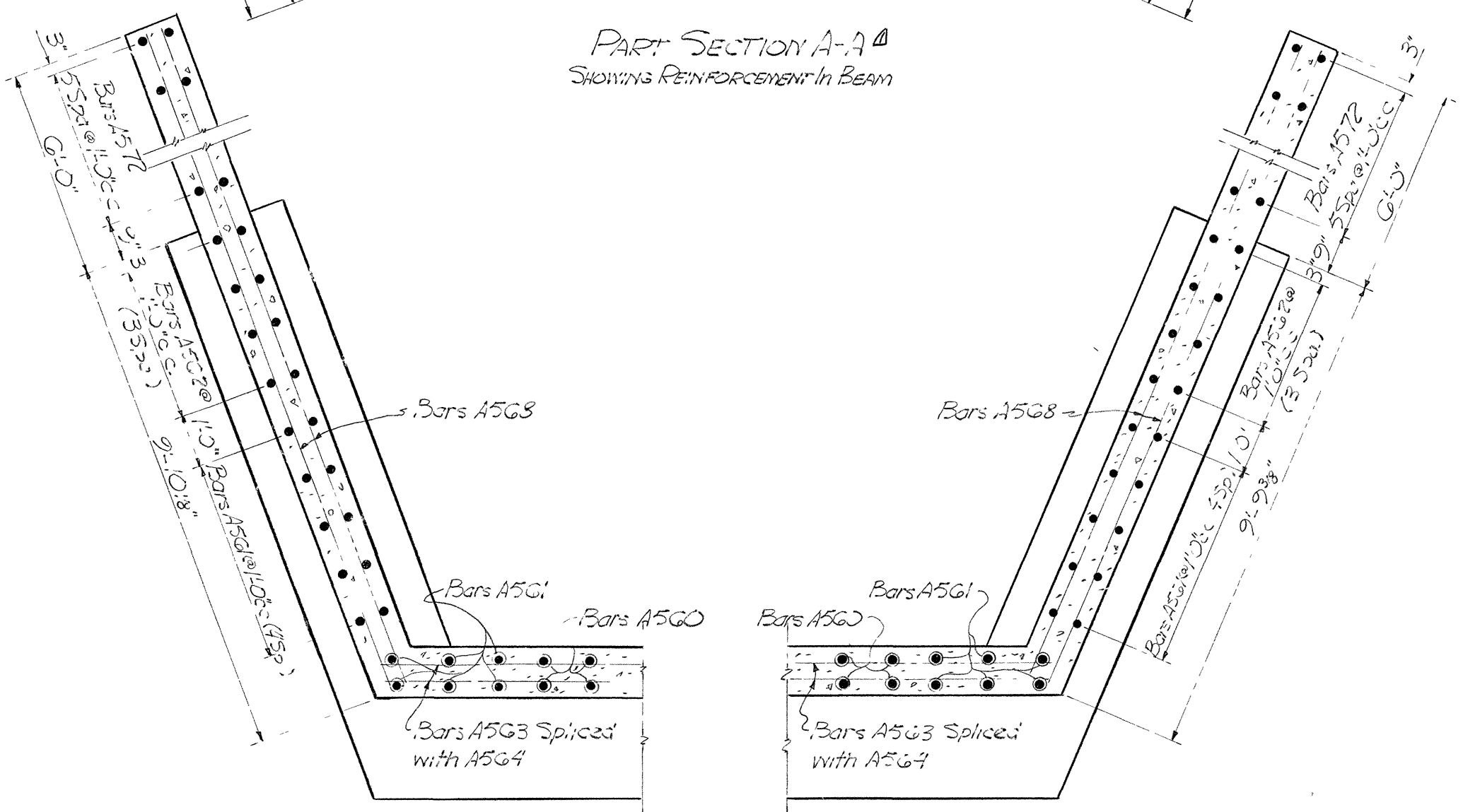
DESIGNED BY: R.M. Dishner
DRAWN BY: Albert Lanier
TRACED BY:
CHECKED BY:

DATE: April, '66
DATE: Feb. '67
DATE:
DATE:

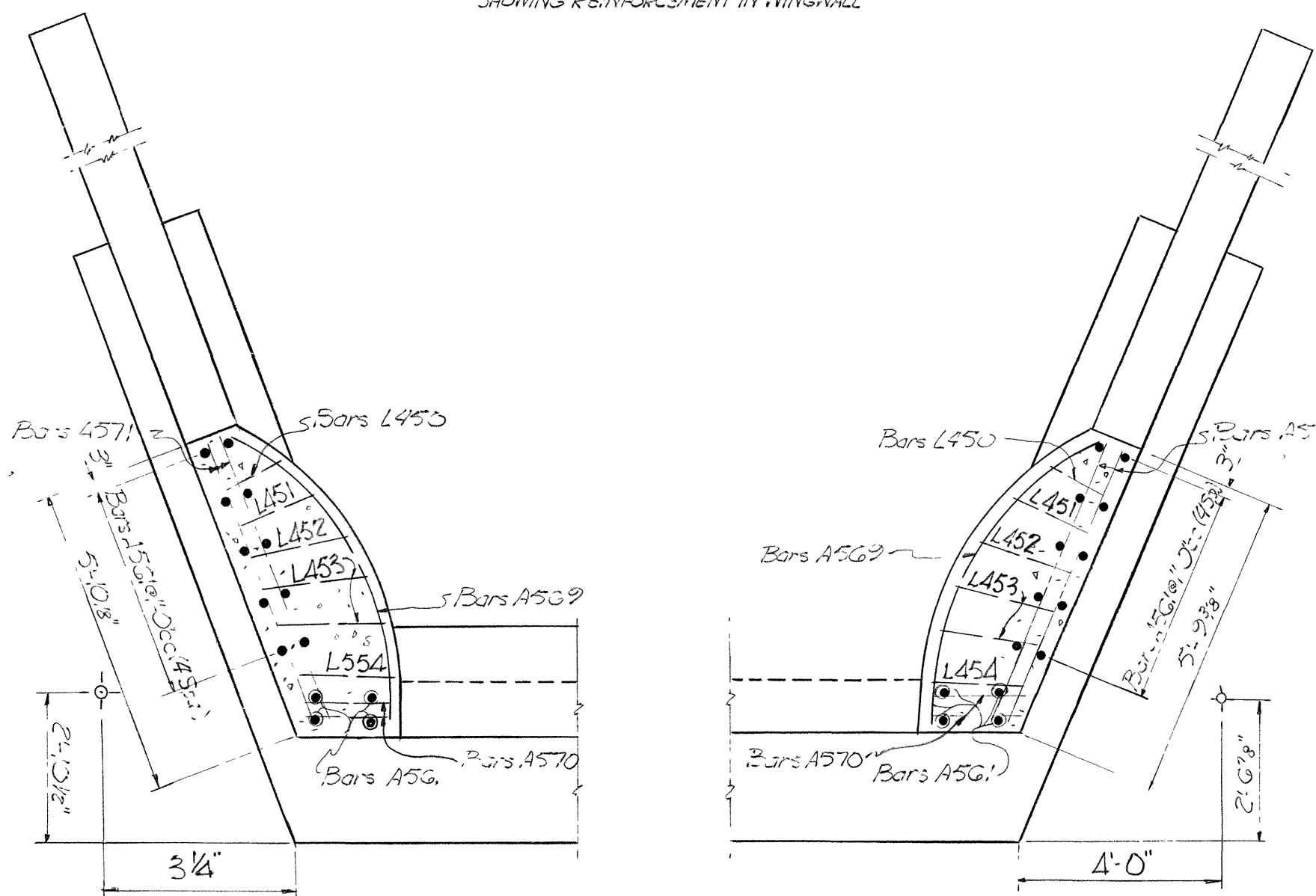
ABUTMENT No. 2



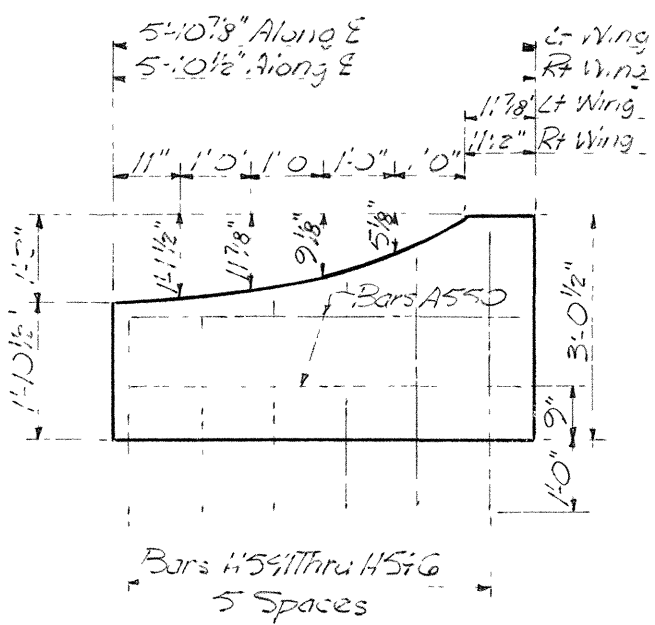
PART SECTION A-A
SHOWING REINFORCEMENT IN BEAM



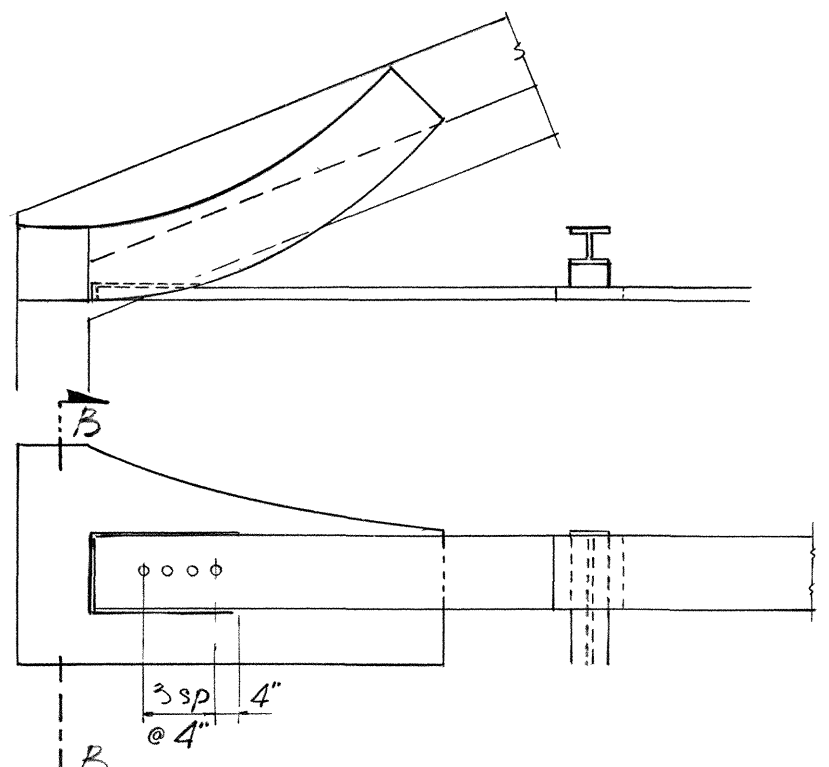
PART SECTION B-B
SHOWING REINFORCEMENT IN WINGWALL



PART SECTION C-C
SHOWING REINFORCEMENT IN CURB



WINGPOST DEVELOPMENT



SECTION B-B

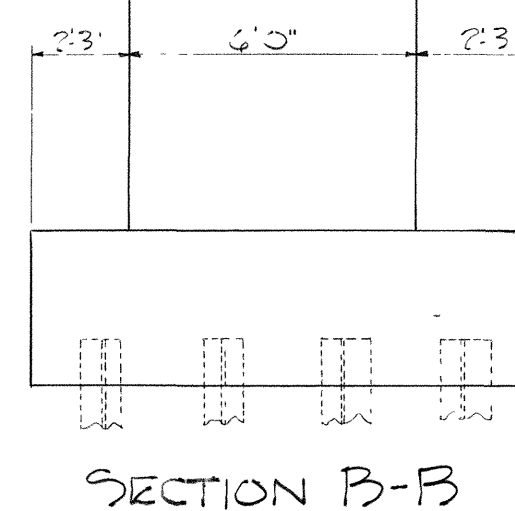
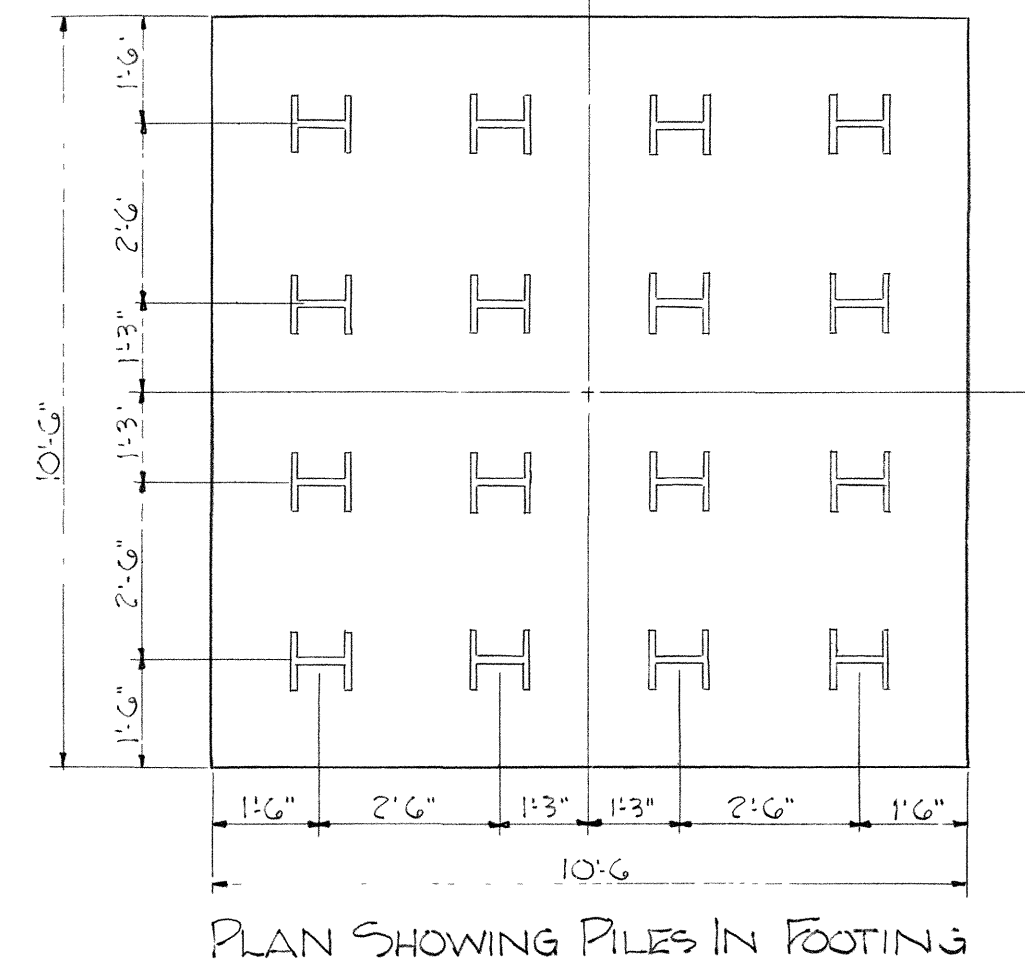
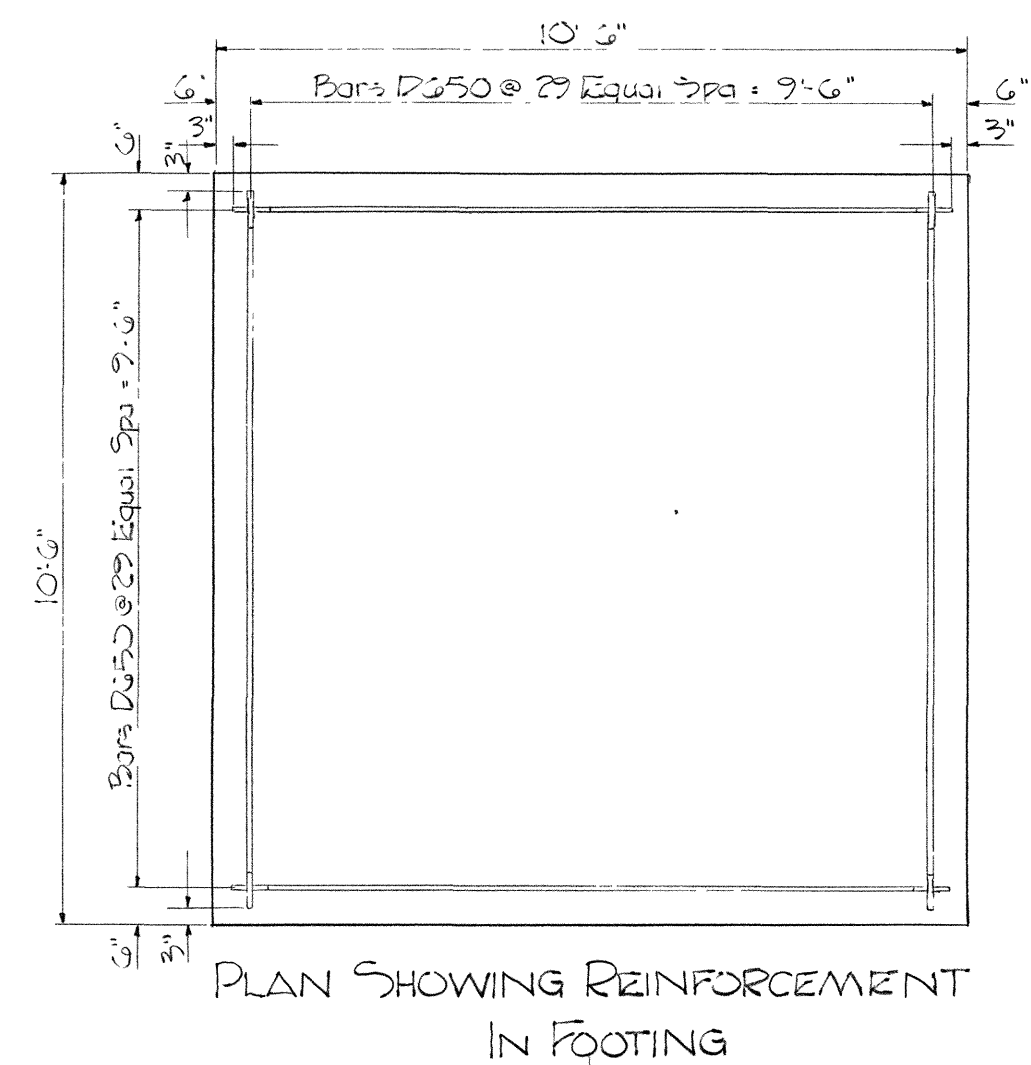
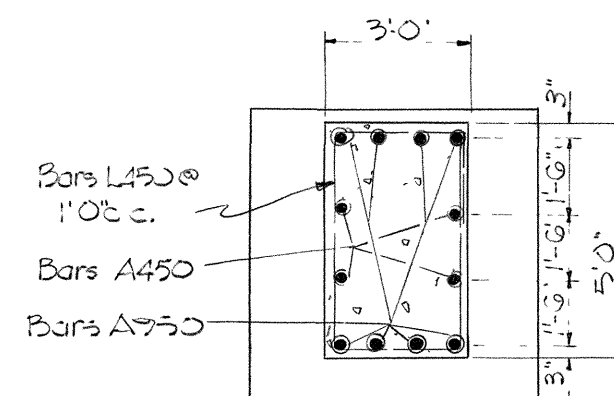
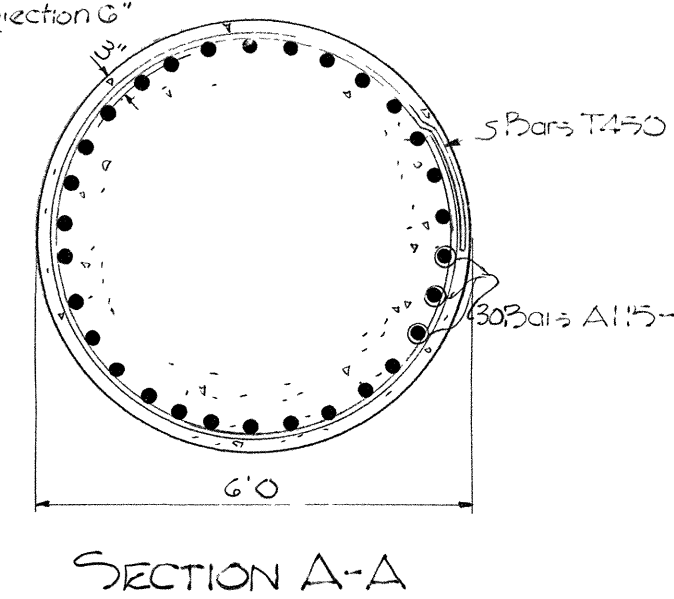
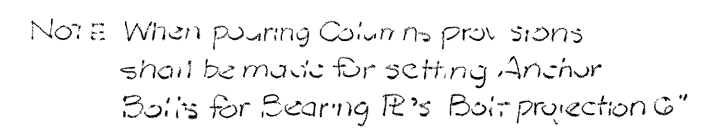
GUARD RAIL CONNECTION

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

ABUTMENT WING DETAILS

I-265
CUMBERLAND RIVER
STA 538+30.67
DAVIDSON COUNTY
1967

CORRECT: Fred Greve
BRIDGE ENGINEER
APPROVED: [Signature]
STATE HIGHWAY ENGINEER

[illegible]

ESTIMATED QUANTITIES

Concrete Class "A".....	272.2	Cu Yds.
Reinforcing Steel.....	46.69	Lbs

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

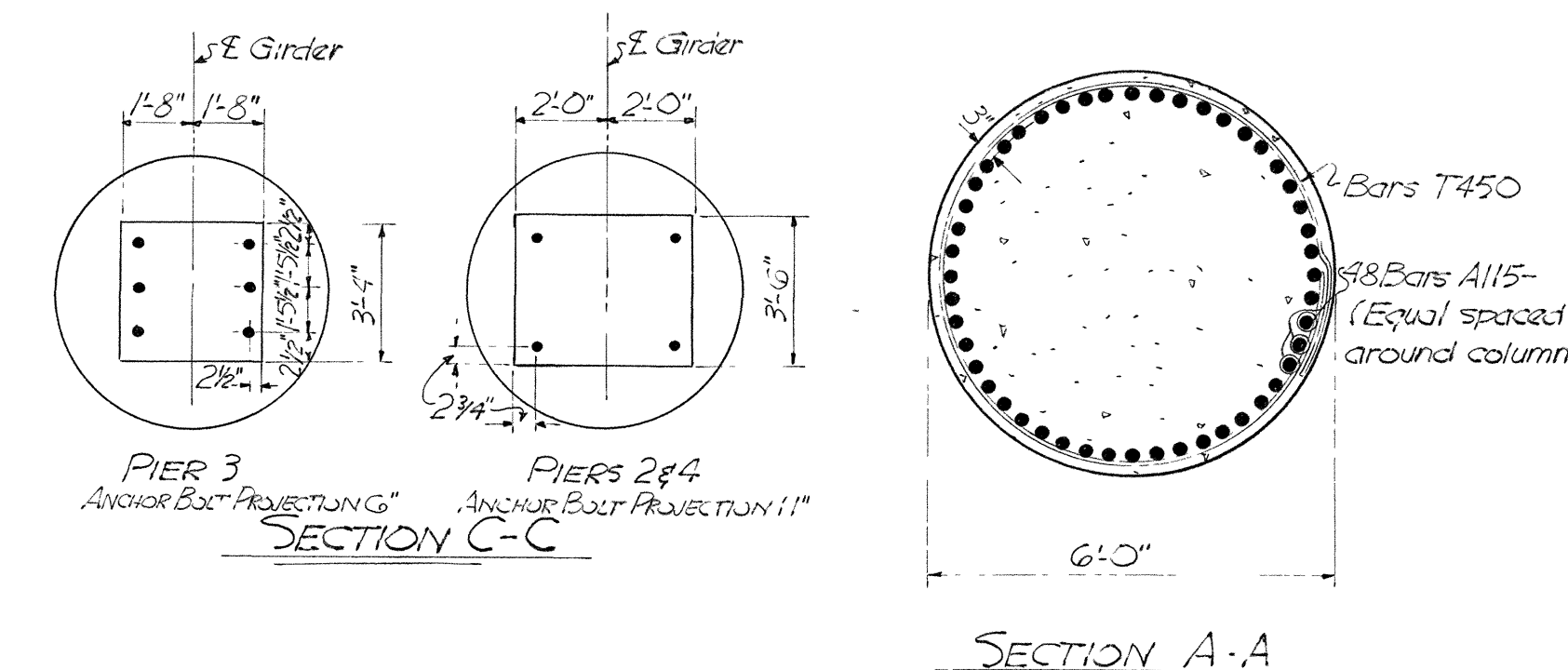
PIER No. 1

I-265 OVER CUMBERLAND RIVER
STA. 538+30.67
DAVIDSON COUNTY
1967

CORRECT Fred Greve
BRIDGE ENGINEER

APPROVED W. B. Dunlap
STATE HIGHWAY ENGINEER

K-59-5

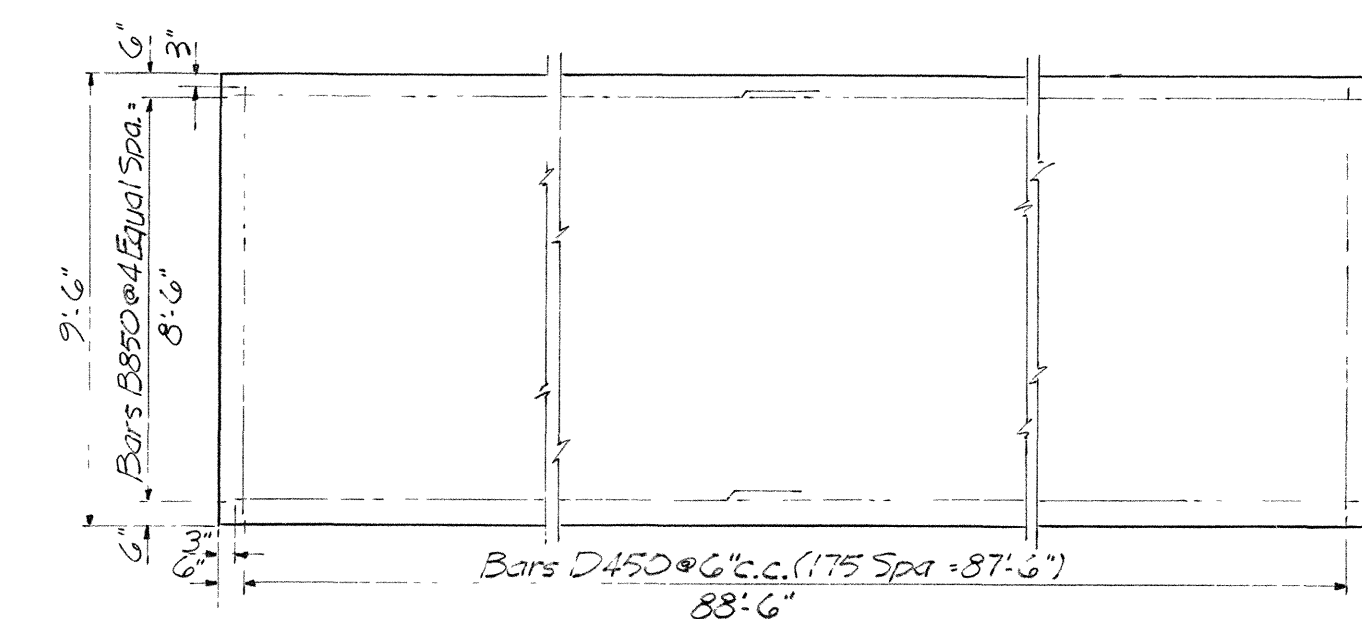
[illegible]

PLAN



Pier	Station	Elevations			Dimensions	
		"A"	"B"	"C"	"X"	"Y"
2	541+35.00	447.18	448.06	359.00	56'-0"	34'-9 3/4"
3	543+95.00	450.52	450.79	354.00	56'-0"	37'-6 1/4"
4	547+25.00	447.85	448.72	362.00	48'-0"	37'-10 1/4"

PLAN SHOWING REINFORCEMENT IN FOOTING



PLAN SHOWING REINFORCEMENT IN FOOTING



STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

PIERS No. 2, 3 & 4

I-265 / CUMBERLAND RIVER

STA. 538+30.67

DAVIDSON COUNTY

1967

DESIGNED BY R. Dishner DATE _____
DRAWN BY Albert Lanier DATE Oct. '66
TRACED BY _____ DATE _____
CHECKED BY _____ DATE _____

ELEVATION

NOTE: Holes 6'-0" deep are to be drilled as recommended by the engineer to determine soundness of rock.
No reinforcing steel for that portion of Pier below Elev. 413.0 shall be ordered until footing elevations have been established.

