

PLANS BY: WRIGHT MORGAN & BROWN, INC. FOR: E. S. PRESTON, LTD.
 DESIGNED BY: TB
 CHECKED BY: PLW
 DATE: 4-77
 REVISION: Reinforcement for Abut 1 & 2
 REVISION: Concrete and Reinforcement for Pier 2 & 3
 REVISION: 6" slope and quantity added
 DATE: 12-16-77
 DATE: 12-24-77
 DATE: 4-23-77

LETTING DATE: 5/19/77

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

CAMPBELL COUNTY
CINCINNATI-1-275 CONNECTOR
HIGHLAND AVENUE OVER I-471

REFERENCE AND ESTIMATE OF QUANTITIES

ITEM	SHEET NO.	CONCRETE CU. YD.		REINF. STEEL LB.	STR. EXC. CU. YD.		STRUCTURAL STEEL LUMP SUM ①	HANDRAIL LIN. FT.	6" CONCRETE Slope wall Sq. Yds.	CHAIN LINK FENCE, 8 FOOT LIN. FT.	TELEPHONE CONDUITS LUMP SUM ②	4" REINFORCED CONCRETE SLOPE PROT. SQ. YDS.	EPOXY COATED REINF. BARS LB.	NEOPRENE EXP. JOINT 4" LIN. FT.
		CL. A'	CL. A'A'	COM.	S.R.									
QUANTITIES	1													
NOTES	2													
LAYOUT	3													
SOUNDINGS	4			(7081)										
ABUTMENT 1	5, 6 & 8	324	23.8	(7078)	120	35						155		
ABUTMENT 2	5, 6 & 8	324	23.8	(7078)	110	40						170		
PIER 1	7 & 8	4.6		G10		5								
PIER 2	54.8	7 & 8	(47.1)	3943		(3153)			305					
PIER 3	60.0	7 & 8	(47.1)	4044		(3153)			294					
PIER 4	7 & 8	4.6		G10		5								
SUPERSTRUCTURE	8-15		521.1	53,707			①	G15.4					62,944	③
ELEVATIONS	16-17													
TELEPHONE CONDUIT	18										②			
CHAIN LINK FENCE	18A									604				
				23,369		(21,050)		77,076						
SUPERSTRUCTURE TOTALS			521.1	53,707		(75,395)	①	G15.4		604			62,944	③
SUBSTRUCTURE TOTALS		188.8	(168.2)	47.6		(21,082)		230	195			599	325	
TOTALS		188.8	(168.2)	568.7		(75,389)		230	195	G15.4		599	325	62,944

- ① Approximate weight of structural steel is 558,488 lbs.
 - ② See Sheet 18, for details and list of materials.
 - ③ Approximate length of Exp. Joint = 90'-8". The Contractor shall use at his option one of the following type expansion joints: Wabo-Flex SR4, Transflex 400A, Fel-Span T-40 or Delastiflex C.P. 400
- Note: Telephone Conduit work is Non-participating

BILL OF INCIDENTAL MATERIAL		
ITEM	NO.	SIZE & LOCATION

NOTE: *
 Revision to the Arch Buttress was due to over cutting of side slopes by the General Contractor. Because of this, the cost of extra material needed to comply with the revised plans will be paid by the contractor.

STANDARD DRAWINGS

The Standard Drawings listed below are the current edition and are to be used with these plans.
 BJE-001-C3, BHA-005-C3, BHA-006-C3, BGX-004-02, BGX-005-02, BGX-006-01

SPECIAL PROVISIONS

- 4(76) ~ Welding Steel Bridges
- 19(76) ~ Epoxy Coated Steel Reinforcement

Note: Total of 19 sheets includes sheets 1 thru 18 and 18A.

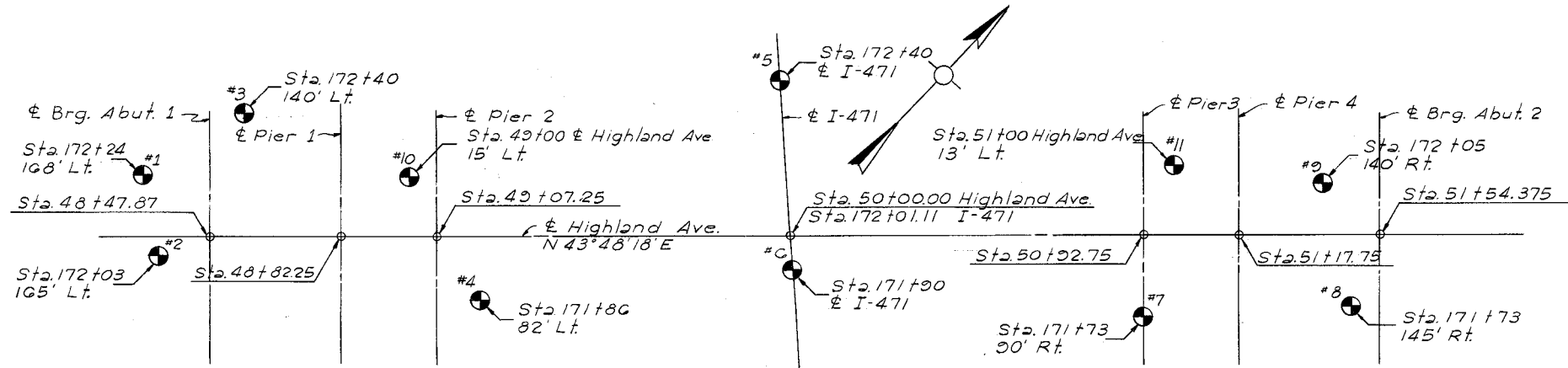
HIGHLAND AVENUE OVER I-471 SHEET 1 OF 19

COMMONWEALTH OF KENTUCKY
 BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF
CAMPBELL
 CINCINNATI-1-275 CONNECTOR
 172 + 111 I-471 = ROAD I-471-4
 STATION 50+00 HIGHLAND AVE. P. E. PROJECT NO. SP 19-961
 CONSTRUCTION PROJECT NO. I-471-4(10)1 MAINTENANCE PROJECT NO. DRAWING NO. 18462

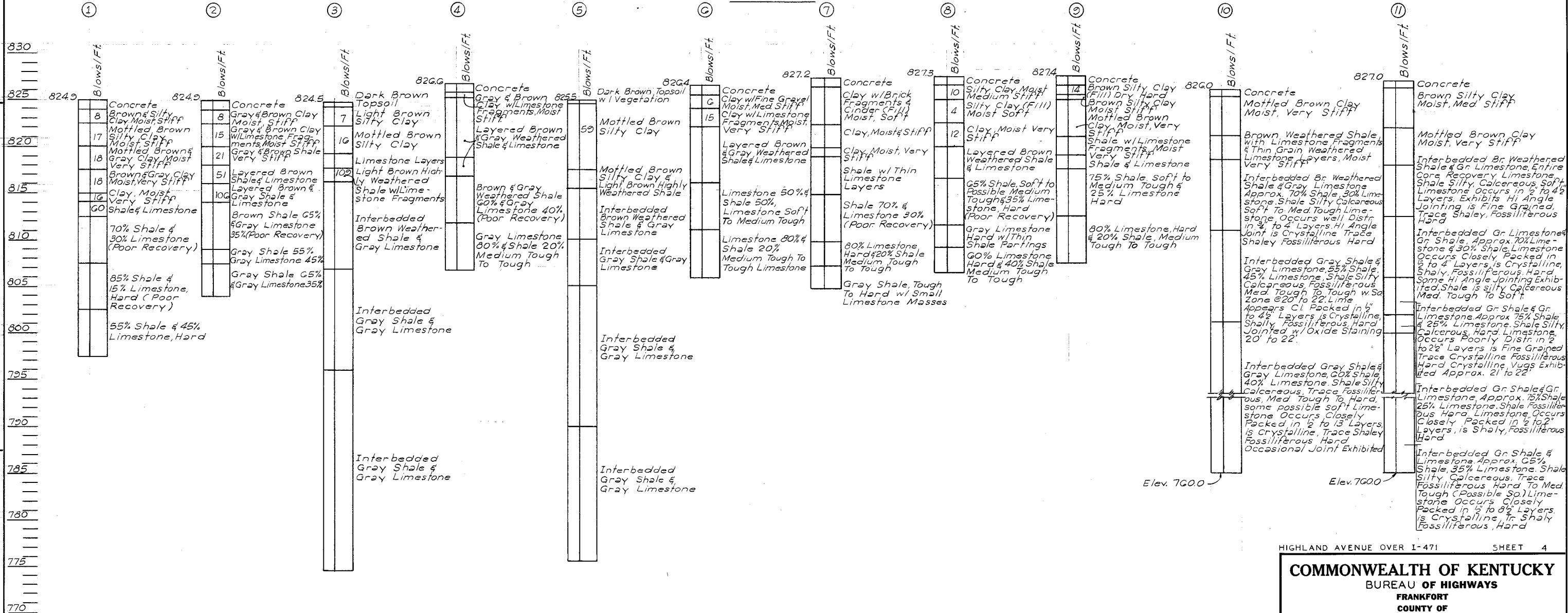
SOUNDINGS BY: H. C. NUTTING CO.

