FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F 330 (3)	

POR-224-G.22

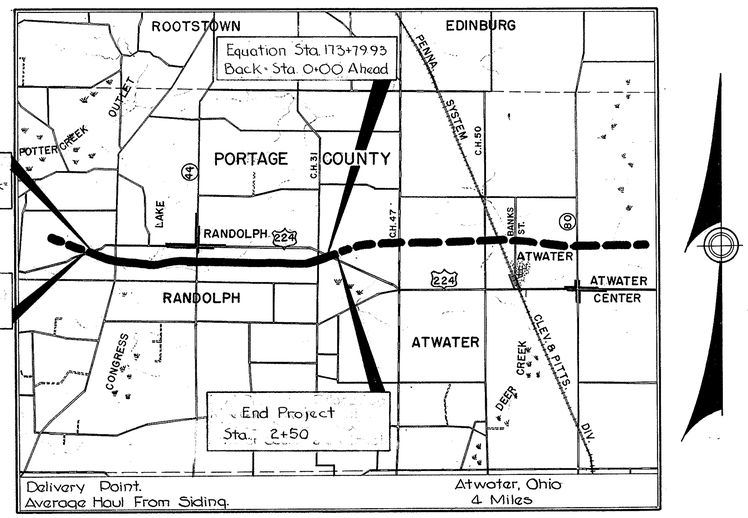
1 / 109

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
POR-224-6.22
PORTAGE COUNTY
RANDOLPH TOWNSHIP

F-330(3)

CONVENTIONAL SIGNS

Survey Center Line and Base Line		Mail Boxes	M
Property Lines		Swamp Area	
Existing Roads, etc.		Road Signs	RS
Fence Lines (regular)		Billboard Type Signs	S
Guard Fence (Existing)		**Trees**	
Guard Fence (Proposed)		Tree Symbol	
Woods Line		Maples	Mp
Brush Line		Cherry	Ch
Streams and Water Course		Plum	Pl
Railroads		Peach	Pe
Field Division Line		Apple	A
Existing Drainage Pipes		Walnut	W
Proposed Drainage Pipes		Hickory	H
Existing Catch Basins & Manholes	CB MH	Oak	Oak
Bench Mark		Locust	L
Survey Monument		Poplar	P
Reference Points		Pear	Pr
Ohio Hwy. Dept. Iron		Pine	Pi
Property Pipes Found		Elm	Elm
Property Plotted from Plats		Willow	Wl.
Power Poles		Cottonwood	Cw
Telephone Poles		Ash	Ash
Guy Poles	GP	Beech	B
Light Poles		Butternut	Bn
		Trees to be removed	



LOCATION MAP

SCALE OF MILES 0 1 2 3 4

Portion to be improved
Federal Routes
State Routes
Other Routes

INDEX OF SHEETS

Title Sheet	1	Super-elevation Tables	29-30
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General Notes	5	Special Raised Curb Inlet Detail	37
Quantity Recapitulation	6	Cross Sections	38-93
Quantity Calculations	7	Bridge Plans (over 20' span)	94-98
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Plan & Profile	9-28	Fence Detail	37-A

LINE DATA

Begin Project Sta. 423+81.76
Equation: 425+12.62 Back = 0+00.0 Ahead
" 173+79.93 Back = 0+00 Ahead
End Project Sta. 2+50

NET LENGTH OF PROJECT = 17,760.79 L.F. or 3.363 Miles

Add For Approaches

Relocated U.S. 224 - Sta. 423+75 to 423+81.76 =	6.76	L.F.
Sta. 2+50 (At. Sect.) to 6+00 (Ran. Sect.) =	350.00	L.F.
Exist. U.S. 224 (West Cross.) Sta. 4+00 W. to 0+30 E.	430.	L.F.
Sta. 0+66 E. to 4+00 E.	334.	L.F.
State Rte. #44 Sta. 0+44 N. to 3+60 N.	316.	L.F.
Sta. 0+44 S. to 3+60 S.	316.	L.F.
County Highway #31 - Sta. 0+39 S. to 6+50 S.	611.	L.F.
Sta. 0+52 N. to 5+00 N.	448.	L.F.
Exist. U.S. 224 (East Cross) Sta. 0+67 W. to 6+75 W.	608.	L.F.
Sta. 0+67 E. to 4+50 E.	383.	L.F.
Total =	3802.76	L.F. or 0.720 Mile
NET LENGTH OF WORK =	21,563.55	L.F. or 4.084 Miles

SCALE

Plan	1"=50'
Profile: Horizontal	1"=50'
Profile: Vertical	1"=5'

Supplemental Prints of Std. Constr. Drawings			
S-27 PC-3	2-20-45	G-7.07	6-1-56
L-3	4-1-50	I-21-23	8-1-56
L-3-A	4-1-50	SD-53	7-21-55
R1-1	1-3-55	DR-1	1-3-55
T-35	1-2-56	LJ No. 1	7-1-55
S-27-PC-4	1-4-54	B-T-71R	3-2-53
I-1,2,3,4&5	2-20-45	T-J	5-1-56
I-8-CB-2-2-A&B	8-1-56	A-1-54	7-1-54
I-8-CB 1-3 & 1-4	5-1-52	P-1-54	7-1-54
I-8-MH-1	5-1-52	I-14 G	1-22-52
I-12	7-1-54	B.T.-50-70-71E N°1	10-1-47
I-15-No. 1	8-1-55	L-1	4-1-50
I-15-No. 2	12-1-54	OS-2	7-1-55
CS-1-54	7-16-56	I-8 M.H. N°-1-A	1-3-55
I-15 No. 2-A	7-2-56	AS-1-54	12-1-54

Supplemental Specification	
L-209.12	7-17-54
18	Rev. 9-7-55
M-109.23	Rev. 4-20-56
M-103.14	7-31-50
M-110.27	9-9-52
6	12-28-55
5	6-8-55
B-119	Rev. 6-30-56

LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a Limited Access Highway or Freeway by action of the Director of Highways in accordance with provisions of Section 5511.02 of the revised Code of Ohio.

The standard specifications of the State of Ohio, Department of Highways, including changes and supplemental specifications listed in the proposal shall govern this improvement.

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

I hereby approve these plans and declare that the making of this improvement will not require the closing of the Highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved Carl L. Campbell
Date 10-19-56 Division Deputy Director

Approved John Hines
Date 11-8-56 Deputy Director of Planning and Programming

Approved D.H. Overman
Date 11-5-56 Engineer of Bridges

Approved E.S. Preston
Date 11-6-56 Engineer of Location and Design

Approved H. J. Gerald
Date 11-6-56 Deputy Director of Design and Construction

Approved V.T. Schaublin
Date 11-8-56 First Assistant Director

Approved J.O. Linzell
Date 11-8-56 Director of Highways

CONSTRUCTION BUREAU AUG 4 1959 GROUND PHOTOLAB

PREPARED AND RECOMMENDED BY
AURILIO, PAGE AND BALLARD
CONSULTING ENGINEERS
Wilson T. Ballard
WILSON T. BALLARD
HIGHWAY PLANS

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DISTRICT ENGINEER DATE

File No. POR-224-G.22
Date of Letting 19
Contract No.

TITLE SHEET

FED. F. DIVISION	STATE	PROJECT	FISCAL YEAR	2 / 109
2	OHIO	F 330( )		

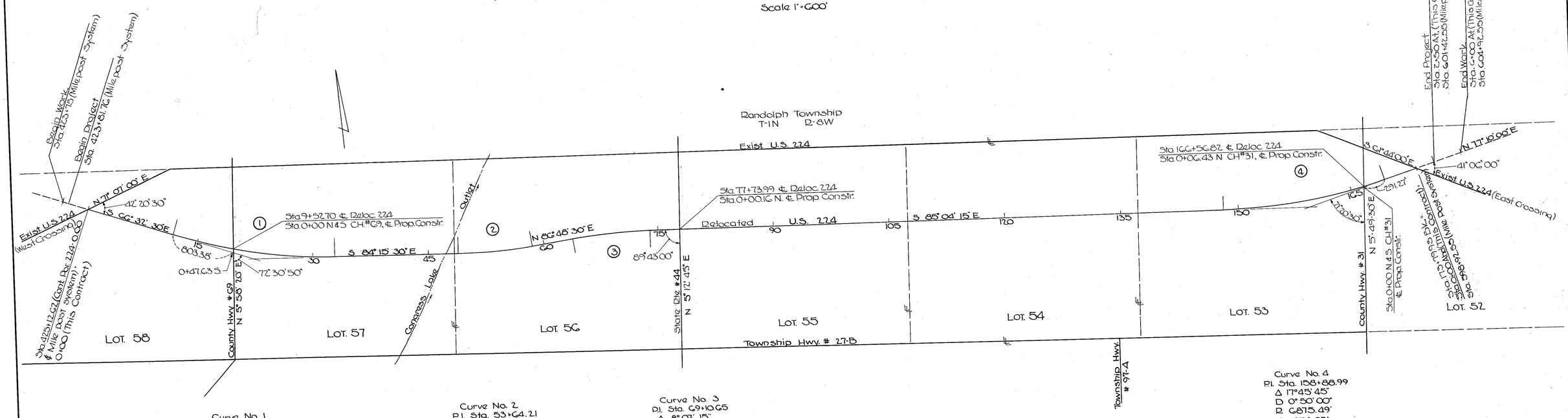
POR-224-G.22

RELOCATION PLAN

POR. - 224 - G.22

PORTAGE COUNTY - RANDOLPH TOWNSHIP

Scale 1"=600'



Curve No. 1
P.I. Sta. 22+33.44
Δ 17° 43' 00"
D 0° 50' 00"
R 6875.49'
T 1071.55'
L 2126.00'
E 83.00'
P.C. 11+61.89
P.T. 32+87.89

Curve No. 2
P.I. Sta. 53+64.21
Δ 8° 56' 00"
D 0° 56' 00"
R 6138.83'
T 479.54'
L 957.14'
E 18.70'
P.C. 48+84.67'
P.T. 58+41.81

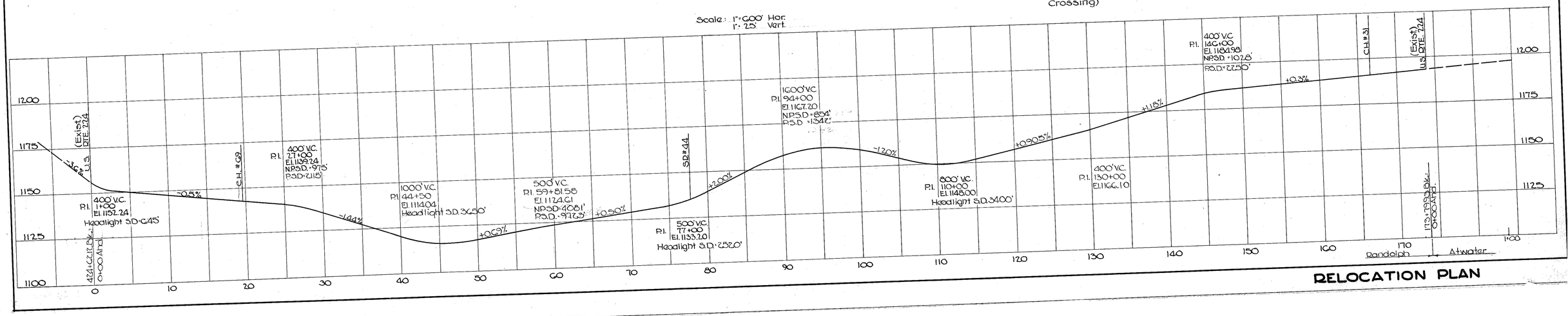
Curve No. 3
P.I. Sta. 69+10.65
Δ 8° 01' 15"
D 0° 50' 00"
R 6875.49'
T 488.07'
L 974.50'
E 17.30'
P.C. 64+22.58
P.T. 73+97.08

Curve No. 4
P.I. Sta. 158+88.99
Δ 17° 45' 45"
D 0° 50' 00"
R 6875.49'
T 1074.37'
L 2131.50'
E 83.43'
P.C. 148+14.62
P.T. 169+46.12

Note:
The Ohio Planning Survey mile post system stationing is shown at the beginning and end of this project. However the stationing for this project is based on 0+00 at the intersection of existing U.S. Rte. 224 (West Crossing)

No. curves existing line	3
No. curves proposed line	4
Max. curve existing line	7° 30'
Max. curve proposed line	0° 56'
Length existing line	3.3 Miles
Length proposed line	3.3 Miles
Max. grade existing line	5.0 %
Max. grade proposed line	3.60%

Scale: 1"=600' Hor.
1"= 25 Vert.



RELOCATION PLAN

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F330( )	

3/109

POR-224-G22

RELOC. U.S. ROUTE 224 TYPICAL SECTIONS
TYPE T-71
SCALE 1"=5'

UTILITY COMPANIES

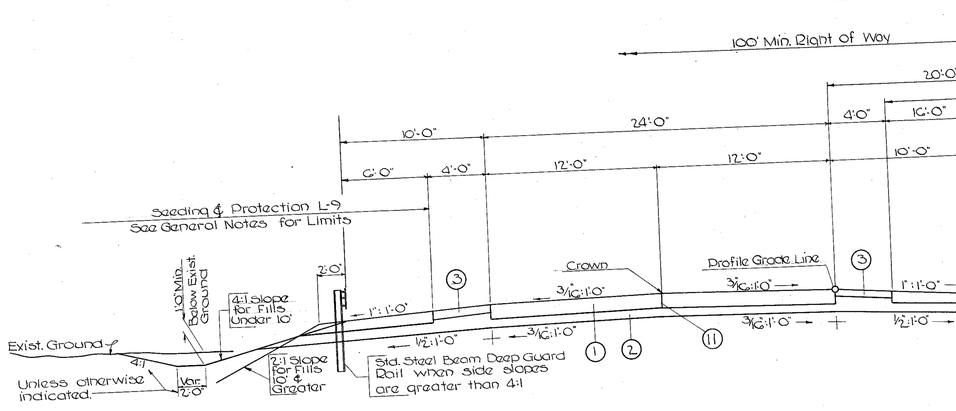
The Ohio Edison Co.
47 N. Main St.
Akron 8, Ohio.

The Ohio Bell Telephone Co.
Room 504
820 W. Superior Ave
Cleveland, 13 Ohio.

Design Speed 70 M.P.H.

TYPICAL SECTION KEY		
STATIONS		PROPOSED CONSTRUCTION
From	To	
42+81.76	60+00	Grade & pave W.B. Lanes only. Ⓐ
60+00	62+50	Transition grading and paving to dual highway section Ⓐ&Ⓔ
62+50	84+00	Grade and pave dual highway section Ⓐ&Ⓑ or Ⓒ&Ⓓ
84+00	89+00	Transition grading and paving to W.B. Lanes construction only. Ⓐ&Ⓔ
89+50	96+50	Grade and pave W.B. Lanes only Ⓐ&Ⓑ
96+50	118+00	Grade for W.B. Lanes & E.B. Lanes. Pave W.B. Lane only Ⓐ&Ⓑ ⊕
118+00	148+14.62	Grade and pave W.B. Lanes only. Ⓐ
148+14.62	155+00	Transition grading and paving to dual highway section. Ⓐ&Ⓔ
155+00	2+50 (AT)	Grade and pave dual highway section. Ⓐ&Ⓑ or Ⓒ&Ⓓ
2+50 (AT)	6+00 (AT)	Grade dual highway section only. Ⓐ&Ⓑ ⊕

⊕ In Fill areas where grading only is to be performed at this time, the fill material shall be placed to the bottom of the subbase.



TYPICAL SPECIAL DITCH AT TOE OF FILL SLOPES

Note: Sod or Conc. shall be placed in ditches only when indicated on plans.

TYPICAL FILL

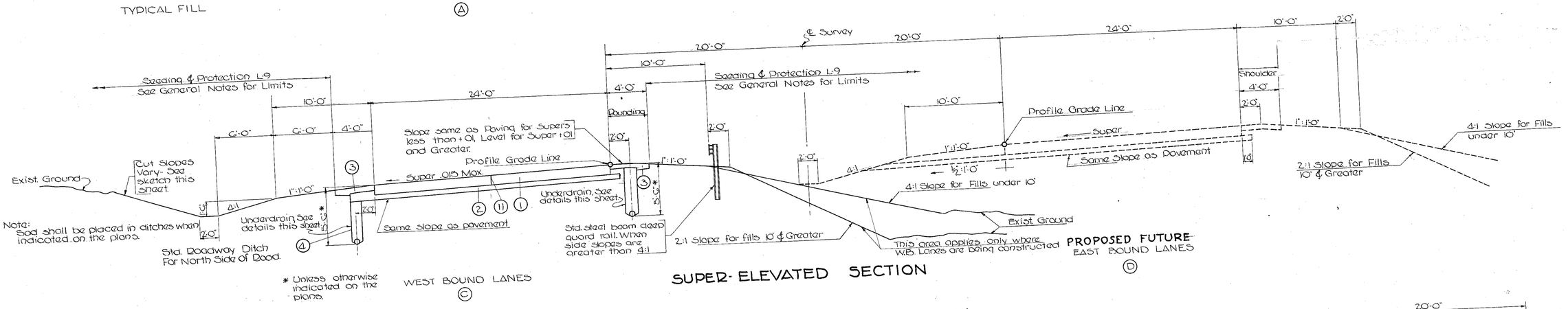
WEST BOUND LANES
Ⓐ

TYPICAL CUT FOR SOUTH SIDE OF ROADWAY

TANGENT SECTION

Note: Sod or Conc. shall be placed in ditches only when indicated on plans.

PROPOSED FUTURE EAST BOUND LANES
Ⓑ



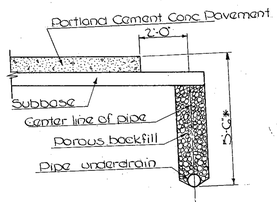
WEST BOUND LANES
Ⓒ

SUPER-ELEVATED SECTION

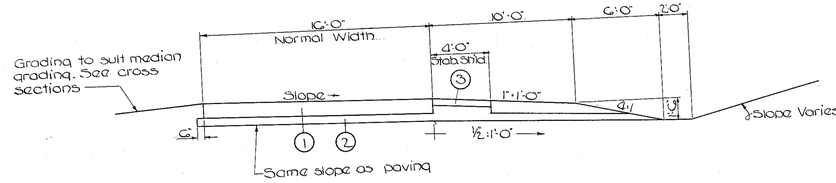
PROPOSED FUTURE EAST BOUND LANES
Ⓓ

LEGEND

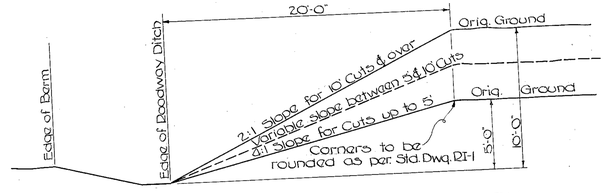
1. T-71, 9" Reinforced Portland Cement Concrete Pavement.
2. I-22., 6" Subbase
3. I-18, 6" Stabilized Crushed Aggregate Shoulders
4. I-4, Typical 6" Pipe Underdrain (Deep) (See Std. Constr. Drawing RI-1
11. Std. Longitudinal Joints.



PIPE UNDERDRAIN
Scale 1"=3"



TYPICAL TRANSITION SECTION
Sta. 60+00 to 72+50
80+00 to 89+00
148+14.62 to 160+50
Ⓔ



VARIABLE CUT SLOPE DESIGN
Scale: 1"=5'-0"

TYPICAL SECTIONS

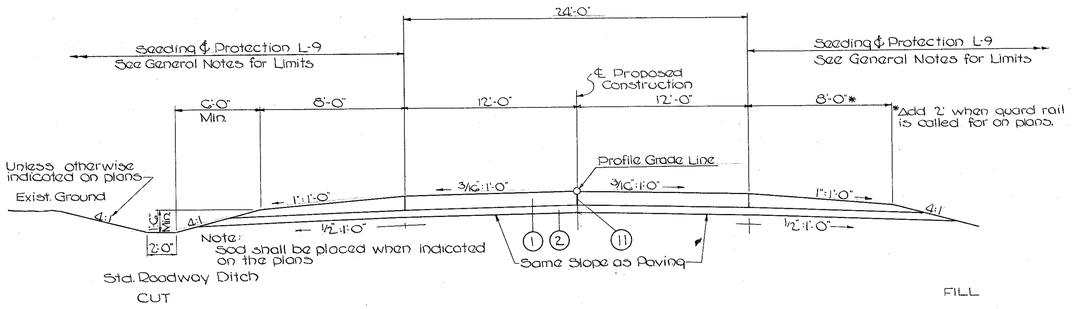
FED. R/A DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F330( )	

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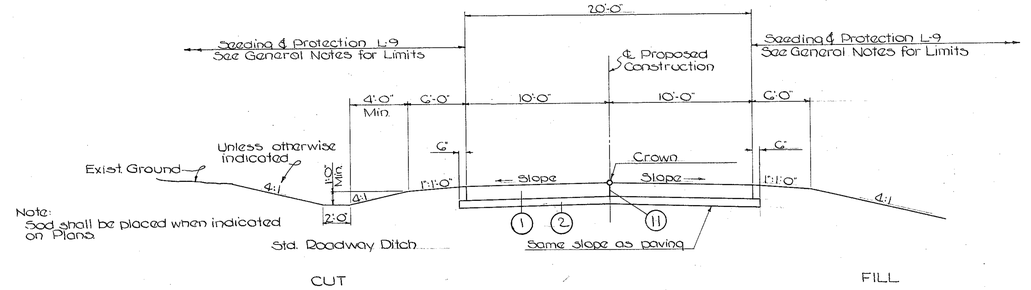
POR-224-G22

TYPICAL SECTIONS INTERSECTING ROADS

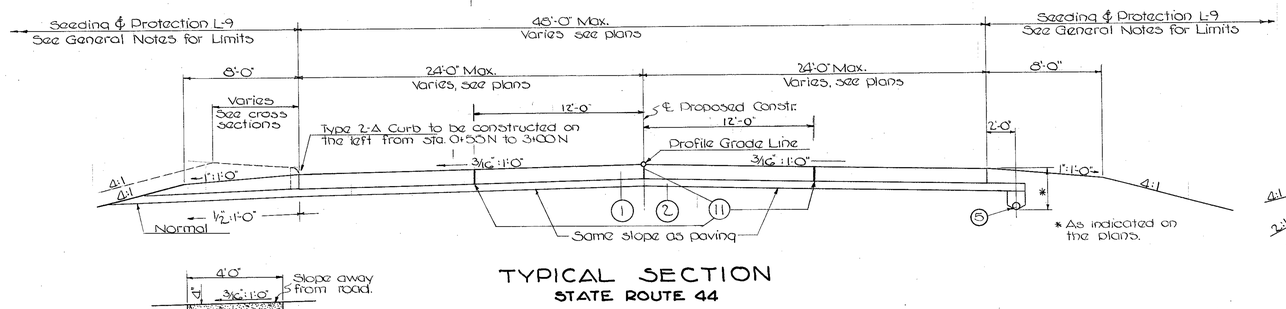
Scale 1"=5'



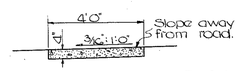
TYPICAL SECTION - EXISTING U.S. ROUTE 224
CROSSINGS AT EAST END AND WEST END OF RANDOLPH SECTION



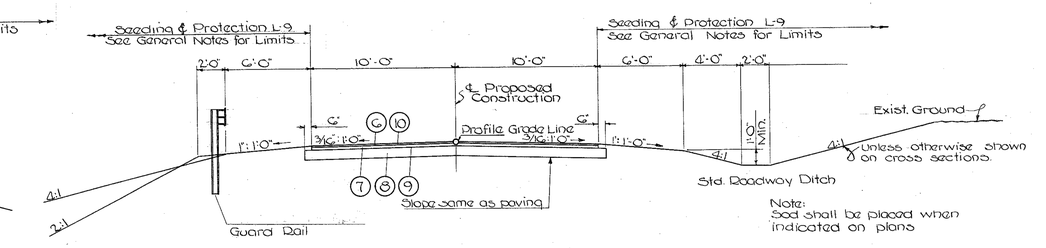
TYPICAL SECTION
COUNTY HIGHWAY # 69



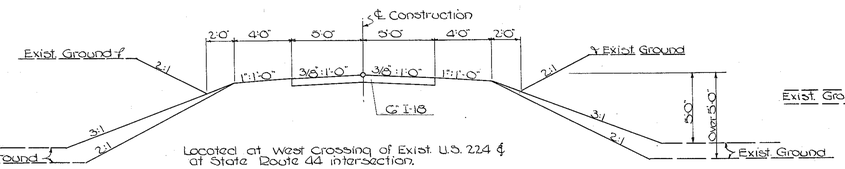
TYPICAL SECTION
STATE ROUTE 44



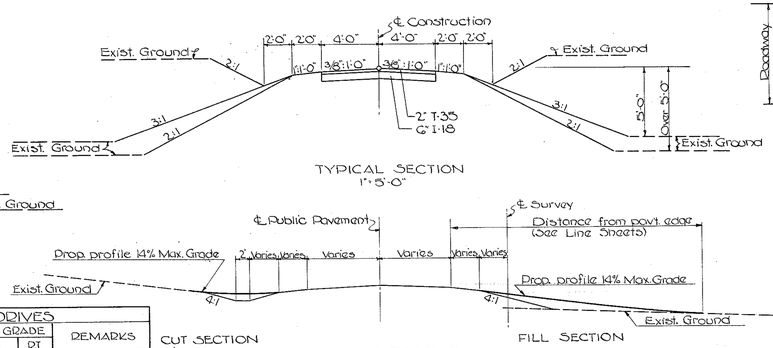
TYPICAL SIDEWALK FOR SR.44
(See plan for location)
Scale 1"=3'-0"



TYPICAL SECTION
COUNTY HIGHWAY # 31

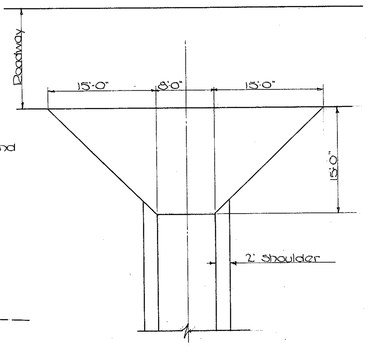


TYPICAL SERVICE DRIVE



TYPICAL SECTION
1"=5'-0"

DRIVE PROFILE.
1"=10'



TYPICAL DRIVE
1"=10'

TYPICAL RESIDENTIAL DRIVEWAY

RESIDENTIAL DRIVES					
LOCATION	STATION	SIDE	% GRADE LT.	% GRADE RT.	REMARKS
Exist. US 224 West Crossing	3+25 W	Lt.	14%		
SR. 44	1+90 S	Lt.	8%		
SR. 44	2+53 S	Rt.		8%	
SR. 44	3+37 S	Lt.	Exist.		
SR. 44	3+52 S	Lt.	Exist.		
SR. 44	1+30 N	Lt.	1%		
SR. 44	1+45 N	Rt.		8%	
SR. 44	2+76 N	Lt.	8%		
CH. 31	2+85 N	Rt.		14%	
CH. 31	3+40 N	Lt.	14%		
CH. 31	2+25 S	Rt.		12%	
Exist. US 224 East Crossing	1+75 W	Rt.		8%	
"	4+20 W	Rt.		12%	
"	5+85 W	Lt.	10%		

① T-71, 9" Reinforced Portland Cement Concrete Pavement
② I-22, 6" Subbase
③ I-18, 6" Stabilized Crushed Aggregate Shoulders
④ I-4, Typical 6" Pipe Underdrain (Deep) (See Std. Construction Drawing DI-1
⑤ I-4, Typical 6" Pipe Underdrain (Shallow)
⑥ T-35, 1 1/2" Asphaltic Concrete Surface Course, Type A (70-80)
⑦ B-35, 2" Asphaltic Concrete Leveling Course. (70-80)
⑧ I-18, [illegible] 8" Stabilized Crushed Aggregate Shoulders and Approaches.
⑨ T-30, Bituminous Prime Coat, See M-5.7 RT-2 or RT-3; or Sec. M-5.2 RC-1 or RC-2 (0.35 gal. per Sq.Yd.)
⑩ T-30, Bituminous Tack Coat (0.10 gal. per S.Y.) See Note in Proposal
⑪ Std. Longitudinal Joint

FED. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-360( )	

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POR-224-6.22

GENERAL NOTES

BERMS & SLOPES

Berms & slopes shall be finished in accordance with the typical sections except where otherwise shown or noted on the cross sections. Although the cross sections as drawn show straight lines and angles, in construction all corners shall be rounded as shown on Stnd. Dwg. "B21-1. All transitions from Cut to Fill slopes shall be blended with the surrounding terrain as directed by the engineer.

FIELD OFFICE

The contractor shall provide a suitable field office in accordance with section 5-0.01 having a minimum floor area of 300 sq. ft. The contractor shall have a telephone installed and maintained during the construction of this project.

TREE & STUMP REMOVAL

All trees and stumps within the construction limits, which are 12" or more as measured per item E-9.01 shall be removed and paid for under item E-9 Lump Sum if marked for removal by the engineer. This number may vary from those trees shown on the plan. Payment for the removal of these additional trees or stumps is included in the Lump Sum bid for the removal of trees and stumps.

MAIL BOXES

The protecting, moving, adjusting, etc. of all mail boxes to secure satisfactory delivery of U.S. Mail shall be considered a part of Item G-7.09 "Preservation & Restoration of Property."

ITEM L-9 SEEDING & PROTECTING, L-9 12-12-12 COMMERCIAL FERTILIZER AND L-9 AGRICULTURAL LIMING MATERIALS

Quantities for these items are calculated for the soil areas between lines ten feet (10') outside the work limits as shown on the cross sections or to the R/W line if such line is less than ten feet from work limits. Seeding shall be omitted on areas to be sodded. All areas outside these limits where the vegetative growth has been injuriously disturbed or destroyed by the contractor, shall be restored and seeded in accordance with the provisions of item L-9 by the contractor at his own expense.

ITEM L-10 SODDING

Areas to be sodded shall be loosened to a depth of 2" just prior to laying the sod. This work shall be included for payment in the price bid per sq. yd. of sodding.

ITEM L-9 AGRICULTURAL LIMING MATERIALS

The location and need for agricultural liming materials will be determined by laboratory tests after rough grading operations have been performed. On the areas where tests indicate the material is not needed, it will be non-performed.

SCALPING

Topsoil from the scalping operation shall be salvaged and placed on all areas to be seeded and sodded as per E-1.03(a) and E-1.05(d). The thickness of replaced topsoil shall be a minimum of 2 inches (loose measurement).

FLEXIBLE FORMS

Approved flexible forms shall be used for construction of circular pavement edges having a radius of 200' or less, circular concrete curbs and concrete curb transitions of short radii.

ITEM I-22 SUBBASE

In the finishing of slopes and ditches care shall be exercised so that the exposed edge of the sub-base (where it extends through the shoulder) be left free of earth cover that would impede free drainage.

In addition to the provisions of Sec. I-22.02, material meeting the requirements of Supplemental Specification M-103.14 (Slacker Aggregate) may be used for this project.

DRIVEWAYS

The distance shown on driveways refers to the length of cut or fill from edge of pavement to the original ground. On old drives the surface course shall extend to the point where the new work meets the existing drive. The maximum allowable grade is 14%. For proposed grades of new drives see sht #4.

CONTRACTION JOINTS

In addition to the pavement joints detailed for approaches and intersections, the maximum distance between contraction joints shall in all cases be in accordance with Stnd. Dwg. T.J.

TRAFFIC

Two way traffic shall be maintained at all times on existing U.S. Rte. 224 and on S. Rte. 44. The contractor shall so arrange this work, that a minimum of inconvenience and a maximum of safety shall be assured traffic on these routes.

The contractor shall notify the Division Traffic Supervisor at least 10 days prior to the beginning of work on any of the approaches within 300 ft. of the intersection of Reloc. U.S. Rte. 224 with Exist. Rte 224 or State Rte. 44.

The contractor shall also notify the County Engineer prior to the beginning of work on County Hwy. 69 and County Hwy. 31.

The contractor shall maintain the existing roadway and pavement by making the necessary repairs including patching the pavement with bituminous material when requested by the engineer. A quantity of asphaltic concrete has been set up as a pay item for maintaining traffic the same as for aggregate and calcium chloride. 200 cu.yd. of T-1.0, 4 tons of M-1.0 and 2.0 cu.yd. of T-3.5 have been included in the General Summary to be used as directed by the engineer for maintaining traffic on all roads.

See note this sheet concerning Sequence of Operations and Temp. Run-Around Roads.

See Sheet #20 for note concerning Barricades.

ITEM T-10: Slacker Aggregate Sec. M-103.14 may be furnished for this item.

DUST CONTROL

Five (5) tons of calcium chloride has been provided for reduction of dust near all residences. The calcium chloride will be applied at the direction of the project engineer. This quantity is provided in the General Summary.

SPRINGS

An additional quantity of (2) No. 1 MH's and 80 L.F. of 6" pipe are carried in the recap to be used as directed by the engineer for providing outlets for existing springs.

TYPE A FENCE MODIFIED shall have a height of 39" in lieu of 47" as required by Supplemental Specification No. 18.

MISCELLANEOUS REMOVALS

The removal and disposal of any existing pavement, sidewalk, building foundations, steps, cellar floors, well covers, cistern covers, septic tanks, concrete bases, walls, curbs, curb and gutter, rails, ties pole stubs, headwalls, pipes, driveway and garage floors or other masonry lying within the right of way (and not specifically paid for under a separate item) shall be classified as excavation, and paid for under the excavation item of which they are a part. If lying below or outside the plan limits for excavation, additional excavation necessary to perform the above operations shall be paid for at the contract unit price bid per cu. yd. for Roadway Excavation Item E-1 or Excavation for Structures Item E-2.

Pavements, sidewalks, steps, cellar floors, or other masonry shall be excavated to a depth of (3) three feet below the proposed pavement subgrade, and to a depth of (3) three feet below the proposed finished surface if located outside the proposed pavement area. If items extend below the above units, they shall be broken up into portions not to exceed (1) one sq. ft. in area but need not be removed.

Wells, cisterns and septic tanks encountered on the project shall be filled with broken foundation masonry or rock placed as rock embankment according to section E-1.08 of the Construction and Materials Specifications.

UTILITY NOTE

Any and all work required for removing, relocating, and construction of new facilities for private or public utilities will be done by and at the expense of the respective owners unless otherwise noted on the plans.

RIGHT OF WAY

All details shown for the Right of Way Lines on the plans are referenced to the ℄ of the Right of Way Line which is not in all cases the ℄ of proposed construction.

UNDERGROUND UTILITIES

The locations of the underground utilities shown on the plans have been obtained by diligent field checks and searches of available records. It is believed they are essentially correct, but the State Of Ohio makes no guarantees as to their accuracy or completeness.

PROPERTY MARKERS

All iron pins or markers within the limits of the project shall be saved and adjusted to the new grade by the contractor as directed by the engineer. Cost of the adjusting and resetting of markers shall be included in the unit price bid for item E-1 Roadway excavation.

T-30 BITUMINOUS TACK COAT

This shall be applied at the rate of 0.1 gal. per sq. yd.

REMOVAL OF EXISTING HOUSE DRAINS

The removal of all existing house connections, which includes sanitary, yard, roof, basement or other similar pipe drains within the roadway construction limits shall be classified and paid for as Item E-1, Roadway Excavation, unless otherwise itemized for payment in the plans.

MEDIAN

Stations given for the beginning and end of the median are to the radius points.

TILE FOR SUBGRADE DRAINAGE

6" Drain tile shall be furnished and placed by the contractor in manholes, catch basins, and inlets for subgrade drainage, where as directed by the engineer. Payment for same shall be included in the price bid per "Each" for manholes, catch basins, and inlets.

SPECIAL DITCHES

For special ditch grades, see cross sections.

SPECIAL SEEDING

Recently cultivated areas located within the right of way but beyond the limits prescribed for item L-9, Seeding and Protecting, where specified on the plan, shall be seeded in accordance with the following:

The area shall be cleared of all weeds and other objectionable material and the surface shall be loosened to a depth of two inches. Red top seed shall be evenly sown in an approved manner at the rate of two pounds to each one thousand square feet. The area shall then be raked or dragged with a light drag to cover the seed. Fertilizing and mulching will not be required.

Seed shall meet the requirements of section L-9.05 of the specifications.

Special seeding shall be performed only between April 1 and May 31 or between September 1 and October 15.

Measurement and payment for item, "Special Seeding as per plan," shall be made in accordance with the applicable provisions of Sections L-9.13 and L-9.14 of the specifications.

ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION

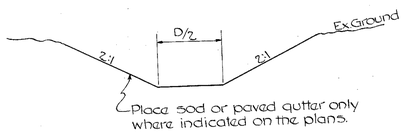
Access to all properties abutting this improvement exclusive of those within the L.A. portion, shall be provided and maintained at all times by the Contractor.

OVERHEAD SIGN ASSEMBLY

Overhead Sign Assemblies are to be placed at approximate locations shown on detail plans. The final location shall be at the direction of the Project Engineer.

UNDERGROUND PIPE FOR TRAFFIC SIGNAL INSTALLATIONS:

Underground pipe for traffic signal installations will be installed 120'± each way from the intersection of S.R. 44. The pipe will be placed perpendicular to the centerline of the highway at a depth of not less than 18" or more than 30" from the surface of the pavement and extend 2' beyond the edge of the pavement and be capped so as to keep the earth out of the pipe. Quantities are carried on the line sheet.



TYPICAL OUTLET DITCH

Not To Scale

ITEM E-4 BORROW USING GRANULAR MATERIAL

A peat bog is located left of Relocated U.S. Rte. 224 centerline between stations 3+00 and 5+50. This unsuitable material shall be completely removed from under the proposed construction with the left lateral limit being where a 3 horizontal to 1 vertical slope intersects the top of the peat, (see cross-sections). Granular backfill shall be used up to elevation 1140.0 in this area where peat is removed. Normal embankment material shall be used above this elevation.

The granular backfill material shall be in accordance with E-1.02 of the specifications modified to require at least 75% by weight of the grains or particles to be retained on the No. 200 sieve.

Two pay items of E-4 Borrow Using Granular Material have been provided for:

A. Item E-4 Borrow Using Granular Material Above Original Ground as per plan. The method of measurement shall be the volume in C.Y. completed and accepted in final position by cross-sections superimposed on the original project cross-sections and the volume computed by the average end area method plus 5% for compaction.

B. Item E-4 Borrow Using Granular Material Below Original Ground as per plan Including The Cost of Excavation of Unsuitable Material. The quantity to be paid for shall be the total quantity of granular material for borrow as measured by Section E 4.04 minus the quantity which does not include the cost of excavation as determined under par. A. above.

SEQUENCE OF OPERATIONS AND S-15 TEMP. RUN-AROUND ROAD AS PER PLAN

As previously stated traffic will be maintained at all times on Exist. U.S. 224 and S.R. 44. The following sequence of operations for accomplishing this is suggested:

1) S.R. 44 construction should be completed prior to any interruption of traffic on Exist U.S. 224. Temp. Run-Around as shown on the plans should be built to handle traffic during reconstruction of this road.

2) The Reloc. U.S. 224 construction should then be completed between the eastern & western intersections with the Exist. U.S. 224.

3) Construct the temporary run-around shown on the plans at the eastern intersection with Exist U.S. 224. Construct the intersection and its east approach along the Exist U.S. 224. The west approach along the existing road and the Reloc. U.S. 224 east of the intersection can be completed once the traffic is turned over the new route.

4) The procedure at the western intersection with Exist. U.S. 224 should be as follows:

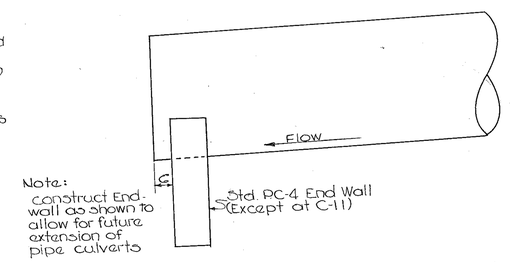
(a) Close Old U.S. 224 west of this intersection and reconstruct the exist. road as shown on the plans to a point as close to the south edge of Reloc. U.S. 224 as practical.

(b) Construct temporary run-around as shown on the plans between Reloc. U.S. 224 & Old U.S. 224 to the west.

(c) Turn traffic over the new route at the eastern intersection with exist. 224, thence along the new route to the western intersection with exist. 224, thence over the temp. run-around and onto the old 224 to a point designated by the Division Traffic Engineer where the traffic can be turned back onto the new route. The above described traffic pattern will allow for the closing of the western intersection with the existing road and thus the construction can be completed and the traffic turned back over the new route.

The contractor may submit any alternate plan for maintenance of traffic to the Project Engineer for his approval prior to the beginning of any construction which would disrupt the traffic on U.S. 224 or S.R. 44.

The Run-Arounds shall be in accordance with S-15 of the specifications. The paving shall be Class 'A'. Grades shall be as directed by the Engineer.



SPECIAL DETAIL FOR END WALL CONSTRUCTION ON SOUTH SIDE OF PROPOSED ROADWAY FOR C-2, 3, 4, 5, 6, 11 & 12

Scale: 1" = 2'-0"

RECAPITULATION

PROJECT	FISCAL YEAR
2-QM&F-330( )	

POR. 224-G22

6
109

ROADWAY

SHEET NO	E-1 EARTHWORK EXCAV. C.Y.	EMB. C.Y.	EMB. % SHR. C.Y.	EXCAV. UNSUIT. MATR. C.Y.	L-9 SEEDING & PROTECT. SY.	E-4 GRANULAR BORROW INCLUDING EXCAV. C.Y.	E-4 GRANULAR BORROW C.Y.	E-8 REMOVAL & DISPOSAL EXIST. PAVT. SY.	EXIST. CURB L.F.	EXIST. SIDE WALK SF.	E-12 REMOVAL & DISPOSAL OF UNDER. 15" L.F.	E-12 REMOVAL & DISPOSAL OVER 15" L.F.	I-8 MON BOX ASSEMBLY EA.	I-18 DEEP BEAM L.F.	I-15 (Barricade) Temp. Guard Rail L.F.	SS-18 RIGHT OF WAY FENCE L.F.	S-15 TEMP RUN-AROUND ROADS Lump	S-25 3" M-G.9 STEEL PIPE L.F.	BRIDGE TYPE OVERHEAD SIGN ASSEMBLY TYPE A 40' SPAN EA.	BRIDGE TYPE OVERHEAD SIGN ASSEMBLY TYPE A 30' SPAN EA.
10	9365	13783			10500	2111	316	2544	120				1	800		1841	Lump			
11	690	1556	See		4352															
12	8895	1692	Calculation		10456						18		1			2512				
13	1362	176	Sheet		2793															
14	15423	14			9232								2			2400				
15	8025	10760		795	13674						100			500		2400				
16	16040	3767			10715								1	514.72		2400				
17	6933	4213			11633								2	100		2400				
18	26945	9132			15057			600		800	345		2	400		2288	Lump	232	1	2
19	2253	197			2623										187.5	2430			1	
20	34591	0			12788								1			2400				
21	4562	25495			20078								1	600		2400				
22	1371	39789			19729											2400				
23	3108	8044			9823								1			2400				
24	3423	2109			8187								1			2400				
25	25252				11809								1			2200				
26	2713	10232			12223						950	35	2	150	162.5	2897	Lump			
27-28	*33373	*10222			*31370			2300												
3C																				
5																				
TOTALS	204524	142181		795	217042	2111	316	5444	120	800	1413	35	16	3064.72		35768		232	2	2
TO CALCULATION	204524	142181																		
TO GEN. SUMMARY				795	217042	2111	316	5444	120	800	1413	35	16	3064.72	350	35768	Lump	232	2	2

DRAINAGE

SHEET NO	I-3 6" M-64(b) RDWY. DR. L.F.	E-2 EXCAV. FOR STRUCT. C.Y.	E-3 CHANNEL EXCAV. C.Y.	I-1 12" L.F.	I-2 CLASS A 12" L.F.	12" U.P. L.F.	15" L.F.	15" U.P. L.F.	18" U.P. L.F.	21" L.F.	21" U.P. L.F.	42" U.P. M-66(a) L.F.	42" L.F.	I-4 UNDERDRAINS 6" SHALLOW L.F.	6" DEEP L.F.	8" OUTLET L.F.	I-5 6"x45° BEND EA.	I-8 STD. 1-4 C.B. EA.	STD. 2-2A C.B. EA.	STD. TYPE I M.H. EA.	SPEC. RAISED CURB INLET EA.
10															600						
11																					
12															2400					1	
13															925	126	3				
14															1850	84	2				
15															1775	84	2				
16		1.5		76	88		110	22	80					290	1385	486	3	2	3	2	1
17															1890	340	2				
18															500						
19															200	84	2				
20															600						
21															1140	84	2				
22															2400						
23															1600	84	2			1	
24		1.5					34	58							1705	35				4	
25		3.5		112		264	24	84		62	24	66									
26		1536	934										496	348						2	
27-28																					
3C	80																				
5																					
TOTALS		1562.5	934	188	88	264	168	164	142	24	66			290	18970	1407	18	2	8	5	1
TO CALCULATION	80	1663	934	188	88	264	168	164	142	24	66	496	348	290	18970	1407	18	2	8	5	1
TO GEN. SUMMARY																					

DRAINAGE

SHEET NO	I-14 STD. TYPE I PAVED GUTTER L.F.	I-14 SPEC. PAVED GUTTER L.F.	I-16 C.B. ABAND. EA.	I-16 M.H. ABAND. EA.	L-10 SODDING SY.	S-1 CLASS E CONC. FOR END WALLS C.Y.
10	365				60	
11						
12	165				722	
13					800	
14					1380	
15	875				430	
16	365				935	
17						
18	40		1	1	749	0.26
19						
20					1000	
21					100	
22					1100	
23					1030	
24					1800	
25					350	
26	10				915	0.26
27-28	50				1980	0.62
3C	203	105			69	33.06
5						
TOTALS	1973	105	1	1	13420	34.20
TO CALCULATION						
TO GEN. SUMMARY	1973	105	1	1	13420	34.20

PAVEMENT

SHEET NO	I-12 TYPE 2-A L.F.	I-13 4' WIDE SIDEWALK SF.	I-18 6" STAB. CRUSHED AGG. CY.	I-23 PRECAST CONC. TRAFFIC DIVIDERS EA.	T-38 2" CY.
10			68		34
11					
12					
13					
14					
15					
16				36	
17					
18	466	664	200.9		174
19					
20				12	
21					
22					
23					
24				21	
25					
26					
27-28	580		684		230
3C					20
5					
TOTALS	1046	664	337.3	69	638
TO CALCULATION			337.3		638
TO GEN. SUMMARY	1046	664		69	

* Includes Totals of Main Line Sta. 165+00 to 6+00 At. Exist. U.S. 224 East Crossing, ¢ CH #31

CALCULATIONS

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR	7 / 109
2	OHIO	[illegible]-330( )		

POR-224-6.22

E-1 ROADWAY EXCAVATION, SUITABLE MATERIAL

Total from Recapitulation Sheet — 204,524 Cu.Yd.
Adjustment to Excavation for underdrain — -2,963 Cu.Yd.
Note:
The earthwork total shown on the recapitulation sheet was computed prior to the receipt of the recommendations for underdrain placement - therefore, the values on the cross-section sheets were not changed. The templates, however, were adjusted to show the proper grading.

Total Excavation — 201,561 Cu.Yd.
Use — 201,561 Cu.Yd.

E-1 ROADWAY EMBANKMENT

Total from Recapitulation Sheet — 142,181 Cu.Yd.
Adjustment to Embankment for underdrain (See note above for explanation) — 972 Cu.Yd.
Adjustment to Embankment for placement of material above Sub-base in areas where underdrain is not to be place — +2800 Cu.Yd.

Total Adjustments — +3,772 Cu.Yd.
Total Embankment — 145,953 Cu.Yd.

Embankment + 25% Shrinkage = 145,158 × 1.25% (for Shrinkage) = **182,441 Cu.Yd.**

E-1 COMPACTED SUB-GRADE

Area for T-71 Paving (Main line & Side roads) — 72,985.0 Sq.Yd.
Area for County Hwy. 31 Paving — 2,106.5 Sq.Yd.

Total — 75,091.5 Sq.Yd.
Use — 75092 Sq.Yd.

E-11 WATER

Embankment	145,953 Cu.Yd. × 5 Gal.	729,765 Gal.
I-18	3,336 Cu.Yd. × 20 Gal.	66,720 Gal.
I-22	17,887 Cu.Yd. × 10 Gal.	178,870 Gal.
	Total	975,355 Gal.
	Use	**975 M Gal.**

I-18 STABILIZED CRUSHED AGGREGATE SHOULDERS & APPROACHES

Reloc. U.S. Rte. 224

423+81.76	To	424+38.12	56.36 × 2	112.72 Lin.Ft.
424+38.12	To	1+45.05	(Includ. Inter. Returns)	425.36 Lin.Ft.
1+45.05	To	18+82.66	1737.61 × 2	3475.22 Lin.Ft.
18+82.66	To	20+09.10	(Includ. Inter. Returns)	314.50 Lin.Ft.
20+09.10	To	60+00	3990.90 × 2	7981.80 Lin.Ft.
1000+00	To	1008+70	(Transition)	870.00 Lin.Ft.
60+00	To	68+50		850.00 Lin.Ft.
68+50	To	76+99.51	849.51 × 2	1699.02 Lin.Ft.
76+99.51	To	78+48.43	(Includ. Inter. Returns)	316.00 Lin.Ft.
78+48.43	To	80+00	151.57 × 2	303.14 Lin.Ft.
2003+95	To	2009+52.32	(Transition)	556.32 Lin.Ft.
80+00	To	84+00	400 × 2	800.00 Lin.Ft.
84+00	To	89+50		550.00 Lin.Ft.
89+50	To	PC.148+14.62	5864.62 × 2	11729.24 Lin.Ft.
3000+00	To	3007+15	(Transition)	715.00 Lin.Ft.
148+14.62	To	155+00		685.38 Lin.Ft.
155+00	To	165+68.30	1068.30 × 2	2136.60 Lin.Ft.
165+68.30	To	167+48.30	(Includ. Inter. Returns)	415.12 Lin.Ft.
167+48.30	To	172+57.89	509.59 × 2	1019.18 Lin.Ft.
172+57.89	To	2+02.08	(Includ. Inter. Returns)	666.66 Lin.Ft.
2+02.08	To	2+50	47.92 × 2	95.84 Lin.Ft.
			Total	35,675.90 Lin.Ft.
			Deduct Bridge Area 92.65 × 2	- 185.30 Lin.Ft.
				35,490.60 Lin.Ft.

Total I-18 = 35490.6 × 4 × .5 × 2.7 = 2628.9 Cu.Yd.
Total for Drives from Recap. Sheet — 537.3 Cu.Yd.
Under C.H. 31 Pavement (2217.5 S.Y. × 5/9 Yd.) = 369.6 Cu.Yd.

TOTAL — 3335.8 Cu.Yd.
USE — 3336 Cu.Yd.

L-9 12-12-12 FERTILIZER 20 lbs/1000 sq.ft.

From Recapitulation Sheet — 217,042 Sq.Yd.

$\frac{217042 \times 9 \times 20}{2000 \times 1000}$ = 19.53 Tons

Use — 19.53 Tons

L-9 AGRICULTURAL GROUND LIMESTONE 100 lbs./1000 sq.ft.

From Recapitulation Sheet — 217,042 Sq.Yd.

$\frac{217042 \times 9 \times 100}{1000 \times 2000}$ = 97.67 Tons

Use — 97.67 Tons

T-10 TRAFFIC COMPACTED SURFACE COURSE FOR MAINTAINING TRAFFIC

From General Notes — 200 Cu.Yd.

Use — 200 Cu.Yd.

I-22 SUB-BASE MATERIAL

Reloc. U.S. Rte. 224

423+81.76	To	11+00		1230.86	× 48	= 59081	SQ.FT.
11+00	To	17+00		600	× 37	= 22200	SQ.FT.
17+00	To	19+00	*(Average Width for Taper)	200	*47	= 9400	SQ.FT.
19+00	To	20+00	*(" " " ")	100	*49.3	= 4930	SQ.FT.
20+00	To	22+00	*(" " " ")	200	*39.3	= 7860	SQ.FT.
22+00	To	37+00		1500	× 29.3	= 43950	SQ.FT.
37+00	To	41+00		400	× 38.7	= 15480	SQ.FT.
41+00	To	46+95		595	× 48	= 28560	SQ.FT.
47+88	To	48+50		62	× 48	= 2976	SQ.FT.
48+50	To	60+00		1150	× 29.3	= 33695	SQ.FT.
60+00	To	63+00	(Taper Area)	300	× 33.8	= 10140	SQ.FT.
63+00	To	64+00	(" ")	100	× 47.5	= 4750	SQ.FT.
64+00	To	66+00	(" ")	200	× 53.7	= 10740	SQ.FT.
66+00	To	68+50	(" ")	250	× 60.7	= 15175	SQ.FT.
68+50	To	73+50	(" ")	500	× 75.3	= 37650	SQ.FT.
73+50	To	75+00		150	× 74	= 11100	SQ.FT.
75+00	To	77+00		200	× 77.3	= 15460	SQ.FT.
77+00	To	78+50		150	× 93.3	= 13995	SQ.FT.
78+50	To	79+00		50	× 87.8	= 4390	SQ.FT.
79+00	To	84+00	(No Sub-base Material Required)				
84+00	To	85+00	(Taper Area)	100	× 90.2	= 9020	SQ.FT.
85+00	To	86+00	(" ")	100	× 55.3	= 5530	SQ.FT.
86+00	To	89+50	(" ")	350	× 35.8	= 12530	SQ.FT.
89+50	To	96+50		700	× 29.3	= 20510	SQ.FT.
96+50	To	117+00		2050	× 48	= 98400	SQ.FT.
117+00	To	121+00		400	× 29.3	= 11720	SQ.FT.
121+00	To	136+30		1530	× 48	= 73440	SQ.FT.
136+30	To	148+00		1170	× 29.3	= 34281	SQ.FT.
148+00	To	153+00	(Taper Area)	500	× 37.8	= 18900	SQ.FT.
153+00	To	155+00	(" ")	200	× 54.3	= 10860	SQ.FT.
155+00	To	158+00	(" ")	300	× 78.8	= 23640	SQ.FT.
158+00	To	161+00	(" ")	300	× 74.5	= 22350	SQ.FT.
161+00	To	165+50		450	× 66.3	= 29835	SQ.FT.
165+50	To	167+50		200	× 93.3	= 18660	SQ.FT.
167+50	To	172+50		500	× 66.3	= 33150	SQ.FT.
172+50	To	173+79		129	× 93.3	= 12036	SQ.FT.
173+79	To	*1+00	*(ATWATER)	101	× 112	= 11312	SQ.FT.
*1+00	To	*2+50		150	× 96	= 14400	SQ.FT.
			Sub-Total			802106	SQ.FT.

Exist. U.S. Rte. 224 (West Crossing)

0+80E	To	3+25E		245	× 44	= 10780	SQ.FT.
3+25E	To	4+00E		75	× 24	= 1800	SQ.FT.
0+00W	To	2+00W		200	× 35	= 7000	SQ.FT.
2+00W	To	3+25W		125	× 44	= 5500	SQ.FT.
3+25W	To	4+00W		75	× 24	= 1800	SQ.FT.
			Sub-Total			26880	SQ.FT.

County Hwy. 69

*0+25N	To	3+00N	*(Sta. backed up to offset	275	× 21	= 5775	SQ.FT.
*0+25N	To	2+75S	fillets.)	300	× 21	= 6300	SQ.FT.
			Sub-Total			12075	SQ.FT.

State Rte. 44

*0+25S	To	1+50S	*(Sta. backed up to offset fillets)	125	× 47	= 5875	SQ.FT.
1+50S	To	3+60S	*(Average Width)	210	*48	= 10080	SQ.FT.
0+45N	To	1+00N	*(" ")	55	*76	= 4180	SQ.FT.
1+00N	To	3+60N	*(" ")	260	*47.7	= 12402	SQ.FT.
			Sub-Total			32537	SQ.FT.

County Hwy. 31

0+41S	To	1+08S	*(Average Width)	67	*64	= 4288	SQ.FT.
0+54N	To	1+22.5N	*(" ")	68	*64	= 4352	SQ.FT.
			Sub-Total			8640	SQ.FT.

Exist. U.S. Rte. 224 (East Crossing)

0+70E	To	2+00E	*(Average Width)	130	*55	= 7150	SQ.FT.
2+00E	To	4+50E		250	× 44	= 11000	SQ.FT.
0+40W	To	1+50W	*(Average Width)	110	*37	= 4070	SQ.FT.
1+50W	To	6+75W		525	× 44	= 23100	SQ.FT.
			Sub-Total			45320	SQ.FT.

Recapitulation
802,106
26,880
12,075
32,537
8,640
45,320
927,558 SQ.FT. × .5 ÷ 27 =

Add for under I-18 — 17,177 Cu.Yd.
Total — 710 Cu.Yd.
Use — 17,887 Cu.Yd.

M-10 CALCIUM CHLORIDE

From General Notes:

Maintenance of Traffic	4 Tons
Dust Control	5 Tons
Total	9 Tons
Use	**9 Tons**

T-71 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

Reloc. U.S. Rte. 224 (Includes all paving within normal outside edges)

423+81.76	To	425+12.62	130.86	× 24	=	3140.64 SQ.FT.
0+00	To	60+00	6000	× 24	=	144000.00 SQ.FT.
60+00	To	73+97.08	Transition Area		=	6033.64 SQ.FT.
73+97.08	To	80+00	Dual Construction		=	3340.16 SQ.FT.
80+00	To	89+50	Transition Area		=	4015.00 SQ.FT.
89+50	To	148+14.62	5864.62 × 24		=	140750.88 SQ.FT.
148+14.62	To	160+50	Transition Area		=	5271.64 SQ.FT.
160+50	To	173+79.93	Dual Construction		=	7184.00 SQ.FT.
0+00	To	2+50	Dual Construction		=	1566.30 SQ.FT.
			Sub-Total			522236.00 SQ.FT. ÷ 9 = 58026.66 Sq.Yd.

Intersecting Roads (Includes all paving from normal outside edges of main line paving to the limits of construction)

Exist. U.S. 224 W

East Normal Edge to 4+00 E	9149.00 SQ.FT.
West Normal Edge to 4+00 W	11050.00 SQ.FT.
Sub-Total	20199.00 SQ.FT. ÷ 9 = 2244.33 Sq.Yd.

County Hwy. *69

North Normal Edge to 3+00 N	9520.00 SQ.FT.
South Normal Edge to 2+75 S	9500.00 SQ.FT.
Sub-Total	19020.00 SQ.FT. ÷ 9 = 2113.33 Sq.Yd.

State Rte. *44

North Normal Edge to 3+60 N	13040.00 SQ.FT.
South Normal Edge to 3+60 S	13040.00 SQ.FT.
Sub-Total	26080.00 SQ.FT. ÷ 9 = 2897.78 Sq.Yd.

County Hwy. *31

North Normal Edge to 1+22.45 N	2700.00 SQ.FT.
South Normal Edge to 1+08.36 S	2625.00 SQ.FT.
Sub-Total	5325.00 SQ.FT. ÷ 9 = 591.67 Sq.Yd.

Exist. U.S. 224 E

West Normal Edge to 6+75 W	15243.00 SQ.FT.
East Normal Edge to 4+50 E	11700.00 SQ.FT.
Sub-Total	26943.00 SQ.FT. ÷ 9 = 2993.67 Sq.Yd.
Deduct for I-71 Reinforced Conc. Approach Slab. 50 × 24 ÷ 9 =	- 133.33 Sq.Yd.
Deduct for Bridge Area 92.65 × 24 ÷ 9	- 247.07 Sq.Yd.
Total	72931.04 Sq.Yd.
Use	**72931.00 Sq.Yd.**

T-35 ASPHALTIC CONCRETE SURFACE COURSE

2" (Drives) — 63.8 Cu.Yd.
1½" (County Hwy *31) 2106.5 S.Y. × 15/36 Yd. = 87.8 Cu.Yd.
Total — 151.6 Cu.Yd.
Use — 152.0 Cu.Yd.

B-35 ASPHALTIC CONCRETE LEVELING COURSE

2" (County Hwy *31) 2106.5 S.Y. × 2/9 Yd. = 117 Cu.Yd.
Use — 117 Cu.Yd.

