

UPDATE DATE 2-77
 LETTING DATE 11-77

REVISOR
 DATE

FINAL CHECK *John Word*
 DATE

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	LOCATION
2	PLAN & PROFILE
3	LAYOUT
4	PILE LAYOUT
5	PILE END BENTS
6	PILE INTERMEDIATE BENTS
7	SOUNDINGS
8	NAVIGATION PERMIT

- STANDARD DRAWINGS
- BDP-009-03 thru BDP-027-03
 - BBP-001-04
 - BGX-006-01
 - RBR-001-03
 - RBR-005-04
 - BJJ-004-02
 - RBR-010-01

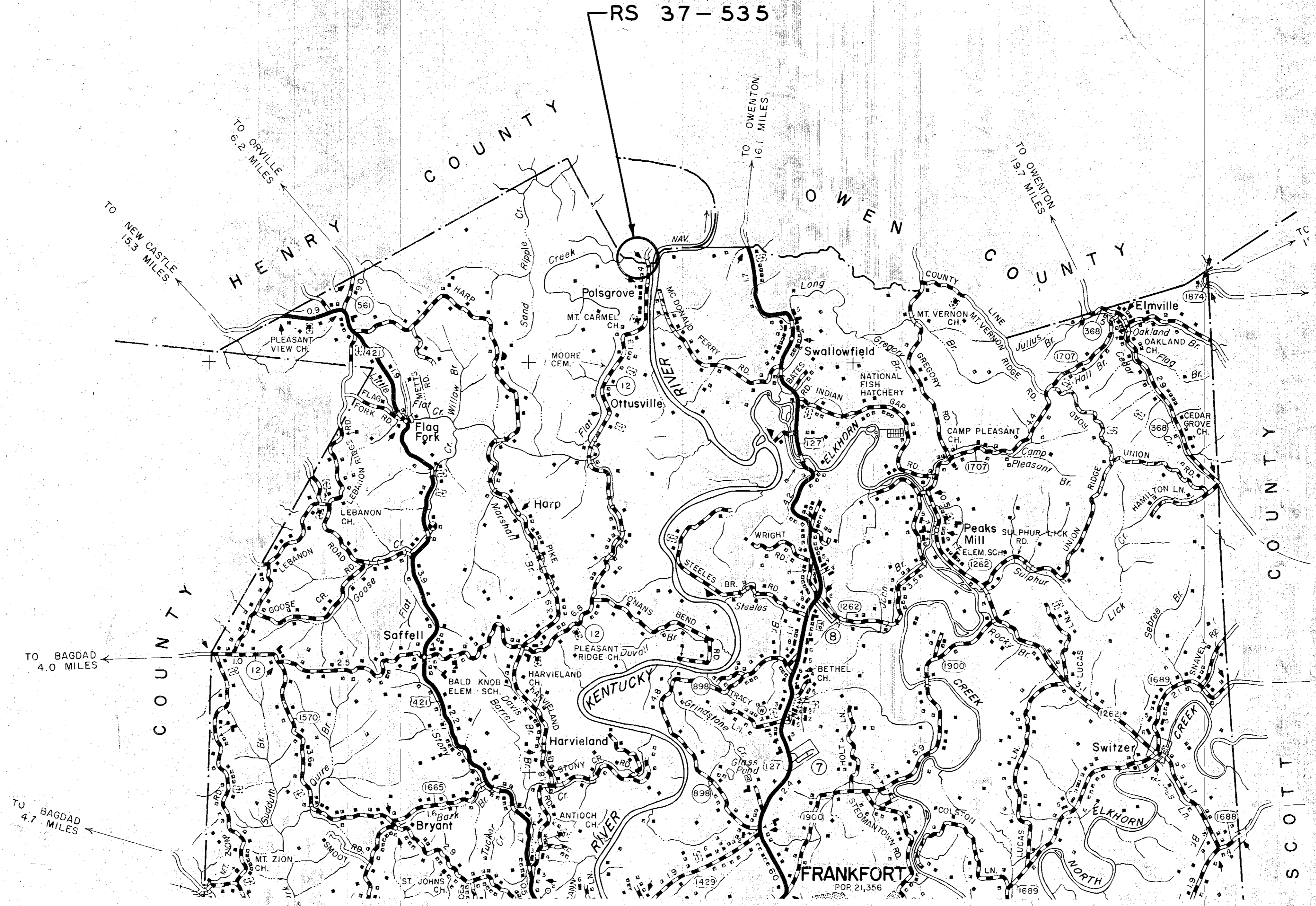
COMMONWEALTH OF KENTUCKY

DEPARTMENT OF TRANSPORTATION

BUREAU OF HIGHWAYS

PLANS OF PROPOSED PROJECT

FRANKLIN COUNTY



SHEET 1 OF 8
 DRAWING NO. 19430

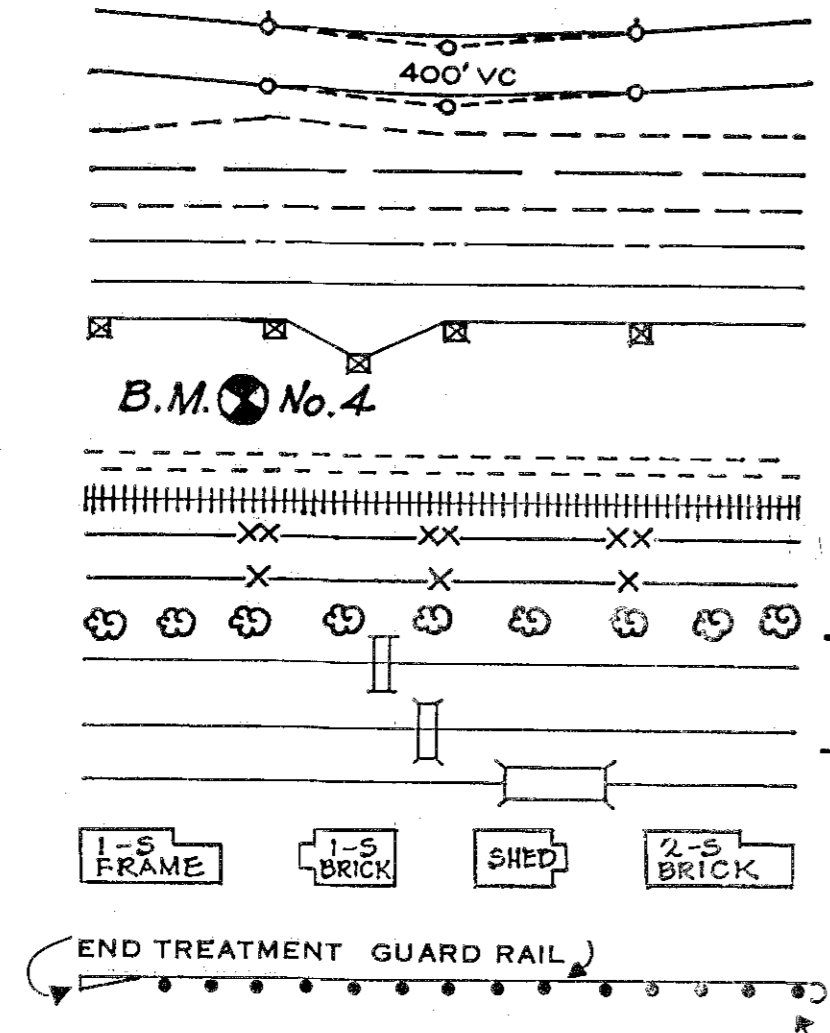
KENTUCKY
 BUREAU OF HIGHWAYS
FRANKLIN
 COUNTY
FLAT CREEK
 ROAD

PROJECT NO. RS 37-535

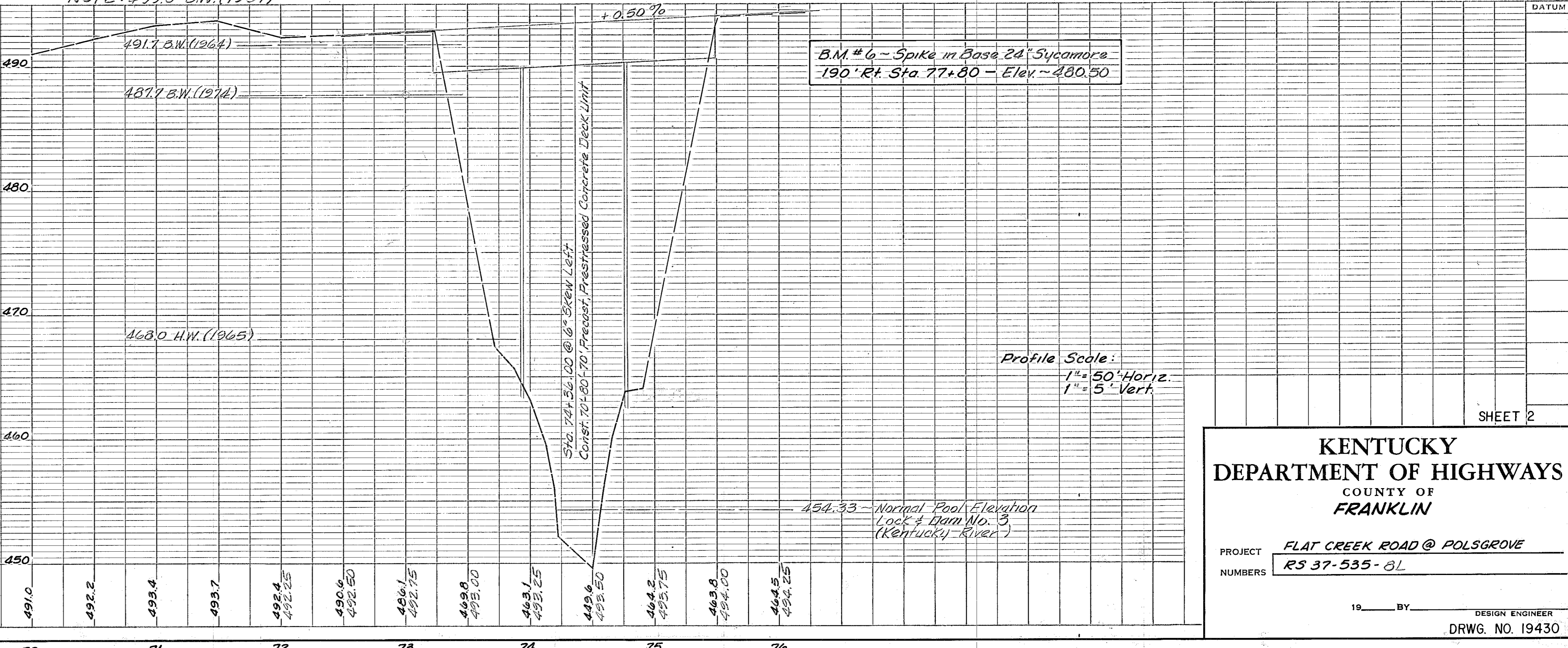
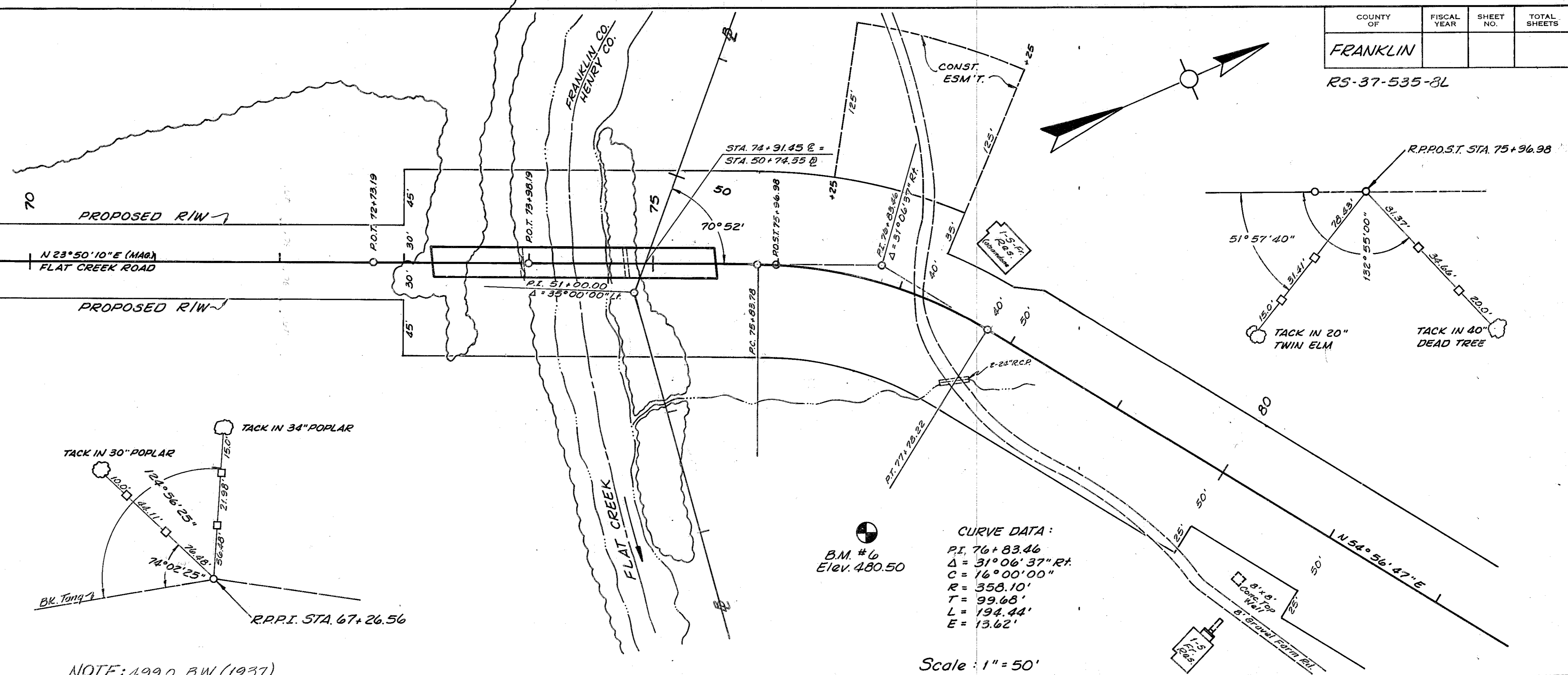
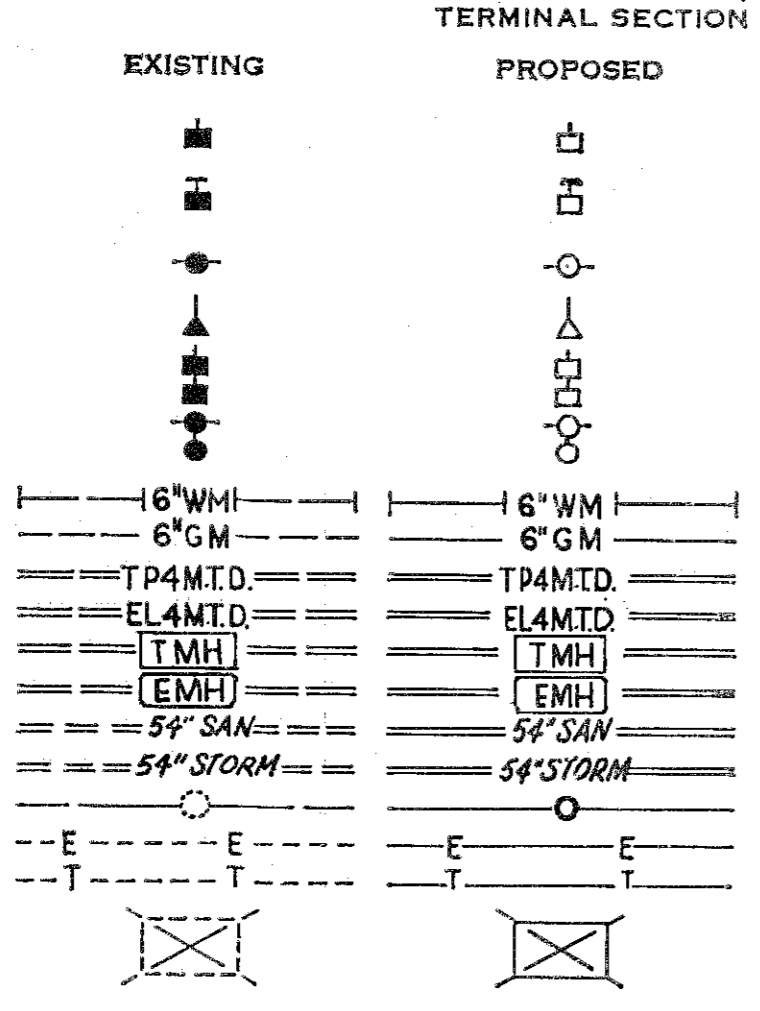
PLAN APPROVED _____	19	BY	_____ DIRECTOR OF BRIDGES
PLAN APPROVED _____	19	BY	_____ STATE HIGHWAY ENGINEER
PLAN APPROVED _____	19	BY	_____ DIRECTOR OF RURAL ROADS

CONVENTIONAL SIGNS

- SURVEY LINE
- GRADE LINE
- GROUND LINE
- COUNTY LINE
- CORPORATE LIMITS
- PROPERTY LINE
- PROPOSED RIGHT OF WAY
- RIGHT OF WAY MARKERS



- BENCH MARK
- EXISTING ROAD
- RAILROAD
- FENCE (CONTROLLED ACCESS)
- FENCE (EXCEPT STONE AND HEDGE)
- TREES
- PIPE CULVERT
- CULVERT
- BRIDGE
- BUILDINGS
- GUARD RAIL
- POWER POLE
- JOINT POWER & TELEPHONE POLE
- TELEPHONE & TELEGRAPH POLE
- ANCHOR, POWER OR TELEPHONE
- STUB POWER
- STUB TELEPHONE
- WATER MAIN
- GAS MAIN
- TELEPHONE DUCT
- ELECTRIC DUCT
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- SANITARY SEWER
- STORM SEWER