DESIGNED BY: C.C.H. CHECKED BY: J.C.W. DATE: DATE: DATE: DATE: TRACED BY: DATE: DATE: DATE: DATE:

LETTING DATE



PLAN



HIGHLAND AVENUE OVER I-471 SHEET 4
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF
CAMPBELL
CINCINNATI-I-275 CONNECTOR
172+01.11 I-471 ROAD
STATION 50+00 HIGHLAND AVE. P. E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18462

SOUNDINGS

LETTING DATE.

DATE 12-10-77
 REVISION TOP PORTION OF WING
 CHECKED BY DRB
 DATE 4-77
 REVISION
 CHECKED BY RLO
 DATE 4-77
 REVISION
 CHECKED BY
 DATE
 REVISION
 CHECKED BY
 DATE
 REVISION

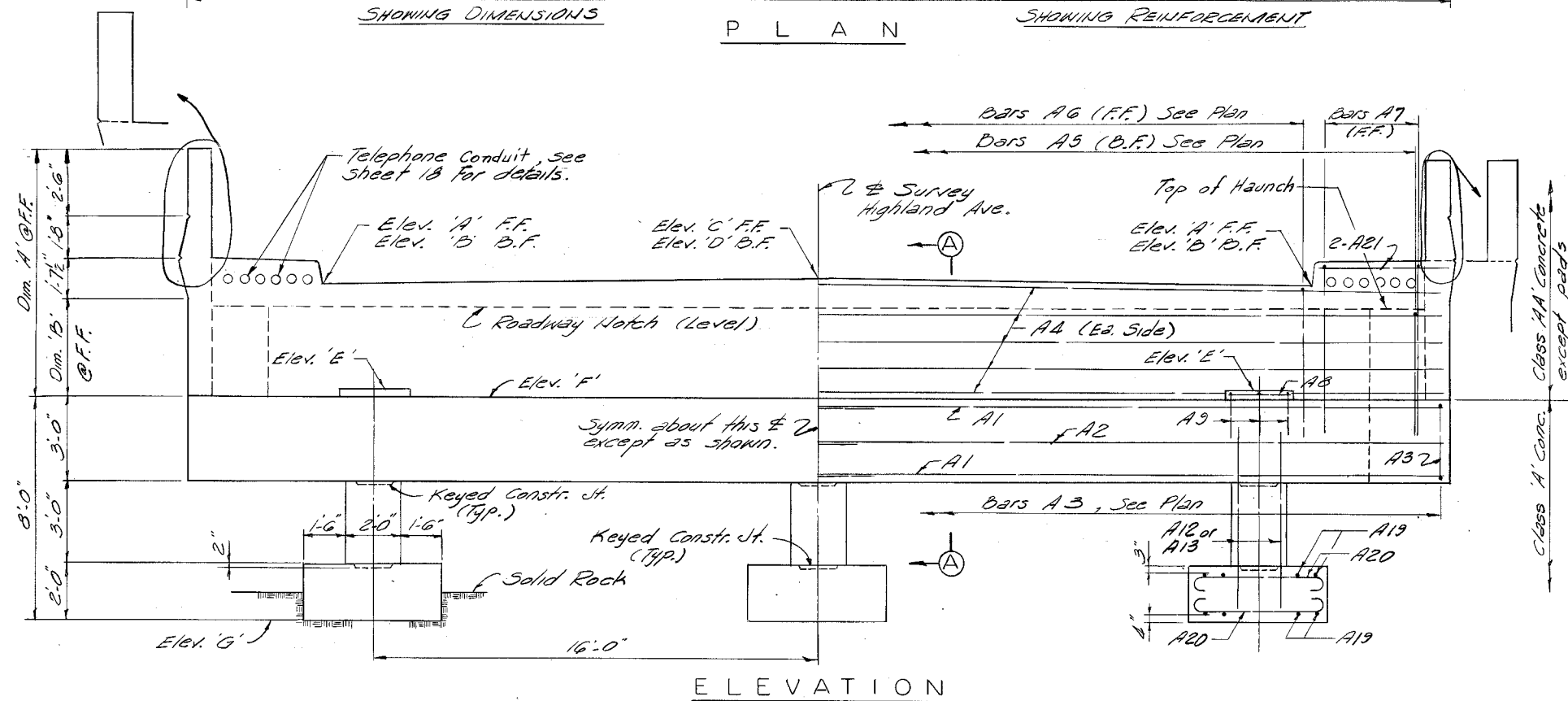
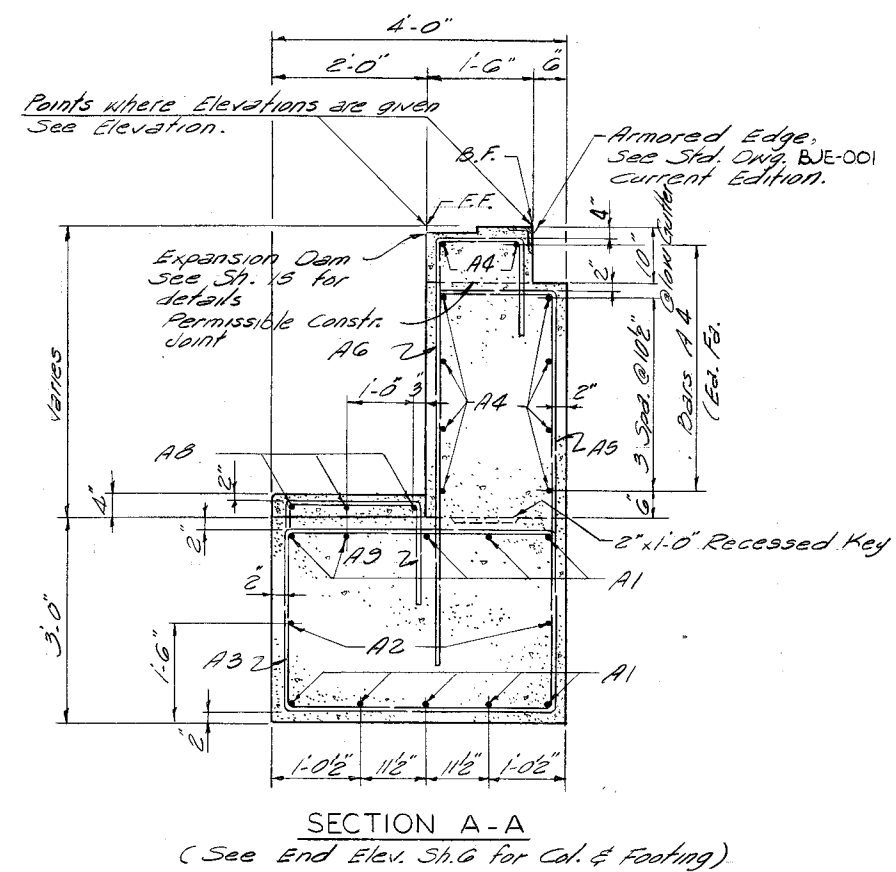
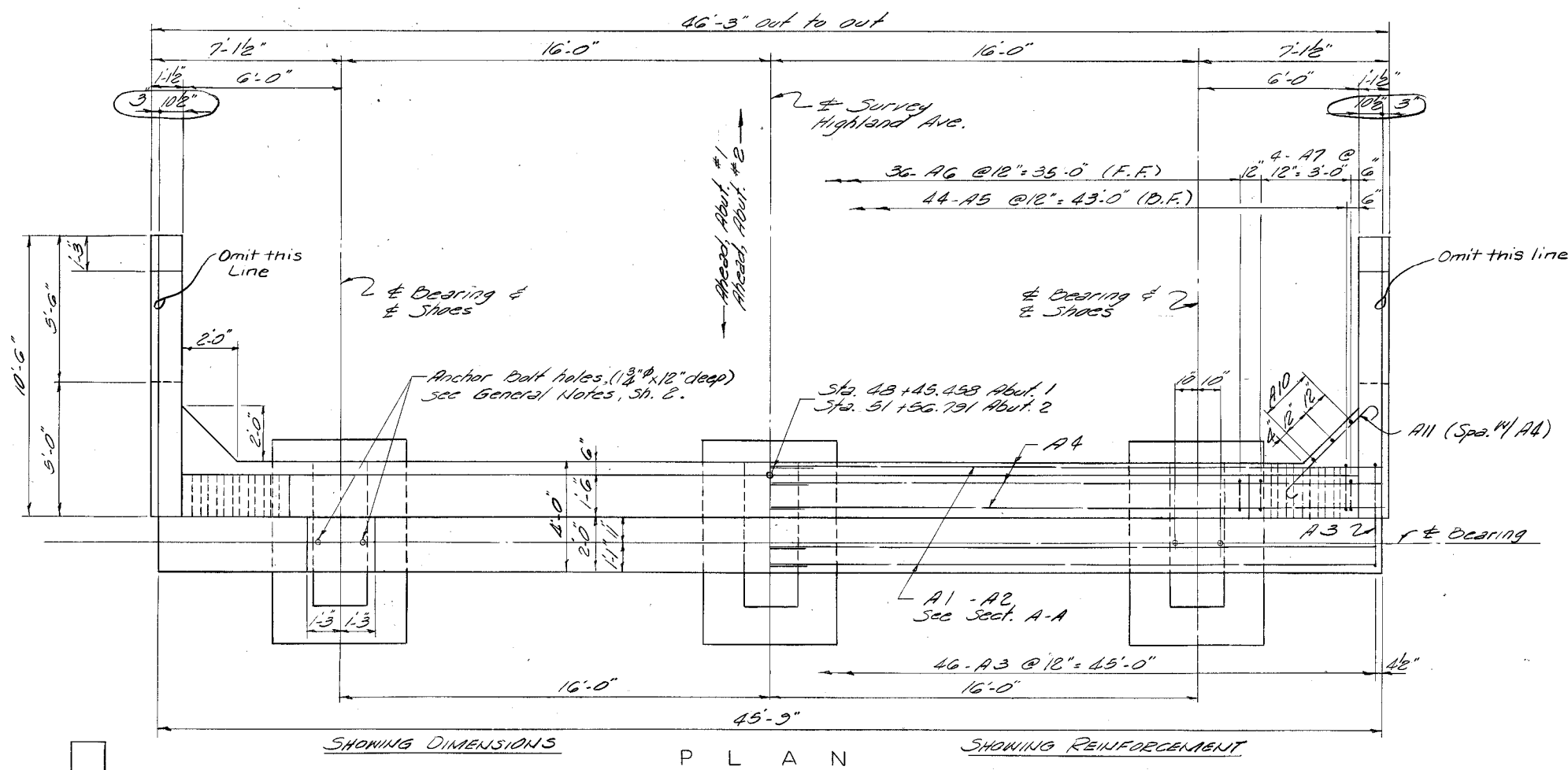


