PRITCHARD AVE. BRIDGE

PROJECT NO. 102 (1966 CONSTRUCTION)

VILLAGE OF LISBON

COLUMBIANA COUNTY

COUNTY ENGINEER – JOHN URSU

WE, THE COMMISSIONERS OF COLUMBIANA COUNTY, IN FORMAL SESSION, HEREBY APPROVE THESE PLANS AND CERTIFY THAT THE NECESSARY RIGHT-OF-WAY IS AVAILABLE.

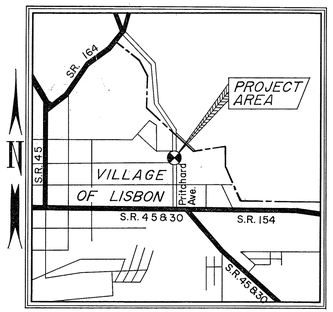
ATTESTED: Daniel A. Butsch (CLERK)

DATE: 4-25-66

COMMISSIONERS: R. MacGard.
Frank C. Wilson

INDEX TO PLANS

TITLE SHEET 1
SITE PLAN 2
SUPERSTRUCTURE DETAILS 3
SOUTH ABUTMENT DETAILS 4
NORTH ABUTMENT DETAILS 5
MISCELLANEOUS DETAILS 6



LOCATION MAP

1965 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, INCLUDING ANY CHANGES OR SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

Built Contract
Sutton & Stewart

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING OF THE STREET TO VEHICULAR TRAFFIC AND THAT AMPLE PROVISION FOR PEDESTRIAN TRAFFIC WILL BE PROVIDED BY COUNTY FORCES.

APPROVED: John Ursu (COLUMBIANA COUNTY ENGINEER)

DATE: 4-25-66

APPROVED: Dean Stockman (MAYOR, VILLAGE OF LISBON)

DATE: March 5, 1966

Pritchard Ave. Bridge
Village of Lisbon
Project # 102

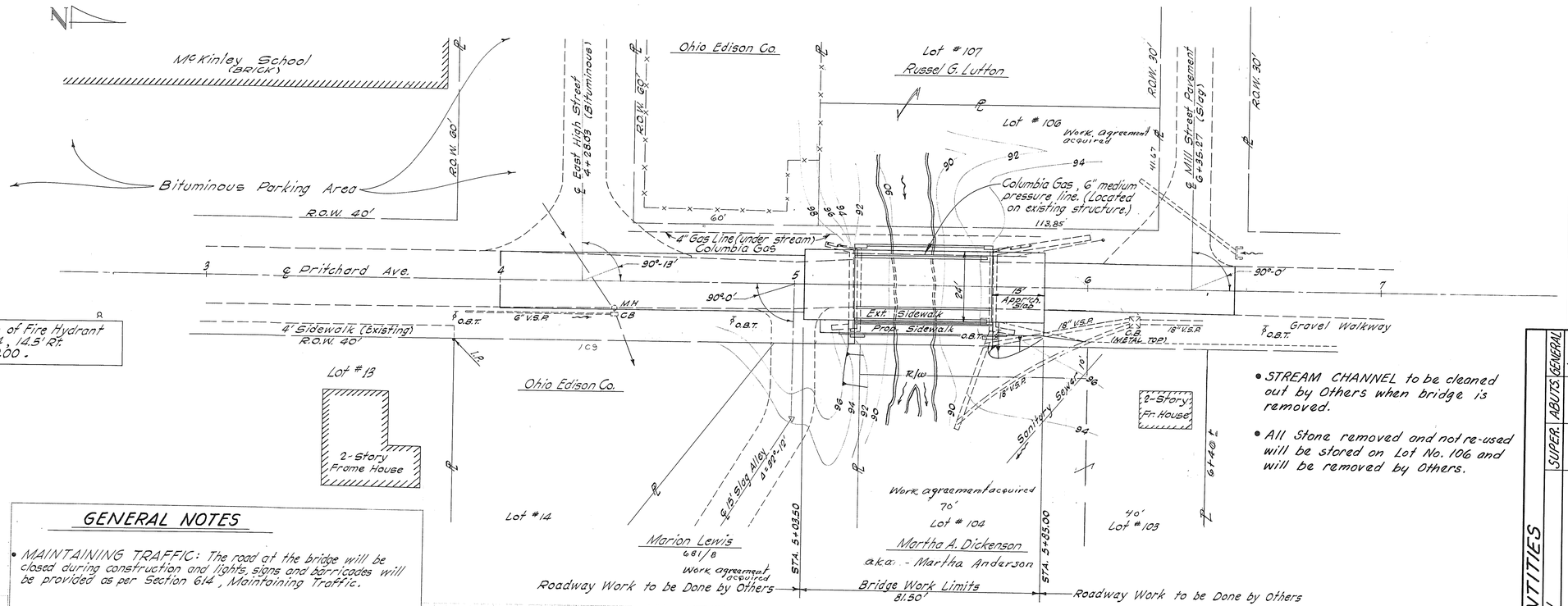
PREPARED AND RECOMMENDED BY:
MOSURE & FOK
CONSULTING ENGINEERS
YOUNGSTOWN, OHIO

OHIO DEPARTMENT OF HIGHWAYS

Recommended for Approval
C. H. Albrecht
Date: 10/28/65 Engr. Bridges
Approved
P. E. Masheter
Date: 10/28/65 Director of Highways.

		PROJECT	
		102(66)	

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- STREAM CHANNEL to be cleaned out by Others when bridge is removed.
- All Stone removed and not re-used will be stored on Lot No. 106 and will be removed by Others.

