



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

P. E. MASHETER
Director

Columbus, Ohio 43216

JAMES A. RHODES
Governor

Division Seven
Sidney, Ohio-45365
December 31, 1970

J. W. WILSON
Chief Engineer

Chester R. Kurtz
Logan County Engineer
P. O. Box 427
Bellefontaine, Ohio- 43111

RE: Project No. 596-70
Logan County
County Road 10- 5.09
Issue No. 1 Funds

Dear Sir:

Attached is a copy of a letter that as to content and form will be acceptable to the State Auditing Department as a request from you for Division Seven Construction to perform the inspection on subject Project. This letter is required by auditing for them to set-up funds to pay the inspection charges for the Project.

Please submit the attached letter of request to the Division Seven Construction office at your earliest convenience.

Sincerely yours,

Oliver M. Liggitt
Division Deputy Director

Joe A. O'Brien
Joe A. O'Brien
Division Construction Engineer

REC:hb
cc: File
Encl. letter

RECEIVED

JAN 4 1971

**LOGAN COUNTY
ENGINEER**

January 6, 1971

Oliver M. Liggitt
Division Deputy Director
Ohio Department of Highways
Division Seven
Sidney, Ohio 45365

ATTENTION: Joe A. O'Brien,
Div. Construction Engineer

Dear Sir:

Re: Project No. 596-70
Logan County
County Road 10 - 5.09
Issue No. 1 Funds

In order for the State Highway Division Seven Construction Department to assume the responsibility and become the official Engineering, Inspection, and Testing Agency for Logan County on subject Project, I herewith request the following:

1. For the State Highway Department to perform the engineering and inspection as required by the 1969 Construction & Materials Specification.
2. For the State to set-up an Engineering & Inspection Fund, estimated to be seven thousand dollars (\$7,000.00), for the above services. This fund is to be deducted from available Logan County Issue No. 1 funds.

Engineering and Inspection Fund is to be adjusted to the actual cost upon completion of the Project.

Very truly yours,



Chester R. Kurtz, P.E.
Logan County Engineer

CRK:sjm

COPY

*Put on letter head
JAN 6, 1971*

Oliver M Liggitt
Division Deputy Director
Ohio Department of Highways
Division Seven
Sidney, Ohio- 45365

RE: Project No. 596-70
Logan County
County Road 10 - 5.09
Issue No. 1 Funds

ATTENTION: Joe A. O'Brien,
Div. Construction Engineer

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Engineering and Inspection Fund is to be adjusted to the actual cost upon completion of the Project.

Sincerely yours,

Chester R. Kurtz
Logan County Engineer



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

JOHN J. GILLIGAN
Governor

J. PHILLIP RICHLEY
Director

Division Seven
Sidney, Ohio-45365
April 1, 1971

Chester R. Kurtz
Logan Co. Engineer
P. O. Box 427
Bellevfontaine, Ohio- 43311

RE: Project No. 596-70
Logan County
County Road 10-5.09

Dear Sir:

The contractor, Iberia Earthmoving Service, Inc., resumed work on subject
Project Wednesday, March 31, 1971.

Joe Allen is the Project Supervisor.

Sincerely yours,

William F. Wagner
Division Deputy Director

Joel A. O'Brien
Joe A. O'Brien
Division Construction Engineer

REC:hb
cc: Project
File

RECEIVED
APR 5 1971
LOGAN COUNTY
ENGINEERING

RESOLUTION NO. 37

The County Commissioners met in regular session on this date of March 19, 1971 with the full Board present.

re: Project No. 596 (1970) of Logan
C.R. #10, Issue 1 Project

Mr. Don Downing moved that the following Resolution be adopted:

The Logan County Commissioners agree to enter into an amended contract with the State of Ohio as attached hereto.

Mr. John R. Inskeep seconded the motion.

Roll Call resulted as follows:

<u>Lois D. Krouse</u>	<u>Yes</u>
Mr. Harvey C. Terrill, Chairman	<u>Yes</u>
<u>John R. Inskeep</u>	<u>Yes</u>
Mr. John R. Inskeep, V. Chairman	<u>Yes</u>
<u>Don Downing</u>	<u>Yes</u>
Mr. Don Downing, Member	<u>Yes</u>

I, Lois D. Krouse, Clerk hereby certify this to be a true copy of the proceedings as taken from the minutes of the meeting of the Logan County Commissioners on this date of March 19, 1971.

Lois D. Krouse

Lois D. Krouse, Clerk



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

JOHN J. GILLIGAN
Governor

Columbus, Ohio 43216

J. PHILLIP RICHLEY
Director

Division Seven
Sidney, Ohio-45365
August 12, 1971

Mr. Chester R. Kurtz
Logan Co. Engineer
P. O. Box 427
Bellefontaine, Ohio- 43311

RE: Project No. 596-70-
Logan County
County Road No. 10

Dear Sir:

Attached is the Resolution of Acceptance on subject Project. Please complete, and return the original and two copies to this office. The Project will be completed prior to the completion date of August 31, 1971.

Sincerely,

William F. Wagner
Division Deputy Director

Joe A. O'Brien REC
Joe A. O'Brien
Division Construction Engineer

REC:hb
cc: File
Encl. R.of Acceptance

RECEIVED

AUG 13 1971

LOGAN COUNTY
ENGINEER

File

RESOLUTION OF ACCEPTANCE NO. 126-71

NAME OF STREET _____ PROJECT NO. 596-70
COUNTY ROAD NO. 10 CONTRACT NO. 22008
STATE ROUTE NO. _____ FEDERAL PROJECT NO. - - -
SECTION 5 09

A Resolution, No. 117, enacted by the Board of County Commissioners of
Logan County, Ohio, under date of July 27, 1970,
in the matter of the hereinafter described improvement, under the supervision of
the Director of Highways.

SECTION I

WHEREAS, the Director of Highways has completed the following improvement under
his supervision of the public highway particularly described as follows:

Replace existing Bridge No. 10-5.09, over the Mad River in Jefferson Township,
at a slightly adjusted location, and make all necessary adjustments to the
alignment and profile of County Road No. 10 necessitated by the new bridge, in
accordance with plans prepared by the County and approved by the Director of
Highways.

SECTION II (Acceptance)

BE IT RESOLVED, that the Board of Commissioners, of the County of Logan
of Ohio, having cooperated with the State of Ohio, in the cost of the above described
improvement, hereby signified approval of the construction and accepts the improvement
as completed by the Director of Highways.

That this Resolution shall take effect and be in force from and after the earliest
period allowed by law.

Passed: August 23, 19 71

Board of County Commissioners

Attest: Leo S. Fowler

Harvey C. Terrill-Absent

Attest: Harvey C. Terrill

John R. Finkbeiner
Don Downing



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

JAMES A. RHODES
 Governor

DIVISION SEVEN
 Sidney, Ohio

May 1, 1970

P. E. MASHETER
 Director

J. W. WILSON
 Chief Engineer

Chester Kurtz
 Logan County Engineer
 County Engineer's Office
 Bellefontaine, Ohio 43311

Subject: Issue #1 Project, County Road #10
Bridge Over Mad River

Dear Mr. Kurtz:

When you were in our office yesterday we handed to you a copy of a letter directed to us on April 28, 1970 by Clarence D. Bowser of our Central Office Bridge Bureau. The letter and attached sheets make reference to sheets 28, 29 and 38 to 55 inclusive of "Design Regulations" issued by the Bridge Bureau of the State Highway Department. For your convenient reference we are furnishing to you attached xerox copies of those sheets.

Oliver M. Liggitt
 Division Deputy Director

W. G. Knasel
 D/E Design & Planning

WGK:rba

Attach.

cc: File
 Leistner

RECEIVED

MAY 8 1970

LOGAN COUNTY
 ENGINEER

DETAIL DESIGN

REINFORCING BAR MARKS AND SIZES (concluded)

The Standard Drawings in current use include a few drawings on which the size of reinforcing bars is given by the obsolete bar-diameter system. In case one of these Standard Drawings is included with the plans as a reference the following note should be placed below the reinforcing steel list:

"The bar size designations shown above do not correspond with the size designations given in the January 1, 1969 edition of the Construction and Material Specifications."

REINFORCING STEEL ON DRAWINGS

Abbreviations should not be used to designate the position of bars in a structure unless they are fully explained in a legend placed near the view in which they are shown.

REPLACEMENT BARS

Replacement Bars, under this title, shall be shown in a separate group in the bar list, but without weights. For bars size No. 11 and smaller the length of individual replacement bars shall be 5'-0" plus 30 diameters of the bar plus the length of any bent portion of a bar. For bar sizes No. 14 and No. 18 the length shall be 2'-6". Replacement bars should be straight bars unless a bent bar is obviously required. For bar sizes No. 11 and smaller the replacement bars are to be lapped onto bars in the field, from one end of which 5'-0" test specimens have been cut. For sizes No. 14 and No. 18 bars, the replacement bars must be spliced to the bars from which 2'-6" samples have been cut by an approved positive mechanical method designed to develop 125% of the yield strength of the bar. In case there are No. 14 or No. 18 bars required for the project the following note shall be provided on the reinforcing steel list:

Splices in No. 14 (or No. 18) size bars shall be made by an approved positive mechanical method designed to develop 125% of the yield strength of the bar.

DETAIL DESIGN

REPLACEMENT BARS (concluded)

One replacement bar is required for each 10 tons or fraction thereof of each size (diameter) of bar.

REFERENCE LINE

For structures on a horizontal curve a reference line (usually a chord of the curve) should be used to simplify field work. This reference line should be shown on the General Plan view with a brief description, such as "Reference Line (chord between faces of abutments)," and the stations of the points where it intersects the curve. Skews, dimensions of substructure elements and superstructure should then be given from this same Reference Line, both on the General Plan and on the detail sheets.

CROWN AND SUPERELEVATION

The roadway crown or rate of slope shall be shown.

On superelevated sections, the cross-section of the bridge shall fit the approach roadway section except on the outer high side, which shall be rounded and sloped as shown on Standard Drawing CSB-3-63, Sheet 1. The median shoulder area shall retain the same slope as the pavement. For bridges with narrow median barrier, the cross-section shall fit the approach typical section.

EXPANSION BEARINGS

The assumed coefficient of friction of lubricated bronze sliding bearings is 0.10.

The assumed rolling-and-sliding resistance of rockers is 0.25 DL times r/R , where: DL is the dead load reaction on the rockers, "r" is the radius of the pin, and "R" is the radius of the rocker.

It may be found that the flexibility of some tall, slender piers is sufficient to absorb the horizontal movement at bearings caused by temperature change without developing the force necessary to cause movement of sliding or rocking expansion bearings. If this condition is found to exist, fixed bearings may be used.

TYPICAL GENERAL NOTES

- *If other steels are used, they also shall be listed.
- **If spirals are not used, the portion of the note beginning with "Spiral" should be omitted.

For structures carrying railroad traffic, the following notes should be provided on the project plans:

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Specifications for Steel Railway Bridges" of the American Railway Engineering Association, 19____ Edition.

CONSTRUCTION AND MATERIAL SPECIFICATIONS: State of Ohio, Department of Highways, dated Jan. 1, 1969.

DESIGN DATA:

Design Loading - Cooper E-80 with (*) impact.
(*steam or diesel).

Concrete Class C - unit stress 1200 p.s.i. for superstructure
unit stress 1333 p.s.i. for substructure

Structural Steel - ASTM A36 - unit stress 20,000 p.s.i.
Reinforcing Steel - ASTM A615 - unit stress 20,000 p.s.i.

The following run-around note should be included on the plans.
The use of the existing bridge should be stated as permissible only if so called for in the Preliminary Design Data.

TEMPORARY RUN-AROUND BRIDGE

Loading for bridge, HS20-44, with unit stresses increased 50%. Existing bridge may be moved and used for the run-around bridge without strengthening.

TYPICAL GENERAL NOTES

The following sample notes will serve as a guide in composing the note for the removal of the existing structure. They should be modified as required to fit the conditions. For example, in the first note the word "dismantled" should be used if the steel is to be re-erected, otherwise the word "removed" is preferable. The information provided in the Preliminary Design Data sheet should be rearranged in a form similar to the samples.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed. (Structural steel shall be carefully dismantled and piled along the right-of-way for disposal by the State's forces.) Suitable waste masonry shall be placed as Bank Protection as directed by the Engineer.

(The parenthetical sentence in the above note is rarely used. If used on Federally financed work, an advance estimate of the value of the salvaged material is required.)

OR

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed. Abutments shall be removed to Elev. _____ . Piers shall be removed to Elev. _____ .

EMBANKMENT CONSTRUCTION AND QUANTITY NOTES

For abutments, with or without piles, appropriate "Construction and Quantity" Notes should be provided in the General Notes.

Piers that are adjacent to or set in the embankment area and that would be subject to lateral forces during embankment construction should be specifically identified by number, otherwise reference to piers should be omitted.

Reference to benches should be omitted when not applicable.

TYPICAL GENERAL NOTES

For capped pile and stub abutments placed in new embankments:

EMBANKMENT CONSTRUCTION: The embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for the abutments (and for the benches) (and for Piers No. _____).

ABUTMENT EXCAVATION QUANTITY, in addition to 503.10, includes the removal of embankment above the bench.

For pedestal abutments:

EMBANKMENT CONSTRUCTION: After the pedestals have been built the embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for the abutment cross beams (and for the benches) (and for Piers No. _____).

ABUTMENT EXCAVATION QUANTITY, in addition to 503.10, includes the excavation for the cross beams (and the removal of embankment above the bench).

For capped pile and stub abutments with benches, where the finished slope in front of the abutment is below the existing ground line, the following note shall be provided:

ABUTMENT EXCAVATION QUANTITY, in addition to 503.10, includes the removal of material bounded by the proposed bench, by the front vertical plane described in 503.10 and by the finished slope of the cut.

For cantilever abutments the following note shall be provided:

EMBANKMENT CONSTRUCTION: Before the backwall is constructed the embankment shall be constructed up to the level of the subgrade with a 1:1 slope from the bridge seat to the subgrade, for a minimum distance of 200 feet back of the abutment.

TYPICAL GENERAL NOTES

The following note, modified to fit the conditions, will apply in all cases except where the piles are to be driven to bedrock.

PILES shall be driven to a minimum bearing capacity of _____ tons per pile for the abutments and _____ tons per pile for the piers.

The following note, modified to fit the conditions, generally will apply where steel H piles are to be driven to bedrock. If the conditions require a minimum energy rating of more than 7000 ft. lbs., which is the minimum permitted by the Construction and Material Specifications, the references to 7000 ft. lbs. should be deleted in the note and the following clause inserted after "driven" in the first line: "with a hammer of not less than 11000 ft. lbs. per blow."

PILES shall be driven to firm contact with bedrock. If the length of penetration is approximately equal to the depth to bedrock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in 507.05 is not less than the following value for a pile hammer of the indicated energy rating:

For the abutment piles

_____ tons per pile using a 7000 ft. lb. hammer
_____ tons per pile using an 11000 ft. lb. hammer
_____ tons per pile using a 15000 ft. lb. or greater hammer

For the pier piles

_____ tons per pile using a 7000 ft. lb. hammer
_____ tons per pile using an 11000 ft. lb. hammer
_____ tons per pile using a 15000 ft. lb. or greater hammer

If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load is _____

_____ tons per pile for the abutment piles and _____ tons per pile for the pier piles.

TYPICAL GENERAL NOTES

The following note should be provided if test loads are called for in case of steel-H piles driven to bedrock or other very hard material, and if the required formula capacity is different from the design load. The value to be provided at the end of the note should be approximately three times the design load.

PILE TEST LOAD shall be according to 506 except that the maximum load required shall be _____ tons.

The following note shall be provided if Std. Dwg. P-1-54, using steel-H piles, is called for:

PIER PILE ENCASUREMENT as shown on Std. Dwg. P-1-54 is not required. The painting of the piles shall extend to low water elevation or, if the proposed surface of the ground is above low water, it shall extend to at least one foot below the proposed surface of the ground.

The following note shall be provided if Std. Dwg. P-1-54, using cast-in-place concrete piles, is called for:

PIER PILE ENCASUREMENT as shown on Std. Dwg. No. P-1-54 may be omitted provided that the tapered portion, if any, of all pier piles does not extend above the stream bed or the proposed surface of the ground. If the tapered portion of any pile extends above these limitations, the encasement will be required for all the pier piles. If the encasement is omitted the pile casings shall have a thickness of metal not less than No. 7 gauge, and the painting of the piles shall extend to low water elevation or, if the proposed surface of the ground is above low water, the painting shall extend to at least one foot below the proposed surface of the ground.

TYPICAL GENERAL NOTES

The following note, with the blanks filled in as appropriate for the individual project, should be provided if there are abutment or pier footings which are not on piles.

FOUNDATION BEARING PRESSURE: _____ footings are designed for a maximum bearing pressure of _____ tons per sq.ft.

The following note should be provided if the footing excavation is mainly bedrock and the footings are to be at an elevation no higher than plan elevation.

FOOTINGS shall be placed in bedrock at the elevation shown.

The following note should be provided, where footings are to be founded in bedrock at an elevation no higher than plan elevation.

FOOTINGS shall extend a minimum of 3 * inches into bedrock or to the elevation shown, whichever is lower.

The following note should be provided where footings are to be founded in bedrock, and where the encountering of bedrock at an elevation considerably above plan elevation may make it desirable to raise the footing to an elevation not above the specified maximum in order to effect an appreciable saving.

FOOTINGS shall extend a minimum of 3 * inches into bedrock. If necessary, the footings should be lowered. However, if the low point of the surface of the bedrock occurs 2 feet or more above plan elevation, the footings may be raised, after approval by the Director, but to an elevation not higher than _____. Stepping of individual footings will not be permitted unless shown on the plans.

* (shall be greater than 3 inches if required by design considerations.)

TYPICAL GENERAL NOTES

The elevations, dimensions and field adjustments in the preceding "FOOTINGS" notes should be chosen to satisfy the requirements of minimum cover, clearance, embedment and type of bedrock, without adversely affecting the strength or stability of the substructure unit.

The following note should be used for concrete bridges on crest vertical curve.

CAMBER of _____ inches shall be provided under full dead load to coincide with the vertical curve over the bridge.

The following note should be used if applicable.

UTILITY LINES: All expense involved in relocating (installing) the affected utility lines shall be borne by the Owner(s). The Contractor and Owner(s) are requested to cooperate by arranging their work in such a manner that inconvenience to either would be held to a minimum.

The following note should be used where a bridge is constructed over another road (highway) on which traffic is to be maintained during construction.

MAINTENANCE OF TRAFFIC: Two lanes of traffic with a minimum horizontal width of 26'-0" (other) and a minimum vertical clearance of 12'-9" (other) shall be maintained on S.R. _____ (county road number) (other) at all times.

The following notes are for railroad grade separation structures:

The actual dimensions used in the text of this note should be obtained from the "Agreement" (a legal document signed by the

TYPICAL GENERAL NOTES

Director of Highways and a Vice President of the railroad involved), a copy of which will be found in the correspondence file of the Bureau of Bridges.

CONSTRUCTION CLEARANCE of _____ vertically above the top of the railroad rails and _____ horizontally from the center of tracks shall be maintained at all times.

RAILROAD AERIAL LINES will be relocated by the Railroad. The Contractor shall use all precautions necessary to see that the lines are not disturbed during the construction stage and shall cooperate with the Railroad in the relocation of these lines. The cost of the relocation shall be included in the railroad force account work.

On the plans for all bridges involving structural steel on which there is welding, the following note shall be placed in the General Notes:

WELDS on non-stress-carrying members are shown thus:



(Welds to be so designated are those which were formerly designated as Class B or S, such as welds attaching curb plates and scupper bracing bars.)

On plans for steel beam and girder bridges, where reference is made to Standard Drawing SD-1-65 for end dam details, the following note should be provided to clarify cleaning and painting requirements:

END DAM PAINTING: Portions of end dams which will be in contact with steel or with concrete shall not be painted. All other portions shall be cleaned and painted in accordance with 514.

TYPICAL DETAIL NOTES

The following note should be placed on the substructure or retaining wall sheet on which are shown the details of steel sheet piling that are to be left in place. (See "Footings, Resistance to Horizontal Forces")

STEEL SHEET PILING left in place shall have a minimum section modulus of _____ per foot of wall. Used piling in good condition may be used.

The following note should be provided on the appropriate detail sheets for wall-type abutments and stub abutments.

POROUS BACKFILL, 2 ft. thick (1.5 ft. thick for stub type), full length of abutment and wings, shall extend up to the subgrade or to the finished ground surface.