TABLE OF ELEVATIONS AND DIMENSIONS

	Elev. A'	Elev. B'	Elev. C'	Elev. D'	Elev. E'	Elev. F'	Elev. G'	Dim. A'	Dim. B'	Dim. C'
Abut. 1	825.024	825.082	825.352	825.340	820.995	820.693	812.697	9'-5 3/8"	3'-7 3/8"	3'-6 3/8"
Abut. 2	827.561	827.573	827.813	827.831	823.330	823.028	815.027	9'-6 3/8"	3'-9 3/8"	3'-10 3/8"

ESTIMATE OF QUANTITIES

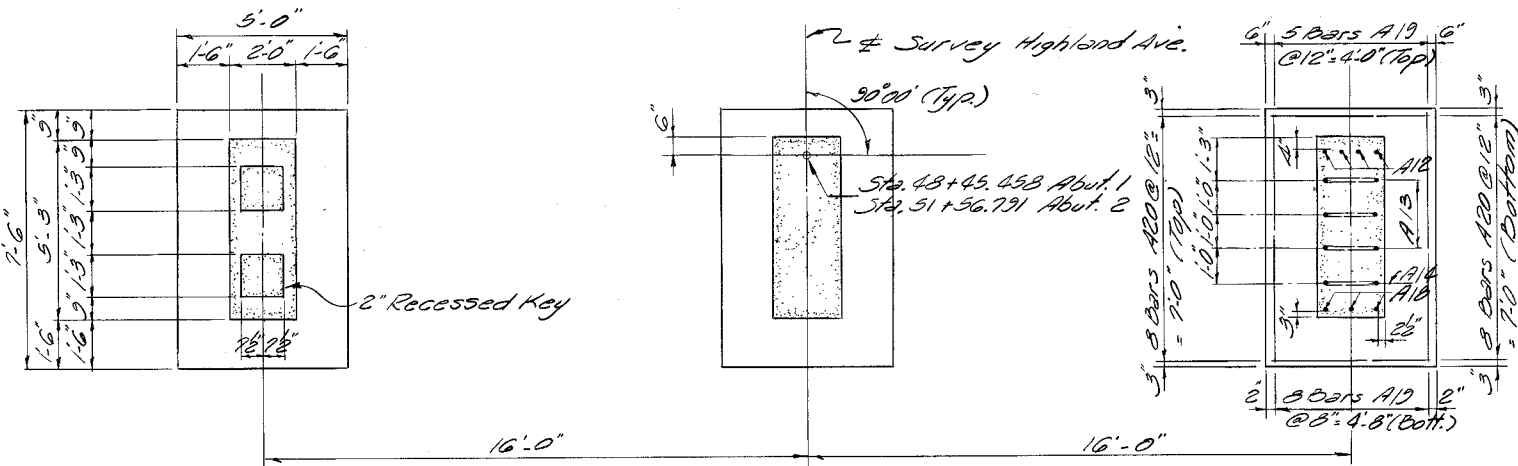
	Abut. 1	Abut. 2	
Concrete, Class AA'	23.8	23.8	Cu. Yds
Concrete, Class A'	32.4	32.4	Cu. Yds
Reinforcement	7,078	7,078	Lbs.
	7,081	7,081	

ABUTMENTS

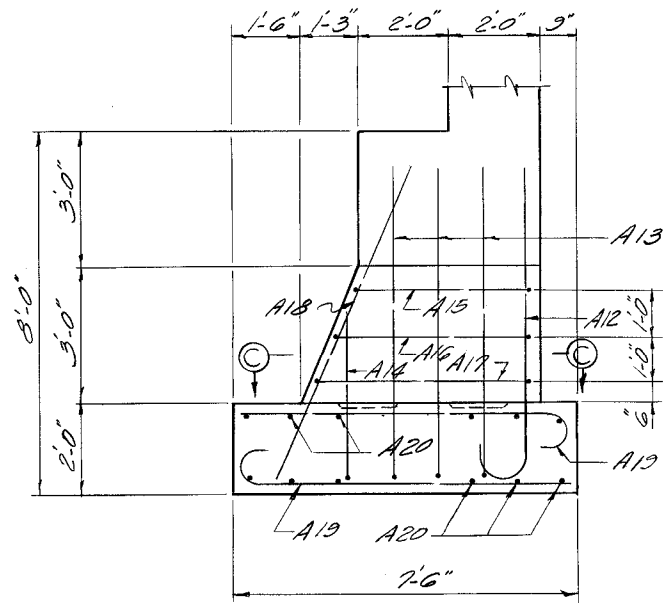
HIGHLAND AVE. OVER I-471 SHEET 5

COMMONWEALTH OF KENTUCKY
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 COUNTY OF
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 CINCINNATI - I - 275 CONNECTOR
 ROAD
 172+01.11 I-471
 STATION 50+00 HIGHLAND AVE P. E. PROJECT NO.
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18462