- SEWER MANHOLE
- DIRECT BURIAL ELECT CABLE
- DIRECT BURIAL TELEPHONE CABLE
- TOWER



DATE	BY	REVISION

DATE	BY	REVISION

**KENTUCKY
DEPARTMENT OF HIGHWAYS**
COUNTY OF
FRANKLIN

PROJECT: **FLAT CREEK ROAD @ POLSGROVE**
NUMBERS: **RS 37-535-3L**

19___ BY _____ DESIGN ENGINEER
DRWG. NO. 19430

UPDATE DATE
LETTING DATE

GENERAL NOTES

SPECIFICATIONS: The Kentucky Bureau of Highways Standard Specifications for Road and Bridge Construction, current edition with revisions, shall apply to this project.

DESIGN LOAD: This Bridge is designed for HS 20-44 live load as specified in the 1973 AASHTO Specifications.

DESIGN STRESSES: For Class "A" Reinforced Concrete:

$f_s = 20,000$ psi.
 $f_c = 3,000$
 $f_c = 1,200$ psi.
 $n = 10$

CONCRETE: Class "A" Concrete is to be used throughout, except in the precast prestressed Box Beams.

REINFORCEMENT: Dimensions shown from face of concrete to bars are clear distances. Spacing of bars is from center to center of bars.

BEVELED EDGES: All exposed concrete edges shall be beveled $\frac{1}{8}$ " unless otherwise shown.

PILING: Piling shall be driven to rock or to sustain a min. load of 75 tons per pile.

CONSTRUCTION JOINTS: No construction joints will be allowed in the caps.

BITUMINOUS COATING OF PILES: All H-piles in End Bent 2 shall be primed and uniformly coated with an asphaltic material conforming to either ASTM D-312 Type II or AASHTO M-115 Type B. Material for the prime coat shall conform to AASHTO M-116.

The piling shall be completely coated between cut off elevation and 12 feet from the tip with the exception of any splice area.