GENERAL NOTES

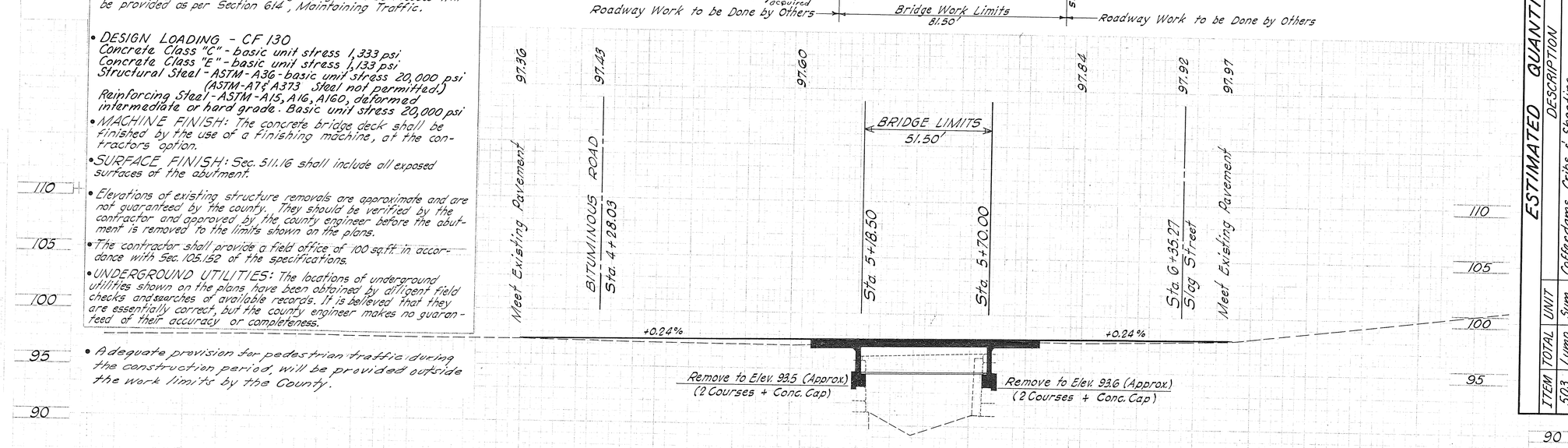
- MAINTAINING TRAFFIC: The road at the bridge will be closed during construction and lights, signs and barricades will be provided as per Section 614, Maintaining Traffic.
- DESIGN LOADING - CF 130
  Concrete Class "C" - basic unit stress 1,333 psi
  Concrete Class "E" - basic unit stress 1,133 psi
  Structural Steel - ASTM-A36 - basic unit stress 20,000 psi (ASTM-A7 & A373 Steel not permitted.)
  Reinforcing Steel - ASTM-A15, A16, A160, deformed intermediate or hard grade. Basic unit stress 20,000 psi
- MACHINE FINISH: The concrete bridge deck shall be finished by the use of a Finishing machine, at the contractors option.
- SURFACE FINISH: Sec. 511.16 shall include all exposed surfaces of the abutment.
- Elevations of existing structure removals are approximate and are not guaranteed by the county. They should be verified by the contractor and approved by the county engineer before the abutment is removed to the limits shown on the plans.
- The contractor shall provide a field office of 100 sq.ft. in accordance with Sec. 105.152 of the specifications.
- UNDERGROUND UTILITIES: The locations of underground utilities shown on the plans have been obtained by diligent field checks and searches of available records. It is believed that they are essentially correct, but the county engineer makes no guarantee of their accuracy or completeness.
- Adequate provision for pedestrian traffic during the construction period, will be provided outside the work limits by the County.

·EXISTING STRUCTURE·

TYPE: Iron Truss w/4" creosote strip floor w/bituminous surface; stone abutments w/conc. pedestals.
ROADWAY: 16' w/3' sidewalk

PROPOSED STRUCTURE

TYPE: Simple span steel beam with reinforced concrete deck and substructure.
SPAN: 47'-0" c/c Bearings.
SKEW: None.
ROADWAY: 24'-0" f/f curb.
LOAD FREQUENCY: C.F. 130 (57)
APPROACH SLABS: 15'-0" Long
ALIGNMENT: Straight
WEARING SURFACE: 1/2" Monolithic



ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUTS.	GENERAL
503	Lump	Sum	Cofferdams, Cribs & Sheeting			Lump
503	20	C.Y.	Unclassified Excavation		20	
511	32	C.Y.	Class "C" Concrete, Superstructure			
511	16	C.Y.	Class "C" Concrete, Abutment North		16	
511	18	C.Y.	Class "C" Concrete, Abutment South		18	
509	19280	Lbs.	Reinforcing Steel			
513	40000	Lbs.	Structural Steel	9538	3742	
514	40000	Lbs.	Field Painting of Structural Steel	40,000		
510	52	Ea.	Dowel Holes			
517	133.67	L.F.	Steel Angle Rail Supports and Concrete End Posts	133.67		
517	12	L.F.	Welded 2½" ø Pipe Railing			12
518	10	C.Y.	Porous Backfill			10
518	65	L.F.	6" Perforated Helical CMP			65
808	32	Ea.	Water reducing, set retarding admixture	32		
202	Lump	Sum	Removal of Portions of Existing Structure			Lump
608	100	S.F.	Conc. Sidewalk (Varies from 12" to 6")			100
611	80	S.Y.	10" Reinforced Conc. Approach Slab.			80
310	15	C.Y.	Subbase			15
203	40	C.Y.	Roadway Excavation, including embankment construction.			40
614	Lump	Sum	Maintaining Traffic			Lump

COLUMBIANA COUNTY
JOHN URSU
COUNTY ENGINEER

MOSURE & FOX
CONSULTING ENGINEERS
YOUNGSTOWN, OHIO

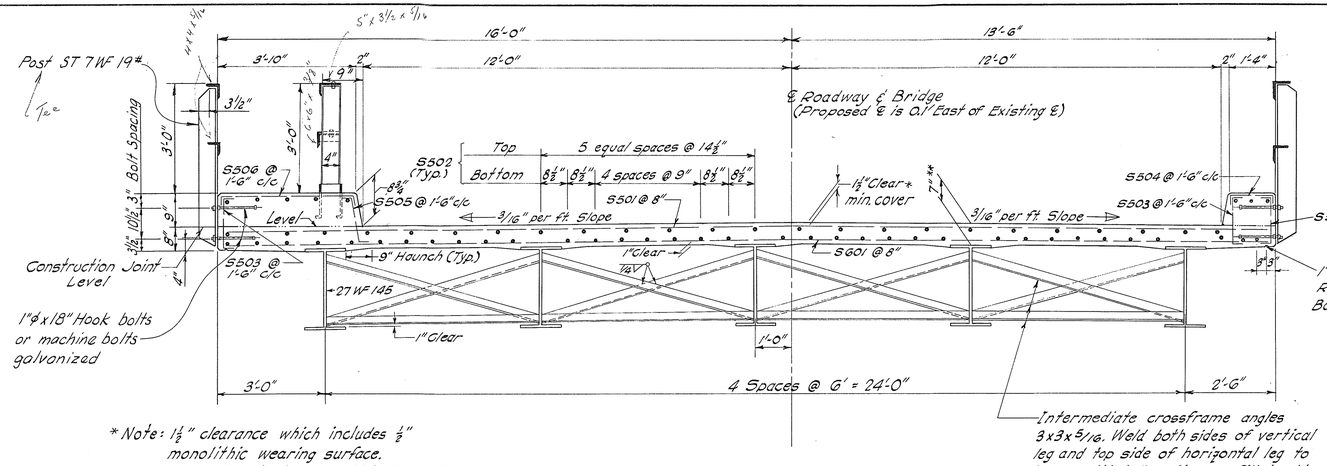
SITE PLAN

BRIDGE NO. 866
PRITCHARD AVE. OVER CREEK
COLUMBIANA COUNTY
VILLAGE OF LISBON

SCALE: 1"=20'-0" DATE: 1-12-66

SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
J.D.	J.O.	T.F.M.	O.M.	T.F.	T.F.M.