T-30 BITUMINOUS TACK COAT

0.10 Gal. × 2106.5 S.Y. = 210.7 Gal.
Use — 211.0 Gal.

T-30 BITUMINOUS PRIME COAT (M-5.1 RT-2 & RT-3 or M-5.2 RC-1 & RC-2

0.35 Gal. × 2217.5 S.Y. — 776.1 Gal.
Use — 777 Gal.

CALCULATION SHEET

GENERAL SUMMARY

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
TYPE	CODE 7221		ROADWAY
E-1	201561	Cu. Yds.	Roadway Excavation, Suitable Material
E-1	795	Cu. Yds.	Roadway Excavation, Unsuitable Material
E-1	75098.	Sq. Yds.	Compacted Subgrade
E-4	2111	Cu. Yds.	Borrow Using Granular Material Below Original Ground As Per Plan Including Cost of Excavation Of Unsuitable Material.
E-4	316	Cu. Yds.	Borrow Using Granular Material Above Original Ground As Per Plan
E-8	5644	Sq. Yds.	Removal and Disposal of Existing Pavement.
E-8	120	Lin. Ft.	Removal and Disposal of Existing Curb
E-8	800	Sq. Ft.	Removal and Disposal of Existing Sidewalk.
E-9	Lump Sum	L.S.	Removal of Trees and Stumps.
E-11	975	M-Gals.	Water
E-12	1413	Lin. Ft.	Pipe Removed, 15" and Under
E-12	35	Lin. Ft.	Pipe Removed, over 15"
I-8	16	Each	Monument ( ) Assembly
I-15	350	Lin. Ft.	Temperary Guard Rail As Per Plan.
I-15	3064.72	Lin. Ft.	Guard Rail, Steel Beam Type (Deep)
I-18	3336	Cu. Yds.	Stabilized Crushed Aggregate Shoulders and Approaches
L-9	217042	Sq. Yds.	Seeding and Protecting ( )
L-9	19.53	Tons	Commercial Fertilizer (12-12-12)
L-9	97.67	Tons	Agricultural Liming Materials
Spec.	93,000	Sq. Yds.	Special Seeding As Per Plan
Spec.	2	Each	Bridge Type Overhead Sign Assembly, Type A, 40' Span
Spec.	2	Each	Bridge Type Overhead Sign Assembly, Type A, 36' Span
M-10	9	Tons	Calcium Chloride Furnished and Applied For Maintaining Traffic.
T-10	200	Cu. Yds.	Traffic Compacted Surface Course For Maintaining Traffic.
S-25	232	Lin. Ft.	3" Welded or Seamless Steel Pipe Sec. M-6.9 Galvanized As per Plan
SS-18	35768	Lin. Ft.	Fence, Type A Modified As per plan
S-16	Lump Sum	L.S.	Temporary Run Around, Roads Using Class A Pavement As per plan
			DRAINAGE
E-2	1563	Cu. Yds.	Excavation for Structures
E-3	934	Cu. Yds.	Channel Excavation
I-1	188	Lin. Ft.	12" Pipe for Driveways Sec. M-6.4(a)
I-2	80	Lin. Ft.	12" Class A Storm Sewers
I-2	264	Lin. Ft.	12" Class A Storm Sewers Under Pavement or Approaches, Sec. M-6.5(b) or Sec. M-6.8(b)
I-2	168	Lin. Ft.	15" Class A Storm Sewers
I-2	164	Lin. Ft.	15" Class A Storm Sewers Under Pavement or Approaches, Sec. M-6.5(b) or Sec. M-6.8(b)
I-2	142	Lin. Ft.	18" Class A Storm Sewers Under Pavement or Approaches, Sec. M-6.5(b) or Sec. M-6.8(b)
I-2	24	Lin. Ft.	21" Class A Storm Sewers
I-2	66	Lin. Ft.	21" Class A Storm Sewers Under Pavement or Approaches, Sec. M-6.6(a) or Sec. M-6.8(b)
I-3	80	Lin. Ft.	6" Helical Perforated Corrugated Metal Pipe, Sec. M-6.4(h) for Roadway Drainage
I-4	290	Lin. Ft.	6" Underdrain, Shallow
I-4	18970	Lin. Ft.	6" Underdrain, Deep
I-4	1407	Lin. Ft.	8" Outlets for Underdrains, Sec. M-6.4 (a)
I-5	18	Each	6" Pipe Specials for Underdrains
I-8	2	Each	Standard #1-4 Catch Basin
I-8	8	Each	Standard #2-24 Catch Basin
I-8	5	Each	Standard No. 1 Manhole
I-8	1	Each	Special Raised Curb Inlet as Per Plan
I-14	1973	Lin. Ft.	Standard Type 1 Paved Gutter
I-14	105	Lin. Ft.	Special Paved Gutter as Per Plan
I-16	1	Each	Catch Basin, Abandoned
I-16	1	Each	Manhole, Abandoned
L-10	13420	Sq. Yds.	Sodding
S-1	342	Cu. Yds.	Concrete for Structures Class E
S-24	Lump Sum	L.S.	Removal of Existing Structures
S-27	550	Lin. Ft.	30" Std. Strength Reinforced Concrete Culvert Pipe, Sec. M-6.6 (b) or Extra Strength Vitrified Sewer Pipe, Sec. M-6.8(b) For Roadway Culverts.
S-27	90	Lin. Ft.	36" Std. Strength Reinforced Concrete Culvert Pipe, Sec. M-6.6 (b) or Extra Strength Vitrified Sewer Pipe, Sec. M-6.8(b) For Roadway Culverts
I-2	496	Lin. Ft.	42" Class A Storm Sewers Under Pavement or Approaches, Sec. M-6.6 (b)
S-27	808	Lin. Ft.	42" Pipe for Roadway Culverts
S-27	188	Lin. Ft.	48" Standard Strength Reinforced Concrete Culvert Pipe Sec. M-6.6 (b) for Roadway Culverts.
S-28	112	Lin. Ft.	12'-6" Span x 7'-11" Rise Sectional Corrugated Metal Structures, Sec. M-6.4 (a) & and 7 gage
I-2	348	Lin. Ft.	42" Class A Storm Sewers
			PAVEMENT
I-7	134	Sq. Yds.	Reinforced Concrete Approach Slabs T = 13"
I-12	1046	Lin. Ft.	Standard Concrete Curb Type 2A
I-13	664	Sq. Ft.	Sidewalks, 4" Concrete
I-22	17,887	Cu. Yds.	Subbase as Per Plan
I-23	69	Each	Precast White Portland Cement Concrete Traffic Dividers
T-30	211	Gals.	Bituminous Tack Coat as Per Plan
T-35	152	Cu. Yds.	Asphaltic Concrete Surface Course Type 'A' (70-80)
T-71	72,931	Sq. Yds.	9" Reinforced Portland Cement Concrete Pavement
B-35	117	Cu. Yds.	Asphaltic Concrete Leveling Course (70-80)
T-30	777	Gals.	Bituminous Prime Coat Sec. M-5.7 RT-2 & RT-3 or Sec. M-5.2 RC-1 & RC-2

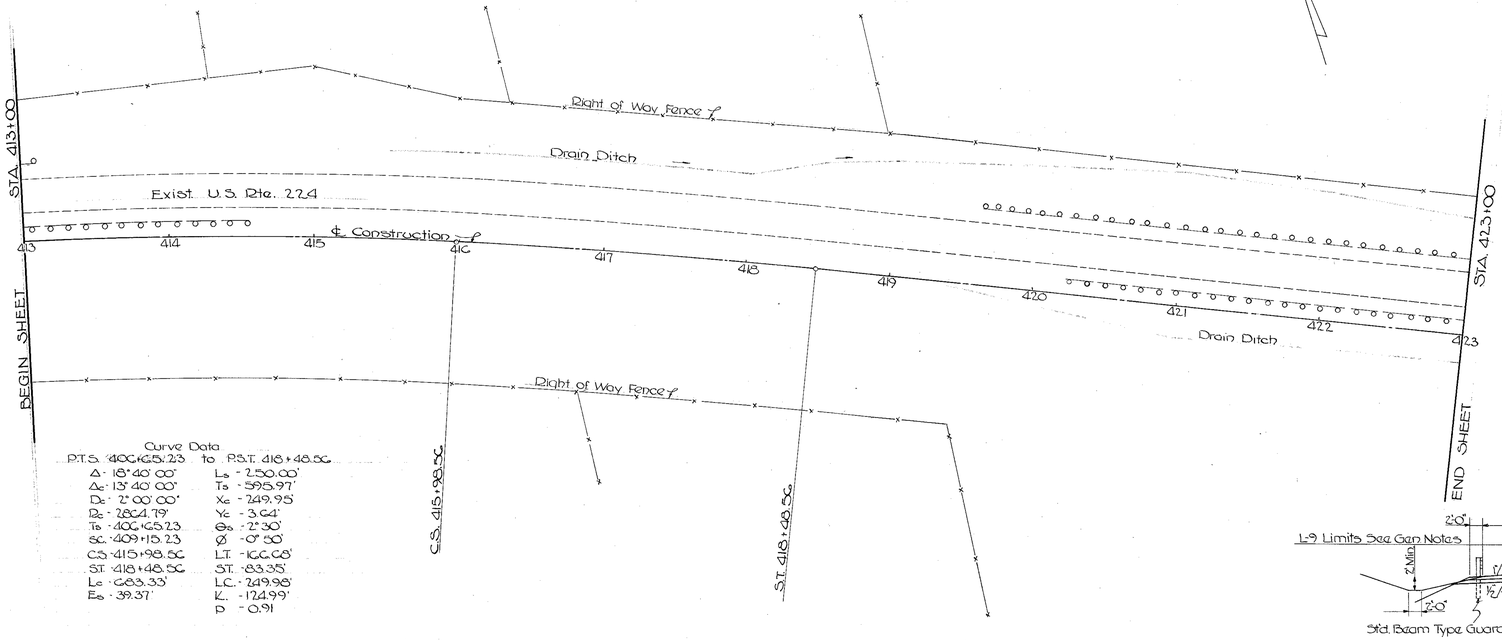
See Sheet No. 95 For Quantities Of Structures Over 20' Span

GENERAL SUMMARY

DIVISION 12 | STATE | PROJECT | SHEET
DIVISION 12 | STATE | F-330( ) | SHEET
FOR 222-G-22

FED. RD. PROJECT	STATE	PROJECT	FISCAL YEAR
2	OHIO	220( )	

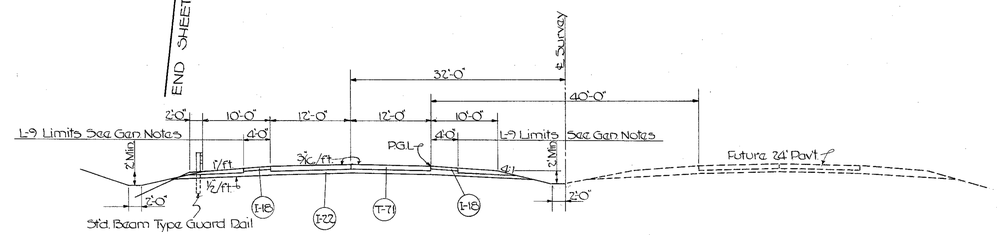
POR-724-6.22



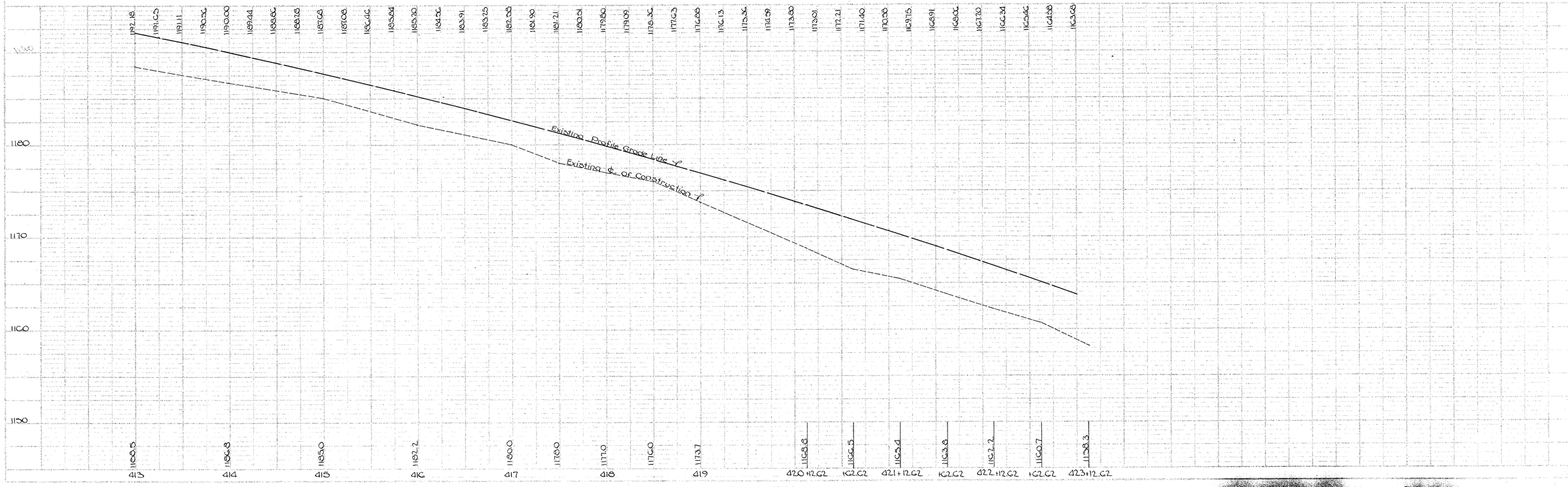
Curve Data

P.T.S. 410+65.23 to P.S.T. 418+48.5C

Δ - 18° 40' 00"	L_s - 250.00'
Δ_c - 13° 40' 00"	T_s - 595.97'
D_c - 2° 00' 00"	X_c - 249.95'
R_c - 2864.79'	Y_c - 3.64'
T_s - 410+65.23	θ_s - 2° 30'
SC - 409+15.23	Ø - 0° 50'
C.S. 415+98.5C	L.T. - 166.68'
S.T. 418+48.5C	S.T. - 83.35'
Le - 683.33'	L.C. - 249.98'
E_s - 39.37'	K - 124.99'
	p - 0.91



TYPICAL SECTION OF ROADWAY
ADJOINING THIS CONTRACT



LINE SHEET - STA. 413+00 TO STA. 423+00

POR-224-G.22

Stake 'C' — Stake 'B' 89.20 — Stake 'A'
139.32 — 143.40 — 109.38
38°15' — POT — ℄ Reloc U.S.224 — 73°00'
Boat Spike on East Tangent POT 0+00

Ref. To POT. 0+00

Iron Pin POT. 3+78.30
Stake 'D' 78.00 — 90° — 90° — 101.40'
Stake 'C' 75.00' — Stake 'A' — Stake 'B'

Ref. To POT. 3+78.30

252°40'
265°30'
POT. G+30.53 Iron Pin
'D' IP
Stake 'C' 100' — 180° — Stake 'B'

Ref. To POT. G+30.53

P.I. 0+21.80

BEGIN PROJECT STA. 423+81.76

End of Ultimate Paving by others. Begin Paving under this Cont

F-330(3)

Marker will be furnished and erected on the right by the the State before acceptance of this project.

Adjust existing 8" Tile

E.S. Drain Tile

Gate

Basin Limited Access Highway

5% — 4.00% — 2.5% asc.

P.T. 0+21.80

WEST CROSSING

℄ Ditch

Connect prop. Guard Fence to Ex.

Remove existing Curb (SM*)

Ex. 15" CMP

Pond

Peat Bog

Ex. 5'x5' Box Culvert

℄ Creek (6'±)

U.S. 224

Tree & Brushline

423+00

423 — 424 — 425 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

BEGIN SHEET STA.

END SHEET STA. 10+00

℄ Ditch

BEGIN WORK STA. 423+75

EXIST.

Temp. Runaround for maint. of traffic. See general notes.

Pond Outlet (2' wide)

Clean exist channel See Culvert Detail Sheet No. 33.

S 66° 32' 30" E

Brush & Woods

Limit of Hi

POT. 1+35.46

POT. 3+78.30

POT. G+30.53

POT. 9+11.39

Abandoned Orchard (Sparse)

Abandoned Orchard (Sparse)

SERVICE Drive

Existing U.S. 224 Curve Data
Sta. 0+21.80E to 3+32.85W
Δ = 10° 10' 00"
De = 2° 52'
R = 1998.90'
T = 177.82
Le = 354.65'
E = 7.87

Cultivated Field

Service Dr.
Δ = 32° 35' 00"
R = 114° 55' 30"
D = 80°
T = 24.70
L = 45.69

Bench Mark "1 Boat Spike E. Side Pole "RD 59 in Island - 0+00
Elev. 1155.960

See next sheet for intersection details. (Sh. No. 11)

SODDING

STATION From	STATION To	Side	L-10 9' Wide S.Y.	
424+35	2+20E (Ex)	Lt	60	Lay each side of Gutter
TOTAL			60	

FENCE

STATION From	STATION To	Side	Distance From ℄	SS-1B L.F.
* 4+00E	4+00	Lt	25'-99	170
4+00	10+00	Lt	99	600
* 1+19W	1+69	Rt	29'-99	740
1+69	10+00	Rt	99	831
TOTAL				1841

*Ex. U.S. 224

REMOVAL

STATION From	STATION To	Side	E-8 Pavement S.Y.	E-8 Exist. Curb L.F.
4+00W	4+00E		1780	
423+81.76	Ex U.S. 224	Lt	764	
424+60	425+05	℄		170
TOTAL			2544	170

DRAINAGE

STATION From	STATION To	Side	1-14 Std. Typ E Pav. Gutter L.F.
424+35	2+20E (Ex)	Lt	765
TOTAL			765

STRUCTURES UNDER 20' SPAN

Mark	Station	Type	Size	Detail Sheet
C-1	2+29 E	Std. Pipe Culvert	42" x 84"	33
C-2	2+50	Std. Pipe Culvert	48" x 114"	33

I-15 GUARD RAIL

STATION From	STATION To	Side	I-15 L.F.
1+50	6+00	Lt	450
423+75	2+50E	Lt	350
TOTAL			800

MONUMENT BOXES

STATION	Side	I-5 Each	
425+12.62 Bk 0+00 Ahd	℄	1	POT.
TOTAL		1	

DRIVES

STATION From	STATION To	Side	Dist. from Pavt Edge	T-35 C.Y.	T-18 C.Y.	E-1 Ex C.Y.	E-1 Emb C.Y.
@20+13	23+10	Lt	29'		58		1700
3+25W	Ex U.S. 224	Lt	38	34	10		15
TOTAL				34	68		1715

@Service Drive

Vertical Curve

Graphic Grade on Contract POR-224-0.00

END PROJECT POR 224-0.00 Sta 423+81.76 BEG. PROJECT POR 224-G.22

Note: Adjustment has been made for transfer of profile grade elev. between this Contract and POR-224-0.00

-3.60% — -0.50% — -0.50%

P.I. — P.T.

Peat Bog Lt. of ℄
See Cross Sections for detail of removal
℄ E-4 Granular Borrow Bank Fill

Existing Ground Line At ℄ Survey

400' V.C.
P.I. 1+00
Elev. 1152.24
DD. = 6.45'

423+12.62 Bk. (By Others) = 0+00 Ahd. (This Contract)
POT. 0+03.12 Ahd. (Exist. U.S. 224)

P.C. Exist. U.S. Rte. 224

See Paving plan for Beg. Paving Warp in this Area Sheet No.

SERVICE DRIVE TO EXIST. U.S. 224

-13.6% — -10.2%
P.C. 20+15 Elev. 1158.27
120' V.C. P.I. 20+75 Elev. 1157.85
P.R.C. 21+35 Elev. 1157.85
120' V.C. P.I. 21+95 Elev. 1145.85
P.T. 22+55 Elev. 1142.95
-1.50%
-3.2%
Limit of T-18 1142.22 (23+05)
Grade is high to allow placement of drainage structure in future.

20+40 Sta. Dr. 1150W (6.12W) 23+05 Sta. Dr. 1150W (Prop. Const.)

E-4 Granular Borrow Including
Excav. of Unsuitable Material = 2111 Cu.Yd.
E-4 Granular Borrow = 3166 Cu.Yd.

EXCAVATION	9365 Cu.Yd.
EMBANKMENT	13783 Cu.Yd.
SEEDING	10500 Sq.Yd.

Embankment from Cross Sections 12068 Cu.Yd.
Embankment from Drive Table 1715 Cu.Yd.
Total 13783 Cu.Yd.

LINE SHEET - STA 423+00 TO STA 10+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

11 / 109

POR-224-6.22

Curve Data (Exist U.S. 224) ℄ R/W
PC 3+32.85W to PT 0+21.80E
Δ = 10°10'00"
Dc = 2°52'
R = 1998.90
T = 177.82
Lc = 354.65
E = 7.87'

BEGIN PROJECT STA 423+81.76

F-330(3)

Marker will be furnished & erected on the right by the State before acceptance of this project.

BEGIN WORK STA 423+75

1+50 West ℄ R/W 20+00 ℄ Service Dr.

BEGIN LIMITED ACCESS HWY 1+18.94W

BM #1 El 1155.960
Boat Spike in E. Side Pole #120.59 in Island 0+00

EXIST. SERVICE Dr.
Δ = 52°35'00"
Dc = 114°35'30"
R = 50'
T = 24.70'
Lc = 45.89'
PC 20+12
PT 20+51.69

Install 24" R.C.P. (Cathers Standard) (This Contract) Toma Dupround for traffic Maint. of traffic See General Notes

RELOC. U.S. 224

U.S. 224 WEST CROSSING

U.S. 224

Pond Outlet (6' Wide)

Pond

Remove Existing Curb

Gate Posts

Gate

12'x7.5' Conc. Box Culvert

Compact Prop. Guard Fence to Ex.

℄ Ditch

Chicken House

Conc. Blk.

Farm House

Corn Crib

Barn

Garage

Chicken House

Gravel Dr.

Fr. Gar.

2 Sty Fr.

Note: See Drainage Plan for Shoulder Taper Details on East Side of Road.

Begin Shoulder Stabilization

Sta 1+50 - Crown - PG El. 1152.86

Sta 1+57.11 E

Sta 1+48.63

Sta 1+60 E - Crown - PG El. 1152.23

Sta 0+92.11 E

Sta 0+79.88

Sta 0+65.16 E

Sta 0+06.16 E

Sta 4+25 W

Sta 4+24.25 - Crown PG El. 1159.18

Sta 2+25 W - Crown PG El. 1159.93

RELOC. U.S. 224

EXIST. U.S. 224

See Intersection Detail This Sheet

End Shoulder Stabilization

Std. Longitudinal Joint

1W ℄ Prop. Construction & R/W ℄ Std. Line 2

Pl. 2+65(E) Elev. 1149.13

PC 1+40

PT 4+90

200' V.C. Pl. 3+00(W) Elev. 1160.90

250' V.C.

-3.60% -1.35% -2.91% +2.20%

See Paving Plan for Special Warping between these Limits

Graphical Grade

0+00 (E&W) Exist. U.S. 224 = 425+17.44 ℄ Reloc. U.S. 224

EXCAVATION 217 C.Y.
EMBANKMENT 444 C.Y.
SEEDING 1924 S.Y.

EXCAVATION 473 C.Y.
EMBANKMENT 1112 C.Y.
SEEDING 2478 S.Y.

EXISTING U.S. RTE. 224

WEST EAST

425+12.44 Reloc U.S. 224 = 0+00 E & W Exist. 224, ℄ R/W

Note: Cross Sections are based on ℄ R/W

Dc = 2°52'00"

21.68'

PT 0+21.80

℄ R/W

℄ Prop. Construction

Ex. Tan ℄

242° 20' 30"

425+12 Gz. Brg. (Reloc U.S. 224) = 0+00 AHD (Reloc U.S. 224)

℄ Reloc. U.S. 224

INTERSECTION DATA

ESTIMATED QUANTITIES

S-15 Temporary Run-Around Road Using Class A Pavt — Lump Sum
E-1 Roadway Excavation — 690 Cu.Yd.
Roadway Embankment — 1556 Cu.Yd.
(Note: See Cross Sections for method of computing)
L-9 Seeding — 4352.3 Sq.Yd.
All other quantities are covered on Main Line Sheet or on calculation Sheet.

(A) Std. Key Joint without tie bars.
(B) Expansion Joint without dowels.
(C) Expansion Joint with dowels

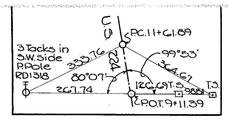
INTERSECTION PAVING PLAN

Scale: 1" = 20'-0"

INTERSECTION DETAILS - EXIST. U.S. 224 (WEST CROSSING)

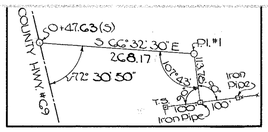
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR	12 / 109
3	OHIO	500( )		

POR-224-6.22

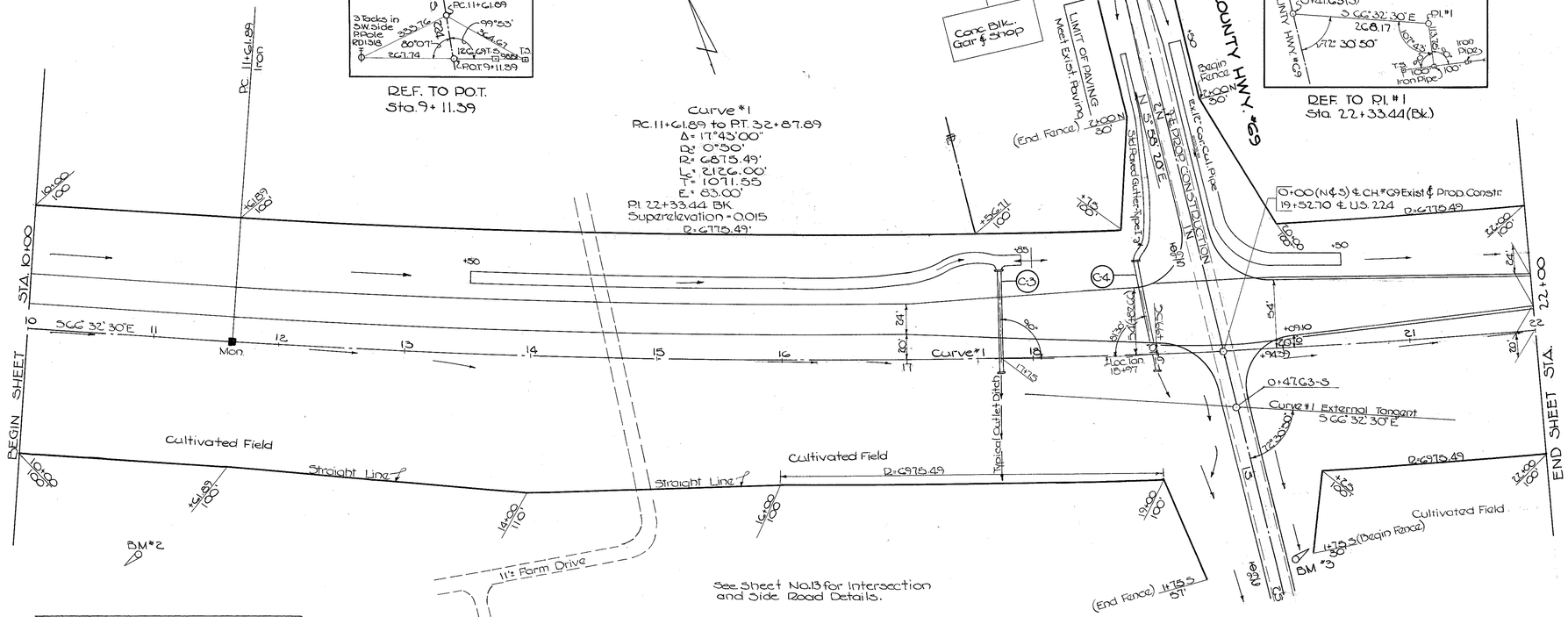


REF. TO P.O.T.
Sta. 9+ 11.39

Curve #1
PC. 11+61.89 to PT. 32+87.89
Δ = 17°43'00"
D' = 0°50'
R = 6875.49'
L_c = 2126.00'
T = 1071.55
E = 83.00'
PI 22+33.44 Bk
Superelevation = 0.015
R = 6775.49'



REF. TO PI. #1
Sta. 22+33.44 (Bk.)



SODDING				
STATION		Side	Lin. ft. Wide Sq. Yd.	
From	To			
10+50	17+85	Lt.	435	
2+50N	20+50	Rt. & Lt.	250	*C.H. 69
2+50N	18+86	Lt.	37	Along Pav. Gutter
TOTAL			722	

FENCE				
STATION		Side	Dist. From ¢	35-18 L.F.
From	To			
10+00	18+75	Lt.	99-99	875
18+75	*2+00N	Lt.	99-29	90
10+00	11+62	Rt.	99-99	162
11+62	14+00	Rt.	99-109	238
14+00	16+00	Rt.	109-99	200
16+00	19+00	Rt.	99-99	300
19+00	1+75.5	Rt.	99-56	90
2+00N	20+00	Lt.	29-99	115
20+00	22+00	Lt.	99	200
1+75.5	20+25	Rt.	29-99	67
20+25	22+00	Rt.	99-99	175
TOTAL				2512

STRUCTURES UNDER 20' SPAN				
MARK	STATION	TYPE	SIZE	SKEW Skew
C-3	17+75	Std. Pipe Culvert	30"x82'	34
C-4	18+97	" " "	30"x92'	34

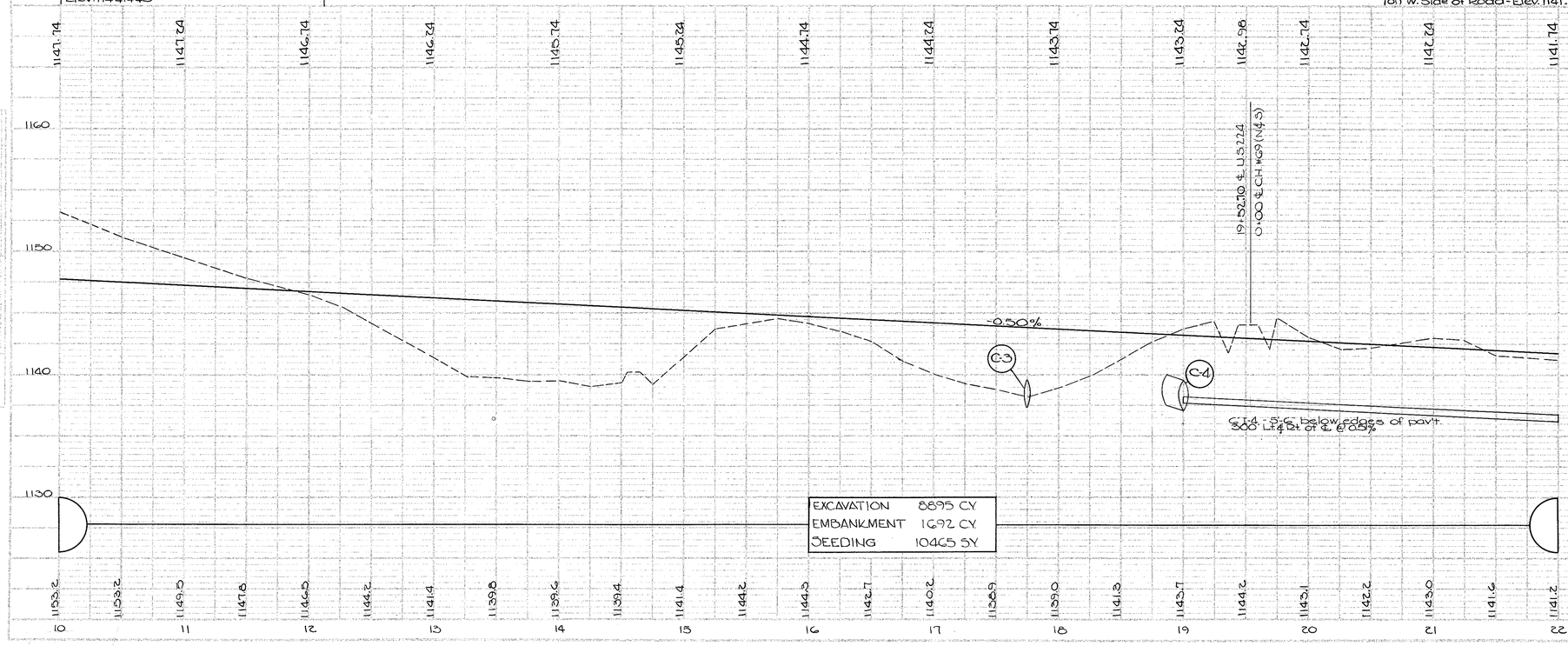
DRAINAGE				
STATIONS		Std. Std. Type I Pav. Gutter L.F.	I-4 Cr Deep	
From	To			
19+00	22+00 (Rt)		300	
19+00	22+00 (Rt)		300	
2+50N	18+86	165		
TOTAL		165	600	

MONUMENT BOXES			
STATION	Side	I-8 Each	
11+61.89	¢	1	P.C.
TOTAL		1	

PIPE REMOVAL-15" & UNDER					
STATION		Side		Pipe to be Remov. L.F.	
From	To				
1+75N*		Rt.		18	*C.H. 69
TOTALS				18	

Bench Mark *2-175' S.W. of Sta. 11+00
PK. Nail in N. Side of Power Pole RD-1319
Elev. 1144.445

Bench Mark *3-170' S.W. Sta. 20+
PK. Nail in N. Side of Tel. Pole * 93
on W. Side of Road - Elev. 1141.698



LINE SHEET - STA. 10+00 TO STA. 22+00

FED. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

13
109

POR-224-6.22

B.M.#3 - El. 1141.692
170' S.W. of Sta. 20+
P.K. Nail in N. Side Tel. Pole #98 on W. Side of road.

COUNTY HWY #69

Trim Exist. Ditch to Exist. Pipe

12" Conc. Pipe

B.M.#3

℄ Exist. & Prop. Constr. ℄

N 5° 58' 20" E

12"-24" Tile Pipe

36" Stump & High

Std. Paved Gutter-Type I

LIMIT OF PAVING Meet Exist. Paving

Drive

Conc. Blk. Garage & Shop

Curve Data (P.I.#1)
P.I. 22+33.44 (BK)
Δ = 17° 43' 00"
D_c = 0° 50' 00"
R = 6875.49'
L_c = 2126.00'
T = 1071.55'
E = 83.00'
P.C. 11+61.89
P.T. 32+87.89

Typical Outlet Ditch

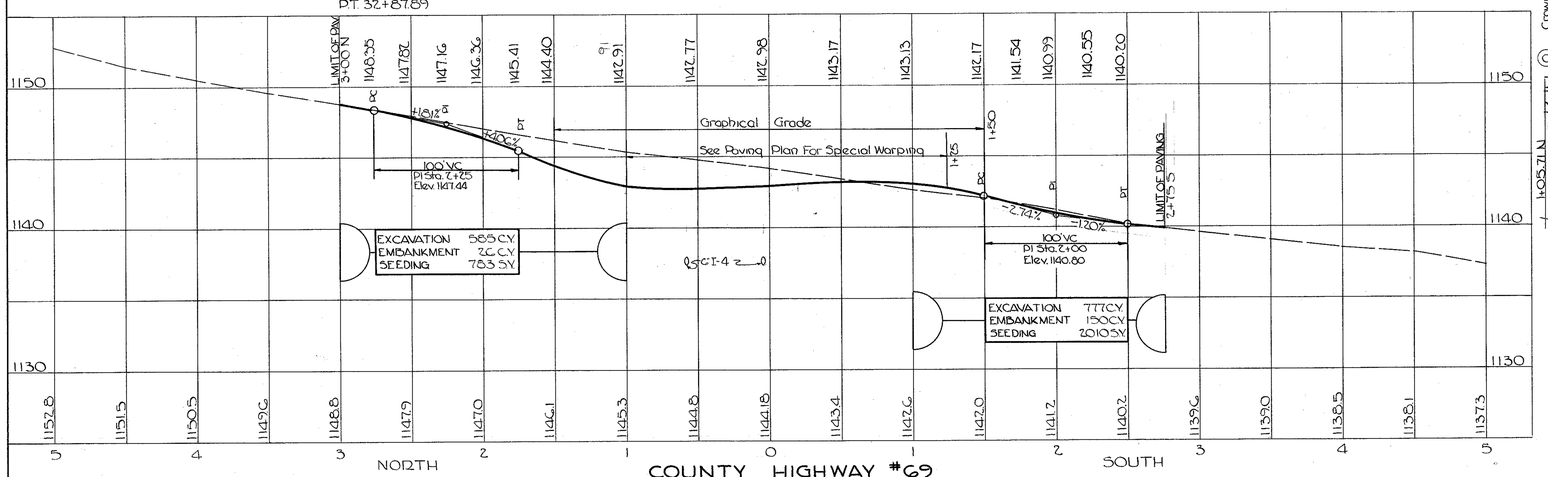
0+47.63

LIMIT OF PAVING Meet Exist. Paving Sta. 2+75

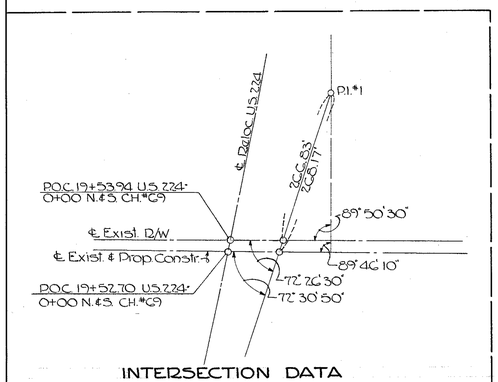
Trim Exist. Ditch to this Point as Shown on Cross Sections

21" Conc. Pipe

See Main Line Sheet No. 12 for Additional Details. See Sheet No. 34 for C-3 & C-4 details.



COUNTY HIGHWAY #69

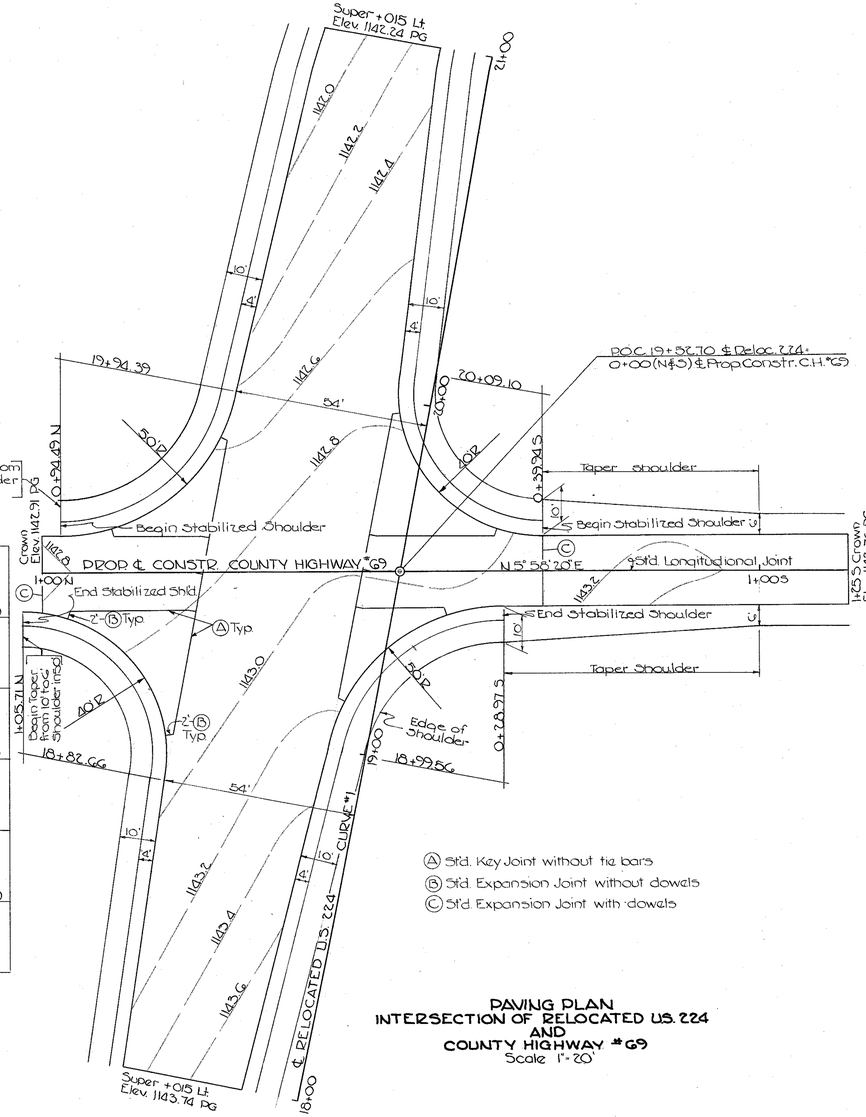


INTERSECTION DATA

ESTIMATED QUANTITIES

E-1	EXCAVATION	1362 C.Y.
	EMBANKMENT	176 C.Y.
L-9	SEEDING	2793 S.Y.

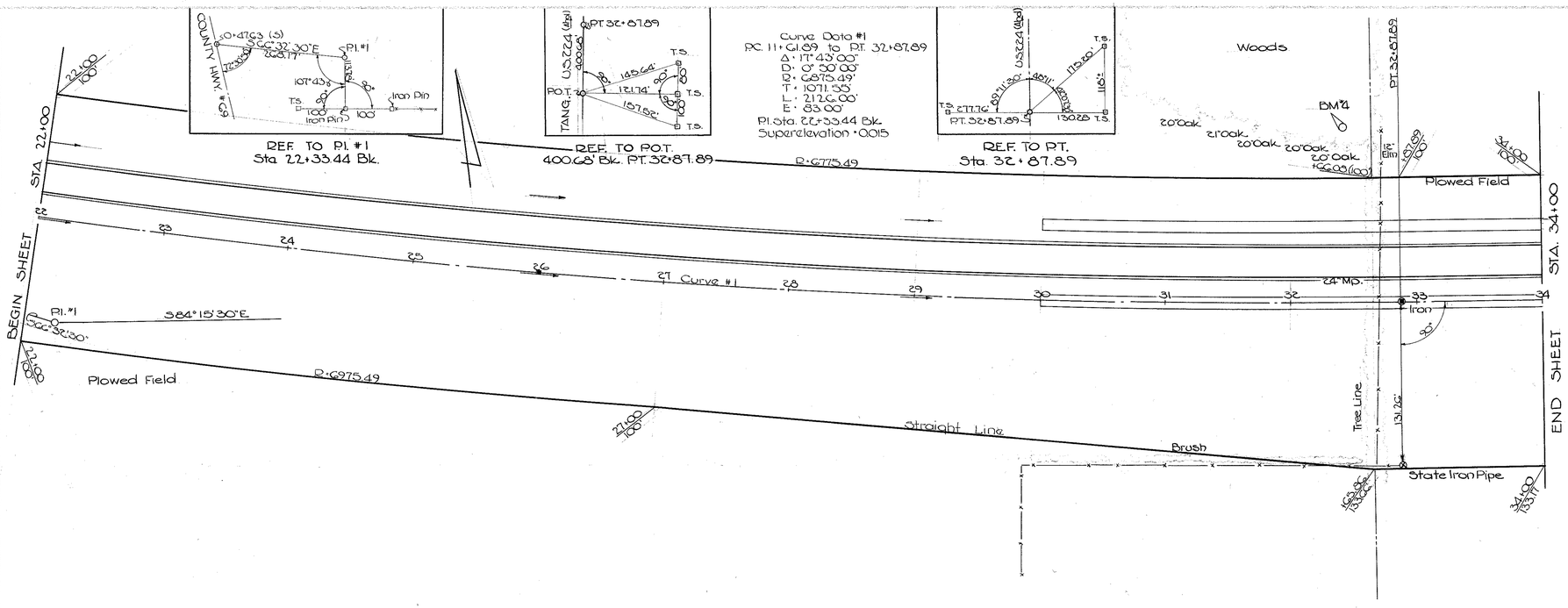
All other quantities are on Main Line Sheet or Calculation Sheet.



Ⓐ Std. Key Joint without tie bars
Ⓑ Std. Expansion Joint without dowels
Ⓒ Std. Expansion Joint with dowels

PAVING PLAN
INTERSECTION OF RELOCATED U.S. 224
AND
COUNTY HIGHWAY #69
Scale 1" = 20'

LINE SHEET - STA. 3+00(N) TO STA. 2+75(S) COUNTY HWY. 69

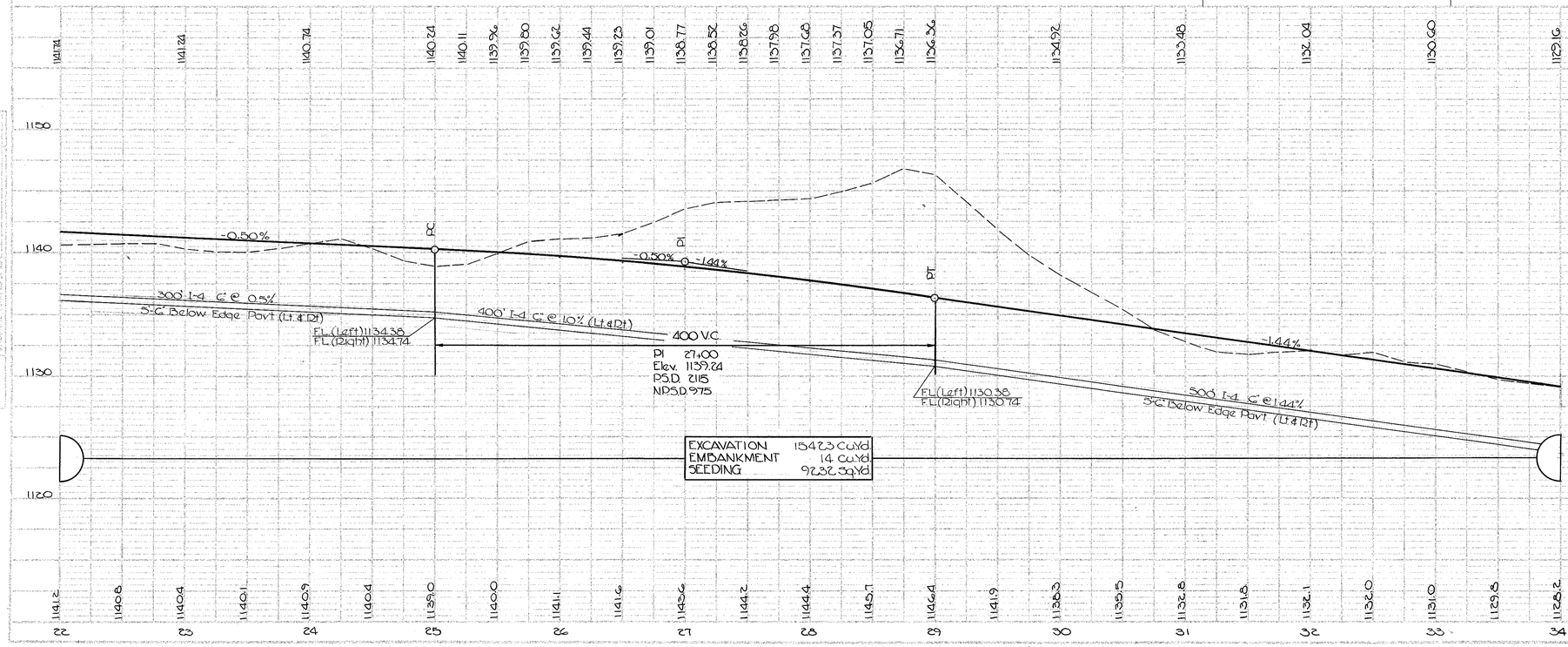


SODDING				
STATION		Side	L-10 9-Wide S.Y.	
From	To			
30+00	34+00	Lt.	400	
30+00	34+00	Rt.	400	
	TOTAL		800	

FENCE				
STATION		Side	Dist. From ℄	55-18 L.F.
From	To			
22+00	34+00	Lt.	99'	12.00
22+00	27+00	Rt.	99'	500
27+00	32+66	Rt.	99'-132.7'	566
32+66	34+00	Rt.	132.7-132.2	134
	TOTAL			2400

MONUMENT BOXES			
STATION	Side	1-@ Each	
26+00	℄	1	POC.
32+87.89	℄	1	PT.
TOTAL		2	

DRAINAGE (1-4)				
STATION		Side & Pavt	1-4	
From	To		C. Dwgs L.F.	
22+00	34+00	L.	12.00	
22+00	34+00	R.	12.00	
TOTAL			2400	

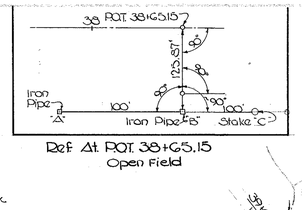


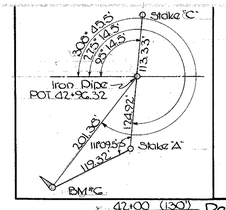
LINE SHEET - STA. 22+00 TO STA. 34+00

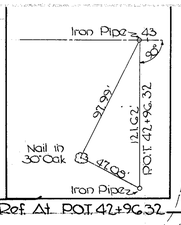
STATE	PROJECT	FISCAL YEAR	
OHIO	50( )		115 / 109

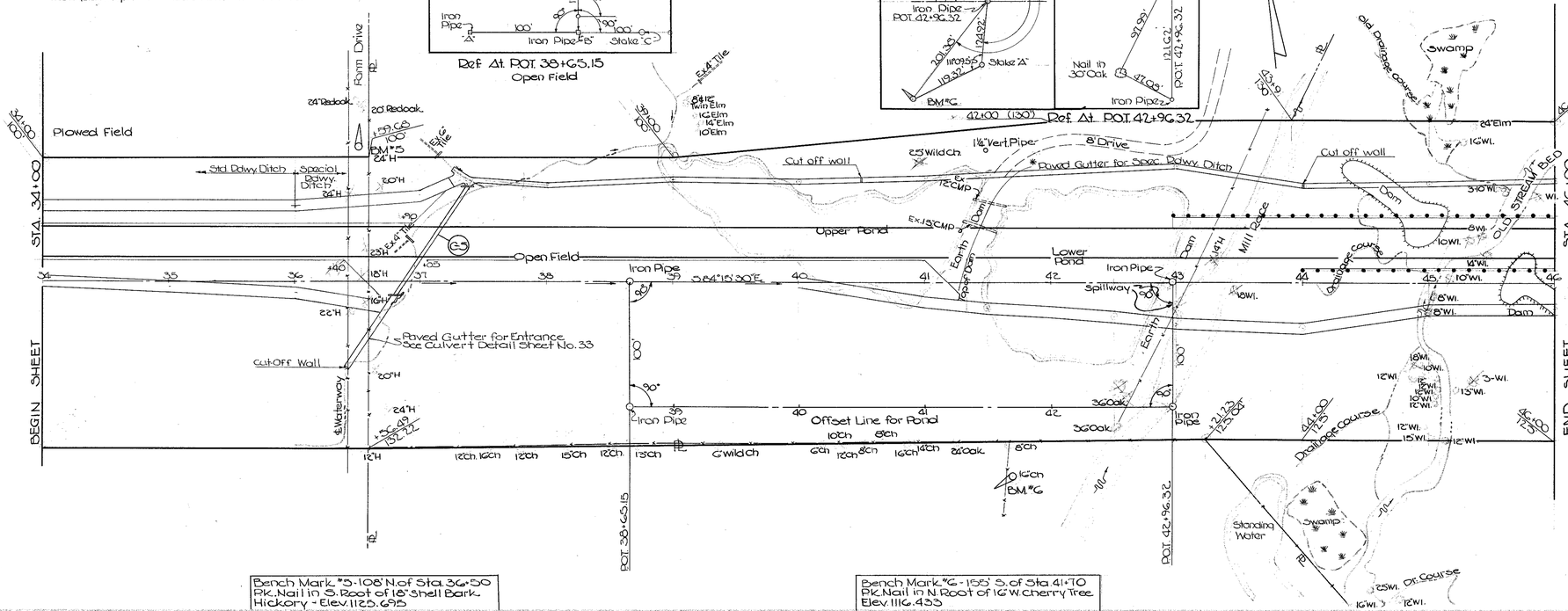
POR-224-G.22

* See std. construction drawing I-14G. Use Type I Paved Gutter, to be same as std. except that 1'-0" of sod to be placed on each side of paving.









Bench Mark "S-108' N. of Sta. 36+50
Pk. Nail in S. Root of 18" Shell Bark Hickory - Elev. 1128.695

Bench Mark "G - 155' S. of Sta. 41+70
Pk. Nail in N. Root of 16" W. Cherry Tree
Elev. 1116.433

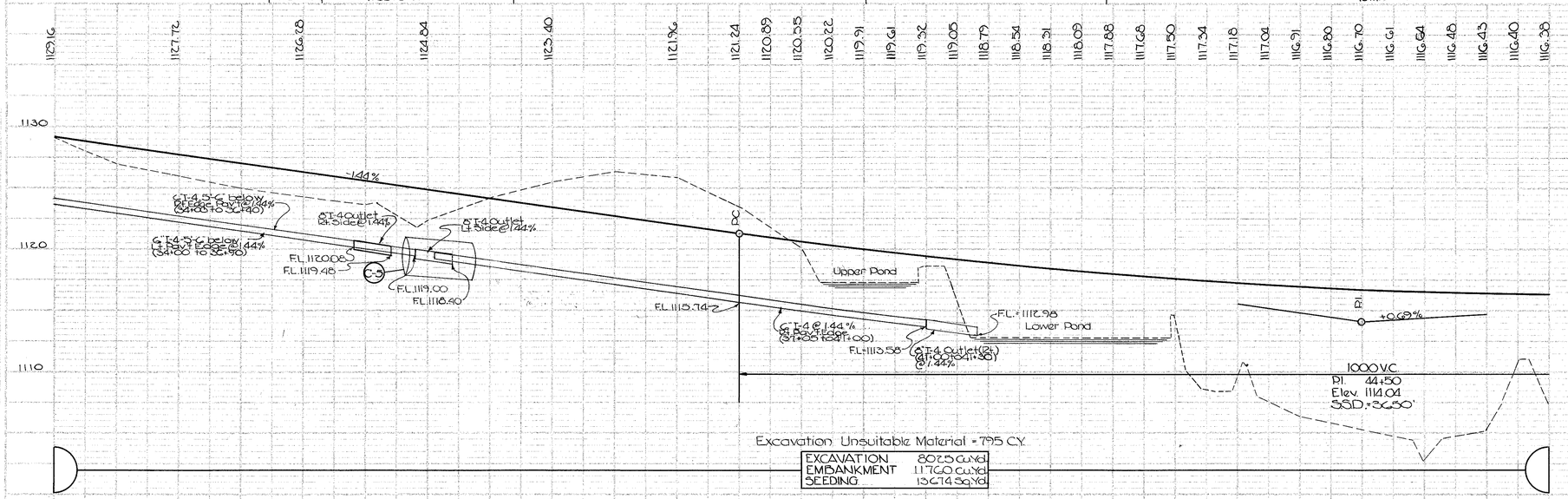
SODDING				
STATION		Side	L/10 9' Wide	Remarks
From	To			
34+00	37+25	Lt.	325	
37+25	46+00	Lt.	195	Pav. Gutter
34+00	36+60	Rt.	260	
40+00	46+00	Rt.	600	
TOTAL			1380	

STRUCTURES UNDER 20' SPAN				
Mark.	STATION	Type	Size	DETAIL SHEET
C-5	36+87	Std. Pipe Culvert	36"ø	33

I-15 GUARD RAIL			
STATION		Side	I-15 LF
From	To		
43+00	46+00	Lt.	300
44+00	46+00	Rt.	200
TOTAL			500

FENCE				
STATION		Side	Dist. From ℄	55-18 LF
From	To			
34+00	39+00	Lt.	99'	500
39+00	42+00	Lt.	99' - 12.9'	300
42+00	46+00	Lt.	12.9'	400
34+00	36+56	Rt.	132.2-130.2	256
36+56	43+21	Rt.	130.2-12.4	665
43+21	44+00	Rt.	12.4-12.4	79
44+00	46+00	Rt.	12.4	200
TOTAL				2400

DRAINAGE							
STATIONS		S.I-14 LF		I-4		Removal of Present End Sections (LF)	I-5 for I-4 C=.45
From	To			Size	Type		
37+25	46+00	Lt.	675				
36+80	37+20	Lt.				50	
41+30	41+65	Lt.				50	
34+00	37+20	Lt.		29ø	42		1
36+00	36+70	Rt.		24ø	42		1
37+09	41+30	Rt.		39ø	42		1
TOTALS			675	92.5	126	100	3



Excavation Unsuitable Material = 795 C.Y.

EXCAVATION	8025 cu.Yd.
EMBANKMENT	11760 cu.Yd.
SEEDING	13674 Sq.Yd.

LINE SHEET - STA. 34+00 TO STA. 46+00

FED. ROAD DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO	BRF-550( )	

16
109

POR-224-G.22

Swamp
Old Stream Bed
Drainage Course
Congress Lake Outlet
12"Wl.
8"Wl.
14"Elm
18"Wl.
18"Elm
10"Elm
24"Elm
38"Elm
30"Ash
30"W.
14"W
Dr. Course
Straight Line
Cultivated Field
Woods
Expansion Joint
Approach Slab
Bridge
Chip
Iron Pipe
Swamp
36"Elm
Dr. Course
30"Elm
Stone
Edge of Swamp
20"Oak
BEGIN SHEET
END SHEET
STA. 46+00
STA. 58+00

B.S. on P.C. 46+84.67
2°51'36.5"
2005.08'
189.81'
189°43'
2005.89'
55°55'5"
1507°49.5"
84.06'
115.33'
Stake 'A'
Stake 'B'
Stake 'C'
12'A

Ref. To P.C. 48+84.67
+93.70
134.30

P.C. 48+84.67

B.S. on P.C.
2°6'9"
2006.89'
P.I. #2
183.96'
183.96'
100'
8°
Iron Pipe
Iron Pipe
Stake 'C'

Ref. to P.I. #2
Sta. 53+32.21 (Bk.)

Curve #2
P.C. Sta. 48+84.67 to P.T. 55+41.81
Δ = 8°56'00"
D = 0°56'
R = 6138.83'
L = 957.14'
T = 479.54'
E = 18.70'
P.I. Sta. 53+64.21 Bk.
Superelevation = +.015
D = 6038.83

S 84°15'30" E
N 86°48'30" E
P.I. #2

D = 6263.83

BM #7

Bench Mark #7 - 210' N. of Sta. 51+50
Pk. Nail in West Root of 24" Red Oak
Elev. 1121.455

Bridge Limits
Sta 46+80.68
℄ Bridge Sta 47+27.00
Sta 47+73.32

PROPOSED STRUCTURE
TYPE: Three Span Continuous Slab Bridge With **Capped Pile Substructure**
SPANS: 28'-35'-28' c/c Bearings
ROADWAY: 44'-0" f/f of Guard Rail
LOAD FREQUENCY: CF-2000(51)
SKEW: 24°-30' LF
WEARING SURFACE: 1" Monolithic
APPROACH SLABS: AS-1-54 (25'-0" Lg)
ALIGNMENT: Tangent
Drainage Area = 23.2 Square Miles

PT
+0.69%
87.4' on tgt. @ 0.69% Lt. of ℄ Brg.
Rt. EL. 1111.0
℄ EL. 1110.99
Rt. EL. 1111.30
FL 1111.28 (Lt)
87.7' (Lt) 8.24' (Rt) of ℄
EL. 1117.96 (Lt)
EL. 1117.58 (Rt)
CF 2-6'-0" Box below Pavt. Edge Lt. & Rt. @ 0.69% (from Sta 46+00 to Sta 58+00 Lt. & Rt.)
Congress Lake Outlet

EXCAVATION	16040 Cu Yd
EMBANKMENT	3767 Cu Yd
SEEDING	10715 Sq Yd

SODDING

STATION From	STATION To	Side	L-10 9' Wide S.Y.	
46+00	47+50	Lt.	33	Along Paved Gutter
46+00	47+00	Rt.	100	
47+90	50+00	Lt.	47	Along Paved Gutter
50+00	50+50	Lt.	50	
47+25	49+25	Rt.	200	
	TOTAL		430	

I-15 GUARD RAIL

STATION From	STATION To	Side	I-15 L.F.	
46+00	47+06±	Lt.	106	
46+00	46+85±	Rt.	85.5	
47+78±	49+00	Rt.	121.86	
47+96±	50+00±	Lt.	201.36	
	TOTAL		514.72	

FENCE

STATION From	STATION To	Side	Dist. From ℄	I-15 L.F.
46+00	48+00	Lt.	129 - 149	2,00'
48+00	50+83	Lt.	149 - 99	283'
50+83	58+00	Lt.	99	717'
46+00	58+00	Rt.	124	1200'
	TOTAL			2400

MONUMENT BOXES

STATION	Side	I-15 Ea.	
48+84.67	℄	1	P.C.
TOTAL		1	

DRAINAGE

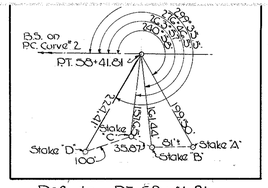
STATION From	STATION To	Side	I-14 Pave. Gutter L.F.	I-14 Cmb. & Gtr. L.F.	I-15	I-15 for I-14 @ 45° Each
46+00	47+50	Lt.	135			
47+90	50+00	Lt.	210			
48+20	56+00	Rt.		920	42'	1
48+70	56+00	Lt.		900	42'	1
	TOTAL		345	1850	84'	2

DISTRICT	STATE	PROJECT	FISCAL YEAR
8	OHIO	0500( )	

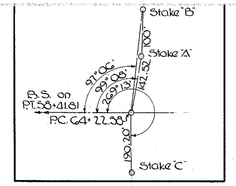
17
109

POI-224-6.22

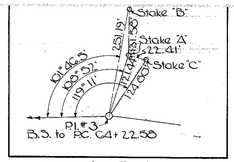
Ref. to P.T. 58+41.81



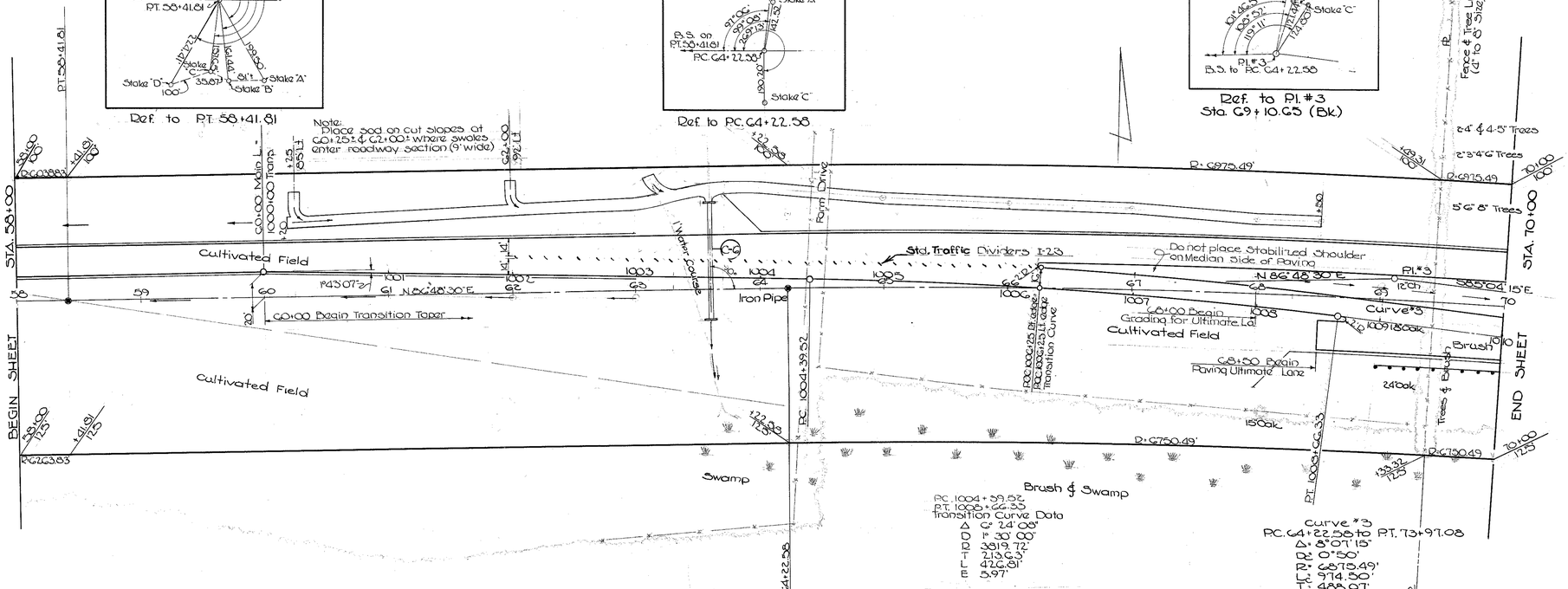
Ref. to P.C. G4+22.58



Ref. to Pl.#3
Sta. G9+10.65 (Bk)



Note:
Place sod on cut slopes at G0+25± & G2+00± where swales enter roadway section (9' wide)



Brush & Swamp

PC 1004+39.52
P.T. 1005+66.35
Transition Curve Data
Δ 5° 24' 08"
D 1° 30' 00"
R 3819.72'
T 213.63'
L 426.81'
E 5.97'

SODDING				
STATION		Side	L-10 9'Wide SY.	
From	To			
G0+20	G6+50	Lt.	935	
	TOTAL		935	

STRUCTURES UNDER 20' SPAN				
Mark	STATION	TYPE	SIZE	DETAIL SHEET
C-6	G3+61	Std. Pipe Culvert	60"x 76"	34

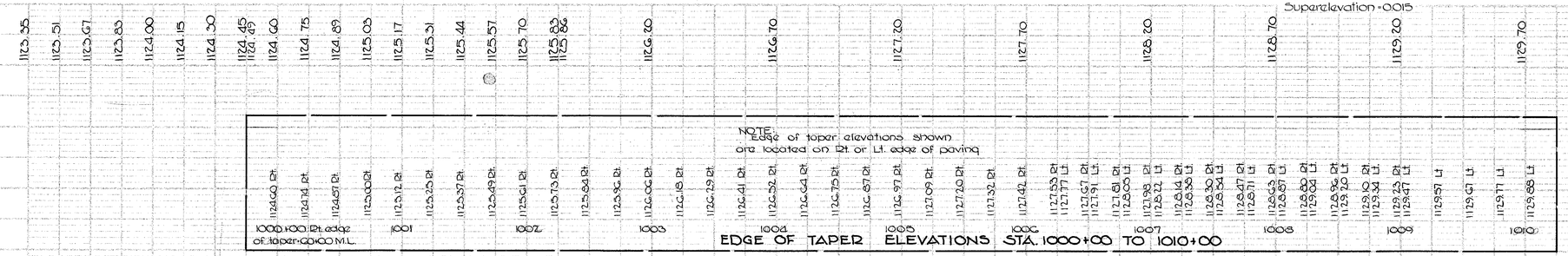
FENCE				
STATION		Side	Dist. from ℄	SS-16 L.F.
From	To			
58+00	70+00	Lt.	99	1200'
58+00	70+00	Rt.	124	1200'
	TOTAL			2400

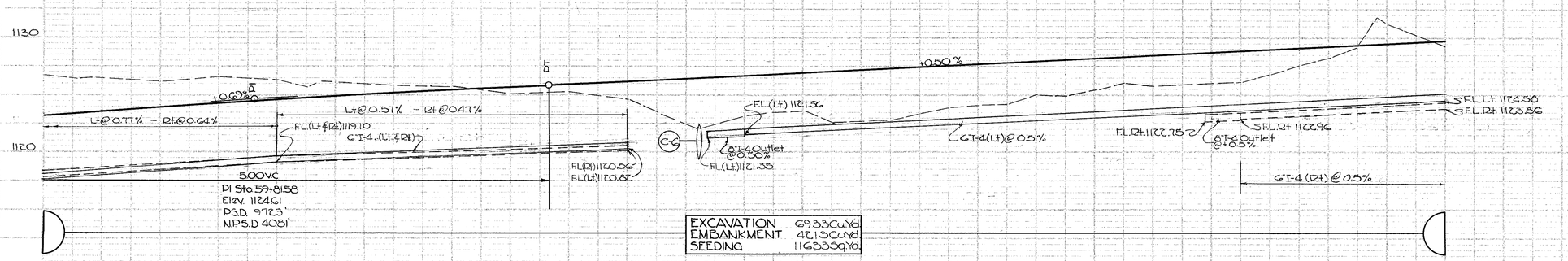
I-15 GUARD RAIL			
STATION		Side	I-15 LF
From	To		
69+00	70+00	Rt.	100'
	TOTAL		100'

DRAINAGE					
STATION		Side	I-4		I-5 for I-4 (2459lbs)
From	To		6"-15" Dia.	Outlet	
58+00	63+00	Lt.	500		
58+00	63+00	Rt.	500		
63+10	70+00	Lt.	600	42'	1
68+25	70+00	Rt.	175	42'	1
TOTALS			1775	84	2

I-23 PRECAST CONCRETE TRAFFIC DIVIDERS		
STATIONS		Dividers Each
From	To	
G2+00	G6+	36
	TOTAL	36

MONUMENT BOXES			
STATION	Side	I-8 Each	
58+41.81	℄	1	P.T.
G4+22.58	℄	1	P.C.
TOTAL		2	





LINE SHEET - STA. 58+00 TO STA. 70+00

Pt.'B' Stake
Pt.'A' Stake
Pt. 73+97.08
Pt.'C' Stake
Ref. To Pt. 73+97.08

Curve Data
PC G4+22.58 to PT. 73+97.08
Δ - 8° 07' 15"
D - 0°50' 00"
R - 6875.49'
T - 488.07'
L - 974.50'
E - 17.34'
Pl Sta. 69+10.65 Bk.

Note
See Sheet No. 31 for Intersection Details and Paving Plan.
See next sheet for SR44 Plan & Profile.

Transition Curve Data
RC 2000+00 to PRC 2007+580
Δ - 7° 30' 00"
D - 1° 30' 00"
T - 3819.72'
L - 7580.36'

℄ State Rte. 44
Proposed Construction

1+40 South State Rte 44
30+00 Service Drive

SERVICE DRIVE
LT. OF STA. 1+40 SOUTH
STATE RTE. 44

EDGE OF TAPER ELEVATIONS, STA. 1010+ TO 1013+75

NOTE: Edge of taper elevations shown are located on Lt. edge of paving.

EDGE OF TAPER ELEVATIONS
STA. 2000+00 TO 2002+00

NOTE: Edge of taper elevations shown are located on Lt. edge of paving.

MONUMENT BOXES			
STATION	Side	I-8 Each	
61+00	℄	1	RPT.
73+97.08	℄	1	PT.
TOTAL		2	

SODDING			
STATION		Side	9' Wide SY.
From	To		
70+28	82+00	Lt	370
78+37	82+00	Rt	370
Along paved gutter			9
TOTAL			749

I-15 GUARD RAIL			
STATION		Side	I-15 L.F.
From	To		
70+00	74+00	Rt.	400'
TOTAL			400

FENCE				
STATION		Side	Dist. from ℄	39-18 L.F.
From	To			
70+00	74+16	Lt.	99.99	416
74+16	74+16	Lt.	99-123.5	64
74+16	77+39	Lt.	123.5-122	323
78+07	82+00	Lt.	129.4-129.2	393
70+00	74+14	Rt.	124-124	414
74+14	75+95	Rt.	124-120.9	181
75+95	77+38	Rt.	120.9-121.5	145
78+06	82+00	Rt.	99.99	394
TOTAL				2786

STRUCTURES UNDER 20' SPAN				
MARK	STATION	TYPE	SIZE	CONC. CU. YD.
C-7	74+78	Std. Pipe Culvert	30"-194'	34
C-8	-	I-2 C.I.A M-6.6(4)	42"-244	31
C-9	-	I-2 C.I.A M-6.6(4)	42"-157	31
C-10	-	I-2 C.I.A	42"-248	31

I-12 CURB		
STATION		Type 2-A L.F.
From	To	
76+97	77+40	106
78+08	78+86	106
0+50 N	3+00 N	254
TOTAL		466

I-13 SIDEWALK		
STATION		SF 4' Wide
From	To	
1+00 N	1+00 S	664
TOTAL		664

REMOVAL					
STATION		Side	Rem't S.Y.	6-12 Pipe Removal (under) L.F.	6-8 Exist Sidewalk S.F.
From	To				
71+00		Lt.		75	
3+60 N	3+60 S	-	600	60	
1+00 N	1+00 S	Lt			800
74+	75+			210	
TOTALS			600	345	800

DRIVES											
LOCATION	STATION	Side	Dist. from Edge of Rav't	T-35 C.Y.	I-16 C.Y.	I-12 L.F.	E-1 Excav.	E-1 Embk.
Sec. Pl. of ℄	36+71 to 38+71	Rt.	19.8	-	148	-	1142	206
SR44	1+90 S	Lt.	6.0	4.3	13.5	20	1	5
SR44	2+30 S	Rt.	15	2.1	6.3	-	1	
SR44	3+21 S	Lt.	15	1.6	5.4	18	1	
SR44	3+82 S	Lt.	15	1.6	5.4	16	1	
SR44	1+30 N	Lt.	15	2.1	6.3	-	2	
SR44	1+45 N	Rt.	37	3.7	9.7	20	5	7
SR44	2+76 N	Lt.	15	2.1	6.3	-	1	
TOTALS				17.4	200.9	76	1154	214

DRAINAGE																											
STATION		Side	I-14 Std. Type L.F.	I-16 Std. Type L.F.	I-16 Temp. Inlet Ea.	I-12 Class A 15" L.F.	18"SUP L.F.	18"CP L.F.	24"CP L.F.	I-8 Std. Curb Inlet Ea.	I-8 Std. Curb Inlet Ea.	I-8 Std. Curb Inlet Ea.	I-8 Std. Curb Inlet Ea.	E-2 C.Y.	E-1 C.Y.	I-4 Base L.F.	I-4 Shallow L.F.	I-4 Gutter L.F.	I-5 Type SF
From	To																		
71+00	71+00		10			54	22						1	1.5	0.26				
70+00	73+50	Lt.														350			
70+00	73+50	Rt.														350			
74+10	76+45	Rt.														345		42	1
75+50	77+00	Lt.														540		42	1
0+50 N	3+00 N	Lt.															290	20	
0+65 S	3+05 S					56				1	1								
0+85 S	78+70		20						80		1								
1+17 N	0+85 N		10					88		1	1								
2+45 N				1	1							2							
78+70	82+00																	382	1
TOTALS			40	1	1	110	22	88	80	2	1	2	3	1.5	0.26	1385	290	486	3

EXCAVATION	26945 C.Y.	Excav. for Drives 1154 C.Y.
EMBANKMENT	9132 C.Y.	Embank. for Drives 214 C.Y.
SEEDING	150575 Y.	

