

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

AC I-1101 (19)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	AC I-1101 (19)	336

MOT.-25-0.49

MOT.-25-0.49

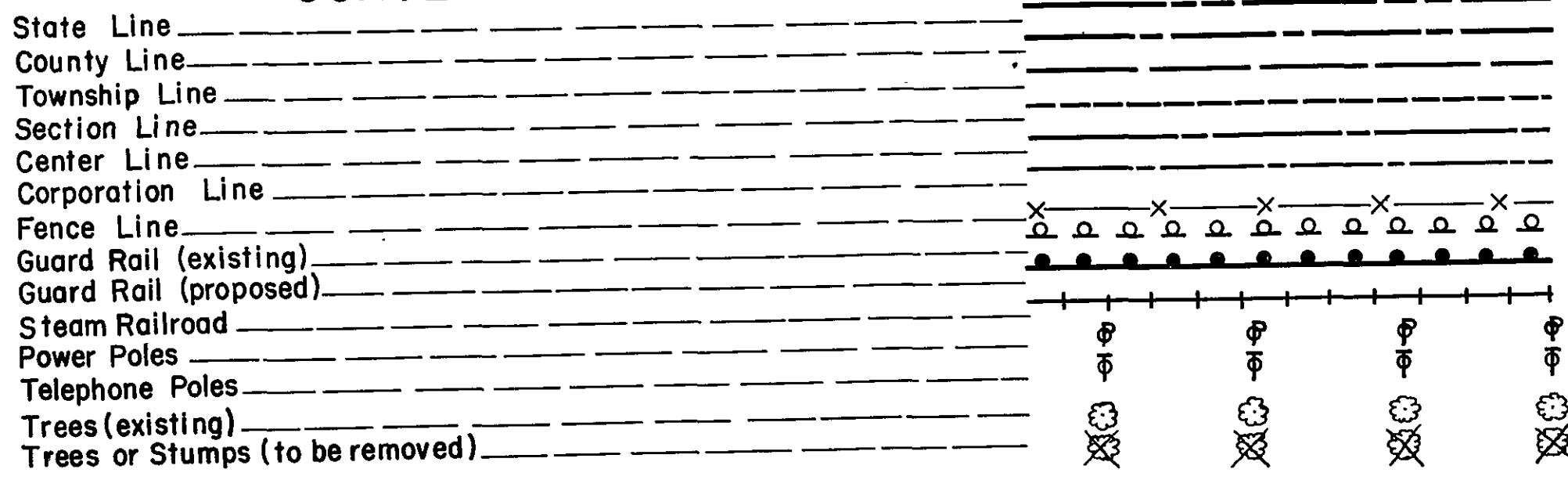
LIMITED ACCESS

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 the provisions of Section 5511.02 of the Revised Code of Ohio.

MIAMI TOWNSHIP, MONTGOMERY COUNTY

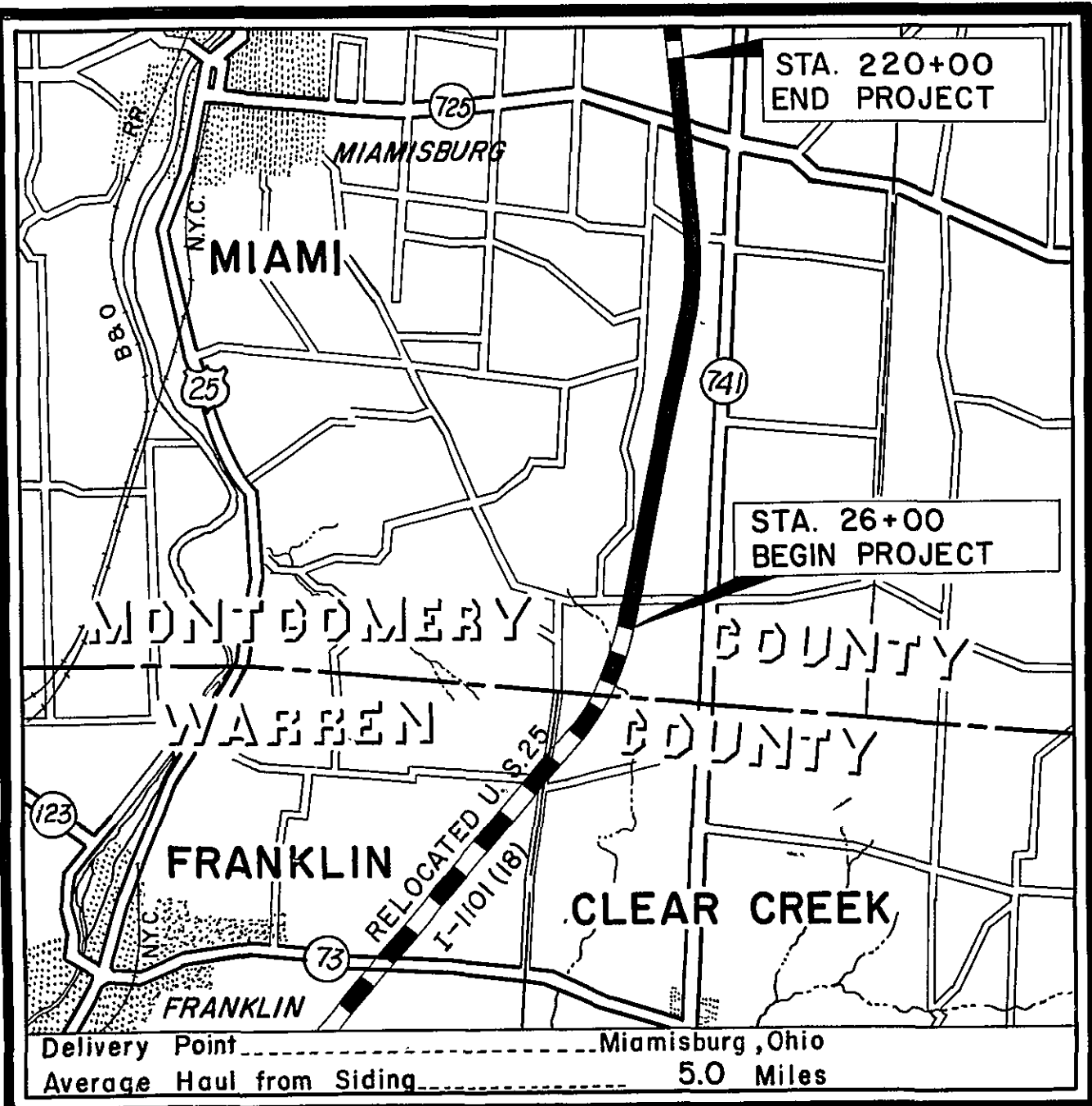
NOTE:
All references to Federal Aid Project No. I-1101 (19) appearing throughout this plan shall be considered to read ACI-1101 (19)

CONVENTIONAL SIGNS



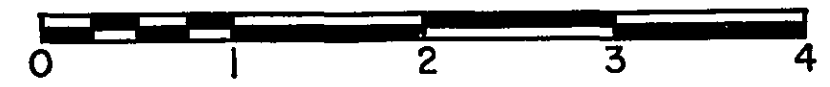
INDEX OF SHEETS

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LOCATION MAP

SCALE OF MILES



LINE DATA

Begin Project	Sta. 26+00	Sheets 22 thru 24, 32 thru 35, 54 thru 64, 106 thru 124, 212, 214 thru 217, 236 thru 242, 258, 260 thru 262, 264 and 279 superseded by Sheets 22-R thru 24-R, 32-R thru 35-R, 54-R thru 64-R, 106-R thru 124-R, 212-R, 214-R thru 217-R, 236-R thru 242-R, 258-R, 260-R thru 262-R, 264-R and 279-R showing revised profiles and cross sections referred to on Sheet 17.
End Project	Sta. 220+00	REC. 1-2-59
No additions or deductions		
Net Length of Project =	19,400.00 Lin. Ft. or 3.674 Miles	
Begin Work	Sta. 24+70	
End Work	Sta. 225+15	
No Equations		
Net Length of Work U.S. 25 =	20,045.00 Lin. Ft.	
Add for Approaches (See Sheet 2)	6,670.00 Lin. Ft.	
Add for Channel Extension (See Sheet 271)	1,200.00 Lin. Ft.	
Total Length of Work	27,915.00 Lin. Ft. or 5.286 Miles	

Portion to be Improved:
State Roads
Other Roads
Future Construction

SCALE

Plans	1" = 50'
Profile: Horizontal	1" = 50'
Profile: Vertical	1" = 5'
Cross Sections	1" = 10'

DEC 11 1961
GROUND PHOTOGRAPH

PLANS PREPARED BY:
YULE, STICKLEN, JORDAN & McNEE
COLUMBUS 14, OHIO

Supplemental Prints of Standard Construction Drawings					
DRAWING NO.	DATE	DRAWING NO.	DATE	DRAWING NO.	DATE
B-T-50-70-71 ENCL	10-1-47	I-8 CB 2-3 & 2-4	5-1-52	I-15 No. 2 B	6-1-57
B-T-71-R	3-2-53	I-8 CB No. 5	7-1-58	I-15 No. 4	12-1-54
DR-1	1-3-55			I-8 I. No. 1	5-1-52
F-1	4-1-57	I-8 M.H. No. 1	5-1-52	I-8 M.H. No. 1-A	1-3-55
G-707	6-1-56	I-12	7-1-54	I-8 CB No. 6	5-1-52
I-1, 2, 3, 4 & 5	4-24-58	I-14 G	1-22-52	I-21-23	8-1-56
		I-15 No. 1	8-1-55	L-1	4-1-50
I-8 CB No. 4	7-1-58	I-15 No. 2 A	6-1-57	L-3	4-1-50

Supplemental Specification			
NO.	DATE	NO.	DATE
18	Rev. 2-6-57	M-106.6(d) Rev.	4-1-58
B-119	Rev. 8-11-57	5	6-8-55
E-101	1-1-57	9	6-24-58
I-127	Rev. 11-16-57		
M-206.14	7-15-49		
I-125	Re. 11-6-57		
B-219	Rev. 7-23-58		
S-114	Rev. 8-1-57		

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DIVISION ENGINEER

DATE

File No.	MONTGOMERY COUNTY	MOT.-25-0.49
Date of Letting		1958
Contract No.		

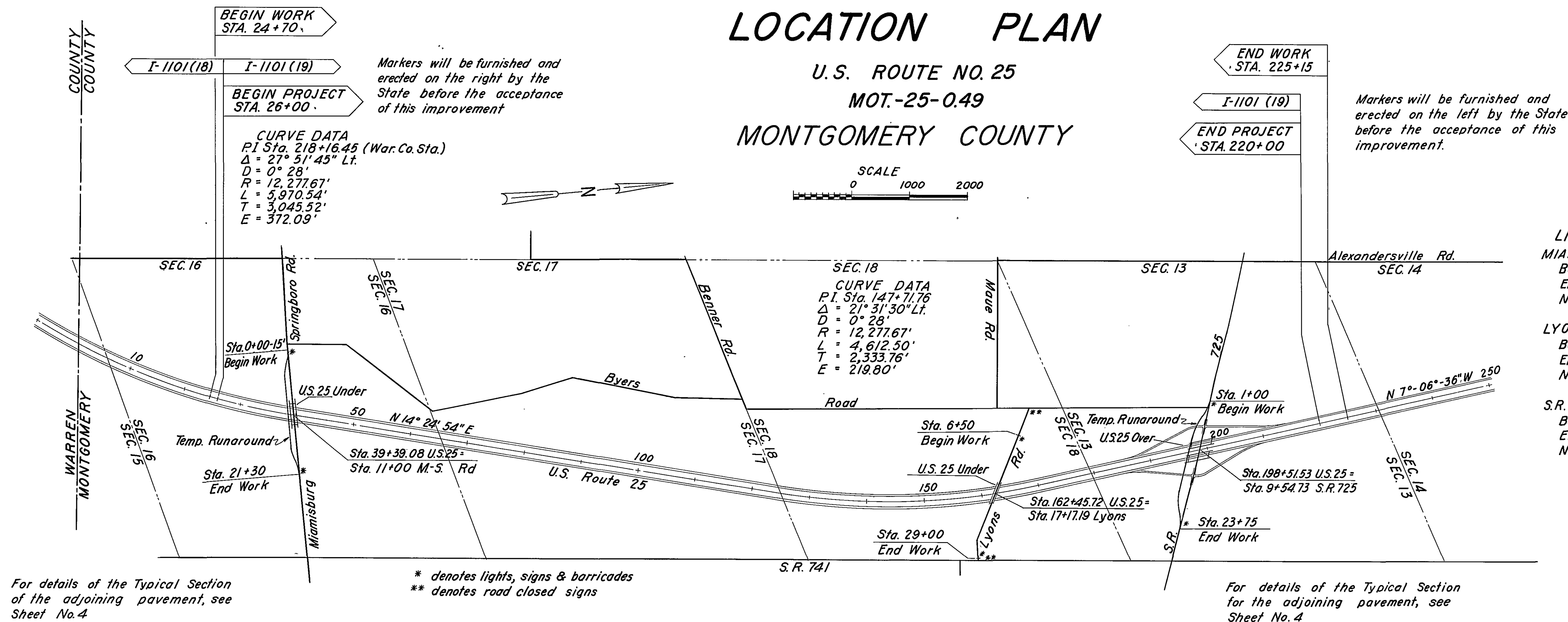
MOT.-25-049

LOCATION PLAN

U.S. ROUTE NO. 25

MOT.-25-049

MONTGOMERY COUNTY



LINE DATA FOR APPROACHES			
MIAMISBURG - SPRINGBORO ROAD			
Begin Work	Sta. 0+00-15'		
End Work	Sta. 21+30		
Net Length of Work	=	2,145	Lin. Ft.
LYONS ROAD			
Begin Work	Sta. 6+50		
End Work	Sta. 29+00		
Net Length of Work	=	2,250	Lin. Ft.
S.R. 725			
Begin Work	Sta. 1+00		
End Work	Sta. 23+75		
Net Length of Work	=	2,275	Lin. Ft.
Total Length	=	6,670	Lin. Ft.

TRAFFIC

MAINTAINING LOCAL TRAFFIC

Local traffic shall be maintained at all times in accordance with Sec. G-4.05, and shall be understood to include maintaining access to adjacent property affected by any of the construction operations.

Traffic Compacted Surface Course, Item S-15, and Calcium Chloride, Item S-15, shall be applied on temporary roadways as directed and in the amounts requested by the Engineer. Estimated quantities are shown below.

The hardness and soundness requirements of the Specifications shall be waived on all of the T-10 material used for Maintenance of Traffic.

Payment for all of the above, including construction, maintenance and subsequent removal, where required, of temporary roadways, except Traffic Compacted Surface Course, Item S-15, Calcium Chloride Item S-15, and Temporary Run-Around, Item S-15, is included in the lump sum bid for Maintaining Traffic.

In addition to the above, Sec. G-4.05, Maintenance of Local Traffic, and Section G-7.07, Barricades, Danger and Warning Signs, shall be in force during the entire life of the contract.

ESTIMATED QUANTITIES

S-15 Traffic Compacted Surface Course	250 Cu.Yds.
S-15 Calcium Chloride	5 Tons.

The unit price bid for Item S-15 aggregate shall also include payment for maintenance of the aggregate where used at the direction of the Engineer outside the limits of the proposed runarounds.

MIAMISBURG - SPRINGBORO ROAD

Two way traffic shall be maintained on Miamisburg-Springboro Road at all times by means of a temporary run-around (Item S-15) constructed to line, grade, and typical section as shown on Sheet 3, Runarounds. Portions of the runaround as shown on Sheet 3 shall not be removed but shall remain in place as permanent drives to properties. The pavement for the runaround shall be Traffic Compacted Surface, for which the following estimated quantities are provided

T-10 Traffic Compacted Surface Course	978 Cu.Yds.
M-10 Calcium Chloride	19.5 Tons.

LYONS ROAD

Two way traffic shall be maintained at all times on Lyons Road except during the time when this road may be closed to traffic for a period not to exceed two hundred and ten (210) consecutive calendar days during the construction of the structure and grading and paving of the approaches.

S.R. 725

Two way traffic shall be maintained on S.R.725 at all times by means of a temporary runaround (Item S-15) constructed to line, grade and typical section as shown on Sheet 3, Runarounds.

NOTES

LIGHTS, SIGNS, AND BARRICADES

Provide, erect and maintain movable gates on intersecting roads closed to traffic at all points where local traffic movement terminates.

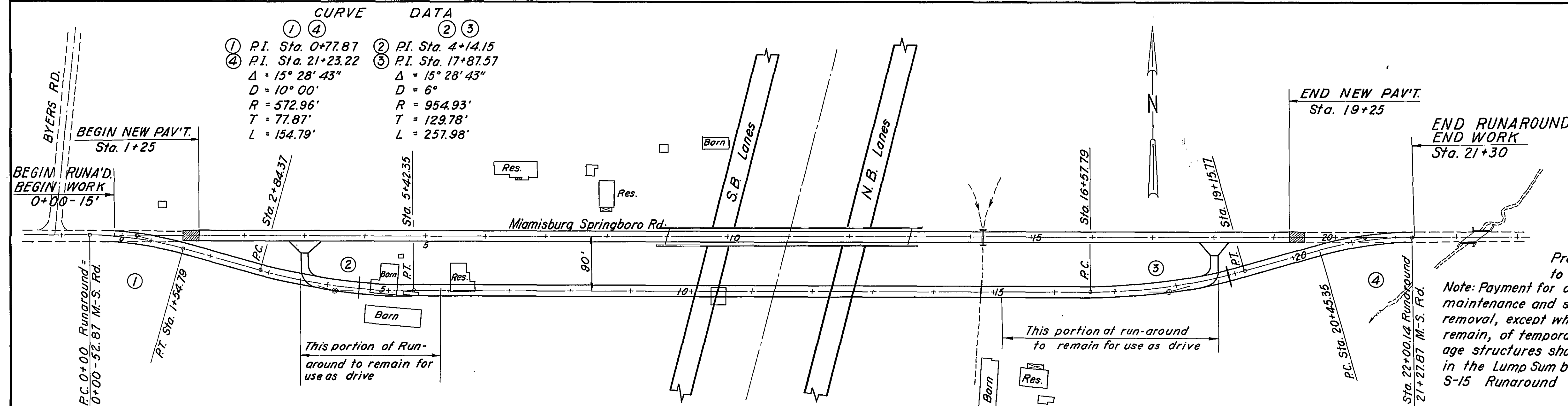
Provide, erect and maintain lights, signs and barricades at the work limits on Miamisburg-Springboro Road, Lyons Road, and S.R.725

Provide, erect and maintain standard road closed signs, sign supports, and lights at the following locations during periods in which the affected road is closed to through traffic:

- Lyons Road just east of Byers Road
- Lyons Road just west of S.R.741

Lights, barricades, and danger and warning signs shall be provided at locations shown above in accordance with Sec. G-7.07. Barricades and gates shall be as detailed on Standard Construction No. G-7.07. Standard "Road Closed" signs shall be 40"x24" size. Payment for providing, erecting, maintaining and removing barricades lights and signs is included in the lump sum bid for "Maintaining Traffic."

MOT. - 25-0.49



Provide ditches as required to permit normal drainage

Note: Payment for construction, maintenance and subsequent removal, except where noted to remain, of temporary pipe drainage structures shown is included in the Lump Sum bid for Item S-15 Runaround

TYPICAL SECTION TEMPORARY RUN-AROUND

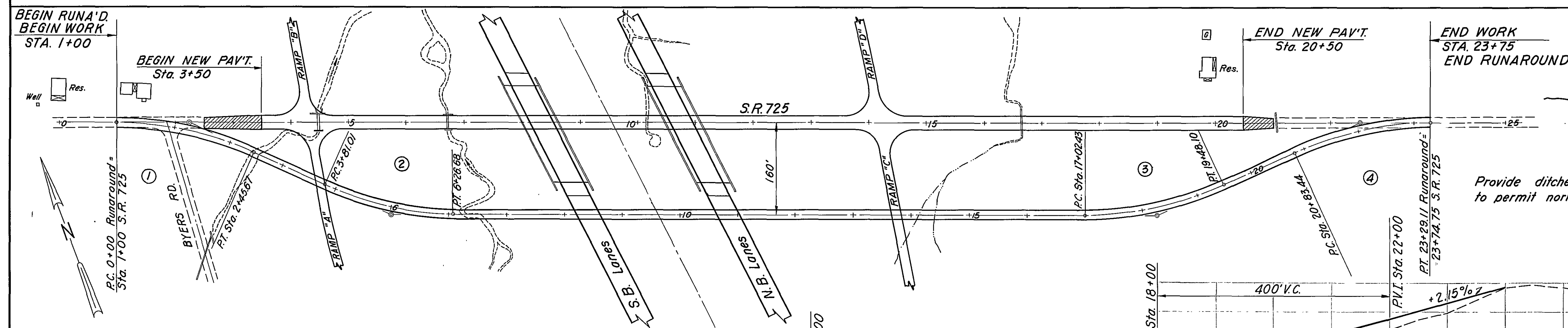
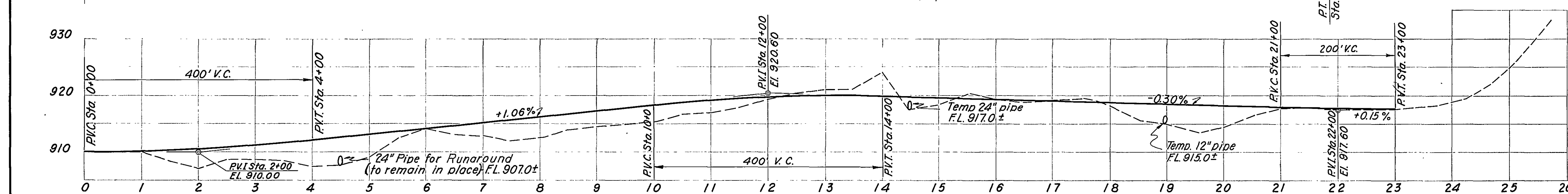
① T-10 8" Traffic Compacted Surface Course

ESTIMATED QUANTITIES

- Item S-15 - Temporary Runaround Road as per plan Lump Sum
- Item S-15 - Furnishing and placing aggregate for traffic bound surface course - 978 cu. yds.
- Item S-15 - Furnishing and applying calcium chloride - 19.5 tons

RUNAROUND AT MIAMISBURG-SPRINGBORO RD.

Scale 1"=100' horiz; 1"=10' Vert.



Provide ditches as required to permit normal drainage

TYPICAL SECTION TEMPORARY RUN-AROUND

① Class "B" Pavement (Item S-15)

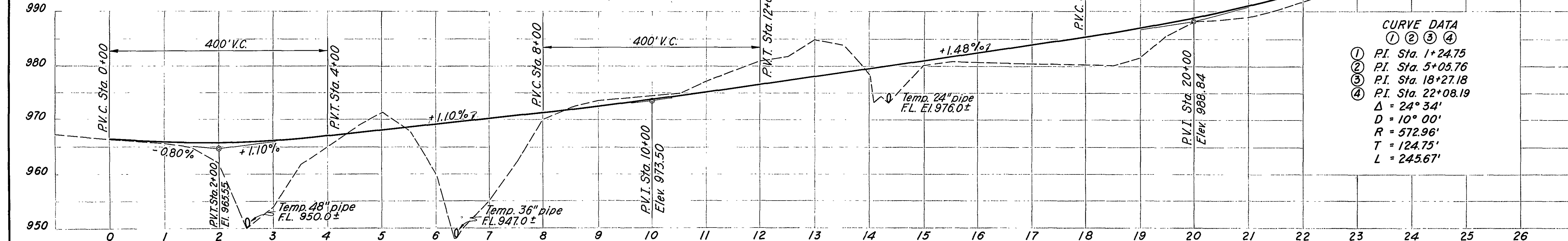
ESTIMATED QUANTITIES

- Item S-15 Temporary Runaround Road, using Class B pavement, as 990 per plan Lump Sum.

Note: Payment for construction, maintenance, and subsequent removal of temporary pipe drainage structures shown is included 970 in the Lump Sum bid for Item S-15 Runaround.

RUNAROUND AT STATE ROUTE 725

Scale: 1"=100' horiz; 1"=10' vert.



CURVE DATA

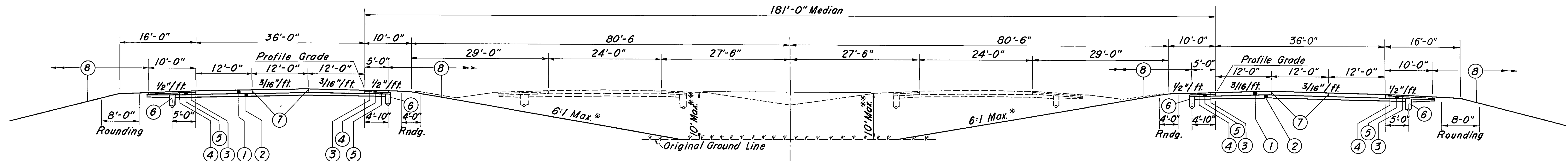
- | ① | ② | ③ | ④ |
|-------------------|-------------------|--------------------|--------------------|
| P.I. Sta. 1+24.75 | P.I. Sta. 5+05.76 | P.I. Sta. 18+27.18 | P.I. Sta. 22+08.19 |
| Δ = 24° 34' | Δ = 10° 00' | Δ = 10° 00' | Δ = 10° 00' |
| D = 10° 00' | D = 10° 00' | D = 10° 00' | D = 10° 00' |
| R = 572.96' | R = 572.96' | R = 572.96' | R = 572.96' |
| T = 124.75' | T = 124.75' | T = 124.75' | T = 124.75' |
| L = 245.67' | L = 245.67' | L = 245.67' | L = 245.67' |

TYPICAL SECTIONS

TYPE T-71

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		4 336

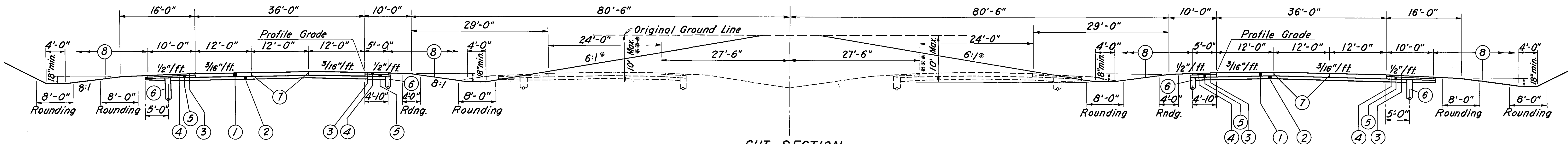
MOT.-25-049



Note: Future Construction Shown by Dashed Lines

FILL SECTION

** Wherever the general elevation of the existing surface within the median area is not lower than ten (10) feet below edge of shoulder, the area between its intersections with fill slopes shall remain undisturbed except when as shown on the cross-sections it has been shaped to drain. Embankments shall be built so that the maximum depth of median at toe of slopes will not exceed ten (10) feet below the shoulder edge with the central median shaped to drain, all as shown on the cross-sections.



CUT SECTION

NORMAL SECTIONS
Scale: 1"=10'

LIMITING STATIONS

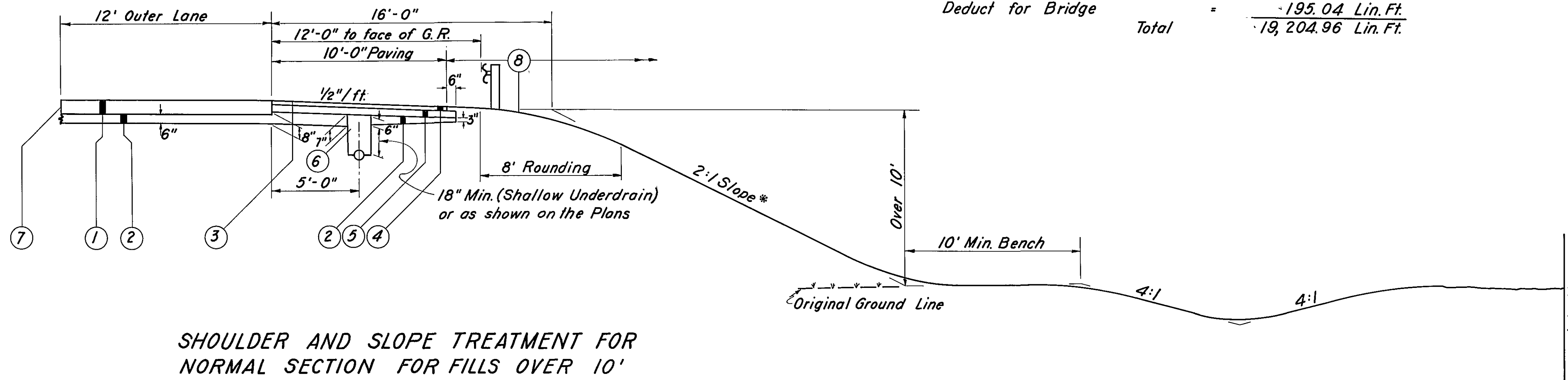
Sta. 26+00 to Sta. 220+00	=	19,400.00 Lin. Ft.
Deduct for Bridge	=	195.04 Lin. Ft.
Total	=	19,204.96 Lin. Ft.

* Unless otherwise shown on the Cross-Sections

*** Wherever the general elevation of existing surface within the median area is not higher than ten (10) feet above ditch flow line, the area between its intersections with backslopes shall remain undisturbed, except when as shown on the cross-sections, it has been shaped to drain. All existing material in the median area, lying more than ten (10) feet above ditch elevation shall be removed with the central median shaped to drain, all as shown on the cross-sections.

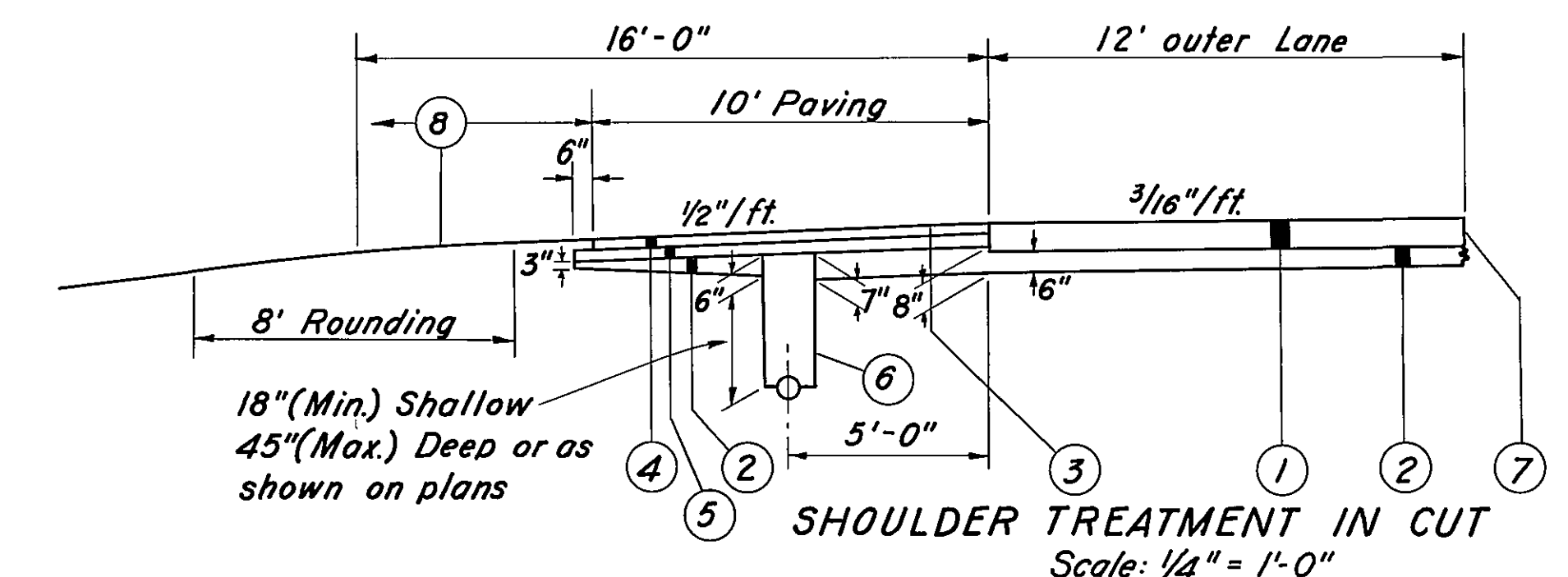
LEGEND

- ① T-71 10" Portland Cement Reinforced Concrete Pavement
- ② I-22 Subbase (6" except as otherwise noted)
- ③ T-31 Bituminous Surface Treatment (See note in proposal)
- ④ B-219 3" Waterproofed Aggregate Base Course
- ⑤ I-18 5" Stabilized Crushed Aggregate Shoulders and Approaches
- ⑥ I-4 6" Pipe Underdrain
- ⑦ Standard Longitudinal Joint.
- ⑧ L-9 Seeding and Protecting



SHOULDER AND SLOPE TREATMENT FOR
NORMAL SECTION FOR FILLS OVER 10'
Scale: 1/4"=1'-0"

For Shoulder and Slope Treatment of Normal Fill Sections
of under 10', See Sheet No.5



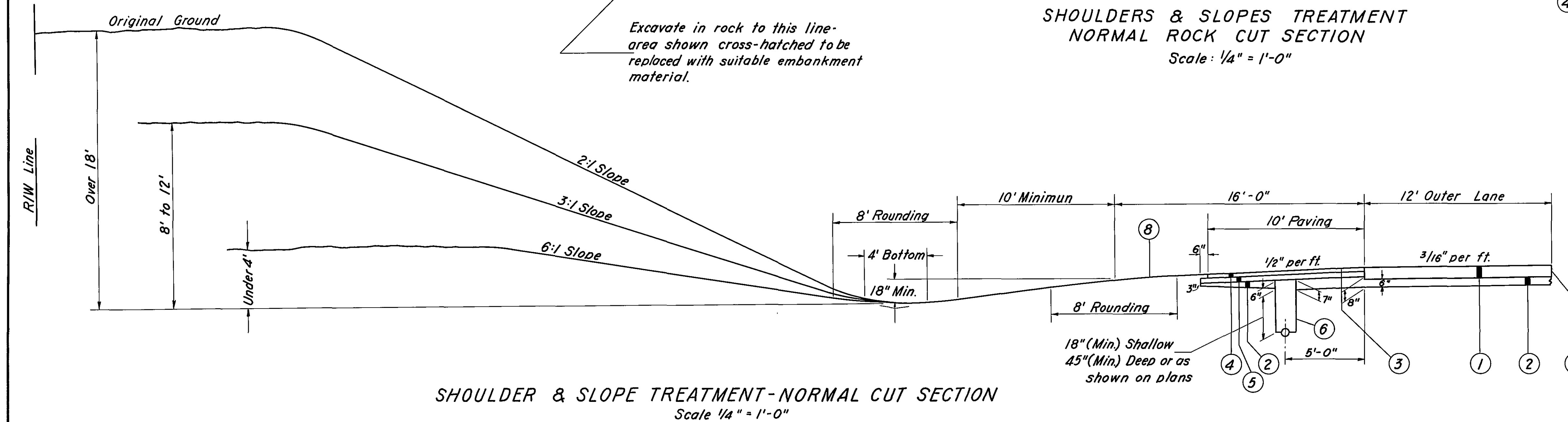
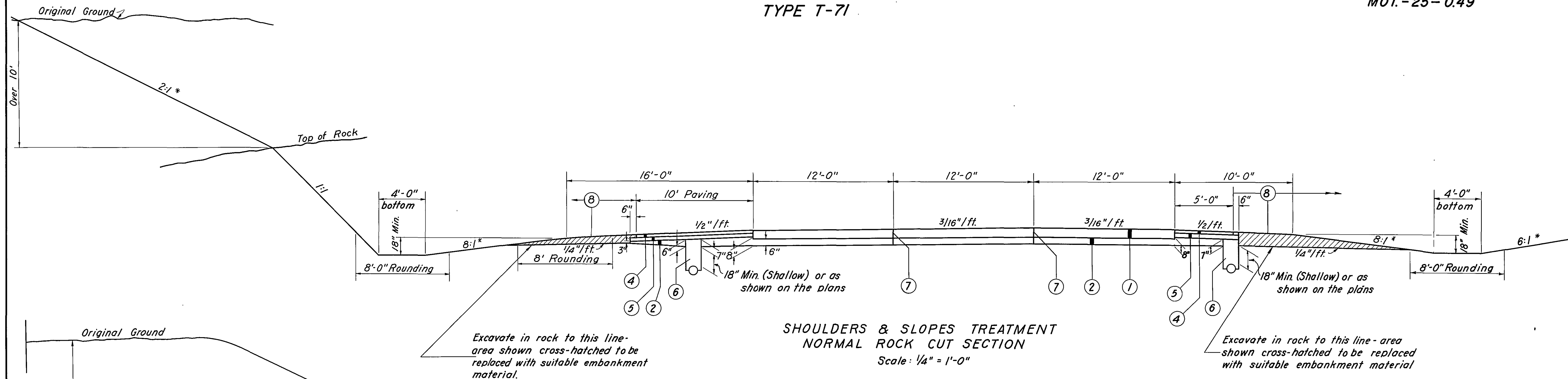
SHOULDER TREATMENT IN CUT
Scale: 1/4"=1'-0"

TYPICAL SECTIONS

TYPE T-71

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		336

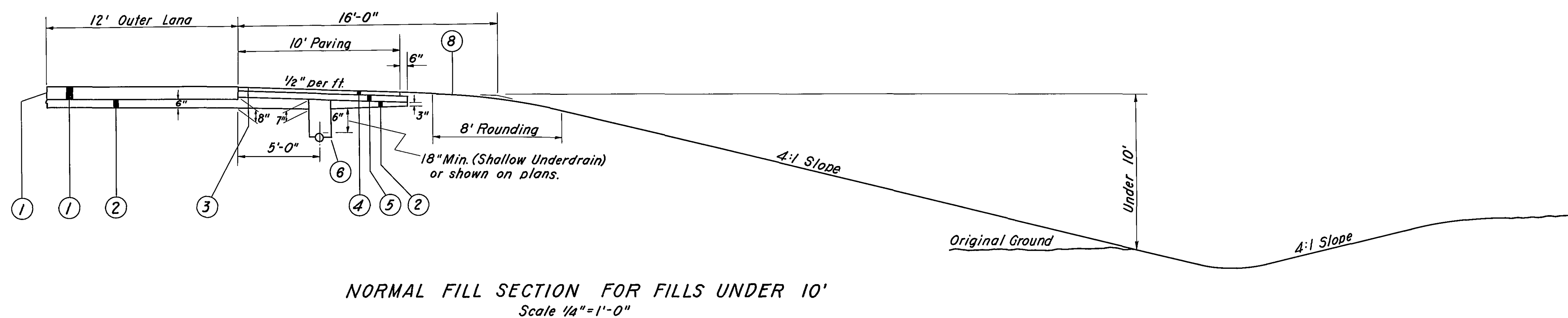
MOT.-25-0.49



LEGEND

- ① T-71 10" Portland Cement Reinforced Concrete Pavement
- ② I-22 Subbase (6" except as otherwise noted)
- ③ T-31 Bituminous Surface Treatment (See note in proposal)
- ④ B-219 3" Waterproofed Aggregate Base Course
- ⑤ I-18 5" Stabilized Crushed Aggregate Shoulders and Approaches.
- ⑥ I-4 6" Pipe Underdrain
- ⑦ Standard Longitudinal Joint
- ⑧ L-9 Seeding and Protecting

* Unless otherwise shown on Cross-Sections



For fills 10' and over, see sheet No.4

TYPICAL SECTIONS

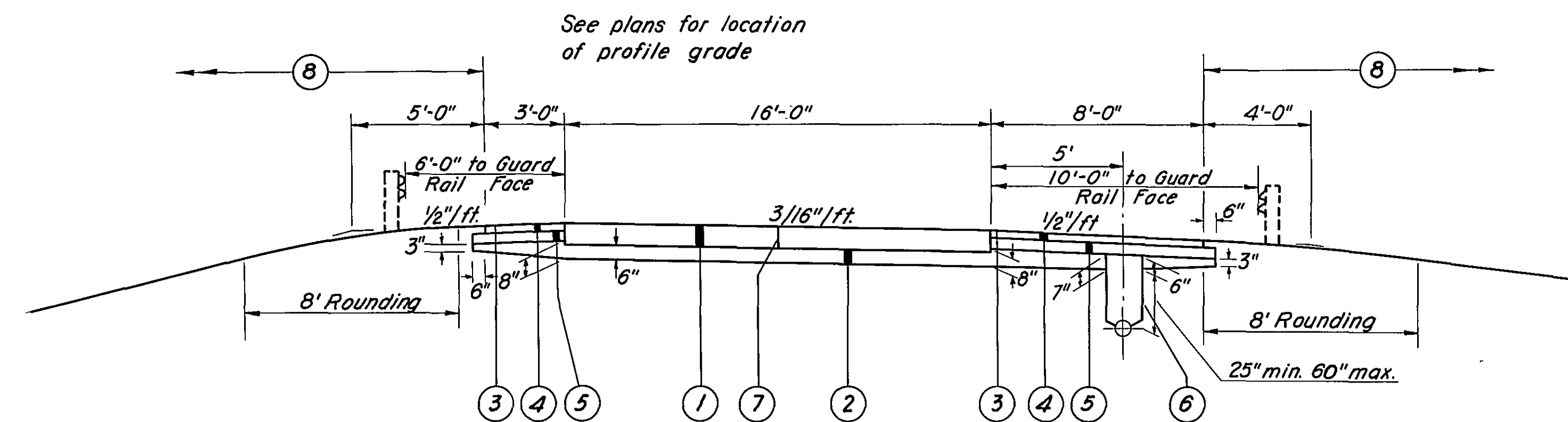
TYPE T-71

Scale: 1/4"=1'-0"

FED. RD. DIVISION	STATE	PROJECT	TYPE FUND
2	OHIO		

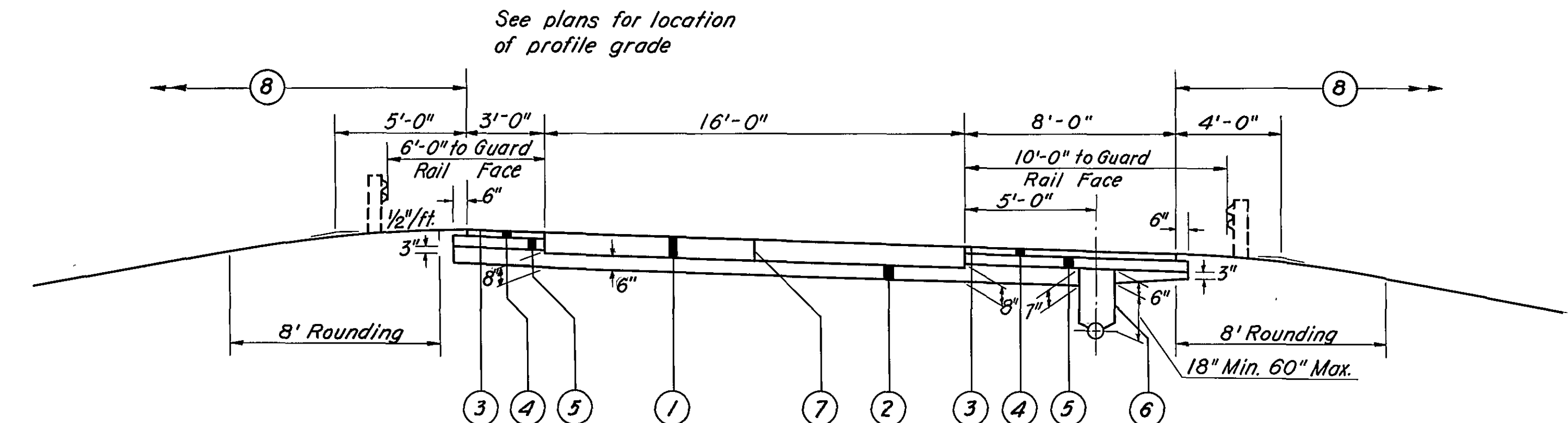
6
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S.R. 725 INTERCHANGE
RAMPS C & D
NORMAL SECTION
LIMITING STATIONS

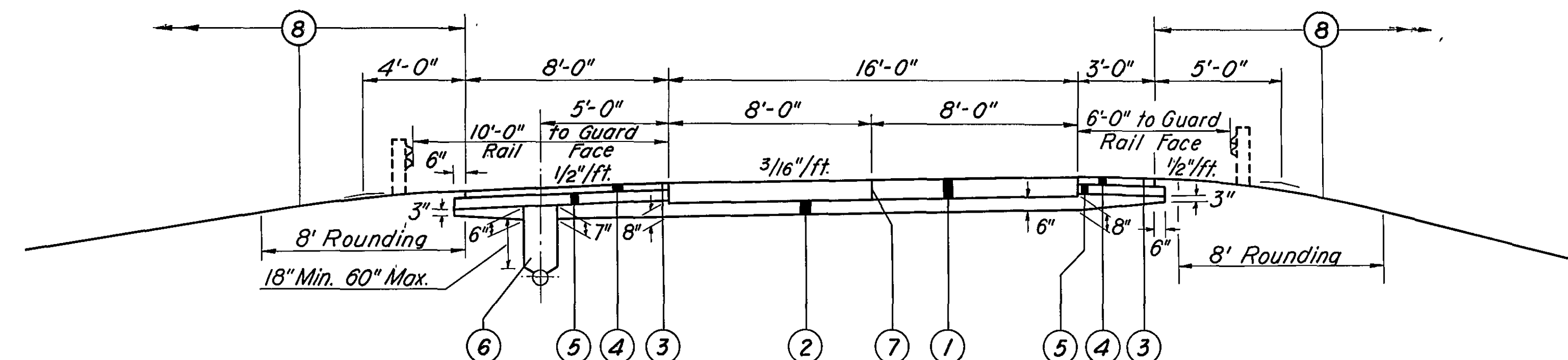
RAMP C	Sta. 12+10.00 to Sta. 12+85.45	=	75.45	lin. ft.
RAMP D	Sta. 5+97.22 to Sta. 8+72.01	=	274.79	" "
	Total		350.24	" "



S.R. 725 INTERCHANGE
RAMPS C & D
SUPERELEVATED SECTION
LIMITING STATIONS

RAMP C	Sta. 5+53.07 to Sta. 12+10.00	=	656.93	lin. ft.
	Sta. 12+85.45 to Sta. 14+76.21	=	190.76	" "
RAMP D	Sta. 0+59.86 to Sta. 5+97.22	=	537.36	" "
	Sta. 8+72.01 to Sta. 16+34.51	=	762.50	" "
	Total		2,147.55	" "

See Plans for location
of Profile Grade



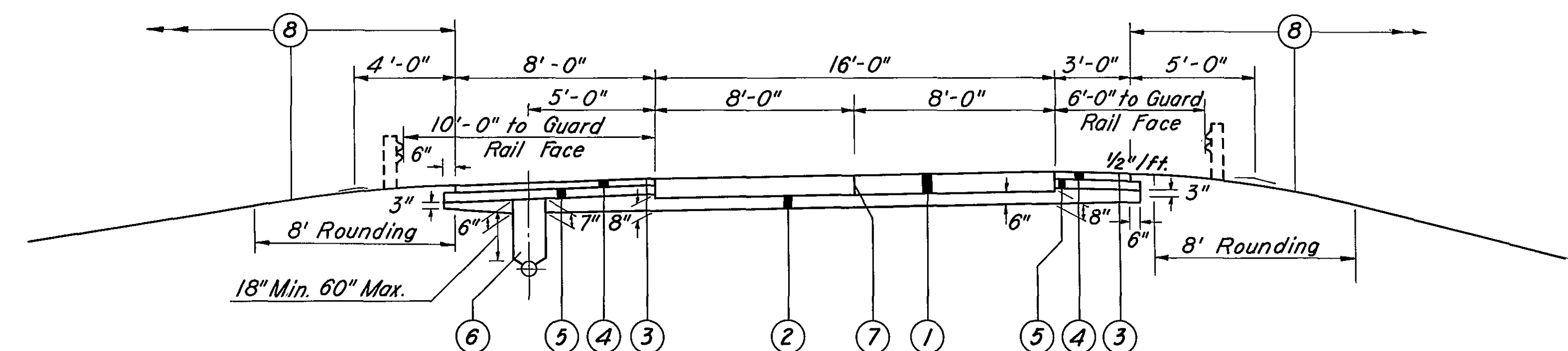
S.R. 725 INTERCHANGE
RAMPS A & B
NORMAL SECTIONS
LIMITING STATIONS

Ramp A	Sta. 7+00 to Sta. 13+34.68	634.68	Lin. Ft.
" B	Sta. 1+50 to Sta. 5+11.53	361.53	" "
	Total	996.21	" "

LEGEND

- ① T-71 10" Reinforced Portland Cement Concrete Pavement
- ② I-22 Subbase (6" except as otherwise noted)
- ③ T-31 Bituminous Surface Treatment (See note in proposal)
- ④ B-219 3" Waterproofed Aggregate Base Course
- ⑤ I-18 5" Stabilized Crushed Aggregate Shoulders
- ⑥ I-4 6" Pipe Underdrain
- ⑦ Standard Longitudinal Joint
- ⑧ L-9 Seeding and Protecting

See Plans for location
of Profile Grade



S.R. 725 INTERCHANGE
RAMPS A & B
SUPERELEVATED SECTION
LIMITING STATIONS

RAMP A	Sta. 3+00.00 to Sta. 7+00.00	=	400.00	lin. ft.
	Sta. 13+34.68 to Sta. 19+07.33	=	572.65	" "
RAMP B	Sta. 0+59.86 to Sta. 1+50.00	=	90.14	" "
	Sta. 5+11.53 to Sta. 17+21.53	=	1,210.00	" "
	Total		2,272.79	" "

Note: See Typical Sections on Sheets 4 & 5 for slope
treatment criteria

TYPICAL SECTIONS

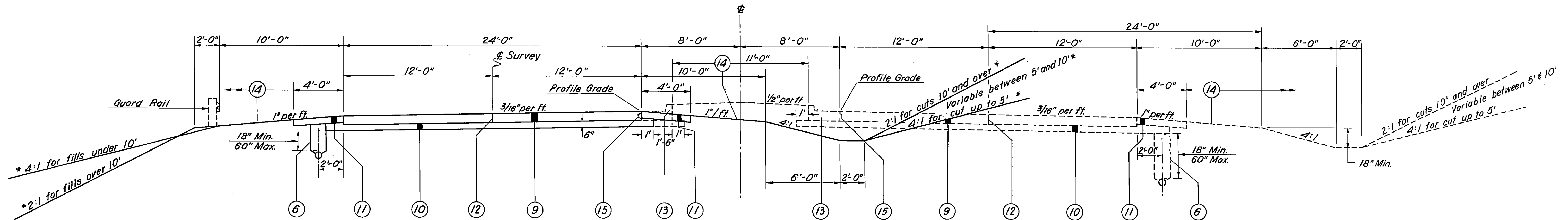
TYPE T-71

Scale: 1/4" = 1'-0"

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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* Unless otherwise shown in the Cross-Sections

S.R. 725
NORMAL SECTION
LIMITING STATIONS
Sta. 3+50 to Sta. 20+50 = 1700.00 Lin.Ft.

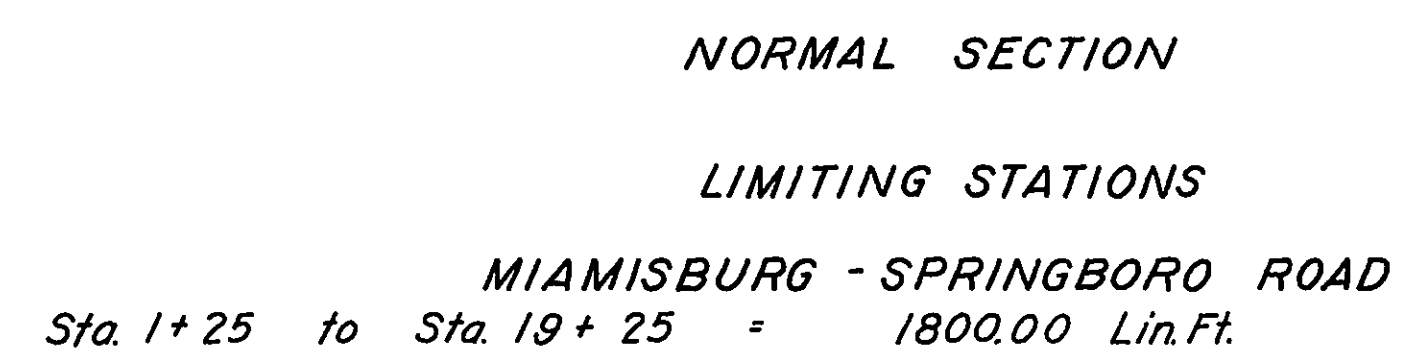
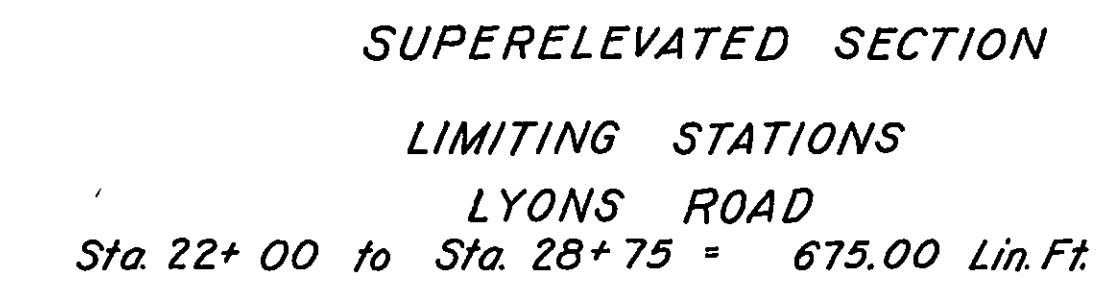
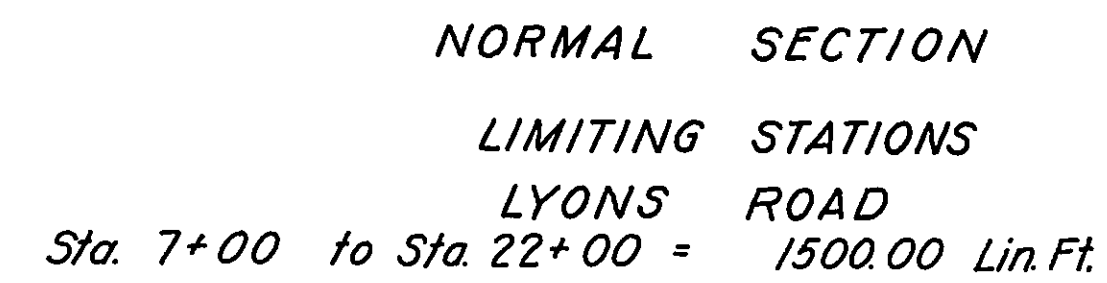
Note: Future contruction shown by Dashed Lines

LEGEND

- ⑥ I-4 6" Pipe Underdrain
- ⑨ T-71 9" Reinforced Portland Cement Concrete Pavement
- ⑩ I-22 Subbase (6", except as otherwise noted)
- ⑪ I-18 6" Stabilized Crushed Aggregate Shoulders (See note in proposal for additional stabilization with calcium chloride in upper 3 inches of this item)
- ⑫ Standard Longitudinal Joint
- ⑬ I-12 Standard Type 2 Combination Curb and Gutter
- ⑭ L-9 Seeding and Protecting
- ⑮ Standard Longitudinal Key Joint, using hook bolts. (Top bolt to be reinserted and remain in place)

TYPE T-35
Scale: 1/4" = 1'-0"

MOT-25-0.49



- (16) T-35 1 1/2" Asphaltic Concrete Surface Course Type A (85-100)
- (17) B-119 6" Crushed Aggregate Base Course
- (18) T-30 Bituminous Prime Coat - Sec. M-5.7, R.T.-2 or R.T.-3, or Sec. M-5.3, MC-0 or MC-1. (0.35 gal. per sq. yds.)
- (19) I-22 4" Subbase
- (20) I-9 Stone Underdrain (No.2) staggered at 100' intervals or as directed by the Engineer
- (21) L-9 Seeding and Protecting

GENERAL

NOTES

ROAD NAME SIGNS:

All County, Township, City or Village road or street name signs that will be disturbed by the construction shall be carefully removed and stored by the Contractor at the disposal of their respective owners. Payment for this operation shall be included in the unit price bid for Roadway Excavation Item E-101.

FIELD OFFICE:

The Contractor shall provide a suitable Field Office for the exclusive use of the State Employees, in accordance with Section S-0-01(b), having a minimum of 500 sq. ft. of floor space. The Contractor shall have a telephone installed and maintained in the Field Office during the construction of this project.