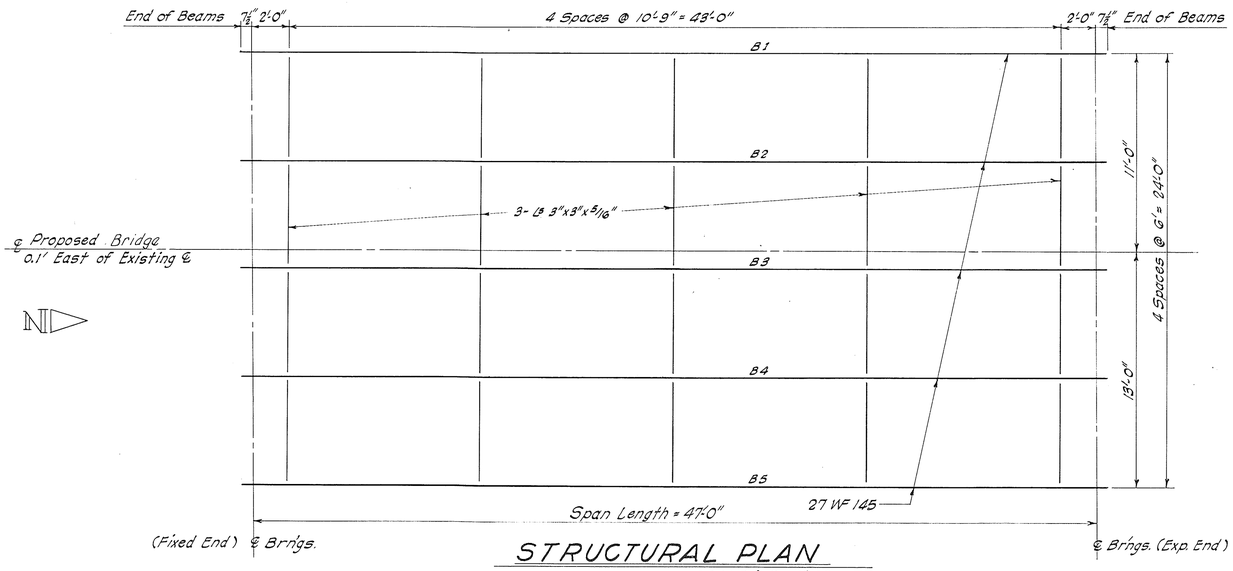
FED. RD.	STATE	PROJECT		3 / 6
	OHIO	102(66)		



* Note: 1½" clearance which includes ½" monolithic wearing surface. All longitudinal bars S502, lap 1'-7".

TRANSVERSE SECTION - LOOKING SOUTH

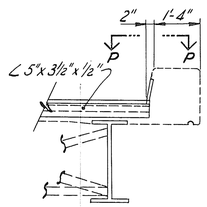
SCALE: ½" = 1'-0"



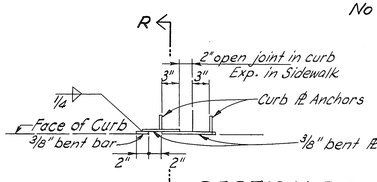
STRUCTURAL PLAN

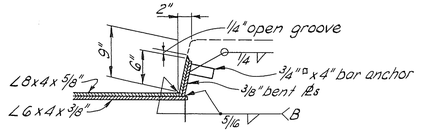
SCALE: ¼" = 1'-0"

Dead Load Deflection @ ℄ Span is ⅛" ~ No Camber req'd.



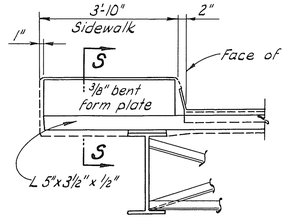
SECTION P-P

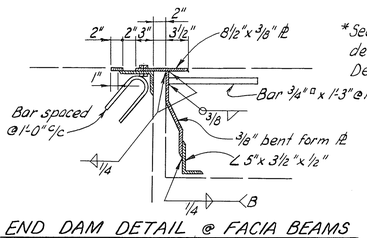




SECTION R-R

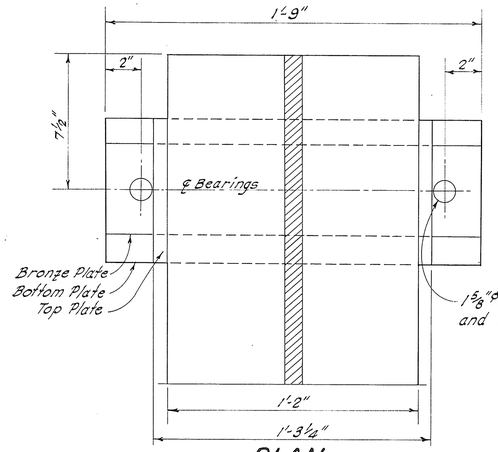
CURB PLATE DETAIL - EACH CURB





END DAM DETAIL @ FACIA BEAMS SECTION S-S

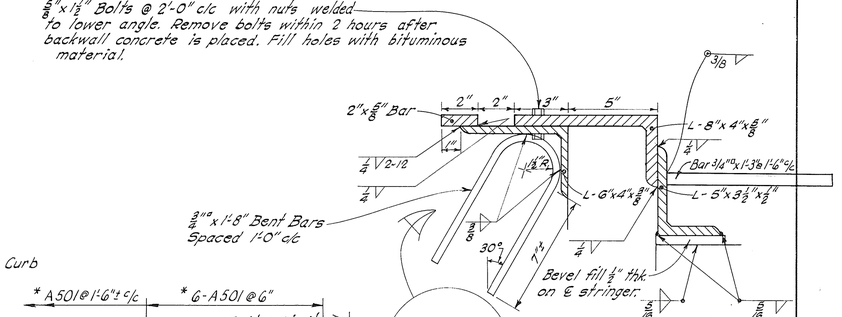
Some Details as End Finish detail unless otherwise shown