Note:
See Drainage Profile on Sheet No. 31

LINE SHEET - STA. 70+00 TO STA. 82+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

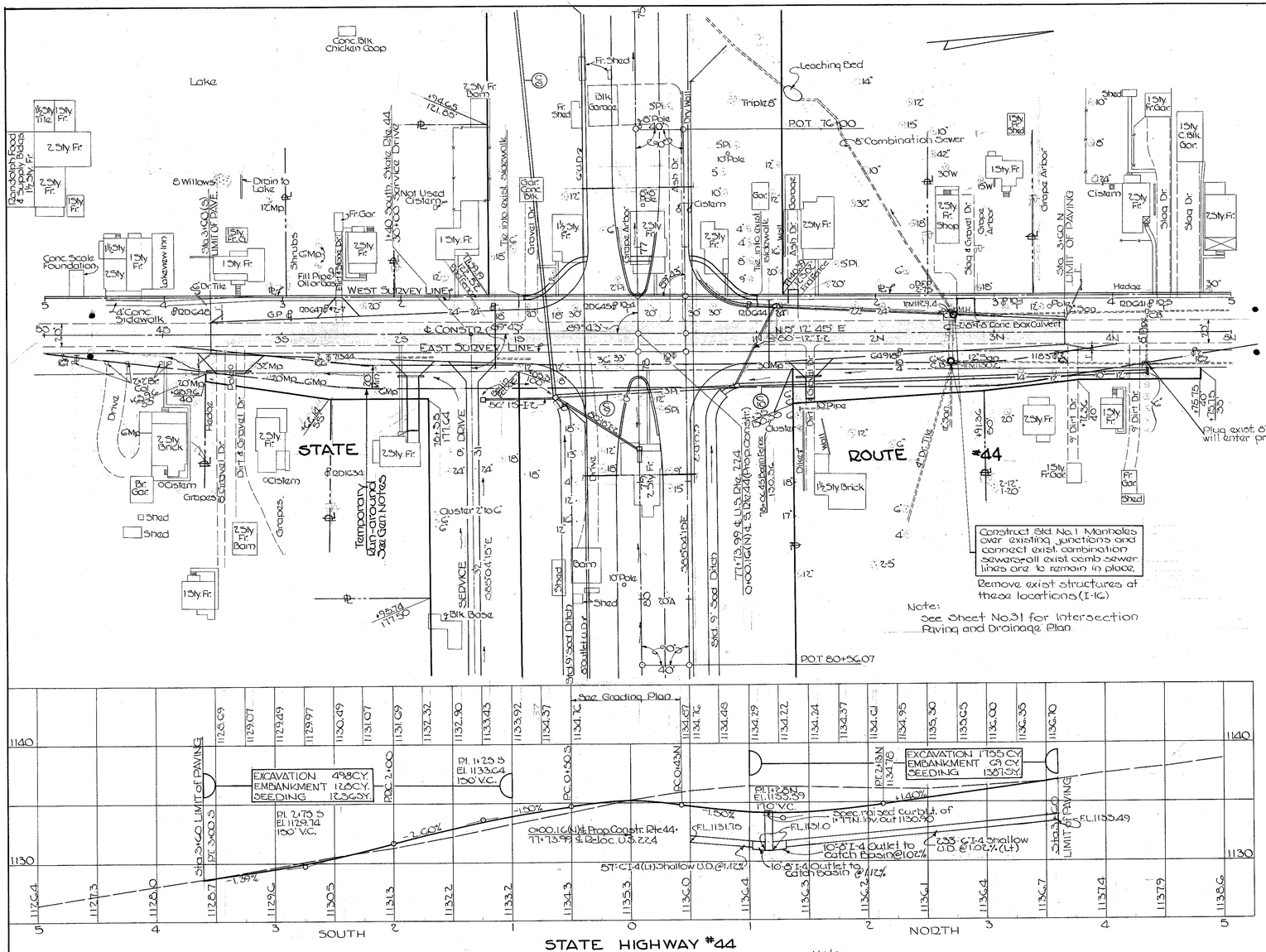
19
109

POR-224-6.22

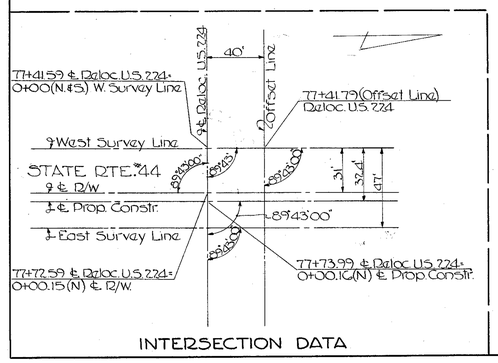
PIPE FOR TRAFFIC SIGNALS	
STATION	*S-25.3 M-6.1 L.F.
76+50 (Reloc. 224)	61'
78+95 (" ")	61'
1+205 (SR 44)	55'
1+10N (" " ")	55'
TOTAL	232'

OVERHEAD SIGN ASSEMBLY					
STATION	O S - 2 - A				
	40' Span	36' Span	"H"	Supports	Spacing
72+75 (EBL)	1		3'	4	3',3',9',9'
4+600 (SR 244)		1	3'	2	3',9'
5+20N (" ")		1	3'	2	3',9'
TOTAL	1	2			

* Galvanizing shall meet the requirements of Sec. M-7.4(d)



Note:
See Sheet No. for profile of Culverts ℄ I-2



ESTIMATED QUANTITIES

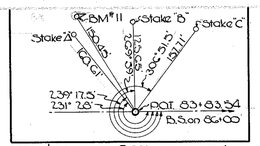
E-1	EXCAVATION	22.53 Cu.Yd.
	EMBANKMENT	19.7 Cu.Yd.
L-9	SEEDING	2623 Sq.Yd.
S-15	TEMPORARY RUN-AROUND, CLASS A PAVT	Lump Sum

All other quantities are on Main Line Sheet No. 18

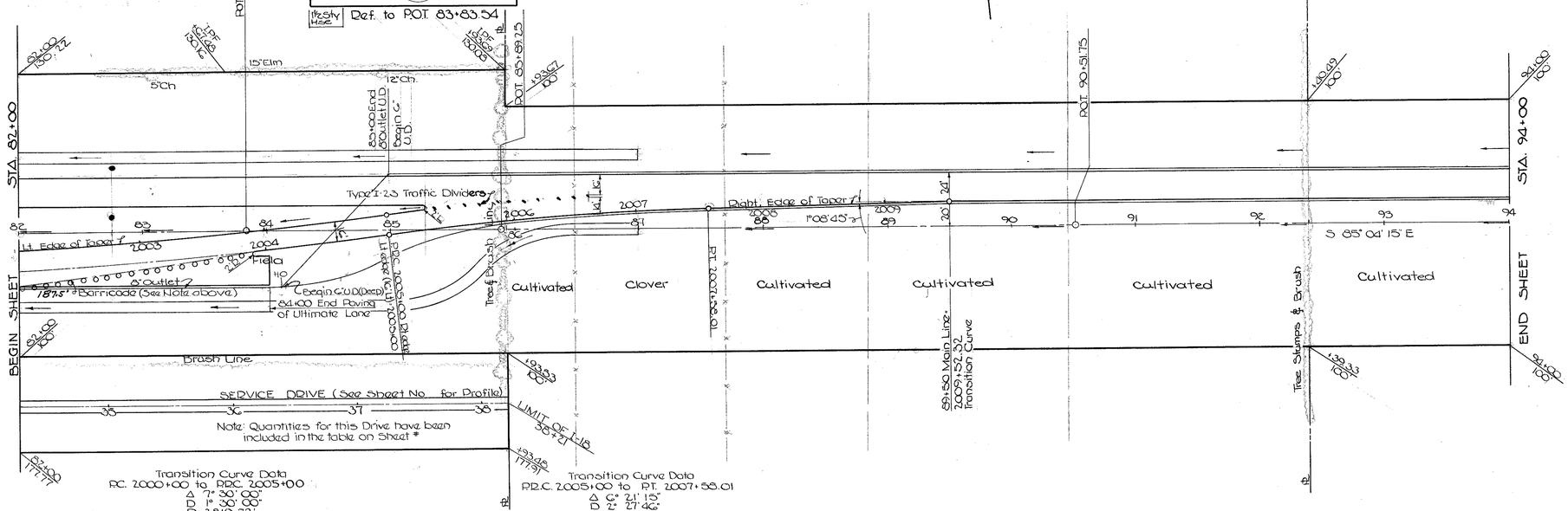
FED. DIVIS.	STATE	PROJECT	FED-AI YEARS
2	OHIO	F-330( )	

POR-224-6.22

Note: Barricade shown shall be 55 gallon drums spaced 12½ ft. c.-c. painted yellow, half full of sand, with steel beam guard rail bolted on traffic side, 2 ft. above pavement.

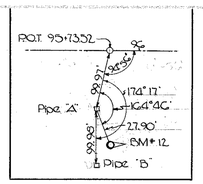


Use Only Ref. to POT 83+83.54

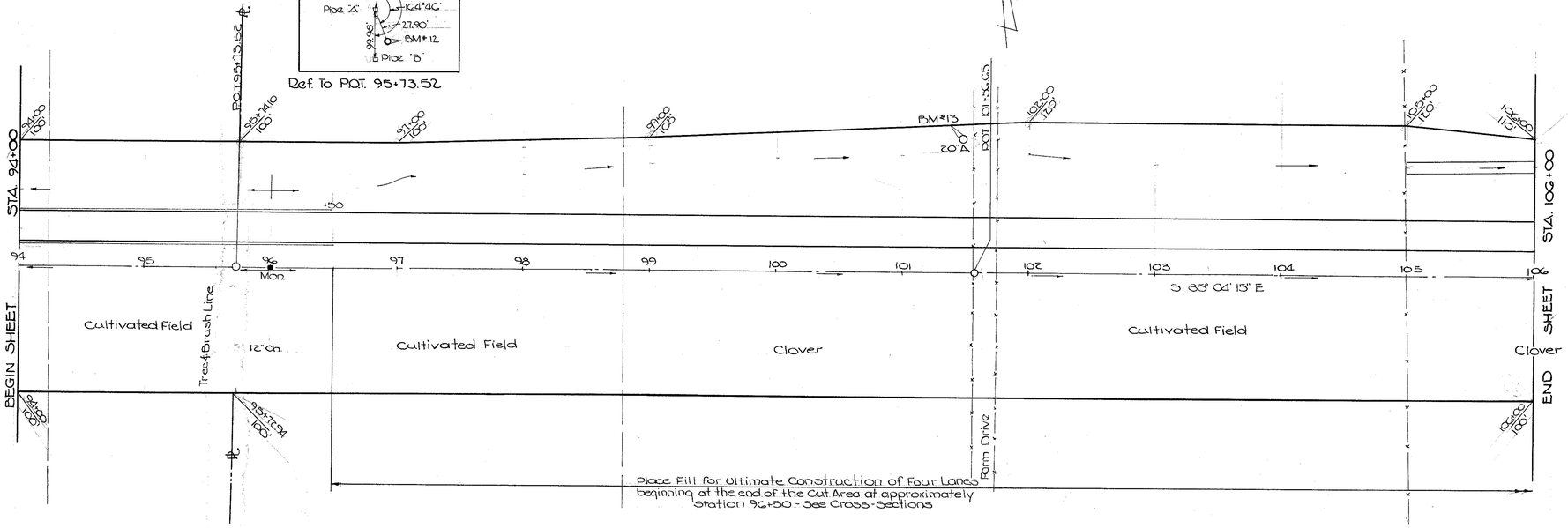

STA 82+00
STA 94+00
BEGIN SHEET
END SHEET
POT 83+83.54
POT 85+89.25
POT 90+51.75
82+00 1301.72
15" Elm
5" Ch
12" Ch
83+00 End of Outlet & U.D.
Begin C.U.D.
Type I-23 Traffic Dividers
Lt. Edge of Taper
2003
2004
2005
2006
2007
2008
2009
Right Edge of Taper
Field
Outlet
187.5' Barricade (See Note above)
Begin C.U.D. (Deep)
84+00 End Paving of Ultimate Lane
Tree & Brush Line
Cultivated
Clover
Cultivated
Cultivated
Cultivated
Cultivated
Brush Line
SERVICE DRIVE (See Sheet No. for Profile)
Note: Quantities for this Drive have been included in the table on Sheet #
LIMIT OF I-18
89+50 Main Line 2009+52.32 Transition Curve
Tree Stumps & Brush
S 85° 04' 15" E
1808.45'
10°85'12.00" LT
140.49
100
94+00
100
82+00
100
1977
1977
1977

DIST. NO. DIVISION	STATE	PROJECT	FISCAL YEAR	21 109
2	OHIO	330 ( )		

POR-224-6.22



Ref. To P.O.T. 95+73.52

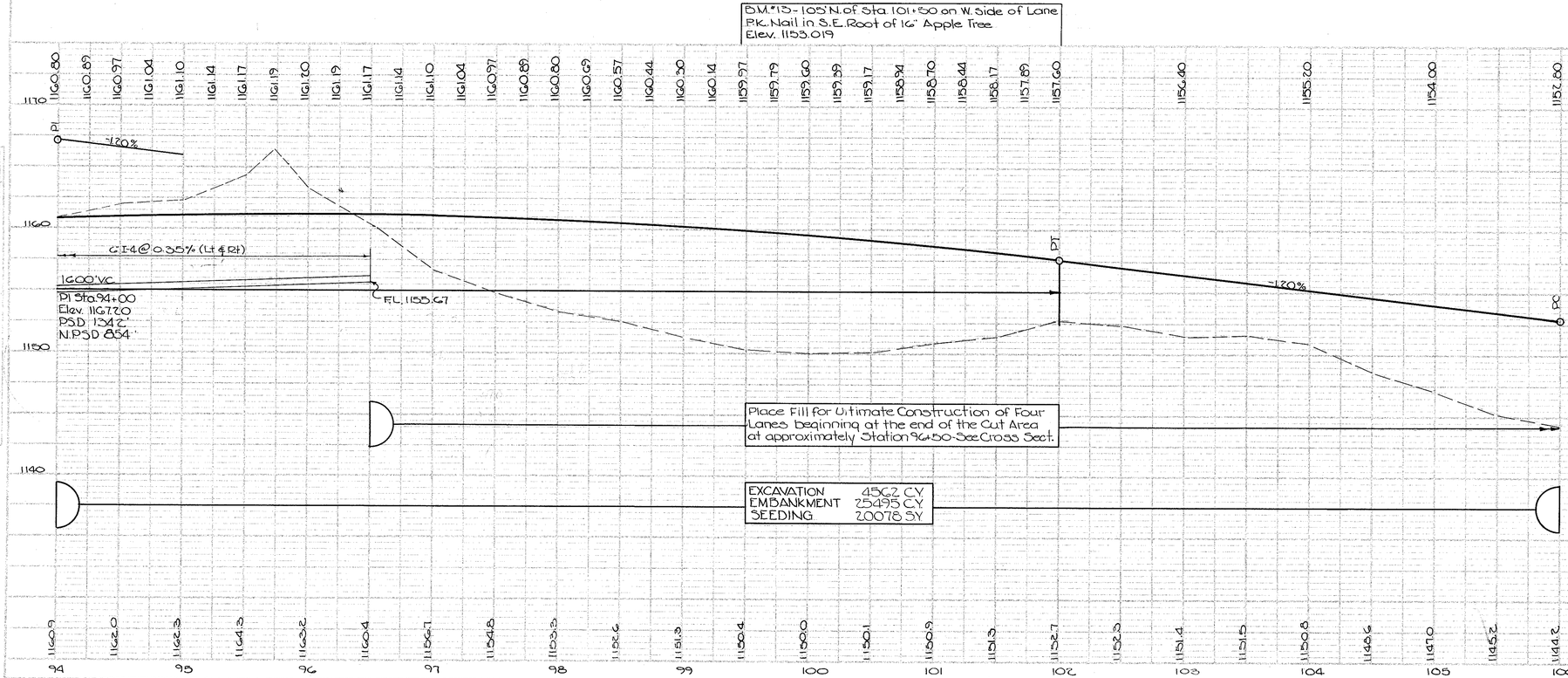


SODDING				
STATION From	STATION To	Side	L-10 9' Wide S.Y.	
105+00	106+00	Lt.	100	
Total			100	

FENCE				
STATION From	STATION To	Side	Dist. from ℄	55-18 L.F.
94+00	97+00	Lt.	99-99	300
97+00	99+00	Lt.	99-104	200
99+00	102+00	Lt.	104-119	300
102+00	105+00	Lt.	119-119	300
105+00	106+00	Lt.	119-109	100
94+00	106+00	Rt.	99-99	1200
TOTAL				2400

MONUMENT BOXES			
STATION	Side	1-8 Each	
96+00	℄	1	
TOTALS		1	

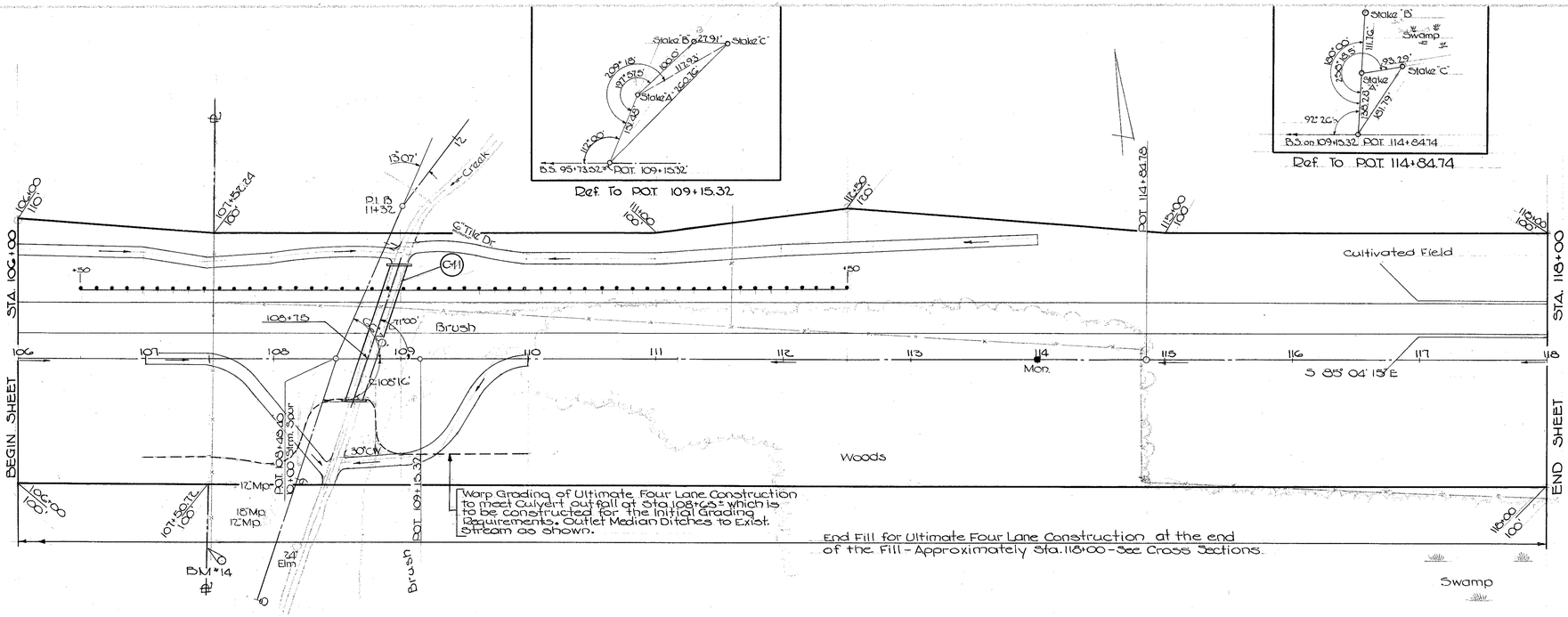
DRAINAGE			
STATION From	STATION To	Side	I-4 w/Deep L.F.
94+00	96+50	Lt.	250
94+00	96+50	Rt.	250
TOTAL			500



LINE SHEET STA. 94+00 TO STA. 106+00

REF. NO. OF SHEETS	STATE	PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2	OHIO	I-350( )		22	109

POR-224-G.22



SODDING				
STATION From	STATION To	Side	L-10 9' Wide SY.	
106+00	109+00	Lt	300	
109+00	114+00	Lt	500	
101+00	108+50	Rt	150	
108+50	110+00	Rt	150	
TOTAL			1100	

STRUCTURES UNDER 20' SPAN					
MARK	STA	TYPE	SIZE		SKEW ANGLE
C-11	108+75	Std Pipe-Arch Culvert	103"-1-11"X17"		30

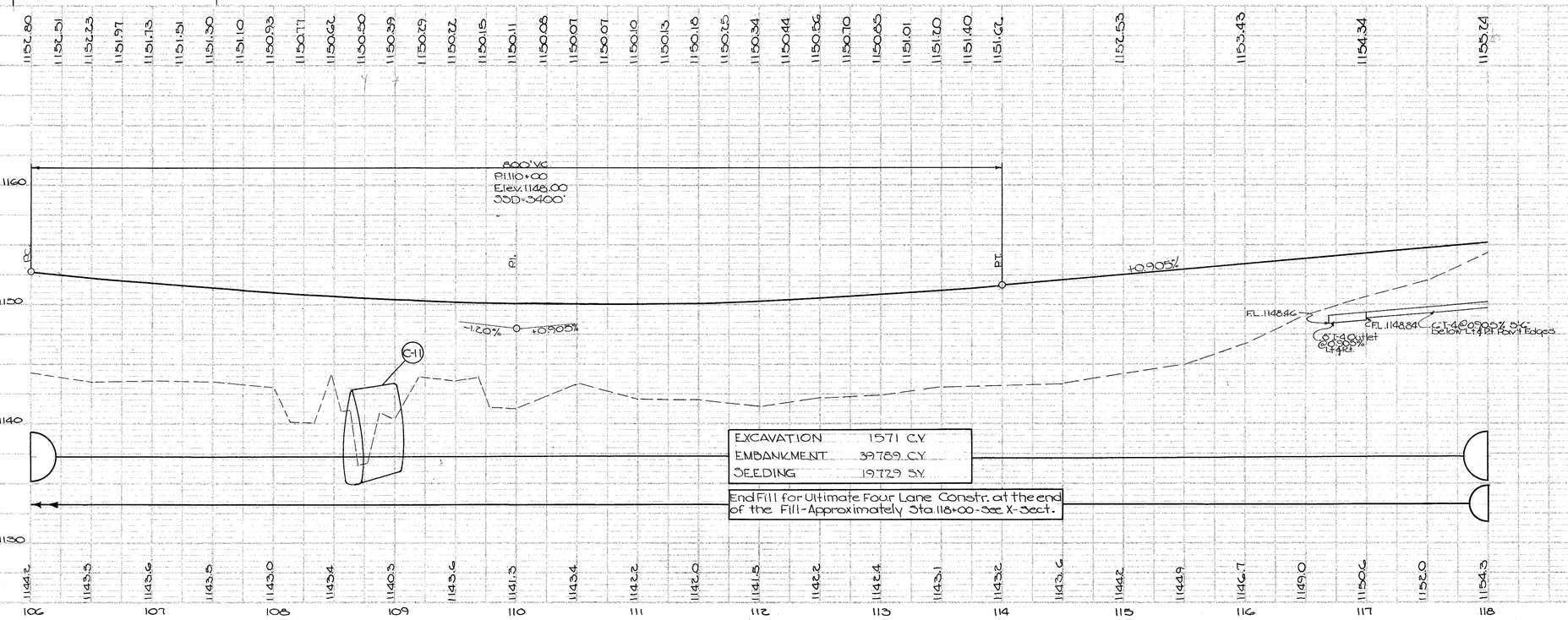
I-15 GUARD RAIL			
STATION From	STATION To	Side	I-15 L.F.
106+50	117+50	Lt.	600
TOTAL			600

FENCE				
STATION From	STATION To	Side	Dist. From ℄	55-18 L.F.
106+00	107+32	Lt.	109.99	132
107+32	111+00	Lt	99.99	348
111+00	112+50	Lt	99-119	150
112+50	115+00	Lt.	119-99	250
115+00	118+00	Lt	99-99	300
106+00	118+00	Rt.	99-99	1200
TOTAL				2400

MONUMENT BOXES		
STATION	Side	I-8 Each
114+00	℄	1
TOTALS		1

DRAINAGE					
STATION From	STATION To	Side	I-4 C Dep	I-4 Q Outlet	I-5 for I-4
116+70	118+00	Lt	100	42	1
116+70	118+00	Rt	100	42	1
TOTAL			200	84	2

B.M.#14 - 160' S. of Sta. 107+60
Pk. Nail in N. Root of 42" Red Oak - Elev. 1142.096

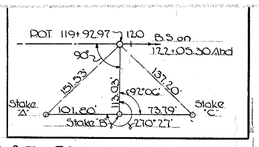


LINE SHEET - STA 106+00 TO STA. 118+00

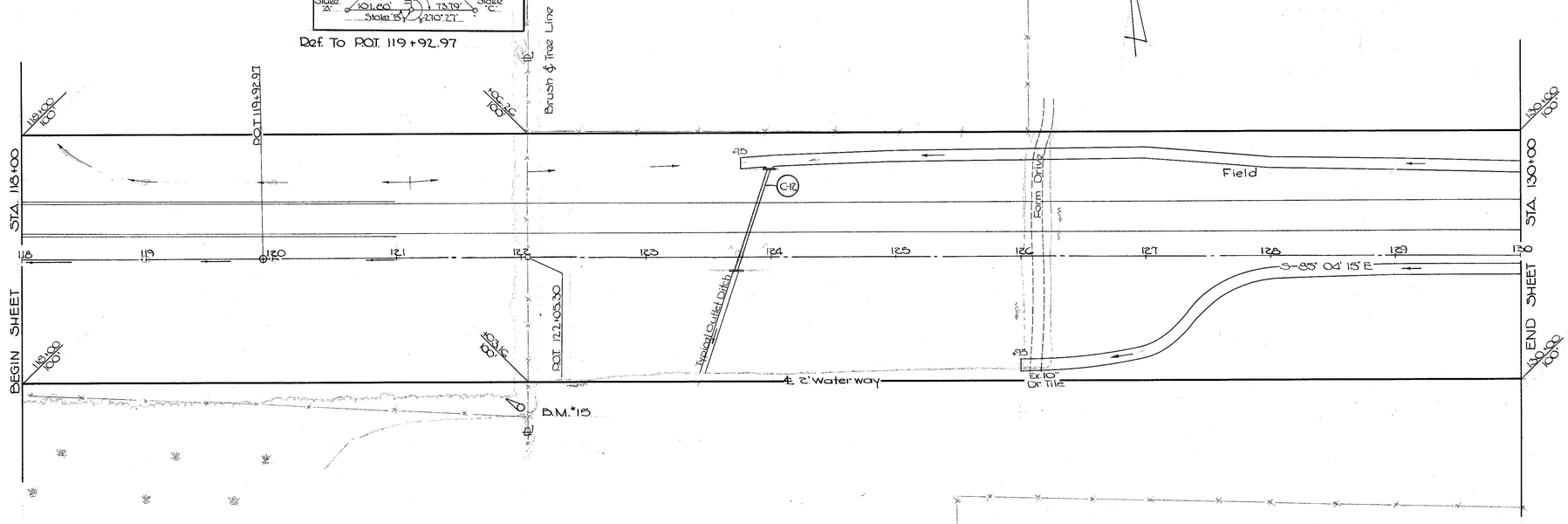
DIST.	COUNTY	PROJECT	FISCAL YEAR
8	CHIC	100( )	

63
109

POR-221-G.22



Ref. To POT 119+92.97



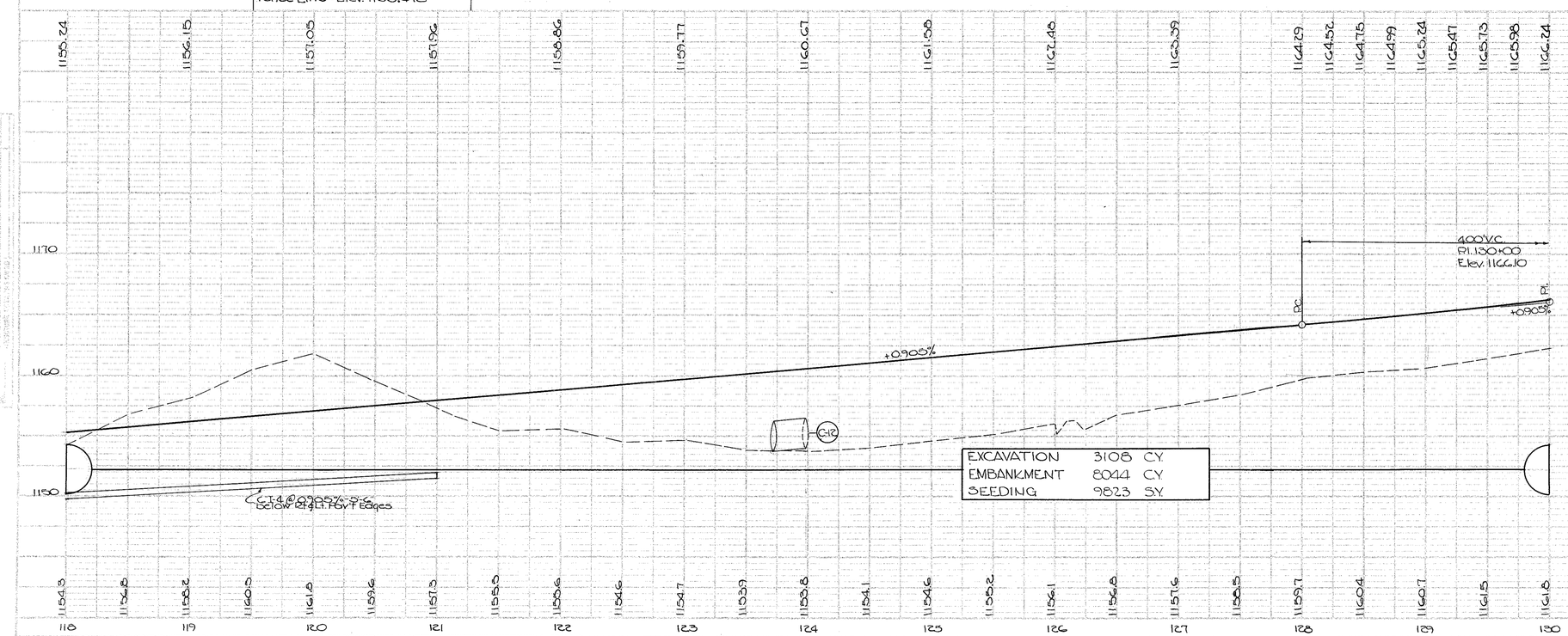
BM.*15-125' S. of Sta. 122+00
PK. Nail in N. Root of 15" Elm at Fence Line - Elev. 1153.478

SODDING				
STATION		Side	9" Wide SY.	
From	To			
123+75	130+00	Lt.	625	
125+95	130+00	Rt.	405	
	TOTAL		1030	

FENCE				
STATION		Side	Dist. from ℄	55-18 L.F.
From	To			
118+00	130+00	Lt.	99'	1200
118+00	130+00	Rt.	99	1200
	TOTAL			2400

DRAINAGE			
STATION		Side	I-4 6' Deep L.F.
From	To		
118+00	121+00	Lt.	300'
118+00	121+00	Rt.	300'
TOTAL			600'

STRUCTURES UNDER 20' SPAN				
Mark	STATION	TYPE	SIZE	DETAIL SHEET
C-12	123+75	Std. Pipe Culvert	30"ø	35



LINE SHEET - STA. 118+00 TO STA. 130+00

CO.	RTE.	PROJECT	FISCAL YEAR
2	CHIE	F 350( )	

POR-224-6.22

Stake "B"
150'
180°
Stake "A"
117.04'
271° 30'
POT 130+16.39
BS on 133+26.57 Ahd.
42.12'
91° 30'
Stake "C"

Ref. To 130+16.39

BS on 139+80.52 Ahd.
POT 133+26.57
65° 54'
90° 00'
112.10'
13.99'
Stake "A"
BM# 16
Stake "B"
112.24'
65.39'
Stake "C"

Ref. To POT 133+26.57

Stake "C"
151.10'
69° 15'
340.00'
BS on 139+26.57
POT 139+80.52
248.35'
284.71'
Stake "A"
123° 45'
Stake "B"
118.25'

Ref. To POT 139+80.52

STA. 130+00
STA. 142+00
BEGIN SHEET
END SHEET
Brush & Tree Line 4'±
POT 133+26.57
POT 139+80.52
130+13.20 100
142+00 100
130+00 100
+13.20
+13.39
+12.33
130 131 132 133 134 135 136 137 138 139 140 141 142
+30
Mon
S 85° 04' 15" E
Cultivated Field
Cultivated Field
Cultivated Field
B.M. 16
24"
POT 130+16.39
130+00.30 100
6.05'
19'
Prop. Cor. Found
Farm Drive
12' A.
2"± Trees & Brush

B.M.#16 - 110' S. of Sta. 133+25 in East Lane of Fence
Nail Head of Insulator in W. side of 18" Pear 2.7' above Ground - Elev. 1172.091

SODDING				
STATION From	STATION To	Side	L-10 9' Wide SY	
130+00	142+00	Lt.	1200	
130+00	136+00	Rt.	600	
TOTAL			1800	

FENCE				
STATION From	STATION To	Side	Dist. from ℄	50-18 L.F.
130+00	142+00	Lt.	99-99	1200
130+00	142+00	Rt.	99-99	1200
TOTAL				2400

MONUMENT BOXES			
STATION	Side	1-8 Each	
131+00	℄	1	POT
TOTALS		1	

DRAINAGE					
STATION From	STATION To	Side	1'-4 6'-Deep L.F.	8'Outlet L.F.	15"x14" Grates Each
136+00	142+00	Lt.	570	42	1
136+00	142+00	Rt.	570	42	1
TOTAL			1140	84	2

1166.24 1166.51 1166.77 1167.04 1167.32 1167.60 1167.88 1168.17 1168.46 1169.64 1170.82 1172.00 1173.18 1174.36 1175.54 1176.72 1177.90 1179.08 1180.26

1190
1180
1170
1160

400' V.C.
PI. 130+00
Elev. 1166.10
PI
P.T.
-1.18%
+1.18%
8"-48" Inlet @ 0.50%
F.L. (14"RCP) 1167.82
F.L. (24"RCP) 1168.03
1'-4" Gutter Pan Below Lt. & Rt. Pavt. Edges

EXCAVATION	3423	C.Y.
EMBANKMENT	2109	C.Y.
SEEDING	8187	S.Y.

1161.8 1163.5 1164.1 1165.2 1166.6 1167.3 1168.6 1169.6 1169.7 1170.0 1170.0 1170.0 1170.2 1170.6 1170.9 1171.6 1172.2 1172.9 1173.7 1174.5 1175.9 1177.4 1179.1 1180.7 1182.5

130 131 132 133 134 135 136 137 138 139 140 141 142

PLATE & PLAN - PROFILE & P. & P. STANDARDS
GEORGE SEIBEL CO., SYRACUSE - NEW YORK

LINE SHEET - STA. 130+00 TO STA. 142+00

DESIGN STATE	COUNTY	PROJECT	FISCAL YEAR
2	DARKE	P.2050( )	

POR-224-6.22

25
109

Boat Spike @ 18"Mp. W. Root
Iron Pipe
P.O.T. 144+78.65
Ref. To P.O.T. 144+78.65

P.C. 148+14.62 M.L. 3000.00 Tran. ℄

Stake at fence cor. — 12.1' 2.5' — Stake along fence line
246.10'
117.16'
90°-55'
274.28'
Iron Pin @ P.C. 148+14.62
Ref. To P.C. 148+14.62

Curve Data #4
P.C. 148+14.62 to P.T. 159+46.12
Δ = 17°43'45"
D = 0°50'00"
R = 6875.49'
T = 1074.37'
L = 2131.50'
E = 83.43'
P.I. 158+88.99 (BK)
Superelevation = 0.015

B.M.*18

B.M.*17
18"Mp.
P.O.T. 143+12.03
P.O.T. 144+78.65
BEGIN SHEET
STA. 142+00
STA. 154+00
END SHEET
R=6775.49'
R=6975.49'
9 Precast Concrete Traffic Dividers
S 85° 04' 15" E
Ex. Tan
1-Mon.
Stop Grading for one Lane only - Warp to 154+00
24"
10"
Small Trees & Brush
Cultivated Field
Cultivated Field
Cultivated Field
Apple Orchard
POC 153+00.30

Note:
See Profile of Taper Edges below.

SODDING				
STATION		Side	L-10 9' Wide SY	
From	To			
142+00	145+50	Lt	350	
TOTAL			350	

FENCE				
STATION		Side	Dist from ℄	35-18 L.F.
From	To			
142+00	154+00	Lt	99-99	1200
142+00	154+00	Rt	99-99	1200
TOTAL				2400

DRAINAGE			
STATION		Side	I-4 C Drop L.F.
From	To		
142+00	154+00	Lt.	1200
142+00	154+00	Rt.	1200
TOTAL			2400

MONUMENT BOXES		
STATION	Side	I-8 Each
148+14.62 ℄		1 P.C.
TOTAL		1

I-23 PRECAST CONCRETE TRAFFIC DIVIDERS	
STATIONS	Each
From To	
150+95 153+80	21
TOTAL	21

B.M.*17 - 200' N. of Sta. 144+60
Pk. Nail in S. Root of 16" Maple
Elev. 1188.045

B.M.*18 - 230' N. of Sta. 152+90
Pk. Nail in S. Root of 20" Pin Oak - Elev. 1194.269

1180.26 1181.44 1182.62 1182.91 1183.18 1183.45 1183.69 1183.95 1184.14 1184.35 1184.54 1184.72 1184.88 1185.04 1185.17 1185.30 1185.40 1185.50 1185.58 1185.88 1186.18 1186.48 1186.76 1187.08 1187.38

1200
1190
1180

400' V.C.
P.I. Sta. 146+00
Elev. 1184.98
P.S.D. 2.250
N.P.S.D. 1.07.7
+1.18%
+0.30%
+0.30%
C.I-4 @ 1.18% (Lt & Rt)
C.I-4 @ 0.65% (Lt & Rt)
C.I-4 @ 0.3% (Lt)
C.I-4 @ 0.47% (Rt)
C.I-4 @ 0.73% (Rt)
F.L. 1177.12 (Lt & Rt)
F.L. 1179.72 (Lt & Rt)
F.L. 1181.08 (Rt)

TRANSITION TAPER PROFILES
Right Edge ℘
Left Edge ℘
P.C. 148+14.62 = 3000.00
℄
Rt
Lt

1185.70 Rt. 1185.77 Rt. 1185.84 Rt. 1185.94 Rt. 1186.01 Rt. 1186.11 Rt. 1186.20 Rt. 1186.27 Rt. 1186.34 Rt. 1186.45 Rt. 1186.54 Rt. 1186.63 Rt. 1186.72 Rt. 1186.81 Rt. 1186.90 Rt. 1186.99 Rt. 1187.10 Rt. 1187.39 Rt. 1187.19 Lt. 1187.43 Rt. 1187.49 Rt. 1187.59 Rt. 1187.69 Lt. 1187.53 Rt.
3000 3001 3002 3003 3004 3005 3006

EXCAVATION	25252 C.Y.
EMBANKMENT	0 C.Y.
SEEDING	11809 S.Y.

182.5 184.3 185.3 185.0 184.3 183.9 183.9 184.8 186.5 187.6 188.5 190.0 190.0 191.3 192.1 192.2 192.5 192.9 193.4 194.0 194.0 193.8 192.9 190.5
142 143 144 145 146 147 148 149 150 151 152 153 154

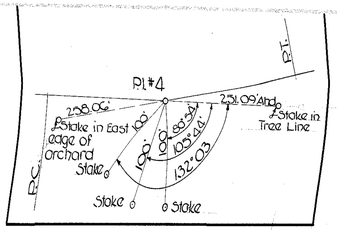
LINE SHEET - STA. 142+00 TO STA. 154+00

NO.	DATE	PROJECT	FISCAL YEAR
2	HIGH F-330( )		26 109

POR-224-G22

Transition Curve Data
Δ: 7°30'00"
D_c: 1°30'00"
R: 3819.72'
T: 250.36'
L: 500'
P.C.: 3006+21.66
P.T.: 3012+38.47

Curve #4
P.C. 148+14.62 to P.T. 169+46.12
Δ: 17°45'45"
D_c: 0°50'
R: 6875.49'
L: 2131.50'
T: 1074.31'
E: 83.43'
P.I. 158+88.99 (BK)
Superelevation: 0.015



REF. TO P.I. #4

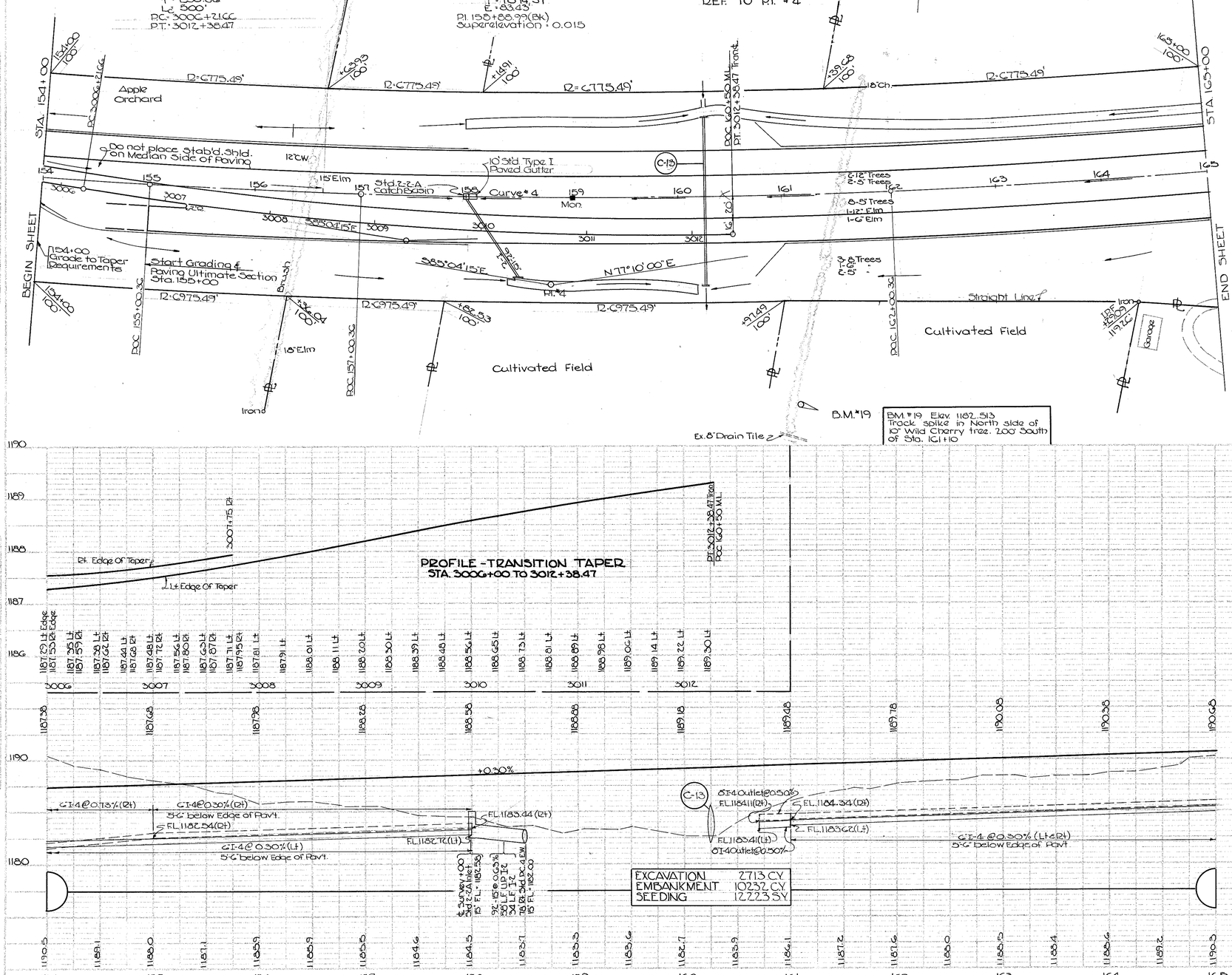
SODDING			
STATION		Side	L-10 9 Wide SY
From	To		
158+00	165+00	Lt.	730
158+40	160+25	Rt.	185
TOTAL			915

STRUCTURES UNDER 20' SPAN				
MAP#	STATION	TYPE	SIZE	SKEW
C-13	160+25	Std. Pipe Culvert	42"-14GA	55

MONUMENT BOXES			
STATION	Side	I-8 Each	
159+00	℄	1	POC
TOTAL		1	

FENCE				
STATION		Side	Dist From ℄	55-18 L.F.
From	To			
154+00	165+00	Lt.	99-99	1100
154+00	160+97	Rt.	99-99	697
160+97	164+29	Rt.	99-1133	532
164+29	165+00	Rt.	1 off ℄	71
TOTAL				2200

DRAINAGE														
STATION		T-2 (CLASS A)					E-5 for I-4 CMP 45° Bend	S-1 ENDWALL	E-2 EXC.	I-8 Std 2-2A Cat Bas.	I-4			I-14
From	To	15" L.F.	18" L.F.				Ea.	C.Y.	C.Y.	Ea.	C Deep L.F.	Outlet L.F.		Std Type I L.F.
158+00	158+50	34	58					0.26	1.5	1				10
160+70(Lt)	165+00(Lt)						1				400	42		
160+70(Rt)	165+00(Rt)						1				400	42		
154+00(Lt)	158+00(Lt)										400			
154+00(Rt)	158+00(Rt)										400			
TOTALS		34	58				2	0.26	1.5	1	1600	84		10



LINE SHEET - STA. 154+00 TO STA. 165+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
8	OHIO	F-330( )	

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POR-224-6.22

NOTE:
Typical section of adjoining roadway to this contract to be same as that shown on sheet No. 3 of this set of plans.

STRUCTURES UNDER 20'SPAN				
MARK	STATION	TYPE	SITE	Detail Sht.
C-14	4+76.5-31	Std. Pipe Culvert	45°x74'	35
C-15	3+44	Std. Twin Pipe Culvert	42°x208'	36
C-16	2+45	Std. Twin Pipe Culvert	42°x82'	36

REMOVAL				
STATION From	To	Side	E-8 Pav't S.Y.	E-12 Apr. 15" &under L.F.
CR5W	4+50E		2500	950'
Entire Sheet				

Exist. 224

Stake 2+45.91 — 76°-39' — 115.32' — 2+57.35 — Stake — East — P.T. 169+46.12 — 2+57.31 — Stake

REF. TO P.T. 169+46.12

STD. CONCRETE CURB TYPE 2-A, F-12		
STATION From	To	L.F.
172+60	1+50	360
165+85	167+30	200
TOTAL		560

DRAINAGE																
STATION		I-2 (Class A)							I-5 Std. E-A Catbas	J-1 Class E C.Y.	E-2 Endwall C.Y.	F4,8" Pipe Outlet for U.D.	Side	F4,6" Deep L.F.	I-14 Std. Type I L.F.
From	To	12" L.F.	12"UP L.F.	15" L.F.	15"UP L.F.	18" L.F.	18"UP L.F.	24" L.F.							
1+50W	2+00N					24	84	264	2	0.26	1.5				20(Ex 224)
167+50+												35'			
166+65	167+50	24	66		62				2	0.36	2				30
165+00	173+25												Lt	885	
165+00	173+80												Rt	880	
TOTALS		24	66		62	24	84	264	4	0.62	3.5	35		1765	50

ITEM S-15 Lump Sum
Temporary Run-Around Road using Class A Pav't

END PROJECT (AT SECTION) THIS CONTRACT STA 2+50 (AT SECTION) STA 501+42.55 (MILEPOST SYSTEM)

Place Fill in this area - Stop all grading Operations at beginning of cut (Sta 4+00)

LIMIT OF PAVING - 2+50

P.O.T. 173+79.93 Reloc. Rte 224 B.W.* P.O.T. 0+00.00 (E&W) Exist. Rte 224 & Prop Constr. Centerline in Pavement Section 0+00.00 Ahead on Atwater Section

(F-330(3))

Marker will be furnished and erected on the left by the State before acceptance of this project.

20 Min Temp Run Around for Maint. of Traffic. See general Notes

Barricade (13.5' & 25') See Notes on sheet No. 20

Std. E-A Catch Basin

1-10 Std. Type I Paved Gutter

Typical detail of Ditch

Spec. Paved Gutter (See Detail Sht No. 3C)

Spec. Paved Gutter (See Detail Sht No. 3C)

Proposed Paving

This tangent continues to Sta. 16+93 (Atwater)

END WORK (AT SECTION) THIS CONTRACT STA 6+00 (AT SECTION) STA 501+92.55 (MILEPOST SYSTEM)

U.S. 224

SODDING				
STATION From	To	Side	L-10 9"Wide S.Y.	
2+85N	3+25N*	Lt.	410	*CH. 31
1+50	2+45N*	Lt. & Rt.	205	*CH. 31
5+00S*	16+85	Lt.	450	*CH. 31
1+50W*	3+50	Lt.	190	*Exist. 224
3+50W*	3+90 AT.	Rt.	700	*Exist. 224
2+00 AT.		Rt.	2.5	Outlet Ditch
TOTAL			1980	

DRIVES						
STATION	Side	Dist. From Pav't Edge	T-35 I-16 C.Y.	E-1 Excav. C.Y.	E-1 Emb. C.Y.	I-1 12" L.F.
2+85N-31	Rt.	65'	5.7	16.8	3.9	32
3+40N-31	Lt.	35'	3.1	9.4	2.7	32
2+25S-31	Rt.	55'	4.8	12.9	2.5	
1+75W-224	Rt.	30'	3.3	9.8	5	18 24
4+20W-224	Rt.	48'	3.8	11.2	12	13 0
5+85W-224	Lt.	28'	2.8	8.3	5	5 24
Totals			23.0	68.4	61	83 112

FENCE				
STATION From	To	Side	Dist. From ℄	38-18 L.F.
165+00	166+00	Lt.	99-99	100'
166+00	166+67	Lt.	99-198	120'
167+54	168+00	Lt.	142-299	80'
168+00	171+01	Lt.	99-99	301'
171+01	171+24	Lt.	99-163	65'
172+83	173+79	Lt.	141.3-99	108'
173+79	5+00	Lt.	99-99	500'
165+00	165+65	Rt.	18-151.6	73'
166+73	167+49	Rt.	180.2-99	115
167+49	0+65 E	Rt.	99-144	635
0+65 E	3+18 E	Rt.	144-49	253
3+18 E	4+49 E	Rt.	49-79	131'
4+49 E	2+99 E	Lt.	29-54	150'
2+99 E	2+99 ML	Lt.	54-99	65
2+99 ML	5+00	Rt.	99-99	201'
TOTAL				2897

I-15 GUARD RAIL			
STATION From	To	Side	I-15 L.F.
3+00 S (C.H. *31)	5+00 S	Rt.	150
TOTAL			150

MONUMENT BOXES			
STATION	Side	I-8 Ea.	
169+46.12	℄	1	P.T.
173+79.93	℄	1	Eq'l'n Sta.
0+00			
Total		2	

Curve Data *4
Δ: 17°45'45"
D: 0°50'
R: 6875.49'
Lc: 2131.50'
T: 1074.37'
E: 83.45'
P.C. 148+14.62
P.T. 169+46.12
P.I. 158+88.99 BK

Begin Sheet

Note: See Sheet #30 for C.H. 31 Intersection Details
See Sheet #32 for Ex. U.S. 224 Intersection Details

B.M. #20 - El. 1190.097
12" Spike in North Side of Pole ℄ on East Side of C.H. #31, 135' South of Sta 166+40

B.M. #21 - El. 1195.009
Boat Spike in 28" Pin Oak North Side of U.S. 224 and North of Sta 173+00

COUNTY HWY. #31

MATCH LINE

Adjust 6" Tile Drain to proposed ditch

INTERSECTION DATA

(PLAN) LINE SHEET - STA 165+00 (P) TO STA 7+00 (A)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

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Note: +0.98% Grade continues to P.I. Sta 23+00 with 800' V.C.

LIMIT OF GRADING END: WORK C+00

LIMIT OF PAVING, Grading only from this Point 2+50

Grade to bottom of Sub-base Mat'l. (See X-Sections)

400' V.C. P.I. 3+00 Elev. 1194.22

+0.80%

+0.50%

+0.98%

C-16

C-14 5-6' Under Edge of Pav't (Lt & Rt) Rt. 165+00 to 173+80?

Lt. 165+00 to 173+82.5

RELOCATION OF U.S. RTE. 224

EXCAVATION	23157 C.Y.
EMBANKMENT	6792 C.Y.
SEEDING	19489 S.Y.

+79.93 0+00 RANDOLPH-ATWATER 0+00 E&W Exist. U.S. 224

M.L. SUPER

LIMIT OF PAVING C+75 W

-1.20% +3.40%

PC PT

300' V.C. P.I. 4+00 W Elev. 1202.0

Graphic Grade: See Intersection Detail Sheet No. 32

0+00 Exist. 224 173-1993 Ran. & 0+00 Alt.

100' V.C. P.I. 2+37 E Elev. 1191.10

PC 2+87 E PT 3+87 E

-0.88% +0.80%

LIMIT OF PAVING 4+50 E.

EXCAVATION	4332 C.Y.
EMBANKMENT	0 C.Y.
SEEDING	3690 S.Y.

EXCAVATION	462 C.Y.
EMBANKMENT	341 C.Y.
SEEDING	1809 S.Y.

EXISTING U.S. RTE. 224

M.L. SUPER

LIMIT OF PAVING 5+00 N (West edge of Exist. 224)

4+80 N PT

-1.00% +2.50%

PC 3+80 N

180' V.C. P.I. 4+00 N Elev. 1196.0

Graphic Grade: See Intersection Detail Sheet No. 30

0+06.54 C.H. #31 = 164+86.82 Rt. of loc. 224

220' V.C. P.I. 5+00 S Elev. 1177.90

PC 6+00 S PT 6+00 S

-0.88% +0.80%

LIMIT OF PAVING 6+50 S

C-14

DRIVES

Embankment	From Line Sheet Table	83 C.Y.
Excavation		61 C.Y.

TOTAL ESTIMATED QUANTITIES THIS SHEET

E-1 Excavation	33373 C.Y.
Embankment	10222 C.Y.
L-9 Seeding	31370 S.Y.

COUNTY HIGHWAY #31

EXCAVATION	4544 C.Y.
EMBANKMENT	0 C.Y.
SEEDING	2636 S.Y.

EXCAVATION	817 C.Y.
EMBANKMENT	3006 C.Y.
SEEDING	3746 S.Y.

(PROFILE) LINE SHEET - STA. 165+00 (R) TO STA. 7+00 (A)

SUPERELEVATION TABLES

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

POR-224-6.22

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Curve No. 1 De=0°30' P.I. Sta. 22+33.44

STATION	SUPER SLOPE	ULTIMATE WESTBOUND LANE PRESENT CONST. Lt. Edge Pave	℄ Elev.	Rt. Edge Pave(RGL)	ULTIMATE EASTBOUND LANE FUTURE CONST. Lt. Edge Pave(RGL)	℄ Elev.	Rt. Edge Pave.
10+00	Crown	1147.74	1147.92	1147.74	1147.74	1147.92	1147.74
+25	-.01	1147.56	1147.74	1147.62	1147.62	1147.80	1147.68
+50	-.005	1147.37	1147.50	1147.49	1147.49	1147.67	1147.61
+75	Level	1147.19	1147.37	1147.37	1147.37	1147.55	1147.55
11+00	+.005	1147.00	1147.23	1147.24	1147.24	1147.42	1147.48
+25	+.01	1146.82	1147.00	1147.12	1147.12	1147.30	1147.42
+50	+.015	1146.63	1146.81	1146.99	1146.99	1147.17	1147.35
+61.89PC	+.015	1146.57	1146.75	1146.93	1146.93	1147.11	1147.29
+75	+.015	1146.51	1146.69	1146.87	1146.87	1147.05	1147.23
12+00	+.015	1146.38	1146.56	1146.74	1146.74	1146.92	1147.10
+25	+.015	1146.26	1146.44	1146.62	1146.62	1146.80	1146.98
+50	+.015	1146.13	1146.31	1146.49	1146.49	1146.67	1146.85
+75	+.015	1146.01	1146.19	1146.37	1146.37	1146.55	1146.73
13+00	+.015	1145.88	1146.06	1146.24	1146.24	1146.42	1146.60
+25	+.015	1145.76	1145.94	1146.12	1146.12	1146.30	1146.48
+50	+.015	1145.63	1145.81	1145.99	1145.99	1146.17	1146.35
+75	+.015	1145.51	1145.69	1145.87	1145.87	1146.05	1146.23
14+00	+.015	1145.38	1145.56	1145.74	1145.74	1145.92	1146.10
+25	+.015	1145.26	1145.44	1145.62	1145.62	1145.80	1145.98
+50	+.015	1145.13	1145.31	1145.49	1145.49	1145.67	1145.85
+75	+.015	1145.01	1145.19	1145.37	1145.37	1145.55	1145.73
15+00	+.015	1144.88	1145.06	1145.24	1145.24	1145.42	1145.60
+25	+.015	1144.76	1144.94	1145.12	1145.12	1145.30	1145.48
+50	+.015	1144.63	1144.81	1144.99	1144.99	1145.17	1145.35
+75	+.015	1144.51	1144.69	1144.87	1144.87	1145.05	1145.23
16+00	+.015	1144.38	1144.56	1144.74	1144.74	1144.92	1145.10
+25	+.015	1144.26	1144.44	1144.62	1144.62	1144.80	1144.98
+50	+.015	1144.13	1144.31	1144.49	1144.49	1144.67	1144.85
+75	+.015	1144.01	1144.19	1144.37	1144.37	1144.55	1144.73
17+00	+.015	1143.88	1144.06	1144.24	1144.24	1144.42	1144.60
+25	+.015	1143.76	1143.94	1144.12	1144.12	1144.30	1144.48
+50	+.015	1143.63	1143.81	1143.99	1143.99	1144.17	1144.35
+75	+.015	1143.51	1143.69	1143.87	1143.87	1144.05	1144.23
18+00	+.015	1143.38	1143.56	1143.74	1143.74	1143.92	1144.10
+25	+.015	1143.26	1143.44	1143.62	1143.62	1143.80	1143.98
+50	+.015	1143.13	1143.31	1143.49	1143.49	1143.67	1143.85
+75	+.015	1143.01	1143.19	1143.37	1143.37	1143.55	1143.73
19+00	+.015	1142.88	1143.06	1143.24	1143.24	1143.42	1143.60
+25	+.015	1142.76	1142.94	1143.12	1143.12	1143.30	1143.48
+50	+.015	1142.63	1142.81	1142.99	1142.99	1143.17	1143.35
+75	+.015	1142.51	1142.69	1142.87	1142.87	1143.05	1143.23
20+00	+.015	1142.38	1142.56	1142.74	1142.74	1142.92	1143.10
+25	+.015	1142.26	1142.44	1142.62	1142.62	1142.80	1142.98
+50	+.015	1142.13	1142.31	1142.49	1142.49	1142.67	1142.85
+75	+.015	1142.01	1142.19	1142.37	1142.37	1142.55	1142.73
21+00	+.015	1141.88	1142.06	1142.24	1142.24	1142.42	1142.60
+25	+.015	1141.76	1141.94	1142.12	1142.12	1142.30	1142.48
+50	+.015	1141.63	1141.81	1141.99	1141.99	1142.17	1142.35
+75	+.015	1141.51	1141.69	1141.87	1141.87	1142.05	1142.23
22+00	+.015	1141.38	1141.56	1141.74	1141.74	1141.92	1142.10
+25	+.015	1141.26	1141.44	1141.62	1141.62	1141.80	1141.98
+50	+.015	1141.13	1141.31	1141.49	1141.49	1141.67	1141.85
+75	+.015	1141.01	1141.19	1141.37	1141.37	1141.55	1141.73
23+00	+.015	1140.88	1141.06	1141.24	1141.24	1141.42	1141.60
+25	+.015	1140.76	1140.94	1141.12	1141.12	1141.30	1141.48
+50	+.015	1140.63	1140.81	1140.99	1140.99	1141.17	1141.35
+75	+.015	1140.51	1140.69	1140.87	1140.87	1141.05	1141.23
24+00	+.015	1140.38	1140.56	1140.74	1140.74	1140.92	1141.10
+25	+.015	1140.26	1140.44	1140.62	1140.62	1140.80	1140.98
+50	+.015	1140.13	1140.31	1140.49	1140.49	1140.67	1140.85
+75	+.015	1140.01	1140.19	1140.37	1140.37	1140.55	1140.73
25+00	+.015	1139.88	1140.06	1140.24	1140.24	1140.42	1140.60
+25	+.015	1139.75	1139.93	1140.11	1140.11	1140.29	1140.47
+50	+.015	1139.63	1139.81	1139.99	1139.99	1140.17	1140.35
+75	+.015	1139.44	1139.62	1139.80	1139.80	1139.98	1140.16
26+00	+.015	1139.26	1139.44	1139.62	1139.62	1139.80	1139.98
+25	+.015	1139.08	1139.26	1139.44	1139.44	1139.62	1139.80
+50	+.015	1138.87	1139.05	1139.23	1139.23	1139.41	1139.59
+75	+.015	1138.65	1138.83	1139.01	1139.01	1139.19	1139.37
27+00	+.015	1138.41	1138.59	1138.77	1138.77	1138.95	1139.13
+25	+.015	1138.16	1138.34	1138.52	1138.52	1138.70	1138.88

Curve No. 1 (Continued)

STATION	SUPER SLOPE	ULTIMATE WESTBOUND LANE PRESENT CONST. Lt. Edge Pave.	℄ Elev.	Rt. Edge Pave(RGL)	ULTIMATE EASTBOUND LANE FUTURE CONST. Lt. Edge Pave(RGL)	℄ Elev.	Rt. Edge Pave.
27+50	+.015	1137.90	1138.08	1138.26	1138.26	1138.44	1138.62
+75	+.015	1137.62	1137.80	1137.98	1137.98	1138.16	1138.34
28+00	+.015	1137.32	1137.50	1137.68	1137.68	1137.86	1138.04
+25	+.015	1137.01	1137.19	1137.37	1137.37	1137.55	1137.73
+50	+.015	1136.69	1136.87	1137.05	1137.05	1137.23	1137.41
+75	+.015	1136.35	1136.53	1136.71	1136.71	1136.89	1137.07
29+00	+.015	1136.00	1136.18	1136.36	1136.36	1136.54	1136.72
+25	+.015	1135.64	1135.82	1136.00	1136.00	1136.18	1136.36
+50	+.015	1135.28	1135.46	1135.64	1135.64	1135.82	1136.00
+75	+.015	1134.92	1135.10	1135.28	1135.28	1135.46	1135.64
30+00	+.015	1134.56	1134.74	1134.92	1134.92	1135.10	1135.28
+25	+.015	1134.20	1134.38	1134.56	1134.56	1134.74	1134.92
+50	+.015	1133.84	1134.02	1134.20	1134.20	1134.38	1134.56
+75	+.015	1133.48	1133.66	1133.84	1133.84	1134.02	1134.20
31+00	+.015	1133.12	1133.30	1133.48	1133.48	1133.66	1133.84
+25	+.015	1132.76	1132.94	1133.12	1133.12	1133.30	1133.48
+50	+.015	1132.40	1132.58	1132.76	1132.76	1132.94	1133.12
+75	+.015	1132.04	1132.22	1132.40	1132.40	1132.58	1132.76
32+00	+.015	1131.68	1131.86	1132.04	1132.04	1132.22	1132.40
+25	+.015	1131.32	1131.50	1131.68	1131.68	1131.86	1132.04
+50	+.015	1130.96	1131.14	1131.32	1131.32	1131.50	1131.68
+75	+.015	1130.60	1130.78	1130.96	1130.96	1131.14	1131.32
32+87.89PT	+.015	1130.41	1130.59	1130.78	1130.78	1130.96	1131.14
33+00	+.015	1130.24	1130.42	1130.60	1130.60	1130.78	1130.96
+25	+.01	1129.94	1130.12	1130.24	1130.24	1130.42	1130.54
+50	+.005	1129.64	1129.82	1129.88	1129.88	1130.06	1130.12
+75	Level	1129.34	1129.52	1129.52	1129.52	1129.70	1129.70
34+00	-.005	1129.04	1129.22	1129.16	1129.16	1129.34	1129.28
+25	-.01	1128.74	1128.92	1128.80	1128.80	1128.98	1128.86
+50	Crown	1128.44	1128.62	1128.44	1128.44	1128.62	1128.44

Curve No. 2 De=0°56' P.I. Sta. 53+64.21

STATION	SUPER SLOPE	ULTIMATE WESTBOUND LANE PRESENT CONST. Lt. Edge Pave.	℄ Elev.	Rt. Edge Pave.(RGL)	ULTIMATE EASTBOUND LANE, FUTURE CONST. Lt. Edge Pave.(RGL)	℄ Elev.	Rt. Edge Pave.
47+50	Crown	1116.54	1116.72	1116.54	1116.54	1116.72	1116.54
+75	-.01	1116.55	1116.73	1116.61	1116.61	1116.79	1116.67
48+00	-.005	1116.58	1116.76	1116.70	1116.70	1116.88	1116.82
+25	Level	1116.62	1116.80	1116.80	1116.80	1116.98	1116.98
+50	+.005	1116.67	1116.85	1116.91	1116.91	1117.09	1117.15
+75	+.01	1116.73	1116.91	1117.03	1117.03	1117.21	1117.33
+84.67 PC	+.015	1116.73	1116.91	1117.09	1117.09	1117.27	1117.45
49+00	+.015	1116.82	1117.00	1117.18	1117.18	1117.36	1117.54
+25	+.015	1116.97	1117.15	1117.33	1117.33	1117.51	1117.69
+50	+.015	1117.13	1117.31	1117.49	1117.49	1117.67	1117.85
+75	+.015	1117.30	1117.48	1117.66	1117.66	1117.84	1118.02
50+00	+.015	1117.48	1117.66	1117.84	1117.84	1118.02	1118.20
+25	+.015	1117.65	1117.83	1118.01	1118.01	1118.19	1118.37
+50	+.015	1117.82	1118.00	1118.18	1118.18	1118.36	1118.54
+75	+.015	1117.99	1118.17	1118.35	1118.35	1118.53	1118.71
51+00	+.015	1118.17	1118.35	1118.53	1118.53	1118.71	1118.89
+25	+.015	1118.34	1118.52	1118.70	1118.70	1118.89	1119.06
+50	+.015	1118.51	1118.69	1118.87	1118.87	1119.05	1119.23
+75	+.015	1118.68	1118.86	1119.04	1119.04	1119.12	1119.30
52+00	+.015	1118.86	1119.04	1119.22	1119.22	1119.40	1119.58
+25	+.015	1119.03	1119.21	1119.39	1119.39	1119.57	1119.75
+50	+.015	1119.20	1119.38	1119.56	1119.56	1119.74	1119.92
+75	+.015	1119.37	1119.55	1119.73	1119.73	1119.91	1120.09
53+00	+.015	1119.55	1119.73	1119.91	1119.91	1120.09	1120.27
+25	+.015	1119.72	1119.90	1120.09	1120.09	1120.26	1120.44
+50	+.015	1119.89	1120.07	1120.25	1120.25	1120.43	1120.61
+75	+.015	1120.06	1120.24	1120.42	1120.42	1120.60	1120.78
54+00	+.015	1120.24	1120.42	1120.60	1120.60	1120.78	1120.96
+25	+.015	1120.41	1120.59	1120.77	1120.77	1120.95	1121.13
+50	+.015	1120.58	1120.76	1120.94	1120.94	1121.12	1121.30
+75	+.015	1120.75	1120.93	1121.11	1121.11	1121.29	1121.47
55+00	+.015	1120.93	1121.11	1121.29	1121.29	1121.47	1121.65
+25	+.015	1121.10	1121.28	1121.46	1121.46	1121.64	1121.82
+50	+.015	1121.27	1121.45	1121.63	1121.63	1121.81	1121.99
+75	+.015	1121.44	1121.62	1121.80	1121.80	1121.98	1122.16