Contractor shall also install wiring and outlets suitable for connecting the electrical office equipment. He shall provide 110 volt alternating current during the construction of this project.

DESIGN SPEED:

The Geometrics for this project have been planned for a design speed of 70 miles per hour.

SPECIAL DITCHES:

For special ditch grades, See Cross-Sections.

TILE FOR SUBGRADE DRAINAGE:

6" Drain Tile, Section M-6.7(b), shall be furnished and placed by the Contractor, in manholes, catch basins and inlets for subgrade drainage, where, and as directed by the Engineer. Payment for same shall be included in the price bid per "Each" for manholes, catch basins, and inlets.

UTILITIES:

The Contractor shall notify at least 48 hours before breaking ground all Public Service Corporations having wire, poles, pipe, conduits, manholes or other structures that may be affected by this operation including all structures which are affected and not shown on these plans. Any and all work required for public or private utilities will be done by and at the expense of their respective owners, unless otherwise noted on these plans.

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 that they are essentially correct but the State of Ohio makes no guarantees as to their accuracy or completeness.

ROUNDING OF CORNERS ON CROSS-SECTIONS:

The rounded corners, shown on Standard Drawing RI-1, apply to all cross-sections even though otherwise shown in these plans.

R/W MONUMENTS, FEDERAL PROJECT MARKERS AND SECTION MARKERS:

Existing R/W Monuments, Federal Project Markers and Section Markers that will be removed by Construction, shall be protected by the Contractor as per Section G-7.09 until they can be witnessed, referenced and reset by the Construction Crew.

ELEVATION DATUM:

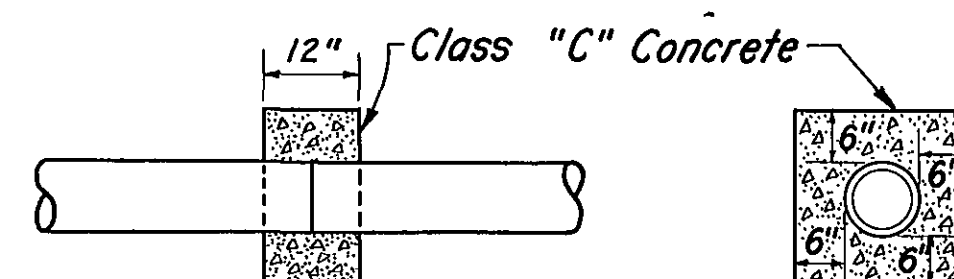
All elevations are based on U.S.G.S. datum.

LOCATION AND SIZE OF PIPES:

The location, type, depth and size of all existing pipes are shown as near exact as the available information will permit. The State will not be responsible for any variations found during construction.

PIPE CULVERT:

When bell and spigot pipe is used, any necessary pipe cut-off will be made at the spigot end of the length of pipe adjacent to the end length. When tongue and groove pipe is used, the length of pipe next to the end length shall be cut and butt joint formed with a collar as shown. The cost of the joint and collar shall be included in the Contract Unit Price bid for pertinent pipe item.



COLLAR DETAIL

EXISTING SANITARY DRAINS OR SEWERS:

Sanitary drains or sewers which include leaching bed outlets, cellar drains, sink drains or polluted water of any kind shall not be connected to the highway drainage system, either pipes or ditches. Any such drains encountered shall be plugged with Class "E" concrete at the Right-of-Way line.

Payment for plugging shall be included in the unit price bid for Item E-101 Roadway Excavation.

EXISTING FLEXIBLE PAVEMENT:

Withing the limits of construction where the existing flexible pavement will have less than six (6) inches of fill placed upon it, the pavement shall be thoroughly scarified for its full depth mixed with sufficient soil and properly recompacted to insure the elimination of any planes of separation between it and the embankment placed thereon.

Outside the limits of construction the existing flexible pavement shall be thoroughly scarified, mixed with sufficient soil and shaped to fit the surrounding terrain in such a manner as to insure the growth of seed planted thereon.

Payment for all the above shall be included in unit price bid for Item E-101 Roadway Excavation.

NON-RIGID PAVEMENT REMOVAL:

The Removal of non-rigid pavement is to be paid for under Item E-101, Roadway Excavation.

EXCAVATION FOR ITEM B-119:

Excavation for B-119 material used on Side Road Approaches, Mail Box, Turnouts and Drives has been included in Earthwork Quantities when same is in "Cut". Where Side Road Approaches, Mail Box Turnouts and Drives are in "Fill" excavation for B-119 material shall be made by the Contractor at his own expense if he builds the embankment up to finish grade before placing the B-119 material.

SUBGRADE COMPACTION FOR DRIVES AND MAIL BOX TURNOUTS WITH B-119

The subgrade under B-119 material used on Drives and Mail Box Turnouts shall be compacted for a depth of six (6) inches to the density requirements of Table III in Item E-101. Payment for subgrade compaction as specified above, shall be included in the unit price bid for Item E-101 Roadway Excavation.

AGRICULTURAL LIMING MATERIALS:

The location and need for agricultural liming materials will be determined by laboratory tests after rough grading operations have been performed. Quantities of agricultural liming materials as shown on the plans are sufficient for the entire project, but will be non-performed for the areas where tests show that the liming material is not needed. Where used this material shall be applied at the rate of 100 lbs. per 1,000 sq. ft.

SUBGRADE COMPACTION 12" IN DEPTH:

The area of compacted subgrade to be paid for includes the main pavements, B-219 paved shoulders, and hard-surfaced crossroad pavements.

L-9 COMMERCIAL FERTILIZER:

All areas to be seeded under Item L-9, or sodded under Item L-10, shall have commercial fertilizer 12-12-12, applied at the rate of twenty (20) pounds per 1,000 sq. ft.

SEEDING AND PROTECTING:
S.R. 725

Quantities for Seeding Item L-9 are calculated for the soil areas between lines ten (10) feet outside the work limits as shown on the Cross-Sections or to the Right-of-Way line if such line is less than ten (10) feet from the work limits and for all areas surrounded by Ramps or proposed pavement. Seed shall be sown at the rate of three (3) pounds per 1,000 sq. ft. except as otherwise noted in plans.

Seeding formula for all seeded areas shall be in accordance with the following:
30% Kentucky Bluegrass (*Poa Pratensis*)
60% Kentucky 31 Fescue (*Festuca elatior* var. Ky. 31)
10% Red Clover (*Trifolium pratense*)

SEEDING AND PROTECTING ROADWAY AREAS
MIAMISBURG-SPRINGBORO RD. & LYONS RD.

Quantities for Seeding are calculated for the soil areas within the work limits as shown on the cross-section and payment shall not be made for Seeding beyond these limits. Seed shall be sown at the rate of three (3) pounds per sq. ft. except as otherwise noted in plans. Seeding formula for all seeded areas shall be in accordance with the following:
30% Kentucky Bluegrass (*Poa Pratensis*)
60% Kentucky 31 Fescue (*Festuca elatior* var. Ky. 31)
10% Red Clover (*Trifolium pratense*)

SEEDING AND PROTECTING:
INTERSTATE U.S. 25

Quantities for Seeding Item L-9 are calculated for the soil areas between the Right-of-Way lines and for the soil areas of any work limits that are beyond the Right-of-Way lines. Seed shall be sown at the rate of three (3) pounds per 1,000 sq. ft. except as otherwise noted in plans. Seeding formula for all seeded areas shall be in accordance with the following:
30% Kentucky Bluegrass (*Poa Pratensis*)
60% Kentucky 31 Fescue (*Festuca elatior* var. Ky. 31)
10% Red Clover (*Trifolium pratense*)

GENERAL

NOTES

ITEM L-10 SODDING, I-10 RIP RAP AND I-14 PAVED GUTTER:

These Items are provided on the plans for erosion control. The Engineer shall check and make adjustments in the location and quantities for these items where indicated by field conditions during construction. Should rock of a stable nature be encountered at flow line of any of these items, they may be non-performed.

GUARD RAIL REMOVAL:

The removal of any guard rail or guard rail posts lying within the limits of roadway excavation or embankment (and not specifically paid under a separate item) is included in the Contract unit price bid for Item E-101, Roadway Excavation. All resulting materials shall become the property of the Contractor and shall be disposed of by him at no extra cost to the State, except that the steel rail on all existing steel beam type or steel cable on steel cable type guard rails shall be stored on the Right-of-Way at the disposal of the State.

GUARD RAIL POST ANCHORS:

At locations where pier footings interfere with installation of full length guard rail posts, short posts shall be provided and shall be anchored in accordance with the detail shown elsewhere in the plans.

Cost of providing and installing necessary anchors shall be included in the unit price bid per lineal foot for guard rail.

GUARD RAIL PARAPET ANCHOR:

Cost of providing and installing anchor for connecting deep steel beam guard rail to bridge parapet is included in the bridge quantities for payment. Contractor shall provide one (1) additional guard rail post in the center of the first panel of deep steel beam guard rail where anchored to the parapet, cost of which shall be included in the unit price bid per lineal foot of guard rail.

ITEM I-15 GUARD RAIL REMOVED AND STORED AS PER PLAN

This item shall include storage only of the rail elements and incidental hardware. The posts shall become the property of the Contractor and disposed of by him.

ESTIMATED QUANTITIES:

Specific locations and usage of estimated quantities set up on this plan to be used "as directed by the Engineer" shall be made a matter of record by incorporation into the final change order governing completion of this project.

REMOVAL OF TREES AND STUMPS:

All trees and stumps lying within the construction limits of this project shall be removed under the Lump Sum bid for Removal of Trees and Stumps, Item E-9, unless work is indicated in the plans to preserve same.

The following is an approximate estimate of the number of trees and stumps to be removed:

Sizes	No. Trees	No. Stumps
12" - 18"	1911	
18" - 24"	287	
24" - 30"	110	
30" - 36"	21	
Over 48"	3	1

The above estimate is only approximate and the State of Ohio reserves the right to order the removal of additional trees or stumps outside of the limits of construction but within Right-of-Way lines.

Payment for the removal of these additional trees or stumps is included for payment in the Lump Sum Bid under Item E-9, Removal of Trees and Stumps.

All trees and stumps to be removed shall be marked as per requirements of Sec. E-9.02 of the specifications.

DRAINAGE OF SUBBASE MATERIAL

Where the subbase material is drained by I-9 Stone Underdrain or by extensions through the shoulders to the fill slope or the ditch line the Contractor shall finish, seed and mulch the slopes so as not to impede drainage of the subbase material. The actual area of the outcrop of the subbase material or I-9 Underdrain shall not be seeded.

STONE UNDERDRAIN NO. 2 (on side roads)

Stone Underdrains, No. 2 have been estimated on this project at 100 ft. intervals on each side where I-4 drainage is not provided. They shall be placed not over 100 ft. apart.

This quantity is to be used in its entirety.

CHANNEL EXCAVATION:

Where channel excavation is carried through a proposed pipe structure site, additional excavation required to obtain a stable foundation for the structure shall be measured and paid for as Item E-3, Channel Excavation.

EXPANSION AND CONTRACTION JOINTS:

Although specific locations of certain expansion and contraction joints have been detailed on this plan, no waiver of the specifications is intended and the maximum distance between contraction joints and the location of expansion joints shall in all cases be in accordance with Standard Drawing T. J.

PLUGGING PIPE ENDS:

The upstream ends of pipe lines or tile lines intercepted by earthwork operations shall be effectively blocked and covered. Broken pieces and portions of pipe or tile shall be removed until a whole length is encountered, which shall be blocked with concrete, flat stone or brick laid in mortar, precast clay or concrete stopper.

Payment for the above work shall be included in the price bid for Item E-101, Roadway Excavation.

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-101, Roadway Excavation, unless otherwise itemized for payment in the plans.

CONNECTIONS TO EXISTING SEWERS:

At places where the plans provide for proposed drainage pipe to be connected to existing pipes, it shall be the responsibility of the Contractor to locate the existing pipe both as to line and grade before he starts to lay the proposed sewer. The cost of this operation shall be included in the unit price bid for the pertinent Pipe Item.

HEAVY EQUIPMENT:

The Contractor shall exercise care in the use of heavy equipment over finished work and will be required to remove and replace any completed work destroyed thereby. Culverts shall be backfilled to a height of four (4) feet before loaded earth-moving equipment is permitted to cross the trench. Heavy equipment shall not be operated over any completed layer of embankment, compacted subgrade or subbase, such operation tends to destroy the soil structure or pipe underdrains; however, if such operation cannot be avoided, the Contractor will be required to reduce the size of loads to an extent that damage does not occur.

CENTERLINE REFERENCE MONUMENTS:

Monuments shall be constructed of Class "C" concrete-cast-in-place in a circular hole eight (8) inches in diameter and forty-four (44) inches in depth. Top of concrete shall be finished at a depth of two (2) inches below ground level and the upper six (6) inch portion of the concrete shall be formed. One-half (1/2) inch Brass Rods six (6) inches long shall be embedded in the wet concrete as directed by the Engineer to mark the Centerline and Station.

For location, See Sheet No. 16

CONSTRUCTION LAYOUT STAKES:

See note in proposal describing the work included in this Lump Sum pay item.

RIGHT-OF-WAY FENCE:

Fence shall be Type "A". For location, see Right-of-Way Plans.

EXISTING WATER WELLS:

Dug wells encountered within the work limits shall be filled with rock or granular material. Drilled well casing shall be removed to an elevation approximately three (3) feet below finished grade and covered with a precast concrete slab or approved large rock. Prior to construction of embankment, the Contractor shall remove any masonry surrounding a well within three (3) feet of finished grade. Pumps and others appurtenances shall become the property of the Contractor and shall be disposed of by him.

The cost of filling or capping of wells shall be included in the unit price bid per cubic yard of Roadway Excavation, Item E-101, for payment.

REPLACEMENT:

The Contractor shall replace at his own expense any item not specifically listed for removal that is damaged or destroyed by his operations.

EROSION CONTROL:

Dumped Rock Fill, Dumped Rock Channel Protection, Sodding, Rip Rap and Paved Gutter are provided in these plans for erosion control. Rock of a stable nature will not be removed in order to place these items. If rock is encountered at the proposed flow line and bottom of dumped rock fill or dumped rock channel protection, and is -- in the opinion of the Engineer -- of stable quality, a portion or all of the above items shall be non-performed at any location where the above conditions prevail.

SODDING AT CATCH BASINS:

Sodding at Standard No. 4 Catch Basins shall be performed as shown on Standard Drawing I-8 C.B. No. 4.

The quantities of sod have been included in the roadway quantities for payment.

ROCK SUBGRADE:

The Contractor shall be paid for the thickness shown on the typical sections of I-22 material in rock excavation areas. All irregularities in the rock below the Subbase shall be filled with I-22 material at no additional cost to the state. The Contractor shall drain all pockets in the subgrade either longitudinally or laterally.

UNDERGROUND ELECTRICAL DUCTS & MARKERS:

For notes and details for ducts and markers see sheets No. 199 and 265.

GENERAL SUMMARY

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ITEM NO.	SHEET NUMBERS																													TYPE CODE 7221				DESCRIPTION	
	2	3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	CALCUL- ATIONS	ITEM NO.		GRAND TOTALS	UNIT				
																																			ROADWAY
E-101					1,482,466																							E-101	1,482,466	cu.yds.	roadway excavation, as per plan				
E-101																											238,422	E-101	238,422	sq.yds.	compacted subgrade				
E-9																																			
E-11					6,439																							lump	E-9	lump	lump	removal of trees and stumps			
																												E-11	6,439	Mqals.	water				
E-12					265																								E-12	265	lin.ft.	pipe removed, 15" and under			
E-12					93																							E-12	93	lin.ft.	pipe removed, over 15"				
I-8					80																								I-8	80	each	centerline reference monuments, as per plan.			
I-15					5,125																								I-15	5,125	lin.ft.	guard rail, steel beam, standard type (deep) as per standard drawing I-15 No. 2-A			
I-15								505	45				1,300	2,000	200						550			1,249.5	1,713	800		I-15	8,362.5	lin.ft.	guard rail, steel beam, standard type (deep) as per standard drawing I-15 No. 2-B				
I-15					15																								I-15	15	each	wood guard rail posts, without rail.			
I-15					534																								I-15	534	lin.ft.	guard rail removed and stored, as per plan			
I-125																												14.91	I-125	14.91	miles	4" edge lines			
I-125																												5.51	I-125	5.51	miles	6" lane lines			
I-125																												lump	I-125	lump	lump	curb and island marking			
I-127																													254	I-127	254	each	standard delineators		
L-9					916,913																								L-9	916,913	sq.yds	seeding and protecting, as per plan ✓			
L-9					84,944																								L-9	84,944	tons	commercial fertilizer (12-12-12)			
L-9					424,70																								L-9	424,70	tons	agricultural liming material, as per plan ✓			
L-10					6,923			487	966	1,318	945	1,638		1,351	789	1,403	814	1,387	343	966	837	2,628	920	266	1147	898	606	237		L-10	26,869	sq.yds.	sodding		
Special																												1380	Special	1,380	sq.yds.	mixing calcium chloride and crushed aggregate.			
S-15					lump																								S-15	lump	lump	temporary runaround at Miamisburg-Springboro Road as per plan			
S-15					lump																								S-15	lump	lump	temporary runaround, using Class "B" pavement at S.R. 725 as per plan			
S-15					5	19.5	1.5																						S-15	26	tons	furnishing and applying calcium chloride			
S-15					167	632		54																					S-15	853	cu.yds	furnishing and placing aggregate for traffic bound surface course			
S-25					458																									S-25	458	lin.ft.	encased, 4" asbestos cement conduit, Sec. M- 206.14, as per plan		
SS-18					37,725																								SS-18	37,725	lin.ft.	fence, type "A"			
S-15					83	346																								S-15	429	cu.yds.	furnishing and placing aggregate for traffic bound surface course, using No. 2 material.		

GENERAL SUMMARY

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ITEM NO.	SHEET NUMBERS																											TYPE CODE 7221				DESCRIPTION	
	2	3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	271	CALCULATIONS	ITEM NO.	GRAND TOTALS	UNIT		
																																	DRAINAGE
E-2			442			1	1	2	1	1		1	421	693	357	1	208	660	1	1036	639			1	21	1036			E-2	5,523	cu.yds.	excavation for structures	
E-3			78										90	346	32		30	153		17	34				20	42	6,431	E-3	1,273	cu.yds.	channel excavation		
I-1			30																										I-1	30	lin.ft.	12" pipe for driveways, Sec. M-6.4(a)	
I-1			20																										I-1	20	lin.ft.	15" pipe for driveways, Sec. M-6.4(a)	
I-1			112																										I-1	112	lin.ft.	24" pipe for driveways, Sec. M-6.4(a)	
I-1			144																										I-1	144	lin.ft.	48" pipe for driveways	
I-2																				56									I-2	56	lin.ft.	15" Class "A" storm sewers	
I-2															8		32	48											I-2	88	lin.ft.	18" Class "A" storm sewers	
I-2			80																										I-2	80	lin.ft.	24" Class "A" storm sewers	
I-2						224	188	126	174	134				190	576	174	186	184	182	234	160		184	196		150	142	I-2	3,404	lin.ft.	8" Class "A" storm sewers under pavement and approaches		
I-2			30							170																			I-2	200	lin.ft.	15" Class "A" storm sewers under pavement and approaches	
I-2			68																										I-2	68	lin.ft.	15" Class "A" storm sewers, Sec. M-6.4(c)	
I-2						184						186		72									248	192	172			I-2	1,054	lin.ft.	18" Class "A" storm sewers under pavement and approaches		
I-2																								34	44			I-2	78	lin.ft.	18" Class "A" storm sewers, Sec. M-6.4(c)		
I-2													170	174		188				172	180							I-2	884	lin.ft.	21" Class "A" storm sewers under pavement and approaches		
I-2			64					180	180																				I-2	424	lin.ft.	24" Class "A" storm sewers under pavement and approaches	
I-2			90																										I-2	90	lin.ft.	24" Class "A" storm sewers, Sec. M-6.6(a) or Sec. M-6.8(b)	
I-2			118																										I-2	118	lin.ft.	24" Class "A" storm sewers under pavement and approaches	
I-2			22																										I-2	22	lin.ft.	24" Class "A" storm sewers under pavement and approaches	
I-2							74	58																					I-2	132	lin.ft.	36" Class "A" storm sewers under pavement and approaches	
I-2			240																										I-2	240	lin.ft.	48" Class "A" storm sewers, Sec. M-6.6(a)	
I-2					500																								I-2	500	lin.ft.	6" Class "B" storm sewers under pavement and approaches.	
I-2					500																								I-2	500	lin.ft.	8" Class "B" storm sewers under pavement and approaches.	
I-2					500								450				164	234										I-2	1,348	lin.ft.	10" Class "B" storm sewers under pavement and approaches.		
I-2					500																								I-2	500	lin.ft.	12" Class "B" storm sewers under pavement and approaches	
I-3					500																								I-3	500	lin.ft.	6" roadway drainage	
I-3					1,000			118		140			325				70												I-3	1,653	lin.ft.	8" roadway drainage	
I-3					1,000																								I-3	1,000	lin.ft.	10" roadway drainage	
I-3					500																								I-3	500	lin.ft.	12" roadway drainage	
I-3			10		100																								I-3	110	lin.ft.	6" outlets for roadway drainage, Sec. M-6.4(h) without perforations	
I-3					200												10												I-3	210	lin.ft.	8" outlets for roadway drainage, Sec. M-6.4(c)	
I-3					200																								I-3	200	lin.ft.	10" outlets for roadway drainage, Sec. M-6.4(c)	
I-3					100																								I-3	100	lin.ft.	12" outlets for roadway drainage, Sec. M-6.4(c)	
I-4			1,828			1,588	3,988	3,868	3,688	3,194	3,988	4,000	3,984	3,952	3,984	3,984	3,732	2,982	2,088	1,976	2,000	3,155	3,084	4,000	3,371	110		I-4	68,544	lin.ft.	6" underdrains (shallow)		
I-4			1,246					120	300	794							252	991	1,896	1,976	2,000	359			200	39		I-4	16,173	lin.ft.	6" underdrains (deep)		
I-4			70			20	20	20	20	20			20	60	30	30	30	30	30	30		20	20		10	10		I-4	490	lin.ft.	8" pipe outlets for underdrains, Sec. M-6.4(a)		
I-5			15			2	2	2	2	1			2	9	2	2	2	2	2	1		2	2			5	1		I-5	56	each	6" pipe specials for underdrains	
I-5						4	4	5	5	3			4	16	4	4	4	4	4	4		4	5			5	3		I-5	82	each	8" pipe specials for Class "A" storm sewers under pavement and approaches, Sec. M-6.5(b) or Sec. M-6.8(b)	

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ITEM NO.	SHEET NUMBERS																												CODE TYPE 722 I			DESCRIPTION
	2	3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	ITEM NO	GRAND TOTALS	UNIT			
																													DRAINAGE (Continued)			
I-5								1		1							1											I-5	3	each	8" pipe specials for roadway drainage	
I-5													1															I-5	1	each	10" pipe special. for Class "B" storm sewers under pavement and approaches	
I-5			2																									I-5	2	each	15" pipe specials for Class "A" storm sewers, Sec. M-6.4 (c)	
I-5																								2	2			I-5	4	each	18" pipe specials for Class "A" storm sewers, Sec. M-6.4 (c)	
I-5			2																									I-5	2	each	24" pipe specials for Class "A" storm sewers, Sec. M-6.4 (d)	
I-5														1														I-5	1	each	36" pipe specials for roadway culverts, Sec. M-6.6 (b)	
I-5																										1		I-5	1	each	36" pipe specials for roadway culverts, Sec. M-6.4 (d)	
I-5															1		1	1										I-5	3	each	48" pipe specials for roadway culverts, Sec. M-6.6 (b)	
I-8													2															I-8	2	each	Standard No.1 side ditch inlets	
I-8			2																									I-8	2	each	Standard No 2-3 catch basins	
I-8						1		1	1	1		1	1	2	1	1	1	1	1	1			1	1	1			I-8	17	each	Standard No.4 catch basins	
I-8			1																									I-8	1	each	Standard No.5 catch basin	
I-8			1																									I-8	1	each	Standard No.6 catch basin	
I-8			1																									I-8	1	each	Standard No.1 manhole	
I-9			906																									I-9	906	lin.ft.	stone underdrains, No.2	
I-10			3186		100		8	7	7.5			5.6	122.3	41			15	19			14	19		14	19	20		I-10	730	cu.yds.	dumped rock channel protection	
I-10			94										28		45			31							16			I-10	214	sq.yds.	riprap Type "A", 6" reinforced concrete	
I-14			30																									I-14	30	lin.ft.	paved gutter, Standard Type I	
I-14			874											8														I-14	882	lin.ft.	special paved gutter, Type I A, as per plan	
I-14			1047									225					107			250	63		516	16			I-14	2224	lin.ft.	special paved gutter, Type I B, as per plan		
I-14			178									375	475							176							I-14	1204	lin.ft.	special paved gutter, Type I C, as per plan		
I-14			546																								I-14	546	lin.ft.	special paved gutter, Type I D, as per plan		
I-14			64																							800	400	I-14	1264	lin.ft.	special paved gutter, Type I E, as per plan	
S-1			96		0.3	0.6	1.0	0.4	0.3		0.3	2.3	1.6	1.7	0.4	1.7	7.1	0.4	4.4	1.5		0.3	2.0	1.5			S-1	37.4	cu.yds.	concrete for structures, Class "E"		
S-24			lump																									S-24	lump	lump	removal of existing structures.	
S-27			182																									S-27	182	lin.ft.	30" pipe for roadway culverts, Sec. M-6.6 (b), or Sec. M-6.8 (b)	
S-27			98																									S-27	98	lin.ft.	33" pipe for roadway culverts, Sec. M-6.4 (d)	
S-27																										482		S-27	482	lin.ft.	36" pipe for roadway culverts, Sec. M-6.4 (d), 10 gage, or M-106.6 (d)	
S-27			132										394															S-27	526	lin.ft.	36" pipe for roadway culverts, Sec. M-6.6 (b), or Sec. M-6.8 (b)	
S-27			110																		500							S-27	610	lin.ft.	42" pipe for roadway culverts, Sec. M-6.6 (b)	
S-27															342		374	360		504								S-27	1580	lin.ft.	48" pipe for roadway culverts, Sec. M-6.6 (b)	
S-27																								496				S-27	496	lin.ft.	48" pipe for roadway culverts, Sec. M-6.4 (d) 8 gage, or Sec. M-106.6 (d)	
S-27												402																S-27	402	lin.ft.	54" pipe for roadway culverts, Sec. M-6.6 (b)	

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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GENERAL SUMMARY

SUB-SUMMARY

MOT.-25- 0.49

ITEM NO.	SHEET NUMBERS																				CALCULATIONS	TYPE CODE 7221			DESCRIPTION
				173	174	185	186	187	199	200	201	202	212	213	225	226	236	237	244	245		ITEM NO.	TOTALS	UNIT	
																									ROADWAY
E-12				159	18	88																E-12	265	lin.ft.	pipe removed, 15" and under
E-12										78		15										E-12	93	lin.ft.	pipe removed, over 15"
I-15				900	625		665.5	1097			100	100							1053	584.5		I-15	5,125	lin.ft.	guard rail, steel beam type, deep as per Standard Drawing I-15 No. 2 A
I-15								15														I-15	15	each	wood guard rail posts without rail
I-15										273	261											I-15	534	lin.ft.	guard rail removed and stored
L-10				782	162		411	519		60	351	222	1150	543	623	603	433	368	511	185		L-10	6,923	sq.yds.	sodding
S-15																						I-15	15	tons	calcium chloride, furnished and applied
S-25																						S-25	458	lin.ft.	4" asbestos cement conduit, Sec. M-206.14, as per plan
																									DRAINAGE
E-2								14		1	235			136		1		52	1	2		E-2	442	cu.yds.	excavation for structures
E-3											38			30				10				E-3	78	cu.yds.	channel excavation
I-1					30																	I-1	30	lin.ft.	12" pipe for driveways, Sec. M-6.4(a)
I-1												20										I-1	20	lin.ft.	15" pipe for driveways, Sec. M-6.4(a)
I-1				64							30	18										I-1	112	lin.ft.	24" pipe for driveways, Sec. M-6.4(a)
I-1								144														I-1	144	lin.ft.	48" pipe for driveways,
I-2										80										68		I-2	68	lin.ft.	15" Class "A" storm sewers, Sec. M-6.4(c)
I-2																						I-2	80	lin.ft.	24" Class "A" storm sewers
I-2																64				22		I-2	22	lin.ft.	24" Class "A" storm sewers Sec. M-6.4(c).
I-2																				118		I-2	64	lin.ft.	24" Class "A" storm sewers Sec. M-6.6(a) or Sec. M-6.8(b) under pavt.
I-2								240														I-2	118	lin.ft.	24" Class "A" storm sewers Sec. M-6.6(c) under pavt. and approaches
I-2																				30		I-2	240	lin.ft.	48" Class "A" storm sewers Sec. M-6.6(a)
I-2																						I-2	30	lin.ft.	15" Class "A" storm sewers Sec. M-6.5(b) or Sec. 6.8(b) under pavement and approaches.
I-3								10								90						I-3	10	lin.ft.	6" pipe outlets for roadway drainage, Sec. M-6.4(h) without perforations
I-4											350			145						675	658	I-2	90	lin.ft.	24" Class "A" storm sewers, Sec. M-6.6(a), or Sec. M-6.8(b).
I-4										250	1162		1000	1128	800	870	900	734	402			I-4	1,828	lin.ft.	6" underdrain, shallow
I-4											20		20		10			10		10		I-4	7,246	lin.ft.	6" underdrain, deep
I-5																				2		I-4	70	lin.ft.	8" pipe outlets for underdrains, Sec. M-6.4(a)
I-5											2		4	2	2		3	2				I-5	2	each	15" pipe specials for Class "A" storm sewers, Sec. M-6.4(c)
I-5																				2		I-5	15	each	6" pipe specials for underdrains
I-8																1				1		I-5	2	each	24" pipe specials for storm sewers, Sec. M-6.4(c)
I-8																1						I-8	2	each	Standard No. 2-3 catch basin
I-8																				1		I-8	1	each	Standard No. 5 catch basin
I-8																				1		I-8	1	each	Standard No. 6 catch basin
I-8											1											I-8	1	each	Standard No. 1 manhole
I-9				230	200	84	140	252														I-9	906	lin.ft.	stone underdrains, No. 2
I-10				75	48		20	75		99				25					30	14		I-10	3,185	cu.yds.	dumped rock channel protection
I-10														80				14				I-10	94	sq.yds.	riprap, Type "A" (6" reinforced concrete)
I-14							30															I-14	30	lin.ft.	Standard Type I paved gutter
I-14										98	776											I-14	874	lin.ft.	special paved gutter, Type "I-A" as per plan
I-14							618				26		150	253								I-14	1,047	lin.ft.	special paved gutter, Type "I-B" as per plan
I-14							178															I-14	178	lin.ft.	special paved gutter, Type "I-C" as per plan.
I-14																			55	491		I-14	546	lin.ft.	special paved gutter, Type "I-D" as per plan
I-14																				64		I-14	64	lin.ft.	special paved gutter, Type "I-E" as per plan.
S-1								15		0.4	3.4			22		0.4		10	0.4	0.3		S-1	96	cu.yds.	concrete for structures, "Class E"
S-24																						S-24	lump	lump	removal of existing structures.
S-27														98				84				S-27	182	lin.ft.	30" pipe for roadway culverts, Sec. M-6.6(b) or Sec. M-6.8(b)
S-27											98											S-27	98	lin.ft.	33" pipe for roadway culverts, Sec. M-6.4(d)
S-27							54							78								S-27	132	lin.ft.	36" pipe for roadway culverts, Sec. M-6.6(b) or Sec. M-6.8(b)
S-27											110											S-27	110	lin.ft.	42" pipe for roadway culverts, Sec. M-6.6(b)

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SUB-SUMMARY

GENERAL NOTES & QUANTITIES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

MOT. - 25-0.49



STORM SEWERS AND ROADWAY DRAINAGE:

An estimated amount of Class B Storm Sewers Item I-2, and Roadway Drainage, Item I-3 has been provided to outlet any existing field drains or tile which may be encountered during construction.

The outlet locations, grades and depths required shall be determined by the Engineer during construction. The following basis shall be used in the handling of the tile.

(a) If fill is to be placed over the existing tile, it shall be replaced within the limits of the proposed roadway with new tile, one commercial size larger.

(b) If the proposed ditches undercut the existing tile, outlet the existing tile into the proposed ditch with 10 lin.ft. of pipe outlet.

Payment will be made on final measurement.

The size and estimated amounts are listed as follows:

Item I-2 6" Class "B" Storm Sewers under Pavement and Approaches	500 lin.ft.
Item I-2 8" Class "B" Storm Sewers under Pavement and Approaches	500 lin.ft.
Item I-2 10" Class "B" Storm Sewers under Pavement and Approaches	500 lin.ft.
Item I-2 12" Class "B" Storm Sewers under Pavement and Approaches	500 lin.ft.
Item I-3 6" roadway drainage	500 lin.ft.
Item I-3 8" roadway drainage	1,000 lin.ft.
Item I-3 10" roadway drainage	500 lin.ft.
Item I-3 12" roadway drainage	100 lin.ft.
Item I-3 6" outlets for roadway drainage	200 lin.ft.
Item I-3 8" outlets for roadway drainage	200 lin.ft.
Item I-3 10" outlets for roadway drainage	100 lin.ft.
Item I-3 12" outlets for roadway drainage	

PROTECTING BACK SLOPES:

An estimated quantity of dumped rock channel protection has been provided to be placed as directed by the Engineer on the back slopes of the proposed ditches where said ditches undercut or intercept adjacent swales.

Payment will be made on final measurement.

The estimate amount is as listed below:

Item I-10 Dumped Rock Channel Protection 100 Cu. Yds.

SEEDING & PROTECTING		
Stations		Seeding & Protecting Sq. Yds.
From	To	
26+00	30+00	17,450
30+00	40+00	37,579
40+00	50+00	34,877
50+00	60+00	36,121
60+00	70+00	37,840
70+00	80+00	27,325
80+00	90+00	41,415
90+00	100+00	41,691
100+00	110+00	43,850
110+00	120+00	41,002
120+00	130+00	37,562
130+00	140+00	37,695
140+00	150+00	41,040
150+00	160+00	44,673
160+00	170+00	40,876
170+00	180+00	42,334
180+00	190+00	25,229
190+00	200+00	41,762
200+00	210+00	38,399
210+00	220+00	37,907
Totals		950,318
Deductions:		
Sodding		26,869
Paved gutters		5,446
Dumped rock		876
Riprap		214
Total		33,405
Net Totals		916,913

R/W FENCE	
From Sheet No.	Type "A" Fence Lin. Ft.
317	2,565
319	2,919
320	3,007
321	3,004
322	2,906
323	2,925
325	2,953
326	2,980
327	2,987
328	2,620
330	3,017
331	1,414
332	1,388
334	3,040
Totals	* 37,725

L-9 COMMERCIAL FERTILIZER

Area Seeding = 916,913 sq.yds.

Area Sodding = 26,869 " "

Total Area 943,782 sq.yds.

943,782 sq.yds @ 20 lbs. per 1000 sq.ft = 84.94 Tons.

L-9 AGRICULTURAL LIMING MATERIALS

Area Seeding and Sodding = 943,782 sq.yds.

943,782 sq.yds @ 100 lbs. per 1000 sq.ft = 424.70 Tons.

E-4 BORROW	
Embankment +15% See Table =	1,419,131 cu.yds.
Rdwy. Excavation, See Table =	1,344,476 c.y.
Channel Excavation, See Sh. 12	7,273 c.y.
Struct. Exc. 20 Ft. Span & Under, Sh. 12	5,523 c.y.
Struct. Excavation Over 20 Ft. Span	2,900 c.y.
	1,360,172 cu.yds.
Net Borrow	58,959 cu.yds.

E-11 WATER, ESTIMATED 6439 M.GALS

NOTE ~ CHANGE IN PROFILE GRADE:

THE LENGTHS OF TWO VERTICAL CURVES WILL BE INCREASED AT THE TIME OF CONSTRUCTION AS FOLLOWS:

1. THE VERTICAL CURVE WITH P.I. AT STA. 76+00 WILL BE LENGTHENED FROM THE 1200 FEET NOW SHOWN IN THESE PLANS TO 2000 FEET. THIS CHANGE WILL LOWER THE PROFILE GRADE BELOW THAT NOW SHOWN IN THESE PLANS A MAXIMUM OF 4.32 FT. AT STA. 76+00.
2. THE VERTICAL CURVE WITH P.I. AT STA. 181+25 WILL BE LENGTHENED FROM THE 2000 FEET NOW SHOWN IN THESE PLANS TO 2500 FEET. THIS CHANGE WILL LOWER THE PROFILE GRADE BELOW THAT NOW SHOWN IN THESE PLANS A MAXIMUM OF 3.43 FT. AT STA 181+25.

THESE CHANGES IN PROFILE GRADE RESULT IN THE FOLLOWING TOTAL CORRECTIONS IN EARTHWORK QUANTITIES:
ROADWAY EXCAVATION = + 137,990 CU.YDS. ~ EMBANKMENT = - 9,958 CU.YDS.

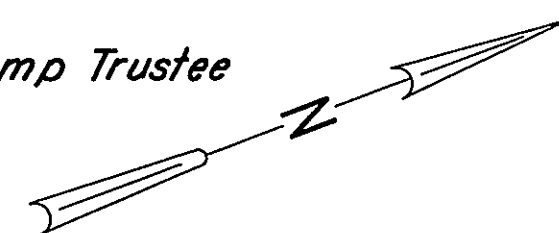
EARTHWORK CORRECTIONS ARE CARRIED IN THE EARTHWORK TABLE SHOWN ELSEWHERE ON THIS SHEET.

SUPPLEMENTAL SHEETS SHOWING REVISED PROFILES AND CROSS SECTION TEMPLATES WILL BE FURNISHED AT THE TIME OF CONSTRUCTION.

EARTHWORK		QUANTITIES					
STATIONS		EXCAVATION		EMBANKMENT		EMB. +15 %	
FROM	TO	CU.	YDS.	CU.	YDS.	CU.	YDS.
26 + 00	30 + 00		766		28,965		33,310
30 + 00	40 + 00		3,482		55,395		63,704
40 + 00	50 + 00		12,993		7,898		9,083
50 + 00	60 + 00		9,765		18,935		21,775
60 + 00	70 + 00		81,439		5,132		5,902
70 + 00	80 + 00		196,244		1,133		1,303
80 + 00	90 + 00		18,747		101,234		116,419
90 + 00	100 + 00		2,543		132,240		152,076
100 + 00	110 + 00		13,261		54,300		62,445
110 + 00	120 + 00		10,470		47,284		54,377
120 + 00	130 + 00		2,344		68,145		78,367
130 + 00	140 + 00		39,120		69,178		79,555
140 + 00	150 + 00		22,568		37,886		43,569
150 + 00	160 + 00		122,511		475		546
160 + 00	170 + 00		73,592		5,648		6,495
170 + 00	180 + 00		68,997		14,820		17,043
180 + 00	190 + 00		123,670		16		18
190 + 00	200 + 00		49,261		28,260		32,499
200 + 00	210 + 00		32,786		158,199		181,929
210 + 00	220 + 00		48,384		170,130		195,650
220 + 00	225 + 15		33,408		36,076		41,487
Miamisburg-Springboro Rd.							
			2,076		39,513		45,440
Lyons Rd.							
			3,758		48,572		55,858
S. R. 725			80,906		8,802		10,122
Ramp A			96,526		2,307		2,653
Ramp B			52,732		7,910		9,096
Ramp C			74,482		0		0
Ramp D			67,645		85,574		98,410
Correction- See Note Below			+137,990		9958		-11,452
Totals			1,482,466		1,243,985		1,430,583

Miamisburg-Springboro Rd.	2,076	39,513	45,440
Lyons Rd.	3,758	48,572	55,858
S. R. 725	80,906	8,802	10,122
Ramp A	96,526	2,307	2,653
Ramp B	52,732	7,910	9,096
Ramp C	74,482	0	0
Ramp D	67,645	85,574	98,410
Correction- See Note Below	+137,990	9,958	-11,452
Totals	1,482,466	1,243,985	1,430,583

Henry N. Hollencamp Trustee



I-1101(18) I-1101(19)

STA 24+70 BEGIN WORK
STA 26+00 BEGIN PROJECT

Lovina Smith et al

CURVE DATA

P.I. Sta. 218+16.45 (Warren Co. Sta.)

$\Delta = 27^\circ 51' 45''$ Lt.

$D = 0^\circ 28' 12''$ Lt.

$R = 12,277.67'$

$L_c = 5,970.54'$

$T = 3,045.52'$

$E = 372.09'$

FED. RD. DIVISION	STATE	PROJECT
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MOT-25-049

Sta. 20+00
Begin Sheet

Sta. 30+00
End Sheet

MOT-75-0045
Site Plans in
Warren Co. Plans
3-9' Culverts

25

Survey

B.M. Spike in base of 8" Locust
410' Rt. of Sta. 20+80
Elev. 897.491

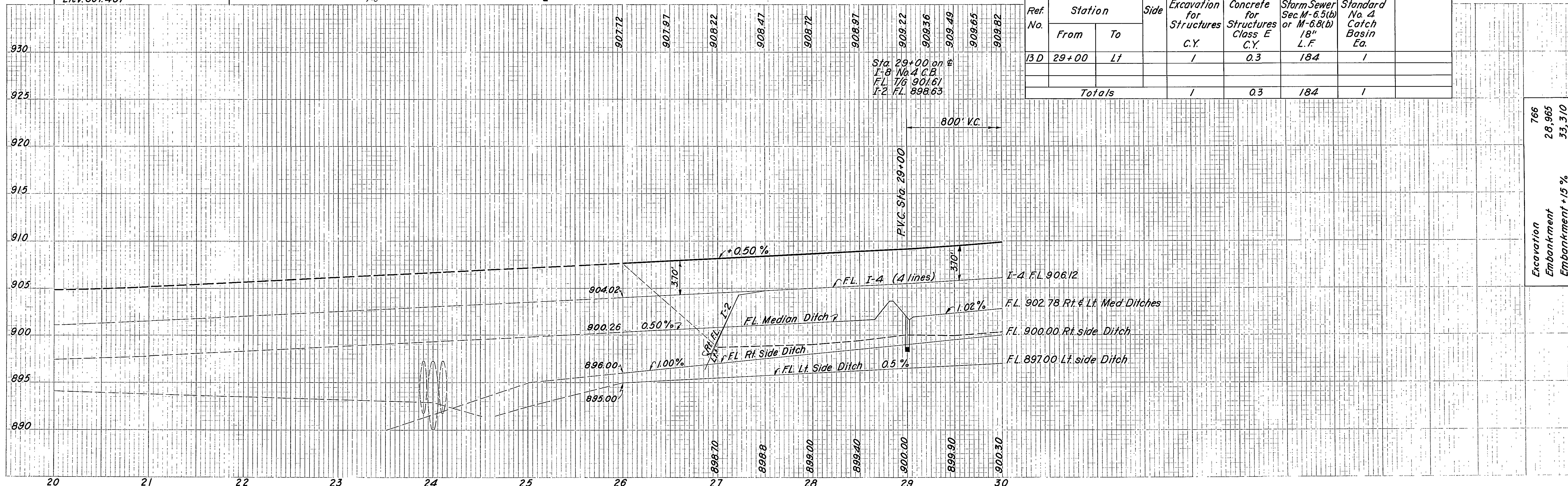
Henry N. Hollencamp
Trustee

Elizabeth A Doan

L.E. Smith, et al

DRAINAGE											
Ref. No.	Station		Side	I-4 Underdrain		I-5 for I-4		I-2 Storm Sewer Sec. M-6.5(b) or M-6.8(b) 8" L.F.	I-5 for I-2		I-4 Pipe Outlets for Underdrain 8" L.F.
	From	To		Shallow 6" L.F.	Deep 6" L.F.	Bend. 60° 6" Ea.			Wye 8"x8" x 6" Ea.	Incr-aser 6"x8" 6" Ea.	
1 D	26+00	27+20	L	120							
2 D	26+00	27+47	L	147							
3 D	26+00	27+47	R	147							
4 D	26+00	27+20	R	120							
5 D	27+23	30+00	L	277							
6 D	27+50	30+00	L	250		1				1	
7 D	26+86	27+50	L					116	1		10
8 D	27+50	30+00	R	250		1				1	
9 D	27+23	30+00	R	277							
10 D	26+92	27+50	R					108	1		10
11 D	26+00	30+00	R								9 400
12 D	24+70	26+00	L								6 87
Totals				1588		2		224	2	2	20 487

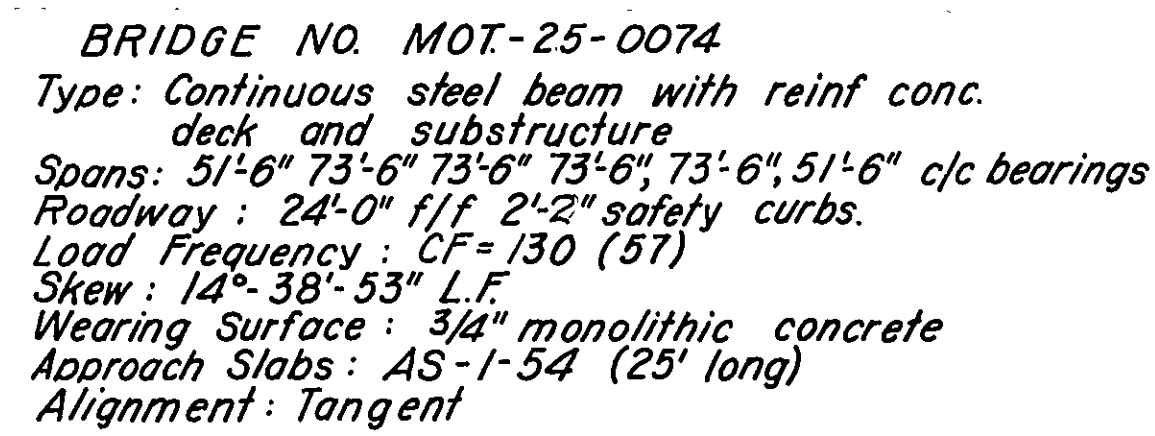
DRAINAGE (Cont.)						
Ref. No.	Station		Side	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class E C.Y.	I-2 Storm Sewer Sec. M-6.5(b) or M-6.8(b) 18" L.F.
	From	To				I-8 Standard No. 4 Catch Basin Ea.
13 D	29+00	Lt		1	0.3	184 1
Totals				1	0.3	184 1



Excavation
Embankment
Embankment + 15 %

766
28,965
33,310

Sta. 20+00 to Sta. 30+00



FCR RD DIVISION	STATE	PROJECT	
2	OHIO		

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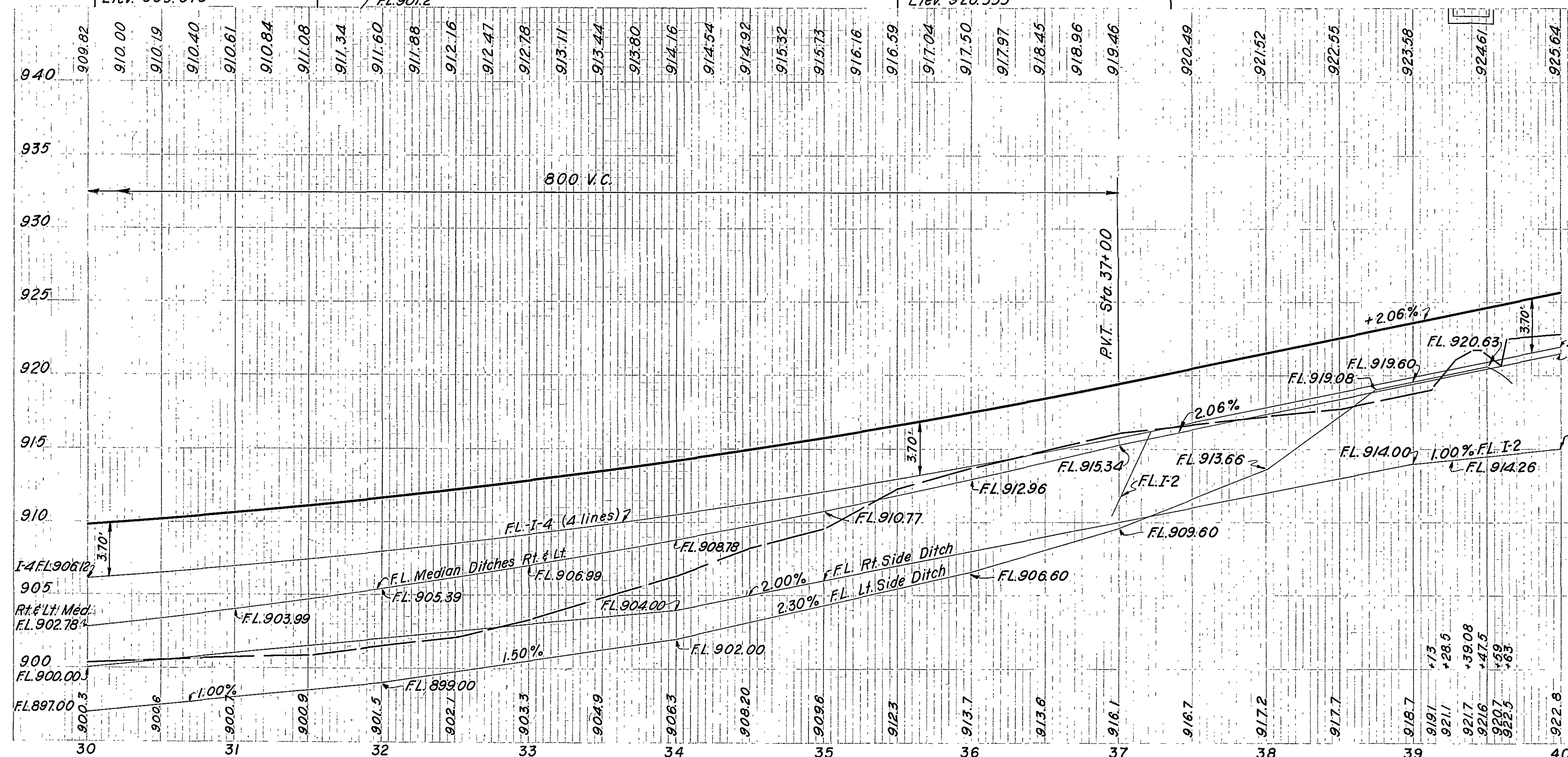
MOT-25-0.49

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DRAINAGE (Cont.)							
Ref. No.	Station		Side	I-2 Storm Sewers Sec. M-68(a) or M-68 (b) S.E.	I-10 Dumped Rock Channel Prot.	S-1 Concrete for Structures Class E C.Y.	E-2 Excavation for Structures C.Y.
	From	To		Depth Inches	C.Y.		
13 D	39+16	39+26	R		30	8	
14 D	39+26	40+00	R	74			0.6
	Totals			74		8	0.6
							1

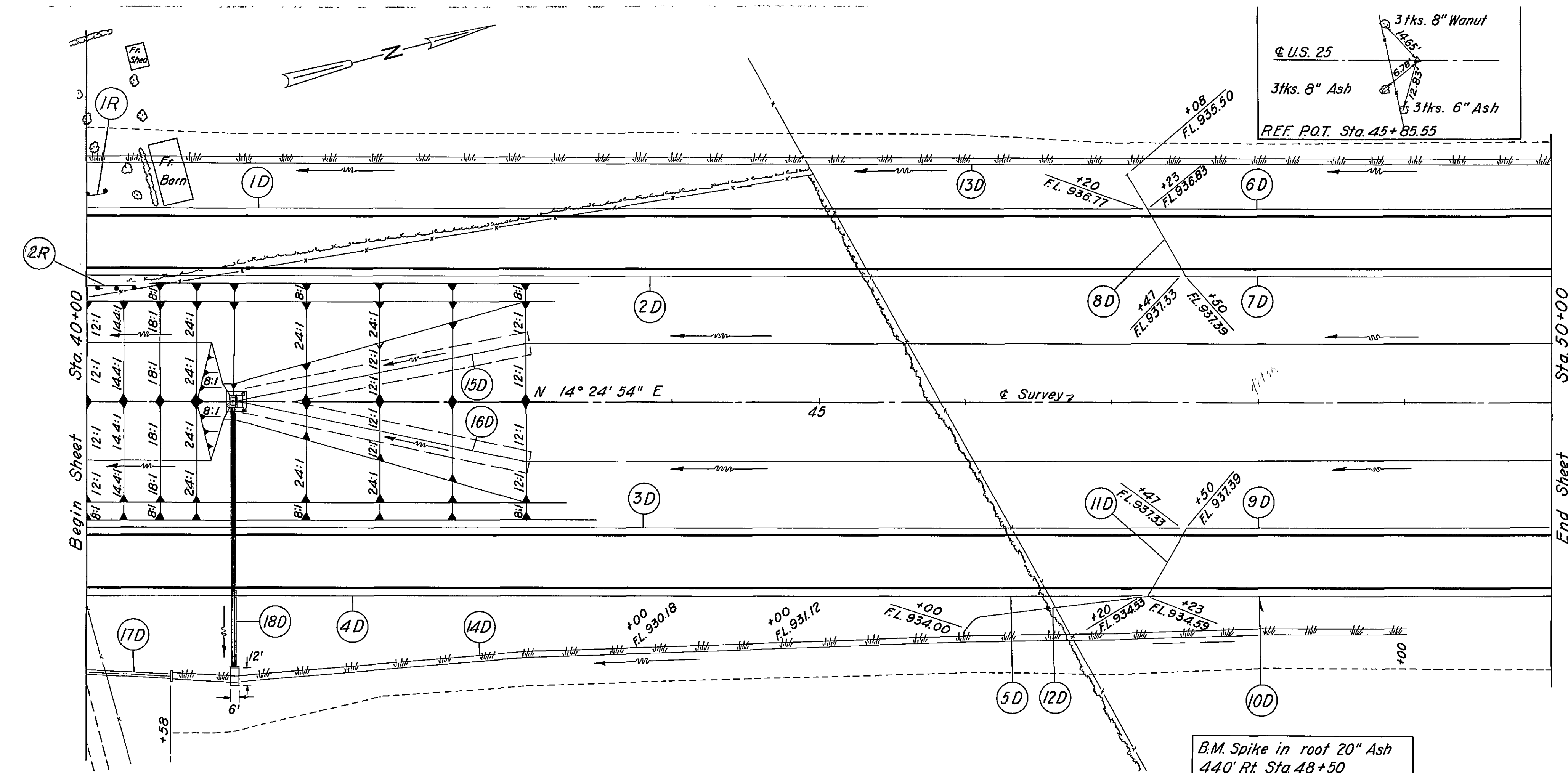
ROADWAY					
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type- Deep Standard L.F.	See Sheet No.
	From	To			
1 R	38+75	40+00	L	125	266
2 R	38+95	40+00	L	105	"
3 R	38+40	39+77.5	R	137.5	"
4 R	38+60	39+97.5	R	137.5	"
Totals				505	

Excavation	3,482 c.y.
Embankment	55,395 c.y.
Embankment + 15 %	63,704 c.y.