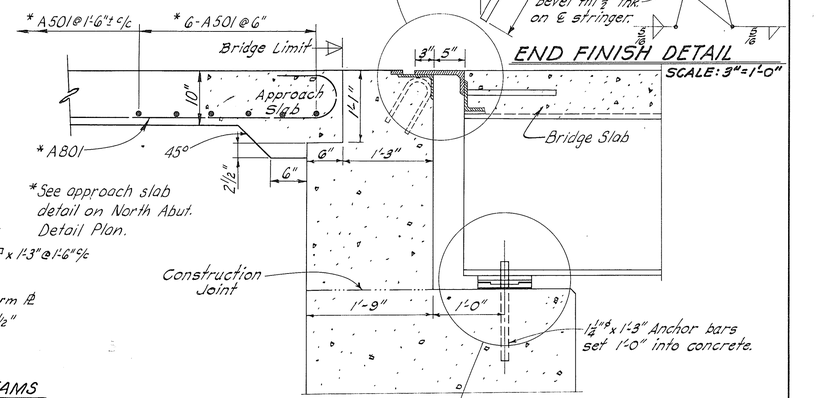


PLAN

- NOTES: ** This is the nominal 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. Deduction shall be made for volume of encased steel plates as per Sec. 511.19 of the Construction and Material Specifications.
- DECK SLAB HAUNCH: A typical 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.
- CONCRETE for Deck shall be class 'C' f_c = 1333 psi

⅝"x1½" Bolts @ 2'-0" c/c with nuts welded to lower angle. Remove bolts within 2 hours after backwall concrete is placed. Fill holes with bituminous material.





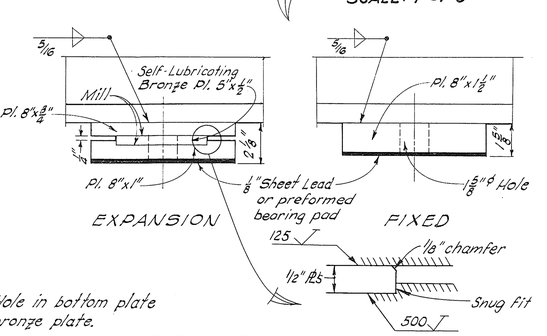
* See approach slab detail on North Abut. Detail Plan.

END FINISH DETAIL

SCALE: 3" = 1'-0"

END FINISH SECTION

SCALE: 1" = 1'-0"



ABUTMENT BEARINGS DETAILS

See Material Specifications in proposal

SCALE: 3" = 1'-0"

COLUMBIANA COUNTY
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COUNTY ENGINEER

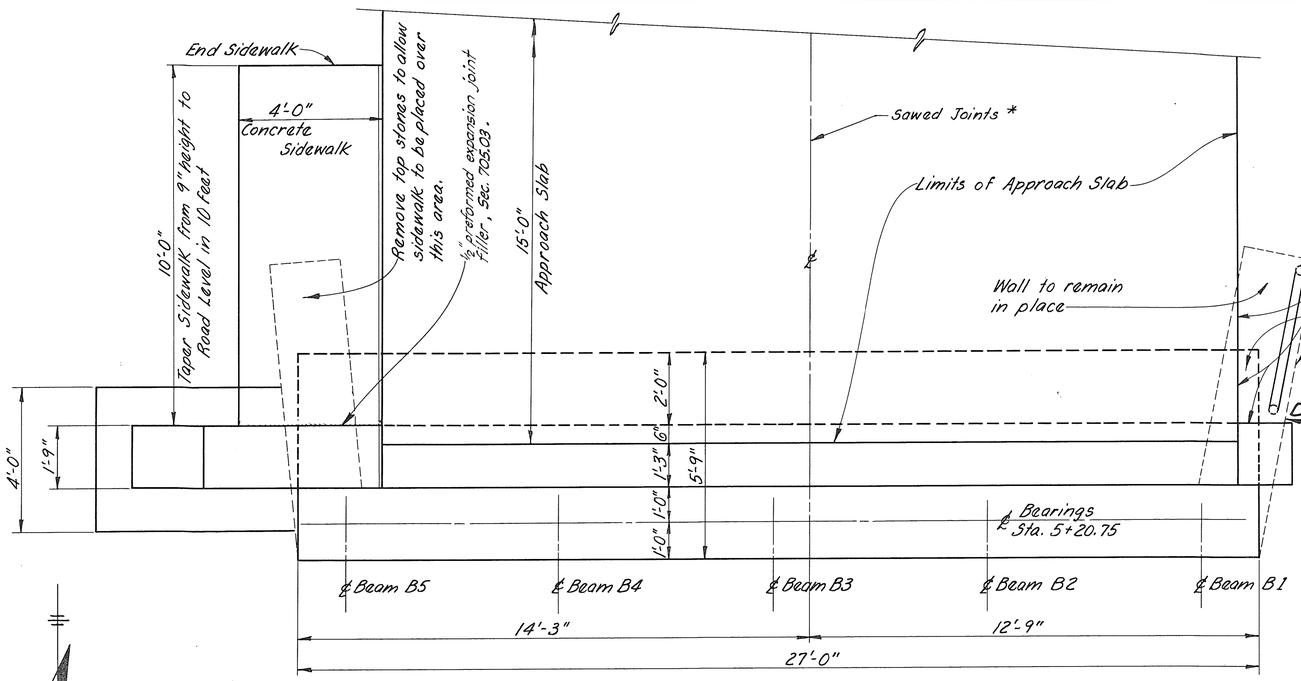
MOSURE AND FOK
CONSULTING ENGINEERS
YOUNGSTOWN, OHIO

SUPERSTRUCTURE DETAILS
BRIDGE NO. 866
PRITCHARD AVE. OVER STREAM
COLUMBIANA COUNTY
VILLAGE OF LISBON

STA. 5+44 DATE: 1-12-66

SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
	J.O.	T.F.M.	J.O.	T.F.	T.F.M.

FED. RD.	STATE	PROJECT		4 / 6
	OHIO	102(66)		



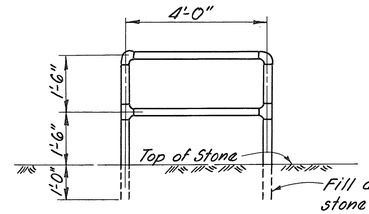
PLAN- SOUTH ABUTMENT

2½"ϕ Pipe Railing placed on existing stone wingwall (4'-0" Section).

