FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	STATE	

1/20

PIC - 316 - (4.22 - 4.31)

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
PIC - 316 - (4.22-4.31)
MUHLENBERG TWP. - VILLAGE OF DARBYVILLE
PICKAWAY COUNTY

E-17

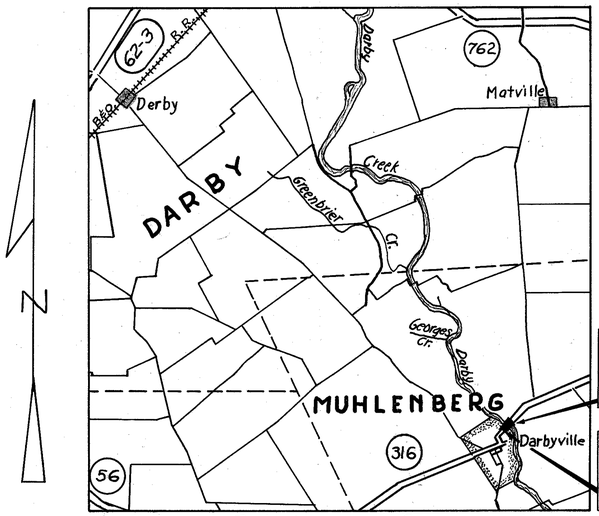
INDEX OF SHEETS

CONVENTIONAL SIGNS

Township Line
Section Line
Center Line
Property Line
City or Village Line
Fence Line
Steam Railroad
Pole Line

LINE DATA

Begin Project Sta. 222+75
End Project Sta. 235+50
Gross Length of Project = 1275.00 Lin Ft.
No Additions or Deductions
Net Length of Project = 1275.00 Lin Ft. or 0.241 Mile
Begin Work Sta. 221+00
End Work Sta. 236+00
Gross Length of Work = 1500.00 Lin. Ft
No Additions or Deductions
Net Length of Work = 1500.00 Lin Ft or 0.284 Mile



Delivery Point Derby — Average Haul 8 Miles

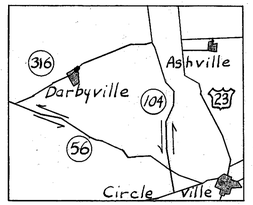
LOCATION PLAN
0 1 2 3 4
SCALE 1" = 1 Mile.

END PROJECT
STA 235+50
SLM 4.46

BEGIN PROJECT
STA 222+75
SLM 4.22

LEGEND:
Portion To Be Improved
State Highways
County Roads
Detours

SCALES:
Plan 1" = 50'
Profile, Vertical 1" = 5'
Profile, Horizontal 1" = 50'
Cross Sections, Horizontal 1" = 5'
Cross Sections, Vertical 1" = 5'



Detour Map
0 3 6

The Standard Specifications of the State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the proposal Shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will require the closing of the highway to traffic, except as noted on sheet No 3, and that detours will be provided as indicated on the plans.

The right of way for this improvement will be provided by the State of Ohio.

Approved _____
Date 7-26-57 Division Deputy Director

Approved _____
Date 8-15-57 Deputy Director of Planning & Programming

Approved _____
Date 8/8/57 Engineer of Bridges

Approved _____
Date 8-9-57 Engineer of Location & Design

Approved _____
Date 8-9-57 Deputy Director of Design & Construction

Approved _____
Date _____ First Assistant Director

Approved _____
Date 8/14/57 Acting Director of Highways.

Supplemental Prints Of Standard Construction Drawings					
I-15-No 1	8-1-55	L-3-A	4-1-50		
		G-7.07	6-1-56		
I-15-No 2-A	6-1-57	RI-1	1-3-55		
L-1	4-1-50	T-35	1-2-56		
L-3	4-1-50	DR-1	1-3-55		

Supplemental Specifications	
B-119	Rev. 6-30-56

File No. PICKAWAY COUNTY
Date of Letting _____
Contract No. _____

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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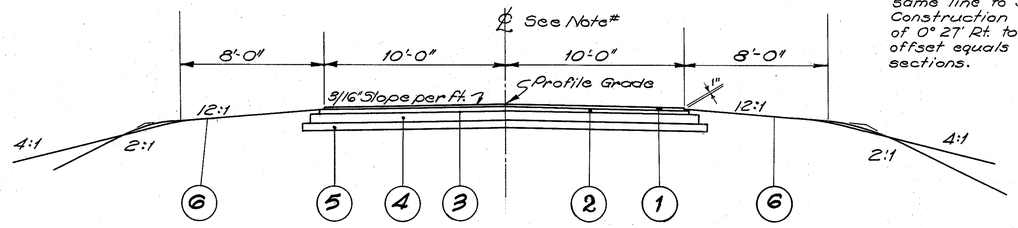
PIC-316-(4.22-4.31)

TYPICAL SECTION
TYPE ~ T-35 ON B-119

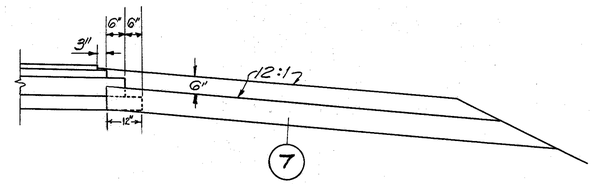


Note*: ℄ Survey and ℄ Construction are same line to Sta. 231+50, where ℄ Construction deviates at an angle of 0° 27' Rt. to Sta. 236+00 where offset equals 3.53', see cross sections.

LIMITING STATIONS

Sta. 222+75.00 to Sta. 227+00.00 = 425.00 Lin. Ft.
Sta. 231+70.00 to Sta. 235+50.00 = 380.00 Lin. Ft.
Total = 805.00 Lin. Ft.

Note:
For details not shown reference is made to Std. Dwgs. No RI-1 & T-35.



For quantity of Stone Underdrains see General Notes.

(1) Item T-35 1 1/2" Asphaltic Concrete Surface Course, Type "A" (85-100).
(2) Item B-35 2" Asphaltic Concrete Leveling Course (85-100).
(3) Item T-30 Bituminous Prime Coat, Sec. M-5.3, MC-0 or MC-1 or Sec. M-5.7, RT-2 or RT-3, applied at the rate of 0.35 gal. per Sq. Yd.
(4) Item B-119 5" Crushed Aggregate Base Course.
(5) Item I-22 4" Subbase
(6) Item L-9 Seeding and Protecting.
(7) Item I-9 Stone Underdrains Nº 2.

FED. RD. DIVISION	STATE	PROJECT		3 / 20
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PIC-316-(4.22-4.31)

DESIGN SPEED.~
The geometrics for this project have been planned for a design speed of 50 miles per hour.

ROUNDING CORNERS OF CROSS SECTIONS.~
The rounded corners, shown on Std. Drawing RI-1, apply to all cross sections even though otherwise shown in these plans.

REMOVAL OF TREES AND STUMPS.~
Trees and stumps shall be removed or preserved as indicated on the plans by the following symbols:
Trees and stumps to be removed
Trees and stumps to be preserved
The number of trees and stumps to be removed, as indicated by the above symbol, is approximate and the State of Ohio reserves the right to order the removal of additional trees and stumps even though these trees and stumps are not indicated on the plans or are indicated to be preserved.
Payment for the removal of these additional trees and stumps shall be at the unit price bid for the removal of trees and stumps.

SEEDING AND PROTECTING.~
Quantities for seeding are estimated for the soil areas within the work limits as shown on the cross sections.

L-9 COMMERCIAL FERTILIZER.~
All areas to be seeded shall have commercial fertilizer (10-6-4 Mix), applied at the rate of twenty (20) pounds per 1000 Sq. Ft.

FIELD OFFICE.~
The contractor shall provide a suitable field office in accordance with Sec. S-0.01 having a minimum floor area of 150 Sq. Ft.. The contractor shall have a telephone installed and maintained during the construction of this project.

STONE UNDERDRAINS.~
In the final finishing of slopes care shall be exercised to assure that the exposed edge of the stone underdrains will be free of earth cover that would impede drainage.
I-9 stone underdrains No. 2 shall be placed along the project at approximately fifty (50) ft. intervals on both sides or as directed by the Engineer.

PAVED DRIVES.~
The subgrade under the B-119 drive shall be compacted to a depth of six (6) inches to the density requirements in Table III, Item E-1. Payment for subgrade compaction, as specified above, shall be included in the unit price bid for Item E-1, Roadway Excavation.
The location of driveway as shown may be moved at the direction of the Engineer, provided no increase in quantites is required.

UTILITIES.~
Any and all work required for public or private utilities will be done by and at the expense of their respective owners unless otherwise noted in these plans.

UTILITIY OWNERSHIP
Columbus and Southern Ohio Electric Co., North Front St, Columbus, Ohio
Ohio Midland Power Co., Canal Winchester, Ohio
U.S. Department of Interior, Geological Survey
Water Resources Division, Columbus, Ohio (Water Stage Recorder)

from Sheet No. 3	4	5	6	Item	Total	Unit	DESCRIPTION
							ROADWAY & DRAINAGE
		1229	45	E-1	1274	Cu. Yds.	Roadway Excavation, As per Plan.
		9312	6422	E-1	15,634	Cu. Yds.	Embankment.
	2027			E-1	2,027	Sq. Yds.	Compacted Subgrade.
		12		E-9	12	Each	Removal of Trees and Stumps.
	81			E-11	81	M. Gals	Water.
		1013	43.7	I-15	1056.7	Lin. Ft.	Guard Rail, Steel Beam Sfondord Type (Deep), as per Std. Dwg. I-15 No. 2-A.
			93.1	I-15	93.1	Lin. Ft.	Guard Rail Removed and Rebuilt, as per Plan.
		.44	.38	L-9	.82	Ton	Commercial Fertilizer, (10-6-4).
		4851	4245	L-9	9096	Sq. Yds.	Seeding and Protecting.
460				I-9	460	Lin. Ft.	Stone Underdrains No. 2.
							PAVEMENT
	763.2			T-30	763	Gals.	Bituminous Prime Coat, Sec M-5.3, Mc-0 or Mc-1 or Sec M-5.7, RT-2 or RT-3.
	92.2	10.4		T-35	103	Cu. Yds.	Asphaltic Concrete Surface Course, Type "A" (85-100).
	122.3	17.7		B-35	140	Cu. Yds.	Asphaltic Concrete Leveling Course, (85-100).
	313.3		28.7	B-119	342	Cu. Yds.	Crushed Aggregate Base Course.
	258.8			I-22	259	Cu. Yds.	Subbase.
							STRUCTURE OVER 20 FT. SPAN
							STR. NO. PIC-316-0431
							FOR ESTIMATED QUANTITIES SEE SHEET No. 14.

STONE UNDERDRAINS-ESTIMATED QUANTITY.~
4.0 drains at 115' = 460.0 lin. ft.
Quantity carried to general summary.

UNCONSOLIDATED DEBRIS.~
End dumped, unconsolidated debris located on left from Sta 221+00 to Sta 227+50 shall be disposed of by spreading this material over the side of the existing embankment and compacting prior to placing new embankment material along that edge. Estimated quantities of Excavation and Embankment for this removal and recompaction have been included in the Earthwork Summaries.

TRAFFIC NOTE~ The contractor shall submit to the Director for approval a proposed schedule of operations prior to the commencement of any work on this project. The detour indicated on sheet No. 1 shall not be put into effect prior to April 1st 1958, unless otherwise approved by the Director. The detour period shall be held to an absolute minimum but in no case shall it exceed Ninety (90) consecutive calendar days. Two-way traffic shall be maintained at all times that the detour is not in effect. Payment for aggregate used in the maintenance of Local Traffic shall be included in the Lump Sum bid for "Maintaining Traffic, as per plan".

FED. RD. DIVISION	STATE	PROJECT	
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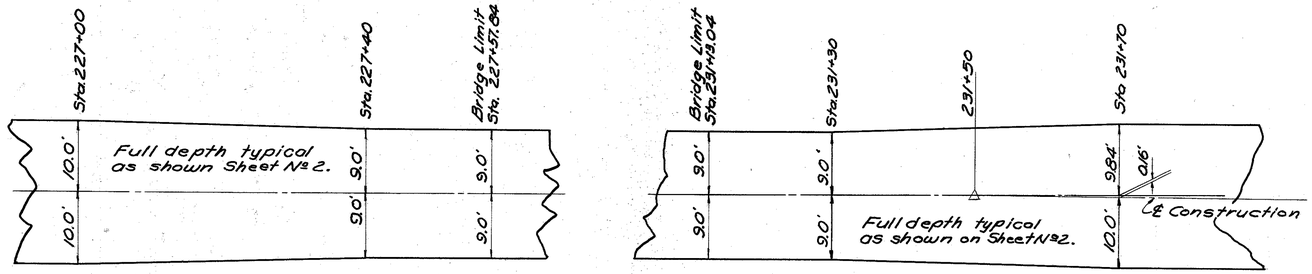
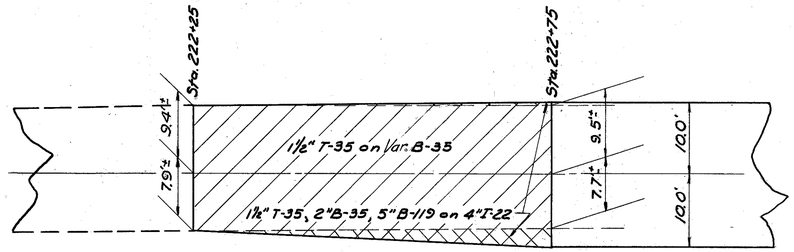
P/C- 316-(4.22-4.31)



STA 227+00 to STA 227+57.84 & STA 231+43.04 to STA 231+70.

ESTIMATED QUANTITIES.