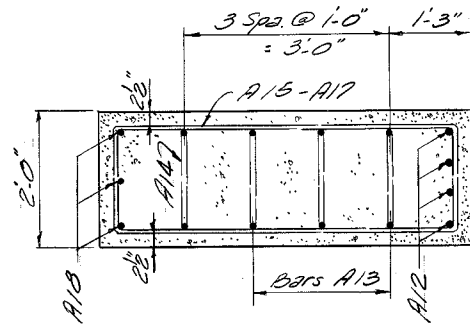
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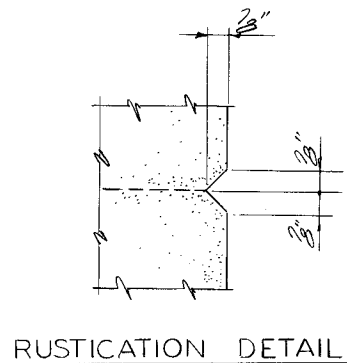
PLAN OF FOOTINGS



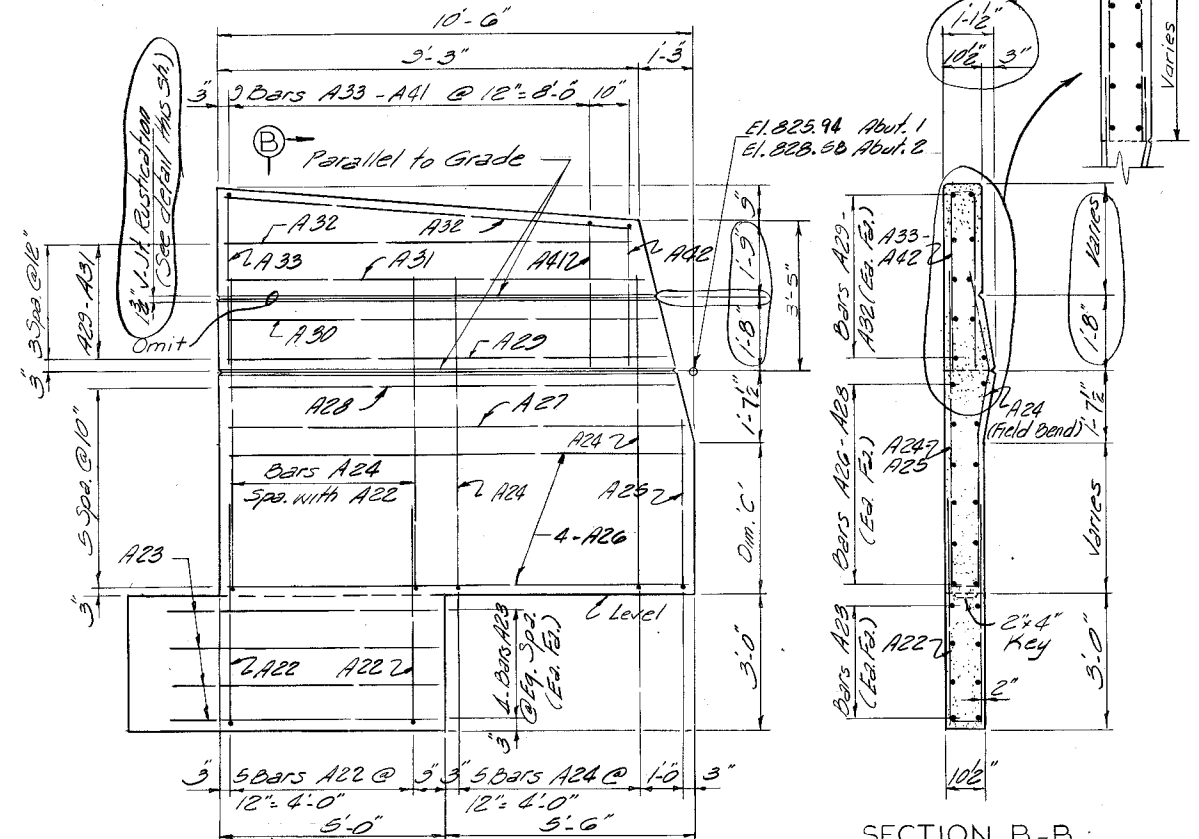
END ELEVATION



SECTION C - C



RUSTICATION DETAIL



WING ELEVATION

SECTION B-B

DESIGNED BY: BK CHECKED BY: PCW
 DATE: 4-71 DATE: 4-71
 TRACED BY: _____ CHECKED BY: _____
 REVISION: Top portion of wing DATE: 12-10-71
 _____ DATE: _____
 _____ DATE: _____

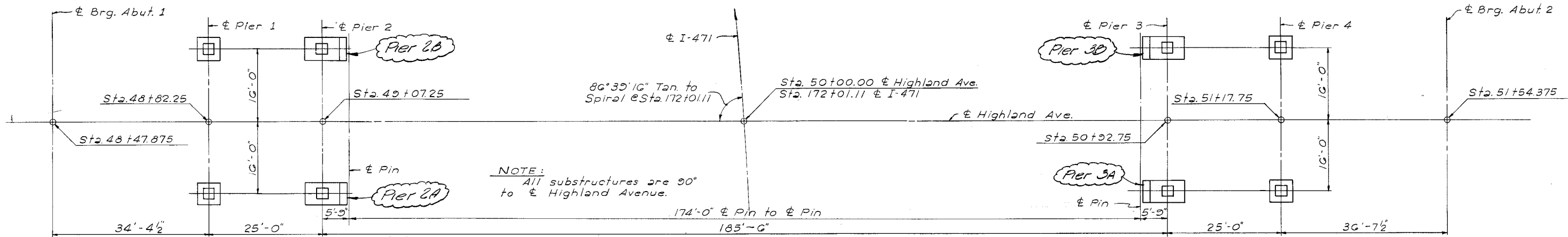
ABUTMENTS

HIGHLAND AVE OVER I-471 SHEET 6

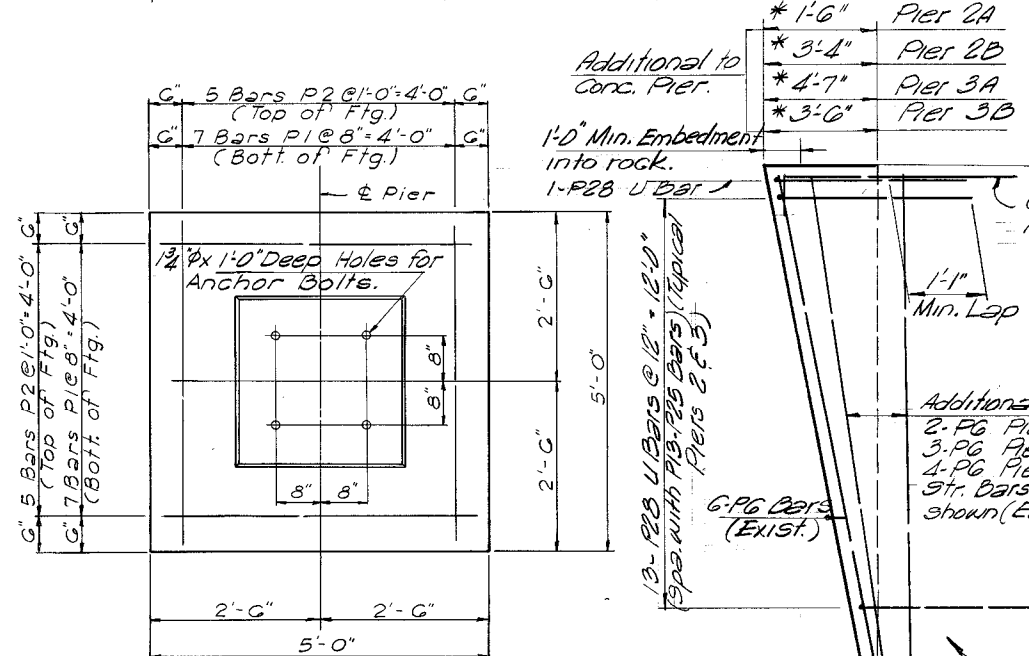
COMMONWEALTH OF KENTUCKY
 BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF
CAMPBELL
 CINCINNATI - I-275 CONNECTOR
 ROAD
 STATION 50+00 HIGHLAND AVE. P. E. PROJECT NO.
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO.