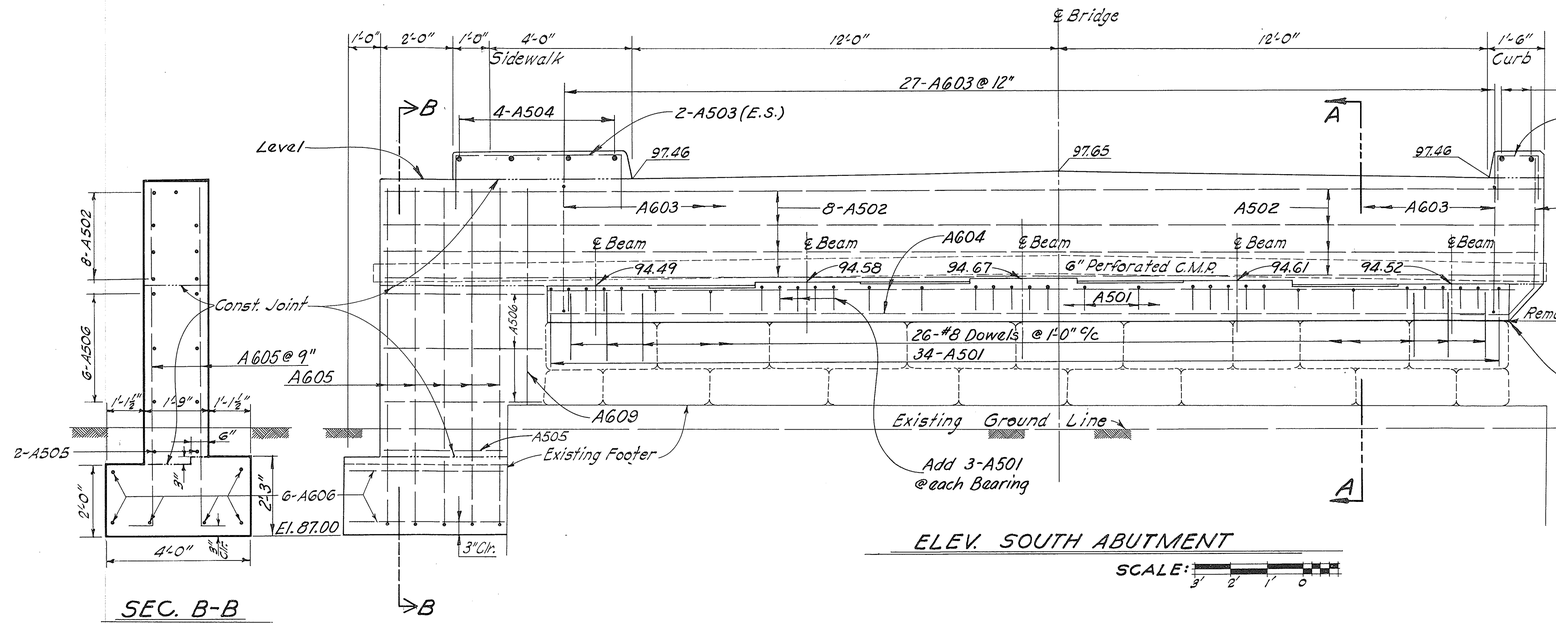
Limits of Top Stone

Existing Wingwall
Remove stones to allow new abutment & approach slab to be placed. Then replace stones to allow for approach slab & abutment limits. See page 5-5 for heights of stone

- Work this Sheet with Sheet No. 4 of 5
- CONCRETE for abutments shall be Class "E"
- POROUS BACKFILL, 2'-6" thick, full length of the abutments shall extend up to the underside of the approach slab or to the finished ground surface.
- 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 holes.
- CONCRETE for approach slabs shall be Class "C"
- * LONGITUDINAL JOINT shall be provided at the ℄ of roadway. The depth of the sawed groove shall be 3". Joint sealer shall be used in the sawed joint conforming to Section 705.01 or 705.02. (APPROACH SLAB)
- Extend 6" Perforated C.M.P. through stone wingwall. Grout with cement.



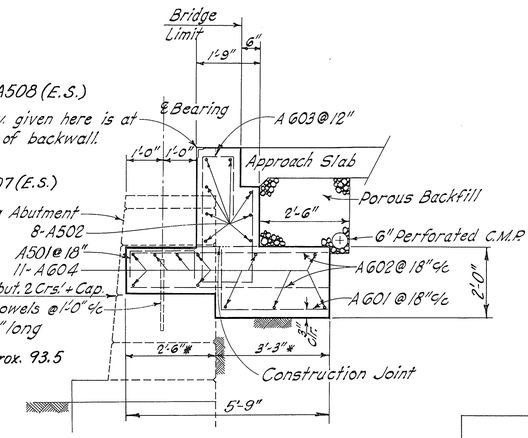
SECTION D-D
WELDED PIPE RAILING



ELEV. SOUTH ABUTMENT

SCALE: 3' 2' 1' 0

SEC. B-B



SEC. A-A

* Dimension could vary because of the width of the existing abutment. The 5'-9" dimension should be held.

COLUMBIANA COUNTY
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COUNTY ENGINEER

MOSURE & FOK
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YOUNGSTOWN, OHIO