T-35 - Asphaltic Concrete Surface Course = 9.94 Cu.Yds.
B-35 - Asphaltic Concrete Leveling Course = 13.60 Cu.Yds.
B-119 - Crushed Aggregate Base Course = 35.78 Cu.Yds.
I-22 - Subbase = 30.03 Cu.Yds.
T-30 - Bituminous Prime Coat as per Sheet No 2 = 90.17 Gals.
E-1 - Compacted Subgrade = 238.45 Sq.Yds.
Above Quantities carried to Calculations This Sheet.



STA. 222+25 to STA 222+75.

ESTIMATED QUANTITIES.

T-35 Asphaltic Concrete Surface Course = 5.03 Cu.Yds.
B-35 Asphaltic Concrete Leveling Course = 3.21 Cu.Yds.
B-119 Crushed Aggregate Base Course = 4.45 Cu.Yds.
I-22 Subbase = 2.55 Cu.Yds.
Above Quantities carried to Calculations This Sheet.

PAVEMENT CALCULATIONS.

T-35 1½" Asphaltic Concrete Surface Course Type "A" (85-100).
From Typical Section = 805.00 Lin. Ft.
805.00 × 20 ÷ 9 = 1788.88 Sq. Yds.
1788.88 × 1.5 ÷ 36 = 74.54 Cu. Yds.
Add from this sheet = 17.67 Cu. Yds. (9.94 + 5.03 + 2.70 = 17.67)
Total = 92.21 Cu. Yds.

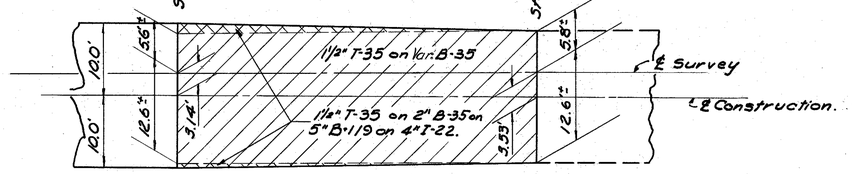
B-35 2" Asphaltic Concrete Leveling Course (85-100).
From Typical Section = 805.00 Lin. Ft.
805.00 × 20.5 ÷ 9 = 1833.60 Sq. Yds.
1833.60 × 2 ÷ 36 = 101.87 Cu. Yds.
Add from this sheet = 20.41 Cu. Yds. (13.60 + 3.21 + 3.60 = 20.41)
Total = 122.28 Cu. Yds.

B-119 5" Crushed Aggregate Base Course
From typical section = 805.00 Lin. Ft.
805.00 × 21.5 ÷ 9 = 1923.05 Sq. Yds.
1923.05 × 5 ÷ 36 = 267.09 Cu. Yds.
Add from this sheet = 46.18 Cu. Yds. (35.78 + 4.45 + 5.95 = 46.18)
Total = 313.27 Cu. Yds.

T-30 Bituminous Prime Coat.
From B-119 Calculation = 1923.05 Sq. Yds.
1923.05 × 0.35 = 673.07 Gals.
Add from this sheet = 90.17 Gals.
Total = 763.24 Gals.

I-22 4" Subbase
From Typical Section = 805.00 Lin. Ft.
805.00 × 22.5 × 9 = 2012.49 Sq. Yds.
2012.49 × 4 ÷ 36 = 223.61 Cu. Yds.
Add from this Sheet = 35.18 Cu. Yds. (30.03 + 2.55 + 2.60 = 35.18)
Total = 258.79 Cu. Yds.

E-1 Compacted Subgrade
From Typical Section = 805.00 Lin. Ft.
805.00 × 20 ÷ 9 = 1788.88 Sq. Yds.
Add from this sheet = 238.45 Sq. Yds.
Total = 2027.33 Sq. Yds.



STA 235+50 to STA. 236+00

ESTIMATED QUANTITIES

T-35 Asphaltic Concrete Surface Course = 2.70 Cu.Yds.
B-35 Asphaltic Concrete Leveling Course = 3.60 Cu.Yds.
B-119 Crushed Aggregate Base Course = 5.95 Cu.Yds.
I-22 Subbase = 2.60 Cu.Yds.
Above Quantities Carried to Calculations This Sheet.

E-11 Water
Embankment = 15,634.00 Cu.Yds.
B-119 = 342.00 Cu.Yds.
I-22 = 258.79 Cu.Yds.
Total = 16,234.79 Cu.Yds.
16,234.79 Cu.Yds. × .005 = 81.17 M.Gals.

SHEET NO.	STATE	DISTRICT	FEDERAL AID
2	OHIO		

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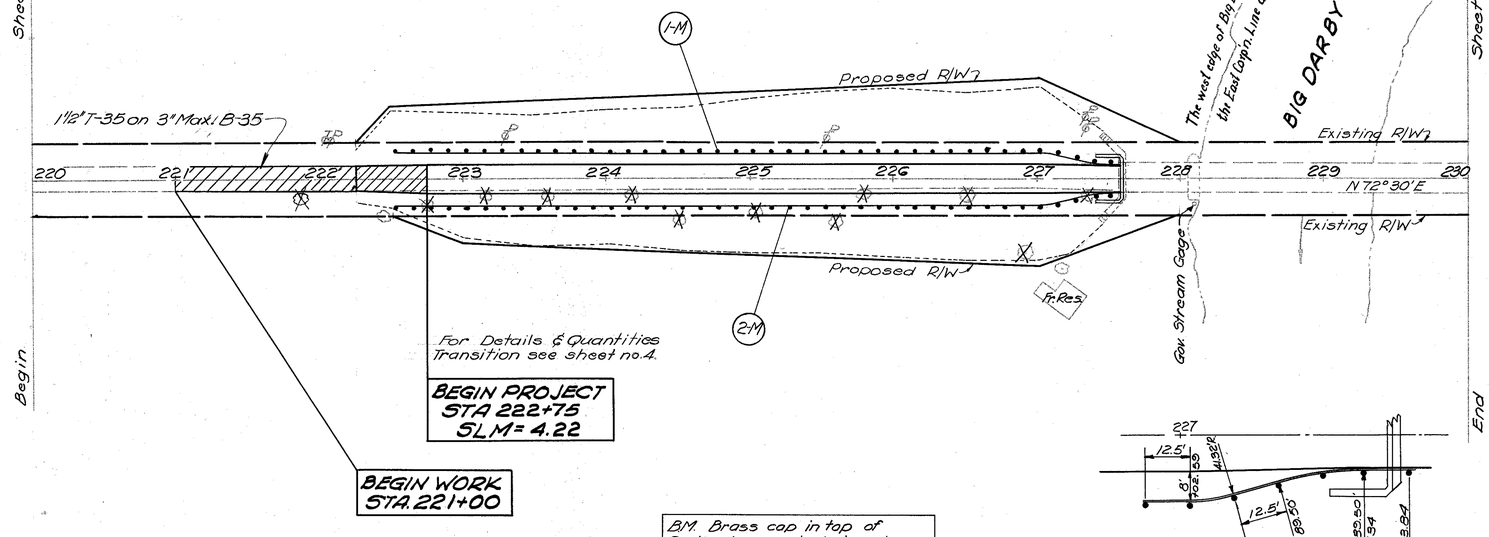
PAVEMENT REPAIR
STA. 221+00 to 222+25
T-35 Surface = 10.42 Cu. Yds.
B-35 Leveling = 17.69 Cu. Yds.

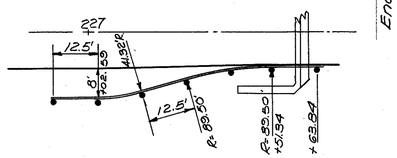


For Details & Quantities Transition see sheet no. 4.

BEGIN PROJECT STA 222+75 SLM = 4.22

BEGIN WORK STA. 221+00

B.M. Brass cap in top of South wing, west abutment. Elev. = 743.51.



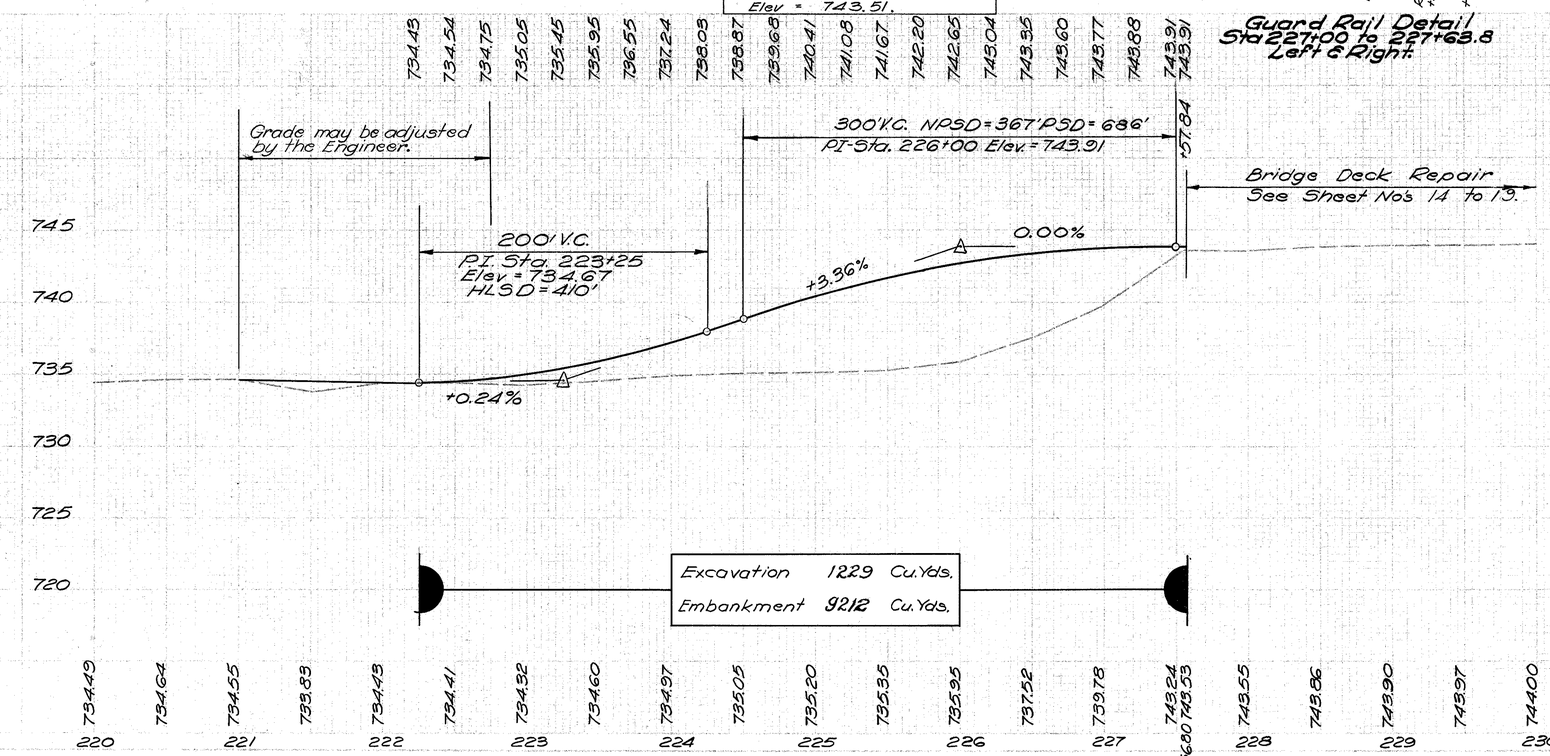
Guard Rail Detail
Sta 227+00 to 227+63.8
Left & Right

MISCELLANEOUS "M"				
Ref. Nº	Station From	Station To	Side	I-15 Guard Rails Lin. Ft.
1-M	222+52.59	227+57.84	Lt.	506.5
2-M	222+52.59	227+57.84	Rt.	506.5
		Totals ~		1013.0

E-9 REMOVAL OF TREES AND STUMPS		
Size	Trees	Stumps
12"-18"	2	-
18"-24"	2	-
24"-30"	-	-
30"-36"	4	-
36"-42"	2	1
42"-48"	-	-
48"+	1	-
Totals ~	11	1

SEEDING			
Station From	Station To	Work Area Sq. Yds.	L-9 Seeding Sq. Yds.
222+25	227+57.8	4851	4851
	Totals ~	4851	4851

4851 × .18 ÷ 2000 = .44 Ton Commerical Fertilizer.