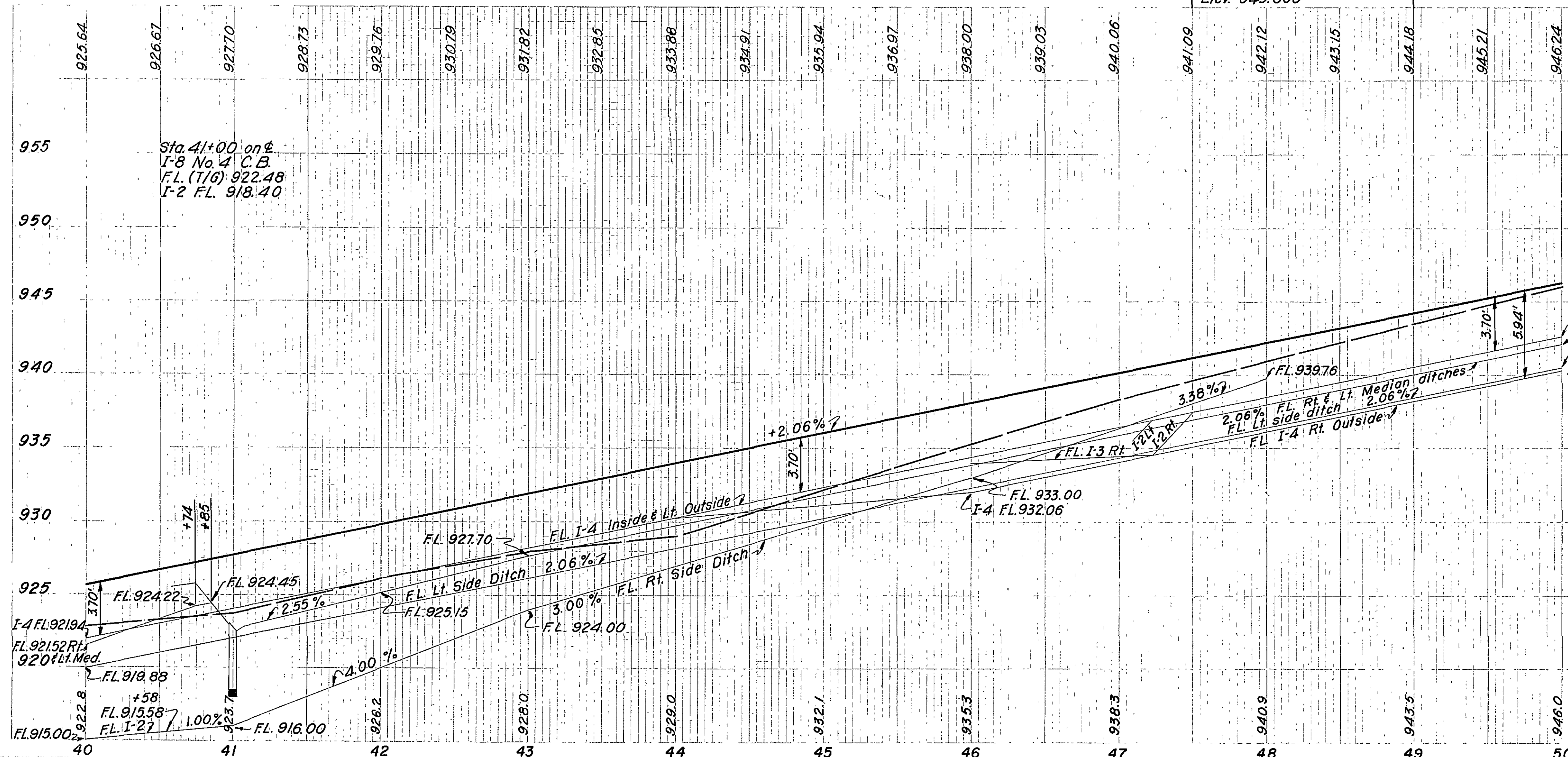
Sta. 30+00 to 40+00

MOT-25-049



DRAINAGE														
Ref. No.	Station		Side	I-4 Underdrain		I-2 Storm Sewers Sec. M-6.5(D) or M-2.8(B) 8" L.F.	I-3 Pipe for Roadway Drainage 8" L.F.	I-4 Pipe Outlets for Underdrains 8" L.F.	I-5 for I-2		I-5 for I-3 Bend 45° 8" Ea.	I-5 for I-4 Bend 60° 6" Ea.	L-10 Sodding	
	From	To		Shallow 6" L.F.	Deep 6" L.F.				Wye 8"x8" x 6" Each	Incr. 6"x8" x 6" Ea.			Width L.F.	S.Y.
1 D	40+00	47+20	L	720										
2 D	40+00	47+47	L	747										
3 D	40+00	47+47	R	747										
4 D	40+00	46+00	R	600										
5 D	46+00	47+20	R		120									
6 D	47+23	50+00	L	277										
7 D	47+50	50+00	L	250										
8 D	47+08	47+50	L			72		10	1	1				
9 D	47+50	50+00	R	250										
10 D	47+23	50+00	R	277										
11 D	47+23	47+50	R			54			1	1	1			
12 D	46+00	47+23	R				118	10						
13 D	40+00	50+00	L										6'	667
14 D	40+58	49+00	R										6'	557
15 D	41+07	43+02	L										18" Strips	40
16 D	41+07	43+02	R										18" Strips	40
Totals				3868	120	126	118	20	2	2	1	1	2	1304

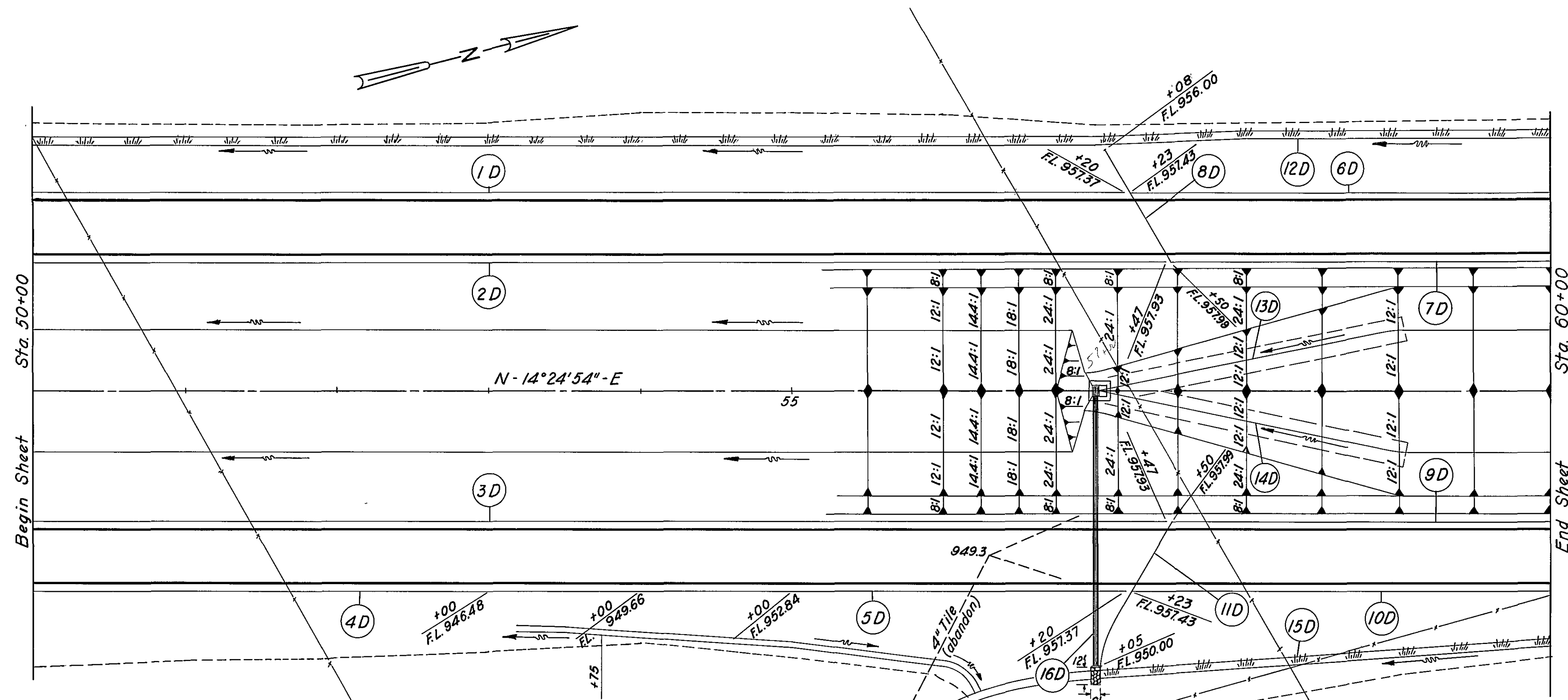
DRAINAGE (Cont)										
Ref. No.	Station		Side	E-2 Excavation for Structures	S-1 Concrete for Struct. Class "E"	I-2 Storm Sewers		I-8 Standard No. 4 Catch Basin	I-10 Dumped Rock Channel Protection	L-10 Sodding
	From	To		C.Y.	C.Y.	Sec. M-6.6(a) 24" L.F.	Sec. M-6.6(b) 36" L.F.	No. Ea.	Depth Inches C.Y.	Width L.F. S.Y.
17 D	40+00	40+58	R	1	0.6		58			
18 D	41+00	-		1	0.4	180		1	30	7 3 14
Totals				2	1.0	180	58	1	7	14



ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type Deep Standard L.F.
	From	To		See Sheet No.
1 R	40+00	40+12.5	L	12.5 266
2 R	40+00	40+32.5	L	32.5 266
Totals				45

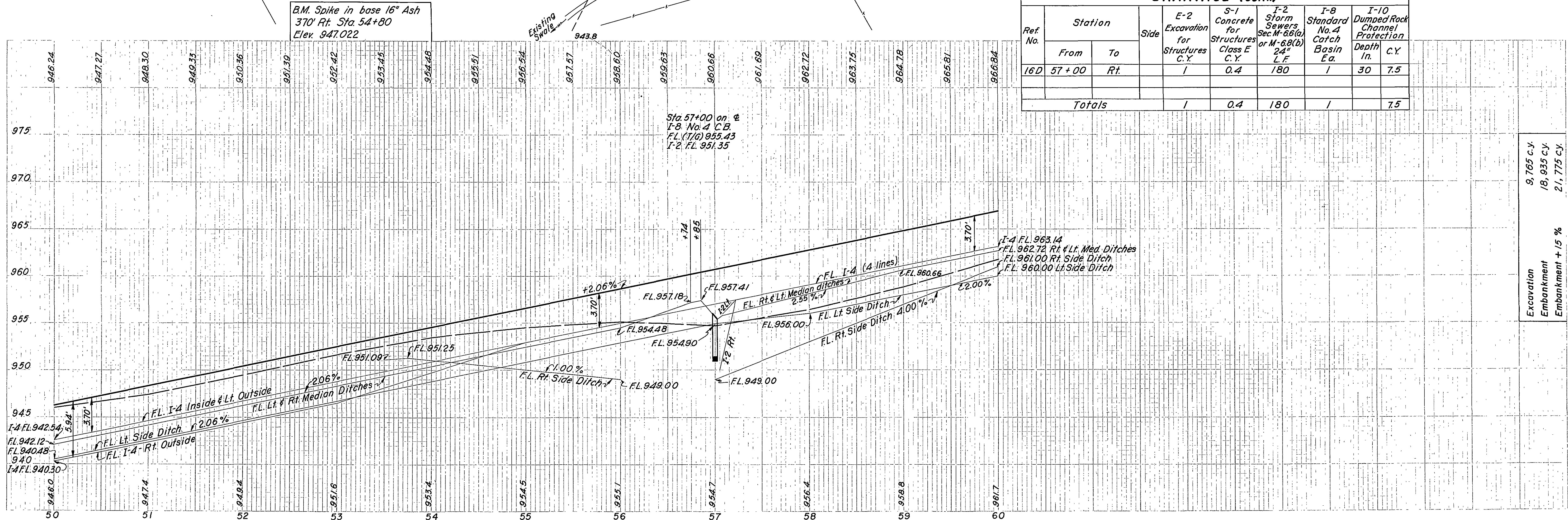
Excavation 12,993 c.y.
Embankment 7,898 c.y.
Embankment +15 % 9,083 c.y.

MOT-25-0.49



DRAINAGE													
Ref. No.	Station		Side	I-4 Underdrain		I-5 for I-4		I-2 Storm Sewers Sec. M-6.5(b) or M-6.8(b) 8" L.F.	I-5 for I-2		I-4 Pipe Outlets for Underdrain 8" L.F.	L-10 Sodding	
	From	To		Shallow 6" L.F.	Deep 6" L.F.	Bend 60° 6" Each	Increaser 6"x8" Ea.		Wye 8"x6" x6" Ea.	Bend 30° 8" Ea.		Width L.F.	S.Y.
1 D	50+00	57+20	L	720									
2 D	50+00	57+47	L	747									
3 D	50+00	57+47	R	747									
4 D	50+00	53+00	R		300								
5 D	53+00	57+20	R	420									
6 D	57+23	60+00	L	277									
7 D	57+50	60+00	L	250		1		1					
8 D	57+08	57+50	L				76		1		10		
9 D	57+50	60+00	R	250		1		1					
10 D	57+23	60+00	R	277									
11 D	57+05	57+50	R				98		1	1	10		
12 D	50+00	60+00	L									6	667
13 D	57+07	59+07	L									18" Strips	40
14 D	57+07	59+07	R									18" Strips	40
15 D	57+03	60+00	R									6	198
Totals				3688	300	2		174	2	2	1	20	945

DRAINAGE (Cont.)									
Ref. No.	Station		Side	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class E C.Y.	I-2 Storm Sewers Sec. M-6.6(a) or M-6.8(b) 24" L.F.	I-8 Standard No. 4 Catch Basin Ea.	I-10 Dumped Rock Channel Protection	
	From	To						Depth In.	C.Y.
16D	57+00	Rt.		1	0.4	180	1	30	7.5
Totals				1	0.4	180	1		7.5



Sta. 50+00 to 60+00

L. Pearl & Clyde C. Long

22-R
336

U.S. 25

37ks

39.19

20.01

37ks

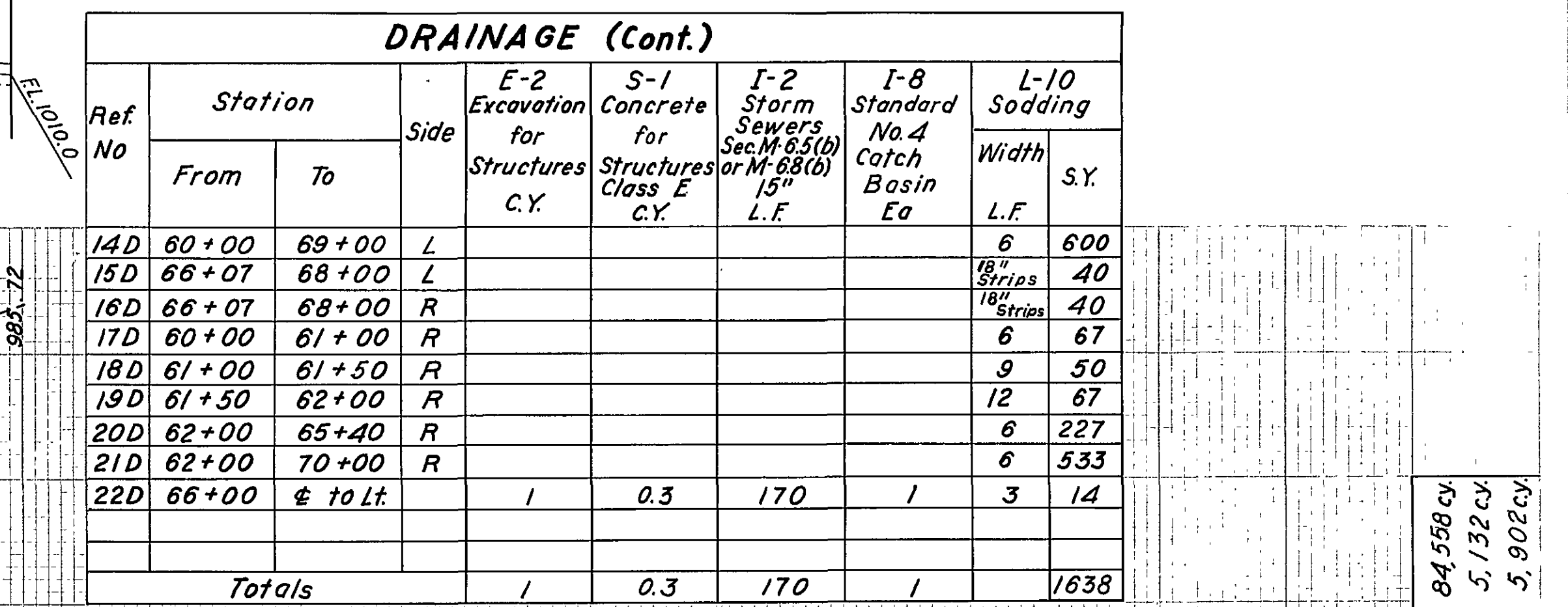
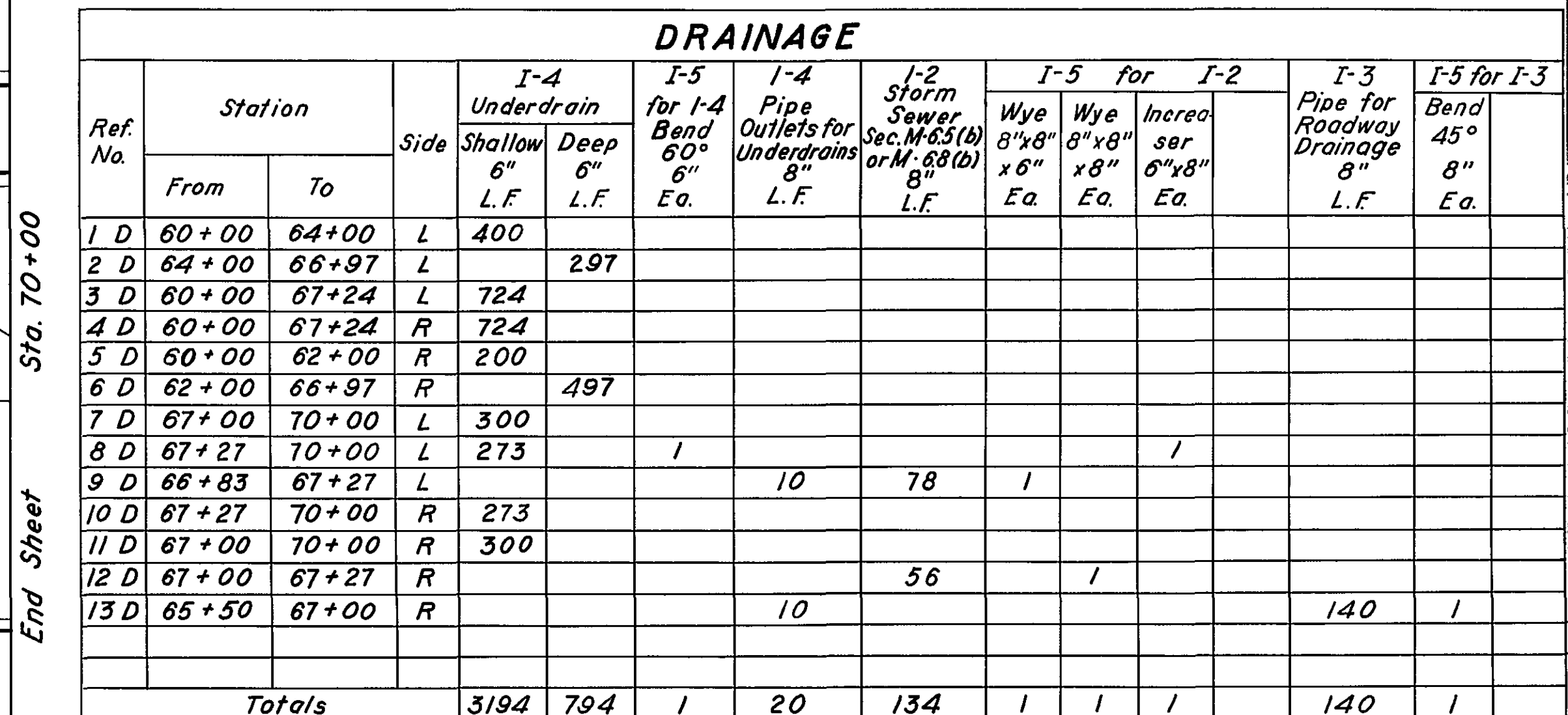
4hacberry

36.13

37ks

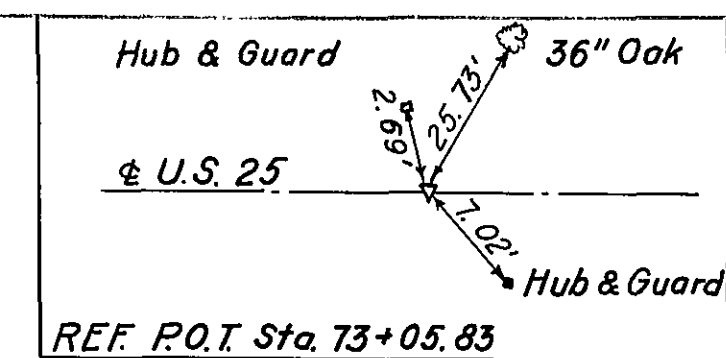
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REF. P.O.T. Sta. 64+99.28



Rev'd. 1-2-59

Sta. 60+00 to Sta. 70+00

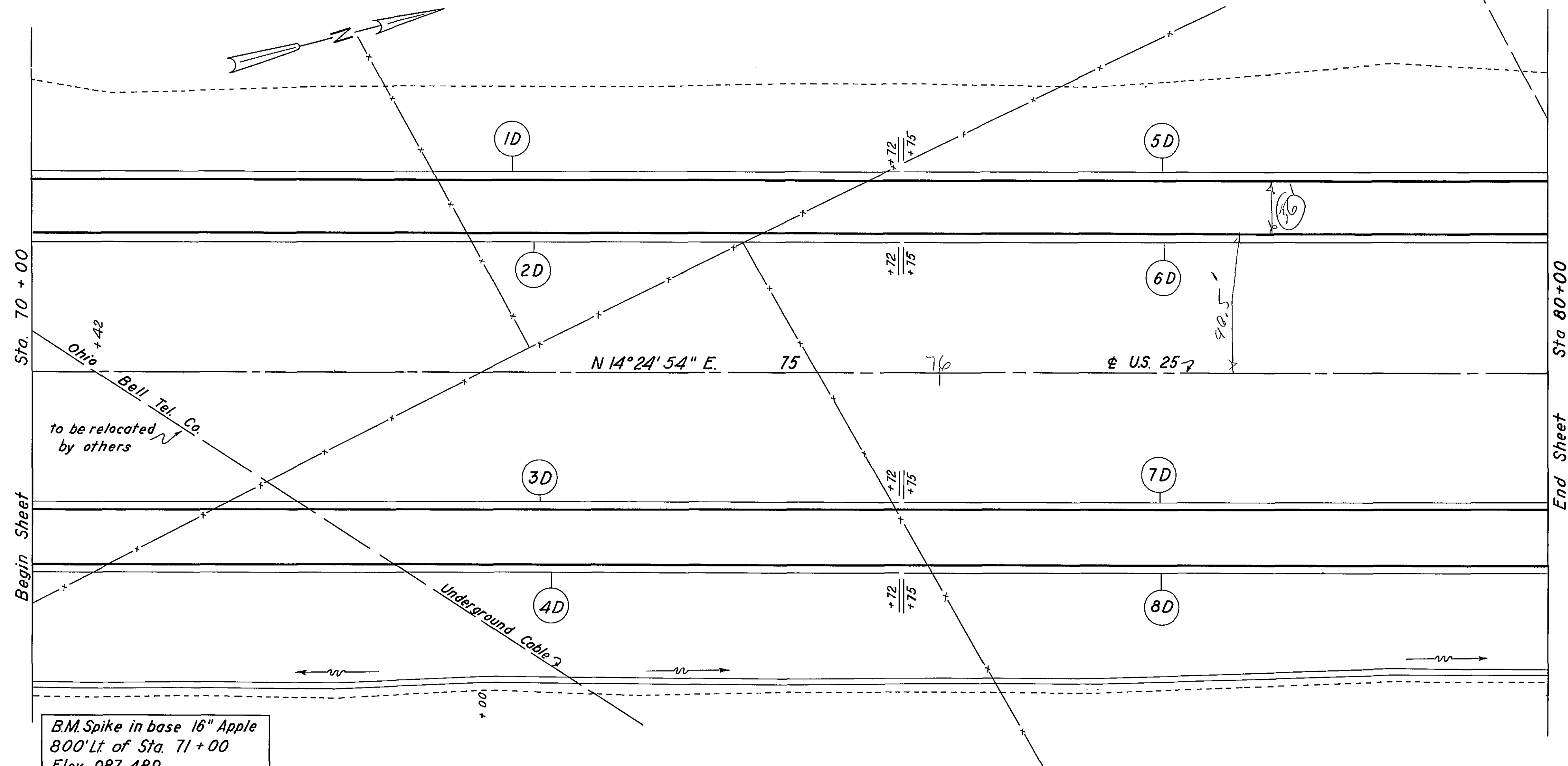


FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

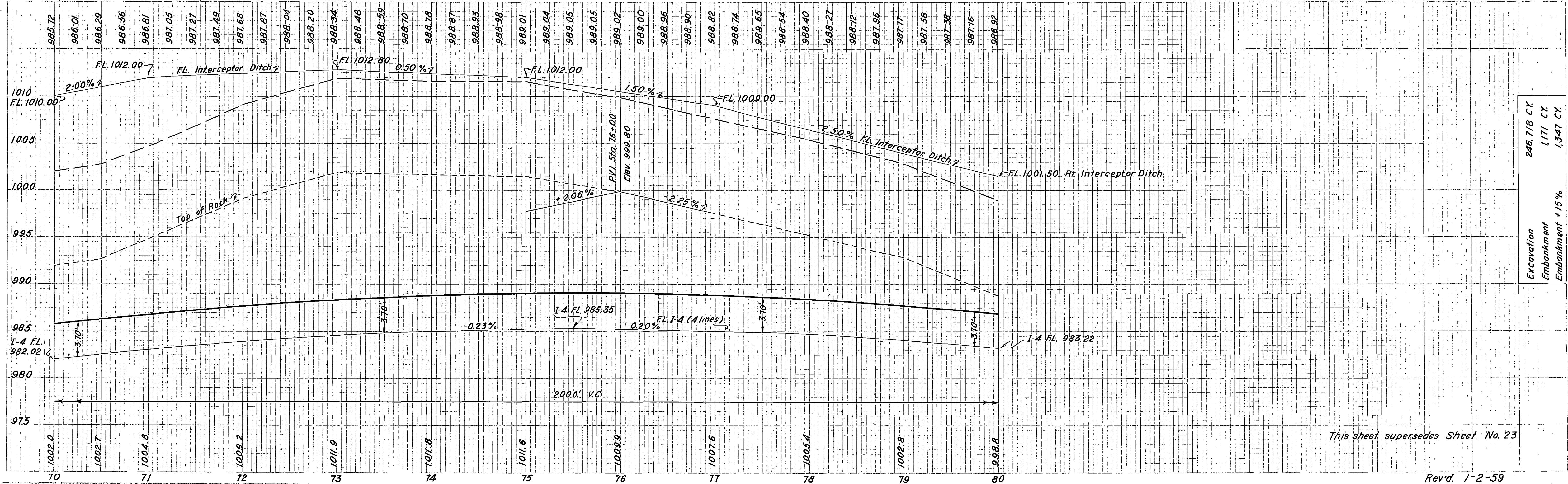
23-R
336

MOT.-25-049

DRAINAGE					
Ref. No	Station		Side	I-4 Underdrain	
	From	To		Shallow 6" L.F.	Deep 6" L.F.
1 D	70+00	75+72	L	572	
2 D	70+00	75+72	L	572	
3 D	70+00	75+72	R	572	
4 D	70+00	75+72	R	572	
5 D	75+75	80+00	L	425	
6 D	75+75	80+00	L	425	
7 D	75+75	80+00	R	425	
8 D	75+75	80+00	R	425	
Totals				3988	



B.M. Spike in base 16" Apple
 800' Lt of Sta. 71+00
 Elev. 987.489



Excavation
 Embankment
 Embankment +15%
 246.718 CY
 1171 CY
 1347 CY

This sheet supersedes Sheet No. 23

Rev'd. 1-2-59

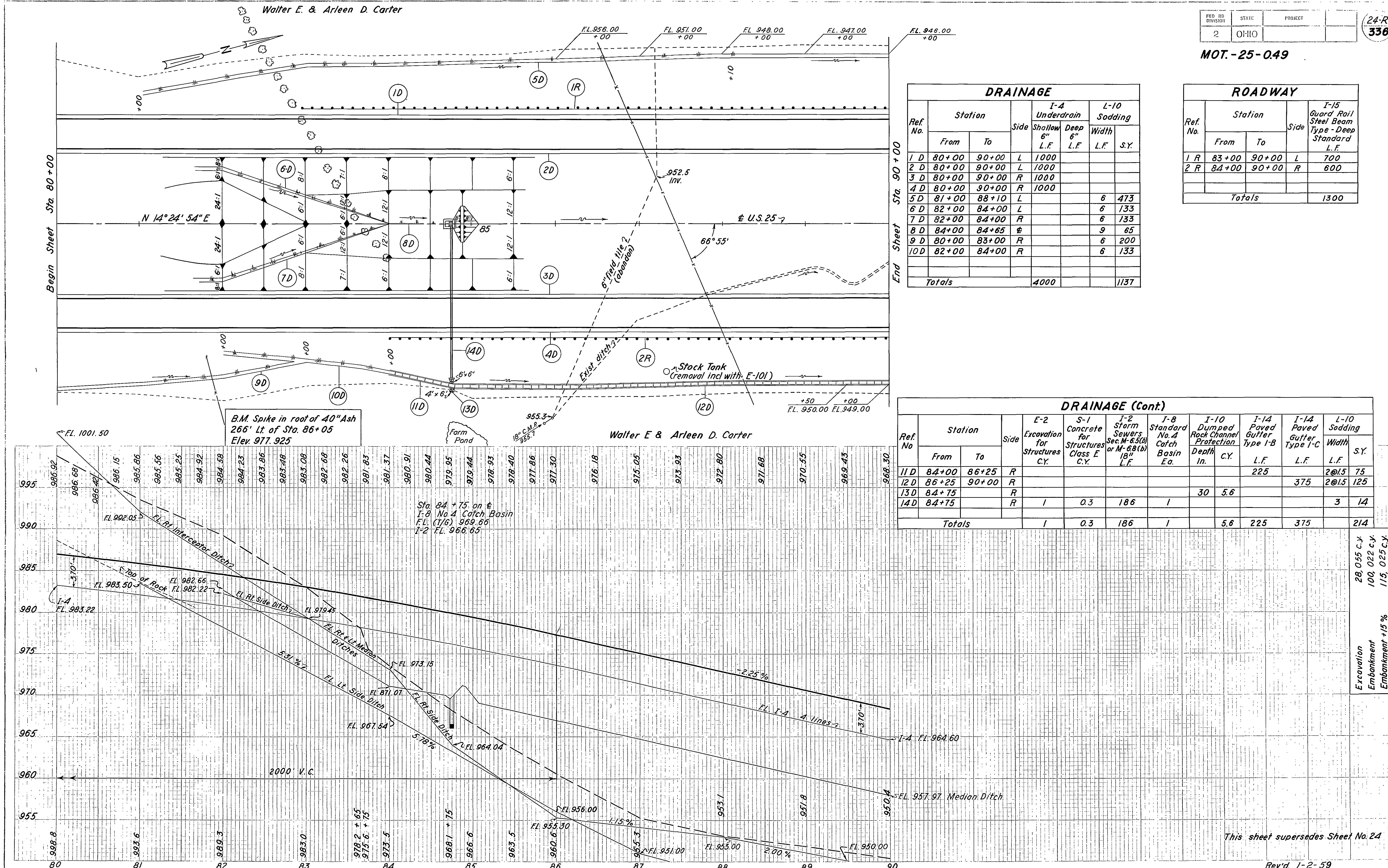
Sta 70+00 to Sta 80+00

MOT.-25-049

ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type - Deep Standard L.F.
	From	To		
1 R	83+00	90+00	L	700
2 R	84+00	90+00	R	600
Totals				1300

DRAINAGE						
Ref. No.	Station		Side	I-4 Underdrain		L-10 Sodding
	From	To		Shallow 6" L.F.	Deep 6" L.F.	
1 D	80+00	90+00	L	1000		
2 D	80+00	90+00	L	1000		
3 D	80+00	90+00	R	1000		
4 D	80+00	90+00	R	1000		
5 D	81+00	88+10	L			6 473
6 D	82+00	84+00	L			6 133
7 D	82+00	84+00	R			6 133
8 D	84+00	84+65	E			9 65
9 D	80+00	83+00	R			6 200
10 D	82+00	84+00	R			6 133
Totals				4000		1137

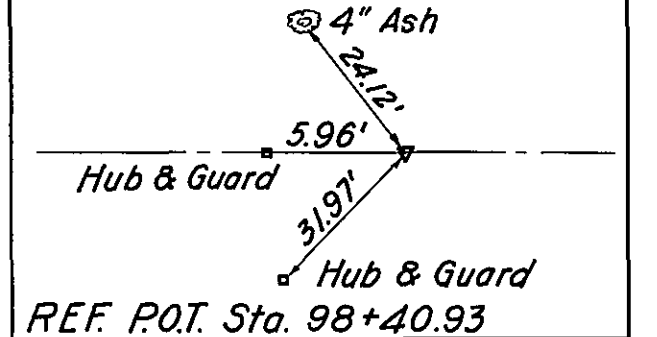
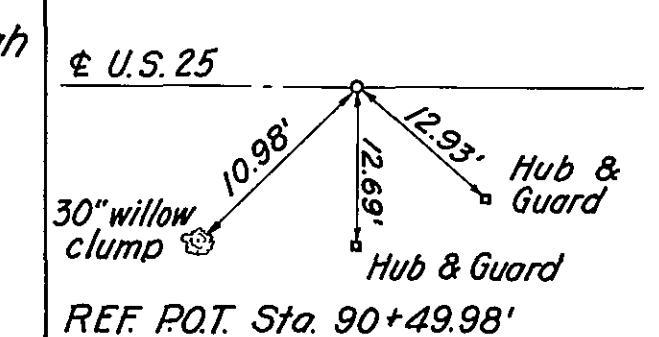
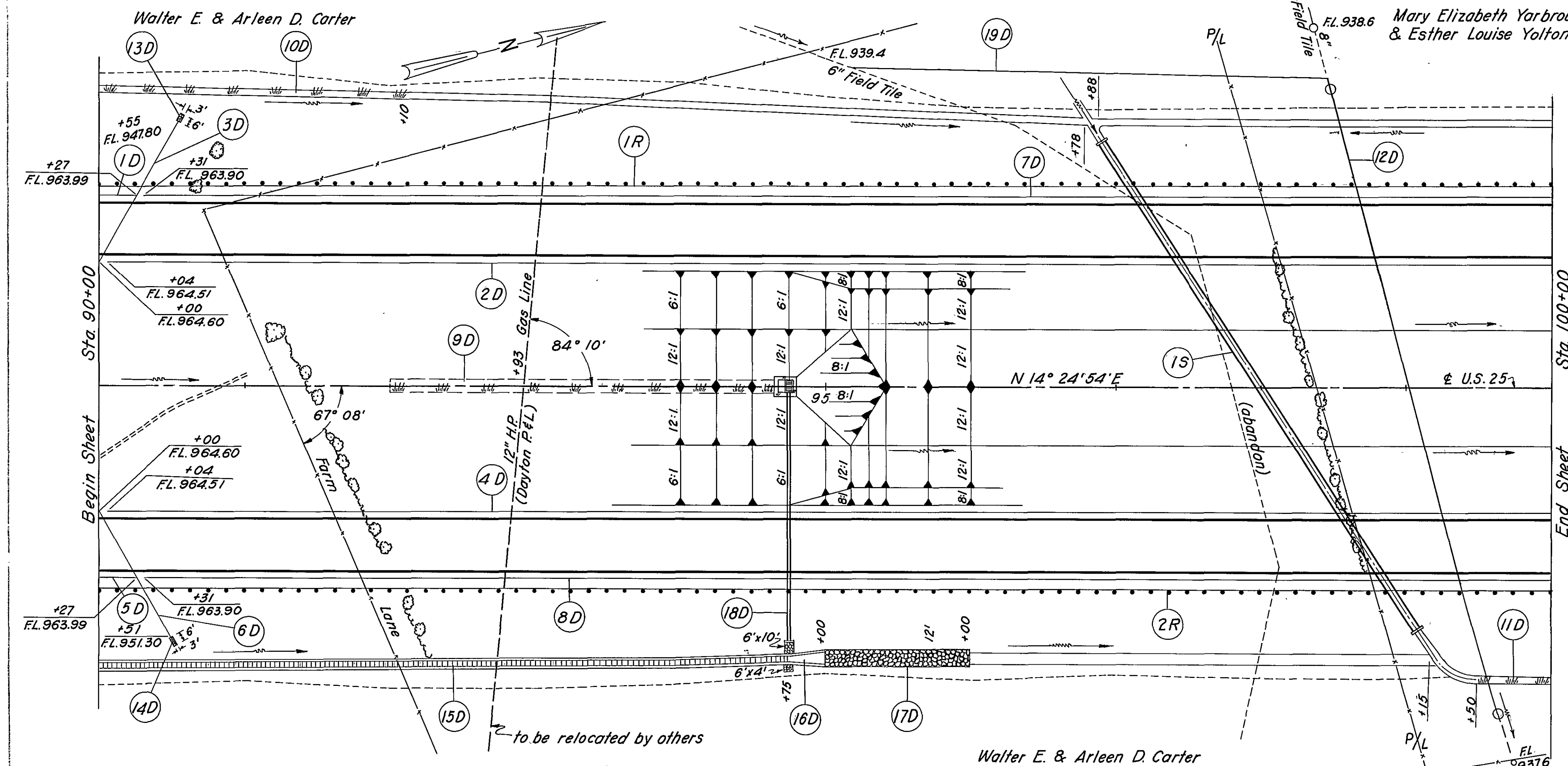
DRAINAGE (Cont.)											
Ref. No.	Station		Side	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class E C.Y.	I-2 Storm Sewers Sec. M-65(b) or M-68(b) 18" L.F.	I-8 Standard No. 4 Catch Basin Ea.	I-10 Dumped Rock Channel Protection Depth In. C.Y.	I-14 Paved Gutter Type I-B L.F.	I-14 Paved Gutter Type I-C L.F.	L-10 Sodding Width L.F. S.Y.
	From	To									
11 D	84+00	86+25	R						225		2@1.5 75
12 D	86+25	90+00	R							375	2@1.5 125
13 D	84+75		R					30 5.6			3 14
14 D	84+75		R	1	0.3	186	1				
Totals				1	0.3	186	1	5.6	225	375	214



This sheet supersedes Sheet No. 24

Rev'd 1-2-59

Sta. 80+00 to Sta. 90+00

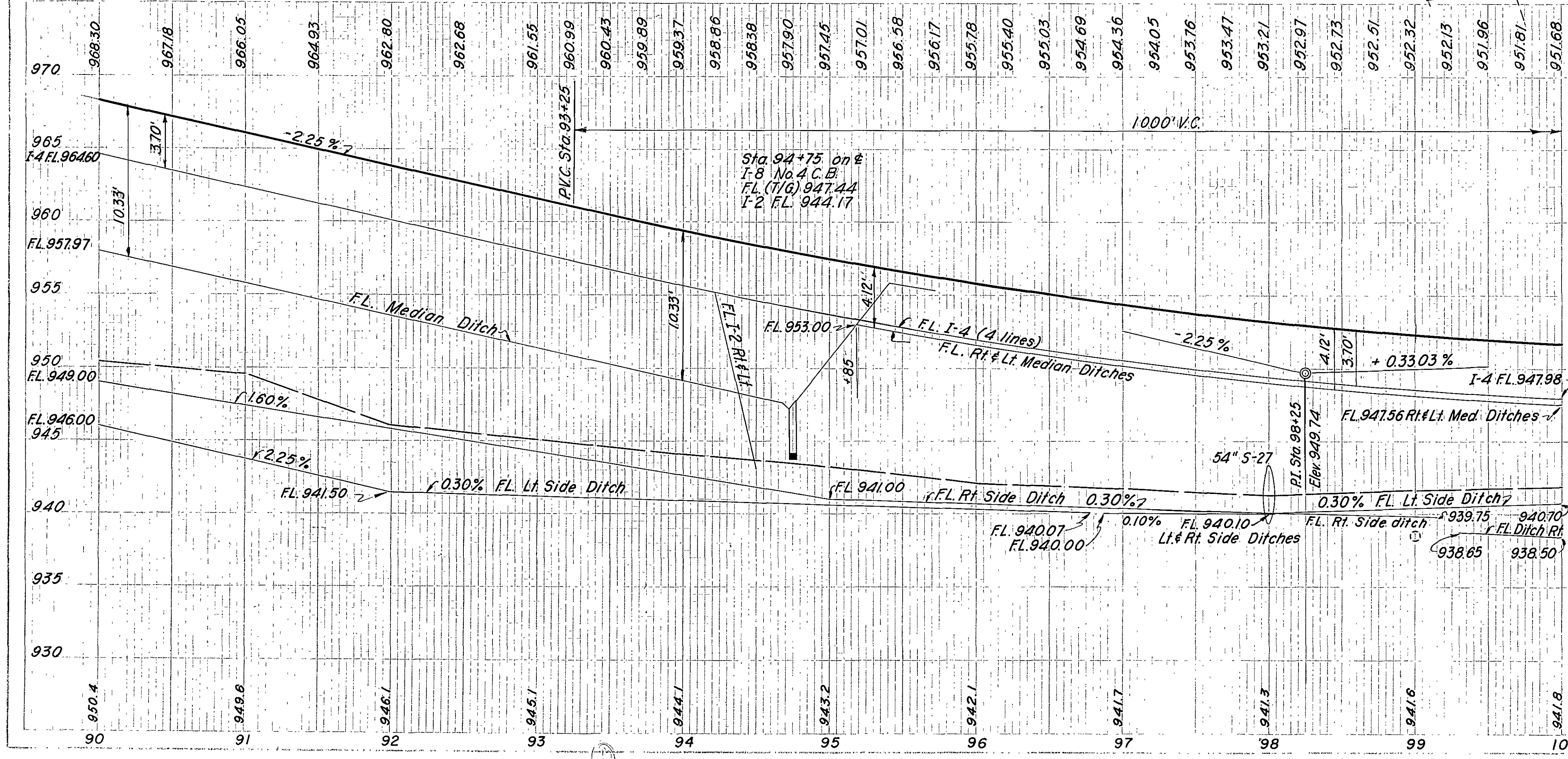


FED. RD. DIST.	STATE	PROJECT	25
2	OHIO		336

MOT-25-049

DRAINAGE													
Ref. No.	Station		Side	I-4 Underdrain Shallow 6" L.F.	I-5 for I-4 Bend 60° Each	I-2 Class B Storm Sewer under Pavt. and Approaches 10" L.F.	I-2 Storm Sewer Sec. M-6.5(b) or M-6.8(b) 8" L.F.	I-5 for I-2		I-4 Pipe Outlets for Underdrain 8" L.F.	L-10 Sodding		I-8 Standard No. 1 Side Ditch Inlet Ea.
	From	To						Wye 8"x8" x 6" Ea.	Incr-aser 6"x8" Ea.		Width L.F.	S.Y.	
1 D	90+00	90+27	L	27									
2 D	90+04	100+00	L	996									
3 D	90+00	90+55	L		1		100	1	1	10			
4 D	90+04	100+00	R	996									
5 D	90+00	90+27	R	27									
6 D	90+00	90+51	R		1		90	1	1	10			
7 D	90+31	100+00	L	969									
8 D	90+31	100+00	L	969									
9 D	92+00	94+65	E								9	265	
10 D	90+00	92+10	L								9	210	
11 D	99+50	100+00	R								12	67	
12 D	98+35	99+65	L-R			450							2
Total				3984	2	450	190	2	2	20		542	2

DRAINAGE (Cont.)											
Ref. No.	Station		Side	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class "E" C.Y.	I-2 Storm Sewer Sec. M-6.6(b) or M-6.8(b) 21" L.F.	I-8 Standard No. 4 Catch Basin Ea.	I-10 Dumped Rock Channel Protection Depth In.	I-14 Paved Gutter Type I-C L.F.	I-10 Type "A" Riprap (6" reinf. conc.) S.Y.	L-10 Sodding Width L.F.
	From	To									
13 D	90+55		L					30	1.7		
14 D	90+51		R					30	1.7		
15 D	90+00	94+75	R							475	2@15
16 D	94+75	95+00	R								158
17 D	90+00	95+00	R					30	111.1		
18 D	94+75				0.4	170	1	30	7.8		3
Totals				1	0.4	170	1	122.3	475	28	172

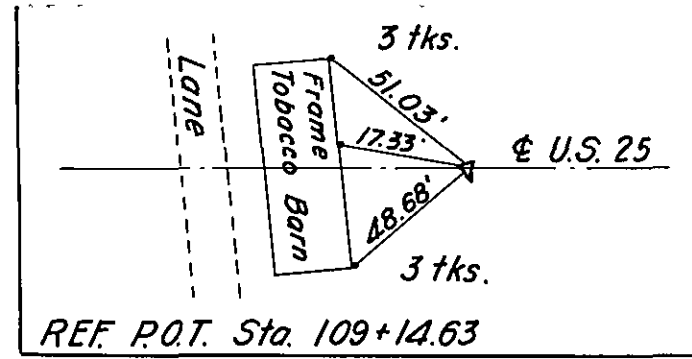


STRUCTURES (20 Ft. Span and Under)						
Ref. No.	Station	E-2 Excavation for Structures C.Y.	E-3 Channel for Excavation C.Y.	S-1 Concrete for Structures Class "E" C.Y.	S-27 Pipe for Roadway Culvert Sec. M-6.6 (b) 54" L.F.	L-10 Sodding S.Y.
I-S	98+00	420	90	1.9	402	75
Totals		420	90	1.9	402	75

DRAINAGE (Cont.)				
Ref. No.	Station		Side	I-3 Pipe for Roadway Drainage 8" L.F.
	From	To		
19 D	95+20	98+45	L	325
Totals				325

ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type - Deep Standard L.F.
	From	To		
1 R	90+00	100+00	L	1000
2 R	90+00	100+00	R	1000
Totals				2000

Sta. 90+00 to 100+00



MOT-25-049

DRAINAGE

Ref. No.	Station		Side	I-4 Underdrain		Bend 60° 6" Ea.	I-5 for I-4		Wye 6"x6" x 6" Ea.	I-2 Storm Sewers		I-5 for I-2		I-4 Pipe Outlets for Underdrains 8" L.F.	L-10 Sodding	
	From	To		Shallow 6" L.F.	Deep 6" L.F.					Sec. M-6.5(b) or M-6.8(b) 8" L.F.	Wye 8"x8" x 6" Ea.	Increase 6"-8" Ea.			Width L.F.	S.Y.
1 D	100+00	101+96	L	195												
2 D	100+00	101+96	L	195												
3 D	101+50	101+99	L							88	2	1		10		
4 D	100+00	101+96	R	195												
5 D	100+00	101+96	R	195												
6 D	101+50	101+93	R							90	2	1		10		
7 D	102+00	108+69	L	658												
8 D	102+00	108+96	L	695												
9 D	102+01	102+50	L							88	2	1		10		
10 D	102+00	109+96	R	796												
11 D	102+00	109+69	R	769												
12 D	102+01	102+50	R							90	2	1		10		
13 D	108+73	110+00	L	127												
14 D	109+00	110+00	L	100												
15 D	108+46	109+00	L							100	1	1		10		
16 D	109+73	110+00	R	27												
17 D	109+35	110+00	R							120	1	1		10		
18 D	100+00	109+40	R												12	1260
19 D	108+28	110+00	L												6	115
Totals				3952			5		4	576	10	6		60		1375

DRAINAGE (Continued)

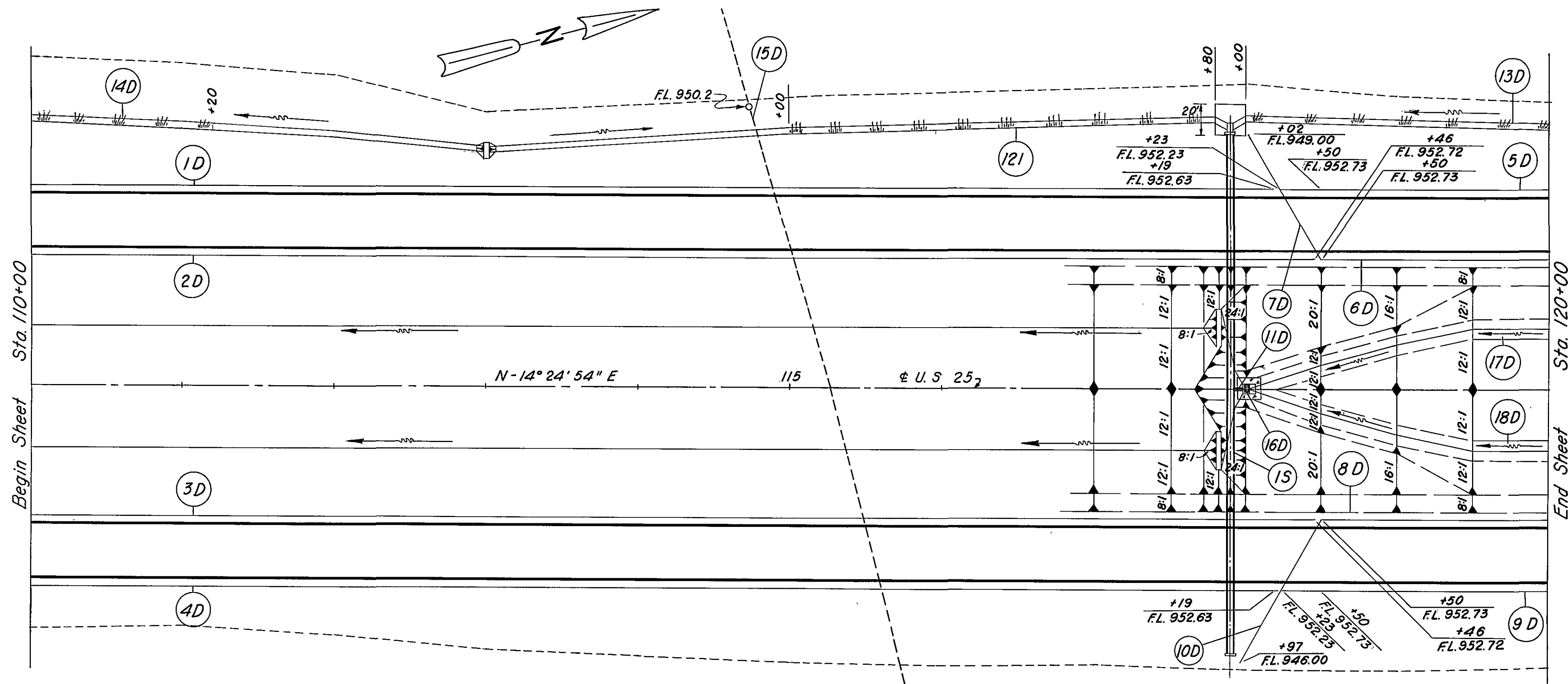
Ref. No.	Station		Side	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class E C.Y.	I-2 Storm Sewers		I-8 Standard No. 4 Catch Basin Ea.	L-10 Sodding		I-10 Dumped Rock Channel Protection Depth inches	C.Y.
	From	To				Sec. M-6.5(b) or M-6.8(b) 21" L.F.	Sec. M-6.5(b) or M-6.8(b) 18" L.F.		Width L.F.	S.Y.		
20 D	101+97	to R		1	0.4	174		1	3	14	30	17
21 D	108+00	108+76					72	1	3	14		
Totals				1	0.4	174	72	2		28		17

ROADWAY

Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type Deep Standard L.F.
	From	To		
1 R	100+00	101+00	L	100
2 R	100+00	101+00	R	100
Totals				200

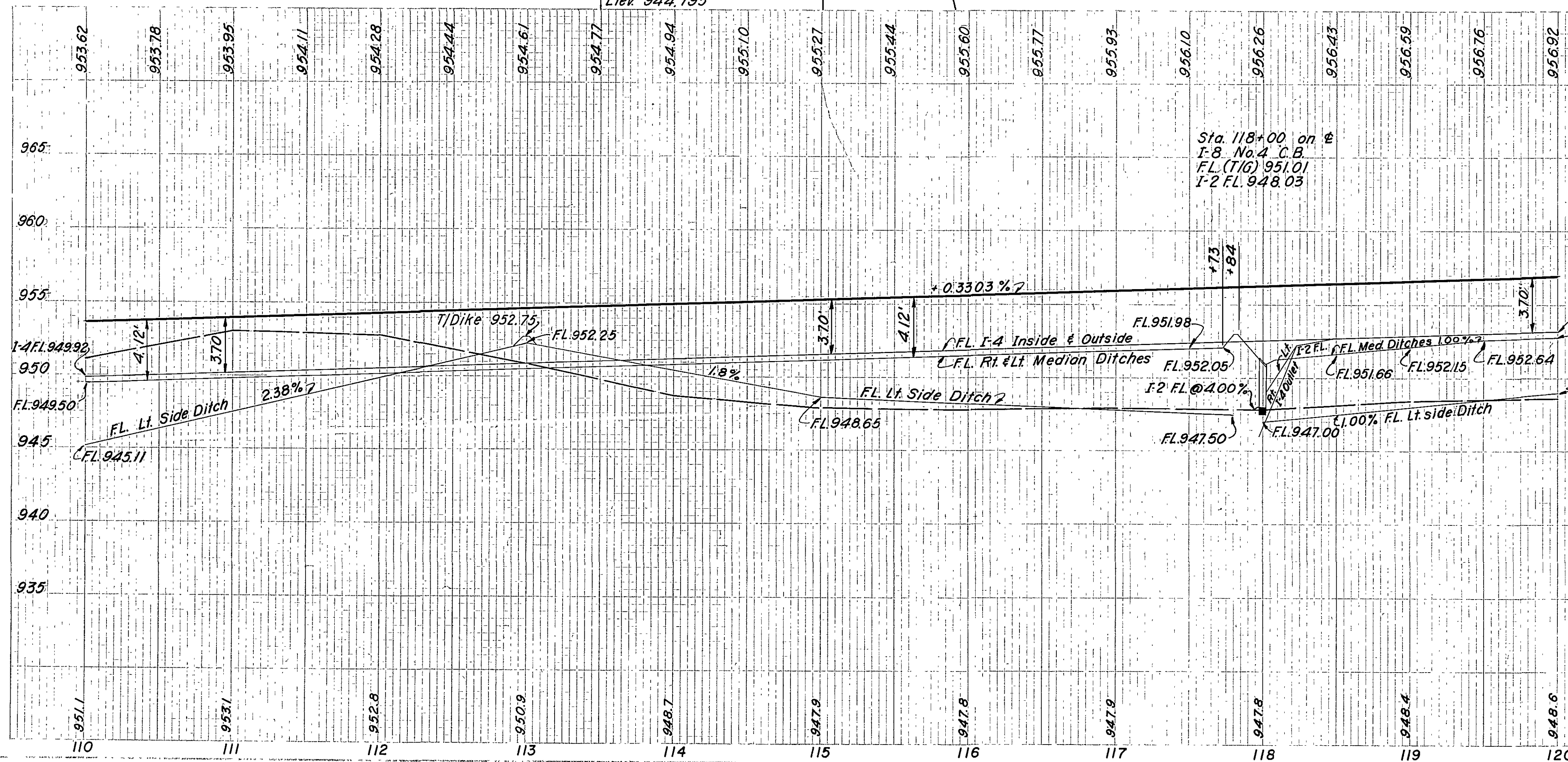
STRUCTURES (20' span and under)

Ref. No.	Station	E-2 Excavation for Structures C.Y.	E-3 Channel Excavation C.Y.	S-1 Concrete for Structures Class E C.Y.	S-27 Pipe for Roadway Culvert Sec. M-6.5(b) or M-6.8(b) 36" L.F.	I-5 for S-27 Pipe Spec. Row. Culv. Sec. M-6.5(b) or M-6.8(b) 36" L.F.	I-10 Dumped Rock Channel Protection C.Y.	I-14 Paved Gutter Type 1 A L.F.	See Sheet No
						Ea.			
1 S	108+76	692	346	1.2	394	1	24	8	270
Totals		692	346	1.2	394	1	24	8	



DRAINAGE															
Ref. No.	Station		Side	I-4 Underdrain		I-5 for I-4		I-2 Storm Sewers		I-5 for I-2		I-4 Pipe Outlets for Underdrains	L-10 Sodding		
	From	To		Shallow 6" L.F.	Deep 6" L.F.	Bend 60° 6" Ea.			Sec. M-65(b) or M-68(b) 8" L.F.	Class "A" 18" L.F.	Wye 8"x8" x6" Ea.	Incr-aser 6"-8" Ea.	8" L.F.	Width L.F.	S.Y.
1 D	110+00	118+19	L	819											
2 D	110+00	118+46	L	846											
3 D	110+00	118+46	R	846											
4 D	110+00	118+19	R	819											
5 D	118+23	120+00	L	177											
6 D	118+50	120+00	L	150		1					1				
7 D	118+02	118+50	L					86		1		10			
8 D	118+50	120+00	R	150		1					1				
9 D	118+23	120+00	R	177											
10 D	117+97	118+50	R					88		1		10			
11 D	117+90	118+00	E						8						
12 D	115+00	117+80	L											12	373
13 D	118+00	120+00	L											12	267
14 D	110+00	111+20	L											6	80
15 D	114+76		L									10			
	Totals				3984		2		174	8	2	2	30		720

DRAINAGE (Cont.)						
Ref. No.	Station		Side	I-8 Standard No. 4 Catch Basin Ea.	L-10 Sodding	
	From	To			Width L.F.	S.Y.
16 D	118+00		E	1	3	14
17 D	118+07	120+00	L		18\"	40
18 D	118+07	120+00	R		18\"	40
Totals				1		94



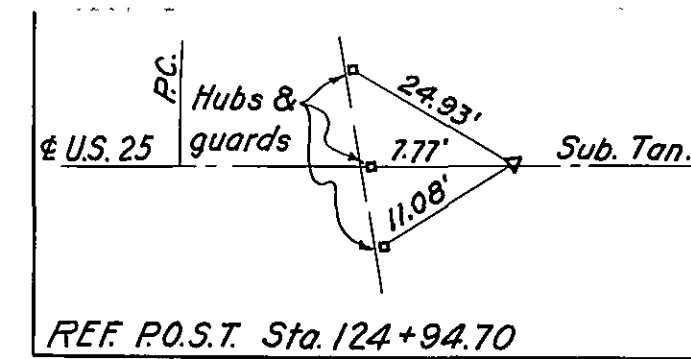
STRUCTURES (20 Ft Span and Under)							
Ref. No.	Station	E-2	E-3	S-1	S-27	I-5 for S-27	I-10
		Excavation for Structures C.Y.	Channel Excavation C.Y.	Concrete for Structures Class \"E\" C.Y.	Pipe for Roadway Culvert Sec. M-6.6(b) 48\" L.F.	Pipe Special for Roadway Culvert 48\"x18\" Tee Ea.	Type \"A\" Rip Rap 6\" Reinf Concrete S.Y.
1 S	117+90	357	32	1.7	342	1	45
Totals		357	32	1.7	342	1	45

Excavation 10,470 C.Y.
Embankment 47,284 C.Y.
Embankment +15% 54,377 C.Y.