1 Elev. C* - Based on good rock
as determined from Coring
Data

Footings to be set 2'-0" into rock

SECTION B-E

Construction Jts.
to be located at
contractors
option subject to
the approval of the
Engineer

SIDE ELEVATION

NOTE: Painted Clearance Gage to be: Pier #3
downstream side only, Pier #4 upstream side only

ITEM	CONCRETE CLASS 'A' CU YDS	REINFORCIN STEEL LBS.
PIER #2	1726.1172.3	61,862
PIER #3	1734.7	64,089
PIER #4	1527.21527.4	60,235

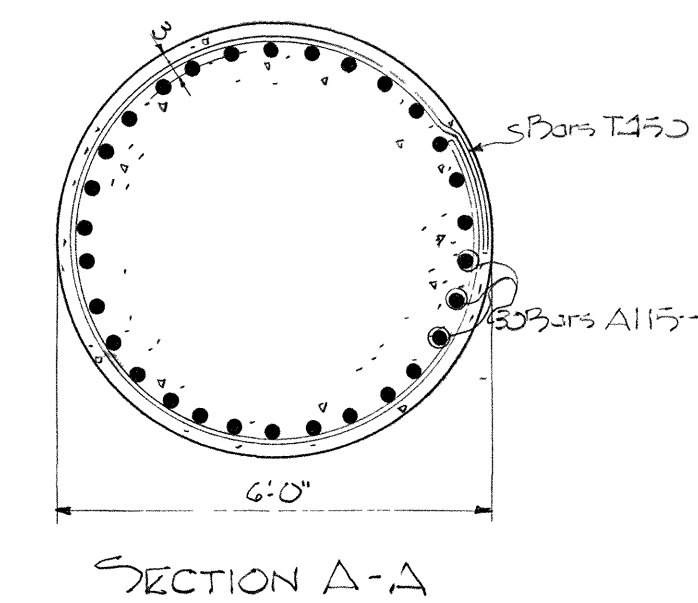
CORREC

Fred Greve

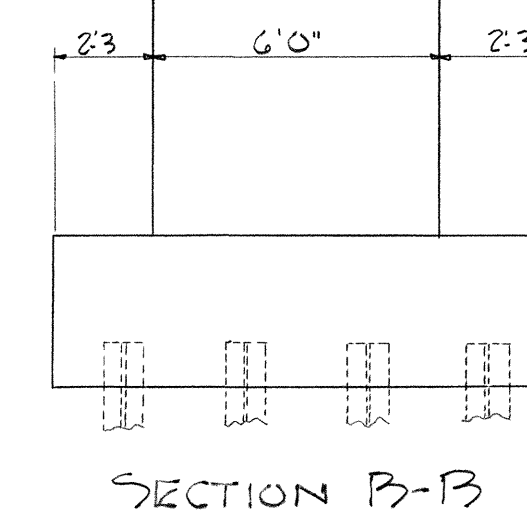
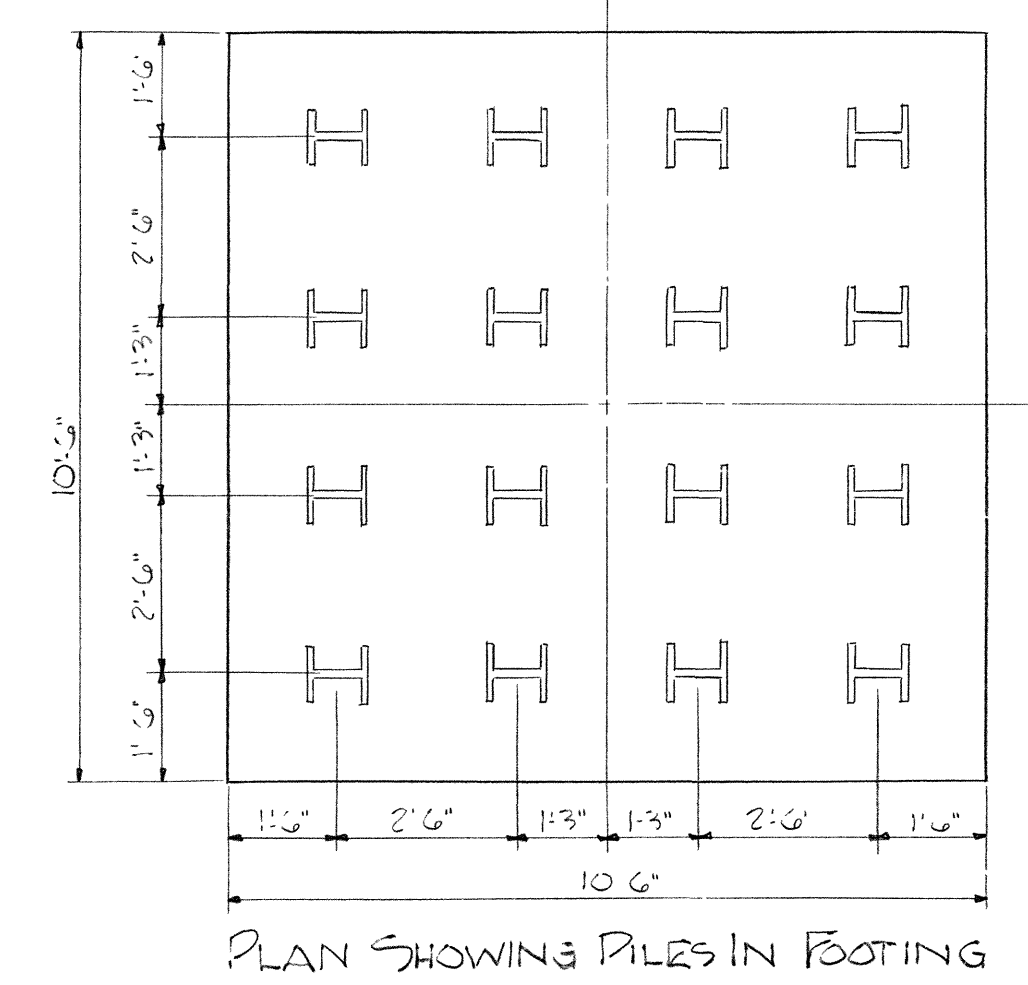
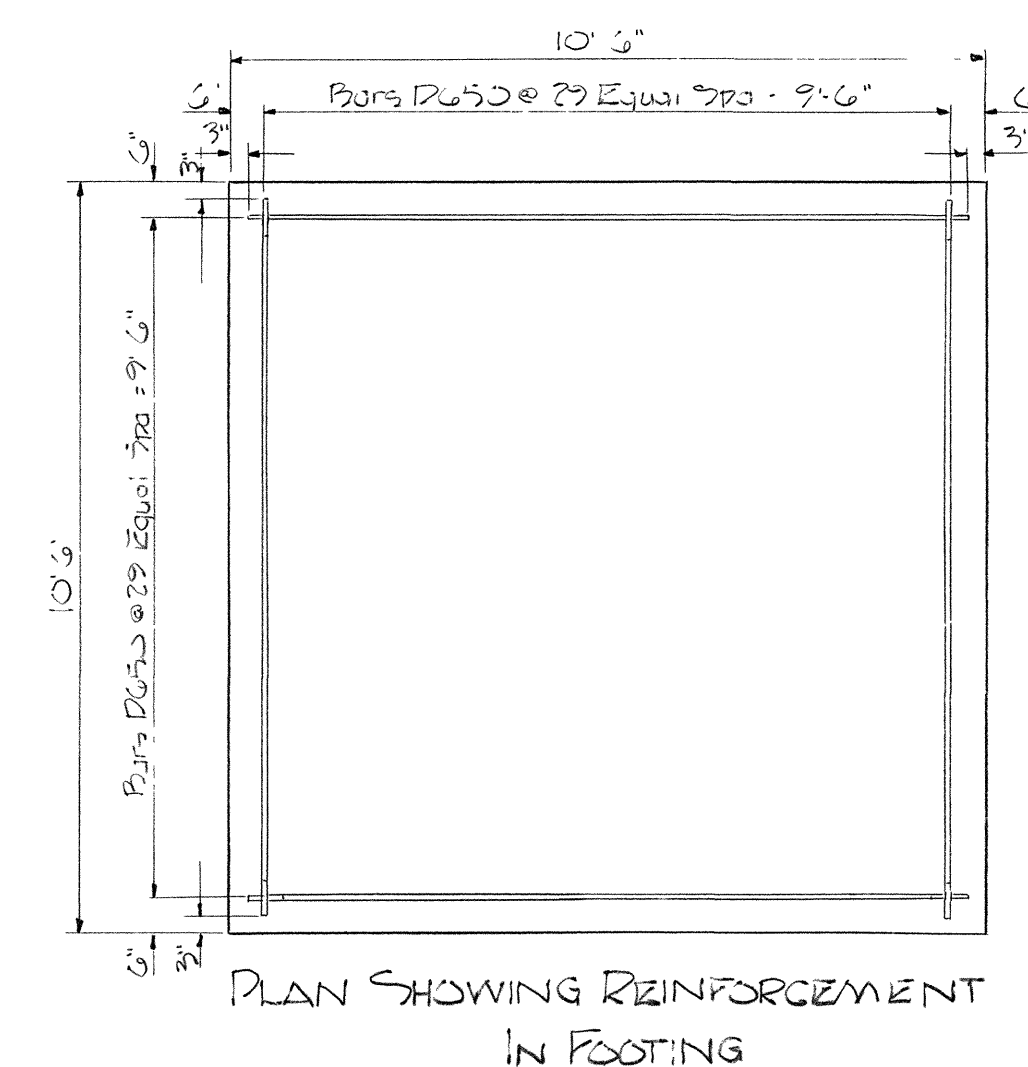
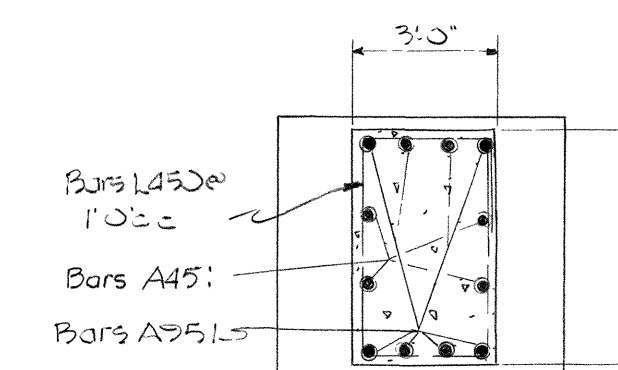
BRIDGE ENGINEER

APPROVED *W. B. Dunlop*

K-59-52

[illegible]

NOTE When pouring Columns provisions shall be made for setting Anchor Bolts for Bearing P's. Bolt projection 6"



ESTIMATED QUANTITIES

Concrete Class A	289.5	Cu Yds
Reinforcing Steel	44,517	Lbs

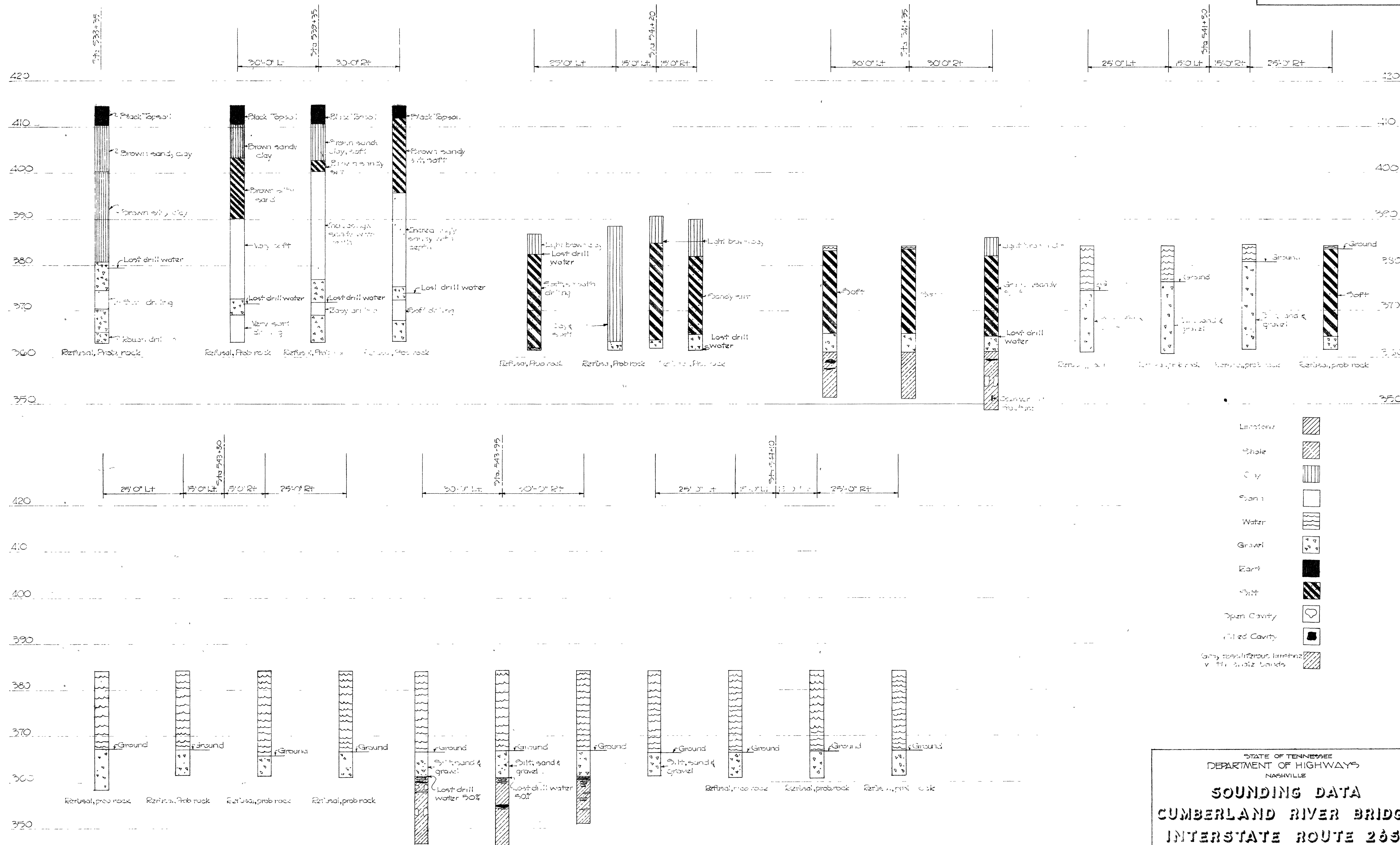
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

PIER NO. 5

I-265 OVER CUMBERLAND RIVER
STA. 538+30.67
DAVIDSON COUNTY
1967

CORRECT Frederic Greve
BRIDGE ENGINEER
APPROVED W. S. Dunlap
STATE HIGHWAY ENGINEER

K-59-53



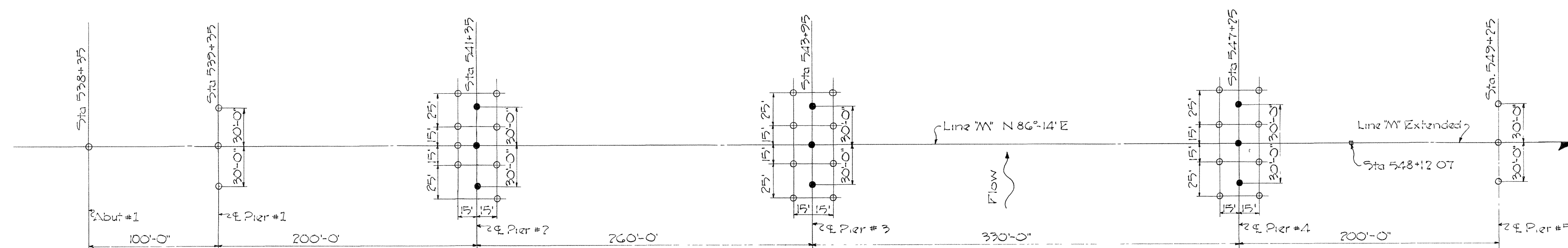
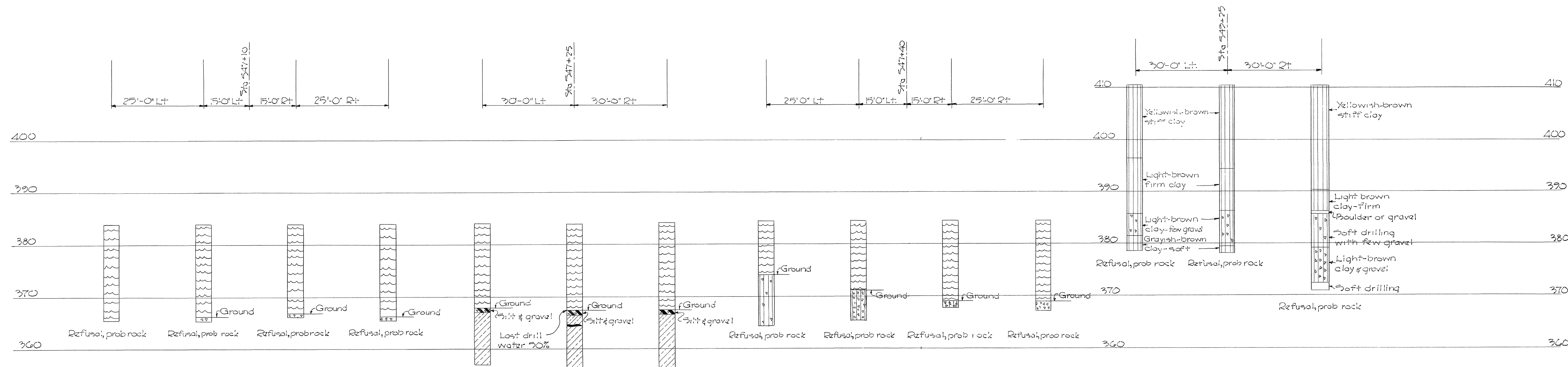
DRAWN BY Albert Lauer DATE: Mar 56

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

SOUNDING DATA
CUMBERLAND RIVER BRIDGE
INTERSTATE ROUTE 265
STA. 538+30.67
DAVIDSON COUNTY
1956

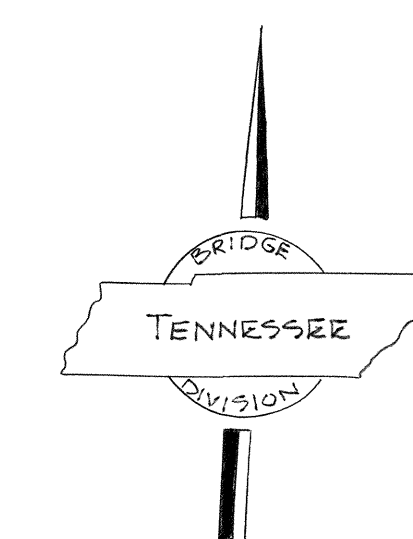
CORRECT *Red Gray* BRIDGE ENGINEER APPROVED *W. D. Dunlap* STATE HIGHWAY ENGINEER K-59-54

FED DIST NO	STATE	FED AID PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
3	TENN		19		



PLAN

KEY
 • Sounding carried into rock
 o Sounding to rock



STATE OF TENNESSEE
 DEPARTMENT OF HIGHWAYS
 NASHVILLE

SOUNDING DATA
 CUMBERLAND RIVER BRIDGE
 INTERSTATE ROUTE 265
 STA. 538+30.67
 DAVIDSON COUNTY
 1966

DESIGNED BY: Albert Lanier DATE: Mar '66
 DRAWN BY: DATE:
 TRACED BY: DATE:
 CHECKED BY: DATE:

CORRECT: Fred Grew BRIDGE ENGINEER
 APPROVED: B. Dunlap STATE HIGHWAY EN.

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITIES PER BRIDGE		TOTAL QUANTITY
			BRIDGE NO. 19-1265-1.42	BRIDGE NO. 19-1265-1.81	
209M08.01	TEMPORARY FILTER BARRIER	M	45	45	90
307M03.15	BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING B-M	TONNE	256	81	337
402M01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TONNE	3	1	4
403M01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TONNE	1.5	2.5	4
407M02.11	REMOVAL OF ASPHALT SHOULDERS	M2	1518	478	1996
411M01.01	MINERAL AGGREGATE (ACS) GRADING D	TONNE	359	848	1207
411M01.02	ASPHALT CEMENT (ACS) GRADING D	TONNE	23	55	78
411M02.01	MINERAL AGGREGATE (ACS) GRADING E	TONNE	471	1129	1600
411M02.02	ASPHALT CEMENT (ACS) GRADING E	TONNE	31	73	104
(23) 415M01.02	COLD PLANING BITUMINOUS PAVEMENT	M2	4250	10436	14686
(23) 415M02.02	SALVAGE VALUE OF COLD PLANINGS	M2	4250	10436	14686
(26) 604M10.90	Miscellaneous Bridge Items	L.S.		1	1
(14) 602M10.06	STRUCTURAL STEEL	kg	304	2323	2627
(1) 602M10.12	BEARING DEVICE (REPAIR)	L.S.		1	1
(21) 602M10.19	JACKING STEEL SPANS	L.S.		1	1
(22) (17) 603M02.01	REPAINTING EXISTING STEEL STRUCTURES (19-1265-1.81)	L.S.	1		1
(18) 603M05.20	CONTAINMENT AND DISPOSAL OF WASTE (19-1265-1.81)	L.S.		1	1
(16) 604M03.09	CLASS D CONCRETE (BRIDGE DECK)	M3	43		43
(20) 604M10.13	CONCRETE SLAB REMOVAL	L.S.	0.3		0.3
(2) 604M10.17	NON-PENETRATING CONCRETE SEALER	M2	255	225	480
(15) 604M10.18	REINFORCING STEEL (REPAIRS)	kg	5958		5958
(3) 604M10.30	BRIDGE DECK REPAIRS (FULL DEPTH OF SLAB)	M2	17	10	27
(4) 604M10.32	EXPANSION JOINT REPAIRS (TYPE A)	M	72		72
(3) 604M10.50	BRIDGE DECK REPAIRS (PARTIAL DEPTH OF SLAB)	M2	991	1000	1991
(5) 604M10.53	CONCRETE REPAIRS (HIGH EARLY STRENGTH CONCRETE)	M2	5	21	26
(8) 604M10.54	CONCRETE REPAIRS (QUICK-SET)	M2		1	1
(6) 604M10.60	EXPANSION JOINT REPAIRS (MODULAR TYPE)	M		55	55
(7) 617M01	BRIDGE DECK SEALANT	M2	3158	9459	12617
705M02.02	SINGLE GUARDRAIL (TYPE 2)	M	8	8	16
705M01.06	MEDIAN DIVIDER GUARDRAIL AT CONCRETE BARRIER	M	9		9
705M10.30	GUARDRAIL ATTACHMENT TO SLOPE FACE ENDPOST	M	16	16	32
706M01	GUARDRAIL REMOVED	M	564	24	588
711M01.06	CONCRETE MEDIAN BARRIER TYING TO GUARDRAIL	M	4		4
(19) 711M02.03	REINFORCED CONCRETE MEDIAN BARRIER (BRIDGES) (813 HEIGHT)	M	101		101
712M01	TRAFFIC CONTROL	L.S.	0.4	0.4	0.8
712M02.02	INTERCONNECTED PORTABLE BARRIER RAIL	M	394	924	1318
712M04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	75	75	150
712M05.01	WARNING LIGHTS (TYPE A)	EACH	5	11	16
712M05.03	WARNING LIGHTS (TYPE C)	EACH	25	20	45
(9) 712M06.01	VERTICAL PANELS	M2	10	22	32
(10) 712M06.10	NEW SIGNS (CONSTRUCTION)	M2	28	28	56
(11) 712M06.15	NEW SIGNS (CONSTRUCTION) ("BEE" ALERT)	EACH	2	3	5
(12) 712M06.16	SIGNS (CONSTRUCTION) (REDUCED SPEED WARNING)	EACH	3	4	7
712M08.03	ARROW BOARD (TYPE C)	EACH	2	2	4
712M09.02	REMOVABLE PAVEMENT MARKING (200 mm BARR LINE)	M	6668	6668	13336
(13) 716M02.01	PLASTIC PAVEMENT MARKING (100 mm LINE)	KM	2.82	2.82	5.64
717M01	MOBILIZATION	L.S.	0.4	0.4	0.8
(24) 711M01	CONCRETE MEDIAN BARRIER	M	528		528
(25) 611M04.01	CATCH BASINS, TYPE 31, DEPTH 1 M	EACH	1		1

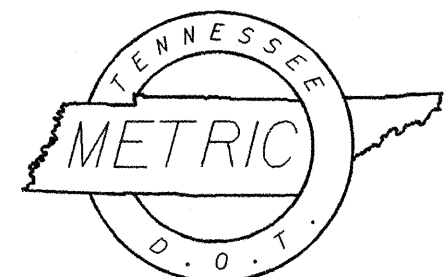
- (24) REQUIRES 864 mm x 991 mm OPENING IN BOTTOM SLAB FOR EXISTING CATCH BASIN OR AS DIRECTED BY THE ENGINEER.
- (25) A 75 mm TALL BY 1000 mm LONG SLOT SHALL BE PROVIDED THROUGH THE BASE OF THE MEDIAN BARRIER AT EACH EXISTING CATCH BASIN.
- (26) Includes all costs for jacking and temporary support for exterior beams at abutment no. 2 for bridge no. 19-1265-1.81.

FOOTNOTES:

- INCLUDES ALL LABOR AND MATERIALS NECESSARY TO RESET EXISTING BEARINGS TO A VERTICAL POSITION. FOR DETAILS AND NOTES SEE DRAWING NO. BR-26-50.
- INCLUDES ALL LABOR AND EQUIPMENT NECESSARY FOR THE APPLICATION OF A NON-PENETRATING CONCRETE SEAL (APPROVED BY THE T.D.O.T. DIVISION OF MATERIALS AND TEST) TO THE DESIGNATED SURFACES OF PIERS (NO.1 AND NO.5, BR. NO.19-1265-1.81 ONLY) AND ABUTMENTS (NO.1 AND NO.2 BR. NO.19-1265-1.42 ONLY). SEE DETAIL ON DWG. NO. BR-26-44.
- INCLUDES ALL COST FOR PERFORMING FULL AND PARTIAL DEPTH DECK REPAIRS AS DESIGNATED BY PERSONNEL FROM THE HEADQUARTERS, BRIDGE INSPECTION AND REPAIR OFFICE. SEE DRAWING NO. BR-26-44 FOR DETAILS AND NOTES FOR DECK REPAIR.
- INCLUDES ALL COST FOR REMOVING THE EXISTING EXPANSION JOINTS AT ABUTMENTS NO.1 & NO.2 AND REPLACING WITH NEW TYPE A STRIP SEAL EXPANSION JOINTS. SEE DRAWING NO. BR-26-43 AND STANDARD DRAWING NO'S. SBRM-2-115, SBRM-2-116, AND SBRM-2-117 FOR NOTES AND DETAILS.
- INCLUDES ALL LABOR AND HIGH EARLY STRENGTH CONCRETE TO REPAIR CONCRETE SURFACES DEFECTS ON ABUTMENT BACKWALL AND COLUMNS. SEE DETAILS ON DRAWING NO. BR-26-45.
- INCLUDES THE COST OF ALL LABOR AND MATERIALS REQUIRED TO REPLACE EXISTING EXPANSION JOINTS WITH NEW MODULAR JOINTS (229 mm TOTAL MOVEMENT REQUIRED), INCLUDING ALL MEDIAN AND PARAPET SLIDER PLATES AT PIERS NO.1 AND NO.5 (BR. NO. 19-1265-1.81 ONLY). FOR DETAILS AND NOTES SEE DRAWING NO. BR-26-49, STANDARD DRAWING STDM-1-2 AND STDM-1-4.
- INCLUDES THE COST OF ALL LABOR AND MATERIALS REQUIRED TO PLACE A BRIDGE DECK SEALANT SYSTEM FOR FULL LENGTH AND WIDTH OF BRIDGE AS DETAILED ON SHEET NO. 3.
- INCLUDES ALL LABOR AND QUICK-SET MATERAIL TO REPAIR THE ABUTMENT WINGPOST. SEE DETAIL ON DRAWING NO. BR-26-45.
- INCLUDES 88 EACH OF VP-1R AND VP-1L.
- INCLUDES THE INSTALLATION AND MAINTENANCE OF A NEW SIGN PANEL, SHEETING, AND SUPPORTS. SEE SPECIAL PROVISION NO. 712F.
- SEE SPECIAL PROVISION NO. 712G.
- ITEM TO BE USED ONLY WHEN THE CONTRACTOR ESTABLISHES A REDUCED SPEED LIMIT WITHIN THE PROJECT CONSTRUCTION WORK ZONE LIMITS. ITEM INCLUDES SIGN FACE, SUPPORTS, AND TWO (2) TYPE 'B' FLASHERS PER THE STANDARD SPECIFICATIONS. THE CONCRATOR SHALL BE RESPONSIBLE FOR TURNING ON THE TYPE 'B' FLASHERS WHEN WORKERS ARE IN THE CONSTRUCTION WORK ZONE AND TURNING THEM OFF WHEN WORKERS ARE NO LONGER IN THE CONSTRUCTION WORK ZONE.
- SHALL BE THERMOPLASTIC.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY TO INSTALL THE NEW END DIAPHRAGMS ON BRIDGE NO. 19-1265-1.42 AND STIFFENERS ON BRIDGE NO. 19-1265-1.81. SEE DETAILS ON DRAWING NO. BR-26-46 AND BR-26-50.
- INCLUDES ALL EPOXY COATED REINFORCING STEEL REQUIRED FOR THE NEW 1892 mm CONCRETE SLAB. SEE BILL OF STEEL ON DRAWING NO. BR-26-47.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY TO CONSTRUCT NEW CONCRETE DECK SLAB. SEE DETAILS ON DRAWING NO. BR-26-47.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR SURFACE PREPARATION AND PAINTING OF EXISTING STRUCTURAL STEEL. SEE SURFACE PREPARATION AND PAINTING NOTES ON DRAWING NO. BR-26-42.
- INCLUDES CONTAINMENT AND DISPOSAL OF ALL WASTE GENERATED DURING CLEANING AND PAINTING OF STRUCTURAL STEEL.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY TO INSTALL THE NEW CONCRETE MEDIAN BARRIER. SEE STANDARD DRAWING NO. STDM-1-4.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR THE REMOVAL AND DISPOSAL OF EXISTING MEDIAN CANTILEVERS. SEE DRAWING NO. BR-26-47 FOR DETAILS.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR JACKING EXISTING BEAMS FOR RESETTNG OF BEARINGS. SEE DRAWING NO. BR-26-50 FOR DETAILS.
- APPROXIMATELY 1206576 kg OF STRUCTURAL STEEL TO BE PAINTED.
- QUANTITIES INCLUDE COLD PLANING ASPHALT WITHIN LIMITS OF BRIDGE AND APPROACH TRANSITIONS.

PROJECT NO.		YEAR	SHEET NO.
19018-4124-04		1996	2
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11/15/96	T.O.	REVISED PROJECT NUMBER AND QUANTITIES
2	11/27/96	T.O.	REVISED QUANTITIES
3	12-9-96	T.E.O.	REVISED QUANTITIES AND ADDED NOTE
4	4-28-97	T.E.O.	REVISED QUANTITIES AND ADDED NOTES AND QUANTITIES
5	7-8-97	TEQ	Added item no. 5 foot note

DESIGNED BY Tom Quinn DATE July 1996
 DRAWN BY Don Kimber DATE July 1996
 SUPERVISED BY Tommy Christensen & Tom Quinn DATE July 1996
 CHECKED BY Tom Quinn DATE July 1996



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

ESTIMATED QUANTITIES
 INTERSTATE 265 OVER MARQUETTE CEMENT YARD
 BRIDGE NO. 19-1265-1.42 (EAST & WEST BOUND LANES)
 INTERSTATE 265 OVER CUMBERLAND RIVER
 BRIDGE NO. 19-1265-1.81 (EAST & WEST BOUND LANES)
 DAVIDSON COUNTY
 1996

BR-26-41

GENERAL NOTES

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (MARCH 1, 1995 EDITION)

DESIGN SPECIFICATIONS: AASHTO 1992 EDITION WITH ADDENDA.

REINFORCING STEEL: SEE THE STANDARD SPECIFICATIONS.

SHOP DRAWINGS: SHALL BE SUBMITTED ACCORDING TO SPECIAL PROVISION NO. 105A. EXCEPT SHOP DRAWINGS SHALL BE SUBMITTED TO THE HEADQUARTERS BRIDGE INSPECTION AND REPAIR OFFICE IN LIEU OF THE DIVISION OF STRUCTURES.

HIGH EARLY STRENGTH CONCRETE: THE MIX TO MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, CLASS "A", EXCEPT THE CEMENT CONTENT SHALL BE A MINIMUM OF 324 kg. THE WATER CEMENT RATIO SHALL BE A MAXIMUM OF 0.40. NO FLY ASH REPLACEMENT WILL BE PERMITTED, AND THE MINIMUM 28 DAY COMPRESSIVE STRENGTH SHALL BE 24 MPa. TRAFFIC SHALL NOT BE PERMITTED ON ANY OF THE REPAIR AREAS UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 21 MPa MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF TEN (10) DAYS.

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, COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EXPANSION JOINTS.

CONCRETE CURING: ALL CONCRETE IN REPAIR AREAS SHALL BE CURED ACCORDING TO THE STANDARD SPECIFICATIONS.

WELDING: ANSI/AASHTO/AWS D1.5-88 BRIDGE WELDING CODE AND THE STANDARD SPECIFICATIONS.

EXPANSION JOINTS: SEE SPECIAL PROVISION 604M AND 604S

SPECIAL NOTE TO CONTRACTOR: CONTRACTOR SHALL USE EXTREME CARE AND TAKE ANY MEASURE NECESSARY TO INSURE THAT NO DEBRIS IS DROPPED INTO THE STREAM. ANY DEBRIS WHICH IS ALLOWED TO DROP ON THE BANKS BELOW THE BRIDGE SHALL NOT BE ALLOWED TO ENTER THE STREAM AND SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. COST OF REMOVING AND DISPOSING OF DEBRIS SHALL BE INCLUDED IN ITEMS BID ON.

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 SIMILAR HEAVY EQUIPMENT FOR CONCRETE REMOVAL. PNEUMATIC HAMMERS MAY BE USED TO REMOVE UNSOUND CONCRETE. FOR FULL DEPTH OF CONCRETE SLAB REMOVAL EXCEPT OVER BEAMS, THE MAXIMUM HAMMER SIZE IS 41 kg CLASS. FOR PARTIAL DEPTH OF CONCRETE SLAB REMOVAL AND ANY WORK OVER BEAMS, THE MAXIMUM HAMMER SIZE IS 27 kg CLASS. 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 THE APPROVAL OF THE ENGINEER.

BRIDGE DECK CONCRETE: SHALL BE CLASS "D" CONCRETE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

CONCRETE FINISH: SHALL BE IN ACCORDNACE WITH SUB SECTION 604.23 METHOD (a) OF THE SPECIFICATIONS.

QUICK-SET PATCHING MATERIAL: QUICK-SET PATCHING MATERIAL SHALL BE A POLYMER MODIFIED CEMENTITIOUS PATCHING MATERIAL SUCH AS SIKATOP 123, MASTER PATCH 230 VP OR APPROVED EQUAL.

STRUCTURAL STEEL: SHALL CONFORM TO AASHTO M270 GRADE 250 (ASTM A709 GRADE 250) UNLESS OTHERWISE NOTED.

BOLTS: SHALL BE HIGH TENSILE STRENGTH BOLTS (ASTM-A325) UNLESS OTHERWISE NOTED. SIZE TO BE AS NOTED ON PLANS. SEE AASHTO SPECIFICATIONS ARTICLE 11.5.6 DIVISION 11. EXISTING CONTACT SURFACE SHALL BE CLEANED TO SSPC.10 SPECIFICATIONS PRIOR TO ATTACHMENT OF NEW MEMBERS.

SPEICAL NOTE FOR BRIDGE NO. 19-1265-1.81/CUMBERLAND RIVER: DURING REMOVAL AND REPOURING OF CONCRETE DECK IN AREAS OF JOINT REPAIR AND FULL DEPTH DECK REPAIR, THE CONTRACTOR SHALL PROVIDE TEMPORARY FALSE WORK TO SUPPORT THE FREE (UNSUPPORTED) EDGES OF THE EXISTING DECK. DETAILS OF THE TEMPORARY FALSE WORK SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL AND FALSE WORK SHALL BE IN PLACE BEFORE CONCRETE REMOVAL IS BEGUN.

PAINT NOTE

BRIDGE NO. 19-1265-1.81 ONLY

INTERSTATE 265/CUMBERLAND RV.