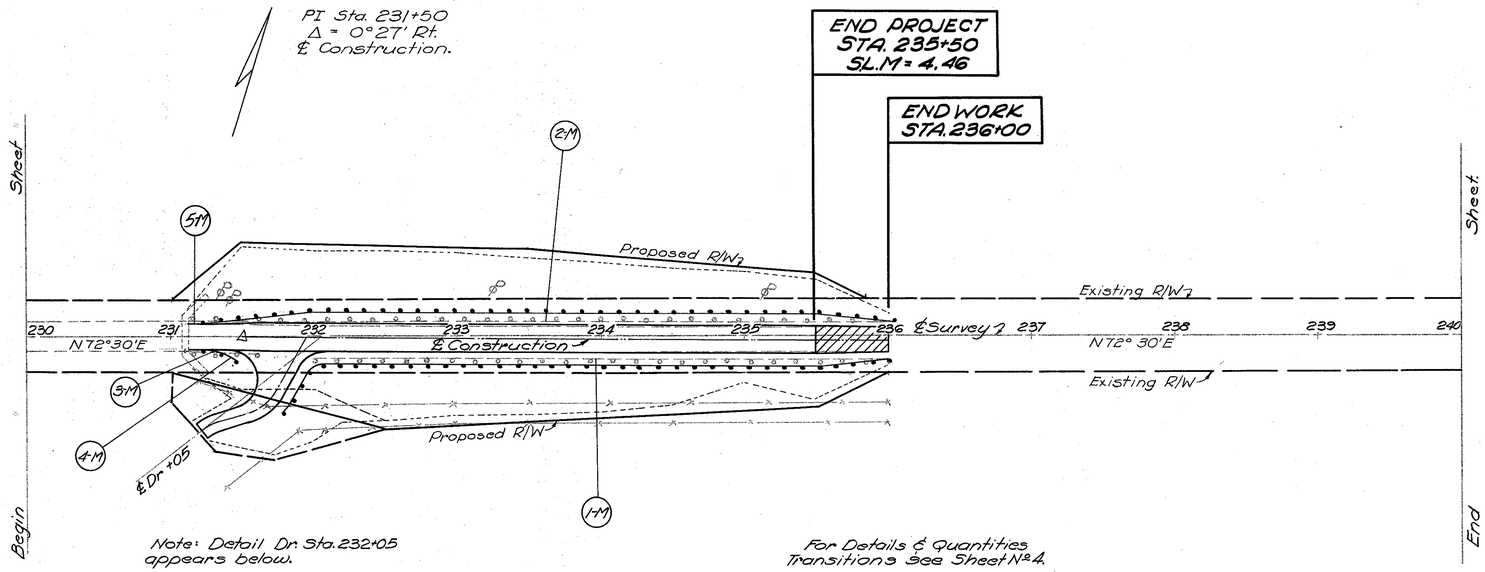
Excavation	1229	Cu. Yds.
Embankment	9212	Cu. Yds.

BRIDGE Nº PIC-316-0431		
Existing Bridge Data.	SPAN #1	SPAN #2
TYPE	Low truss	High truss
SPAN	44'-0"	292'-0" clear span
ROADWAY	17'-10"	18'-0"
LOADING	S-5.96-46-35% Legal	
SKEW	0°	
ALIGNMENT	Tangent	
WEARING SURF.	Bituminous on Block	
STREAM	Big Darby Creek	
CONDITION	Poor	Fair
Proposed Bridge Data.	**SPAN #1**	**SPAN #2**
TYPE	Steel Beam	High Truss
SPAN	49'-6"	292'-0" clear span
ROADWAY	18'-0"	
LOADING	CF-30	
SKEW	0°	
WEARING SURF.	Asphaltic Concrete	
APPR. SLABS	None	
ALIGNMENT	Tangent	

STA. 220+00 To STA. 230+00

STATE	PROJECT	SHEET NO.
OHIO		

PIC-316-(4.22-4.31)



Note: Detail Dr. Sta. 232+05 appears below.

For Details & Quantities Transitions see Sheet No. 4.

MISCELLANEOUS "M"

Ref No.	Station From	Station To	Side	I-15 G. R. Removed and Rebuilt Lin. Ft.	I-15 Guard Rails Lin. Ft.	
1-M	232+00	236+00	Rt.	400		
2-M	231+15	236+00	Lt.	485		
3-M	231+15	231+61	Rt.	46		
4-M	231+13.04	231+44	Rt.		34.33	
5-M	231+13.04	231+22.37	Lt.		9.33	
		Totals ~		931	43.66	

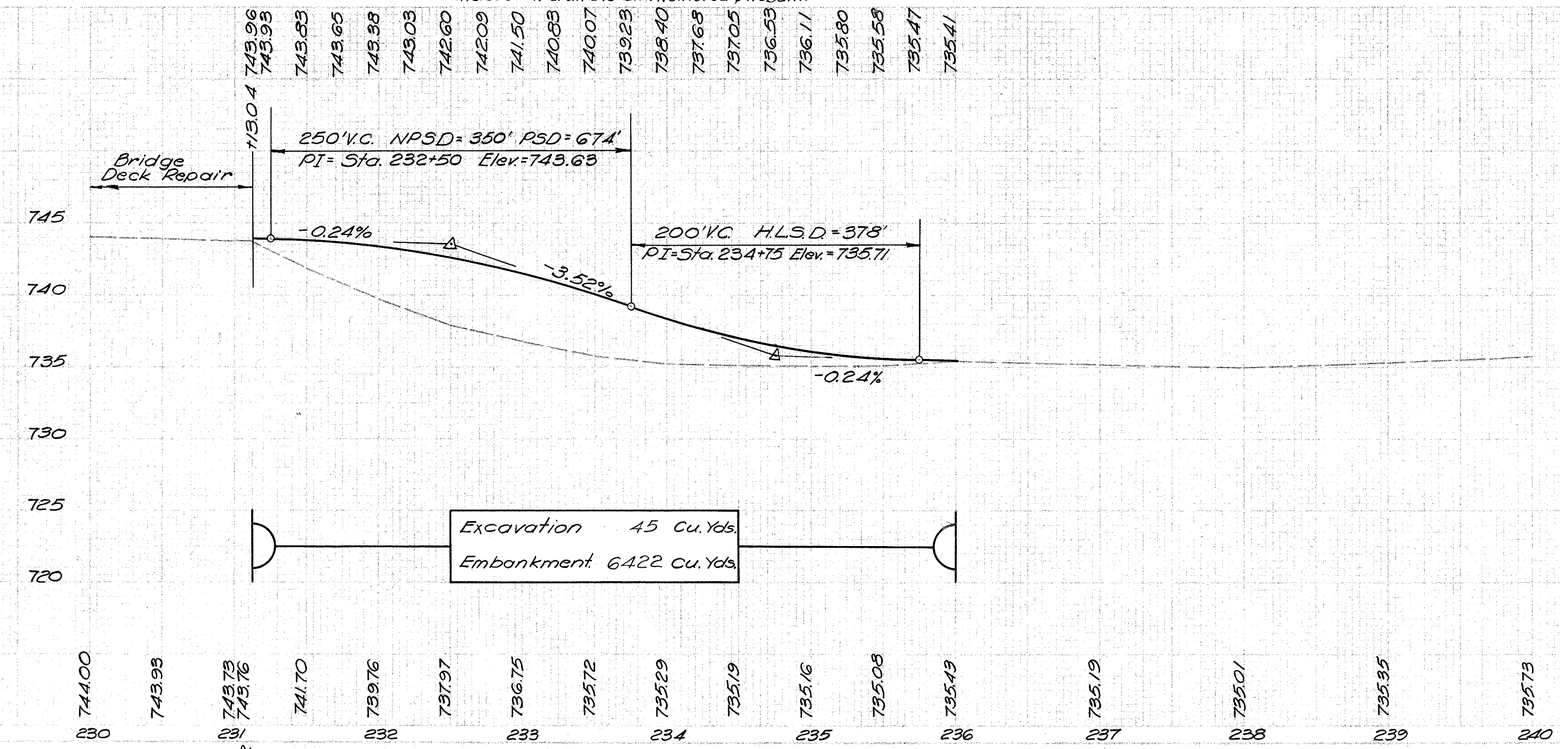
SEEDING

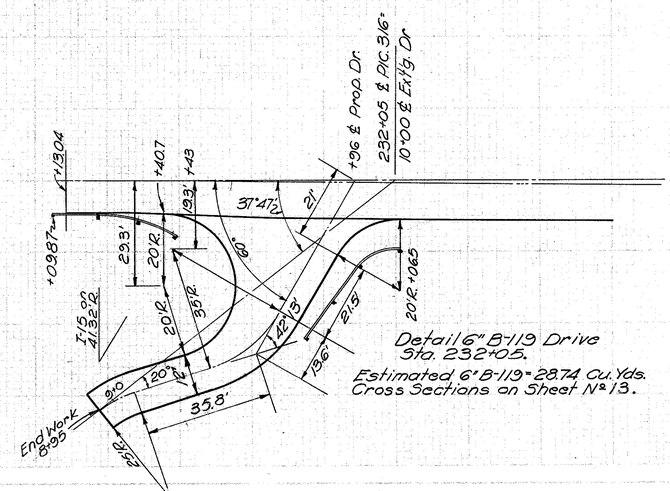
Station From	Station To	Work Area Sq. Yds.	L-9 Seeding Sq. Yds.
231+13.04	236+00	4245	4245
Totals =		4245	4245

4245 × .18 ÷ 2000 = .38 Ton Commerical Fertilizer.

Note:
Existing Guard Rail Ref. No. 3-M shall be removed and used in Ref No. 1-M and 2-M.

Note: Existing posts removed under Reference Nos. 1M, 2M & 3M shall be stored along the R/W for removal by the State of Ohio. Payment included in Item I-15-G.R. Removed & Rebuilt.

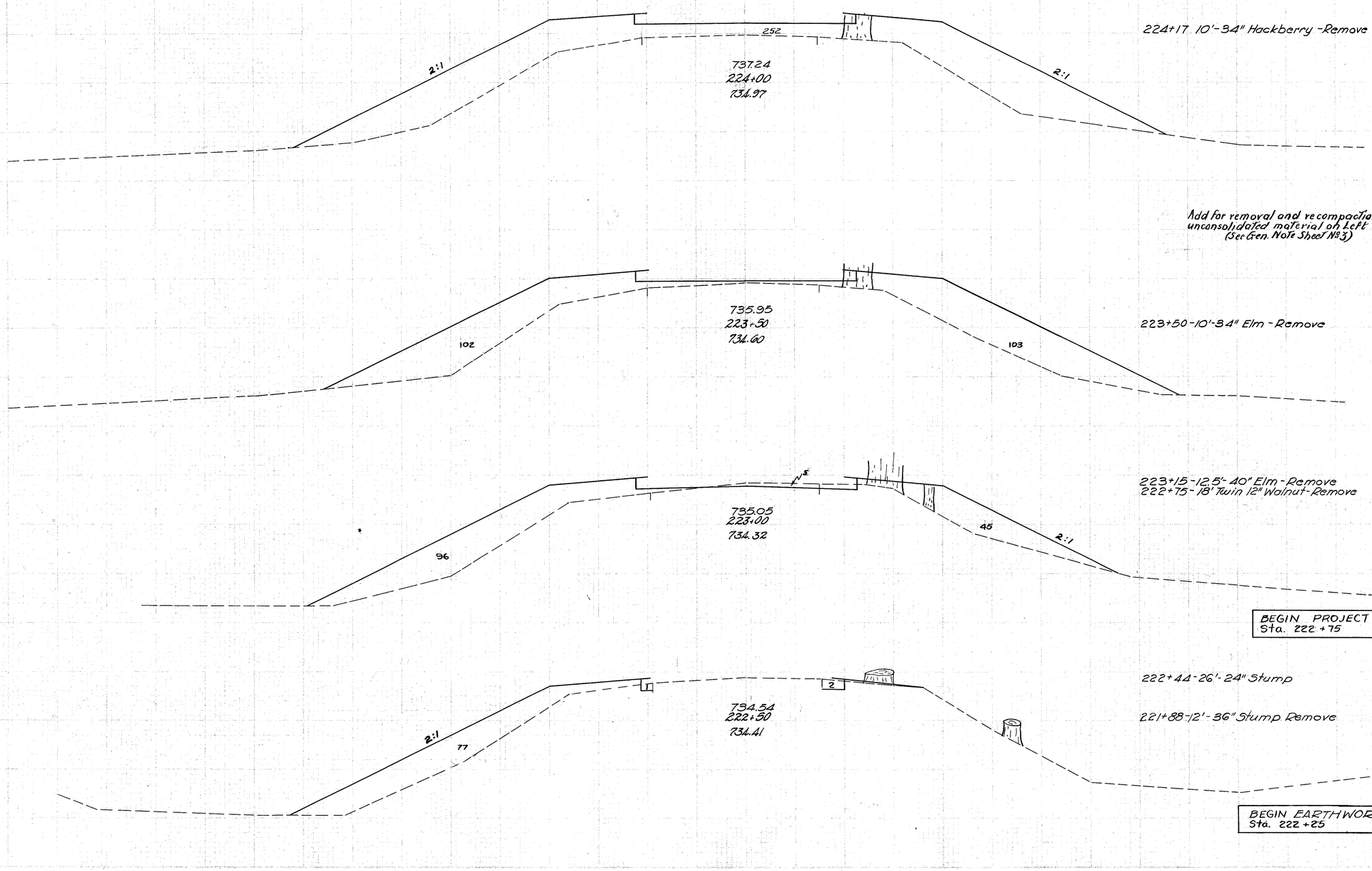




Detail 6" B-11.9 Drive Sta. 232+05.
Estimated 6" B-11.9 = 28.74 Cu. Yds.
Cross Sections on Sheet No. 13.