Mary Elizabeth Yarbrough &
Esther Louise Yoltan

Margaret I. Bailey

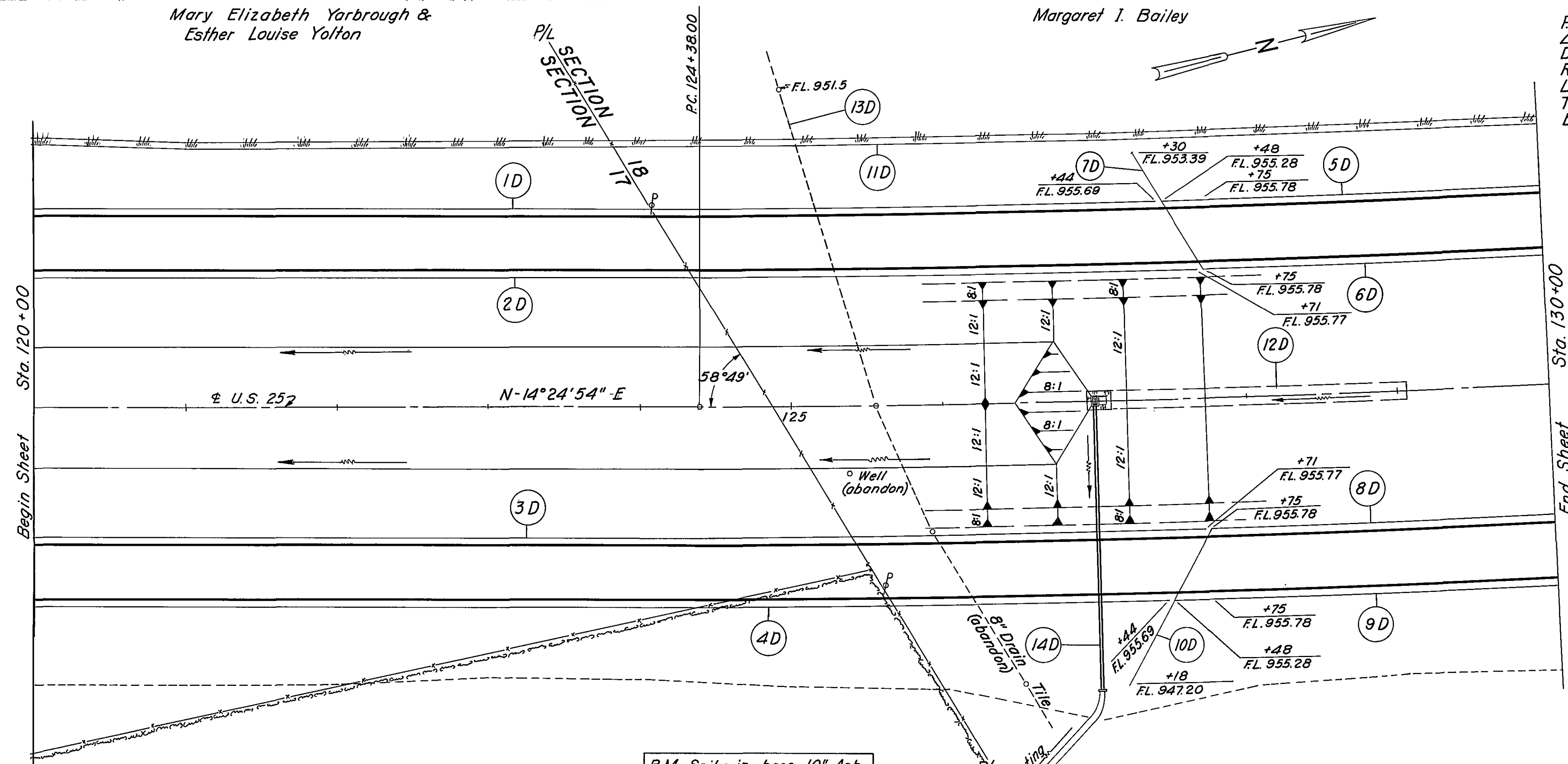
CURVE DATA
PI Sta 147+71.76
 $\Delta = 21^\circ 31' 30''$ Lt.
 $D = 0^\circ 28'$
 $R = 12,277.67'$
 $L = 4,612.50'$
 $T = 2,333.76'$
 $E = 219.80'$



F.C.D. NO.	STATE	PROJECT
2	OHIO	

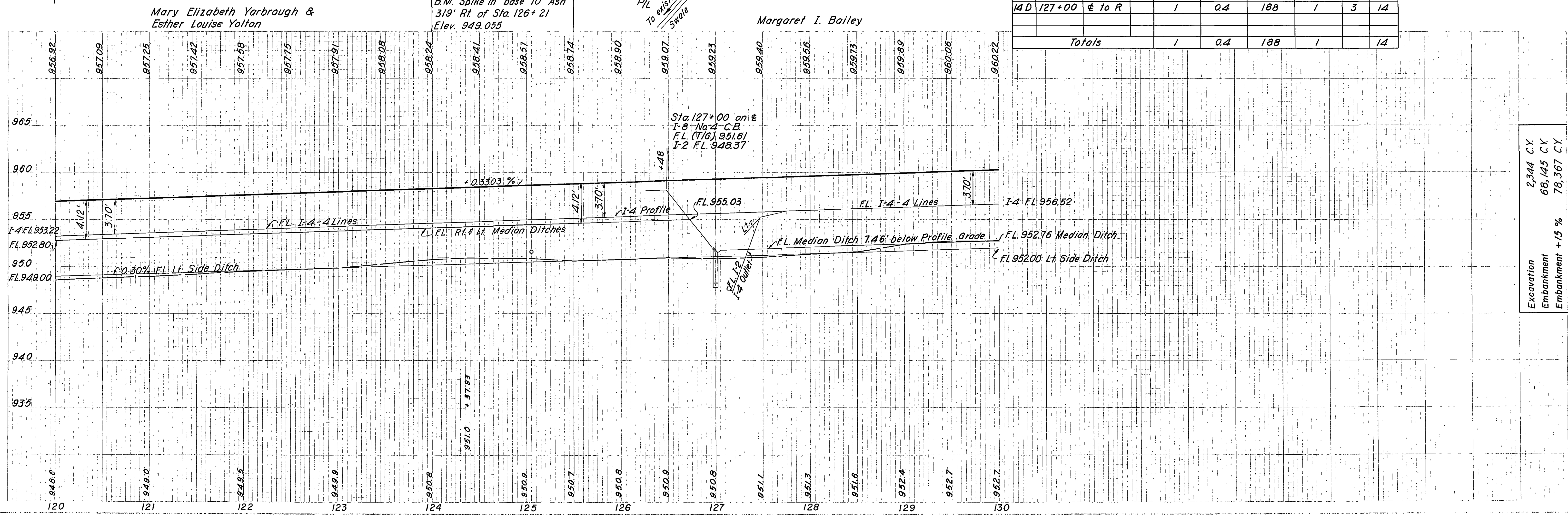
28
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MOT-25-0.49



DRAINAGE													
Ref. No.	Station		Side	I-4 Underdrain		I-5 for I-4		I-2 Storm Sewer Sec. M-65(b) or M-68(b) 8" L.F.	I-5 for I-2		I-4 Pipe Outlets for Underdrains 8" L.F.	L-10 Sodding	
	From	To		Shallow 6" L.F.	Deep 6" L.F.	Bend 60° 6" Ea.			Wye 8"x8" x 6" Ea.	Increa- ser 6"-8"		Width L.F.	S.Y.
1 D	120+00	127+44	L	744									
2 D	120+00	127+71	L	771									
3 D	120+00	127+71	R	771									
4 D	120+00	127+44	R	744									
5 D	127+48	130+00	L	252									
6 D	127+75	130+00	L	225		1				1			
7 D	127+30	127+75	L					78	1		10		
8 D	127+75	130+00	R	225		1				1			
9 D	127+48	130+00	R	252									
10 D	127+18	127+75	R					108	1		10		
11 D	120+00	130+00	L									12	1333
12 D	127+07	129+07	E									18" strip	40
13 D	125+00		L								10		
Totals				3984		2		186	2	2	30		1373

DRAINAGE (Continued)									
Ref. No.	Station		Side	E-2 Excavation for Structures	S-1 Concrete for Structures	I-2 Storm Sewers Sec. M-65(a) or M-68(b)	I-8 Standard No. 4 Catch Basin	L-10 Sodding	S.Y.
	From	To		C.Y.	Class "E" C.Y.	21" L.F.	Ea.	Width L.F.	
14 D	127+00	E to R		1	0.4	188	1	3	14
Totals				1	0.4	188	1		14



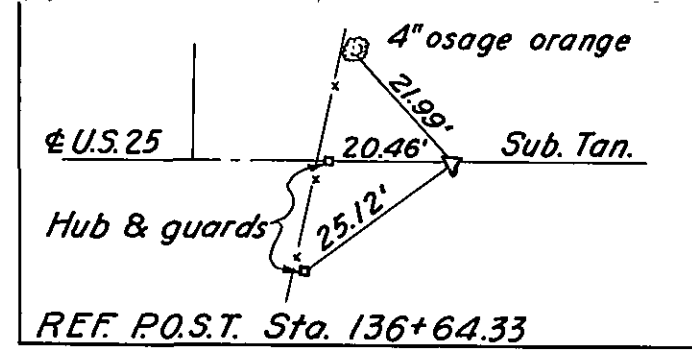
Excavation 2,344 C.Y.
Embankment 68,145 C.Y.
Embankment +15 % 78,367 C.Y.

Sta 120+00 to 130+00

CURVE DATA
P.I. Sta. 147+71.76
 $\Delta = 21^\circ 31' 30''$ Lt.
 $D = 0^\circ 28'$
 $R = 12,277.67'$
 $L = 4,612.50'$
 $T = 2,333.76'$
 $E = 219.80'$

Margaret I. Bailey

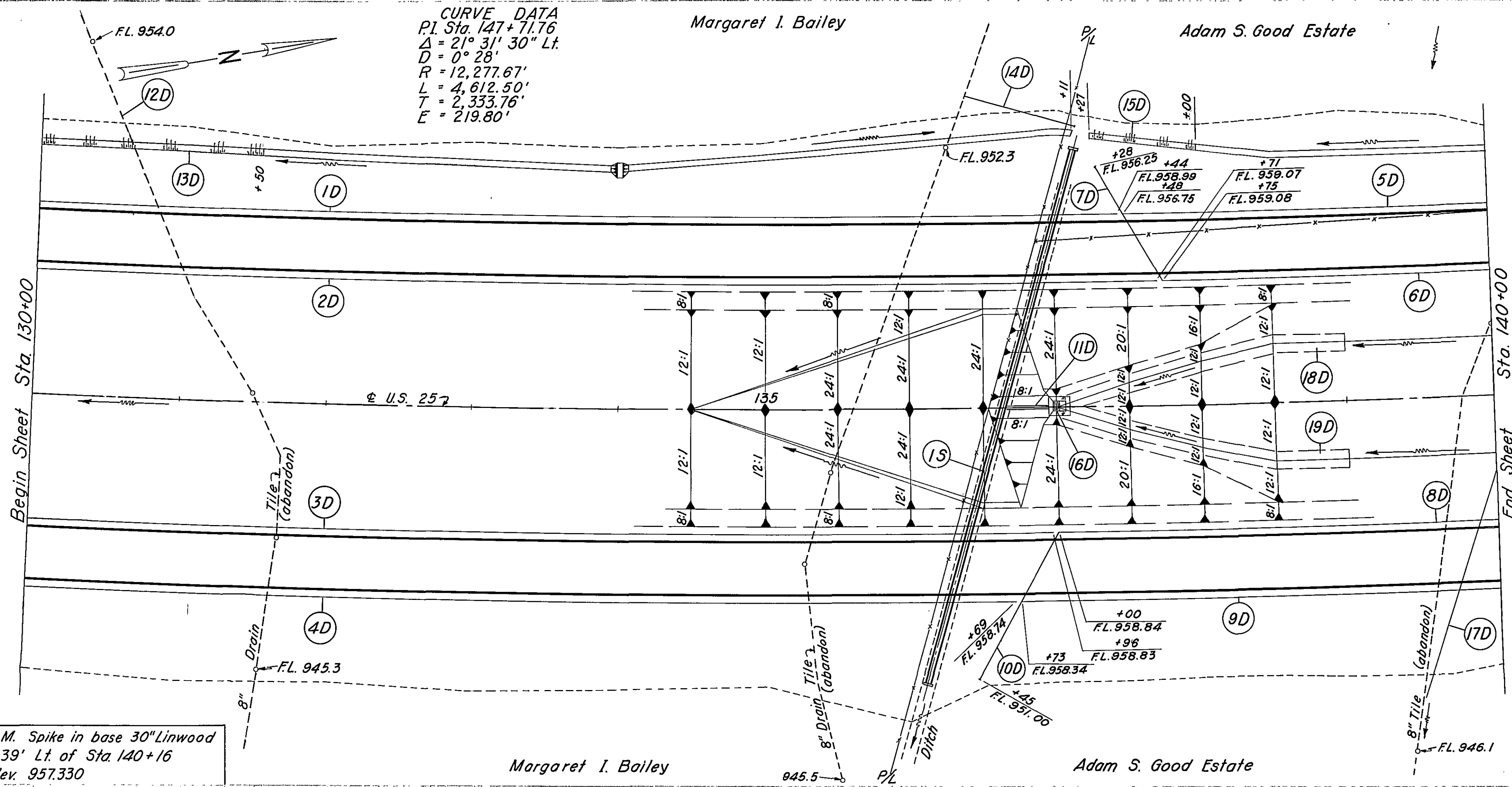
Adam S. Good Estate



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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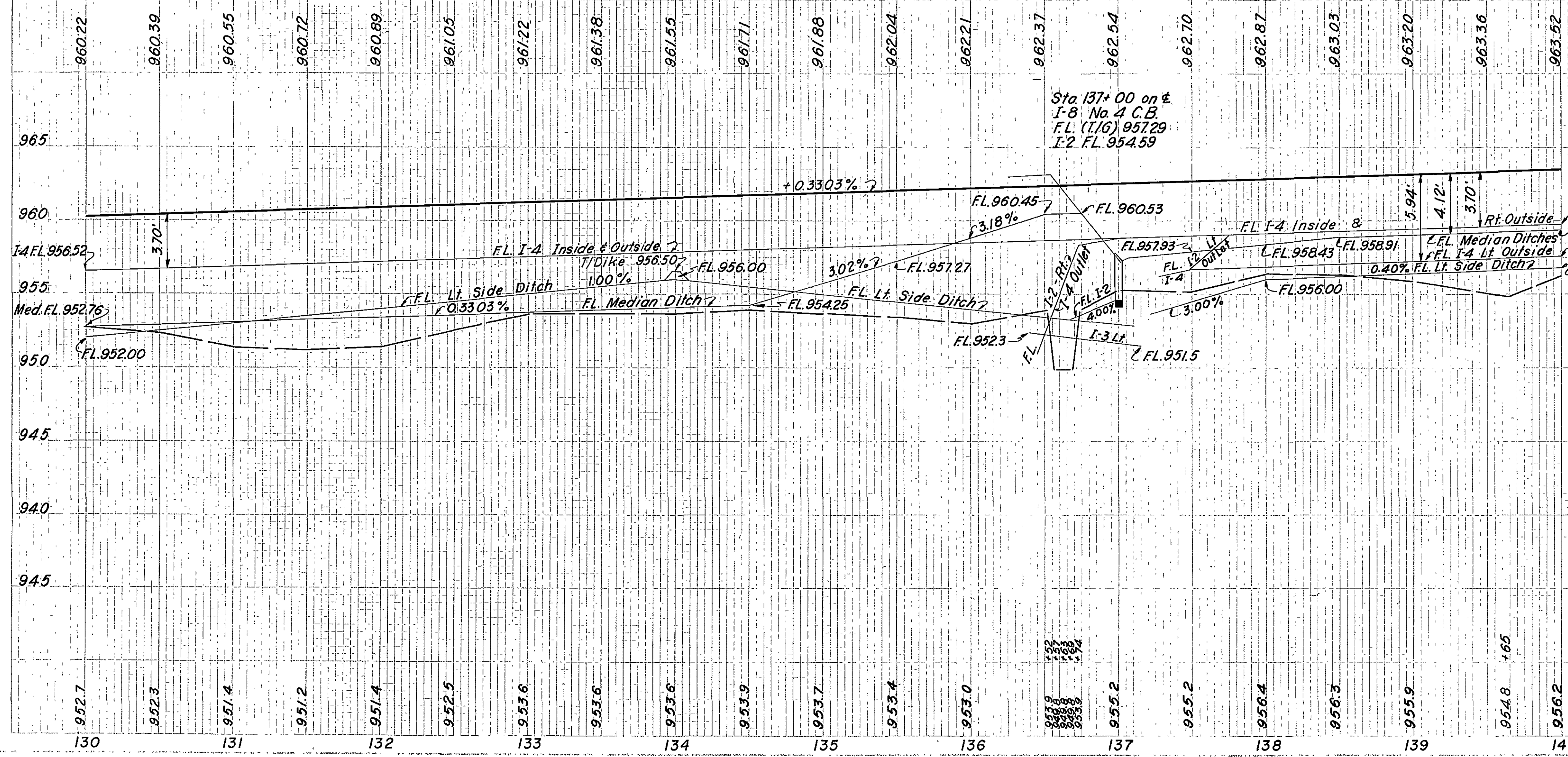


B.M. Spike in base 30" Linwood
239' Lt. of Sta. 140+16
Elev. 957.330

Margaret I. Bailey

Adam S. Good Estate

Sta. 137+00 on \pm
I-8 No. 4 C.B.
FL. (T/G) 957.29
I-2 FL. 954.59



DRAINAGE

Ref. No.	Station		Side	I-4 Underdrain		Bend 60° 6" Ea.	I-5 for I-4	I-2 Storm Sewers Sec. M-65(b) or M-68(b) 8" L.F.	I-2 Class A Storm Sewers 18" L.F.	I-5 for I-2 Wye 8"x8" x 6" Ea.	I-5 for I-2 Ince. ser 6"x8" Ea.	I-4 Pipe Outlet for Underdrain 8" L.F.
	From	To		Shallow 6" L.F.	Deep 6" L.F.							
1 D	130+00	137+44	L	744								
2 D	130+00	137+71	L	771								
3 D	130+00	136+96	R	696								
4 D	130+00	136+69	R	669								
5 D	137+48	140+00	L		252							
6 D	137+75	140+00	L	225		1					1	
7 D	137+28	137+75	L					80				10
8 D	137+00	140+00	R	300		1					1	
9 D	136+73	140+00	R	327								
10 D	136+45	140+00	R					104		1		10
11 D	136+66	136+98	\pm					32				
12 D	130+55		L									10
Totals				3732	252	2		184	32	2	2	30

DRAINAGE (Continued)

Ref. No.	Station		Side	I-8 Standard No. 4 Catch Basin Ea.	L-10 Sodding		I-3 Pipe for Roadway Drainage 8" L.F.	I-5 for I-3 Bend 90° 8" Ea.	I-3 Pipe Outlet for Rdwy. Drainage 8" L.F.	I-2 Class B Storm Sewer under Pavt. and Appro. 10" L.F.
	From	To			Width L.F.	S.Y.				
13 D	130+00	131+50	L		12	200				
14 D	136+40	137+15	L				70	1	10	
15 D	137+27	138+00	L		6	49				
16 D	137+00		\pm	1	3	14				
17 D	139+45	140+00	R						164	
18 D	137+07	139+00	L		18" Strip	40				
19 D	137+07	139+00	R		18" Strip	40				
Totals				1		343	70	1	10	164

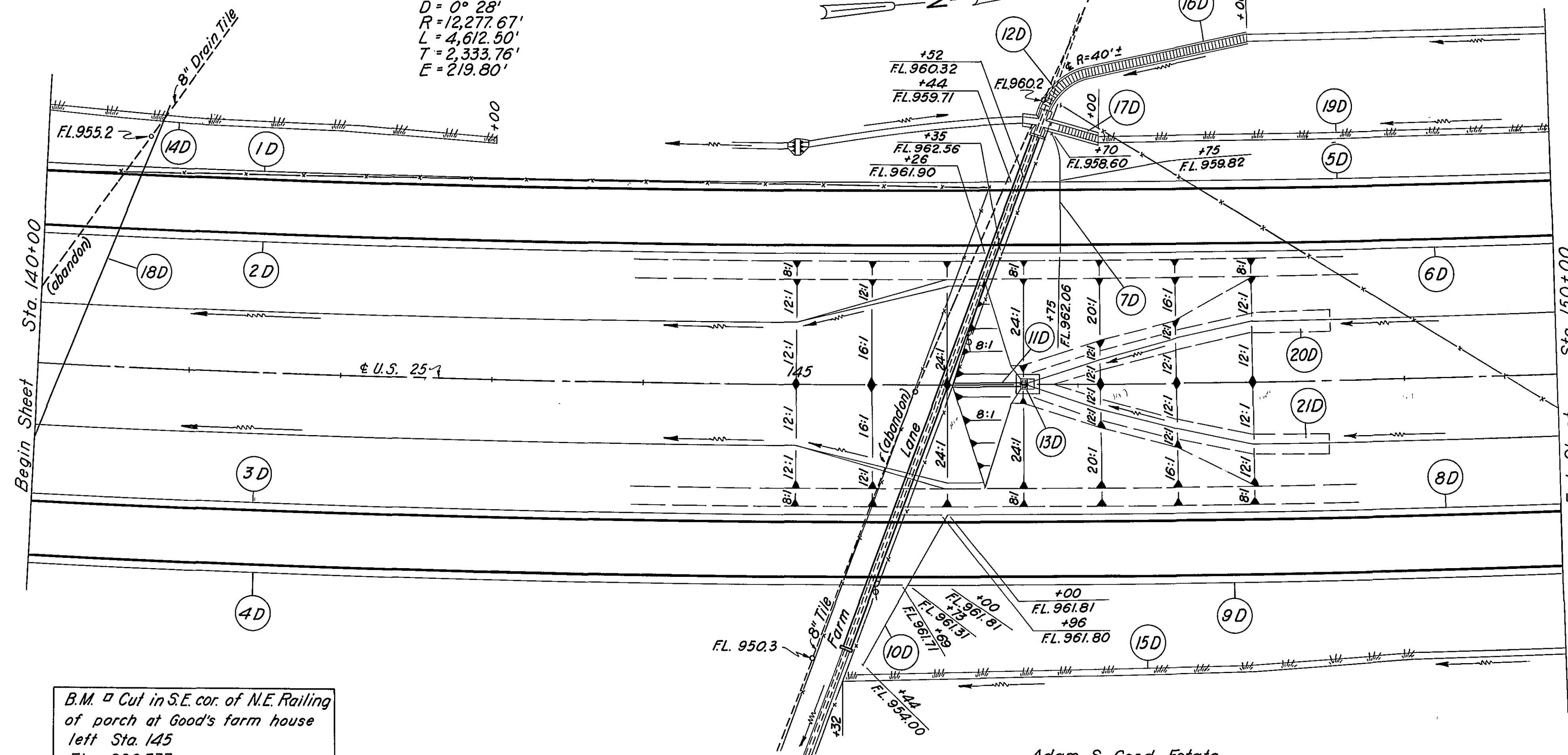
STRUCTURES (20 ft. Span and Under)

Ref. No.	Station	E-2 Excavation for Structures		E-3 Channel for Excavation	S-1 Concrete for Structures Class "E"	S-27 Pipe for Roadway Culvert Sec. M-6.6(b)		I-5 for S-27 Pipe Special for Roadway Culvert 48"x18"Wye 75" Ea.		I-10 Dumped Rock Channel Protection	See Sheet No.
		C.Y.	C.Y.	C.Y.	C.Y.	L.F.	L.F.	L.F.	C.Y.		
1 S	136+63	208	30		1.7	374		1	15		275
Totals		208	30		1.7	374		1	15		

Excavation 39,120 C.Y.
Embankment 69,178 C.Y.
Embankment +15 % 79,555 C.Y.

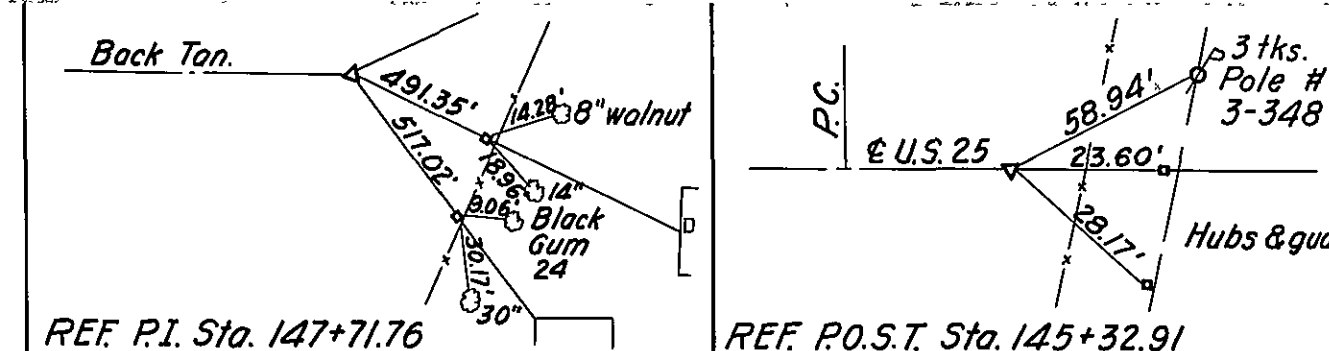
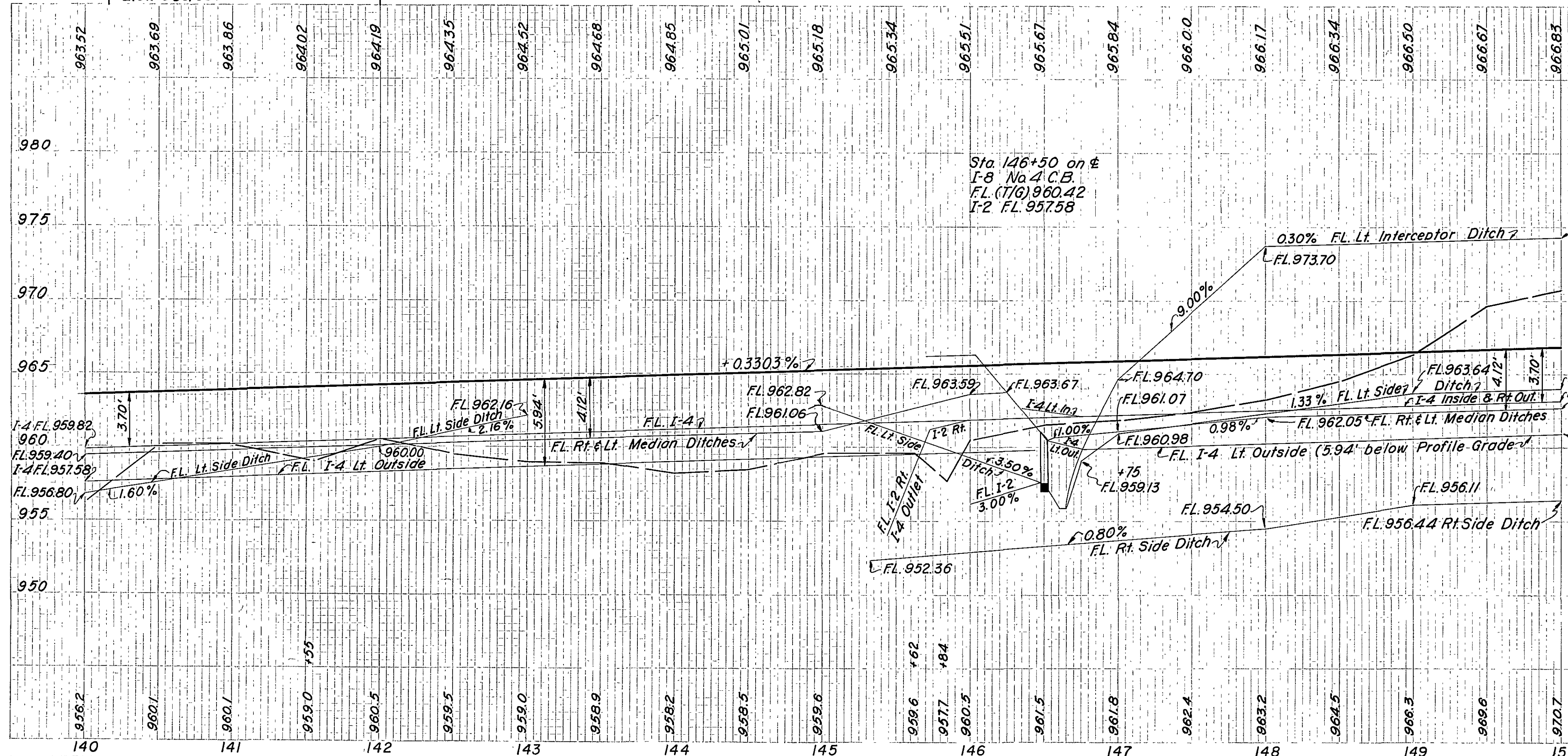
Adam S. Good Estate

CURVE DATA
P.I. Sta. 147+71.76
 $\Delta = 21^\circ 31' 30''$ Lt
 $D = 0^\circ 28'$
 $R = 12,277.67'$
 $L = 4,612.50'$
 $T = 2,333.76'$
 $E = 219.80'$



Adam S. Good Estate

Sta. 146+50 on \pm
I-8 No. 4 C.B.
FL (T/G) 960.42
I-2 FL 957.58



MOT-25-049

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DRAINAGE

End Sheet

Ref. No.	Station		Side	I-4 Underdrain		I-5 for I-4			I-2		I-5 for I-2		I-4 Pipe Outlet for Underdrain		
				Shallow 6" L.F.	Deep 6" L.F.	Tee 6"x6" x 6" Ea.	Bend 60" 6" Ea.		Storm Sec. M-65(b) or M-68(b) 8" L.F.	Sewers Class A 18" L.F.	Cross 8"x6" Ea.	Wye 8"x8" x 6" Ea.		Increa- ser 6"-8" Ea.	
	From	To													
1 D	140+00	146+44	L		644										
2 D	140+00	146+26	L	626											
3 D	140+00	145+96	R	596											
4 D	140+00	145+69	R	569											
5 D	146+52	150+00	L		347										
6 D	146+35	150+00	L	364		1							1		
7 D	146+75		L						78		1			10	
8 D	140+00	150+00	R	400			1						1		
9 D	145+73	150+00	R	427											
10 D	145+44	146+00	R						104			1		10	
11 D	145+00	145+48								48					
12 D	146+70		L											10	
Totals					2982	991	1	1		182	48	1	1	2	30

DRAINAGE

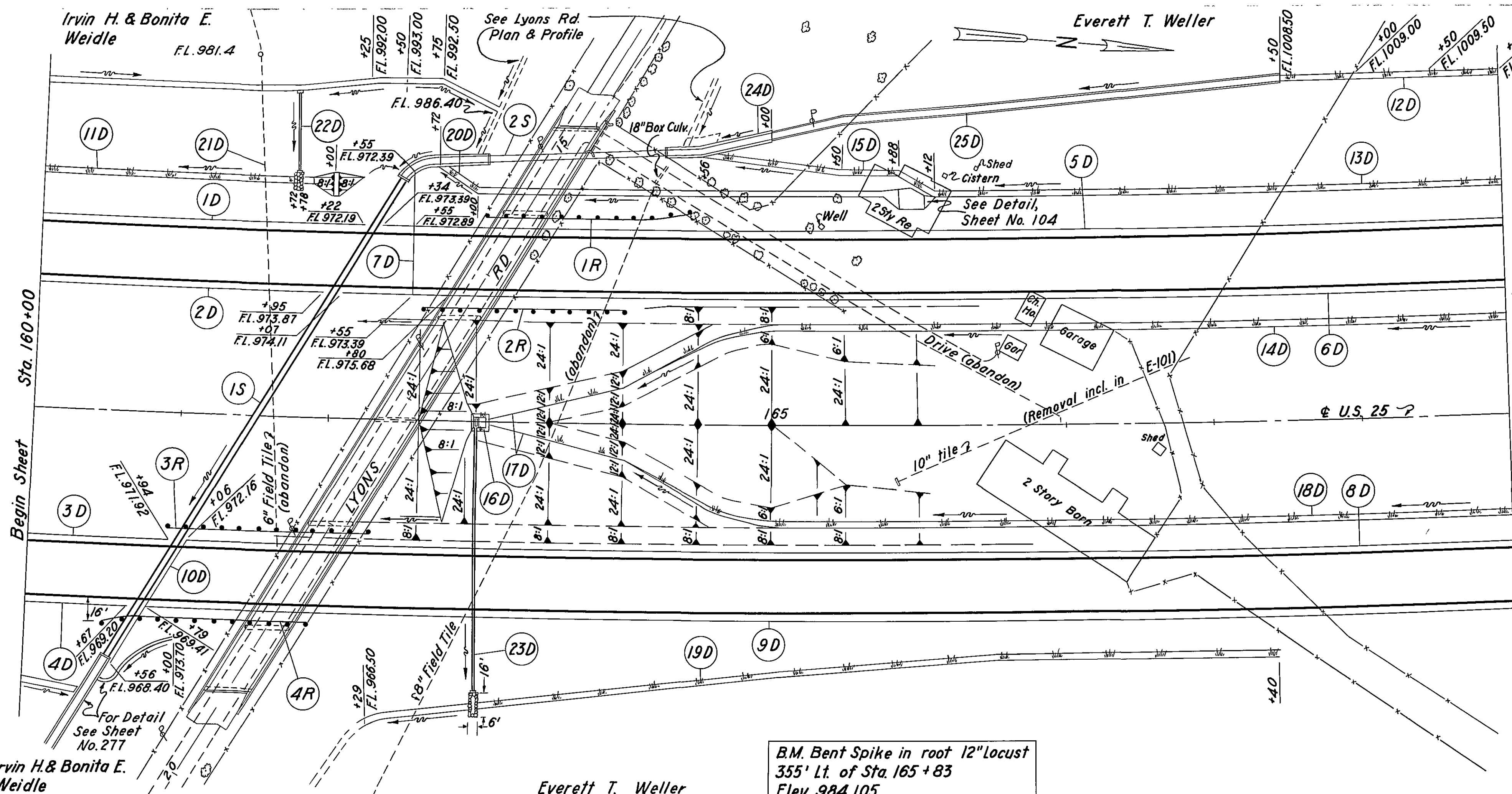
Ref. No.	Station		Side	I-8 Standard No. 4 Catch Basin Ea.	I-10 Sodding		I-14 Paved Gutter	I-2 Class B Storm Sewer under Pavt. and Approaches 10" L.F.
	From	To			Width L.F.	S.Y.	Type I-B L.F.	
13 D	146+50		\pm	1	3	14		
14 D	140+00	143+00	L		6	200		
15 D	145+32	149+00	R		9	368		
16 D	146+65	148+00	L		2@15	48	125	
17 D	146+75	147+00	L		2@15	8	25	
18 D	140+00	140+78	L					234
19 D	147+00	150+00	L		9	300		
20 D	146+57	148+50	L		18" ships	14		
21 D	146+57	148+50	R		18" ships	14		
Totals				1		966	170	234

Excavation 22,568 C.Y.
Embankment 37,886 C.Y.
Embankment +15 % 43,569 C.Y.

STRUCTURES (20 Ft. Span and Under)

Ref. No.	Station	E-2 Excavation for Structures C.Y.	E-3 Channel Excavation C.Y.	S-1 Concrete for Structures Class "E" C.Y.	S-27 Pipe for Roadway Culverts Sec. M-6.6(b) 48" L.F.	I-5 Pipe Special for Roadway Culverts 48" x 18" Wye 75° Ea.	I-10 Dumped Rock Channel Protection C.Y.	I-10 Type "A" Rip Rap 6" Reinf. Concrete S.Y.	See Sheet No.
I-S	145+98	660	153	7.1	360	1	19	31	276
Totals		660	153	7.1	360	1	19	31	

Sta. 150+00 to Sta. 160+00



CURVE DATA
P.I. Sta. 147+71.76
 $\Delta = 21^\circ 31' 30''$ Lt
 $D = 0^\circ 28'$
 $R = 12,277.67'$
 $L = 4612.50'$
 $T = 2333.76'$
 $E = 219.80'$

BR. NO. MOT-25-0306
Type-Continuous steel beam with
rein. conc. deck and substruct.
Spans- 66'-6" 82'-9" 82'-9", 82'-9"
82'-9" and 49'-6" c/c b'gs.
Roadway - 24'-0" f/f 2'-0" safety curbs
Load Frequency - CF=130 (57)
Skew = 30°-45' R.F.
Wearing Surface - 3/4" monolithic concrete
Approach Slabs - AS-1-54 (25' long)
Alignment - Tangent

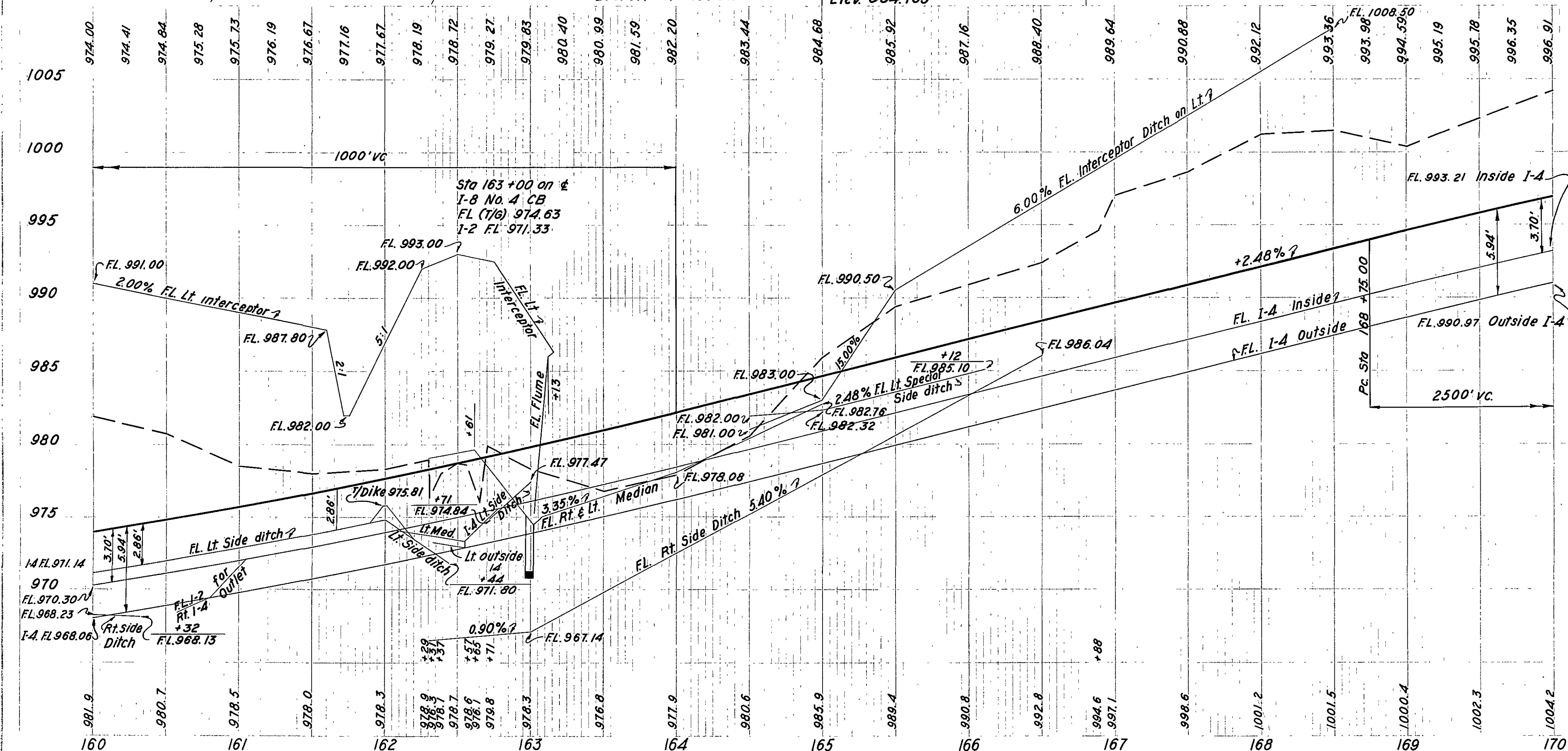
FCD. NO.	STATE	PROJECT	32R
2	OHIO		336

MOT.-25-049

Sta. 170+00

End Sheet

DRAINAGE															
Ref No.	Station		Side	I-4 Underdrain		I-5 for I-4	I-4 Pipe Outlets for Underdrains	I-2 Storm Sewer Sec. M-65(b) or M-68(b)	I-5 for I-2				L-10 Sodding		See Sheet No.
	From	To		Shallow 6" L.F.	Deep 6" L.F.				Wye 8"x 8" x 6" Ea.	Tee 6"x 6" x 8" Ea.	Cross 8" x 6" Ea.	Increa- ser 6"x 8" Ea.	Width L.F.	S.Y.	
1 D	160+ 00	162+22	L		222										
2 D	160+ 00	161+95	L	195											
3 D	160+ 00	160+94	R	94											
4 D	160+ 00	160+67	R		67										
5 D	162+34	170+00	L		766										
6 D	162+07	170+00	L	793											
7 D	162+55		L				10	72		/	/				
8 D	161+06	170+00	R	894		/									
9 D	160+79	170+00	R		921										
10 D	160+56	161+06	R				10	88	/		/				
11 D	160+00	161+72	L									9	172		
12 D	168+50	170+00	L									9	150		
13 D	166+10	170+00	L									9	390		
14 D	163+35	170+00	L									9	672		
15 D	164+56	166+10	L									6	105		
16 D	163+00		±									3	14		
17 D	163+10	163+35	L&R									6	35		
18 D	163+35	170+00	R									9	672		
19 D	163+03	168+40	R									6	358		
20 D	162+72	163+00	L									6	20		
21 D	161+50		L				10								



DRAINAGE (Cont.)												
Ref. No.	Station		Side	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class "E" C.Y.	I-2 Class "A" Storm Sewers 15" L.F.	I-2 Storm Sewers Sec. M-65(b) or M-68(b) 21" L.F.	I-8 Standard No. 4 Catch Basin Ea.	I-14 Paved Gutter Type I-B L.F.	I-14 Paved Gutter Type I-C L.F.	I-10 Dumped Rock Channel Protection Depth Inches	C.Y.
	From	To										
22 D	161+75		L	1	0.6	56					30	5
23 D	163+00		R	1	0.4		180				30	9
24 D	164+50	165+00	L							50		
25 D	165+00	168+50	L						250			
Totals				2	1.0	56	180	1	250	50	14	

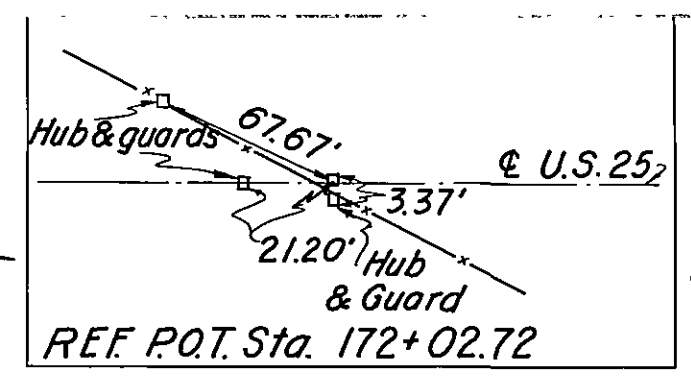
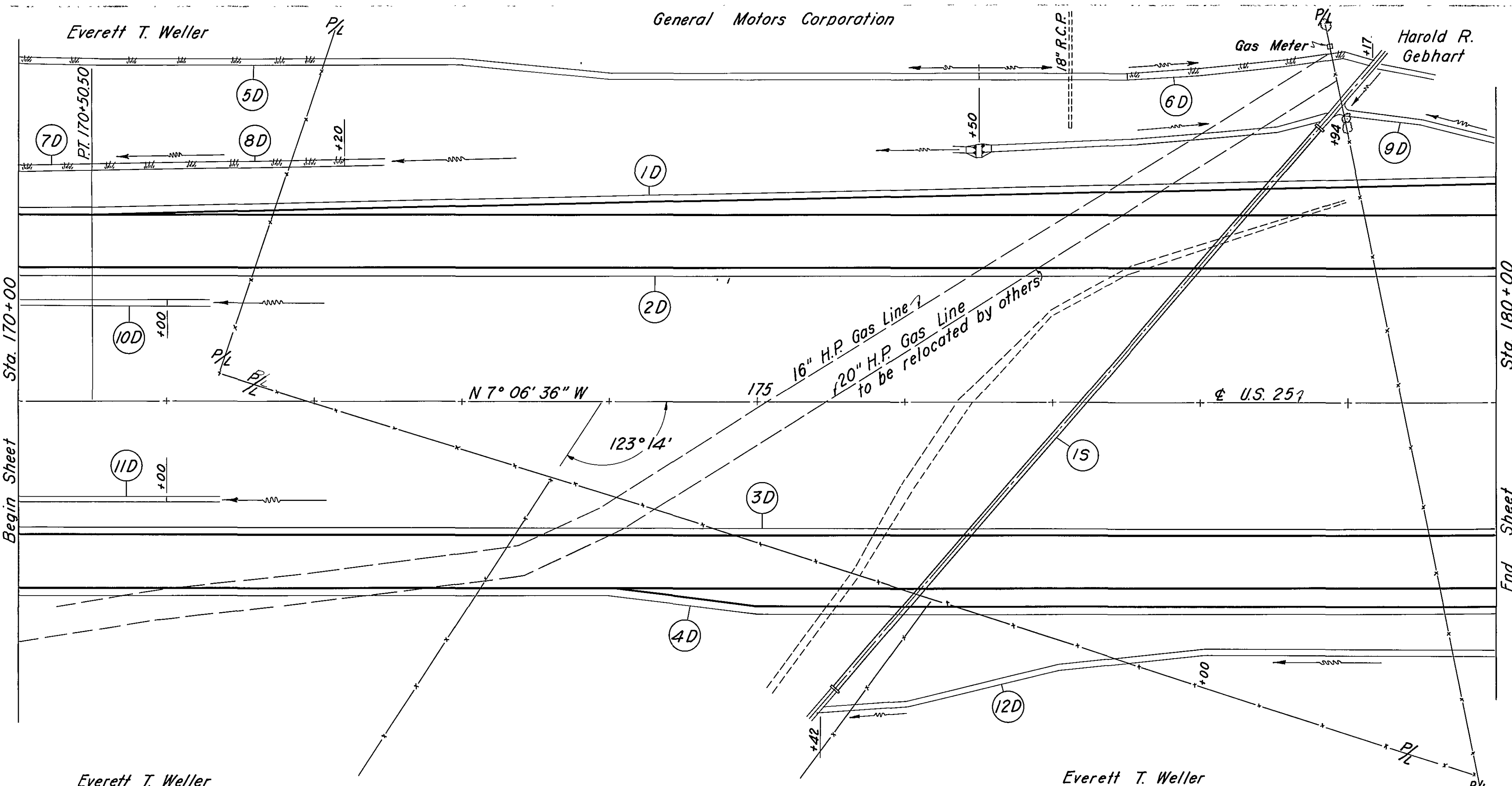
STRUCTURES (20 FT. SPAN AND UNDER)							
Ref. No.	Station	E-2 Excavation for Structures C.Y.	E-3 Channel Excavation C.Y.	S-1 Concrete for Structures Class "E" C.Y.	S-27 Pipe for Rdwy. Culv. Sec. M-65(b) 48" L.F.	I-14 Paved Gutter Type I-C L.F.	See Sheet No.
1 S	161+50	816	17	1.7	382	65	277
2 S	15+07.5 Lyons	218		1.7	122	61	278
Totals		1034	17	3.4	504	126	40

ROADWAY				
Ref. No.	Station	Side	I-15 Guard Rail - Steel Beam, Type Deep Standard L.F.	See Sheet No.
1 R	163+06	164+43.5	L	137.5
2 R	162+62	163+99.5	L	137.5
3 R	160+93	162+30.5	R	137.5
4 R	160+52	161+89.5	R	137.5
Totals			550	

This sheet supersedes Sheet No. 32

Revid. 1-2-59

Sta. 160+00 to Sta. 170+00



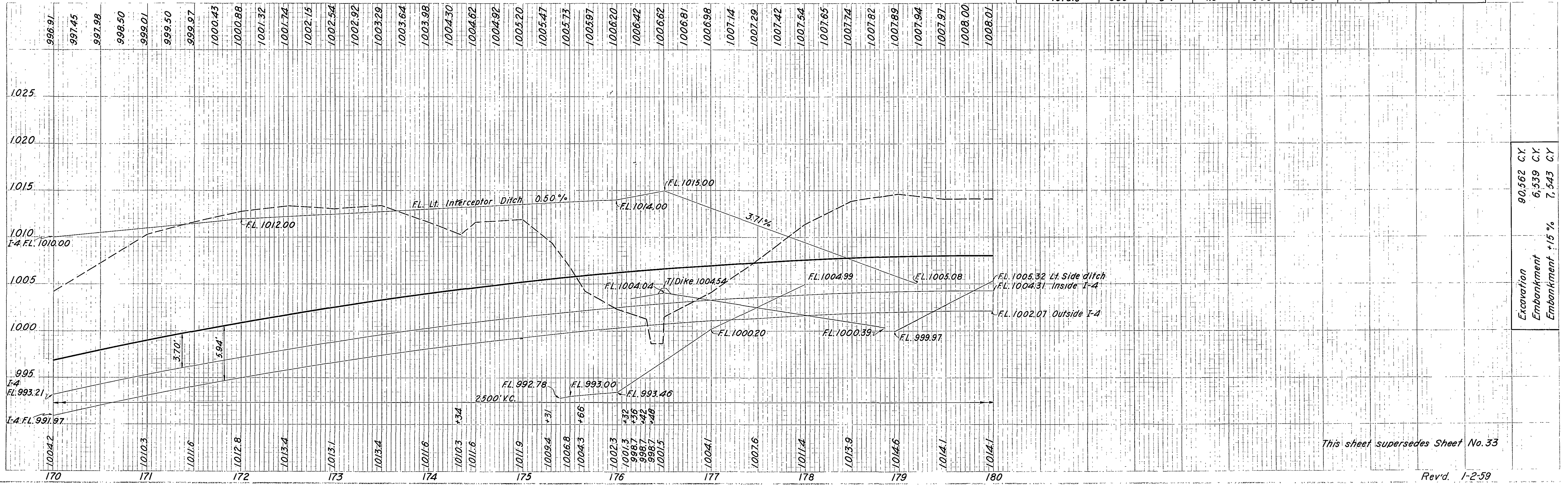
FED. DIVISION	STATE	PROJECT	
2	OHIO		

MOT-25-0.49

33-R
336

DRAINAGE							
Ref. No.	Station		Side	I-4 Underdrain		L-10 Sodding	
	From	To		Shallow 6" L.F.	Deep 6" L.F.	Width L.F.	S.Y.
1 D	170+00	180+00	L		1000		
2 D	170+00	180+00	L	1000			
3 D	170+00	180+00	R	1000			
4 D	170+00	180+00	R		1000		
5 D	170+00	172+00	L			9	200
6 D	177+50	179+17	L			6	112
7 D	170+00	170+50	L			9	50
8 D	170+50	172+20	L			6	113
9 D	178+94	180+00	L			6	71
10 D	170+00	171+00	L			9	100
11 D	170+00	171+00	R			9	100
12 D	175+42	178+00	R			6	174
Totals				2000	2000		920

STRUCTURES (20' Span and Under)								
Ref. No.	Station	E-2 Excavation for Structures C.Y.	E-3 Channel Excavation C.Y.	S-1 Concrete for Structures Class "E" C.Y.	S-27 Pipe for R'dwy. Cul. Sec. M-6.6(b) 42" L.F.	I-14 Paved Gutter Type I-B L.F.	I-10 Dumped Rock Channel Protection C.Y.	See Sheet No.
I-S	177+20	639	34	1.5	500	63	19	279-A
Totals		639	34	1.5	500	63	19	

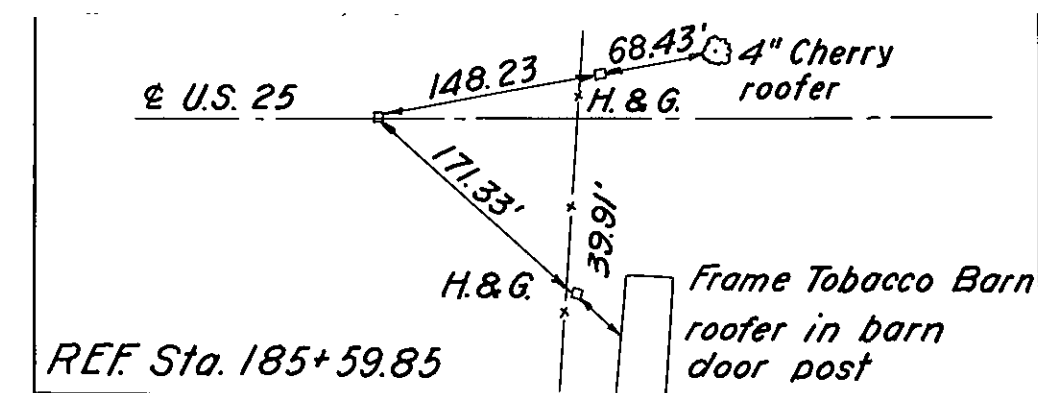
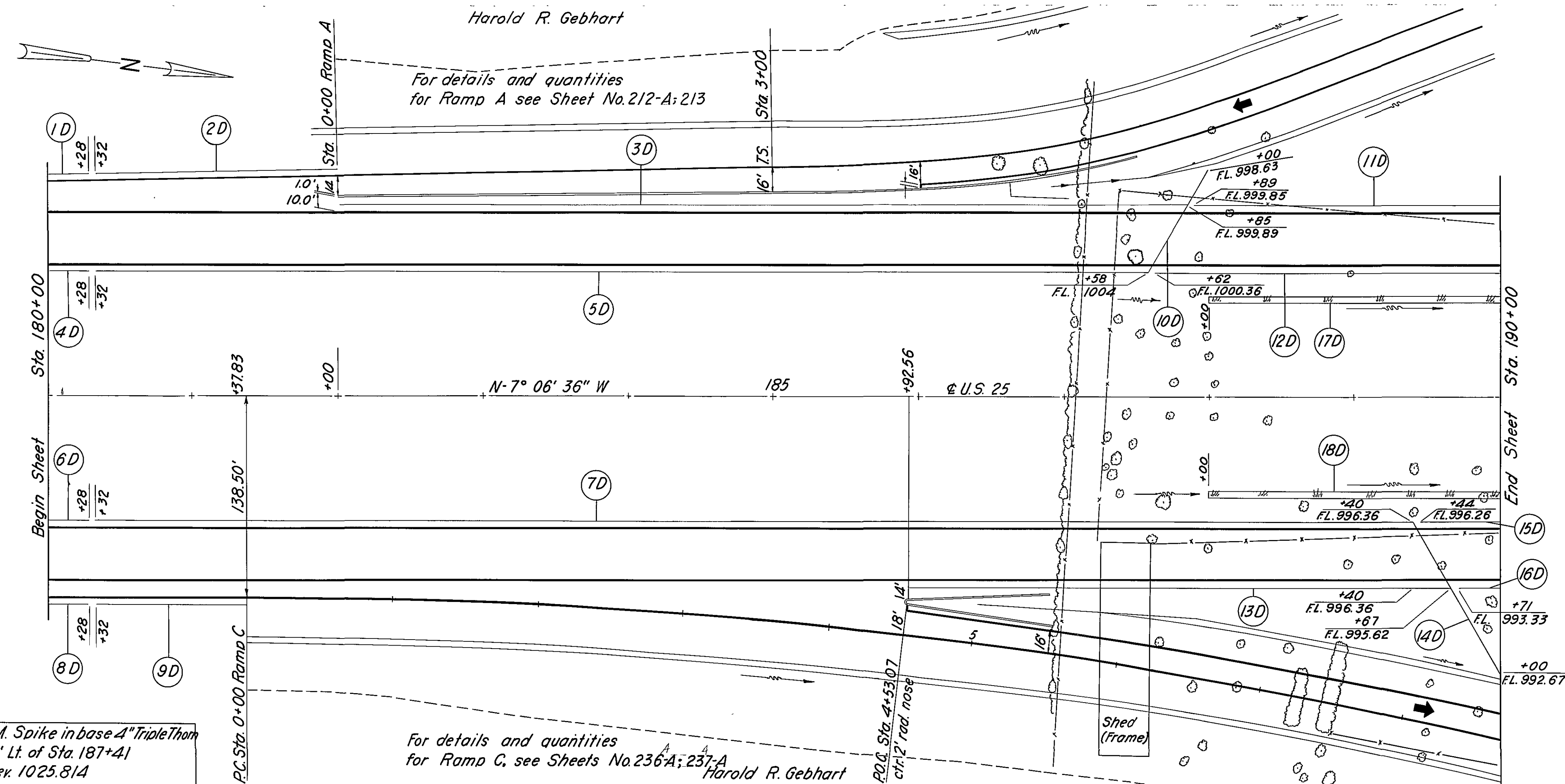


This sheet supersedes Sheet No. 33

Rev'd. 1-2-59

Sta. 170+00 to Sta. 180+00

Excavation	90,562 C.Y.
Embankment	6,539 C.Y.
Embankment +15%	7,543 C.Y.