DRAWING NO. 18462

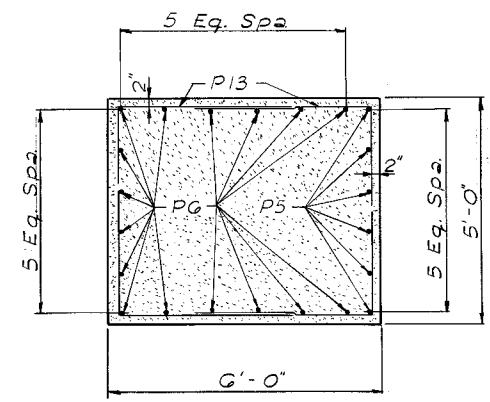
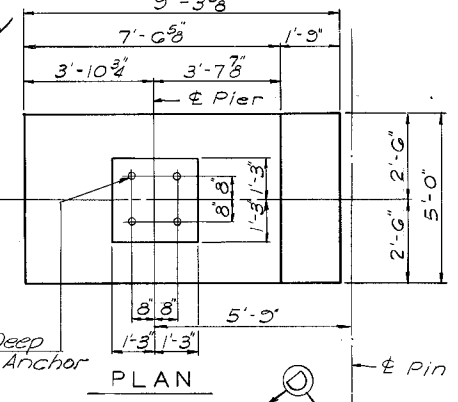
LETTING DATE _____



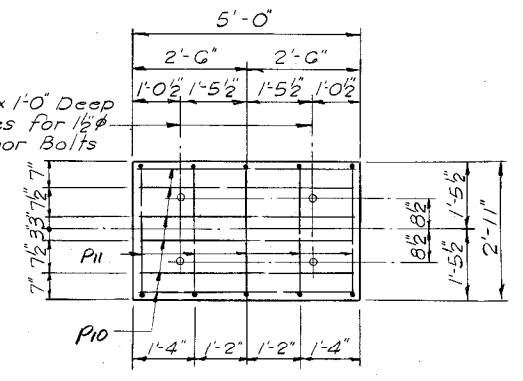
FOUNDATION LAYOUT



***NOTE: To be Field Verified.**

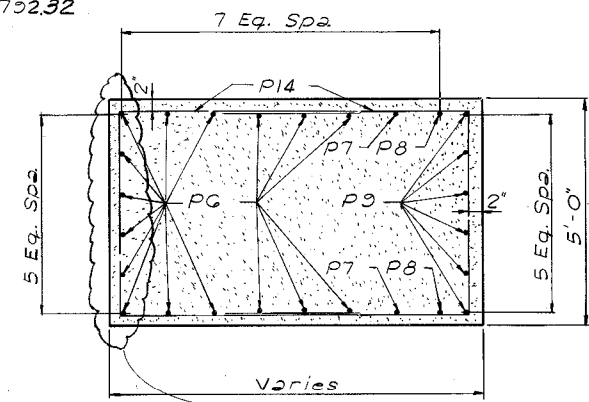


SECTION C-C

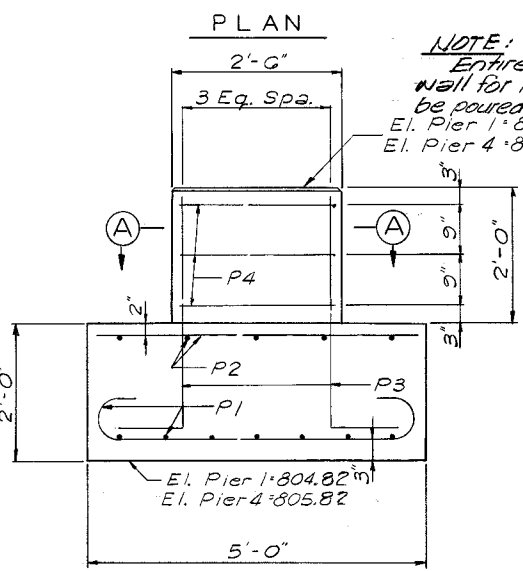
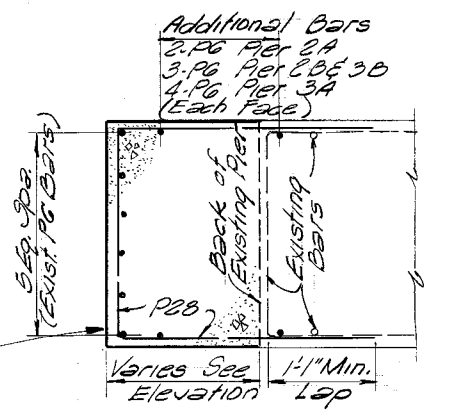


VIEW D-D

***NOTE:** Care is to be used in placing bars in top of cap to provide clearance for drilling Anchor Bolt Holes. See Anchor Bolt Note Sh. 2.

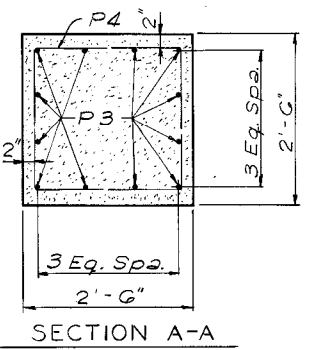


SECTION B-B

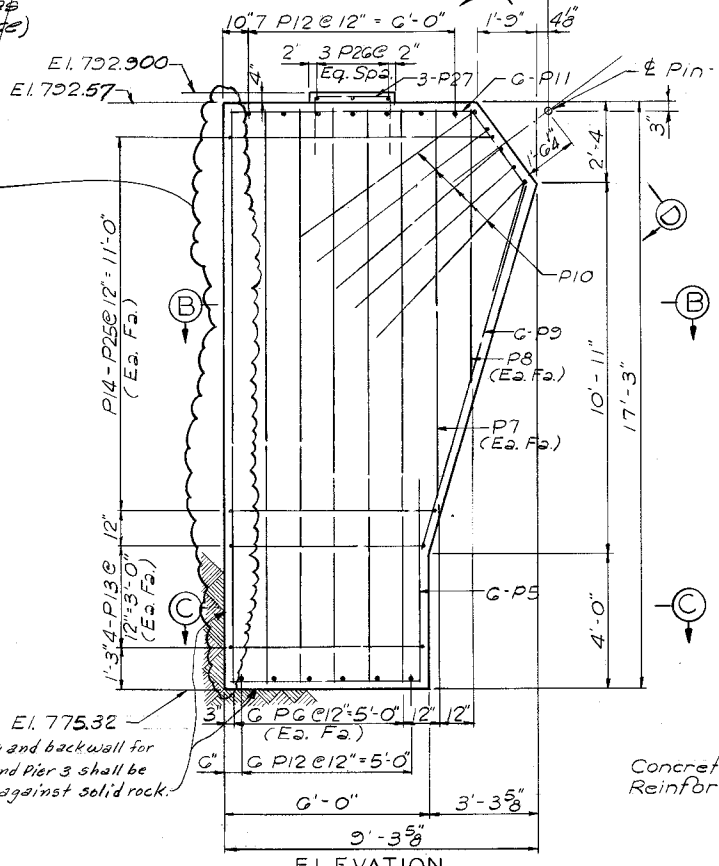


ELEVATION

PIER 1 & PIER 4 FOOTING



SECTION A-A



ELEVATION

PIER 2 & PIER 3 FOOTING

Note: Entire footing and backwall for Pier 2 and Pier 3 shall be poured against solid rock.