The following note should be provided on the appropriate detail sheets for capped-pile abutments or stub-type abutments of the A-1-54 or A-2-54 type:

POROUS BACKFILL shall extend upward to the subgrade and to the surface of the earth shoulders, and outward to the surface of the embankment slopes.

In case No. 14 or No. 18 size reinforcing bars requiring splicing are used, the following note should be provided on the sheet where the splices are shown:

SPLICES in No. 14 (or No. 18) size reinforcing bars shall be made by an approved positive mechanical method designed to develop 125% of the specified yield strength of the bar.

The following note should be placed on the reinforcing steel list of all plans unless it appears on a Standard Drawing which is a part of the plans:

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A700 is a No. 7 size bar and A1014 is a No. 10 size.

TYPICAL DETAIL NOTES

The following note should be placed on the appropriate abutment and pier detail sheets for continuous steel beam or steel girder bridges:

BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the vicinity of the bridge seat so as to avoid interference with the drilling of anchor bar (bolt) holes.

The following note should preferably be provided on one of the structural steel detail sheets if, on other than steel sheets, there are notes that the steel shop detailer will need:

ADDITIONAL NOTES: See Sheet No.

This note should be placed on the structural steel detail sheet:

HIGH STRENGTH BOLTS (RIVETS) shall be _____ diameter unless otherwise noted.

This note should be placed at the typical section of deck.

SLAB THICKNESS shown includes _____" for monolithic wearing surface.

This note should be provided if no typical section of the deck is shown.

SLAB THICKNESS is _____" which includes _____" for monolithic wearing surface.

For a rolled steel beam bridge with concrete deck the following note shall be provided on a superstructure detail sheet near the typical cross-section of the deck:

TYPICAL DETAIL NOTES

DECK SLAB DEPTH: The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

For a steel plate girder bridge with concrete deck the distance from the top of deck slab to bottom of top flange shall be made a constant (required slab thickness plus the thickness of the thickest flange plate) for the full length of the girder, except as may be modified for a curved deck on straight girders. This dimension shall be shown with an asterisk * and the following note provided:

* This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.19.

For a steel beam or plate girder bridge with concrete deck, the deck concrete shall be haunched down to the bottom of the top flange and a note shall be added as follows:

A HAUNCH WIDTH of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

For steel beam or built-up girder bridges a tabulation similar to that shown below shall be provided on a structural steel detail sheet. Tabulation is required regardless of amount of

TYPICAL DETAIL NOTES

deflection and required for exterior and interior beams, if deflection is different.

DEFLECTION AND CAMBER				
	SPAN NO. ---			
	1/4 Point A	Center Point B	3/4 Point C	Splice Point D
Deflection due to weight of steel				
Deflection due to remaining dead load				
*Adjustment required for vertical curve				
*Adjustment required for horizontal curve				
Required Shop Camber				

* Provide if applicable

Except as noted below the deflection and camber data should be shown for center of span, quarter points of span and for all field splice points. Where a splice point occurs close to a quarter point, the camber at the quarter point should be omitted. For spans of less than 50 ft. only data at the center point need be given.

The "Required Shop Camber" shall in all cases be the algebraic sum of the computed deflections and vertical and horizontal curve adjustment and shall be measured to a chord between adjacent bearing points.

A camber diagram should be provided showing the location of the points in the above Table and giving vertical offset dimensions of the bearing points from a "base" or "work" line between abutment bearings.

TYPICAL DETAIL NOTES

For a prestressed concrete beam bridge (I-beam or box beam) with concrete deck, the slab depth at beam bearings and the anticipated slab depth at mid-span shall be computed as follows:

A = Design slab thickness

B = Anticipated total camber in beam = two times initial camber plus 1/4" to 1/2"

C = Adjustment for vertical curve. Positive for crest V. C.

D = Deflection due to dead load of slab, diaphragms, curbs, and parapets

E = Slab depth at beam bearings = $A+B-C-D$ except for crest V. C. where $C > (B-D)$ in which case $E = A$

F = Anticipated slab depth at mid-span = A except where $C > (B-D)$, in which case $F = A-B+C+D$

The superstructure cross-section shall show the slab depth at beam bearings and the anticipated slab depth at mid-span, the latter as a nominal dimension with the following note:

"This is the nominal dimension. The pay quantity of that portion of the deck concrete over the beams shall be based on the average of this dimension and the depth at beam bearings even though deviation from this average may occur because the top of the beam may not have the camber anticipated in the design; i.e., B. The camber of beams shall be measured in the field before the deck is placed. The actual depth at mid-span shall be $(A+B)$ minus the measured camber." (Where $C > (B-D)$ substitute $(A+C+D)$ for $(A+B)$ in the last sentence.)

In the above note actual values shall be substituted for B and $(A+B)$ or $(A+C+D)$.

TYPICAL DETAIL NOTES

Downspouts should be described as follows:

DOWNSPOUTS shall be 6" standard wrought iron pipe, alloy steel pipe, 707.11, or hot-dip galvanized steel pipe. Joint shall be made by welding or by the use of a clamp-type coupling with a ring gasket. All welding shall be done before galvanizing. Straps or clamps for attaching downspouts shall be wrought iron, alloy steel or hot-dip galvanized steel. On bolts, galvanizing as called for in ASTM A-153 is acceptable.

On drawings showing pipe drainage of the porous backfill behind abutments where fittings such as tees or elbows are required, the following note should be added:

ADJUSTABLE TYPE ELBOWS meeting specification requirements for gage and coating are acceptable for making bends in perforated corrugated metal pipe. Elbows and the stem of tees need not be perforated.

The following note should be placed on the sectional view of the deck for structures on which subdrainage for Asphalt Concrete wearing surface course is required:

SUBDRAINAGE FOR WEARING SURFACE COURSE shall conform to 518.07

If reference is made to Standard Drawing SD-1-65 for end dam details the following note should be provided on the plans:

JOINT SEALER: Item 828 joint sealer including bond breaker, shown in Section A-A of Std. Dwg. SD-1-65, Sheet No. 1, shall be omitted.

REMINDER LIST OF ESTIMATED QUANTITIES

The first unit of measure shown for an item in this list is the one commonly used. The others are permitted by the Specifications and may be used when appropriate.

Supplemental instructions for many items will be found on the pages following the Reminder List.

<u>ITEM</u>	<u>TOTAL</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
202	Lump sum		Existing structure removed
202	Cu.yd., Lb., Lump sum		Portions of existing structure removed
502	Lump sum		Temporary run-around bridge
503	Lump sum		Cofferdams, cribs and sheeting
503	Cu.yd.		Unclassified excavation
503	Cu.yd.		Unclassified excavation including rock (or shale)
503	Cu.yd.		Rock (or shale) excavation
504	Sq.ft.		Steel sheet piling left in place (minimum section modulus of ___in ³ per foot of wall)
505	Lump sum		First test pile
506	Lump sum		First pile test load
506	Each		Subsequent pile test load
507	Lin.ft.		Timber piles, untreated (or creosoted)
507	Lin.ft.		Steel piles, 12BP53 (or 10BP42 or 14BP73)
507	Lin.ft.		" Cast-in-place reinforced concrete piles
507	Lin.ft.		" reinforced concrete piles, cast-in-place or precast
507	Each		Steel shoes (or points) for timber piles
507	Lin.ft.		Prebored holes
509	Lb.		Reinforcing steel
510	Lin.ft., Each, Lump sum		Dowel holes
511	Cu.yd.		Class C concrete, _____
511	Cu.yd.		Diaphragms for prestressed concrete bridge
512	Sq.yd.		Type A waterproofing

REMINDER LIST OF ESTIMATED QUANTITIES

<u>ITEM</u>	<u>TOTAL</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
512		Sq.yd.	Type B waterproofing
512		Lin.ft.	Premolded sealing strip
513		Lb., Lump sum	Structural steel
513		Lb.	Steel castings
513		Lump sum, Lb.	Dismantle, move, alter and/or recondition and erect re-used structural steel
514		Lb., Lump sum	Field painting of structural steel
514		Lump sum, Lb., Sq.ft.	Cleaning and painting existing (or re-used) structural steel (one prime spot coat and two complete field coats)
515		Each, Lin.ft. Cu.yd.	Prestressed concrete bridge members
516		Sq.ft.	" thick elastomeric bearing pads
516		Lb.	Structural expansion and con- traction joints
516		Lb.	" sliding plates
516		Sq.ft.	" preformed expansion joint filler
516		Lin.ft.	Folded copper strip _____
516		Lin.ft.	Joint sealer
517		Lin.ft.	Railing (_____)
518		Cu.yd., Lump sum	Porous backfill
518		Lin.ft.	" pipe, including specials
518		Lin.ft.	6" perforated, helical corrugated metal pipe including specials, 707.01
518		Lin.ft.	6" non-perforated helical corru- gated metal pipe, 707.01
518		Lin.ft.	8" perforated (non-perforated) corrugated metal pipe including specials, 707.01, bituminous coated as per 707.04
518		Each, Lb., Lump sum	_____ pipe specials
518		Each	Scuppers including supports
518		Lbs., Lin.ft.	Metal gutters _____

REMINDER LIST OF ESTIMATED QUANTITIES

<u>ITEM</u>	<u>TOTAL</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
518	Lin.ft., Lump sum	Trough (or pipe) horizontal conductors	
518	Lin.ft.	6" std. pipe downspout, wrought iron, alloy steel (707.11) or hot-dip galvanized steel, including specials	
518	Lin.ft.	Subdrainage for wearing surface course	
519	Sq.ft.	Patching concrete structures	
520	Sq.ft.	Pneumatically placed mortar	
521	M.B.M.	Bridge timber creosoted (or untreated)	
521	Sq.ft.	" strip flooring, creosoted (or untreated)	
522	Lin.ft.	" " Sectional corrugated metal arch structure, ___ gage	
601	Sq.yd.	Riprap	
601	Sq.yd.	Crushed aggregate slope protection	
601	Sq.yd.	Concrete slope protection	
601	Cu.yd.	Dumped rock fill, Type A, (or B or C)	
601	Cu.yd.	Rock channel protection, Type A (or B)	
614	Lump sum	Maintaining traffic	
625		(Designer: Use this note in this space):	
		See Sheet _____ for Lighting Summary	
808	Units	Water-reducing, set-retarding admixture	
809	Sq.yd.	Waterproofing for structures carrying Railroad traffic	
810	Lb., Lump sum	Structural steel for structures carrying Railroad traffic	
812	Each	Welded stud shear connectors	
825	Sq.yd.	Concrete surface treatment	
927	Lb.	Self-lubricating bronze bearing plates	

AMENDED CONTRACT FOR

PROJECT NO. 596-1970, LOGAN COUNTY ROAD NO. 10

SECTION 5.09

(STATE ISSUE NO. 1)

This amended contract made in duplicate this 19th day of March, 1971, amends a certain contract, dated July 27, 1970, by and between the County of Logan for and in behalf of the County of Logan, hereinafter referred to as the County, and the Director of Highways, for and in behalf of the State of Ohio, hereinafter referred to as the State, witnesseth:

WHEREAS, On the 27th day of July, 1970, the County of Logan, Ohio, entered into a contract with the State of Ohio, the 7th whereas clause of which reads as follows:

"WHEREAS, Said County Commissioners agree to enter into a contract with the State Highway Director of Ohio in the improvement of County Road No. 10, by assuming and contributing the entire cost and expense of the improvement less the amount of Issue No. 1 Funds determined to be eligible for participation in said improvement, and further the County agrees to furnish the preliminary and construction engineering, rights-of-way and all costs for added construction items generating extra work contracts, unless performance is approved by the State of Ohio before the work is authorized.

In view of the fact that the County's share of the cost is now estimated in the amount of \$102,900.00 and the County's allocation of State Issue No. 1 funds to this project is now in the amount of \$102,900.00, the County will not be required to deposit any funds at this time.

The County's share of the cost will be finally determined when the final actual costs and allocations are determined;" ; and

WHEREAS, The State's estimate of the construction cost of the project was in the amount of \$98,000.00 and on September 16, 1970, the Director of Highways awarded the contract for the aforementioned project to Iberia Earthmoving Service, Inc., Iberia, Ohio, in the amount of \$76,697.92, which is substantially below the estimate; and

WHEREAS, The County has now requested that the State of Ohio perform the construction engineering and inspection for the project and deduct an estimated sum of \$7,000.00 from available Logan County Issue No. 1 funds and adjust the actual cost of said engineering and inspection upon the completion of the project.

Now, Therefore, in consideration of the foregoing and in order to comply with the intent of the parties, it is hereby agreed between the parties that the 7th (seventh) whereas clause of said contract executed on July 27, 1970, be amended to read as follows:

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MAR 19 1971

LOGAN COUNTY
ENGINEER

2X page 144

WHEREAS, Said County Commissioners agree to enter into a contract with the State Highway Director of Ohio in the improvement of County Road No. 10, by assuming and contributing the entire cost and expense of the improvement less the amount of Issue No. 1 funds determined to be eligible for participation in said improvement, and further the County agrees to furnish the preliminary engineering, rights-of-way and all costs for added construction items generating extra work contracts, unless performance is approved by the State of Ohio before work is authorized.

In view of the fact that the County's share of the cost is now estimated in the amount of \$86,500.00 and the County's allocation of State Issue No. 1 funds to this project is now in the amount of \$86,500.00, the County will not be required to deposit any funds at this time.

The provisions of the aforementioned contract between the County of Logan and the State of Ohio, dated July 27, 1970, which are not inconsistent herewith are hereby incorporated in this amended contract, the same as if fully written herein.

For Logan County, Ohio:

Attest: Charles R. Hunt

John R. Inkbeef
Board of County Commissioners

Don Downing
Board of County Commissioners, Logan County, Ohio

Attest: Jane P. Radich

State of Ohio
Accepted by: [Signature]
State Highway Director of Ohio.


The State of Ohio }
Logan County, Ohio }
Office of the Board of County Commissioners


This is to certify that we have compared the foregoing copy of contract with the original record thereof, found in the record of the proceedings of the Board of County Commissioners of Logan County, Ohio, and which contract was duly signed by the Board of County Commissioners of said Logan County, Ohio, on the 19th day of March, 1971, and the same is a true and correct copy of the record of said contract and the action of said Board of County Commissioners thereon.

We further certify that said contract and the action of said Board of County Commissioners thereon is recorded in the Journal of said Board of County Commissioners in volume 2 K, at page 71, and under date of March 19, 1971.

IN WITNESS WHEREOF, We have hereunto set our hands and seal, this 19th day of March, 1971.

*SEAL


President


Clerk (Secretary Ex-officio)

Board of County Commissioners
Logan County, Ohio.

*Note: If the fiscal officer is secretary ex-officio of the Board of County Commissioners, his seal should be affixed. If there is no seal, this fact should be stated by separate letter and attached hereto.

JK page 146



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

J. PHILLIP RICHLEY
Director of Highways

JOHN J. GILLIGAN
Governor

WILLIAM P. MCKENNA
Chief Engineer

Division System
Sidney, Ohio-45365
November 8, 1971

Iberia Earthmoving Service, Inc.
Iberia, Ohio- 43325

RE: Project No. 596-71
Logan County
60 700 19

Dear Sirs:

Attached is the approved copy of Change Order No. 1 on subject Project for
your records.

Sincerely,

William F. Wagner
Division Deputy Director

Joe A. O'Brien
Division Construction Engineer

JH:hb
cc: Project, Co. Engr.

File
Encl. C.O. 1

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NOV 15 1971

**LOGAN COUNTY
ENGINEER**

COPY

C-77a Rev. Sheet 1 of 1 Contract No. 22008
 County LOGAN Route No. Co. Rd. No. 10
 Project No. 70- 596 Federal No. Issue No. 1
 Change Order No. 17 18 Part or Proposal No. _____

STATE OF OHIO
 DEPARTMENT OF HIGHWAYS
 BUREAU OF CONSTRUCTION

CHANGE ORDER

PROPOSED WORK OR NON-PERFORMANCE IN CONNECTION
 WITH CONTRACT ITEMS (See Directive No. DC-12D)

Contract Ref. No.	Item No.	Location	Part Code	Quantity Or Lump		Unit	Description	Unit Price Or Lump Sum Amt.	Additions		Non-Perfor- mances	
				22	23				42	43	52	53
3	202	See explan	1	39		L F	Guard rail removed for storage, as per plan	1 05	40	95		
6	203	See explan	1	101		C Y	Excavation not including embankment construction	0 75				75 75
8	607	See explan	1	25		L F	Fence, Type 47	2 05				51 25
10	659	See explan	1	9		S Y	Seeding and mulching	0 16				1 44
11	659	See explan	1	0 05		Ton	Commercial fertilizer (12-12-12)	126 00	6	30		
16	601	See explan	1	14		C Y	Rock channel protection, Type B	14 00				196 00
19	301	See explan	1	0 05		C Y	Bituminous aggregate base: 702.01 (85-100) or 702.09, RT-11, or RT-12	24 48	1	22		
20	402	See explan	1	0 05		C Y	Asphalt concrete (85-100)	24 48	1	22		
21	404	See explan	1	0 05		C Y	Asphalt concrete (85-100)	24 48	1	22		
22	408	See explan	1	42		Gals	Bituminous prime coat; 702.02, MC-30 or MC-70	1 02	42	84		
23	409	See explan	1	16		Gals	Seal coat bitumihous material, 702.02, MC-800 or MC-3000	1 02	16	32		
25	304	See explan	1	20		C Y	Aggregate base	12 24				244 80
29	507	BR 10-5.09	1	46		L F	14" cast-in-place reinforced concrete piles	8 84				406 64
30	509	BR 10-5.09	1	2,607		Lbs	Reinforcing steel	0 15				391 05
32	511	Br 10-5.09	1	3		C Y	Class "C" concrete abutments	80 00				240 00
35	601	Br 10-5.09	1	62		C Y	Rock channel protection Type A	14 00	868	00		
37	808	Br 10-5.09	1	101		Units	Chemical admixture for concrete Type A, B, or D	1 00				101 00
Totals									978	07	1,707	93
GRAND TOTALS									978	07	1,707	93

I hereby agree to perform the work and to the non-performance of work as listed above.

Iberia Earthmoving Service, Inc. (Contractor)
 By Myron A. Sage 11-2, 19-71 (Date)
 Title Sec. Treas.

Charles R. Keef 11/4/71 Requested Logan Co. Engineer Date
John A. Derrin 11-3, 19-71 (Date) (Division Construction Engineer)
William J. Meyers 11-3, 19-71 (Date) (Division Deputy Director)



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

J. PHILLIP RICHLEY
Director of Highways

JOHN J. GILLIGAN
Governor

WILLIAM P. MCKENNA
Chief Engineer

Division 2000
Sidney, Ohio 44380
November 16, 1971

Barla Surfing Service, Inc.
Ipswich, Ohio 43025

RE: Project No. 500-70
Logan County
County Road 10

Dear Sirs:

Attached is the approved copy of Change Order No. 2 and Final on subject
Project for your records.

Sincerely,

William P. Wagner
Division Deputy Director

Joe A. O'Brien
Division Construction Engineer

JHW
cc: Chester A. Kuntz, D.C. Engr.
File
Encl. C.O. 2 & F.

COPY

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NOV 18 1971
LOGAN COUNTY
ENGINEERING

"The Future Belongs To Those Who Prepare For It"

CHANGE ORDER

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF CONSTRUCTION

PROPOSED WORK OR NON-PERFORMANCE IN CONNECTION
WITH CONTRACT ITEMS (See Directive No. DC-12D)

Contract No. 22008
Route No. Co. Rd. 10
Federal No. 5
Project No. 70-596
1YR - Proj. 2 & Final
Change Order No. 17
A-G-0 1047 B or
G-905 9

Contract . Ret. No.	Item No.	Location	Part. Code	Quantity Or Lump	Unit	Description	Unit Price Or Lump Sum Amt.	Additions	Non-Per- formances	
B. 11 A. 13							33.384	42.43	584.62	
Shaded Areas for Data Processing Bureau Use Only										
2021 Additions B or Non-Per- 9										
Dashed Lines Indicate Decimal Point Positioning										
	203	See explain	1	23	C Y	Excavation not including embankment construction	0.75		17.25	
GRAND TOTALS								0.00	17.25	
Totals								0.00	17.25	

I hereby agree to perform the work and to the non-performance of work as listed above.

Iberia Earthmoving Service, Inc. (Contractor)

By *William A. King* 11/9, 1971 (Date)
Title *Asst. - Treas.*

Charles R. King 11/15/71 Requested
Logan Co. Engineer Date

(Division Construction Engineer)

Approved *John F. King* 11-11-1971 (Date)
(Division Deputy Director)

EXPLANATION OF NECESSITY FOR ABOVE ITEMS

PARTICIPATION CODE

1. 07699-0 No breakdown

REF. NO. 6 - Required to correct error in calculation on final

cross sections discovered on final audit of final pay quantities

by the Division Audit Technician.