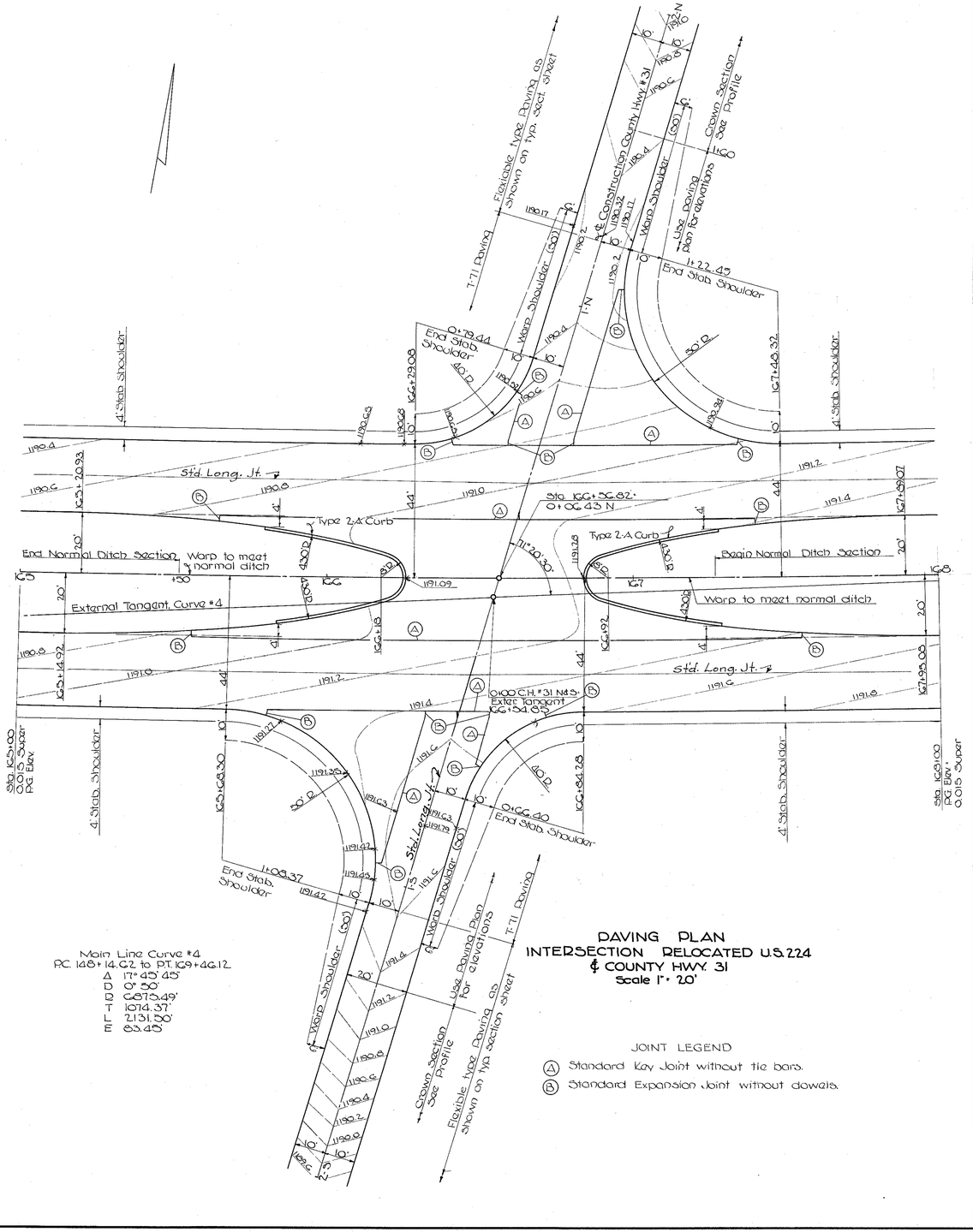
Curve No. 2 (Continued)

STATION	SUPER SLOPE	ULTIMATE WESTBOUND LANE, PRESENT CONST. Lt. Edge Pave.	℄ Elev.	Rt. Edge Pave.(RGL)	ULTIMATE EASTBOUND LANE FUTURE CONST. Lt. Edge Pave.(RGL)	℄ Elev.	Rt. Edge Pave.
56+00	+.015	1121.52	1121.80	1121.98	1121.98	1122.16	1122.34
+25	+.015	1121.79	1121.97	1122.15	1122.15	1122.33	1122.51
+50	+.015	1121.96	1122.14	1122.32	1122.32	1122.50	1122.68
+75	+.015	1122.13	1122.31	1122.49	1122.49	1122.67	1122.85
57+00	+.015	1122.31	1122.49	1122.67	1122.67	1122.85	1123.03
+25	+.015	1122.48	1122.66	1122.84	1122.84	1123.02	1123.20
+50	+.015	1122.65	1122.83	1123.01	1123.01	1123.19	1123.37
+75	+.015	1122.82	1123.00	1123.18	1123.18	1123.36	1123.54
58+00	+.015	1122.99	1123.17	1123.35	1123.35	1123.53	1123.71
+25	+.015	1123.15	1123.33	1123.51	1123.51	1123.69	1123.87
+41.81 PT	+.015	1123.26	1123.44	1123.62	1123.62	1123.80	1123.98
+50	+.015	1123.31	1123.49	1123.67	1123.67	1123.85	1124.03
+75	+.01	1123.53	1123.71	1123.83	1123.83	1124.01	1124.13
59+00	+.005	1123.76	1123.94	1124.00	1124.00	1124.18	1124.24
+25	Level	1123.97	1124.15	1124.15	1124.15	1124.33	1124.33
+50	-.005	1124.18	1124.36	1124.30	1124.30	1124.48	1124.42
+75	-.01	1124.39	1124.57	1124.45	1124.45	1124.63	1124.51
60+00	Crown	1124.60	1124.78	1124.60	1124.60	1124.78	1124.60

Curve No. 3 De=0°50'00" P.I. Sta. 69+10.65

STATION	SUPER SLOPE	ULTIMATE WESTBOUND LANE, PRESENT, CONST. Lt. Edge Pave.	℄ Elev.	Rt. Edge Pave.	ULTIMATE EASTBOUND LANE, FUTURE CONST. Lt. Edge Pave.(RGL)	℄ Elev.	Rt. Edge Pave.
62+50	Crown	1125.95	1126.13	1125.95	1125.95	1126.13	1125.95
+75	-.01	1126.14	1126.26	1126.08	1126.08	1126.20	1126.02
63+00	-.005	1126.32	1126.38	1126.20	1126.20	1126.26	1126.08
+25	Level	1126.51	1126.51	1126.33	1126.33	1126.33	1126.15
+50	+.005	1126.69	1126.63	1126.45	1126.45	1126.39	1126.21
+75	+.01	1126.88	1126.76	1126.58	1126.58	1126.46	1126.28
64+00	+.015 RT	1127.06	1126.88	1126.70	1126.70	1126.52	1126.34
PC +22.58	+.015	1127.17	1126.99	1126.81	1126.81	1126.63	1126.45
+25	+.015	1127.19	1127.01	1126.83	1126.83	1126.65	1126.47
+50	+.015	1127.31	1127.13	1126.95	1126.95	1126.77	1126.59
+75	+.015	1127.44	1127.26	1127.08	1127.08	1126.90	1126.72
65+00	+.015	1127.56	1127.38	1127.20	1127.20	1127.02	1126.84
+25	+.015	1127.69	1127.51	1127.33	1127.33	1127.15	1126.97
+50	+.015	1127.81	1127.63	1127.45	1127.45	1127.27	1127.09
+75	+.015	1127.94	1127.76	1127.58	1127.58	1127.40	1127.22
66+00	+.015	1128.06	1127.88	1127.70	1127.70	1127.52	1127.34
+25	+.015	1128.19	1128.01	1127.83	1127.83	1127.65	1127.47
+50	+.015	1128.31	1128.13	1127.95	1127.95	1127.77	1127.59
+75	+.015	1128.44	1128.26	1128.08	1128.08	1127.90	1127.72
67+00	+.015	1128.56	1128.38	1128.20	1128.20	1128.02	1127.84
+25	+.015	1128.69	1128.51	1128.33	1128.33	1128.15	1127.97
+50	+.015	1128.81	1128.63	1128.45	1128.45	1128.27	1128.09
+75	+.015	1128.94	1128.76	1128.58	1128.58	1128.40	1128.22
68+00	+.015	1129.06	1128.88	1128.70	1128.70	1128.52	1128.34
+25	+.015	1129.19	1129.01	1128.83	1128.83	1128.65	1128.47
+50	+.015	1129.31	1129.13	1128.95	1128.95	1128.77	1128.59
+75	+.015	1129.44	1129.26	1129.08	1129.08	1128.90	1128.72
69+00	+.015	1129.56	1129.38	1129.20	1129.20	1129.02	1128.84
+25	+.015	1129.69	1129.51	1129.33	1129.33	1129.15	1128.97
+50	+.015	1129.81	1129.63	1129.45	1129.45	1129.27	1129.09
+75	+.015	1129.94	1129.76	1129.58	1129.58	1129.40	1129.22
70+00	+.015	1130.06	1129.88	1129.70	1129.70	1129.52	1129.34
+25	+.015	1130.19	1130.01	1129.83	1129.83	1129.65	1129.47
+50	+.015	1130.31	1130.13	1129.95	1129.95	1129.77	1129.59
+75	+.015	1130.44	1130.26	1130.08	1130.08	1129.90	1129.72
71+00	+.015	1130.56	1130.38	1130.20	1130.20	1130.02	1129.84
+25	+.015	1130.69	1130.51	1130.33	1130.33	1130.15	1129.97
+50	+.015	1130.81	1130.63	1130.45	1130.45	1130.27	1130.09
+75	+.015	1130.94	1130.76	1130.58	1130.58	1130.40	1130.22
72+00	+.015	1131.06	1130.88	1130.70	1130.70	1130.52	1130.34
+25	+.015	1131.19	1131.01	1130.83	1130.83	1130.65	1130.47
+50	+.015	1131.31	1131.13	1130.95	1130.95	1130.77	1130.59
+75	+.015	1131.44	1131.26	1131.08	1131.08	1130.90	1130.72
73+00	+.015	1131.56	1131.38	1131.20	1131.20	1131.02	1130.84
+25	+.015	1131.69	1131.51	1131.33	1131.33	1131.15	1130.97
+50	+.015	1131.81	1131.63	1131.45	1131.45	1131.27	1131.09
+75	+.015	1131.94	1131.76	1131.58	1131.58	1131.40	1131.22
PT +97.08	+.015	1132.05	1131.87	1131.69	1131.69	1131.51	1131.33
74+00	+.015	1132.06	1131.88	1131.70	1131.70	1131.52	1131.34
+25	+.01	1132.13	1132.01	1131.83	1131.83	1131.71	1131.53
+50	+.005	1132.19	1132.13	1131.95	1131.95	1131.89	1131.71
+75	Level	1132.27	1132.27	1132.09	1132.09	1132.09	1131.91
75+00	-.005	1132.36	1132.42	1132.24	1132.24	1132.30	1132.12
+25	-.01	1132.47	1132.59	1132.41	1132.41	1132.53	1132.35
+50	Crown	1132.60	1132.78	1132.60	1132.60	1132.78	1132.60

Note:
Superelevation Table for Curve #4 is on next Sheet No. 30



SUPERELEVATION TABLES (CONT.)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

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POR-224-G.22

Curve No. 4. D_c = 0° 50' 00" P.I. Sta. 158+88.99

STATION	SUPER SLOPE	ULTIMATE WESTBOUND LANE-PRESENT CONSTRUCTION			ULTIMATE EASTBOUND LANE, FUTURE CONSTRUCTION		
		LT. EDGE PAVT.	℄ ELEV.	RT. EDGE PAVT. (P.G.L.)	LT. EDGE PAVT. (P.G.L.)	℄ ELEV.	RT. EDGE PAVT.
KG+50	Crown	1184.88	1185.06	1184.88	1184.88	1185.06	1184.88
+75	-.01	1184.98	1185.16	1185.04	1185.04	1185.22	1185.10
147+00	-.005	1185.05	1185.23	1185.17	1185.17	1185.54	1185.29
+25	Level	1185.12	1185.30	1185.30	1185.30	1185.48	1185.48
+50	+.005	1185.16	1185.34	1185.40	1185.40	1185.58	1185.64
+75	+.01	1185.20	1185.38	1185.50	1185.50	1185.68	1185.80
148+00	+.015	1185.22	1185.40	1185.58	1185.58	1185.76	1185.94
PC. +14.62	+.015	1185.26	1185.44	1185.62	1185.62	1185.80	1185.98
+25	+.015	1185.30	1185.48	1185.66	1185.66	1185.84	1186.02
+50	+.015	1185.37	1185.55	1185.73	1185.73	1185.91	1186.09
+75	+.015	1185.45	1185.63	1185.81	1185.81	1185.99	1186.17
149+00	+.015	1185.52	1185.70	1185.88	1185.88	1186.06	1186.24
+25	+.015	1185.60	1185.78	1185.96	1185.96	1186.14	1186.32
+50	+.015	1185.67	1185.85	1186.03	1186.03	1186.21	1186.39
+75	+.015	1185.75	1185.93	1186.11	1186.11	1186.29	1186.47
150+00	+.015	1185.82	1186.00	1186.18	1186.18	1186.36	1186.54
+25	+.015	1185.90	1186.08	1186.26	1186.26	1186.44	1186.62
+50	+.015	1185.97	1186.15	1186.33	1186.33	1186.51	1186.69
+75	+.015	1186.05	1186.23	1186.41	1186.41	1186.59	1186.77
151+00	+.015	1186.12	1186.30	1186.48	1186.48	1186.66	1186.84
+25	+.015	1186.20	1186.38	1186.56	1186.56	1186.74	1186.92
+50	+.015	1186.27	1186.45	1186.63	1186.63	1186.81	1186.99
+75	+.015	1186.35	1186.53	1186.71	1186.71	1186.89	1187.07
152+00	+.015	1186.42	1186.60	1186.78	1186.78	1186.96	1187.14
+25	+.015	1186.50	1186.68	1186.86	1186.86	1187.04	1187.22
+50	+.015	1186.57	1186.75	1186.93	1186.93	1187.11	1187.29
+75	+.015	1186.65	1186.83	1187.01	1187.01	1187.19	1187.37
153+00	+.015	1186.72	1186.90	1187.08	1187.08	1187.26	1187.44
+25	+.015	1186.80	1186.98	1187.16	1187.16	1187.34	1187.52
+50	+.015	1186.87	1187.05	1187.23	1187.23	1187.41	1187.59
+75	+.015	1186.95	1187.13	1187.31	1187.31	1187.49	1187.67
154+00	+.015	1187.02	1187.20	1187.38	1187.38	1187.56	1187.74
+25	+.015	1187.10	1187.28	1187.46	1187.46	1187.64	1187.82
+50	+.015	1187.17	1187.35	1187.53	1187.53	1187.71	1187.89
+75	+.015	1187.25	1187.43	1187.61	1187.61	1187.79	1187.97
155+00	+.015	1187.32	1187.50	1187.68	1187.68	1187.86	1188.04
+25	+.015	1187.40	1187.58	1187.76	1187.76	1187.94	1188.12
+50	+.015	1187.47	1187.65	1187.83	1187.83	1188.01	1188.19
+75	+.015	1187.55	1187.73	1187.91	1187.91	1188.09	1188.27
156+00	+.015	1187.62	1187.80	1187.98	1187.98	1188.16	1188.34
+25	+.015	1187.70	1187.88	1188.06	1188.06	1188.24	1188.42
+50	+.015	1187.77	1187.95	1188.13	1188.13	1188.31	1188.49
+75	+.015	1187.85	1188.03	1188.21	1188.21	1188.39	1188.57
157+00	+.015	1187.92	1188.10	1188.28	1188.28	1188.46	1188.64
+25	+.015	1188.00	1188.18	1188.36	1188.36	1188.54	1188.72
+50	+.015	1188.07	1188.25	1188.43	1188.43	1188.61	1188.79
+75	+.015	1188.15	1188.33	1188.51	1188.51	1188.69	1188.87
158+00	+.015	1188.22	1188.40	1188.58	1188.58	1188.76	1188.94
+25	+.015	1188.30	1188.48	1188.66	1188.66	1188.84	1189.02
+50	+.015	1188.37	1188.55	1188.73	1188.73	1188.91	1189.09
+75	+.015	1188.45	1188.63	1188.81	1188.81	1188.99	1189.17
159+00	+.015	1188.52	1188.70	1188.88	1188.88	1189.06	1189.24
+25	+.015	1188.60	1188.78	1188.96	1188.96	1189.14	1189.32
+50	+.015	1188.67	1188.85	1189.03	1189.03	1189.21	1189.39
+75	+.015	1188.75	1188.93	1189.11	1189.11	1189.29	1189.47
160+00	+.015	1188.82	1189.00	1189.18	1189.18	1189.36	1189.54
+25	+.015	1188.90	1189.08	1189.26	1189.26	1189.44	1189.62
+50	+.015	1188.97	1189.15	1189.33	1189.33	1189.51	1189.69
+75	+.015	1189.05	1189.23	1189.41	1189.41	1189.59	1189.77
161+00	+.015	1189.12	1189.30	1189.48	1189.48	1189.66	1189.84
+25	+.015	1189.20	1189.38	1189.56	1189.56	1189.74	1189.92
+50	+.015	1189.27	1189.45	1189.63	1189.63	1189.81	1189.99
+75	+.015	1189.35	1189.53	1189.71	1189.71	1189.89	1190.07
162+00	+.015	1189.42	1189.60	1189.78	1189.78	1189.96	1190.14
+25	+.015	1189.50	1189.68	1189.86	1189.86	1190.04	1190.22
+50	+.015	1189.57	1189.75	1189.93	1189.93	1190.11	1190.29
+75	+.015	1189.65	1189.83	1190.01	1190.01	1190.19	1190.37
163+00	+.015	1189.72	1189.90	1190.08	1190.08	1190.26	1190.44
+25	+.015	1189.80	1189.98	1190.16	1190.16	1190.34	1190.52
+50	+.015	1189.87	1190.05	1190.23	1190.23	1190.41	1190.59
+75	+.015	1189.95	1190.13	1190.31	1190.31	1190.49	1190.67

Curve No. 4 Cont.

STATION	SUPER SLOPE	ULTIMATE WESTBOUND LANE, PRESENT CONSTRUCTION			ULTIMATE EASTBOUND LANE, FUTURE CONSTRUCTION		
		LT. EDGE PAVT.	℄ ELEV.	RT. EDGE PAVT. (P.G.L.)	LT. EDGE PAVT. (P.G.L.)	℄ ELEV.	RT. EDGE PAVT.
KG4+00	+.015	1190.02	1190.20	1190.38	1190.38	1190.56	1190.74
+25	+.015	1190.10	1190.28	1190.46	1190.46	1190.64	1190.82
+50	+.015	1190.17	1190.35	1190.53	1190.53	1190.71	1190.89
+75	+.015	1190.25	1190.43	1190.61	1190.61	1190.79	1190.97
KG5+00	+.015	1190.32	1190.50	1190.68	1190.68	1190.86	1191.04
+25	+.015	1190.40	1190.58	1190.76	1190.76	1190.94	1191.12
+50	+.015	1190.47	1190.65	1190.83	1190.83	1191.01	1191.19
+75	+.015	1190.55	1190.73	1190.91	1190.91	1191.09	1191.27
KG6+00	+.015	1190.62	1190.80	1190.98	1190.98	1191.16	1191.34
+25	+.015	1190.70	1190.88	1191.06	1191.06	1191.24	1191.42
+50	+.015	1190.77	1190.95	1191.13	1191.13	1191.31	1191.49
+75	+.015	1190.85	1191.03	1191.21	1191.21	1191.39	1191.57
KG7+00	+.015	1190.92	1191.10	1191.28	1191.28	1191.46	1191.64
+25	+.015	1191.00	1191.18	1191.36	1191.36	1191.54	1191.72
+50	+.015	1191.07	1191.25	1191.43	1191.43	1191.61	1191.79
+75	+.015	1191.15	1191.33	1191.51	1191.51	1191.69	1191.87
KG8+00	+.015	1191.22	1191.40	1191.58	1191.58	1191.76	1191.94
+25	+.015	1191.30	1191.48	1191.66	1191.66	1191.84	1192.02
+50	+.015	1191.37	1191.55	1191.73	1191.73	1191.91	1192.09
+75	+.015	1191.45	1191.63	1191.81	1191.81	1191.99	1192.17
KG9+00	+.015	1191.52	1191.70	1191.88	1191.88	1192.06	1192.24
+25	+.015	1191.60	1191.77	1191.96	1191.96	1192.14	1192.32
PT. +46.12	+.015	1191.66	1191.84	1192.02	1192.02	1192.20	1192.38
+50	+.015	1191.67	1191.85	1192.03	1192.03	1192.21	1192.39
+75	+.01	1191.81	1191.99	1192.11	1192.11	1192.29	1192.41
170+00	Level	1192.00	1192.18	1192.18	1192.18	1192.36	1192.36
+25	-.005	1192.14	1192.32	1192.26	1192.26	1192.44	1192.36
+50	-.01	1192.27	1192.45	1192.33	1192.33	1192.51	1192.39
+75	Crown	1192.41	1192.59	1192.41	1192.41	1192.59	1192.41

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

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POR-224-6.22

MATCH LINE @ 'A'

4:1

24' | 20' | 20' | 24'

4' Stab'ld. Shoulder | 4' Stab'ld. Shoulder

℄ RELOC. U.S. Rte. 224

Edge of Shoulder

4:1

12" @ 0.8%

(8)

Std. PC-4 Endwall Inv. El. 1122.03 101 Lt. Sta. 74+84

Typical Outlet Ditch Length - 75'

Std. PC-4 Endwall Inv. El. 1132.4 34' Rt. of 4+30 N

(10)

348'-42" @ 1.78% Class A I-2

25'

Trim channel to prop. culvert Std. Type I Paved gutter

50' Taper

8' Shoulder

Taper Prop shoulder to exist. shoulder

Taper 1:20

Pipe for Traffic Signal

4N

N 5° 12' 45" E

3N

Std. Long. Jt.

2N

℄ SR. 44

1135.0

End Curb @ 3+00 (N)

Special raised curb inlet Lt. of 1+17 (N) S Rte. 44 Inv. 1130.90

1134.0

Shoulder varies, see cross sections

I-2 - 6' Underdrain (Shallow)

Type 2A Curb

2'-(B) Typ

Place 10' of 8" U.D. Outlet

Meet existing sidewalk @ 1+00 N

3+60 LIMIT OF PAVING

ESTIMATE OF QUANTITIES C-10, C-9, & C-8

ITEM	DESCRIPTION	QUANTITIES C-8	C-9	C-10
I-2,	42" Class A Storm Sewers			348 LF
E-3	Channel Excavation	14 CY		6 CY
I-14	Paved Gutter (Std. Type I)			30 LF
I-10	Sodding (along paved gutter)			7 SY
C-1	Concrete for Structures, Class 'F'			0.7 C CY
I-2	42" M-6.6 (a) Class A Under Pavt	344 L.F.	152 L.F.	

(All other Quantities, see line sheet)

Warp Shoulder area to suit curb, sidewalk and roadway elevations

77+00.43

* Stop curb 10' off normal edge of U.S. Rte. 224 pavt.

Normal Crown Section (79+50)

Std. 9' Sod Ditch

10' Shoulder

Std. Long. Jt.

4' Stab'ld. Shoulder

+16.08

Pipe for Traffic Signal

1136.0

1137.0

10' Std. Type I Pav Gutter

2'-(B) Typ

430' R

(I-2)

℄ Sta. 78+70 Std. 2-2-A C.B. Normal ditch El. 1133.6 Inv. 1130.35

54' Lt. of 0+69 (S) S.Rte. 44 Std. 1-4 C.B. Normal Ditch El. 1133.00 Inv. 42" (in) 1124.88 Inv. 42" (Out) 1124.78 Inv. 15" (in) 1126.88 Inv. 15" (in) 1127.13

46' Rt. of 0+83 N (S.Rte. 44 Std. 1-4 C.B. Normal Ditch El. 1131.6 Inv. 42" (in) + 1126.2 Inv. 42" (Out) 1126.1 Inv. 12" (in) +1128.7

78+48.63 (95' D)

20' R

0+94.53 (N)

78+47.51 (95' D)

0+93.47 (S)

15" @ 1.55%

(I-2)

152'-42" @ 0.6%

Class A Under Pavt

78+10

Type 2A Curb

50' R

8' Shoulder

Taper 1:20

℄ Proposed Construction 0+00 I.C. ℄ S. Rte 44 77+73.99 ℄ U.S. Rte 224

℄ Proposed Const. S Rte 44

1+40 S Rte. 44 · 30+00 Sw. Drive

Pipe for Traffic Signal

West Survey Line 0+00 N 45° 5 Rte 44 77+41.39 ℄ U.S. Rte 224

Shoulder varies, see cross sections

Type 2A Curb 77+32

Meet existing sidewalk at 1+00 S

End stab'ld shoulder at PT of Return

Warp shoulder area to suit curb, sidewalk and roadway elevations

77+08

77

4:1

76+99.51

0.6%

I-2, 42"

Sta. 30+35 (9' Lt. of ℄) Std. 2-2A C.B. Ditch El. = 1131.0 Inv. = 1127.75

℄ SERVICE DRIVE

Std. 9' Sod Ditch

10' Shoulder

54' Lt. of 0+69 (S) S.Rte. 44

6'-1-4 Underdrain Outlet

Edge of Shoulder

4' Stab'ld. Shoulder

℄ RELOC. U.S. Rte. 224

S 65° 04' 15" E

Pipe for Traffic Signal

+32.08

Std'd. Long. Jt.-2

MATCH LINE 'A'

Normal Crown Section

(A) Std. Key Joint without tie bars.
(B) Expansion Joint without dowels
(C) Expansion Joint with dowels

PLAN
GRADING AND DRAINAGE
INTERSECTION U.S. Rt. 224 & State Rt. 44
Scale 1" = 20'

348'

152'

344'

83'

69'

54'

290'

1140

1135

1130

1125

1120

Special Raised Curb Inlet Lt. of 1+17 (N) S Rte. 44

Existing Ground

Std. Type I Paved Gutter

Cut off Wall

30'

Trim Channel to Proposed Culvert Inv.

Slope 1.78% Proposed 42" Class A I-2

Inv. 1132.4 Std. PC-4 Endwall

Spec. raised curb inlet

12" Inv. 1130.90

Slope 2.75%

I-2

12" Inv. 1128.7

Std. 1-4 CB 46' Rt. of 0+83 (S.N)

Std. 2-2-A CB 18" Inv. 1130.35

I-14 Underdrain

Slope 4.33%

Proposed 42" I-2 CLASS A UNDER PAVT Slope 0.6%

M-6.6(a)

Inv. 1127.13

Inv. 1126.2

Inv. 1126.1

Inv. 1124.88

Inv. 1124.78

℄ Relocated U.S. Rte. 224

℄ Sta. 78+10

℄ S.Rte. 44

54' Lt. of 0+69 (S)

9' Lt. of 30+35 Serv. Drive

Sta. 1-4 CB

Slope 1.55%

Std. 2-2-A CB 15" Inv. 1127.75

15" Inv. 1126.88

Prop. Sidewalk

Proposed 42" I-2 M-6.6 (a) Slope 0.6%

Inv. 1122.03 Std. PC-4 Endwall

Typical Outlet Ditch 0.6% Grade

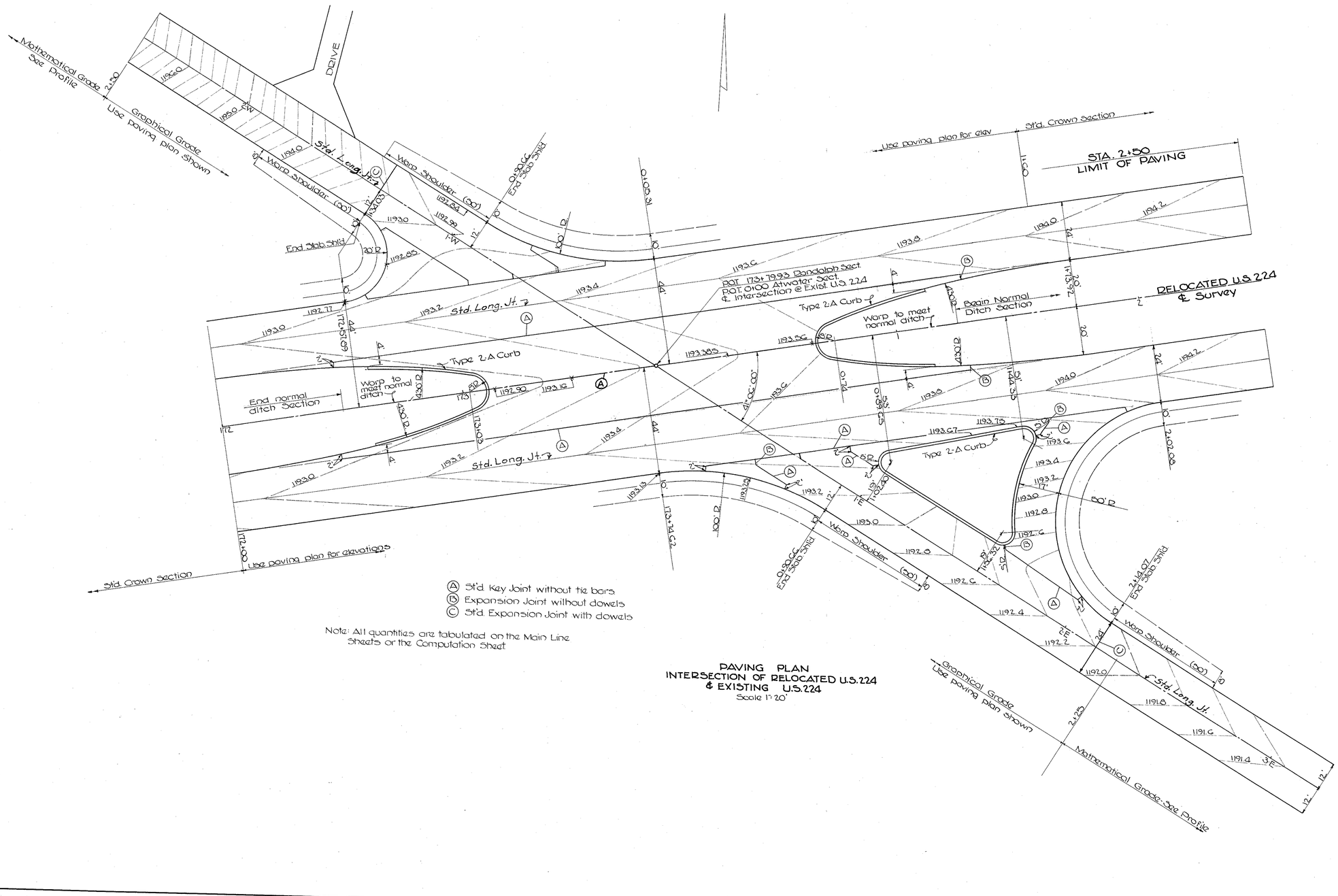
PROFILE
CULVERT C-10, C-9, AND C-8
Scale: Hor. 1"=50'
Vert. 1"=5'

INTERSECTION PAVING AND DRAINAGE PLAN - RELOC. U.S. 224 AND STATE RTE. 44

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

32
109

POR-224-6.22


Mathematical Grade See Profile
2.50
Graphical Grade Use paving plan shown
DRIVE
1196.0
1195.0 PW
1194.0
Std. Long. Jt.
Warp Shoulder (SD)
1192.84
End Slab Shld
1192.98
1-W
1193.0
1193.31
1193.0
1193.0
1193.0

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

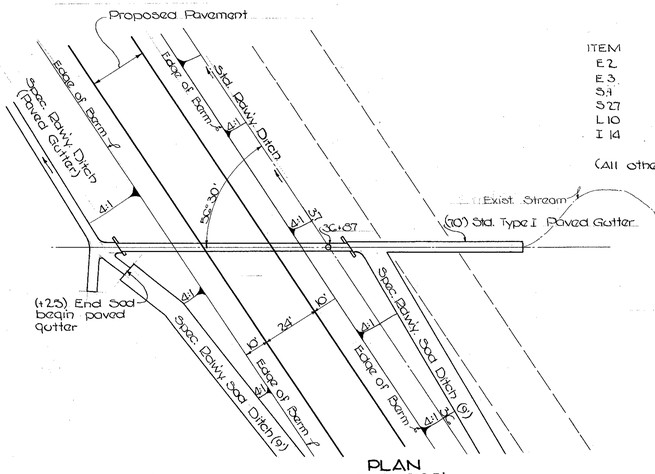
33
109

POR-224-G.22

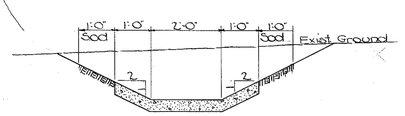
ESTIMATE OF QUANTITIES

ITEM	DISCRIPTION	QUANTITY	
E 2	Excavation For Structures	116	C.Y.
E 3	Channel Excavation	155	C.Y.
S 1	Concrete For Structures (Class E)	118	C.Y.
S 27	36" M-6.6(b) or M-6.8(b) Culverts	86	L.F.
L 10	Seeding	16	S.Y.
I 14	Paved Gutter	70	L.F.

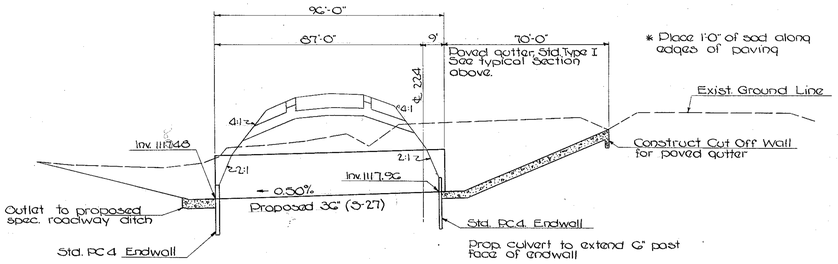
(All other quantities are on Line Sheet)



PLAN
Scale 1" = 30'

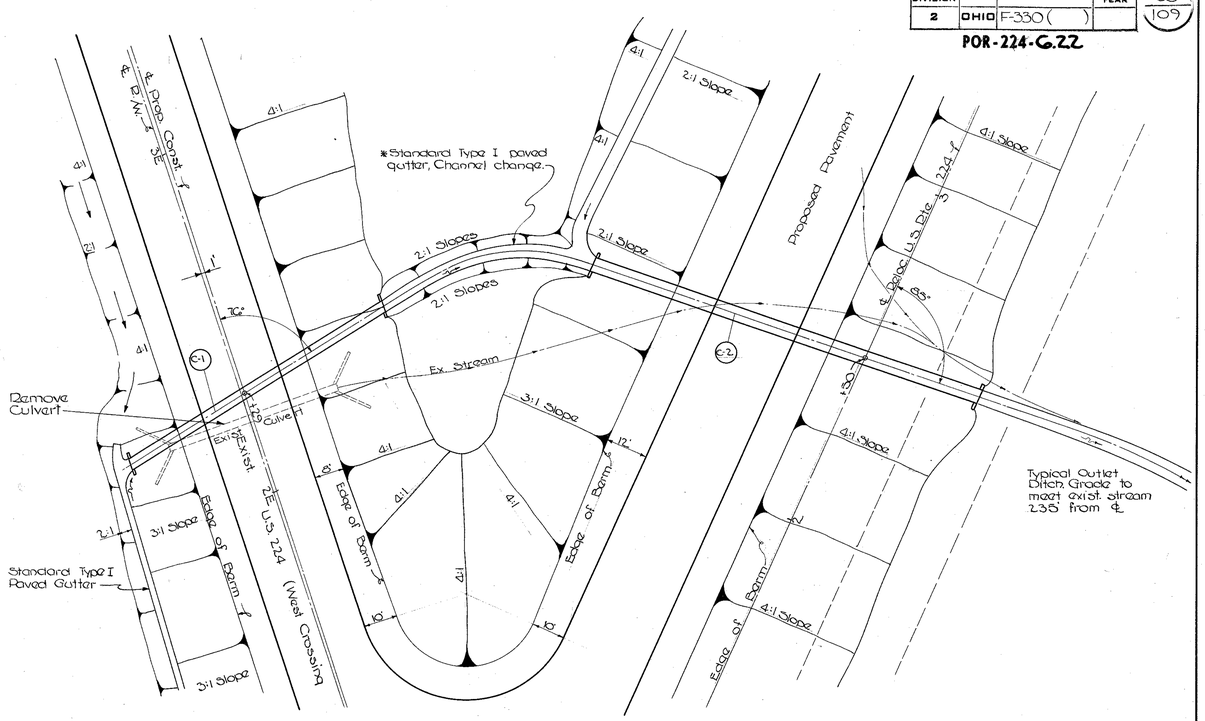


TYPICAL SECTION
FOR INLET CHANNEL
Scale 1" = 3'



PROFILE
CULVERT C-5 STA. 36+87
Scale Vert 1"=5'
Horz. 1"=30'

Drainage Area (C-5)
= 16 Acres
Q 25 = 33 C.F.S.



PLAN
CULVERT NO. 1 & NO. 2
Scale 1"=20'

ESTIMATE OF QUANTITIES

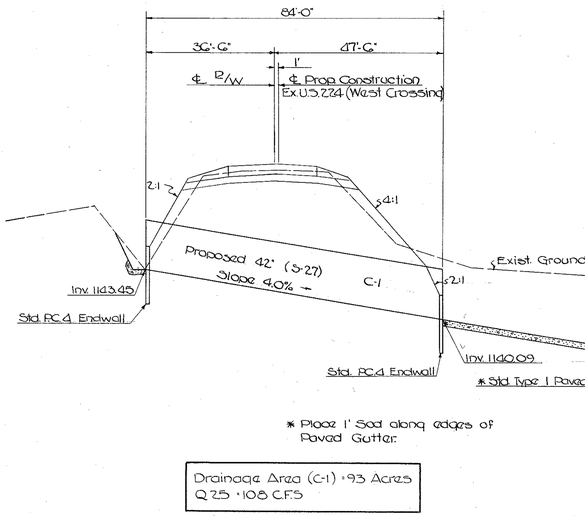
C-1

ITEM	DESCRIPTION	QUANTITY	
E-2	Excavation for structures	160	C.Y.
E-3	Channel excavation	111	C.Y.
S-1	Concrete for structures (Class E)	1.52	C.Y.
S-27	42" Pipe for Roadway Culverts	84	L.F.
S-24	Removal of exist. Structures		L.S.
L-10	Seeding	14	S.Y.
I-14	Paved gutter (Std)	63	L.F.

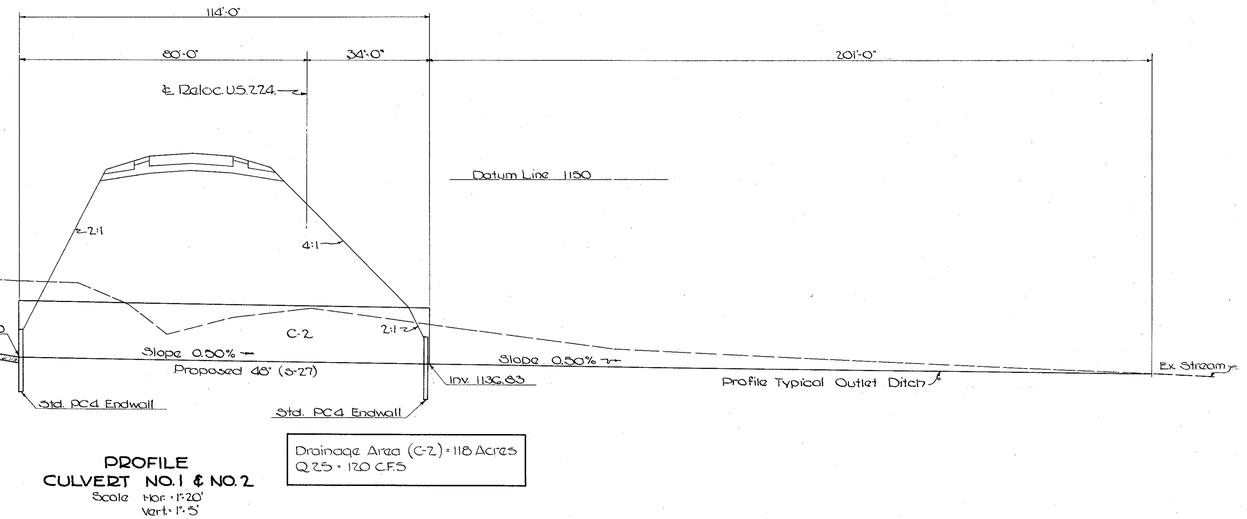
(C-1 estimate includes all quantities) (up to face of North End Wall of C-2)

C-2

E-2	Excavation for structures	145	C.Y.
E-3	Channel excavation	50	C.Y.
S-1	Concrete for structures (Class E)	1.72	C.Y.
S-27	48" M-6.6(b)	114	L.F.



Drainage Area (C-1) = 93 Acres
Q 25 = 108 C.F.S.



PROFILE
CULVERT NO. 1 & NO. 2
Scale Hor. = 1"=20'
Vert. = 1"=5'

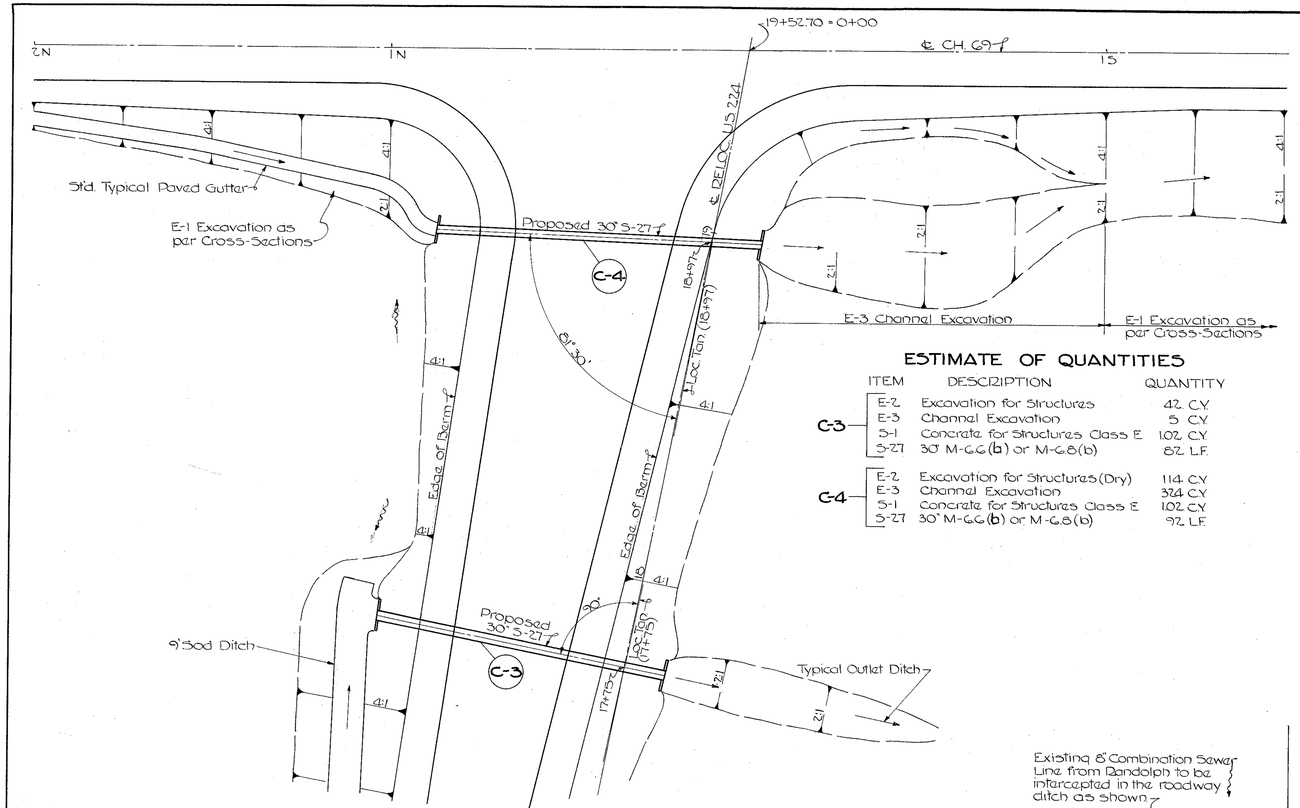
Drainage Area (C-2) = 118 Acres
Q 25 = 130 C.F.S.

CULVERT DETAILS C-1, C-2, & C-5

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

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109

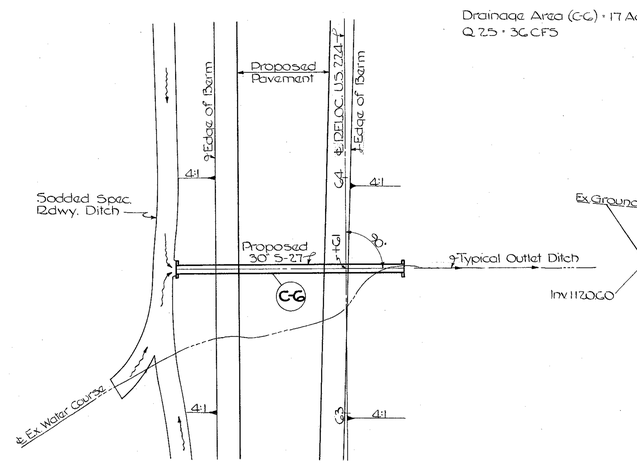
POR-224-6.22



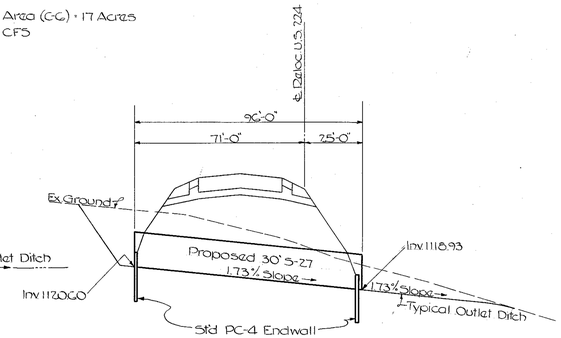
PLAN

ESTIMATE OF QUANTITIES

	ITEM	DESCRIPTION	QUANTITY
C-3	E-2	Excavation for Structures	42 C.Y.
	E-3	Channel Excavation	5 C.Y.
	S-1	Concrete for Structures Class E	1.02 C.Y.
	S-27	30" M-66(b) or M-68(b)	82 L.F.
C-4	E-2	Excavation for Structures (Dry)	114 C.Y.
	E-3	Channel Excavation	324 C.Y.
	S-1	Concrete for Structures Class E	1.02 C.Y.
	S-27	30" M-66(b) or M-68(b)	92 L.F.



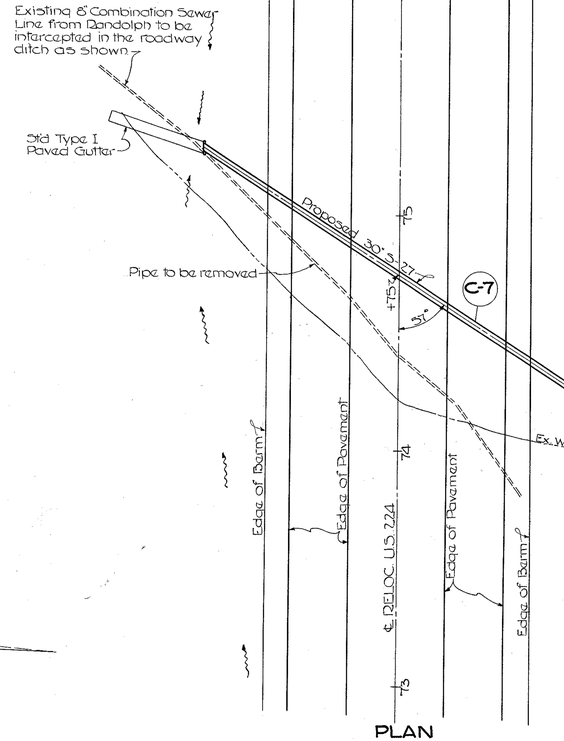
PLAN
Scale 1"=30'



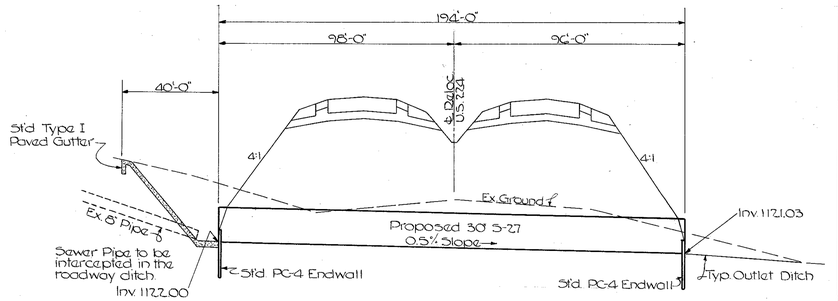
CULVERT C-6 PROFILE
Scale: Hor 1"=30'
Ver. 1"=5'

ESTIMATE OF QUANTITIES

ITEM	DESCRIPTION	QUANTITY
E-2	Excavation for Structures	80 C.Y.
S-27	30" M-68(b) or M-66(b)	96 L.F.
E-3	Channel Excavations	13 C.Y.
S-1	Concrete for Structures Class E	1.02 C.Y.



PLAN
Scale 1"=30'

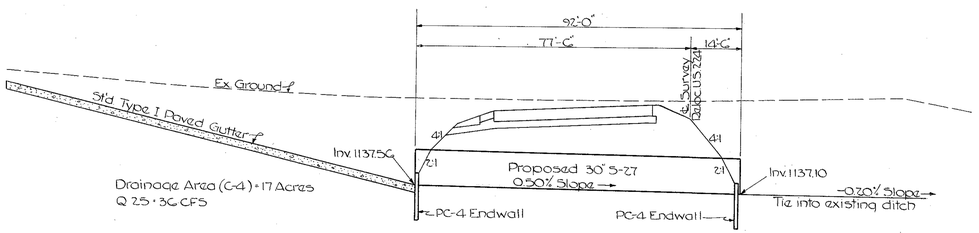


CULVERT C-7 PROFILE
Scale: Hor. 1"=30'
Ver. 1"=5'

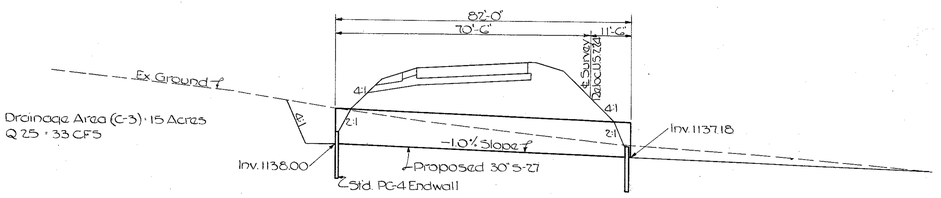
ESTIMATE OF QUANTITIES

ITEM	DESCRIPTION	QUANTITY
E-2	Excavation for Structures	111 C.Y.
E-3	Channel Excavation	66 C.Y.
S-27	30" M-68(b) or M-66(b)	194 L.F.
T-14	Paved Gutter	40 L.F.
L-10	Sodding	9 S.Y.
S-1	Concrete for Structures Class E	1.02 C.Y.

Drainage Area (C-7) = 12 Acres
Q 25 = 27 CFS



CULVERT C-4 PROFILE
Scale: Hor. 1"=20'
Ver. 1"=5'



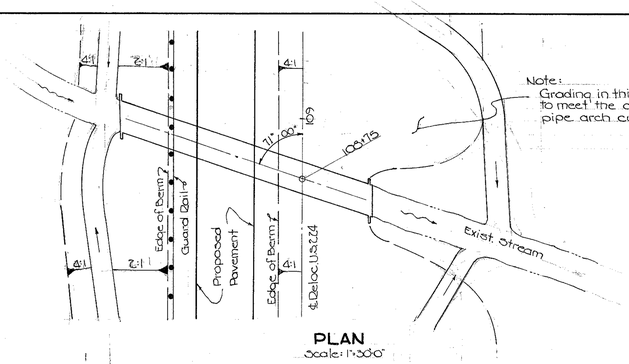
CULVERT C-3 PROFILE
Scale: Hor. 1"=20'
Ver. 1"=5'

CULVERT DETAILS C-3, C-4, C-6 & C-7

FED. RTY. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

35
109

POR-224-6.22

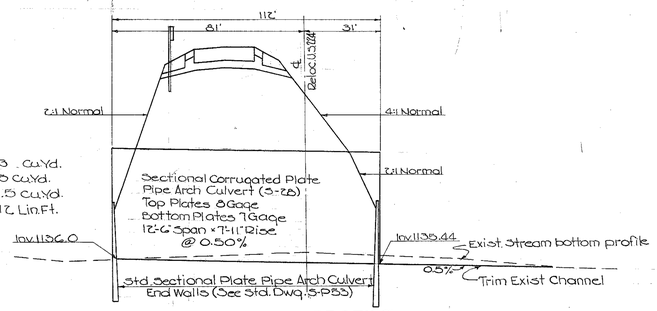


PLAN
Scale: 1"=30'-0"

C-11
ESTIMATE OF QUANTITIES

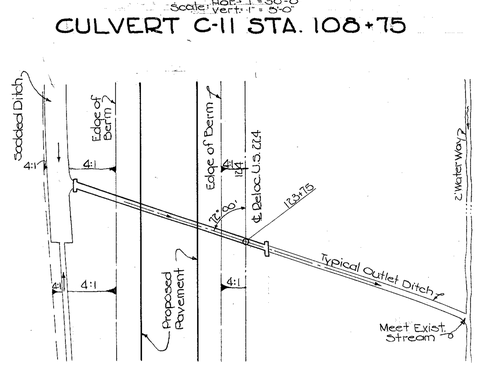
E-2	Structure Excavation	43 Cu.Yd.
E-3	Channel Excavation	15 Cu.Yd.
S-1	Concrete for Structures (Class 'E')	11.5 Cu.Yd.
S-28	12'-6" Span × 7'-11" Rise M-6.4(6)	112 Lin.Ft.

Drainage Area 915 Acres
Q25 480 C.F.S.



PROFILE
Scale: Hor. 1"=30'-0"
Vert. 1"=5'-0"

CULVERT C-11 STA. 108+75

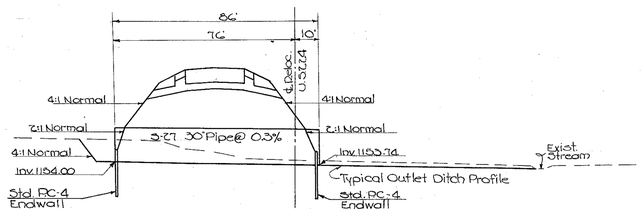


PLAN
Scale: 1"=30'-0"

C-12
ESTIMATE OF QUANTITIES

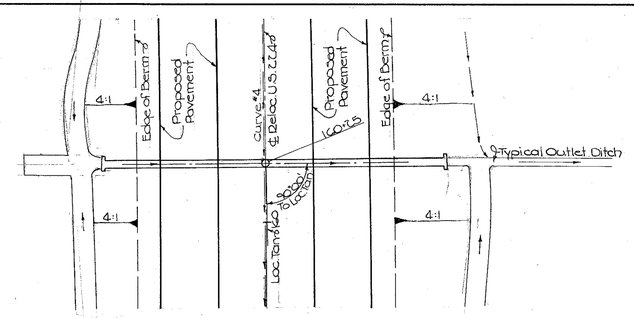
E-2	Excavation for Structure	27 Cu.Yd.
E-3	Channel Excavation	5 Cu.Yd.
S-27	30" M-6.8(b) or M-6.6(b)	86 Lin.Ft.
S-1	Concrete for Structure (Class 'E')	1.0 Cu.Yd.

Drainage Area 15 Acres
Q25 33 C.F.S.

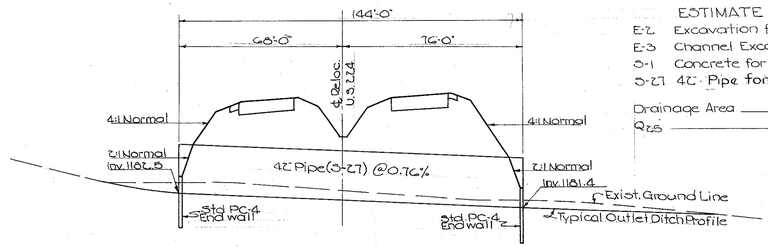


PROFILE
Scale: Vert. 1"=5'-0"
Hor. 1"=30'-0"

CULVERT C-12 STA. 123+75



PLAN
Scale: 1"=30'-0"



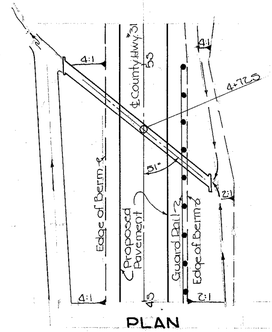
PROFILE
Scale: Hor. 1"=30'-0"
Vert. 1"=5'-0"

C-13
ESTIMATE OF QUANTITIES

E-2	Excavation for Structure	36 Cu.Yd.
E-3	Channel Excavation	5 Cu.Yd.
S-1	Concrete for Structure (Class 'E')	1.5 Cu.Yd.
S-27	42" Pipe for Roadway Culverts	144 Lin.Ft.

Drainage Area 38 Acres
Q25 57 C.F.S.

CULVERT C-13 STA. 160+25

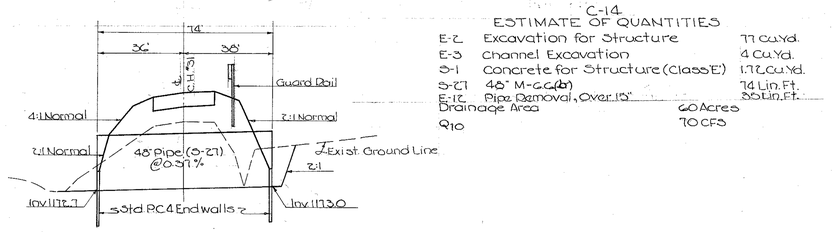


PLAN

C-14
ESTIMATE OF QUANTITIES

E-2	Excavation for Structure	77 Cu.Yd.
E-3	Channel Excavation	4 Cu.Yd.
S-1	Concrete for Structure (Class 'E')	1.7 Cu.Yd.
S-27	48" M-6.6(b)	74 Lin.Ft.
E-12	Pipe Removal, Over 15"	85 Lin.Ft.

Drainage Area 60 Acres
Q10 70 C.F.S.



PROFILE
Scale: Hor. 1"=30'-0"
Vert. 1"=5'-0"

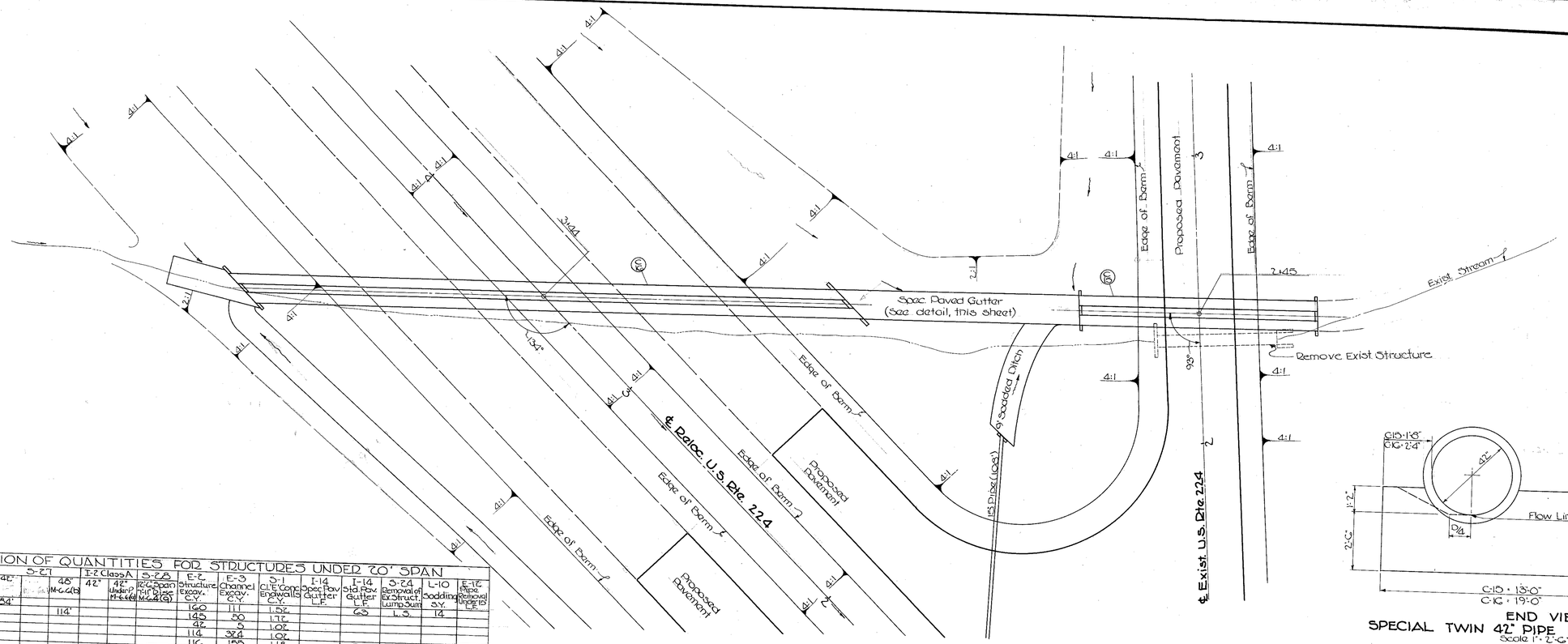
CULVERT C-14 STA. 4+72.5 (COUNTY HWY. #31)

CULVERT DETAILS C-11, C-12, C-13 & C-14

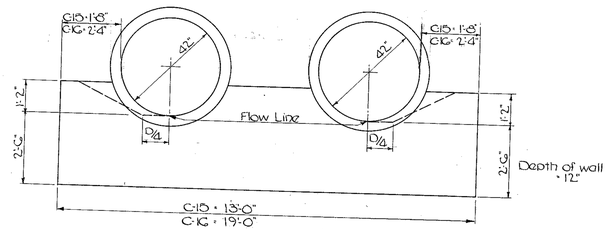
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

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109

POR-224-6.22



PLAN
CULVERT C-16 & C-15
Scale 1" = 30'

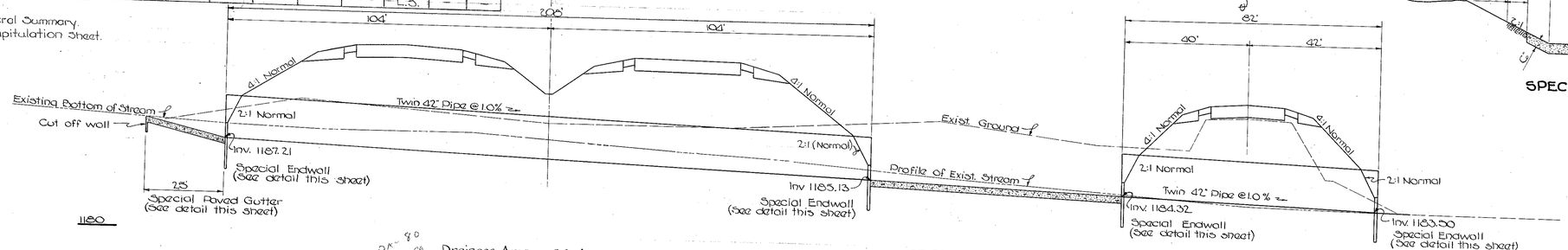


END VIEW
SPECIAL TWIN 42" PIPE ENDWALL FOR C15 & C16
Scale 1" = 2'-6"

RECAPITULATION OF QUANTITIES FOR STRUCTURES UNDER 20' SPAN

Culvert No.	S-27 80° Mat'l	S-27 80° Mat'l	S-27 45°	I-2 Class A 45° M-6.06(b)	I-2 Class A 42°	S-28 42" (RC) Span Mit Pipe Under M-6.06(b)	E-2 Structure Excav. C.Y.	E-3 Channel Excav. C.Y.	SU Class C Endwalls C.Y.	I-14 Spec. Fav Gutter L.F.	I-14 Std. Fav Gutter L.F.	S-24 Removal of Ex. Struct. Lump Sum	L-10 Sodding S.Y.	E-12 Pipe Removal Under 20' L.F.
C-1			84'				160	111	1.52					
C-2				114'			185	50	1.72		60	L.S.	14	
C-3	82'						92	0	1.02					
C-4	92'						114	364	1.02					
C-5		96'					116	150	1.18		70		16	
C-6	96'						80	15	1.02					
C-7	194'						111	66	1.02		40		9	
C-8					344			14	.16					
C-9					152									
C-10				348										
C-11								6	.76					
C-12	86'					112'	45	18	1.18		30		7	
C-13			144'				27	5	1.02					
C-14				74'			36	3	1.52					
C-15			164'				11	4	1.12					
C-16			416				198	7	2.98					35
***	—	—	—	—	348	496	—	407	159	4.3	105	L.S.	23	
TOTAL**	550	96	808	-	185	-	112	1556	924	55.96	105	205	—	69	35
												L.S.			

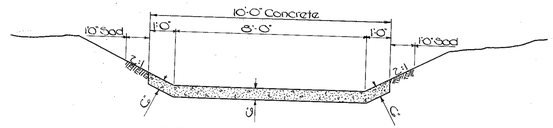
** To be carried to General Summary.
*** To be carried to Recapitulation Sheet.



PROFILE
CULVERT C-16 & C-15
Scale Hor. 1"=20'
Vert. 1"=5'

DA ~ 80 99 Drainage Area = 8.0 Acres
Q_{25} = 99 CFS

DA 111 Drainage Area = 111 Acres
Q_{25} = 120 CFS



SPECIAL PAVED GUTTER
Scale 1" = 3'

ESTIMATE OF QUANTITIES C-16 & C-15

C-16

ITEM	DISCRIPTION	QUANTITY
E-2	Excavation for structures	407 CY.
S-1	Concrete for structures (Class E)	430 CY.
S-27	Twin 42" Pipe for Roadway Culverts	416 L.F.
I-14	Special paved gutter	105 LF
L-10	Sodding	23 SY.
E-3	Channel excavation	159 CY.