CLEANING AND PAINTING: ALL STRUCTURAL STEEL SHALL BE BLAST CLEANED AND PAINTED. BLAST CLEANING SHALL BE IN ACCORDANCE WITH SECTION 603.05(b). PAINT SHALL BE SYSTEM "A"- INORGANIC ZINC. COLOR OF THE FINISH COAT SHALL COMPLY WITH FEDERAL STANDARD NO. 595a, 24110, BRIGHT GREEN. SEE SECTIONS 603 AND 910 OF THE STANDARD SPECIFICATIONS.

CONTAINMENT AND DISPOSAL: ACCORDING TO OUR RECORDS THE EXISTING PAINT SYSTEM CONTAINS LEAD AND/OR CHROMATE THE CONTRACTOR SHALL CONTAIN AND DISPOSE OF ALL PAINT REMOVAL WASTE IN ACCORDANCE WITH SECTION 603.13.

UTILITY NOTES

THE LOCATION OF UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR, AND BY CONTACTING THE UTILITY COMPANIES INVOLVED. SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC. AT 1-800-351-1111.

UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO CO-OPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONTACTING ALL AFFECTED UTILITIES PRIOR TO SUBMITTING HIS BID. IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF THE WORK FOR THE PROJECT. SOME UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS, WHILE SOME WORK MAY BE REQUIRED "AROUND" UTILITY FACILITIES THAT WILL REMAIN IN PLACE. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR INCONVENIENCE CAUSED BY THE UTILITY ADJUSTMENTS.

THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.

SPECIAL NOTE: THE MANUFACTOR OF THE MODULAR EXPANSION JOINTS SHALL BE WATSON BOWMAN ACME COMPANY OR THE D.S. BROWN COMPANY.

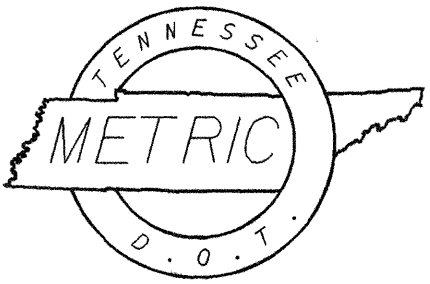
SPECIAL NOTE CONCERNING WORK OVER A NAVIGABLE WATERWAY:

THE CONTRACTOR SHALL COMPLY FULLY WITH ANY REQUIREMENTS ESTABLISHED BY THE CORPS OF ENGINEERS, U.S. COAST GUARD, AND ANY OTHER AGENCIES WHICH MAY HAVE JURISDICTION RELATIVE TO CONSTRUCTION WORK OVER A NAVIGABLE STREAM WHICH IS APPLICABLE TO THIS CONTRACT, AND WHICH MAY NOT BE COVERED BY EXISTING PERMITS. THE CONTRACTOR SHALL NOTIFY THE CORPS OF ENGINEERS, INFORMING THEM OF WORK TO BE PERFORMED, BEFORE ANY WORK OVER THE WATERWAY IS BEGUN. THE CONTRACTOR SHALL SUBMIT A DESCRIPTION OF WORK AND SKETCHES OF ANY FALSEWORK, SCAFFOLDING, DEBRIS CONTAINMENT SYSTEMS, ETC... WHICH MAY ENCROACH UPON THE VERTICAL AND/OR HORIZONTAL CLEARANCES FOR WATERWAY TRAFFIC TO THE U.S. COAST GUARD FOR APPROVAL BEFORE ANY WORK IS BEGUN.

ROGER K. WIEBUSCH
U.S. COAST GUARD
BRIDGE ADMINISTRATOR
1222 SPRUCE STREET
ST. LOUIS, MO. 63103-2832

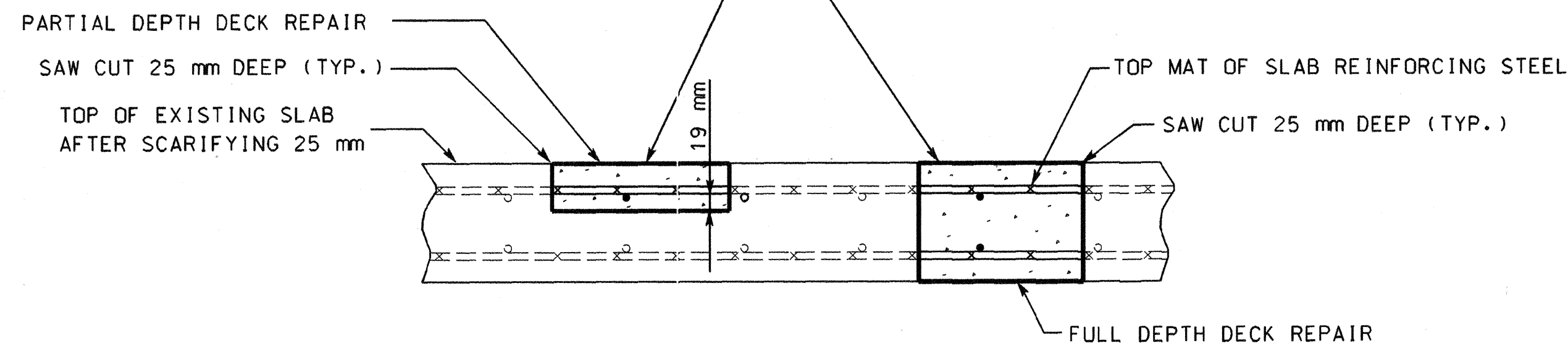
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GENERAL NOTES
INTERSTATE 265 OVER MARQUETTE CEMENT YARD
BRIDGE NO. 19-1265-1.42 (EAST & WEST BOUND LANES)
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (EAST & WEST BOUND LANES)
DAVIDSON COUNTY
1996



DESIGNED BY: Tom Quinn DATE: July 1996
DRAWN BY: Don Kimber DATE: July 1996
SUPERVISED BY: Tommy Christianson & Tom Quinn DATE: July 1996
CHECKED BY: Tom Quinn DATE: July 1996

CONCRETE FOR DECK REPAIR SHALL BE HIGH EARLY STRENGTH CONCRETE, $f'c = 24 \text{ MPa}$ @ 28 DAY STRENGTH. TRAFFIC SHALL NOT BE PERMITTED ON ANY OF THE REPAIR AREAS UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 21 MPa MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF TEN (10) DAYS.



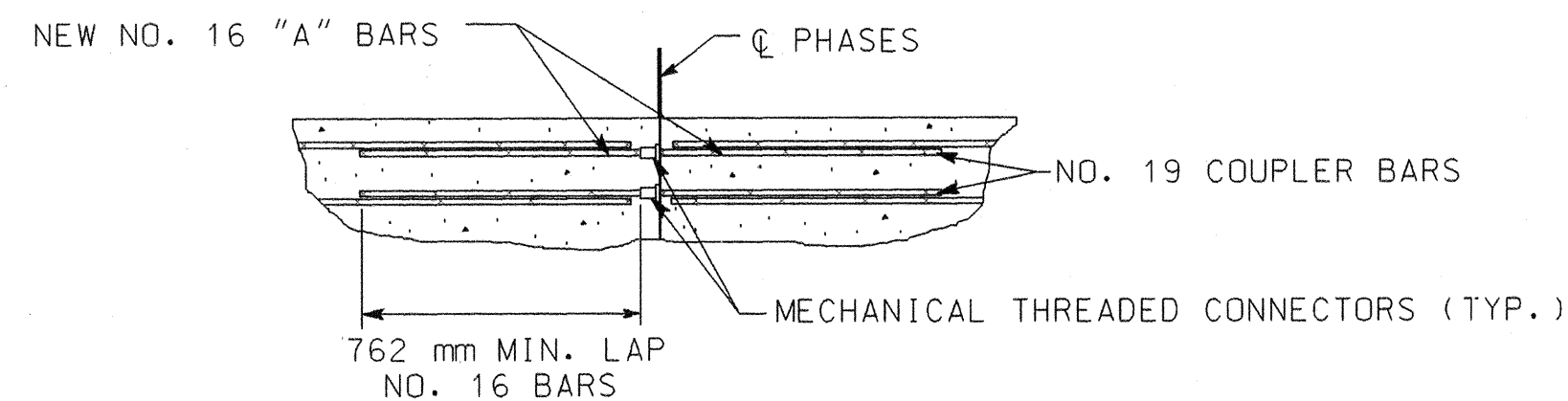
DETAIL SHOWING FULL AND PARTIAL DEPTH DECK REPAIR

NOTE: REMOVE CONCRETE IN ALL DELAMINATED AREAS TO A DEPTH OF 19 mm 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 HEADQUARTERS, BRIDGE INSPECTION AND REPAIR OFFICE. DECK REPAIR WILL BE PAID FOR UNDER ITEM NO. 604M10.50, BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB), AND ITEM NO. 604M10.30, 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. 604M10.30.

NOTE: 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 27 kg CLASS SHALL NOT BE USED. ALSO TRAFFIC CONTROL SHALL BE SET UP DURING PARTIAL DEPTH REPAIRS OVER TRAFFIC. (2) FULL DEPTH REPAIRS: PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 41 kg CLASS SHALL NOT BE USED. ALSO ALL DECK REPAIR OVER BEAMS WILL BE RESTRICTED TO 27 kg PNEUMATIC HAMMERS. (3) CHIPPING HAMMERS OF THE 7 kg CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL.

NOTE: ITEM NO. 604M10.30 AND 604M10.50 SHALL BE BID WITH THE CONTINGENCY THAT THESE ITEMS MAY BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.

NOTE: THE CONTRACTOR SHALL HAVE THE OPTION OF SUBSTITUTING CLASS 'D' CONCRETE FOR HIGH EARLY STRENGTH CONCRETE IN DECK REPAIR AREAS. CLASS 'D' CONCRETE SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

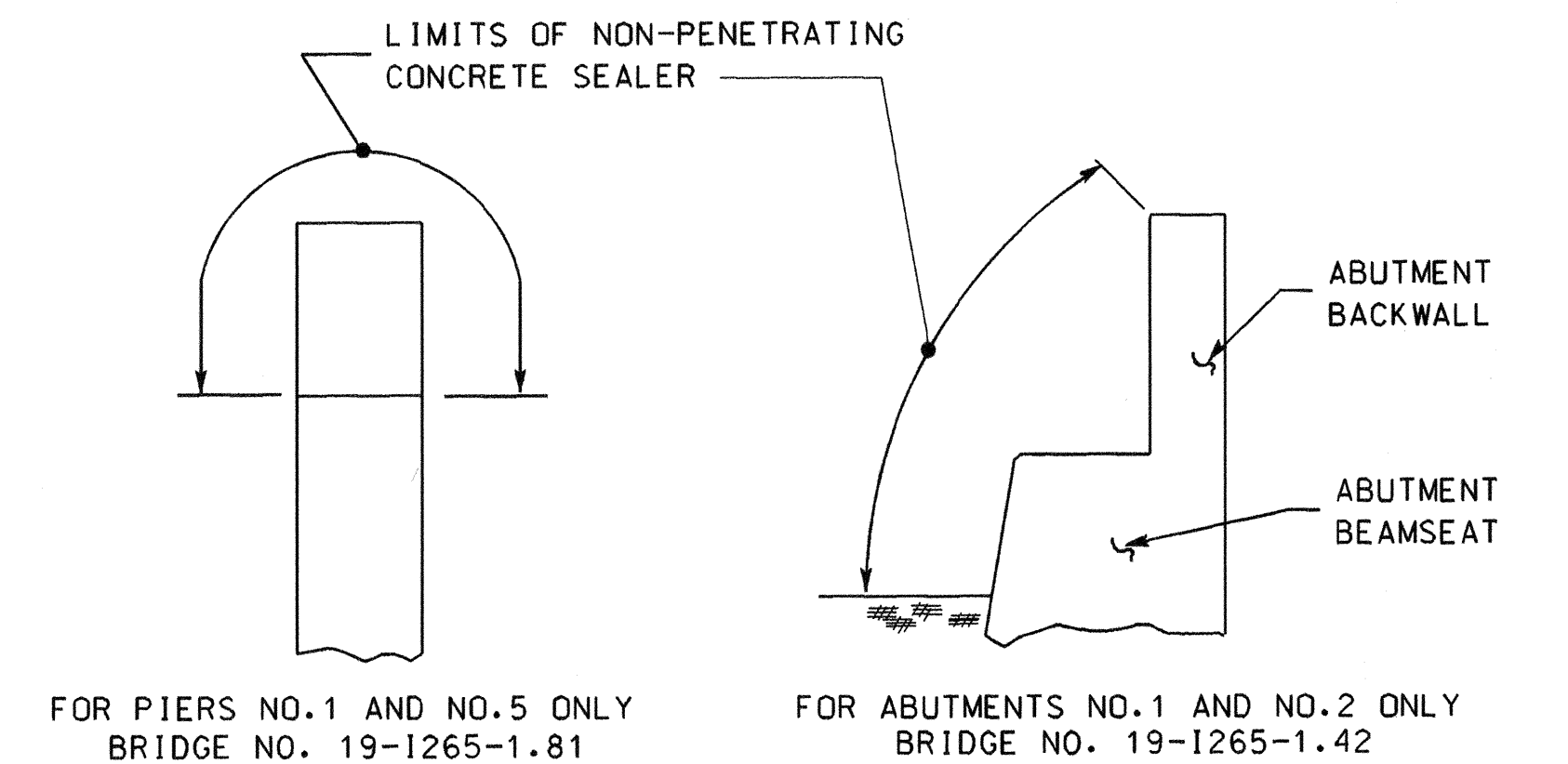


COUPLER BAR DETAIL

SHOWING TRANSVERSE REINFORCING STEEL SPLICING WITH MECHANICAL THREADED CONNECTORS. COUPLER BAR DETAIL GOOD FOR BOTH STRIP SEAL AND MODULAR JOINTS.

NOTE: COST OF MECHANICAL THREADED CONNECTORS WITH COUPLER BARS TO BE INCLUDED UNDER EXPANSION JOINT ITEM NO. INSTALLATION MUST MEET WITH THE FULL APPROVAL OF THE ENGINEER.

NON-PENETRATING SEALER SHALL BE APPLIED AFTER ALL REPAIR WORK TO JOINT AND CAP HAS BEEN COMPLETED. APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



CONCRETE SEALANT DETAIL

BEFORE APPLYING ANY CONCRETE SEALER, ALL SURFACES TO BE SEALED SHALL BE CLEANED OF ALL DEBRIS AND FOREIGN MATERIALS.

THE SURFACE CONDITIONS OF THE CONCRETE TO BE SEALED SHALL MEET THE REQUIREMENTS OF THE SEALANT MANUFACTURER. THE THICKNESS OF THE CONCRETE SEAL SHALL BE AS RECOMMENDED BY THE SEALANT MANUFACTURER. ALL WORK MUST MEET WITH THE FULL SATISFACTION OF THE ENGINEER.

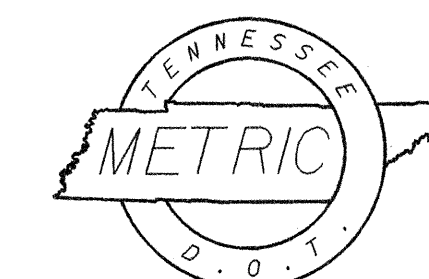
THE ACCEPTABLE BRANDS OF CONCRETE SEALER SHALL BE APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TEST. THE COLOR OF THE SEALER SHALL BE CLEAR OR SIMILAR TO THE COLOR OF THE EXISTING CONCRETE SURFACE TO BE SEALED.

THE COST OF THE CONCRETE SEALER, COMPLETE AND IN-PLACE, SHALL BE PAID FOR UNDER ITEM NO. 604M10.17, NON-PENETRATING CONCRETE SEALANT, M2.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGE REPAIR DETAILS
INTERSTATE 265 OVER MARQUETTE CEMENT YARD
BRIDGE NO. 19-1265-1.42 (WESTBOUND LANES)
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (WESTBOUND LANES)
DAVIDSON COUNTY
1996



DESIGNED BY Tom Quinn DATE July '96
DRAWN BY Cory Hawkins & Don Kimber DATE July '96
SUPERVISED BY Tom Quinn & Tommy Christianson DATE July '96
CHECKED BY Tom Quinn DATE July '96

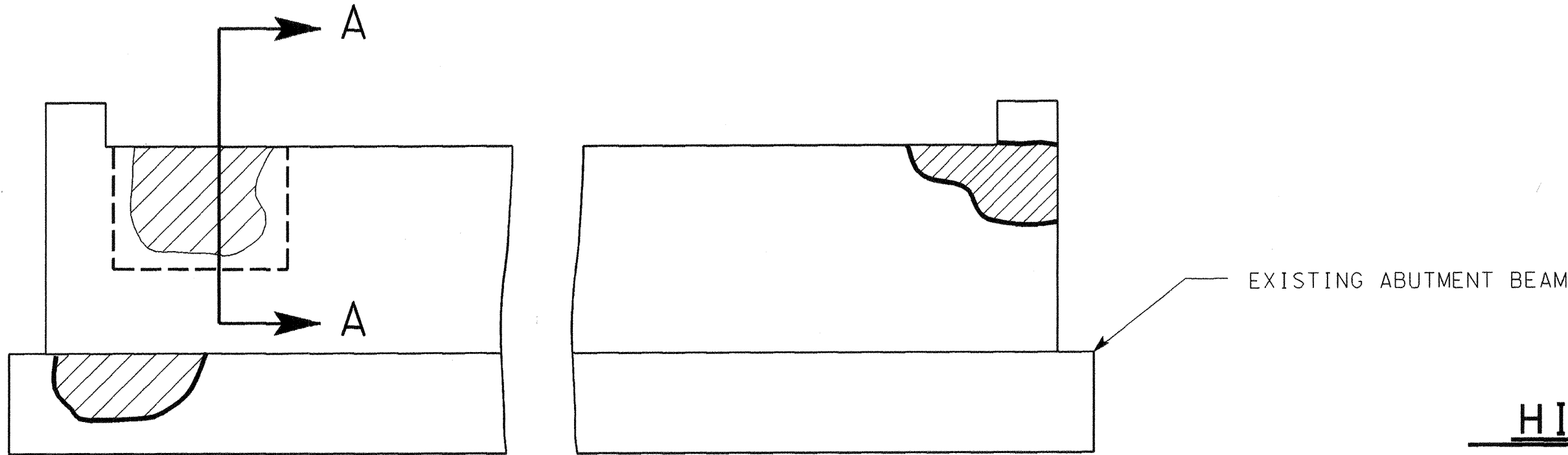
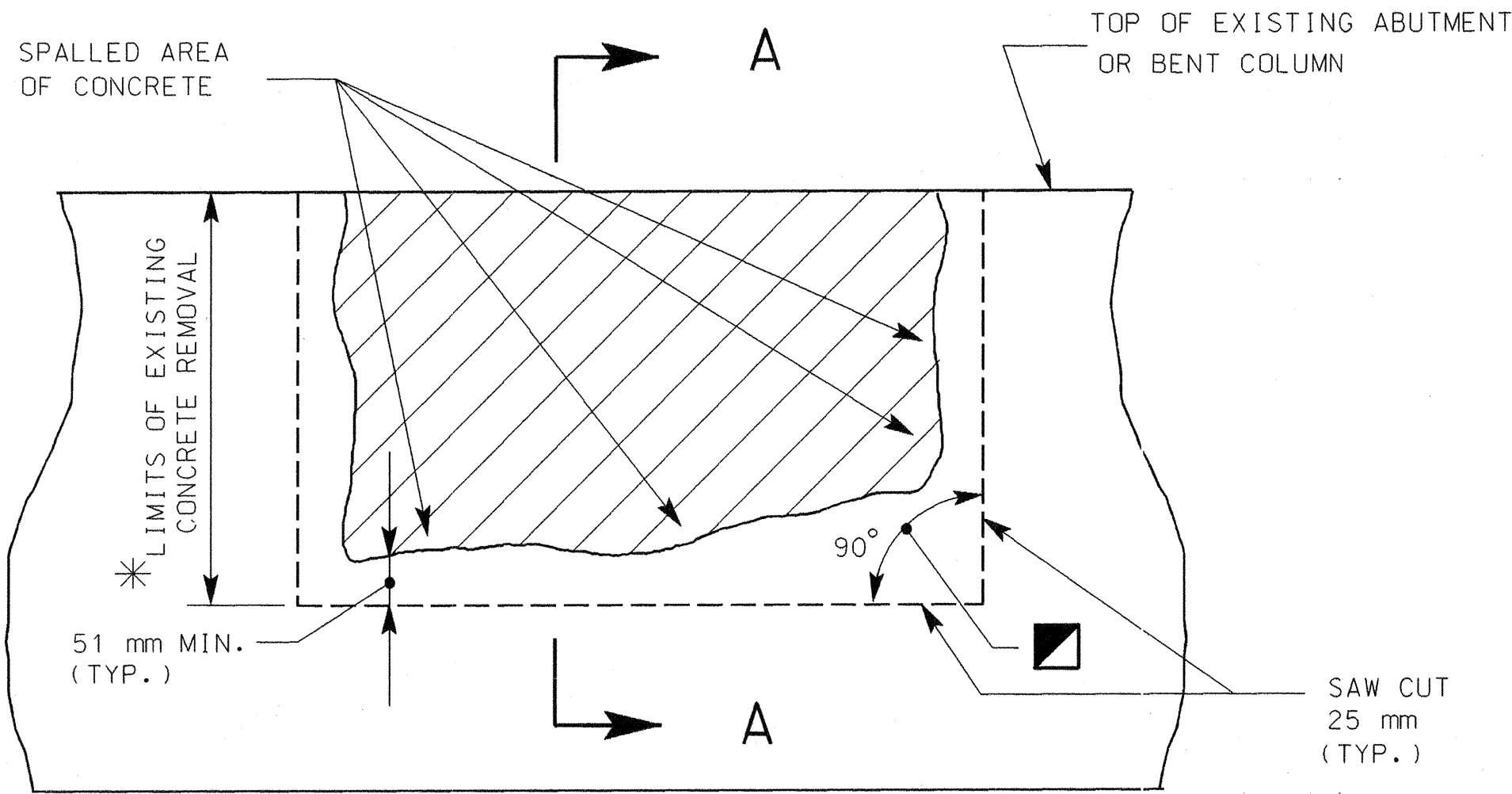
BR-26-44

PROJECT NO.		YEAR	SHEET NO.
19013-4124-04		1996	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-15-96	TEG	REV. PROJ. No.
2	7-8-97	TEG	Added note

ESTIMATED QUANTITIES FOR HIGH EARLY STRENGTH CONCRETE

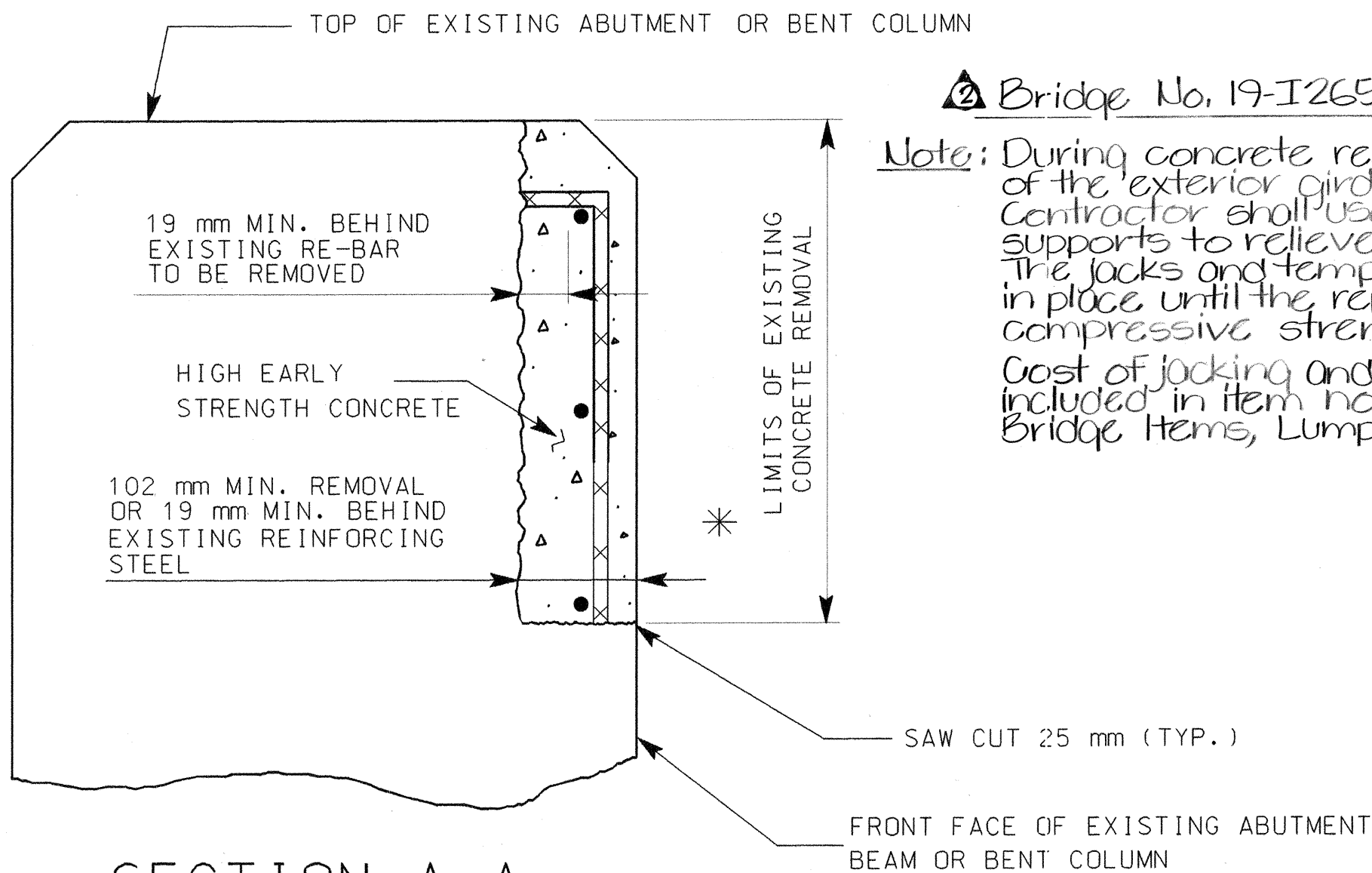
	19-1265-1.42/ MARQUETTE CEMENT YARD	19-1265-1.81/ CUMBERLAND RIVER
ABUTMENT NO. 1	6	3
PIER NO. 1	2	0
PIER NO. 5	8	0
ABUTMENT NO. 2	5	2
TOTAL	21	5

NOTE: ITEM NO. 604M10.53, CONCRETE REPAIRS, M2 SHALL BE BID WITH THE CONTINGENCY THAT IT MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER.



PARTIAL ABUTMENT ELEVATION
(SKETCH SHOWING AREAS OF CONCRETE REPAIRS)

ELEVATION
(EXISTING ABUTMENT OR BENT COLUMN AREA)



SECTION A-A

DETAIL SHOWING AREAS OF EXISTING SPALLED CONCRETE SURFACES TO BE REMOVED AND REPAIRED

(FOR BRIDGES NO. 19-1265-1.42 AND 19-1265-1.81)

■ DENOTES: SAW CUT EXISTING CONCRETE SURFACES SO AS TO OBTAIN SQUARE CORNERS.

*** DENOTES:** LIMITS AND LOCATION OF REPAIR TO BE DESIGNATED BY THE ENGINEER.

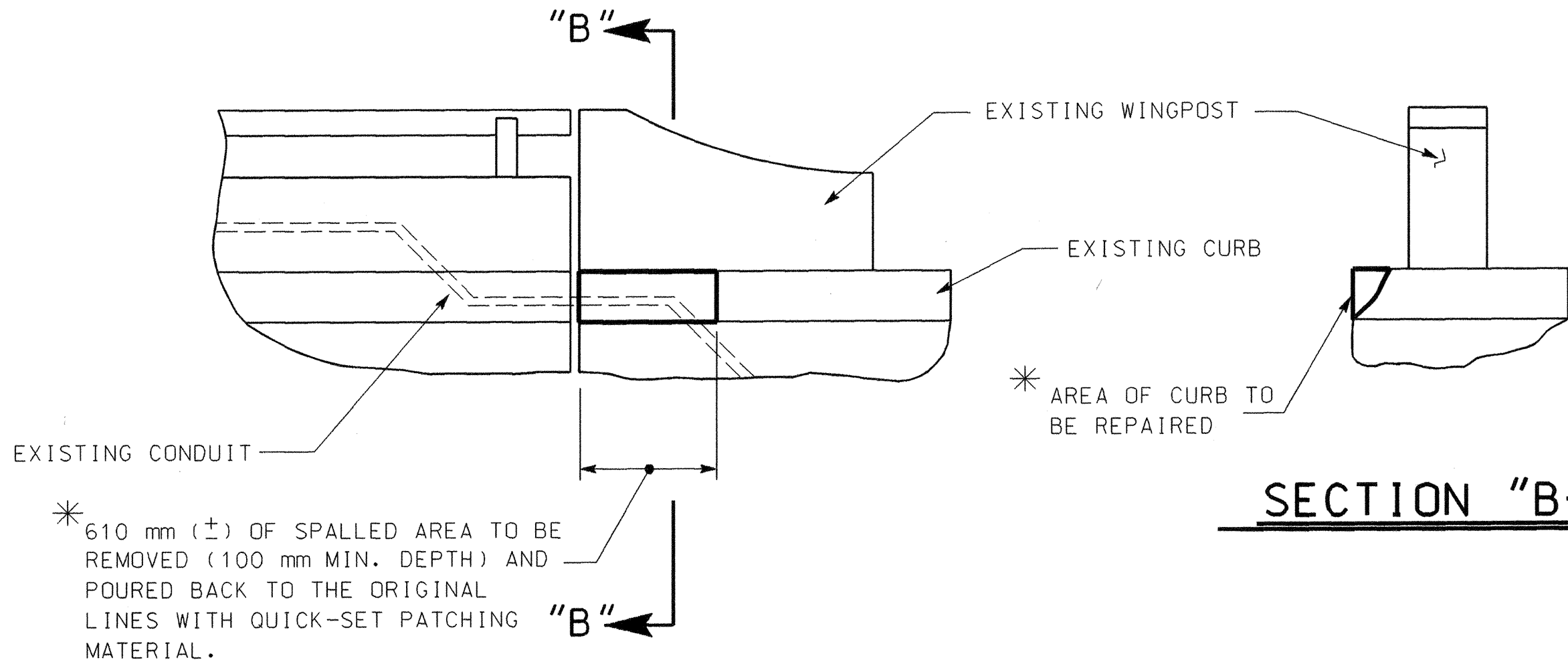
NOTES:

THE COST OF REMOVING PORTIONS OF THE EXISTING CONCRETE WITHIN THE LIMITS SHOWN, SAW CUTTING, COMPLETELY CLEANING EXISTING REINFORCING STEEL, MATERIAL, LABOR AND ALL MISCELLANEOUS MATERIAL NECESSARY TO COMPLETE THE REPAIRS AS SHOWN SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO 604M10.53, CONCRETE REPAIRS, M2.

PROVISIONS SHALL BE MADE DURING CONCRETE REMOVAL TO PROTECT THE EXISTING REINFORCING STEEL FROM DAMAGE. THE EXISTING REINFORCING STEEL SHALL BE COMPLETELY CLEANED AND INCORPORATED INTO THE NEW CONSTRUCTION.

ⓐ Bridge No. 19-1265-1.81 over Cumberland River

Note: During concrete repairs under the bearing areas of the exterior girders at abutment no. 2, the contractor shall use jacking and temporary supports to relieve pressure from the bearing. The jacks and temporary support shall remain in place until the repair concrete attains a compressive strength of 21 MPa. Cost of jacking and temporary support shall be included in Item no. 604M10.90, Miscellaneous Bridge Items, Lump Sum.



CURB AND WINGPOST ELEVATION

(FOR BRIDGE NO. 19-1265-1.81/CUMBERLAND RIVER)

NOTES:

PROVISIONS SHALL BE MADE DURING CONCRETE REMOVAL TO PROTECT THE EXISTING REINFORCING STEEL FROM DAMAGE. THE EXISTING REINFORCING STEEL SHALL BE COMPLETELY CLEANED AND INCORPORATED INTO THE NEW CONSTRUCTION.

THE COST OF REMOVING PORTIONS OF THE EXISTING CONCRETE WITHIN THE LIMITS SHOWN, SAW CUTTING, COMPLETELY CLEANING EXISTING REINFORCING STEEL, QUICK-SET PATCHING MATERIAL, LABOR AND ALL MISCELLANEOUS MATERIAL NECESSARY TO COMPLETE THE CURB REPAIRS AS SHOWN SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 604M10.54, CONCRETE REPAIRS, M2.