CURRENT STATUS OF ENGINEERING AND CONTINGENCY FUND (To be supplied by Division Office)

1. Amount of original Engineering and Contingency Fund* (Enc. Est. No. C. 507689)	\$ 2,802.08
2. Additions to or deductions from Fund Amount* (Enc. Est. No. 806042)	\$ 7,000.00
3. Total Engineering and Contingency Fund (1+2)	\$ 9,802.08
4. Totals of Change Orders No. _____ to No. _____ 1 Inclusive	\$ 1,707.93
5. This order	\$ 17.25
6. Totals	\$ 1,725.18
7. Total Non-performance from Line 6	\$ 1,725.18
8. Net increase/(+) or decrease (-) due to Change Orders	\$ 747.11
9. Actual Engineering costs to date	\$ 7,100.00
10. Estimated additional Engineering to complete project	\$ 7,100.00
11. Algebraic sum of Lines 8, 9 and 10	\$ 6,352.89
12. Balance /or/ Overdraft/	\$ 3,449.19

* Do not include Detour Funds.



FILE
Bridoe 10

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

P. E. MASHETER
Director

JAMES A. RHODES
Governor

J. W. WILSON
Chief Engineer

Division Seven
Sidney, Ohio-45365
October 15, 1970

Chester R. Kurtz
Logan County Engineer
P. O. Box 427
Bellevfontaine, Ohio- 43311

RE: Project No. 596-70
Logan County
County Road 10 - 5.09
Issue No. 1 Funds

Dear Sir:

In order for the State Highway Division Seven Construction Department to become the official Engineering and Inspection Agency for Logan County on subject Project, please write Mr. Oliver M. Liggitt, Division Deputy Director, a letter requesting the following:

1. For the State Highway Department to perform the inspection and engineering for subject Project.
2. For the State to set-up an Engineering and Inspection Fund estimated to be seven thousand, (\$7,000.00) dollars for said services to be paid by Logan County Issue No. 1 funds if they are available.

The Engineering and Inspection Fund will be adjusted to the actual cost upon completion of the Project.

Sincerely yours,

Oliver M. Liggitt
Division Deputy Director

Joe A. O'Brien rec.
Joe A. O'Brien
Division Construction Engineer

REC:hb
cc: Project
File

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OCT 19 1970
LOGAN COUNTY
ENGINEER



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

P. E. MASHETER
Director

Columbus, Ohio 43216
JAMES A. RHODES
Governor

J. W. WILSON
Chief Engineer

October 12, 1970

Mr. Chester R. Kurtz
Logan County Engineer
Bellefontaine, Ohio 43311

RE: Logan County Rd. 10 Bridge
Quantity Calculations

Dear Mr. Kurtz:

The subject quantity calculations were received from you on September 30 in response to our previous telephone request. They were then transmitted to our Construction Bureau. They have been returned to us as they lack the proper validation, the necessity of which is explained in a memo dated March 20, 1970, from Mr. Krauser, Engineer of Construction, to this bureau. A copy of this memo and a memo dated October 7 on the subject job are attached.

Will you please prepare quantity computations in conformance with the requirements set forth in the attached memos.

Yours very truly,

C. H. Altwater
Engineer of Bridges

Walter J. Jestings
Design Engineer

WJJ:im
Attach. (2)
cc: E. I. Fullwiler

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OCT 13 1970

LOGAN COUNTY
ENGINEER



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Cc of _____ Div. _____

S. H. _____ Sec. _____

INTER-OFFICE COMMUNICATION Date March 20, 1970

To Mr. C. H. Altwater, Engineer of Bridges

Attention: _____

From Mr. H. L. Krauser, Engineer of Construction

Subject Wayne County, Project Number 18(1970), Bridge Number GREEN-44-2.81, Computations of Plan Quantities

Computations of plan quantities for subject bridge were received March 16, 1970.

Instead of placing the validation of the checker on the original computations, two sets of computations were forwarded, one by "RAK" and one by "JPG".

This method of verification of quantities is acceptable only if the two computers agree on the quantities.

In this instance, out of a total of nine quantities the two individuals disagreed on four of them.

It is our position that if the checker disagrees with the original computer on any given quantity, the difference should be ironed out and the Construction Bureau furnished one figure only.

When our field personnel receive two different figures for the same quantity they have to make a third set of computations to determine whether or not one of the figures is correct and if so, which one. This involves the same amount of work as would be required if the original computation had not been checked at all.

Use figure on piers

This structure was designed by a consultant, however, recently received computations prepared in the Bridge Bureau reveal the same situation.

Please transmit this information to all State and consultant personnel involved in structure design.

HLK

HLK:gf
Enclosure

BRIDGE BUREAU			
MAR 25 1970			
REFER TO			
✓	✓	✓	✓
CHS	RES	JHPB	JHB
✓	✓	✓	✓
NEW	WHI	RAK	MEB

RECEIVED

OCT 13 1970

LOGAN COUNTY
ENGINEER

COPY

September 29, 1970

State of Ohio
Department of Highways
Bureau of Bridges
Columbus, Ohio 43216

Attention: Mr. Walter Jestings:

Dear Mr. Jestings:

Enclosed are quantity calculations for
structure No. 10-5.09.

Very truly yours,



Chester R. Kurtz, P.E.
Logan County Engineer

CRK:DLD:sjm

Copy of calculations mailed 10-13-70

County— Logan

S. H. 16 Section

7-14691

RECEIVED

SEP 17 1970

STATE OF OHIO

DEPARTMENT OF HIGHWAYS

LOGAN COUNTY
ENGINEER

PERMIT

Subject to all of the terms, conditions and restrictions printed or written below, and on the reverse side hereof, permission is hereby granted to

Deyton Power & Light Co.
2365 Campbell Road
Sidney, Ohio 45365
% Mr. W.B. Crumey

Mr. J. A. O'Brien, Division Seven Construction Engineer, State Highway Department, Sidney, Ohio shall be notified by the Deyton Power & Light Co. two days prior to the start of work. Lines and grade must be set by utility company and field checked prior to and during the work by the Project Engineer or his agent. Install pole lines and anchors across C.R. 10. All proposed work shall be done as per the attached plan, which because a part of this permit. Through traffic will be maintained at all times. Permit holder shall furnish sufficient flagmen and/or signs to protect traveling public at all times, or as otherwise required by the Director of Highways. Maintenance of this installation shall in no way be the responsibility of the State or Federal Government. Location of this installation is that of Mansfield on CR 10. This permit is issued by State Highway and does not constitute authority on Logan County roads or approval of the Logan County Engineer.

This permit to be in possession of employes in charge of work at all times. To be shown upon request to any employee of the Department of Highways.

No work shall be done under this permit until the party or parties to whom it is granted shall have communicated with and received instruction from Mr. J.A. O'Brien Construction Engineer Department of Highways, Division 7 Office, Sidney, Ohio

This permit shall be void unless the work herein contemplated shall have been completed before January 15, 1971

Dated at Columbus, this 11th day of September, 19 70

P.B. Mahan
Director of Highways

Owen L. ...
Division Deputy Director

County— Logan
 S. H. 10 Section

7-14093

STATE OF OHIO

DEPARTMENT OF HIGHWAYS

PERMIT

Subject to all of the terms, conditions and restrictions printed or written below, and on the reverse side hereof, permission is hereby granted to

Logan County Coop Power & Light Assn.
1815 S. Detroit Street
Walleston, Ohio 43111
2 Mr. E.S. Farnham

Remove and relocate pole lines and anchors along G.A. 10. All proposed work shall be done as per the attached plan, which becomes a part of this permit. Plans shall be submitted with the State Highway Department Construction Engineer or his agent prior to all proposed work herein to assure no conflict with highway construction operation. Permit holder shall furnish all labor, equipment, and materials necessary for this installation. Through traffic will be maintained at all times. Permit holder shall furnish sufficient flags and/or signs to protect traveling public at all times, or as otherwise required by the Director of Highways. Minimums of this installation shall in no way be the responsibility of the State or Federal Government. Location of this installation is approximately 0.2 miles East of Zanesfield, Ohio. This permit is issued for Highway Construction and does not constitute authority of Logan County Board or approval of the Logan County Engineer.

This permit to be in possession of employes in charge of work at all times. To be shown upon request to any employee of the Department of Highways.

No work shall be done under this permit until the party or parties to whom it is granted shall

have communicated with and received instruction from Mr. J.A. O'Brien
Construction Engineer
Secretary of the Department of Highways, Division 7 Office, Sidney, Ohio

This permit shall be void unless the work herein contemplated shall have been completed before

January 30, 1971

Dated at Columbus, this 11th day of September, 19 70

E.S. Manchester

Director of Highways

Oliver M. Liggett

Oliver M. Liggett
 Division Deputy Director



Division No. 7

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

P. E. MASHETER
Director

JAMES A. RHODES
Governor

J. W. WILSON
Chief Engineer

*mail to
creator Kurtz
Logan Co. Engin.*

O. M. Liggitt
Division Deputy Director
Ohio Department of Highways
P. O. Box 381
Sidney, Ohio

Re: Logan County - Project No. 596 (1970)
County Road No. 10
Letting - September 10, 1970

Attention: W. G. Knasel

Dear Sir:

Receipt is hereby acknowledged of the following legislation which has been executed by the County of Logan, in connection with the subject project:

- a - One copy Approximate Estimate
- b - One copy Final Resolution
- c - Original and duplicate copy Contract

A copy of the Contract will be returned to the County of Logan, when approved by the Attorney General.

Yours very truly,

RAB:SK:vs

R. A. Booth
Administrator of Contract Sales
Division of Design and Construction

cc: ✓ Logan County
R. E. Catlin
E. Reissig
John H. Smith
David Shaw
File

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AUG 12 1970

**LOGAN COUNTY
ENGINEER**

G O P Y



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216
JAMES A. RHODES
 Governor

P. E. MASHETER
 Director

J. W. WILSON
 Chief Engineer

C O P Y

August 12, 1970

Mr. Max Huffman, Manager
 Logan County Cooperative Power & Light Ass.
 1015 S. Detroit St.
 Bellefontaine, Ohio 43311

RE: Logan County Road # 10 - 5.09
 Bridge replacement over Mad
 River N. and E. of Zanesfield.

Dear Mr. Huffman:

Attached are final prints of the plan and profile and the right of way sheets for the above project. This project is scheduled for sale September 10, 1970.

Don Dodson reports that he had furnished a right of way print to the Bellefontaine office of the D.P. & L. Co. and the United Telephone Co. but has not received a plan of the proposed relocation.

We were informed today that the Logan County Cooperative Power & Light Association also has facilities involved.

Please prepare a plan for the relocation of your facilities and submit three copies to this office for review along with a statement as to when you can have the relocation completed.

Yours truly,

Oliver M. Liggitt
 Division Deputy Director

Joseph M. Bowen
 Utility Supervisor

Enc. 2

c.c. Mr. Chester Kurtz Co. Engr. ✓
 file

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 AUG 14 1970
 LOGAN COUNTY
 ENGINEER



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216
JAMES A. RHODES
 Governor

P. E. MASHETER
 Director

J. W. WILSON
 Chief Engineer

August 12, 1970

C O P Y

RECEIVED
AUG 14 1970
 LOGAN COUNTY ENGINEER

Mr. William Crusey
 The Dayton Power & Light Co.
 Campbell Rd.
 Sidney, Ohio 45365

RE: Logan County Road # 10 - 5.09
 Bridge replacement over Mad
 River N. and E. of Zanesfield.

Dear Mr. Crusey:

Attached are final prints of the plan and profile and the right of way sheets for the above project. This project is scheduled for sale September 10, 1970.

Dan Dodson reports that he had furnished a right of way print to the Bellefontaine office of the D.P. & L. Co. and the United Telephone Co. but has not received a plan of the proposed relocation.

We were informed today that the Logan County Cooperative Power & Light Association also has facilities involved.

Please prepare a plan for the relocation of your facilities and submit three copies to this office for review along with a statement as to when you can have the relocation completed.

Yours truly,

Oliver M. Liggitt
 Division Deputy Director

Joseph M. Bowen
 Utility Supervisor

Enc. 2

c.c. Mr. Chester Kartz Co. Engr. 
 file



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216
JAMES A. RHODES
 Governor

P. E. MASHETER
 Director

J. W. WILSON
 Chief Engineer

C O P Y

August 12, 1970

RECEIVED
AUG 14 1970
LOGAN COUNTY
ENGINEER

Mr. Dick Lewis
 Outside Plant Engr.
 United Telephone Company
 127 N. Main St.
 Bellefontaine, Ohio 43311

RE: Logan County Road # 10 - 5.09
 Bridge replacement over Mad
 River N. and E. of Zanesfield.

Dear Mr. Lewis:

Attached are final prints of the plan and profile and the right of way sheets for the above project. This project is scheduled for sale September 10, 1970.

Dan Dodson reports that he had furnished a right of way print to the Bellefontaine office of the D.P. & L. Co. and the United Telephone Co. but has not received a plan of the proposed relocation.

We were informed today that the Logan County Cooperative Power & Light Association also has facilities involved.

Please prepare a plan for the relocation of your facilities and submit three copies to this office for review along with a statement as to when you can have the relocation completed.

Yours truly,

Oliver M. Liggitt
 Division Deputy Director

Joseph M. Bowen
 Utility Supervisor

Enc. 2

c.c. Mr. Chester Kurtz Co. Engr. *✓*
 file

F I N A L R E S O L U T I O N

Adopting plans;
Proposing to co-operate;
Requesting Director to proceed;
(Chapter 5521 Ohio Revised Code)

Mr. John R. Inskip moved the adoption of the following Resolution:

WHEREAS, At a meeting of the Board of County Commissioners of Logan County, Ohio, held in the office of the Commissioners of said County, on the 27th day of July, 1970, a quorum being present, the improvement of County Road No. 10, under the provisions of Chapter 5521, Ohio Revised Code and amended Senate Bill 428, passed by the 108th General Assembly of Ohio and in accordance with "Ohio Department of Highways Procedure Manual, State Issue 1 Funds", came on for further consideration; said portion of road as described in the preliminary application of this Board to the State Highway Director of Ohio, on the 6th day of April, 1970, being as follows:

Replace existing Bridge No. 10-5.09 over the Mad River in Jefferson Township, at a slightly adjusted location, and make all necessary adjustments to the alignment and profile of County Road No. 10 necessitated by the new bridge, in accordance with plans prepared by the County and approved by the Director of Highways

; and

WHEREAS, This Board of County Commissioners proposes to cooperate with the State Highway Director of Ohio in the improvement of County Road No. 10 by assuming and contributing the entire cost and expense of the improvement less the amount of Issue No. 1 Funds determined to be eligible for participation in said improvement, and further the County agrees to furnish the preliminary and construction engineering, rights-of-way and all costs for added construction items generating extra work contracts, unless performance is approved by the State of Ohio, before the work is authorized.

In view of the fact that the County's share of the cost is now estimated in the amount of \$102,900.00, and the County's allocation of State Issue No. 1 Funds to this project is now in the amount of \$102,900.00, the County will not be required to deposit any funds at this time.

The County's share of the cost will be finally determined when final actual costs and allocations are determined

; and

WHEREAS, The State Highway Director has approved said application and the plans and specifications and an estimate of cost and expense for improving the above described highway; and

WHEREAS, This Board desires the State Highway Director to proceed with the aforementioned work;

Now, Therefore, Be It Resolved by the Board of County Commissioners of Logan County, Ohio:

- I. That the section of highway above described be improved under the provisions of aforesaid law. That said work be done under the charge, care and superintendence of the State Highway Director and that said plans, specifications and estimates for this highway improvement as approved by the State Highway Director, are hereby approved and adopted by this Board;
- II. That the County further resolves that the installation of all utility facilities on the right of way shall conform with the requirements of the Bureau of Public Roads Policy and Procedure Memorandum 30-4 "Utility Relocations and Adjustments";
- III. That this Board is still of the opinion the proposed work on the above described highway should be constructed; and that the County should co-operate on the basis set forth in their proposal;
- IV. That this Board hereby requests the State Highway Director to proceed with the aforesaid highway improvement;
- V. That this Board of County Commissioners enter into a contract with the State Highway Director of Ohio, providing for the payment by said Board, the sum of money set forth hereinabove, for improving County Road No. 10, in said County;
- VI. That the Clerk of this Board be, and he is hereby directed to transmit to the State Highway Director a certified copy of these Resolutions.

Thereupon, Mr. Harvey C. Terrill seconded the said motion; and upon the roll being called the result of the vote was as follows:

Don Downing, Yea.

Sammy C. Terrill, Yea.

John R. Inskip, Yea.

Commissioners of Logan County, Ohio.

The State of Ohio }
County of Logan } Office of the Board of County Commissioners

This is to certify that we have compared the foregoing copy of resolution with the original record thereof, found in the record of the proceedings of the Board of County Commissioners of said County, and which resolution was duly passed by the Board of County Commissioners of said Logan County, Ohio, on the 27th day of July, 1970, and that the same is a true and correct copy of the record of said resolution and the action of said Board of County Commissioners thereon.

We further certify that said resolution and the action of said Board of County Commissioners thereon is recorded in the Journal of said Board of County Commissioners in volume 2-I, at pages 745, 746 & 747, and under date of July 27, 1970.

IN WITNESS WHEREOF, we have hereunto set our hands and seal, this 27th day of July, 1970.

*(SEAL)

Don Downing
President

Lois D. Krause
Clerk (Secretary Ex-officio)

Board of County Commissioners
of Logan County, Ohio.

*Note: If the fiscal officer is secretary ex-officio of the Board of County Commissioners, his seal should be affixed. If there is no seal, this fact should be stated by separate letter and attached hereto.

July 27, 1970

Mr. P. E. Masheter
State Highway Director of Ohio
Columbus, Ohio 43216

Dear Sir:

The Logan County Commissioners' Office does
not have an official seal.

Yours very truly,

Lois D. Krouse

Lois D. Krouse, Clerk

File Br. 10

FLYNN, PY & KRUSE
ATTORNEYS AND COUNSELLORS

JAMES F. FLYNN (1987-1963)
JOHN R. PY (1908-1969)
RICHARD R. KRUSE
RAYMOND N. WATTS
MELVYN J. STAUFFER
WM. CHARLES STEUK

165 EAST WASHINGTON ROW P. O. Box 900 TELEPHONE 625-6324
AREA CODE 419

SANDUSKY, OHIO
44870

July 21, 1970

Mr. Chester R. Kurtz
Logan County Engineer
P. O. Box 427
Bellevfontaine, Ohio 43311

Dear Mr. Kurtz:

Your letter of May 27th with enclosures directed to Dr. Harold Snedden has been referred to the writer for consideration.

Dr. Snedden has no objection to the straightening of the existing channel of Mad River if your office feels that it is necessary; however, we see no good reason to execute the "work agreement" and thereby agree to hold Logan County harmless for any damages arising out of this work.

Very truly yours,

FLYNN, PY & KRUSE

By *Raymond N. Watts*
Raymond N. Watts

RTW:S

Att. To Work Agreement.

RECEIVED

JUL 23 1970

LOGAN COUNTY
ENGINEER

OHIO DEPARTMENT OF HIGHWAYS

CERTIFICATE OF JOURNALIZATION

I hereby certify that the State Highway Director of Ohio, in compliance with Section 5521.04 Ohio Revised Code, approved legislation enacted on April 6, 1970, by the legislative authority of

Logan County, Ohio, which legislation proposed cooperation with the State Highway Director of

Ohio in the improvement of that portion of County Road No. 10, more particularly described as

follows:

Replace existing Bridge No. 10-5.09, over the Mad River in Jefferson Township, at a slightly adjusted location, and make all necessary adjustments to the alignment and profile of County Road No. 10 necessitated by the new bridge, in accordance with plans prepared by the County and approved by the Director of Highways

and that said approval was entered on the Director's official journal in Volume 55, Page 445,

under date of May 6, 1970.

Administrator of Contract Sales



Division No. 7

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

P. E. MASHETER
Director

JAMES A. RHODES
Governor

J. W. WILSON
Chief Engineer

RECEIVED

July 9, 1970

JUL 20 1970

LOGAN COUNTY
ENGINEER

O. M. Liggitt
Division Deputy Director
Ohio Department of Highways
P. O. Box 381
Sidney, Ohio

Re: Logan - County Road No. 10

Attention: W. G. Knase1

Dear Sir:

This office is transmitting herewith the following suggested final legislation for the County of Logan, relating to the subject project:

- a - 2 copies Approximate Estimate
- b - Certified copy Director's Certificate of Journalization
- c - 3 copies Final Resolution
- *d - 3 copies Contract
(Plans and a Specification Book have been sent to you for the political sub-division)

When the legislation has been properly executed, one copy each of items a and c, and two copies of item d must be returned to this office.