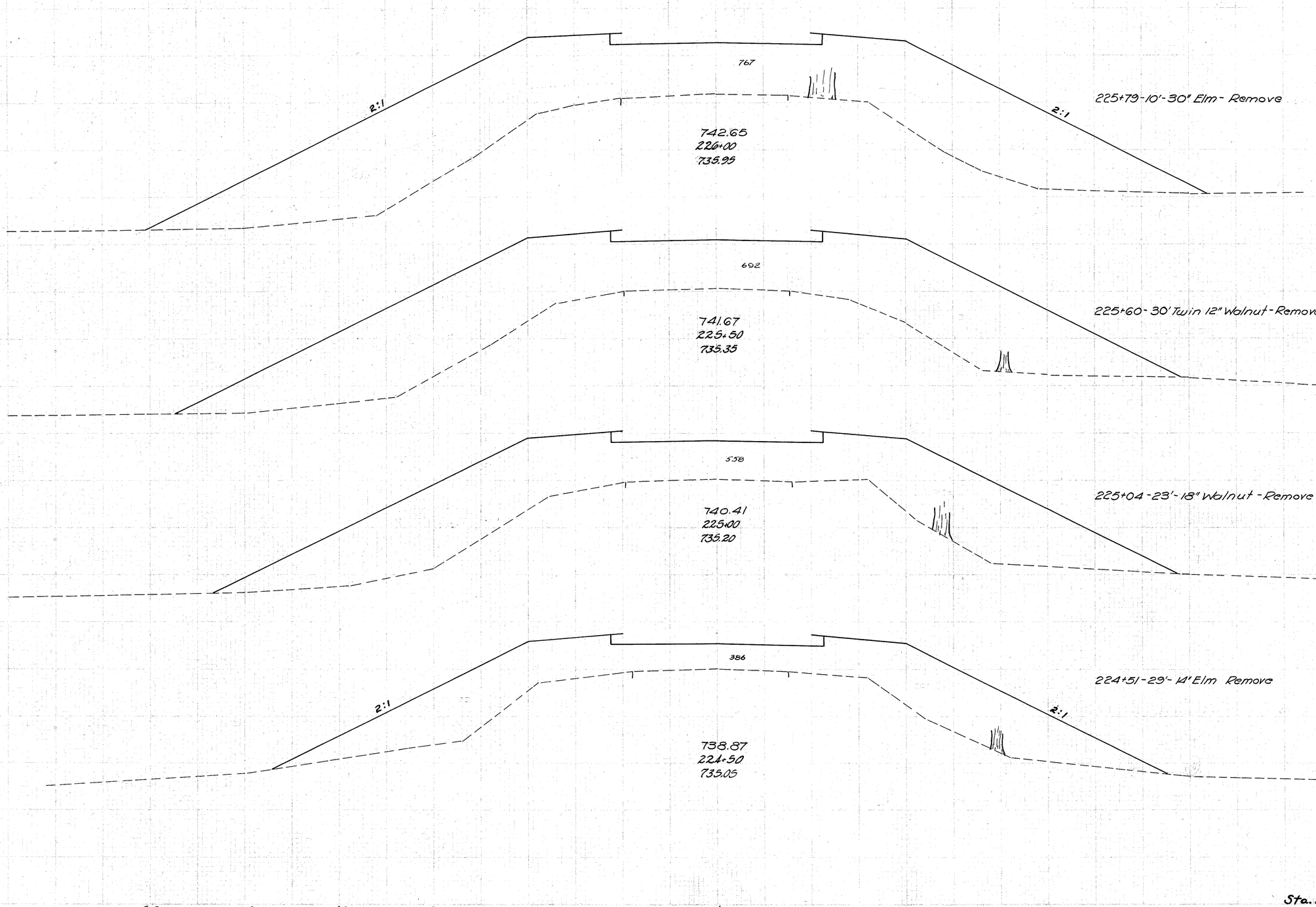
STA. 230+00 To STA. 240+00

PIC. 316 - (4.22 - 4.31)



	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
	0	252		
			0	423
			1,200	1,200
	0	205		
			5	321
			5	141
			5	116
Ahead			5	109
Back			3	109
			3	86
			3	77
			3	36
Ahead			3	0
Back			0	0

PIC. 316-(4.22-4.31)



Excavation	Cu. Yds.	1229
Embankment	Cu. Yds.	9212

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
0	767		
			0 1351
0	692		
			0 1157
0	558		
			0 874
0	386		
			0 591
0	252		

PIC. 316 - (4.22 - 4.31)

231+13.04
743.76

227+57.84
743.53

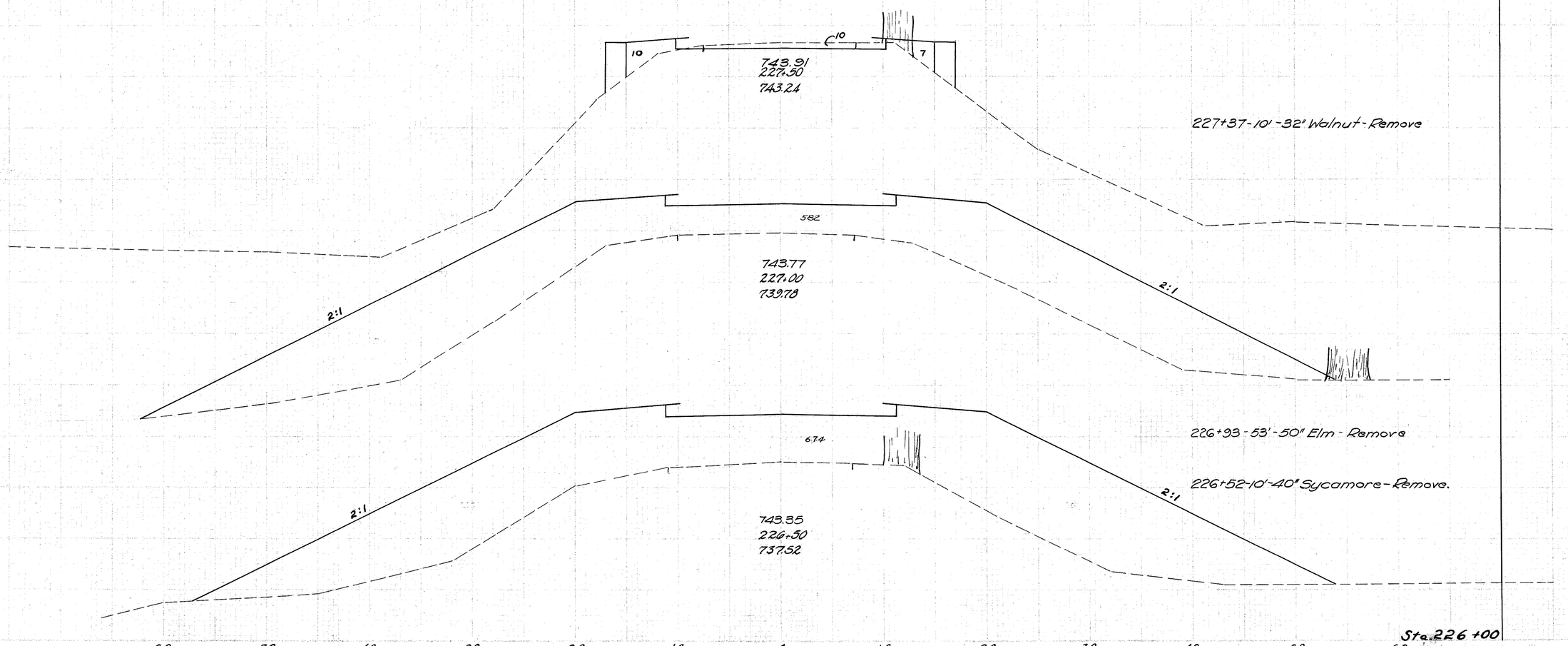
227+57.84 Bridge Limits

227+37 - 10' - 32" Walnut - Remove

226+93 - 53' - 50" Elm - Remove

226+52 - 10' - 40" Sycamore - Remove.

End Area		C.u. Yds.	
Cut	Fill	Cut	Fill
10	17		
		3	5
10	17		
		10	555
0	582		
		0	1163
0	674		
		0	1334
0	767		



Sta. 226+00
STA. 226+50 TO 231+13.04

10
20

PIC. 316-(4.22-4.31)

.78'
℄ Construction
592
2:1
2:1
742.60
232+50
737.94
.43'
Dr. Slope = 14.54%
743.32
232+05 Drive Rt. Skewed
739.48 Move Dr. to 231+96

Note: For Cross Sections
Drive, See Sheet N° 13.

.39'
423
743.38
232+00
739.68

℄ Construction
385
2:1
2:1
743.83
231+50
741.66

Add for Drive Rt.

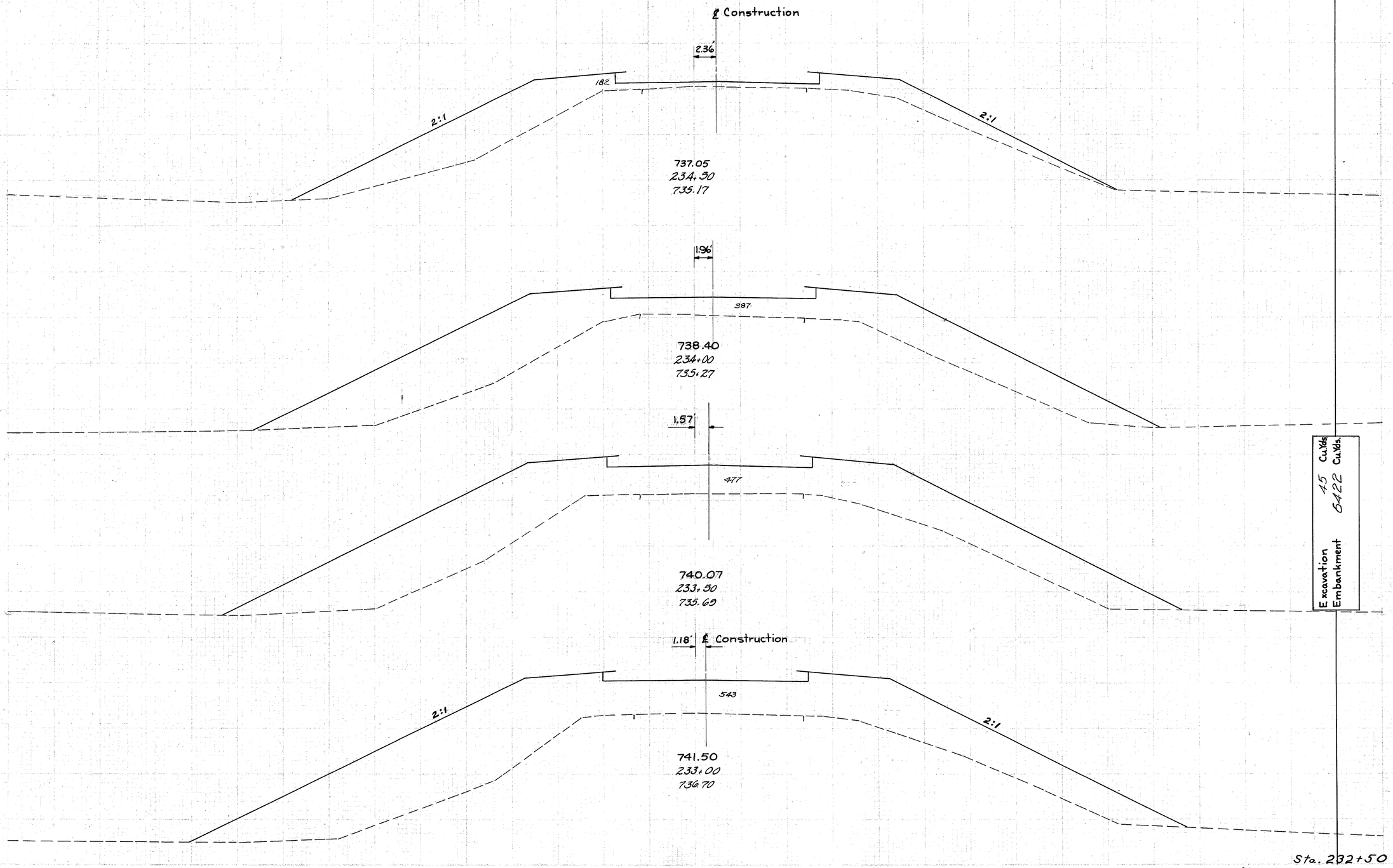
231+13.04 Bridge Limits

60 50 40 30 20 10 ℄ 10 20 30 40 50 60

STA. 231+13.04 TO 232+50

End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
0	592		
			0 940
0	490		
0	423		
			0 748
0	385		
			14 264
21	0		

PIC. 316-(422-4.31)



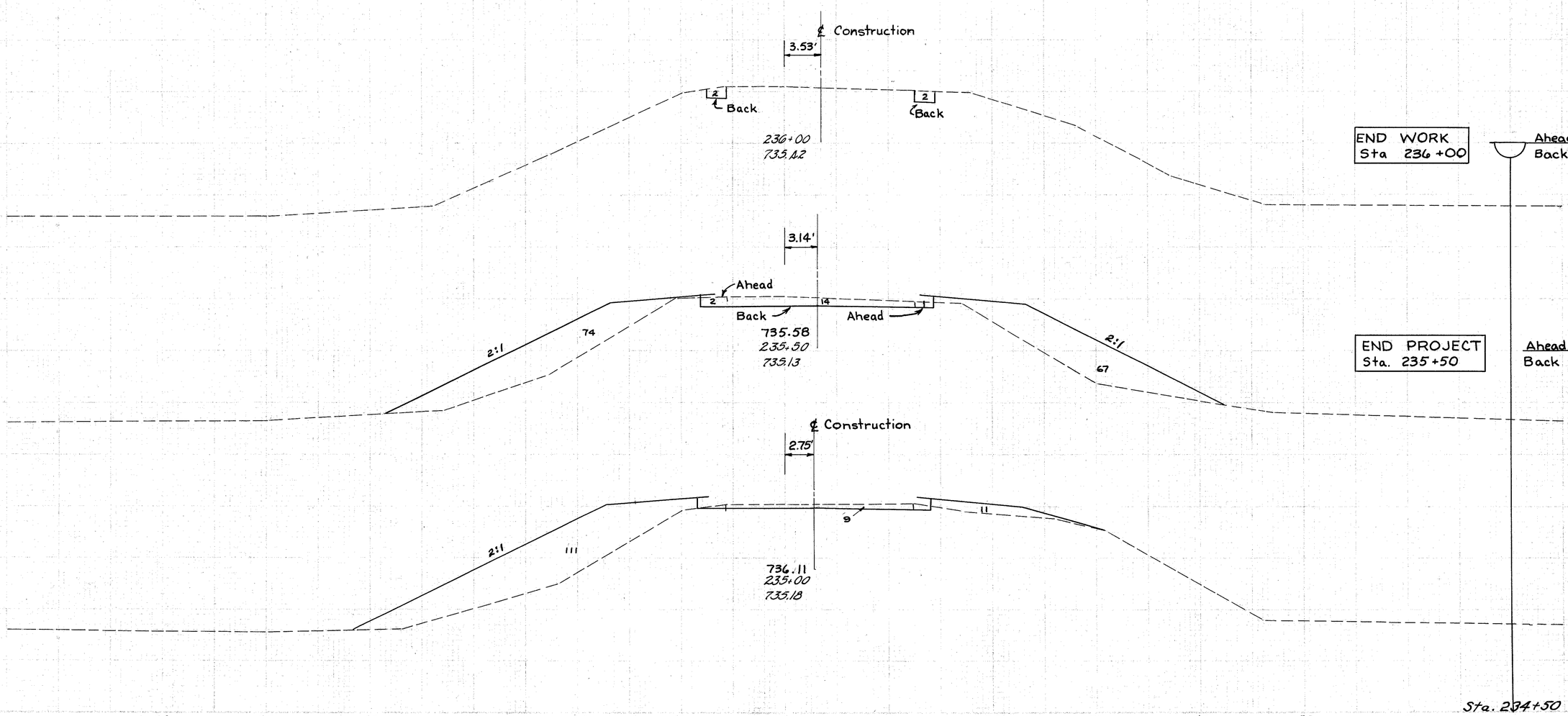
End Area Cu.Yds.			
Cut	Fill	Cut	Fill
0	182		
		0	527
0	387		
		0	800
0	477		
		0	945
0	543		
		0	1051
0	592		

	Cu.Yds.
Excavation	45
Embankment	6422

Sta. 232+50

P/C. 316-(422-431)

237+00



	End Area		Cu Yds.	
	Cut	Fill	Cut	Fill
END WORK Sta 236+00				
Ahead	0	0		
Back	4	0		
			7	131
END PROJECT Sta. 235+50				
Ahead	3	141		
Back	17	141		
			24	244
			9	122
			0	282
Sta. 234+50	0	182		

60 50 40 30 20 10 ℄ 10 20 30 40 50 60

STA. 235+00 TO 237+00

PIC.-316 (4.22-4.31)

℄ Ex't'g Dr.