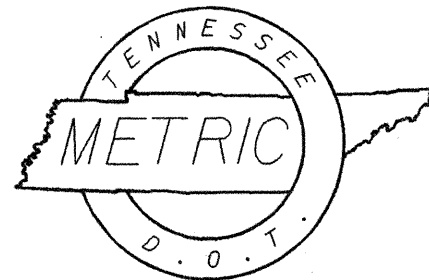
QUICK-SET PATCHING MATERIAL SHALL BE A POLYMER MODIFIED, CEMENTITIOUS PATCHING MATERIAL SUCH AS SIKATOP 123, MASTERPATCH 230 VP OR APPROVED EQUAL. CONCRETE SURFACE PREPARATION AND PATCHING MATERIAL APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

SAW CUT EXISTING CONCRETE SURFACES SO AS TO OBTAIN SQUARED CORNERS.

PROVISIONS SHALL BE MADE DURING CONCRETE REMOVAL TO PROTECT THE EXISTING CONDUIT IN THE CURB AREA. IF DAMAGED IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT NO ADDITIONAL COST TO THE STATE. SEE REFERENCE DRAWING K-59-39.

DENOTES:

LIMITS AND LOCATION OF REPAIR TO BE DESIGNATED BY THE ENGINEER.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGE REPAIR DETAILS
INTERSTATE 265 OVER MARQUETTE CEMENT YARD
BRIDGE NO. 19-1265-1.42 (EAST & WEST BOUND LANES)
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (EAST & WEST BOUND LANES)
DAVIDSON COUNTY

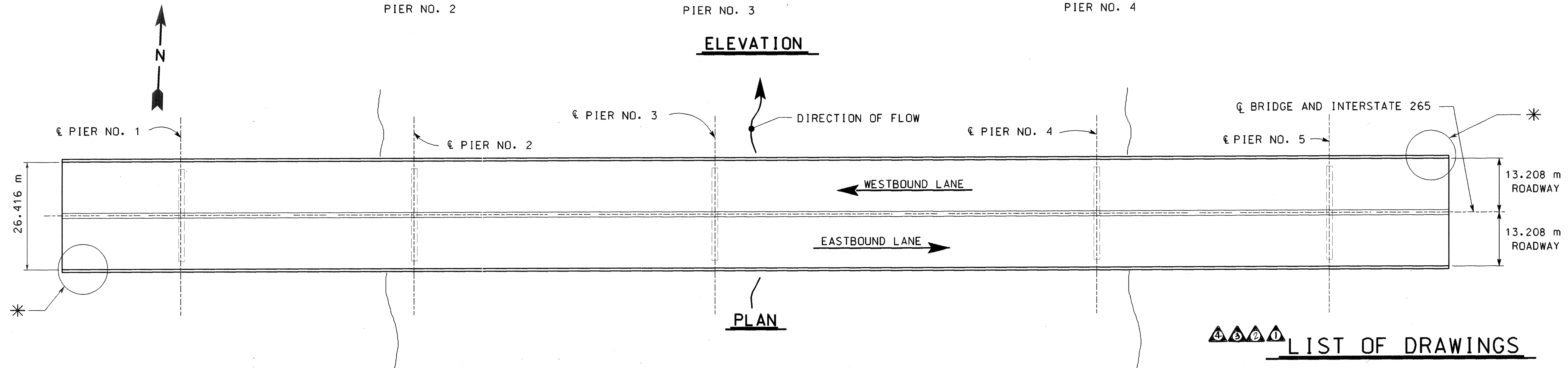
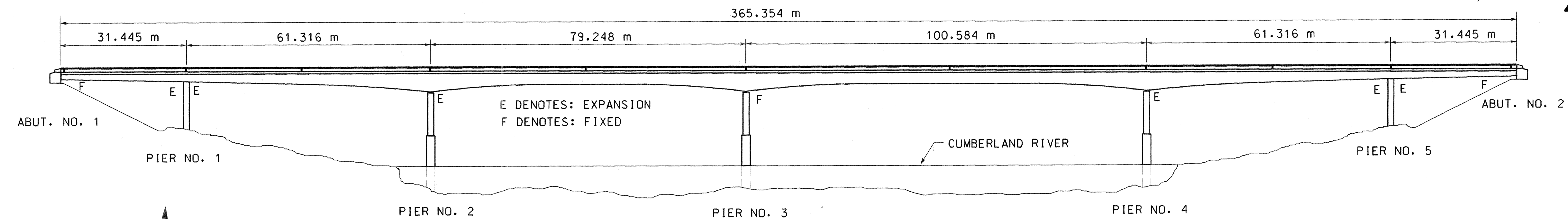
1996

BR-26-45

DESIGNED BY Tom Gulon DATE September '96
DRAWN BY Ben Kimber DATE September '96
SUPERVISED BY Tom Gulon & Tommy Christianson DATE September '96
CHECKED BY Tom Gulon DATE September '96

PROJECT NO.	YEAR	SHEET NO.
19018-4124-04	1996	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-15-96	T.G.	REVISED PROJECT NO. & LIST OF DRAWINGS
2	11-27-96	T.G.	REVISED LIST OF DRAWINGS
3	12-9-96	TEQ	REVISED LIST OF DRAWINGS
4	7-8-97	TEQ	REVISED LIST OF DRAWINGS



LIST OF DRAWINGS

DRAWING NO.	LAST REV. DATE	DRAWING
BR-26-48	7-8-97	LAYOUT OF BRIDGE TO BE REPAIRED
BR-26-41	7-8-97	ESTIMATED QUANTITIES
BR-26-42	11-15-96	GENERAL NOTES
BR-26-49	11-15-96	EXPANSION JOINT DETAILS
BR-26-44	11-15-96	BRIDGE REPAIR DETAILS
BR-26-45	7-8-97	BRIDGE REPAIR DETAILS
BR-26-50	11-15-96	BEARING REPAIR DETAILS

LIST OF SPECIAL PROVISIONS

** DENOTES: CURRENT REVISION DATE, AS PER CONTRACT DOCUMENTS.

NO.	LAST REV. DATE	REGARDING
105A	**	APPROVAL OF SHOP DRAWINGS
604M	**	MODULAR ROADWAY EXPANSION DEVICES

LIST OF REFERENCE DRAWINGS

(TO BE PRINTED WITH PLANS)

DRAWING NO.	DRAWING
K-59-37, K-59-39, K-59-42, K-59-45, K-59-47, K-59-51, K-59-53, K-67-5, K-67-5A	EXISTING BRIDGE DRAWINGS

GENERAL SCOPE OF WORK

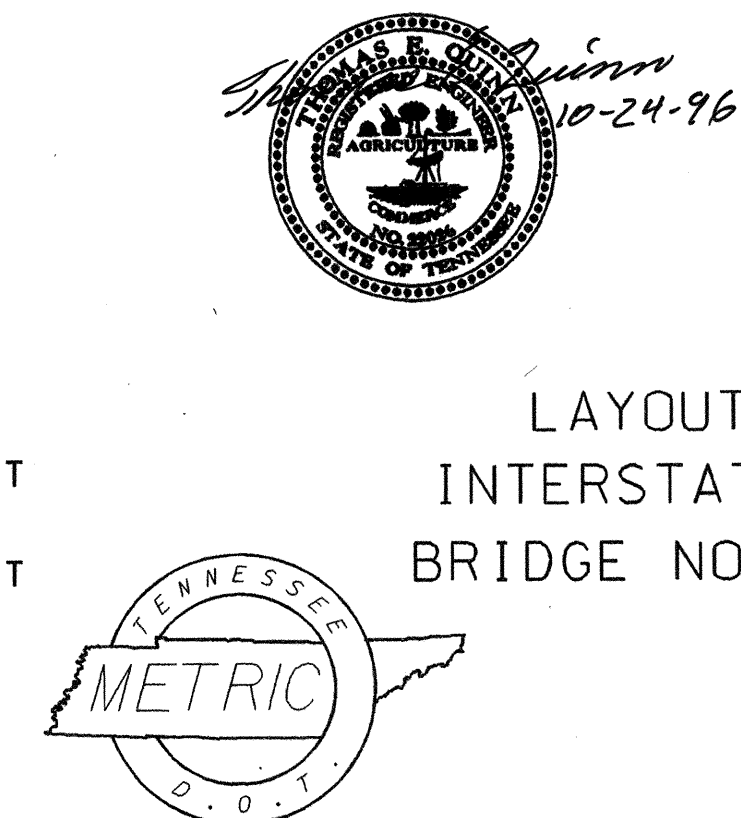
- REMOVE 89 mm ($\pm$) EXISTING ASPHALT OVERLAY.
- REPAIR DECK IN AREAS OF FULL AND PARTIAL DEPTH DETERIORATION.
- REPLACE EXISTING EXPANSION JOINTS AT PIERS NO. 1 AND 5 WITH MODULAR EXPANSION JOINTS.
- PLACE NEW 85 mm ASPHALT OVERLAY WITH DECK SEALANT FOR FULL WIDTH AND LENGTH OF BRIDGE.
- REMOVE AND REPLACE EXISTING APPROACH GUARDRAIL AT TWO LOCATIONS. SEE STANDARD DRAWINGS SBRM-2-131 AND SBRM-2-133 FOR NOTES AND DETAILS.
- RESET EXISTING BEARINGS AT PIERS 1 & 5.
- REPAIR AREAS OF DETERIORATED CONCRETE ON ABUTMENTS AND PIERS 1 & 5.

LIST OF STANDARD DRAWINGS

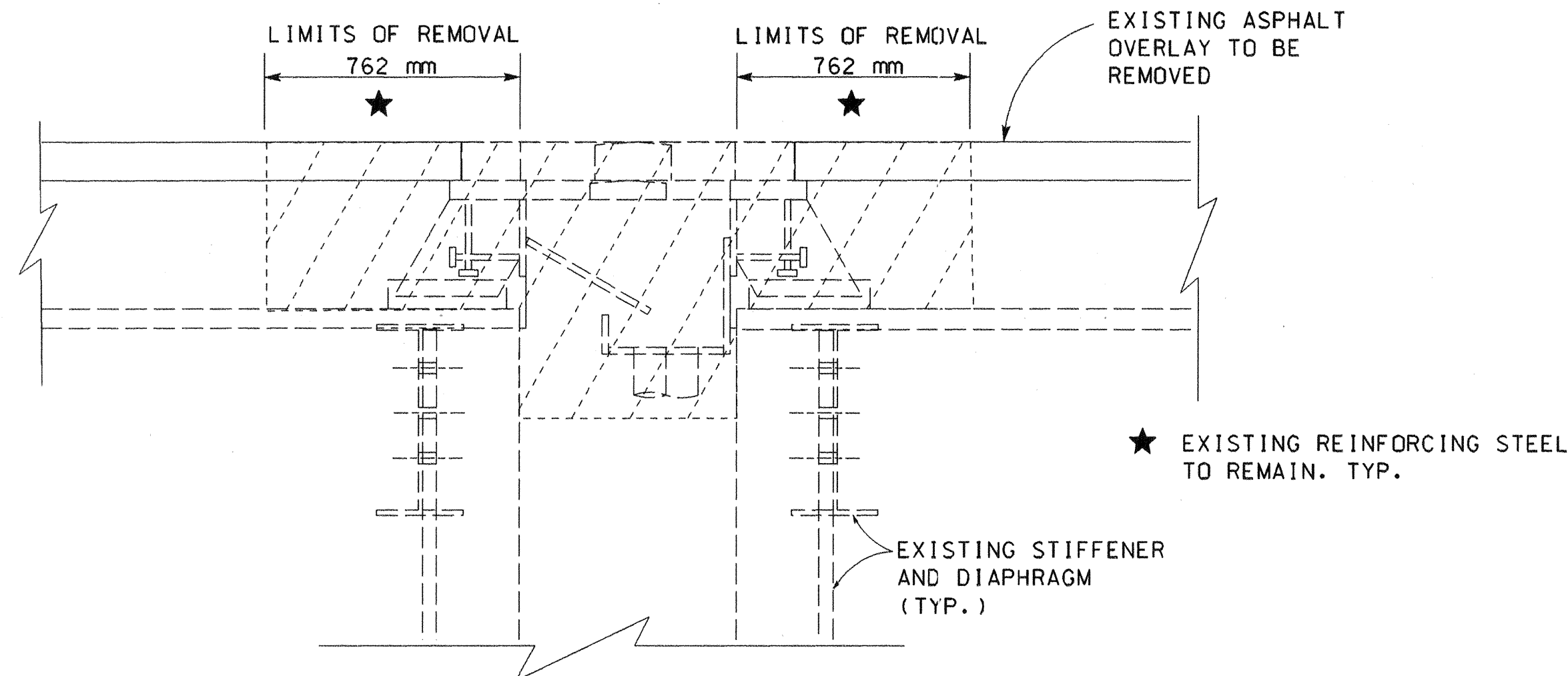
(TO BE PRINTED WITH PLANS)

DRAWING NO.	LAST REV. DATE	DRAWING
SBRM-2-115	6-1-96	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT CONSTRUCTION TYPES "A" THRU "J"
SBRM-2-116	6-1-96	GENERAL DETAILS FOR STRIP SEAL EXPANSION JOINT REPLACEMENT CONSTRUCTION DETAILS TYPES A THU J
SBRM-2-133	6-1-96	DETAILS SHOWING GUARDRAIL ATTACHMENT AT BRIDGE ENDS TO EXISTING CONCRETE VERTICAL FACE ENDPOST
SBRM-2-134	6-1-96	DETAILS SHOWING GUARDRAIL ATTACHMENT AT BRIDGE ENDS TO EXISTING CONCRETE VERTICAL FACE ENDPOST
STDN-1-2	6-10-96	STEEL SLIDER PLATE ASSEMBLIES FOR CONCRETE PARAPET AND BRIDGE DECK DRAIN DETAILS
STDN-1-4	6-10-96	STEEL SLIDER PLATE ASSEMBLIES FOR CONCRETE MEDIAN BARRIER

DESIGNED BY: **Tom Quinn** DATE: **July 1996**
DRAWN BY: **Don Kimber** DATE: **July 1996**
SUPERVISED BY: **Tommy Christianson & Tom Quinn** DATE: **July 1996**
CHECKED BY: **Tom Quinn** DATE: **July 1996**

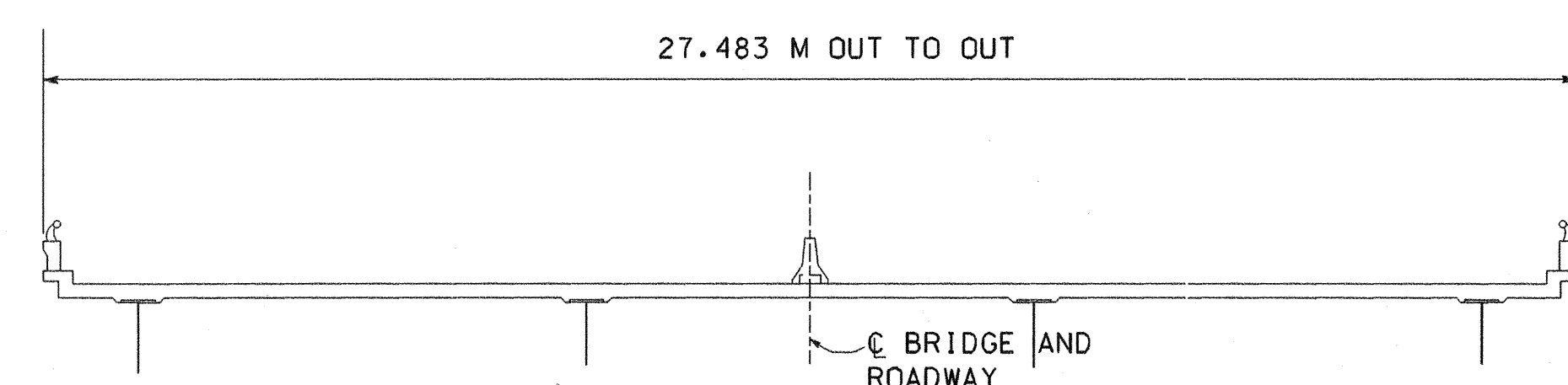


LAYOUT OF BRIDGE TO BE REPAIRED
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (EAST & WEST BOUND LANES)
DAVIDSON COUNTY
1996



SECTION AT PIERS

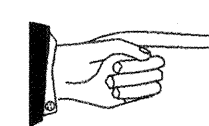
SHOWING AREAS OF EXISTING EXPANSION JOINT, BRIDGE SLAB TO BE REMOVED AND REPLACED WITH NEW MODULAR EXPANSION JOINT. LOCATION OF REPAIRS AT PIERS NO. 1 AND NO.5 ONLY.



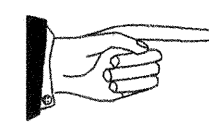
TYPICAL CROSS SECTION

SHOWING LIMITS OF ITEM NO. 604M10.60

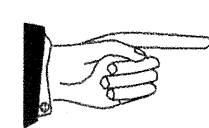
NOTE: FOR ADDITIONAL NOTES AND DETAILS SEE STANDARD DRAWING NO'S SBRM-2-115 AND SBRM-2-116.



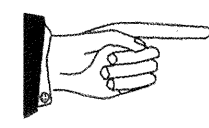
NOTE: THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR SUPPORTING THE PORTIONS OF THE SLAB WHICH ARE NOT TO BE REMOVED WHEN MAKING REPAIRS WHICH REQUIRE THE REMOVAL OF THE END SUPPORT OF A SLAB SPAN. SEE SPECIAL NOTE ON DRAWING NO. BR-26-42 (SHEET 3).



NOTE: CONTRACTOR SHALL PLACE THE NEW MODULAR JOINT WITH TEMPORARY SELF ALIGNING GUIDE MEMBERS. SEE SPECIAL PROVISION NO. 604M. THE PROFILE OF THE CONCRETE POURS AND NEW JOINT SYSTEM SHALL CONFORM TO ROADWAY CROSS SLOPE, SKEW, AND GRADE.



NOTE: THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS IN ORDER TO FABRICATE THE EXPANSION DEVICES. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AT THE HEADQUARTERS BRIDGE INSPECTION AND REPAIR OFFICE FOR APPROVAL BEFORE ANY FABRICATION BEGINS.



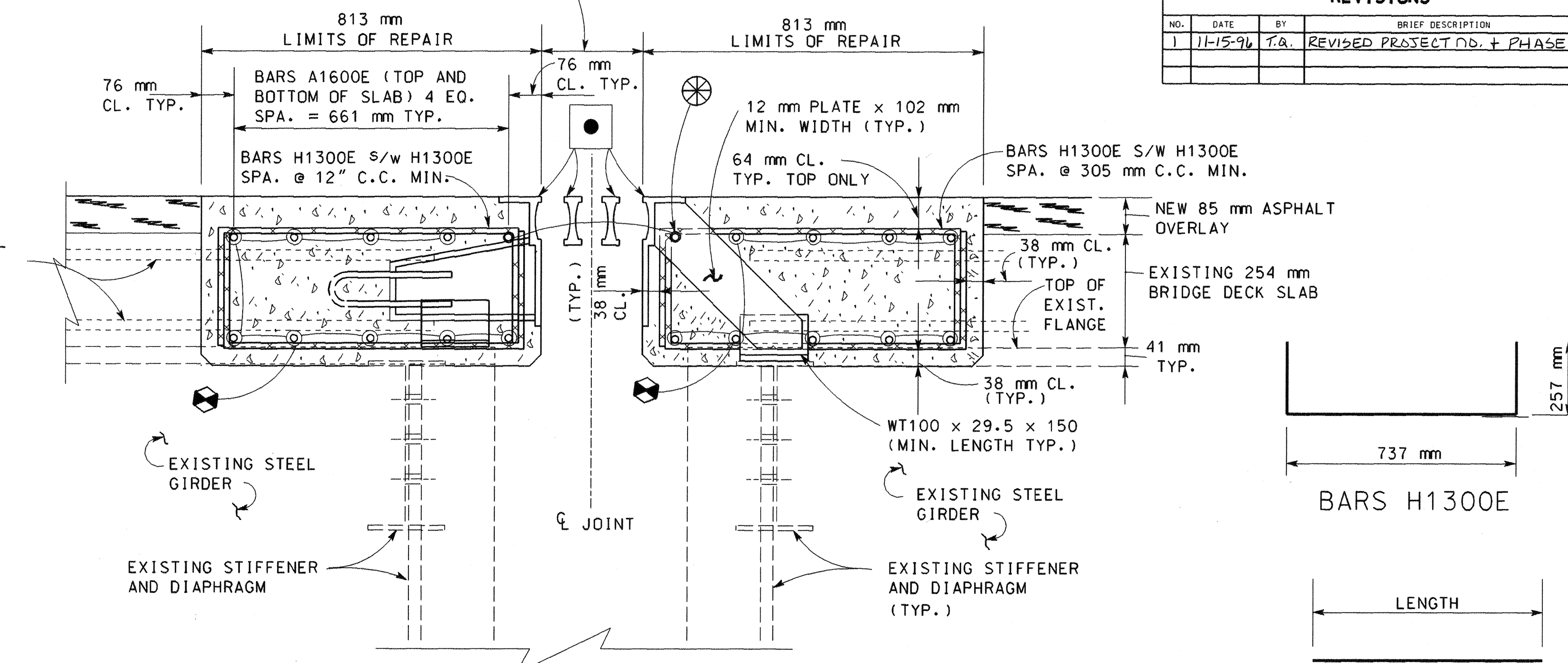
NOTE: THE EXPANSION JOINT LEVELING ASSEMBLIES SHALL BE LOCATED AT THE CENTER LINE OF EACH EXISTING GIRDER, EXCEPT WHEN DISTANCE BETWEEN ASSEMBLIES EXCEEDS 3050 mm. THEN ADDITIONAL ASSEMBLIES SHALL BE USED SUCH THAT THE DISTANCE BETWEEN ASSEMBLIES SHALL NOT EXCEED 3050 mm. BOLT ASSEMBLIES SHALL BE LOCATED IN THE FIELD BASED UPON DIMENSIONS TAKEN FROM THE SHOP DRAWINGS. EXPANSION DEVICES SHALL BE ALIGNED AND BROUGHT TO PROPER ELEVATION BEFORE LEVELING BOLTS ARE TIGHTENED AND NEW CONCRETE POURED.



NOTE: WHEN REMOVING THE DESIGNATED CONCRETE, EXTREME CARE SHALL BE TAKEN SO AS NOT TO DAMAGE THE EXISTING LONGITUDINAL REINFORCING STEEL. EXISTING LONGITUDINAL STEEL SHALL BE LEFT PROJECTING AND BE INCORPORATED IN WITH THE NEW REINFORCING STEEL. THE EXISTING EXPOSED LONGITUDINAL REINFORCING STEEL SHALL BE CLEANED BEFORE PLACEMENT OF NEW CONCRETE.

DESIGNED BY Tom Quinn DATE July 1996
 DRAWN BY Don Kimber DATE July 1996
 SUPERVISED BY Tommy Christensen & Tom Quinn DATE July 1996
 CHECKED BY Tom Quinn DATE July 1996

MID-TEMPERATURE SETTING AT 15.6° C (ACTUAL SETTING AS PER TEMPERATURE CHART ON EXPANSION JOINT SHOP DRAWINGS) 229 mm TOTAL MOVEMENT REQUIRED. (ITEM NO. 604M10.60)

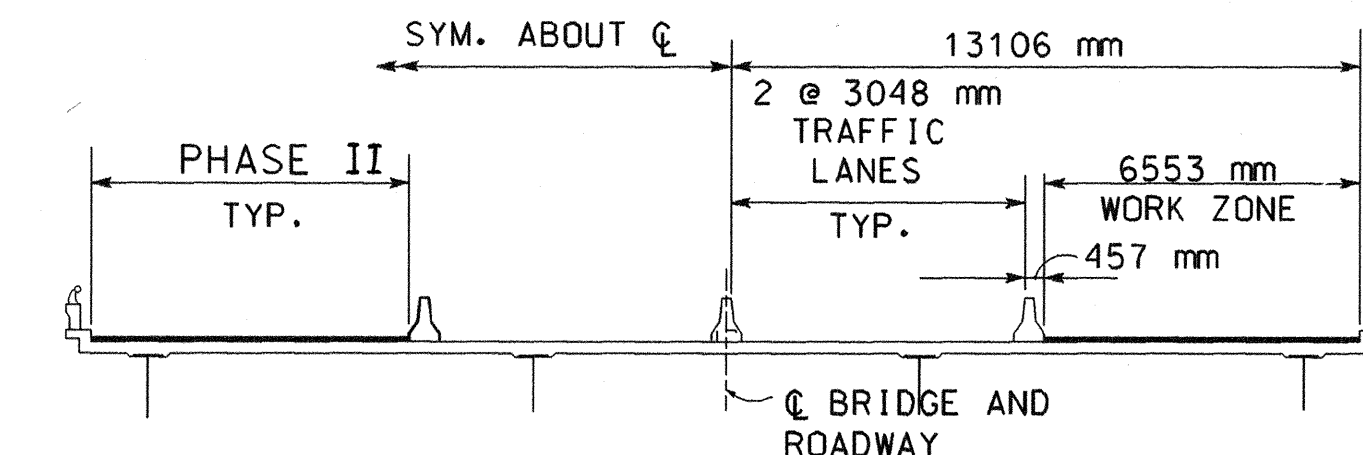


SECTION AT PIERS

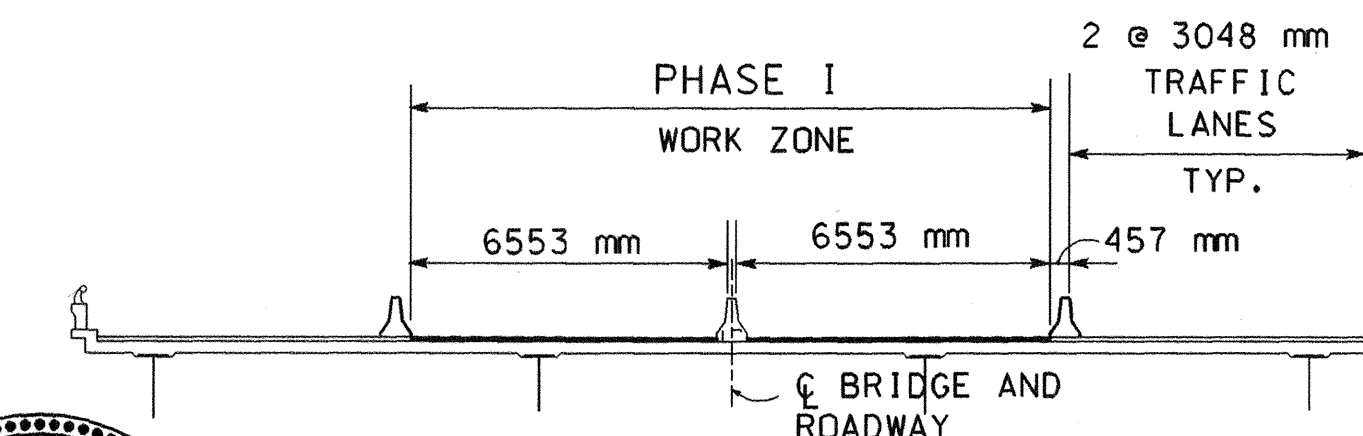
SHOWING NEW MODULAR TYPE EXPANSION JOINT REPLACEMENT DETAILS LOCATED AT PIERS NO.1 AND NO.5 (TOTAL MOVEMENT REQUIRED 229 mm PER LOCATION).

A BARS

BAR BENDS



TYPICAL CROSS SECTION SHOWING LIMITS OF PHASE II



TYPICAL CROSS SECTION SHOWING LIMITS OF PHASE I

PHASE DETAILS



DENOTES: NO.A16__E BARS TO BE CONTINUOUS. FIELD DRILL HOLES (6 mm LARGER THAN THE BARS) THROUGH STEEL PLATES. IF THE CONTRACTOR ELECTS TO SPLICE THE A16__E BARS, TO FACILITATE INSTALLATION, A MINIMUM SPLICE OF 610 mm SHALL BE PROVIDED.



DENOTES: NEW NO.A16__E BARS IN LENGTHS AS REQUIRED TO MAINTAIN TRAFFIC (SPACED AS SHOWN).



NOTE: MODULAR JOINT ANCHORAGE AND SUPPORT SYSTEM DETAILS ARE INCOMPLETE AS SHOWN THIS SHEET. DUE TO DIFFERENT MANUFACTURER'S MODULAR EXPANSION JOINT SYSTEMS, THE ANCHORAGE AND SUPPORT SYSTEM DETAILS SHOWN THIS SHEET, MAY NEED TO BE ALTERED. ANCHORAGE AND SUPPORT SYSTEM SHALL BE AS PER SPECIAL PROVISION NO. 604M.

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING MODULAR JOINT ANCHORAGE AND SUPPORT SYSTEM DETAILS INCLUDING ALL NEW REINFORCING STEEL DETAILS AND SPACING FOR APPROVAL, BEFORE ANY FABRICATION IS BEGUN.

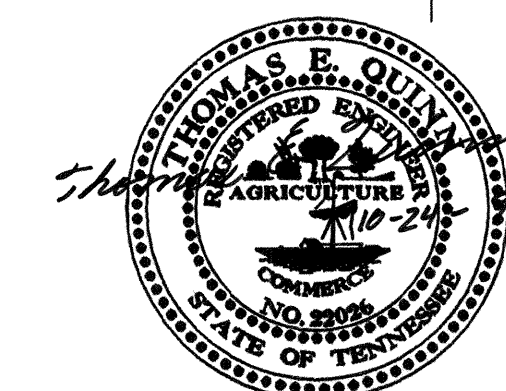
NOTE: ALL CONCRETE POURS SHALL BE WELL CONSOLIDATED BEHIND AND AROUND THE EXPANSION JOINT STEEL RETAINERS.

NOTE: COST OF ANY MODIFICATIONS NECESSARY TO PROPERLY INSTALL THE EXPANSION JOINTS SHALL BE INCLUDED IN ITEMS BID ON.

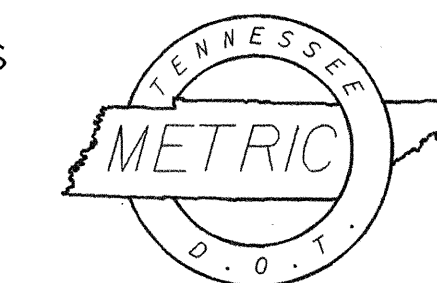
NOTE: EXTEND THE MODULAR EXPANSION JOINT 51 mm OFF THE EDGE OF THE CONCRETE SLAB AT THE PARAPET INTERSECTIONS.