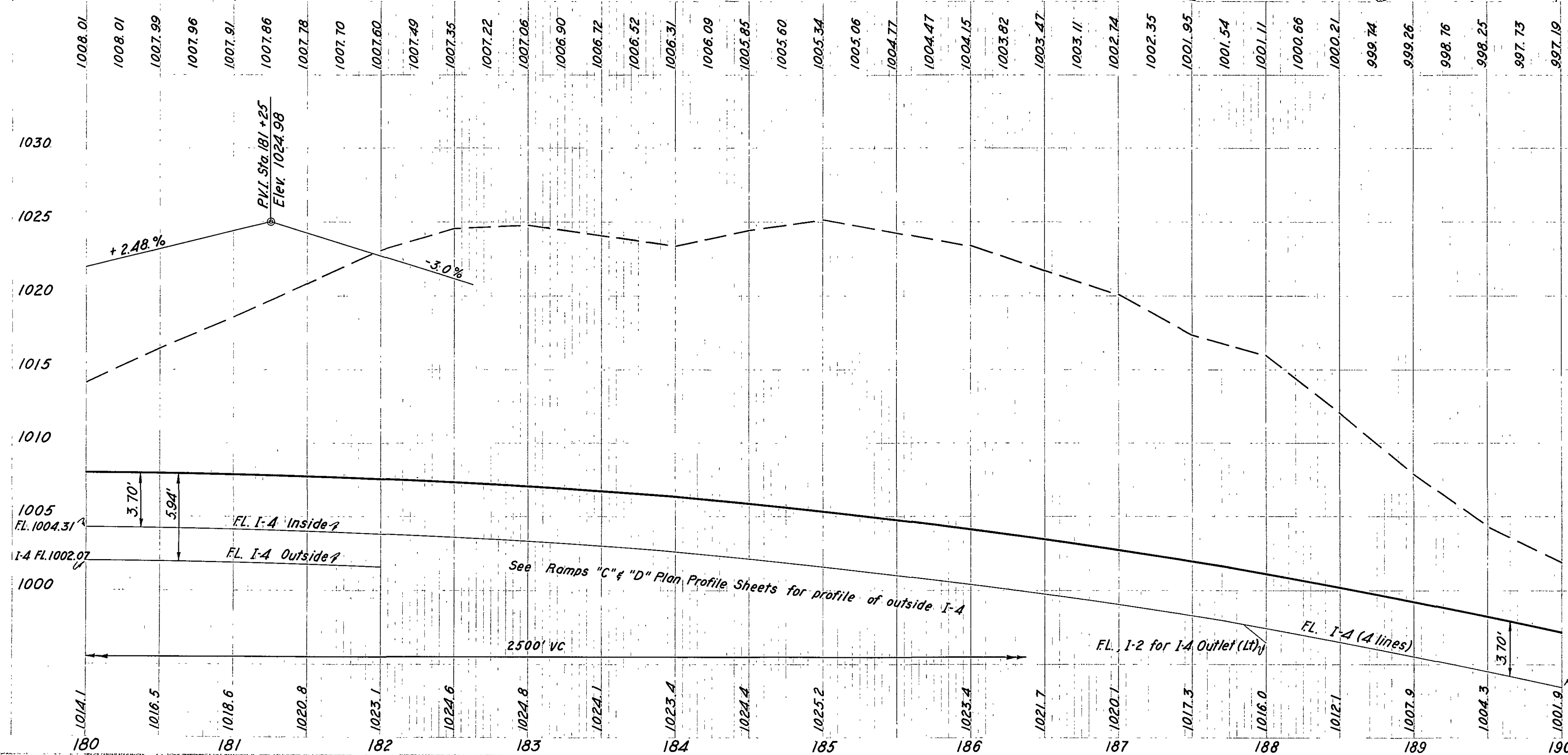
MOT-25-049

DRAINAGE

Ref. No.	Station		Side	I-4 Underdrain		I-5 for I-4 Bend 60° Ea.	I-2 Storm Sewers Sec. M-8.5 (b) or M-6.8 (b) 8" L.F.	I-5 for I-2 Wye 60° 8" x 8" x 6" L.F.		I-4 Pipe Outlets for Underdrains 8" L.F.	L-10 Sadding	
	From	To		Shallow 6" L.F.	Deep 6" L.F.						Width L.F.	S.Y.
1 D	180+00	180+28	L		28							
2 D	180+32	182+00	L		168							
3 D	182+00	187+85	L	585								
4 D	180+00	180+28	L	28								
5 D	180+32	187+58	L	726		1						
6 D	180+00	180+28	R	28								
7 D	180+32	189+40	R	908		1						
8 D	180+00	180+28	R		28							
9 D	180+32	181+3783	R		106							
10 D	187+58	188+00	L				74	1	1	10		
11 D	187+89	190+00	L	211								
12 D	187+62	190+00	L	238								
13 D	185+92	189+67	R	375								
14 D	189+40	190+00	R				110	1	1	10		
15 D	189+44	190+00	R	56								
16 D	189+71	190+00	R		29							
17 D	188+00	190+00	L								6	133
18 D	188+00	190+00	R								6	133
Totals				3155	359	2	184	2	2	20		266

B.M. Spike in base 4" Triple Thor 510' Lt. of Sta. 187+41 Elev. 1025.814

For details and quantities for Ramp C, see Sheets No. 236A:237-A Harold R. Gebhart

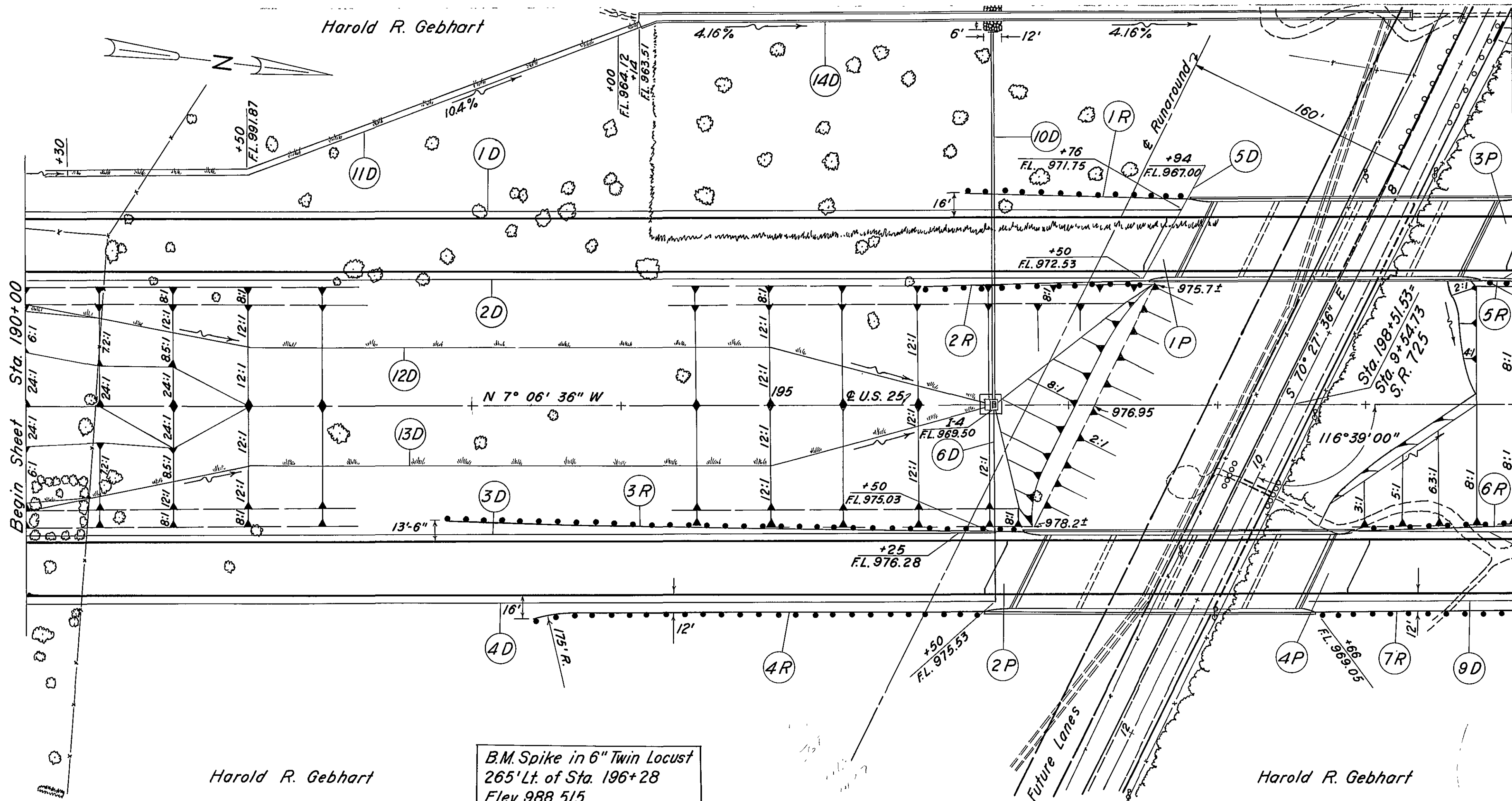


Excavation 158, 110 C.Y.
Embankment 0 C.Y.
Embankment +15% 0 C.Y.

This sheet supersedes Sheet No. 34

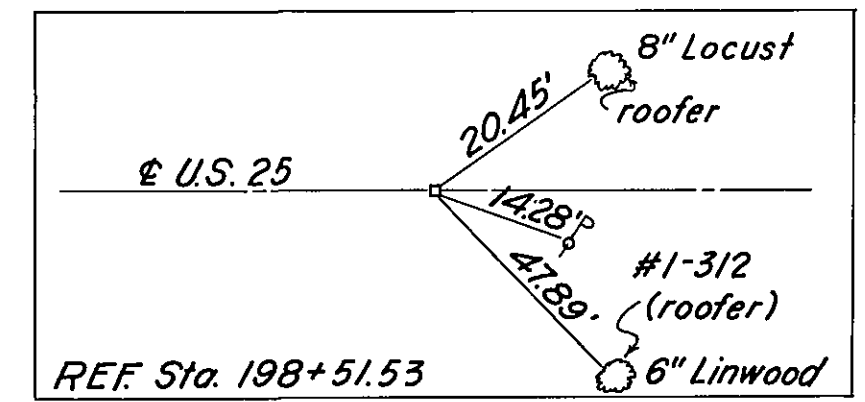
Revd. 1-2-59

Sta. 180+00 to Sta. 190+00



BR. NO. MOT-25-0374
 Type: Twin continuous steel beam with reinf. conc. deck and substructure
 Spans: 40'-6", 57'-6", 57'-6", 34'-6" c/c. bearings
 Roadway: 2@ 54'-0" f/f parapets
 Load Frequency: CF=2,000 (57) adequate for A.A.S.H.O. alternate loading
 Skew: 26° 39' 00" Lt.
 Wearing Surface: 1" monolithic concrete
 Approach Slabs: AS-1-54 (25' long)
 Alignment - Tangente

MOT-25-049

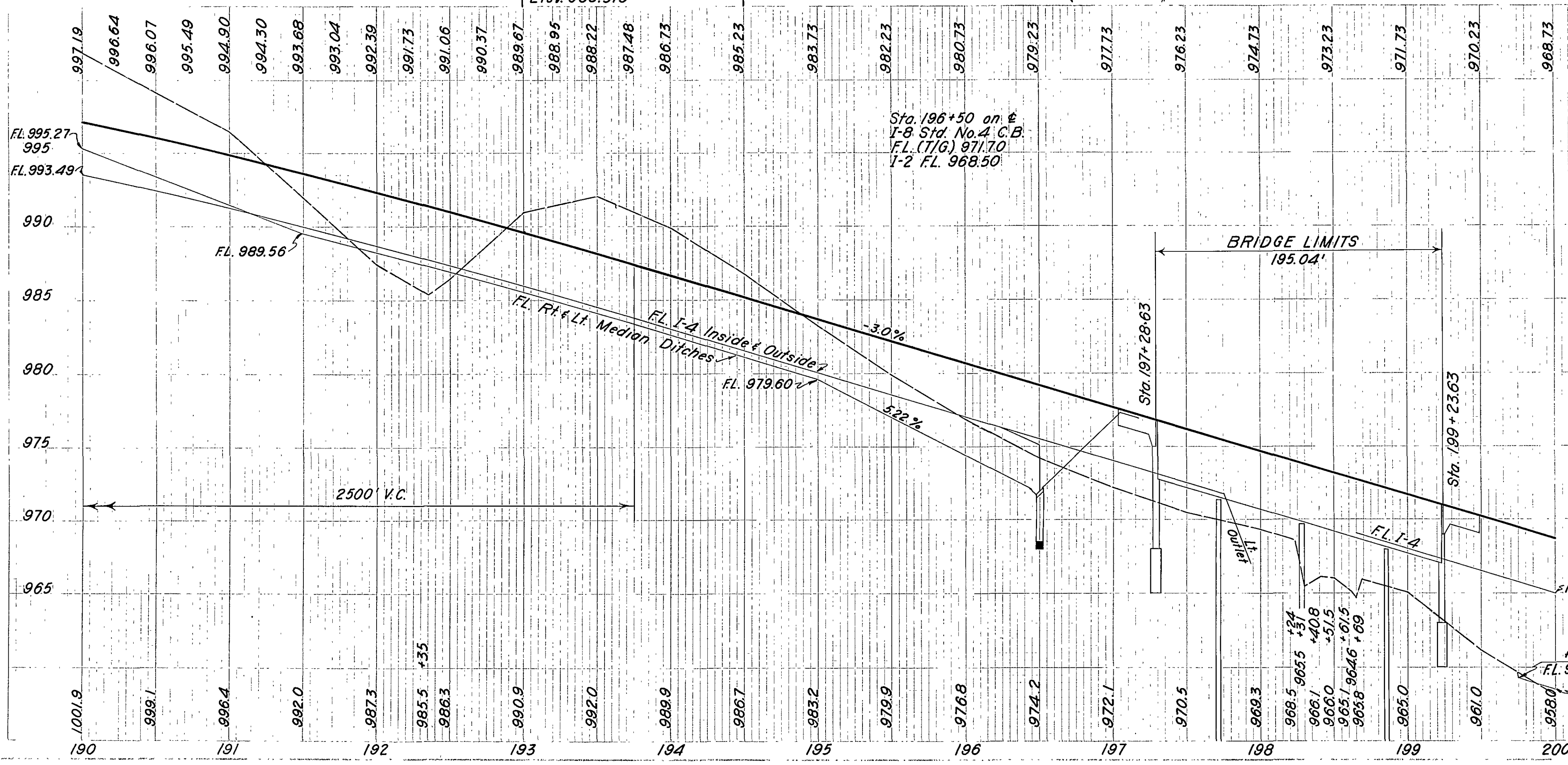


DRAINAGE									
Ref. No.	Station		Side	I-4 Underdrain	I-5 for I-4	I-2 Storm Sewers	I-5 for I-2	I-4	Pipe Outlets for Underdrains
	From	To		Shallow 6" L.F.	Bend 60° 6" L.F.	Sec. M-65(b) or M-68(b) 18" L.F.	Incrd ser 6" x 8" Ea.	Wye 8" x 8" Ea.	
1 D	190+00	197+76	L	776					
2 D	190+00	197+50	L	750					
3 D	190+00	196+50	R	650					
4 D	190+00	196+50	R	650					
5 D	197+50	197+94	L			80			10
6 D	196+50	R to E				116			10
7 D	199+80	200+00	L	20					
8 D	198+96	200+00	R	104					
9 D	198+66	200+00	R	134					
Totals				3084	1	1	196	3	20

DRAINAGE											
Ref. No.	Station		Side	E-2 Excavation for Structures	S-1 Concrete for Structures Class "E"	I-2 Storm Sewers Sec. M-65(b) or M-68(b) 18" L.F.	I-8 Standard No. 4 Catch Basin Ea.	L-10 Sodding		I-10 Dumped Rock Channel Protection	I-14 Paved Gutter
	From	To		C.Y.	C.Y.			Width L.F.	S.Y.	Depth inches	C.Y.
10 D	196+50	E to Lt.		1	0.3	248	1	3	14	30	14
11 D	190+30	194+14	L					6	269		
12 D	190+00	196+40	L					6	432		
13 D	190+00	196+40	R					6	432		
14 D	194+14	199+30	L								516
Totals				1	0.3	248	1	1147		14	516

PAVEMENT				
Ref. No.	Station		Side	I-7 Reinforced Concrete Appr. Slab T=13" S.Y.
	From	To		S.Y.
1 P	197+03.63	197+28.63	L	100
2 P	197+03.63	197+28.63	R	100
3 P	199+23.67	199+48.67	L	100
4 P	199+23.67	199+48.67	R	100
Totals				400

ROADWAY						
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type - Deep		See Sheet No.
	From	To		Standard		
				L.F.		
1 R	196+32	197+82	L	150	266	
2 R	196+05	197+55	L	150	"	
3 R	192+83	196+70.5	R	387.5	"	
4 R	193+44	196+44	R	300	"	
5 R	199+78	200+00	L	22	"	
6 R	198+93	200+00	R	107	"	
7 R	198+67	200+00	R	133	"	
	Totals			1249.5		

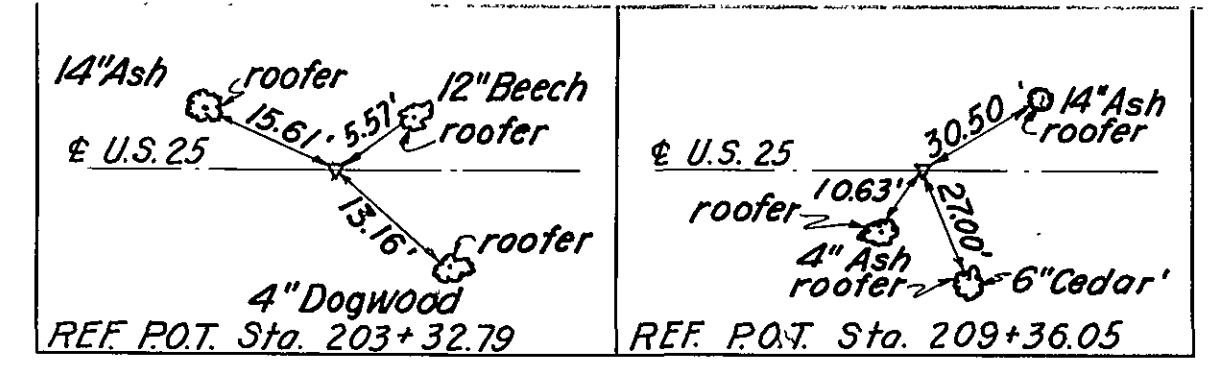
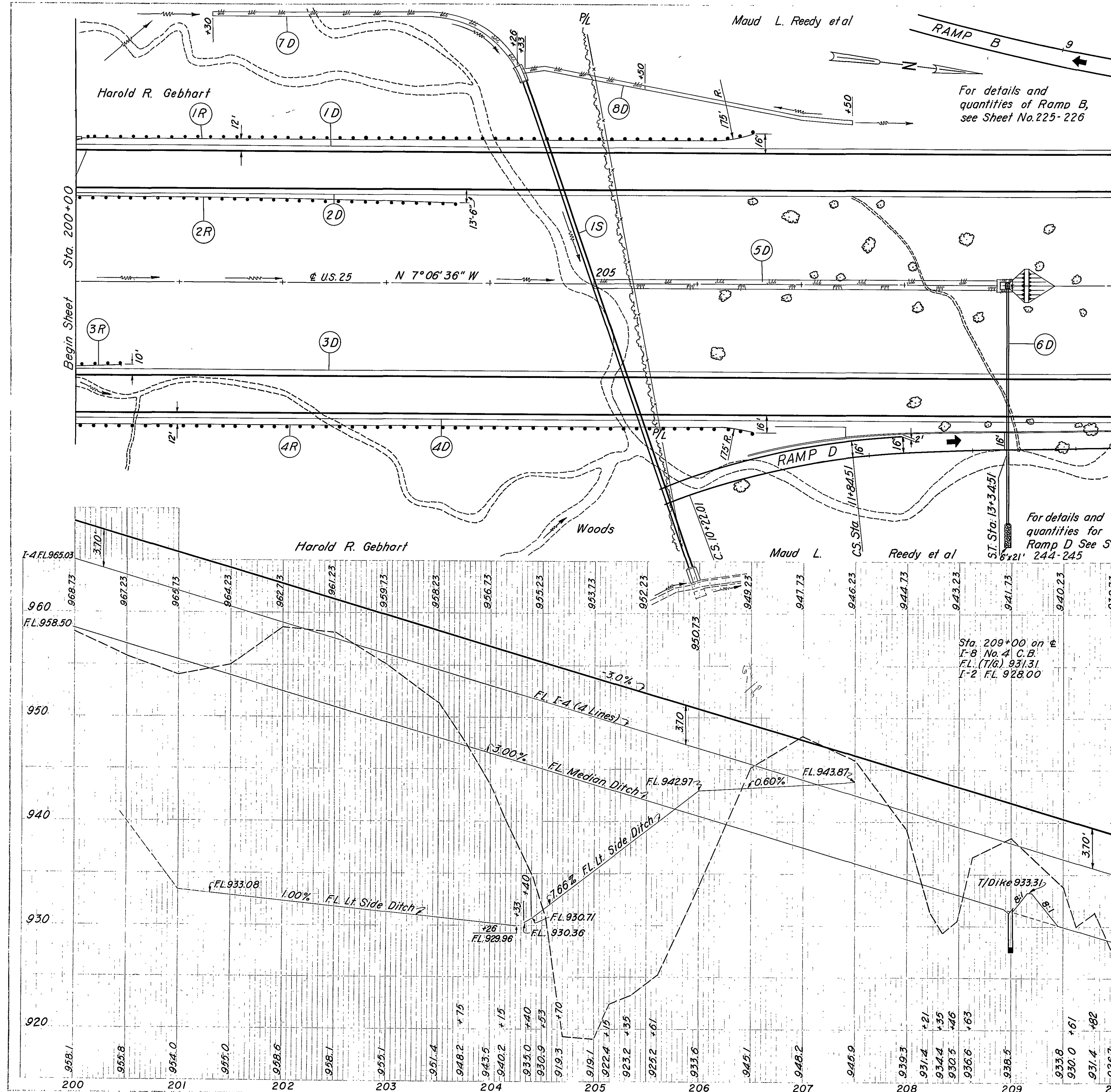


Excavation
Embankment
Embankment + 15%

This sheet supersedes Sheet No. 35

Rev'd 1-2-59

Sta. 190+00 to Sta. 200+00



MOT-25-0.49

DRAINAGE												
Ref. No	Station		Side	I-4 Underdrain Shallow 6" L.F.	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class "E" L.F.	I-2 Storm Sewers Sec. M-6.5(b) or M-6.8(b) 18" L.F.	I-5 for I-2 30" Bends Sec. M-6.4(k) 18" Ea.	I-8 Standard No. 4 Catch Basin Ea.	I-10 Dumped Rock Channel Protection Depth Inches C.Y.	L-10 Sodding Width L.F.	S.Y.
	From	To										
1 D	200+00	210+00	L	1000								
2 D	200+00	210+00	L	1000								
3 D	200+00	210+00	R	1000								
4 D	200+00	210+00	R	1000								
5 D	205+00	208+90	E									
6 D	209+00	E to Rt.			1	0.3	192	34	2	1	30	12
7 D	201+30	204+26	L									9
8 D	204+33	205+50	L									3
												14
												12
												416
												6
												78
Totals				4000	1	0.3	192	34	2	1	12	898

STRUCTURES (20ft. Span and Under)										
Ref. No.	Station	E-2	E-3	S-1	S-27	I-10	I-10		I-14	See Sheet No.
		Excavation for Structures C.Y.	Channel Excavation C.Y.	Concrete for Structures Class "E" C.Y.	Pipe for Rdwy. Culv. Sec. M-6.4(d) 8" to 60" L.F. 106.60	Type A Riprap (6" reinf. Concrete) S.Y.	Dumped Rock Channel Protection Depth Inches	C.Y.	Paved Gutter Type I-B L.F.	
1 S	205+00	20	20	1.7	496	16	30	7	16	285
Totals		20	20	1.7	496	16		7	16	

ROADWAY					
Ref. No	Station		Side	I-15 Guard Rail Steel Beam Type Deep Standard L.F	See Sheet No.
	From	To			
1 R	200+06	206+56	L	650	266
2 R	200+00	203+65.5	L	365.5	"
3 R	200+00	200+43	R	43	"
4 R	200+00	206+54.5	R	654.5	"
Totals				1713	

Excavation
Embankment
Embankment +15 %

Maud L. Reedy et al

I-101-19
STA. 220+00
END PROJECT

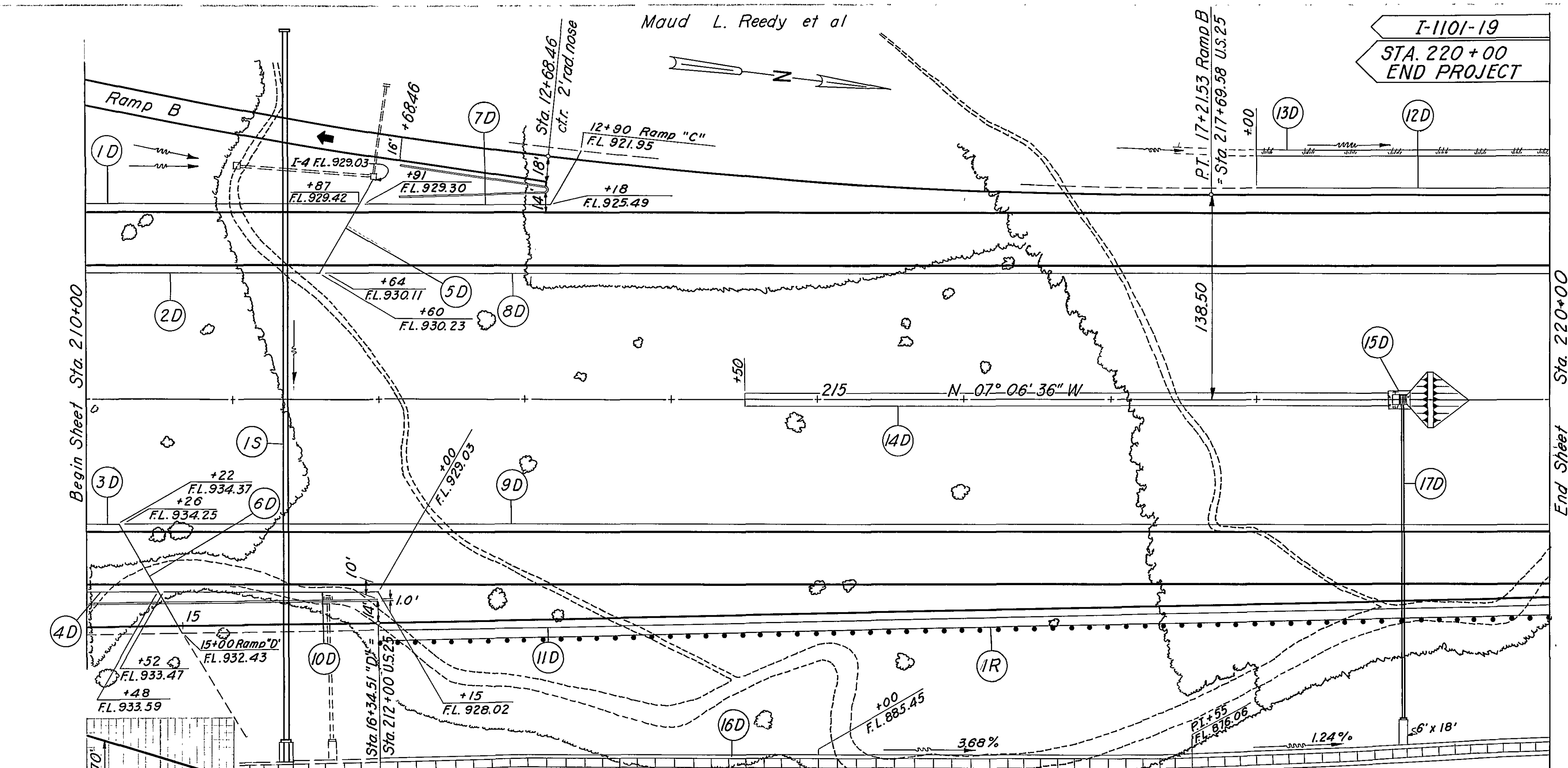
B.M. Spike in roof 36" Oak
345' Lt of Sta 210+70
Elev. 945.615

10" Locust roofer 2.60' 8.88' 12.71' 8" Maple roofer
REF. Sta. 219+83.57

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

37
336

MOT-25-0.49

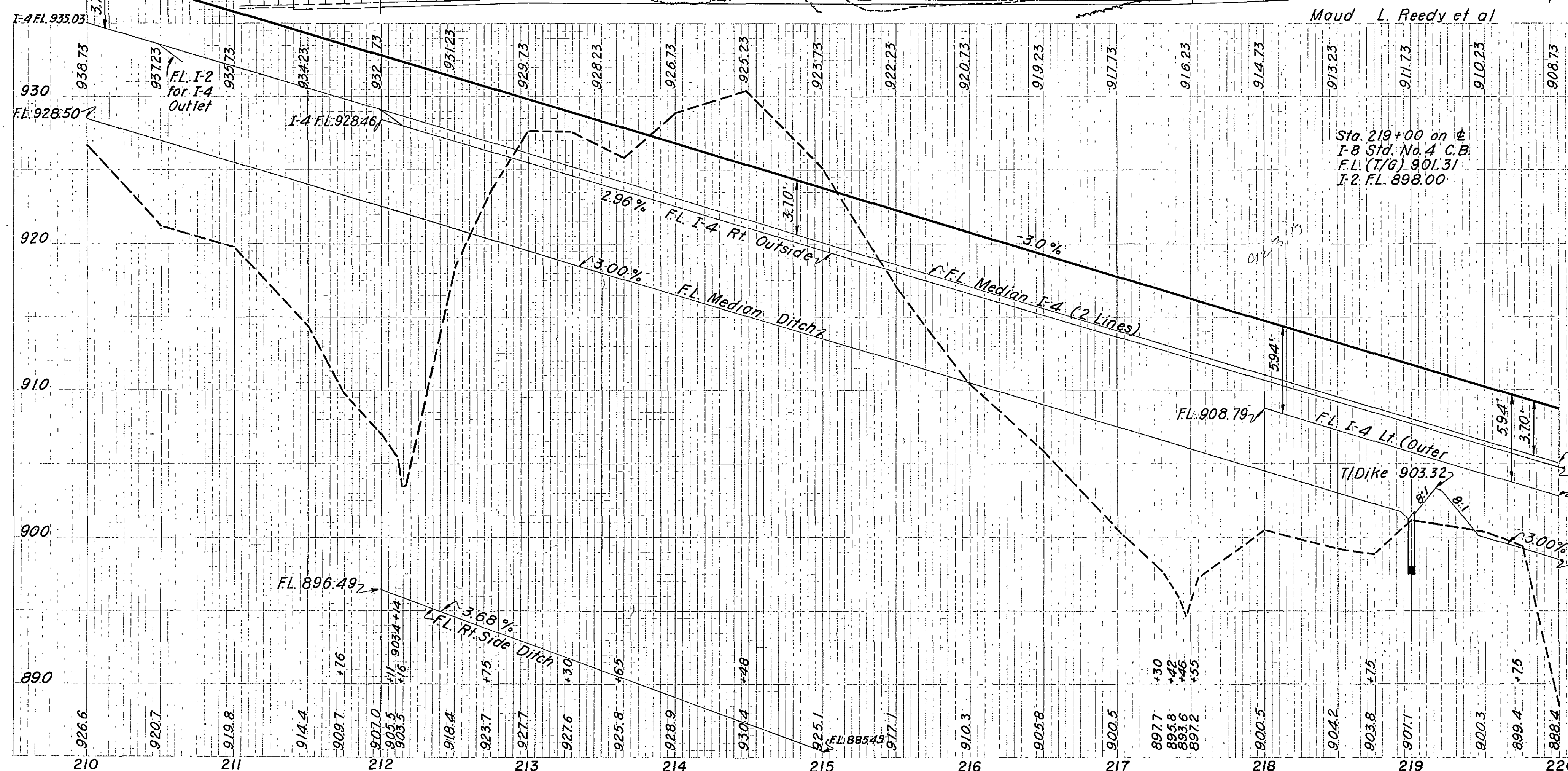


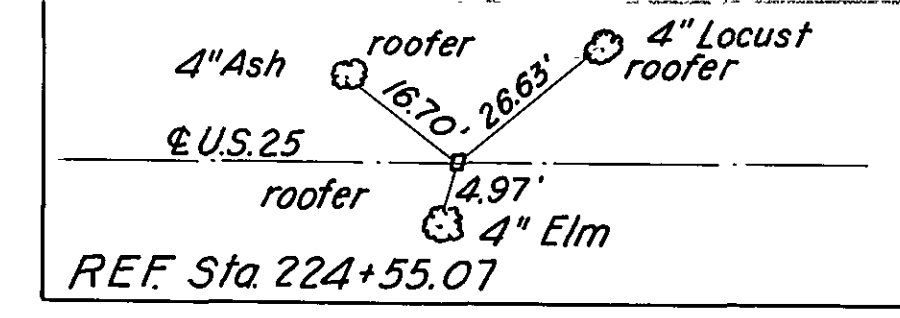
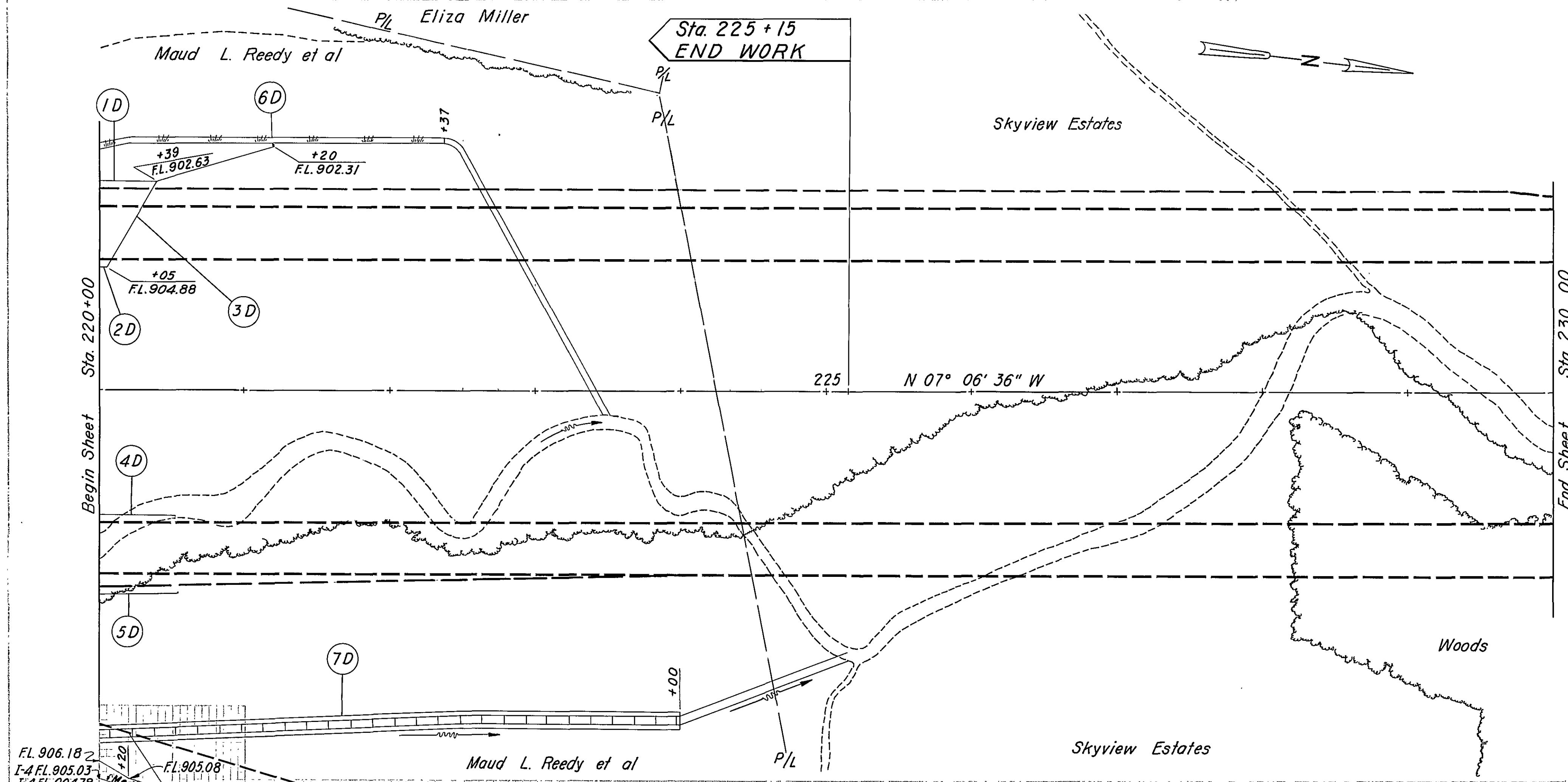
DRAINAGE												
Ref. No.	Station		Side	I-4 Underdrain		I-5 for I-4 Bend 60" Ea	I-2 Storm Sewers Sec. M-6.5(b) or M-6.8(b) 8" L.F.	I-5 for I-2 Increaser 6"x8" Ea	I-4 Pipe Outlets for Underdrains 8" L.F.	L-10 Sodding Width L.F.	S.Y.	I-14 Paved Gutter Type I-E L.F.
	From	To		Shallow 6" L.F.	Deep 6" L.F.							
1 D	210+00	211+87	L	187								
2 D	210+00	211+60	L	160								
3 D	210+00	210+22	R	22								
4 D	210+00	210+48	R	48								
5 D	211+60	211+96	L				64	1	1	10		
6 D	210+22	210+66	R				86	1	2			
7 D	211+91	213+38	L	168								
8 D	211+64	220+00	L	836								
9 D	210+26	220+00	R	974								
10 D	210+52	212+15	R	176								
11 D	212+00	220+00	R	800								
12 D	218+00	220+00	L		200							
13 D	218+00	220+00	L							6	134	
14 D	214+50	218+90	E							9	440	
15 D	219+00		E							3	14	
16 D	212+00	220+00	R									800
Totals				3371	200	4	1	150	2	3	10	588 800

DRAINAGE (Cont.)									
Ref. No.	Station		Side	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class "E" C.Y.	I-2 Storm Sewer Sec. M-6.5(b) or M-6.8(b) 18" L.F.	I-5 for I-2 30" Bends Sec. M-6.4(c) 18" Each	I-8 Standard No. 4 Catch Basin Ea.	I-10 Dumped Rock Channel Protection Depth inches
	From	To							
17 D	219+00	E to R		2	0.3	172	44	2	1
Totals				2	0.3	172	44	2	1

STRUCTURES (20 Ft. Span and Under)								
Ref. No.	Station		Side	E-2 Excavation for Structures C.Y.	E-3 Channel Excavation C.Y.	S-1 Concrete for Structures Class "E" C.Y.	S-27 Pipe for Rdwy. Culv. Sec. M-6.4(d) 100 gage or M-6.8(d) 100 gage L.F.	I-10 Dumped Rock Channel Protection C.Y.
	From	To						
I-5	211+35			1034	42	1.2	482	10
Totals				1034	42	1.2	482	10

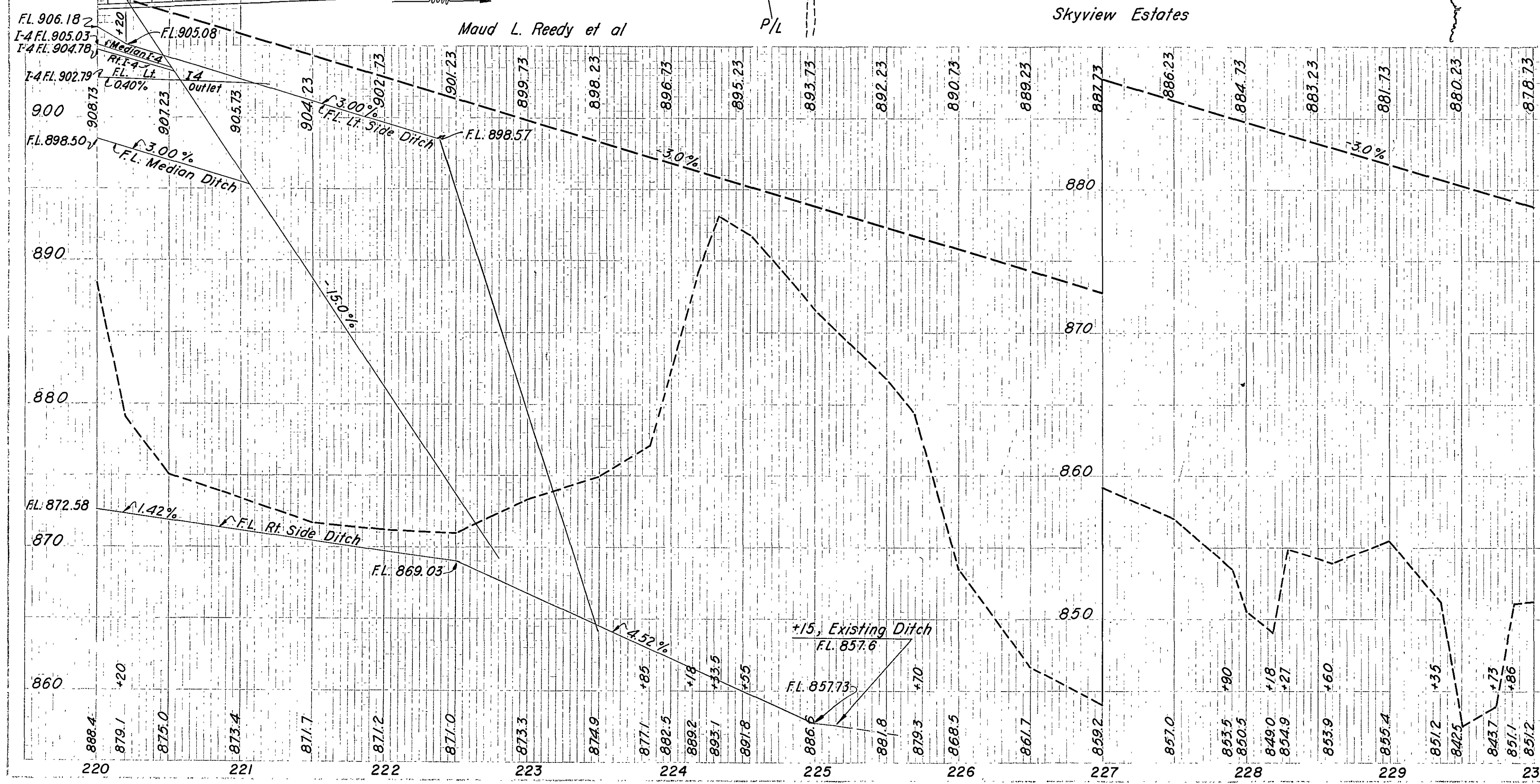
ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type - Deep Standard L.F.
	From	To		
I-R	212+00	220+00	R	800
Totals				800





MOT-25-0.49

DRAINAGE														
Ref. No.	Station		Side	I-4 Underdrain		I-5 for I-4 Bend 60° 6" Ea.	I-2 Storm Sewer Sec. M-6.5(b) or M-6.8(b) 8" L.F.	I-5 for I-2 Increaser 6"x8" 6" Ea.	Wye 8"x8" x6" Ea.	Bend 60° 8" Ea.	I-4 Pipe Outlets for Underdrains 8" L.F.	I-14 Paved Gutter Type 1E L.F.	L-10 Sodding	
	From	To		Shallow 6" L.F.	Deep 6" L.F.								Width L.F.	S.Y.
1 D	220+00	220+39	L		39									
2 D	220+00	220+05	L	4		1								
3 D	220+05	221+20	L				142	1	1	1	10			
4 D	220+00	220+52	R	52										
5 D	220+00	220+54	R	54										
6 D	220+00	222+37	L										9	237
7 D	220+00	224+00	R									400		
Totals				110	39	1	142	1	1	1	10	400	9	237



B.M. Spike in root 24" Walnut
232' Lt of Sta. 220+97
Elev. 930.840

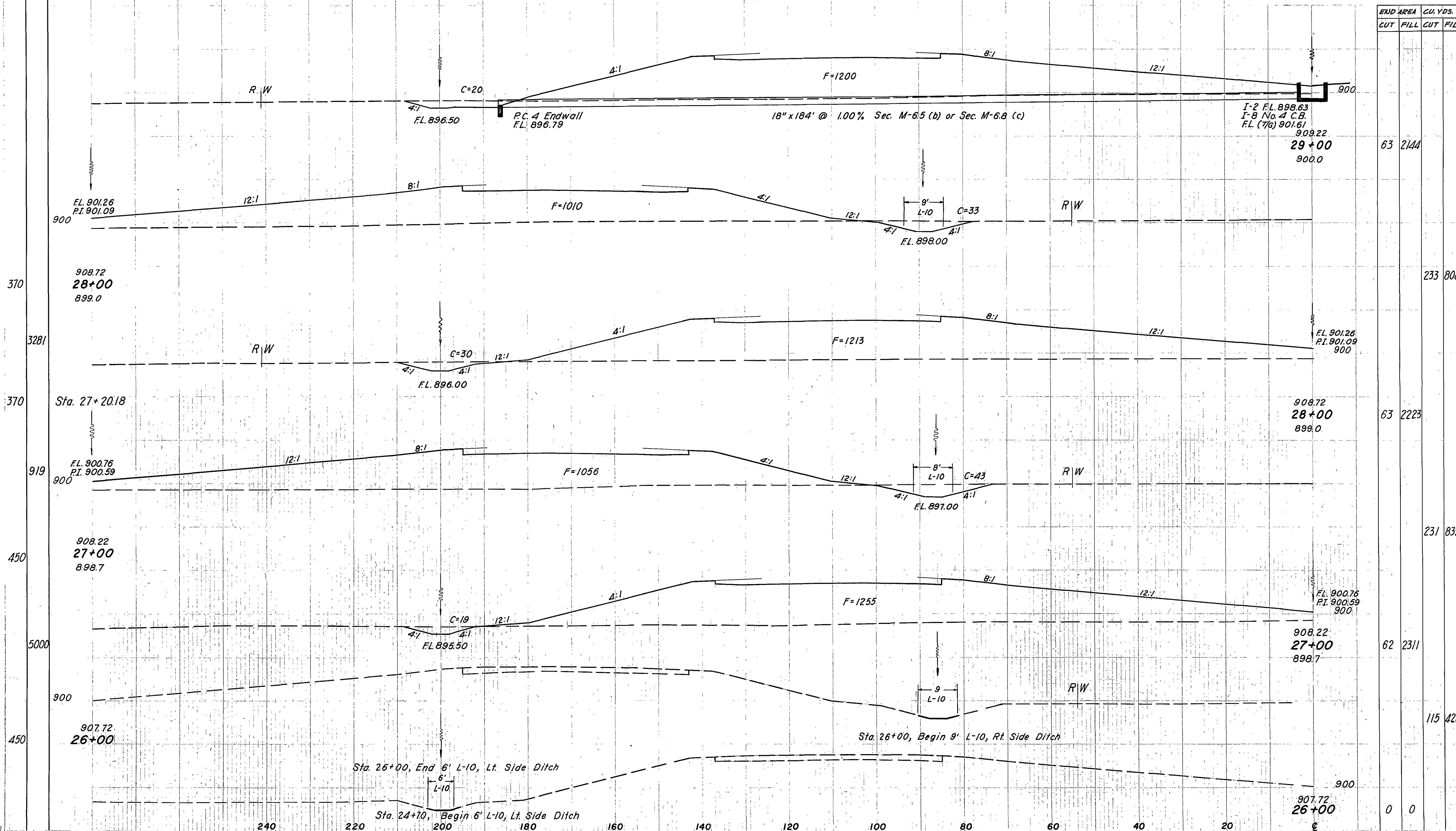
Excavation	33,408 C.Y.
Embankment	36,076 C.Y.
Embankment + 15 %	41,487 C.Y.

Sta 220+00 to 230+00

SEEDING
END
WIDTH
Sq.
YDS.

2 OHIO 39
336

MONTGOMERY COUNTY
MOT.-25-0.49

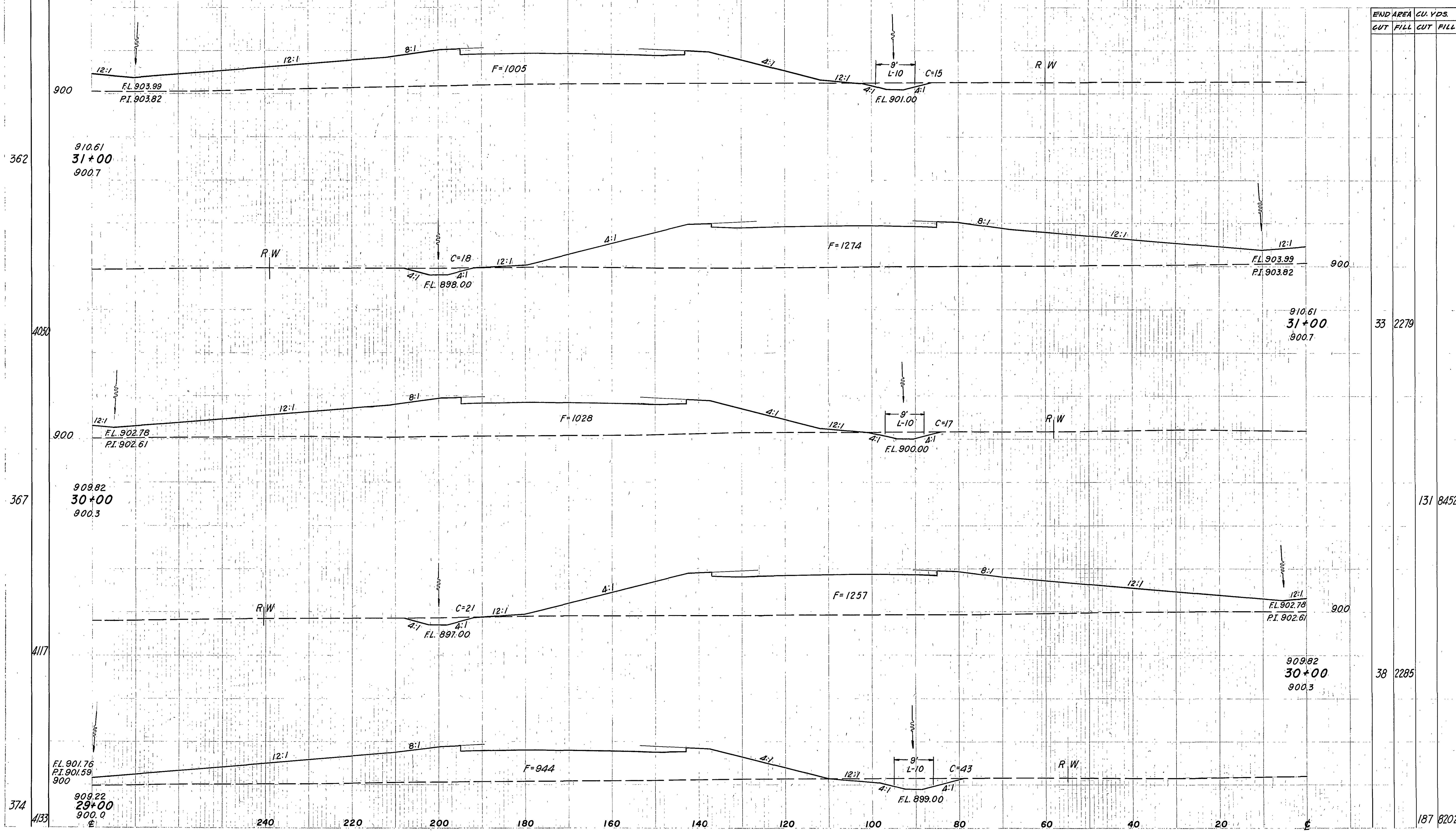


END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
63	2144	233	8087
63	2223	231	8396
62	2311	115	4280
0	0		

Sta 26+00 to Sta 29+00 It

SEEDING
END
WIDTH
SP.
YDS.

MONTGOMERY COUNTY
MOT-25-0.49



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL

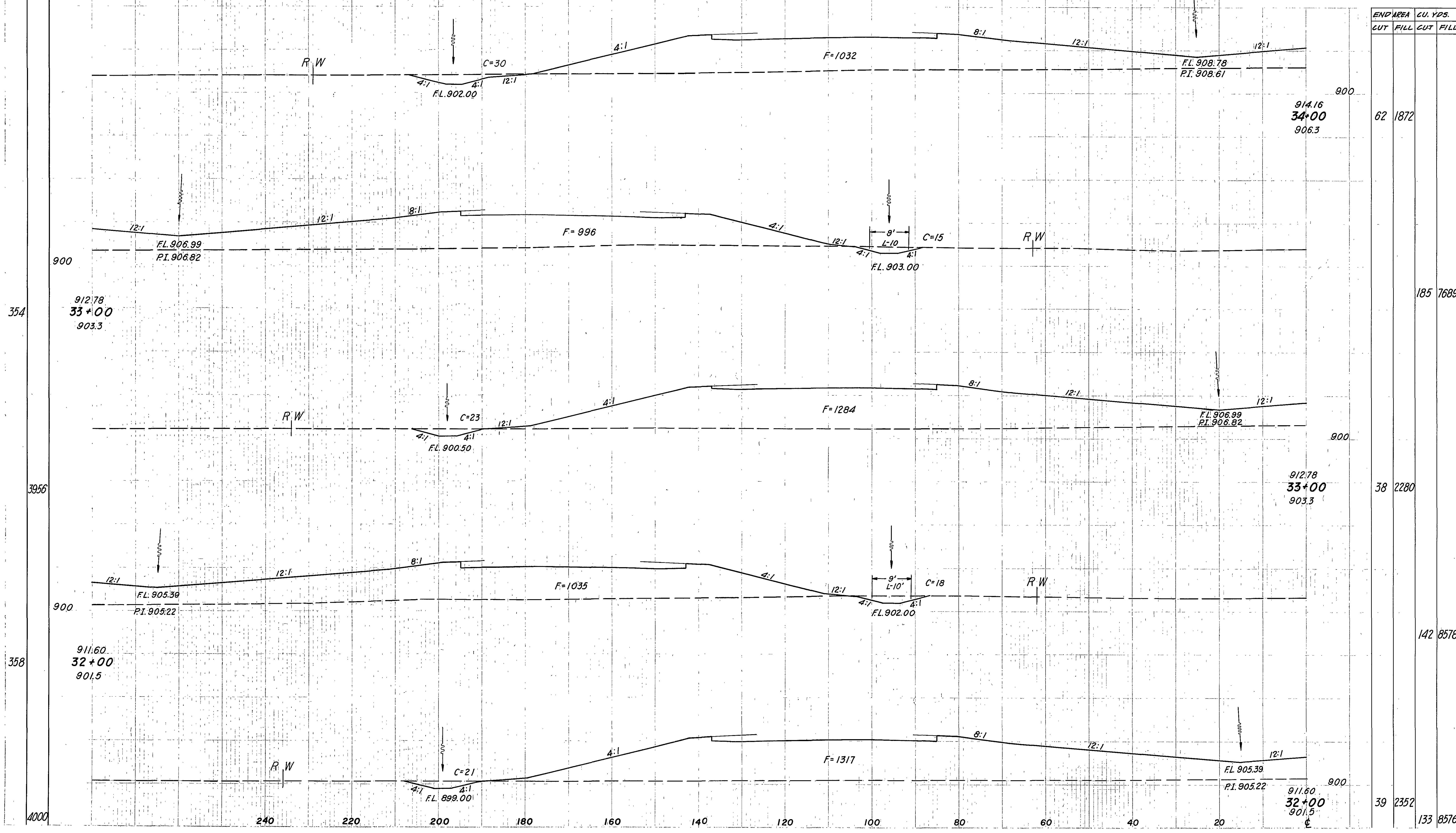
33	2279		
131	8452		
38	2285		
187	8202		

Sta 29+00 Pt. to Sta 31+00

SEEDING
END SQ.
WIDTH YDS.