℄ Proposed Dr.

Edge Pavement Match Line

℄ Roadway Emb.

742.95
9+75
739.29

128

Edge of Pavement Match Line

℄ Roadway Emb.

739.32
9+50
737.09

264

Edge of Pavement Match Line

℄ Proposed Dr.

935.69
9+25
734.59

144

70 60 50 40 30 20 10 0 ℄ 10 20 30 40 50 60 70 Total

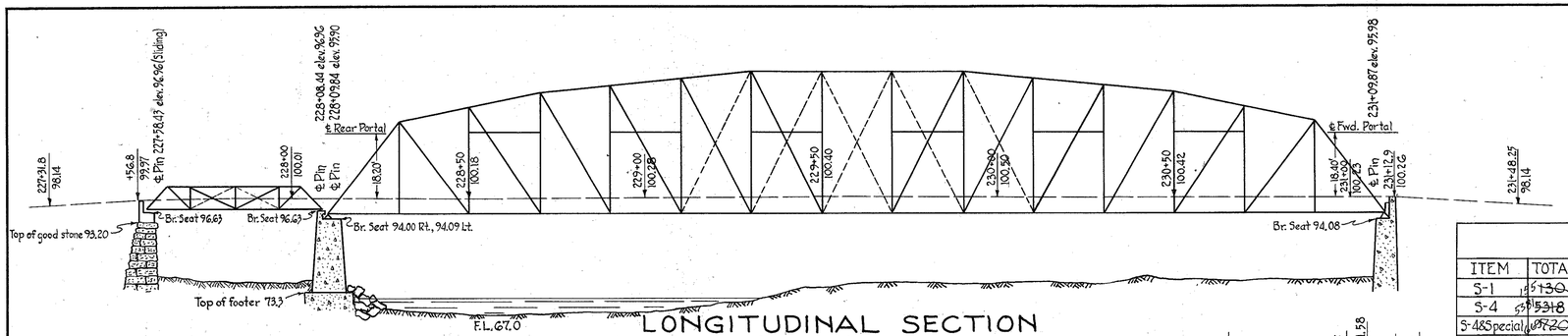
	FILL EA.	FILL C.Y.
9+82.5	0	
		39
	128	
		182
	264	
		189
	144	
		80
8+95	0	
		490

Quantities Carried To Sheet No. 10.

DRIVE X-SECTIONS STA. 232+05

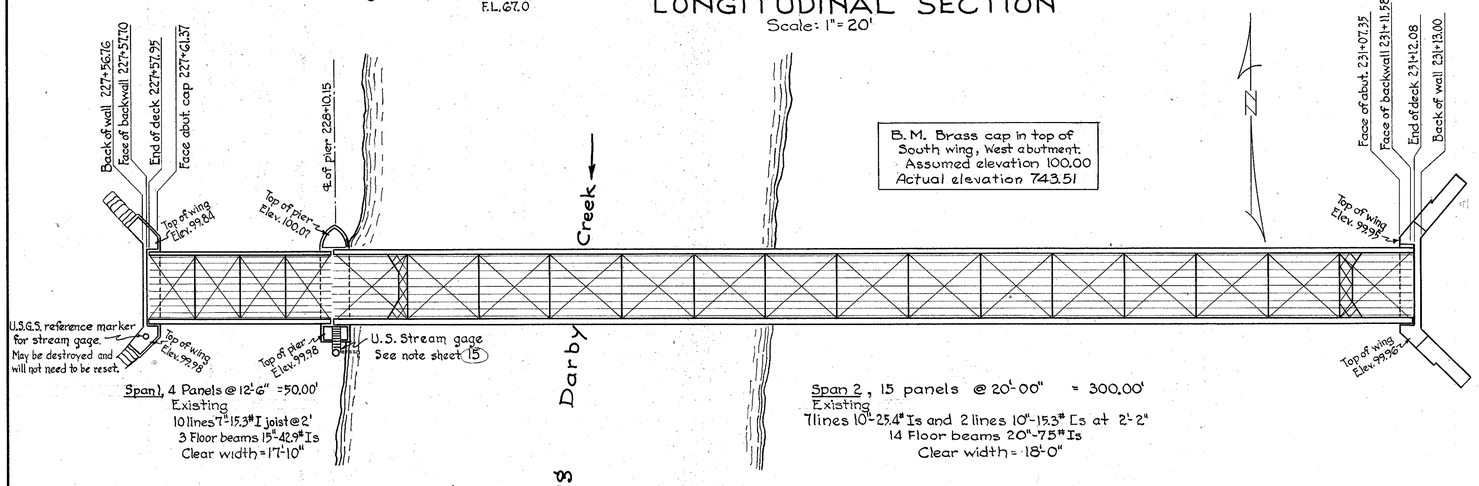
FED. RD. DIVISION	STATE	PROJECT		14 / 20
2	OHIO			

PIC-316-(4.22-4.31)



LONGITUDINAL SECTION

Scale: 1" = 20'



PLAN

Scale: 1" = 20'

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	PIER	ABUT'S.	GEN.	AS BUILT	
S-1	~~130~~ 151	Cu. Yds.	Class "E" Concrete, abutments and pier repair		~~31~~	~~99~~		C-1, +2.5 / 155	AB
S-4	~~5318~~ 5181	lbs.	Reinforcing steel		~~691~~	~~4615~~	N2	C-1, +63 / 5381	AB
S-4 Special	~~8720~~ 8720	Sq. Ft.	Reinforcing steel, 3"x3", 10 gage, welded wire mesh		~~369~~	~~351~~		C-1, -51 / 669	AB
S-7	Lump	Sum	Lifting and supporting existing truss span	Lump					
S-7	~~127,221~~ 127,221	lbs.	Structural steel (new)	~~127,221~~				C-1, +525 / 127,746	AB
S-8	~~127,221~~ 127,221	lbs.	Field painting of new structural steel	~~127,221~~				C-1, +525 / 127,746	AB
S-8	Lump	Sum	Cleaning and painting existing structural steel	Lump					
S-14	1304.4	Lin. Ft.	Railing, Type I-15.13, as per plan	1304.4					
S-22	Lump	Sum.	Removal of portions of existing superstructure	Lump					
S-22	~~164~~ 749	Cu. Yds.	Removal of portions of existing pier and abutments		~~52~~	~~97~~		C-1, +1.5 / 164	AB
S-23	456	Each	Dowel holes		182	274			
T-30	71	Gal.	Bituminous tack coat, Sec. M-5.5, M.5-2 or RS-1 or	71					
			Sec. M.-5.2, RC-1 or RC-2, as per Sec. T-30.02.						
T-35	30	Cu. Yds.	Asphaltic concrete surface course, Type "C" (85-100)	30					
B-35	20	Cu. Yds.	Asphaltic concrete leveling course, (85-100)	20					
Special	6326	Sq. Ft.	Corrugated sheet steel bridge flooring	6326					

GENERAL NOTES

LOADING CAPACITY:-

The new floor system including the stringers of Span 1 and the strengthened floor beams on Span 2 is based on a frequency rating of CF-30. All truss members of Span 2 are generally of a greater capacity and of sufficient strength to permit the use of this bridge by vehicles of a maximum legal weight without posting for reduction of loads.

PROPOSED WORK:-

Substructure- Remove disintegrated concrete from abutment and pier provide new reinforced concrete caps and repair faces with Class "E" concrete.

Span 1- Remove existing low steel truss and replace with new steel beam structure with corrugated steel flooring and bituminous surface course and steel beam rail on steel post.

Span 2- Remove existing floor and steel joist. Replace roller nest at East abutment. Provide new flange plates for all existing floor beams. Provide new end floor beam at East abutment. Provide new stringers and end finish. Provide new corrugated steel floor with bituminous surface course. Provide two lines of steel beam rail. Paint new structural steel. Clean and paint existing structural steel.

BITUMINOUS SURFACE COURSE:-

The bituminous surface course shall consist of an application of 0.1 gallon per square yard of T-30, Bituminous tack coat, sufficient B-35, Asphaltic concrete leveling course, to fill the corrugations of the steel floor level with the tops after compaction, and a surface course of T-35 Asphaltic concrete surface course. The leveling course, after initial rolling, shall be further densified by running a loaded truck equipped with pneumatic tires, over the floor enough times to contact every part of the surface of the leveling course.

Item T-35, Asphaltic concrete surface course, Type "C", may be used in place of Item B-35, Asphaltic concrete leveling course at the Contractor's option. Payment, however, will be at the unit price bid for Item B-35, Asphaltic concrete leveling course.

S-4, SPECIAL, REINFORCING STEEL, 3"x3", 10gage Welded Wire Mesh:-

This item shall consist of furnishing and placing welded wire mesh of the quality, type, size and quantity designated in S-1, Class "E" Concrete, as required by Item S-4 of the Specifications and as shown on the plans.

The number of square feet to be paid for shall be the actual number of square feet incorporated in the concrete as shown on the plans, or as directed by the Engineer.

The number of square feet determined as above provided, shall be paid for at the contract unit price per square foot bid for "Item S-4, Special, Reinforcing steel," which price and payment shall constitute full compensation for furnishing, preparing and placing all materials and all necessary labor, tools and equipment.

REMOVAL OF PORTIONS OF EXISTING SUPERSTRUCTURE:-

The steel I-beam and channel joist from both spans and the floor beams from span 1 shall be piled along the right-of-way for removal by State forces. Remainder of removed materials shall become the property of the Contractor and to be removed from the site.

PAINTING:-

New structural steel- both shop and field coats shall be applied by brushing. Spray application will not be permitted.

Existing structural steel- The steel shall be thoroughly cleaned in accordance with Item S-8 and one complete coat of prime paint and one complete coat of field paint applied by brushing. Spray application will not be permitted.

EXCAVATION:-

Excavation and backfill required to facilitate the removal of portions of existing abutments and placing abutment concrete shall be considered as included in the unit price bid for Item S-22, Removal of portions of piers and abutments. No separate payment will be made. Backfill shall be in accordance with Section E-2.08.

CORRUGATED SHEET STEEL BRIDGE FLOORING:-

The flooring shall be of the type manufactured by "Armco Drainage and Metal Products Inc.", "The United Steel Fabricators, Inc." or an approved equivalent.

The materials shall be open-hearth or electric furance steel sheets with a minimum thickness of 7 gage, subject to the standard mill tolerances. The carbon content shall not exceed 0.3%.

Sheets shall be fabricated into corrugated plates with a minimum width of 12 inches and of sufficient length to extend over three or more stringers. Corrugations shall be not less than 2" deep spaced not more than 8 inches center to center and have a minimum section modulus of 0.162 inches cubed per inch. Oval holes approximately ¾"x1¼" shall be provided in every corrugation for welding to every stringer, and in every corrugation at the quarter points between each pair of stringers for drainage.

Plates may be butt-spliced end to end, with a 12" minimum joint stagger, by a continuous shop butt-weld both sides of the plate. When splices occur over stringers the welds that bear on the stringers shall be ground flush. Plates shall be attached to every stringer at every corrugation valley with two ⅜"x1" fillet welds while being held tight against the top of the stringer. Where the sides of the adjacent plates come together they shall be connected by a 3 inch bead weld on the upper side midway between each pair of stringers.

Painting of the floor plates shall be in accordance with the provisions of Item S-8 of the Construction and Material Specifications. The two aluminum field coats need be applied to the underside only of the plates. One field coat shall be applied to the tops of the stringers before erection of the plates, and included with Item S-8 for payment.

Payment for the corrugated sheet steel bridge floor shall be for the actual number of square feet of floor complete in place, painted and accepted, including all necessary material, labor, tools and equipment.

LIFTING AND SUPPORTING TRUSS:-

Approval of the Contractor's plan for lifting and supporting truss while repairs are being made shall be obtained from the Director of Highways before this work is begun. Three blue print copies of said plan shall be submitted at least 15 days prior to truss raising.