Estimate for this Culvert includes everything up to the North End Wall for C-15.

C-15

ITEM	DISCRIPTION	QUANTITY
E-2	Excavation for structures (Dry)	198 CY.
S-1	Concrete for structures (Class E)	2.98 CY.
S-27	Twin 42" Pipe for Roadway Culverts	164 L.F.
E-3	Channel excavation	2.0 CY.
S-24	Removal exist. structure	Lump Sum

CULVERT DETAILS C-15 & C-16

RAISED CURB INLET

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-330( )	

37
109

POR-224-6.22

~NOTES~

Castings shall be of cast iron in accordance with Material Details. The design shall be essentially the same and equally as strong as those shown hereon, and shall be given one coat of asphaltum paint as per specifications. Weight approximately 645 pounds.

After casting has been set the spacing between the webs shall be filled with 1-2 cement mortar.

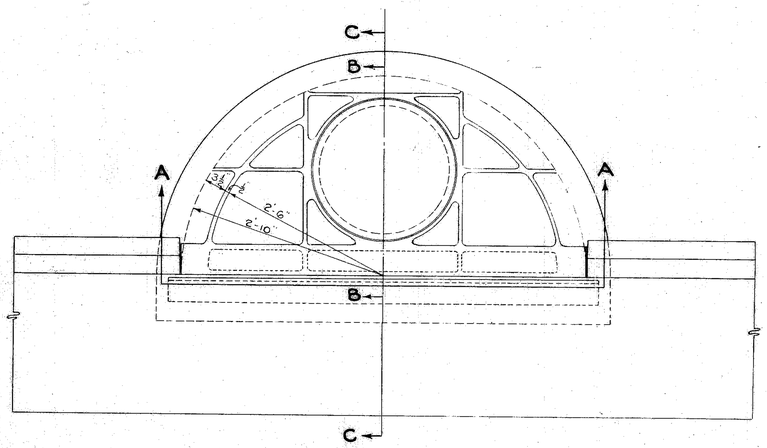
CONSTRUCTION :- Inlets shall be constructed of brick laid in Portland Cement mortar, with every sixth course a stretcher course.

Bottom of inlet to slope to outlet pipe, 1/2 diameter of the pipe.

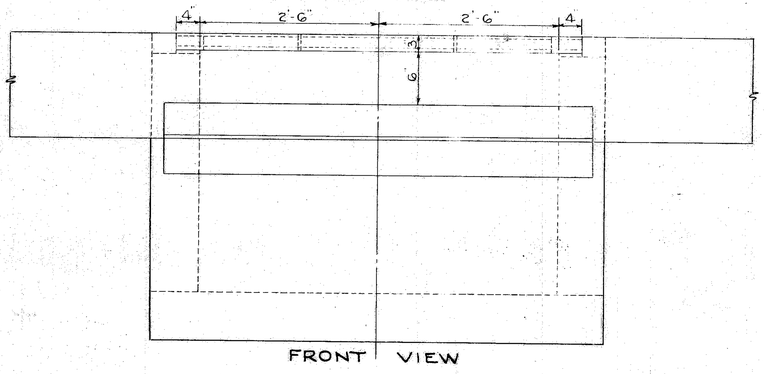
All inside joints are to be struck.

Drain tile incorporated in inlet is included in unit cost of inlet.

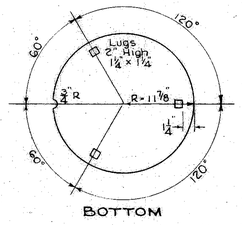
Monolitic construction for combination Curb and Gutter will be permitted as part of this plan. Bottom of Curb shall be on same plane as bottom of Gutter.



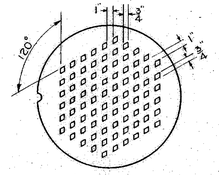
PLAN VIEW



FRONT VIEW

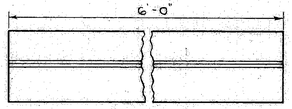


BOTTOM

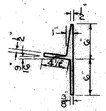


TOP

COVER DETAIL

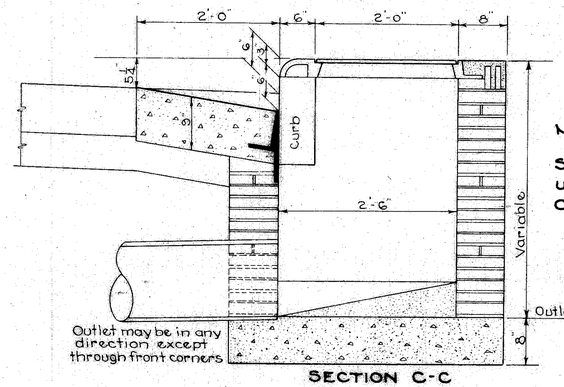


FRONT VIEW

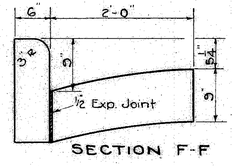


SIDE VIEW

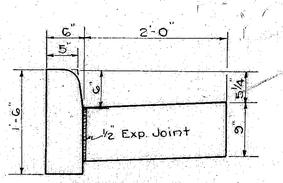
DETAIL OF PAVEMENT SUPPORT FOR OPENINGS
Approximate Weight 160 lbs.



SECTION C-C

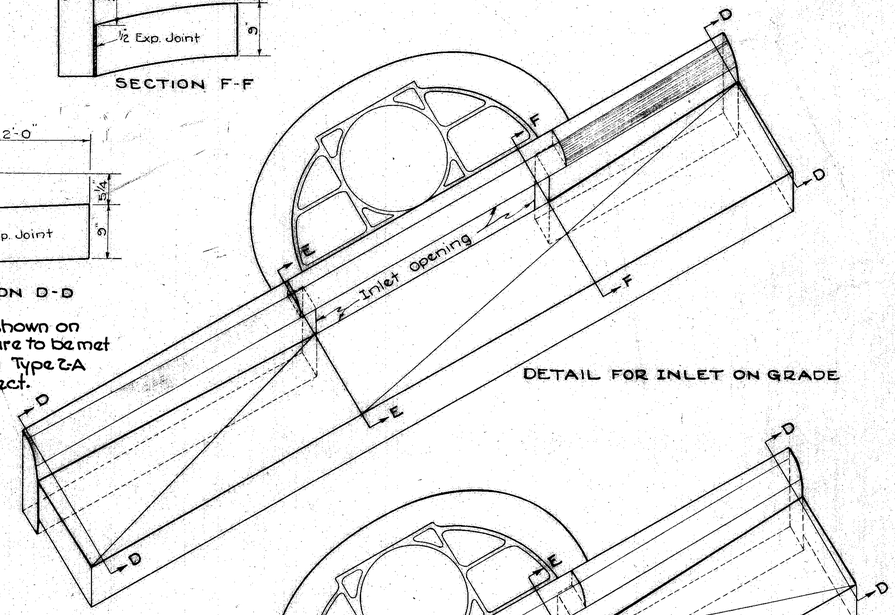


SECTION F-F

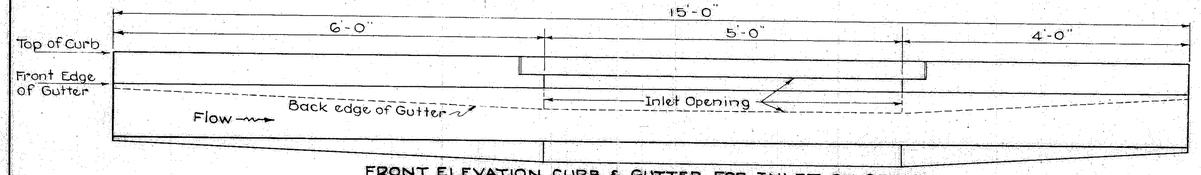


SECTION D-D

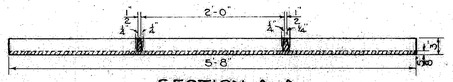
Note:
The conditions shown on Sections D-D & F-F are to be met using the proposed Type 2-A Curb for this project.



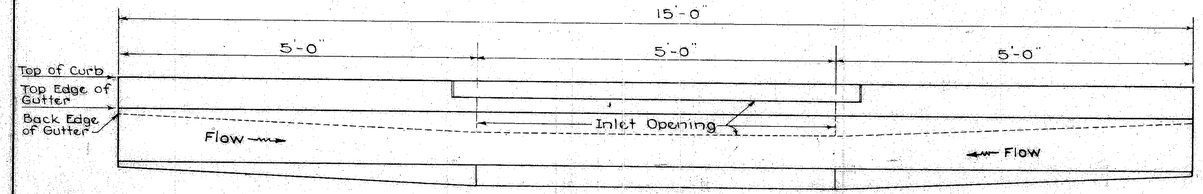
DETAIL FOR INLET ON GRADE



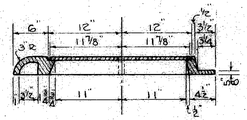
FRONT ELEVATION CURB & GUTTER FOR INLET ON GRADE



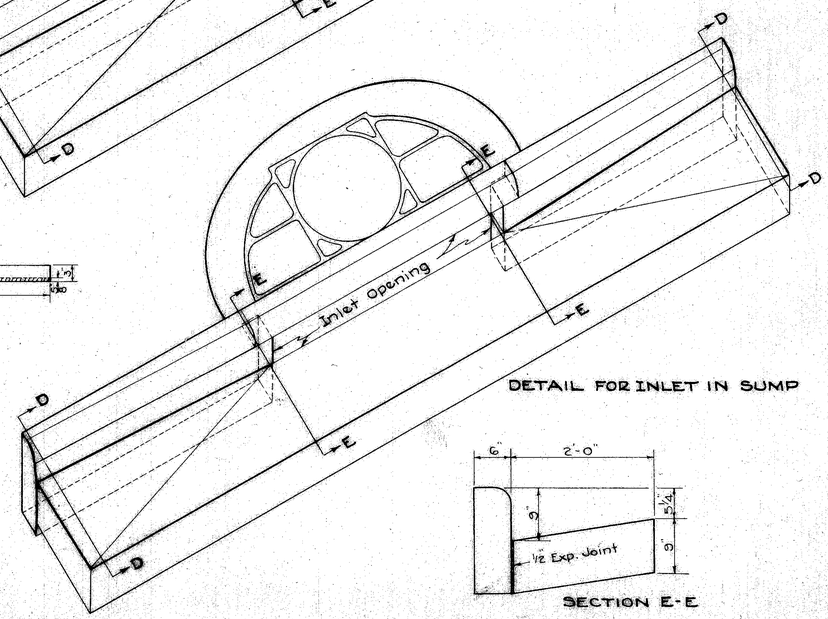
SECTION A-A
Approximate Weight 485 lbs.



FRONT ELEVATION CURB & GUTTER FOR INLET IN SUMP



SECTION B-B



DETAIL FOR INLET IN SUMP

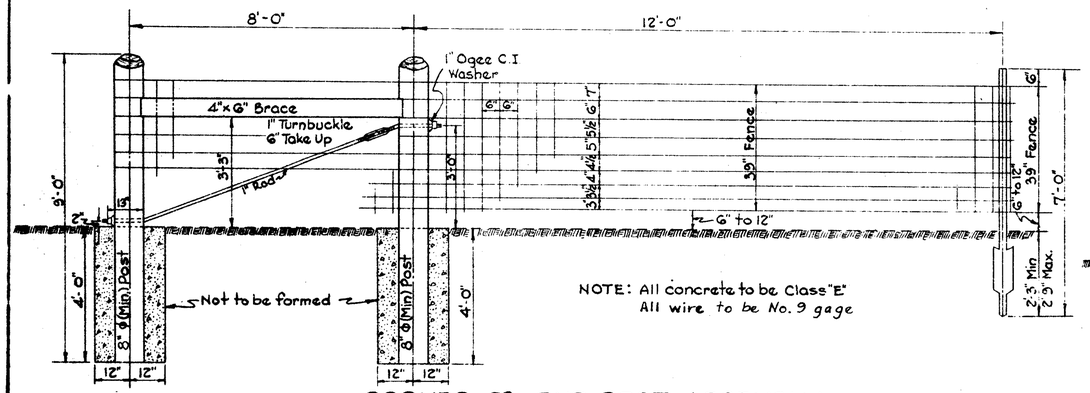
SECTION E-E

SPECIAL RAISED CURB INLET

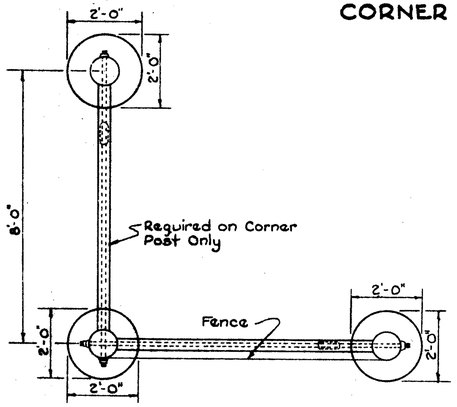
TYPE "A" FENCE DETAIL

FED RD DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

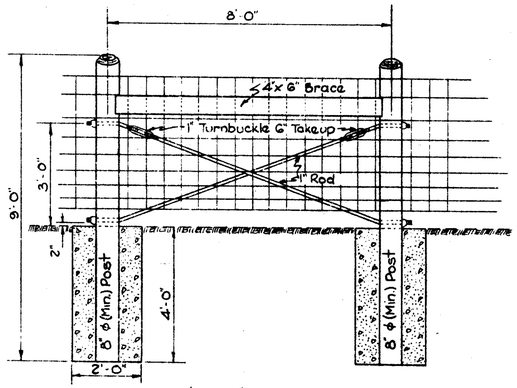
37A 109



CORNER OR END POST ASSEMBLY

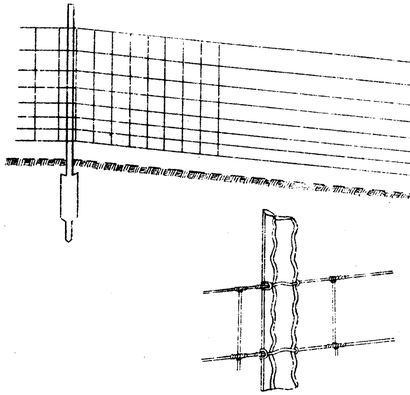


PLAN OF CORNER OR END POST ASSEMBLY



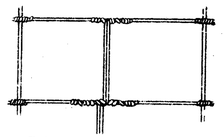
To be placed at locations shown on Plan or shifted if directed by the Engineer.

INTERMEDIATE ANCHOR POST ASSEMBLY

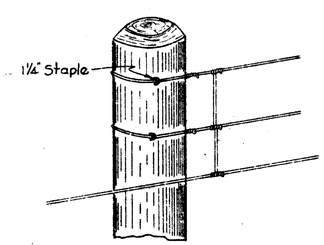


LINE POST IN DIP SECTION

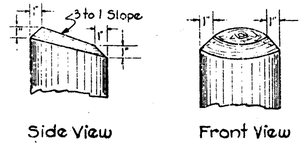
METHOD OF FASTENING FENCE AT LINE POST



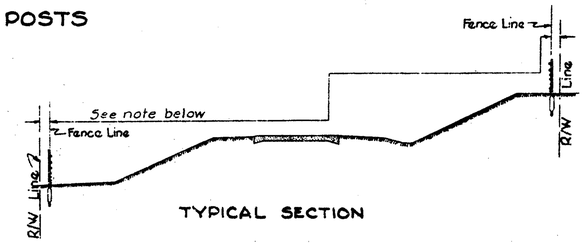
SPLICE DETAIL



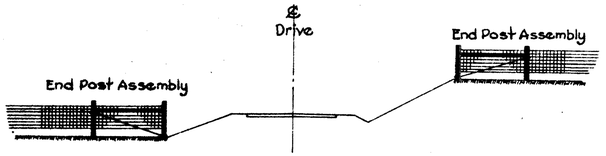
METHOD OF FASTENING FENCE AT END, CORNER POST AND ONE POST OF INTERMEDIATE ANCHOR POST ASSEMBLY



TOP OF POSTS



TYPICAL SECTION



R/W FENCE TREATMENT AT DRIVES



R/W FENCE TREATMENT AT CULVERTS

Notes:

Maximum spacing between intermediate anchor post assemblies or between end post assemblies and intermediate post assemblies shall be 660 Lin. Ft.

At points where individual spans of fence change alignment in excess of 4 degrees and less than 30 degrees, an intermediate anchor post assembly shall be built. If the change in alignment is 30 degrees or more a corner post assembly shall be built at the point of change.

In lieu of the requirement of Supplemental Specification No. 18 the End Posts, Corner Posts, and Intermediate Anchor Posts or Pull Posts shall be placed so that the side of the posts toward the highway is two feet from the Right-of-Way line.

REV. 7-26-56

TYPE "A" FENCE DETAIL

FEDERAL DIVISION	STATE	PROJECT	FEDERAL YEAR	SHEET NO.
2	OHIO	330( )		38
				409

POR-224-6.22

SEEDING	PAVEMENT AREA	CU. YDS.		
LF	SY	CUT	FILL	EXC. BAR



Note: No construction under this contract is proposed in the area covered by the x-sections on this sheet

E.F.T. DLM + C.T.C.

4-56 5-856

RA-3

CROSS SECTIONS - STA 420+12.62 TO STA 422+12.62

FED. DIVISION	STATE	PROJECT	FISCAL YEARS
2	OHIO	330 ( )	

39 / 109

POR 224 6.22

SEEDING LF.	SY.	END AREA CUT	FILL	CU YDS EXC.	EMB.

1150

422+62.62 = (-2+50)(W)
1160.7

1160

E 2' Ditch

423+12.62 = (-2+00)(W)
1158.3

Note: No construction under this contract is proposed behind Sta. 423+75

1150

E 2' Ditch

1157.74
423+62.62 = (-1+50)(W)
1157.1

For Earthwork
Use an area of 0 at Sta. 423+81.76
to average ahead with area at Sta. 424+12.62

BEGIN PAVING - STA. 423 + 81.76

Start Guard Rail 423+75
(Connect to existing)

E 2' Ditch

2:1 F: 48 4:1

1159.0
424+12.62 = (-1+00)(W)
1157.1

4:1 F: 30

M.L.

M.L.

Start Paved Gutter in Rdwy Ditch
424+35

E 2' Ditch

F: 187

Normal edge of prop.
Rte. 224 (West Edge)

M.L.

M.L.

424+62.62 = (-0+50)(W)
1156.0

M.L.

Edge Exist. Rte. 224 1156.24
425+12.44

2:1 F: 70

M.L.

Maintain Existing Ditch

For Earthwork
Stop Sheer at Sta. 425+12.44

423+81.76	0		0	0	
	150			0	56
	55		0	98	
	327			0	265
	63		0	187	
	267			0	238
	32		0	70	

150 100 50 0 50 100 140

E. F. T.
D. M. & C. T. C.
C. & L. P. J. F. W.
C. S. B. J.
C. W.

4-56
7-56
6-9-58
8-15-58
8-14-58

ORIGINAL SURVEY NOTE: RA-3

CROSS SECTIONS - STA 422+62.62 TO STA 425+12.44

D/W

Top of Peat

2:1

Water Elev. 1139.47

W.E. Pond

F·487

4:1

℄ C·10

1144.0

C·3

1137.4

Limits of E-4 Borrow Including Exc.

E-4 Granular Borrow

Approx. bottom of peat bed

1130

1150.24
5+00
1144.2

Note: Granular Borrow to be placed in peat bog area to elevation 1140.00

(Pond water to drain)

Stations	E-4 Granular Borrow Including Excavation		E-4 Granular Borrow	
	End Area	Cu. Yds.	End Area	Cu. Yds.
3+00	0		0	
		778		46
4+00	420		25	
		1148		196
5+00	280		80	
		185		74
5+50	0		0	
TOTAL		2111		316

Top of Peat

2:1

E-4 Granular Borrow

Water Elev. 1139.52

W.E. Pond

F·724

4:1

℄ C·G

1142.0

C·6

1137.4

Limits of E-4 Borrow including Exc.

Approx. bottom of peat bed

1130

1150.74
4+00
1141.0

E-4 Granular Borrow = 316 C.Y.
E-4 Granular Borrow including excav. of unsuitable material

EXCAVATION	9,365 C.Y.
EMBANKMENT	12,066 C.Y.
SEEDING	110,500 S.Y.

D/W 230' Lt.

230' Lt.

2:1

F·750

4:1

℄ C·3

1140.0

C·20

1137.4

Begin Spec. Rdwy. Ditch at Sta. 2+43

Stnd. Rdwy Ditch

1130

1151.24
3+00

2:1 Side Slope · 2+50

T.B.

℄ Creek

3:1

T.B.

F·800

4:1

1130

1152.18
2+00
1140.5

D/W

Normal rdwy. slope · 4:1 @ 1+50

F·505

4:1

Begin guard rail @ 1+50

1152.86
1+50
1143.9

124.68' Rt.

℄ SERVICE DRIVE

D/W 145' Rt.

1140

℄ Exist. U.S. 224

M.L.

T.B.

Ditch 0.5' Deep

Edge Exist. Rte. 224

M.L.

F·194

4:1

1153.79
1+00
1148.9

Quantities for Service Drive are shown on line sheet.

124.68' Rt.

℄ SERVICE DRIVE

D/W 145' Rt.

M.L.

Edge Existing Rte. 224

F·19

4:1

Exist. Gr.

M.L.

1150

1154.91
0+50
1152.9

For Earthwork Start sheer at sta. 0+50

D/W

124.68' Rt.

℄ SERVICE DRIVE

D/W 145' Rt.

150 100 50 0 50 100 140

LF	SY	CUT	FILL	EXC	END
85		13	487		
1044				44	2444
102		11	724		
1211				65	2730
116		23	750		
1244				44	2870
107		0	800		
572				0	1210
98		0	505		
366				0	648
34		0	194		
172				0	198
27		0	19		

E.F.T.
R.R.
M.C. + R.W.
R.R.
C.N.R.

4-18-56
4-20-56
6-26-56
6-29-56

PRELIMINARY SURVEY PLAT
SCALE 1" = 50'
R-5

CROSS SECTIONS STA 0+50 TO STA 5+00

D/W

C = 820

1147.74

10+00
1153.2

1150

D/W

C = 645

1148.24

9+00
1154.0

1150

C = 745

1148.74
8+00
1153.2

1150

C = 564

1149.24
7+00
1153.7

1150

W.E. Pond

C = 358

1149.49
6+50
1153.9

Stnd. Rdwy Ditch

D/W

C = 104

4:1

F = 182

1149.74
6+00
1151.9

W.E. Pond

D/W

Water Elev. 1139.47

1140

150 100 50 0 50 100 140

SEEDING LF.	END AREA SY.	CUT	FILL	EXC. END
101	820	0		
1078		2715		0
93	645	0		
1055		2574		0
96	745	0		
1055		2426		0
93	564	0		
476		853		0
79	358	0		
481		427		1
94	104	182		
1000		219		1

E.P.T. 4-26-56
R.U.B. 4-14-56
C.R.L. 6-20-56
V.O.E.W. 6-26-56
C.R.L. 6-29-56
C.L.N.K.

R-5

CROSS SECTIONS - STA 6+00 TO STA 10+00



EXCAVATION 8,895 C.Y.
EMBANKMENT 1,692 C.Y.
SEEDING 10.456 S.Y.

STA	SEEDING L.F.	SEEDING S.Y.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
11+00	54		60	37		
		689			167	307
12+00	69		30	128		
		800			189	382
13+00	74		72	77		
		867			552	144
14+00	82		225	0		
		535			368	0
15+00	75		296	0		
		591			816	0
	96		416	0		
		1100			2289	0

4-5-96
4-11-96
5-23-96
6-26-96
6-28-96

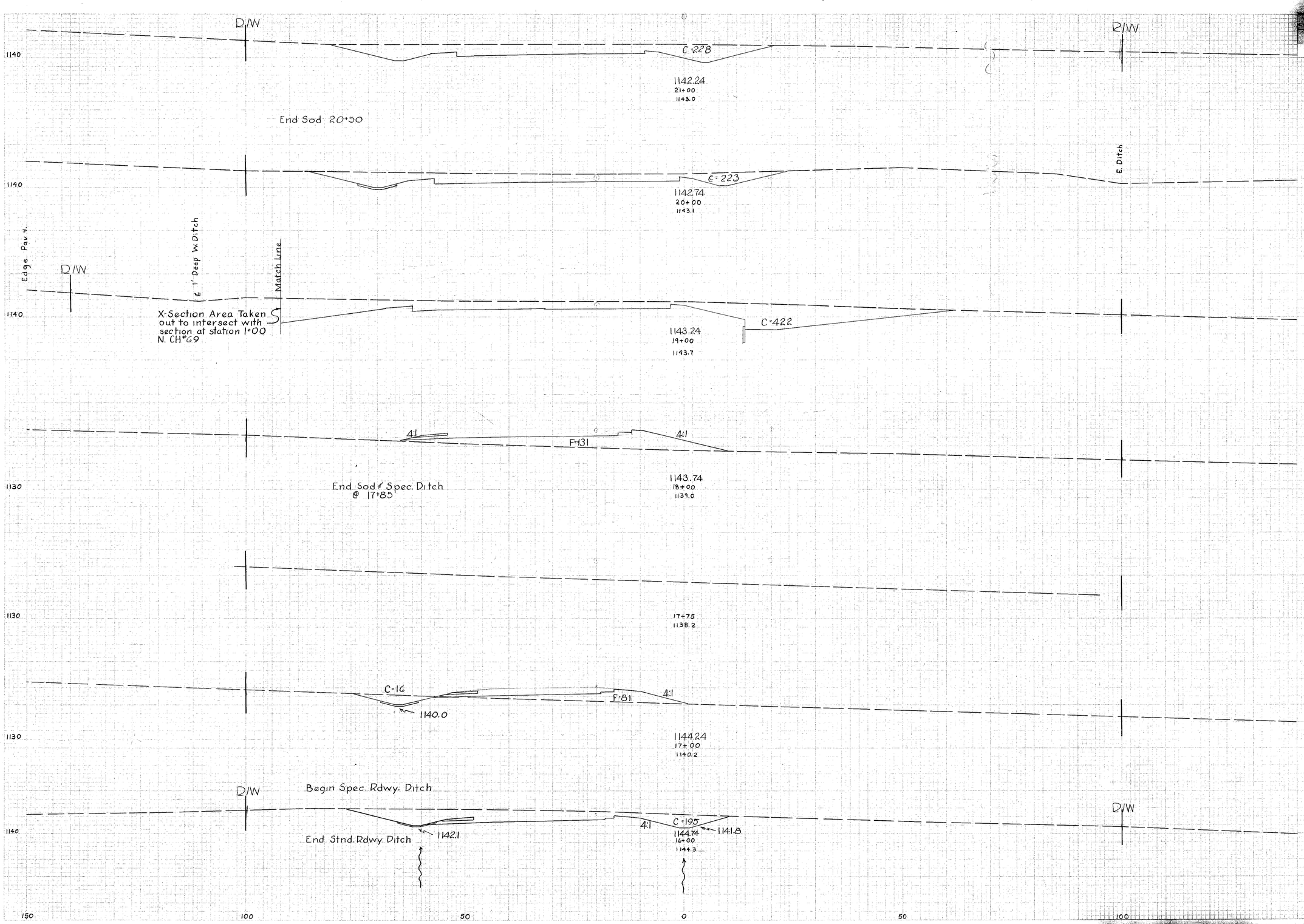
E.F.T.
D.W.B.
C.R.D.
L.N.K.

R-5

CROSS SECTIONS - STA 11+00 TO STA 15+00

POR 224 6.22

SEEDING LF	SEEDING SY	END AREA CUT	END AREA FILL	CU YDS EXC.	CU YDS EMB.
82		228	0		
	878			837	0
75		223	0		
	1230			1196	0
170		422	0		
	1110			782	244
52		0	131		
	611			59	393
58		16	81		
	700			396	152
67		195	0		
	667			474	70



CROSS SECTIONS STA 16+00 TO STA 21+00

E.F.T.
D.L.M. + R.J.B.
D.B.L. & J.F.W.
C.R.K.
M.S.B.

A 4-19-56
4-19-56
4-20-56
6-20-56

R-5

NO.	DATE	REVISION	PROJECT
2	5-30-24		

PROJ. 2018-6122



SLOPING	END AREA	CU YDS	
	CUT	FILL	EXC
76	514	0	
822		1459	0
72	273	0	
755		622	7
64	63	4	
778		446	7
75	179	0	
800		496	0
69	89	0	
811		519	0
76	190	0	
878		774	0

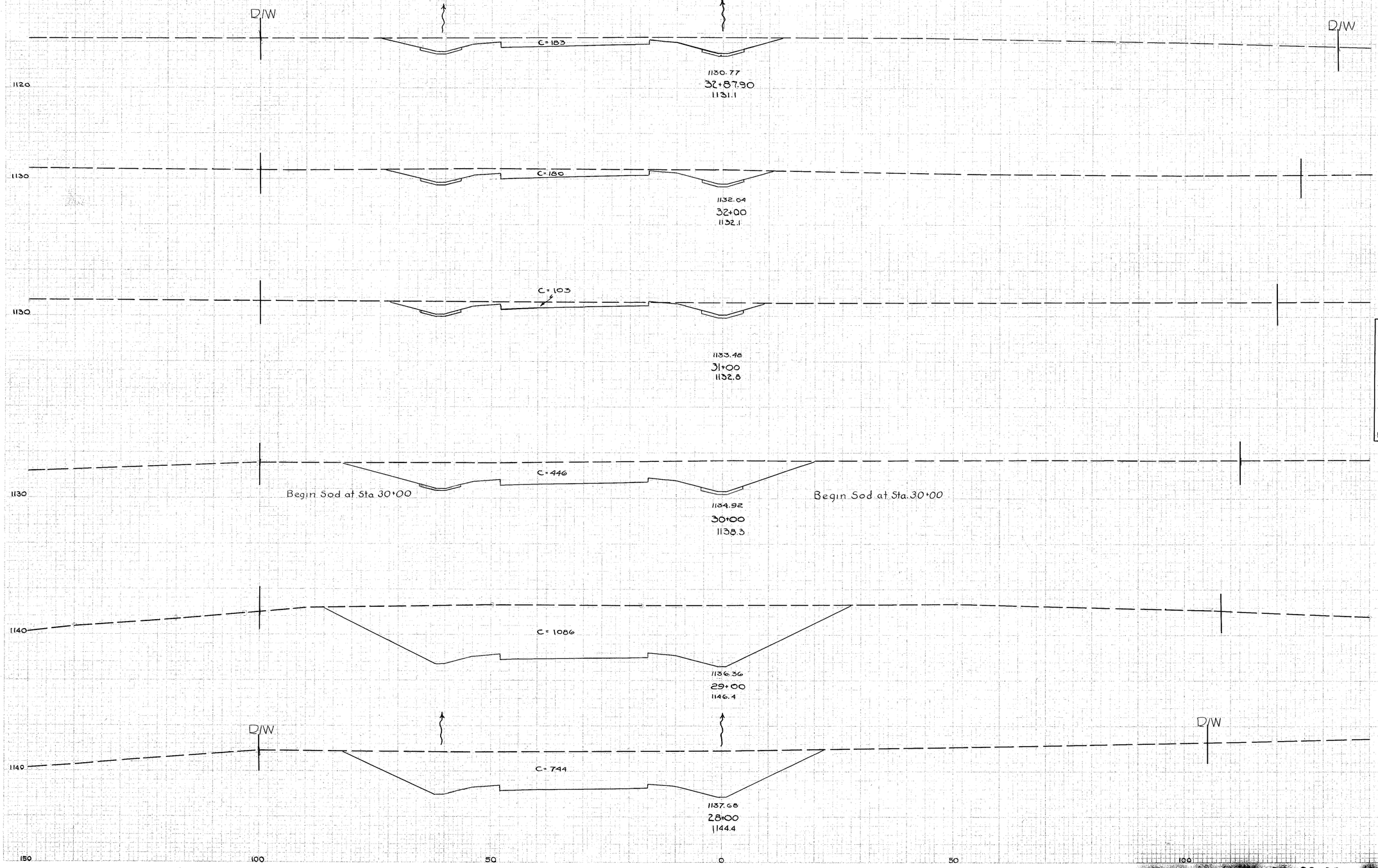
E.F.T. 4-15-24
D.L.M. & R.J.B. 4-17-24
R.B.B. 4-25-24
E.R.L. 6-29-24

R-5

CROSS SECTIONS STA 22+00 TO STA 27+00

FED. DIV.	STATE	PROJECT	FED. NO.
2	OHIO	330(1)	

FOR 224-6.22



SEEDING	END AREA	CU. YDS.			
LF	SF	CUT	FILL	EXC.	EMB.
60		183	0		
	566			592	0
56		180	0		
	611			526	0
55		103	0		
	711			1019	0
74		446	0		
	911			2837	0
90		1086	0		
	944			3389	0
79		744	0		
	867			2330	0

EXCAVATION	15423 CY
EMBANKMENT	14 CY
SEEDING	9232 SY

E.M.T.
R.J.B.
M.S.R.L.
C.R.L.
L.N.K.

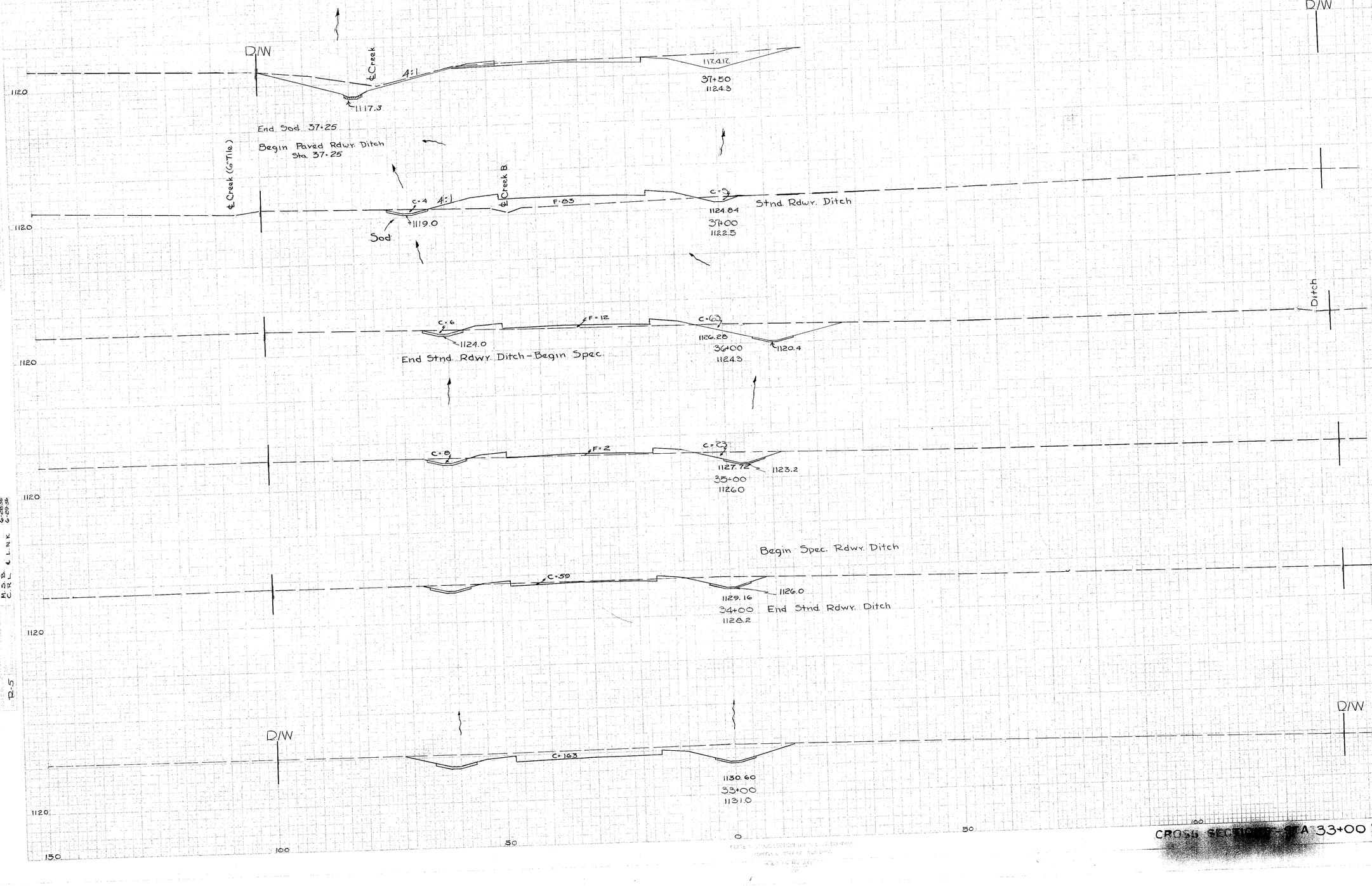
1-3%
2-2%
3-2%
4-2.5%
5-2.5%
6-2.5%

R-5

CROSS SECTIONS STA 28+00 TO STA 32+87.90

POR-224-0.22

SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
57	9	83			
556		144		178	
42	69	12			
478		185		26	
43	31	2			
500		167		4	
47	59	0			
578		411		0	
57	163	0			
78		775			



EFB RJB 4-95
DJB JJW 4-2556
RHB CRL 6-2856
C.R.L. & LINK 6-2856

R-5

PGE. 27A. 6.22

D/W

Water Elev. 1117.33

2:1 C=260 4:1

1111.5

(C=71) (F=71)

F=238

1119.91
40+50
1115.3

D/W

S.E. Upper Pond

Begin Spec. Rdwy Ditch

Water Elev. 1117.33

C=195

1112.5

(C=58) (F=58)

F=205

C=43

1120.55
40+00
1120.2

Begin Sod 40+00

Begin Removal of Unsuitable Material @ Sta 39+00

S.E. Upper Pond

Water Elev. 1117.33

1114.2

C=365

1121.96
39+00
1125.9

C=360

1115.0

1122.66
38+50
1126.9

D/W

E. Creek

2:1 4:1

1116.7

C=385

1123.40
38+00
1125.5

D/W

E.F.T. + R.U.B.
D.M.L. + J.R.W.
C.R.L.L.
M.S.B.

4-30-96
4-30-96
6-30-96
7-10-96
7-10-96

R-5

SEED LB.	SEED SY.	END AREA CUT	END AREA FILL	CU YDS. EXC.	CU YDS. END.
113		280 (71)	238 (71)		
	584			434 (119)	411 (119)
96		188 (58)	205 (58)		
	1222			1026 (107)	382 (107)
124		365 (0)	0 (0)		
	645			857	0
108		560	0		
	567			876	0
95		385	0		
	844			730	156

Unsuitable Matl. 795 C.Y.

Excavation	8025 C.Y.
Embankment	11760 C.Y.
Seeding	13674 S.Y.

150 100 50 0 50 100 140

CROSS SECTIONS STA 38+00 TO STA 40+50

Begin Guard Rail
44+00

E Millrace

D/W

Millrace

2:1 C=27

2:1

F=627

4:1

C=80 4:1

D/W

1105.6

1116.91
44+00
1106.5

1100

43+50 Side Slope - 3:1

Average Unsuitable Material area at Sta 43+00 ahead with an area of 0 at Sta 43+10.

W.E. Lower Pond

W.E. Pond Top Dam

Lower Dam

Top Dam

Spillway

Millrace

Millrace

C=215

4:1

Water Elev. 1112.80

F=300

1110

1107.1

(C=50) (F=50)

1117.80
43+00
1114.6

C=28

Begin Guard Rail
43+00

W.E. Lower Pond

C=185

F=471

Water Elev. 1112.80

1110

1108.0

(C=112) (F=112)

1117.88
42+50

C=17

W.E. Lower Pond

C=168

F=455

Water Elev. 1112.80

1110

1108.9

(C=65) (F=65)

1118.31
42+00

C=10

W.E. Lower Pond

C=293

F=172

Water Elev. 1112.80

1110

1109.8

(C=13) (F=13)

1118.79
41+50

C=16

E. Upper Pond

E. Pond + Top Dam

Top Dam

D/W

D/W

Water Elev. 1117.33

2:1

C=168

4:1

F=170

4:1

C=168

4:1

1110

1110.5

(C=52) (F=52)

1119.52
41+00
1118.6

150 100 50 0 50 100 140

E.F.M.
D.L.M. + R.W.B.
C.R.L. ✓J.F.W
M.S.B.

4-5-56
4-19-56
7-26-56
8-16-56
7-10-58

A-5

Station	Sta. Diff.	Cut Area	Cut Vol.	Fill Area	Fill Vol.
LF	LF	(SF)	(CY)	(SF)	(CY)
1722				144	1238
	1722				
1355				537	2089
	1355				
650				411	715
	650				
684				350	858
	684				
689				452	582
	689				
700				617	317
	700				
684				589	378
	684				

Station	Sta. Diff.	Cut Area	Cut Vol.	Fill Area	Fill Vol.
LF	LF	(SF)	(CY)	(SF)	(CY)
127	127	47	627		
		(0)	(0)		
116	243	300		(9)	(9)
		(50)	(50)		
117	200	471			
		(112)	(112)		
128	178	455			
		(65)	(65)		
119	309	172			
		(13)	(13)		
132	356	170			
		(52)	(52)		
	684				

CROSS SECTIONS STA 41+00 TO STA 44+00

End Sod & Spac. Rdwy Ditch 49+25

D/W

F=127 | 2:1 | C=48 | 1114.0 | 1117.18 | 49+00 | 1116.44

End Guard Rail 49+00

Begin Guard Rail 48+05

F.B. | C=70 | 1103.0 | F=625 | 2:1 | C=5 | 1116.70 | 48+00 | 1104.8

1104.0 Begin Spac Rdwy Ditch & Sod 47+25

Begin Paved Gutter & Sod 47+50

End Guard Rail 47+00

Congress Lake Outlet

End Paved Gutter & Sod 47+50

Begin Guard Rail 47+80

End Spac. Rdwy Ditch & Sod. 47+00

F=504 | 2:1 | C=33 | 1102.0 | 1116.44 | 47+00 | 1109.6 | C=70 | Water Elev. 1103.7 | 1101.0

Bridge Gap

End Guard Rail 46+80

For Earthwork
Start shear averaging area at Sta. 47+00 ahead with area at Sta. 48+00 using a distance of 15'.

For Earthwork
Use area at Sta. 46+00 to average ahead with area at Sta. 47+00 using a distance of 50' and Stop Shear.

℄ Old Channel | Top Dam | F=589 | C=10 | 1102.5 | 1116.38 | 46+00 | 1107.5 | C=130 | 1101.5

Top Dam | F=664 | C=9 | 1104.1 | 2:1 | C=8 | 1116.54 | 45+00 | 1102.8 | 1102.0

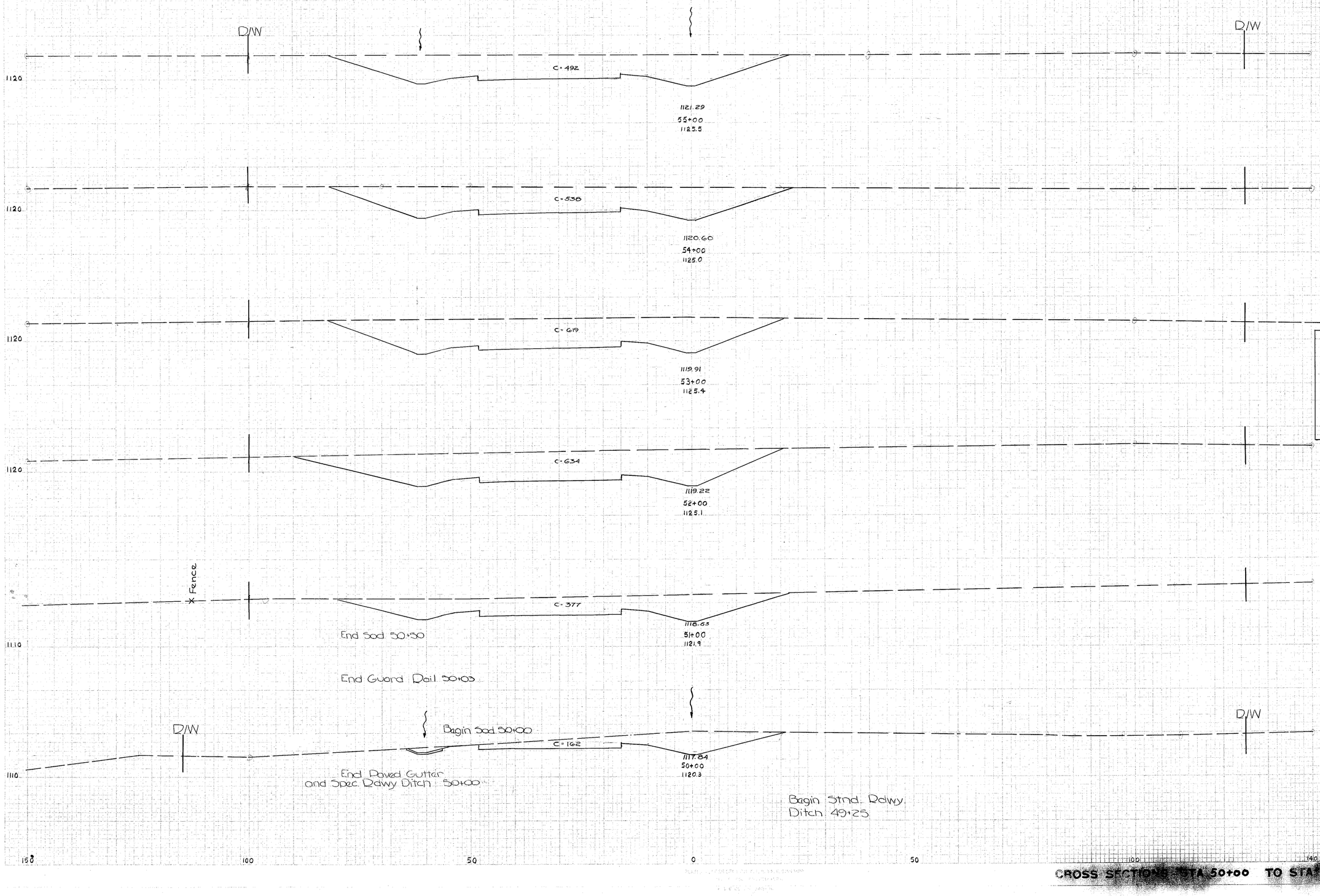
Top Dam | D/W | C=9 | 1104.8 | 2:1 | F=729 | 3:1 | C=100 | 1116.70 | 44+50 | 1105.4 | 1103.0 | D/W

E.F.T. 4-'56
L.M.& R.J.B. 7-6-'56
D.Q.L. V.J.F.W. 7-16-'56
C.R.D. & L.N.K. 7-19-'56
M.S.D.

92		93	127		
	1333			311	1393
148		75	625		
	225			49	314
122		103	504		
	1170			507	1823
111		200	589		
	1155			393	2322
96		12	664		
	639			113	1291
132		109	729		

150 100 50 0 50 100 140

CROSS SECTIONS - STA 44+50 TO STA 49+00



SEEDING	END AREA	CU YDS.	
STA.	CUT	FILL	EXC.	EMB.
76		492	0	
	844		1907	0
76		538	0	
	844		2144	0
76		619	0	
	889		2322	0
83		634	0	
	878		1874	0
74		377	0	
	711		996	0
53		162	0	
	811		385	237

EXCAVATION	16,640CY
EMBANKMENT	376.7CY
SEEDING	10.15ac

4-96 4-2036 7-9-36 7-10-36 7-12-36

M.M. - R.V.B. D.L.M. - J.F.W. C.L.L. - K.H.S.D. L.N.K.

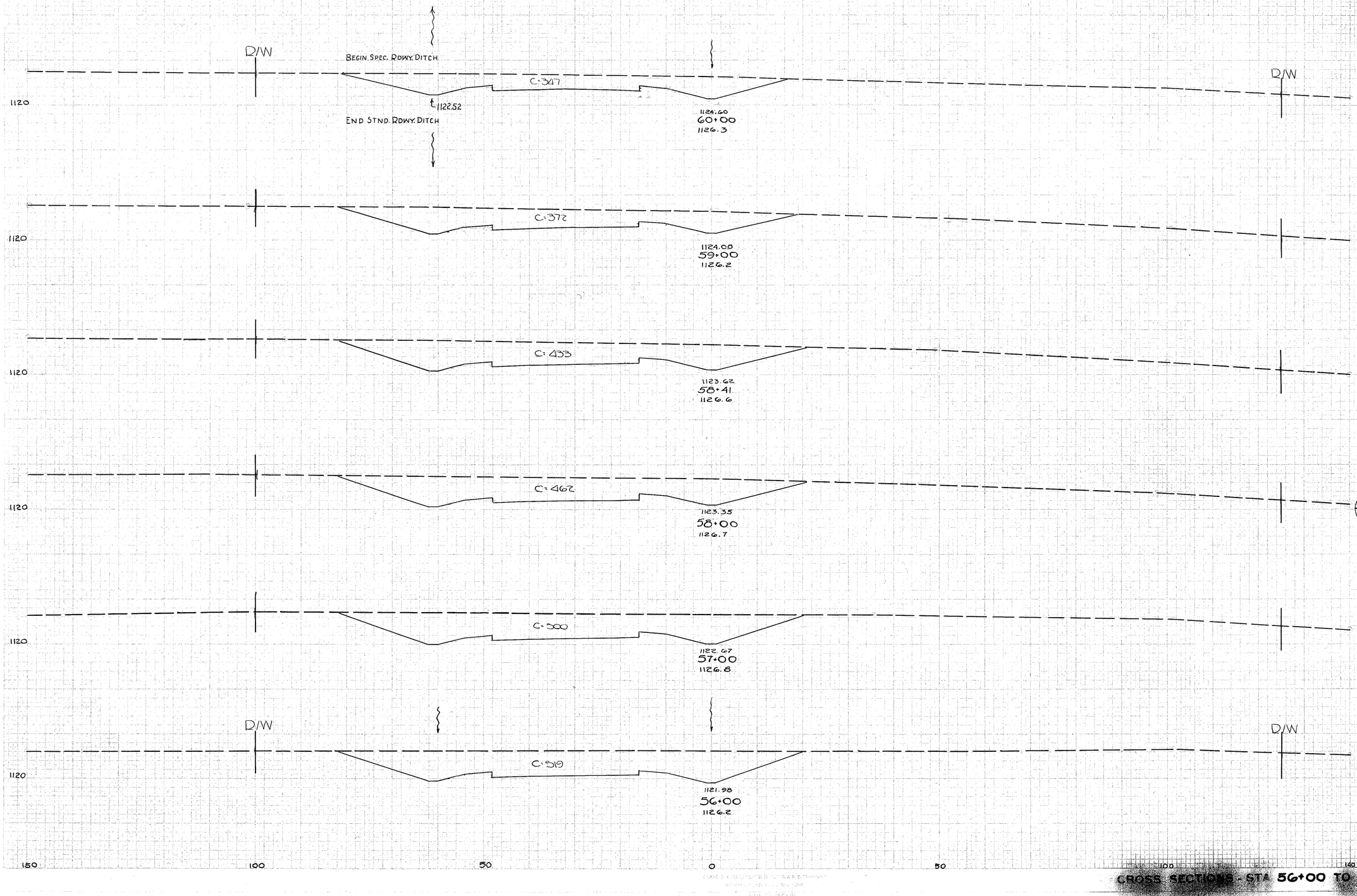
R.6

CROSS SECTIONS STA 50+00 TO STA 55+00

PROJECT	STATE	FEDERAL AID PROJECT NO.
2	ILLINOIS	

FAP 334 (US 22)

SECTION	STATION	AREA	CU. YDS.		
LF		SY	CUT	FILL	EXC. EMB.
89		347	0		
	1000			1333	0
91		372	0		
	1022			880	0
93		433	0		
	1033			680	0
93		462	0		
	1033			1782	0
93		500	0		
	1033			1889	0
93		519	0		
	944			1074	0



CROSS SECTIONS - STA 56+00 TO STA 60+00

4-5G
4-20-36
7-5-36
7-11-36
7-11-36

M. M. & R. J. B.
D. L. J. V. J. R. W.
M. S. B.
L. N. K.

R-6

STATE	STATE PROJECT	FED. AID PROJECT
OHIO	FAS-330(C)	

PON-224-6.22

52
109

	SEEDING	END AREA		CU. YDS.	
	LF	SY	CUT	FILL	EXC.	EMB.
	67			30	90	
			164		207	80
	67			51	106	
			767		252	407
	71			85	14	
			800		496	26
	73			183	0	
			822		789	0
	75			243	0	
			911		1093	0

EXCAVATION 6,935 CY
EMBANKMENT 4,213 CY
SEEDING 1.163 AC

R/W

C=30

1121.5

F=90

9:1

1126.81
64+22
1123.5

R/W

1120

C=51

1121.2

Spec. Rdwy Ditch
To pipe Culvert

F=106

1126.70
64+00
1123.2

Water Course

63+61
1122.0

Cut=72

1121.0

F=14

C=13

1126.20
63+00
1124.7

Place sod (9' Wide) on the Roadway Cut Slope at approx. Sta. 62+00 where a shallow swale enters the roadway section.

C=183

1121.5

1125.70
62+00
1125.1

R/W

C=243

1122.0

Grade to ultimate ditch

1125.17
61+00
1125.8

Place sod (9' Wide) on the Roadway Cut Slope at approx. Sta. 60+25 where a shallow swale enters the roaway section.

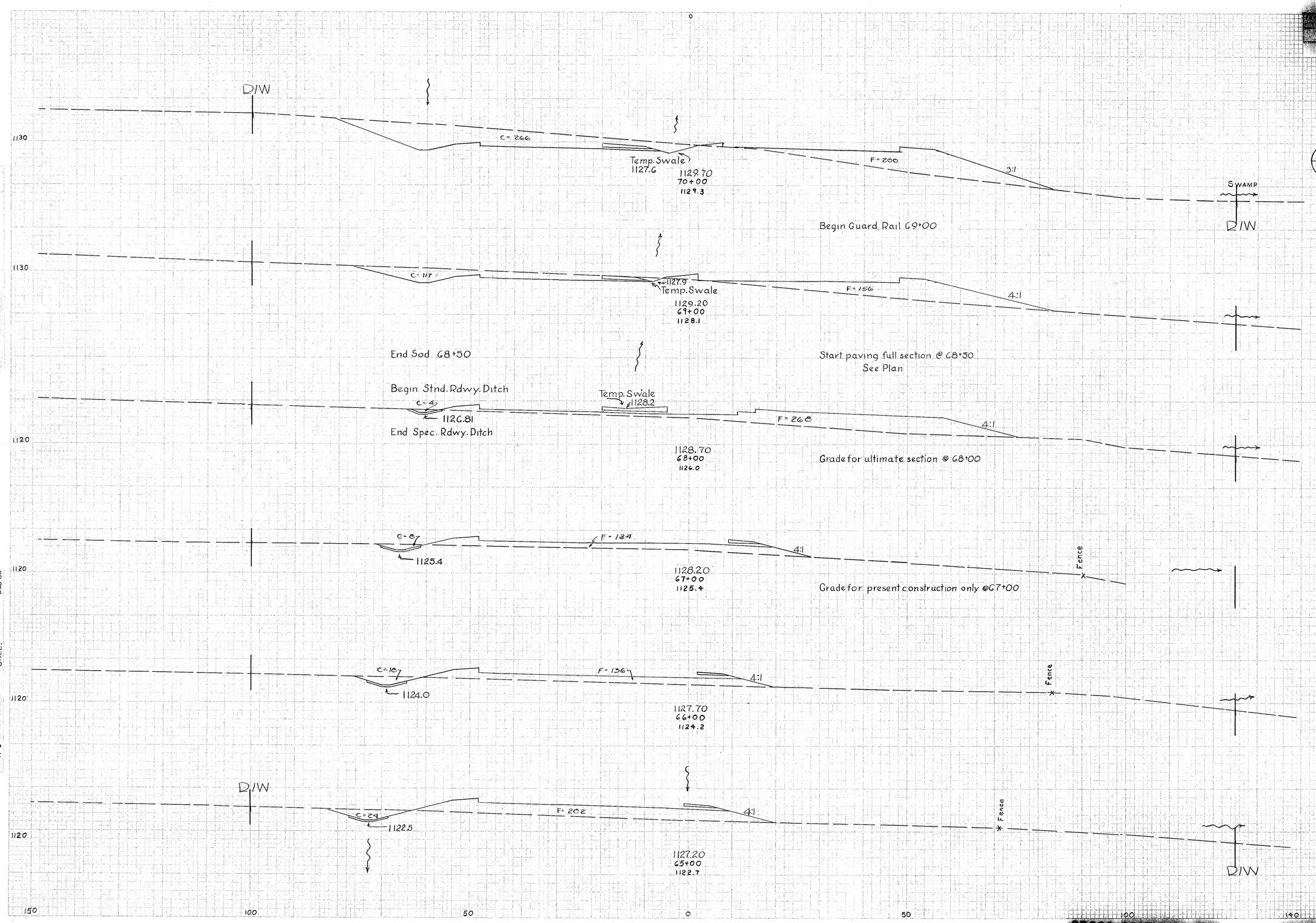
BEGIN SOD IN SPEC. RDWY DITCH AT 60+20

M.M. 4-25-56
P.B.K. 6-26-56
C.R.L. 6-26-56

R-6

150 100 50 0 50 100 150

CROSS SECTIONS STA 61+00 TO STA 64+22



STATION	SEEDING LF	SEEDING SY	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
70+00	120		266	200		
		1267			711	659
69+00	107		117	156		
		1083			226	785
68+00	88		4	268		
		783			22	726
67+00	53		8	124		
		611			48	482
66+00	57		18	136		
		689			89	626
65+00	67		24	202		
		681			107	422

M.M.
R.J.B.
D.W.B.
C.M.B.
P.L.S.

4-20-56
7-28-56
6-28-56
6-28-56

R. 6

CROSS SECTIONS STA 65+00 TO STA 70+00

FED. DIV.	STATE	PROJECT	SHEET
2			54 / 109

SEEDING END AREA - CU YDS.

STA.	SY.	CUT	FILL	EXC.	EMB.
1103		33	145		
1311				74	1346
132		7	690		
1478				22	3082
133		5	982		
1367				37	863
112		23	377		
1256				256	1019
113		115	173		
1300				493	1007
120		150	370		
1335				770	1056

EXCAVATION 2576 C.Y.
EMBANKMENT 6916 C.Y.
SEEDING 13057 S.Y.

D/W Dry wall — C:15 — 4:1 — F:101 — Dry Wall — C:18 — F:44 — 4:1 — D/W

1120

11274

1133.04
76+00
1131.6

C:7 — Water Way — 11230 — F:690 — 4:1

1120

1132.24
75+00
1126.7

C:5 — 4:1 — 1127.0 — F:982 — End Guard Rail Sta. 74+00 — 4:1 — Swamp

1120

1131.70
74+00
1123.4

Begin Spec. Rdwy. Ditch

C:3 — F:20 — C:20 — End Stnd. Rdwy. Ditch — F:357 — Swamp — 2:1

1120

1131.20
73+00.0
1129.7

C:11b — F:173 — 2:1 — Swamp

1130

1130.70
72+00
1129.5

D/W — C:150 — Inlet ditch 1127.3 — F:370 — 2:1 — Swamp — D/W

1130

1130.20
71+00
1127.8

150 100 50 0 50 100 140

CROSS SECTIONS STA 71+00 TO STA 76+00

4-20-56
4-12-56
4-13-56

M.M. & R.J.B.
W.S.B.

DRAWN BY
SURVEYED BY
CHECKED BY

FED. RD. DIVISION	STATE	ROUTE	FISCAL YEAR	SHEET NO.
2	OHIO	30	1	109

PID 14622

STATIONS		CHD	AREA	CU	YDS
FROM	TO	CUT	FILL	EXC.	EMB.
124	1157	0			
820				2380	0
122	1112	0			
518				1535	0
111	960	0			
311				1413	20
0	566	22			
622				2107	41
111	572	0			
1180				1122	220

4-7-56
7-12-56
7-13-56

M.K.M.
J.F.W.
M.S.B.

R-3

Drive
D/W
1140
C = 1137
Var
1142.5
1138.20
79+50
1145.0
Drive
Var
1140
E
150
200

Drive
1140
1142.0
1137.79
79+29
1144.7
1130
D
150
200

Stop Sub-Base Material at Sta. 79+00

House N. Edge
House S. Edge
Drive
Dike
1130
4:1
1141.6
C = 1112
1137.55
78+90
1146.4
Var
1130
1134.6
C
150
200

Drive
Dike
1130
Begin Sod 78+20
1140.7
C = 960
1136.35
78+50
1144.0
Drive
4:1
Begin Sod 78+20
1132.0
B
1130
150
200

25' Right of SR44 Sta. 1+00 N.
Drive
Match Line
1130
1136.8
C = 566
1135.54
78+00
1138.7
Drive
F = 22.9
26' Left of SR44 Sta. 1+00 S
Match Line
A
1130
150
200

D/W
House N. Edge
House S. Edge
House N. Edge
House S. Edge
House N. Edge
House S. Edge
D/W
1130
C = 572
1134.14
77+00
1137.8

120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

CROSS SECTIONS STA 77+00 TO STA 79+50

REGION	DIVISION	STATE	PROJECT	MODAL YEAR
2		OHIO	550 (--)	

556
109

ROR-334-6.22

M.M. 4-20-56
D.D.M. 7-12-56
M.S.B. 7-13-56
C.R.L.

D-3

D/W

1150

2:1

Temp. Swale
1149.0

C=1338

Var

1149.20
85+00
1157.7

Stop grading full sections @ sta. 85+00 &
warp grading to that shown for sta. 86+00

Stop paving full section @ sta. 84+00

Resume Sub-Base Material
at Sta. 84+00

1160

C=2427

Temp. Swale
1146.5

1147.20
84+00
1161.9

2:1

1160

C=2450

1145.20
83+00
1159.1

Temp. Swale
1143.5

1'-1'0"

1150

1143.20
82+00
1154.6

C=2140

2:1

1150

C=1933

Var

1141.20
81+00
1152.6

D/W

1140

2:1

C=1223

Var

1139.20
80+00
1145.3

NOTE: Transition taper begins @ sta. 80+00

NOTE: Service Drive Quantities
are shown on line sheet.

D/W

L
1153.5
150
200
1150

K
1151.0
150
200
1150

J
1150.5
150
200
1150

H
1150.0
150
200
1150

G
1146.0
150
200
1140

F
1142.5
150
200
1140

F
1142.5

STEERING LT.	STEERING SY.	END AREA CUT	END AREA FILL	CU YDS EXC	CU YDS EMB.
127		1388	0		
	1394			7077	0
124		2427	0		
	1461			9052	0
139		2450	0		
	1844			8500	0
143		2140	0		
	1518			7544	0
130		1933	0		
	1367			5849	0
116		1223	0		
	667			2185	0

150 100 50 0 50 100 140

[redacted] STA. 80+00 TO [redacted] STA. 85+00

FOR-124-6.22



SEEDING LF	SEEDING SY	END AREA CUT	END AREA FILL	CU YDS EXC	CU YDS EMB
83		239	0		
	911			848	0
81		219	0		
	883			804	0
78		214	0		
	870			926	0
80		285	0		
	878			993	0
77		250	0		
	822			907	0
71		540	0		
	1100			3570	0

EXCAVATION 33439 CY
EMBANKMENT 0 CY
SEEDING 12788 SY

M.M. & D.L.M.
R.J.B.
W.S.P.
4-20-56
7-12-56
7-15-56

CROSS SECTIONS STA 86+00 TO STA 91+00

REGION OFFICE	STATE	PROJECT	FISCAL YEAR
2	W. Va.	330 ( )	

POB 324-622

STATION	END AREA		CU YDS	
LT	ST	FOR	FILL	EXC
83		244	0	
	252			307 0
85		370	0	
	681			798 0
82		221	0	
	878			700 0
76		157	0	
	900			741 0
86		243	0	
	867			600 0
70		80	0	
	850			393 0

4-20-56 JLM.
6-28-56 JFW.
7-2-56 LNK.

M.M. & D.J.M.
C.B.L. & J.F.W.
L.N.K.

CROSS SECTIONS STA 92+00 TO STA 96+00

PROJECT NUMBER	STATE	PROJECT	FISCAL YEARS	SHEET NO.
2	OHIO	330 C		52 of 89

POD 274-6.22

SEEDING LF	SEEDING SY	END AREA CUT	END AREA FILL	CU YDS EXC	CU YDS EMB
173		105	507		
	1944			278	2557
177		45	863		
	1939			93	3830
172		4	1204		
	1867			39	4037
164		17	975		
	1778			70	3685
156		21	798		
	1633			52	2656
138		6	420		
	1228			463	778

EXCAVATION 4562 C.Y.
EMBANKMENT 23493 C.Y.
SEEDING 20078 S.Y.

M.M. 4.30 36
C.R.L. 6.38 52
LINK: 6.39 36

R/W

1150

C=10.5 — 1147.8 — A:1 — F=507 — 4:1 — R/W

1157.60
102+00
1152.7

C=4.5 — 1148.0 — F=863

1158.70
101+00
1150.9

C=9.7 — 1150.2 — F=1204

1159.60
100+00
1150.0

C=1.7 — 1152.0 — F=975

1160.30
99+00
1151.3

C=2.1 — 1154.5 — F=798

1160.80
98+00
1153.5

R/W

C=6.2 — 1156.8 — A:1 — F=420 — 4:1 — R/W

Special Rdwy. Ditch

1161.10
97+00
1156.7

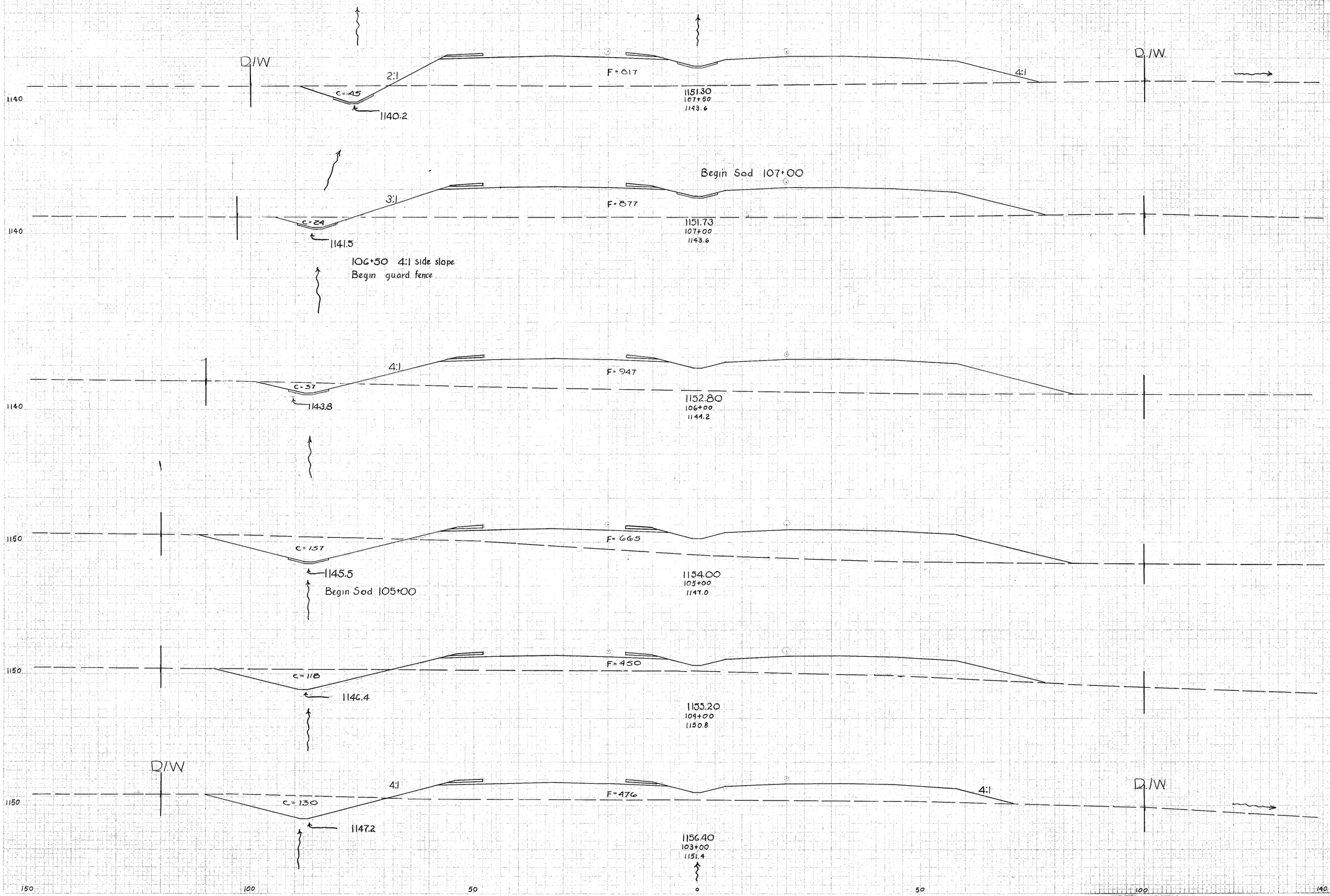
NOTE: Begin placing fill for ultimate section at beginning of this fill - Sta. 96+30(±).