One copy of item c and one copy of item d may be retained by you for the division files.

Since it is contemplated to schedule this project for letting, September 10, 1970, and since the executed legislation must bear the approval of the Attorney General, prior to advertising for bids, these papers must reach this office not later than August 12, 1970.

RAB:SK:YS

Yours very truly,

cc: Logan County
R. E. Catlin
John H. Smith
David W. Shaw
File

R. A. Booth
Administrator of Contract Sales
Division of Design and Construction

*The Attorney General will not approve the foregoing contract unless the following official seal is properly affixed:

1. Contract - Certificate of copy (County and/or Corporation Seal) -
In the event there is no such seal, a letter to that effect from the proper body is required.

- "Better Roads For A Better Ohio" -

COPY



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

JAMES A. RHODES
Governor

DIVISION SEVEN
Sidney, Ohio

June 18, 1970

P. E. MASHETER
Director

J. W. WILSON
Chief Engineer

Chester Kurtz
Logan County Engineer
County Engineer's Office
Bellevfontaine, Ohio 43311

Subject: Issue #1 Project, Mad River Bridge on CR 10

Dear Mr. Kurtz:

For your information and file we are furnishing to you herewith one set of prints of plans for the subject project. These prints are produced from the original tracings as we submitted them to our Central Office on June 15, 1970. They are essentially the same as you furnished to us a few days earlier. There are a few minor changes in calculations, etc.

Oliver M. Liggitt
Division Deputy Director

W. G. Knasel

W. G. Knasel
D/E Design & Planning

WCK:rba

Attach.

cc: File

RECEIVED

JUN 19 1970

LOGAN COUNTY
ENGINEER

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
APPROXIMATE ESTIMATE

State (Issue No. 1)

TYPE 404 on 301 & Structure

LOGAN

COUNTY

C. R. NO. 10

UNIT PRICE CONTRACT

For improving Section C.R. 10-5.09, County Road No. 10 in Jefferson Township, Logan County, Ohio, in accordance with plans and specifications by grading, draining and paving with asphalt concrete on a bituminous aggregate base and by constructing:

Bridge No. 10-5.09, a continuous concrete slab with capped-pile substructure (spans 24'-30'-24', roadway 30'), over the Mad River.

REF. NO.	ITEM NO.	PAVEMENT WIDTH	APPROXIMATE QUANTITIES	ITEM	PROJECT LENGTH WORK LENGTH	FT.	UNIT PRICE		TOTAL	
							Dollars	Cents	Dollars	Cents
		20		ROADWAY	1,087.51					
1	201		lump sum	clearing and grubbing						
2	202		16	lin. ft.						
3	202		778	lin. ft.						
4	202		1,097	lin. ft.						
5	203		2,235	sq. yds.						
6	203		3,416	cu. yds.						
7	203		6,612	cu. yds.						
8	607		1,088	lin. ft.						
9	607		1	each						
10	659		9,353	sq. yds.						
11	659		0.84	ton						
12	659		4.2	tons						
13	606		186	lin. ft.						
14	606		4	each						
15				Total Roadway						
				DRAINAGE						
16	601		511	cu. yds.						
17	603		36	lin. ft.						
18				Total Drainage						

LOGAN COUNTY, SECTION LOG-Co. Rd. 10

REF. NO.	ITEM NO.	APPROXIMATE QUANTITIES	ITEM	UNIT PRICE		TOTAL	
				DOLLARS	CENTS	DOLLARS	CENTS
19	301	406	cu. yds.	PAVEMENT bituminous aggregate base: 702.01 (85-100); or 702.09, RT-11 or RT-12			
20	402	81	cu. yds.	asphalt concrete (85-100)			
21	404	65	cu. yds.	asphalt concrete (85-100)			
22	408	202	gals.	bituminous prime coat, 702.02, MC-30 or MC-70			
23	409	142	gals.	seal coat bituminous material, 702.02, MC-800 or MC-3000			
24	409	4	cu. yds.	seal coat cover aggregate No. 8			
25	304	132	cu. yds.	aggregate base			
26				Total Pavement			
				STRUCTURE OVER 20 FOOT SPAN			
				Logan County Rd. Bridge No. 10-5.09			
27	505	lump sum		first test pile			
28	202	lump sum		existing structure removed			
29	507	720	lin. ft.	14" cast-in-place reinforced concrete piles			
30	509	32,525	lbs.	reinforcing steel			
31	511	112	cu. yds.	Class "C" concrete, superstructure and pier caps			
32	511	50	cu. yds.	Class "C" concrete, abutments			
33	517	164	lin. ft.	railing (deep beam rail with steel posts and bolts)			
34	518	13	cu. yds.	porous backfill			
35	601	330	cu. yds.	rock channel protection, Type A			
36	503	126	cu. yds.	unclassified excavation			
37	808	101	units	chemical admixture for concrete, Type A, B or D			
38				Total, Structure Over 20 Foot Span			

LOGAN COUNTY SECTION LOG-Co. Rd. 10

SEQ. NO.	ITEM NO.	APPROXIMATE QUANTITIES	ITEM	UNIT PRICE		TOTAL
				Dollars	Cents	
39	103.05	Lump Sum	Premium for Contract Bond (Performance)			
40	614	Lump Sum	Maintaining Traffic			
41		Total Amount of Above Items				
			Estimated Cost of Engineering			
			Estimated Cost of Preliminary Engineering			
			Approximate Total Cost and Expense			

Federal Aid - - - - \$
 State's Share - - - - \$
 County's Share - - - - \$ X - State Issue No. 1 Funds
 Municipality's Share - - - - \$



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

JAMES A. RHODES
Governor

P. E. MASHETER
Director

J. W. WILSON
Chief Engineer

DIVISION SEVEN
Sidney, Ohio

July 16, 1970

Chester Kurtz
Logan County Engineer
County Engineer's Office
Bellevfontaine, Ohio 43311

RECEIVED

JUL 20 1970

LOGAN COUNTY
ENGINEER

Subject: Issue #1 Project, County Road 10, Bridge
Over Mad River Near Zanesfield, Final Legislation

Dear Mr. Kurtz:

We are furnishing to you herewith for your presentation to the County Commissioners, for their consideration and execution, the following listed items:

- 1) One copy of a letter from our Central Office to us dated July 9, 1970. This is for your information and file and requires no action.
- 2) Two copies of "Unit Price Contract". This is the estimated quantities for construction of the subject improvement. The Chairman of the County Commissioners and Clerk for the Board of Commissioners should sign and date the extension at the bottom of the third page. One copy should be returned to us, the other copy may be retained for county files.
- 3) One copy of Director's "Certificate of Journalization". This is for County's information and files and requires no action.
- 4) Three copies of "Final Resolution". After this Resolution is completely executed, two copies should be returned to us. The other copy may be retained for County files.
- 5) Three copies of "Contract". After execution by the County all three copies should be returned to us. A completely executed copy will be returned to the County after signature by the State Highway Director.
- 6) One copy of specification book which will govern the contract for the improvement. An official set of prints of plans for the project will be furnished to you in the near future.

In conformance with the note at the bottom of the letter directed to us on July 9, of which we are furnishing you a copy, please make sure that official seals are

VOL 2-1 PAGE 754

— "Better Roads For A Better Ohio" —

To: Chester Kurtz
Subj: Issue #1 Project, County Road 10, Bridge Over Mad River Near Zanesfield,
Final Legislation
July 16, 1970
Page 2

affixed where indicated on the attached papers.

The project is now scheduled for sale September 10, 1970. In order to allow time for approval of the legislation by the State Attorney General prior to advertising for bids, the executed papers must be in our Central Office not later than August 12, 1970. In order to comply with that schedule please arrange to have the executed papers in our office here at Sidney not later than August 7, 1970.

If any additional information is needed please let us know.

Oliver M. Liggitt
Division Deputy Director

W. G. Knasel (Phd)

W. G. Knasel
D/E Design & Planning

WGK:rba

Attach.

cc: File
Simpson

RECEIVED

JUL 20 1970

LOGAN COUNTY
ENGINEER

June 2, 1970

Mr. Oliver M. Liggitt
Division Deputy Director
Division Seven
State of Ohio
Department of Highways
Sidney, Ohio 45365

Dear Mr. Liggitt:

Subject: Issue No. 1 Program
Bridge 10-5.09 over Madriver

We received the set of bridge prints for the above mentioned project with the indicated corrections and additions.

The major correction appears to be the addition of 25 foot approach slabs.

It is my policy to construct bridges without approach slabs. I have found that county maintenance forces can maintain approach embankments much easier than approach slabs; therefore, I shall resubmit the bridge plans without the indicated approach slabs.

Respectfully submitted,



Chester R. Kurtz, P.E.
Logan County Engineer

CRK:DLD:sjm

COPY



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

P. E. MASHETER
Director

Columbus, Ohio 43216
JAMES A. RHODES
Governor

J. W. WILSON
Chief Engineer

DIVISION SEVEN
Sidney, Ohio

May 28, 1970

Chester Kurtz
Logan County Engineer
County Engineer's Office
Bellevfontaine, Ohio 43311

Subject: Issue #1 Project, Bridge Over Mad River
on CR #10

Dear Mr. Kurtz:

A couple of days ago we forwarded to you a copy of a letter from our Central Office Bridge Bureau to us regarding their review of detailed plans for subject bridge. That letter made reference to marked prints. These prints have now been received by us and are being forwarded to you herewith. Please return these prints to us when you submit final tracings to this office.

Oliver M. Liggitt
Division Deputy Director

W. G. Knasel
D/E Design & Planning

W GK: rba

Attach.

cc: File
Leistner



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

P. E. MASHETER
Director

Columbus, Ohio 43216
JAMES A. RHODES
Governor

J. W. WILSON
Chief Engineer

DIVISION SEVEN
Sidney, Ohio

May 26, 1970

Chester Kurtz
Logan County Engineer
County Engineer's Office
Bellevfontaine, Ohio 43311

Subject: Issue #1 Program Bridge Over Mad River on CR #10

Dear Mr. Kurtz:

For your information and guidance we are furnishing to you attached a copy of an IOC directed to us on May 25, 1970 by our Central Office Bridge Bureau. This IOC lists Bridge Bureau recommendations for completion of the plans. Also attached are copies of Supplemental Specifications 808 and 836 which are referred to in the IOC.

The IOC also refers to a set of prints of the bridge plans being returned to us. These prints have been marked with further information for completing the plan tracings. We have not yet received these prints. We will forward them to you as soon as received.

Oliver M. Liggitt
Division Deputy Director

W. G. Knasel
D/E Design & Planning

WGK:rba

Attach.

cc: File
Leistner

RECEIVED

MAY 28 1970

**LOGAN COUNTY
ENGINEER**

WORK AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

That Florence Pennock for and in consideration of the sum of One dollars

(\$ 1.00) and for other good and valuable consideration to her paid by the County of Logan, the receipt whereof is hereby acknowledged, does hereby authorize the County Engineer of Logan County and/or his duly authorized agents or contractors to enter upon her land, for the purpose of performing the work necessary to

Relocate the existing channel of Mad River.

in accordance with the plans and specifications prepared by the County Engineer for the improvement of County Highway No. 10 Section 5.09, Jefferson Township, Logan County, does hereby release and forever save harmless the County of Logan, and its authorized agents or contractors, from any and all claims of damage of every kind and nature whatsoever to her property, arising from or in any manner growing out of the above described operations as called for by the said plans and specifications, and it is further understood and agreed that the County of Logan assumes no obligation of maintenance outside the limits of the permanent right of way.

IN WITNESS THEREOF Florence Pennock

has hereunto set Her hand, the 6 day of July in the year of our Lord one thousand nine hundred and Seventy.

Signed and sealed in the presence of:

Florence Pennock Am. P. Penock

WORK AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

That William Fraser and Mary Elizabeth Fraser for and in consideration of the sum of One dollars

(\$ 1.00) and for other good and valuable consideration to them paid by the County of Logan, the receipt whereof is hereby acknowledged, do hereby authorize the County Engineer of Logan County and/or his duly authorized agents or contractors to enter upon their land, for the purpose of performing the work necessary to

Relocate the existing channel of Mad River.

in accordance with the plans and specifications prepared by the County Engineer for the improvement of County Highway No. 10 Section Jefferson, Logan County, do hereby release and forever save harmless the County of Logan, and its authorized agents or contractors, from any and all claims of damage of every kind and nature whatsoever to their property, arising from or in any manner growing out of the above described operations as called for by the said plans and specifications, and it is further understood and agreed that the County of Logan assumes no obligation of maintenance outside the limits of the permanent right of way.

IN WITNESS THEREOF WILLIAM & MARY E. FRASER

have hereunto set their hands, the 6 day of JULY

_____ in the year of our Lord one thousand nine hundred

and 70.

Signed and sealed in the presence of:

William Fraser M. E. Doon

Mary E. Fraser _____

July 6, 1970

Mrs. Florence Pennock
Zanesfield, Ohio

Dear Mrs. Pennock:

Re: Right-of-way Purchase
and Work Agreement
Project No. 10-5.09

In return for the 0.32 acres of land to be used for right-of-way for County Road No. 10 and a work easement along Mad River, as shown on the Right-of-way sheet of Project No. 10-5.09, the Logan County Highway Department agrees to the following:

1. The County will construct a new fence on the right-of-way from Sta. 252+50 west to the east side of a driveway leading to Mrs. Pennock's land.
2. The County will reset all fences disturbed between the properties of Wm. Fraser and Florence Pennock.
3. The County will erect a livestock protection gate across the channel of Mad River at the right-of-way line.
4. All areas disturbed will be left in a neat and finished manner.
5. All other items shown on the plans shall apply to this agreement.

Very truly yours,

Chester R. Kurtz
Chester R. Kurtz, P.E.
Logan County Engineer

CRK:sjm

COPY

July 6, 1970

Mrs. Florence Pennock
Zanesfield, Ohio

Dear Mrs. Pennock:

Re: Right-of-way Purchase
and Work Agreement
Project No. 10-5.09

In return for the 0.32 acres of land to be used for right-of-way for County Road No. 10 and a work easement along Mad River, as shown on the Right-of-way sheet of Project No. 10-5.09, the Logan County Highway Department agrees to the following:

1. The County will construct a new fence on the right-of-way from Sta. 252+50 west to the east side of a driveway leading to Mrs. Pennock's land.
2. The County will reset all fences disturbed between the properties of Wm. Fraser and Florence Pennock.
3. The County will erect a livestock protection gate across the Channel of Mad River at the right-of-way line.
4. All areas disturbed will be left in a neat and finished manner.
5. All other items shown on the plans shall apply to this agreement.

Very truly yours,

Chester R. Kurtz
Chester R. Kurtz, P.E.
Logan County Engineer

CRK:sjm

COPY

July 6, 1970

Mr. & Mrs. Wm. Fraser
Zanesfield, Ohio

Dear Mr. & Mrs. Fraser:

Re: Right of Way purchase
and Work Easement
Project No. 10-5.09

In return for the 0.94 acres of land to be used for right-of-way for County Road No. 10 and a work easement along Mad River, as shown on the Right-of-way sheet of Project No. 10-5.09, the Logan County Highway Department agrees to the following:

1. The County will construct a new fence on the right-of-way line from Sta. 246+00 to Sta. 252+50.
2. The County will reset all fences disturbed between the properties of Wm. Fraser & Florence Pennock.
3. The County will erect a livestock protection gate across the channel of Mad River at the right-of-way line.
4. The County will reconstruct the channel of Mad River for a distance of approximately 500 feet to a Sycamore tree on the right bank north of an existing sand bar. The County will maintain said channel improvement free of sand bars for a period of 5 years.
5. All areas disturbed will be left in a neat and finished manner.
6. All other items shown on the plans shall apply to this agreement.

Very truly yours,

Chester R. Kurtz, Jr.
Chester R. Kurtz, P.E.
Logan County Engineer

CRK:sjm

COPY

OFFICE OF THE
COUNTY ENGINEER

LOGAN COUNTY
BELLEFONTAINE, OHIO 43311

CHESTER R. KURTZ, COUNTY ENGINEER

July 6, 1970

Mr. & Mrs. Wm. Fraser
Zanesfield, Ohio

Dear Mr. & Mrs. Fraser:

Re: Right of Way purchase
and Work Easement
Project No. 10-5.09

In return for the 0.94 acres of land to be used for right-of-way for County Road No. 10 and a work easement along Mad River, as shown on the Right-of-way sheet of Project No. 10-5.09, the Logan County Highway Department agrees to the following:

1. The County will construct a new fence on the right-of-way line from Sta. 246+00 to Sta. 252+50.
2. The County will reset all fences disturbed between the properties of Wm. Fraser & Florence Pennock.
3. The County will erect a livestock protection gate across the channel of Mad River at the right-of-way line.
4. The County will reconstruct the channel of Mad River for a distance of approximately 500 feet to a Sycamore tree on the right bank north of an existing sand bar. The County will maintain said channel improvement free of sand bars for a period of 5 years.
5. All areas disturbed will be left in a neat and finished manner.
6. All other items shown on the plans shall apply to this agreement.

Very truly yours,
Chester R. Kurtz
Chester R. Kurtz, P.E.
Logan County Engineer

CRK:sjm

May 27, 1970

Harold E. Snedden, M.D.
27 Cedar Point Road
Sandusky, Ohio 44870

Dear Dr. Snedden:

Enclosed you will find the original and one copy of a work agreement.

Please sign both copies and return the original in the enclosed envelope.

Also you will find a plan profile sheet showing the proposed work to be done on this project.

I have also enclosed a map showing the location of your 2.40 acre tract.

If you have any questions, please contact me.

Thanking you in advance, I remain.

Very truly yours,

Chester R. Kurtz, P.E.
Logan County Engineer

CRK:DLD:sjm

COPY

MAY 26 1970

STATE OF OHIO - DEPARTMENT OF HIGHWAYS

BUREAU OF BRIDGES

May 25, 1970

RECEIVED

MAY 28 1970

#7

LOGAN COUNTY ENGINEER

Memo to: Oliver M. Liggitt, Div. Deputy Director Div.

Attention: W. G. Knasel, Div. Design & Planning Engineer County Logan

From: C. H. Altwater, Engineer of Bridges Sec.

By: Clarence D. Bowser, Design Engineer Bridge No. 10-5.09 C.R. 10 over Mad River

Subject: Bridge No. 10-5.09 - C.R. 10 over Mad River

A review has been made of the detail plans for Logan County Bridge No. 10-5.09 and we have these comments.

See the Title Sheet of the returned set of plans for additions to the list of Standard Drawings and Supplemental Specifications.

Sheet 9 - Site Plan

On account of the depth of the embankment at the abutments, approach slabs should be provided. 25' long slabs are usually used. Approach slabs should be listed in the roadway quantities.

The limits of the Rock Channel Protection should be shown in the plan.

INDICATED IN NOTES!

Sheet 10 - General Plan, etc.

In the Plan View, the out/out width of slab should be shown.

The bench width is usually measured from face of abutment. See Std. Dwg. A-1-54.

The stationing of the abutment piling should be revised as shown on the returned prints. See Section B-B on Sheet 11.

NO

Oliver M. Liggitt
Attn: W. G. Knasel
5-25-70

-2-

Sheet 10 - General Plan, etc. - continued

The scale should preferably be omitted on this sheet and sheets 11, 12 and 13 since it will be incorrect on reduced-size prints.

The upstream and downstream edges of the Rock Channel Protection should be shown as broken lines since the actual limits are outside of the picture.

The approach slabs should be shown in Plan and Elevation.

In the Estimated Quantities, the Item 511 concrete should be listed on three separate lines since each kind is priced differently. See page 59 of the Design Regulations.

In Item 517, the amount should be only that part inside the Bridge Limits; i.e., 159 lin.ft. Other guard rail should be listed in the roadway quantities.

The description for Item 517 should read: Railing (Deep beam rail with steel posts and bolts).

There should be a lump sum Item 202, Existing Structure Removed if such is to be a part of the contract.

There should be an Item 808, Chemical admixture for concrete, type A, B or D. The amount should be one unit for each cubic yard of superstructure concrete.

In the General Notes, Std. Dwg. CS-1-54 should be dated 6-1-65.

Add Reference to Supplemental Specification 808 dated 11-14-69 and 836 dated 6-17-69. A copy of each is attached for your information.