REMOVAL OF PORTIONS OF EXISTING PIER AND ABUTMENT:-

The disintegrated concrete removed from the pier and abutment may be used as bank protection as directed by the Engineer.

VERIFICATION:-

The Contractor shall verify all dimension and conditions at the site.

WELDING:-

All welding shall be Class A.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

GENERAL PLAN & ELEVATION NOTES & ESTIMATED QUANTITIES

PIC-316-0431
over Big Darby Creek
PICKAWAY COUNTY

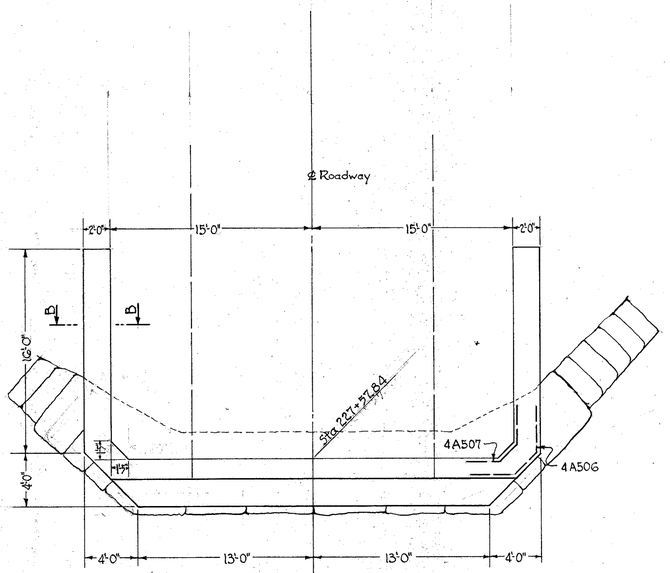
EXISTING TOPO			PROPOSED WORK		
Surveyed	Drawn	Traced	Designed	Drawn	Reviewed
Fravel	R.Wood	W.M.C.	W.M.C.		

Revised 8-7-57 11-13-58 Revised as-built JKP

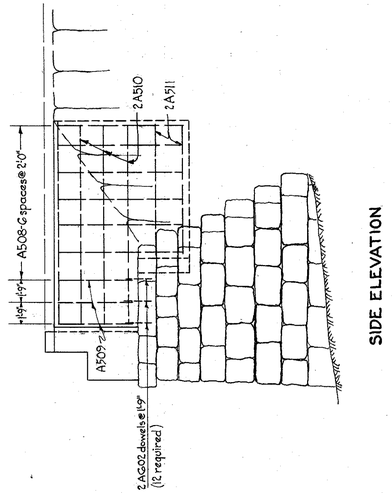
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

15/20

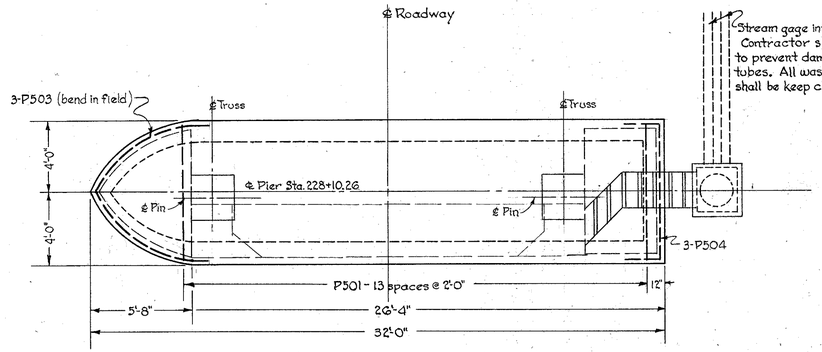
PIC-316-(4.22-4.31)



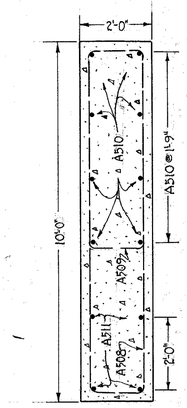
PLAN
WEST ABUTMENT



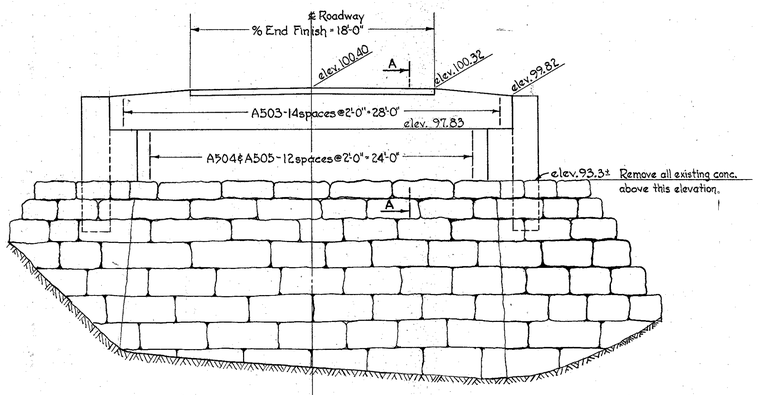
SIDE ELEVATION



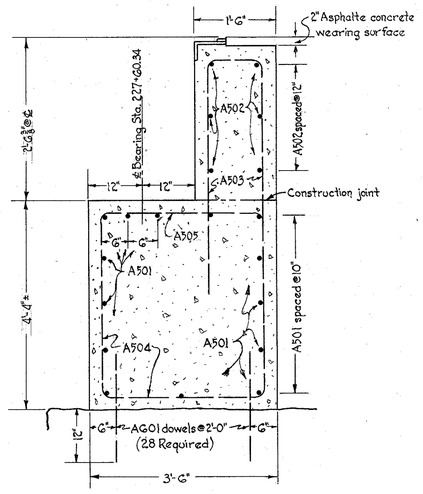
PLAN
PIER



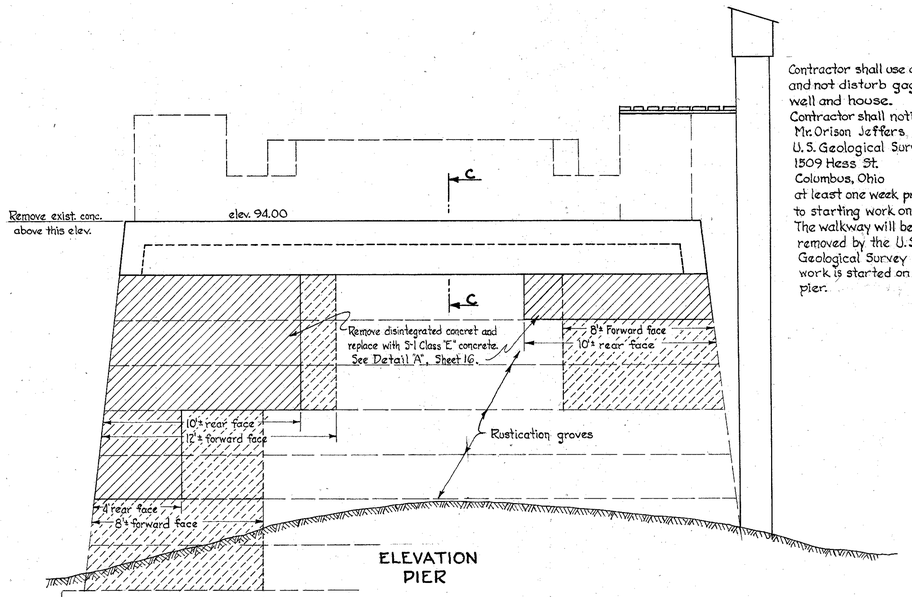
SECTION B-B



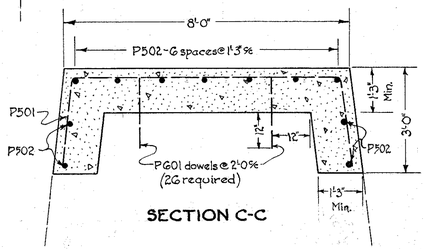
ELEVATION
WEST ABUTMENT



SECTION A-A



ELEVATION
PIER



SECTION C-C

Contractor shall use care and not disturb gage well and house. Contractor shall notify Mr. Orison Jeffers U. S. Geological Survey 1509 Hess St. Columbus, Ohio at least one week prior to starting work on pier. The walkway will be removed by the U.S. Geological Survey before work is started on the pier.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

REAR ABUTMENT and PIER DETAILS

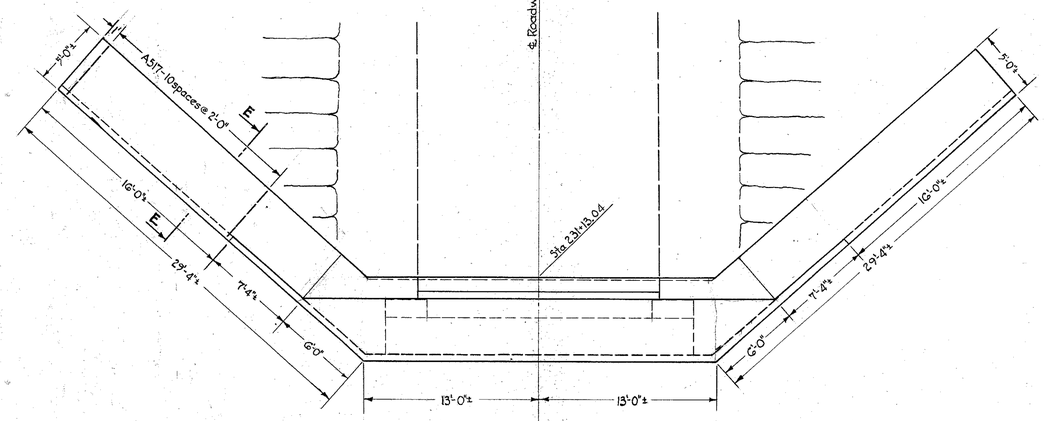
PIC-316-0431
over Big Darby Creek
PICKAWAY COUNTY

DESIGNED	DRAWN	TRACED	REVIEWED	DATE	REVISED
wmg	wmc	wmc			since 6-27-57

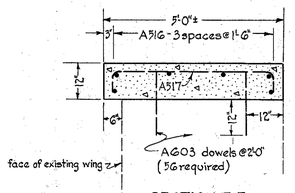
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

16/20

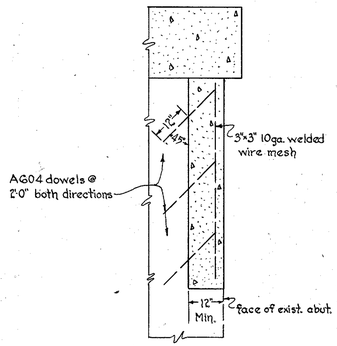
PIC-316-(4.22 - 4.31)



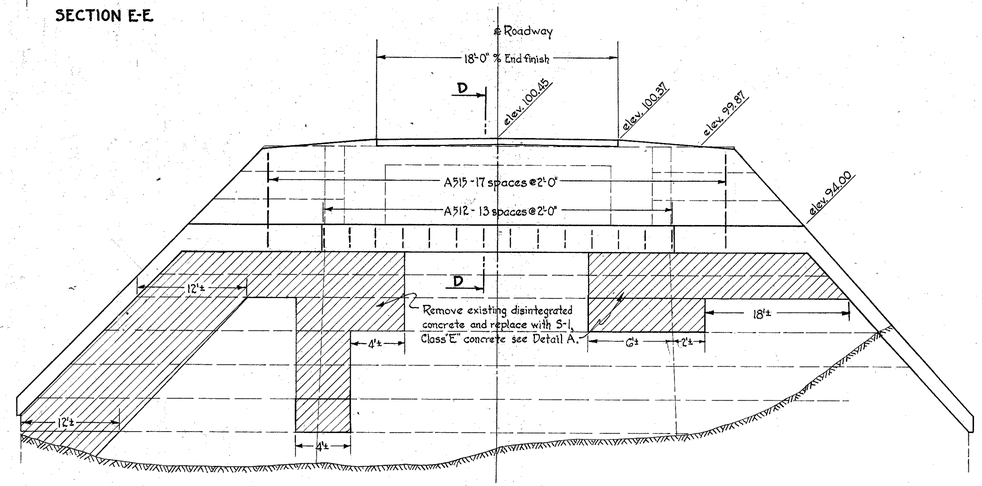
PLAN
EAST ABUTMENT



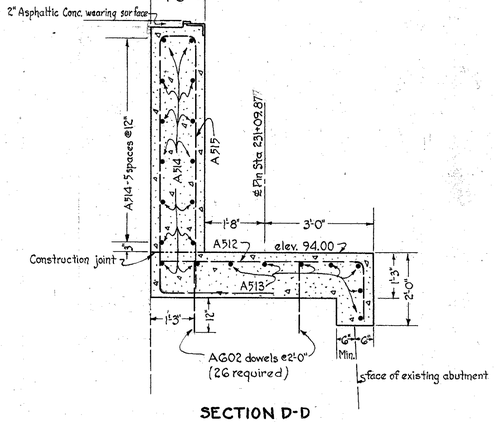
SECTION E-E



DETAIL "A"



ELEVATION
EAST ABUTMENT



SECTION D-D

Construction Joints:

Location and number of needed construction joints in East Abutment and Pier caps shall be determined by the Engineer after approval of the Contractor's plan for lifting and supporting trusses.