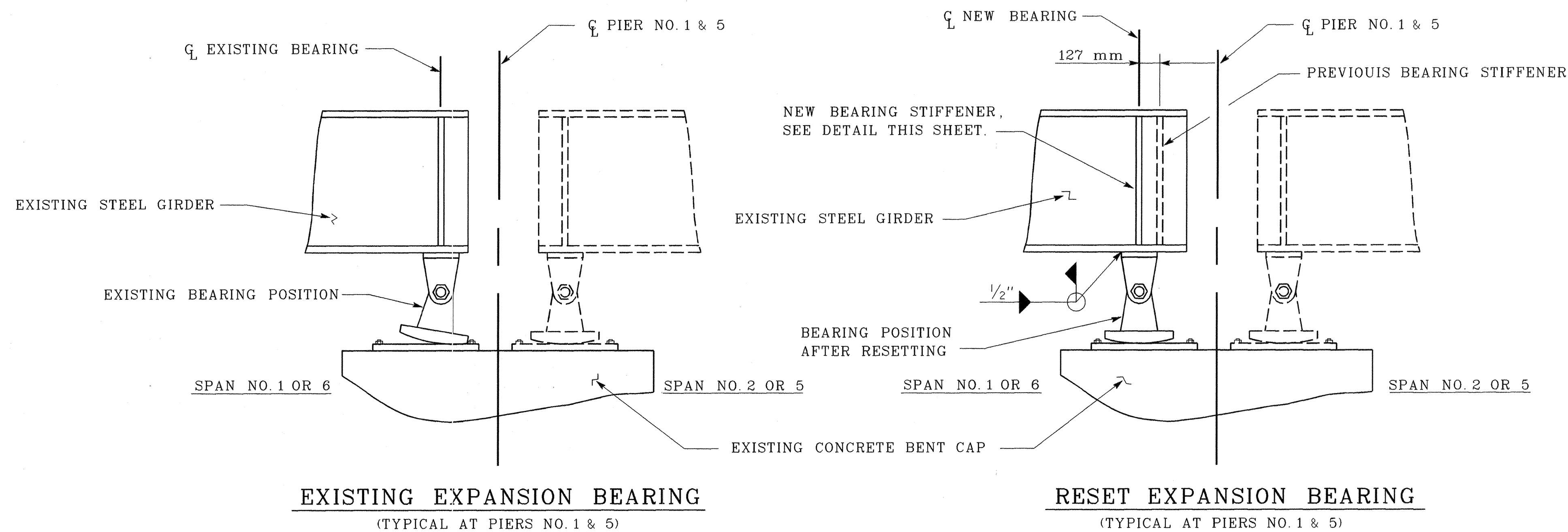
NOTE: COST OF REMOVING THE EXISTING EXPANSION JOINTS AND PLACEMENT OF NEW MODULAR EXPANSION JOINTS, INCLUDING ALL CONCRETE REMOVAL, NEW CONCRETE, REMOVAL OF SLIDER PLATE ASSEMBLIES FOR PARAPET AND MEDIAN BARRIERS, NEW SLIDER PLATE ASSEMBLIES, REINFORCEMENT BARS, LABOR, ANY AND ALL MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE REPAIRS AS SHOWN THESE PLANS TO THE EXPANSION JOINTS AT PIERS NO. 1 AND NO. 5 SHALL BE INCLUDED IN ITEM NO. 604M10.60, EXPANSION JOINT REPAIRS (229 mm MODULAR TYPE), M

	PROJECT NO.	YEAR	SHEET NO.
	19018-4124-04	1996	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-15-96	T.A.	REVISED PROJECT NO. + PHASES



EXPANSION JOINT REPLACEMENT DETAILS
 INTERSTATE 265 OVER CUMBERLAND RIVER
 BRIDGE NO. 19-I265-1.81 (WESTBOUND LANES)
 DAVIDSON COUNTY
 1996





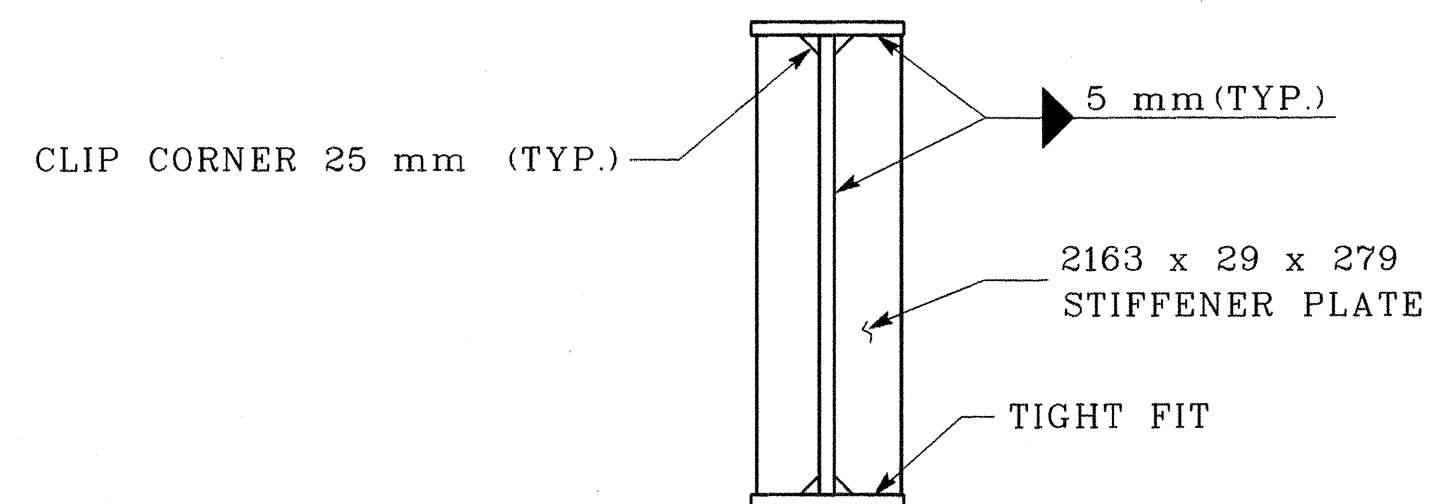
RESET BEARING DETAILS

NOTE: BEARING DEVICES ARE TO BE RESET TO A VERTICAL POSITION AT 60 DEGREES FAHRENHEIT. AT TEMPERATURES OTHER THAN 60 DEGREES FAHRENHEIT, BEARING SHALL BE SET AS INSTRUCTED BY THE ENGINEER. TEMPERATURE SHALL BE THE BEAM TEMPERATURE. ALL WORK SHALL MEET WITH THE FULL SATISFACTION OF THE ENGINEER.

NOTE: COST OF RESETTING EXPANSION BEARINGS, INCLUDING ALL JACKING, REMOVING THE EXISTING SOLE PLATE AND REWELDING TO THE BOTTOM FLANGE OF THE GIRDER, LABOR, SURFACE PREPARATION AND PAINTING, AND ANY MISCELLANEOUS MATERIALS NEEDED TO COMPLETE THE REPAIRS TO BE PAID FOR UNDER ITEM NO. 602-10.01. STRUCTURAL STEEL REPAIRS, L. S.

SPECIAL NOTE: INSTALLATION OF NEW BEARING STIFFENERS AND RESETTING OF BEARINGS SHALL BE THE FIRST ORDER OF WORK PERFORMED BEFORE OTHER REPAIRS ARE BEGUN. NEW BEARING STIFFENERS SHALL BE IN PLACE BEFORE JACKING OPERATIONS ARE BEGUN.

JACKING: DURING JACKING OF BEAMS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE BRIDGE. DETAILS OF THE PROPOSED JACKING SYSTEM SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE ANY JACKING IS BEGUN.



PIER NO. 1 & 5

BEARING STIFFENER DETAILS

PROJECT NO.		YEAR	SHEET NO.
19013-4124-04		1996	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-15-96	T.A.	REVISED PROJECT NO.



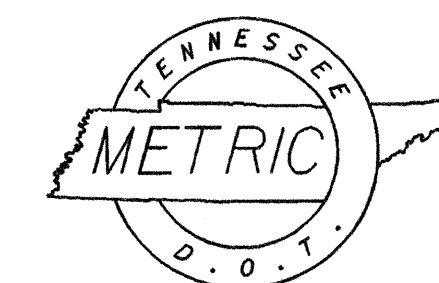
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

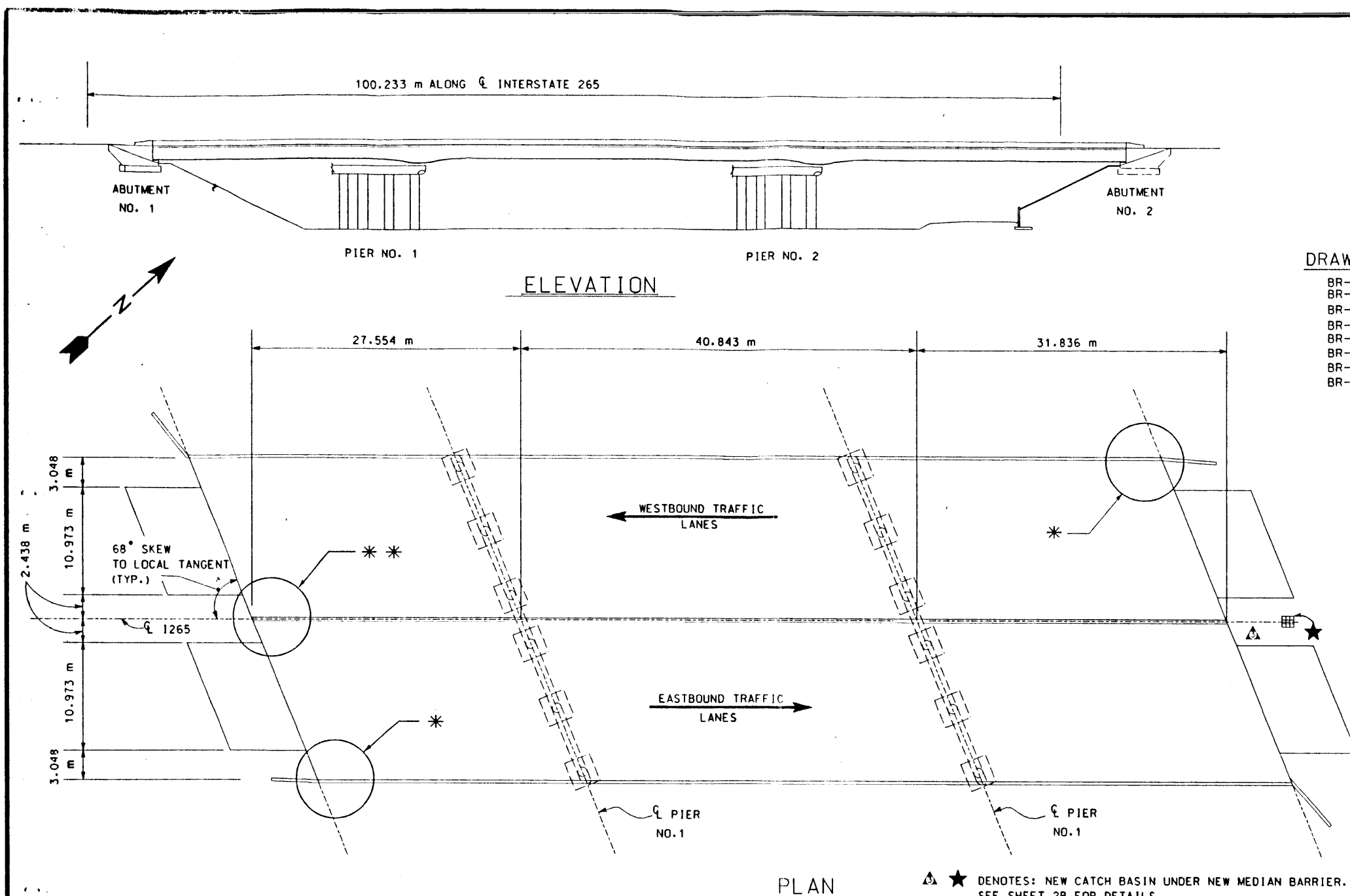
BEARING REPAIR DETAILS
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (EAST & WEST BOUND LANES)
DAVIDSON COUNTY

1996

BR-26-50

DESIGNED BY Tom Quinn DATE October, 1996
DRAWN BY Cory Hawkins DATE October, 1996
SUPERVISED BY Tom Quinn, J. Christianson DATE October, 1996
CHECKED BY Tom Quinn DATE October, 1996





PROJECT NO.	YEAR	SHEET NO.
19013-4124-04	1996	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-15-96	T.E.O.	REVISED PROJECT NUMBER AND LIST OF DRAWINGS
2	12-9-96	T.E.O.	REVISED LIST OF DRAWINGS
3	4-28-97	T.E.O.	REVISED PLAN, ADDED CATCH BASIN AND NOTE ADDED NOTE TO GENERAL SCOPE OF WORK AND REVISED LIST OF DRAWINGS.

LIST OF DRAWINGS

DRAWING NO.	LAST REV. DATE	DRAWING
BR-26-40	4-28-97	LAYOUT OF BRIDGE TO BE REPAIRED
BR-26-41	4-28-97	ESTIMATED QUANTITIES
BR-26-42	11-15-96	GENERAL NOTES
BR-26-43	11-15-96	EXPANSION JOINT DETAILS
BR-26-44	11-15-96	BRIDGE REPAIR DETAILS
BR-26-45	11-15-96	BRIDGE REPAIR DETAILS
BR-26-46	11-15-96	DIAPHRAGM DETAILS
BR-26-47	11-15-96	SLAB REPAIR DETAILS

LIST OF REFERENCE DRAWINGS

DRAWING NO.	DRAWING
K-67-67, K-67-67A, K-67-68, 69, 70, 72, K-67-74, 75, K-67-2 AND M-106-16, K-38-154, K-67-5, K-67-5A	EXISTING BRIDGE DRAWINGS

LIST OF SPECIAL PROVISIONS

- ** DENOTES: CURRENT REVISION DATE, AS PER CONTRACT DOCUMENTS.
- | NO. | LAST REV. DATE | REGARDING |
|------|----------------|-----------------------------|
| 105A | ** | APPROVAL OF SHOP DRAWINGS |
| 604S | ** | STRIP SEAL EXPANSION JOINTS |
- * DENOTES: REMOVE AND REPLACE EXISTING APPROACH GUARDRAIL. SEE STANDARD DRAWING NO. SBRM-2-133 & 134 FOR DETAILS AND LIMITS.
- * * DENOTES: SEE ROADWAY STANDARD S-MB-1 FOR END POST DETAILS. SEE STANDARD DRAWING NO. SM-GR-20 FOR APPROACH GUARDRAIL DETAILS AND LIMITS.

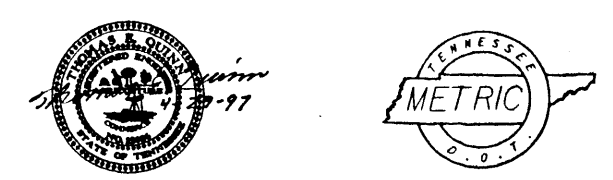
GENERAL SCOPE OF WORK

- 1) REPLACE EXISTING EXPANSION JOINT AT ABUTMENT NO. 1 AND NO. 2 WITH A NEW STRIP SEAL JOINT "TYPE A". SEE STANDARD DRAWING NO'S. SBRM-2-115, SBRM-2-116 AND SBRM-2-117 FOR DETAILS AND NOTES.
- 2) REMOVE 89 mm EXISTING ASPHALT FULL LENGTH AND WIDTH OF BRIDGE.
- 3) REPAIR EXISTING BRIDGE DECK WITH PARTIAL AND FULL DEPTH REPAIR.
- 4) PLACE NEW 85 mm (±) ASPHALT OVERLAY WITH MEMBRANE SEAL ON EXISTING BRIDGE DECK.
- 5) REMOVE EXISTING MEDIAN GUARDRAIL AND INTERIOR SLAB CANTILEVERS. REPOUR INTERIOR SLAB WITH NEW CONCRETE MEDIAN BARRIER RAIL.
- 6) REPAIR AREAS OF DETERIORATED CONCRETE ON ABUTMENT BACKWALLS.
- 7) INSTALL NEW MEDIAN END DIAPHRAGM AT EACH ABUTMENT.
- 8) REMOVE AND REPLACE EXISTING APPROACH GUARDRAIL AT MEDIAN AND TWO CORNERS OF THE BRIDGE. SEE STANDARD DRAWING SBRM-2-133 & 134.
- 9) REMOVE EXISTING MEDIAN GUARDRAIL AND INSTALL NEW CONCRETE MEDIAN BARRIER BETWEEN BRIDGE AT L.M. 1.42 AND BRIDGE AT L.M. 1.81.

LIST OF STANDARD DRAWINGS

DRAWING NO.	LAST REV. DATE	DRAWING
SBRM-2-115	6-1-96	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT CONSTRUCTION TYPES "A" THRU "J"
SBRM-2-116	6-1-96	GENERAL DETAILS FOR STRIP SEAL EXPANSION JOINT REPLACEMENT CONSTRUCTION DETAILS TYPES A THRU J
SBRM-2-117	6-1-96	STRIP SEAL EXPANSION JOINTS - REPLACEMENT CONSTRUCTION DETAILS TYPE "A" AND TYPE "B"
SBRM-2-133	6-1-96	DETAILS SHOWING GUARDRAIL ATTACHMENT AT BRIDGE ENDS TO EXISTING CONCRETE VERTICAL FACE ENDPOST
SBRM-2-134	6-1-96	DETAILS SHOWING GUARDRAIL ATTACHMENT AT BRIDGE ENDS TO EXISTING CONCRETE VERTICAL FACE ENDPOST
STDN-1-3	6-10-96	CONCRETE MEDIAN BARRIER

DESIGNED BY: Tom Quinn DATE: July 1996
 DRAWN BY: Ben Kimber DATE: July 1996
 SUPERVISED BY: James F. Johnson & Tom Quinn DATE: July 1996
 CHECKED BY: Tom Quinn DATE: July 1996



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

LAYOUT OF BRIDGE TO BE REPAIRED
 INTERSTATE 265 OVER MARQUETTE CEMENT YARD
 BRIDGE NO. 19-1265-1.42 (EAST & WEST BOUND LANES)
 DAVIDSON COUNTY
 1996

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITIES PER BRIDGE		TOTAL QUANTITY
			BRIDGE NO. 19-1265-1.42	BRIDGE NO. 19-1265-1.81	
209M08.01	TEMPORARY FILTER BARRIER	M	45	45	90
307M03.15	BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING B-M	TONNE	256	81	337
402M01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TONNE	3	1	4
403M01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TONNE	1.5	2.5	4
407M02.11	REMOVAL OF ASPHALT SHOULDERS	M2	1518	478	1996
411M01.01	MINERAL AGGREGATE (ACS) GRADING D	TONNE	359	848	1207
411M01.02	ASPHALT CEMENT (ACS) GRADING D	TONNE	23	55	78
411M02.01	MINERAL AGGREGATE (ACS) GRADING E	TONNE	471	1129	1600
411M02.02	ASPHALT CEMENT (ACS) GRADING E	TONNE	31	73	104
(23) 415M01.02	COLD PLANING BITUMINOUS PAVEMENT	M2	4250	10436	14686
(23) 415M02.02	SALVAGE VALUE OF COLD PLANINGS	M2	4250	10436	14686
(14) 602M10.06	STRUCTURAL STEEL	Kg	304	2323	2627
(1) 602M10.12	BEARING DEVICE (REPAIR)	L.S.	1	1	1
(21) 602M10.19	JACKING STEEL SPANS	L.S.	1	1	1
(22) (17) 603M02.01	REPAINTING EXISTING STEEL STRUCTURES (19-1265-1.81)	L.S.	1	1	1
(18) 603M05.20	CONTAINMENT AND DISPOSAL OF WASTE (19-1265-1.81)	L.S.	1	1	1
(16) 604M03.09	CLASS D CONCRETE (BRIDGE DECK)	M3	43	43	43
(20) 604M10.13	CONCRETE SLAB REMOVAL	L.S.	0.3	0.3	0.3
(2) 604M10.17	NON-PENETRATING CONCRETE SEALER	M2	255	225	480
(15) 604M10.18	REINFORCING STEEL (REPAIRS)	Kg	5958	5958	5958
(3) 604M10.30	BRIDGE DECK REPAIRS (FULL DEPTH OF SLAB)	M2	17	10	27
(4) 604M10.32	EXPANSION JOINT REPAIRS (TYPE A)	M	72	72	72
(3) 604M10.50	BRIDGE DECK REPAIRS (PARTIAL DEPTH OF SLAB)	M2	991	1000	1991
(5) 604M10.53	CONCRETE REPAIRS (HIGH EARLY STRENGTH CONCRETE)	M2	5	21	26
(8) 604M10.54	CONCRETE REPAIRS (QUICK-SET)	M2	1	1	1
(6) 604M10.60	EXPANSION JOINT REPAIRS (MODULAR TYPE)	M	55	55	55
(7) 617M01	BRIDGE DECK SEALANT	M2	3158	9459	12617
705M02.02	SINGLE GUARDRAIL (TYPE 2)	M	8	8	16
705M01.06	MEDIAN DIVIDER GUARDRAIL AT CONCRETE BARRIER	M	9	9	9
705M10.30	GUARDRAIL ATTACHMENT TO SLOPE FACE ENDPST	M	16	16	32
706M01	GUARDRAIL REMOVED	M	564	24	588
711M01.06	CONCRETE MEDIAN BARRIER TYING TO GUARDRAIL	M	4	4	4
(19) 711M02.03	REINFORCED CONCRETE MEDIAN BARRIER (BRIDGES) (813 HEIGHT)	M	101	101	101
712M01	TRAFFIC CONTROL	L.S.	0.4	0.4	0.8
712M02.02	INTERCONNECTED PORTABLE BARRIER RAIL	M	394	924	1318
712M04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	75	75	150
712M05.01	WARNING LIGHTS (TYPE A)	EACH	5	11	16
712M05.03	WARNING LIGHTS (TYPE C)	EACH	25	20	45
(9) 712M06.01	VERTICAL PANELS	M2	10	22	32
(10) 712M06.10	NEW SIGNS (CONSTRUCTION)	M2	28	28	56
(11) 712M06.15	NEW SIGNS (CONSTRUCTION) ("BEE" ALERT)	EACH	2	3	5
(12) 712M06.16	SIGNS (CONSTRUCTION) (REDUCED SPEED WARNING)	EACH	3	4	7
712M08.03	ARROW BOARD (TYPE C)	EACH	2	2	4
712M09.02	REMOVABLE PAVEMENT MARKING (200 mm BARR LINE)	M	6668	6668	13336
(13) 716M02.01	PLASTIC PAVEMENT MARKING (100 mm LINE)	KM	2.82	2.82	5.64
717M01	MOBILIZATION	L.S.	0.4	0.4	0.8
(24) 711M01	CONCRETE MEDIAN BARRIER	M	528	528	528
(25) 611M04.01	CATCH BASINS, TYPE 31, DEPTH 1 M	EACH	1	1	1

(24) REQUIRES 864 mm x 991 mm OPENING IN BOTTOM SLAB FOR EXISTING CATCH BASIN OR AS DIRECTED BY THE ENGINEER.

(25) A 75 mm TALL BY 1000 mm LONG SLOT SHALL BE PROVIDED THROUGH THE BASE OF THE MEDIAN BARRIER AT EACH EXISTING CATCH BASIN.

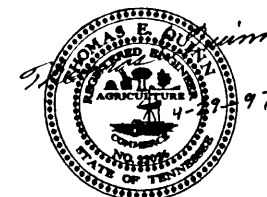
FOOTNOTES:

- INCLUDES ALL LABOR AND MATERIALS NECESSARY TO RESET EXISTING BEARINGS TO A VERTICAL POSITION. FOR DETAILS AND NOTES SEE DRAWING NO. BR-26-50.
- INCLUDES ALL LABOR AND EQUIPMENT NECESSARY FOR THE APPLICATION OF A NON-PENETRATING CONCRETE SEAL (APPROVED BY THE T.D.O.T. DIVISION OF MATERIALS AND TEST) TO THE DESIGNATED SURFACES OF PIERS (NO.1 AND NO.5, BR. NO.19-1265-1.81 ONLY) AND ABUTMENTS (NO.1 AND NO.2 BR. NO.19-1265-1.42 ONLY). SEE DETAIL ON DWG. NO. BR-26-44.
- INCLUDES ALL COST FOR PERFORMING FULL AND PARTIAL DEPTH DECK REPAIRS AS DESIGNATED BY PERSONNEL FROM THE HEADQUARTERS, BRIDGE INSPECTION AND REPAIR OFFICE. SEE DRAWING NO. BR-26-44 FOR DETAILS AND NOTES FOR DECK REPAIR.
- INCLUDES ALL COST FOR REMOVING THE EXISTING EXPANSION JOINTS AT ABUTMENTS NO.1 & NO.2 AND REPLACING WITH NEW TYPE A STRIP SEAL EXPANSION JOINTS. SEE DRAWING NO. BR-26-43 AND STANDARD DRAWING NO'S. SBRM-2-115, SBRM-2-116, AND SBRM-2-117 FOR NOTES AND DETAILS.
- INCLUDES ALL LABOR AND HIGH EARLY STRENGTH CONCRETE TO REPAIR CONCRETE SURFACES DEFECTS ON ABUTMENT BACKWALL AND COLUMNS. SEE DETAILS ON DRAWING NO. BR-26-45.
- INCLUDES THE COST OF ALL LABOR AND MATERIALS REQUIRED TO REPLACE EXISTING EXPANSION JOINTS WITH NEW MODULAR JOINTS (229 mm TOTAL MOVEMENT REQUIRED), INCLUDING ALL MEDIAN AND PARAPET SLIDER PLATES AT PIERS NO.1 AND NO.5 (BR. NO. 19-1265-1.81 ONLY). FOR DETAILS AND NOTES SEE DRAWING NO. BR-26-49, STANDARD DRAWING STDN-1-2 AND STDN-1-4.
- INCLUDES THE COST OF ALL LABOR AND MATERIALS REQUIRED TO PLACE A BRIDGE DECK SEALANT SYSTEM FOR FULL LENGTH AND WIDTH OF BRIDGE AS DETAILED ON SHEET NO. 3.
- INCLUDES ALL LABOR AND QUICK-SET MATERIAL TO REPAIR THE ABUTMENT WINGPOST. SEE DETAIL ON DRAWING NO. BR-26-45.
- INCLUDES 88 EACH OF VP-1R AND VP-1L.
- INCLUDES THE INSTALLATION AND MAINTENANCE OF A NEW SIGN PANEL, SHEETING, AND SUPPORTS. SEE SPECIAL PROVISION NO. 712F.
- SEE SPECIAL PROVISION NO. 712G.
- ITEM TO BE USED ONLY WHEN THE CONTRACTOR ESTABLISHES A REDUCED SPEED LIMIT WITHIN THE PROJECT CONSTRUCTION WORK ZONE LIMITS. ITEM INCLUDES SIGN FACE, SUPPORTS, AND TWO (2) TYPE 'B' FLASHERS PER THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TURNING ON THE TYPE 'B' FLASHERS WHEN WORKERS ARE IN THE CONSTRUCTION WORK ZONE AND TURNING THEM OFF WHEN WORKERS ARE NO LONGER IN THE CONSTRUCTION WORK ZONE.
- SHALL BE THERMOPLASTIC.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY TO INSTALL THE NEW END DIAPHRAGMS ON BRIDGE NO. 19-1265-1.42 AND STIFFENERS ON BRIDGE NO. 19-1265-1.81. SEE DETAILS ON DRAWING NO. BR-26-46 AND BR-26-50.
- INCLUDES ALL EPOXY COATED REINFORCING STEEL REQUIRED FOR THE NEW 1892 mm CONCRETE SLAB. SEE BILL OF STEEL ON DRAWING NO. BR-26-47.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY TO CONSTRUCT NEW CONCRETE DECK SLAB. SEE DETAILS ON DRAWING NO. BR-26-47.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR SURFACE PREPARATION AND PAINTING OF EXISTING STRUCTURAL STEEL. SEE SURFACE PREPARATION AND PAINTING NOTES ON DRAWING NO. BR-26-42.
- INCLUDES CONTAINMENT AND DISPOSAL OF ALL WASTE GENERATED DURING CLEANING AND PAINTING OF STRUCTURAL STEEL.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY TO INSTALL THE NEW CONCRETE MEDIAN BARRIER. SEE STANDARD DRAWING NO. STDN-1-4.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR THE REMOVAL AND DISPOSAL OF EXISTING MEDIAN CANTILEVERS. SEE DRAWING NO. BR-26-47 FOR DETAILS.
- INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR JACKING EXISTING BEAMS FOR RESETTNG OF BEARINGS. SEE DRAWING NO. BR-26-50 FOR DETAILS.
- APPROXIMATELY 1206576 kg OF STRUCTURAL STEEL TO BE PAINTED.
- QUANTITIES INCLUDE COLD PLANING ASPHALT WITHIN LIMITS OF BRIDGE AND APPROACH TRANSITIONS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ESTIMATED QUANTITIES
INTERSTATE 265 OVER MARQUETTE CEMENT YARD
BRIDGE NO. 19-1265-1.42 (EAST & WEST BOUND LANES)
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (EAST & WEST BOUND LANES)
DAVIDSON COUNTY
1996

DESIGNED BY: Tom Quinn DATE: July 1996
DRAWN BY: Ben Kimber DATE: July 1996
SUPERVISED BY: Tommy Christensen & Tom Quinn DATE: July 1996
CHECKED BY: Tom Quinn DATE: July 1996



GENERAL NOTES

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (MARCH 1, 1995 EDITION)

DESIGN SPECIFICATIONS: AASHTO 1992 EDITION WITH ADDENDA.

REINFORCING STEEL: SEE THE STANDARD SPECIFICATIONS.

SHOP DRAWINGS: SHALL BE SUBMITTED ACCORDING TO SPECIAL PROVISION NO. 105A. EXCEPT SHOP DRAWINGS SHALL BE SUBMITTED TO THE HEADQUARTERS BRIDGE INSPECTION AND REPAIR OFFICE IN LIEU OF THE DIVISION OF STRUCTURES.

HIGH EARLY STRENGTH CONCRETE: THE MIX TO MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, CLASS "A", EXCEPT THE CEMENT CONTENT SHALL BE A MINIMUM OF 324 kg. THE WATER CEMENT RATIO SHALL BE A MAXIMUM OF 0.40. NO FLY ASH REPLACEMENT WILL BE PERMITTED. AND THE MINIMUM 28 DAY COMPRESSIVE STRENGTH SHALL BE 24 MPa. TRAFFIC SHALL NOT BE PERMITTED ON ANY OF THE REPAIR AREAS UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 21 MPa MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF TEN (10) DAYS.

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, COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EXPANSION JOINTS.

CONCRETE CURING: ALL CONCRETE IN REPAIR AREAS SHALL BE CURED ACCORDING TO THE STANDARD SPECIFICATIONS.

WELDING: ANSI/AASHTO/AWS D1.5-88 BRIDGE WELDING CODE AND THE STANDARD SPECIFICATIONS.

EXPANSION JOINTS: SEE SPECIAL PROVISION 604M AND 604S

SPECIAL NOTE TO CONTRACTOR: CONTRACTOR SHALL USE EXTREME CARE AND TAKE ANY MEASURE NECESSARY TO INSURE THAT NO DEBRIS IS DROPPED INTO THE STREAM. ANY DEBRIS WHICH IS ALLOWED TO DROP ON THE BANKS BELOW THE BRIDGE SHALL NOT BE ALLOWED TO ENTER THE STREAM AND SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. COST OF REMOVING AND DISPOSING OF DEBRIS SHALL BE INCLUDED IN ITEMS BID ON.

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 SIMILAR HEAVY EQUIPMENT FOR CONCRETE REMOVAL. PNEUMATIC HAMMERS MAY BE USED TO REMOVE UNSOUND CONCRETE. FOR FULL DEPTH OF CONCRETE SLAB REMOVAL EXCEPT OVER BEAMS, THE MAXIMUM HAMMER SIZE IS 41 kg CLASS. FOR PARTIAL DEPTH OF CONCRETE SLAB REMOVAL AND ANY WORK OVER BEAMS, THE MAXIMUM HAMMER SIZE IS 27 kg CLASS. 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 THE APPROVAL OF THE ENGINEER.

BRIDGE DECK CONCRETE: SHALL BE CLASS "D" CONCRETE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

CONCRETE FINISH: SHALL BE IN ACCORDANCE WITH SUB SECTION 604.23 METHOD (c) OF THE SPECIFICATIONS.

QUICK-SET PATCHING MATERIAL: QUICK-SET PATCHING MATERIAL SHALL BE A POLYMER MODIFIED CEMENTITIOUS PATCHING MATERIAL SUCH AS SIKATOP 123, MASTER PATCH 230 VP OR APPROVED EQUAL.

STRUCTURAL STEEL: SHALL CONFORM TO AASHTO M270 GRADE 250 (ASTM A709 GRADE 250) UNLESS OTHERWISE NOTED.

BOLTS: SHALL BE HIGH TENSILE STRENGTH BOLTS (ASTM-A325) UNLESS OTHERWISE NOTED. SIZE TO BE AS NOTED ON PLANS. SEE AASHTO SPECIFICATIONS ARTICLE 11.5.6 DIVISION 11. EXISTING CONTACT SURFACE SHALL BE CLEANED TO SSPC.10 SPECIFICATIONS PRIOR TO ATTACHMENT OF NEW MEMBERS.

SPECIAL NOTE FOR BRIDGE NO. 19-1265-1.81/CUMBERLAND RIVER: DURING REMOVAL AND REPOURING OF CONCRETE DECK IN AREAS OF JOINT REPAIR AND FULL DEPTH DECK REPAIR, THE CONTRACTOR SHALL PROVIDE TEMPORARY FALSE WORK TO SUPPORT THE FREE (UNSUPPORTED) EDGES OF THE EXISTING DECK. DETAILS OF THE TEMPORARY FALSE WORK SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL AND FALSE WORK SHALL BE IN PLACE BEFORE CONCRETE REMOVAL IS BEGUN.

DESIGNED BY: Tom Quinn DATE: July 1998
DRAWN BY: Don Kimber DATE: July 1998
SUPERVISED BY: Tommy Christensen & Tom Quinn DATE: July 1998
CHECKED BY: Tom Quinn DATE: July 1998

PAINT NOTE

BRIDGE NO. 19-1265-1.81 ONLY
INTERSTATE 265/CUMBERLAND RV.

CLEANING AND PAINTING: ALL STRUCTURAL STEEL SHALL BE BLAST CLEANED AND PAINTED. BLAST CLEANING SHALL BE IN ACCORDANCE WITH SECTION 603.05(b). PAINT SHALL BE SYSTEM "A" - INORGANIC ZINC. COLOR OF THE FINISH COAT SHALL COMPLY WITH FEDERAL STANDARD NO. 595a, 24110, BRIGHT GREEN. SEE SECTIONS 603 AND 910 OF THE STANDARD SPECIFICATIONS.

CONTAINMENT AND DISPOSAL: ACCORDING TO OUR RECORDS THE EXISTING PAINT SYSTEM CONTAINS LEAD AND/OR CHROMATE. THE CONTRACTOR SHALL CONTAIN AND DISPOSE OF ALL PAINT REMOVAL WASTE IN ACCORDANCE WITH SECTION 603.13.

UTILITY NOTES

THE LOCATION OF UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR, AND BY CONTACTING THE UTILITY COMPANIES INVOLVED. SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC. AT 1-800-351-1111.

UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO CO-OPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONTACTING ALL AFFECTED UTILITIES PRIOR TO SUBMITTING HIS BID, IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF THE WORK FOR THE PROJECT. SOME UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS, WHILE SOME WORK MAY BE REQUIRED "AROUND" UTILITY FACILITIES THAT WILL REMAIN IN PLACE. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR INCONVENIENCE CAUSED BY THE UTILITY ADJUSTMENTS.

THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.

SPECIAL NOTE: THE MANUFACTURER OF THE MODULAR EXPANSION JOINTS SHALL BE WATSON BOWMAN ACME COMPANY OR THE D.S. BROWN COMPANY.

SPECIAL NOTE CONCERNING WORK OVER A NAVIGABLE WATERWAY:

THE CONTRACTOR SHALL COMPLY FULLY WITH ANY REQUIREMENTS ESTABLISHED BY THE CORPS OF ENGINEERS, U.S. COAST GUARD, AND ANY OTHER AGENCIES WHICH MAY HAVE JURISDICTION RELATIVE TO CONSTRUCTION WORK OVER A NAVIGABLE STREAM WHICH IS APPLICABLE TO THIS CONTRACT, AND WHICH MAY NOT BE COVERED BY EXISTING PERMITS. THE CONTRACTOR SHALL NOTIFY THE CORPS OF ENGINEERS, INFORMING THEM OF WORK TO BE PERFORMED, BEFORE ANY WORK OVER THE WATERWAY IS BEGUN. THE CONTRACTOR SHALL SUBMIT A DESCRIPTION OF WORK AND SKETCHES OF ANY FALSEWORK, SCAFFOLDING, DEBRIS CONTAINMENT SYSTEMS, ETC... WHICH MAY ENCROACH UPON THE VERTICAL AND/OR HORIZONTAL CLEARANCES FOR WATERWAY TRAFFIC TO THE U.S. COAST GUARD FOR APPROVAL BEFORE ANY WORK IS BEGUN.

ROGER K. WIEBUSCH
U.S. COAST GUARD
BRIDGE ADMINISTRATOR
1222 SPRUCE STREET
ST. LOUIS, MO. 63103-2832

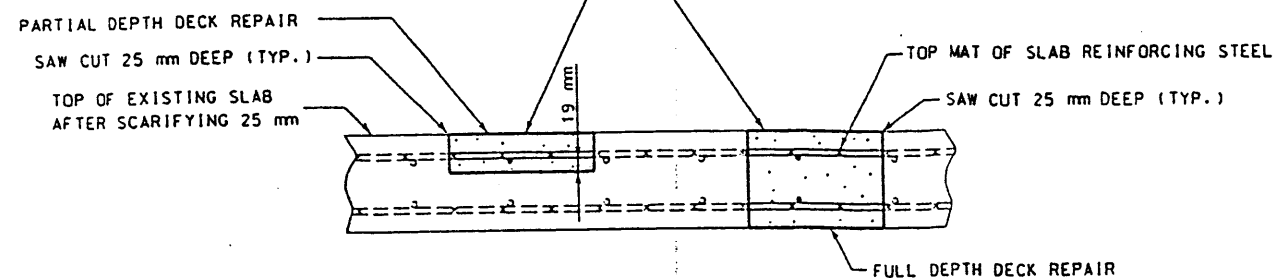
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GENERAL NOTES

INTERSTATE 265 OVER MARQUETTE CEMENT YARD
BRIDGE NO. 19-1265-1.42 (EAST & WEST BOUND LANES)
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (EAST & WEST BOUND LANES)
DAVIDSON COUNTY
1996



CONCRETE FOR DECK REPAIR SHALL BE HIGH EARLY STRENGTH CONCRETE, $f'c = 24$ MPa @ 28 DAY STRENGTH. TRAFFIC SHALL NOT BE PERMITTED ON ANY OF THE REPAIR AREAS UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 21 MPa MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF TEN (10) DAYS.



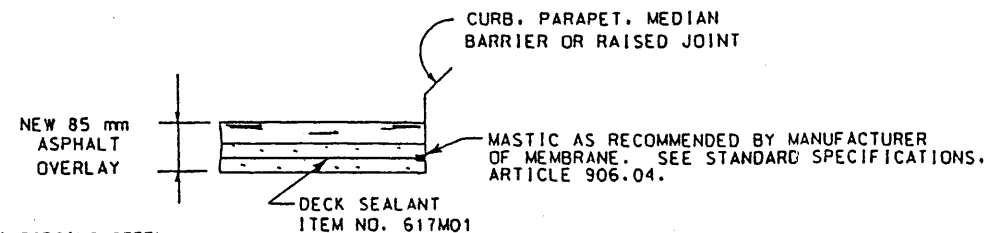
DETAIL-SHOWING FULL AND PARTIAL DEPTH DECK REPAIR

NOTE: REMOVE CONCRETE IN ALL DELAMINATED AREAS TO A DEPTH OF 19 mm 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 HEADQUARTERS, BRIDGE INSPECTION AND REPAIR OFFICE. DECK REPAIR WILL BE PAID FOR UNDER ITEM NO. 604M10.50, BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB), AND ITEM NO. 604M10.30, 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. 604M10.30.

NOTE: ITEM NO. 604M10.30 AND 604M10.50 SHALL BE BID WITH THE CONTINGENCY THAT THESE ITEMS MAY BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.

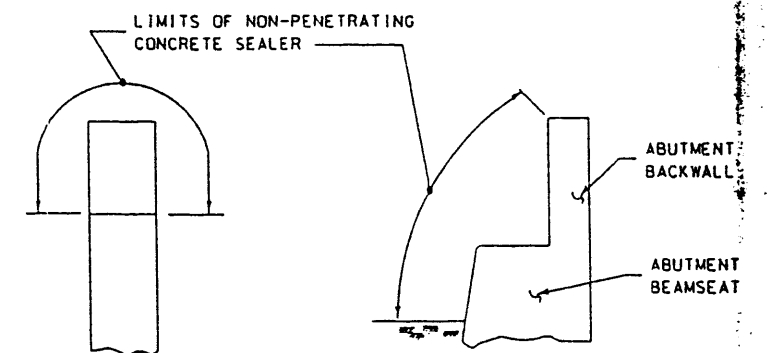
NOTE: THE CONTRACTOR SHALL HAVE THE OPTION OF SUBSTITUTING CLASS 'D' CONCRETE FOR HIGH EARLY STRENGTH CONCRETE IN DECK REPAIR AREAS. CLASS 'D' CONCRETE SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

NOTE: 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 27 kg CLASS SHALL NOT BE USED. ALSO TRAFFIC CONTROL SHALL BE SET UP DURING PARTIAL DEPTH REPAIRS OVER TRAFFIC. (2) FULL DEPTH REPAIRS: PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 41 kg CLASS SHALL NOT BE USED. ALSO ALL DECK REPAIR OVER BEAMS WILL BE RESTRICTED TO 27 kg PNEUMATIC HAMMERS. (3) CHIPPING HAMMERS OF THE 7 kg CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL.



	PROJECT NO.	YEAR	SHEET NO.
	19013-4124-04	1996	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-15-96	TEC	REV. PROJ. NO.

NON-PENETRATING SEALER SHALL BE APPLIED AFTER ALL REPAIR WORK TO JOINT AND CAP HAS BEEN COMPLETED. APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



FOR PIERS NO.1 AND NO.5 ONLY
BRIDGE NO. 19-1265-1.81

FOR ABUTMENTS NO.1 AND NO.2 ONLY
BRIDGE NO. 19-1265-1.42

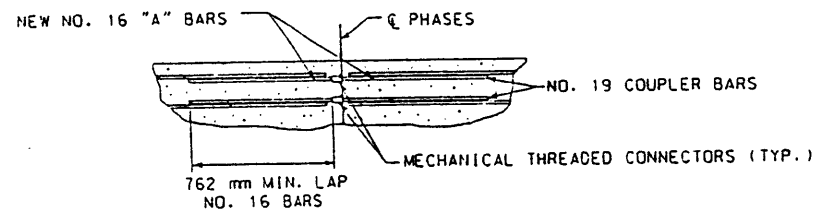
CONCRETE SEALANT DETAIL

BEFORE APPLYING ANY CONCRETE SEALER, ALL SURFACES TO BE SEALED SHALL BE CLEANED OF ALL DEBRIS AND FOREIGN MATERIALS.

THE SURFACE CONDITIONS OF THE CONCRETE TO BE SEALED SHALL MEET THE REQUIREMENTS OF THE SEALANT MANUFACTURER. THE THICKNESS OF THE CONCRETE SEAL SHALL BE AS RECOMMENDED BY THE SEALANT MANUFACTURER. ALL WORK MUST MEET WITH THE FULL SATISFACTION OF THE ENGINEER.

THE ACCEPTABLE BRANDS OF CONCRETE SEALER SHALL BE APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TEST. THE COLOR OF THE SEALER SHALL BE CLEAR OR SIMILAR TO THE COLOR OF THE EXISTING CONCRETE SURFACE TO BE SEALED.

THE COST OF THE CONCRETE SEALER, COMPLETE AND IN-PLACE, SHALL BE PAID FOR UNDER ITEM NO. 604M10.17, NON-PENETRATING CONCRETE SEALANT, M2.



COUPLER BAR DETAIL

SHOWING TRANSVERSE REINFORCING STEEL SPLICING WITH MECHANICAL THREADED CONNECTORS. COUPLER BAR DETAIL GOOD FOR BOTH STRIP SEAL AND MODULAR JOINTS.

NOTE: COST OF MECHANICAL THREADED CONNECTORS WITH COUPLER BARS TO BE INCLUDED UNDER EXPANSION JOINT ITEM NO. INSTALLATION MUST MEET WITH THE FULL APPROVAL OF THE ENGINEER.



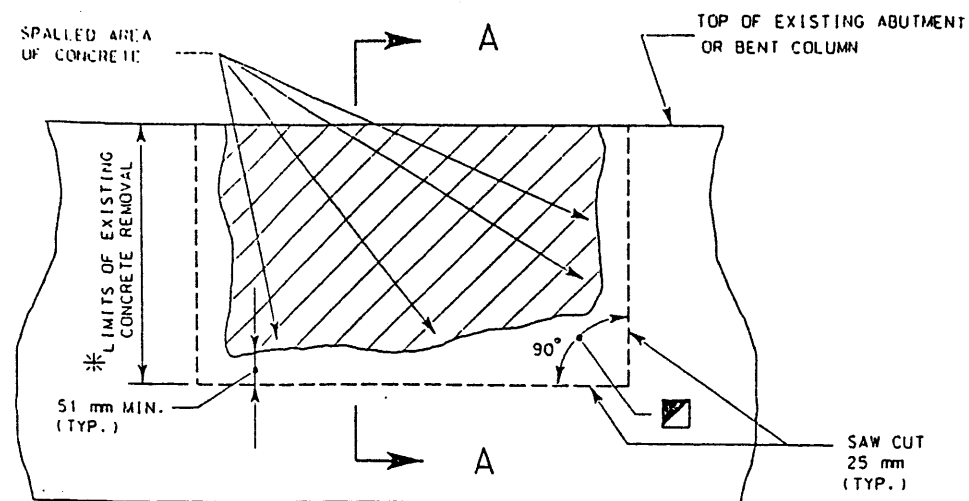
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGE REPAIR DETAILS
INTERSTATE 265 OVER MARQUETTE CEMENT YARD
BRIDGE NO. 19-1265-1.42 (WESTBOUND LANES)
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (WESTBOUND LANES)
DAVIDSON COUNTY
1996



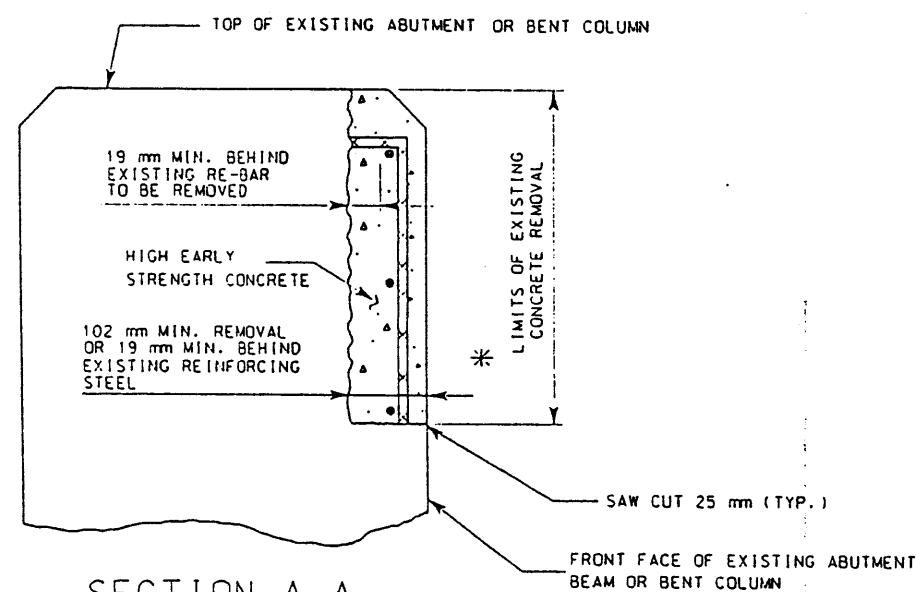
DESIGNED BY: Tom Quinn DATE: July '96
DRAWN BY: Greg Hamilton & Don Kibler DATE: July '96
SUPERVISED BY: Tom Quinn & Tommy Christensen DATE: July '96
CHECKED BY: Tom Quinn DATE: July '96

BR-26-44



ELEVATION

(EXISTING ABUTMENT OR BENT COLUMN AREA)



SECTION A-A

DETAIL SHOWING AREAS OF EXISTING SPALLED CONCRETE SURFACES TO BE REMOVED AND REPAIRED

(FOR BRIDGES NO. 19-1265-1.42 AND 19-1265-1.81)

☑ DENOTES: SAW CUT EXISTING CONCRETE SURFACES SO AS TO OBTAIN SQUARE CORNERS.

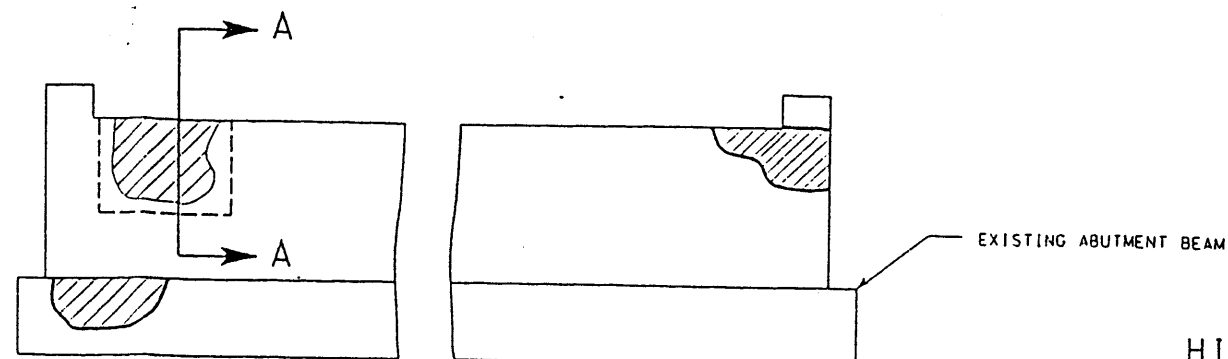
* DENOTES: LIMITS AND LOCATION OF REPAIR TO BE DESIGNATED BY THE ENGINEER.

NOTES:

THE COST OF REMOVING PORTIONS OF THE EXISTING CONCRETE WITHIN THE LIMITS SHOWN, SAW CUTTING, COMPLETELY CLEANING EXISTING REINFORCING STEEL, MATERIAL, LABOR AND ALL MISCELLANEOUS MATERIAL NECESSARY TO COMPLETE THE REPAIRS AS SHOWN SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO 604M10.53, CONCRETE REPAIRS, M2.

PROVISIONS SHALL BE MADE DURING CONCRETE REMOVAL TO PROTECT THE EXISTING REINFORCING STEEL FROM DAMAGE. THE EXISTING REINFORCING STEEL SHALL BE COMPLETELY CLEANED AND INCORPORATED INTO THE NEW CONSTRUCTION.

DESIGNED BY: Tom Aulin DATE: September '96
DRAWN BY: Bob Stuber DATE: September '96
SUPERVISED BY: Tom Aulin & Jeremy Christensen DATE: September '96
CHECKED BY: Tom Aulin DATE: September '96



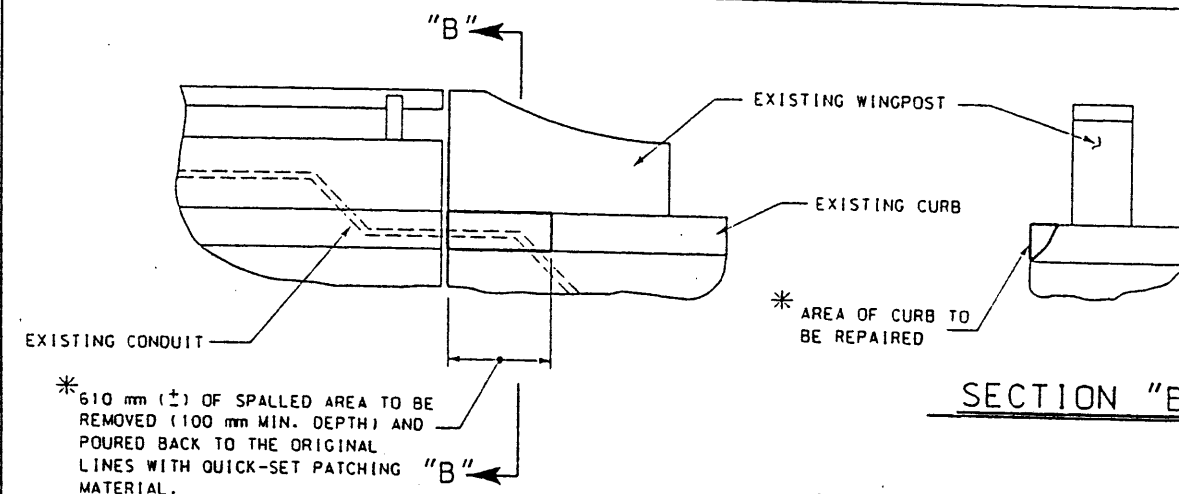
PARTIAL ABUTMENT ELEVATION

(SKETCH SHOWING AREAS OF CONCRETE REPAIRS)

ESTIMATED QUANTITIES FOR HIGH EARLY STRENGTH CONCRETE

	19-1265-1.42/ MARQUETTE CEMENT YARD	19-1265-1.81/ CUMBERLAND RIVER
ABUTMENT NO. 1	6	3
PIER NO. 1	2	0
PIER NO. 5	8	0
ABUTMENT NO. 2	5	2
TOTAL	21	5

NOTE: ITEM NO. 604M10.53, CONCRETE REPAIRS, M2 SHALL BE BID WITH THE CONTINGENCY THAT IT MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER.



CURB AND WINGPOST ELEVATION

(FOR BRIDGE NO. 19-1265-1.81/CUMBERLAND RIVER)

NOTES:

PROVISIONS SHALL BE MADE DURING CONCRETE REMOVAL TO PROTECT THE EXISTING REINFORCING STEEL FROM DAMAGE. THE EXISTING REINFORCING STEEL SHALL BE COMPLETELY CLEANED AND INCORPORATED INTO THE NEW CONSTRUCTION.

THE COST OF REMOVING PORTIONS OF THE EXISTING CONCRETE WITHIN THE LIMITS SHOWN, SAW CUTTING, COMPLETELY CLEANING EXISTING REINFORCING STEEL, QUICK-SET PATCHING MATERIAL, LABOR AND ALL MISCELLANEOUS MATERIAL NECESSARY TO COMPLETE THE CURB REPAIRS AS SHOWN SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 604M10.54, CONCRETE REPAIRS, M2.

QUICK-SET PATCHING MATERIAL SHALL BE A POLYMER MODIFIED, CEMENTITIOUS PATCHING MATERIAL SUCH AS SIKATOP 123, MASTERPATCH 230 VP OR APPROVED EQUAL. CONCRETE SURFACE PREPARATION AND PATCHING MATERIAL APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

SAW CUT EXISTING CONCRETE SURFACES SO AS TO OBTAIN SQUARED CORNERS.

PROVISIONS SHALL BE MADE DURING CONCRETE REMOVAL TO PROTECT THE EXISTING CONDUIT IN THE CURB AREA. IF DAMAGED IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT NO ADDITIONAL COST TO THE STATE. SEE REFERENCE DRAWING K-59-39.

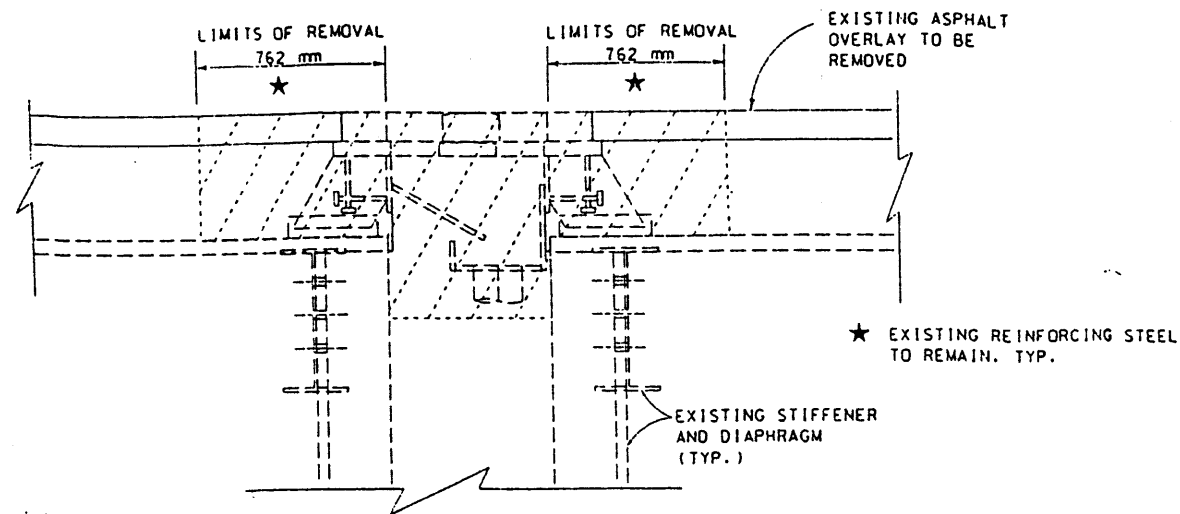
* DENOTES:

LIMITS AND LOCATION OF REPAIR TO BE DESIGNATED BY THE ENGINEER.



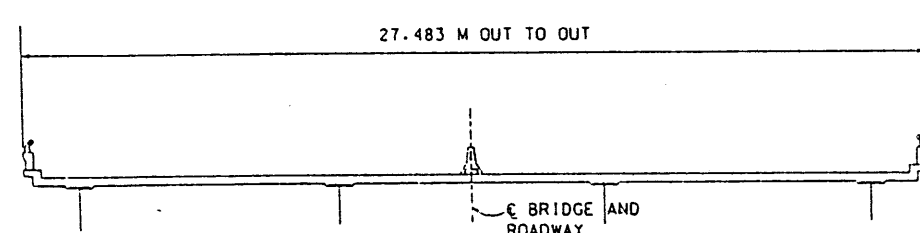
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGE REPAIR DETAILS
INTERSTATE 265 OVER MARQUETTE CEMENT YARD
BRIDGE NO. 19-1265-1.42 (EAST & WEST BOUND LANES)
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (EAST & WEST BOUND LANES)
DAVIDSON COUNTY
1996



SECTION AT PIERS

SHOWING AREAS OF EXISTING EXPANSION JOINT. BRIDGE SLAB TO BE REMOVED AND REPLACED WITH NEW MODULAR EXPANSION JOINT. LOCATION OF REPAIRS AT PIERS NO. 1 AND NO. 5 ONLY.



TYPICAL CROSS SECTION

SHOWING LIMITS OF ITEM NO. 604M10.60

NOTE: FOR ADDITIONAL NOTES AND DETAILS SEE STANDARD DRAWING NO'S SBRM-2-115 AND SBRM-2-116.



NOTE: THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR SUPPORTING THE PORTIONS OF THE SLAB WHICH ARE NOT TO BE REMOVED WHEN MAKING REPAIRS WHICH REQUIRE THE REMOVAL OF THE END SUPPORT OF A SLAB SPAN. SEE SPECIAL NOTE ON DRAWING NO. BR-26-42 (SHEET 3).



NOTE: CONTRACTOR SHALL PLACE THE NEW MODULAR JOINT WITH TEMPORARY SELF ALIGNING GUIDE MEMBERS. SEE SPECIAL PROVISION NO. 604M. THE PROFILE OF THE CONCRETE POURS AND NEW JOINT SYSTEM SHALL CONFORM TO ROADWAY CROSS SLOPE, SKEW, AND GRADE.



NOTE: THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS IN ORDER TO FABRICATE THE EXPANSION DEVICES. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AT THE HEADQUARTERS BRIDGE INSPECTION AND REPAIR OFFICE FOR APPROVAL BEFORE ANY FABRICATION BEGINS.



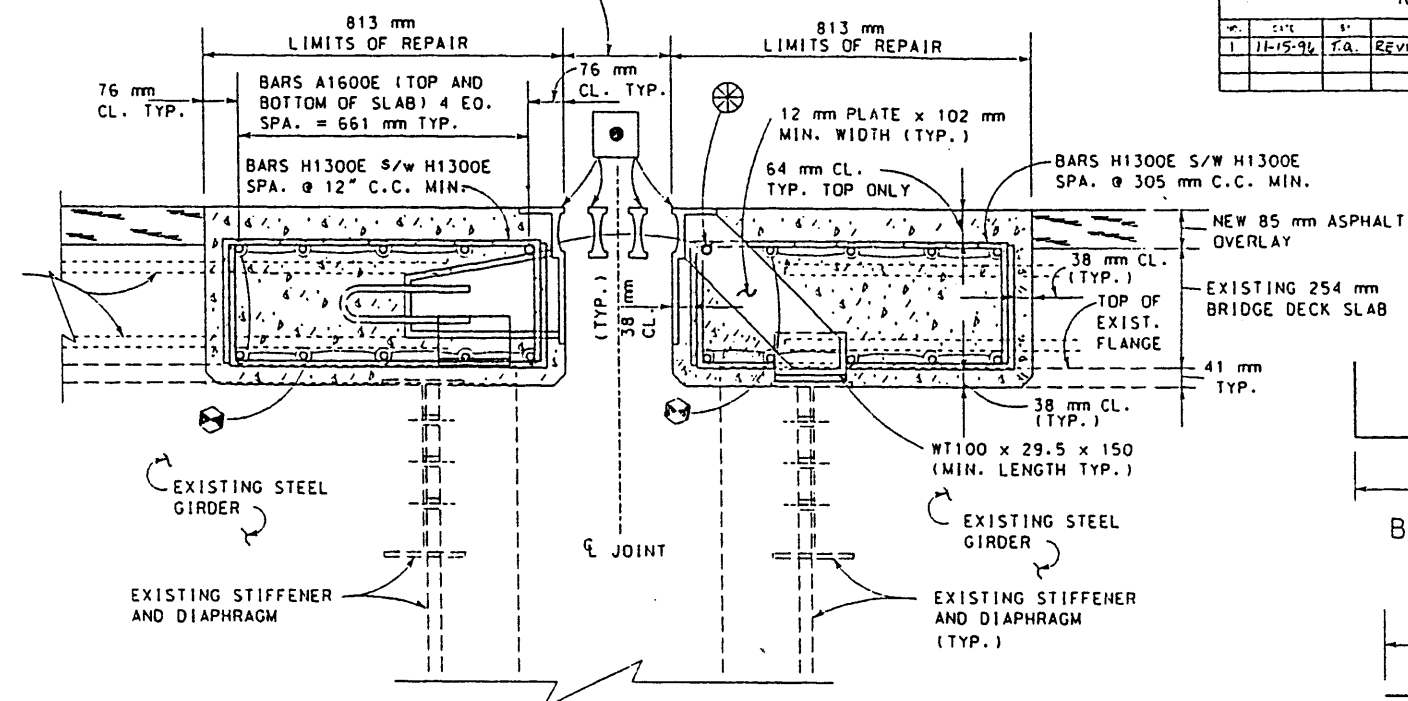
NOTE: THE EXPANSION JOINT LEVELING ASSEMBLIES SHALL BE LOCATED AT THE CENTER LINE OF EACH EXISTING GIRDER, EXCEPT WHEN DISTANCE BETWEEN ASSEMBLIES EXCEEDS 3050 mm. THEN ADDITIONAL ASSEMBLIES SHALL BE USED SUCH THAT THE DISTANCE BETWEEN ASSEMBLIES SHALL NOT EXCEED 3050 mm. BOLT ASSEMBLIES SHALL BE LOCATED IN THE FIELD BASED UPON DIMENSIONS TAKEN FROM THE SHOP DRAWINGS. EXPANSION DEVICES SHALL BE ALIGNED AND BROUGHT TO PROPER ELEVATION BEFORE LEVELING BOLTS ARE TIGHTENED AND NEW CONCRETE POURED.



NOTE: WHEN REMOVING THE DESIGNATED CONCRETE, EXTREME CARE SHALL BE TAKEN SO AS NOT TO DAMAGE THE EXISTING LONGITUDINAL REINFORCING STEEL. EXISTING LONGITUDINAL STEEL SHALL BE LEFT PROJECTING AND BE INCORPORATED IN WITH THE NEW REINFORCING STEEL. THE EXISTING EXPOSED LONGITUDINAL REINFORCING STEEL SHALL BE CLEANED BEFORE PLACEMENT OF NEW CONCRETE.

DESIGNED BY Tom Quinn DATE July 1996
 DRAWN BY Dan Kimber DATE July 1996
 SUPERVISOR BY Thomas Davidson & Son, Inc. DATE July 1996
 CHECKED BY Tom Quinn DATE July 1996

MID-TEMPERATURE SETTING AT 15.6° C (ACTUAL SETTING AS PER TEMPERATURE CHART ON EXPANSION JOINT SHOP DRAWINGS) 229 mm TOTAL MOVEMENT REQUIRED. (ITEM NO. 604M10.60)



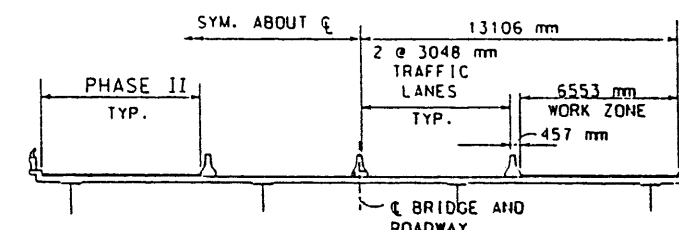
SECTION AT PIERS

SHOWING NEW MODULAR TYPE EXPANSION JOINT REPLACEMENT DETAILS LOCATED AT PIERS NO. 1 AND NO. 5 (TOTAL MOVEMENT REQUIRED 229 mm PER LOCATION).

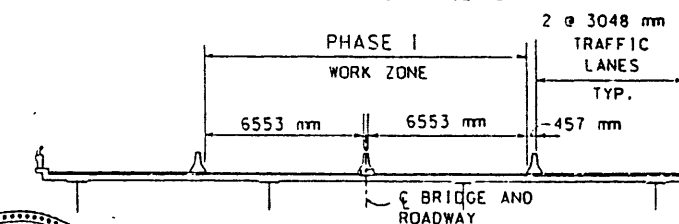
BARS H1300E

A BARS

BAR BENDS



TYPICAL CROSS SECTION SHOWING LIMITS OF PHASE II



TYPICAL CROSS SECTION SHOWING LIMITS OF PHASE I

PHASE DETAILS



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

EXPANSION JOINT REPLACEMENT DETAILS
 INTERSTATE 265 OVER CUMBERLAND RIVER
 BRIDGE NO. 19-1265-1.81 (WESTBOUND LANES)
 DAVIDSON COUNTY
 1996



NOTES: NO. A16_E BARS TO BE CONTINUOUS. FIELD DRILL HOLES (6 mm LARGER THAN THE BARS) THROUGH STEEL PLATES. IF THE CONTRACTOR ELECTS TO SPLICE THE A16_E BARS, TO FACILITATE INSTALLATION, A MINIMUM SPLICE OF 610 mm SHALL BE PROVIDED.



NOTES: NEW NO. A16_E BARS IN LENGTHS AS REQUIRED TO MAINTAIN TRAFFIC (SPACED AS SHOWN).