In the fourth line of the Pier Pile Encasement note, "mold" should read "metal."

There should be a Removal of Existing Structure note. See page 40 of the Design Regulations for suggestions.

There should be a Utility Lines note. See page 45 of Design Regulations.

Logan County
10-5.09
C.R. 10 over
Mad River

Oliver M. Liggitt
Attn: W. G. Knasel
5-25-70

-3-

Sheet 11 - Abutments

Since the plans (Sheet 10) refer to Standard Drawing A-1-54, it would seem wise to make the details on this sheet consistent with the Standard. See marks on Sections A-A, B-B and C-C.

Provision for the approach slab should be made in the abutments. See marks on returned print.

On account of superelevation the abutments will be "opposite hand" to each other. Add the notes marked at the bottom of Sheet 11.

Onemarked set of plans is being returned for guidance in making revisions.

Two sets of bridge drawings should be submitted for another review.



CDB:bn
Encl.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
SUPPLEMENTAL SPECIFICATION 808
CHEMICAL ADMIXTURES FOR CONCRETE

November 14, 1969

808.01 Description. This work consists of furnishing and incorporating Type A water-reducing, Type B retarding or Type D water-reducing and retarding admixtures in 511 concrete for bridge superstructure.

808.02 Use. When an air temperature of 60 degrees F or higher prevails at time of placing concrete in a bridge superstructure (over a 20-foot span), the Contractor shall add an approved admixture to the concrete mix. Only admixtures approved by the Director may be used.

808.03 Type. The admixture shall be furnished in liquid or powder form; however, it shall be added in liquid form. It shall be Type A, B or D, ASTM C 494 conforming to the respective physical requirements of Table 1 except that the relative durability shall be not less than 90.

808.04 Acceptance. The producer of the admixture shall furnish the Department's Laboratory two copies of test data from a recognized laboratory showing that the admixture meets the requirements specified herein. A recognized laboratory shall be a laboratory of any State Highway Department, EPR, or any cement or concrete laboratory regularly inspected by the Cement and Concrete Reference Laboratory of ASTM.

The test data shall be obtained and reported in accordance with ASTM C 494.

808.05 Procedure. All concrete mixes containing the admixture shall be produced using cement of the same brand and source. The fine aggregate shall be from one source, and coarse aggregate from one source. The Contractor shall notify the Laboratory of the admixture, cement and aggregates he will use at least 60 days before the date of proposed use. If the Department has had no prior experience with the proposed admixture cement-aggregate combination, it may be necessary to make tests to determine whether or not the admixture can be approved. When this is done, the necessary samples of the materials to be used shall be furnished by the Contractor.

The admixture in liquid form, shall be batched accurately by means of a visual volumetric device in quantities recommended by the admixture producer and approved by the Engineer. The admixture shall be introduced into the mix in a manner that will prevent it from coming in direct contact with the dry cement or the air-entraining admixture.

The admixture shall be delivered in the manufacturer's original container labeled to show the names of the manufacturer and the content. Tests will be made on each shipment of admixture to be used by the Contractor.

The approved status of an admixture is dependent on satisfactory performance on the job. Tests to determine the rate of hardening and the compressive strength of the concrete may be made at any time during the progress of the work.

808.06 Measurement. The quantity of admixture shall be the number of units of approved material furnished and incorporated into the specified concrete.

A unit of admixture shall be the material required for acceptably treating one cubic yard of 511 concrete.

808.07 Payment. Payment for accepted quantities, complete in place, will be made at contract price for:

Item	Unit	Description
808	Units	Type A Water-reducing admixture
808	Units	Type B Retarding admixture
808	Units	Type D Water-reducing and retarding admixture

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
SUPPLEMENTAL SPECIFICATION 836
ITEM 836 CONCRETE CURING AND PROTECTIVE MEMBRANE

6-17-69

836.01 Description
836.02 Curing
836.03 Material
836.04 General

836.05 Immediate Application
836.06 Delayed Application
836.07 Construction Joints
836.08 Basis of Payment

836.01 Description. This work shall consist of furnishing and applying this membrane material to the exposed concrete surfaces noted below:

The top surface and fascia of bridge decks.

All exposed surfaces of railings, curbs, parapets and medians.

Abutment bridge seats and all exposed abutment surfaces above the bridge seat but the application need not extend laterally beyond the deck fascia.

To all other exposed surfaces that are specified in the plans.

836.02 Curing. Except as noted in the following paragraph this membrane material shall serve as a curing membrane in lieu of or in conjunction with Method (a) as specified in 511.15.

All concrete placed during cold weather shall be cured according to the provisions of 511.13. All construction joint surfaces shall be cured or protected by Method (a) until curing is complete or until the concrete adjacent to the joint has been placed.

836.01

Concrete surfaces not itemized in ~~835.01~~ shall be cured by Method (a) or Method (b).

Multiple joint wood forms without liners, if left in place longer than 2 days after placing concrete, shall be thoroughly wet down at least once each day for the remainder of the curing period.

836.03 Material. The material shall consist of a concrete curing membrane, Type 1, meeting the requirements of FSS TT-C-00800(1) dated March 1, 1967. The Contractor shall submit the manufacturer's certified analysis for the lot or lots shipped.

836.04 General. The condition of the concrete surfaces that are to receive applications of this membrane material shall be approved by the Engineer immediately prior to such applications. The cost of all surface preparation, including abrasive blast cleaning if required, shall be included in the unit price bid for "Concrete" or for "Concrete Curing and Protective Membrane" as described in 836.08.

836.05 Immediate Application. After concrete has received a final surface finish including any grout cleaning or rubbing that the Engineer may require, or immediately after the disappearance of free surface water, the concrete surface shall be sealed by spraying as a fine mist a uniform, one coat application of the membrane material at the rate of 1 gallon per 200 square feet.

836.06 Delayed Application. On surfaces which have been partially or fully cured by Method (a) the membrane material shall be applied as a protective coating as soon as practicable in order to avoid the accumulation of surface impurities and contaminants. Under no circumstance shall applications of other than clean water be applied to the finished surface prior to the application of the membrane material.

MAIL TO CHESTER CURTIS - 8 APR 28 1970
 FROM STATE HIGHWAY DEPT., W.D. BRASEL

PR-1 Rev. 9-1-66

REPORT FOR NEEDED PROJECT

MAY 1 1970

LOGAN COUNTY
 SPECIAL PROGRAM
 Issue No. 1

HIGHWAY SYSTEM	PROJECT LENGTH (Mi.)	OTHER AGENCIES
State _____	Rural 0.21	Munic. _____
Federal _____	Munic. _____	County Logan
Other _____	Total 0.21	Other _____

PROJECT TERMINI AND LOCATION
 The Project commences 0.3 mile East of the Village of Zanesfield on C.H. 10 and terminates 0.10 mile East of Zanesfield, Jefferson Twp., Logan County, Ohio.

EXISTING CONDITIONS

Pavement - Width 18', Condition Fair, Roadway Width 30'

Traffic - Passenger Cars 8 "A" 263, "B" & "C" 50, Year 1968

Capac. Rtg. _____, Ser. & Saf. Rtg. _____, Suff. Rating _____

Accidents - Per Mile 0, Per M.V.M. 0, Per Location 0, Year(s) 1960 - 1970

Railroad Section None, No. of Tracks _____

Crossings No. of Trains _____, Type of Protection _____ (Show Location on Map).

Airports - (Within 2-Miles) - Name _____, Bridge No. 10-5.09

Bridges > 20' Span - Width 13'-8", Condition Poor

PURPOSE AND DESCRIPTION OF WORK
 Purpose of this project is to eliminate a narrow bridge at the base of a steep hill and to improve both vertical & horizontal alignment. The project consists of construction of a 24'-30'-24' continuous slab bridge with 30' roadway and grading, draining and paving approximately 500' of approach roadway each side of the bridge. Financing: Preliminary Engineering by the County, Balance of Contract by Issue No. 1 Funds.

* Logan County Issue No. 1 Funds - \$445,000

COST ESTIMATE	PROPOSED FINANCING (Central Office Use)		FISCAL YEAR
	Federal	State	
Prel. Engr. Co. * \$7,500.00		Logan	1971
Right of Way * Co. 2,000.00			
Constr. Engr. * Co. 5,000.00			
Rdwy & Pavt. 45,000.00			
Structures 80,000.00			
Conting'ces 20,000.00			
Total \$145,000.00			

Relocation: Parcels _____, Families _____, Businesses _____, Total Cost _____

Recommended By Chester R. Curtis County Eng'r., Date 2-26-70

Recommended By Charles M. Briscoe Division Eng'r., Date 3-2-70

Reviewed By W. J. Stuber Program Eng'r., Date 4-21-70

JOB NUMBER ASSIGNMENT (Central Office Use)

Phase of Work Job Number

Prel. Engr. 07699(0)

Right of Way _____

Constr. Engr. 07699(0)

PROJECT DESCRIPTION
 Co.(s) Logan
 Rte.(s) C.R.-10
 Sec.(s) _____

IDENTIFICATION NO.
 P.F. NO. Log-7
 Original Date 2-26-70
 Revised _____
 Revised _____

Note: On phases of work indicated above for federal participation, no work is to be done until authorization for that phase is obtained from B.P.R.

Note: Map showing location of project - Attach to original copy

(Include large scale map if adjacent to or in municipality)

* County funds being used for plans & R.W.E.C.F.

STATE OF OHIO - DEPARTMENT OF HIGHWAYS

BUREAU of BRIDGES

*copy given to K. J. ...
4-30-70
April 28, 1970
E. Knasel*

APR 29 1970

Memo to: Oliver M. Liggitt, Div. Deputy Director Div. #7

Attention: W. G. Knasel

County LOGAN

From: C. H. Altwater, Engineer of Bridges

Sec.

By: Clarence D. Bowser, Assistant Engineer Bridge No. _____
of Bridges BR. NO. 10-5.09
CR 10 OVER MAD RIVER

Subject:

Our Preliminary Design Section recommends, after analysis, that rock channel protection be placed at both abutments and that the crushed aggregate slope protection now shown be eliminated. Attached are Xerox copies of portions of the Site Plan and General Plan marked where changes should be made. Also, attached is a Detail of Rock Channel Protection which shows how the quantity should be figured. The detail should appear in the plans.

The Detail Design Drawings appear to be satisfactory as far as they have progressed. Needed parts include Notes and Quantities. See our Design Regulations, pages 38-55 for suggestions.

When 14" diameter piles are used in the piers, for convenience the same size is usually used in the abutments.

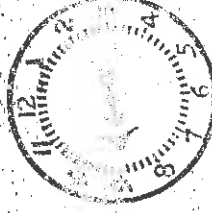
Replacement Bars should be added to the Reinforcing Steel List. See pages 28 and 29 of the Design Regulations.

A bar-size note is needed in or near the Steel List. See page 47 of the Design Regulations.

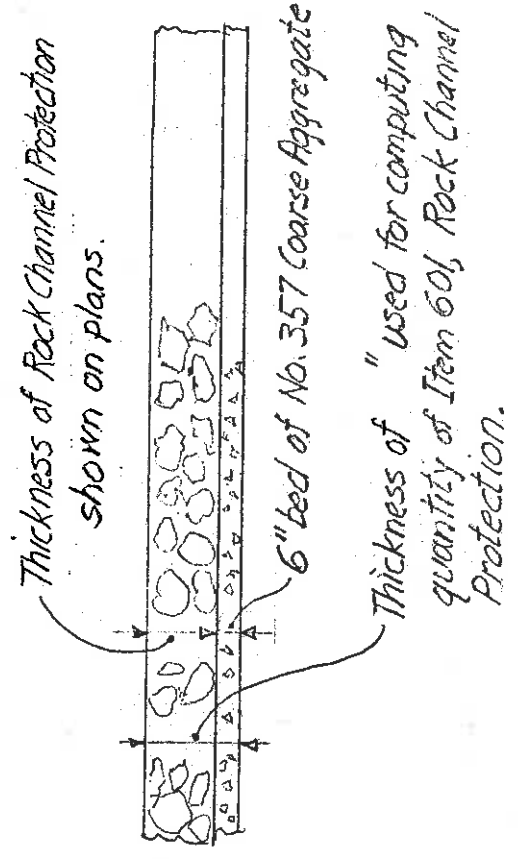
Two sets of prints of the bridge sheets should be submitted for a second review.

CDB:ae

[Signature]
APR 29 1970 AM



STATE HIGHWAY DEP
DIVISION

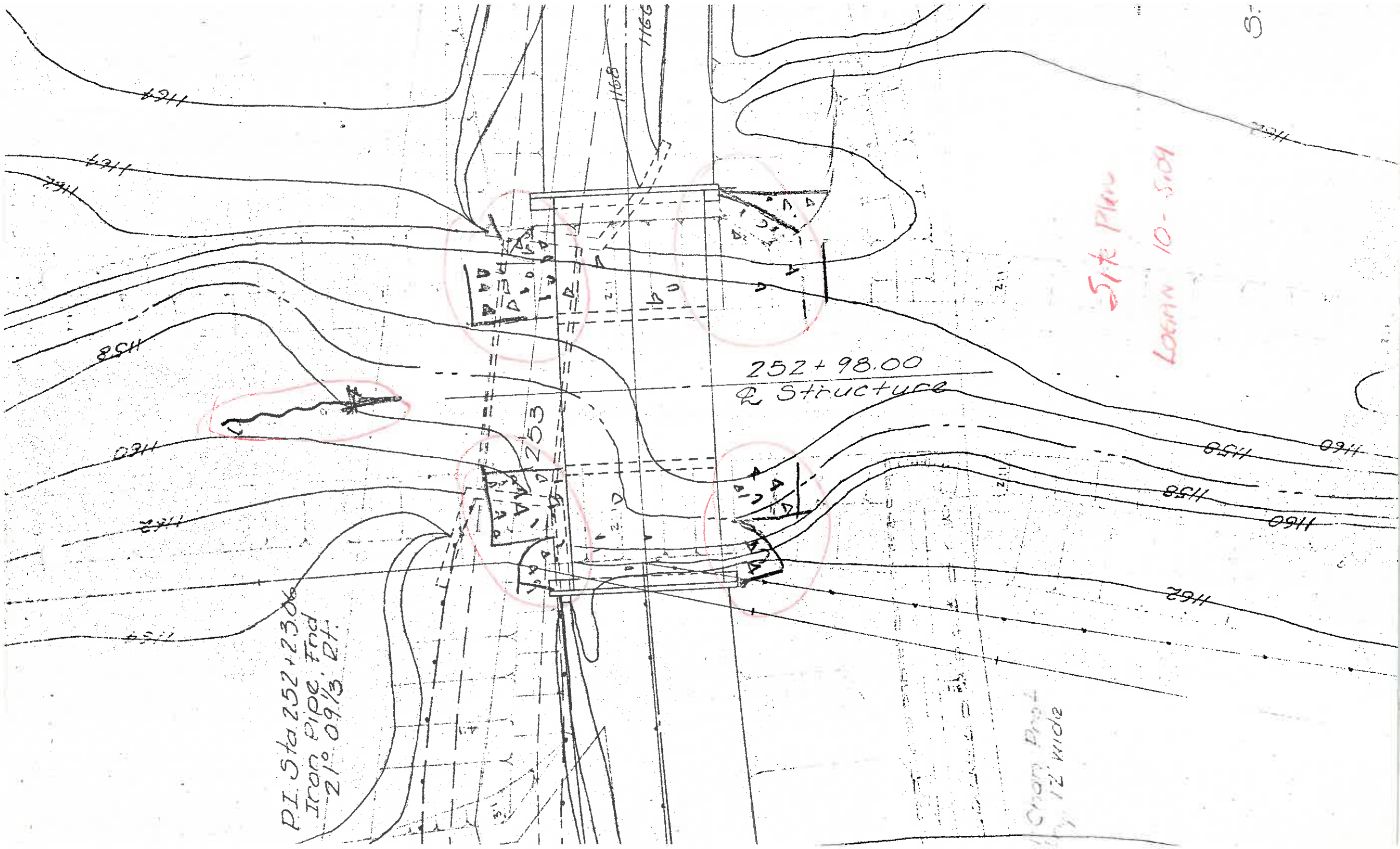


DETAIL OF ROCK CHANNEL PROTECTION

NOTE: This detail should be used on all projects on which Item 601 Rock Channel Protection appears.

In QUANTITY LIST use
601 Cu. yd. Rock channel protection, Type A (or B)

(If thickness shown on plans is more than 30", use Type A)



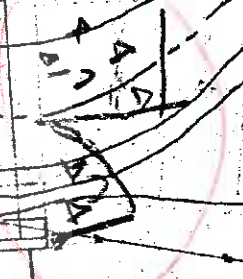
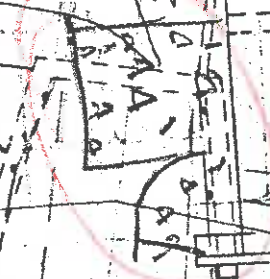
5:

Site Plan
LOGAN 10-5109

252+98.00
Q Structure

PI Sta 252+23.06
Iron Pipe Fnd
21° 09 1/3' Pt.

Cham. Prop.
12' wide



1164

1164

1158

1160

1152

1154

1168

1166

253

1158

1160

1158

1160

1162

1172

1172

LOG# 10-5.07

Site Plan

254
1168.37

253

252
1169.59

Rock Channel Protection 601.08

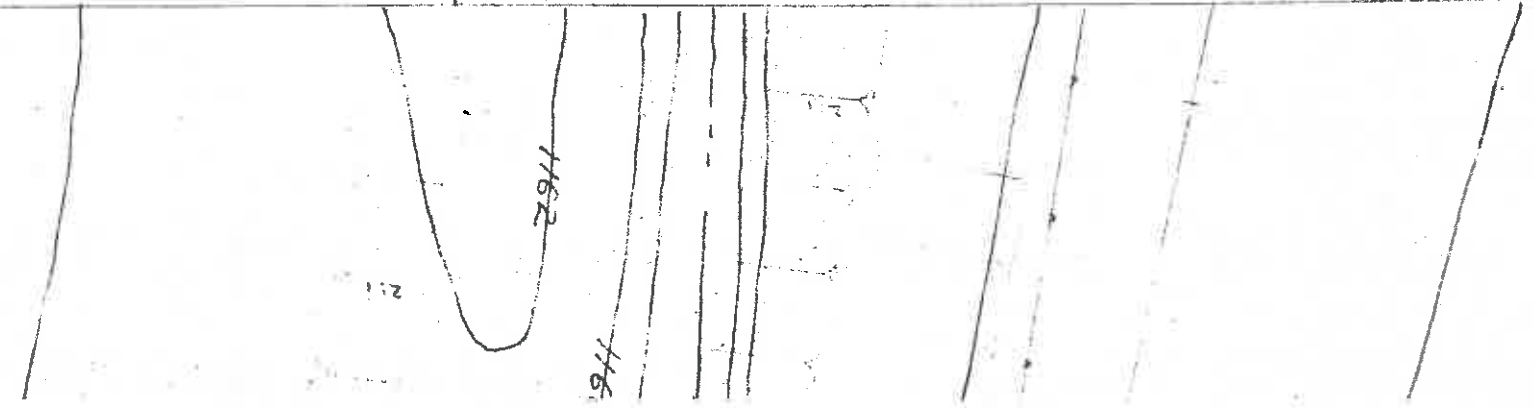
Bench Elev. 1166.1
10 year High Water Type A 3.0 ft thick
1162.5
Excavate to 1157.0 thru structure

Normal Water Elev. 1158.0

Bench Elev. 1166.9

Usually use 14" bell pipe & abutts.