150 100 50 0 50 100 140

CROSS SECTIONS - STA 97+00 TO STA 102+00

R-6

SECTION	STA	CUT	FILL	EXC	EMB
14.8	45	817			
811			64	1368	
144	24	877			
1728			112	3378	
167	37	947			
1906			359	7983	
176	157	665			
1983			509	2066	
181	118	450			
2017			459	1900	
182	130	476			
1972			435	1880	



CROSS SECTIONS STA 103+00 TO STA 107+50

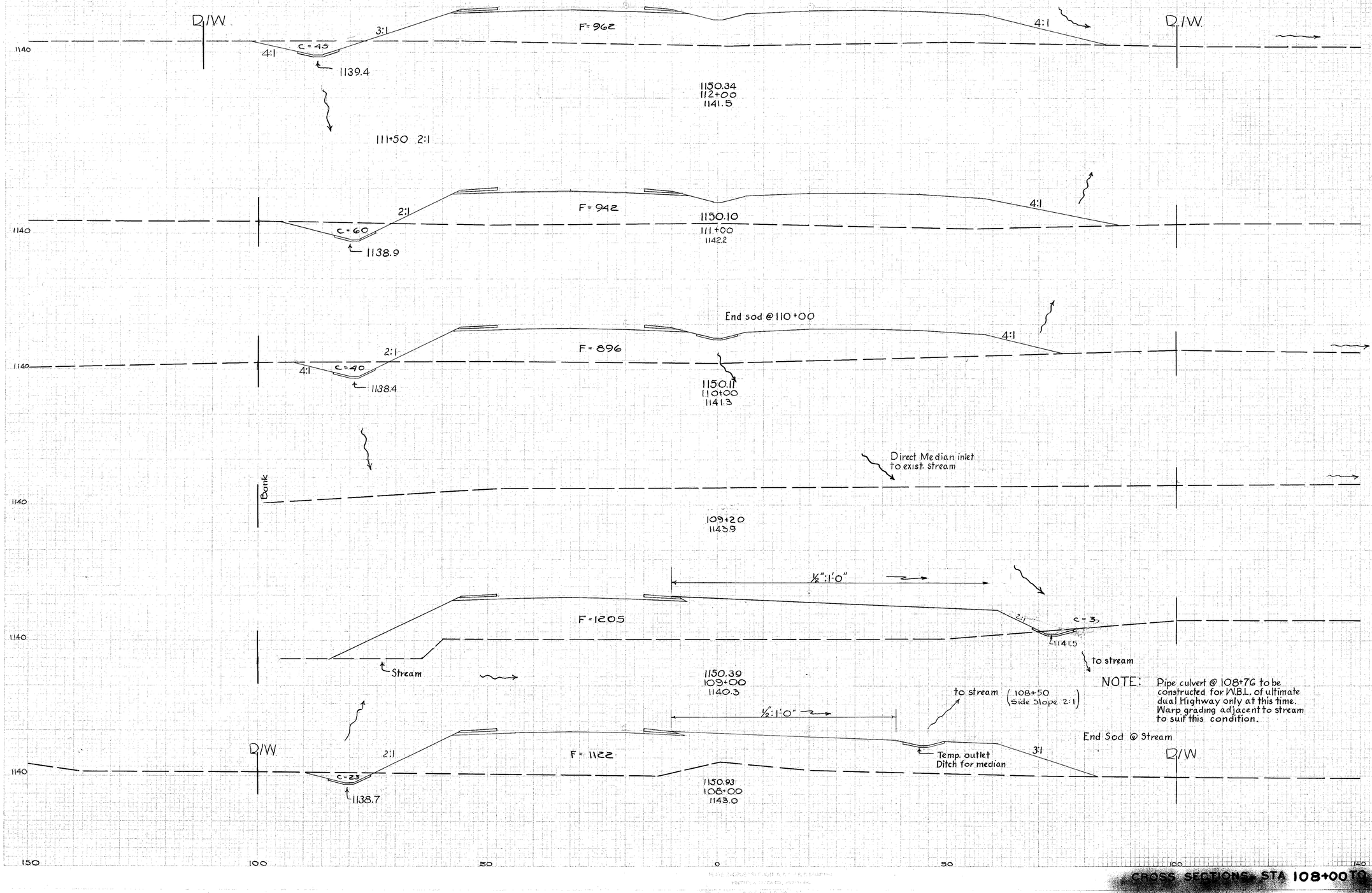
STATE	PROJECT	FISCAL YEAR
N.C.	F-3301(1)	

61
109

PGA 134.6.22

SEEDING	END AREA CU YDS			
LB.	S.Y.	CUT	FILL	STA.
176		45	962	
1989			196	3526
162		60	942	
1678			185	3409
140		40	896	
1667		82	3895	
160		3	1205	
1800		48	4317	
164		23	1122	
867		630	1914	

EXCAVATION 1571 C.Y.
EMBANKMENT 39789 C.Y.
SEEDING 19729 S.Y.



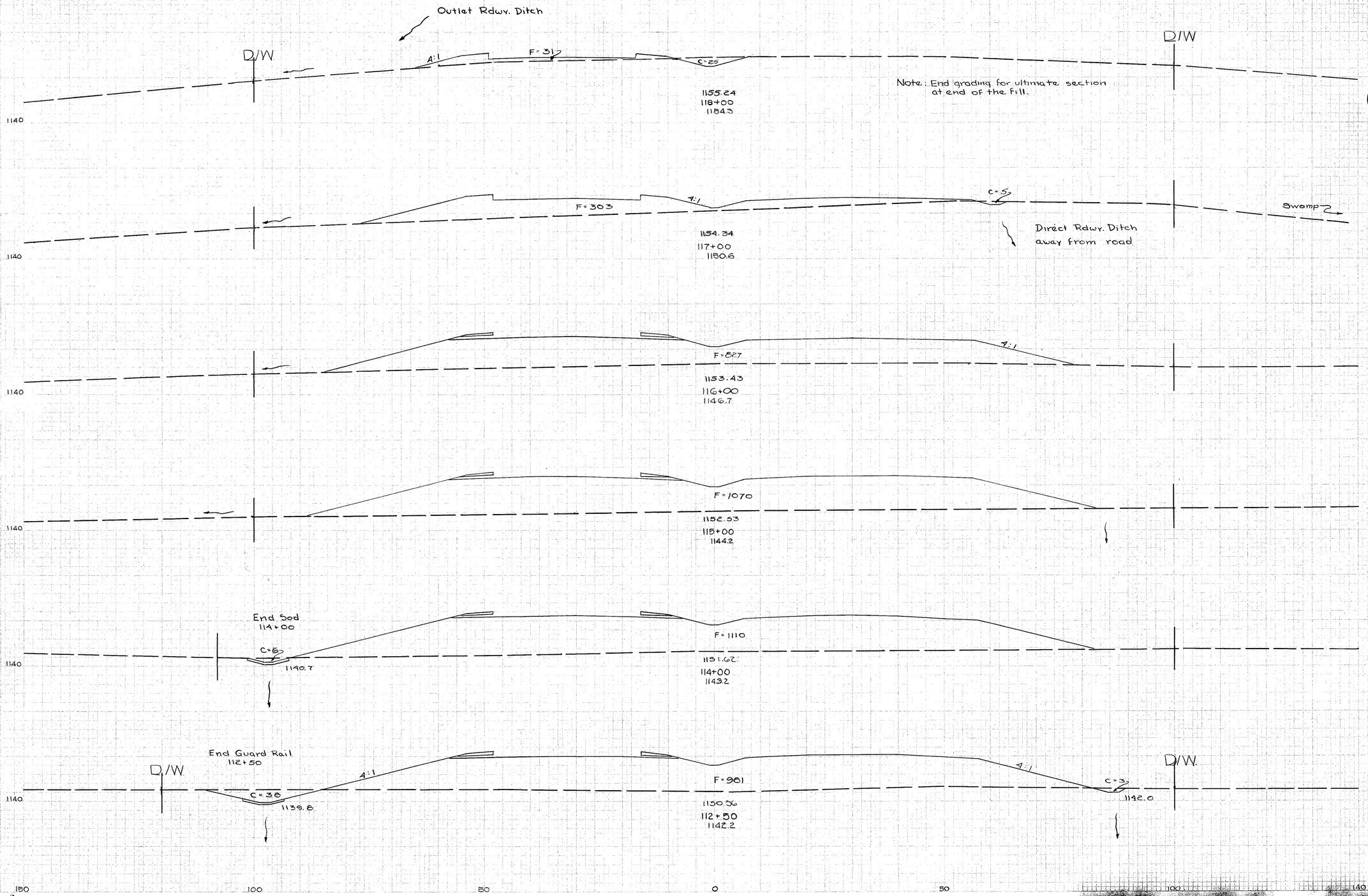
M.M. & R.W.B.
C.R.B.
C.R.E.

R-6

CROSS SECTIONS STA 108+00 TO STA 112+00

FED. AID PROJECT	STATE	PROJECT	FISCAL YEAR	62 / 69
2	[illegible]	3307 ( )		

FOR 124-6.62



SECTION		AREA		CU. YDS.	
STA.	STA.	CUT	FILL	EXC.	EMB.
62		25	31		
	1067			19	619
131		5	303		
	1576			11	1985
152		0	827		
	1756			0	3516
163		0	1070		
	1810			11	4046
163		6	1110		
	1961			133	5822
190		41	981		
	1017			80	1800

4-26-96
4-22-96
6-24-96
7-2-96

M.M. & R.J.B.
C.R.L. / J.F.W.
N.K.
L.E.L.

R-7

CROSS SECTIONS - STA 112+50 TO STA 118+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	[illegible]	350( )	

63
109

PDY. 744: 6.2.2

EXCAVATION 3108 C.Y.
EMBANKMENT 2041 C.Y.
SEEDING 9825 S.Y.

STATION	SEEDING LF	SEEDING SY	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
124+00						
	77		10	335		
		833			41	967
	73		11	187		
		744			30	552
	61		4	110		
		689			126	204
	63		67	0		
		844			944	0
	89		442	0		
		911			1174	0
	74		192	0		
		755			404	59
119+00						

1150
Begin Sod
123+75
D.W.
4:1
C=10
4:1
1154.0
F=335
4:1
1160.67
124+00
1153.8
2' Water Way
D/W
1150
C=11
1154.5
F=187
1159.77
123+00
1154.7
2' Water Way
1150
BEGIN SPEC. RDWY. DITCH
C=4
4:1
1155.0
F=110
4:1
1158.86
122+00
1155.6
2' Water Way
STND. RDWY. DITCH
C=67
1150
1157.96
121+00
1157.3
2' Water Way
C=442
1150
1157.05
120+00
1161.8
Swamp
D/W
C=192
1150
1156.15
119+00
1158.2
D/W
150
100
50
0
50
100
140

4-20-56
6-25-56
9-26-56

DMM
RL
CDK

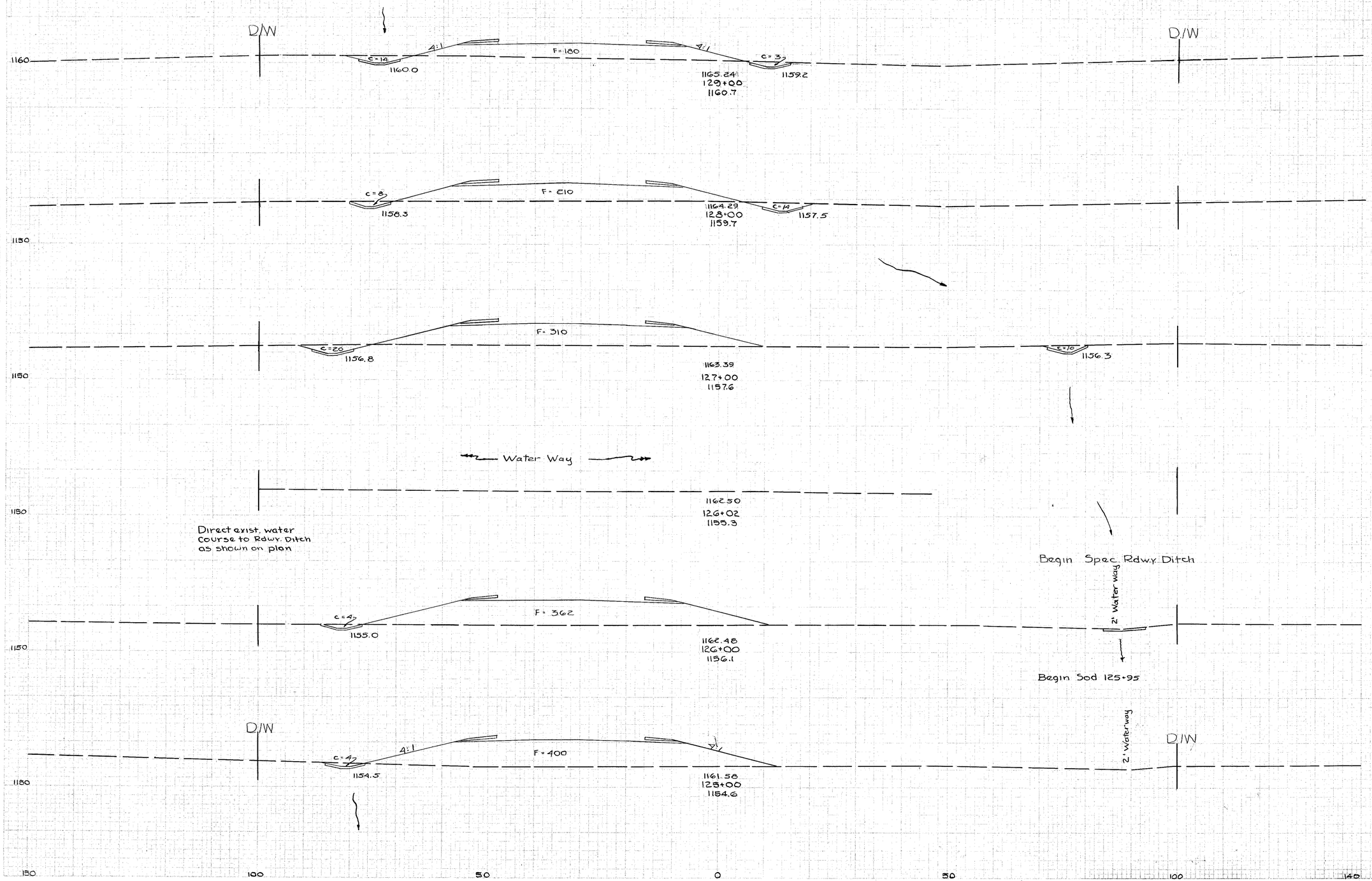
R-7

CROSS SECTIONS - STA 119+00 TO STA 124+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	E-330 ( )	

64
109

POR-224-6.22



SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
68		17	180		
	779			74	722
73		22	210		
	867			100	963
82		30	310		
	889			59	1244
78		4	362		
	867			15	1411
78		4	400		
	867			26	1363

M. M.
D. M. & R. J. B.
J. F. H.
J. N. K.
M. S. B.

4-5-96
4-20-96
6-14-96
7-10-96

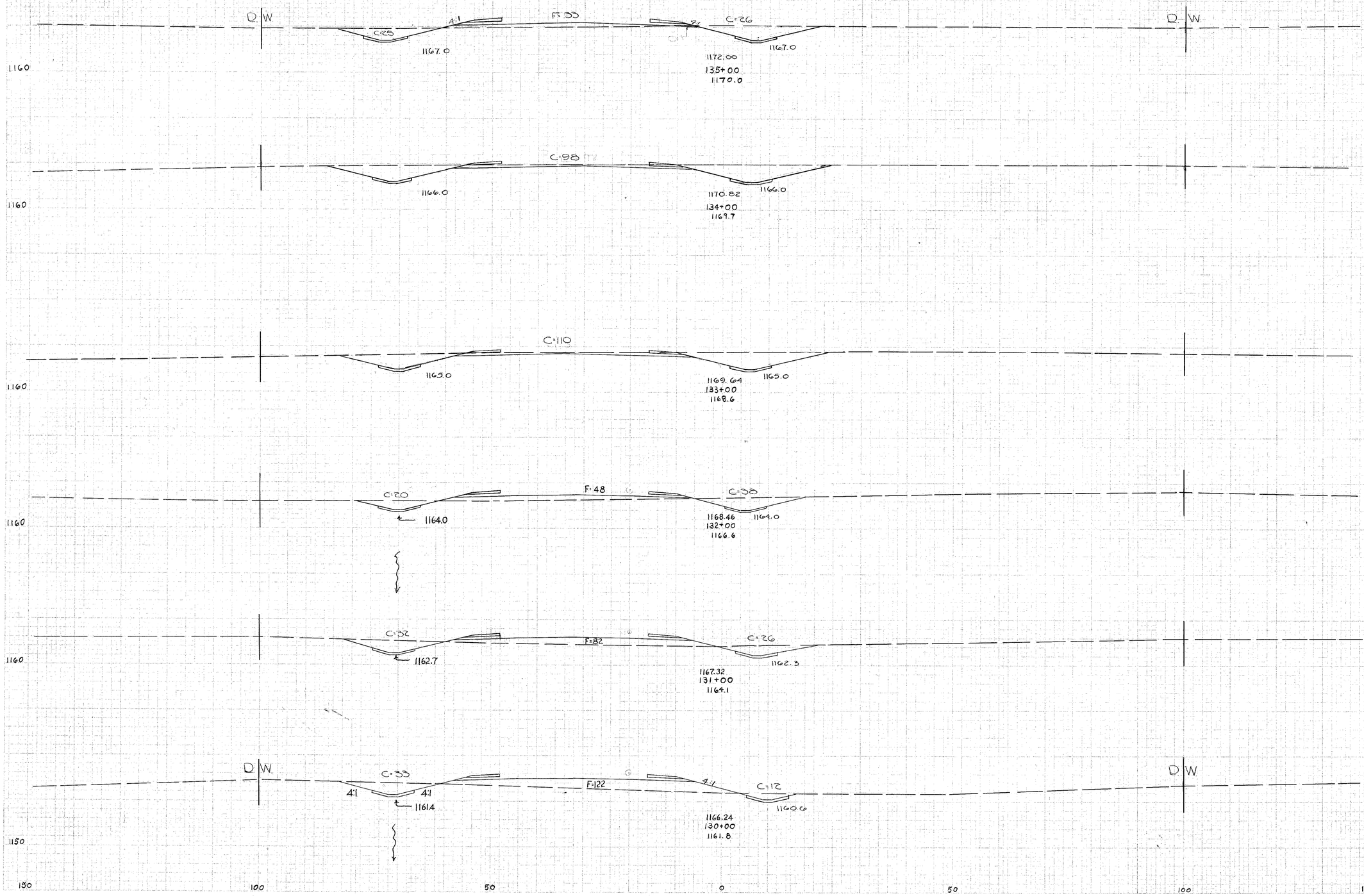
R-7

CROSS SECTIONS - STA 125+00 TO STA 129+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
5	OHIO	E-330( )	

65 / 109

POR-224-6.22



SEEDING L.F.	SEEDING S.Y.	EMB. AREA CUT	EMB. AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
59		51	33		
	700			278	63
66		98	0		
	755			383	0
69		110	0		
	778			311	89
70		58	48		
	800			215	241
73		58	82		
	811			193	378
72		45	122		
	778			113	559

M.M. 4 56
C.B.M. 7 25 96
E.N.R. 6 25 96
7 2 96

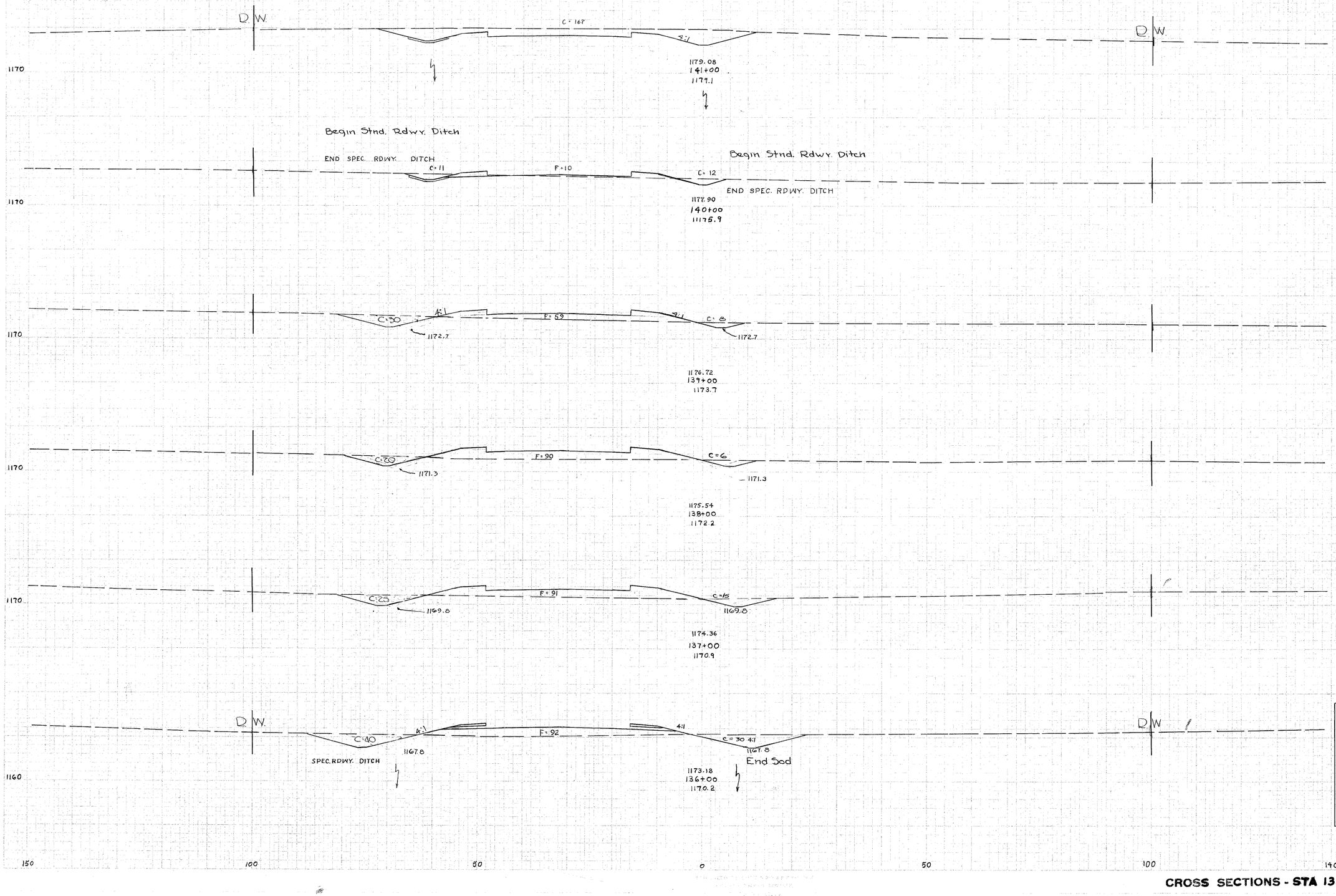
R-7

CROSS SECTIONS - STA 130+00 TO STA 135+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

66
109

POR-224-6.22



SEEDING LF.	SEEDING SY.	EMD AREA CUT	EMD AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
56		167	0		
	544			352	19
43		23	10		
	544			111	130
55		38	59		
	600			119	278
53		26	90		
	600			122	337
54		40	91		
	655			224	341
66		70	92		
	700			222	233

EXCAVATION 3423 C.Y
EMBANKMENT 2109 C.Y
SEEDING 8187 S.Y

4. 56
4-20-56
6-22-56
9-29-56

D.M.M. & R.J.B.
C.R.K.
C.R.K.

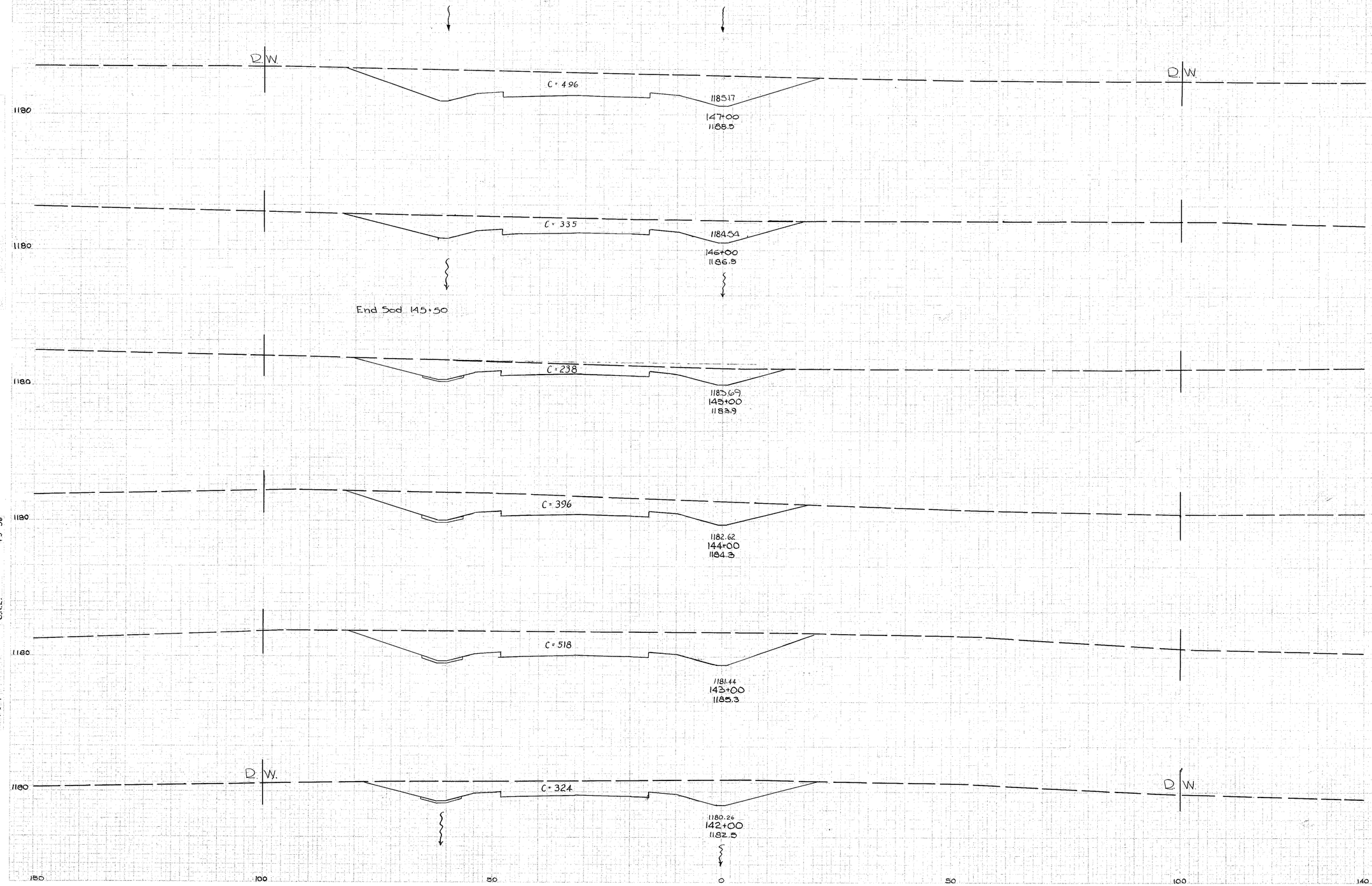
R-7

CROSS SECTIONS - STA 136+00 TO STA 141+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

67
109

POR-224-622



SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
93		496	0		
	1022			1541	0
90		335	0		
	911			1063	0
74		238	0		
	867			1174	0
81		396	0		
	878			1693	0
76		518	0		
	811			1559	0
70		324	0		
	700			911	0

M.M. & E.D.L. M
R.S.B. J.F.N.
C.R.L.
4-23-56
4-24-56
4-27-56
4-30-56

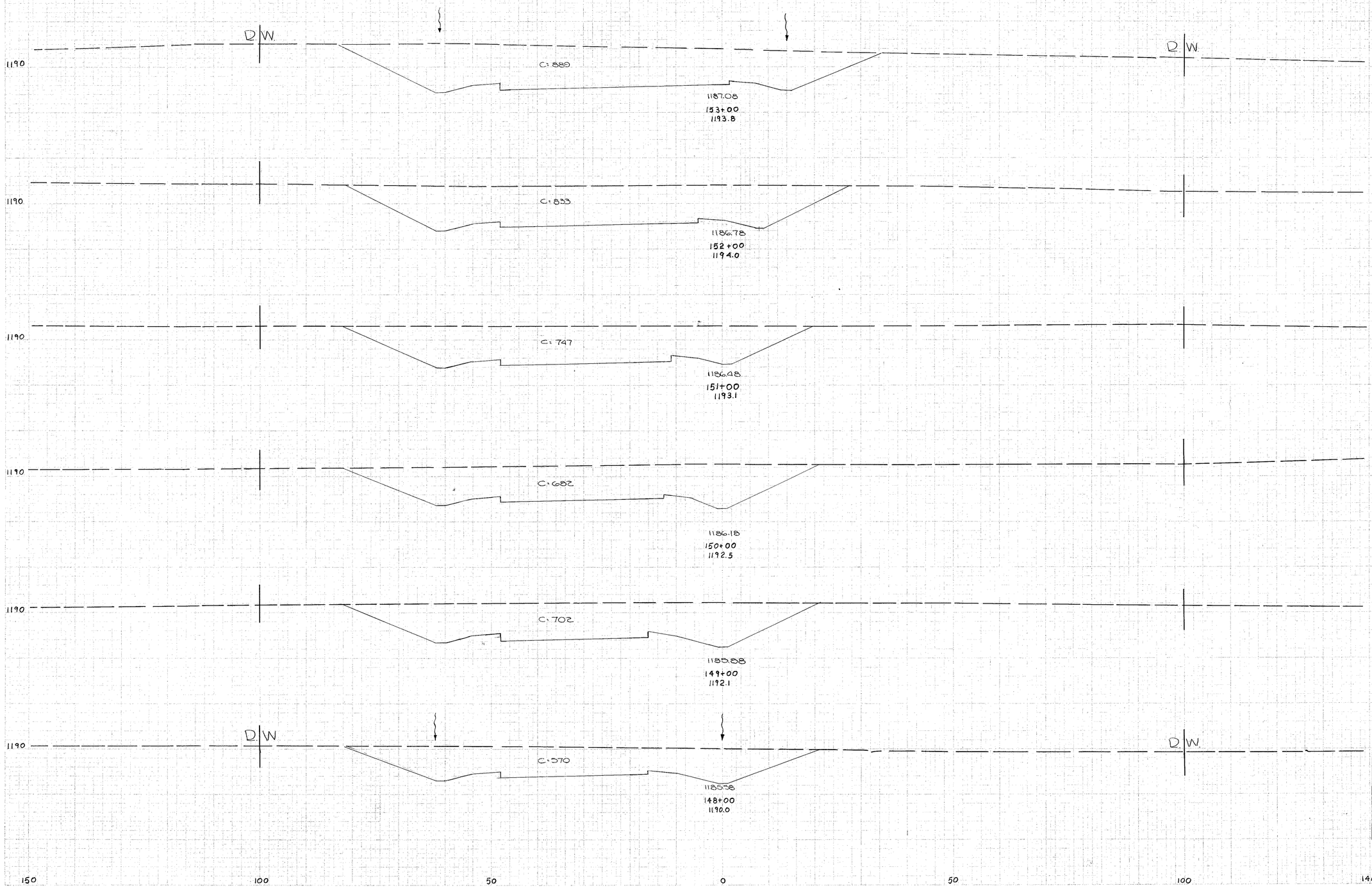
R-7

CROSS SECTIONS - STA 142+00 TO STA 147+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

68
109

POR-224.6.22



SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
53		889	0		
	1033			3189	0
52		833	0		
	1022			2815	0
52		747	0		
	1067			2663	0
100		682	0		
	1088			2569	0
95		702	0		
	1055			2356	0
94		570	0		
	1044			1974	0

EXCAVATION	25257 C.Y
EMBANKMENT	0 C.Y
SEEDING	11809 S.Y

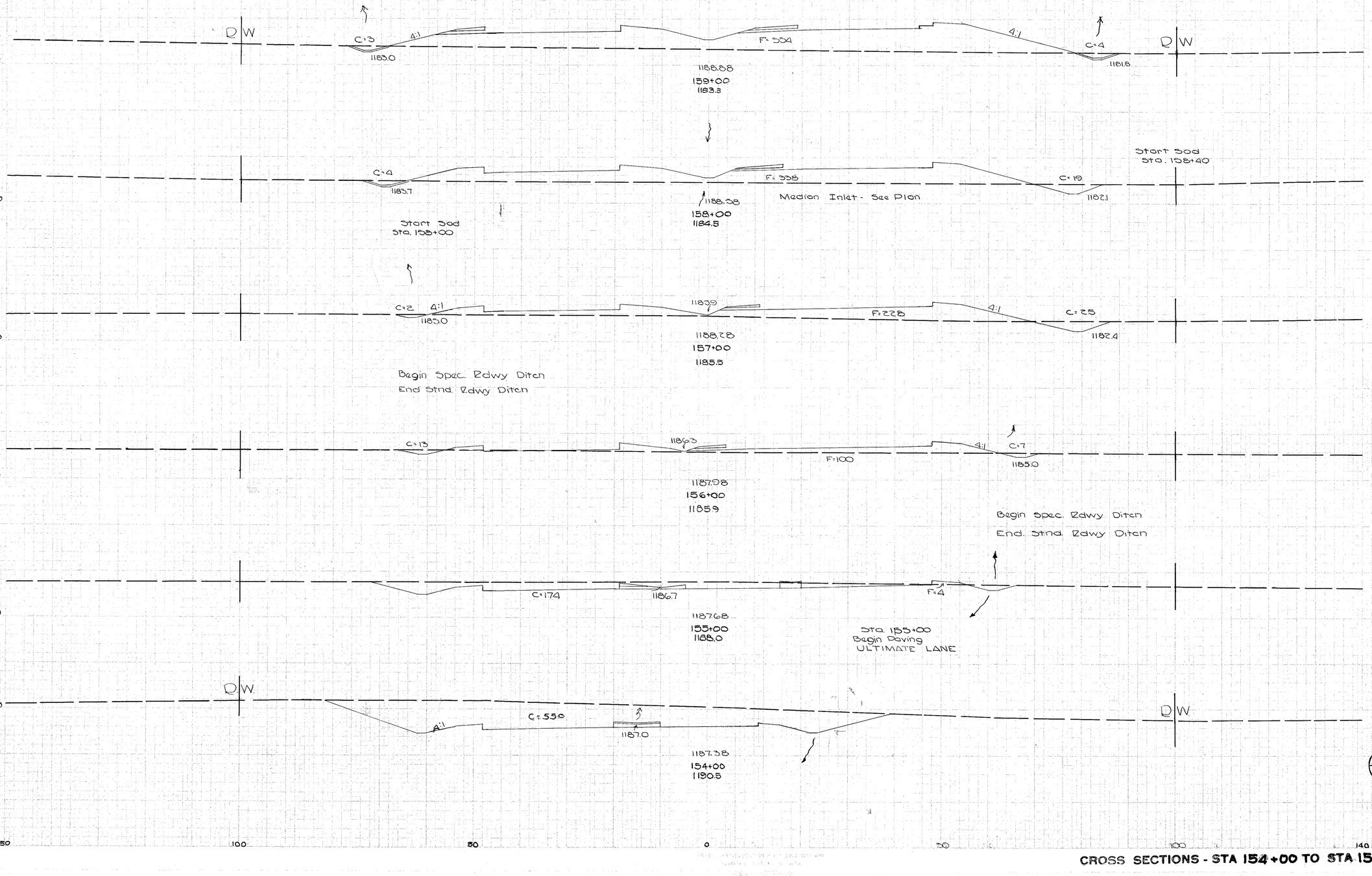
CROSS SECTIONS - STA 148+00 TO STA 153+00

R-7

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
5	OHIO	F-330( )	

69
109

POR-226-6.22



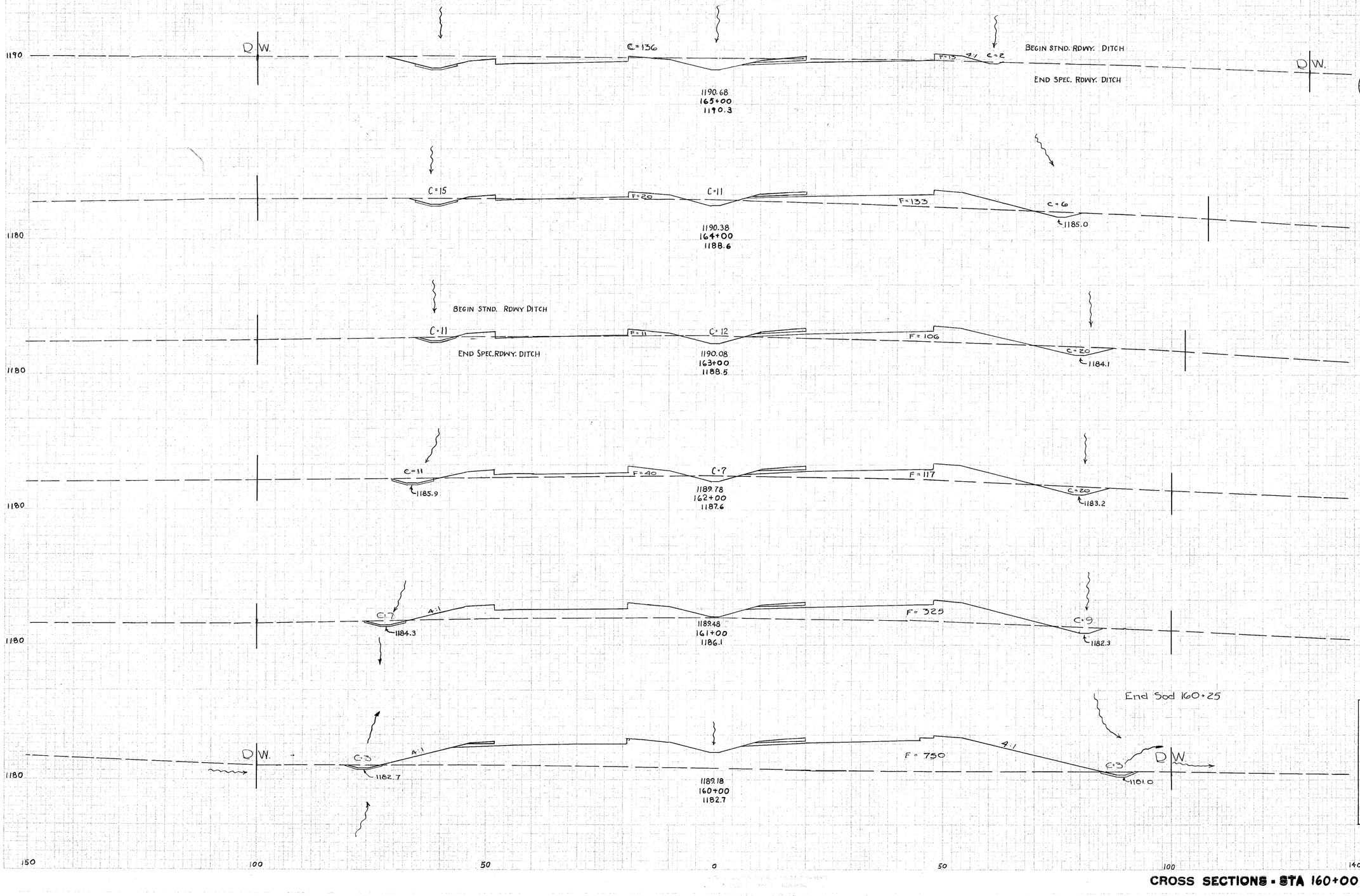
SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
110		7	554		
	1167			56	1602
99		23	338		
	1033			99	1048
86		27	228		
	933			89	607
81		20	100		
	867			359	193
74		174	4		
	900			1341	7
88		550	0		
	1011			2667	0

CROSS SECTIONS - STA 154+00 TO STA 159+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
5	OHIO	F-330( )	

70
109

POR-224-6.22



SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
91		138	13		
	1089			315	307
104		32	153		
	1178			141	500
108		43	117		
	1233			152	507
114		38	157	100	893
	1267				
114		16	325		
	1289			41	2048
118		6	780		
	1267			26	2470

EXCAVATION 2713 C.Y.
EMBANKMENT 10252 C.Y.
SEEDING 13225 S.Y.

A. 56
4-27-56
6-25-56
6-31-56

M.M. & D.L.M.
R.W.B.
CHK.

R-7

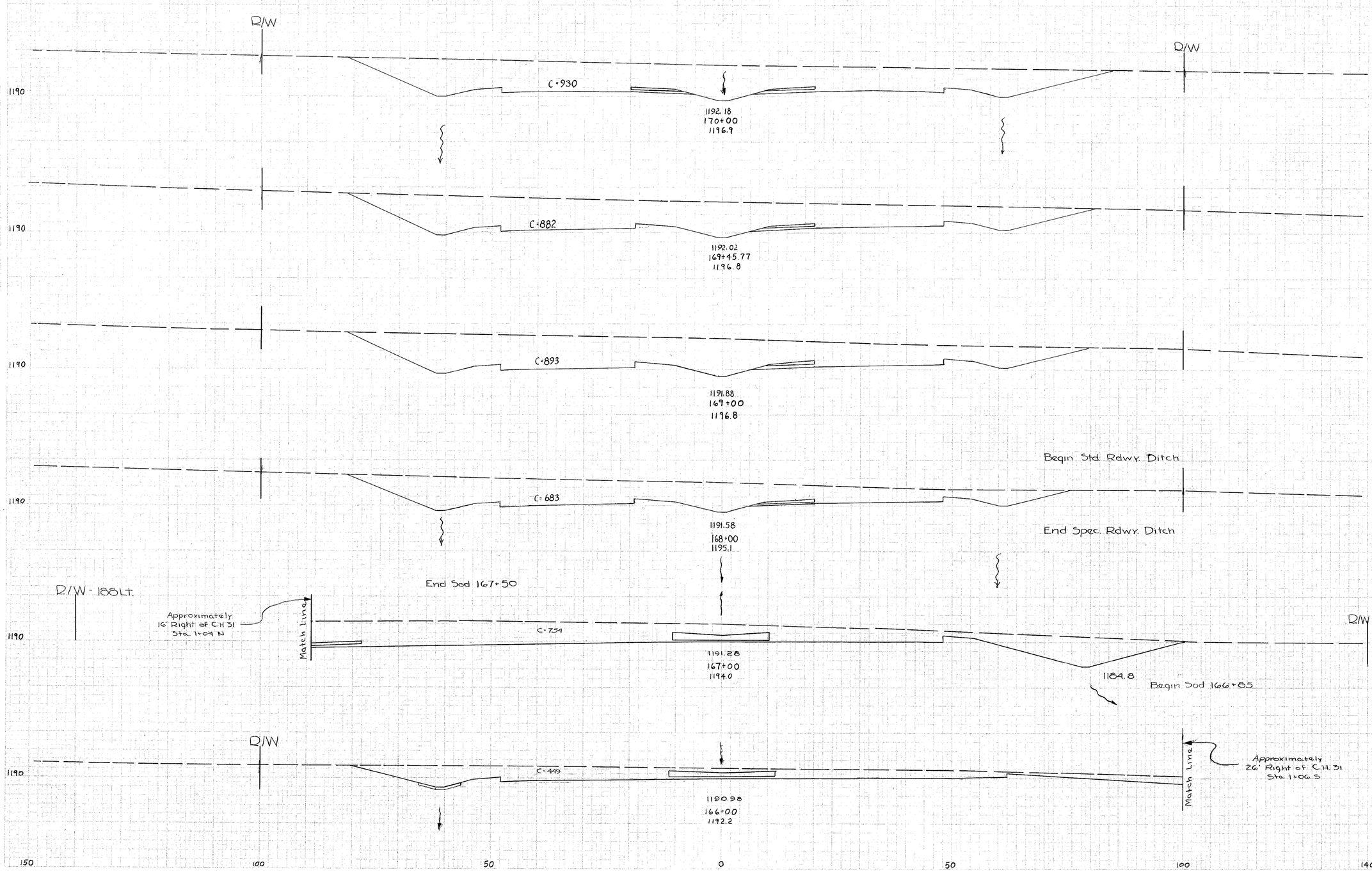
CROSS SECTIONS - STA 160+00 TO STA 165+00

FED. FG. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

711
109

POR-224-6.22

SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
126		930	0		
	747			1012	0
122		882	0		
	620			1513	0
121		893	0		
	1322			2918	0
116		683	0		
	1078			2663	0
77		754	0		
	1122			2230	0
124		449	0		
1200				1089	22



M.M. 4-23-56
R.A.B. 6-27-56
L.M. 9-13-56
J.F.H.

ENGINEER'S SEAL
R-7

CROSS SECTIONS - STA 166+00 TO STA 170+00

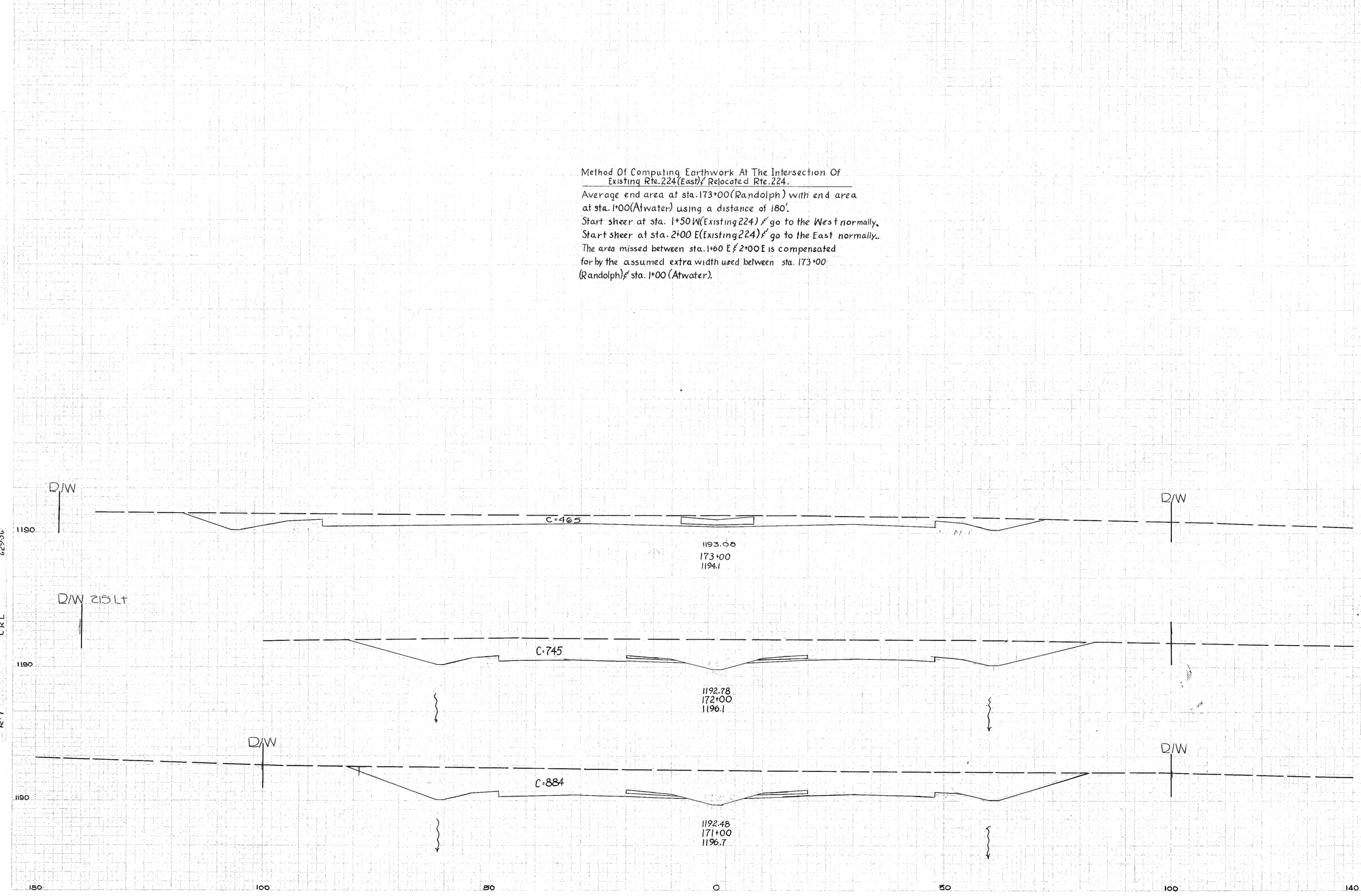
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

72
109

POR-224-6.22

Method Of Computing Earthwork At The Intersection Of Existing Rte.224(East)℄ Relocated Rte.224.

Average end area at sta.173+00(Randolph) with end area at sta. 1+00(Atwater) using a distance of 180'.
Start sheer at sta. 1+50 W(Existing 224)℄ go to the West normally.
Start sheer at sta. 2+00 E(Existing 224)℄ go to the East normally..
The area missed between sta.1+60 E℄2+00 E is compensated for by the assumed extra width used between sta. 173+00 (Randolph)℄ sta. 1+00 (Atwater).



EXCAVATION	23157 C.Y.
EMBANKMENT	6792 C.Y.
SEEDING	19459 S.Y.

SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
	1167			1560	927
97		465	0		
	1222			2241	0
122		745	0		
	1355			3016	0
122		884	0		
	1378			3356	0

CROSS SECTIONS - STA 171+00 TO STA 173+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

73
109

POR-224-

Stop Grading At Sta 6+00

D/W

1190

1197.16
6+00
1195.6

D/W

End Spec. Rdwy. Ditch

For Earthwork
Average area at Sta 5+00 ahead
with an area of zero at Sta 6+00

1190

C=37
1190.0

4:1

F=204

1196.18
5+00
1193.0

C=13
1192.2

1190

C=9
1188.3

F=260

1195.29
4+00
1191.5

C=32
1190.0

End Sod 3+90

1190

C=24
1189.0

F=434

1194.56
3+00
1189.2

4:1

C=45
1187.0

Limit of Paving - Sta. 2+50

1190

C=27
1189.5

F=487

1194.01
2+00
1189.3

C=15
1186.2

D/W

C.B. @ 1+25

1190

C=4

4:1

1190.0

F=388

1193.62
1+00
1190.1

4:1

D/W 170' Rt

Spec. Rdwy. Ditch

NOTE: See Earthwork Note Pertaining to Sta. 1+00 on Sheet No.

150 100 50 0 50 100 140

SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
0		0	0		
	1006			93	378
101		50	204		
	2061			170	859
190		41	260		
	2133			204	1285
194		69	434		
	1789			207	1707
128		42	487		
	1289			85	1611
112		4	388		

CROSS SECTIONS - STA 1+00 (AT) TO STA 6+00 (AT)

4-12-96
4-30-96
6-20-96
7-2-96
7-10-96

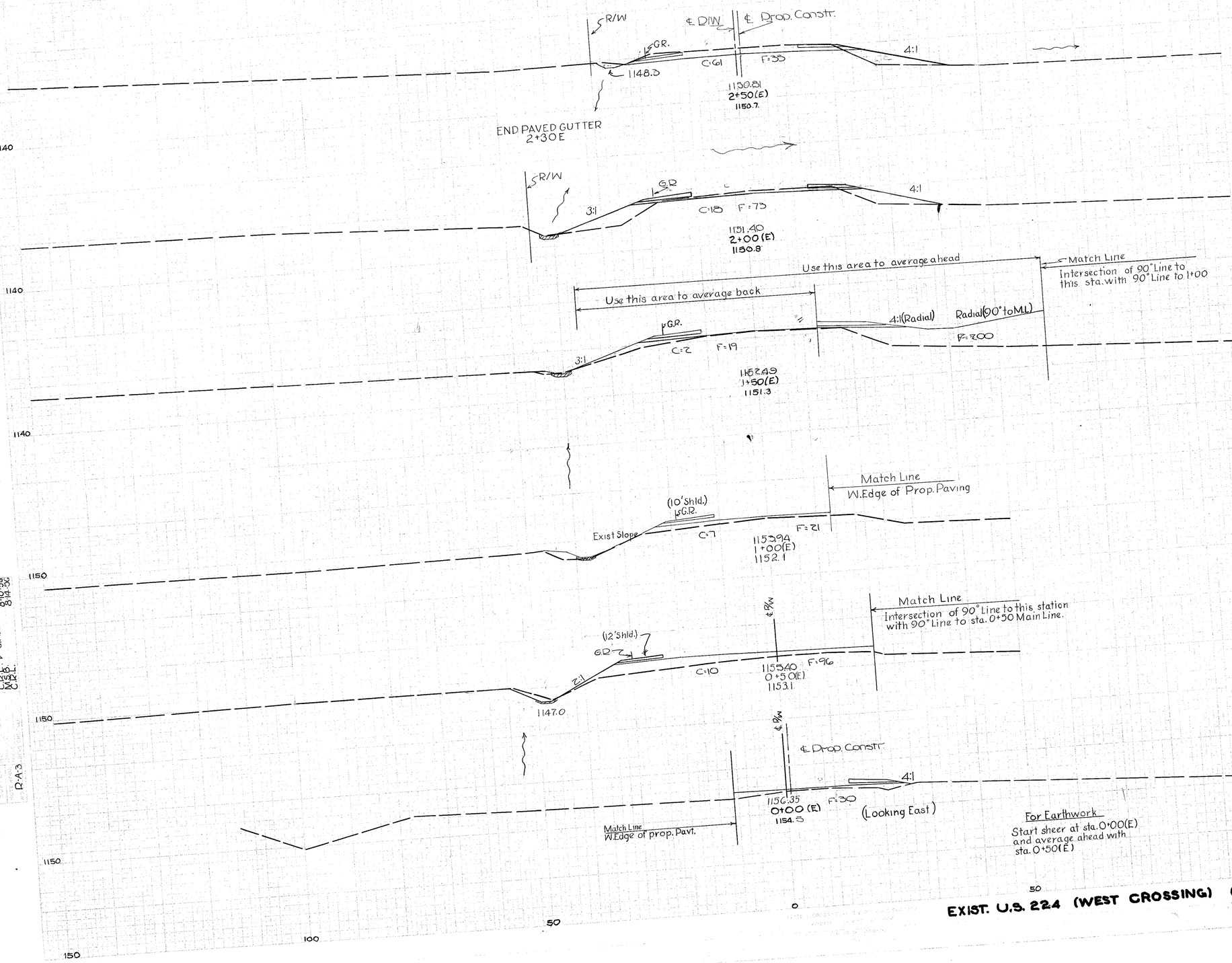
R.W.H.
R.J.B. & R.B.
C.R.L. & J.F.W.
M.S.B.

A-5

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F 330 ( )	

79
109

POR-224-6.22



SEEDING	END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
	358			157	122
62		61	35		
	364			74	100
69		18	73		
	308			19	85
ahead area →	42	2	19		
back area →	90	0	200		
	369				ft. 36
43		7	21		
	231				17
40		10	96		
	178				9
23		0	30		

EXCAVATION 475 CY
EMBANKMENT 1112 CY
SEEDING 2428 SY

E.E.T. M. & C.T.C.
C.D.C.
M.S.B.
C.R.L.
J.F.W.

4-8-56
5-8-56
8-10-56
8-14-56

D-A-3

EXIST. U.S. 224 (WEST CROSSING) CROSS SECTIONS - STA 0+00(E.) TO STA 2+50(E.)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

75
109

POR-224-

SEEDING		EMB AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
				0	
		0	0		0
				214	
					44 94
				79	
		48	102		
				406	
					146 179
				67	
		109	96		

1150

5+50 (E)
1155.8

W.E. Pond
Water Elev 1139.47

1150

5+00 (E)
1154.8

W.E. Pond
Water Elev 1139.47

House

1150

4+50 (E)
1153.2

W.E. Pond
Water Elev 1139.47

E. Drive

Meet Existing Paving & Grading
@ Sta. 4+00

W.E. Pond
Water Elev 1139.47

1140

1152.10
4+00 (E)
1152.1

For Earthwork
Average area at Sta. 3+50 E
ahead with an area of zero
at Sta. 4+00 E

Exist R/W
℄ R/W
℄ Prop. Constr.
1½:1
1150.2
C=48
F=102
4:1

1140

1151.16
3+50 (E)
1151.1

W.E. Pond
Water Elev 1139.47

Exist R/W
℄ R/W
℄ Prop. Constr.
Grade Ditch to
stay within R/W
Shown.
1148.8
C=109
F=96
4:1

1140

1150.73
3+00 (E)
1150.9

END GUARD RAIL
2+50 E

150 100 50 0 50 100 140

M.M. - C.T.G.
C.R.S. - J.F.W.
C.S.B.
M.K.R.

4-8-86
2-20-86
8-13-86
8-25-86

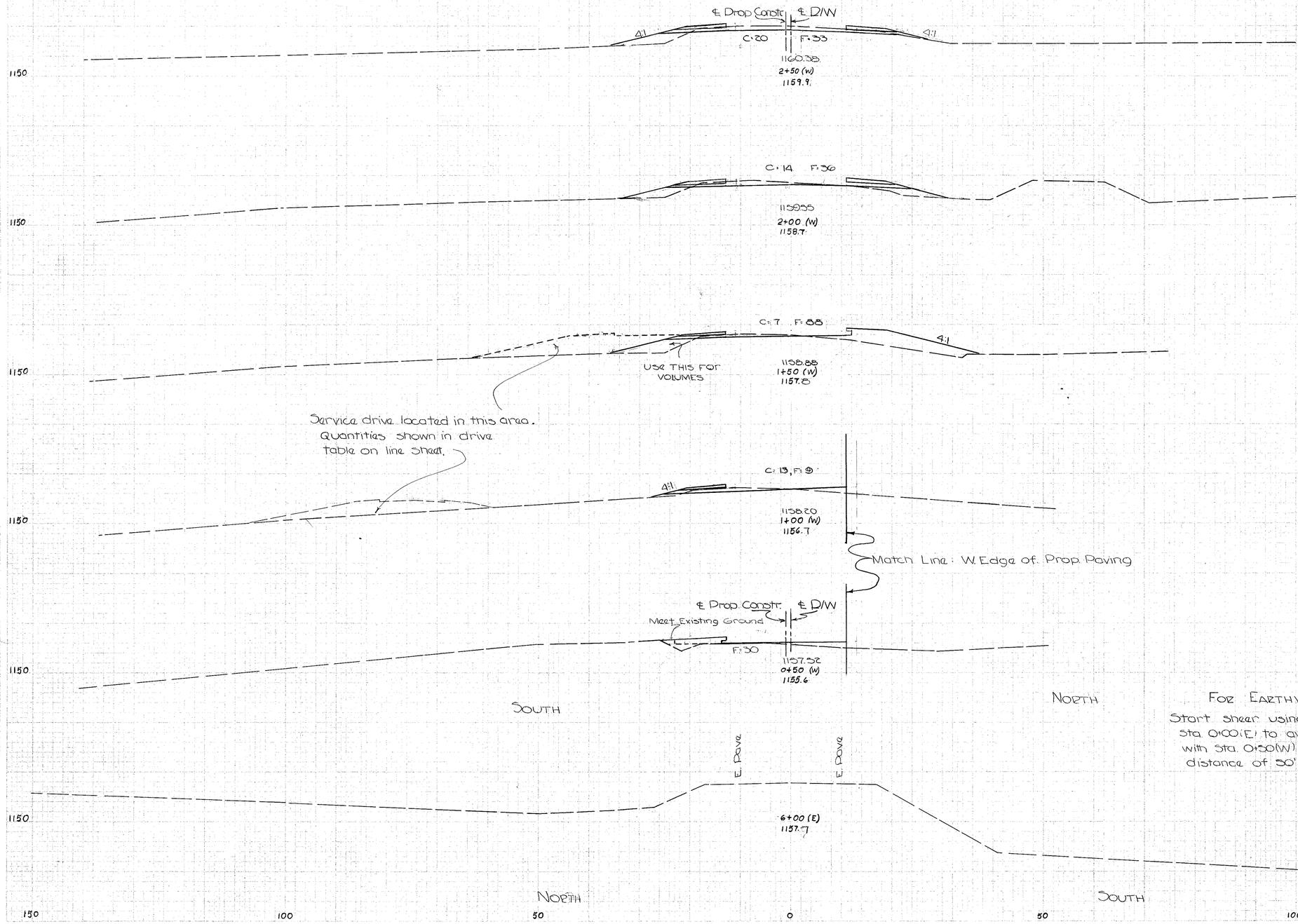
SURVEY RA-3

EXIST. U.S. 224 (WEST CROSSING) CROSS SECTIONS - STA 3+00 (E) TO STA 5+50 (E)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

76
109

POR-224-6.22



EXCAVATION 27 C.Y.
EMBANKMENT 444 C.Y.
SEEDING 1924 SY

SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
	319			41	43
61		20	33		
	342			31	65
62		14	36		
	369			20	115
71		7	88		
	267			19	91
25		13	9		
	133			12	44
23		0	38		
	188			0	63
23		0	30		

0+00(E)

FOR EARTHWORK

Start sheer using area at sta. 0+00(E) to average ahead with sta. 0+50(W) using a distance of 50'.

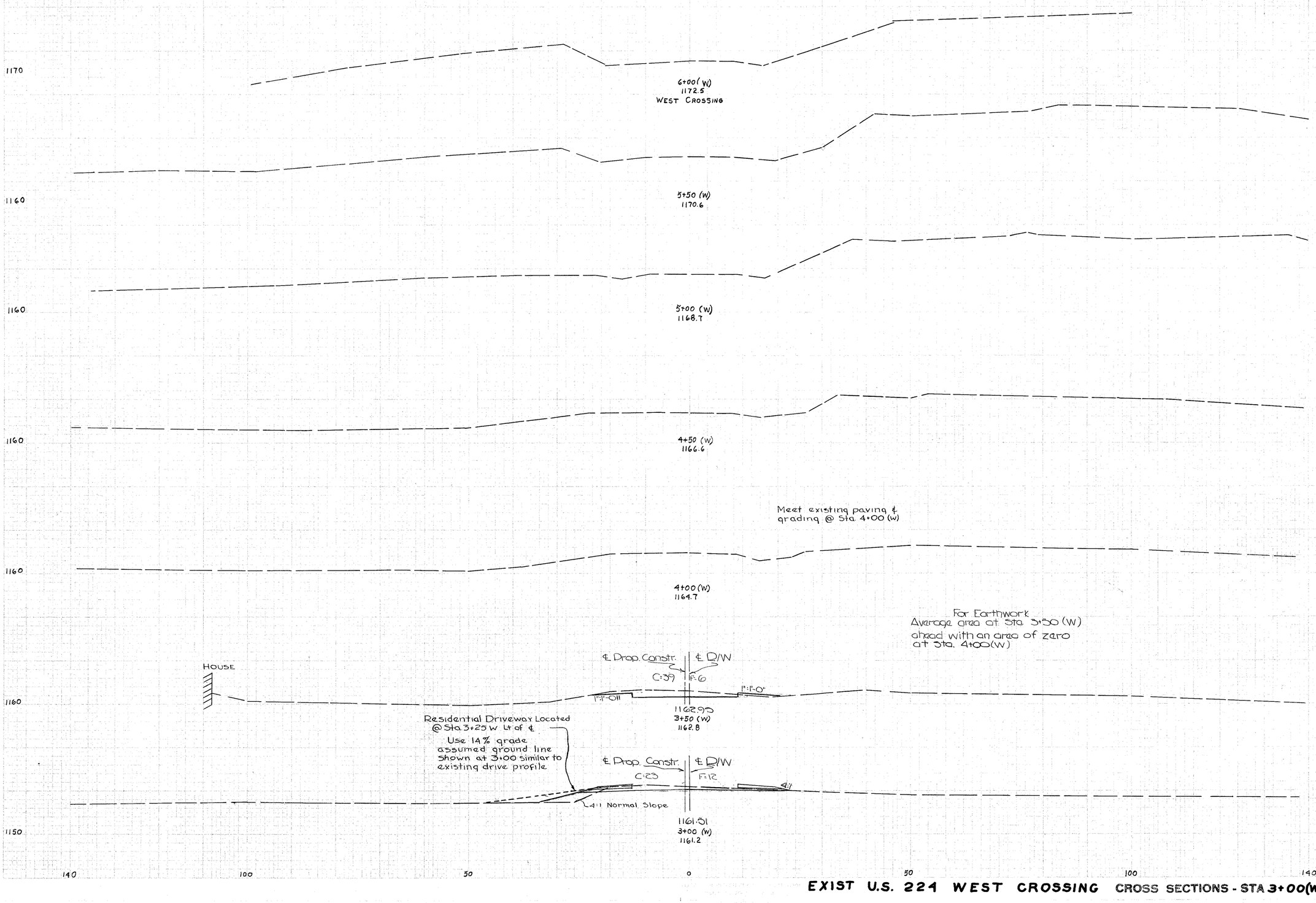
EXIST U.S. 224 (WEST CROSSING) CROSS SECTIONS - STA 6+00(E) TO STA 2+50(W)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

77
109

POR-224-

SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
		0		0	0
			108		37 6
		39		39 6	
			298		57 17
		54		23 12	



EXIST U.S. 224 WEST CROSSING CROSS SECTIONS - STA 3+00(W) TO STA 6+00 (W)

E F T
D L M
U R L
E R L

A.C.T.C.
J.F.W

4-86
3-0-96
6-20-96
8-15-96
8-19-96

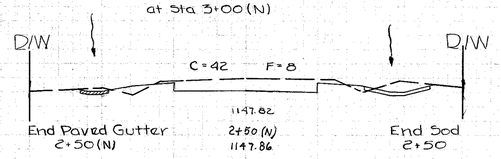
RA-3

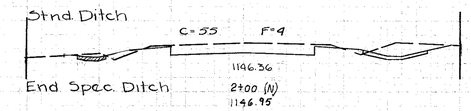
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

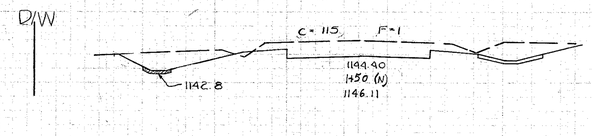
POR-224-6.22

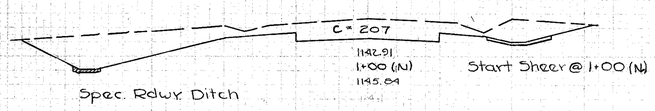
78
109

For Earthwork
Average area at Sta 2+50(N) ahead with an area of zero at Sta 3+00 (N)

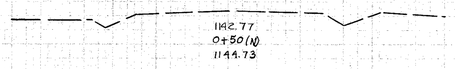


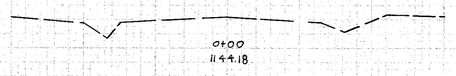






ML. Sections cover C.H. 69 Intersection

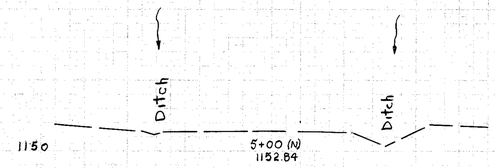




30 20 10 0 10 20 30

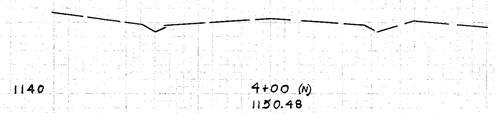
SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
26		42	8		
	120			91	11
27		55	4		
	222			157	6
28		115	1		
	339			298	2
69		207	0		
				0	0
				0	0
				72	39
					7

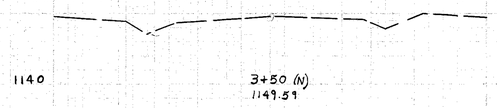
EXCAVATION	585 C.Y.
EMBANKMENT	26 C.Y.
SEEDING	785 S.Y.