NOTE: MODULAR JOINT ANCHORAGE AND SUPPORT SYSTEM DETAILS ARE INCOMPLETE AS SHOWN THIS SHEET. DUE TO DIFFERENT MANUFACTURER'S MODULAR EXPANSION JOINT SYSTEMS, THE ANCHORAGE AND SUPPORT SYSTEM DETAILS SHOWN THIS SHEET, MAY NEED TO BE ALTERED. ANCHORAGE AND SUPPORT SYSTEM SHALL BE AS PER SPECIAL PROVISION NO. 604M.

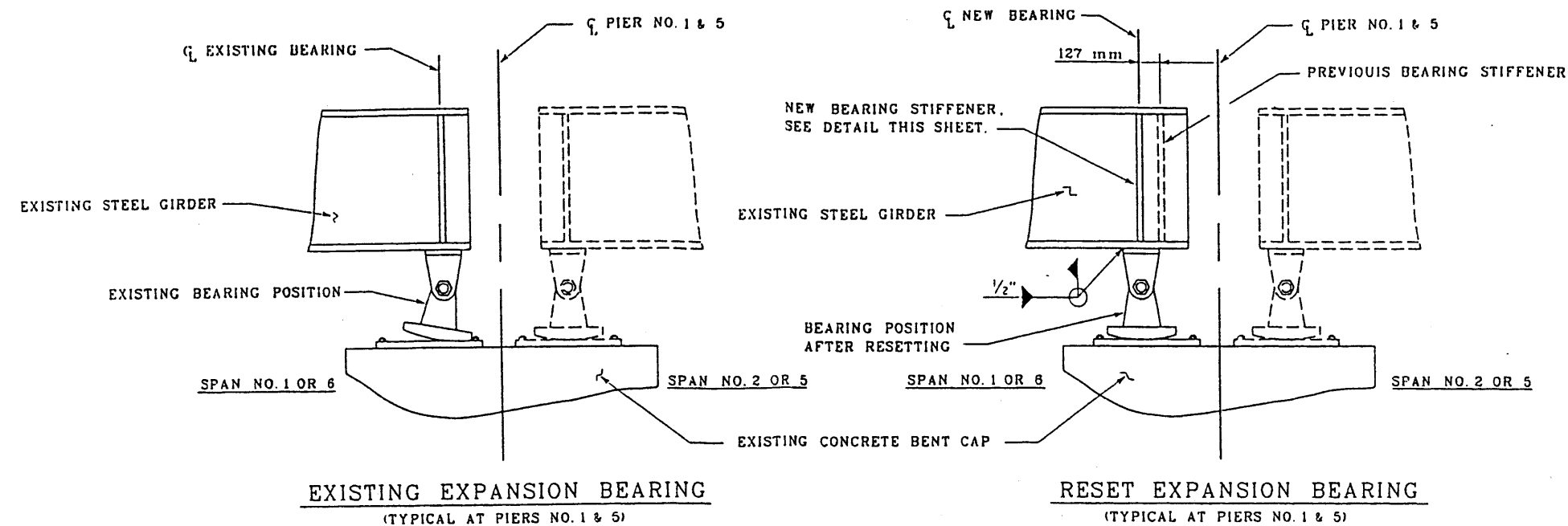
THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING MODULAR JOINT ANCHORAGE AND SUPPORT SYSTEM DETAILS INCLUDING ALL NEW REINFORCING STEEL DETAILS AND SPACING FOR APPROVAL, BEFORE ANY FABRICATION IS BEGUN.

NOTE: ALL CONCRETE POURS SHALL BE WELL CONSOLIDATED BEHIND AND AROUND THE EXPANSION JOINT STEEL RETAINERS.

NOTE: COST OF ANY MODIFICATIONS NECESSARY TO PROPERLY INSTALL THE EXPANSION JOINTS SHALL BE INCLUDED IN ITEMS BID ON.

NOTE: EXTEND THE MODULAR EXPANSION JOINT 51 mm OFF THE EDGE OF THE CONCRETE SLAB AT THE PARAPET INTERSECTIONS.

NOTE: COST OF REMOVING THE EXISTING EXPANSION JOINTS AND PLACEMENT OF NEW MODULAR EXPANSION JOINTS, INCLUDING ALL CONCRETE REMOVAL, NEW CONCRETE, REMOVAL OF SLIDER PLATE ASSEMBLIES FOR PARAPET AND MEDIAN BARRIERS, NEW SLIDER PLATE ASSEMBLIES, REINFORCEMENT BARS, LABOR, ANY AND ALL MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE REPAIRS AS SHOWN THESE PLANS TO THE EXPANSION JOINTS AT PIERS NO. 1 AND NO. 5 SHALL BE INCLUDED IN ITEM NO. 604M10.60, EXPANSION JOINT REPAIRS (229 mm MODULAR TYPE), M



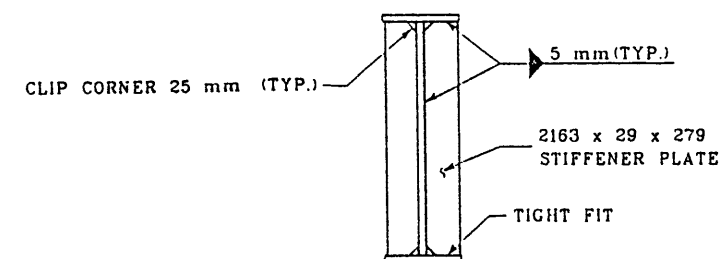
RESET BEARING DETAILS

NOTE: BEARING DEVICES ARE TO BE RESET TO A VERTICAL POSITION AT 60 DEGREES FAHRENHEIT. AT TEMPERATURES OTHER THAN 60 DEGREES FAHRENHEIT, BEARING SHALL BE SET AS INSTRUCTED BY THE ENGINEER. TEMPERATURE SHALL BE THE BEAM TEMPERATURE. ALL WORK SHALL MEET WITH THE FULL SATISFACTION OF THE ENGINEER.

NOTE: COST OF RESETTNG EXPANSION BEARINGS, INCLUDING ALL JACKING, REMOVING THE EXISTING SOLE PLATE AND REWELDING TO THE BOTTOM FLANGE OF THE GIRDER, LABOR, SURFACE PREPARATION AND PAINTING, AND ANY MISCELLANEOUS MATERIALS NEEDED TO COMPLETE THE REPAIRS TO BE PAID FOR UNDER ITEM NO. 602-10.01. STRUCTURAL STEEL REPAIRS, L. S.

SPECIAL NOTE: INSTALLATION OF NEW BEARING STIFFENERS AND RESETTNG OF BEARINGS SHALL BE THE FIRST ORDER OF WORK PERFORMED BEFORE OTHER REPAIRS ARE BEGUN. NEW BEARING STIFFENERS SHALL BE IN PLACE BEFORE JACKING OPERATIONS ARE BEGUN.

JACKING: DURING JACKING OF BEAMS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE BRIDGE. DETAILS OF THE PROPOSED JACKING SYSTEM SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE ANY JACKING IS BEGUN.



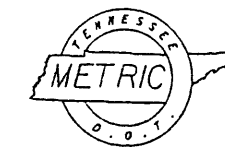
BEARING STIFFENER DETAILS

PROJECT NO.		YEAR	SHEET NO.
19013-1124-04		1996	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-15-96	T.O.	REVISED PROJECT NO.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BEARING REPAIR DETAILS
INTERSTATE 265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-1265-1.81 (EAST & WEST BOUND LANES)
DAVIDSON COUNTY
1996

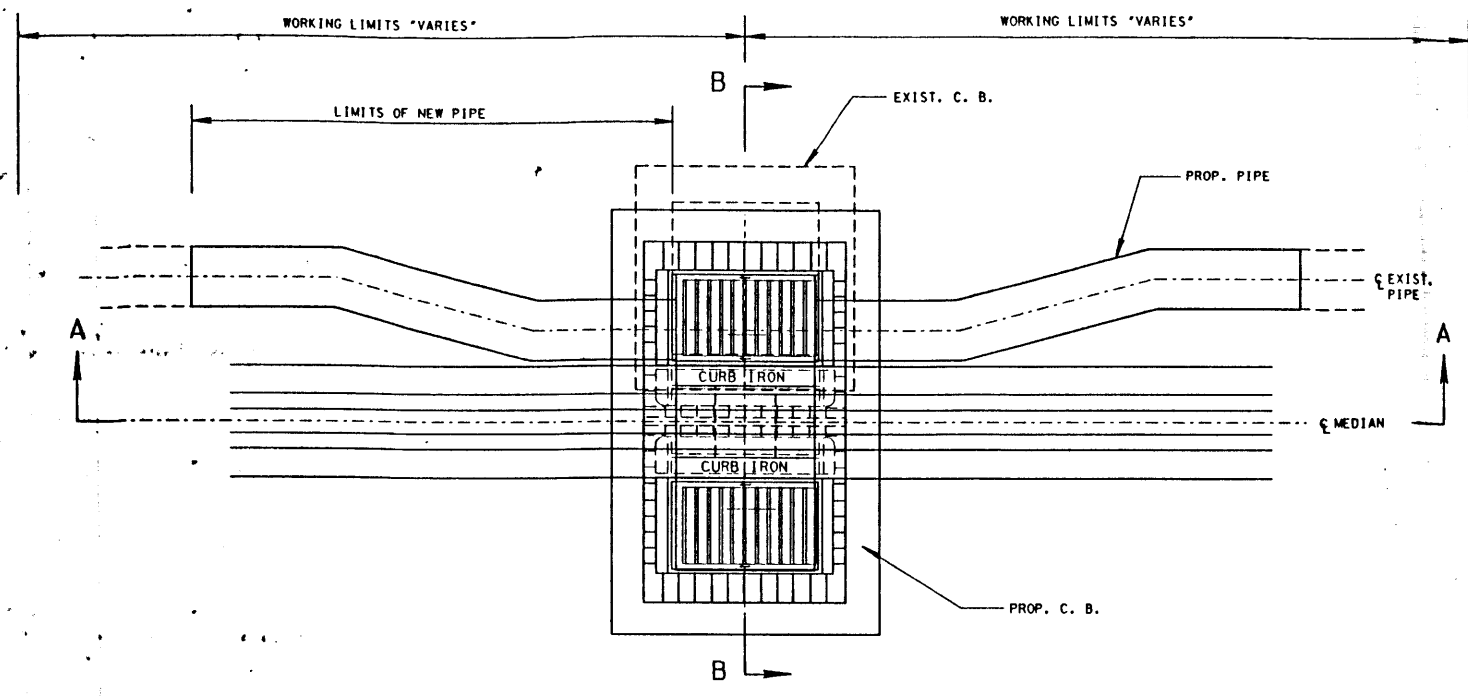


DESIGNED BY Tom Quinn DATE October, 1996
DRAWN BY Cory Christian DATE October, 1996
SUPERVISED BY Tom Quinn DATE October, 1996
CHECKED BY Tom Quinn DATE October, 1996

BR-26-50

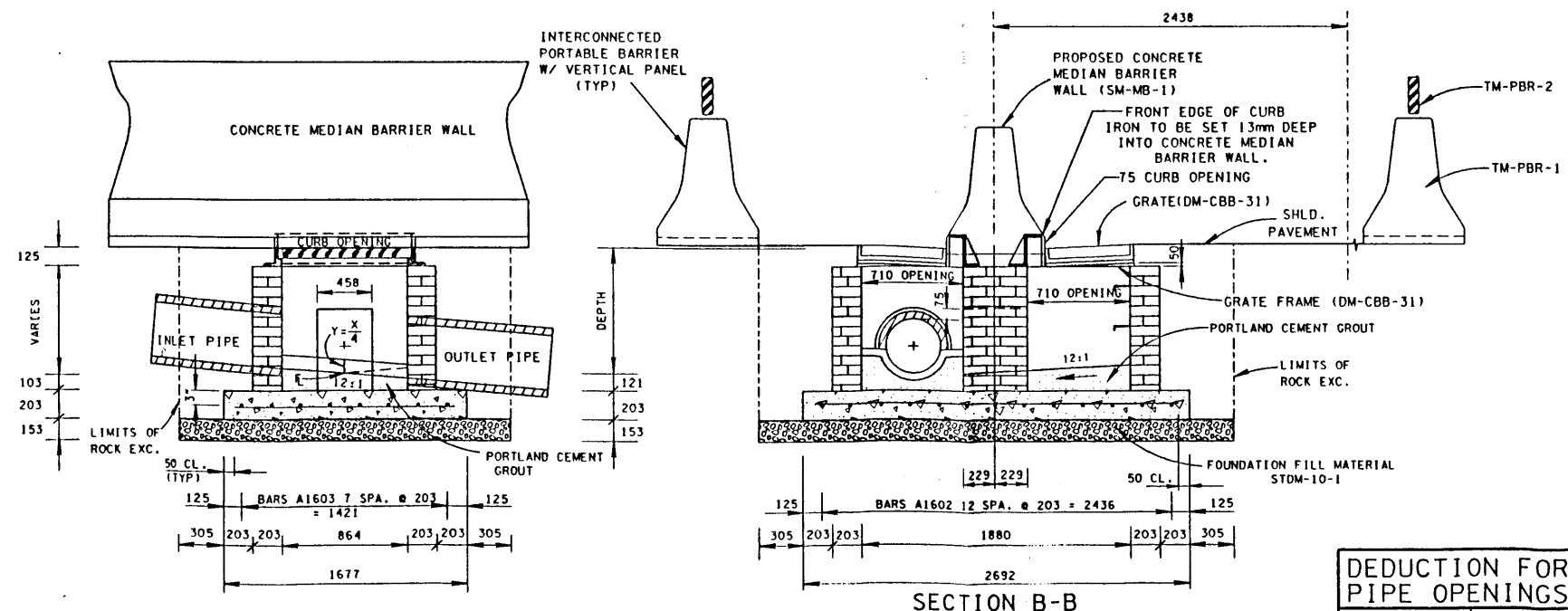
TYPE	YEAR	PROJECT NO.	SHEET NO.
RR REP	1997	19013-4124-04	28

4-28-97 TEQ Added Sheet
 to Plans



PLAN VIEW

- GENERAL NOTES**
- (A) DRAWING TO BE USED FOR MODIFIED BRICK CATCH BASINS THAT ARE 2.5 METERS AND LESS IN DEPTH.
 - (B) BRICK CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS.
 CONCRETE: $f'_c = 28$ MPa AT 28 DAYS
 REINFORCING STEEL: ASTM A615M, $F_y = 415$ MPa
 ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.
 - (C) INVERT ELEVATIONS ARE TO BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.
 - (D) SEE STANDARD DRAWING DM-CBB-31 FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.
 - (E) SEE STANDARD DRAWING DM-MH-3 AND DM-MH-4 FOR DETAILS REGARDING STEPS.
 - (F) DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO EXISTING FLOW LINE ELEVATION BASED ON INLET AND OUTLET PIPES BEING THE SAME DIAMETER. IF OUTLET PIPE IS GREATER, ADJUSTMENT IN DEPTHS MUST BE MADE TO ACCOMMODATE THIS SITUATION.
 - (G) PAYMENT FOR BRICK CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611M04.01 THROUGH 611M04.29 CATCH BASIN, TYPE 31, DEPTH 1m PER EACH. INCLUDES: ROAD AND DRAIN EXCAVATION, ROCK EXCAVATION, FOUNDATION FILL MATERIAL, BACKFILL MATERIAL, REMOVING EXIST. CATCH BASIN AND EXIST. PIPE, NEW PIPE, GRATE, FRAME AND CURB IRON, STEPS, PORTLAND CEMENT GROUT, CONCRETE AND REINFORCING STEEL IN SLAB.



SECTION A-A

SECTION B-B

REINFORCING STEEL LEGEND

1575	A1602
2590	A1603

ESTIMATED QUANTITIES

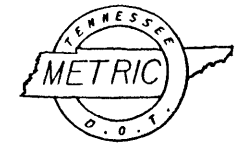
DEPTH = HEIGHT FROM TOP OF GRATING TO FLOW LINE ELEV.

DEPTH	NUMBER OF BRICK	CONCRETE CLASS 'A' m3	REINF. STEEL kg	FOUNDATION FILL MAT. m3
610mm	608	0.918	64	1.151
ADD PER 305mm	304	----	----	----

NO DEDUCTION MADE FOR PIPE OPENING

DEDUCTION FOR PIPE OPENINGS

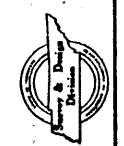
NUMBER OF BRICK	35
-----------------	----



ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF PLANNING & DEVELOPMENT

PROPOSED NO. 31
 BRICK CATCH BASIN
 N.T.S.



①

①

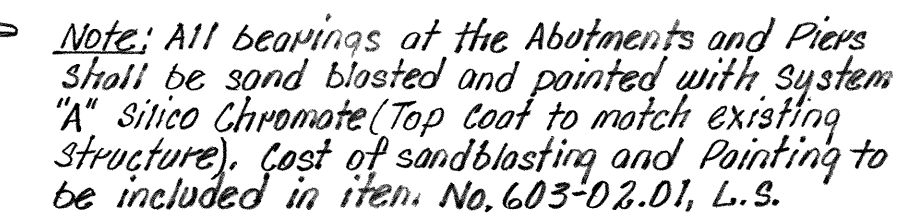
SPECIFICATIONS: Standard Road and Bridge Specifications of the Tennessee Department of Transportation. (March 1, 1995 edition).

STRUCTURAL STEEL: Shall conform to AASHTO M270 GRADE 36 (ASTM A709 GRADE 36) unless otherwise noted.

WELDING: ANSI/AASHTO/AWS D1.5-88 Bridge Welding Code and the Standard Specifications.

ESTIMATE QUANTITIES and
GENERAL NOTES
INTERSTATE 265 over CUMBERLAND
RIVER
BRIDGE No. 19-1265-1.81
DAVIDSON COUNTY
1995

BR-20-25



6" x 4" x 1/2" L

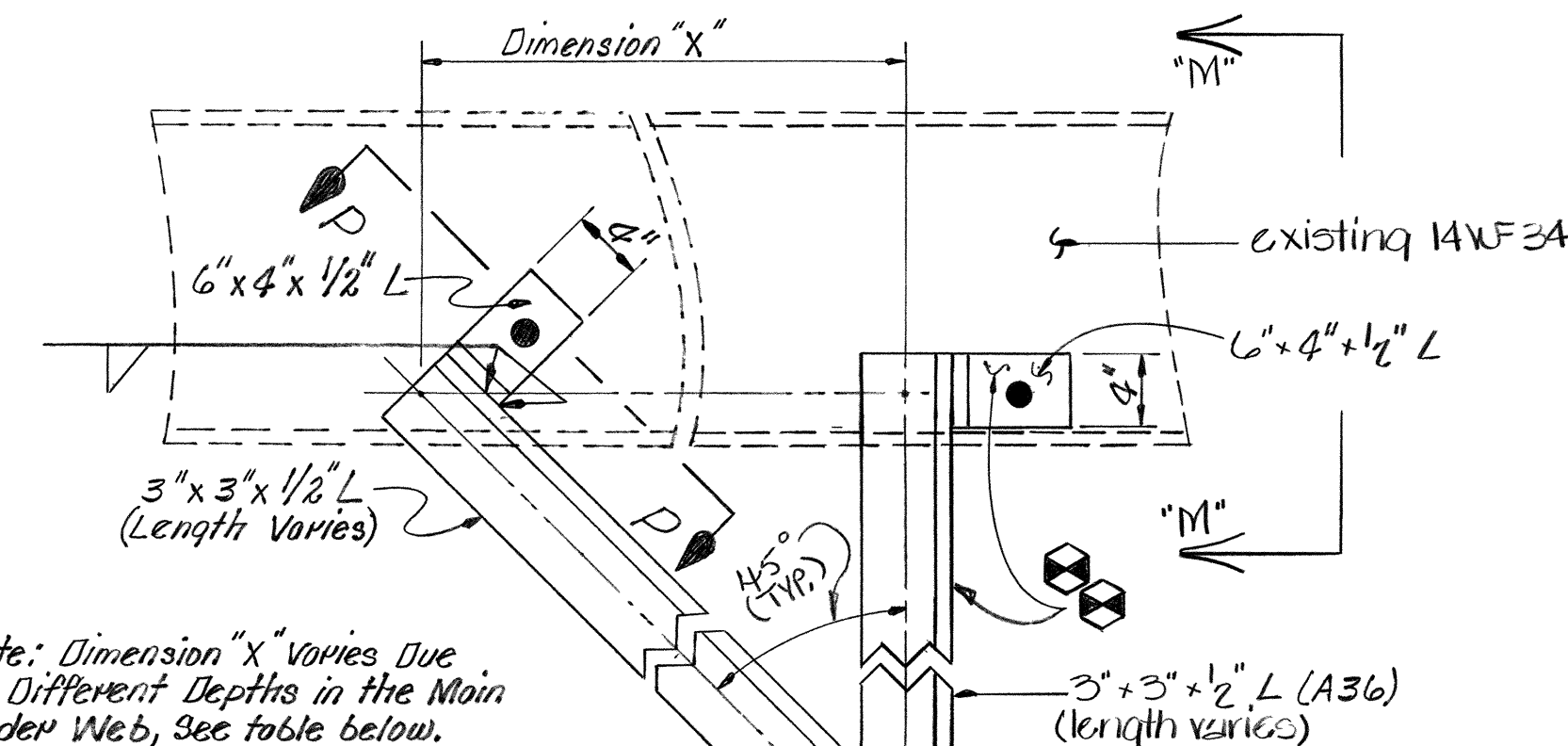
existing 14WF34

3/4" bolt with hex nuts and washers (typical)

3" x 3" x 1/2" L

HALF SECTION IN HAUNCH REGION

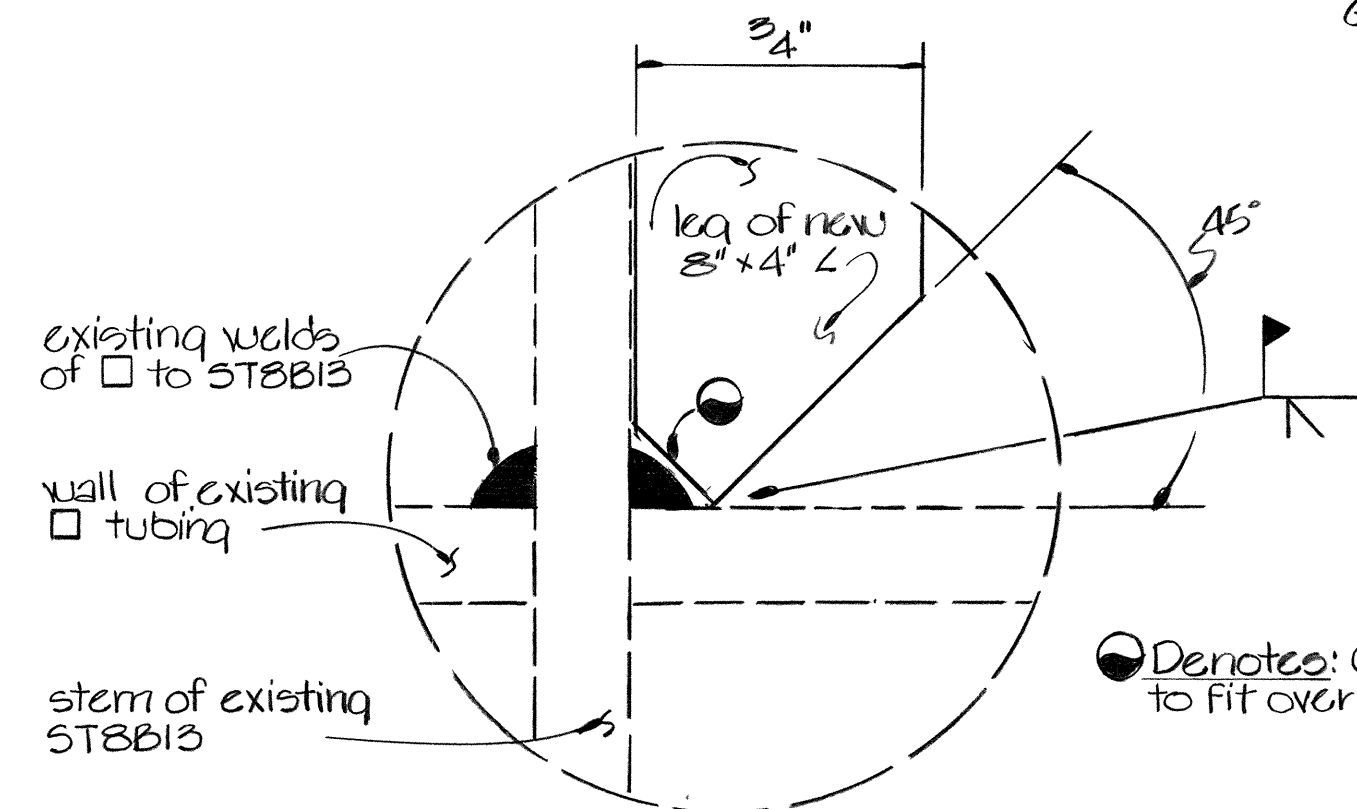
SECTION "M-M"



Note: Dimension "X" Varies Due to Different Depths in the Main Girder Web, See table below.

  **Note:** Connections for handrail support brackets shall be at each cross frame location, see framing plan on diag. no. K-59-37C, for locations of cross frames. Maximum spacing on connections to be 25'-0".

DETAIL "K"
(showing bottom repaired area
of cross frame connection)



 Denotes: Grind corner 45°
to fit over existing weld.

Dimension "X"	Variation in Main Girder Web Depth
2'-0"	5'-6" to 7'-0"
3'-0"	7'-0" to 9'-0"
4'-0"	9'-0" to 15'-6"

DETAIL "X"

HANDRAIL NOTES:

- 1) Two (2) hanger brackets will be required at piers no. 1 & 5 due to the existing expansion openings in the bridge. The pipe handrail at these locations shall have a open gap not to exceed 12".
- 2) The pipe handrail shall clear the abutment backwalls by 6"±, and shall be continuous along the bridge with the exception at piers no. 1 & 5.
- 3) The cost of all angles, H.S. bolts, field drilling, painting, pipe handrail, labor, and all miscellaneous materials necessary for the complete installation of the pipe handrail system to be included in cost of Structural Steel Repairs, item no. 60C-10.01, L.S.

1 DETAIL "Y"

(showing new 2" ϕ pipe handrail details)

Note: The new pipe handrail shall be placed each side of the interior girders and the inside face of the exterior girders, a total number of six (6) lines of handrails required.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

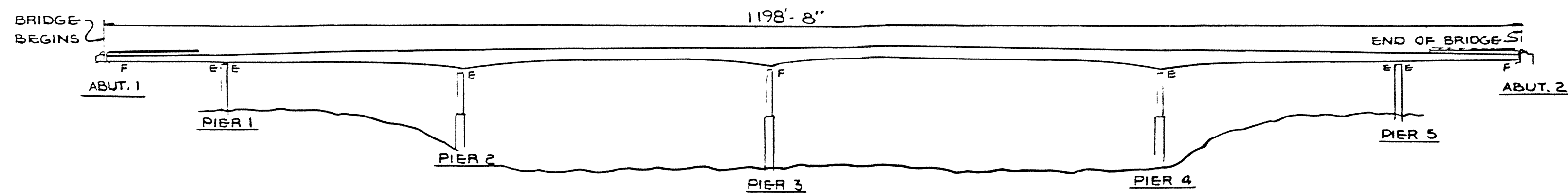
Bridge Repair Details
Interstate 265 over Cumberland River
Bridge No. 19-I265-1.87
Davidson County
1983

DESIGNED BY _____ DATE _____
DRAWN BY Denise White DATE Oct. '83
SUPERVISED BY W. M. Inturff DATE Oct. '83
CHECKED BY W. M. M. & R. D. Gentry DATE Nov. '83

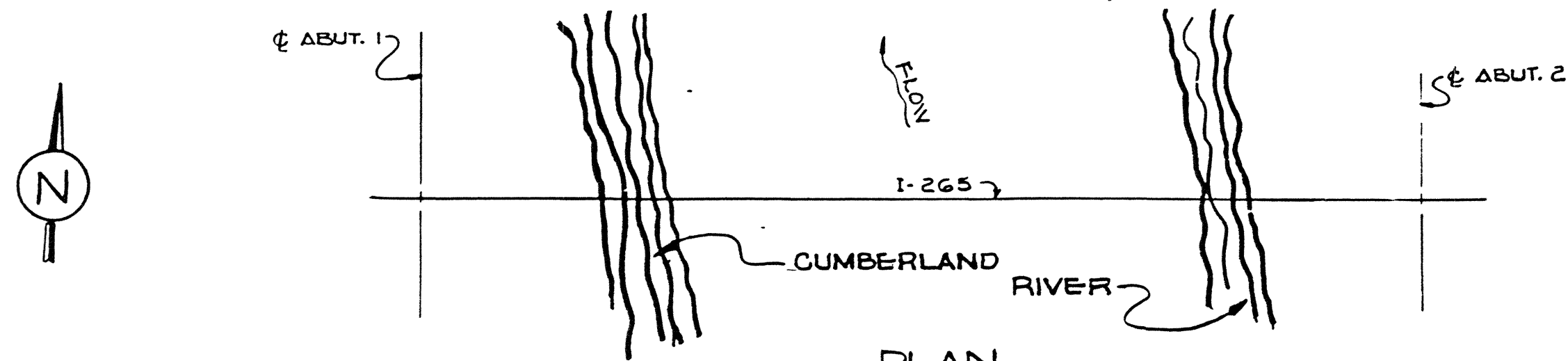
CORRECT B. Lellon H. Towall
ENGINEER OF STRUCTURES
APPROVED Lewis Evans
DIRECTOR OF HIGHWAYS

K-59-37 D

E = EXPANSION
F = FIXED



ELEVATION



PLAN

SCOPE OF WORK

Existing deck to be repaired as shown on sketches below.

Existing W-Beam Steel Median Barrier to be removed from bridge and reinforced concrete median barrier to be constructed.

Existing steel finger joints @ Piers No. 1 & 5 to be modified as shown on Dwg. K-59-37B.

Existing bridge deck to be sealed with System "A" or "B" Bridge Deck Sealant and Asphalt Overlay.

PROJECT NO.	YEAR	SHEET NO.	
	1982		
REVISIONS			
NO	DATE	BY	BRIEF DESCRIPTION
1	1-12-83	RBG	CONCRETE NOTE ADDED
			</

GENERAL NOTES:

SPECIFICATIONS: STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH 1981 EDITION).

WELDING: SEE SPECIAL PROVISION NO. 602.

STRUCTURAL STEEL: SHALL CONFORM TO AASHTO "M-183" (ASTM A36) UNLESS OTHERWISE NOTED.

PAINT: (NEW WORK @ EXP. JTS., PIERS 1 & 5) SYSTEM A SILICO CHROMATE BRIGHT GREEN COLOR COAT SEE STD. SPEC. SECTION 603.

① **CONCRETE:** TO BE HIGH EARLY STRENGTH, $f'c = 3000$ P.S.I. FOR THE CONCRETE MEDIAN MODIFICATION AT PIERS NO. 1 & 5.

① **CONCRETE:** TO BE CLASS "A" $f'c = 3000$ P.S.I. FOR THE CONCRETE MEDIAN BARRIER.

LIST OF DRAWINGS:

DRAWINGS	DWG. NO.	LAST REV. DATE
BRIDGE DECK SEALING	K-59-37A	
CONC. MEDIAN BARRIER &		
EXP. JOINT DETAILS	K-59-37B	
MISC. BRIDGE REPAIR		
DETAILS	M-106-16	

LIST OF SPECIAL PROVISIONS:

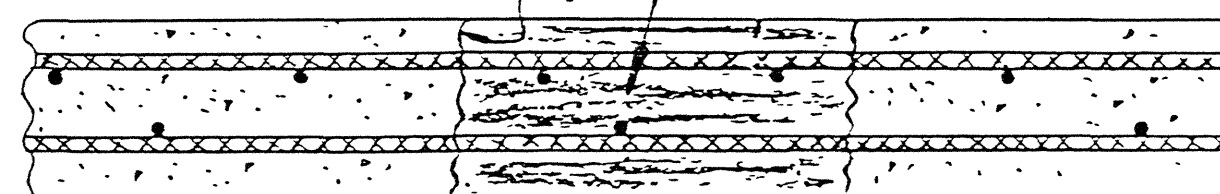
NO. 602, REGARDING SECTION 602 STEEL STRUCTURES

LAST REV. DATE

8-2-82

SEE NOTE ON SKETCH SHOWING PARTIAL DECK REPAIR.

EDGES TO BE SAW CUT



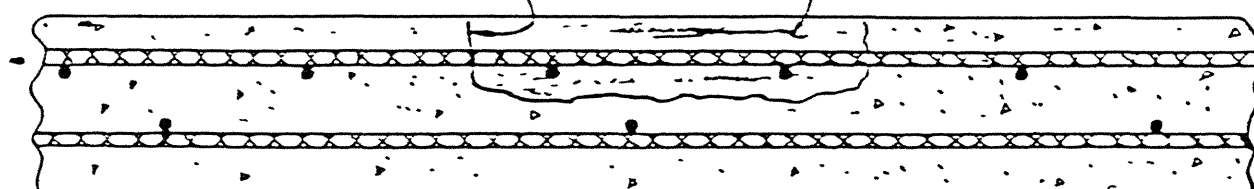
SKETCH SHOWING FULL SLAB DEPTH REPAIR

NOTE: IN AREAS WHERE THE SLAB IS REMOVED FOR FULL DEPTH, EXTREME CARE SHALL BE TAKEN SO AS NOT TO DAMAGE EXISTING REINFORCING STEEL. FULL DEPTH REPAIR OF SLAB SHALL BE PAID FOR UNDER ITEM NO. 604-10.30.