ESTIMATE OF QUANTITIES

	Pier 1	Pier 2	Pier 3	Pier 4	
Concrete Class A	4.6	4.7	4.7	4.6	Cu. Yds.
Reinforcement	610	3153	3153	610	Lbs.
	54.8			60.0	
	3943			4044	

PIERS

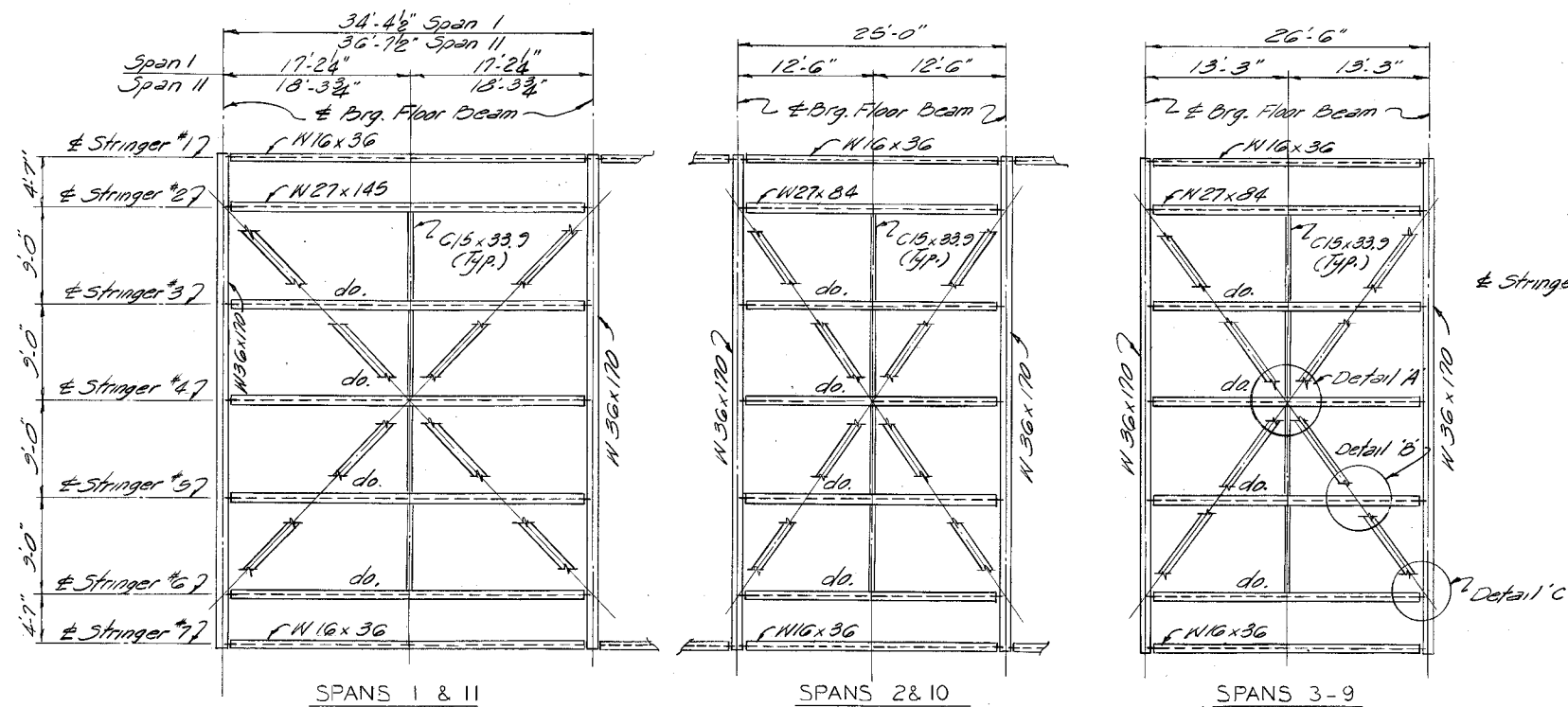
DESIGNED BY: PCW
 CHECKED BY: C.H.
 DATE: 4-71
 REVISIONS: _____

HIGHLAND AVENUE OVER I-471 SHEET 7

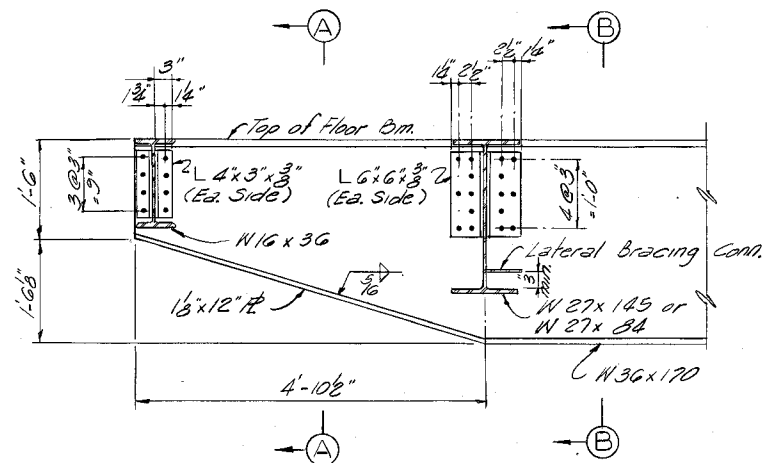
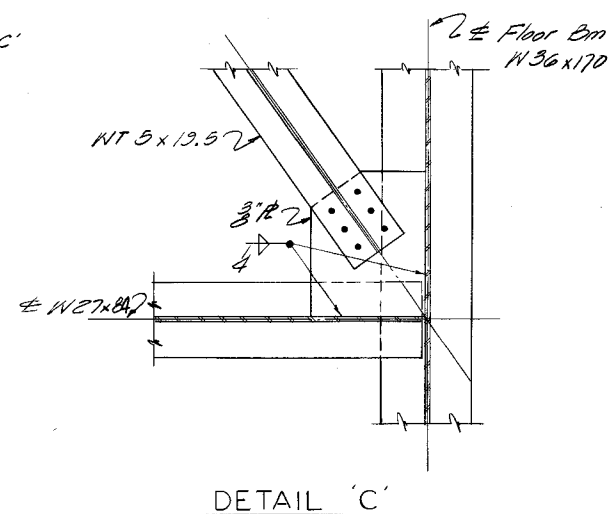
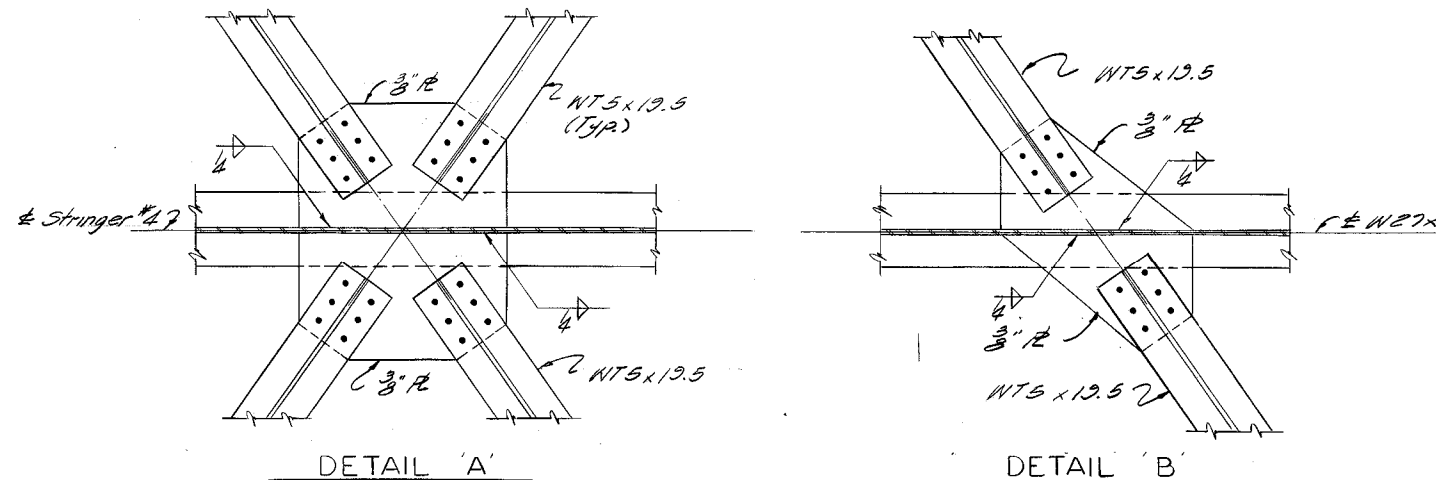
COMMONWEALTH OF KENTUCKY
 BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF
CAMPBELL
 CINCINNATI-I-275 CONNECTOR