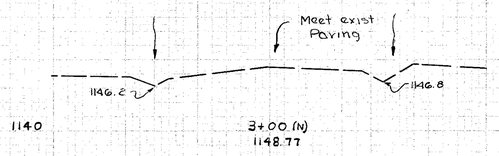




4+50 (N)
1151.54







Limit Of Paving 3+00 (N)

30 20 10 0 10 20 30

E.F.T.
D.L.M. + OTC.
M.S.B.
C.M.L.

1-56
5-24-56
6-28-56
9-25-56

U.S. R. 5

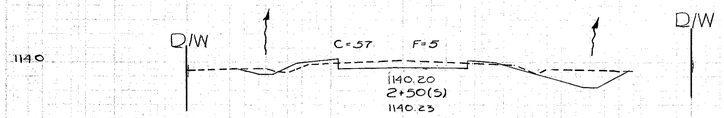
C.H. 69 CROSS SECTIONS - STA 0+00 (N) TO STA 5+00(N)

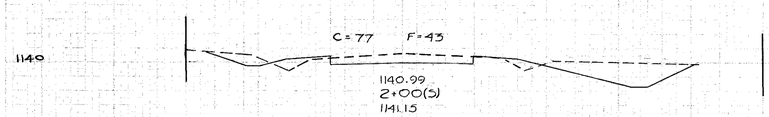
FED. HWY. DIVISION	STATE	PROJECT	FISCAL YEAR	79 / 109
2	OHIO	E-330( )		

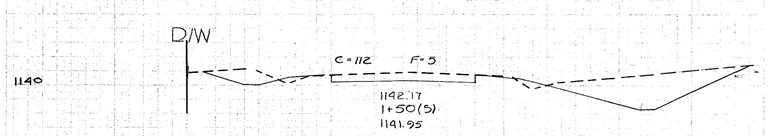
POR-224

LIMIT OF PAVING 2+75(S)

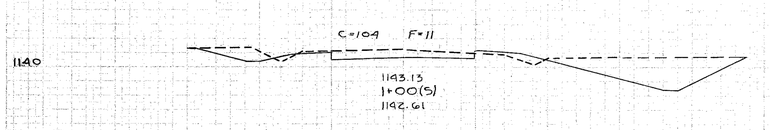
For Earthwork
Average area at Sta. 2+00(S)
ahead with an area at Sta. 2+50(S)
Using a distance of 75' and stop sheet.











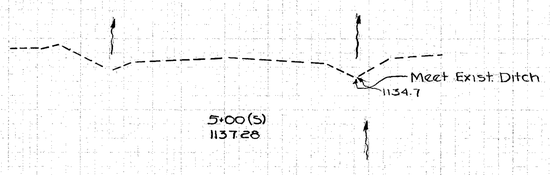
For Earthwork
Start sheer at Sta. 0+50(S)
using a distance of 60' to
average ahead with Sta. 1+00(S)

E-3 Exc. See Culvert
Detail Sheet for C-4

SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
55		57	5		
	492			186	67
63		77	43		
	372			176	44
71		112	5		
	394			200	15
70		104	11		
	527			130	24
87		35	10		

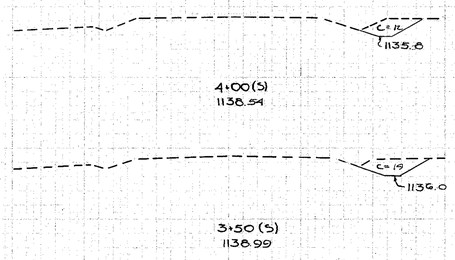
EXCAVATION 777 CY
EMBANKMENT 1300 CY
SEEDING 2010 SY

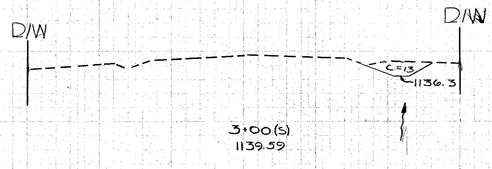
SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
0		0	0		
	36			11	0
13		12	0		
	72			30	0
13		19	0		
	117			44	0
15		13	0		



For Earthwork
Average area at 4+00(S) ahead
with an area of zero at 4+50(S)

4+26 Exist. 24" Pipe
Inv. 1135.6





For Earthwork
Start sheer using area at
Sta. 3+00(S) to average ahead
with Sta. 3+50(S) using a
distance of 75'.

30 20 10 0 10 20 30

E.F.T.
F.D.D.
M.S.B.
M.S.B.
C.A.J.
M.S.B.
C.R.L.

4-96
3-96
9-24-96
9-24-96
9-25-96

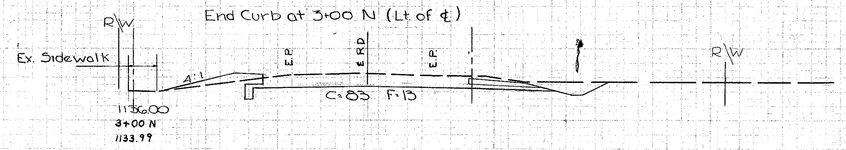
R-5

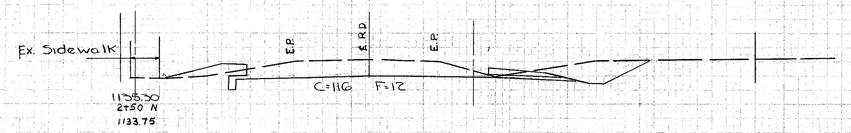
CH 69 CROSS SECTIONS - STA 0+50(S) TO STA 5+00(S)

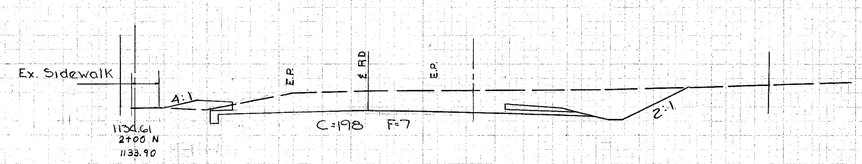
FED.RD DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	FE-220( )	80 09

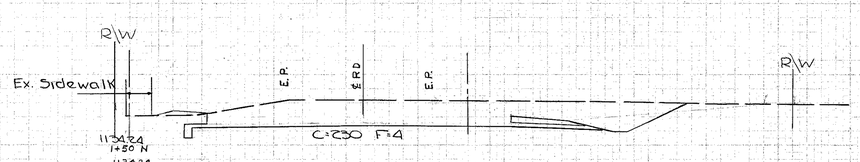
POR-224-6.22

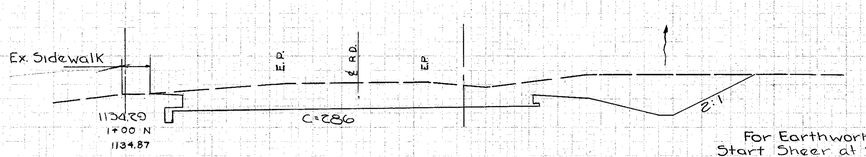
End Curb at 3+00 N (Lt of ℄)





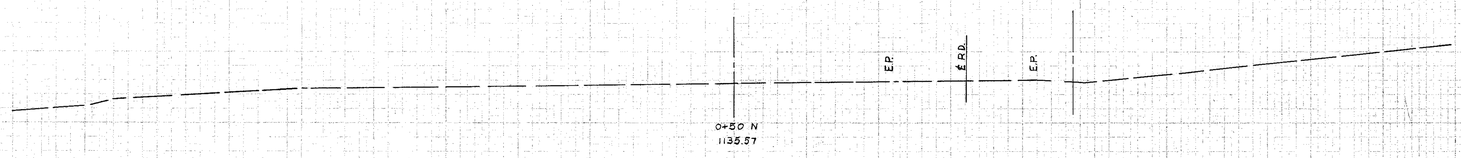


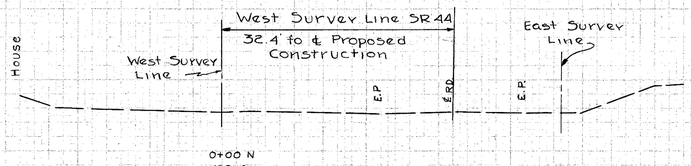




Meet existing sidewalk at 1+00 N

For Earthwork Start Sheer at Sta 1+00 N





EXCAVATION	1755 C.Y.
EMBANKMENT	69 C.Y.
SEEDING	1387 S.Y.

STATION	SEEDING LF	SEEDING SY	END AREA CUT	END AREA FILL	CU YDS EXC	CU YDS EMB
3+00 N	45		83	13		
		247			184	23
2+50 N	44		116	12		
		253			291	18
2+00 N	47		198	7		
		250			396	10
1+50 N	43		230	4		
		247			477	4
1+00 N	46		286	0		
	128				765	0
0+50 N	0		0	0		

M.M.
L.W. + J.F.W.
M-5-80
T-M.L.

4-30
7-6-84
8-24-84
9-25-86
9-25-86

A-3

STATE ROUTE #44 CROSS SECTIONS STA 0+00 N TO STA 3+00 N

DIST.	COUNTY	ROUTE	SHEET NO.
2	DEL	330	

POD 224.6.22

SEEDING AND AREA CU YDS
LP SY CUT FILL EXC EMB

1130

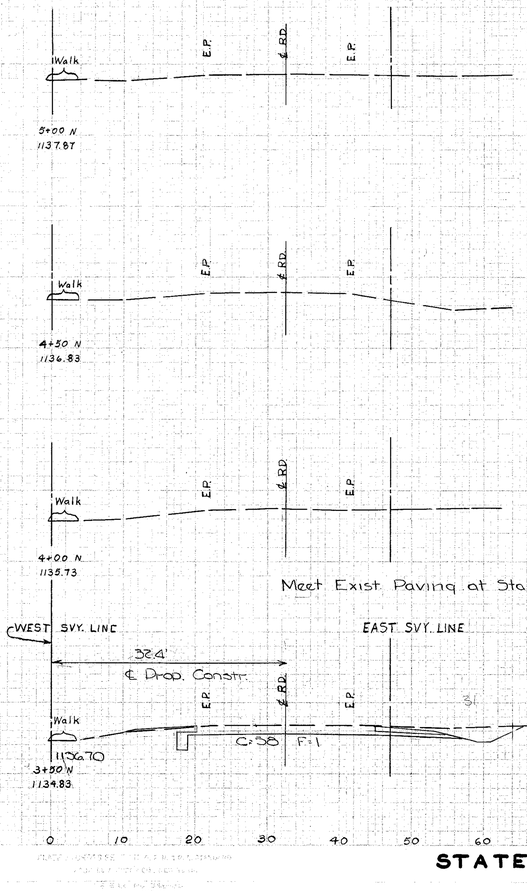
1130

1130

1130

1130

100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100

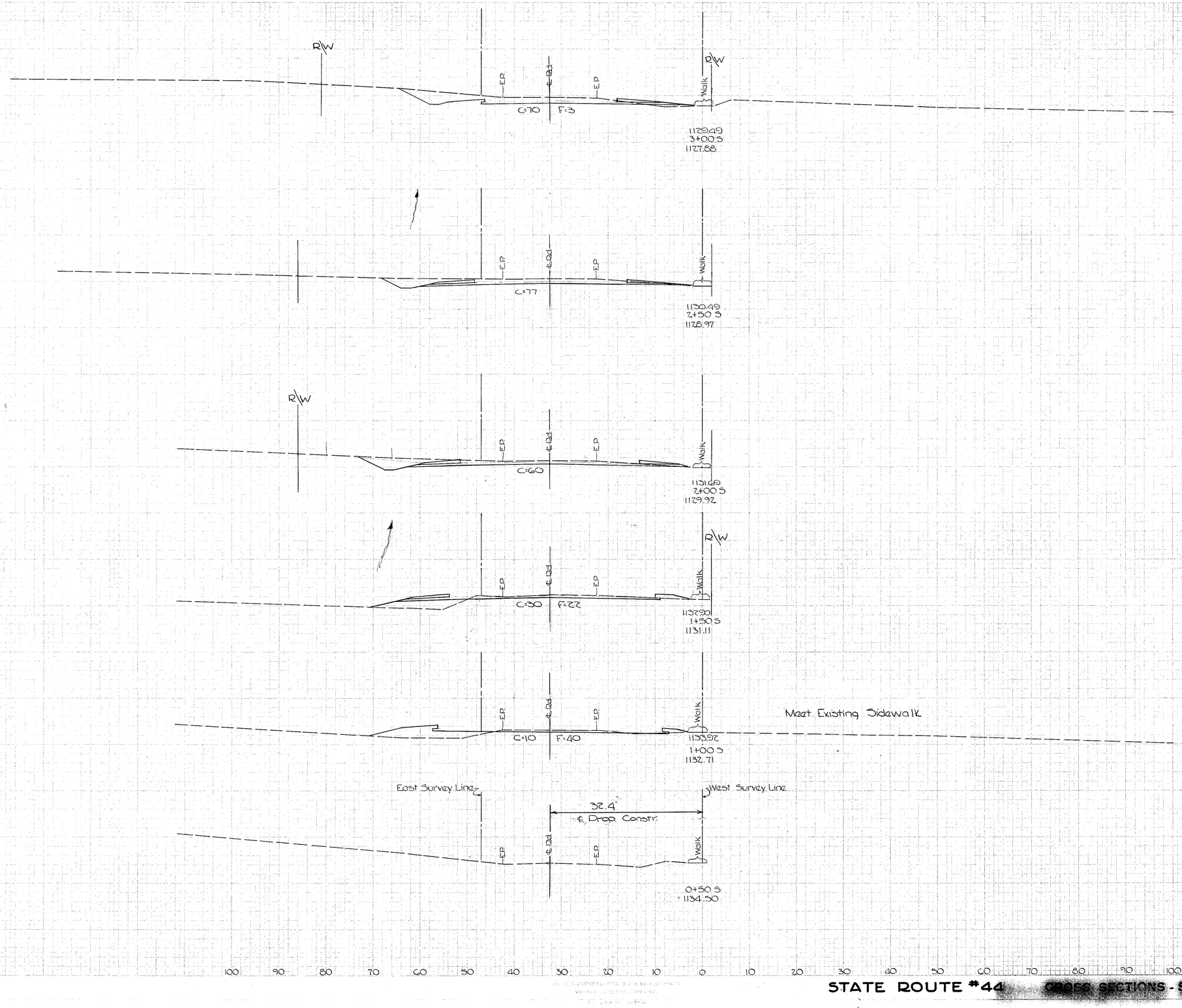


For Earthwork
Average area at Sta. 3+50 N
ahead with an area of zero
using a distance of 10'.

Meet Exist. Paving at Sta. 3+60 N

| | | |

POB 224+6.22



EXCAVATION 498 CY
EMBANKMENT 100 CY
SEEDING 1236 SY

STEEDING LF	END AREA SY	CU. YDS. CUT	FILL	Exc.	Emb.
45		70	3		
	250			136	3
45		77	0		
	244			127	0
43		60	0		
	217			83	20
35		30	22		
	181			37	57
30		10	40		
	83			9	37
0		0	0		

4-Sta
2-Ex Cs
0-Ex Sht
0-Sp Sht
0-Sp Cs

M.M.
J.F.W.
J.F.W.
T.M.D.

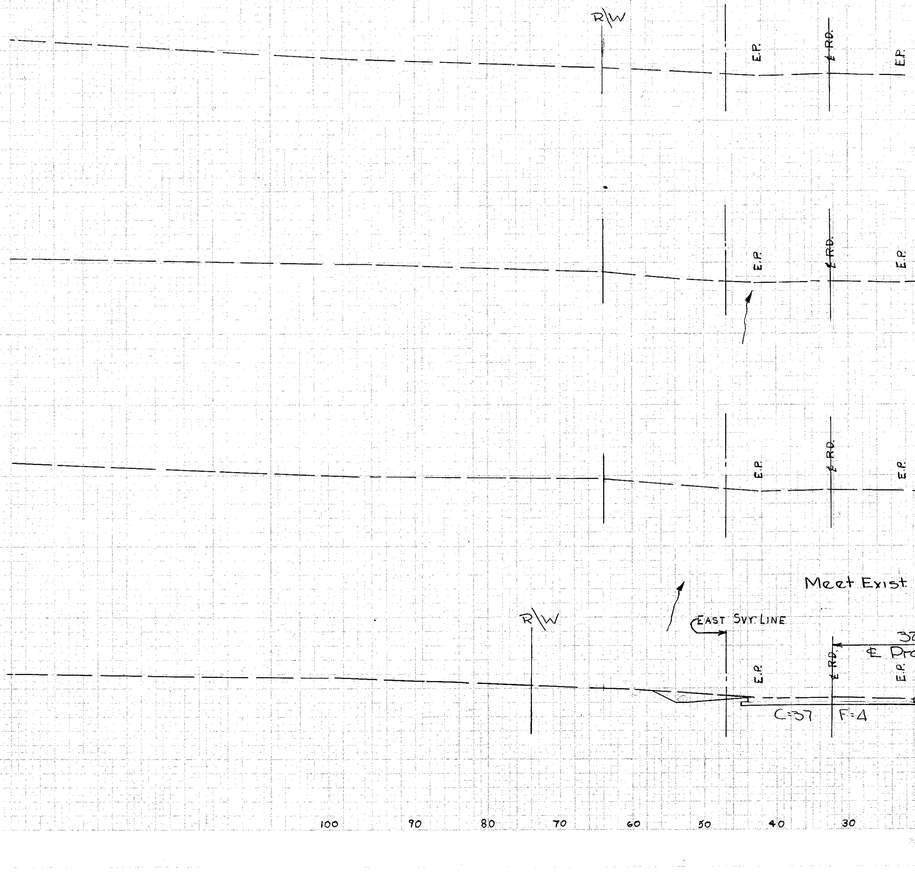
DESIGN SUPV. DIRECT. | DRAWN | CHECKED | QUANTITIES | CHECKED | 12-3

STATE ROUTE #44 CROSS SECTIONS - STA 0+50.5 TO STA 3+00.5

FED. RTE. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	83 09

POD-224-6.22

SEEDING LF	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.



4-56
7-56
8-23-56
9-26-56
9-26-56

M.M.+J.F.W
J.F.S.B.D.
T.M.

R-3

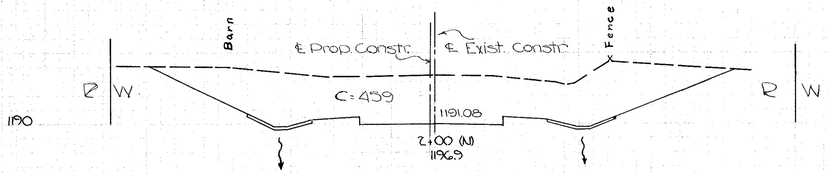
For Earthwork
Average area at Sta. 3+50 S
ahead with an area of zero
using a distance of 10'.

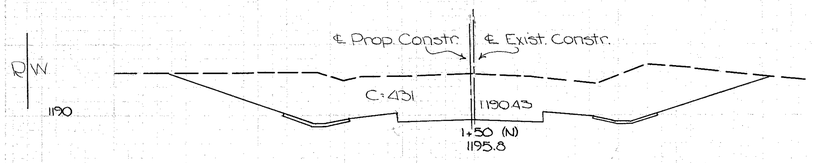
								0		0	0
									23		
											7 1
								41		37 4	
								239		99 7	

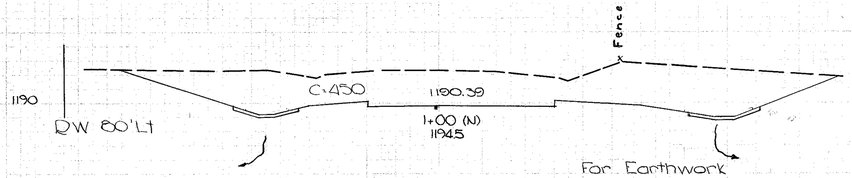
STATE ROUTE #41 CROSS SECTIONS - STA 3+50 S TO STA 5+00 S

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR	SHT. NO.
2	OHIO	E-330( )		10

POR-224-G.22

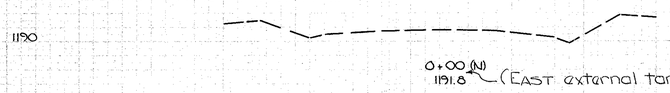






For Earthwork
Start sheer at sta. 1+00(N)





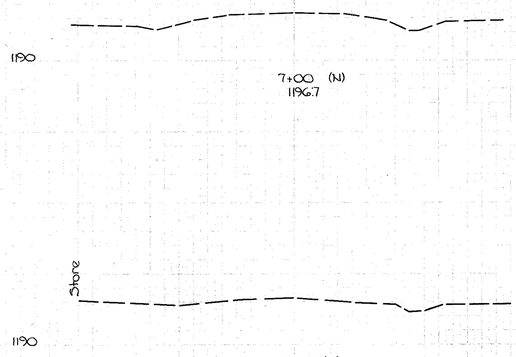
30 20 10 0 10 20 30

EXCAVATION 4346CY
EMBANKMENT 0 CY
SEEDING 2636 SY

RW 100' Rt.

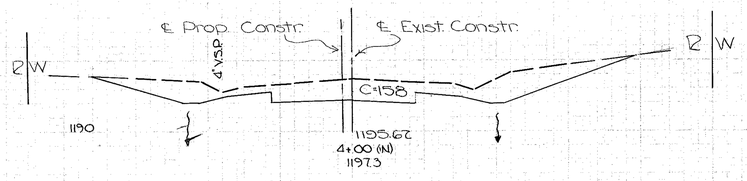
SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
	325			812	0
57		459	0		
	339			824	0
65		431	0		
	403			817	0
80		450	0		

SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
0		0	0		
	422			293	0
76		138	0		
	794			1037	0
67		402	0		
	353			761	0
60		419	0		

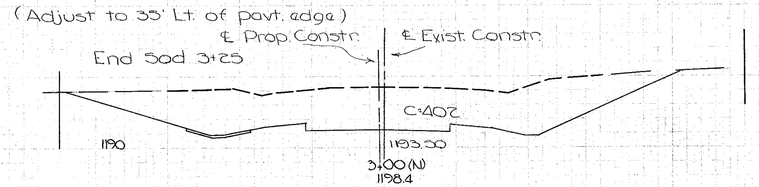


For Earthwork
Use area at Sta. 4+00(N) to average ahead with an area of zero using a distance of 100

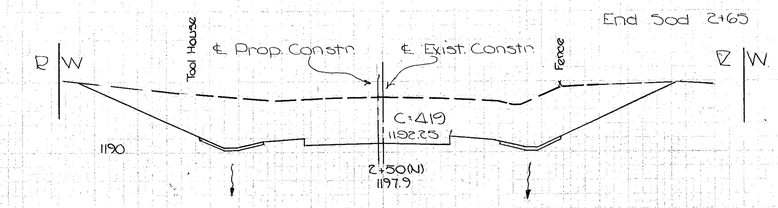
Note:
Proposed paving to meet South edge of Exist. 224 paving



Drive - Lt. of Sta. 3+40 N
14% Grade
(Adjust to 35' Lt. of pavt. edge)



Drive - Rt. of Sta. 2+85 N
14% Grade
(Adjust to 85' Rt. of pavt edge)

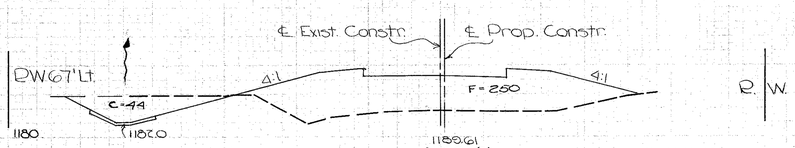


30 20 10 0 10 20 30

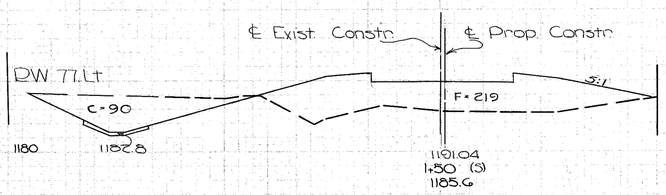
C.H. 31 CROSS SECTIONS - STA 0+00(N) TO STA 7+00 (N)

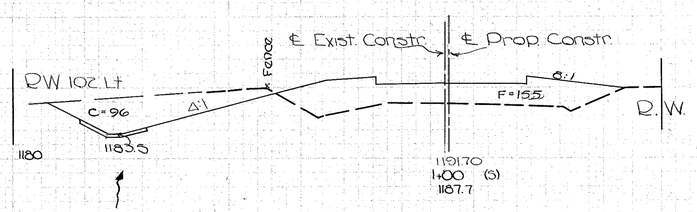
EST. 24 M.
M-5.3
M-2.1
M-5.3

RA-3



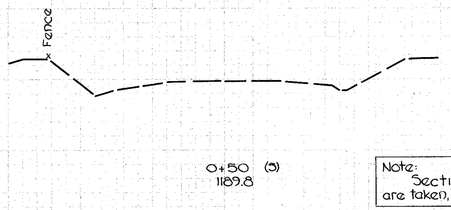
Drive Rt. of Sta. 1+55 (S)
Adjust to 25' of pavt. edge



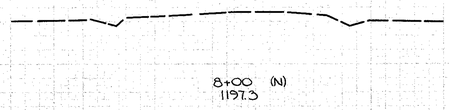


Spec. Rdwy. Ditch

For Earthwork
Start Shear at Sta. 1+00 (S)



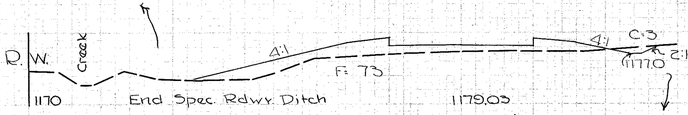
Note:
Sections from 0+00(S) to 2+00(S) are taken based on ℄ Exist. Constr. as ℄.

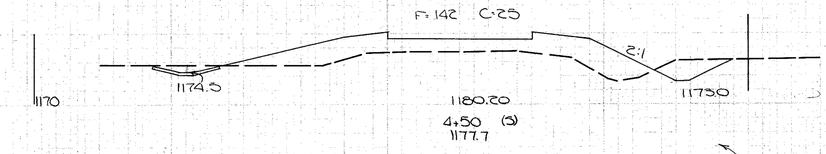


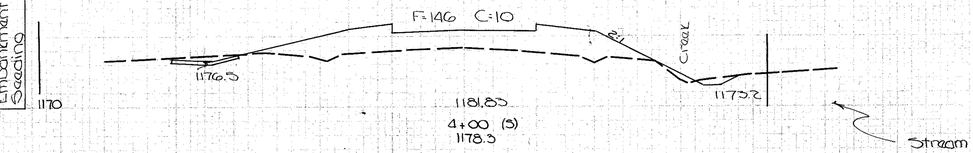
SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
	406			76	480
72		44	250		
	394			124	435
70		90	219		
	381			172	346
67		96	155		
	761			35	715
68		9	240		
	394			43	470
74		37	267		

SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
55		3	73		
	336			26	200
66		25	142		
	375			33	267
69		10	146		

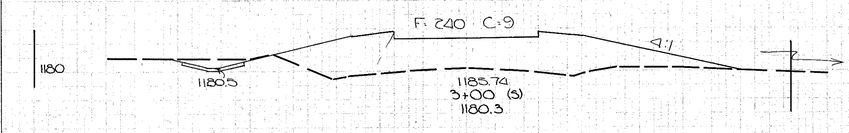
Excavation 817 C.Y.
Embankment 2006 C.Y.
Seeding 5746 S.Y.

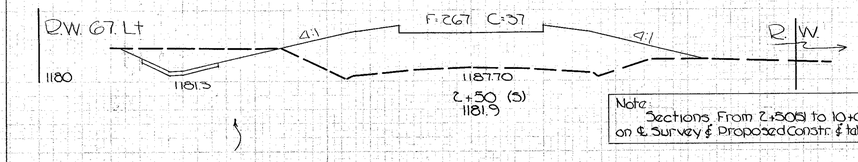






Sta. 3+50 3:1 Side Slope
Begin Guard Rail





Note:
Sections From 2+50(S) to 10+00(S) are based on ℄ Survey & Proposed Constr. & taken as ℄.

30 20 10 0 10 20 30 50 40 30 20 10 0 10 20 30 40 50

C.H. 31 CROSS SECTIONS - STA 0+50(S) TO STA 5+00(S)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

86
109

POR-224-6.22

SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
0		0	0		
144				72	4
51		77	4		
272				102	13
46		33	9		
283				34	76

SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.

1170

7+50 (S)
1174.1

1170

7+00 (S)
1177.2

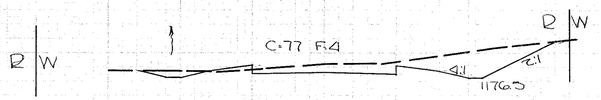
1170

6+50 (S)
1178.2

Proposed paving to meet existing road @ sta. 6+50 (S)

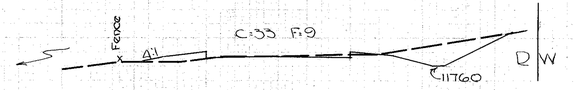
For Earthwork

Use area at sta. 6+00 to average ahead with an area of zero using a distance of 50'



1178.11
6+00 (S)
1178.2

Spec. Rdwy. Ditch



1178.34
5+50 (S)
1177.5

1170

1160

10+00 (S)
1162.6

1160

9+50 (S)
1163.9

1160

9+00 (S)
1163.4

1160

8+50 (S)
1167.3

1170

8+00 (S)
1170.7

30 20 10 0 10 20 30

CH. 31 CROSS SECTIONS - STA 5+50(S) TO STA 10+00(S)

E.F.T.
F-M-S-B
M-S-B

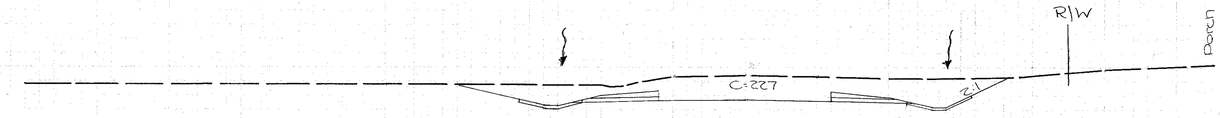
4.26
7.85
8.88
8.88

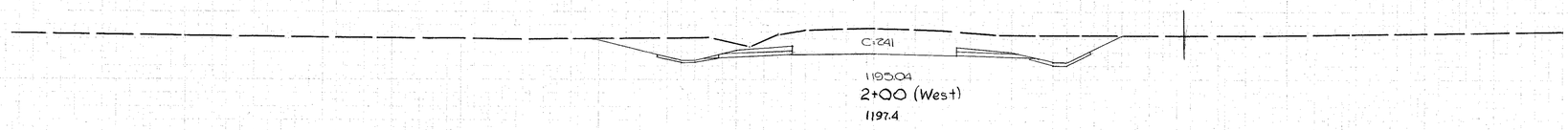
RTE. 3

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

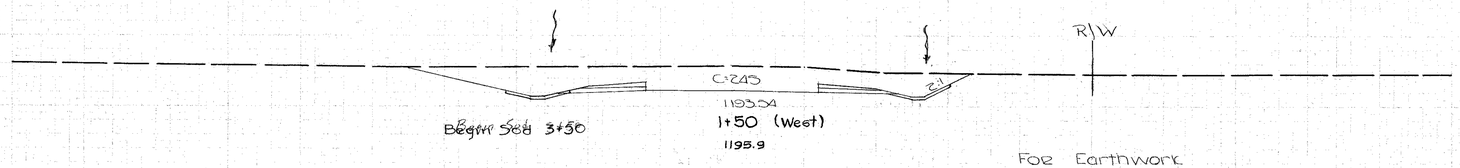
87
109

POR-224-6.22

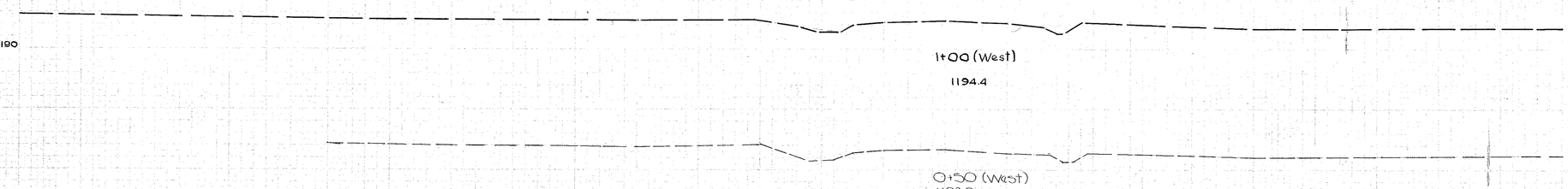




Drive located on Rt. - Sta. 1+75(±)
8% Slope
Tie in 38' Rt. of edge paving



For Earthwork.
Start sheer at sta. 1+50 W
(See Note on sheet No.)



SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
57		227	0		
	315			433	0
56		241	0		
	317			450	0
58		245	0		

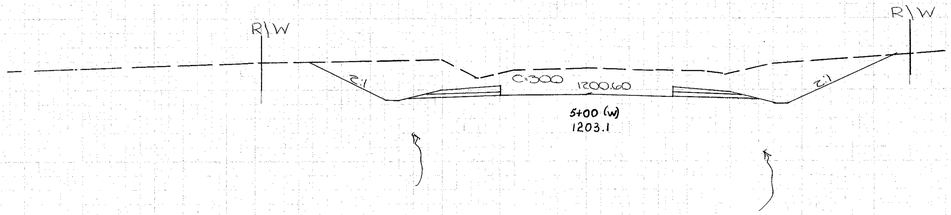
150 100 50 0 50 100 140

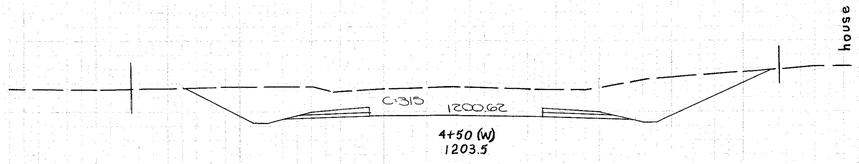
EXIST. U.S. 224 (EAST CROSSING) CROSS SECTIONS - STA 0+50(W) TO STA 2+50(W)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	E-330( )	

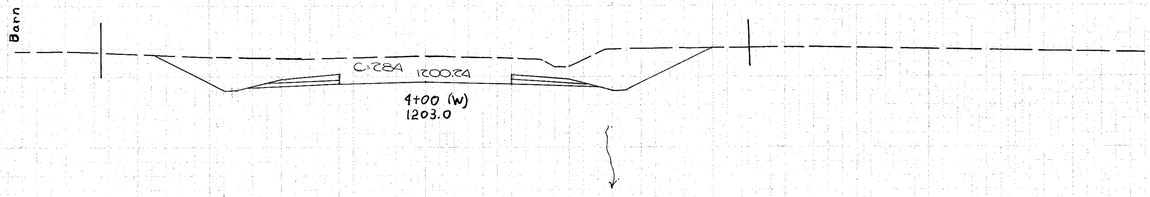
88
109

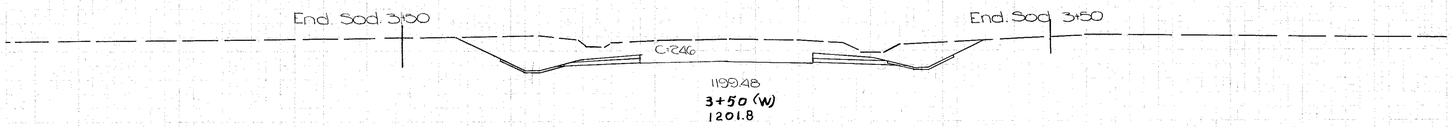
POR-224-6.22

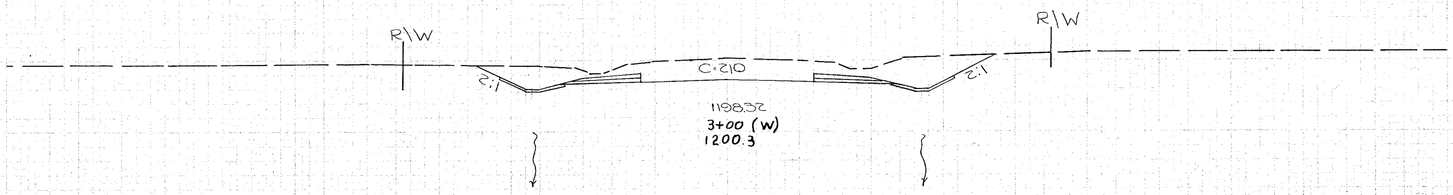




Drive located on Rt. - Sta. 4+20
12% Slope
Tie in 48' Rt. of edge paving







EXCAVATION 4332 C.Y.
EMBANKMENT 0 C.Y.
SEEDING 3690 SY.

SEEDING LF.	SEEDING SY.	END AREA CUT	END AREA FILL	CU. YDS. EXC.	CU. YDS. EMB.
80		300	0		
	447			570	0
81		315	0		
	436			556	0
76		284	0		
	361			491	0
54		246	0		
	295			422	0
52		210	0		
	303			406	0

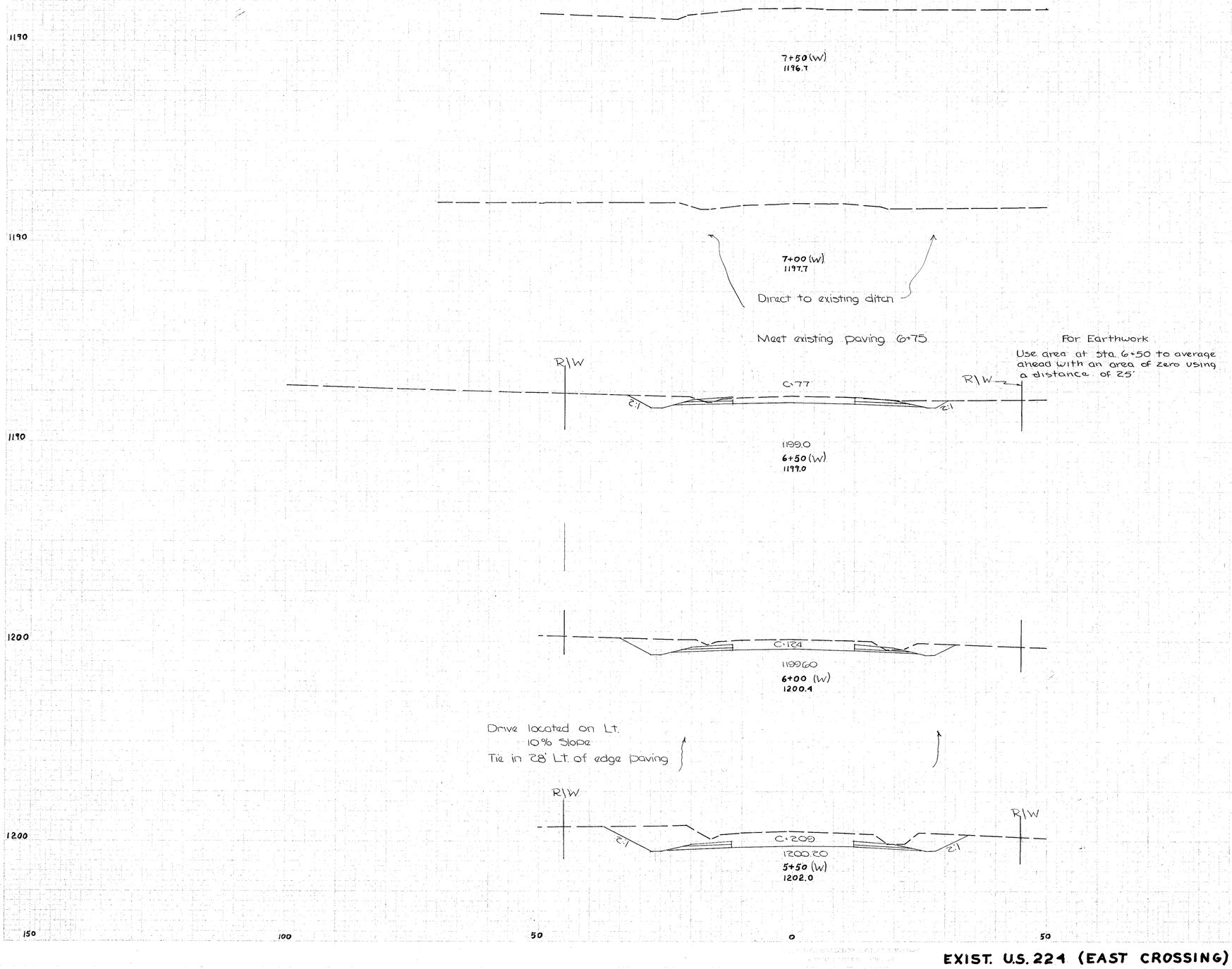
EXIST. U.S. 224 (EAST CROSSING) CROSS SECTIONS - STA 3+00(W) TO STA 5+00 (W)

FED. HWY. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

859
109

POR-224-6.22

SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
0		0	0		
	83			36	0
60		77	0		
	344			187	0
64		124	0		
	372			309	0
70		209	0		
	417			472	0



EXIST. U.S. 224 (EAST CROSSING) CROSS SECTIONS - STA 5+50(W) TO STA 7+50(W)

FED. ED. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

90
109

POR-224-6.22

SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.

EFT
T.M.D. + M.S.B.
4-56
4-58

1190

9+00 (W)
1195.4

Store

1190

8+00 (W)
1196.0

150 100 50 0 50 100 140

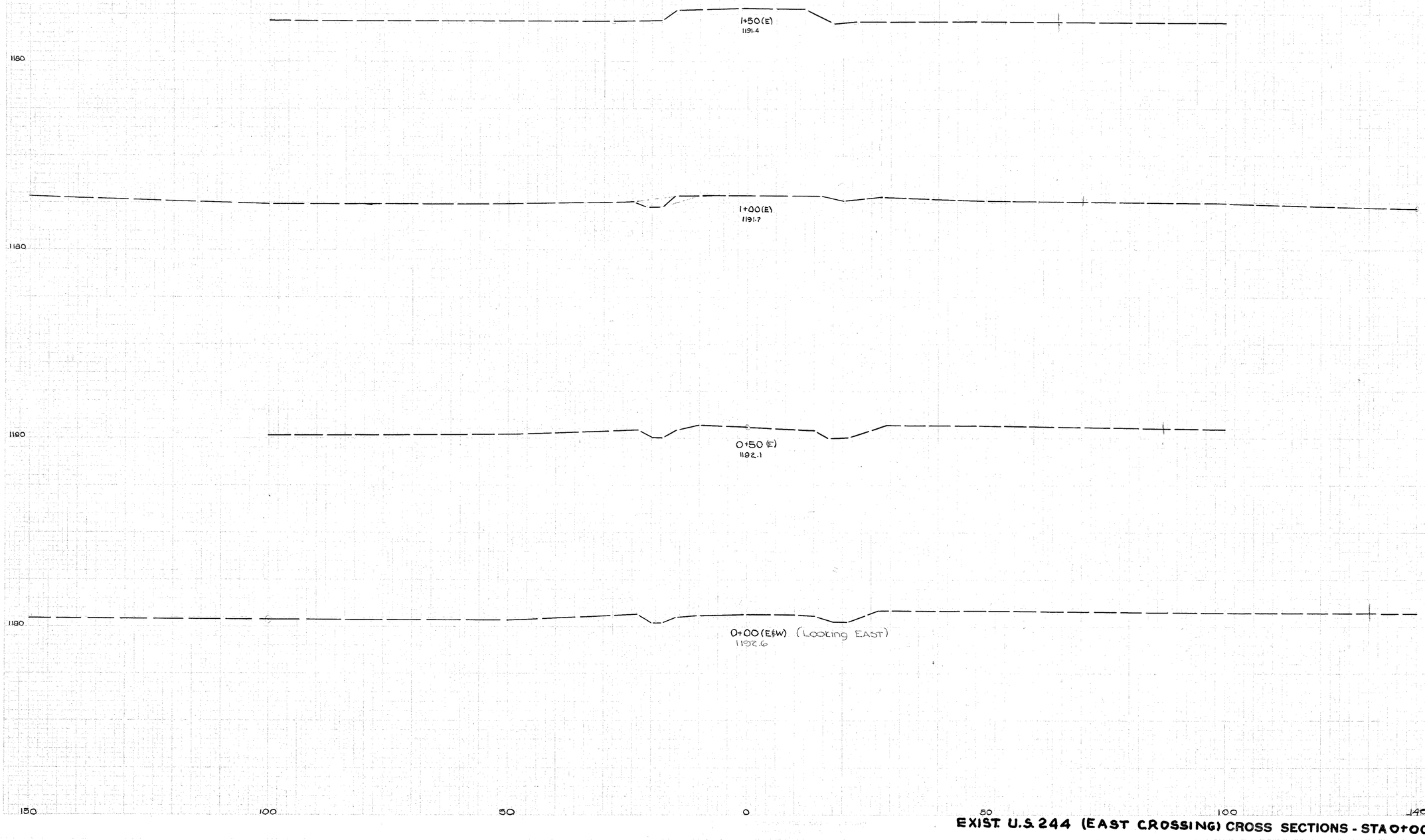
EXIST. U.S. 224 (EAST CROSSING) CROSS SECTIONS - STA 8+00(W) TO STA 9+00(W)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
8	OHIO	F-330( )	

91
109

POR-224-6.22

SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.



EXIST. U.S. 244 (EAST CROSSING) CROSS SECTIONS - STA 0+00(E) TO STA 1+50(E)

FED. H.L.S.&D.L.M. 4-58 52856

RA3

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

92
109

POR-224-6.22

Meet existing paving
4+50 E

For Earthwork
Use area at sta. 4+00(E) to average ahead with an area of zero using a distance of 50'

4+50

SEEDING	END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.
	161			52	9
58		56	10		
	331			104	19
61		56	9		
	391			113	43
80		66	36		
	465			106	113
91		47	85		
	461			87	157
75		0	95		

EXCAVATION 462 C.Y.
EMBANKMENT 341 C.Y.
SEEDING 1809 S.Y.

R\W
Ditch
C:56 F:10
4:1
Spec. Rdwy. Ditch
1191.60
4+00 (E)
1191.6
1180
1188.0
C:56 F:9
1191.31
3+50 (E)
1191.3
C:66 F:36
1187.0
1191.44
3+00 (E)
1191.1
C:47 F:85
1186.0
1191.87
2+50 (E)
1191.0
F:95
1192.31
2+00 (E)
1191.1
℄ Creek

FOR EARTHWORK
Start Sheet at Sta. 2+00 E
(See Note ON Sheet No.)

150 100 50 0 50 100 140

EXIST. U.S. 224 (EAST CROSSING) CROSS SECTIONS - STA 2+00(E) TO STA 4+00 (E)

A.S.W.
E.J.S.
T.J.S.
B.T.B.

E.F.T.
D.L.M. + H.L.S.
V.J.F.W.
M.R.B.
M.S.B.

RA-3

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

93
109

POR-224-6.22

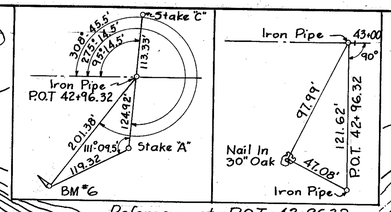
SEEDING		END AREA		CU. YDS.	
LF.	SY.	CUT	FILL	EXC.	EMB.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-330(3)	

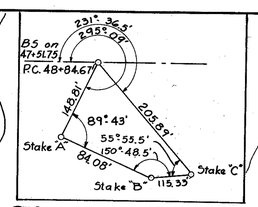
94
109

SEC. POR-224-6.22

N



Reference at P.O.T. 42+96.32



Reference to P.C. Sta 48+84.67

Old Mill Race

Farm Drive

Old Stream Bed

℄ Bridge

℄ Pavement Initial Construction

Sta 46+80.68
End Approach Slab

℄ Survey U.S. 224

Sta 47+27.00

Sta 47+73.32
Begin Approach Slab

℄ Proposed Future Eastbound Lanes

P.C. 48+84.67

Drainage Area 23.2 Square Miles

Congress Lake Outlet

Bridge Limits

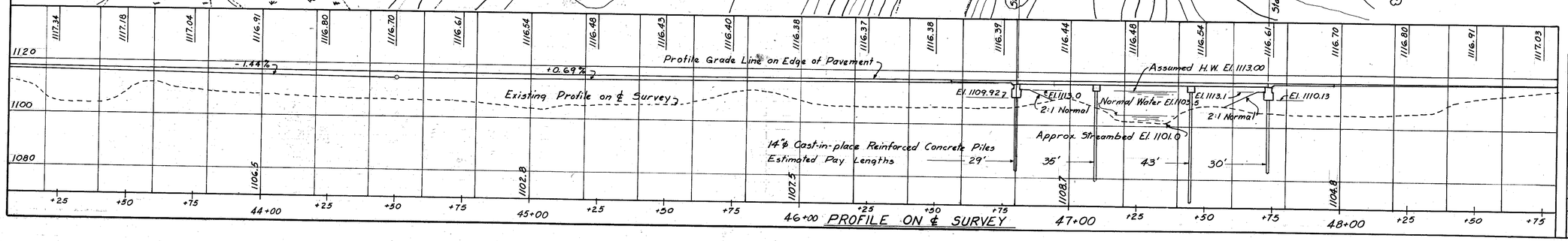
Sta 46+80.68

Sta 47+73.32

B.M. #7 — 210' No. of Sta 51+50 - PK Nail in West Root of 24" Red Oak; El. 1121.455

Foundation design and foundation quantities are based on a study of rod soundings and soil sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the division office, but the State assumes no responsibility for the accuracy thereof.

Vertical Curve Data
P.V.I. Sta 44+50
El. 1114.04
1000' V.C.
Corr. +2.66'
-1.44%
+0.69%
39+50 P.V.C.
44+50 P.V.I.
49+50 P.V.T.



U.S.R. 224 12-24.12 Initial Construction
Pavement Type T-71
Future Construction 10-24.12

PROPOSED STRUCTURE

TYPE: Three Span Continuous Slab Bridge With Capped Pile Substructure
SPANS: 28'-35'-28' c/c Bearings
ROADWAY: 44'-0" f/f of Guard Rail
LOAD FREQUENCY: CF = 2000(51)
SKEW: 24°-30' L.F.
WEARING SURFACE: 1" Monolithic
APPROACH SLABS: AS-1-54 (25'-0" Lg)
ALIGNMENT: Tangent

AURILIO, PACE AND BALLARD CONSULTING ENGINEERS

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

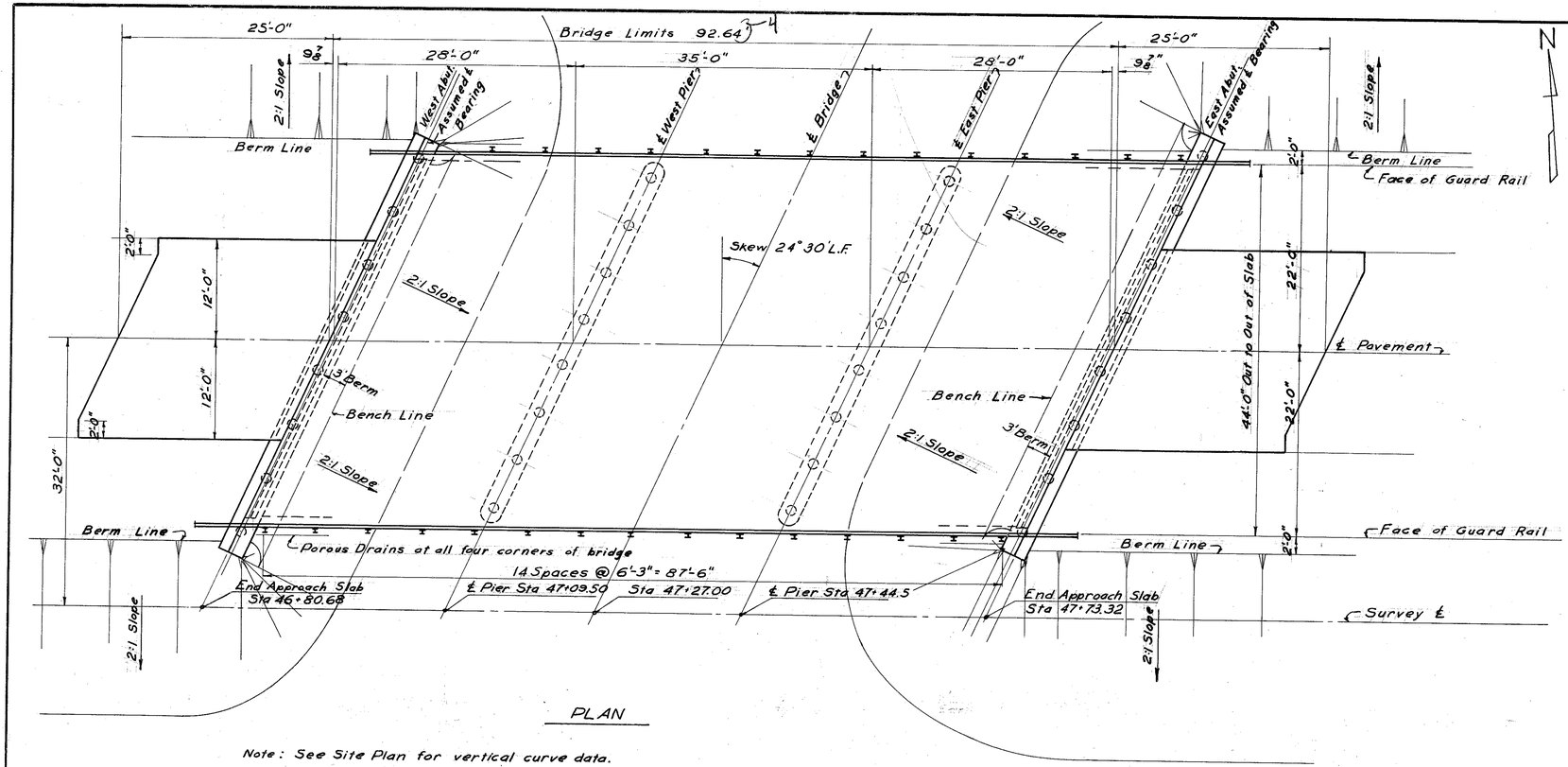
SITE PLAN

BRIDGE NO. POR-224-0713 OVER CONGRESS LAKE OUTLET
PORTAGE CO. U.S.R. 224
STA. 46+80.68
STA. 47+73.32
SCALE 1" = 20'

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
AURILIO	R.N.B.	R.R.	W.S.-R.R.	R.F.N.	

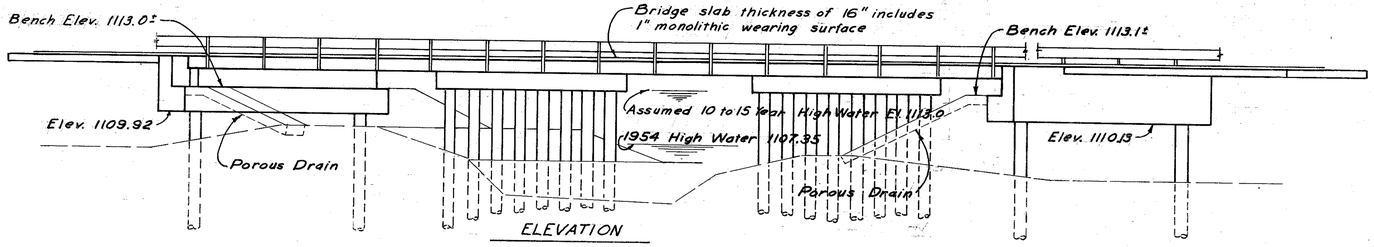
FED RD DIVISION	STATE	PROJECT		95
2	OHIO	F-330(3)		109

SEC POR-224-6.22



PLAN

Note: See Site Plan for vertical curve data.



ELEVATION

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Superstr.	Abut.	Piers	Gen'r'l
E 2	37	Cu. Yd.	Unclassified excavation		37		
S1	219	Cu. Yd.	Class "C" concrete superstructure and pier caps	202		17	
S1	57	Cu. Yd.	Class "E" concrete abutments		57		
S4	62,200	Lb.	Reinforcing steel	51,050	6060	4940	150
S14	185.28	Lin. Ft	Railing (Type I 15.13 with galvanized steel posts)	185.28			
S16	Lump	Sum	First test pile				Lump Sum
S18	1096	Lin. Ft.	14"ϕ Cast-in-place reinforced concrete piles		472	624	
S29	16	Cu. Yds.	Porous backfill		16		
S29	10	Cu. Yds.	Porous drains on embankment slopes				10

GENERAL NOTES

REFERENCE shall be made to Standard Drawings A-1-54 dated 7-1-54, P-1-54 dated 7-1-54 and CS-1-54 revised 7-16-56.

POROUS DRAINS, extending from face of abutment to existing ground shall be placed on and flush with embankment slopes at all four corners of the bridge. The drains shall be four feet wide and one foot thick.

PILING shall be driven to a minimum bearing capacity of 37 tons per pile. Piles shall be 14" diameter cast-in-place.

PIER PILE ENCASEMENT as shown on Standard Drawing P-1-54 may be omitted provided that the tapered portion, if any, of all piers 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 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 atleast one foot below the propose surface of the ground.

12/31/61
Raymond Ballard

AURILIO, PACE AND BALLARD CONSULTING ENGINEERS

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

GENERAL PLAN AND ESTIMATED QUANTITIES

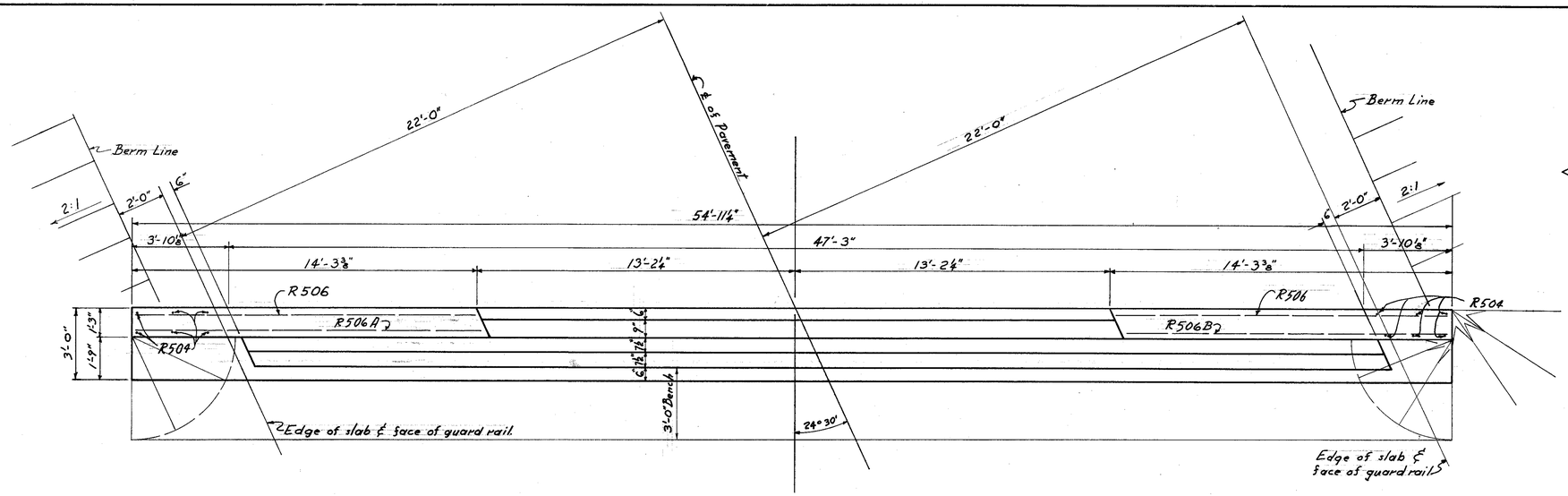
BRIDGE No. POR. 224-0713 OVER CONGRESS LAKE OUTLET
PORTAGE CO.
U.S.R. 224
STA. 46+80.68
STA. 47+73.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
W.S.	W.S.	J.W.C.	R.R.			

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-330(3)	

96
109

SEC. POR-224-6.22

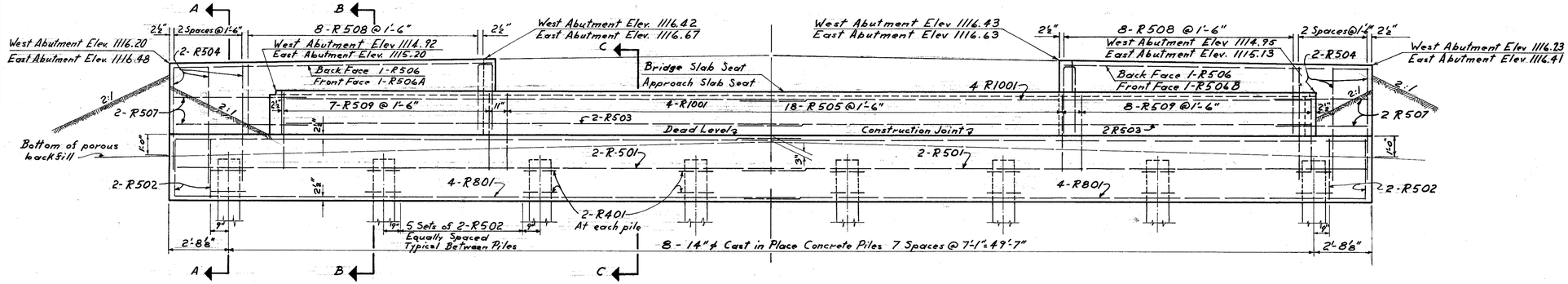


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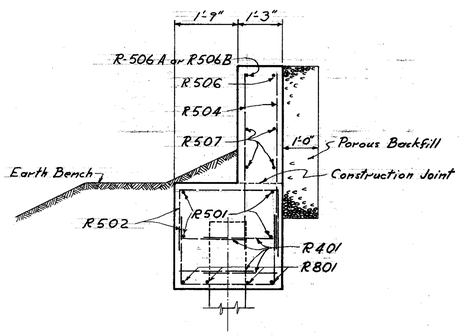
REINFORCING STEEL shall clear face of concrete 2" unless otherwise noted.

PLAN

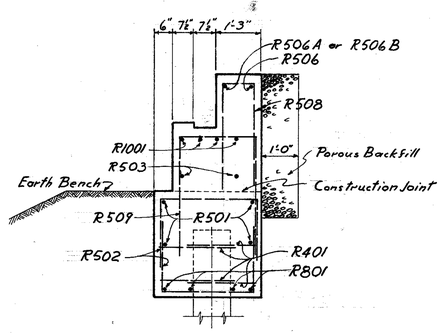
West Abutment Shown
East Abutment Similar by Rotation



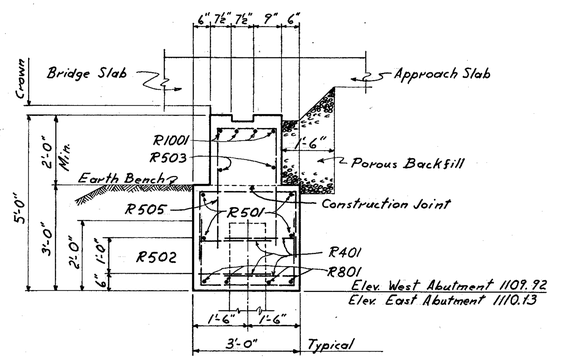
ELEVATION



SECTION A-A



SECTION B-B



SECTION C-C

12/31/58
Raymond Ballard

AURILIO, PACE AND BALLARD
CONSULTING ENGINEERS

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

ABUTMENT DETAILS

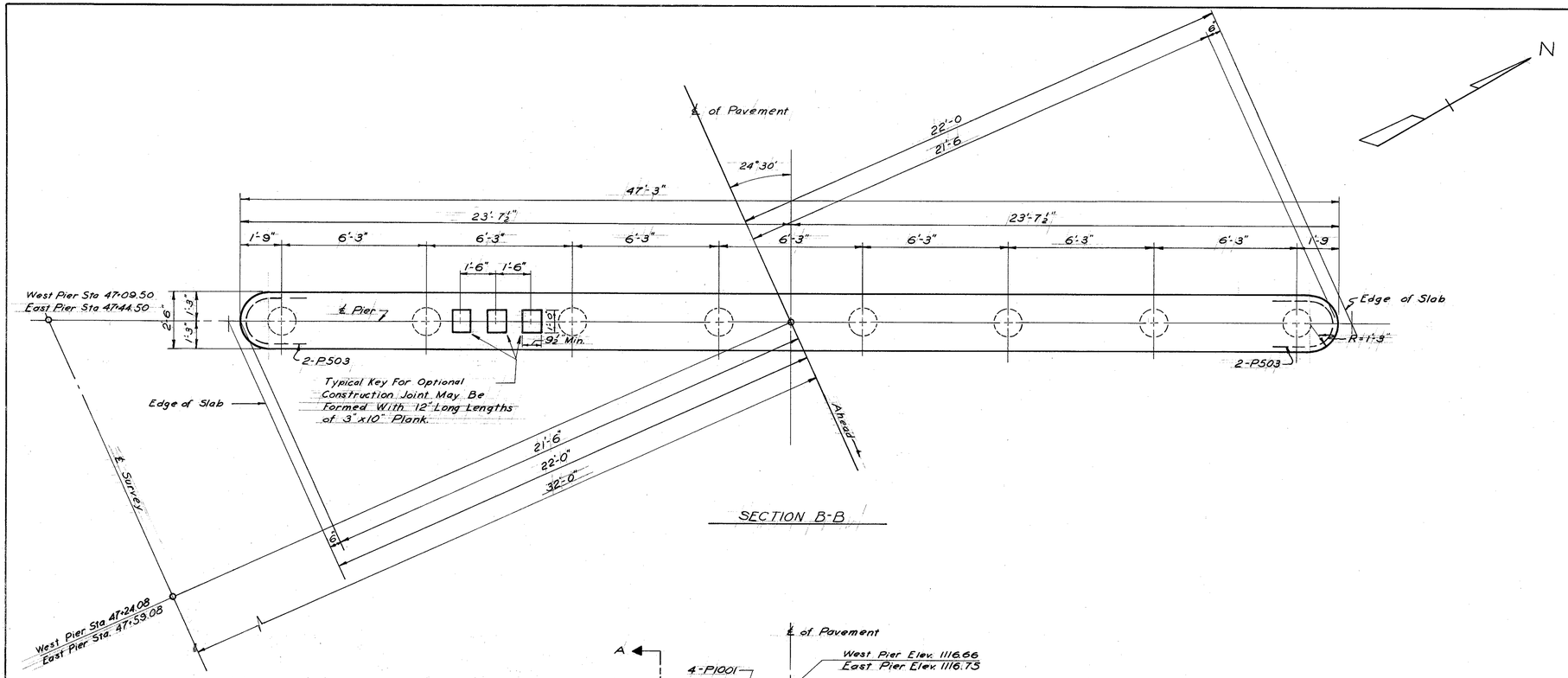
BRIDGE No. POR. 224-0713 OVER CONGRESS LAKE OUTLET
PORTAGE Co. U.S.R. 224
STA. 46+80.68
STA. 47+73.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISE
W.S.	W.S.	J.M.	R.R.			