24-30-24 = 281.04 OK
1166.9
9.9
19.8 30
1157.0
9.1
15.2
1166.1
6-1
75.70 ft
OK

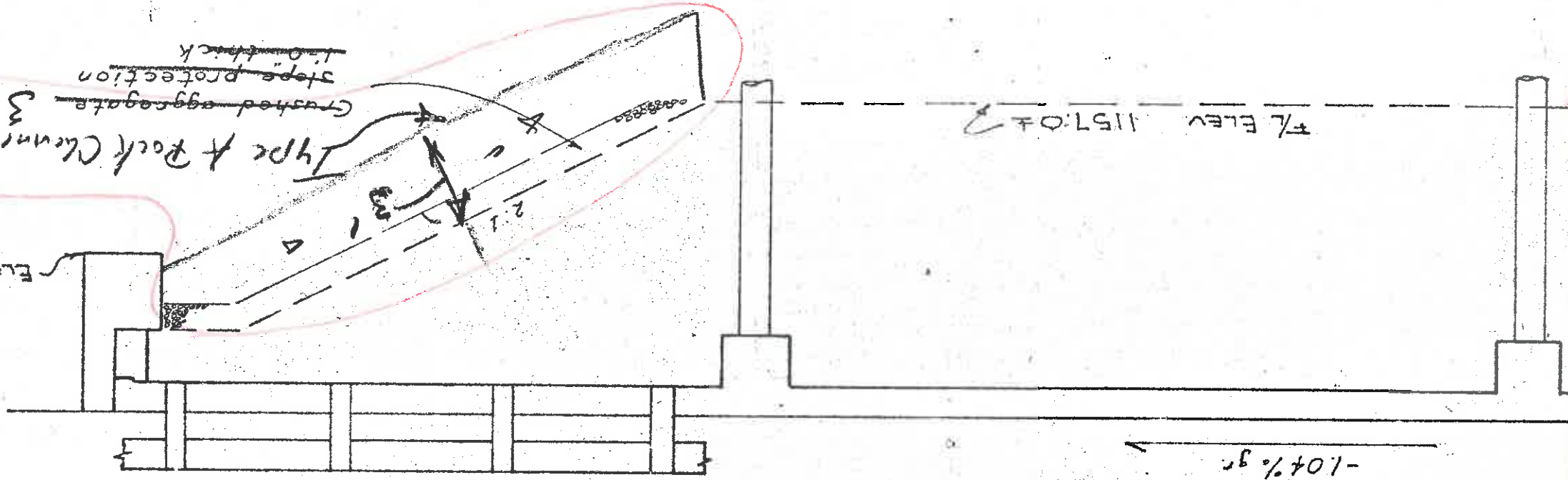


GENERAL PLAN

Scale: $\frac{1}{2}$ " = 1'

LOSER 10-5.07

-1.04% \rightarrow



Type A Rock Channel Protection 3' Thick.

Crushed aggregate 3' Thick.
~~Slope protection~~
~~1.0' thick~~

ELEV. 1163.07

± ELEV. 1157.07 ±

MEMORANDUM OF ESTABLISHMENT OR REVISION SALE DATE

Map No. N/A Date: April 27, 1970

PF No. LOG-7

Funds Issue 1 *

Amount 145

X ADD

DELETE

RESCHEDULE LOG CR-10
(County) (Route) (Section)

from the Unscheduled 19 sale list to the
(Month) (Day) (Year)

Sept. 10 19 70 sale list.
(Month) (Day) (Year)

REMARKS: R/W to be certified by County. Financed 100% by Issue 1
funds allocated to Logan County

Dep. Dir. of Design & Construction
Bureau of Contract Sales
Bureau of Location & Design
Bureau of Design Services
Bureau of Bridges
Estimating Section (L&D)
PS&E Voucher Section (L&D)
Plan Review Section (L&D)

Deputy Director, Division 7
Bureau of Traffic
Bureau of Utilities (R/W)
Bureau of R/W Engineering
Bureau of Programming (2)
Bureau of Public Relations
Project Management Section
Mr. C. R. Kurtz-County Engineer ✓

James R. ...
Administrative Assistant to Deputy
Director of Planning & Programming

RECEIVED

ISSUE 1 FUNDS

APR 28 1970

LOGAN COUNTY
ENGINEER



STATE OF OHIO
DEPARTMENT OF HIGHWAYS

Columbus, Ohio 43216

P. E. MASHETER
Director

JAMES A. RHODES
Governor

J. W. WILSON
Chief Engineer

Division Seven
Sidney, Ohio

April 3, 1970

Chester Kurtz
Logan County Engineer
County Engineer's Office
Bellefontaine, Ohio 43311

Subject: Issue No. 1 Project, Bridge on County
Road No. 10 Near Zanesfield

Dear Mr. Kurtz:

We are furnishing to you attached the original and three copies of a suggested Resolution for execution by the County Commissioners to serve as an agreement between the State and the County for the construction of the subject improvement. Will you please present this legislation to the County Commissioners for their consideration and action. If the County Commissioners concur and execute the legislation, please return the original and two copies of the completely executed forms to us.

If any additional information is needed please feel free to contact us. We will appreciate your early attention.

Oliver M. Liggitt
Division Deputy Director

W. G. Knasel
D/E Design & Planning

WGK:rba

Attach.

cc: File
Logan County Bd. Comm.
Simpson

RECEIVED
APR 6 1970

**LOGAN COUNTY
ENGINEER**

*John - Moved
Harvey - Secord
Done OK*

net. 4-9-70

— "Better Roads For A Better Ohio" —

RESOLUTION OF COUNTY COMMISSIONERS PROPOSTING
TO COOPERATE WITH THE DIRECTOR OF HIGHWAYS

Mr. John R. Inskoop moved the adoption of the following resolution:

WHEREAS, the public interest demands the improvement hereinafter described.

NOW THEREFORE, BE IT RESOLVED, by the Board of Commissioners of Logan County, Ohio, hereinafter referred to as the County, that:

SECTION I. - The public interest demands the improvement, under the provisions of Chapter 5521 Ohio Revised Code and Amended Senate Bill 428 passed by the 108th General Assembly of Ohio and in accordance with "Ohio Department of Highways, Procedure Manual, State Issue 1 Funds", of that part of County Road No. 10, situated in the County of Logan, State of Ohio and Described as follows:

Replace existing bridge No. 10-5.09, over the Mad River in Jefferson Township, at a slightly adjusted location, and make all necessary adjustments to the alignment and profile of County Road No. 10 necessitated by the new bridge, in accordance with plans prepared by the County and approved by the Director of Highways.

SECTION II. - The County agrees to: Cooperate with the Director of Highways by assuming and contributing the entire cost and expense of the improvement less the amount of Issue No. 1 funds determined to be eligible for participation in said improvement, and further the County agrees:

1. To bear 100% of the cost of the following items, which shall not be a part of the State's estimate:

- a. Preliminary Engineering.
- b. Construction Engineering
- c. Right of Way.
- d. All cost for added construction items generating extra work contract, unless performance is approved by the State of Ohio, before the work is authorized.

SECTION III. - The Commissioners will arrange for the relocation, rearrangement or alteration of all utilities of any nature whatsoever, whether privately, publicly, or cooperatively owned, occupying the rights-of-way of county and township roads, which will be affected by or interfere with said improvement. The cost of the relocation, rearrangement and alteration of such utilities occupying the county or township road rights-of-way will be borne by the owners or the County.

SECTION IV. - Upon completion of the said improvement the County will thereafter keep said highway open to traffic at all times, and

- (a) Maintain the improvement and make ample financial and other provisions for such maintenance; and
- (b) Maintain the right-of-way and keep it free of obstructions, and hold said right-of-way inviolate for public highway purposes, and permit no signs, posters, billboards, roadside stands or other private installations within the right-of-way limits; and
- (c) Will place and maintain all traffic control devices conforming to the Ohio Manual of Uniform Traffic Control Devices on the improvement in compliance with the provisions of Section 4511.11 and related sections of the Ohio Revised Code; and

(d) Regulate parking in the following manner;

Prohibit parking on the pavement.

Thereupon, Mr. Harvey C. Terrill, seconded the said motion and upon the roll being called, the result of the vote was as follows:

Mr. Don Downing AYE

Commissioners of Logan

Mr. Harvey C. Terrill AYE

County, Ohio.

Mr. John R. Inskeep AYE

IN WITNESS WHEREOF, the undersigned County Commissioners of Logan County sign in duplicate and certify to be correct in duplicate the foregoing resolution and action of said Board of County Commissioners thereon, this 6th day of April, 19 70.

Don Downing
John R. Inskeep
Board of County Commissioners of Logan County, Ohio.

The State of Ohio, County of Logan, Office of the Board of County Commissioners.

This is to certify that we have compared the foregoing copy of resolution with the original thereof, found in the record of the proceedings of the Board of County Commissioners of said Logan County, Ohio, which resolution was duly passed by said Board of County Commissioners on the 6th day of April, 19 70, and that the same is a true and correct copy of the record of said resolution and action of said Board of County Commissioners thereon.

We further certify that said resolution and the action of said Board of County Commissioners is recorded in the Journal of said Board of County Commissioners in Vol. 2-I at page 360, 361, and under date of April 6, 19 70.

IN WITNESS WHEREOF, we have hereunto set our hands this 6th day of April, 19 70.

ATTEST:

Clerk Lois D. House

Don Downing
PRESIDENT, BOARD OF COMMISSIONERS

Logan County, Ohio.

The foregoing is accepted as a basis for proceeding with the improvement herein described.

ATTEST:

DIRECTOR OF HIGHWAYS

DATE

Office Copy

February 26, 1970

State of Ohio
Department of Highways
Division Seven
Sidney, Ohio 45365

Attention: Mr. Oliver M. Liggitt, Deputy Director

Dear Mr. Liggitt:

Re: Program Report, Logan County, Ohio
Project on Issue No. 1 Funds

Attached are the program reports and location maps for the project we recently discussed. This project is listed as priority No. 3 on our initial proposal for the Issue No. 1 Fund Program. This project is nearest to completion, thus the reason for its submission at this date.

We submit the following tentative schedule for the project:

Plan Completion - April 1, 1970
R/W Acquisition - April 1, 1970
Contract Letting - August 1, 1970

As noted on the report the County will finance the plans and right-of-way purchase. The balance of the project is expected to come from Issue No. 1 Funds.

Respectfully submitted,



Chester R. Kurtz, P.E.
Logan County Engineer

CRK:sjm

COPY

REPORT FOR NEEDED PROJECT

HIGHWAY SYSTEM State _____ Federal _____ Other <u>County</u>	PROJECT LENGTH (Mi.) Rural <u>0.21</u> Munic. _____ Total <u>0.21</u>	OTHER AGENCIES Munic. _____ County _____ Other _____	SPECIAL PROGRAM _____ _____ _____
---	--	---	--

PROJECT TERMINI AND LOCATION

The Project commences 0.3 mile East of the Village of Zanesfield on C.H. 10 and terminates 0.10 mile East of Zanesfield, Jefferson Twp., Logan County, Ohio.

EXISTING CONDITIONS

Pavement - Width 18', Condition FAIR, Roadway Width 30'
 Traffic - Passenger Cars & "A" 263, "B" & "C" 50, Year 1968
 Capac. R'tg. _____, Ser. & Saf. R'tg. _____, Str. R'tg. _____, Suff. Rating _____
 Accidents - Per Mile 0, Per M.V.M. 0, Per Location 0, Year (s) 1960 - 1970
 Railroad Section None, No. of Tracks _____
 Crossings No. of Trains _____, Type of Protection _____ (Show Location on Map).
 Airports - (Within 2-Miles) - Name _____
 Bridges > 20' Span - Bridge No. 10-5.09, Width 13'-8", Condition POOR

PURPOSE AND DESCRIPTION OF WORK

Purpose of this project is to eliminate a narrow bridge at the base of a steep hill and to improve both vertical & horizontal alignment. The project consists of construction of a 24'-30'-24' continuous slab bridge with 30' roadway and grading, draining and paving approximately 500' of approach roadway each side of the bridge. Financing: Preliminary Engineering by the County, Balance of Contract by Issue No. 1 Funds.

COST ESTIMATE	PROPOSED FINANCING (Central Office Use)	
	Federal	State
Prel. Eng'r. <u>\$7,500.00</u>	_____	_____
Right of Way <u>2,000.00</u>	_____	_____
Constr. Eng'r. <u>5,000.00</u>	_____	_____
R'dwy & Pav't. <u>45,000.00</u>	_____	_____
Structures <u>80,000.00</u>	_____	_____
Conting'ces <u>20,000.00</u>	_____	_____
Total <u>\$159,500.00</u>	_____	_____

Relocation Payments: Parcels, _____, Families, _____, Businesses, _____, Total Cost _____

Recommended By Charles R. Kutz **County** Eng'r., Date 2-26-70
 Recommended By _____ Division Eng'r., Date _____
 Reviewed By _____ Program Eng'r., Date _____

JOB NUMBER ASSIGNMENT (Central Office Use)		FISCAL YEAR
Phase of Work	Job Number	_____
Prel. Eng'r.	_____	_____
Right of Way	_____	_____
Constr. Eng'r.	_____	_____

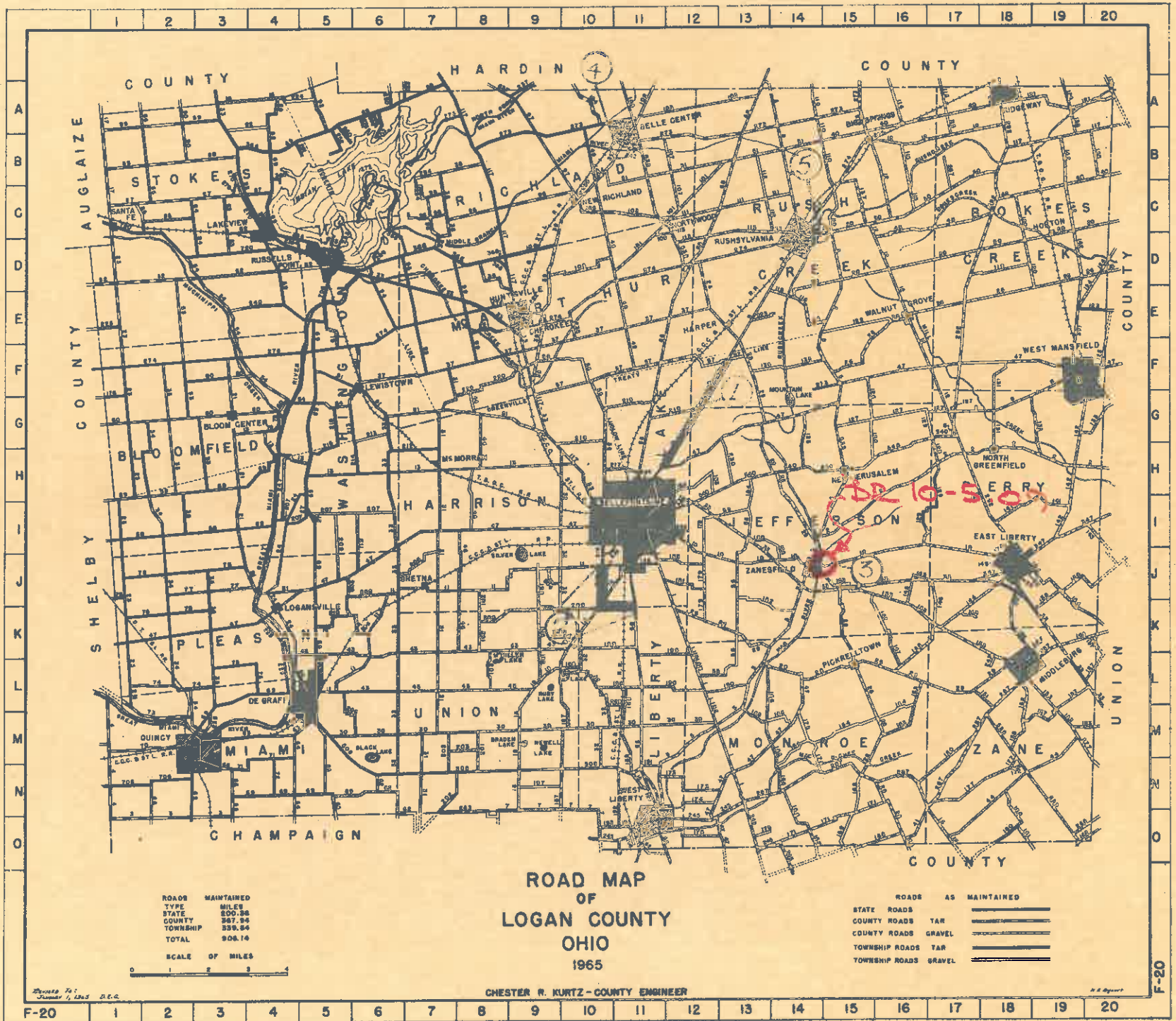
PROJECT DESCRIPTION

Co.(s) _____
 R'te.(s) _____
 Sec.(s) _____
 IDENTIFICATION NO. _____

P.F. NO. _____
 Original Date _____
 Revised _____
 Revised _____

Note: Map showing location of project - Attach to original copy
 (Include large scale map if adjacent to or in municipality)

① In Route Number of Project



Jefferson
copy

STATE OF OHIO - DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE INSPECTION REPORT

BR-86 REV. 01-77

BRIDGE NUMBER 112 CO. 10-509 ROUTE 115 UNIT Mad River

YEAR BUILT 7100

DISTRICT	BRIDGE TYPE	TYPE SERVICE	CO.	ROUTE	UNIT	TYPE COND	TYPE COND	TYPE COND
DECK								
1. FLOOR		8	1	1		2. WEARING SURFACE	56	21
3. CURBS & WALKWAYS		10				4. MEDIAN		58
5. RAILING		12	7	1		6. DRAINAGE	59	1
7. EXPANSION JOINTS		14				8. SUMMARY		61
SUPERSTRUCTURE								
9. ALIGNMENT			16			10. BEAMS or GIRDERS	62	
11. DIAPHRAGMS or CROSSFRAMES			17			12. JOIST		64
13. FLOOR BEAMS			18			14. FLOOR BEAM CONNECTIONS		65
15. VERTICALS			19			16. DIAGONALS		66
17. END POST			20			18. TOP CHORD		67
19. LOWER CHORD			21			20. LOWER LATERAL BRACING		68
21. TOP LATERAL BRACING			22			22. SWAY BRACING		69
23. PORTALS			23			24. BEARINGS	70	
25. ARCH			24			26. ARCH COLUMNS or HANGERS		72
27. SPANDRAL WALLS			25			28. SUSPENSION SYSTEM		73
29. SUSPENDERS			26			30. TOWERS		74
31. BENT POST			27			32. ANCHORAGE		75
33. BRIDGE MACHINERY			28			34. PAINT	76	
35. LIVE LOAD RESPONSE			29			36. SUMMARY		79
SUBSTRUCTURE								
37. ABUTMENTS		7	30	10	1	38. ABUTMENT SEATS		80
39. PIERS			33	7	1	40. PIER SEATS		81
41. BACKWALLS			36			42. WINGWALLS		82
43. FENDERS & DOLPHINS			37			44. SUMMARY		83
CULVERTS								
45. GENERAL			38			46. ALIGNMENT		84
47. HEADWALLS or END WALLS			40			48. SUMMARY		85
CHANNEL								
49. ALIGNMENT			42		1	50. PROTECTION	86	
51. WATERWAY ADEQUACY			43			52. SUMMARY		88
APPROACHES								
53. PAVEMENT			44	2	1	54. ALIGNMENT		89
55. GRADE			46		1	56. APPROACH SLABS		90
57. GUARD RAIL			47	1	1	58. RELIEF JOINTS		91
59. EMBANKMENT			49			60. SUMMARY		92
GENERAL								
61. NAVIGATION LIGHTS			50			62. WARNING SIGNS		93
63. INSPECTION RESPONSIBILITY			51			64. MAINTENANCE RESPONSIBILITY		94
65. VERTICAL CLEARANCE			52			66. GENERAL APPRAISAL & OPERATIONAL STATUS	95	COND STA