Application of the prime coat shall be with a brush or other approved means and in a manner to thoroughly coat the surface of the piling within the limits designated above with a uniform continuous film. Primer may be applied without heating and when deemed necessary may be thinned to a suitable brushing consistency with a volatile solvent. The primer shall be permitted to set thoroughly before the slip layer is applied.

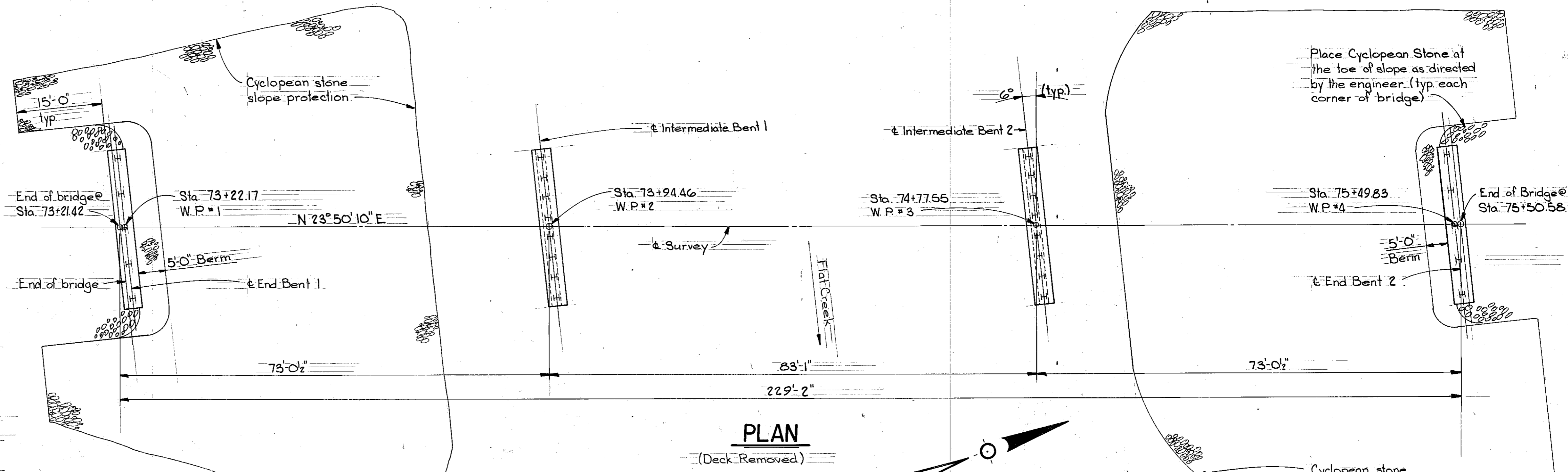
Asphalt for the slip layer shall be heated to 300-400 degrees Fahrenheit and applied by one or more mop coats or other approved means as necessary to apply an average coating depth of 10mm (.04").

White washing of the coating may be required as deemed necessary by the engineer to prevent running and sagging of the slip layer prior to driving during hot weather.

The cost of this item shall be included in the unit price bid for steel piles.

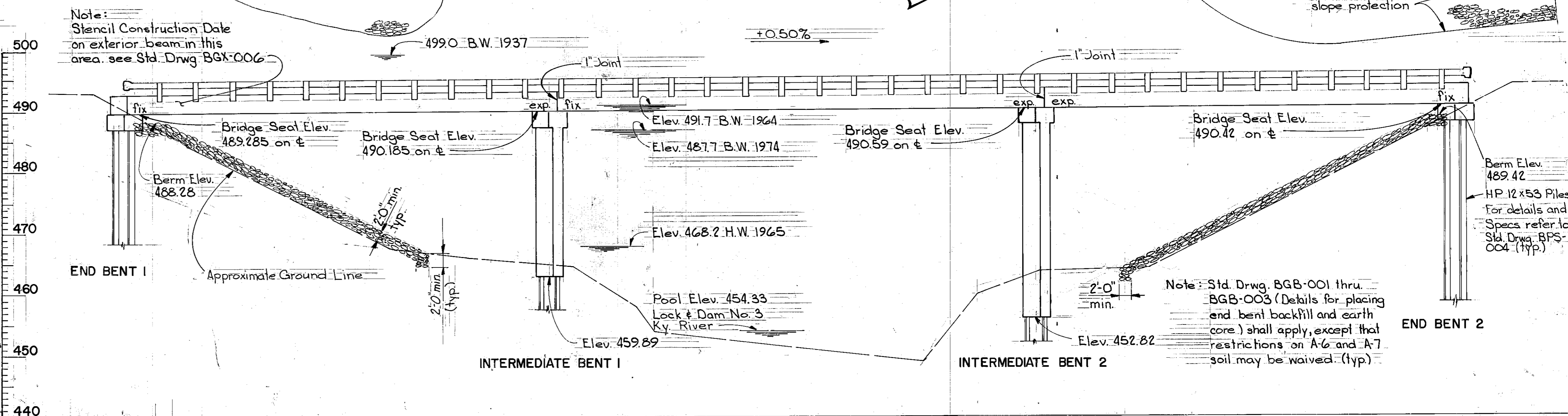
APPROACHES: Approaches to be constructed by others.

DOWELS: The 1" ϕ dowels shown on Std. Drwg. BDP-016 shall be placed in the interior and exterior beams.



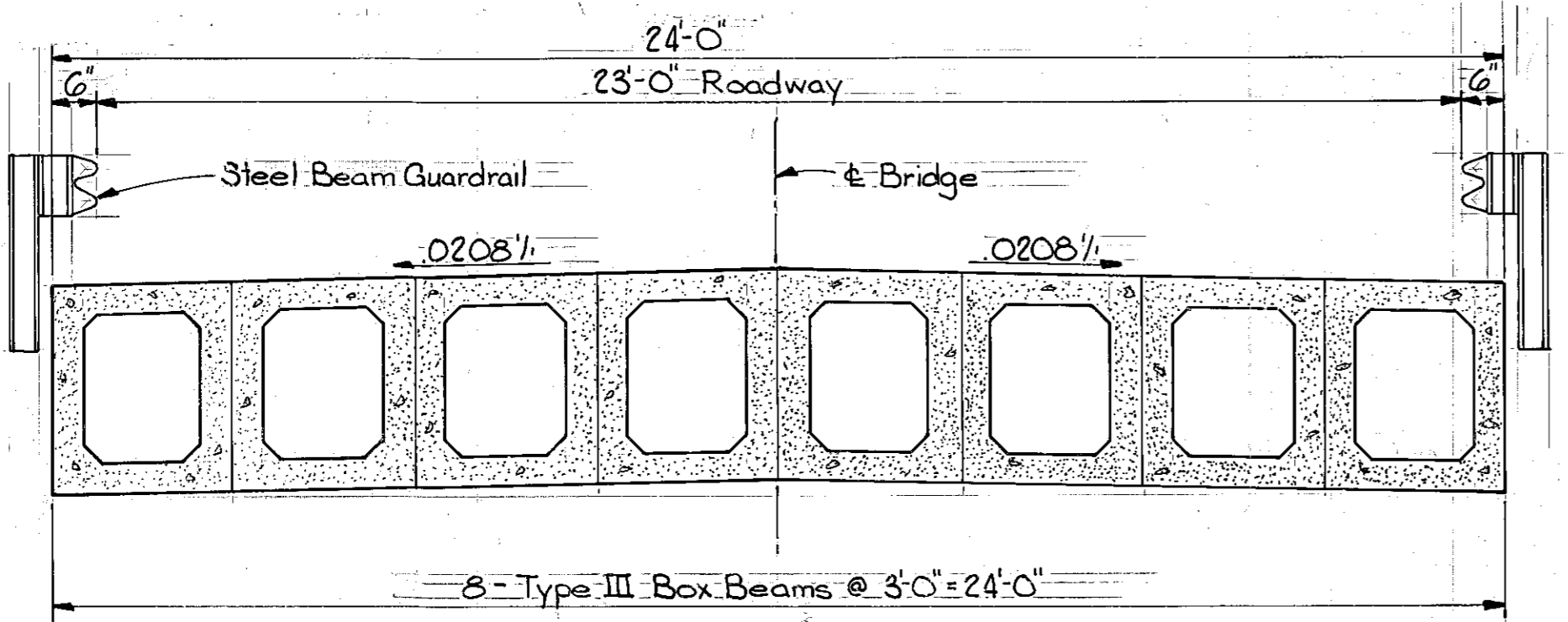
PLAN

(Deck Removed)



ELEVATION

70'-0", 80'-0", 70'-0" Clear Span P.P.C. Box Beam Type III
23'-0" Roadway, 6° Left Skew, Standard Drwg. BDP-009 thru BDP-027



TYPICAL SECTION THRU BRIDGE

ESTIMATE OF QUANTITIES

CONCRETE CLASS "A"	120.7	Cubic Yards
STEEL REINFORCEMENT	7198	Pounds
STRUCTURE EXCAVATION COMMON	99	Cubic Yards
PRECAST PRESTRESSED CONCRETE		
BOX BEAMS TYPE III	1832	Linear Feet
PILES STEEL HP 12 x 53	1618	Linear Feet
TEST PILES	300	Linear Feet
CYCLOPEAN STONE RIPRAP	1135	Tons
DEMOLITION		Lump Sum

DESIGNED BY: [Signature] DATE: 1-77
 CHECKED BY: [Signature] DATE: 1-77
 REVISIONS: [Table with 3 columns: NO., DATE, DESCRIPTION]
 10947