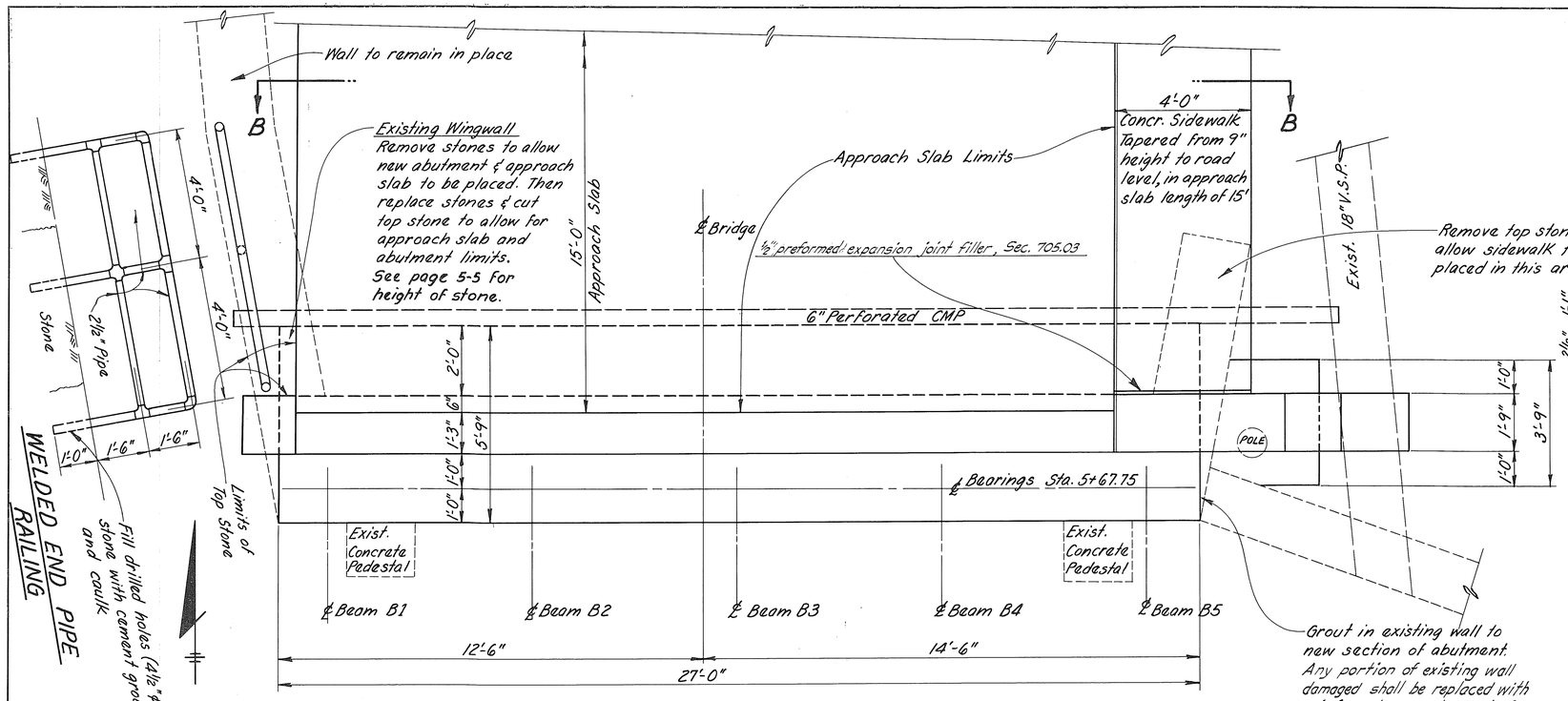
SOUTH ABUTMENT DETAILS
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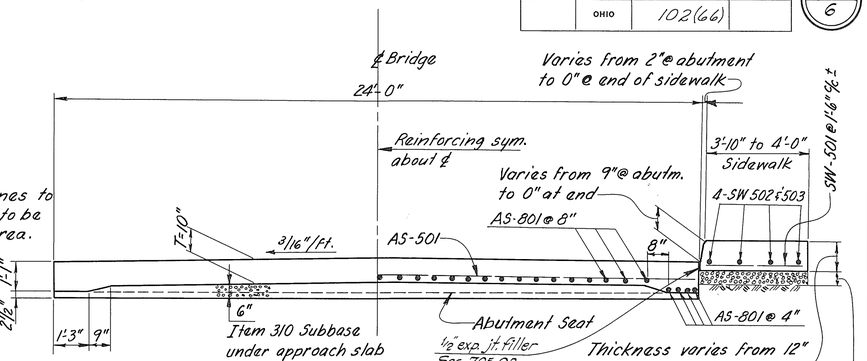
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
	J.O.	T.F.M.	O.M.	T.F.	T.F.M.

FED. RD.	STATE	PROJECT	
	OHIO	102(66)	

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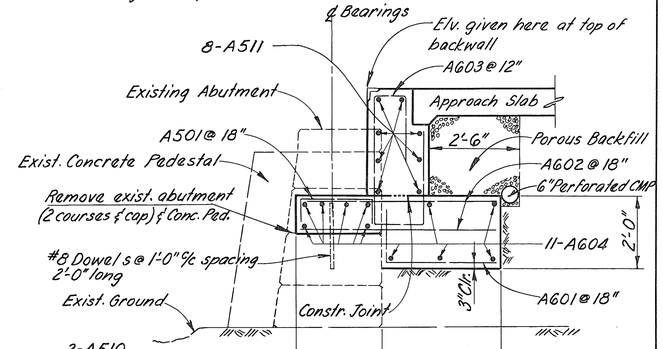
PLAN - NORTH ABUTMENT



SECTION B-B
APPROACH SLAB & SIDEWALK (TYP.) 6" - Item 310 Subbase

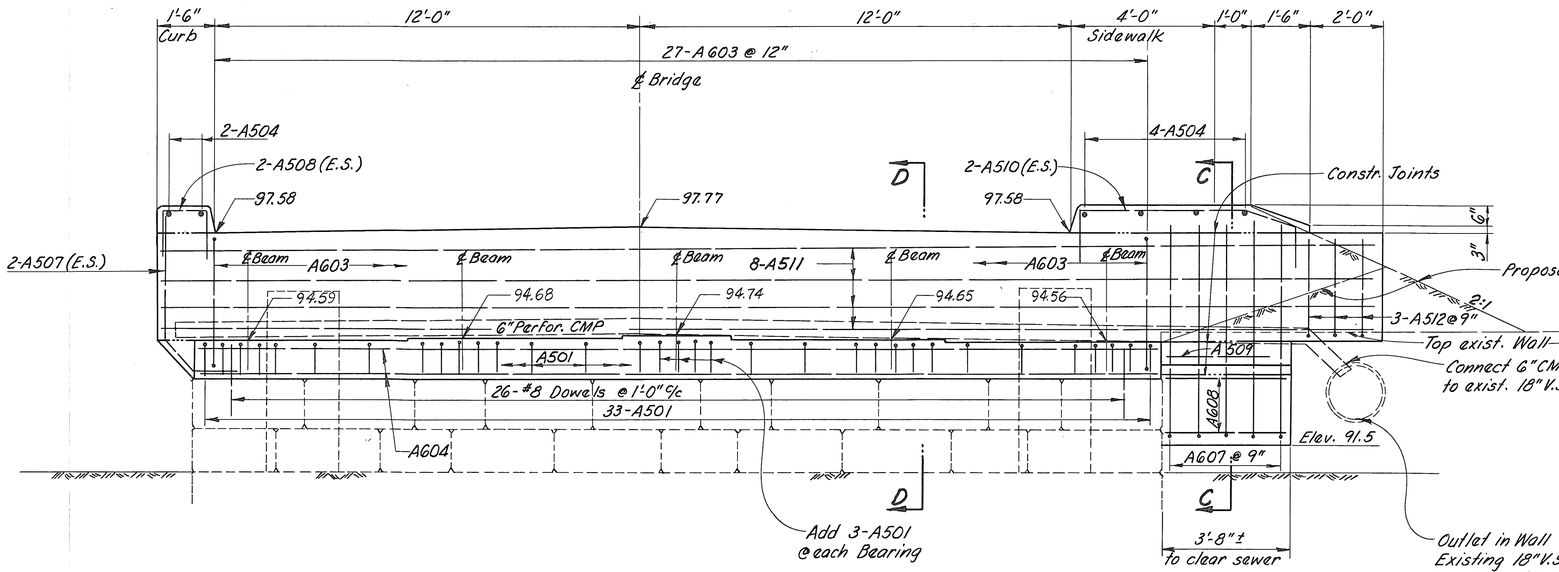
REINFORCING STEEL included in price bid for Sq. Yds. of approach slab and sq. ft. for sidewalk.