DATE: 10/12/04
PROJECT: 41
336

MONTGOMERY COUNTY
MOT-25-0.49



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
62	1872		
185	7689		
38	2280		
142	8578		
39	2352		
133	8576		

Sta 32+00 to Sta 34+00 1+

SEEDING
END
WIDTH
YDS.

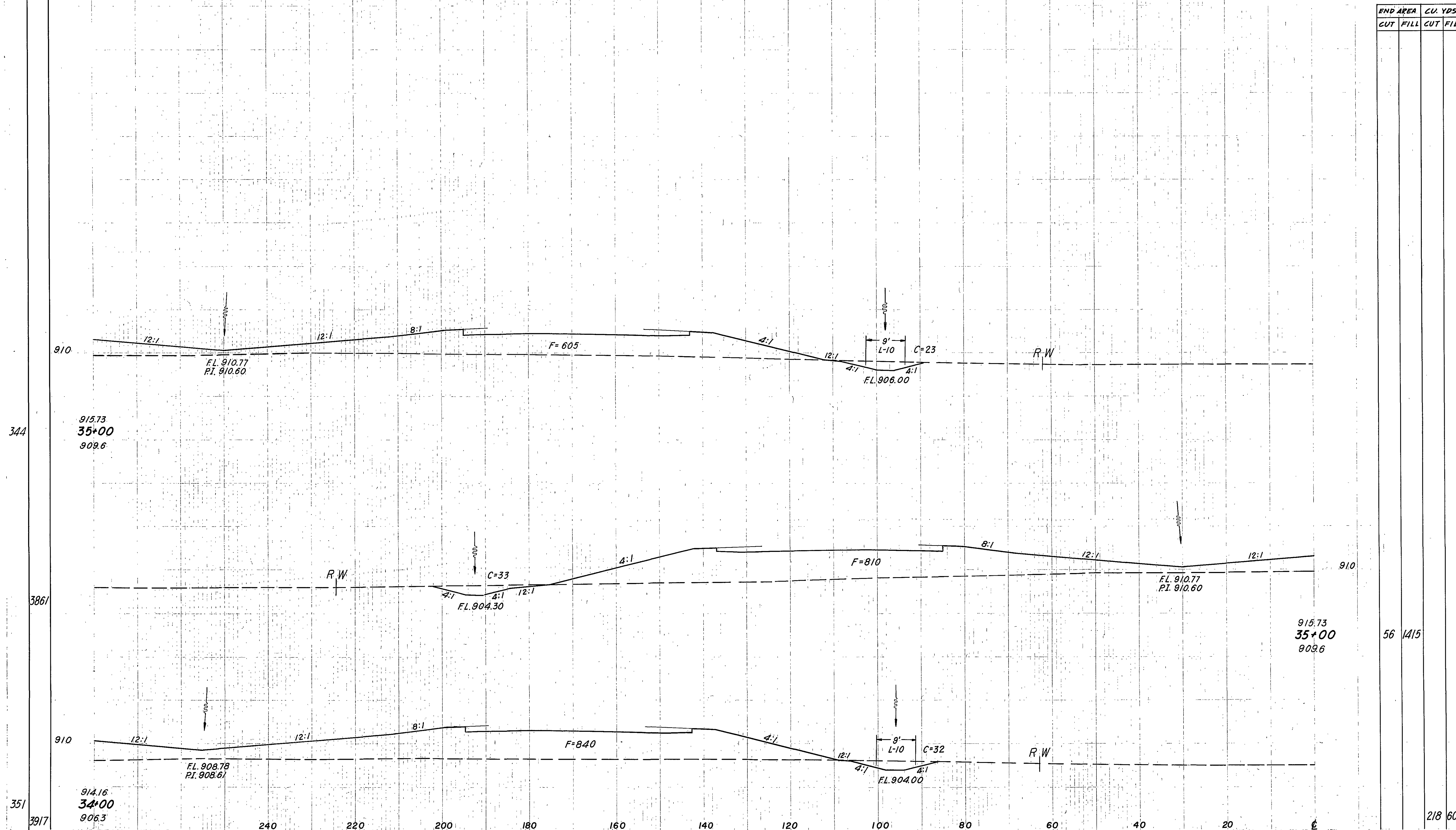
SQ.
YDS.

FOR RD.
SECTION
25-049

42
336

MONTGOMERY COUNTY
MOT.-25-049

END AREA		CU. YDS	
CUT	FILL	CUT	FILL

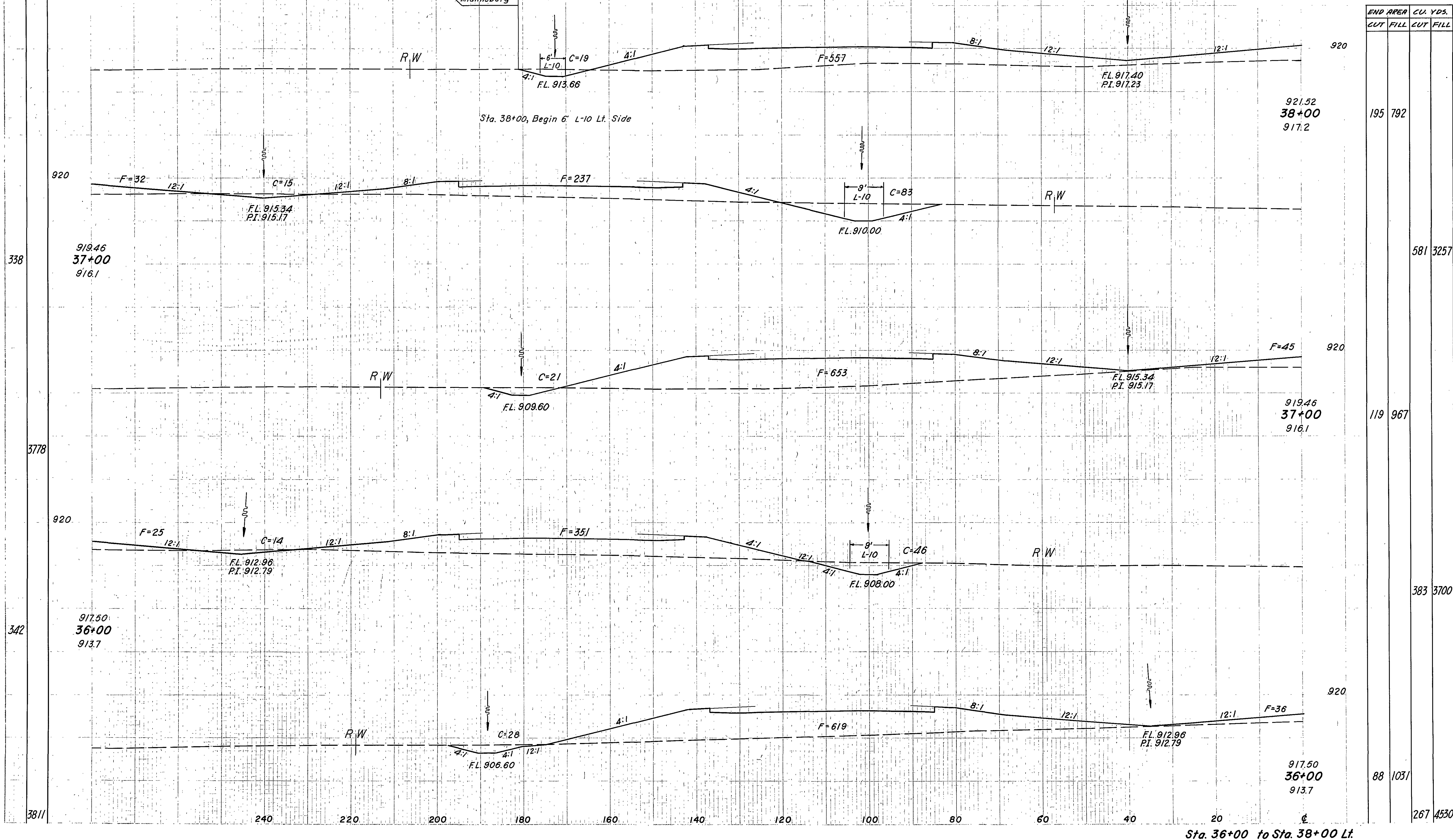


SEEDING
END SQ.
WIDTH YDS.

22
2

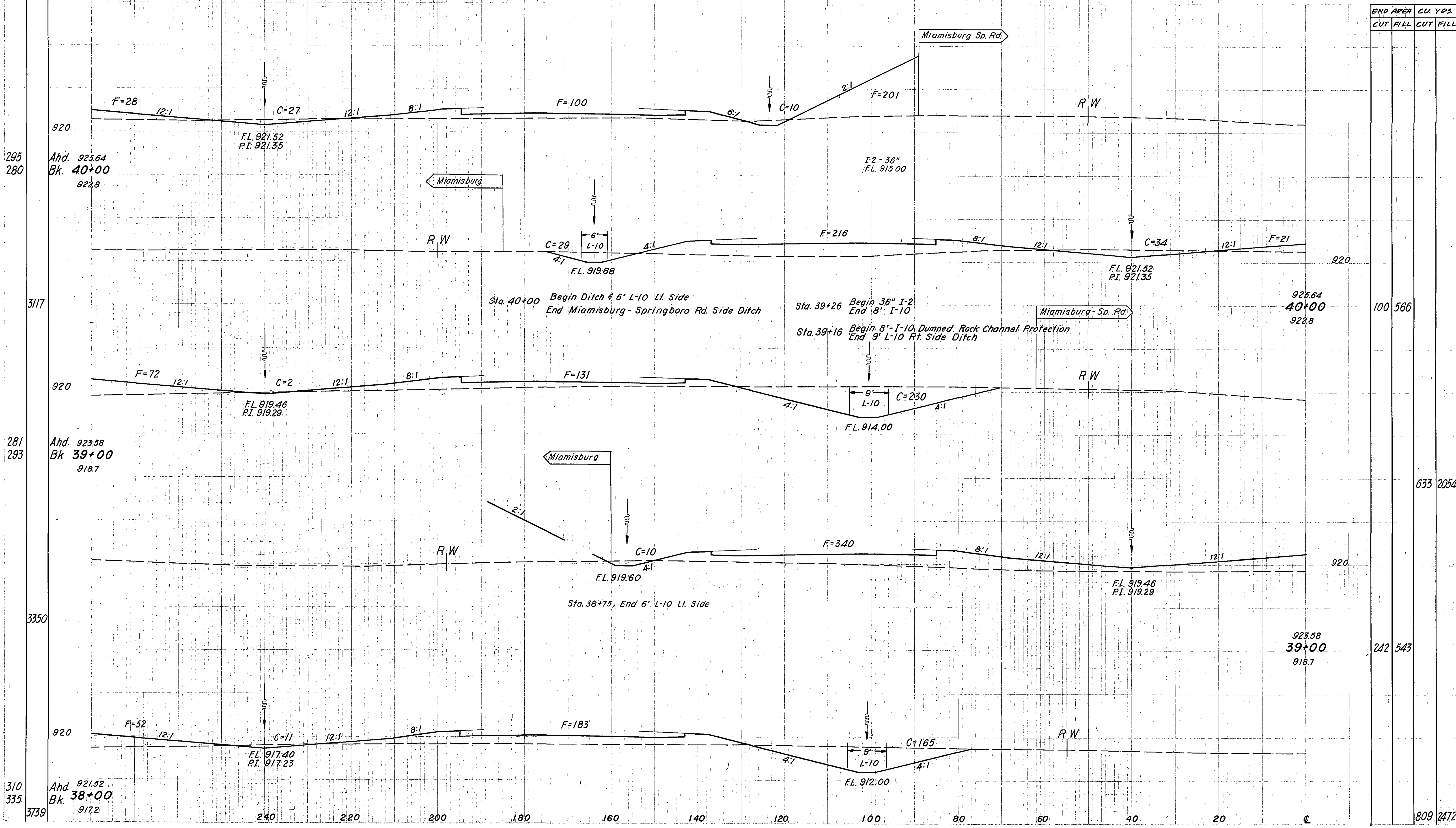
43
336

MONTGOMERY COUNTY
MOT-25-049



SEEDING
END SP.
WIDTH YDS.

MONTGOMERY COUNTY
MOT-25-0.49

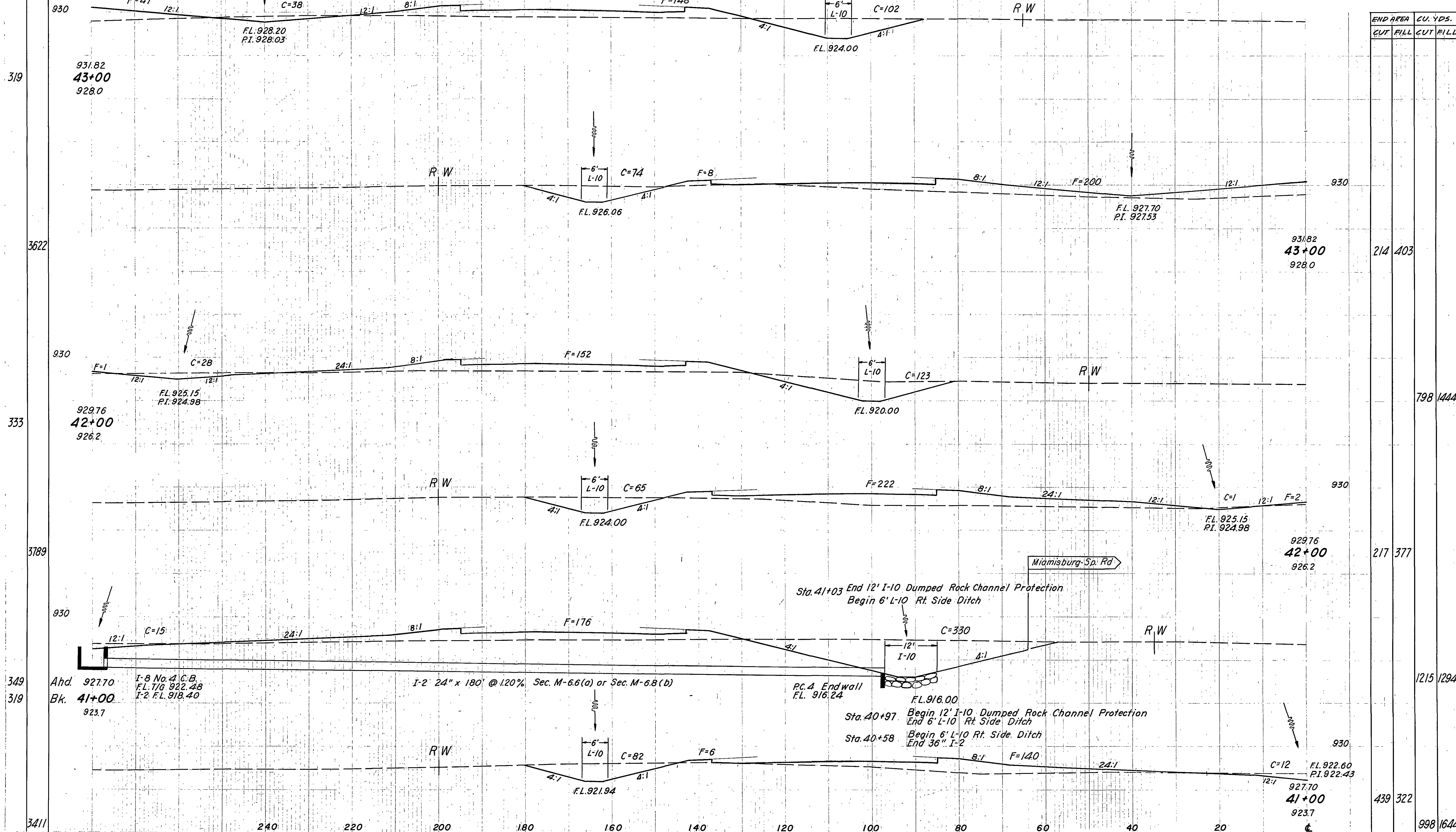


END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
100	566		
633	2054		
242	543		
809	2472		

SEEDING
END SQ.
WIDTH YDS.

MONTGOMERY COUNTY
MOT-25-0.49

45
336



Sta 41+00 to Sta 43+00

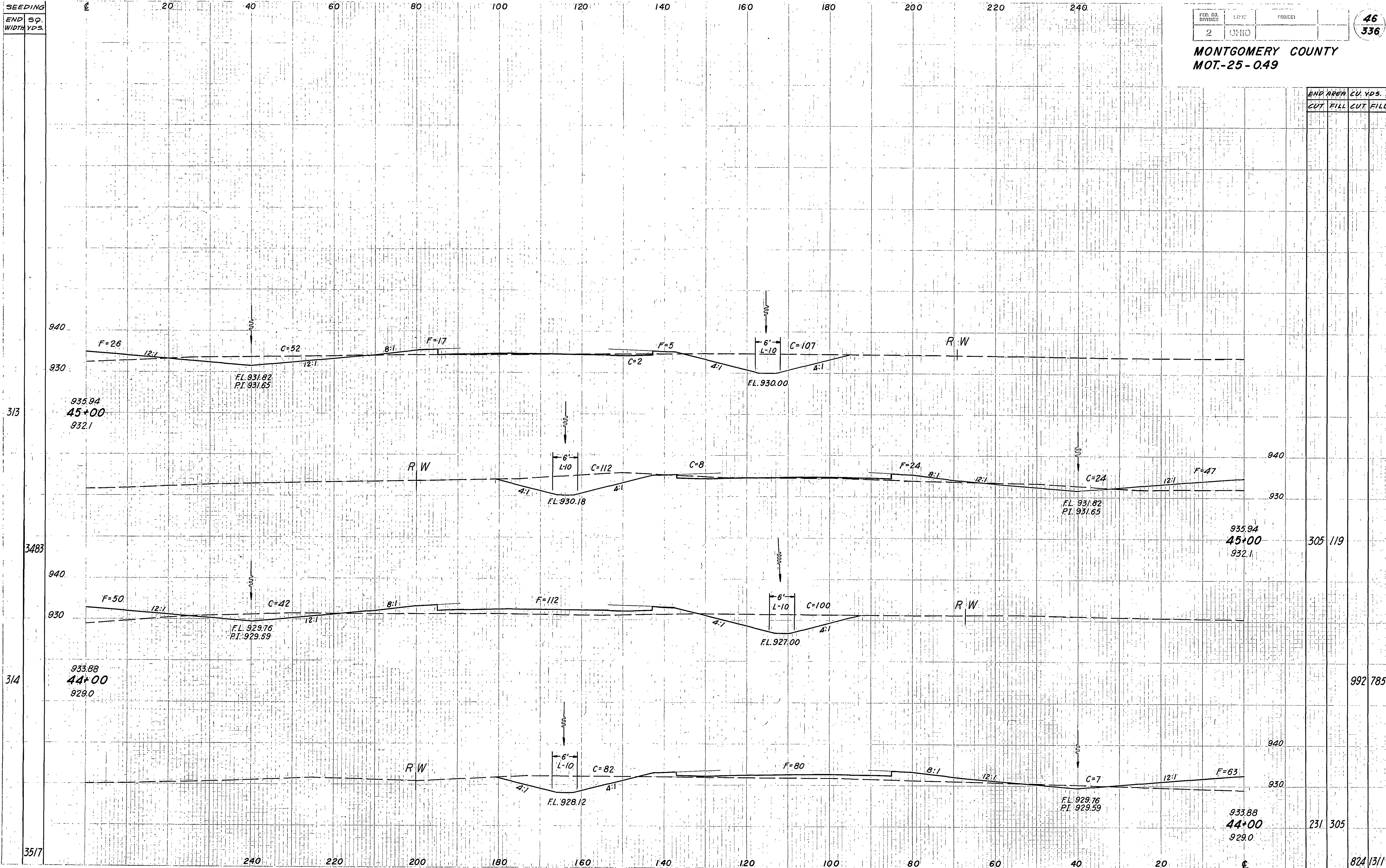
SEEDING
END SQ.
WIDTH YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

46
336

MONTGOMERY COUNTY
MOT.-25-0.49

END AREA		CU. YDS.	
CUT	FILL	CUT	FILL

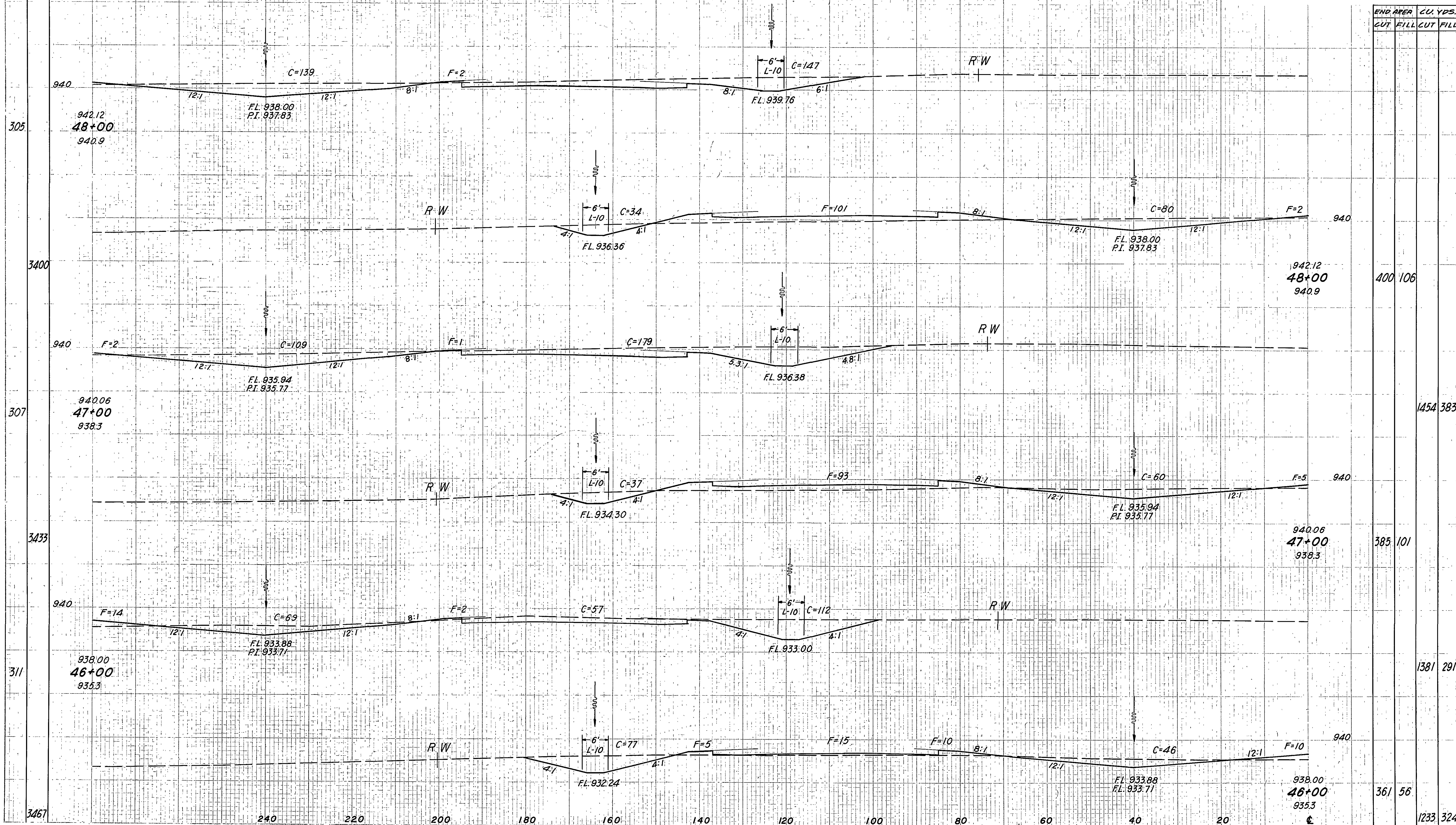


SEEDING
END SQ.
WIDTH YDS.

FED. RD. DISTRICT	STATE	PROJECT
2	OHIO	

47
336

MONTGOMERY COUNTY
MOT-25-0.49



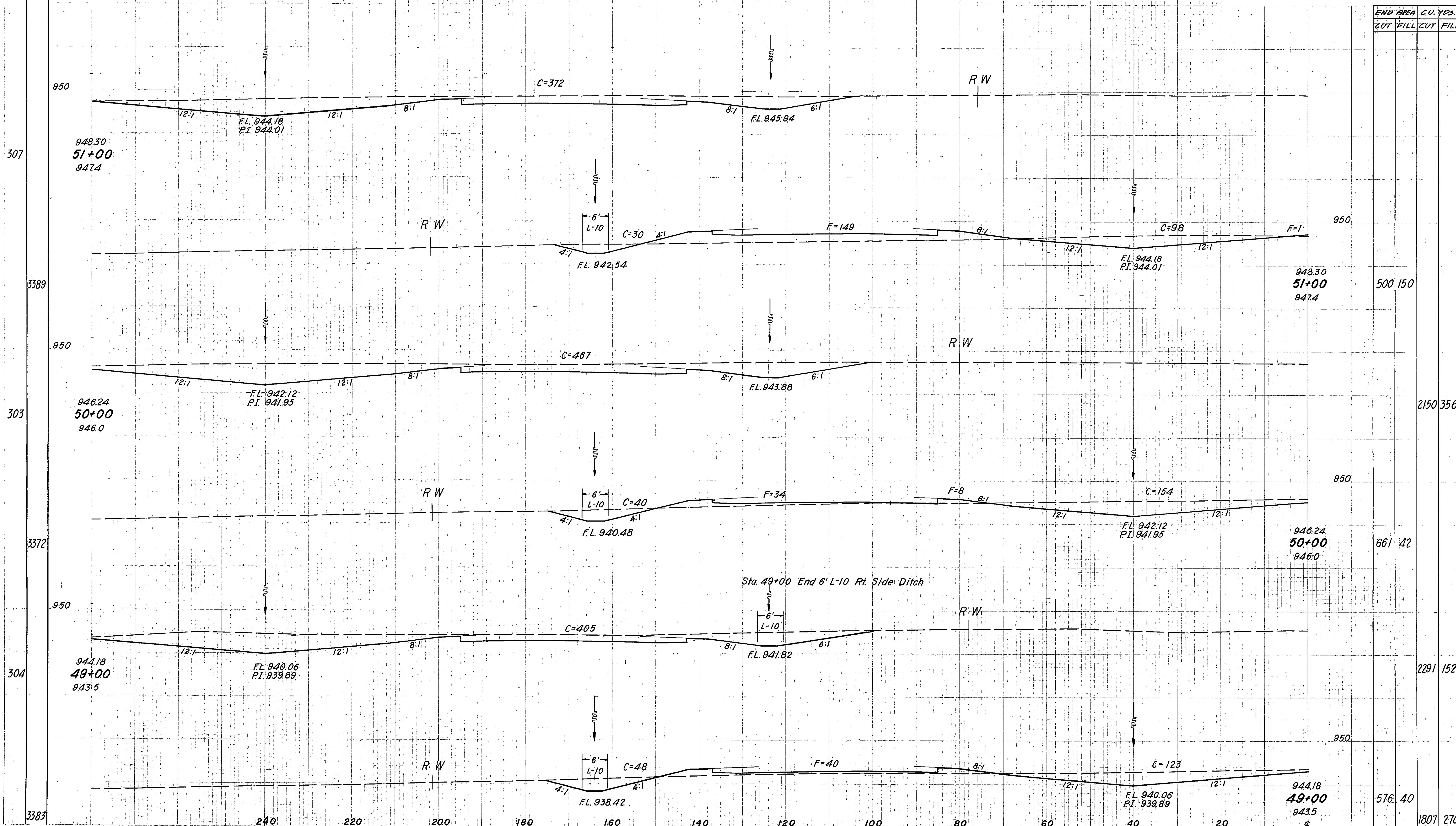
Sta 46+00 to Sta 48+00

SEEDING	END SQ. WIDTH YPS.
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FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

48
336

MONTGOMERY COUNTY
MOT-25-0.49

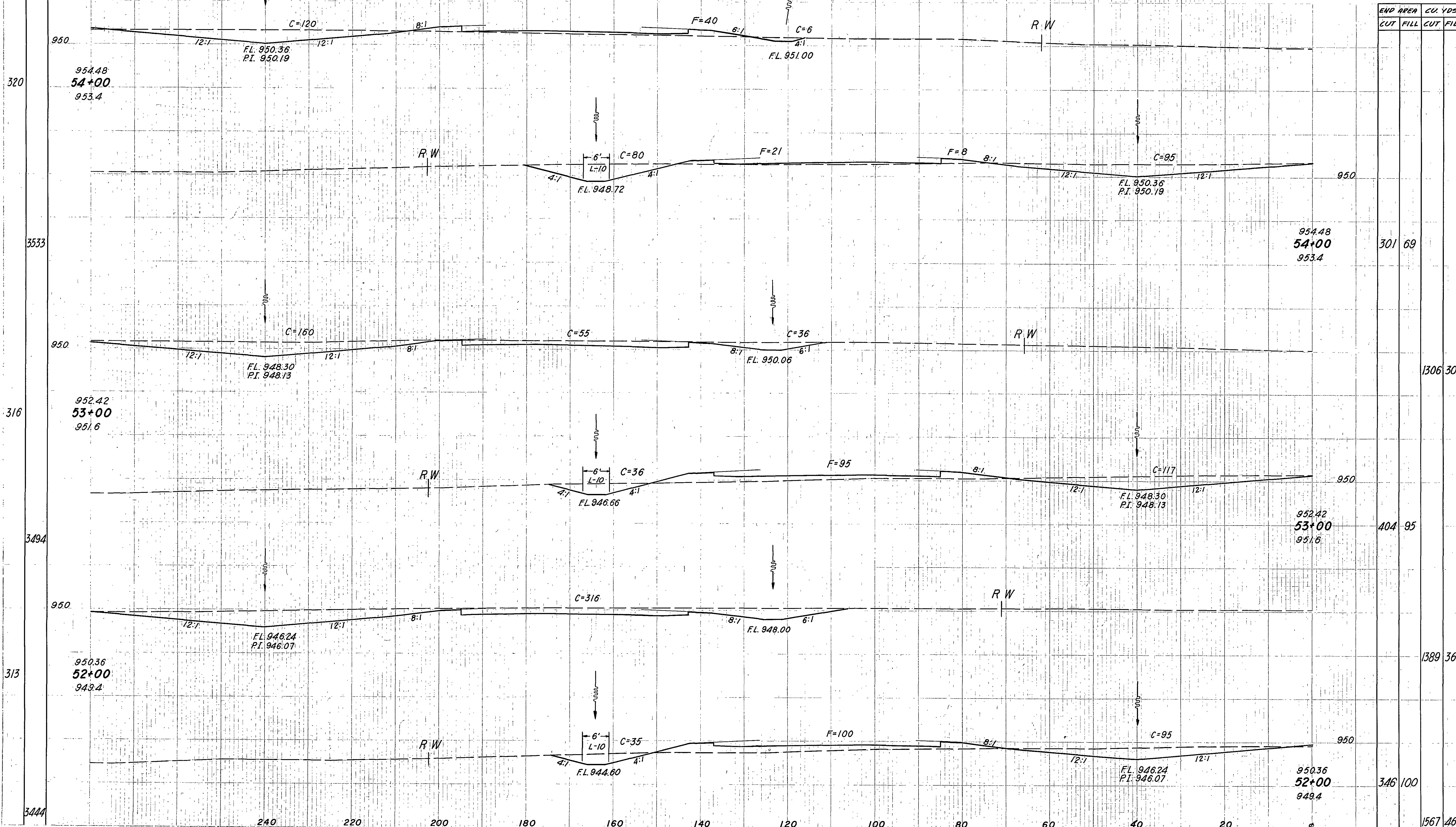


Sta. 49+00 to Sta. 51+00

SEEDING
END
WIDTH
50
YDS.

FED. RD. DIVISION
2
STATE
OHIO
PROJECT
49
336

MONTGOMERY COUNTY
MOT-25-049



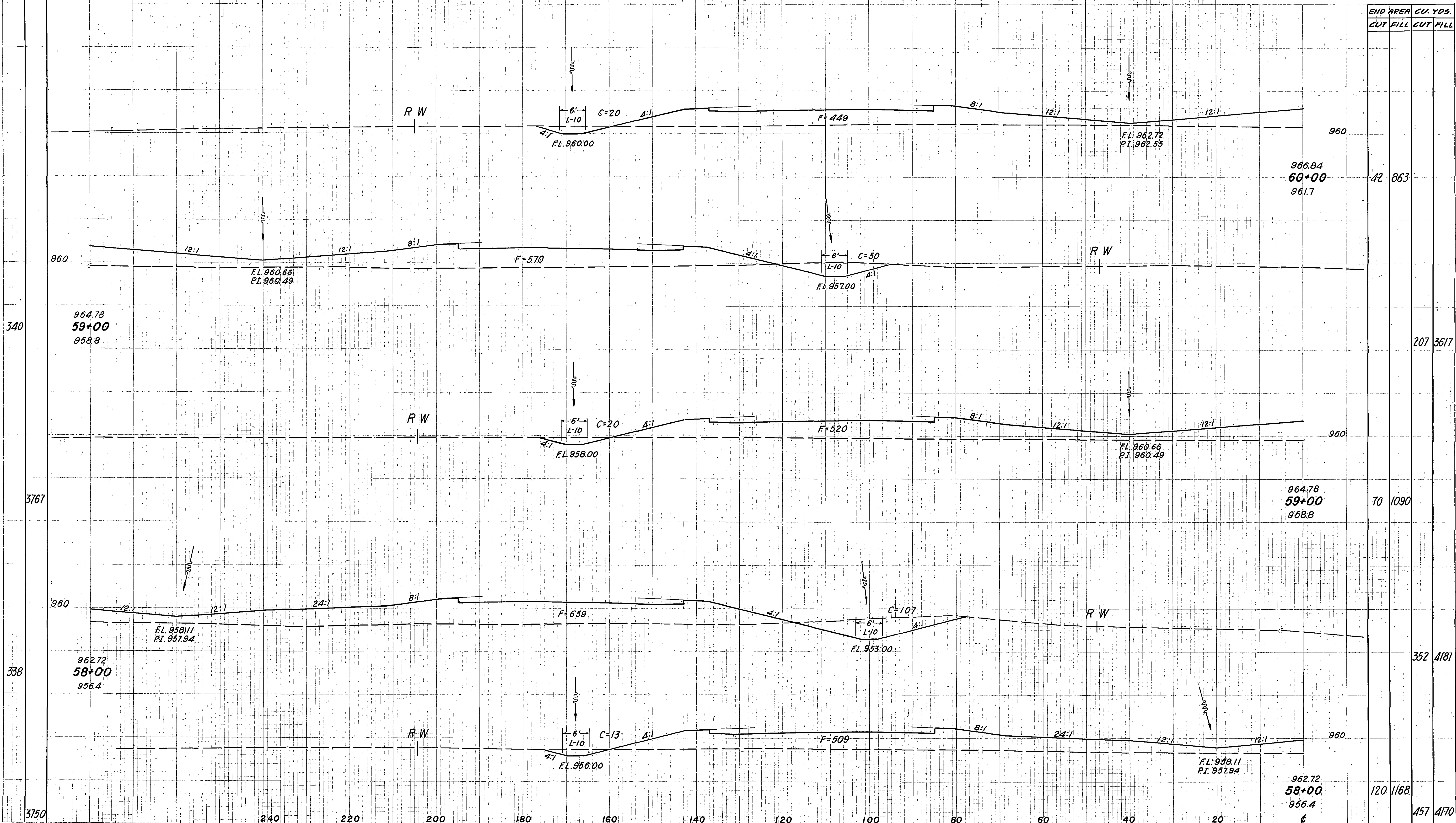


SEEDING
END SP.
WIDTH YDS.

FED. RD. DIVISION	STATE	PROJECT
2	0180	

51
336

MONTGOMERY COUNTY
MOT.-25-049



Sta 58+00 to Sta 60+00 Lt

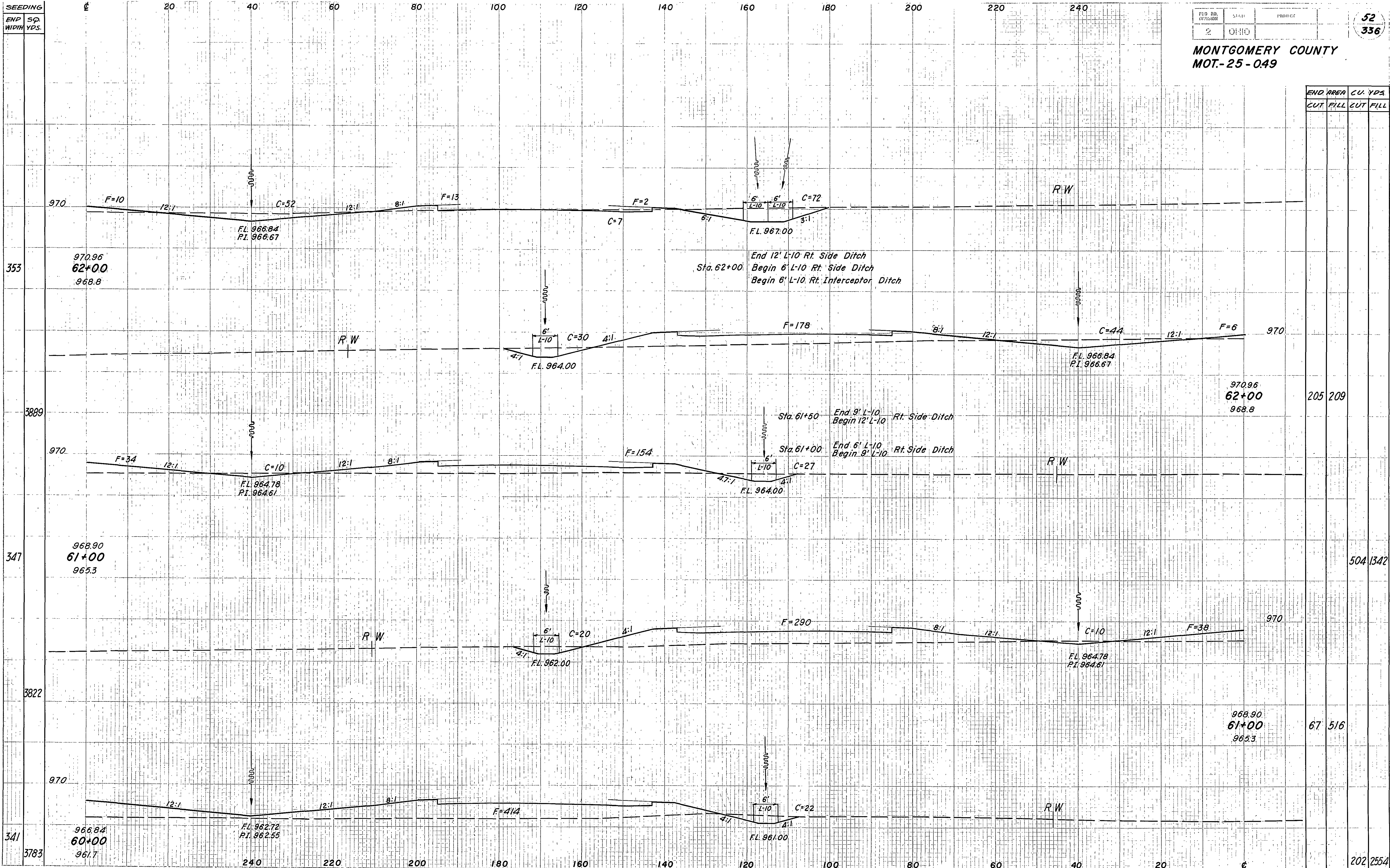
SEEDING
ENP SQ.
WIDTH YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

52
336

MONTGOMERY COUNTY
MOT.-25-049

END AREA CU. YDS.
CUT FILL CUT FILL

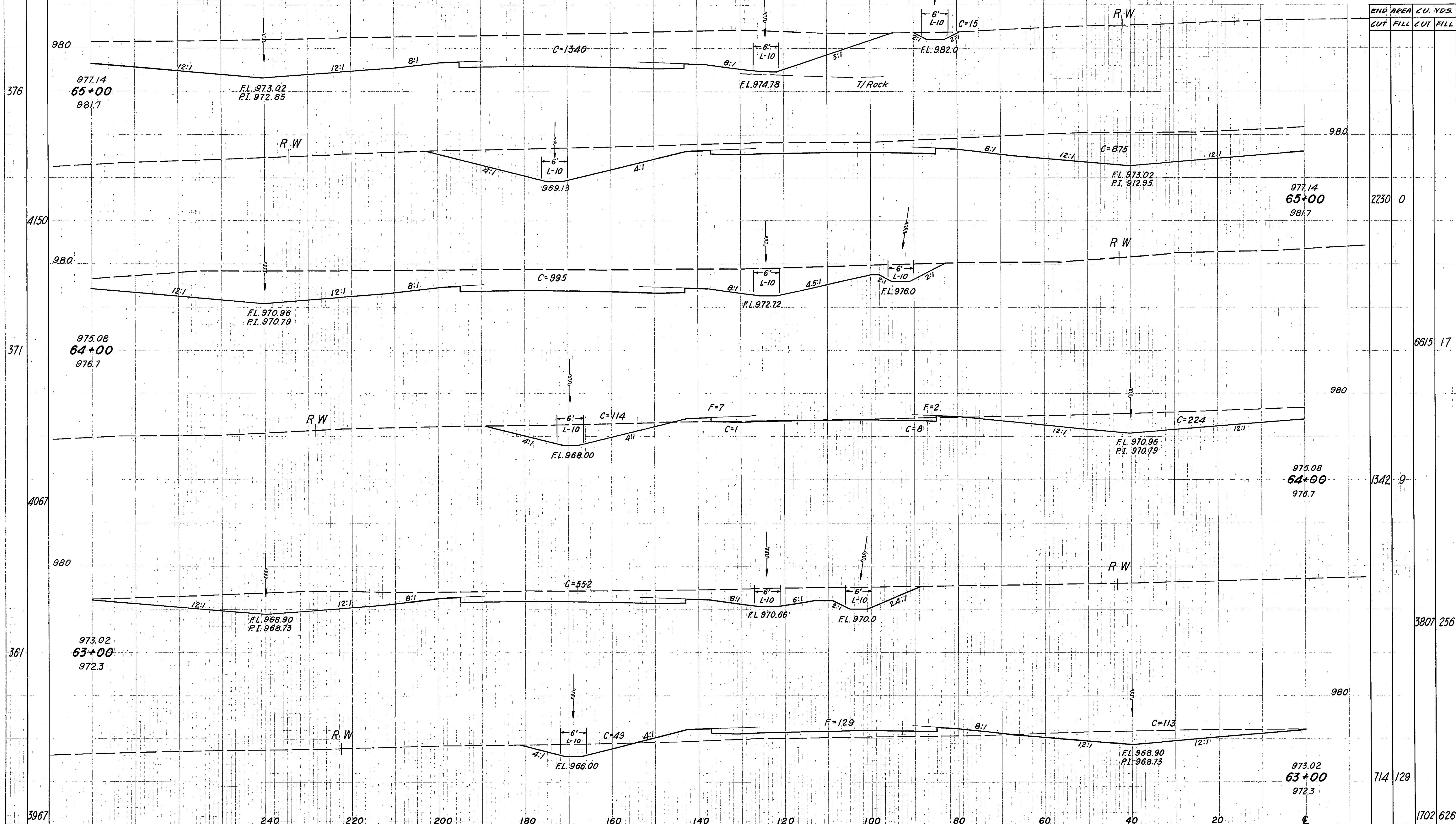


Sta 60+00 Pt. to Sta 62+00

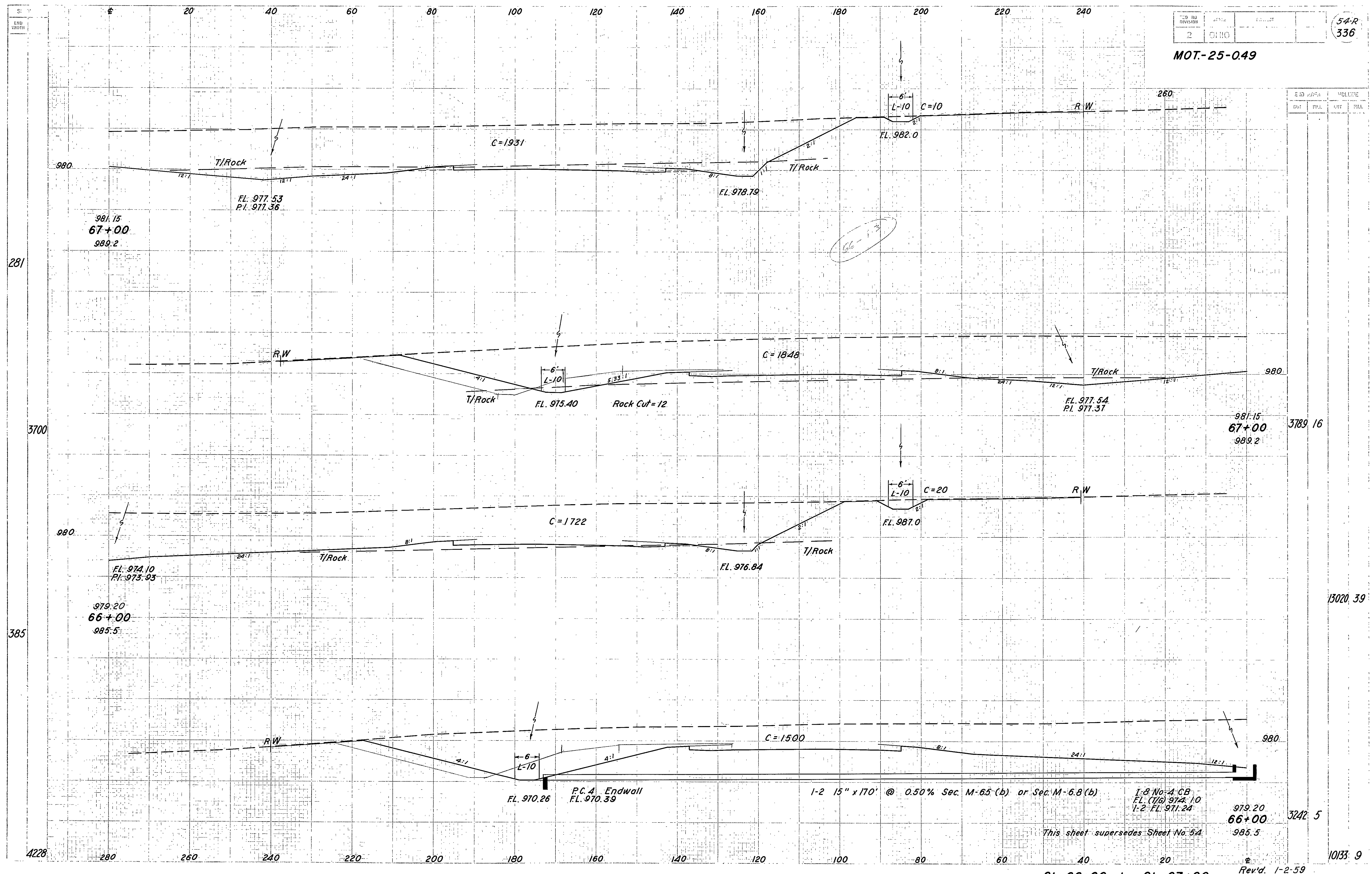
SEEDING
END SP.
WIDTH YDS.