LAYOUT

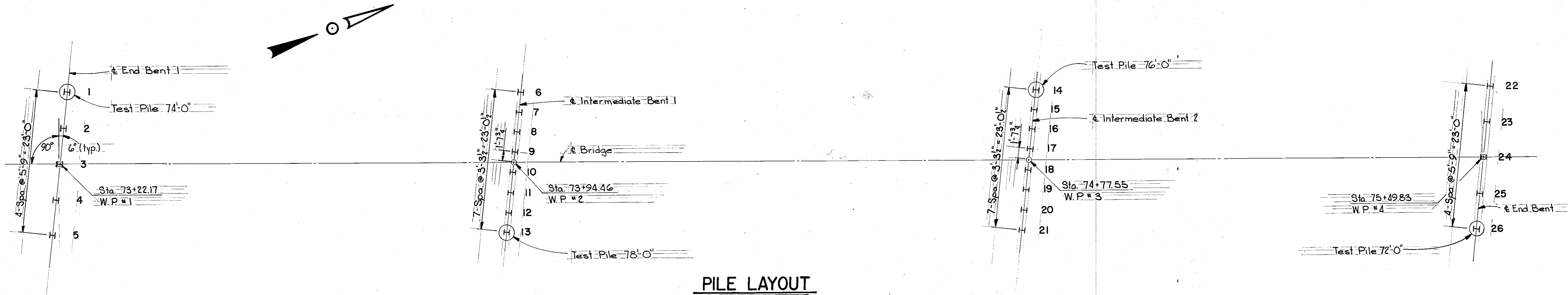
BRIDGE OVER FLAT CREEK AT POLSGROVE Sheet 3

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF

FRANKLIN
FLAT CREEK
ROAD

STATION 74+36 P.E. PROJECT NO.
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 19430

UPDATE DATE
LETTING DATE



PILE LAYOUT

NOTE: After all piles have been driven, the Resident Engineer shall record for each pile: the tip-of-pile elevation as driven, the length of pile in place, and the calculated bearing capacity and shall return one blue print copy of this sheet with this data to the Director of the Division of Bridges so that the data may be recorded on the original plans. Length of piles shown hereon are the actual length of piles in the finished structure below cutoff elevation and are not necessarily pay items. This pile record does not replace other records of piles required to be kept and submitted by the Resident Engineer.

PILE RECORD				
PILE NO.	PILE CUTOFF ELEVATION	TIP OF PILE ELEVATION AS DRIVEN	LENGTH OF PILE IN PLACE (Linear Feet)	CALCULATED BEARING CAPACITY (Tons)
1	487.47			
2	487.47			
3	487.47			
4	487.47			
5	487.47			
6	488.39			
7	488.39			
8	488.39			
9	488.39			
10	488.39			
11	488.39			
12	488.39			
13	488.39			
14	488.82			
15	488.82			
16	488.82			
17	488.82			
18	488.82			
19	488.82			
20	488.82			
21	488.82			
22	488.64			
23	488.64			
24	488.64			
25	488.64			
26	488.64			

DESIGNED BY: M.B. Nelson
 CHECKED BY: J. P. ...
 DATE: 1-77
 REVISIONS:
 1-77
 1-77

PILE LAYOUT

BRIDGE OVER FLAT CREEK AT POLSGROVE SHEET 4

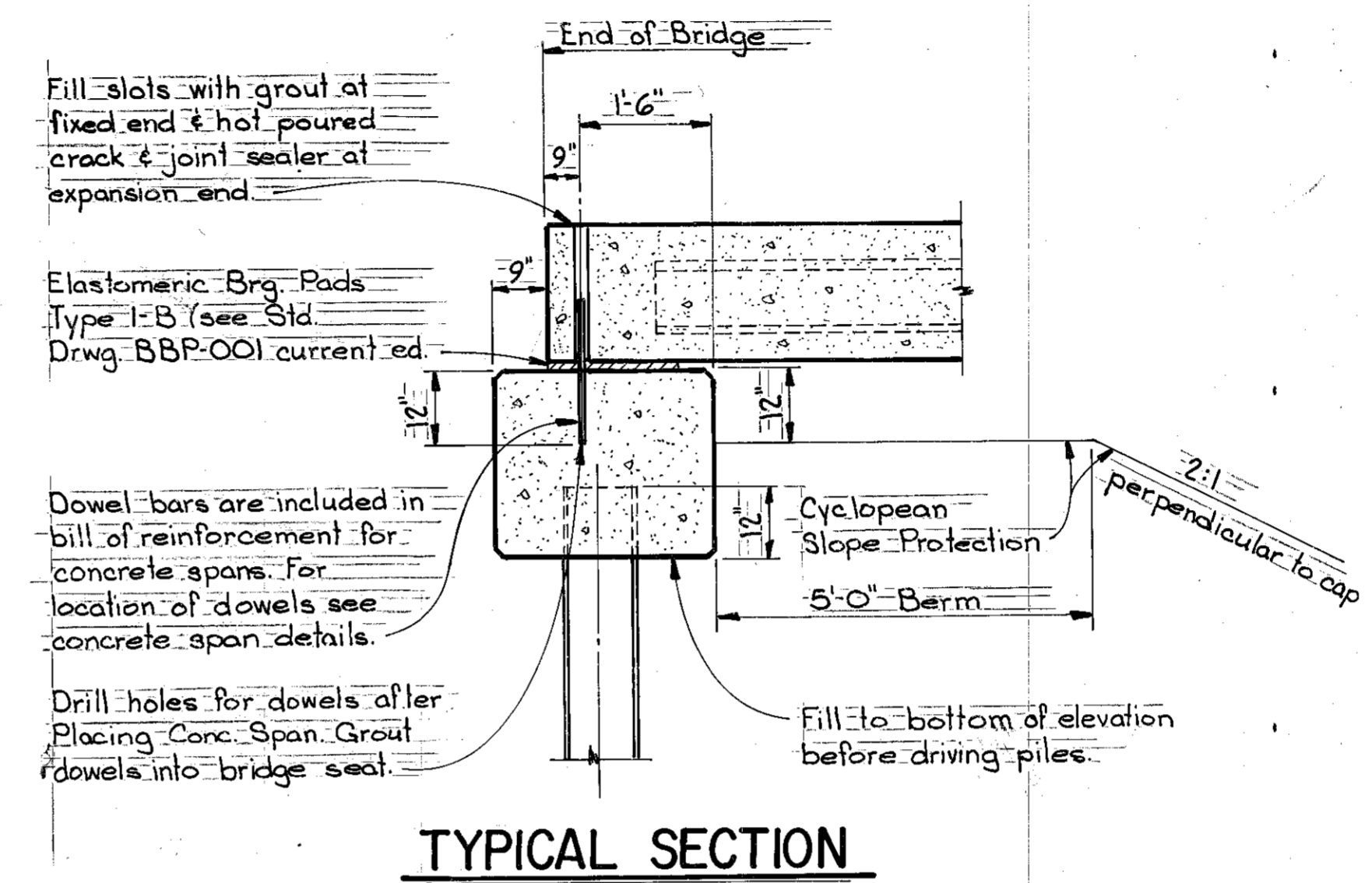
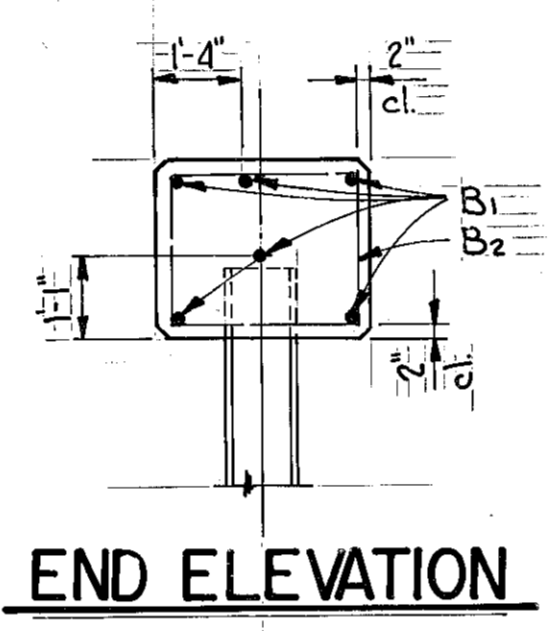
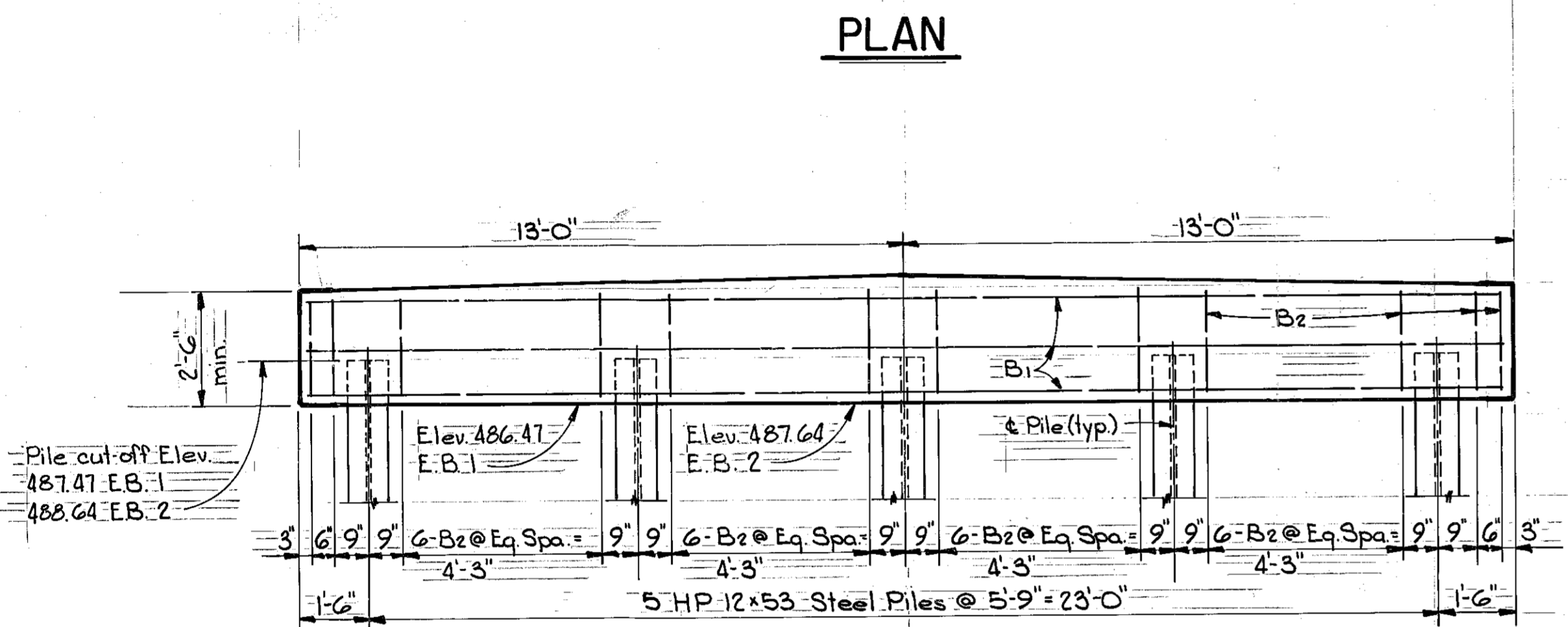
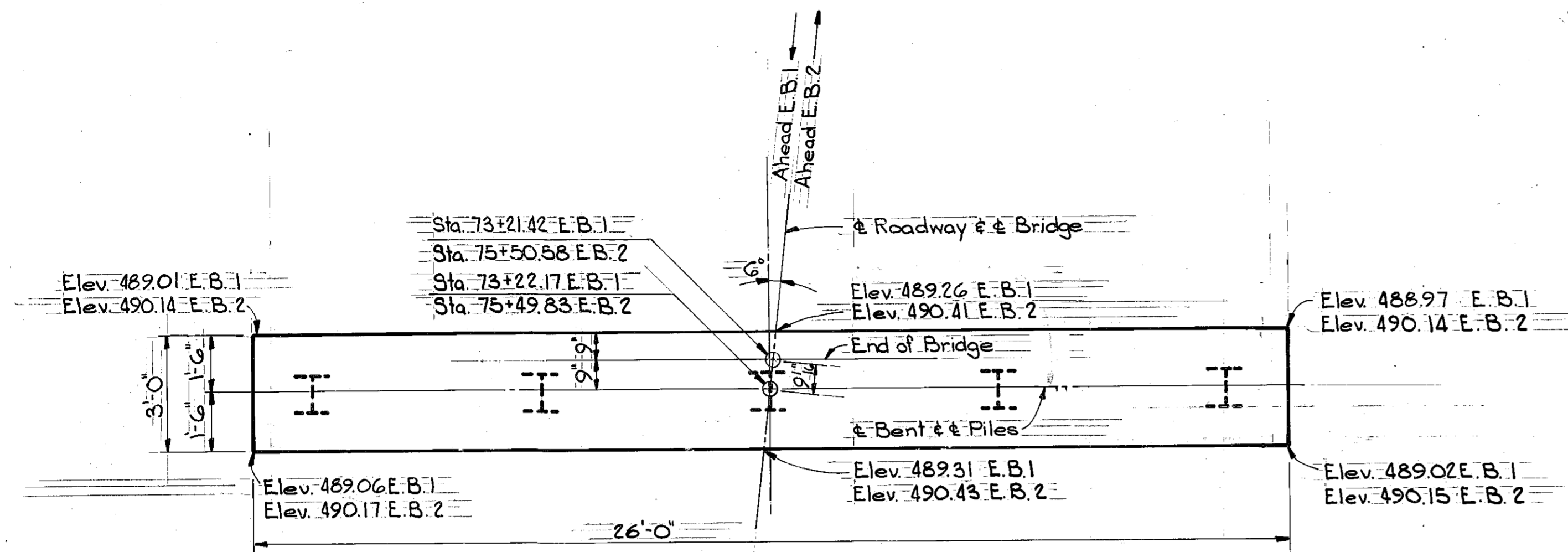
COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF

FRANKLIN
FLAT CREEK
 ROAD

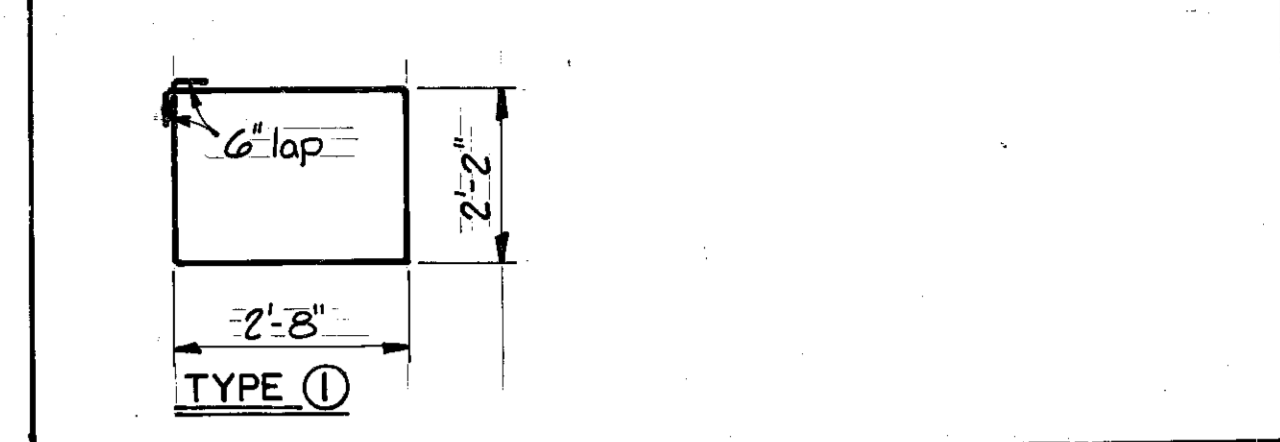
STATION 74+36 P.E. PROJECT NO.
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 19430

UPDATE DATE
LETTING DATE

DESIGNED BY: M.B. Walker
CHECKED BY: J.P. ...
DATE: 1-77
REVISIONS:
DATE: 1-77



BILL OF REINFORCEMENT							
Mark	Type	Number		Size	Length		Location
		E.B.1	E.B.2		Ft.	In.	
B1	Str.	6	6	#8	25	8	Cap
B2	①	28	28	#5	10	5	Cap



ESTIMATE OF QUANTITIES			
CONCRETE CLASS "A"	7.6 Cu. Yds. E.B.1	7.6 Cu. Yds. E.B.2	
STEEL REINFORCEMENT	716 Pounds E.B.1	716 Pounds E.B.2	