172+0.11 I-471 ROAD
 STATION 50+00 HIGHLAND AVE. P. E. PROJECT NO.
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18462

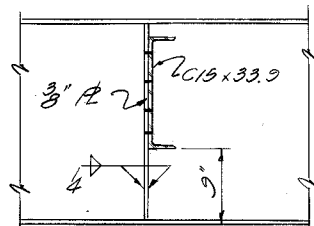
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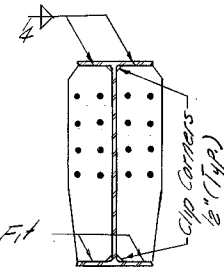
FRAMING PLAN



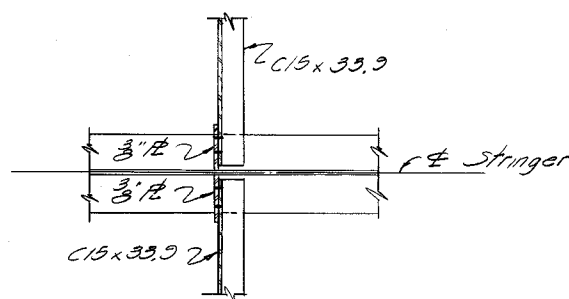
PART FLOOR BEAM ELEVATION



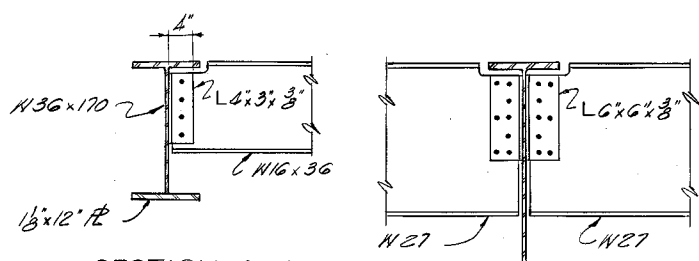
ELEVATION



SECTION



PLAN
DIAPHRAGM DETAIL



SECTION A-A

SECTION B-B

NOTE - Use 3/8" H.S. Bolts in all connections.

NOTE - Natural camber of all stringers and floor beams to be up.

DESIGNED BY: PKW DATE: 4-71
 CHECKED BY: PKW DATE: 4-71
 TRACED BY: PKW DATE: 4-71

HIGHLAND AVE. OVER I-471 SHEET 13

COMMONWEALTH OF KENTUCKY
 BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF
 CAMPBELL
 CINCINNATI - I-275 CONNECTOR

172+01.11 I-471 ROAD
 STATION 50+00 HIGHLAND AVE. P.E. PROJECT NO.

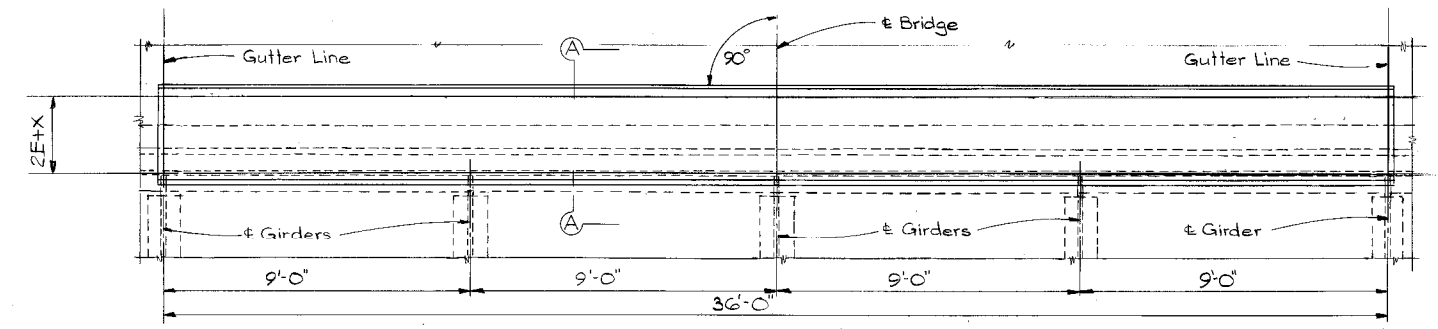
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18462

SUPERSTRUCTURE

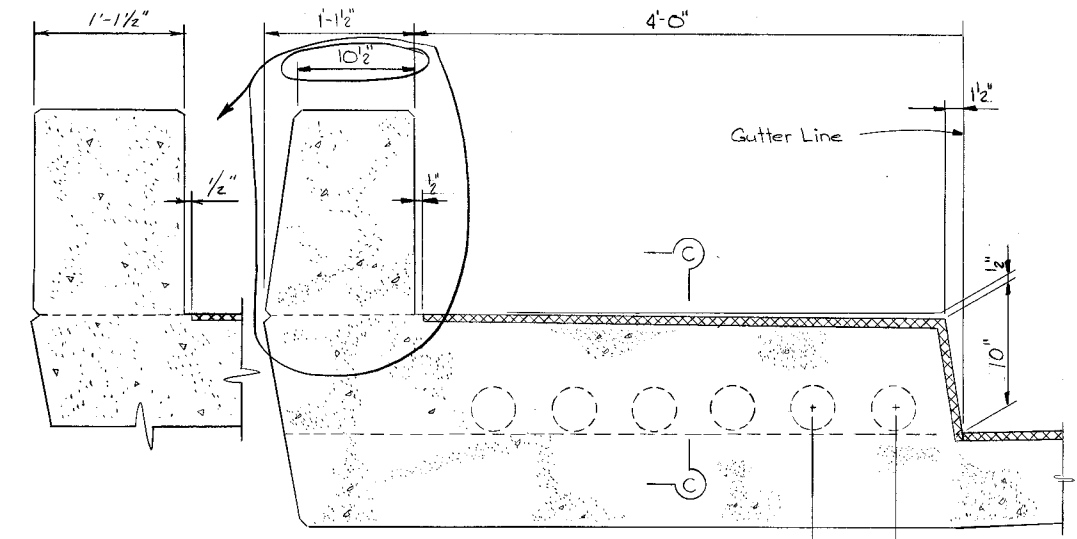
UPDATE DATE
LETTING DATE

DATE 12-10-77
DESIGNED BY
CHECKED BY
TRACED BY

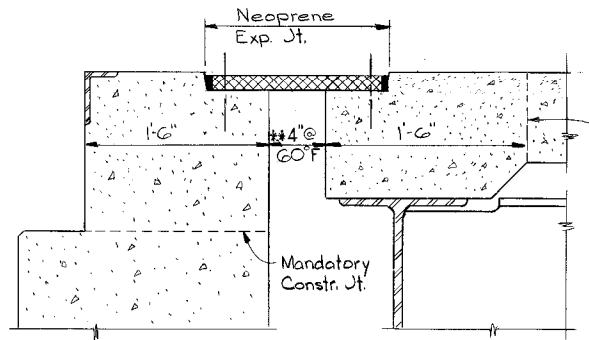
DATE
DESIGNED BY
CHECKED BY
TRACED BY



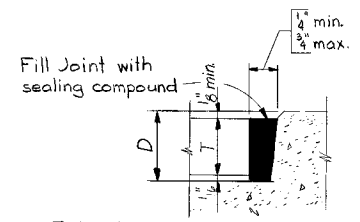
PLAN OF NEOPRENE EXP. JOINT
(For Abut. 1 & Abut. 2)



SECTION THRU CURB

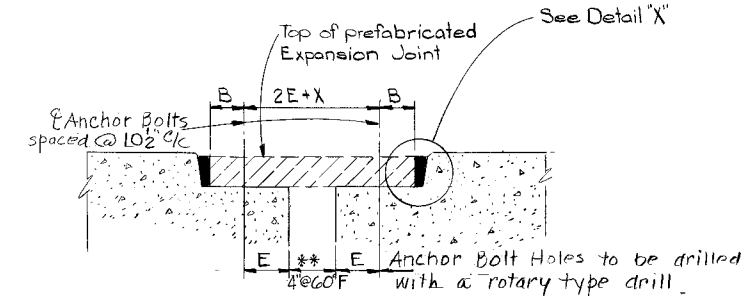


SECTION A-A
(Showing Exp. Jt. Seal)

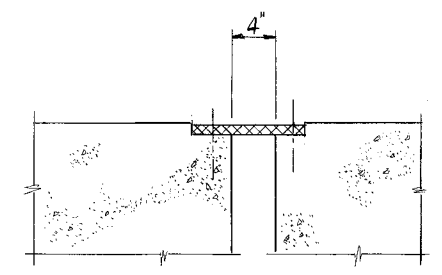


DETAIL "X"

T = Thickness of Neoprene Exp. Joint used.