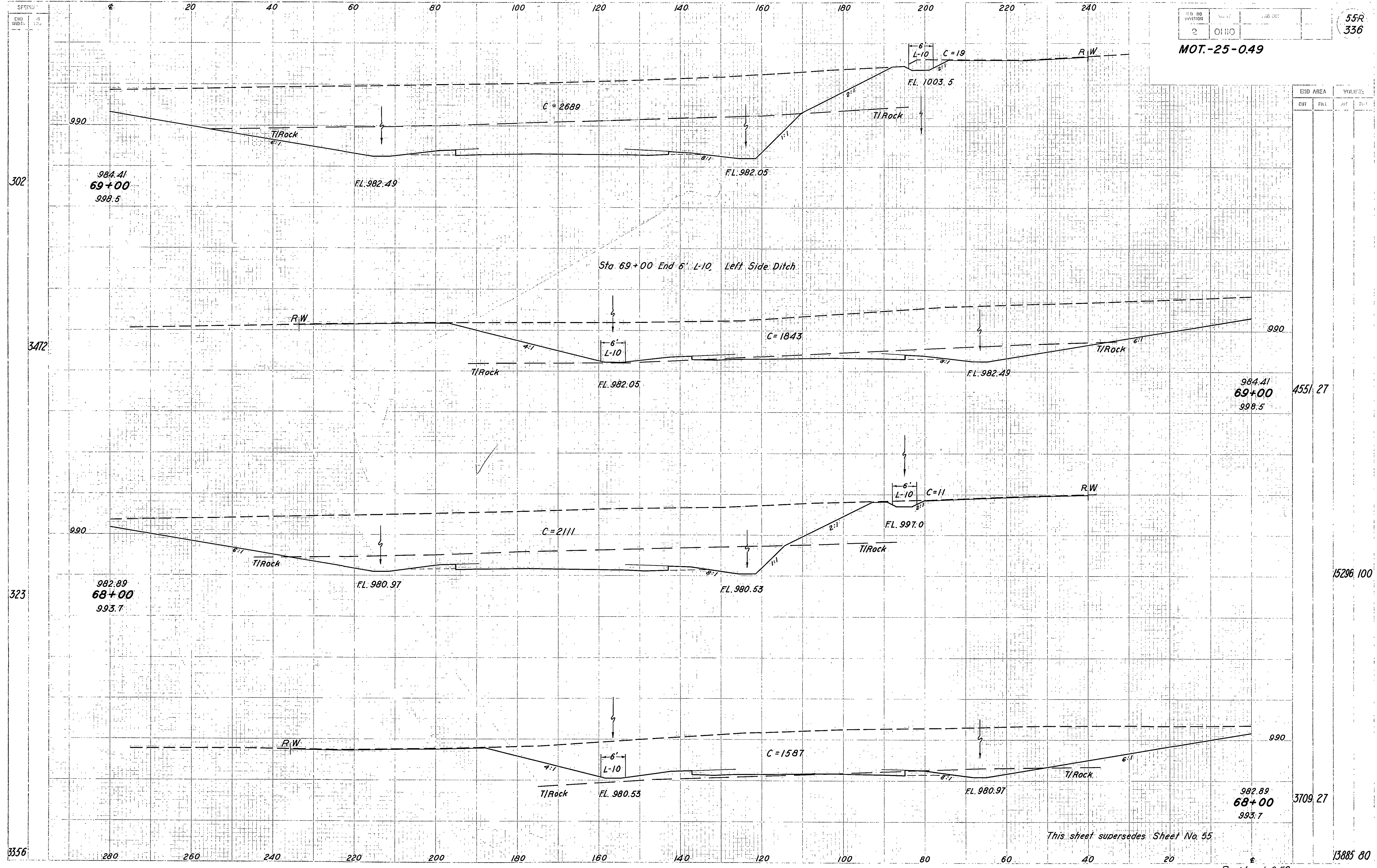
2 0110 53
336

MONTGOMERY COUNTY
MOT.-25-049



Sta 63+00 to Sta 65+00





MOT.-25-049

END AREA		VOLUME	
CUT	FILL	CU	CU

455/ 27

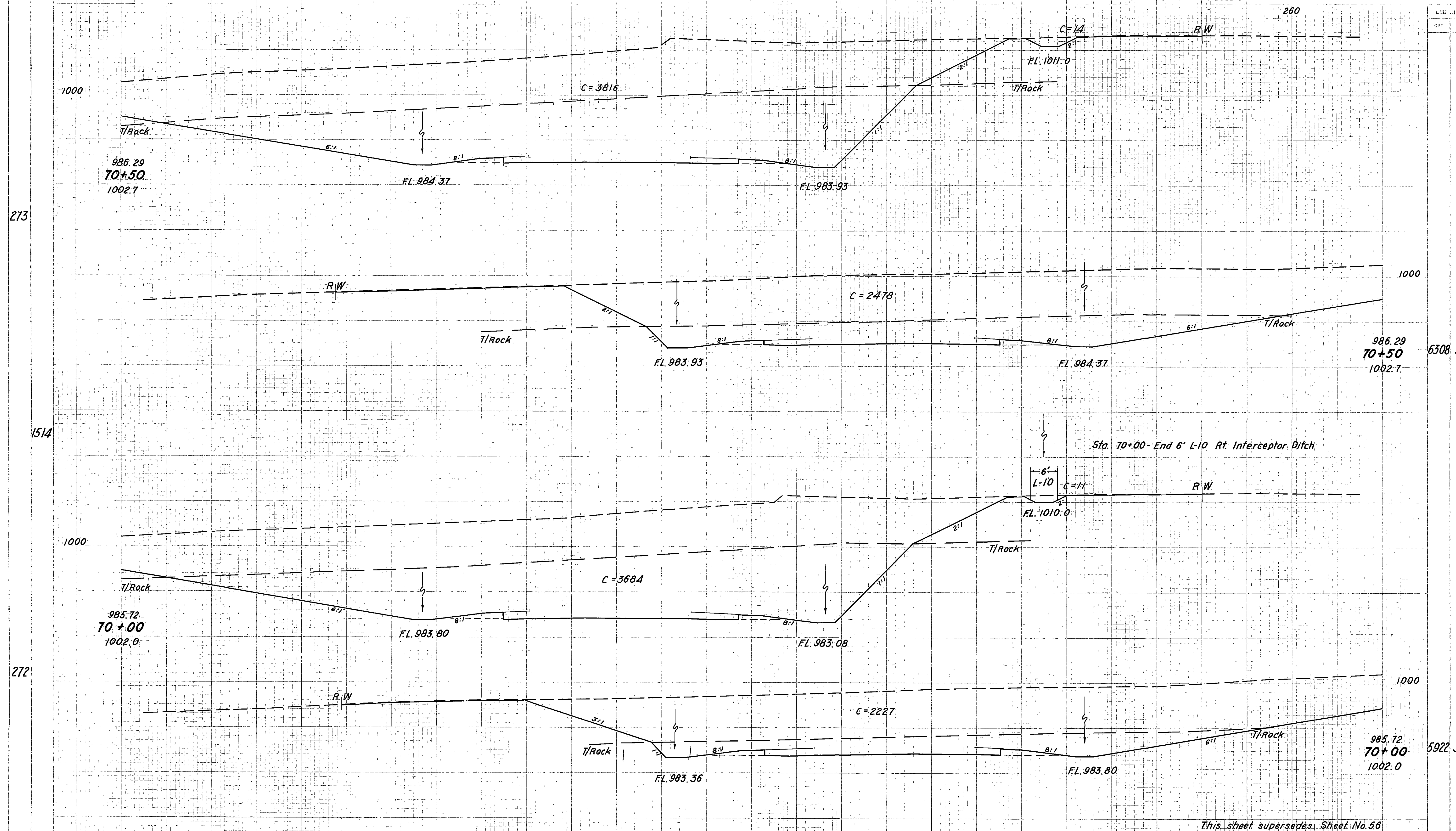
15296 100

3709 27

13885 80

This sheet supersedes Sheet No. 55

MOT-25-049



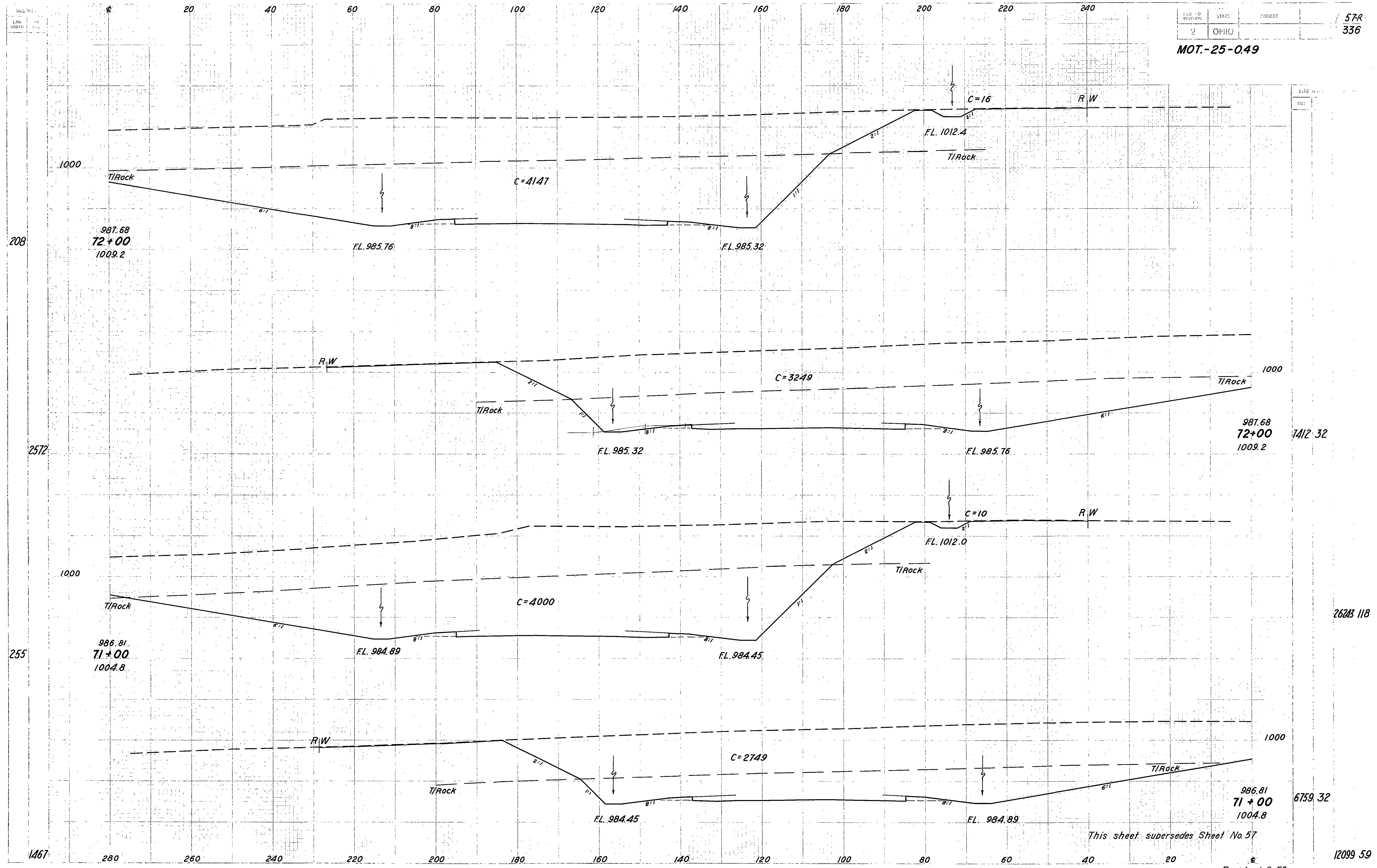
This sheet supersedes Sheet No. 56

Sta 70+00 to Sta 70+50

Rev'd. 1-2-59

3/89

19394 109



ED. NO.	STATE	PROJECT	57R
2	OHIO		336

MOT-25-0.49

This sheet supersedes Sheet No. 57

Rev'd. 1-2-59

Sta 71+00 to Sta 72+00

12099 59

26243 118

7412 32

6759 32

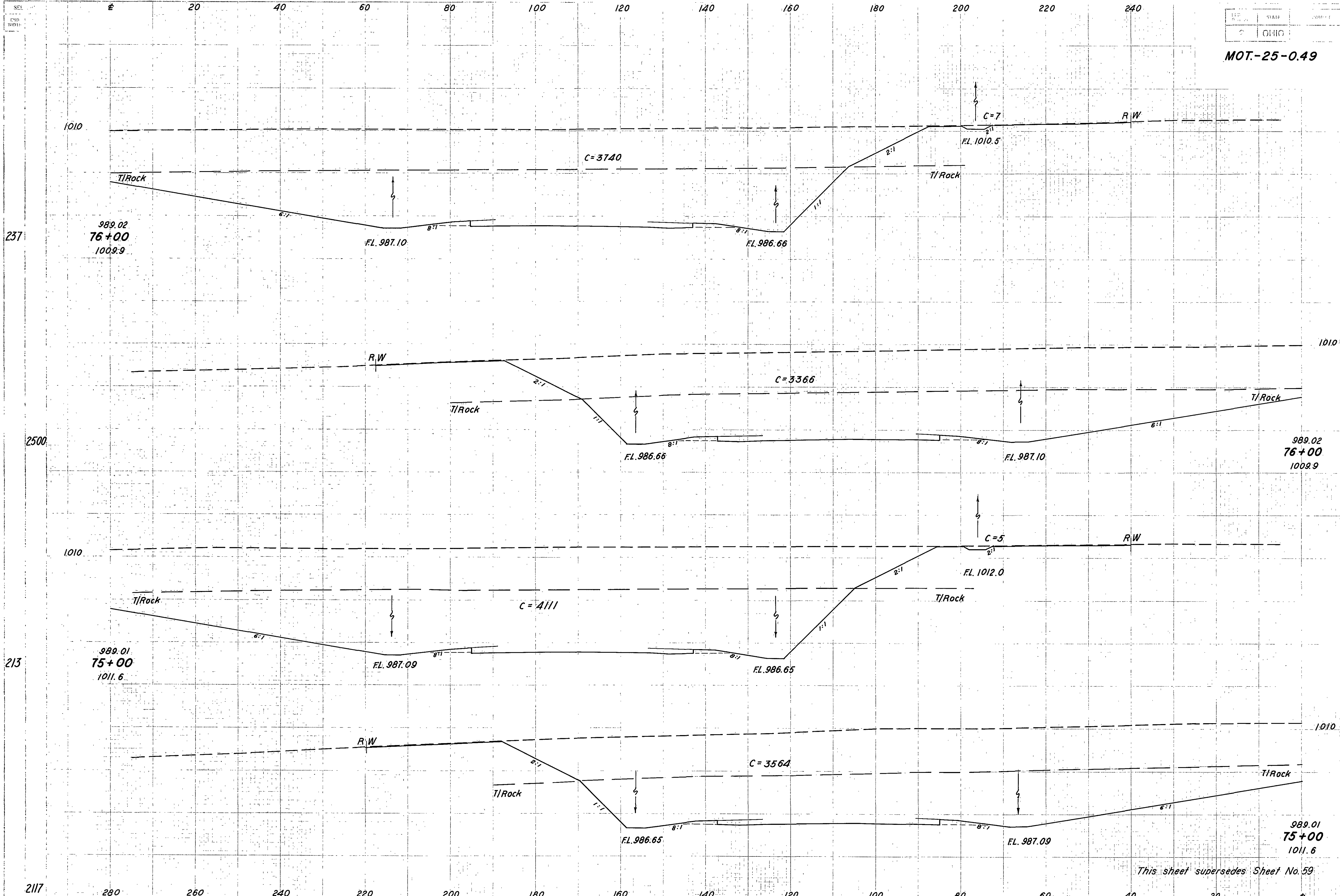
208

2572

255

1467





MOT-25-0.49

DATE	1-2-59
BY	28861 118

7113 32

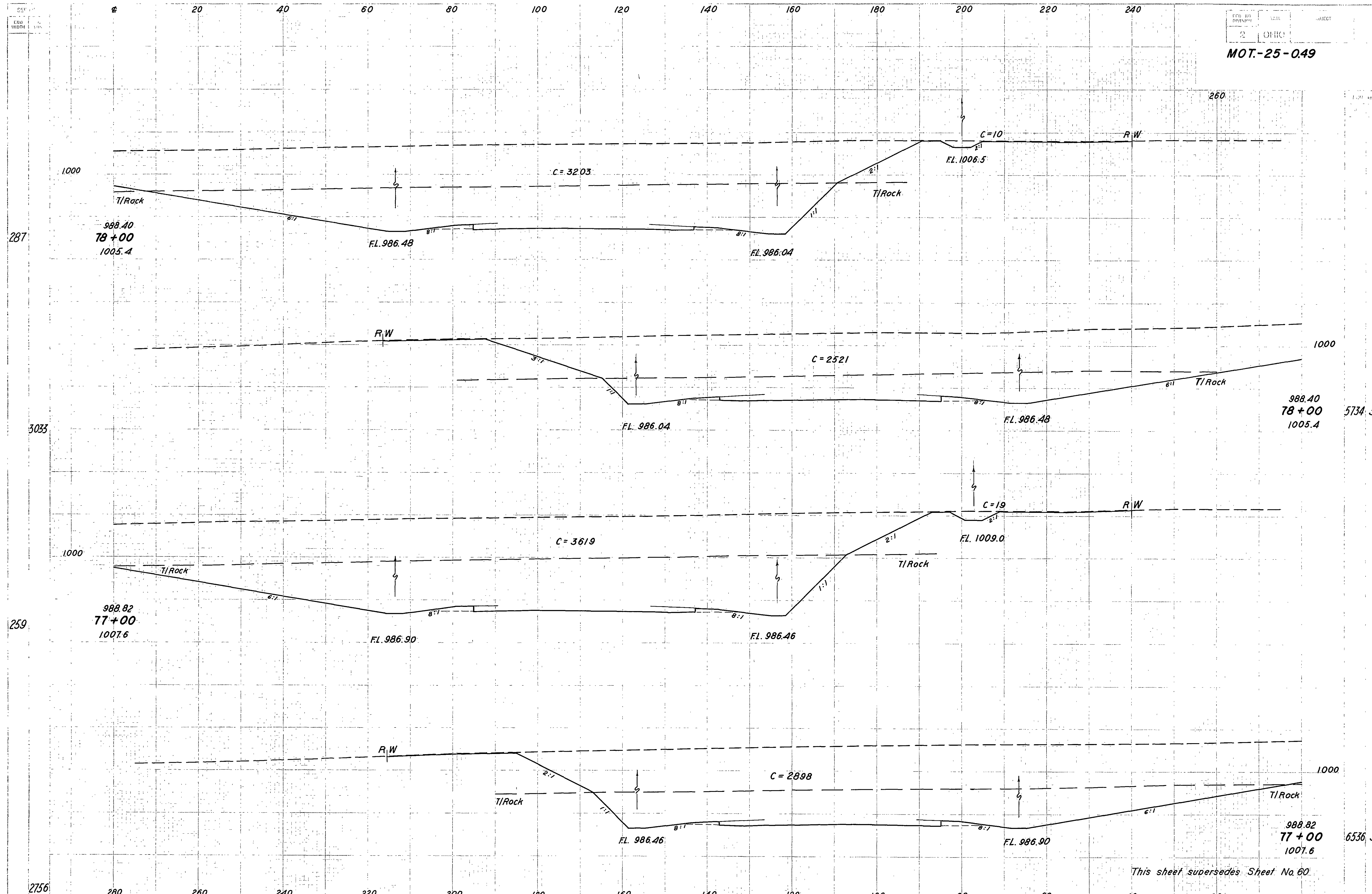
27394 118

7680 32

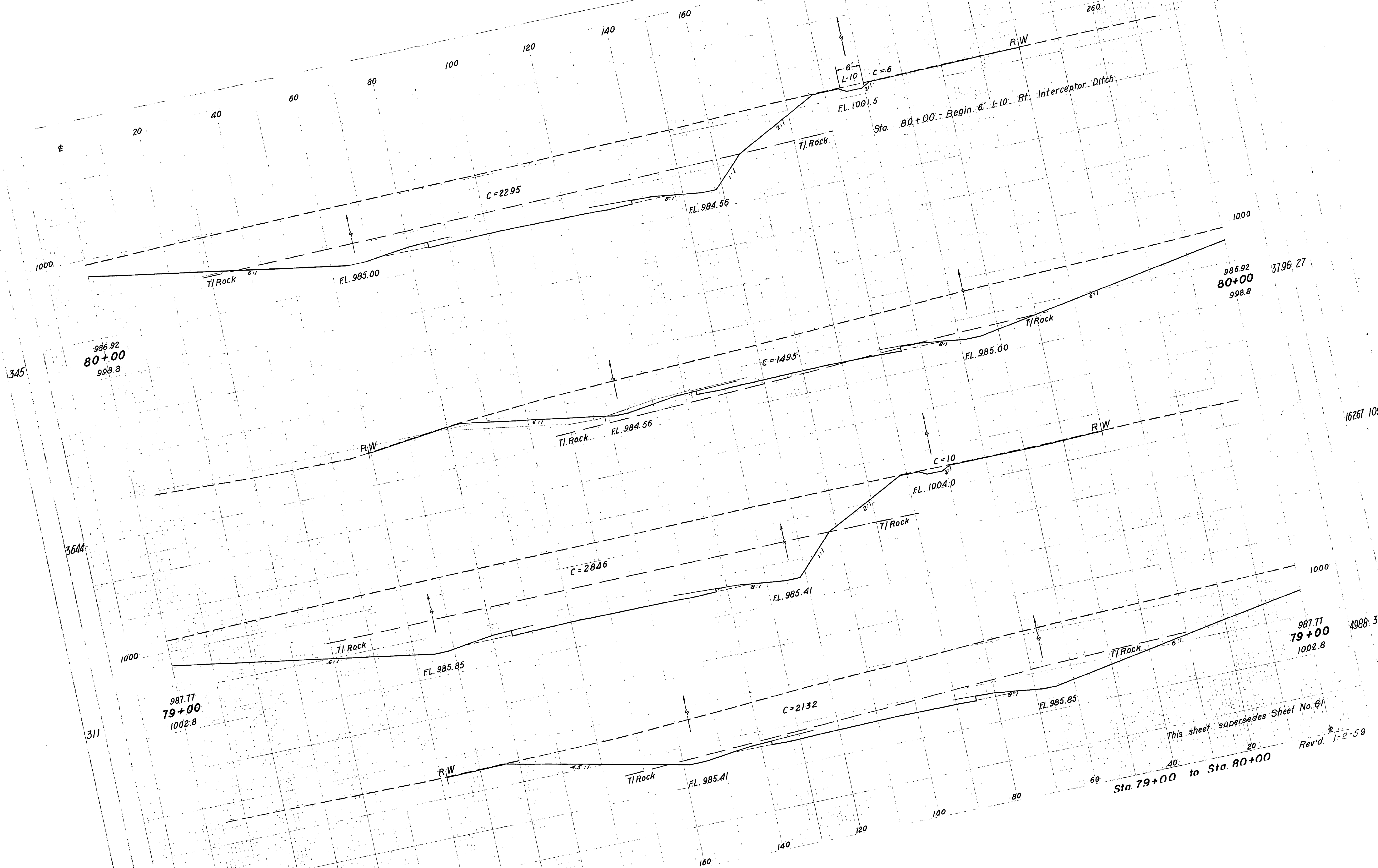
28861 118

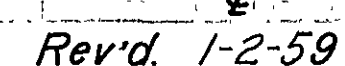
This sheet supersedes Sheet No. 59

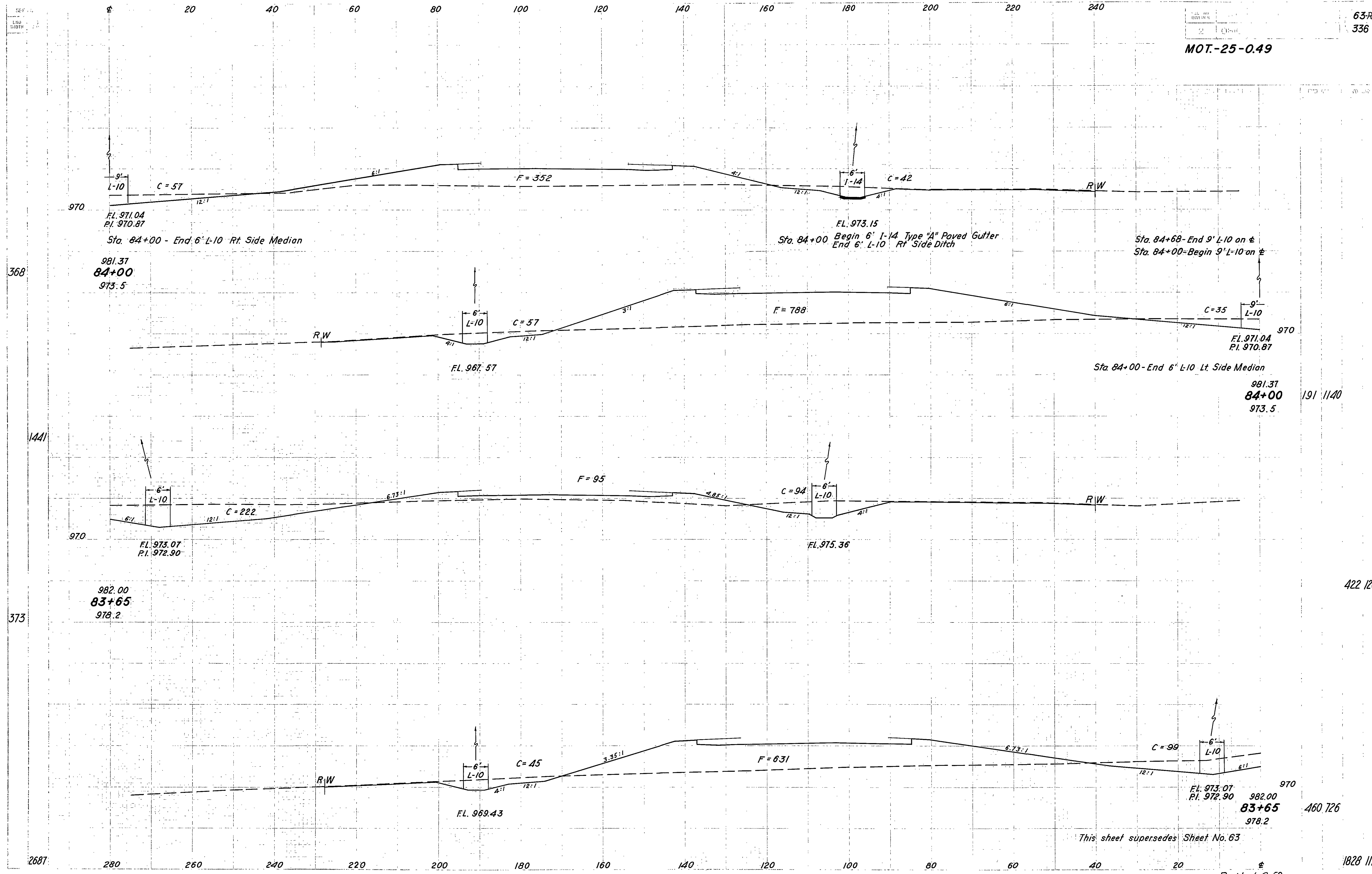
MOT.-25-049



This sheet supersedes Sheet No. 60.







MOT-25-0.49

368

1441

373

191 1140

422 1209

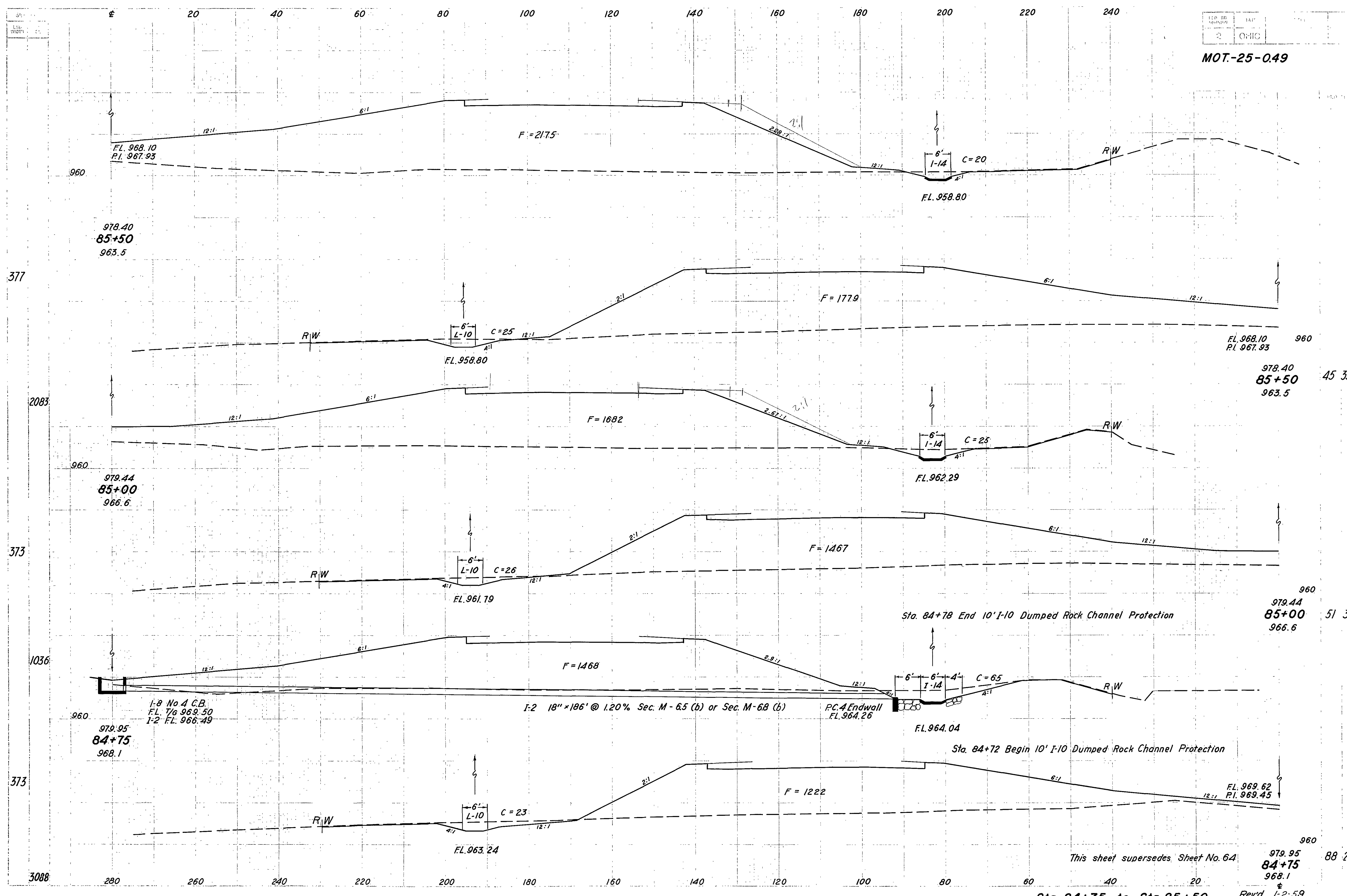
460.726

1828 1116

This sheet supersedes Sheet No. 63

Sta 83+65 to Sta 84+00 Rev'd. 1-2-59

MOT-25-049



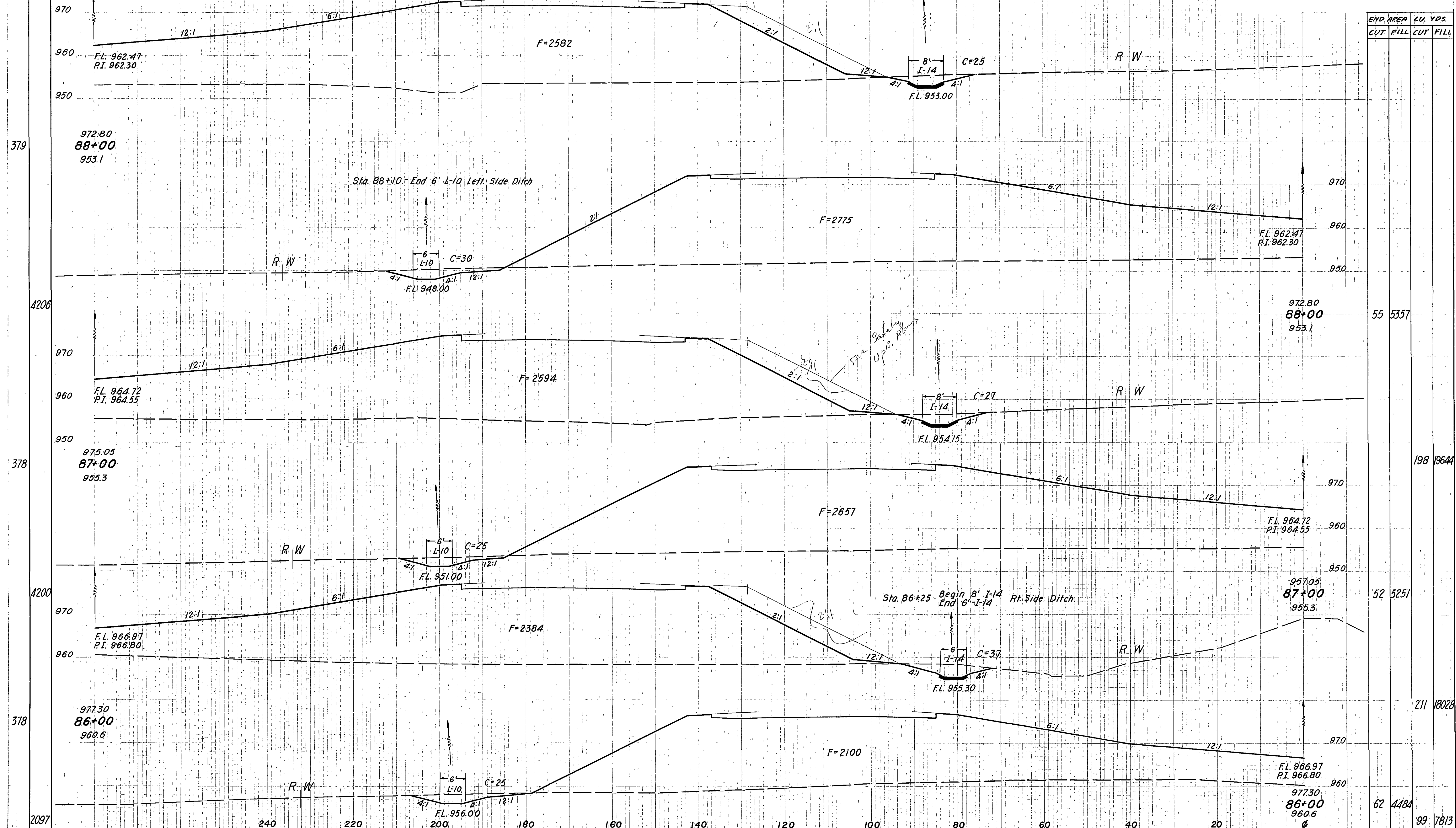
This sheet supersedes Sheet No. 64

84+75
968.1
Rev'd 1-2-59

Sta 84+75 to Sta 85+50

388 5319

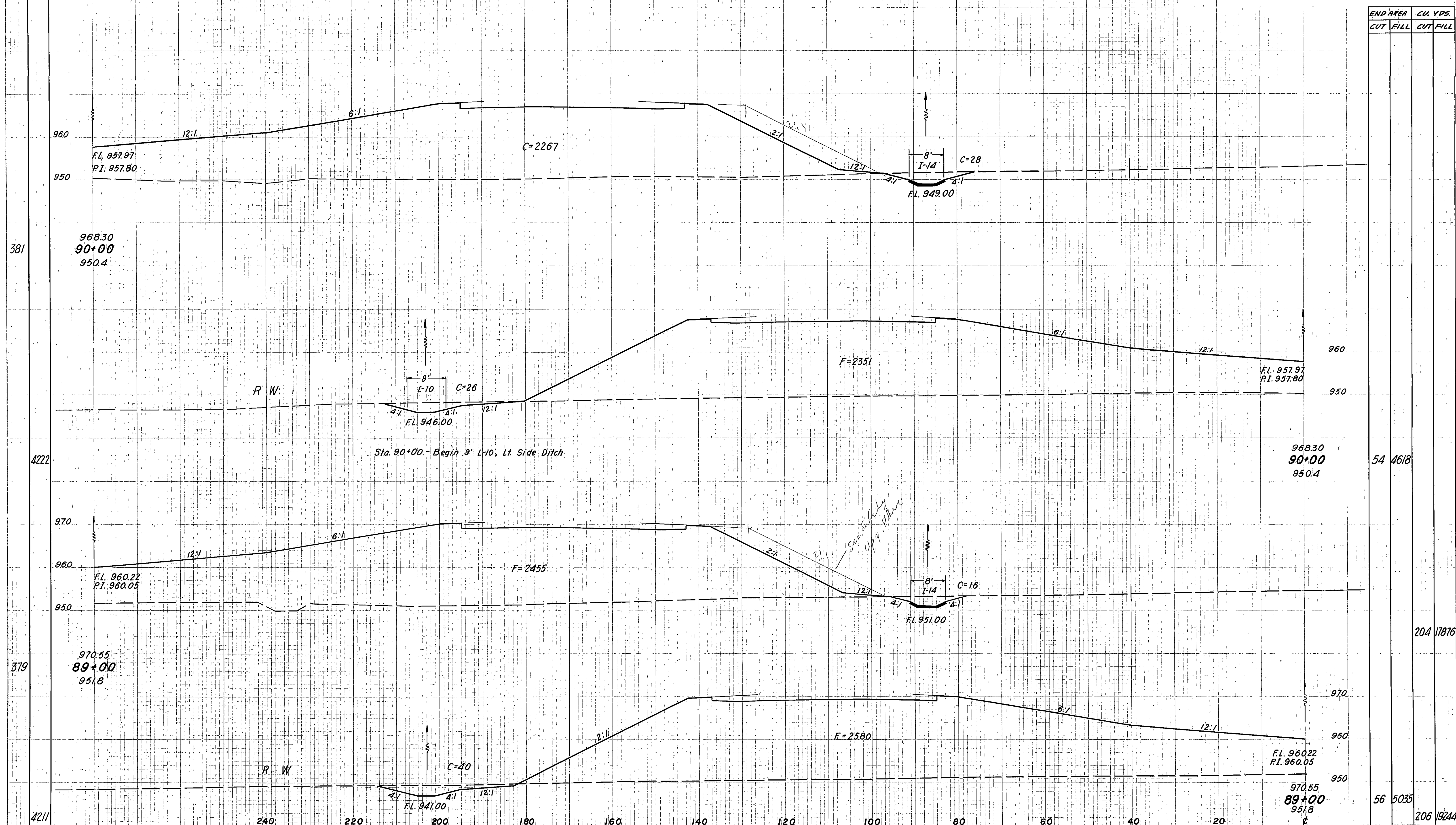
MONTGOMERY COUNTY
MOT.-25-049



SEEDING	
END	SQ.
WIDTH	YDS.

FED ID DIVISION	STATE	COUNTY		66 336
2	OHIO			

MONTGOMERY COUNTY
MOT-25-049

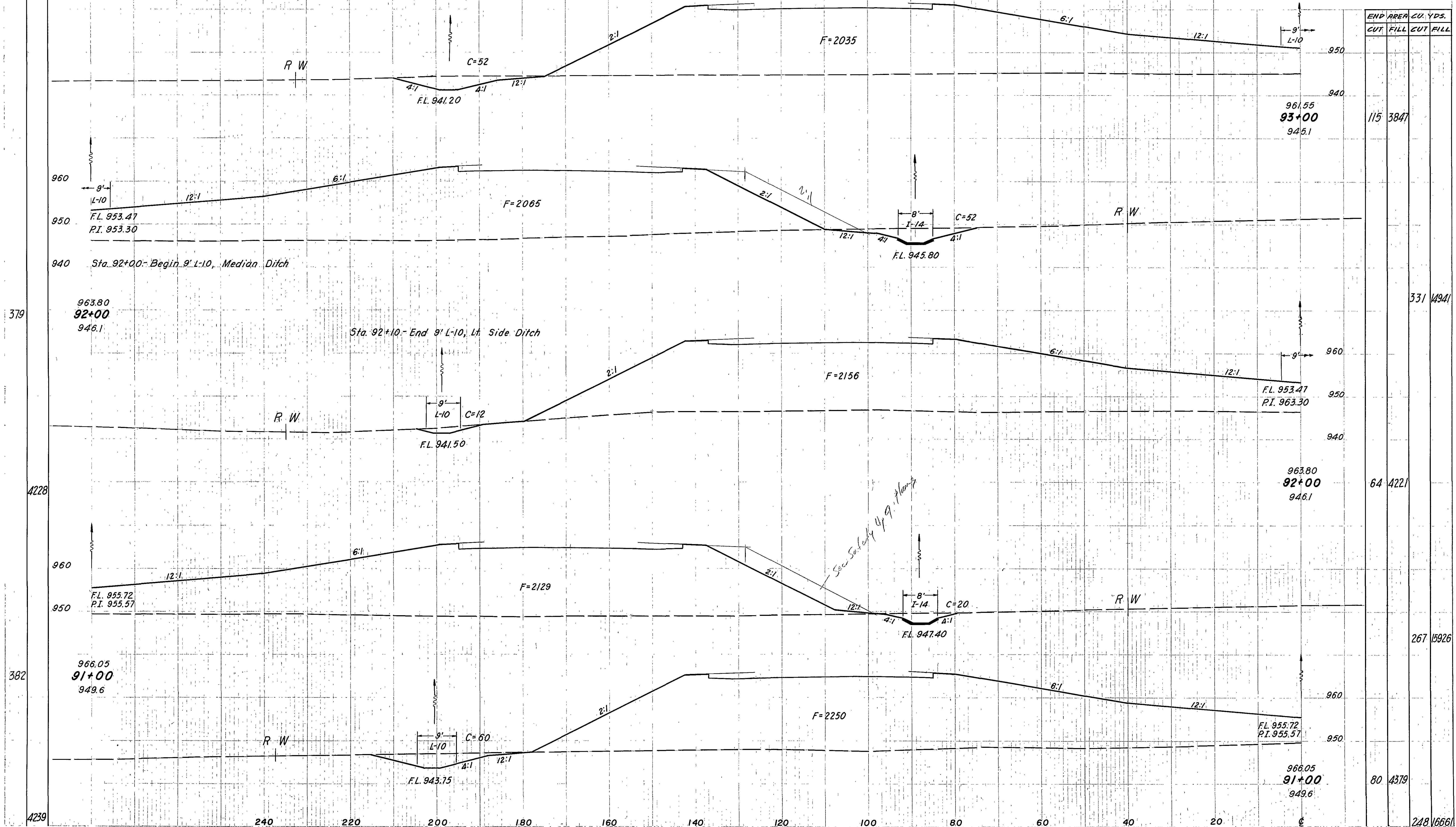


SEEDING
END SQ.
WIDTH YDS.

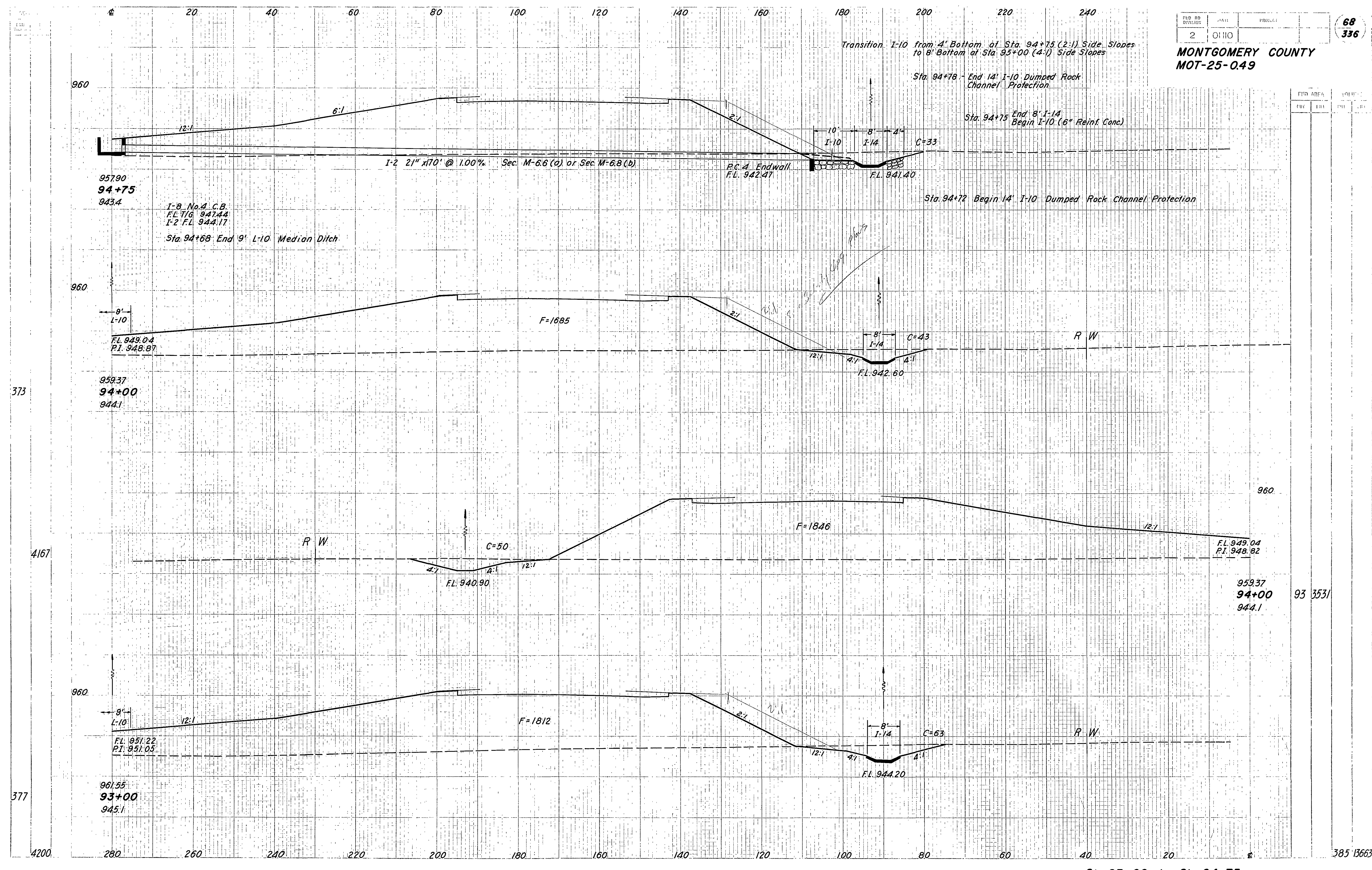
FED. RD. DIVISION
2 OHIO
PROJECT

67
336

MONTGOMERY COUNTY
MOT.-25-049



MONTGOMERY COUNTY
MOT-25-0.49



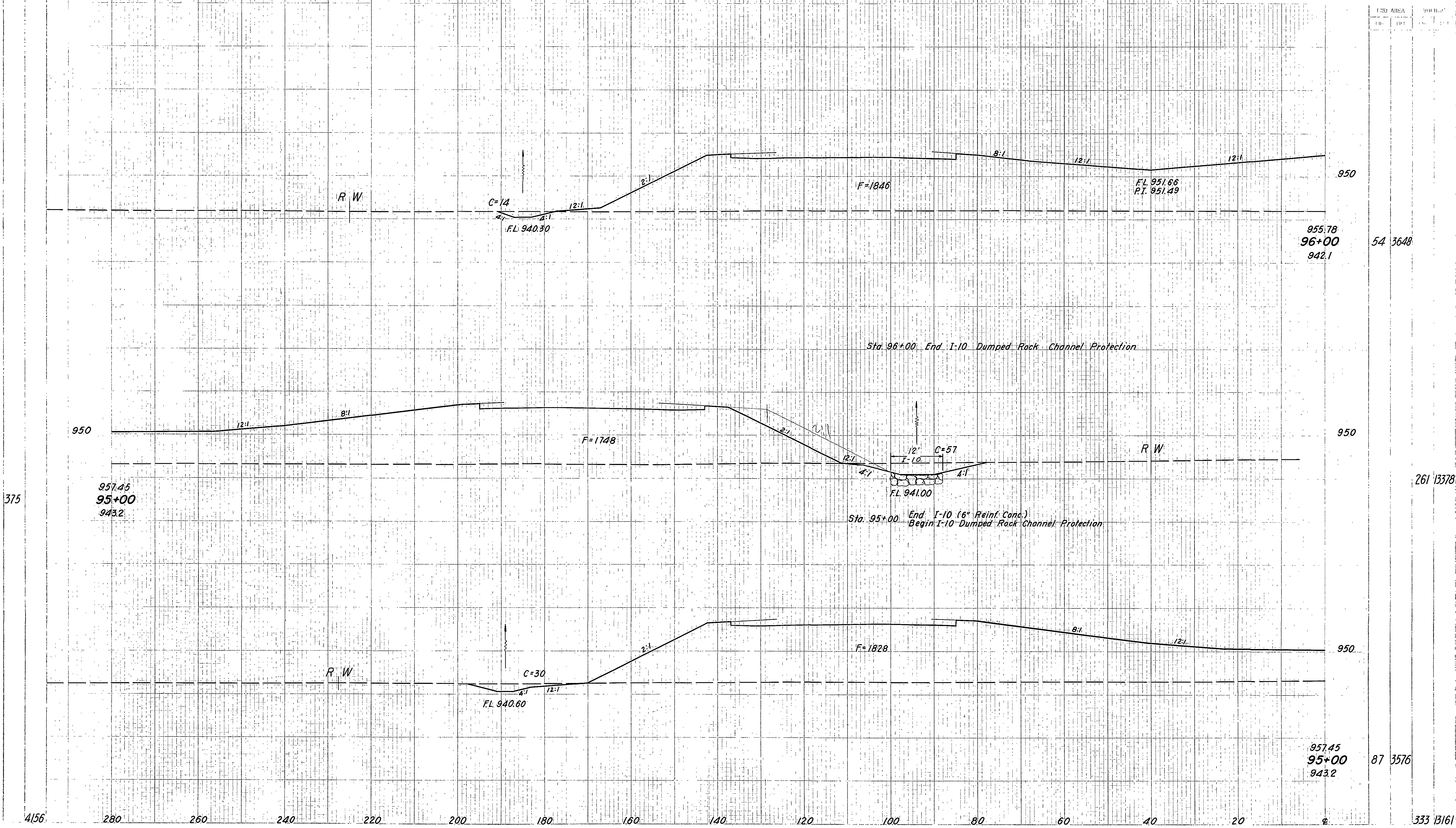
373

4167

377

93 3531

MONTGOMERY COUNTY
MOT-25-0.49

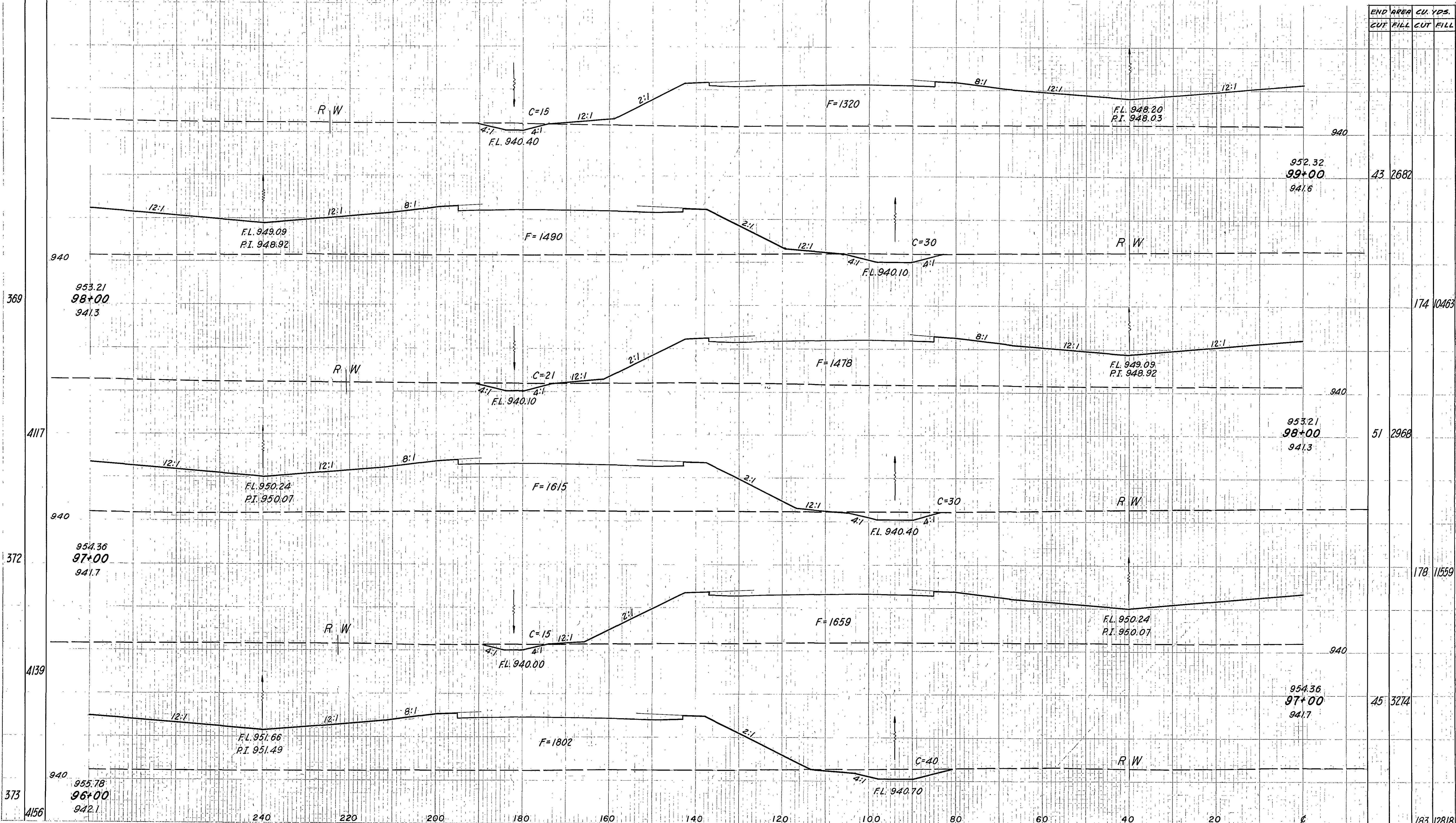


SEEDING
END SQ.
WIDTH YDS.

FED. RD. DISTRICT	STATE	PROJECT
2	OHIO	

70
336

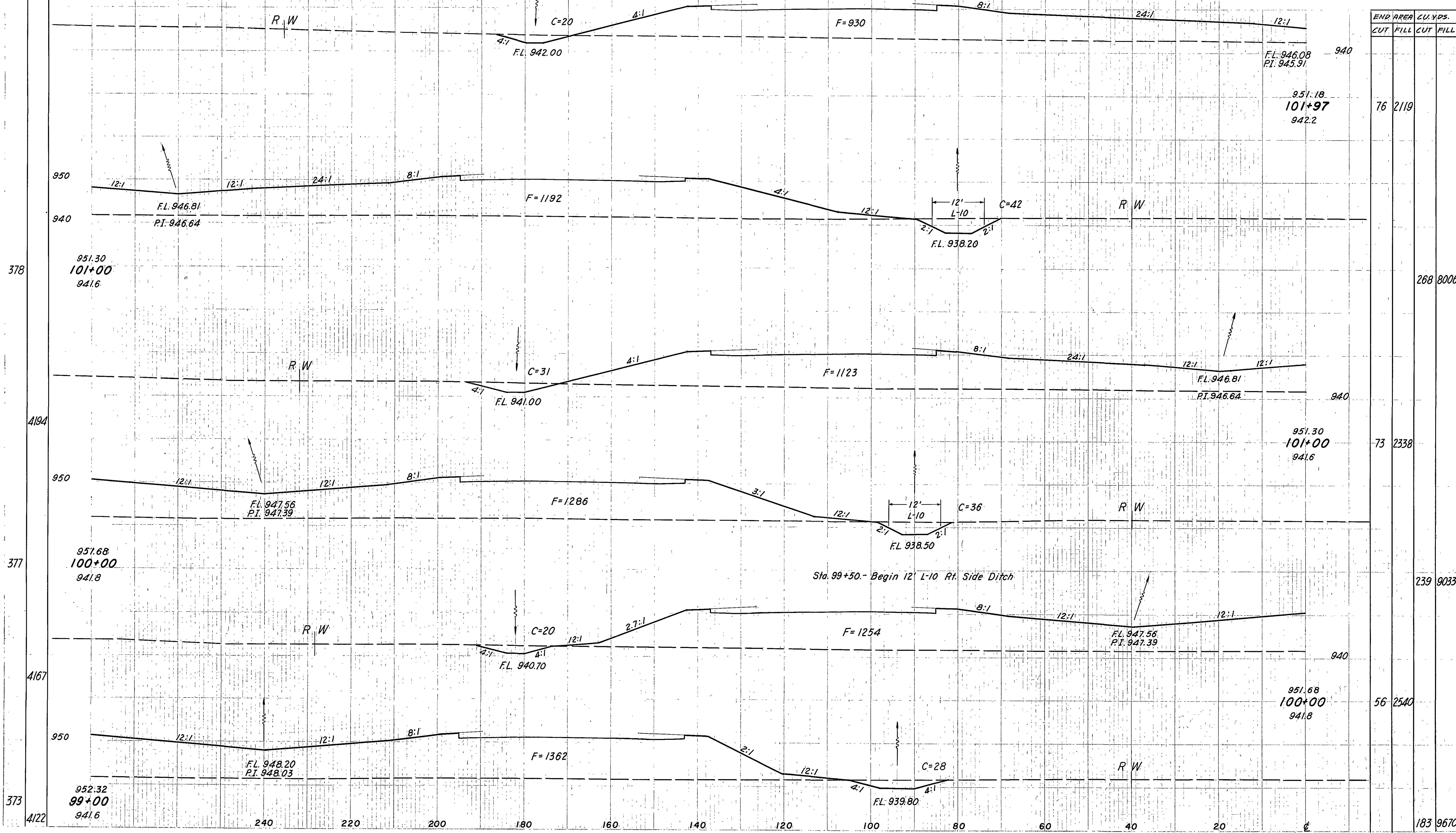
MONTGOMERY COUNTY
MOT.-25-049



Sta 96+00 Pt. to Sta 99+00 Lt

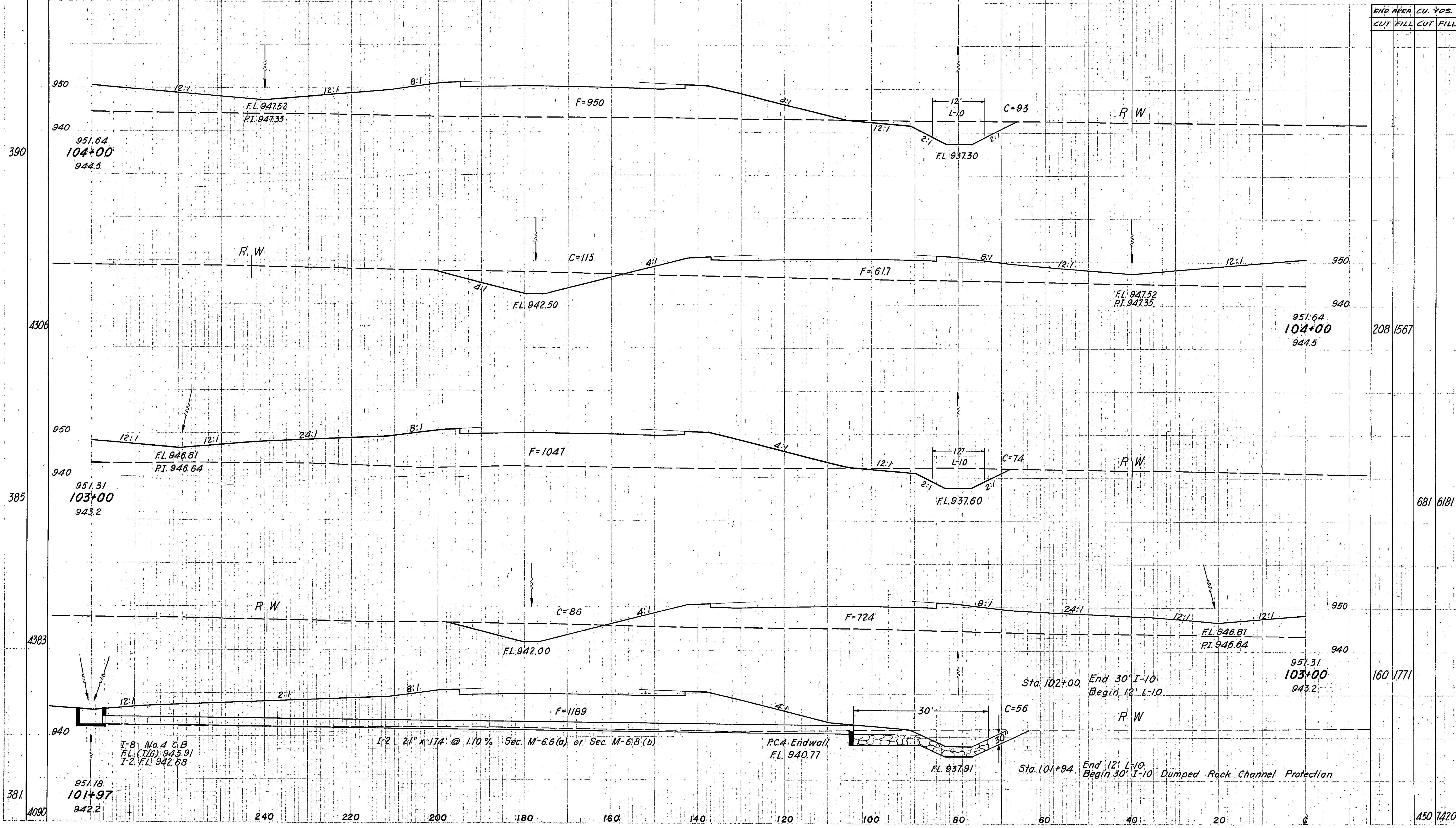
SEEDING
END SQ
WIDTH YDS.

MONTGOMERY COUNTY
MOT.-25-049



SEEDING
END 50.
WIDTH YDS.

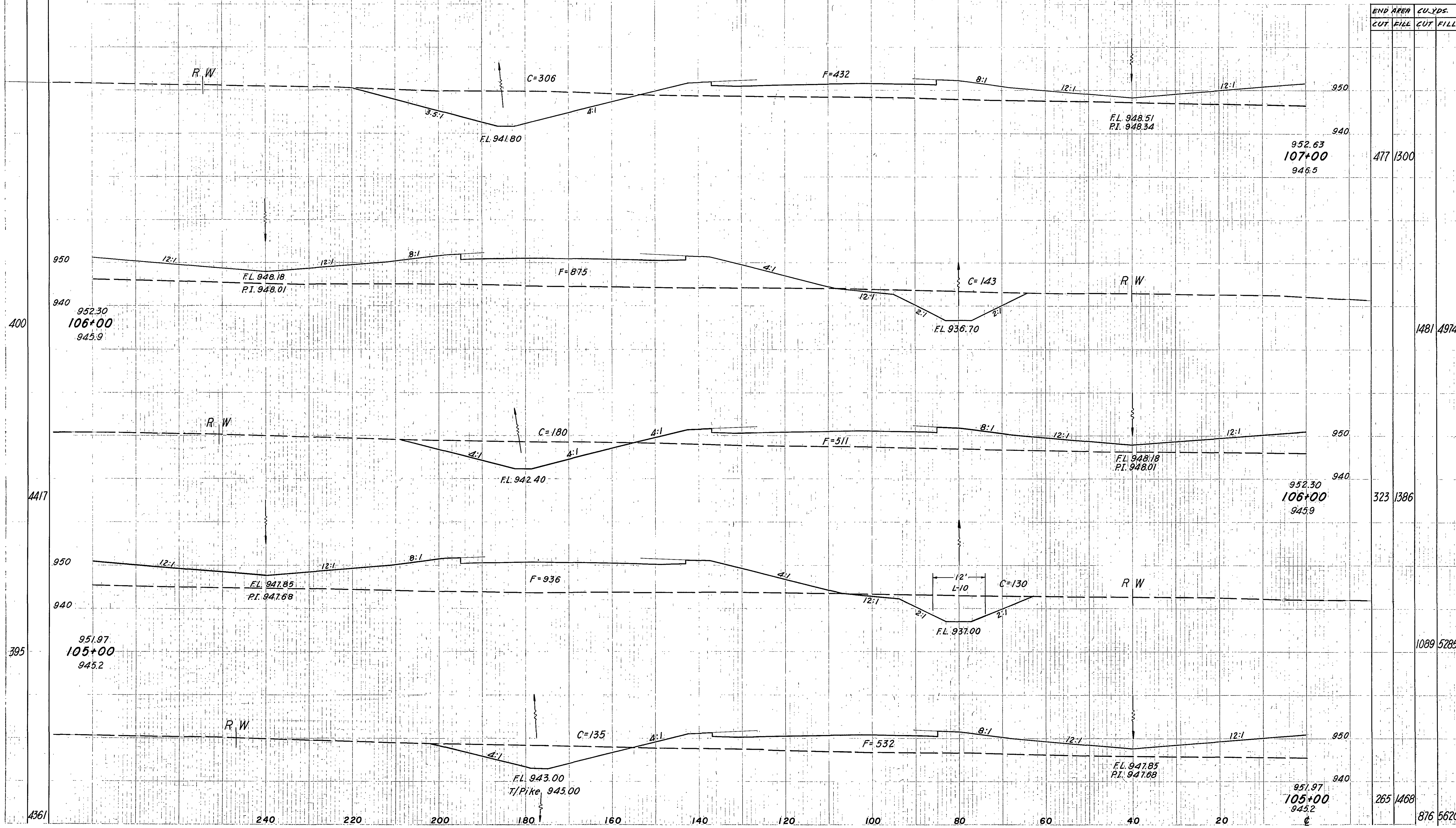
MONTGOMERY COUNTY
MOT-25-049



Sta. 101+97 Rt. to Sta. 104+00

SEEDING
END SQ.
WIDTH YDS.