APPROACH SLAB	14'-6" A801	
	AS-501 ~ 23'-6" long - 14 required @ each approach slab	
	AS-801 ~ 15'-7" long - 39 required @ each approach slab	
SIDEWALK	SW-501 ~ 3'-6" long	8 required at South Abutment; 11 required at North Abutment
	SW-502 ~ 14'-6" long - 4 required at North Abutment	
	SW-503 ~ 9'-6" long - 4 required at South Abutment	

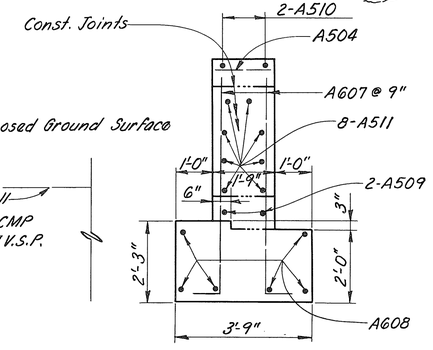


SECTION D-D

* Dimension could vary because of width of existing abutment. The 5'-9" dimension should be held.



ELEVATION - NORTH ABUTMENT



SECTION C-C

Work this Sheet with Sheet No. 3 of 5

COLUMBIANA COUNTY
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COUNTY ENGINEER

McGUIRE & BOK
CONSULTING ENGINEERS
YOUNGSTOWN, OHIO

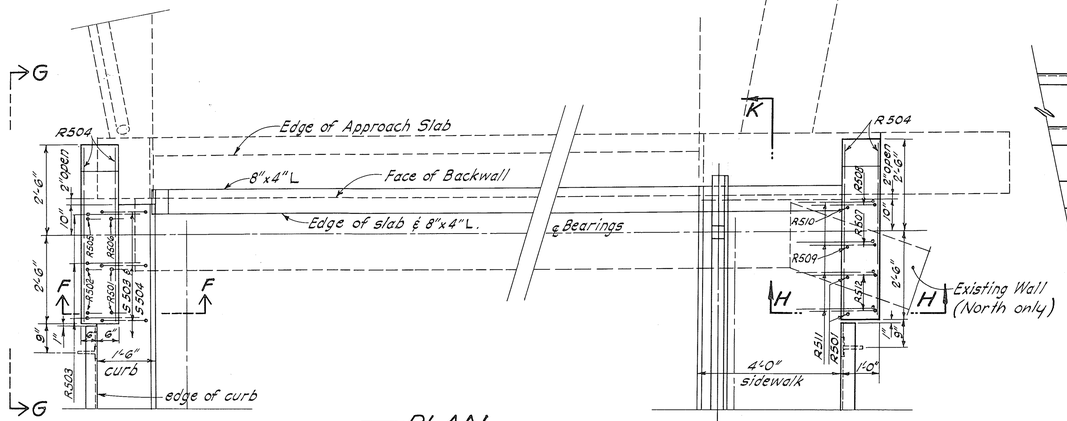
NORTH ABUTMENT DETAILS
BRIDGE NO. 866
PRITCHARD AVE. OVER STREAM
COLUMBIANA COUNTY
VILLAGE OF LISBON

STA. 5+44 DATE: 1-12-66

SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
J.D.	J.O.	T.F.M.	O.M.	T.F.	T.F.M.

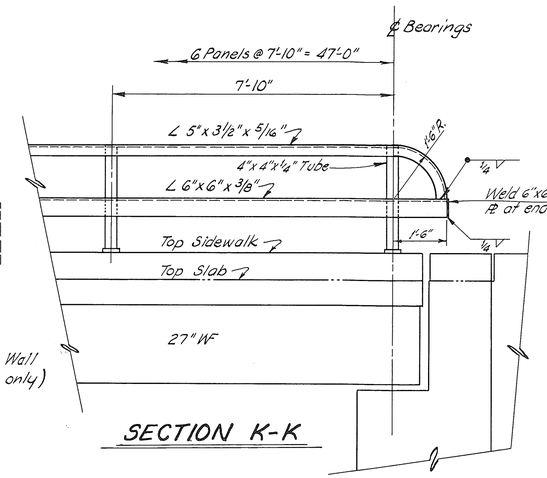
FED. RD.	STATE	PROJECT	
	OHIO	102(66)	

6/6

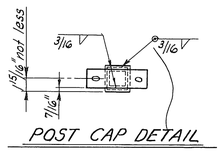


—PLAN—

RAILING & POST DETAIL
NORTH ABUTMENT
(Typical for Slab @ South Abutment also)

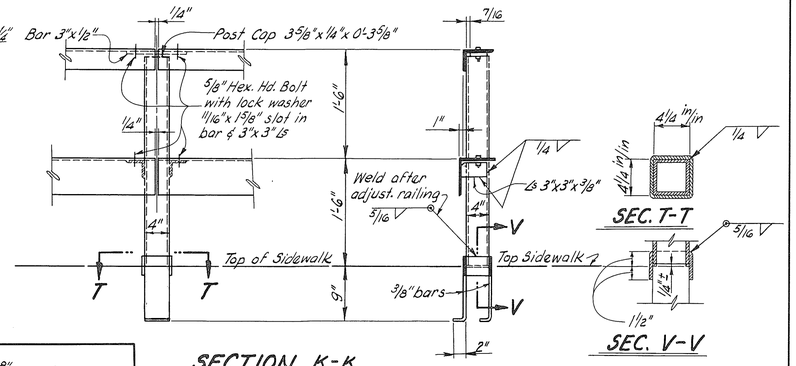


SECTION K-K



POST CAP DETAIL

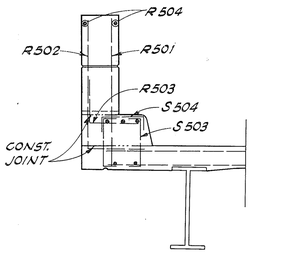
Railing Angles shall be continuous for two or three panel length; joints in upper and lower rails to be staggered.