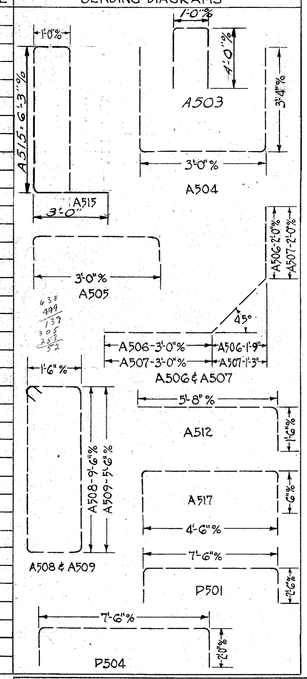
Concrete above abutment bridge seat construction joint shall not be placed until after steel work is erected. Steel end finish shall be used as a template for top of backwall.

Care shall be taken to insure that bridge seat reinforcing steel will clear anchor bearing bolts.

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	SHAPE
AG01	28	2'-0"	84	St.
AG02	26	2'-0"	78	St.
AG03	56	1'-9"	147	St.
AG04	320	2'-0"	961	St.
A501	14	26'-0"	380	St.
A502	6	28'-0"	181	St.
A503	15	9'-0"	141	Bt.
A504	13	9'-8"	131	Bt.
A505	13	3'-8"	50	Bt.
A506	8	7'-6"	58	Bt.
A507	8	6'-9"	57	Bt.
A508	14	22'-8"	341	Bt.
A509	6	14'-8"	92	Bt.
A510	16	15'-6"	97	St.
A511	8	10'-0"	83	St.
A512	14	7'-2"	105	Bt.
A513	14	18'-0"	262	St.
A514	14	34'-0"	638	St.
A515	18	16'-3"	253	Bt.
A516	12	28'-0"	350	St.
A517	22	5'-6"	126	Bt.
PG01	26	2'-0"	78	St.
P501	14	12'-6"	183	Bt.
P502	22	15'-0"	344	St.
P503	3	16'-0"	50	St.
P504	3	11'-6"	36	Bt.
RG01	1	4'-0"	6	St.
R501	1	5'-7"	6	St.

BENDING DIAGRAMS



Replacement Bars:

If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 4.02 need not be furnished and replacement bars will not be required.

All reinforcing shall be 3" clear, unless otherwise shown.

In the reinforcing steel bar marks, the first digit indicates the bar size.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

EAST ABUTMENT DETAILS
REINFORCING STEEL LIST

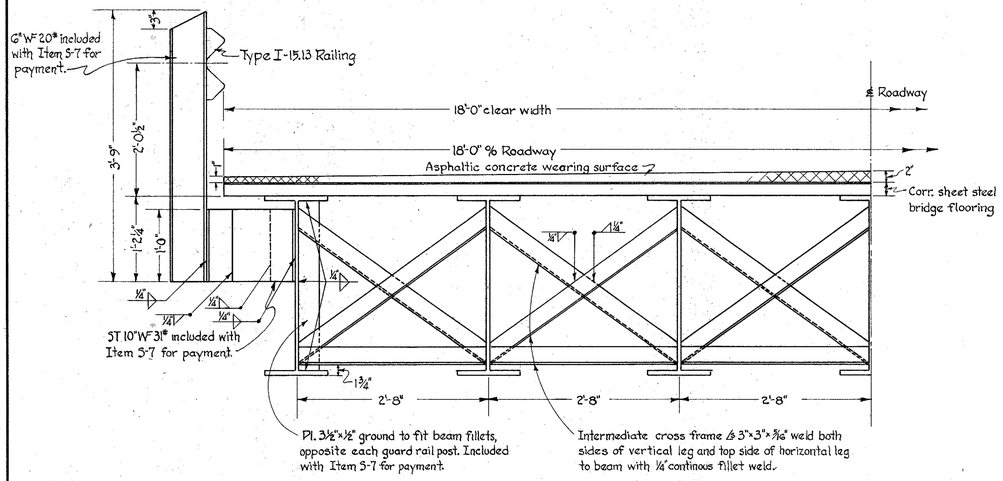
PIC-316-0431
over Big Darby Creek
PICKAWAY COUNTY

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
wmc	wmc				8-8-97

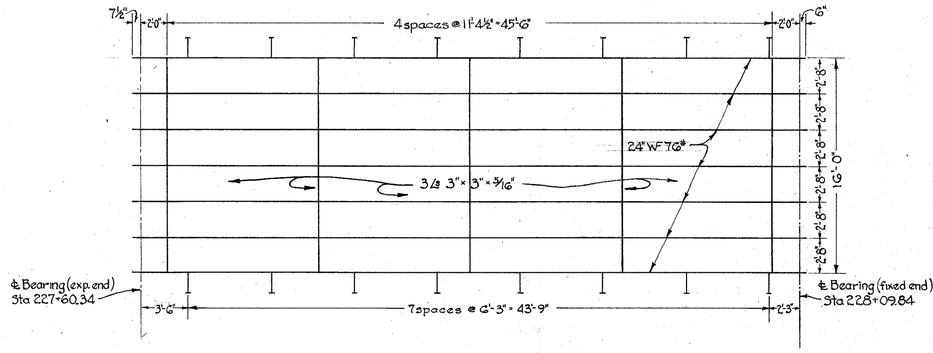
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

17/20

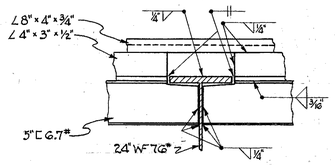
PIC-316-(4.22 - 4.31)



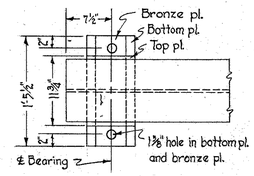
HALF TRANSVERSE SECTION SPAN 1



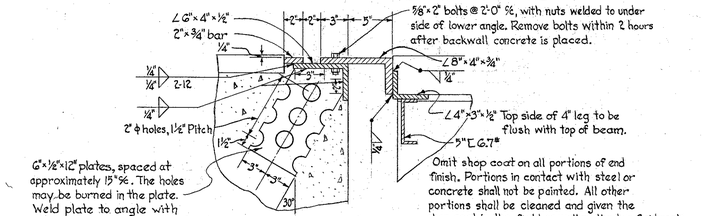
STRUCTURAL STEEL LAYOUT



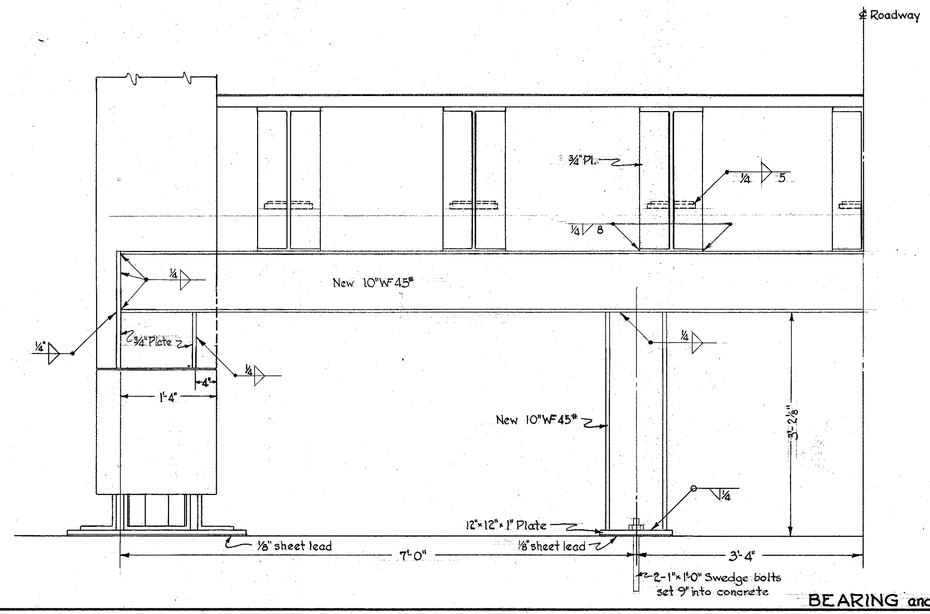
SECTION A-A

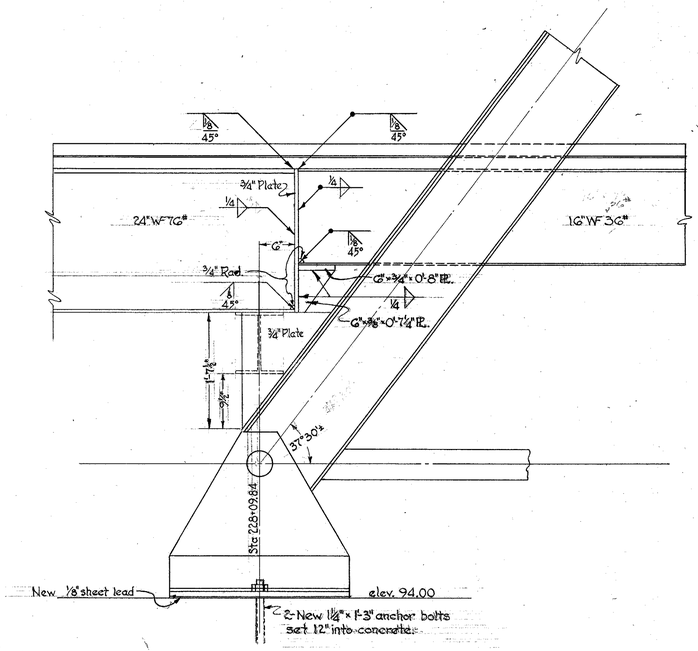


EXPANSION BEARING PLATES

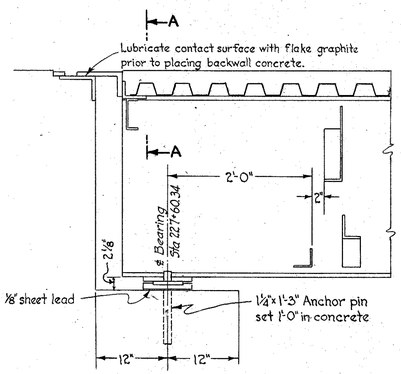


END FINISH AT W. ABUTMENT (NEW)





BEARING and SPLICE DETAILS at PIER



END FINISH SECTION

Cast leaded bronze plates and sheet lead included with structural steel for payment.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS SPAN 1

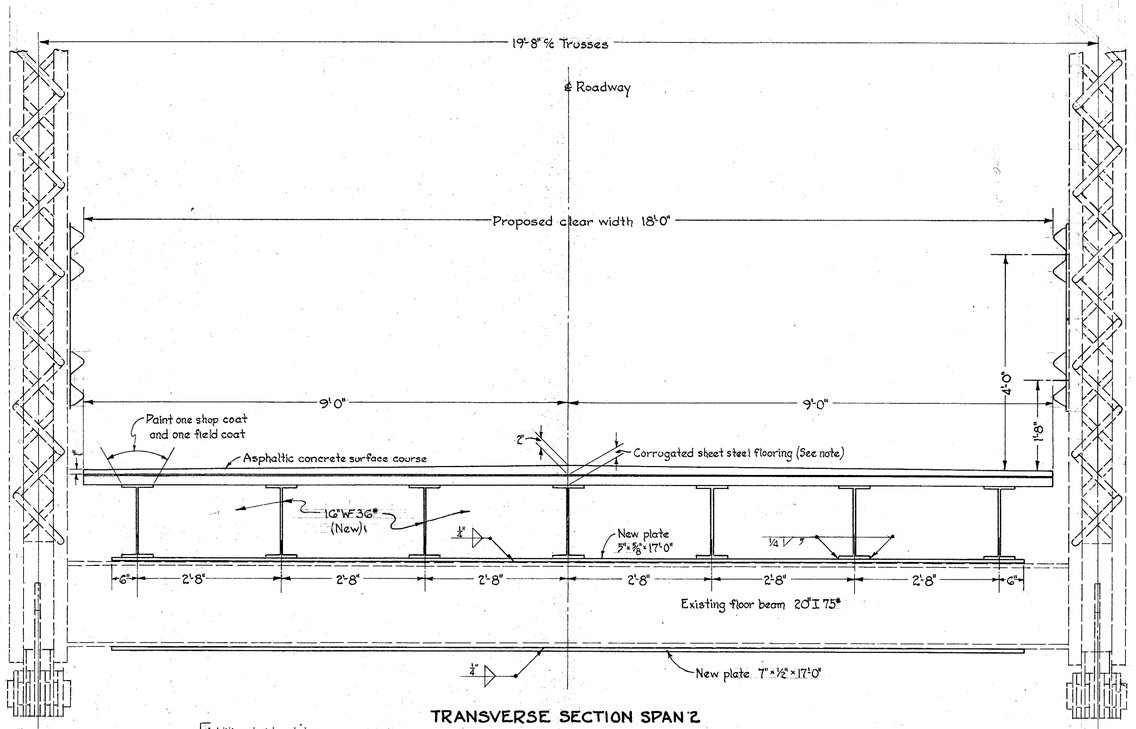
PIC-316-0431
over Big Darby Creek
PICKAWAY COUNTY

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
wmc	wmc				wmc 6-27-97

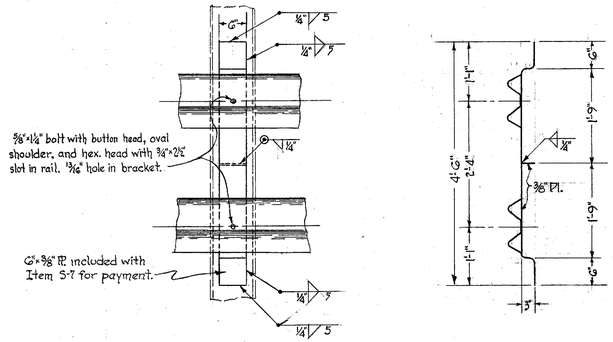
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

18
20

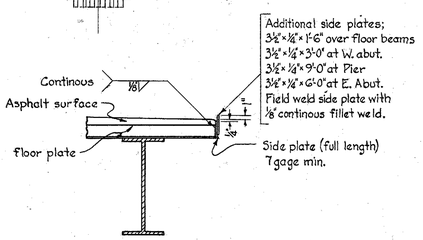
PIC-316-(4.22-4.31)



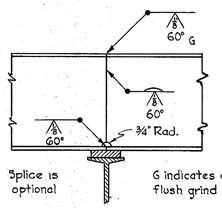
TRANSVERSE SECTION SPAN 2



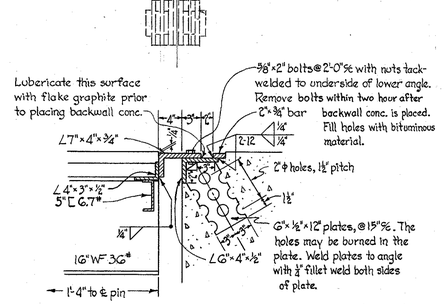
VERTICAL POST RAIL BRACKET
28 Required



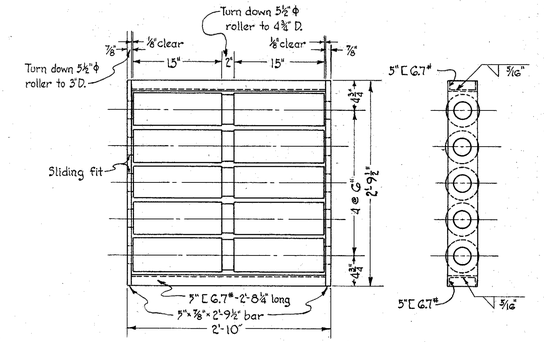
STEEL FLOOR SIDE PLATES (New)
Side plates included in the price per sq. ft. bid for "Corrugated sheet steel bridge flooring".