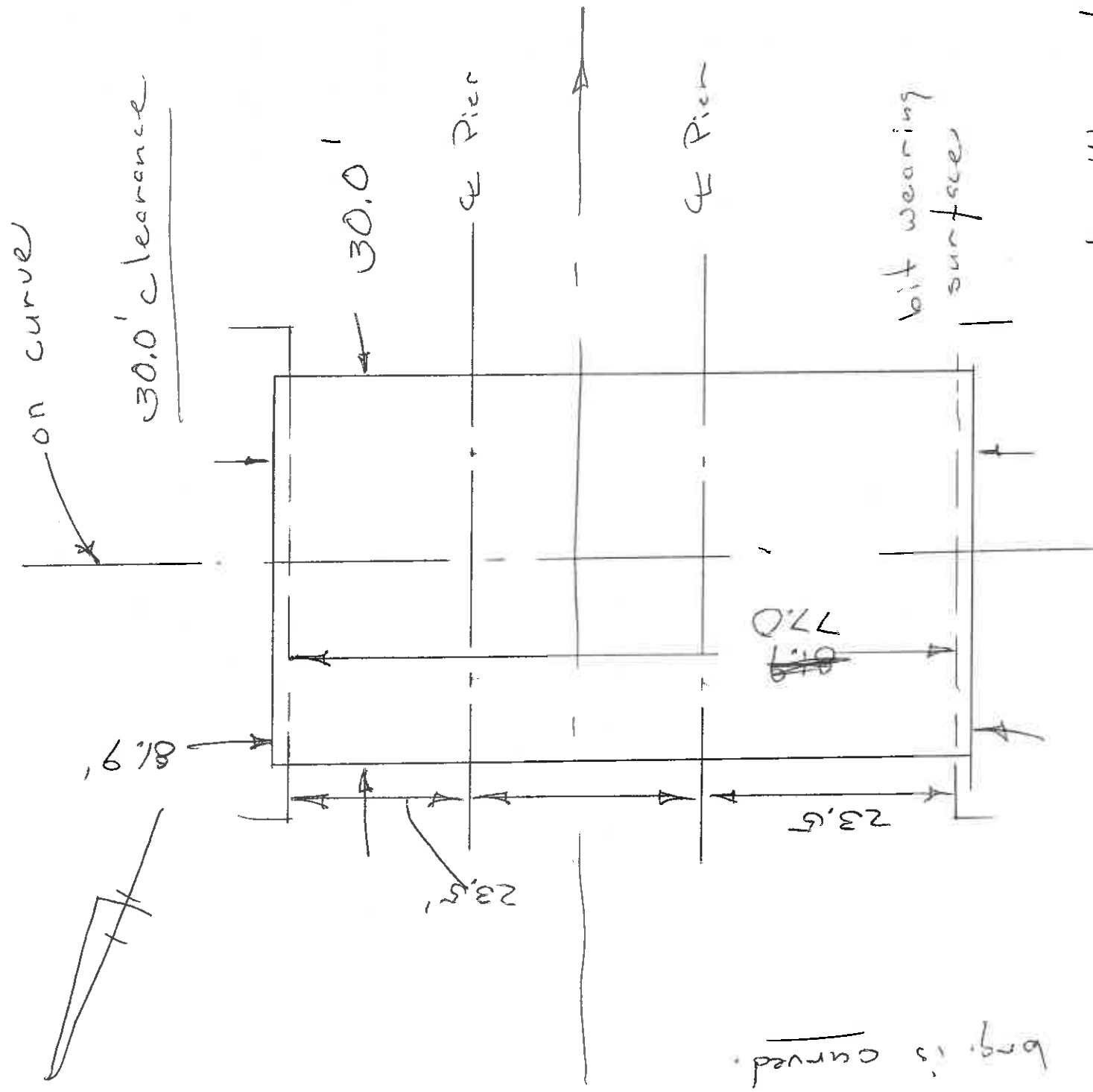
67 INSPECTED BY E. D. Mueloh SIGNED CM 97 INITIALS

68 REVIEWED BY SIGNED 111 INITIALS

DATE 2 9 79 104

DATE 01 00 11 10 112

USE REVERSE SIDE FOR ADDITIONAL INITIALS



Pavement width 20.7'

rdwy width 30.0'

BRIDGE INVENTORY & APPRAISAL CODE SHEET

10-5.09

PROCESSING KEY	
STRUCTURE FILE NO.	TRANS. CODE
4630858	C

CHECKED BY Carl Dill DATE 2-22-80

CARD NO.	(1) DISTRICT	(2) CITY OR TOWN	(3) INVENTORY ROUTE			(4) FEATURE(S) INTERSECTED	(5) INV. RTE. BRIDGE NO.		(6) SECTION I. D. NUMBER	(7) INVENTORY ROUTE A.D.T. (TENS)	(8) A.D.T. YEAR	(9) FED. AID SYSTEM	(10) ADMIN. JURISD.	(11) FUNCTIONAL CLASS	(12)					
			ON/UNDER SYSTEM	ROUTE NUMBER	DIRECT SUFFIX		DESIGNATION	PREF. ROUTE								COUNTY	UNIT NUMBER			
9	10	12	16	17	18	23	24	25	26	51	54	59	61	65	71	79	75	77	79	80
1										JEF	05.09			000030	80					

CARD NO.	(13) DEFENSE			(14) TOT. MIN HORIZONTAL CLEAR.		(15) PRACTICAL MAXIMUM VERTICAL CLEAR.	(16)	(17) INTERSECTED ROUTE			(18) FEATURE(S) INTERSECTED	(18) INTER. RTE. BRIDGE NO.									
	SECTION NUMBER	MILEPOINT BEGIN SECTION	SECTION LENGTH	NON-CARD. OPENING	CARDINAL OPENING			ON/UNDER SYSTEM	ROUTE NUMBER	DIRECT SUFFIX		DESIGNATION	PREF. ROUTE	COUNTY	UNIT NUMBER	STRAIGHT LINE MILEAGE	SPECIAL DESIGNATION				
9	10		19	22	25	28	30	32	36	37	38	43	44	45	46	71	74			79	80
2																					

CARD NO.	(20) INTERSECTED ROUTE A.D.T. (TENS)	(21) A.D.T. YEAR	(22) FED. AID SYSTEM	(23) ADMIN. JURISD.	(24) FUNCTIONAL CLASS	(25) DEFENSE			(26) TOT. MIN HORIZONTAL CLEAR.		(27) PRACTICAL MAXIMUM VERTICAL CLEAR.	(28)	(29) BY-PASS LENGTH	(30) COORDINATES		S1	S2	(33) YEAR BUILT		(34) NO. LANES		(35) HORIZ. CURVE		(36) SKEW	(37) DESIGN LOADING				
						SECTION NUMBER	MILEPOINT BEGIN SECTION	SECTION LENGTH	NON-CARD. OPENING	CARDINAL OPENING				FT.	IN.			DEGREES	MINUTES	DEGREES	MINUTES	PHYS. VULNER.	TOLL			ORIG. CON.	MAJOR RECON.	ON STRUCT.	UNDER STRUCT.
9	10	16	18	20	22	24	29	33	36	39	42	44	46	50	52	54	57	60	63	64	65	67	69	71	73	75	77	79	80
3																													

CARD NO.	(38) APPROACH ROADWAY WIDTH	(39) MEDIAN TYPE	40	(41) BRIDGE ROADWAY WIDTH (CB/CB)	(42) DECK WIDTH (OUT/OUT)	43	44	(45) SIDEWALKS		46	(47) WEARING SURFACE	(48) STRUCTURE TYPE		(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	57							
								LEFT	RIGHT			FLOOR SLAB TYPE	THICKNESS (INCH)										NUMBER	TYPE CODE	NUMBER	TYPE CODE	TOTAL NO. SPANS	MAXIMUM SPAN LENGTH	OVERALL STRUCTURE LENGTH
9	10	13	18	17	21	25	26	27	30	33	34	35	37	40	43	46	49	52	56	62	64	66	68	70	76			80	
4																													

CARD NO.	(58) SUBSTRUCTURE										59	(60) MIN. VERT. UNDERCLEAR. (MAIN LANES)				(61) MIN. LATERAL UNDERCLEAR. TO EDGE OF LANE				(62) NAVIGATION		(63)	(64)	(65)						
	ABUTMENTS		PIERS						PILING	NON-CARD. OPENING		CARDINAL OPENING		NON-CARD. DIRECT.		CARDINAL DIRECT.		CONTROLLED	VERT. CLEAR.	HORIZ. CLEAR.	OHIO ORIGINAL CONSTR. PROJ. NO.			MICROFILM REEL NO.	ORIGINAL CONSTRUCTION FEDERAL AID PROJECT NUMBER					
	REAR	FWD.	PREDOMINATE	OTHER	OTHER	OTHER	OTHER	NON-CARD. FT.		NON-CARD. IN.		CARDINAL FT.	CARDINAL IN.	LEFT	RIGHT	LEFT	RIGHT								FT.	IN.				
9	10	11	12	13	14	18	17	18	20	21	22	24	25	26	27	28	31	33	35	38	41	44	47	48	51	56	61	67	80	
5																														

CARD NO.	(66) LOAD RATING				(67) APPRAISAL				(70) PROPOSED IMPROVEMENTS										(71) COST OF IMPROVEMENTS					72						
	OPERATING RATING	INVENTORY RATING	OHIO % OF LEGAL	RATING YEAR	INSP. RESP.	MAINT. RESP.	DECK DEON.	UNDERCLEAR.	SAFE LOAD CAP.	WATERWAY ADEQ.	APPR. ALIGN.	REMAIN. LIFE	YEAR NEEDED	TYPE SERVICE	TYPE WORK	LENGTH OF IMPROVEMENT	IMPR. DES. LOAD	PROPOSED ROAD WIDTH	NUMBER LANES	DESIGN A.D.T. (TENS)	YEAR A.D.T.	ADJ. ROWY.	TOTAL COST (\$1000'S)		YEAR OF COSTS	BREAKDOWN (\$1000'S)			PRIORITY	
9	10	13	16	19	21	22	23	24	25	26	27	28	29	31	32	35	40	42	46	48	64	66	68	69	74	76	77	78	80	
0																														

REMARKS:

OFFICIAL USE ONLY

O.A. CODE _____

REVIEWED BY _____

DATE _____

DATA PROVER (STAMP)

FEB 02 1981

DATE _____

10-5109

PROCESSING KEY	
STRUCTURE FILE NO.	TRANS. CODE
1	7 8
46308580	

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

BRIDGE INVENTORY & APPRAISAL CODE SHEET

CODED BY	DATE	REVIEWED BY	DATE	BRIDGE INVENTORY & APPRAISAL CODE SHEET																																																																		
				(1) CARD NO.	(2) ODDT DISTRICT	(3) CITY OR TOWN	(3) ON/UNDER SYSTEM	(3) ROUTE NUMBER	(3) DIRECT. SUFFIX	(3) DESIGNATION	(3) PREF. ROUTE	(4) FEATURE(S) INTERSECTED	(5) INV. RTE. BRIDGE NO.	(6) COUNTY	(6) UNIT NUMBER	(6) STRAIGHT LINE MILEAGE	(6) SPECIAL DESIGNATION	(7) SECTION I. D. NUMBER	(7) INVENTORY ROUTE A.D.T. (TENS)	(8) A.D.T. YEAR	(9) FED. AID. SYSTEM	(10) ADMIN. JURISD.	(11) FUNCTIONAL CLASS	(12)																																														
1				9	10	12	16	17	18	23	24	25	26		61	64	69	61	65	71	73	75	77	79	80																																													
2				9	10	15	18	22	25	28	30	32		36	37	39	43	44	45	46					71	74	79	80																																										
3				9	10	16	18	20	22	24	29	33		36	38	42	44	46		50	52	54	57	60	63	64	65	67	69	71	73	75	77	79	80																																			
4				9	10	19	16	17	21	25	26	27	30	33	34	35	37	40	43	46	49	52	55		62	64	66	68	70		75		80																																					
5				9	10	11	12	13	14	16	17	18	20	21	22	24	25	26	27	29	31	33	35	38	41	44	47	48	51	55	61	67		80																																				
6				9	10	13	16	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

DATA RECORDER (STAMP)

DATE FEB 06 1981

BRIDGE INVENTORY & APPRAISAL CODE SHEET

10-5.09

PROCESSING KEY	
STRUCTURE FILE NO.	TRANS. CODE
4630858A	

CHECKED BY R.A. Bruce DATE 4/16/79

CARD NO.	(1) ODOT DISTRICT	(2) CITY OR TOWN	(3) INVENTORY ROUTE						(4) FEATURE(S) INTERSECTED	(5) INV.-RTE. BRIDGE NO.		(6) COUNTY	(7) SECTION I. D. NUMBER	(8) INVENTORY ROUTE A.D.T. (TENS)	(9) A.D.T. YEAR	(10) FED.AID SYSTEM	(11) ADMIN. JURISD.	(12) FUNCTIONAL CLASS		
			ON/UNDER SYSTEM	ROUTE NUMBER	DIRECT.SUFFIX DESIGNATION	PREF. ROUTE	UNIT NUMBER	SPECIAL DESIGNATION												
9	10	12	16	17	18	23	24	25	26	51	54	59	61	65	71	79	75	77	79	80
1	07	0000	14	C	0010	1			MAD RIVER	46	0509			000044	77	11	40	06		

CARD NO.	(13) DEFENSE SECTION NUMBER	(14) MILEPOINT BEGIN SECTION	(15) SECTION LENGTH	(16) TOT. MIN HORIZONTAL CLEAR.		(17) INTERSECTED ROUTE ON/UNDER SYSTEM	ROUTE NUMBER	DIRECT. SUFFIX DESIGNATION	PREF. ROUTE	(18) FEATURE(S) INTERSECTED	(18) INTER. RTE. BRIDGE NO. COUNTY	UNIT NUMBER								
				NON-CARD. OPENING	CARDINAL OPENING							STRAIGHT LINE MILEAGE	SPECIAL DESIGNATION							
9	10	16	19	22	25	26	30	32	36	37	38	43	44	45	46	71	74	79	80	
2				000	300		99	99												

CARD NO.	(20) INTERSECTED ROUTE A.D.T. (TENS)	(21) A.D.T. YEAR	(22) FED. AID SYSTEM	(23) ADMIN. JURISD.	(24) FUNCTIONAL CLASS	(25) DEFENSE SECTION NUMBER		(26) MILEPOINT BEGIN SECTION	(27) SECTION LENGTH	(28) TOT. MIN HORIZONTAL CLEAR.		(29) PRACTICAL MAXIMUM VERTICAL CLEAR.	(30) COORDINATES BY-PASS LENGTH	LATITUDE DEGREES	LONGITUDE MINUTES	DEGREES	MINUTES	(31) PHYS. VULNER.	(32) TOLL	(33) YEAR BUILT	(34) NO. LANES	(35) HORIZ. CURVE		(36) SKEW	(37) DESIGN LOADING				
						NON-CARD. OPENING	CARDINAL OPENING			FT.	IN.											DEG.	MIN.						
9	10	16	18	20	22	24	28	33	36	39	42	44	46	50	52	54	57	60	63	64	65	67	69	71	73	75	77	79	80
3													09							371	00	02	00	04	00	00	30		

CARD NO.	(38) APPROACH ROADWAY WIDTH	(39) MEDIAN TYPE	40 FLARED	(41) BRIDGE ROADWAY WIDTH (CB/CB)	(42) DECK WIDTH (OUT/OUT)	43 RAIL. TYPE	44 DECK DRAIN.	(45) SIDEWALKS		46 FLOOR SLAB TYPE	(47) WEARING SURFACE THICKNESS (INCH)	(48) STRUCTURE TYPE		(49) TOTAL NO. SPANS	(50) MAXIMUM SPAN LENGTH	(51) OVERALL STRUCTURE LENGTH	(52) TYPE SERVICE	(53) BRIDGE DESCRIPTION	(54) MINIMUM VERTICAL CLEAR. ON BRIDGE		(55)	(56)	57 BEARING TYPE						
								LEFT	RIGHT			NUMBER	TYPE CODE						NUMBER	TYPE CODE				FT.	IN.				
9	10	13	16	17	21	25	26	27	30	33	34	35	37	40	43	46	49	52	56	62	64	66	68	70	75	80			
4	030	000	0	0300	0300	7	1	0	0	1	2	0	1	1	2	0	0	3	0	0	30	00	08	2	15	99	99		

CARD NO.	(58) SUBSTRUCTURE						59 PILING	(60) MIN. VERT. UNDERCLEAR. (MAIN LANES)				(61) MIN. LATERAL UNDERCLEAR. TO EDGE OF LANE				(62) NAVIGATION		(63) OHIO ORIGINAL CONSTR. PROJ. NO.	(64) MICROFILM REEL NO.	(65) ORIGINAL CONSTRUCTION FEDERAL AID PROJECT NUMBER										
	ABUTMENTS		PIERS					NON-CARD. OPENING	CARDINAL OPENING	NON-CARD. DIRECT.		CARDINAL DIRECT.		CONTROLLED	VERT. CLEAR.	HORIZ. CLEAR.	PRELIM. ENG.			DEMO-LITION										
	REAR	FWD.	PREDOMINATE	OTHER	OTHER	FT.				IN.	FT.	IN.	LEFT								RIGHT	LEFT	RIGHT							
9	10	11	12	13	14	16	17	18	20	21	22	24	25	26	27	28	29	31	33	35	38	41	44	47	48	51	56	61	67	80
5	76	76	02	77	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CARD NO.	(66) LOAD RATING				(69) APPRAISAL				(70) PROPOSED IMPROVEMENTS								(71) COST OF IMPROVEMENTS					72 PRIORITY							
	OPERATING RATING	INVENTORY RATING	OHIO % OF LEGAL	RATING YEAR	INSP. RESP.	MAINT. RESP.	DECK GEOM.	UNDERCLEAR.	SAFE LOAD CAP.	WATERWAY ADEQ.	APPR. ALIGN.	REMAIN. LIFE	YEAR NEEDED	TYPE SERVICE	TYPE WORK	LENGTH OF IMPROVEMENT	IMPR. DES. LOAD	PROPOSED ROAD WIDTH	NUMBER LANES	DESIGN A.D.T. (TENS)	YEAR A.D.T.		ADJ. ROWY.	TOTAL COST (\$1000'S)	YEAR OF COSTS	PRELIM. ENG.	DEMO-LITION	SUB-STRUCTURE	SUPER-STRUCTURE
9	10	13	16	18	21	22	23	24	25	26	27	28	29	31	32	35	40	42	46	48	54	56	58	64	66	69	72	76	80
6	940	927	100	79	3	3	8	N	6	8	8	4	0									00							00

REMARKS:

OFFICIAL USE ONLY

O.A. CODE _____
REVIEWED BY _____
DATE _____

DATA RECORDER (STAMP)

DATE _____

Memo

To: Bridge Files
From: Stephanie Ann Goff, Assistant Engineer
Date: 11/10/98
Re: Change in Bridge Numbers

In 1998, the Logan County Engineer's Office had Mastemind Systems re-run the control point information for all of Logan County.

Therefore, all of the log points for the bridges have changed. In each file, a BR-87 was filled out showing the change in log points and this memo was attached to show the reason for the changes.

ENGLISH
UNITS

RECEIVED
NOV 10 1998
LO. CO. ENGINEER

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE INVENTORY & APPRAISAL CODE SHEET

REMARKS DATA RECORD
DATE STAMP
DATE
CODED BY
ALL ITEMS SHOWN
IN RED LETTERS ARE
MANDATORY WHERE
APPLICABLE

BR-87
(REV. 1-95)
DOT-2853

STRUCTURE FILE NO. 4630858	TRAN. CODE 8	CARD 9	MPO CODE 10	CITY OR TOWN (FIPS) 12	ON/UNDER SYSTEM 17	ROUTE NUMBER 18 19 C0010	DIRECT SUFFIX 24	DESIGNATION 25	PREF. ROUTE 26 27	4 FEATURE(S) INTERSECTED										5 INV. RTE. BRIDGE NO.	6	7	8	9	10	11	12	13
		A								52	55	60	62	68	70	75	76	77	78	79	80							
											0.506																	

CARD 9	NHS 10	MACRO COR 11	FUNCTIONAL CLASS 12	TOT. MIN. HORIZONTAL CLEAR NON-CARD. OPENING 14	CARDINAL OPENING 17	PRACTICAL MAXIMUM VERTICAL CLEARANCE FT. IN. 20	DEFENSE 24	25	27	ON/UNDER SYSTEM 28	29	30	23 FEATURE(S) INTERSECTED										24 INT. RTE. BRIDGE NO.	25	26
B													35	36	37	38	63	66	71	73	79	80			

CARD 9	INTERSECTED ROUTE TRUCK TRAFFIC 10	NHS 15	MACRO COR 16	FUNCTIONAL CLASS 17	TOT. MIN. HORIZONTAL CLEAR NON-CARD. OPENING 19	CARDINAL OPENING 22	DIR. TRAF. NETWORK PARALLEL 25	26	27	28	29	30	PRACTICAL MAXIMUM VERTICAL CLEARANCE FT. IN. 34	36	37	NT. 38	COORDINATES LATITUDE DEGREES MINUTES SECONDS 39			40	41	42	43	44	45	46	47	48		
C																				52	53	57	61	63	65	69	71	78	80	

CARD 9	APPROACH ROADWAY WIDTH 10	BRIDGE ROADWAY WIDTH (CB/CB) 13	DECK WIDTH (OUT/OUT) 17	MEDIAN TYPE 21	MED. OP./CL. 24	SIDEWALKS LEFT RIGHT 25		28	CURBS SIDEWALKS LEFT RIGHT 31		32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	
D																													

CARD 9	SUBSTRUCTURE ABUTMENTS PIERS REAR FWD. PREDOMINATE OTHER OTHER MATL. TYPE MATL. TYPE NUMBER UNITS MATL. TYPE NUMBER UNITS MATL. TYPE NUMBER UNITS MATL. TYPE 10 11 12 13 14 16 17 18 20 21 22 24 25 26 27 28 29 30 31										FOUNDATION ABUT. PIERS REAR FORWARD PREDOM. OTHER OTHER MATL. TYPE MATL. TYPE MATL. TYPE MATL. TYPE 32 33 35 36 37 38				MIN. VERT. UNDERCLEAR. (MAIN LANES) NON-CARD. OPENING CARDINAL OPENING FT. IN. FT. IN. 42		MIN. LATERAL UNDERCLEAR. TO EDGE OF LANE NON-CARD. DIRECT CARDINAL DIRECT LEFT RIGHT LEFT RIGHT 46 49 52 55 58				MINIMUM VERTICAL CLEAR ON BRIDGE FT. IN. 59		MINIMUM LATERAL CLEARANCE TO EDGE OF LANE NON-CARDINAL CARDINAL LEFT RIGHT LEFT RIGHT 62 65 68 71 74 77				82
E																											

CARD 9	LOAD RATING HS OPERATING RATING HS INVENTORY RATING OHIO % OF LEGAL RATING YEAR 10 13 16 19				RAT. METH. 21		STREAM VELOCITY V-100 22 23		WAY AEO. APPR. ALIGN. TYPE WORK METHOD 28 29 30 32 33		LENGTH OF IMPROVEMENTS 39		BRIDGE IMPROVEMENT COSTS (\$1000) 45		ROADWAY IMPROVEMENT COSTS (\$1000) 51		TOTAL PROJECT COSTS (\$1000'S) 57		YEAR OF COSTS 59		FUTURE A.D.T. (ON THE BRIDGE) YR. FUT. A.D.T. 65 67		DESIGNATED INSPECTION FREQUENCY 69		INSP. RESP. MAINT. RESP. 71 72 73		TYPE SERVICE 76 78 79 80	
F																												

G																												
H																												
I																												

To the State Highway Director of Ohio:
 The undersigned, having full knowledge of the site, plans and specifications for the following improvement and the conditions of this proposal, hereby agrees to furnish all services, labor, materials, and equipment necessary to complete the entire project, according to the plans, specifications and completion dates, and to accept the unit prices specified below for each item as full compensation for the work in this proposal.