BRIDGE OVER FLAT CREEK AT POLSGROVE SHEET 5

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF

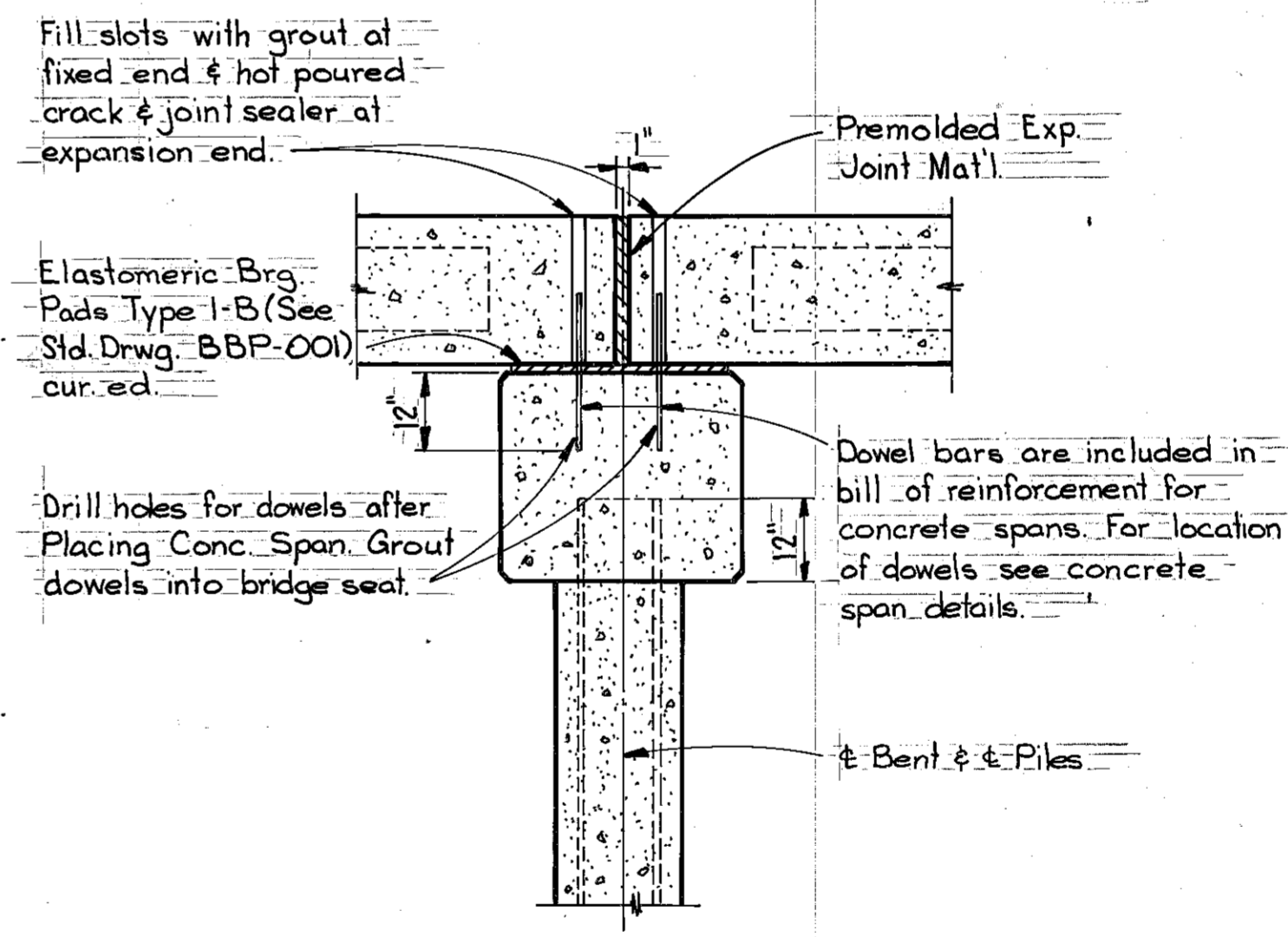
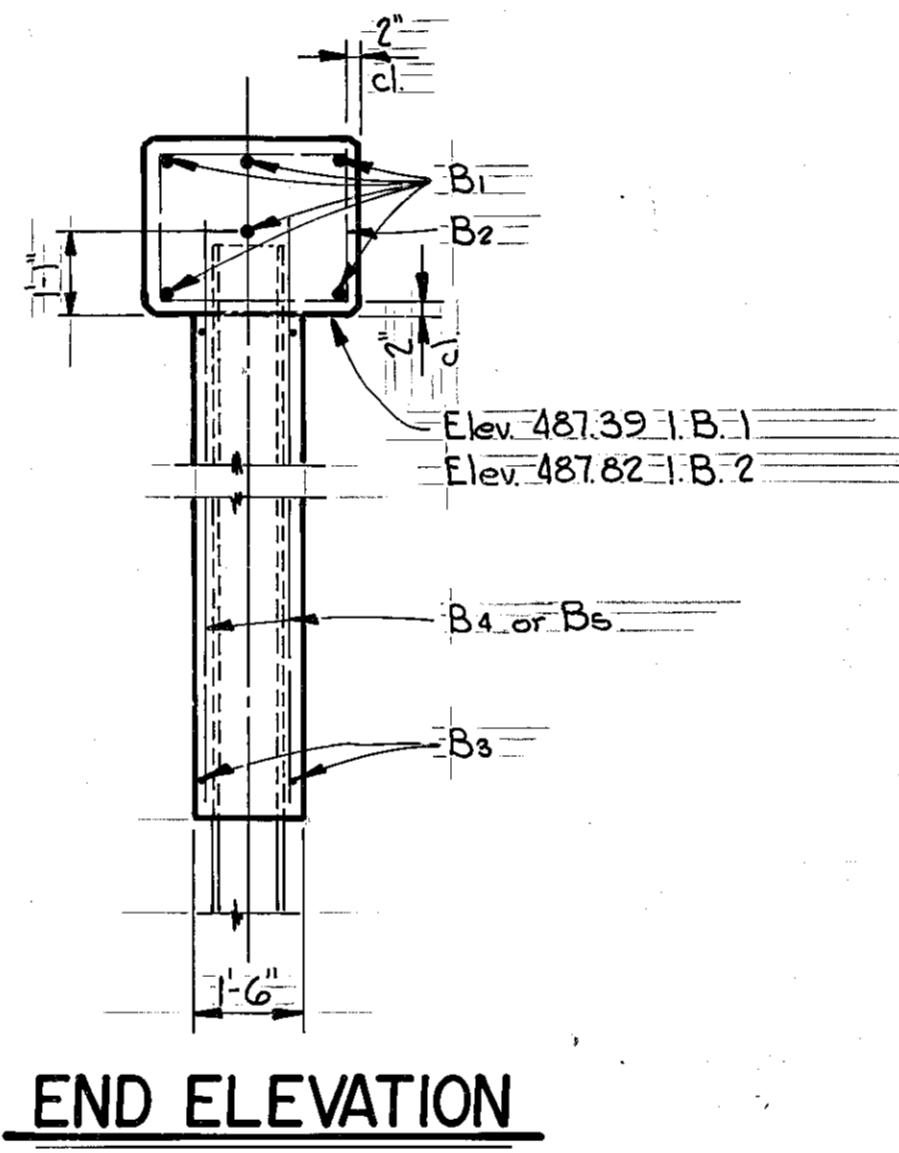
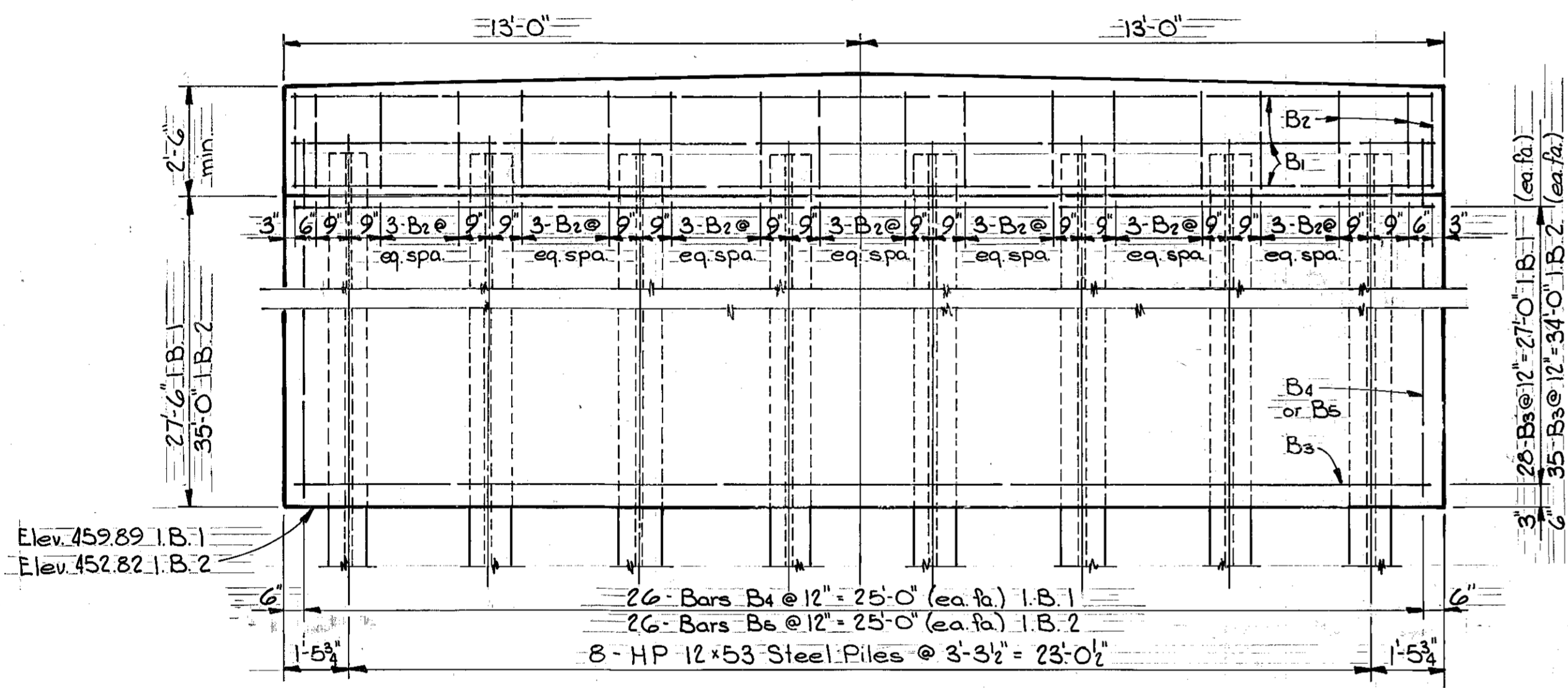
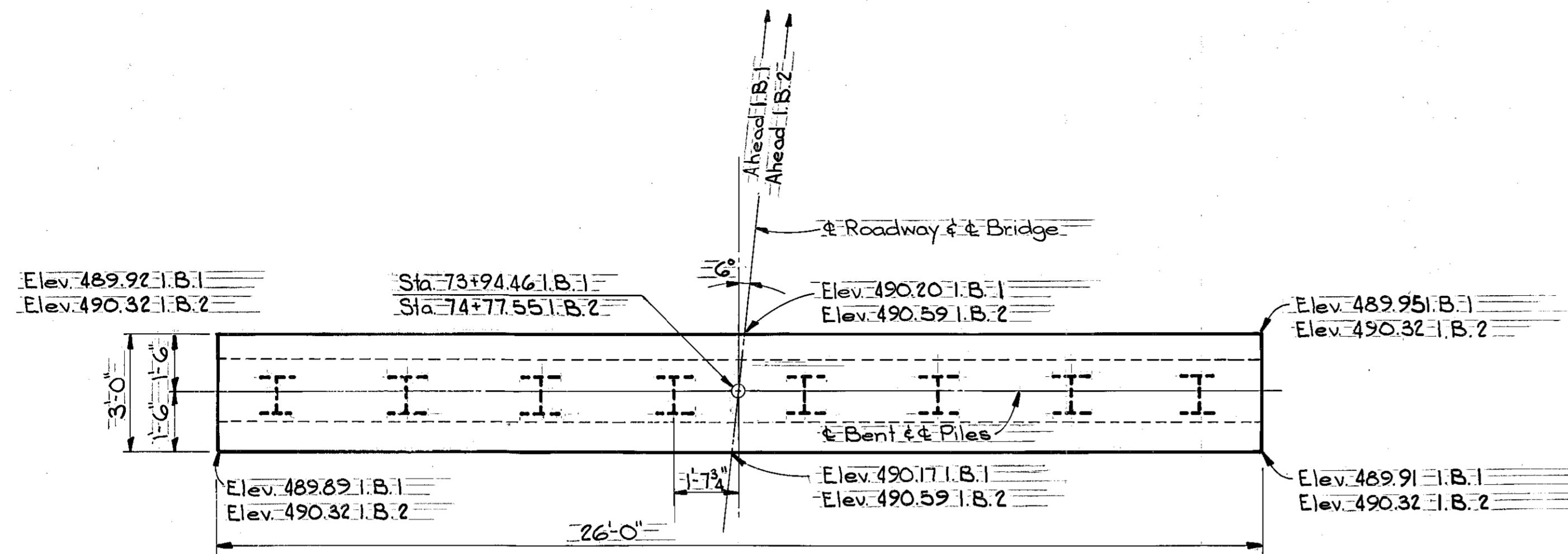
FRANKLIN
FLAT CREEK
ROAD

STATION 74 +36 P.E. PROJECT NO.