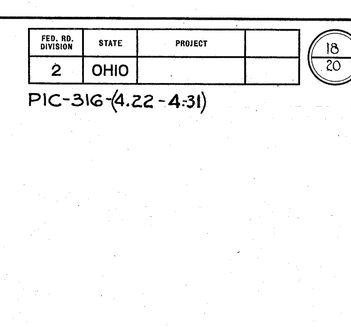
STRINGER SPLICE



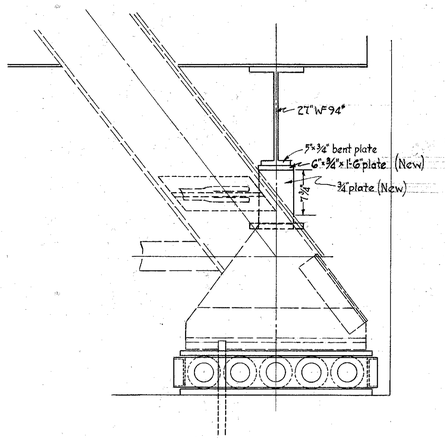
END FINISH at E. ABUTMENT (New)
For details not shown see end finish W. abutment.

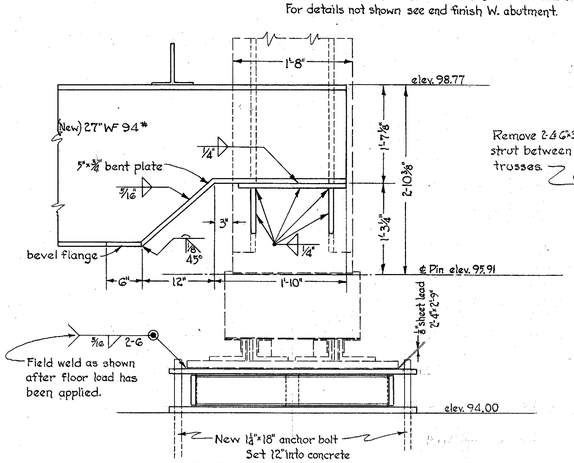


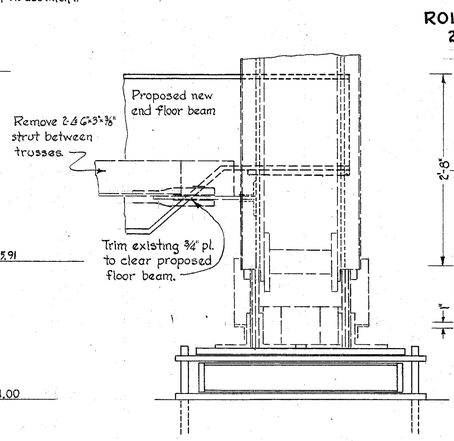
ROLLER NEST
2 Required
(New)



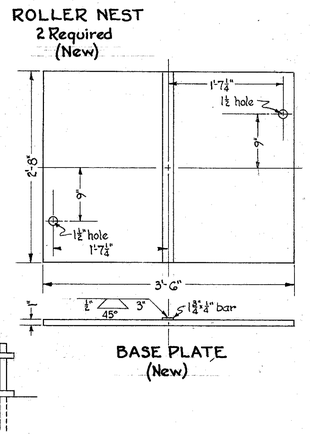
TOP PLATE
(New)







DETAILS at EAST ABUTMENT



BASE PLATE
(New)

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS SPAN 2

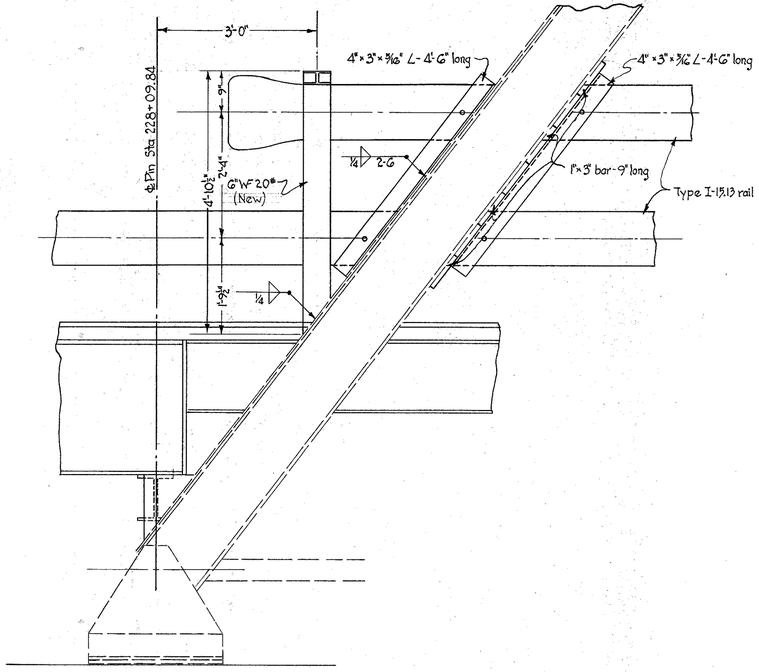
PIC-316-0431
over Big Darby Creek
PICKAWAY COUNTY

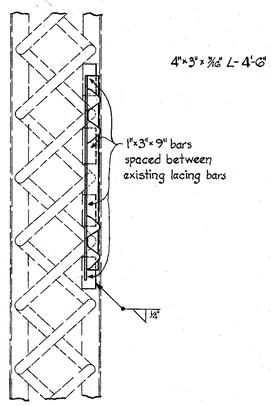
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
wmc	wmc				

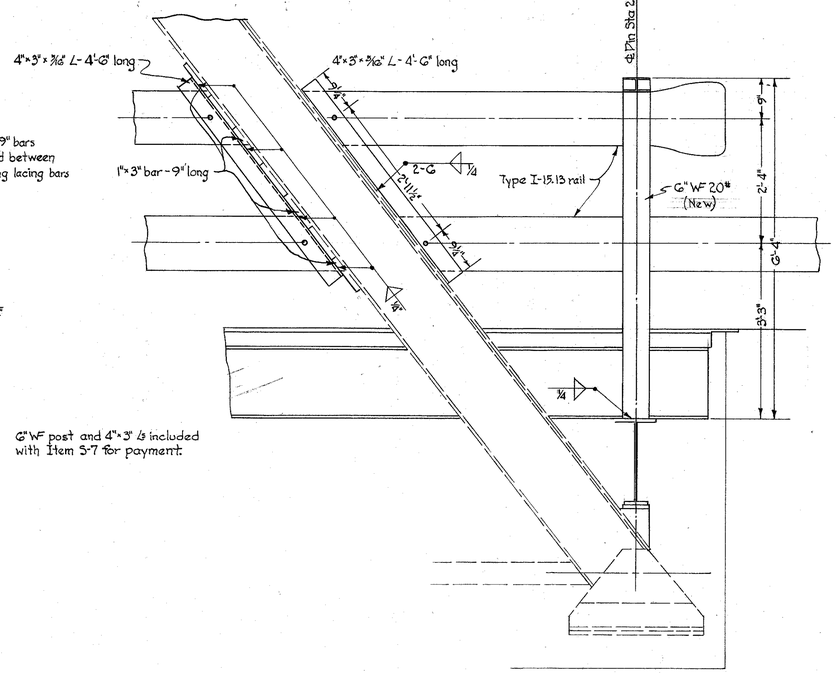
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

19
20

PIC-316-(4.22 - 4.31)







6" WF post and 4" × 3" ℓ is included with Item 5-7 for payment.

RAILING DETAILS at PIER and FORWARD ABUTMENT

STATE OF OHIO
DEPARTMENT OF HIGHWAY
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

RAILING DETAILS at PIER and EAST ABUTMENT

PIC-316-0431
over Big Darby Creek
PICKAWAY COUNTY

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
WMC	WMC				

MUHLENBERG TWP.
V.M.S. 515 & 2607

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

20/20

PIC-316-(4.22-4.31)

R/W PLAN

EVELYN L. MILLER

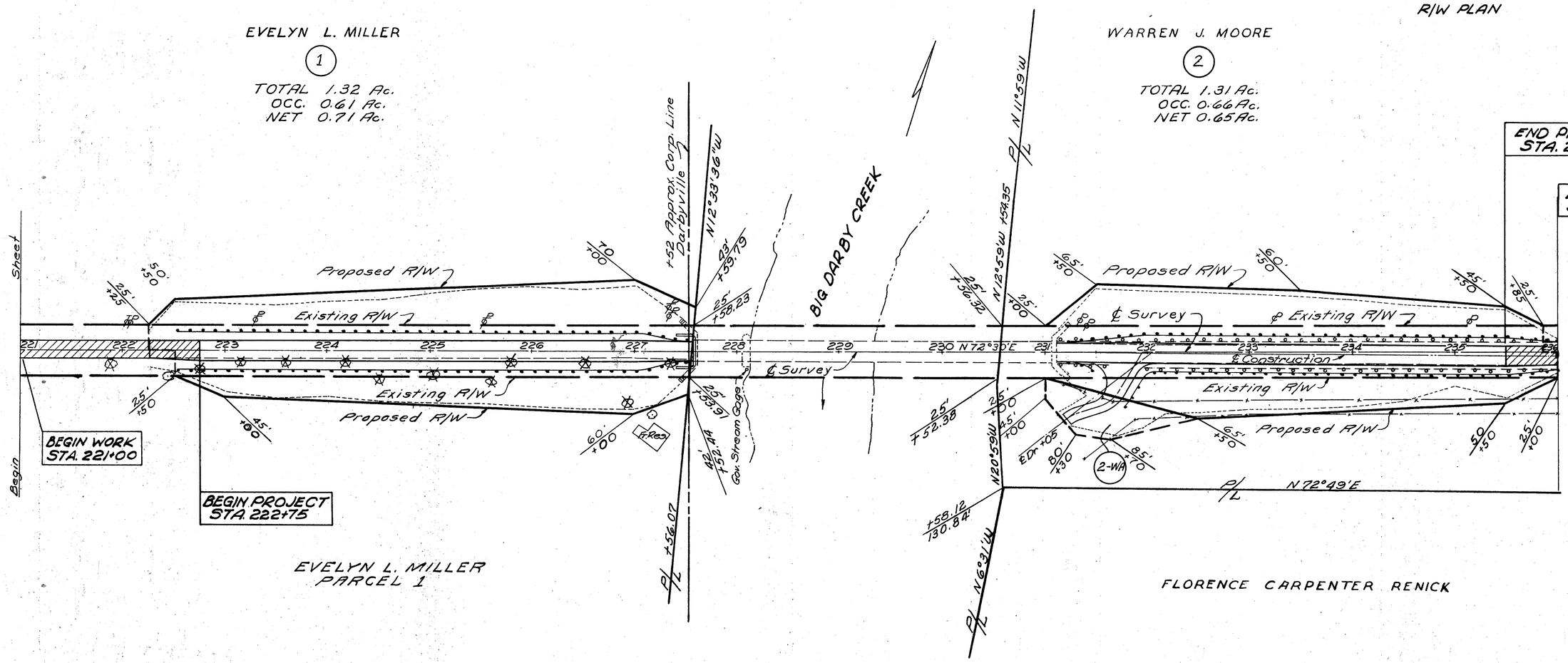
(1)

TOTAL 1.32 Ac.
OCC. 0.61 Ac.
NET 0.71 Ac.

WARREN J. MOORE

(2)

TOTAL 1.31 Ac.
OCC. 0.66 Ac.
NET 0.65 Ac.



EVELYN L. MILLER
PARCEL 1

FLORENCE CARPENTER RENICK

Route 316 Section (4.22 - 4.31) County PICKAWAY
Total Number Owners 2

SUMMARY OF ADDITIONAL R/W REQUIRED

Parcel No's	Owners	Area Acres	Exist. Bldg's	Sheet No's	Remarks
1	EVELYN L. MILLER	0.71	0	1	
2	WARREN J. MOORE	0.65	0	1	
2-WA	" " "			1	

MUHLENBERG TWP.
V.M.S. 515

SHEET No. 1 OF 1

STA. 221+00 To STA. 236+00