NOTE:

CONCRETE FOR DECK REPAIR SHALL BE SET 45 ALCRETE, SPEED CRETE, OR A QUICK SETTING PATCHING MATERIAL AS APPROVED BY THE MATERIALS AND TEST DIVISION OF TENNESSEE DEPARTMENT OF TRANSPORTATION.

EDGES TO BE SAW CUT



SKETCH SHOWING DECK REPAIR (PARTIAL DEPTH)

REMOVE CONCRETE IN ALL DELAMINATED AREAS TO A DEPTH OF 3/4" BELOW THE TOP MAT OF REINFORCING STEEL. ALL REINFORCING STEEL IN AREAS OF DECK REPAIR SHALL BE BLAST CLEANED. AREAS OF CONCRETE REMOVAL SHALL BE DESIGNATED BY THE ENGINEER. DECK REPAIR IS TO BE PAID FOR UNDER ITEM NO. 604-36.10, BRIDGE DECK REPAIR.

NOTE: FOR BRIDGE DECK SEALING AND ASPHALT OVERLAY DETAILS, SEE DWG NO. M-106-16.

NOTE: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN ON DWG. NO. K-59-37B FOR ADDING NEW 3 INCH FINGER JOINTS AND RECONSTRUCTING MEDIAN JOINTS AT PIERS NO. 1 & 5. SHOP DRAWINGS FOR ALL NEW STEEL COMPONENTS FOR THE JOINTS AT PIERS NO. 1 & 5 SHALL BE SUBMITTED TO THE ENGINEER DIRECTOR, STRUCTURES FOR APPROVAL BEFORE FABRICATION BEGINS. EXISTING SHOP DRAWING FOR THE RDWY. EXPANSION JOINTS AT PIERS NO. 1 & 5 ARE AVAILABLE FOR INSPECTION AT THE DIVISION OF STRUCTURES.

NOTE: ASPHALT QUANTITIES INCLUDE 150 FT TRANSITION AT EACH END OF BRIDGE.

ESTIMATED QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
403-01	BIT MATERIAL FOR TACK COAT (TC)	2	TON
411-01.01	MINERAL AGGREGATE FOR ASPHALTIC CONC. SURFACE (ACS) GRADING "D"	660	TON
411-01.02	ASPHALT CEMENT FOR ASPHALTIC CONC. SURFACE (ACS) GRADING "D"	42	TON
411-02.01	MINERAL AGGREGATE FOR ASPHALTIC CONC. SURFACE (ACS) GRADING "E"	1234	TON
411-02.02	ASPHALT CEMENT FOR ASPHALTIC CONC. SURFACE (ACS) GRADING "E"	79	TON
602-11	STRUCTURAL STEEL (ERECTION)	34,377	LBS.
602-15	STRUCTURAL STEEL (FURNISH DOMESTIC)	34,377	LBS.
602-40	STRUCTURAL STEEL (FURNISH FOREIGN)	34,377	LBS.
604-10.01	CONCRETE REPAIRS	1	L.S.
604-10.30	BRIDGE DECK REPAIRS (FULL DEPTH OF SLAB)	24	
604-10.50	BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB)	1,265	S.Y.
617-01	BRIDGE DECK SEALANT	11,262	S.Y.
705-08.03	REIN. CONCRETE MEDIAN BARRIER	1347	L.F.

① Structural Steel, Item No. 602-10.06 includes all bars, R's, welds, studs, 3" thick new steel fingers, median fender plates etc. necessary to repair expansion joints at Piers No. 1 & 5.

② CONCRETE REPAIRS ITEM NO. 604-10.01 INCLUDES ALL CONCRETE REMOVAL AND REPAIRING NECESSARY TO RECONSTRUCT MEDIAN EXP. JOINTS @ PIERS NO. 1 & 5.

BRIDGE NO. 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

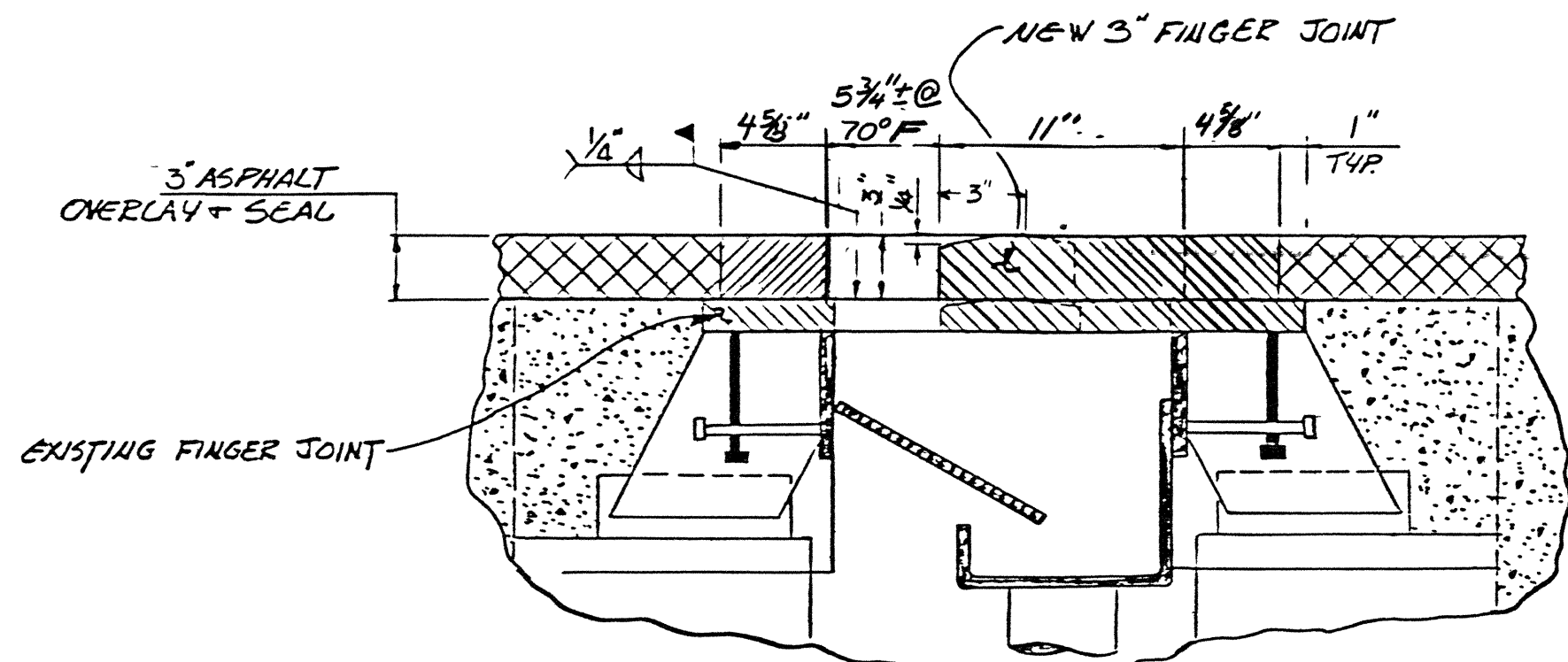
BRIDGE DECK SEALING
I-265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-I-265-1.87
DAVIDSON COUNTY
1982

DESIGNED BY SEBASTIAN
DRAWN BY PAT
SUPERVISED BY W. M. MCINTURE
CHECKED BY W. M. MCINTURE & R. GENTRY
DATE 7-82
DATE 7-82
DATE 9-82

CORRECT
ENGINEER OF STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

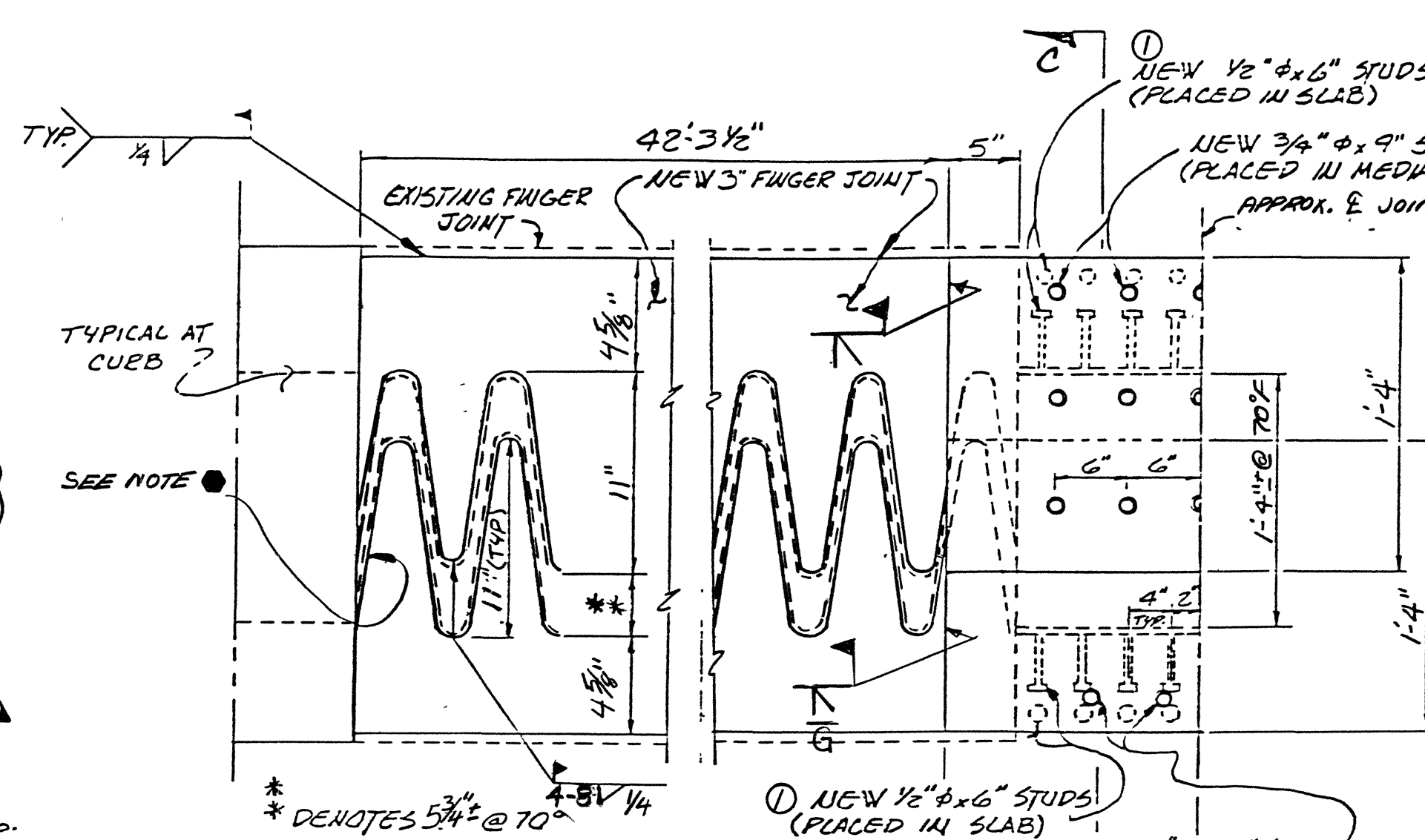
K-59-37A

PROJECT NO.		YEAR		SHEET NO.	
		1982			
REVISIONS					
NO	DATE		BY	BRIEF DESCRIPTION	
1	1-13-83	BDD	CONCRETE MEDIAN BARRIER		
2	3-18-83	BDD	GENERAL REV. TO CLARIFY DRAWING		
		</			

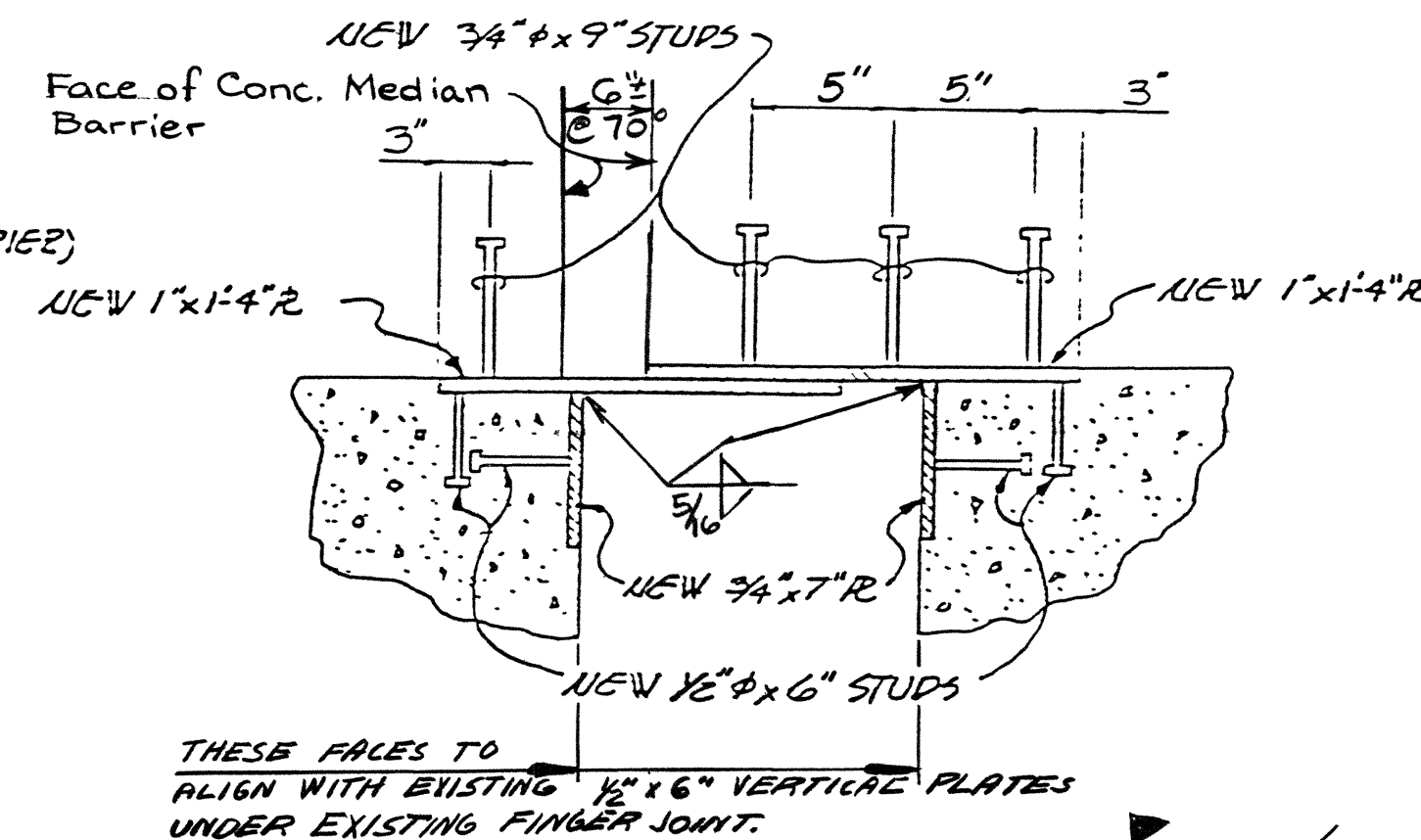


SECTION AT FINGER JOINT A
TYPICAL AT PIERS 1 AND 5

NOTE: COST OF FURNISHING AND INSTALLING NEW FINGER JOINT FOR RAISING GRADE OF PAVEMENT SHALL BE INCLUDED UNDER ITEM NO. 602-10.06.

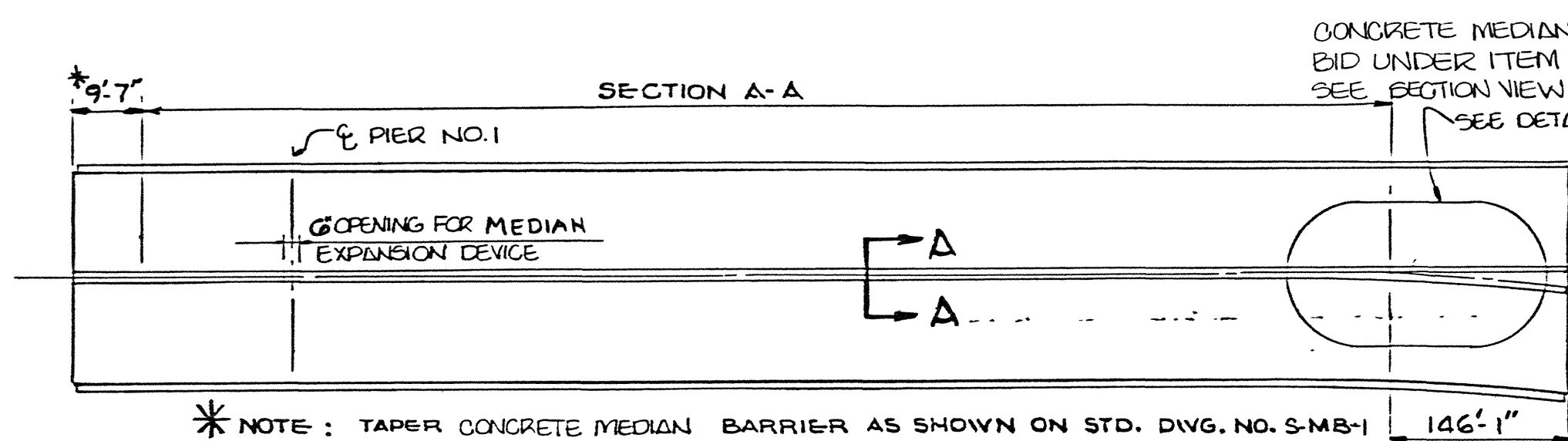


ROADWAY AND MEDIAN EXPANSION DEVICE @ PIER #5

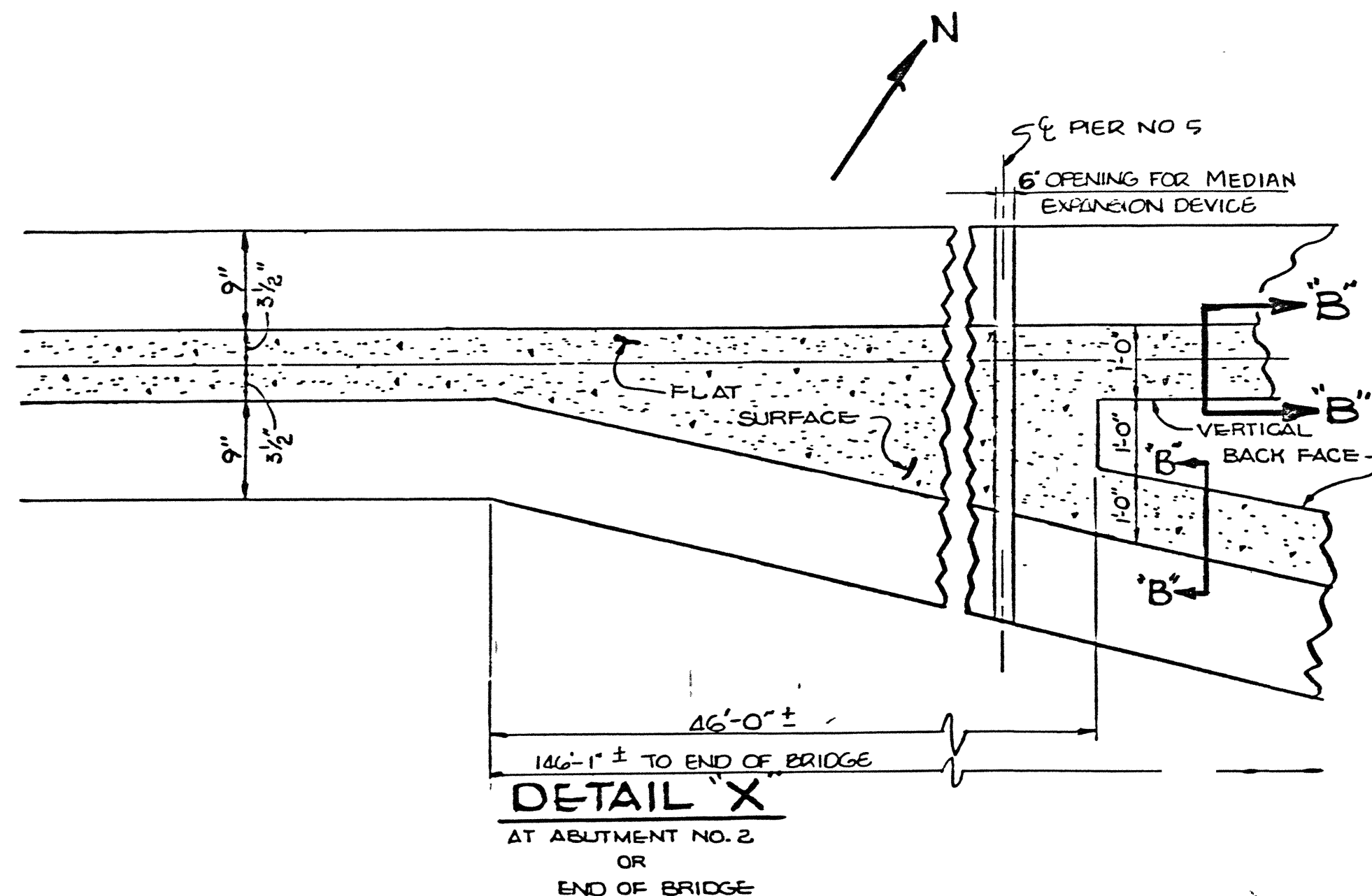


SECTION C-C

THESE PILES TO ALIGN WITH EXISTING 1/2" x 6" VERTICAL PLATES UNDER EXISTING FINGER JOINT.



PLAN SHOWING & MEDIAN CONCRETE BARRIER RAIL



DETAIL X
AT ABUTMENT NO. 2
OR
END OF BRIDGE

ESTIMATED QUANTITIES (PER FOOT) FOR CONCRETE MEDIAN BARRIER

ITEM	CONCRETE CLASS "A" C.Y.	EPOXY COATED REINF. STEEL LBS. FINISH (NEW) S.Y.	
SECTION A-A	0.11	17	0.70
SECTION B-B	0.12	18	0.70

1 THE REINFORCED CONCRETE MEDIAN BARRIER SHALL BE GIVEN AN APPLIED TEXTURE FINISH. THE COLOR OF THE FINISH SHALL BE SIMILAR TO OFF WHITE, FEDERAL SPECIFICATION NO. 3778. COST OF THE FINISH SHALL BE INCLUDED IN COST OF CONCRETE MEDIAN BARRIER, ITEM NO. 705-08.03. SEE SECTIONS THIS SHEET FOR LIMITS OF FINISH.

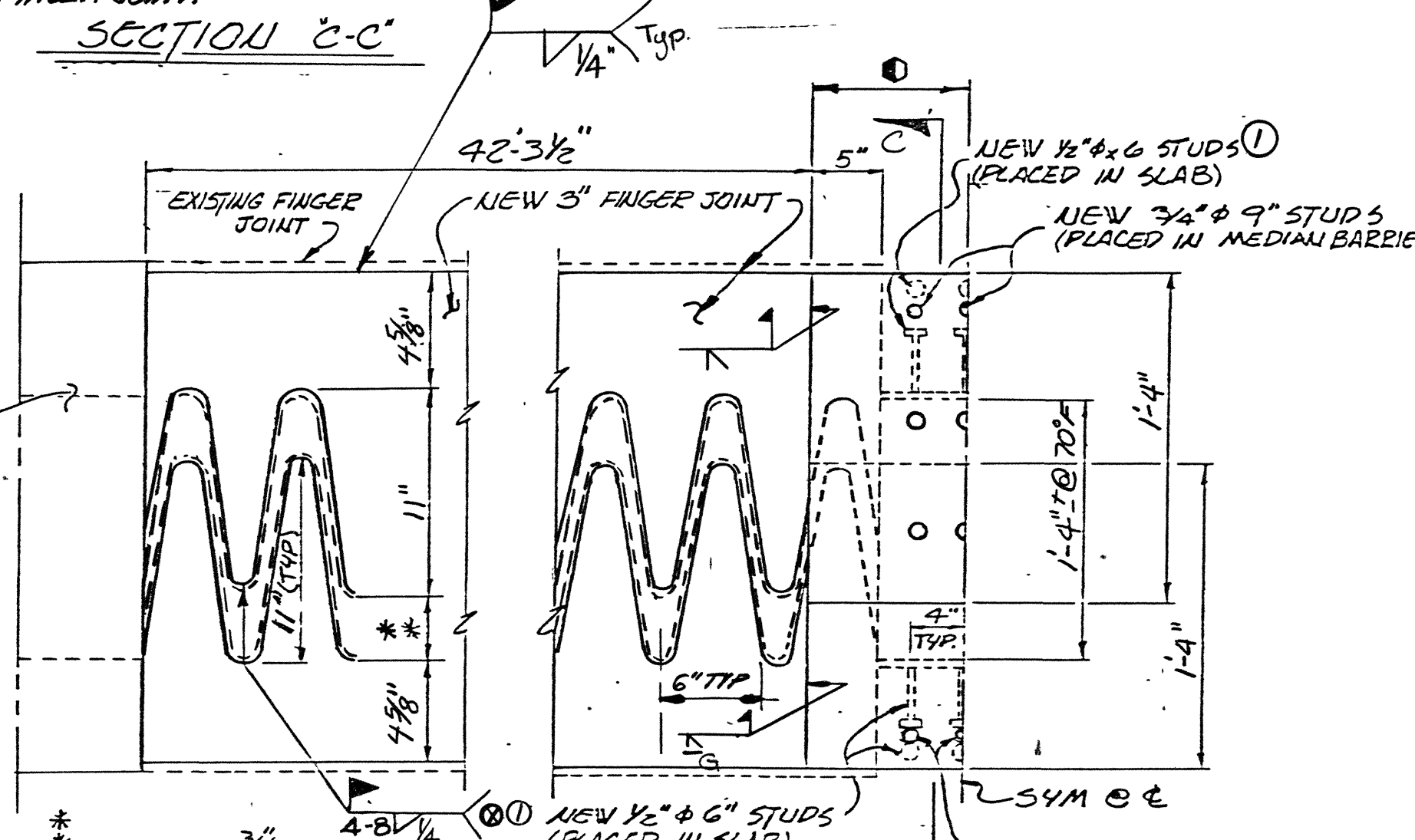
NOTE: HOLES FOR 5" Ø BARS TO BE 1" x 6" DEEP @ 1'-0" C.C., AND DRILLED WITH HIGH SPEED DRILL. THE HOLES TO BE CLEANED OUT WITH AIR AND FILLED WITH FEL-POXY FP-III OR EQUAL AND BARS CDS E OR AS E.

NOTE: AFTER REMOVING METAL RAIL AND POST, EXISTING BOLTS TO REMAIN AND INCORPORATED IN WITH NEW CONCRETE BARRIER.

NOTE: CONTRACTOR TO ATTACH EXISTING GUARD RAIL AT BRIDGE ENDS USING NEW RAILS AND POST AS SHOWN ON STD. DWG. NO. 5-GR-1E, (PROTECTIVE GUARD RAIL AT BRIDGE ENDS- METAL POST). COST OF REMOVING EXISTING GUARD RAIL POSTS AND RAILS TO BE INCLUDED IN COST OF CONCRETE MEDIAN BARRIER, ITEM NO. 705-08.03.

NOTE: CONTRACTOR TO REMOVE EXISTING METAL BARRIER RAIL, POST, AND BASE PLATES. ALL MATERIAL TO BE STOCK PILED FOR STATE MAINTENANCE AT A LOCATION DESIGNATED BY THE ENGINEER. COST OF REMOVING AND STOCK PILING TO BE INCLUDED IN COST OF NEW CONCRETE MEDIAN BARRIER, ITEM NO. 705-08.03.

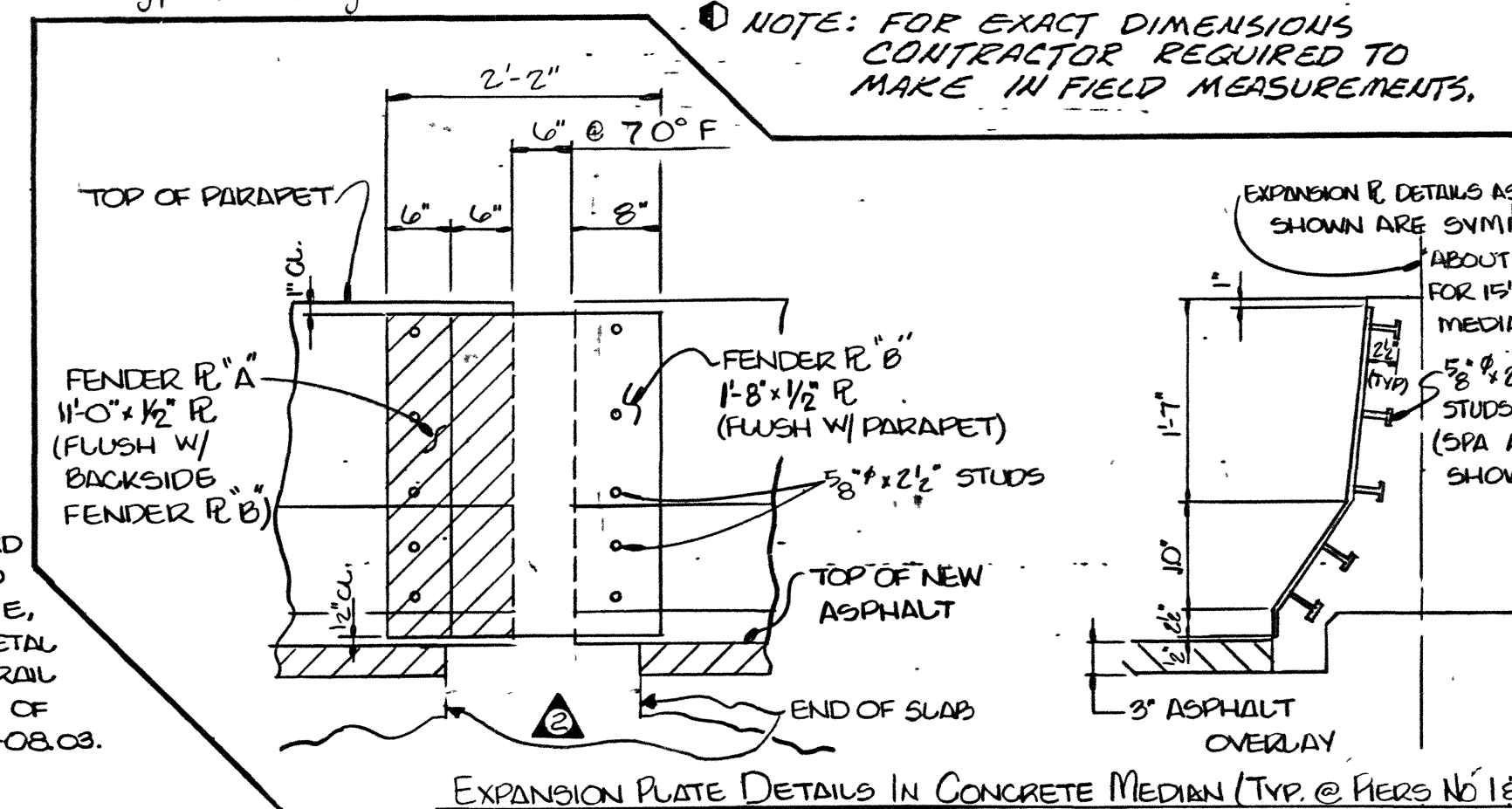
NOTE: "E" DENOTES REINFORCING BARS TO BE EPOXY COATED.



ROADWAY AND MEDIAN EXPANSION DEVICE @ PIER #1

4'-8" Typ. for fingers

NOTE: FOR EXACT DIMENSIONS CONTRACTOR REQUIRED TO MAKE IN FIELD MEASUREMENTS.



EXPANSION PLATE DETAILS IN CONCRETE MEDIAN (TYP. @ PIERS NO. 1&5)

BRIDGE NO. 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGE DECK SEALING
I-265 OVER CUMBERLAND RIVER
BRIDGE NO. 19-I265-187
DAVIDSON COUNTY
1982

CORRECT
ENGINEER OF STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

K-59-37B

WITH DWG. NO. K-59-37A

DESIGNED BY
DRAWN BY
SUPERVISED BY
CHECKED BY

DATE
DATE
DATE
DATE