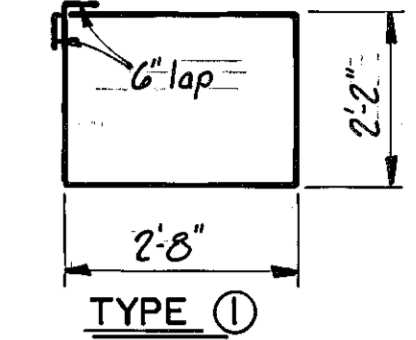
CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 19430

END BENTS 1&2

UPDATE DATE
LETTING DATE



BILL OF REINFORCEMENT							
Mark	Type	Number		Size	Length		Location
		I.B.1	I.B.2		Ft.	In.	
B1	Str.	6	6	#8	25	8	Cap
B2	(1)	25	25	#5	10	5	Cap
B3	Str.	56	70	#4	25	8	Webwall
B4	Str.	52	-	#4	28	6	Webwall
B5	Str.	-	52	#4	36	0	Webwall



ESTIMATE OF QUANTITIES			
CONCRETE CLASS "A"	47.3 Cu. Yds. I.B.1	58.2 Cu. Yds. I.B.2	
STEEL REINFORCEMENT	2633 Pounds I.B.1	3133 Pounds I.B.2	

DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 1-77
 TRACED BY: [Signature]
 DATE: 1-77

Pile cut-off Elev. 488.39 I.B.1
 488.82 I.B.2

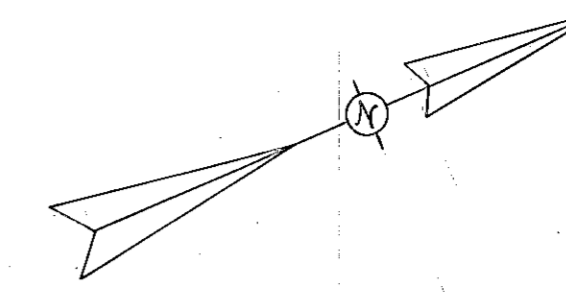
INTERMEDIATE BENTS 1&2

BRIDGE OVER FLAT CREEK AT POLSGROVE SHEET 6

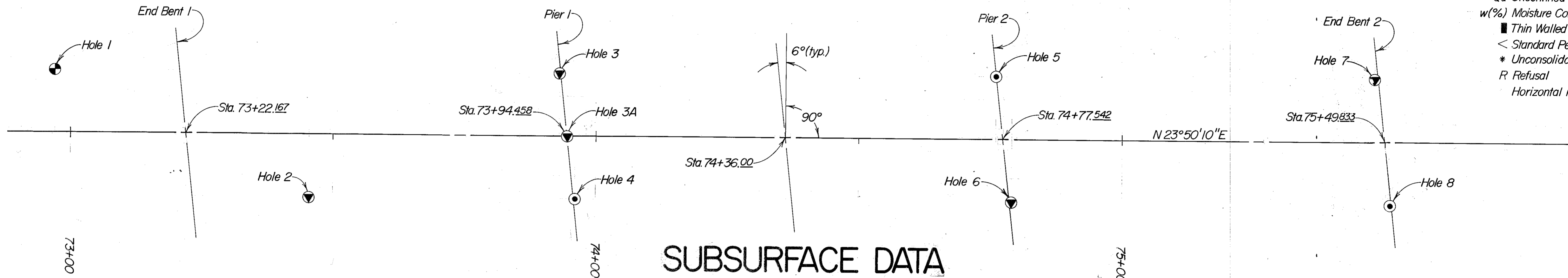
COMMONWEALTH OF KENTUCKY
 BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF
FRANKLIN
 FLAT CREEK
 ROAD

STATION 74+36 P.E. PROJECT NO.
 CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO. 19430

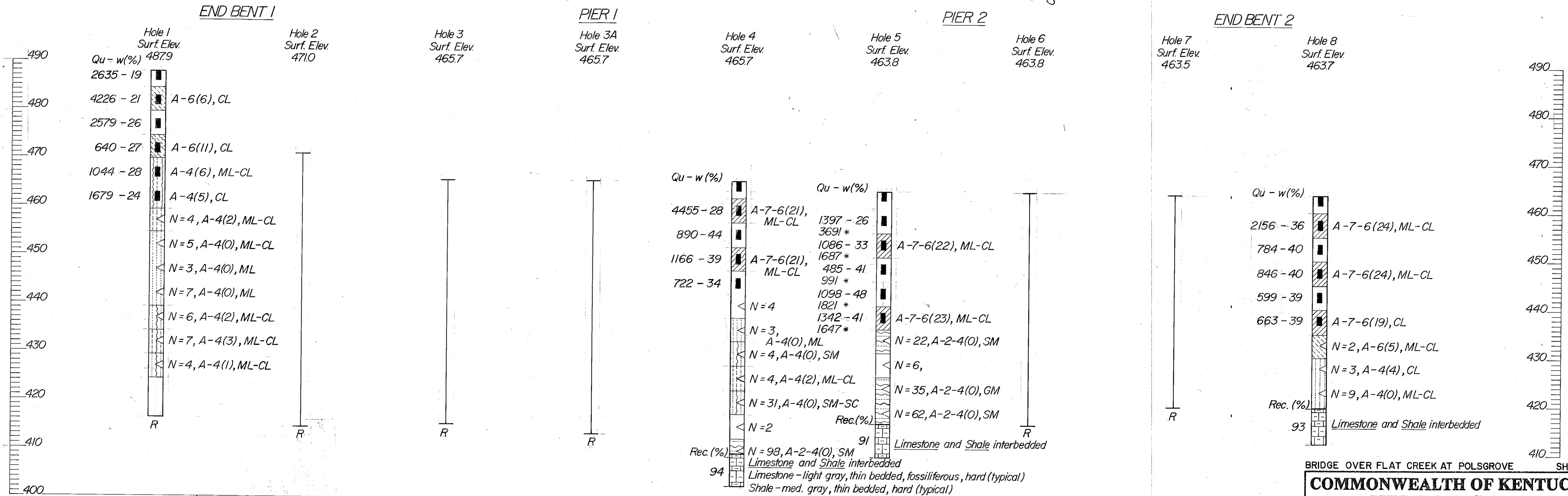
SUBSURFACE EXPLORATION PLAN



- LEGEND**
- ▼ Rock Line Sounding
 - Rock Core and Sample Boring
 - ⊙ Sample Boring
 - Qu Unconfined Compressive Strength (PSF)
 - w(%) Moisture Content
 - Thin Walled Tube Sample
 - < Standard Penetration Test
 - * Unconsolidation - Undrained (UU) Test
 - R Refusal
- Horizontal not to scale on Subsurface Data*



SUBSURFACE DATA



UPDATE DATE _____ LETTING DATE _____

DESIGNED BY _____ CHECKED BY _____ DATE 11/18/74

DRAWN BY _____ CHECKED BY _____ DATE 11/18/74

TRACED BY _____

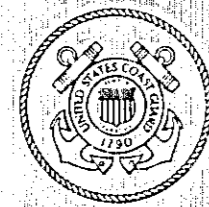
BRIDGE OVER FLAT CREEK AT POLSGROVE SHEET 7

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
 FRANKFORT
 COUNTY OF
FRANKLIN
 Flat Creek Rd.
 ROAD
 P.E. PROJECT NO. RS37-535-16L

STATION 74+36.00

CONSTRUCTION PROJECT NO. _____ MAINTENANCE PROJECT NO. _____ DRAWING NO. 19430

UPDATE DATE
LETTING DATE



DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS
COMMANDER (obr)
HENRY COUNTY GUARD DISTRICT
FEDERAL BLDG.
150 MARKET ST.
ST. LOUIS, MO. 63102
Tel: (314) 425-4607

16591.1/0.36 Flat Creek
SEP 2 2 1977

RECEIVED
SEP 26 1977

Mr. Charles G. Cook, Director
Division of Bridges
Commonwealth of Kentucky
Department of Transportation
Frankfort, KY 40601

DIVISION OF BRIDGES
FRANKFORT, KENTUCKY

Re: Proposed bridge across Flat Creek, Mile 0.36 near Polsgrove, Kentucky

Dear Mr. Cook:

Your application of 14 February 1977 requesting approval of the location and plans for a proposed bridge across Flat Creek, Mile 0.36 near Polsgrove, Kentucky, has been approved. Bridge Permit No. 131-77 dated 9 September 1977 is enclosed.

It is essential that we be kept informed of any events that could affect navigation during construction of the bridge. Your representative should be specifically instructed to keep this office informed of the progress of construction with particular reference to any and all events that may have an effect on navigation. The information received regarding the work will be disseminated to mariners by radio and by written notices.

Plans for cofferdams, temporary causeways, work bridges, falsework bents, or any other temporary structures that will be placed in the water to facilitate construction of this bridge must be approved by this office. Construction of this bridge must be accomplished with minimal interference with navigation. To this end, construction schedules, plans, and erection schemes should be submitted to us at the earliest possible time so that approval can be assured prior to commencing work.