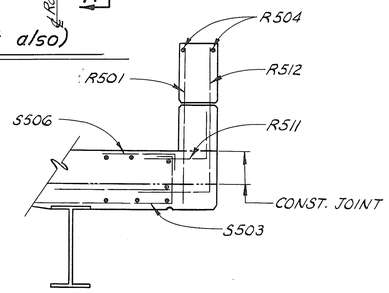
SECTION K-K

RAILING DETAIL

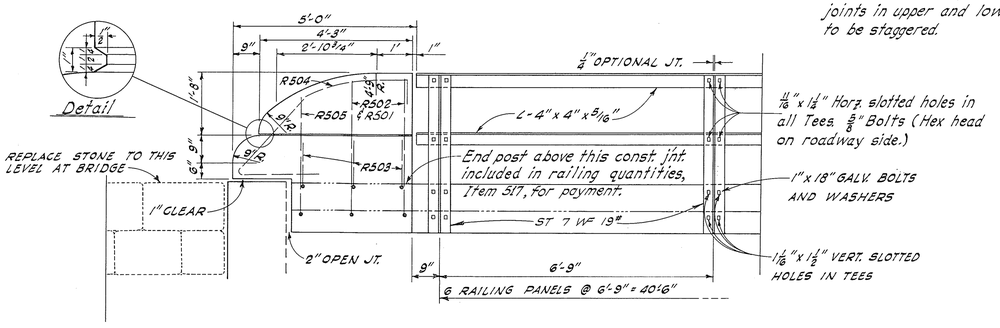
Post Anchors included with Railing for Payment



SEC. F-F



SEC. H-H

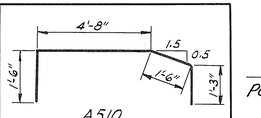


SEC. G-G

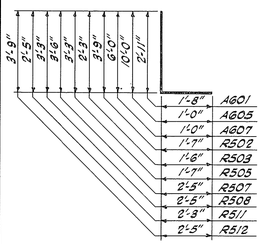
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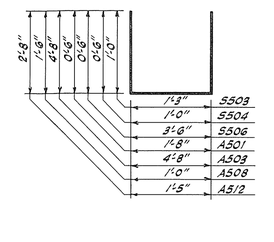
Note: Railing angles shall be continuous for two or three panel lengths: joints in upper and lower rails to be staggered.

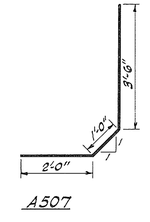
REINFORCING STEEL LIST				
SUPERSTRUCTURE				
Mark	No.	Length	Weight #	Sh'p.
S501	13	29'-0"	2208	S
S502	134	24'-10"	3470	S
S503	97	3'-2"	321	B
S504	33	1'-10"	63	B
S505	33	4'-3"	147	B
S506	33	4'-4"	149	B
S601	73	29'-0"	3180	S
Total Weight			9538	
ABUTMENTS				
A501 (N)	33	2'-6"	86	B
A501 (S)	34	2'-6"	89	B
A502 (S)	8	32'-0"	267	S
A503 (S)	2	7'-6"	16	B
A504 (N)	6	1'-5"	10	S
A504 (S)	6	1'-5"	10	S
A505 (S)	2	3'-3"	7	S
A506 (S)	6	4'-3"	27	S
A507 (N)	2	6'-5"	14	B
A507 (S)	2	6'-5"	14	B
A508 (S)	2	3'-10"	8	B
A508 (N)	2	3'-10"	8	B
A509 (N)	2	3'-3"	7	S
A510 (N)	2	8'-9"	18	B
A511 (N)	8	33'-8"	281	S
A512 (N)	3	6'-7"	21	B
A601 (S)	18	4'-6"	122	B
A601 (N)	18	4'-6"	122	B
A602 (S)	36	5'-3"	284	S
A602 (N)	36	5'-3"	284	S
A603 (S)	27	10'-0"	406	B
A603 (N)	27	10'-0"	406	B
A604 (N)	11	26'-8"	441	S
A604 (S)	11	26'-8"	441	S
A605 (S)	10	10'-11"	164	B
A606 (S)	6	4'-0"	36	S
A607 (N)	10	7'-0"	105	B
A608 (N)	6	3'-3"	30	S
A609 (S)	2	6'-0"	18	S
Total Weight			3742	



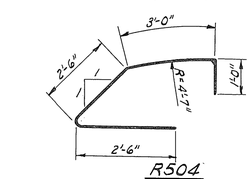
A510



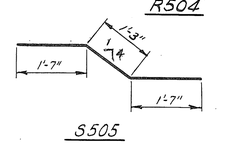




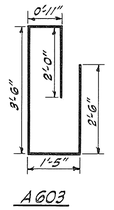
A507



R504



S505



A603

* Railing Bars				
Mark	No.	Length	Weight	Sh'p.
R501	8	4'-0"		S
R502	4	5'-3"		B
R503	6	3'-8"		B
R504	8	9'-0"		B
R505	2	4'-9"		B
R506	2	3'-6"		S
R507	2	5'-10"		B
R508	2	5'-7"		B
R509	2	3'-6"		S
R510	2	3'-3"		S
R511	8	4'-7"		B
R512	4	6'-1"		B

- BAR SIZE is indicated in the bar mark. The first digit where three digits are used, indicates the bar size number. For example, A 700 is a No. 7 size bar
- BAR DIMENSIONS shown in bar diagram are out to out.

* Included in Railing for Payment Item 517

COLUMBIANA COUNTY
JOHN URSU
COUNTY ENGINEER

MOSURE AND FOK
CONSULTING ENGINEERS
YOUNGSTOWN, OHIO

MISCELLANEOUS DETAILS
BRIDGE NO. 866
PRITCHARD AVE OVER STREAM
COLUMBIANA COUNTY
VILLAGE OF LISBON

STA. 5+44 DATE: 1-12-66

SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
J.O.	J.O.	T.F.M.	O.K.M.	T.F.	T.F.M.