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	F-330(3)	

97
109

SEC. POR-224-6.22



12/31/52
Raymond Ballard

AURILIO, PACE AND BALLARD CONSULTING ENGINEERS

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

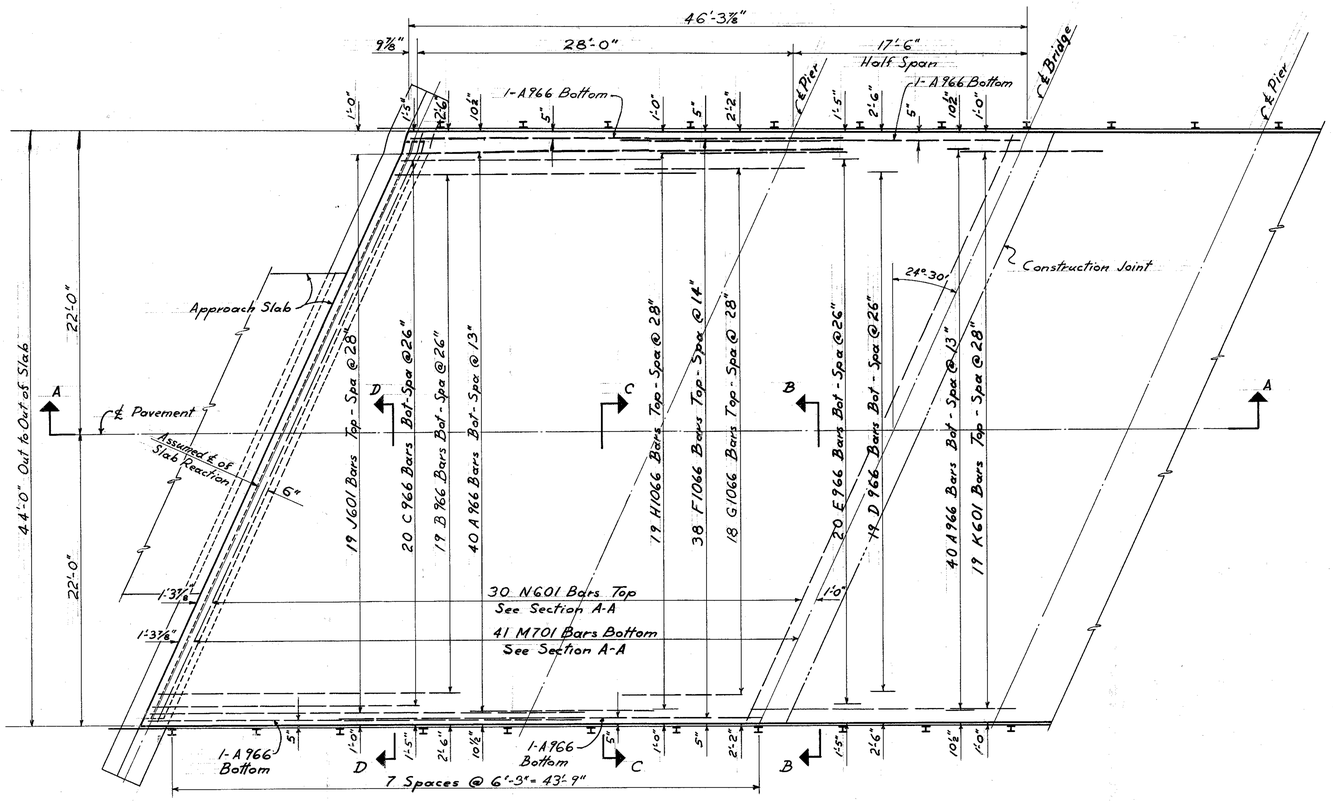
PIER DETAILS

BRIDGE No. POR. 224-0713 OVER CONGRESS LAKE OUTLET
PORTAGE Co. U.S.R. 224
STA. 46+80.68
STA. 47+73.32

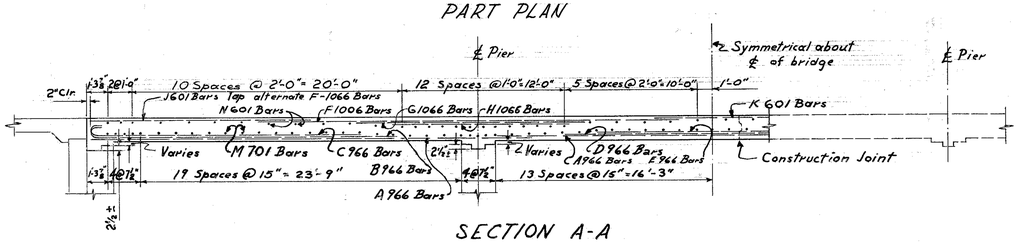
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
W.S.	W.S.	P.C.	R.R.			

FED. RD. DIVISION	STATE	PROJECT		98
2	OHIO	F-330(3)		109

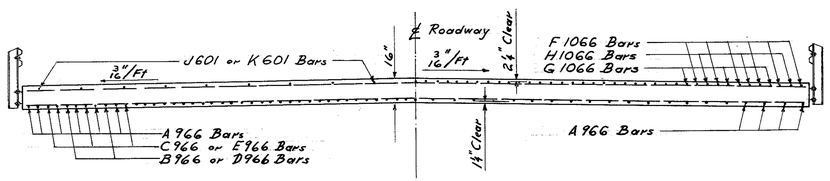
SEC. POR-224-6.22



PART PLAN



SECTION A-A

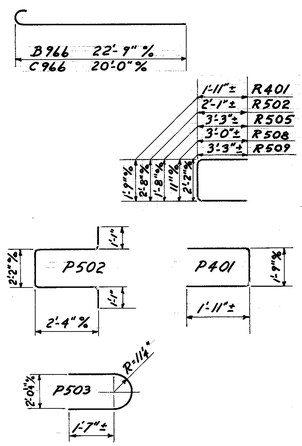


SECTION BB & DD SECTION CC

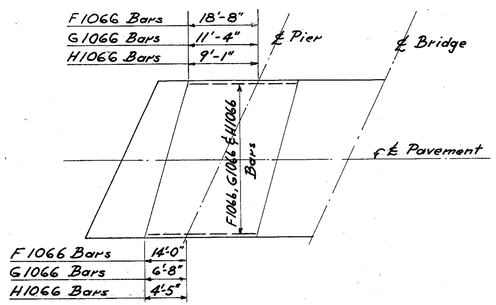
REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	SHP.
SUPERSTRUCTURE				
A966	126	32'-8"	13,995	S
B966	38	23'-10"	3079	B
C966	40	21'-1"	2867	B
D966	19	22'-0"	1421	S
E966	20	17'-2"	1167	S
F1066	76	31'-3"	10,220	S
G1066	36	16'-11"	2621	S
H1066	38	13'-6"	2207	S
J601	38	16'-6"	942	S
K601	19	9'-0"	257	S
M701	81	48'-0"	7947	S
N601	60	48'-0"	4326	S
PIERS				
P1001	16	25'-6"	1756	S
P901	16	23'-7"	1283	S
P701	96	4'-0"	785	S
P501	8	23'-5"	195	S
P502	76	8'-0"	634	B
P503	8	6'-4"	53	B
P401	64	5'-5"	232	B

BENDING DIAGRAMS



MARK	NO.	LENGTH	WEIGHT	SHP.
ABUTMENTS				
R1001	16	25'-2"	1735	S
R801	16	28'-9"	1228	S
R501	16	28'-2"	470	S
R502	156	6'-7"	1071	B
R503	8	24'-4"	203	S
R504	24	5'-4"	134	S
R505	36	7'-11"	297	B
R506	4	13'-11"	58	S
R506A	2	14'-6"	30	S
R506B	2	13'-4"	28	S
R507	16	5'-5"	90	S
R508	32	6'-8"	222	B
R509	30	8'-5"	263	B
R401	61	5'-5"	232	B
REPLACEMENT BARS				
RE401	1	5'-5"	4	B
RE501	1	5'-7"	6	S
RE601	1	5'-11"	9	S
RE701	1	6'-2"	13	S
RE801	1	6'-6"	17	S
RE901	2	6'-10"	46	S
RE1001	1	7'-2"	31	S



PLACEMENT DIAGRAM FOR F, G & H BARS

12/31/56

AURILIO, PACE AND BALLARD
CONSULTING ENGINEERS

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

SUPERSTRUCTURE DETAILS

BRIDGE No. POR. 224-0713 OVER CONGRESS LAKE OUTLET
PORTAGE Co.
U.S.R. 224
STA. 46+80.68
STA. 47+73.32

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.R.	R.R.	J.M.	R.F.N.			

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

1/10

POR-224-6.22

Randolph Township T-1N R-8W

Original Lot # 58

Original Lot # 58

SILAS J. YOUNG & CLARICE M. YOUNG
TBA: 4.58 ACRES
PRO: 0.26 ACRES

CHARLES RALPH SMITH
TBA: 413 ACRES
PRO: 0.18 ACRES

WILBUR ROTHERMEL & ALVIN ROTHERMEL
(200) LA
TBA: 0.54 ACRES
PRO: 0.18 ACRES

ALVIN ROTHERMEL & WILBUR ROTHERMEL
(100)
0.38 ACRES

(201) X
0.11 Ac.

POR-224-0629

(201) LA

(202) LA

Chicken House

Frame Garage

2 Sty Frm House

Pond

Brush & Woods

Abandoned Orchard

Abandoned Orchard

Form House

Corn Crib

Barn

Corn Crib

Chicken House

Pond Outlet

Tree & Brush Line

Ex. 15" & Drain Tile

Ex. 12'-2 Box Culv.

Ex. Wash

Creek

Creek

Gate

Ex. 8" Drain Tile

Existing U.S. 224 Curve Data
Sta 0+21.80E to 3+32.85W
Δ 10° 16' 00"
D_c 2° 52'
D_l 1998.90'
T 177.52'
L_c 354.65'
E 7.87'

4+00 E
Begin Limited Access Highway

1+18.94 W
Begin Limited Access Highway

N 71° 07' 00" E

N 61° 17' 00" E

S 66° 32' 30" E

S 61° 17' 00" W

N 61° 17' 00" E

Exist. Right of Way Fence

Exist. Right of Way Fence

Exist. Right of Way Fence

Exist. R/W Limits

Exist. R/W Limits

New R/W Limits

New R/W Limits

Proposed Construction Limits

Proposed Construction Limits

℄ RELOC. U.S. Rte. 224

EXISTING U.S. Rte. 224 WEST CROSSING

BEGIN SHEET

END SHEET STA. 10+00

STA. 419+00

12-4-56

RIGHT OF WAY SHEET - STA. 419+00 TO STA. 10+00

FED. RI. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

2/10

POR-224-6.22

Randolph Township T-1N R-8W
Original Lot # 58

Original Lot # 57

CEMETERY

136' Cove Exposed Pipe

Drive

92.52 S 16° E

Conc. Blk. Gar. & Shop

Exist. R/W Limits ℄

ROBERT G. MATHISEN &
EDNA MAE MATHISEN
TBA 0.13 ACRES
PBO 0.08 ACRES

N 5° W

+.30 (N)

End of Limited Access Left & Right

2+00 (30) Begin Fence

End Fence 2+00 N 30

N 58° 20' E

Curve #1
PC. 11+61.89 to PT. 32+87.89
Δ - 17° 43' 00"
D - 0° 50' 00"
R - 6875.49'
Lc - 2126.00'
T - 1071.55'
E - 83.00'
Pl. Sta. 22+33.44 Bk.

SILAS J. YOUNG &
CLARICE M. YOUNG
TBA 4.58 ACRES
PBO 0.22 ACRES

ALBERT ROTHERMEL
TBA - 6.20 ACRES
PBO - 0.22 ACRES

202 LA

203 LA

204 LA

PC 11+61.89 Iron

10+00 100

11+61.89 100

17+36.11 100

19+25.03 50.92

19+36.03 50.92

19+75 100

20+00 100

22+00 100

0+00 (N 45) ℄ CH #69 Exist. ℄ Prop. Constr.
19+52.10 ℄ U.S. 224

19+52.94 ℄ U.S. 224
0+00 N 45 R/W

19+75.06 0+00

19+24.01 0+00

New R/W Limits
R-6775.49'

Proposed Construction Limits

STA 10+00

S 66° 32' 30" E

11 12 13 14 15 16 17 18 19 20 21 22

Curve #1

I.P.F. 17+27.46 51.52

I.P.F. 19+07.99 52.46

BEGIN SHEET

Straight Line

Straight Line

R-6975.49
New R/W Limits

44+00 100

52+00 100

11' Farm Drive

Exist. R/W Limits ℄

N 8° 40' 00" E 15.00 (at 19+24.01 New R/W Limits)

T.P. CH #69

R-6975.49
New R/W Limits ℄

22+00 100

20+25 100

204 L.A.

Original Lot # 57

1+75 (S) (30) Begin Fence

1+75 End of Limited Access Left & Right

1+75 (S) End Fence

202

SILAS J. YOUNG &
CLARICE M. YOUNG
0.04 ACRES

ADAM ROTHERMEL

Exist. R/W Limits ℄

3+00 S 30

E. GERTRUDE JENIOR

TBA - 2.10 ACRES

Curve #1
PC. 11+61.89 to PT. 32+87.89
Δ 17° 43' 00"
D 0° 50' 00"
R 6875.49'
T 1071.55'
L 2126.00'
E 83.00'
Pl. Sta. 22+33.44 Bk.

Original Lot # 57

ALBERT ROTHERMEL
TBA - 6.20 ACRES
PBO - 0.22 ACRES

204 LA

22+00 100

New R/W Limits ℄
R-6775.49

Proposed Construction Limits

27 23 24 25 26 Curve #1 27 28 29 30 31 32 33 34

32+65.89 100

PT 32+87.89

203 LA

34+00 100

STA. 34+00

S 84° 15' 30" E

S 66° 32' 30" E

22+00 100

New R/W Limits
R-6975.49

Proposed Construction Limits

Straight Line ℄

Brush

Tree Line

END SHEET

21+00 100

Original Lot # 57

Cor. Post 133.66 133.66

Revised 12-4-56

RIGHT OF WAY SHEET - STA. 10+00 TO STA. 34+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330( )	

3/10

POR-224-6.22

Randolph Township T-1N R-8W

Original Lot #57

E. GERTRUDE JENIOR

(TBA - 2.10 Acres)

205 LA

206 LA

207 LA

209 LA

STA. 34+00

BEGIN SHEET

New R/W Limits

Proposed Construction Limits

Ex. 4 Tile

14" Iron Pipe

8 Drive

12 CMP

15 CMP

Upper Pond

Lower Pond

Earth Dam

Spillway

S. Mill Race

Old Stream Bed

Drainage Course

Swamp

Tree & Brush Line

S. Waterway

S 84° 15 30" E

Corner Post 132.72

Standing Water

CLARK ELDRIDGE
BETTY JANE ELDRIDGE
(TBA - 3.84 Acres)

AL MONZO
CONCETTA A MONZO
(TBA - 4.14 Acres)

Curve Data #2
RC. 48+84.67 to PT. 58+41.81
Δ 9° 36' 00"
D 9° 56.00'
R 601.38.83'
T 479.54'
L 957.14'
E 18.10
PI 53+04.21 (BK)

Original Lot #56

EARL R. THOMAS
NANCY A THOMAS
(TBA - 9.97 Acres)

208 LA

Straight Line

Dr. Course

Water Hole

Edge of Swamp

Woods

Curve #2
N 86° 48' 30" E

STA 58+00

END SHEET

12-4-54

RIGHT OF WAY SHEET - STA. 34+00 TO STA. 58+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	330( )	

4/10

POR-224-6.22

Randolph Township T-1N R-9W

208 LA	EARL R & NANCY A. THOMAS	TBA	9.97 ACRES
209 LA	LUCRETIA E. WILLIS	TBA	2.44 ACRES
210 LA	BESSIE WISE	PRO	0.06 ACRES
		TBA	1.50 ACRES
210 X	WORK AGREEMENT FOR CHANNEL CLEANOUT (30')		
211	G. RAGULEE WESTERN, GLADYS WESTERN		0.01 ACRES
211 B	ANDY JHORGO		0.01 ACRES
212 LA	AGNES LANG	PRO	0.06 ACRES
		TBA	0.27 ACRES
213 LA	SYLVAN HUTH EDITH HUTH	PRO	0.01 ACRES
		TBA	0.27 ACRES
214	LEWIS SWARTZ		0.09 ACRES
215 LA	WILSON & HAZEL MANGOLD	PRO	0.18 ACRES
		TBA	4.16 ACRES
215	WILSON & HAZEL MANGOLD		1.41 ACRES
216	EMMET & EDITH ENGLEHART		0.04 ACRES
217	CLEM HUTH		0.04 ACRES

Curve Data #3
PC 64+22.58 to PT 73+97.08
Δ 8° 07' 15"
D 0° 15' 00"
R 6875.49'
T 488.07'
L 974.50'
E 17.30'
PI Sta. 69+10.65 Bk.

Curve Data #3
PC 64+22.58 to PT 73+97.08
Δ 8° 07' 15"
D 0° 30' 00"
R 6875.49'
T 488.07'
L 974.50'
E 17.30'
PI Sta. 69+10.65 Bk.

MATCH LINE A

MATCH LINE A

RIGHT OF WAY SHEET - STA. 58+00 TO STA. 82+00

12-1-56

FED. RD. DIVISION	STATE	PROJECT	F SEAL YEAR
2	OHIO	F-330 ( )	

5 / 10

POR-224-6.22

Randolph Township T-1N R-8W

WILSON MANGOLD
HAZEL MANGOLD
(PRO - 0.18 Acres)
(TBA - 4.16 Acres)

2.15 LA

1½ Sty HSE

82+00 130.72

IDF 82+66.48 130.72

New R/W Limits ℄

New R/W Limits

IDF 83+06.48 130.00

83+39.47 130.00

STA. 82+00

BEGIN SHEET

Brush Line

New R/W Limits ℄

82+00 100.00

2.15
1.41 Acres

83+39.47 100.00

New R/W Limits

82+00 117.91

83+39.48 117.91

Original Lot # 55

2.18 LA

New R/W Limits ℄

Proposed Construction Limits ℄

83+28.60

82 83 84 85 86 87 88 89 90 91 92 93 94

Tree & Brush Line

Proposed Construction Limits

New R/W Limits

2.18 LA

JAMES A SPELLMAN
ALICE M SPELLMAN
(TBA - 2.98 Acres)

Original Lot # 55

92+32.43 100.00

2.17 LA

94+00 100.00

92+00.00

S 85° 04' 15" E

Tree Stumps & Brush

92+32.43 100.00

2.17 LA

94+00 100.00

GEORGE H GIBSON
TBA - 1.53 Acres
AMANDA GIBSON

Original Lot # 55

2.19 LA

94+00 100.00

95+13.74 100.00

97+00 100.00

99+00 100.00

2.20 LA

New R/W Limits ℄

Proposed Construction Limits ℄

102+00 100.00

104+00 100.00

106+00 100.00

STA. 106+00

95+13.52

94 95 96 97 98 99 100 101 102 103 104 105 106

S 85° 04' 15" E

Tree & Brush Line

95+13.94 100.00

Proposed Construction Limits

New R/W Limits

END SHEET

94+00 100.00

2.19 LA

GEORGE H GIBSON
(TBA - 1.53 Acres)
AMANDA GIBSON

Original Lot # 55

Farm Drive

2.20 LA T.B.A. 5.70 Acres

ANNA M. KNECHT
a.k.a. ANNA LOHR KNECHT
EDNA MYRTLE LOHR
n.k.a. EDNA LOHR PHILLIPS
HARRY W. LOHR
RAY M. LOHR

MARSHALL E. LOHR
MARSHALL H. LOHR - Life Estate

12-4-56

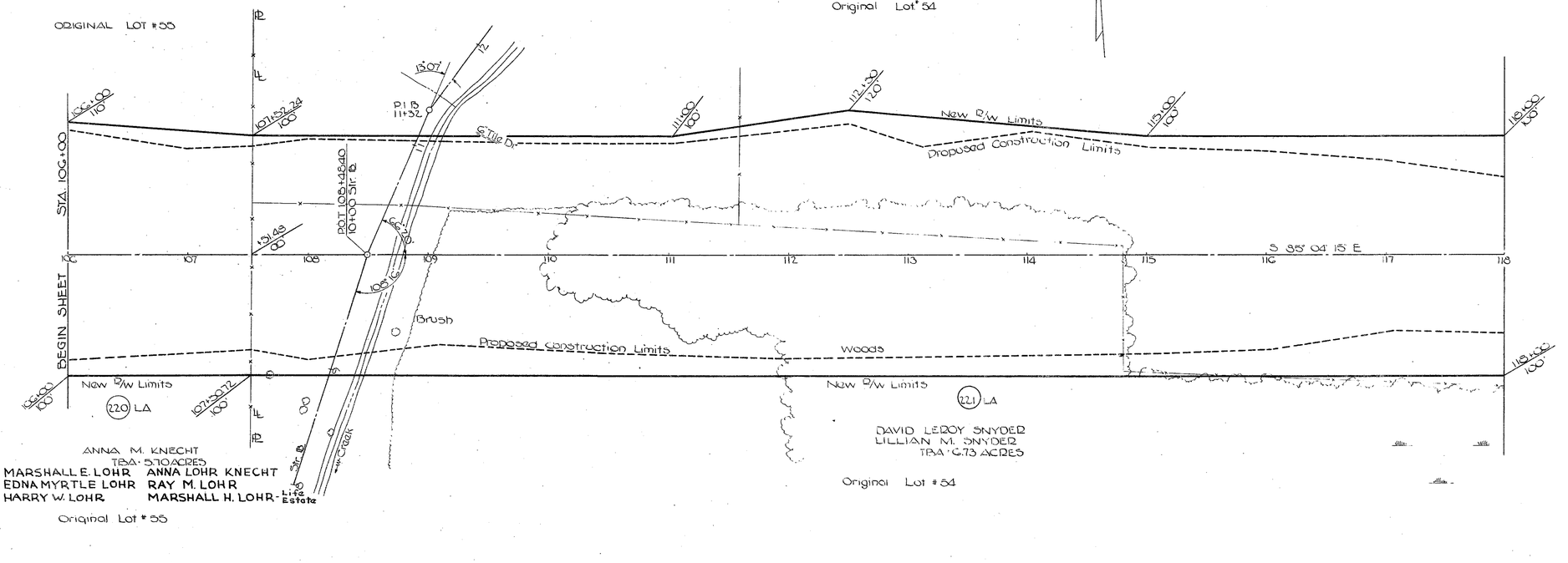
RIGHT OF WAY SHEET - STA. 82+00 TO STA. 106+00

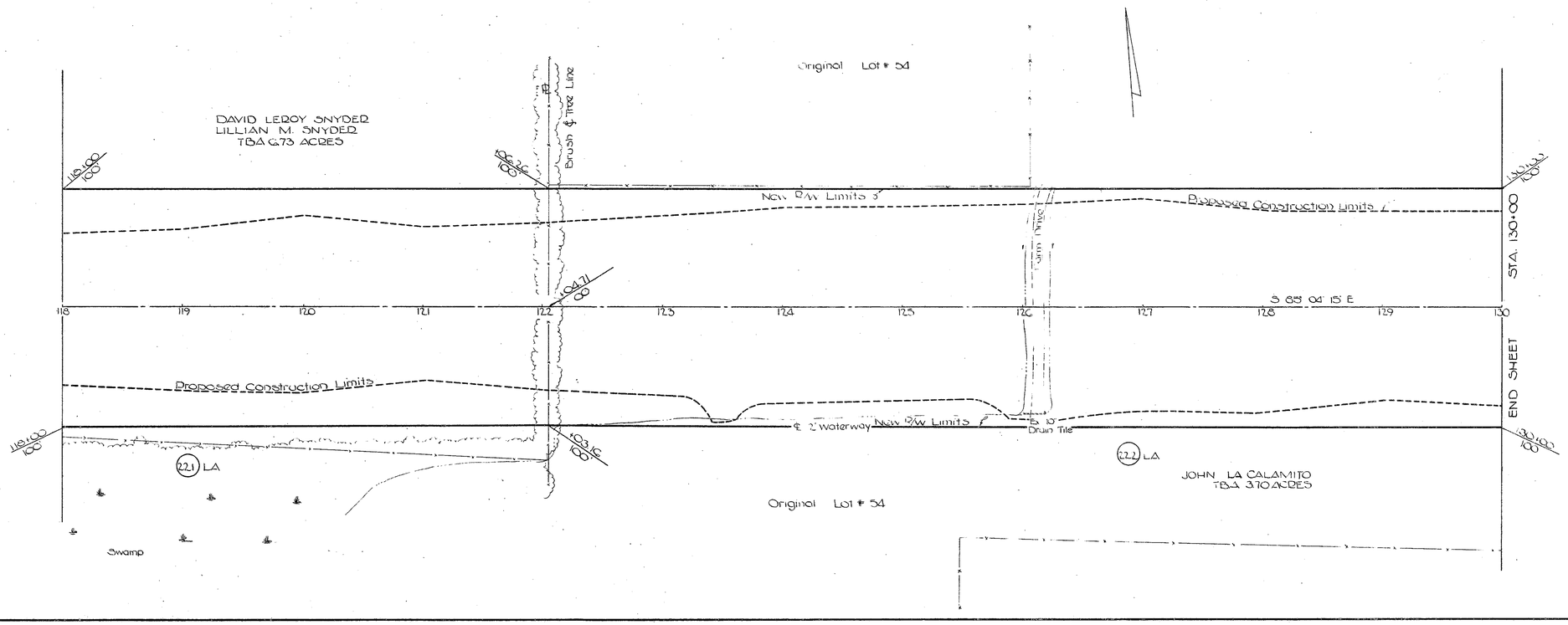
FED. RD. DIVISION	STATE	PROJECT	FEDERAL YEAR
2	OHIO	P-350( )	

6
10

POR-224-G.22

Randolph Township T-1N R-8W





12-4-56

RIGHT OF WAY SHEET - STA. 106+00 TO STA. 130+00

FED. RD DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

7
10

POR-224-G.22

JOHN LA CALAMITO
(TBA-3.70 Acres)

Randolph Township T-1N R-8W

Original Lot # 54

FRANK MOLEDOR
ESTELLA MOLEDOR
IRENE MOLEDOR
MAGGIE MOLEDOR - Life Estate
(TBA - 6.71 Acres)

Original Lot # 53

222 LA

223 LA

STA 130+00

BEGIN SHEET

130+00
100

130+13.20
100

130+11.25

130+02.30
100

130+00
100

Brush & Trees

New R/W Limits

Proposed Construction Limits

137+46.23
100

137+14.38

137+16.33
100

142+00
100

142+20
100

2± Trees & Brush

S 55° 04' 15" E

130 131 132 133 134 135 136 137 138 139 140 141 142

N

Farm Drive

Original Lot # 54

Original Lot # 53

Curve Data #4
PC 148+14.62 to PT 159+46.12
Δ 17° 45' 45"
D 0° 50' 00"
R 6875.49'
T 1074.37'
L 2131.50'
E 85.43'
PI 158+88.99 (15K)

FRANK MOLEDOR
ESTELLA MOLEDOR
IRENE MOLEDOR
MAGGIE MOLEDOR - Life Estate
(TBA - 6.71 Acres)

223 LA

JULIA REINHART
(TBA - 1.63 Acres)

224 LA

EDGAR BETTES
(TBA 2.35 Acres)

225 LA

226 LA

147+00
100

144+73.23
100

144+27.84
100

PC 148+14.62

R-6875.49'

153+34.05
100

154+00
100

STA 154+00

153+14.67

Curve #4

147 148 149 150 151 152 153 154

S 55° 04' 15" E

END SHEET

144+71.40

148+76.47

R-6975.49'

142+00
100

144+69.52
100

146+14.62
100

146+43.41
100

153+35.14
100

154+00
100

Small Trees & Brush

Apple Orchard

FREDERICK SCHWEITZER
LULAH SCHWEITZER
(TBA - 1.40 Acres)

Original Lot # 55

12-4-56

RIGHT OF WAY SHEET - STA. 130+00 TO STA. 154+C

FED. RD. DIVISION	STATE	PROJECT	TRIBAL YEAR
2	OHIO	F-330( )	

8/10

POR-224-G.22

Randolph Township T-1N R-8W

Original Lot # 53

Curve #4
PC 148+14.62 to PT 149+46.12
Δ 17° 45' 45"
D 0° 50' 00"
R 6875.49'
L 2131.50'
T 1074.37'
E 83.43
PI Sta 158+88.99 Bk

FREDERICK SCHWEIZER
LULAH SCHWEIZER
TBA 1.40 ACRES

RODGER L. WOLCOTT
DOROTHY M. WOLCOTT
TBA 0.68 ACRES

RUBY SCHAFFNER
TBA 1.47 ACRES

226 LA
227 LA
228 LA
229 LA

STA 154+00
STA 165+00

R-6775.49

Apple Orchard

New R/W Limits
R-6775.49

Proposed Construction Limits

154 155 156 157 158 159 160 161 162 163 164 165

Curve #4

POR-224-0928

BEGIN SHEET

END SHEET

S 69° 04' 15" E

N 77° 10' 00" E

Proposed Construction Limits
R-6975.49

New R/W Limits

Straight Line

228 x
0.06 Ac.

JENNIE C UNGER
TBA 2.65 ACRES
PRO 0.25 ACRES

#11 MICHAEL RODENBUCHER
& LAUIZA M. RODENBUCHER
0.07 ACRES

Garage

Ex. 8" Drain Tile

Original Lot # 53

12-4-58

RIGHT OF WAY SHEET - STA 154+00 TO STA 165+00

FED. AID DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO F-330 ( )		

9
10

POR-224-6.22 & 9.50

RANDOLPH TOWNSHIP
T-1N R-8W

Original Lot #52

Original Lot #53

Original Lot #52

END SHEET

BEGIN SHEET

STA 4+00

STA 165+00

MATCH LINE

MATCH LINE

Curve Data #4
Δ-17°45'45"
Dc-0°50'
R-6875.49'
Lc-2131.50'
T-1074.37'
E-83.45
PC 148+14.62
PT 169+46.12

** MODIFICATION OF (230) LIMITED ACCESS LINE AS PER DIRECTORS JOURNAL VOL 1117, PG 479

12-4-58 1-29-92 MODIFIED L/A LINE PL 229

229	JENNIE C. UNGER		0.10 Acres
229 LA	JENNIE C. UNGER	PI20	0.75 "
229 LA	JENNIE C. UNGER	TBA	2.63 "
230	MICHAEL & LAURA M. RODENBUCHER		0.07 "
231	C.E. & H. KENTY		0.03 "
232	RUBY SCHAFFNER		0.26 " 232 B 0.30 Ac.
232 LA	RUBY SCHAFFNER	PI20	0.29 "
232 LA	RUBY SCHAFFNER	TBA	2.27 "
233 LA	DALE NEAL	TBA	1.21 "
233 LA	DALE NEAL	PI20	0.38 "
234	NORA WRIGHT		0.12 "
235	MINNIE F. SHARP		0.03 "
235 LA	MINNIE F. SHARP	PI20	0.27 "
235 LA	MINNIE F. SHARP	TBA	1.39 "
236 LA	EVALYN WILLADINE MILLER & ELMER ELLIS MILLER	PI20	0.15 "
236 LA	EVALYN WILLADINE MILLER & ELMER ELLIS MILLER	TBA	1.99 "
237 LA	JESSE U. HILLEGAS	TBA	0.03 "
237 LA	JESSE U. HILLEGAS	PI20	0.10 "

RIGHT OF WAY SHEET - STA. 165+00 (RAN.) TO STA. 4+00 (AT.)

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	F-330 ( )	

10
10

POR-224-6.22 & 9.58

Randolph Township T-1N R-8W

Original Lot #62

MINNIE F. SHARP
(TBA · 1.39 Acres)
(P120 · 0.27 Acres)
235 LA

MINNIE F. SHARP
TBA · 2.15 Acres
235B LA

Original Lot # 52

FRANK KALTENBACH
ELIZABETH KALTENBACH
(TBA · 3.06 Acres)
239 LA

STA 4+00

1+00 POT

4+42.16 100

Stream

Prop Cor

5+30.41 100

New R/W Limits

Proposed Construction Limits

13+13.72 100 POT

14+28.82 100

22½° Farm Drive

Tree, Brush & Fence Line

16+00 POT

8+70.54

8+39.05 35.4

4 5 6 7 8 9 10 11 12 13 14 15 16

N 77° 10' 00" E

Tree & Brush Line

BEGIN SHEET

Proposed Construction Limits

New R/W Limits

1+00 POT

8+11.30 100 0.67

11+36.00 100

12+47.24 100 0.67

16+00 POT

236 LA

EVALYN WILLADINE MILLER
ELMER ELLIS MILLER
(TBA · 1.99 Acres)
(P120 · 0.15 Acres)

237 LA

JESSE W. HILLEGAS
TBA · 0.37 Acres

238 LA

W. DALE JONES
HAZEL NEEDHAM JONES
(TBA · 2.36 Acres)

Original Lot # 52

Original Lot #62

FRANK KALTENBACH
ELIZABETH KALTENBACH
(TBA · 3.06 Acres)
239 LA

Original Lot # 62

16+00 POT

PC 16+93.39

22½° Farm Drive

New R/W Limits
D-6°-15'-49"

Proposed Construction Limits

17+46.15

17 18 19 20 21 22 23 24 25 26 27 28

Curve # 5

Brush, Tree & Fence Line

22+88.07

Proposed Construction Limits

Original Lot # 62
D-6°-15'-49"

New R/W Limits

Brush, Tree & Fence Line

16+00 POT

100

PC 16+93.39

236 LA

W. DALE JONES
HAZEL NEEDHAM JONES
(TBA · 2.36 Acres)

239 LA

24+46.72 100

Original Lot #61

JONATHAN E. LLOYD
MARIE M. LLOYD
240 LA

24+79.64 100

D-6°-15'-49"

24+00 POT

N 77° 10' 00" E

S 83° 26' 52" E

Fence Line

27+43.44

STA. 28+00

Original Lot #62

Original Lot #61

D-6°-15'-49"

Woods

239 LA

240 LA

24+46.72 100

Sinclair Crude Petroleum Pipe Line

25+00 100

END SHEET

Curve Data #5
P.C. 16+93.39 to P.I. 37+79.64
Δ 17° 23' 05"
D 6° 30' 00"
R 875.49'
T 1051.20'
L 2085.25
E 199.90'
P.I. 27+44.59 (BK)

PC 16+93.39

12-4-56

RIGHT OF WAY SHEET - STA 4+00 TO STA. 28+00

224-POR-6.22

1/2

LIMITED ACCESS HIGHWAY
I Hereby Certify this Plat to be Correct
Signed by: _____
Division Deputy Director
State of Ohio Department of Highways

LOCATION PLAT

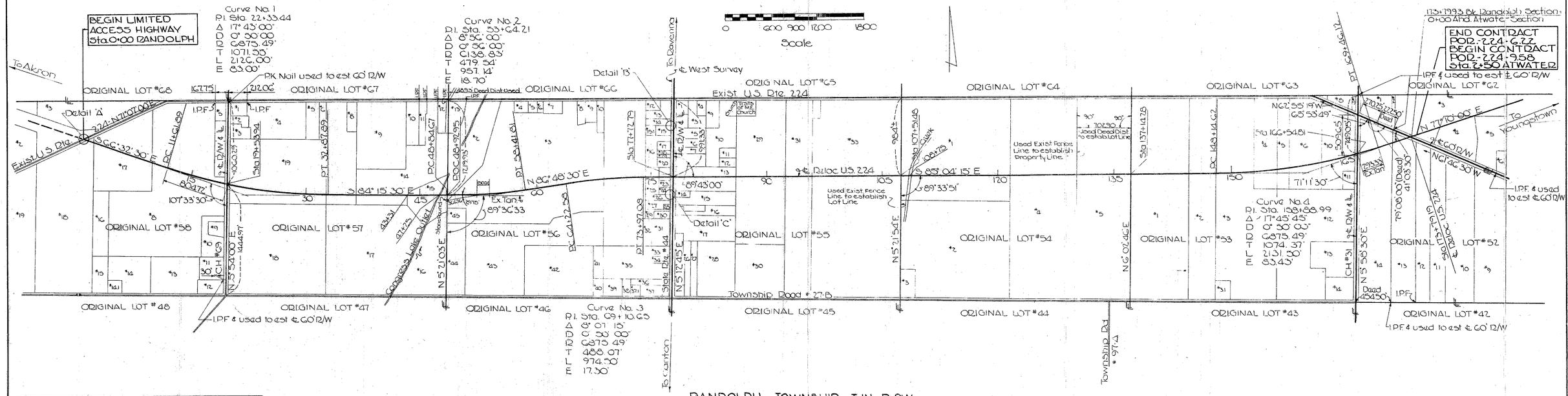
NATIONAL ROAD

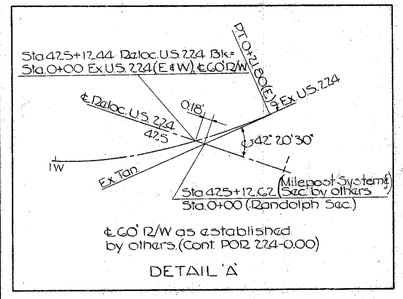
U.S.R POR.-224-(6.22 & 9.58)

PORTAGE COUNTY-RANDOLPH AND ATWATER TOWNSHIPS

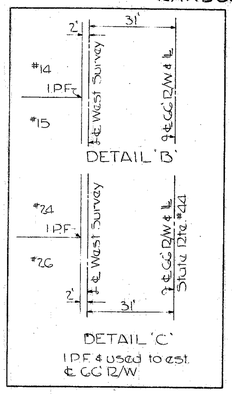
Received At
Recorded
Plat Book 12 Page 21
Signed Recorder Portage County
Fee Ohio

Signed
Anthony S. Aurilio - P.E. № 6063
Date. Registered Surveyor № 3210

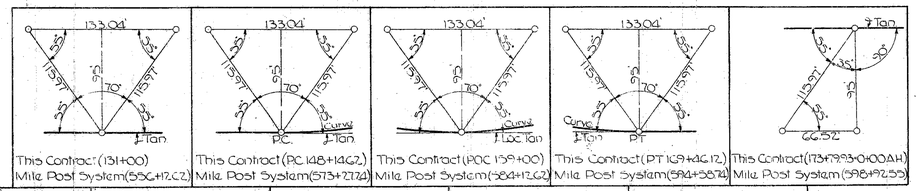




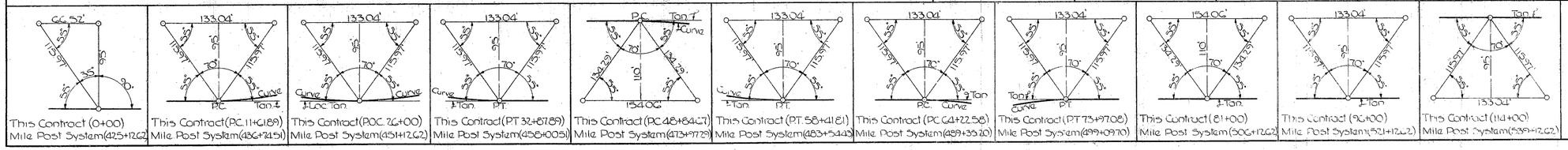
RANDOLPH TOWNSHIP T-1N, R-8W



CENTER LINE REFERENCE MONUMENTS WILL BE SET AFTER CONSTRUCTION



This Contract (131+00) Mile Post System (55G+12.62)
This Contract (PC 148+14.62) Mile Post System (573+27.74)
This Contract (POC 159+00) Mile Post System (584+17.62)
This Contract (PT 159+46.12) Mile Post System (584+58.74)
This Contract (173+79.93+0+00 Δ H) Mile Post System (598+92.55)



This Contract (0+00) Mile Post System (42.5+12.62)
This Contract (PC 11+61.89) Mile Post System (426+24.51)
This Contract (POC 26+00) Mile Post System (451+12.62)
This Contract (PT 32+87.89) Mile Post System (458+00.51)
This Contract (PC 48+84.71) Mile Post System (473+97.29)
This Contract (PT 58+41.81) Mile Post System (483+54.43)
This Contract (PC 64+22.58) Mile Post System (489+35.20)
This Contract (PT 73+97.08) Mile Post System (499+09.70)
This Contract (81+00) Mile Post System (506+12.62)
This Contract (96+00) Mile Post System (521+12.62)
This Contract (114+00) Mile Post System (539+12.62)

PREPARED AND RECOMMENDED BY
AURILIO, PACE & BALLARD
CONSULTING ENGINEERS

SUMMARY OF ADDITIONAL R/W REQUIRED

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

POR.-224-6.22

PARCEL NO.	OWNER	AREA ACRES	EXIST BLDGS	SHEET NO'S.	REMARKS
200	Alvin Rothermel &	0.38			
	Wilbur Rothermel				
200 L.A.	Wilbur Rothermel &	0.54	–		
	Alvin Rothermel				
201 L.A.	Charles Ralph Smith	4.13	–		W.A.
202 L.A.	Silas J. Young &	4.58	–		
	Clarice M. Young				
202	Silas J. Young &	0.04	–		
	Clarice M. Young				
203 L.A.	Robert G. Mathisen &	0.15	–		
	Edna Mae Mathisen				
204 L.A.	Albert Rothermel	6.20	–		
205 L.A.	E. Gertrude Jenior	2.10	–		
206 L.A.	Clark Eldridge &	3.84	–		
	Betty Jane Eldridge				
207 L.A.	A.L. Monzo &	4.14	–		
	Concetta A. Monzo				
208 L.A.	Earl R. Thomas &				
	Nancy A. Thomas	9.97	–		
209 L.A.	Lucretia E. Willis	2.44	–		
210 L.A.	Bessie Wise	1.30	Yes		W.A.
211	G. Ragulee Western &	0.02	–		
	Gladys A. Western				
211 B	Andy Chorgo	0.02	–		
212 L.A.	Agnes Lang	0.27	Yes		
213 L.A.	Sylvan & Edith Huth	0.27	Yes		
214	Lewis Swartz	0.09	–		
215 L.A.	Wilson Mangold &	4.16	Yes		
	Hazel Mangold				
215	Wilson Mangold &	1.41	–		
	Hazel Mangold				
216	Emmet Englehart &	0.04	–		
	Edith Englehart				

PARCEL NO.	OWNER	AREA ACRES	EXIST BLDGS	SHEET NO'S.	REMARKS
217	Clem Huth	0.04	–		
218 L.A.	James A. Spellman &	2.98	–		
	Alice M. Spellman				
219 L.A.	George H. Gibson &	1.53	–		
	Amanda Gibson				
** 220 L.A.	~~Minerva J. Lohr &~~	~~5.70~~	–		See next column
	~~Anna M. Knecht~~				
221 L.A.	David Leroy Snyder &	6.73	–		
	Lillian M. Snyder				
222 L.A.	John La Calamito	3.70	–		
*** 223 L.A.	~~Henry Moledor~~	~~6.71~~	–		See next column
224 L.A.	Julia Reinhart	1.63	–		
225 L.A.	Edgar Bettes	2.38	–		
226 L.A.	Fredrick Schweizer	1.40	–		
	& Lulah Schweizer				
227 L.A.	Rodger L. Wolcott &	0.68	–		
	Dorothy M. Wolcott				
228 L.A.	Ruby Schaffner	1.47	–		
***** 229 L.A.	Jennie C. Unger	2.63	Yes		See next column
229	Jennie C. Unger	0.10	Yes		
230	Michael Rodenbucher	0.07	–		
	& Laura M. Rodenbucher				
231	C.E. & H. Kenty	0.03	–		
232	Ruby Schaffner	0.26	–		
232 B	Ruby Schaffner	0.30	–		
232 L.A.	Ruby Schaffner	2.27	–		
233 L.A.	Dale Neal	1.21	Yes		
234	Nora Wright	0.12	–		
235	Minnie F. Sharp	0.03	–		
235 L.A.	Minnie F. Sharp	1.39	–		
236 L.A.	Evalyn Willadine Miller	1.99	–		
	& Elmer Ellis Miller				
237A L.A. ****	~~Jesse U. Hillegas~~	~~0.03~~	–		See next column

PARCEL NO.	OWNER	AREA ACRES	EXIST BLDGS	SHEET NO'S.	REMARKS
235B L.A.	Minnie F. Sharp	2.15	–		
238 L.A.	W. Dale Jones & Hazel Needham Jones	2.36	–		
239 L.A.	Frank Kaltenbach &				
	Elizabeth Kaltenbach	3.06	–		
240 L.A.	Jonathan E. Lloyd &	–			
	Marie M. Lloyd				
** 220 L.A.	Anna M. Knecht	5.70			
	a/k/a Anna Lohr Knecht				
	Edna Myrtle Lohr				
	a/k/a Edna Lohr Phillips				
	Harry W. Lohr	"			
	Marshall E. Lohr				
	Marshall H. Lohr Life Estate				
*** 223 L.A.	Frank Moledor	6.71			
	Estella Moledor				
	Irene Moledor				
	Maggie Moledor - Life Estate				
**** 237 L.A.	Jesse U. Hillegas	0.37			
237A-L.A.	Jesse U. Hillegas	0.03			
***** 228-X	Ruby Schaffner	0.08			channel

PARCEL NO.	OWNER	AREA ACRES	EXIST BLDGS	SHEET NO'S.	REMARKS

12-4-56

LEGEND FOR PROJECT-AVERAGE RESULTS OF TESTS- 404 SAMPLES TESTED

DESCRIPTION	H.R.B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Gravel.	A-1-a(0)	A-1-a	59	20	12	3	6	N.P.	N.P.	11	5
Gravel with sand.	A-1-b(0)	A-1-b	38	23	24	6	9	N.P.	N.P.	12	19
F.S. Fine sand.	A-3(0)	A-3	9	18	65	3	5	N.P.	N.P.	18	6
Coarse and fine sand.	—	A-3a	12	18	48	9	13	N.P.	N.P.	17	41
Gravel with sand and silt.	A-2-4(0)	A-2-4	36	12	25	12	15	22	3	14	14
Sandy silt.	A-4(4)	A-4a	9	8	26	29	28	22	6	17	204
Silt.	A-4(8)	A-4b	1	1	8	62	28	25	3	24	17
Silt and clay.	A-6(9)	A-6a	5	4	12	32	47	32	13	21	56
Silty clay.	A-6(11)	A-6b	4	3	13	31	49	37	18	25	17
Elastic clay. with organic material.	A-7-5(20)	A-7-5	1	4	12	46	37	72	33	66	11
Clay.	A-7-6(12)	A-7-6	4	2	6	27	61	44	18	27	14

S F Peat. S=Sedimentary. F=Fibrous. (Classified by visual inspection.)

Auger boring plotted to vertical scale only.

Auger boring - plan view.

W—— Free water.

Sod & topsoil = X' = approximate depth.

Swamp muck. S.M. = X' = approx. depth.

Berm. material.

● Water content nearly equal to or greater than liquid limit.

This A-4a soil will be rubbery and unstable at water contents which exceed the optimum.

Note: Figures beside borings indicate water content in percent.

Samples Taken.

Lab. Nos. So. 43317-43435 incl.; 43975-44050 incl.; 44332-44367 incl.; 44449-44453 incl.; 44554-44662 incl.; 44782-44781 incl.; 44973-45022 incl.

Moisture Density Samples.

Lab. Nos. So. 44048-44050 incl.; 44449-44453 incl.

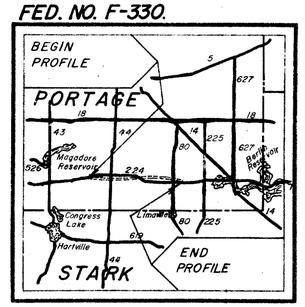
SOIL PROFILE
PORTAGE COUNTY
POR-224-6.22

STATE HIGHWAY TESTING AND RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

1/8

NOTE: THE INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS SECURED FOR THE USE OF THE STATE OF OHIO AND IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING THE CONSTRUCTION OF THE PROJECT.

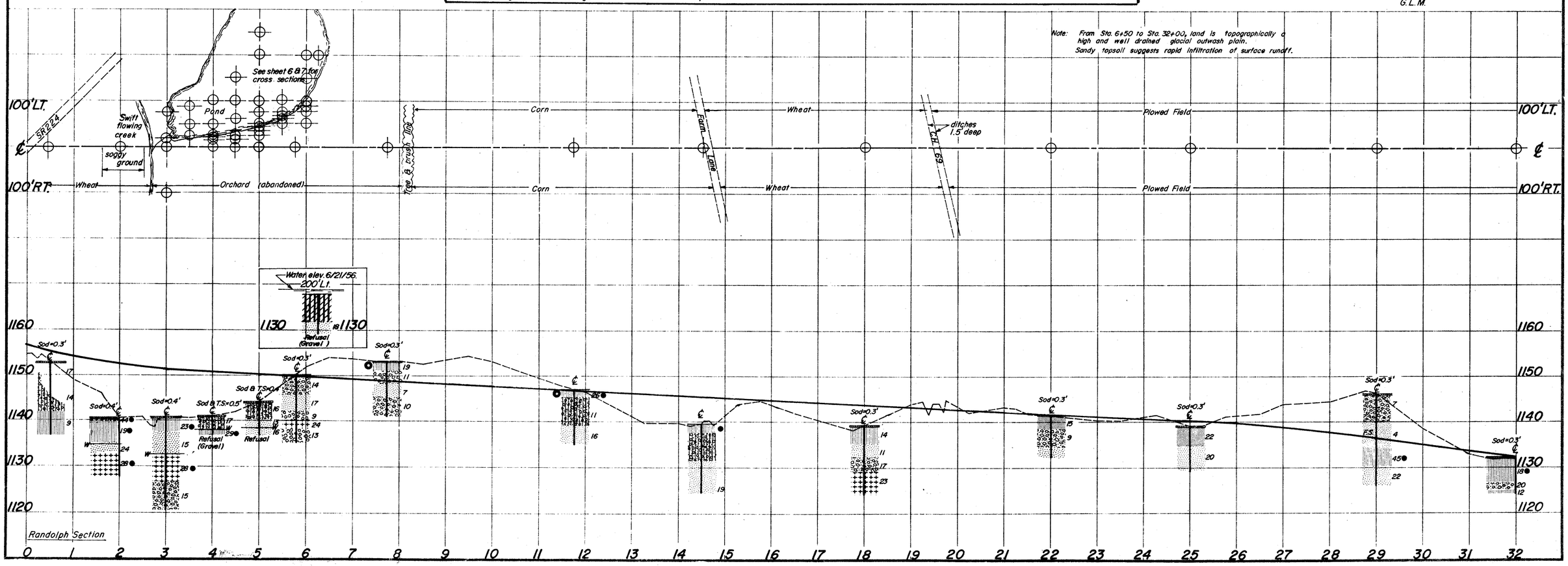
FED. NO. F-330.



LOCATION MAP

Recon-L.O.T.- 5/30/56
Drilling-C.A.S.-C.A.C.-9/6/56
Drafting-P.A.H.-9/20/56
G.L.M.

Note: From Sta. 6+50 to Sta. 32+00, land is topographically a high and well drained glacial outwash plain. Sandy topsoil suggests rapid infiltration of surface runoff.



SOIL PROFILE
PORTAGE COUNTY
POR-224-6.22

STATE HIGHWAY TESTING AND RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

2/8

Note: From Sta. 43+00 to Sta. 49+00 ground is low, drainage poor. Mill Race east of Sta. 43+00 traps drainage to west. Drainage to east trapped by earth fill resulting from dredging of Congress Run.

Woods — Tree Line — Plowed Field — Waterway — Open Field — Plowed Field — Open Field — Pond — Dam — Mill Race — Pond — See sheet 7 for cross section. — Old Stream Bed small sluggish flow — Dam — Congress Run — See sheet 8 for cross sections. — Swamp — Wheat — Corn — Wheat — Corn Stubble

Sod=0.3' 19 20 12 — Sod=0.4' 29 20 Refusal — Sod=0.4' 18 15 21 — Sod=0.3' 14 W 22 — Sod=0.3' 6.5' ht. 20 22 — Sod=0.4' 23 W 23 14 22 Hole closed at 6.5' (Hand auger) — Sod=0.4' 24 16 W 26 29 — Water elev. 9/16/56 — Refusal (Gravel) — Sod=0.4' 15 25 29 W 19 — Sod=0.4' 18 22 20 20 — Sod=0.4' 22 — Sod=0.4' 20 14 20 — Sod=0.4' 17 22 17

Corn — Corn — Swamp — Note: From Sta. 50+00 to Sta. 78+00, land is well drained southward into swampy area. — See sheets 7&8 for cross sections. — Brush — Swamp — Edge of compressable material — Sump, draining septic tank drain water into swamp, rapid flow, gravel bed and sides 2-3' deep. — SR 44 — Field — Pronounced Swale 150' RT. of ℄ — Note: From Sta. 78+00 to Sta. 107+00 well drained glacial outwash plain — Corn — Clover — Plowed Field — Wheat — Plowed Field — Corn — Wheat

Sod=0.4' 150' Rt. 30 20 23 17 33 W

Sod=0.3' 15 22 24 26 24 71 — Sod=0.4' F.S. 11 13 10 19 — Sod=0.3' 12 18 Hole closed at 10' — Sod=0.4' 26 12 11 27 W 14 — Sod=0.4' 16 14 9 10 12 6 Hole closed at 12' — Sod=0.4' 11 12 — Sod=0.4' 22 14 14 Refusal — Sod=0.4' 16 10 13 12

Moisture Density Samples.
(1.5-10.0') Maximum dry wt. 126.6 lbs/cu. ft. Optimum moisture 10.5%
(10.0-12.5') Maximum dry wt. 134.1 lbs./cu.ft. Optimum moisture 8.5%

100'LT. 100'RT. ℄ 1160 1150 1140 1130 1120 1110 1100 1090 1080 1070

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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96

SOIL PROFILE
PORTAGE COUNTY
POR-224-6.22

STATE HIGHWAY TESTING AND RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO

3/8

See sheet 6 for cross sections.

100'LT. Corn Field | Clover | Wheat | Clover — Oat Field — 100'LT.
℄
100'RT. Corn Field | Clover | Wheat | Clover

Stream — Woods

Note: Area between Sta. 110+00 and Sta. 114+00 is low and poorly drained

Sod=0.3' 75' Lt. — Hole closed at 9'

Plowed ground to left of ℄ shows organic material. — Field

Swampy

Note: Several borings in swampy area showed soil similar to that at Sta. 124+00 and 125+00. No organic material was encountered.

Hole closed at 9' — Refusal (Hand auger) — Sod=0.4' 65 Lt. — Hole closed at 8' — Hole closed at 10' — Hole closed at 8' — Refusal (Hand auger) — Refusal (Hand auger) — Refusal (Hand auger) — Hole closed at 10'

96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128

100'LT. Field | Hay | Corn — Wheat — Corn — Orchard — Hay — 100'LT.
℄
100'RT. Hay | Corn — Wheat — Corn — Orchard — Hay — 100'RT.

Tree — 225'

Sod=0.4' 205 Lt.

Refusal (Hand auger) — Refusal (Hand auger) — Refusal (Hand auger)

Moisture density sample (0.3-(1.5') Maximum dry wt. 119.3 lbs./cu. ft. Optimum moisture 12.7%

128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160

100'LT. Hay | Wheat — 1.5' ditches — C.H. 31 — SR 224 — SR 224 — Clover — Plowed Field
℄
100'RT. Hay | Wheat — Wheat — Pasture — 100'RT.

Note: From Sta. 115+00 to Sta. 173+00 drainage is fair to good. the area is an eastward extension of the outwash plain between Sta. 78+00 and 107+00.

Note: Sta. 0+00 to Sta. 3+00 Ground breaks as it approches stream. This is part of the outwash plain and well drained

Small Stream — Tree & Brush Line — Tree & Brush Line — High well drained land

Randolph Section — STA. 173+79.95 Back = Sta. 0+00 Ahead — Atwater Section

(Hand auger)

160 161 162 163 164 165 166 167 168 169 170 171 172 173 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SOIL PROFILE

PORTAGE COUNTY

POR-224-6.22

4/8

STATE HIGHWAY TESTING AND RESEARCH LABORATORY

O. S. U. CAMPUS, COLUMBUS, OHIO

Note: By holes noted & spot checks, no organic or compressable material was found below 0.6'. Swamp is due to thin clay silt layer beneath organic causing impervious seal and swamp to form on top.

Note: Water standing at Sta. 27+00, poor drainage. hummocky topography.

Surface water 7/9/56 Sta 47+50

From Sta. 63+50 to Sta. 75+00, water standing in many places, hummocky terrain.

Unable to drill at Sta. 55+00 and 62+00 because of crops.

Standing water from Sta. 89+90 to Sta. 96+10

Note: Boring refusals were due to encounters with glacial boulders.

Moisture Density Samples
(0.4-2.5') Maximum dry wt. 109.6 lbs./cu. ft.
Optimum moisture 16.9%
(2.5-10.5') Maximum dry wt. 126.6 lbs./cu. ft.
Optimum moisture 10.5%
(10.5-16.0') Maximum dry wt. 129.3 lbs./cu. ft.
Optimum moisture 9.7%

Moisture Density Sample
(0.4-19.0') Maximum dry wt. 124.2 lbs./cu. ft.
Optimum moisture 11.2%

SOIL PROFILE

PORTAGE COUNTY

POR-224-6.2 ℄

STATE HIGHWAY TESTING AND RESEARCH LABORATORY

O. S. U. CAMPUS, COLUMBUS, OHIO

5/8

Note: Between Sta. 126+00 and Sta. 129+50 there is a meandering stream, not shown because of its very erratic course.

100'LT. Pond Ditches 1'-1.5' deep ℄ 100'RT. — Swampy — Creek — Woods — Penna. RR — High ground, well drained outwash plain. — Corn — Tree line — Well drained — Field — Clover — Tree Line — Clover

1150 1140 1130 1120 1110 1100 1090 1080

Surface water 7/12/56
Sod & T.S.=0.8'
50' Rt.
50 30 20 27
Refusal (Gravel)

Sod=0.4' ℄ 16 19 18 25 12 14 12 20

Sod=0.4' 35' Rt. 21 12 11 12

Sod=0.4' 12' Rt. 16 24 14 W F.S. 23

S.M.=0.8' 40' Lt. 28 25 28 40
Refusal (Hand auger)

Sod=0.4' ℄ 26 22 23 11 15 F.S.

Sod=0.3' ℄ 14 18 14 19 11 11 24

Sod=0.3' ℄ 35 29 27 29 22 14

Sod=0.4' ℄ 25 20

Sod=0.4' ℄ 21 13 13 13 13

Sod & T.S.=0.6' ℄ 26 22 26 12

T.S.=0.5' ℄ 25 14 21

114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146

100'LT. Clover Corn Trees ℄ 100'RT. Clover Corn — High well drained land

1150 1140 1130

T.S.=0.5' ℄ 23 19 16 Refusal (Hand auger)

T.S.=0.6' ℄ 18 15 20

T.S.=0.5' ℄ 25 13

T.S.=0.6' ℄ 27 15 16

Sod & T.S.=0.8' ℄ 26 24 16 W

Sod & T.S.=0.4' ℄ 24 18 15

Sod & T.S.=0.5' ℄ 24 24 Refusal (Boulders)

Sod & T.S.=0.6' ℄ 31 20 26 Refusal (Boulders)

Sod & T.S.=0.4' ℄ 19 18 14 Refusal (Hand auger)

Sod & T.S.=0.4' ℄ 21 16 16 Refusal (Hand auger)

146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178

SOIL PROFILE

PORTAGE COUNTY

POR-224-6.22

STATE HIGHWAY TESTING AND RESEARCH LABORATORY

O. S. U. CAMPUS, COLUMBUS, OHIO

6/8

100'LT. — High well drained land. — Ditches 2'-3' deep. — Hay — 100'RT.

S.R. 80

Water course

Woods

1150 / 1140 / 1130 / 1120 / 1110

Sod & T.S.=0.4' — 21, 16, 16 — Refusal (Hand auger)

Sod & T.S.=0.6' 75' Rt. — 19, 18, 22, 15, 11, W 14

Sod & T.S.=0.6' — 26, 13, 19, W 14, 17

Sod & T.S.=0.6' — 23, 17 — Refusal (Hand auger)

Sod & T.S.=0.5' — 28, 18, 15 — Refusal (Boulders)

Sod & T.S.=0.8' — 25 — Refusal (Hand auger)

AT WATER SECTION
DOES NOT APPLY TO THIS CHART

178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193

NOTE: Holes drilled on cross sections to a depth less than 6' with no refusal indicated, were drilled to determine depth of organic material.

Note: All cross sections are on Randolph section.

Sta. 3+00 — Proposed grade.

Sod=0.4' — 20

Sta. 3+50 — Proposed grade.

Sod=0.4' — 29, 15, W, 28, 15

Sod=0.4' — 15, 25

Sod=0.4' — 35, 18, W

Sta. 4+00 — Proposed grade.

S.M.=1.02' — 28 organic, 23 — Refusal (Gravel)

Water elev. 8/28/56. — 106, 159, 21 — Refusal (Gravel)

Sod & T.S.=0.4' — 27, 28

Sod & T.S.=0.5' — 17, W, 29 — Refusal (Gravel)

T.S.=0.5' — 19, 30 — Refusal (Gravel)

Water elev. 8/28/56. — 165, 59, 41 — organic — 21 — Refusal (Gravel)

72

SOIL PROFILE

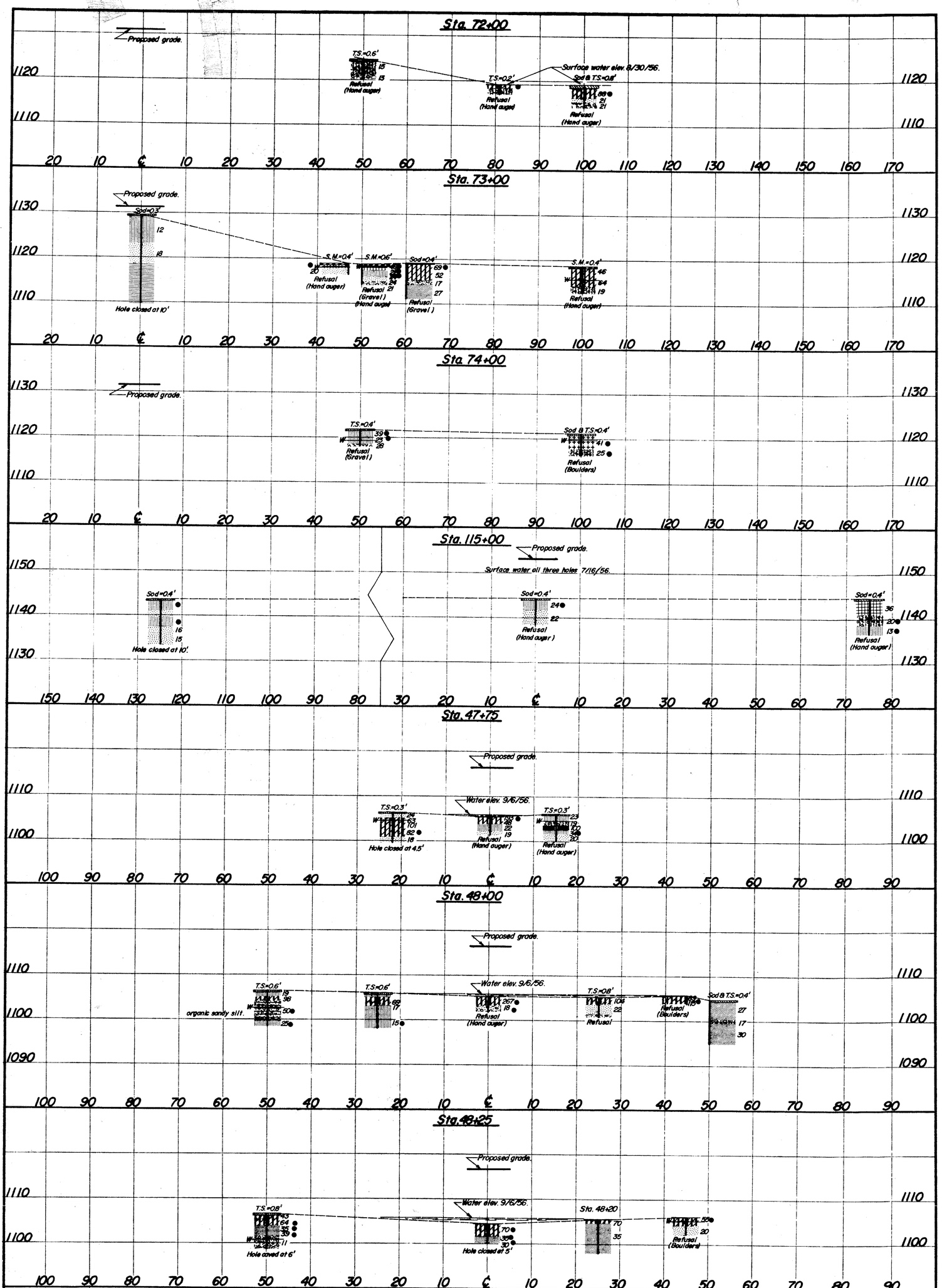
PORTAGE COUNTY

PoR-224-6.22

STATE HIGHWAY TESTING AND RESEARCH LABORATORY

O. S. U. CAMPUS, COLUMBUS, OHIO

7 / 8



SOIL PROFILE
PORTAGE COUNTY
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