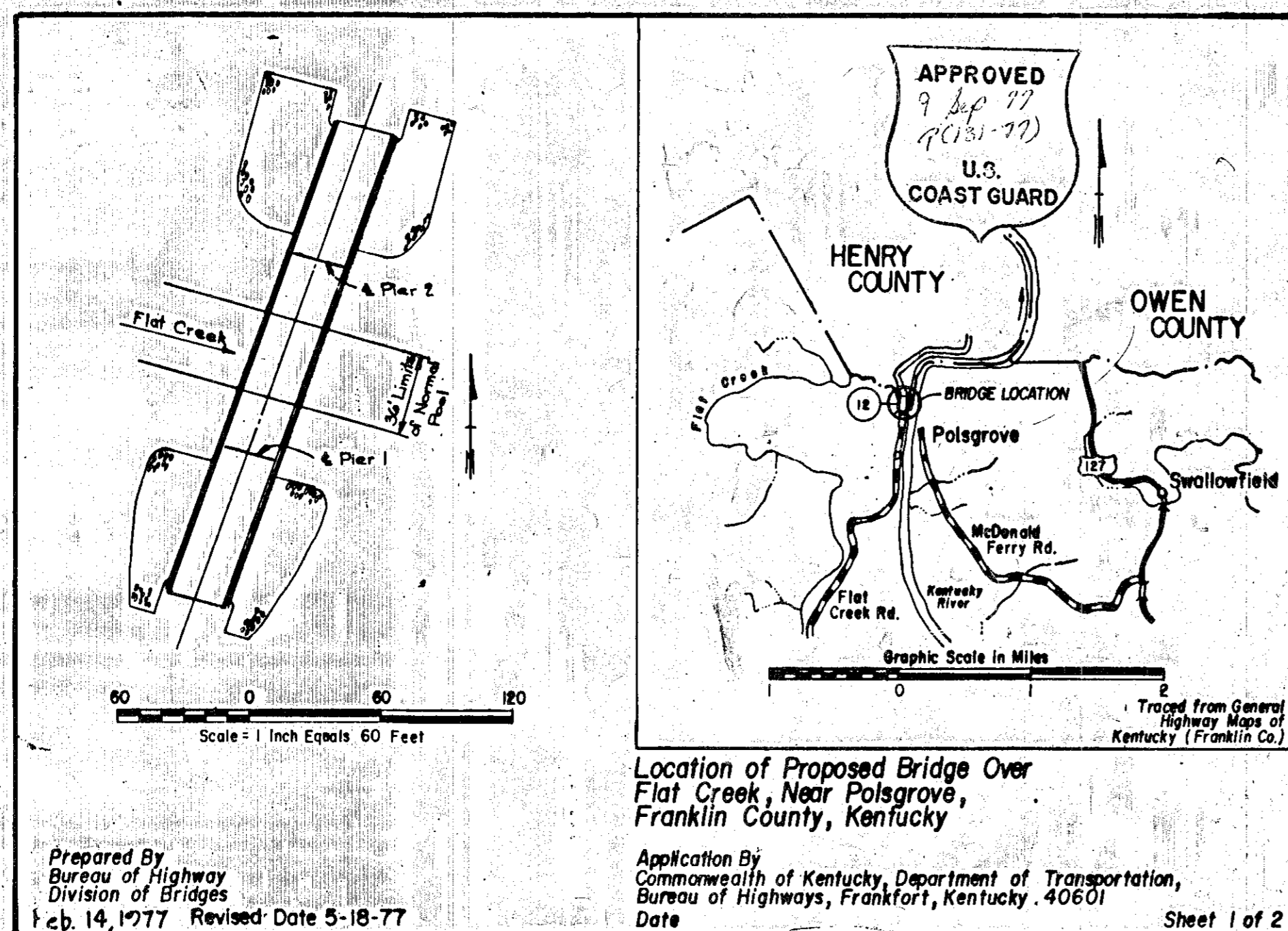
Please acknowledge receipt of the Permit. If you have any questions concerning our jurisdiction or requirements, you can contact us at telephone no. (314) 425-4607.

Sincerely,

S. W. Thoroughman
S. W. THOROUGHMAN
Chief, Bridge Branch
By direction of the District Commander

Encl: (1) USCG Bridge Permit No. 131-77 of 9 September 1977

Copy to:
CofE, Louisville Dist.
Div. Engr., Ohio River Div.



DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS
U.S. COAST GUARD
WASHINGTON, D.C. 20590
PHONE

BRIDGE PERMIT
(131-77)

9 SEP 1977

WHEREAS by Title V of an act of Congress approved August 2, 1946, entitled "General Bridge Act of 1946," as amended (33 U.S.C. 525-533), the consent of Congress was granted for the construction, maintenance and operation of bridges and approaches thereto over the navigable waters of the United States;

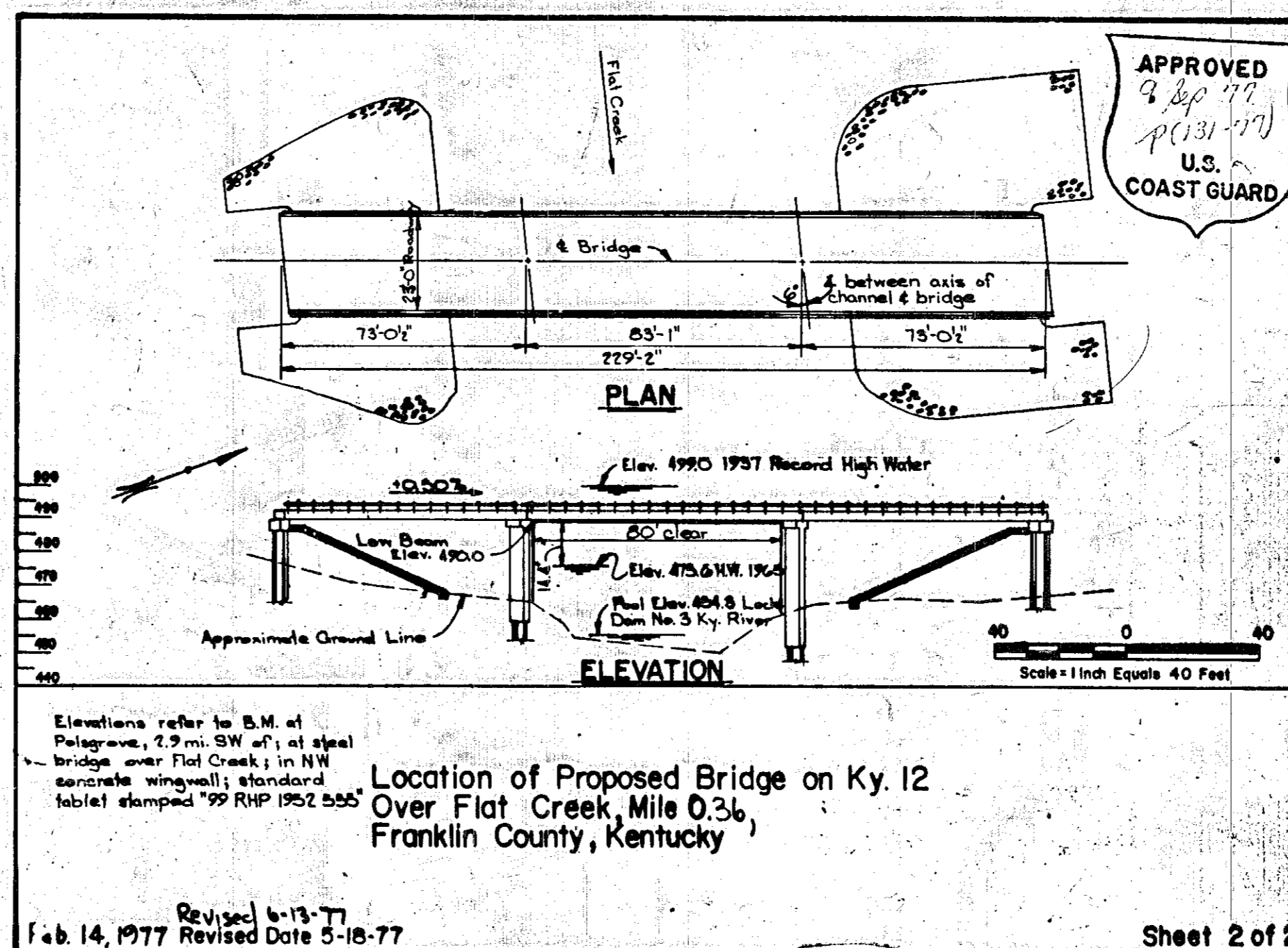
AND WHEREAS under Section 502(b) of that act, the authority of which was transferred to and vested in the Secretary of Transportation by Section 6(g)(6)(C) of the Department of Transportation Act (80 Stat. 931) and delegated by the Secretary to the Commandant, U. S. Coast Guard by Section 1.46(c) of Title 49 Code of Federal Regulations, it is required that the location and plans for such bridges be approved by the Commandant before construction is commenced and in approving the location and plans of any such bridge, the Commandant may impose any specific conditions relating to the construction, maintenance and operation of the structure which he deems necessary in the interest of public navigation, such conditions to have the force of law;

AND WHEREAS the - COMMONWEALTH OF KENTUCKY - has submitted plans and a map of location of a bridge to be constructed across Flat Creek near Polsgrove, Kentucky;

NOW THEREFORE, This is to certify that the location and plan sheet 1 (of 2) revised 18 May 1977 and sheet 2 last revised 13 June 1977 are hereby approved by the Commandant, subject to the following conditions:

1. No deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant.

2. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. The construction of falsework, pilings or other obstructions, if required, and the scheme for constructing and erecting the bridge shall be in accordance with plans submitted to and approved by the Commandant, Second Coast Guard District prior to construction of the bridge. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction. The channel or channels through the structure shall be promptly cleared of all obstructions placed therein or caused by the construction of the bridge to the satisfaction of the District Commander, when in his judgment the construction work has reached a point where such action should be taken, but in no case later than ninety days after the bridge has been opened to traffic.



BRIDGE PERMIT: Bridge across Flat Creek near Polsgrove, Kentucky (131-77)

3. Issuance of this permit does not relieve the permittee of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the Commonwealth of Kentucky, Department for Natural Resources and Environmental Protection; Kentucky Heritage Commission, or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge.

4. The existing to be replaced KY 12 Bridge across Flat Creek, mile 0.1, shall be removed down to or below the natural bottom of the waterway and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed within 90 days after the new bridge, mile 0.36, has been opened to traffic. The proposed method and schedule for removal of the existing bridge shall be submitted to the District Commander for approval prior to commencing such removal.

5. The approval hereby granted shall cease and be null and void unless construction of the bridge is commenced within 3 years and completed within 5 years after the date of this permit.

R. D. Hobbins
R. D. HOBBS
Captain, U.S. Coast Guard
Chief, Bridge Division
By direction of the Commandant

BRIDGE OVER FLAT CREEK AT POLSGROVE Sheet 8

COMMONWEALTH OF KENTUCKY
BUREAU OF HIGHWAYS
FRANKFORT
COUNTY OF

FRANKLIN
FLAT CREEK
ROAD

STATION 74 + 36 P.E. PROJECT NO.

CONSTRUCTION PROJECT NO. MAINTENANCE PROJECT NO. DRAWING NO.

19430

NAVIGATION PERMIT