EXPANSION JOINT SEAT



SECTION C-C

** This dimension to be maintained at normal temperature of 60° Fahrenheit. For each 10° above or below 60°, decrease or increase respectively by 3/16."

The Expansion Joint at Abut. 1 & Abut. 2 shall be furnished by the contractor and shall be one of the following types:
 Wabo Elastodam 400, Wabo-Flex SR4, manufactured by Watson Bowman Assoc. Inc.
 Transflex 400A, manufactured by the General Tire and Rubber Co.
 Fel-Span T40, manufactured by Fel-Pro Inc.
 Delastiflex CP400, manufactured by D.S. Brown Co.

The expansion joint shall be fabricated to follow the contour of the Roadway and up the Curbs and across sidewalk to sidewalk plinth as shown by Section Thru Curb.

If it is necessary to modify the design drawings to accommodate the expansion joint device any additional labor or material cost will be at the contractor's expense.

	E	D	B	T
Waboflex SR4	3 3/4"	2 1/4"	1 1/4"	2 1/8"
Transflex 400A	3 5/8"	2 3/8"	1 1/4"	2 1/8"
Fel-Span T40	2 1/2"	1 3/8"	3"	2 1/8"
Delastiflex CP400	***	2 5/8"	***	2"
Wabo Elastodam 400	3"	2 1/4"	4 3/4"	2 1/8"

*** Must be furnished Manufacturer
 Note: Any dimension shown in table must be verified by the manufacturer.

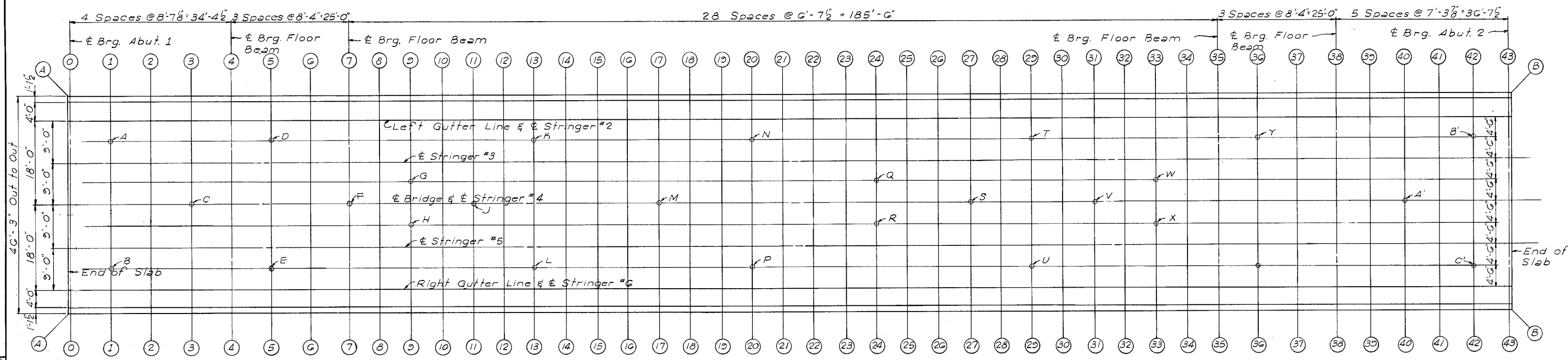
SUPERSTRUCTURE

HIGHLAND AVENUE OVER I-471 SHEET 15

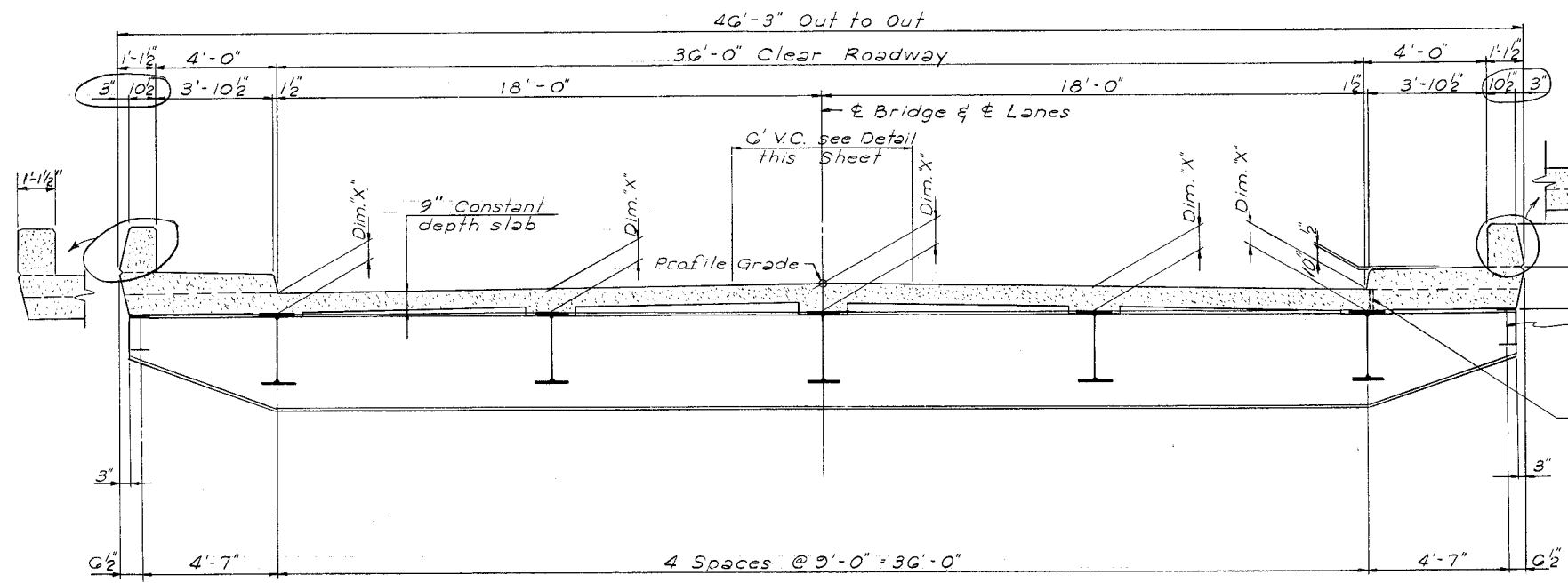
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF
CAMPBELL
 CINCINNATI I-275 CONNECTOR
 172 + 01.11 I-471 ROAD
 STATION 50+00 Highland Ave. P.E. PROJECT NO.

CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18462

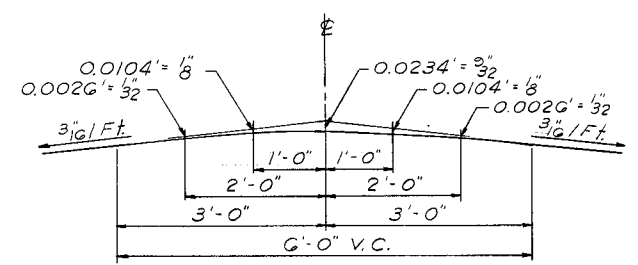
LETTING DATE



PLAN



TYPICAL SECTION



PARABOLIC CROWN

NOTE: Fascia Beam shall not be used to support finishing machine.
1" Std. Black Pipe to support finishing machine screed pipe.

Note: Construction Elevations shown are top of "AA" Concrete Slab

ELEVATIONS

DESIGNED BY: C.H. DATE: 4-7
 CHECKED BY: PCW DATE: 4-7
 TRACED BY: DATE:

HIGHLAND AVENUE OVER I-471 SHEET 16

COMMONWEALTH OF KENTUCKY
 BUREAU OF HIGHWAYS
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 CINCINNATI - I-275 CONNECTOR

ROAD
 STATION 50+00 HIGHLAND AVE. P. E. PROJECT NO.
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 18462