Date Set for Completion: August 31, 1971

The total amount of the bid, based on the approximate quantities given below and the unit prices specified by the bidder amounts to the sum of Seventy-Six Thousand Six Hundred Twenty-Six and 92/100 Dollars (\$76,626.92)
 (in Digits)

UNIT PRICE CONTRACT

For improving Section C.R. 10-5-09, County Road No. 10 in Jefferson Township, Logan County, Ohio, in accordance with plans and specifications by grading, draining and paving with asphalt concrete on a bituminous aggregate base and by constructing: Bridge No. 10-5-09, a continuous concrete slab with capped-pile substructure (spans 24'-30'-24', roadway 30'), over the Mad River. Pavement width 20 ft. Project length 1,087.51 ft. or 0.205 mile; work length 1,187.51 ft. or 0.224 mile.

Ref. Item No.	Approximate Unit Quantities	ITEM	ITEMIZED PROPOSAL			
			Unit Price Bid	Total Amount Bid	\$	cts.
ROADWAY						
1	201	lump clearing and grubbing	Lump	Sum	1000	00
2	202	16 lin. ft. 15" pipe removed for storage	2	00	32	00
3	202	778 lin. ft. Guard rail removed for storage, as per plan	1	05	816	90
4	202	1,097 lin. ft. fence removed for storage, as per plan		63	691	11
5	203	2,235 sq. yds. subgrade compaction		15	335	25
6	203	3,416 cu. yds. excavation not including embankment construction		75	2562	00
7	203	6,612 cu. yds. embankment		25	4959	00
8	607	1,088 lin. ft. fence, Type 47	2	05	2230	40
9	607	1 each gate, Type 47, 4'x16'		367	367	50
10	659	9,353 sq. yds. seeding and mulching		16	1496	48
11	659	0.84 ton commercial fertilizer (12-12-12)		126	105	84
Total Roadway						
			Lump	Sum	1000	00

12	659	4.2 tons agricultural liming	26	25	110	25
13	606	186 lin. ft. guard rail, Type 4	6	30	1771	80
14	606	4 each anchor assembly	168	00	672	00
Total Roadway					\$16,550	53
DRAINAGE						
16	601	511 cu. yds. rock channel protection, Type B	14	00	7154	00
17	603	36 lin. ft. 24" conduit, Type D	9	00	324	00
Total Drainage					7478	00
PAVEMENT						
19	301	406 cu. yds. bituminous aggregate base: 702.01 (85-100); or 702.09, RT-11 or RT-12	24	46	9938	88
20	402	81 cu. yds. asphalt concrete (85-100)	24	48	1982	58
21	404	65 cu. yds. asphalt concrete (85-100)	24	48	1591	20
22	408	202 gals. bituminous prime coat, MC-30 or MC-70	1	02	206	04
23	409	142 gals. seal coat bituminous material, 702.02, MC-800 or MC-3000	1	02	144	64
24	409	4 cu. yds. seal coat cover aggregate No. 8	30	60	122	40
25	304	132 cu. yds. aggregate base	12	24	1675	08
Total Pavement					15661	92

STRUCTURE OVER 20 FOOT SPAN						
Logan County Rd. Bridge No. 10-5-09						
27	505	lump first test pile	Lump	Sum	800	00
28	202	lump existing structure removed	Lump	Sum	1000	00
29	507	730 lin. ft. 14" cast-in-place reinforced concrete piles	8	64	6364	80
30	509	32,525 lbs. reinforcing steel		15	4828	75
31	511	112 cu. yds. Class "C" concrete, superstructure and pier caps		95	4000	00
32	511	50 cu. yds. Class "C" concrete, abutments		80	2050	00
33	517	164 lin. ft. railing (deep beam rail with steel posts and bolts)		12	195	00
34	518	13 cu. yds. porous backfill		14	4620	00
35	601	380 cu. yds. rock channel protection, Type A		10	1260	00
36	503	126 cu. yds. unclassified excavation		1	101	00
37	808	101 unis chemical admixture for concrete, Type A, B or D				
Total, Structure Over 20 Foot Span					35909	55
39	103.05	Lump Premium for Contract Bond (Performance)	Lump	Sum	607	92
40	614	Lump Maintaining Traffic	Lump	Sum	550	00
TOTAL AMOUNT OF THE BID					\$76,697	92

Have you double checked your bid ? ? ? Errors or omissions could result in your bid's being declared informal.

PROJECT No. 596

Wage Scale—

The minimum wage to be paid to all labor employed on this contract shall be in accordance with the "Schedule of Prevailing Hourly Wage Rates Ascertained and Determined by the Department of Industrial Relations applicable to State Highway Department Improvements in accordance with Chapter 4115 Ohio Revised Code.
This contract requires the payment of the total of the "basic hourly rates" plus the "fringe benefits payments" for each classification of "Laborer or Mechanic," all in accordance with Chapter 4115 Ohio Revised Code.

HEAVY AND HIGHWAY CONSTRUCTION
POWER EQUIPMENT OPERATORS

Fringe Benefits Payments :
H & W .28
Pensions .35
App. Tr. .05

Basic Hourly Rates

\$6.69

Master Mechanic

Classifications

- Air Compressor on Steel Erection; Boiler Operator or Compressor when mounted on a rig; Cableways; Combination Concrete Mixer and Tower; Concrete Plants (over 4 yd. capacity); Concrete Pumps; Cranes (all types, including A Frames, Boom Trucks, Cherry Pickers); Derricks; Draglines; Elevating Grader or Euclid Loaders; Floating Equipment (all types); Hoes (all types); Hoisting Engines on Shaft or Tunnel Work; Industrial-Type Tractor; Locomotives (standard gauge); Maintenance Operator Class A; Mixer, Paving (single or double drum); Piledriving Machines (all types); Power Shovels; Rotary Drill on Caisson Work; Slip-Form Paver; Tower Derricks; Trench Machines (over 24" wide)
- Asphalt Paver; Automatic Subgrade Machine, Self-propelled (GMI type); Bulldozer; Endloaders; Kolman Loader (production type-dirt); Lead Grease Man; Mucking Machines; Power Grader; Power Scoops and Scrapers; Push Cat
- Air Compressors on Tunnel Work (low pressure); Maintenance Operators Class B; Pump Operator installing and operating Well Points; Trench Machines (24" wide and under); Welding Machines and Generators
- Asphalt Plant Engineer; Locomotive (narrow gauge); Mixers, concrete (capacity more than one bag); Mixers, one bag capacity (side loader); Power Boilers over 15 lb. pressure; Pumps (4" and over discharge); Rollers-Asphalt
- Back Fillers; Bar, joint and Mesh Installing Machines; Batch Plant; Bull Floats; Burlap and Cutting Machines; Compressors (portable, sewer, heavy and highway); Concrete Plant (capacity 4 yd. and under); Concrete Saw (multiple); Conveyors (highway); Crushers; Drill, highway (with integral power); Farm-Type Tractors with attachments (highway); Finishing Machines; Fireman, Floating Equipment (all types); Fork Lift (highway); Forming Equipment; Hydro-Seeders; Plant Mixers; Power Form Trenchers; Road Widening Trencher; Rollers (brick, grade, macadam); Self-propelled Power Spreaders; Self-propelled Power Subgraders; Steam Fireman; Tractor (pulling sheepsfoot roller or grader); Vibratory Compactors (with integral power)
- Drum Fireman (asphalt plant); Helpers; Oil Heaters (asphalt plants); Oilers; Power Driven Heaters; Pumps (under 4" discharge); Signalmen; Tire Repairmen

5.16

5.81

6.06

6.21

6.37

6.44

710.06 Deep Beam Rail—

In lieu of the provisions of 710.06 Deep Beam Rail as provided in the Construction and Material Specifications, the following amended section shall apply to this project.

"710.06 Deep Beam Rail. AASHTO M 180 I, Class A, Type 2 with the following exceptions and addition: 6.2 the minimum check limit triple-spot test ounces per square foot shall apply in addition to the minimum check limit single-spot test ounces per square foot.

Section 14.2 Acceptance by sampling shall apply.
 Inspection and the selection of random samples for tests shall be made at the project site. When requested by the Laboratory, random samples for test shall be selected at the place of manufacture or warehouse from the lot to be shipped."

703.04 Aggregate—

In lieu of the provisions of 703.04 Paragraph 1 of the Construction and Material Specifications, the following amended paragraph shall apply to this project:

"1. The coarse aggregate for bituminous aggregate base and the coarse and fine aggregates for aggregate base shall be of crushed carbonate stone, crushed gravel, or crushed air-cooled slag. The fine aggregate for bituminous aggregate base shall be natural sand or sand manufactured from stone, gravel or air-cooled slag. The aggregate for macadam shall be crushed carbonate stone or crushed air-cooled slag."

Class E or Class D Concrete—

Class E or Class D concrete appearing on certain Standard Construction Drawings shall be considered to read, Class C concrete.

COMMON LABOR

Fringe Benefits Payments

H & W .30
 Pensions .15
 T & U .02

Classifications

Basic Hourly Rates

Labors (construction), Plant Laborers or Yardmen, Right-of-Way Laborer, Landscape Laborer, Utility Man or Handyman, Joint Setter, Flagman, Carpenter Helper, Waterproofing Laborer, Slurry Seal, Seal Coating, Surface Treatment or Road Mix Laborer, Riprap Laborer and Grouter, Asphalt Laborer, Dump Man (batch trucks), Guardrail and Fence Installers, Mesh Handlers and Placers, Concrete Curing Applicator, Scaffold Erector	\$4.70
Asphalt Raker, Concrete Puddler, Kettle Man (pipeline), All Machine Driven Tools (gas, electric, air), Mason Tender, Mortar Mixer, Sheeting and Shoring Man, Surface Grinder Man, Power Buggy or Power Wheelbarrow	4.825
Form Setter, Bottom Man, Welder Helper (pipeline), Concrete Saw Man, Cutting with Burning Torch, Pipe Layer, Hand Spiker (railroad), Car Pusher (without air), Underground Man (working in sewer and waterline, cleaning, repairing and reconditioning), Tunnel Laborer (without air) and Gaisson, Cofferdam (below 25 feet deep), Air Track and Wagon Drill	4.90
Blaster and Powder Man, Muckers, Wrencher (mechanical joints and utility pipeline), Varner, Top Lander	5.05
Curb Setter and Cutter, Miner without air, Concrete Crew in Tunnels, Utility Pipeline Tapper, Gunnite Nozzle Man, Waterline Caulker	5.35
Watchmen (rate per 40 hr. wk.)	100.00
The minimum wage to be paid to all common labor, for which laborer classification for which he is signaling.	4.70
rates are not shown above, shall be not less than	

PROJECT No. 596

(This page must be executed, in the appropriate place, prior to submission of this bid)

WRITTEN CONTRACT—

On acceptance of the proposal for said work, I or we, do hereby bind myself or ourselves, this day

of 19.., to enter into a written contract with the State Highway

Director within ten days from date of notice of award.

IF AN INDIVIDUAL, SIGN BELOW:

..... (Name) (Post office address)

IF AN INDIVIDUAL DOING BUSINESS UNDER A TRADE NAME, SIGN BELOW:

..... (Trade name) (Post office address)

Sole Owner

By

IF A PARTNERSHIP, SIGN BELOW:

..... (Name of partnership) (Post office address)

By

IF A JOINT BID, SIGN BELOW:

..... (Partner) (Post office address)

..... (Partner) (Post office address)

..... (Partner) (Post office address)

..... (Partner) (Post office address)

IF A CORPORATION, SIGN BELOW:

..... (Post office address)

By

..... (Name)

..... (Name of corporation)

Incorporated under the laws of the State of

By

(Signature)

..... (Title of officer signing)

DATE	
90	
SEPT 10/MR 4.2	
OCT 10	8.4
OCT 25	12.6
Nov 10	16.8
Nov 25	21.0
DEC 10	25.2
DEC 25	29.4
JAN 10, 1971	33.6
JAN 25	37.8
FEB 10	42.0
FEB 25	46.2
MAR 10	50.4
MAR 25	54.6
APR 10	58.8
APR 25	63.0
MAY 10	67.2
MAY 25	71.4
JUNE 10	75.6
JUNE 25	79.8
JULY 10	84.0
JULY 25	88.2
AUG 10	92.4
AUG 25	96.6
AUG 31	100.0

Project No. 596 (1970)

Logan—County Road 10—5.09
(ISSUE NO. 1)

Type—404 on 301 & Structure

Contract No - 22 008

Job No. - 07699(0)

I No. - 806042

Contract Amt - \$76,697.92

Completion Date - Aug 31, 1971

(200-S)

PROPOSAL

STATE OF OHIO

DEPARTMENT OF HIGHWAYS

P. E. MASHETER, Director

Letting—September 10, 1970

(Exact Prequalification Name and Address Must Appear Below)

DO NOT SUBMIT MORE THAN ONE BID PROPOSAL FOR EACH BID

Submitted by IBERIA FORTH MOVING SERVICE, INC.

Street _____

Postoffice IBERIA

State OHIO

Zip Code 43325

Have you double checked your bid ? ? ?



PROJECT No. 596

(This affidavit must be executed for the bid to be considered)

Non-Collusion Affidavit

STATE OF OHIO

COUNTY OF

SS. }

I,

(Name of party signing affidavit)

(Title)

being duly sworn, do depose and say:

That

(Insert name of Individual, Co-partnership, or Corporation)

its agent, officers or employees have not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.

(Signature)

(Title)

Sworn to and subscribed before me this day of, 19.....

Notary Public in and for

..... County, Ohio.

My commission expires

(SEAL)

Have you double checked your bid ? ? Errors or omissions could result in your bid's being declared informal.

PROJECT No. 596

NOTICE TO BIDDERS

Specifications—

The Standard Specifications of the State of Ohio Department of Highways dated January 1, 1969,

Supplemental Specification No. 808	November 14, 1969
Supplemental Specification No. 836	June 17, 1969
Supplemental Specification No. 938	August 12, 1969
Supplemental Specification No. 1001	January 1, 1969

will govern this improvement with the following:

Equal Employment Opportunity Pledge—

"The bidder, with knowledge of the provisions of the June 5, 1967, Executive Order of the Governor of Ohio relating to equal employment opportunity, by executing this proposal makes the pledges and commitments enumerated in said order as prerequisites to a responsive bid."

703.08 Granulated Slag. 1--

This section is hereby modified to include electric furnace slag and shall be considered to read as follows:

703.08 GRANULATED SLAG. 1. The granulated slag shall be the glassy, granular materials formed when molten blast-furnace or electric furnace slag is rapidly chilled, as by immersion in water. Material containing mill waste, cinders, large pieces of ungranulated slag, runner slag, or other matter foreign to the production of slag in the normal operation of the blast furnace or electric furnace may be rejected. The material shall be of such nature that it will compact to the satisfaction of the Engineer.

Specialty Items—

The contractor shall perform, with his own organization, work amounting to not less than 50 per cent of the remainder obtained by subtracting from the total original contract value the sum of any items designated in the contract as "Specialty Items." The following items in this contract, if subtle, will be treated as "Specialty Items": 517, 606, 607, 659.

614 Steel Drums for Maintaining Traffic—

Steel drums used in maintaining traffic shall be painted yellow and shall have an eight inch band of yellow reflectorized sheeting around the drum at the top. Drums shall be at least half-filled with granular material as ballast. Cost of the above shall be included in the lump sum bid for item 614 Maintaining Traffic.

Nuclear Tests—

Measurement of moisture and density of soils and aggregates may be determined by nuclear devices in accordance with current supplements 1019 and 1020. Copies of supplements 1019 and 1020 are on file in the office of the Director of Highways and may be reviewed upon request.

Absorption Tests for Concrete Pipe—

In lieu of the absorption tests referred to in Items 706.01, 706.02, 706.03 and 706.04 of the Specifications for testing in accordance with AASHTO T 33, the absorption shall be determined in accordance with the appropriate paragraphs of ASTM C 497, Determining Physical Properties of Concrete Pipe or Tile, under the procedure for the boiling absorption tests.

PROJECT No. 596

Classifications	Basic Hourly Rates	H & W	Pensions	Vacation	App. Tr.	Others
B. S. & O. Ironworkers & Reinforcing	\$6.80	.25	.45	.02		
Bricklayers & Stonemasons	6.65	.15				
Bricklayers, Sewer	6.65	.15				
Carpenters	6.80	.35	.01			
Electricians	6.60	.15	a		b	
Painters, Brush	5.30	.25				
Painters, Structural	5.85	.25				
Painters, Bridge	*N.A.					
Plumbers	7.55	.30	.02			
Piledriverman	7.05	.35			b	
Linemen	6.60	.15	a			
Cement Masons	5.88	.32				

SKILLED LABOR

Fringe Benefits Payments

The blank spaces in the proposal must be filled in correctly, where indicated, and written in ink. Blank Supplemental Questionnaires, furnished with each Proposal, must be filled out and attached to each bid submitted.

Preparation for Proposal—

PROJECT No. 596

Footnotes:

a—1% of gross monthly labor payroll
 b—0.2%
 *—Not Available

Certified Check or Bid Bonds—(Payable to the Director of Highways)—
 Each bidder shall be required to file with his bid a certified check for an amount equal to five per cent of his bid, but in no event more than ten thousand dollars, or a bond for ten per cent of his bid, payable to the director. (Bid Bond forms enclosed herewith.)

Address—

Proposals must be sealed and addressed
 "Office of Contract Sales
 Department of Highways
 Room 507
 Department of Highways Bldg.
 Columbus 15, Ohio"

and envelope marked—

"Project No. 596"

and with the name and address of the bidder.

Time—

Bids to be opened at
 10:00 A.M.
 Eastern Daylight Saving Time
 Thursday, September 10, 1970

Place—

Hearing Room No. 2
 1st Floor State Office Building
 Columbus 15, Ohio

P. E. MASHETER,
 Director.

Classifications	\$6.00 per week per employee	Basic Hourly Rates
Drivers, including, but not limited to, 4-Wheel Service Trucks; 4-Wheel Dump Trucks; Batch Trucks; Oil Distributors; Asphalt Distributors	\$4.96	5.01
Drivers, Tandem Trucks		5.06
Drivers, Tractor-trailer Combinations including, but not limited to, Semi-tractor Trucks; Pole Trailers; Ready Mix Trucks; Fuel Trucks		5.16
All Trucks Five (5) Axle and Over		5.26
Asphalt-oil Spray-bar Man, when operating from cab		5.43
Drivers, Euclid Wagons; Euclid End Dumps; Low Boys and Heavy Duty Equipment over 12 cubic yard capacity (irrespective of load carried) when used exclusively for transportation; Truck Mechanics (when needed)		5.43