MONTGOMERY COUNTY
MOT-25-049

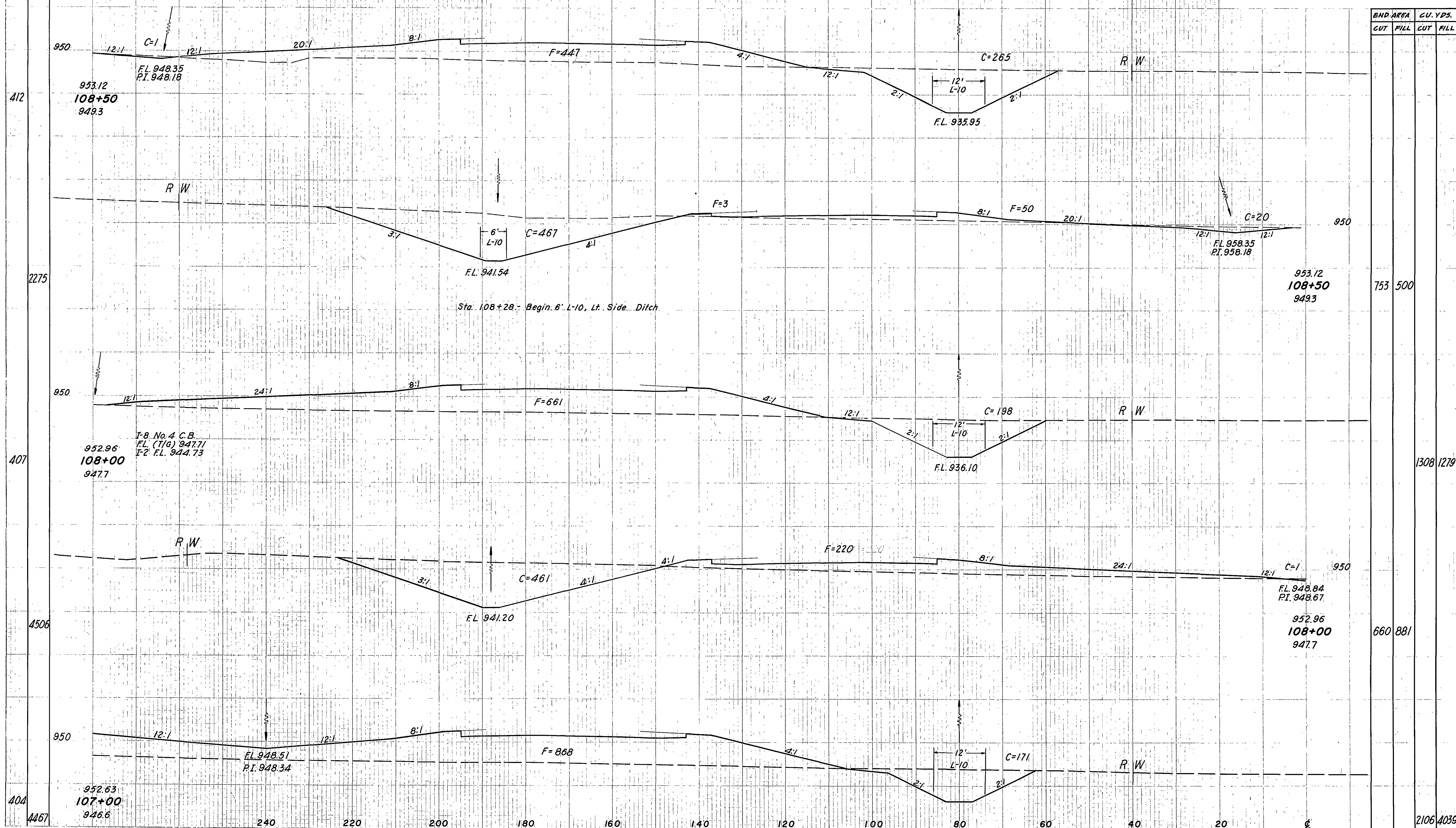


SEEDING	
END WIDTH	SQ. YDS.

110 RD. DIVISION	5144	PROG 01	
2	0410		

MONTGOMERY COUNTY
MOT.-25-0.49

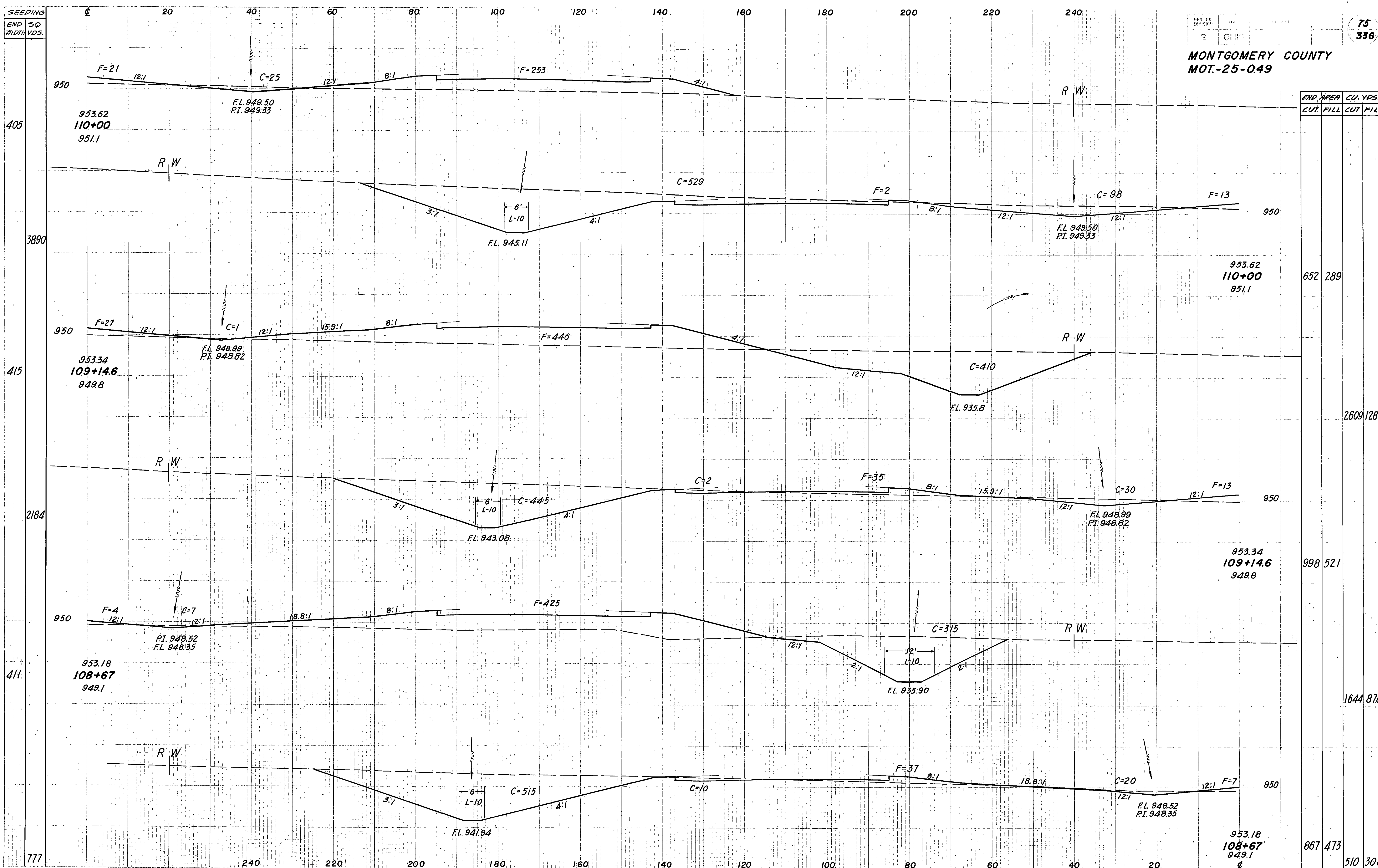
END AREA		CU. YDS.	
CUT	FILL	CUT	FILL



Sta 107+00 Rt. to Sta 108+50

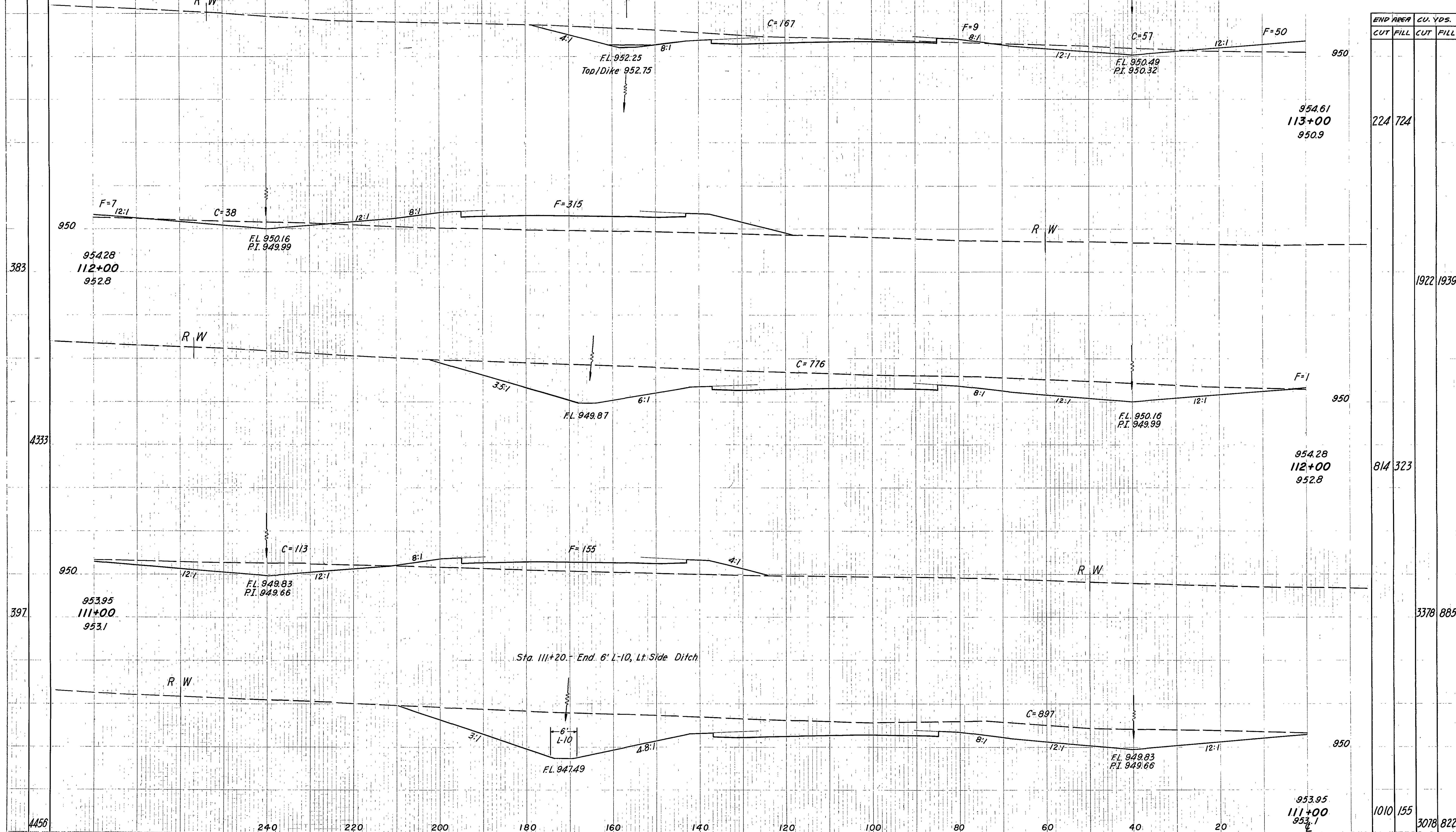
SEEDING
END 30
WIDTH YDS.

MONTGOMERY COUNTY
MOT-25-049



Sta 108+67 to Sta 110+00

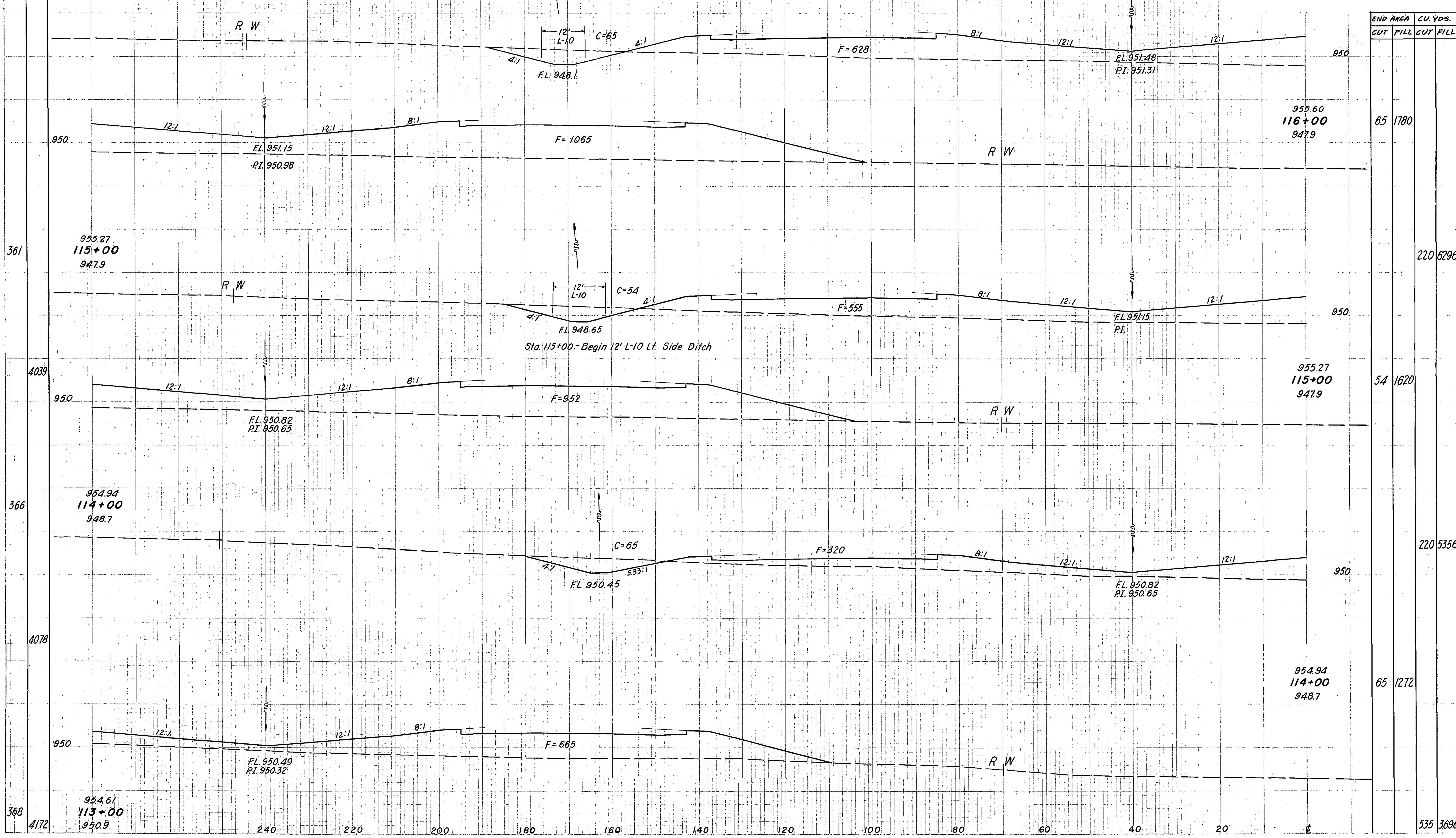
MONTGOMERY COUNTY
MOT.-25-0.49



Stg III 100 to Stg III 1001 +

SEEDING
END 50
WIDTH YDS.

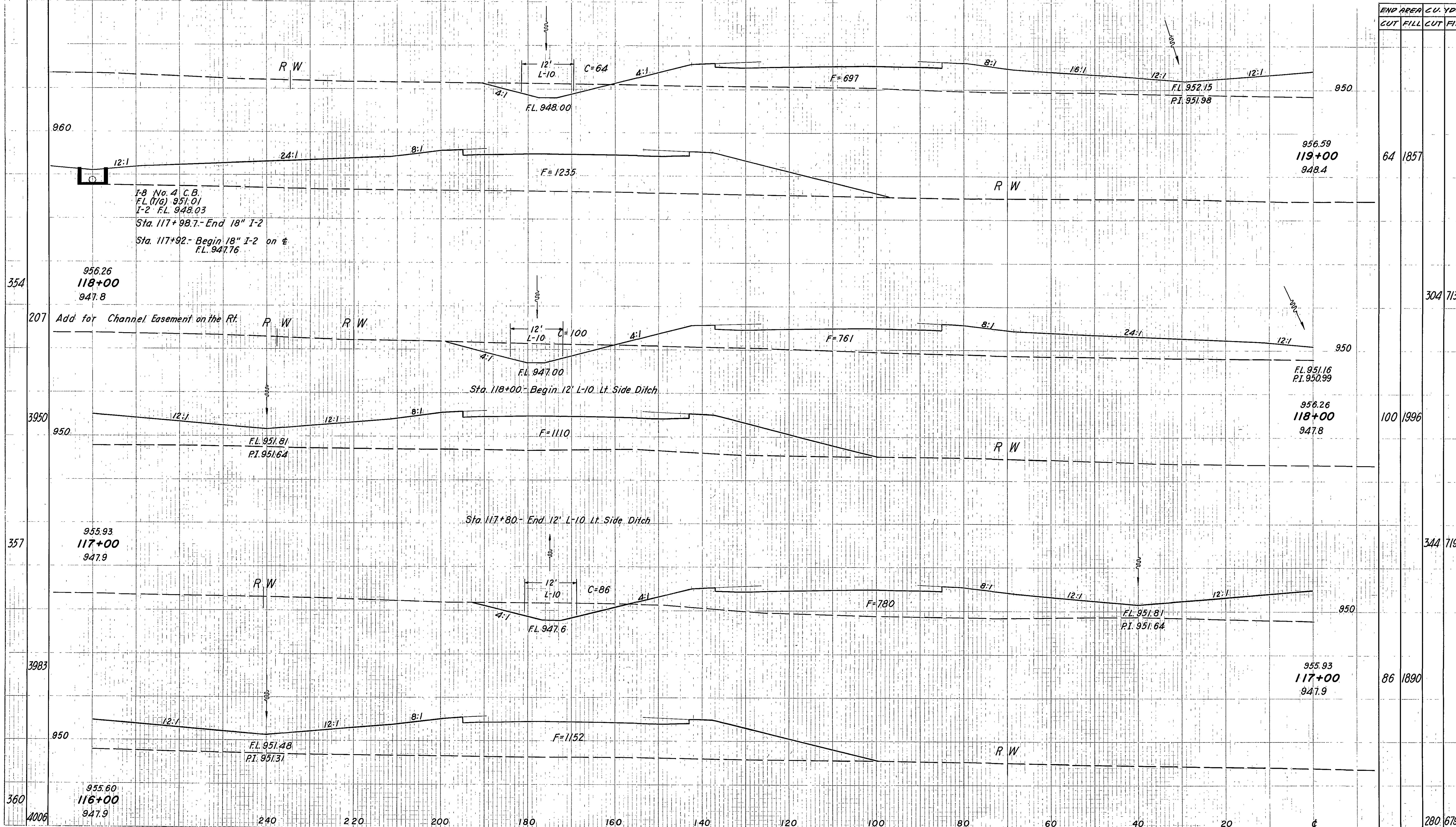
MONTGOMERY COUNTY
MOT-25-0.49



SEEING
END 50.
WIDTH YDS.

MONTGOMERY COUNTY
MOT-25-049

END AREA C.U. YDS.
CUT FILL CUT FILL

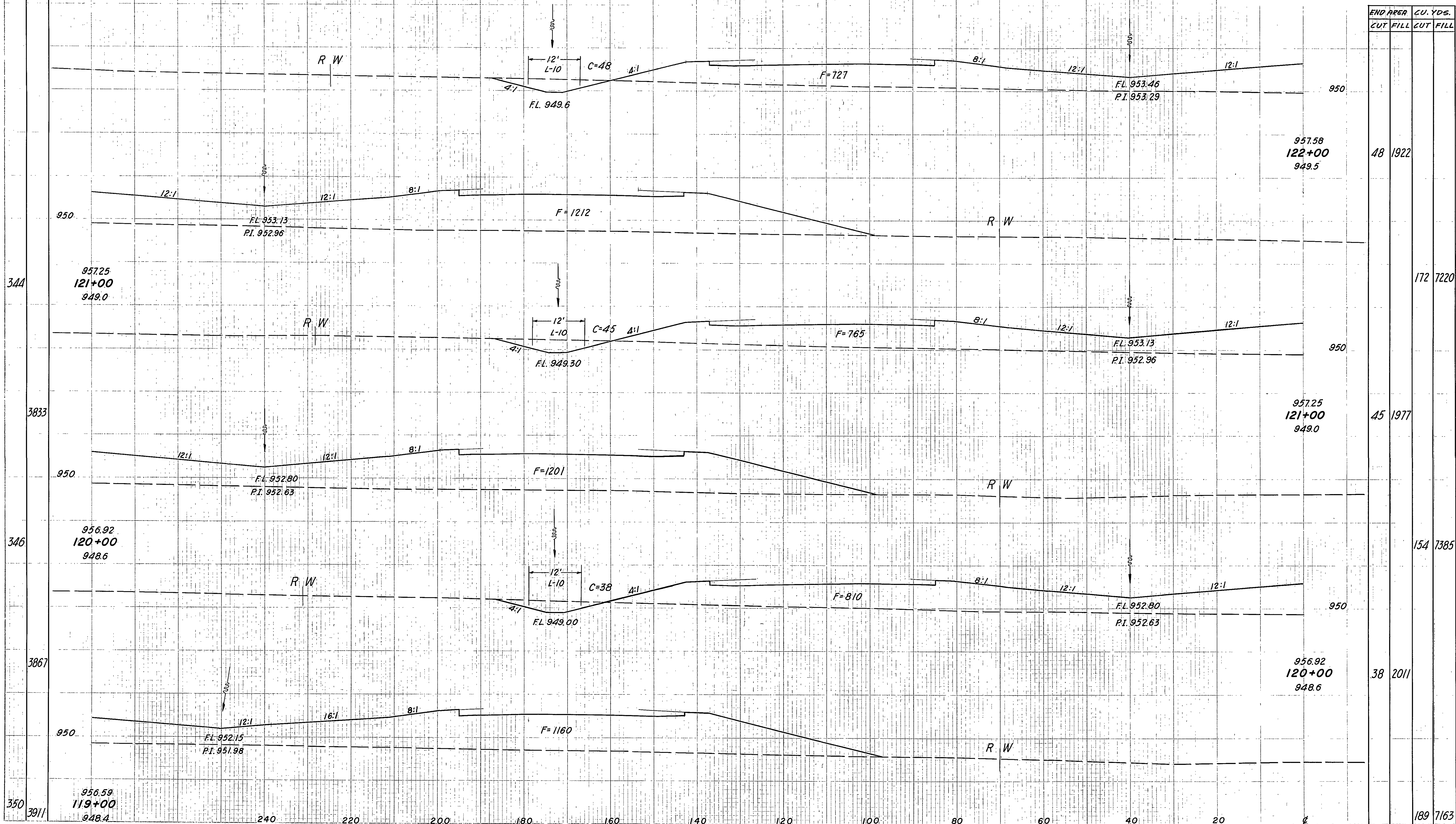


SEEDING
END SP.
WIDTH YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

79
336

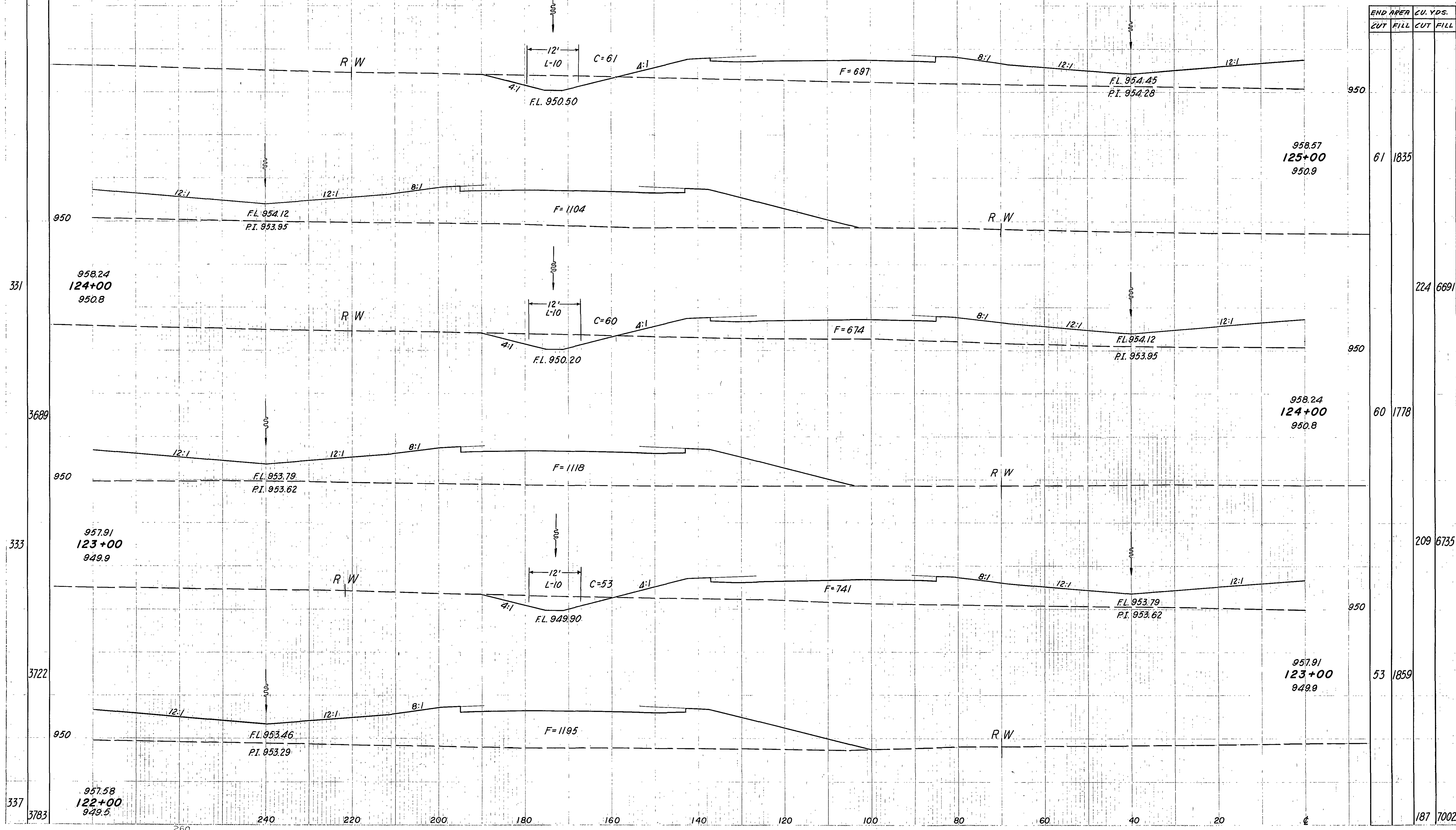
MONTGOMERY COUNTY
MOT.-25-0.49



SEEDING
END SP.
WIDTH YDS.

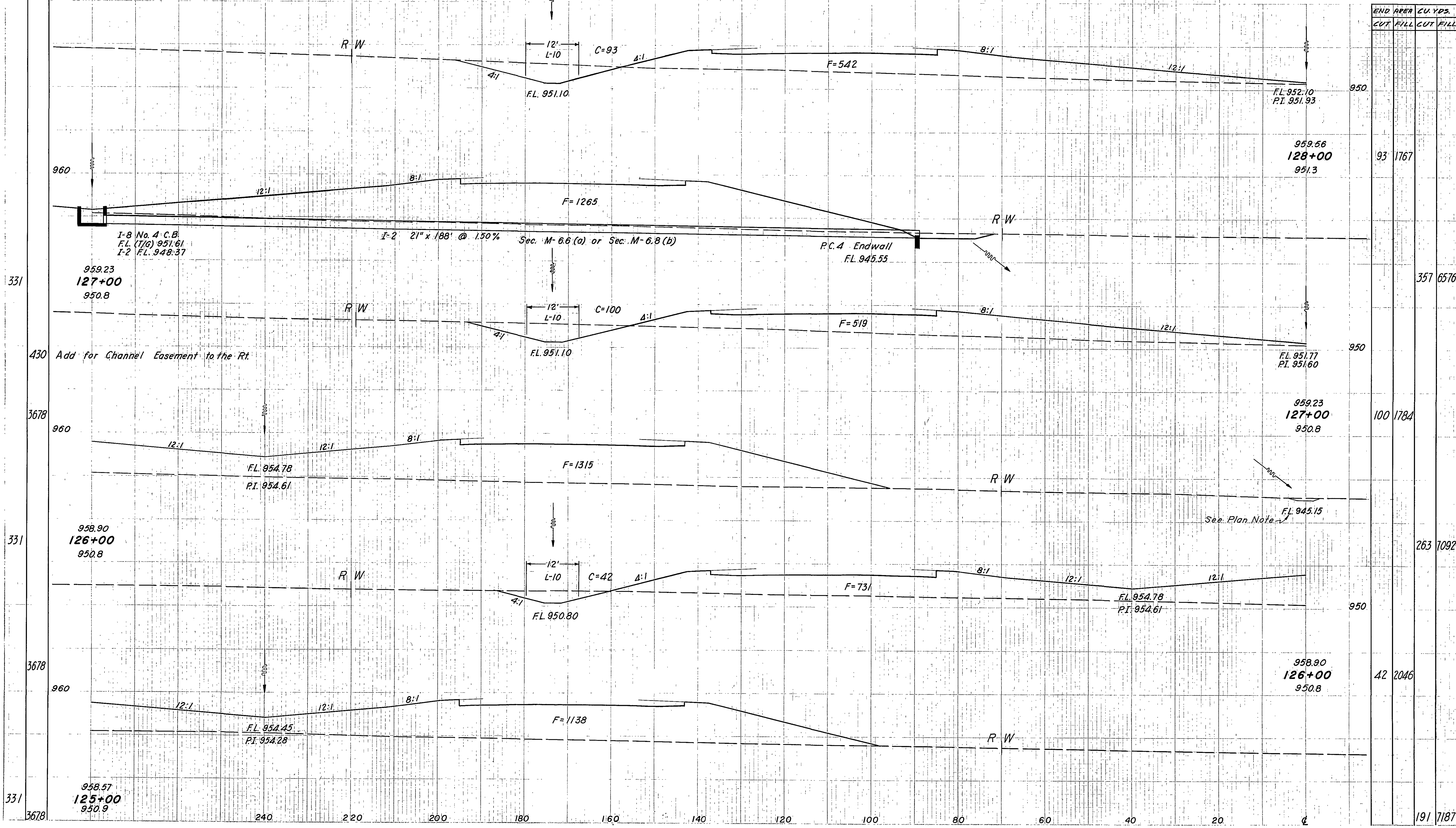
CO. RD. DISTRICT
2 OHIO PROJECT
80
336

MONTGOMERY COUNTY
MOT.-25-0.49



SEEDING
END SQ.
WIDTH YDS.

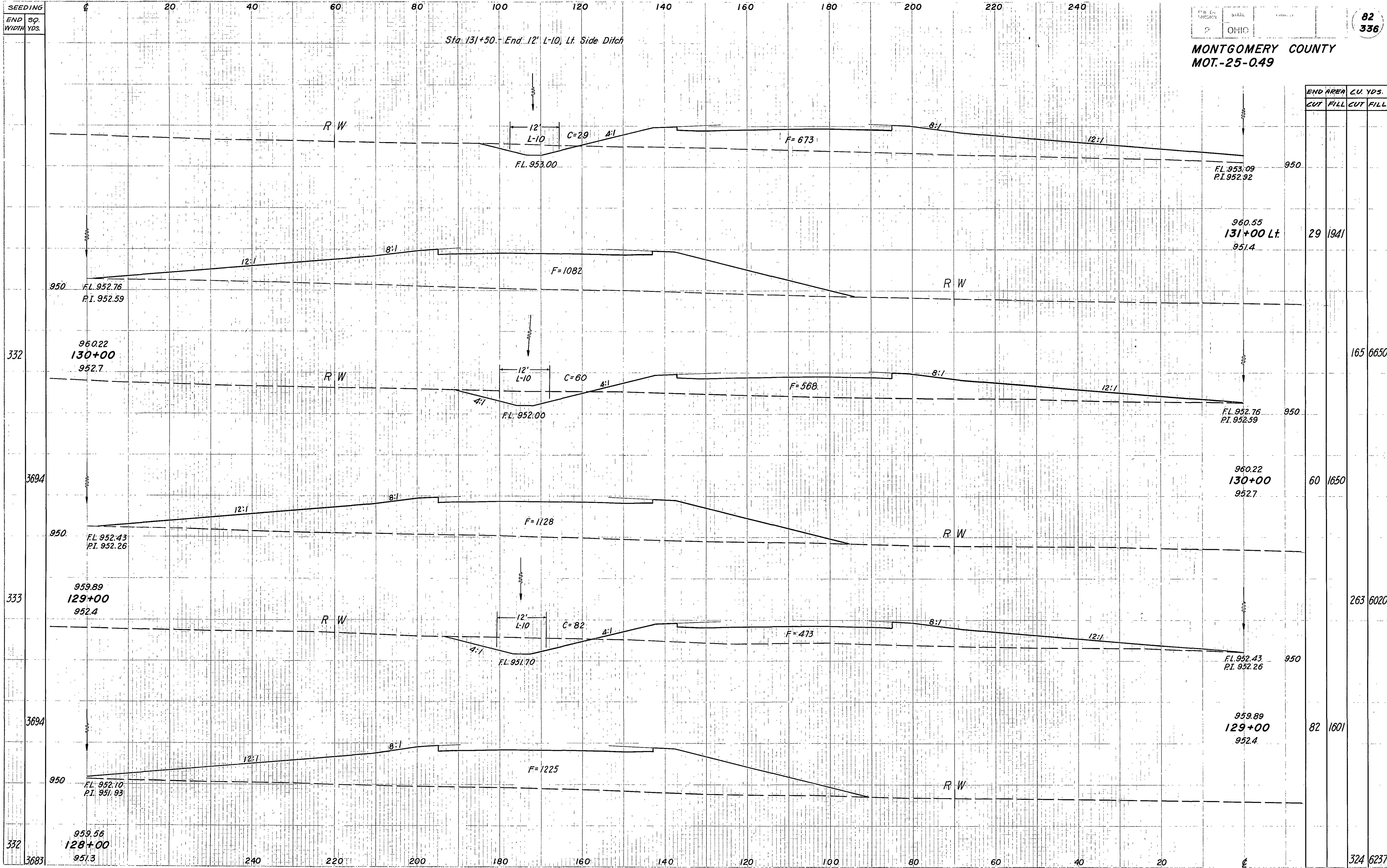
MONTGOMERY COUNTY
MOT-25-0.49



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
93	1767	357	6576
100	1784	100	1784
263	7092	263	7092
42	2046	42	2046
191	7187	191	7187

SEEDING
END SP.
WIDTH YDS.

MONTGOMERY COUNTY
MOT.-25-049



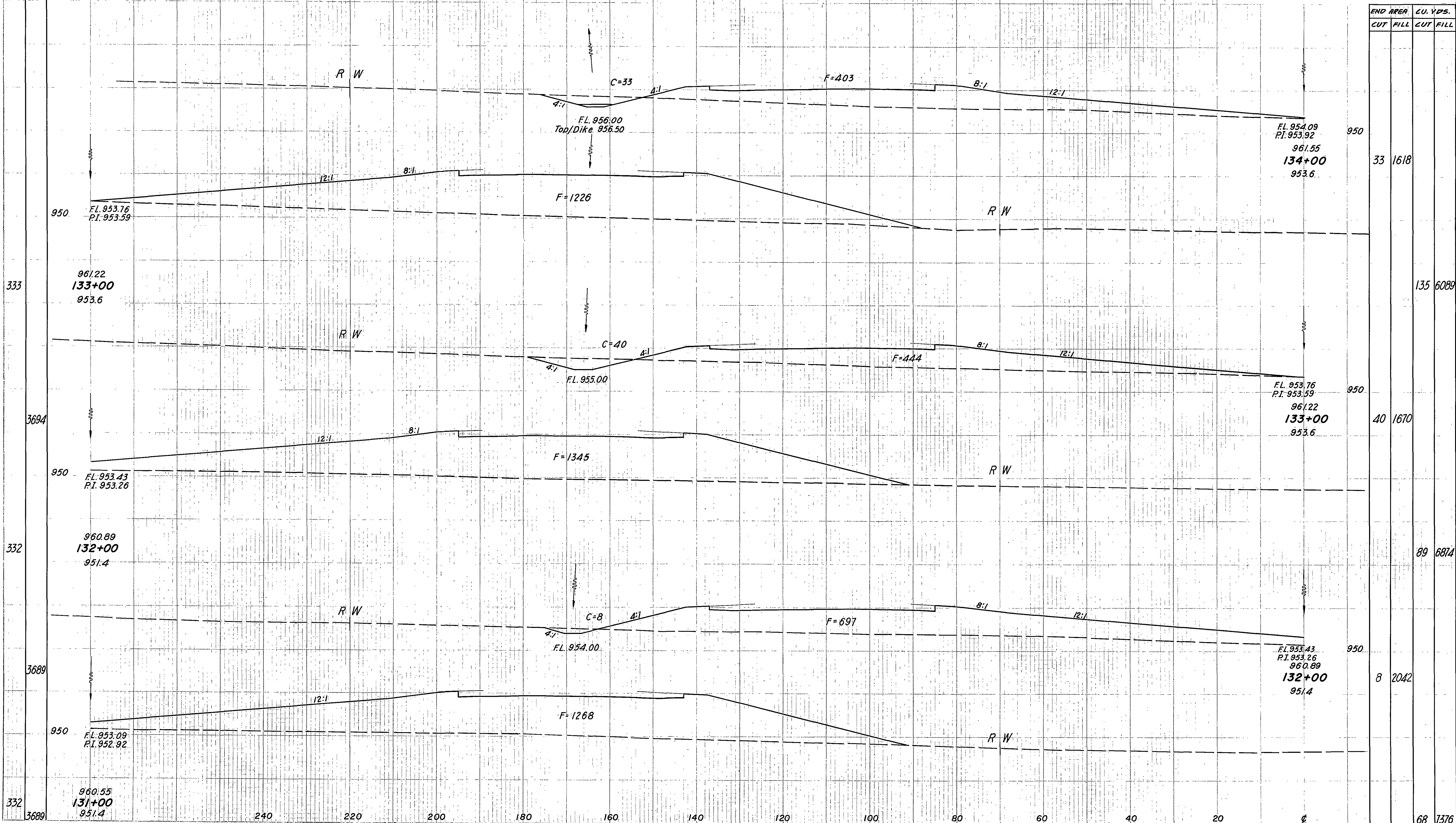
Sta. 128+00 Rt. to Sta. 131+00 Lt.

SEEDING
END SQ
WIDTH YDS.

2 OHIO

83
336

MONTGOMERY COUNTY
MOT.-25-049

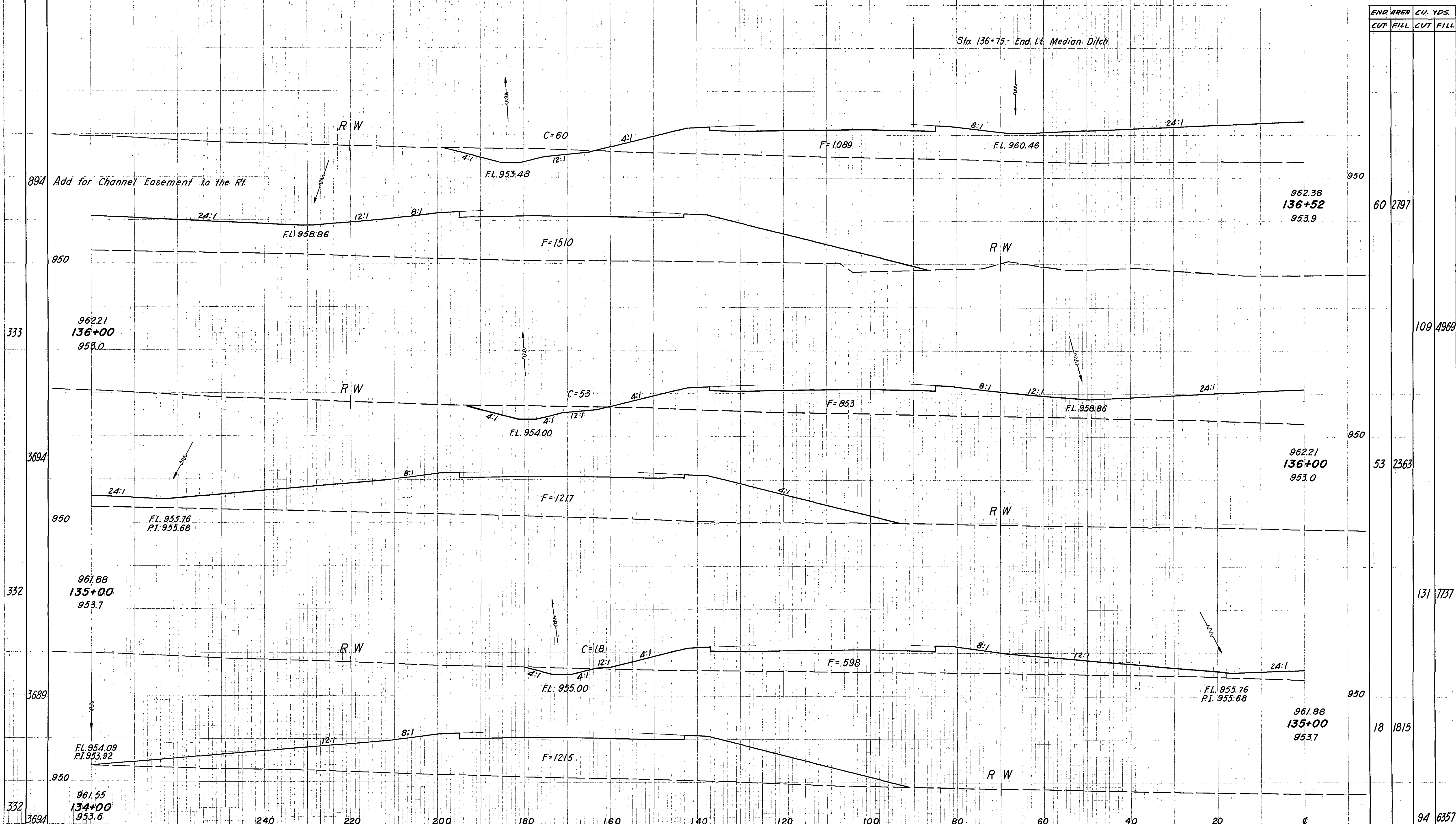


Sta 131+00 Pt. To Sta 134+00

SEEDING
END SP.
WIDTH YDS.

MONTGOMERY COUNTY
MOT.-25-0.49

84
336



Sta. 134+00 Rt. to Sta. 136+52 Lt.

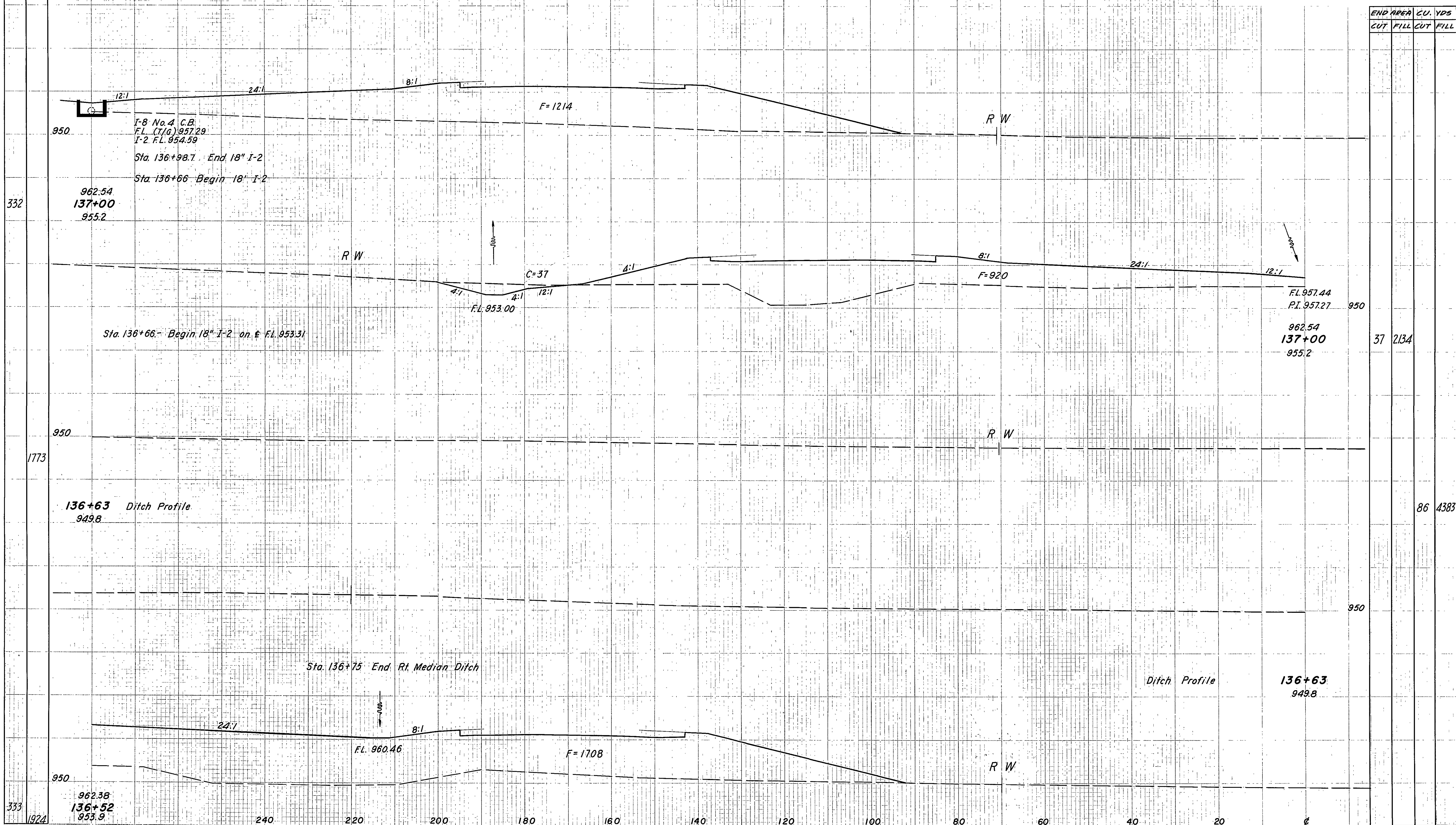
SEEDING	
END WIDTH	SQ. YDS.

0	20	40	60	80	100	120	140	160	180	200	220	240
---	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----

FED. ID. NUMBER	STATE	COUNTY
2	OHIO	

$\frac{85}{336}$

MONTGOMERY COUNTY
MOT.-25-0.49



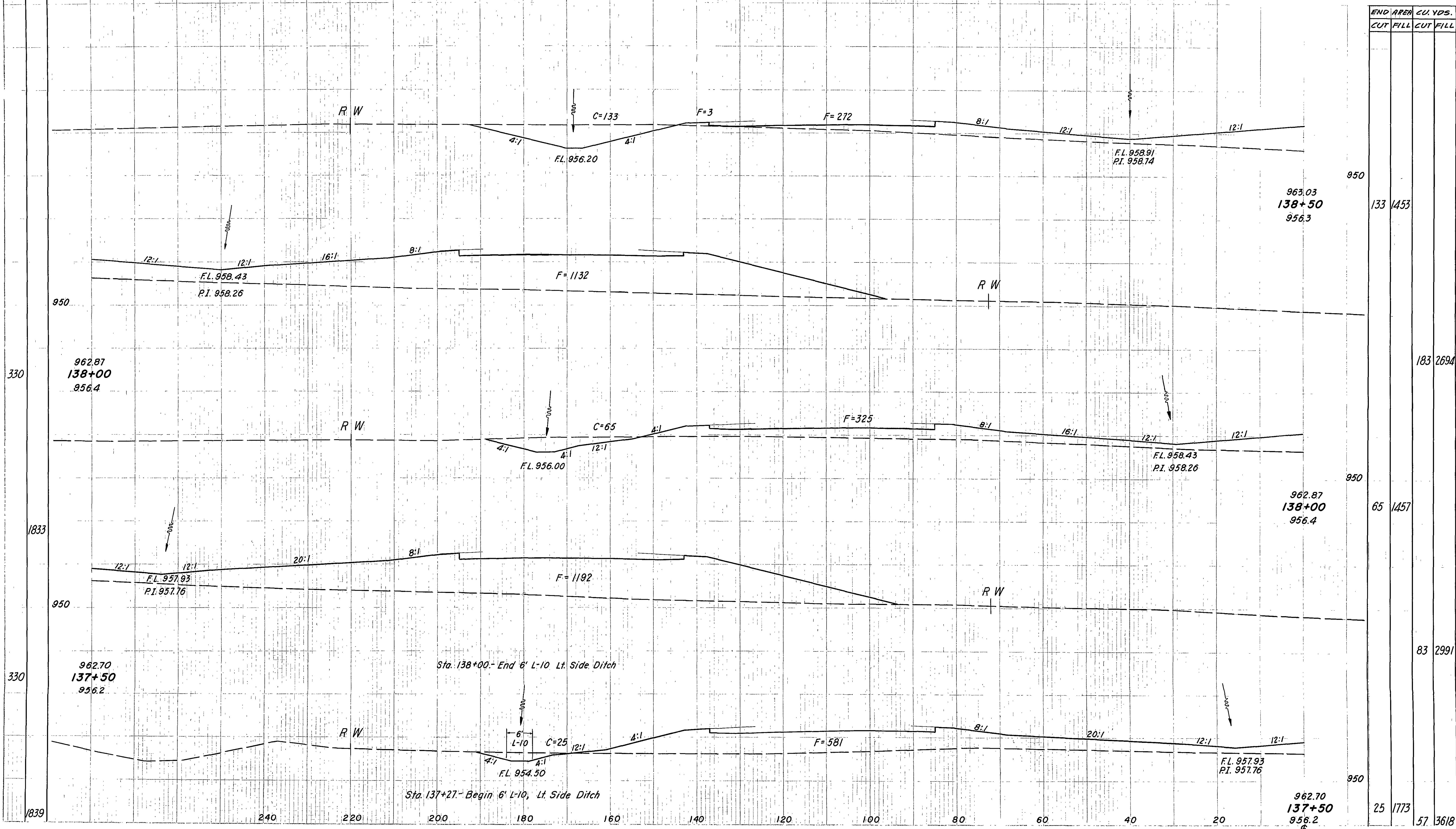
Sta. 136+52 Rt. To Sta. 137+00

SEEDING
END S.P.
WIDTH YDS.

2 OHIO

86
336

MONTGOMERY COUNTY
MOT-25-0.49

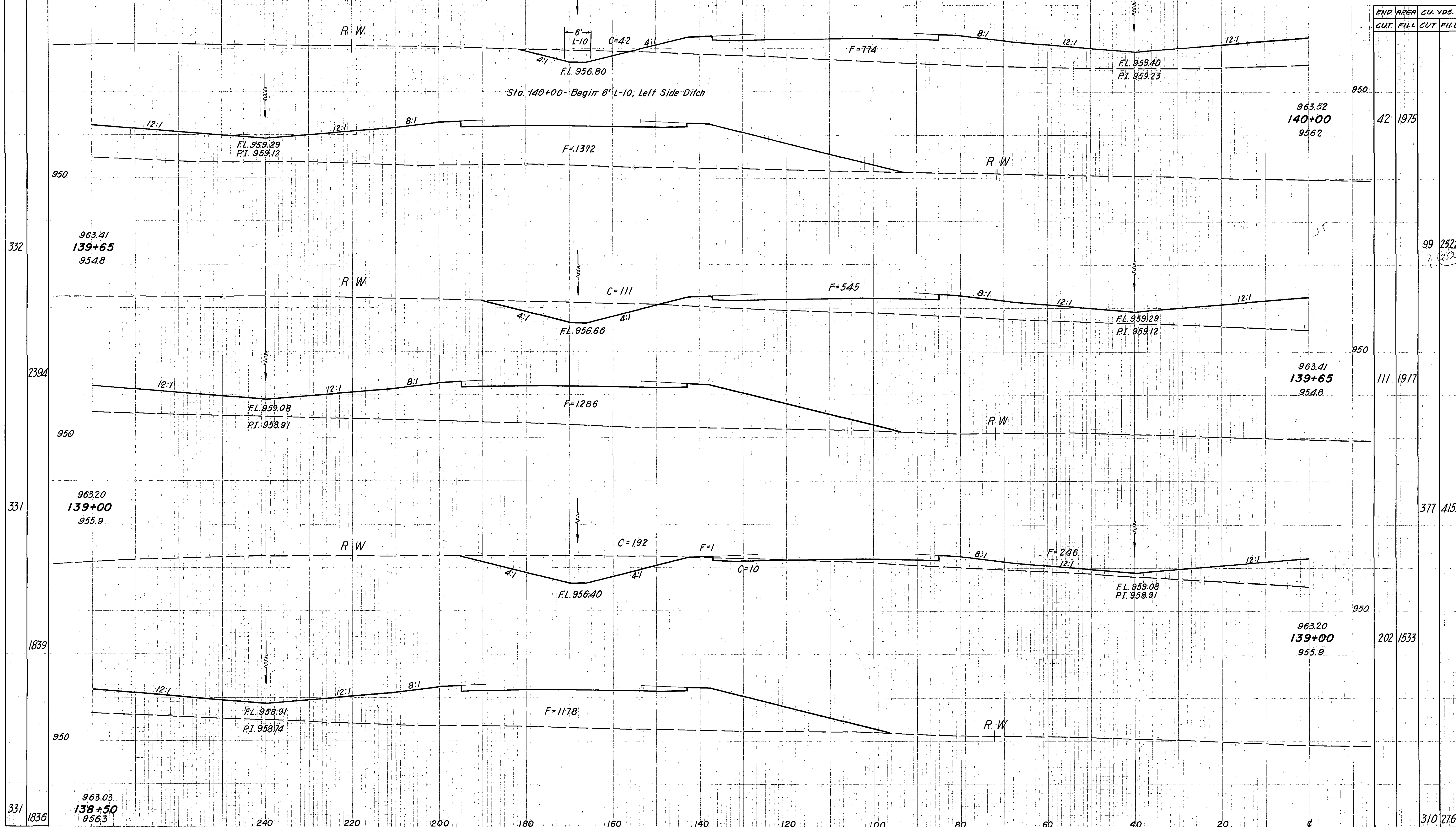


SEEDING
END SP.
WIDTH YDS.

2	OHIO	
---	------	--

87
336

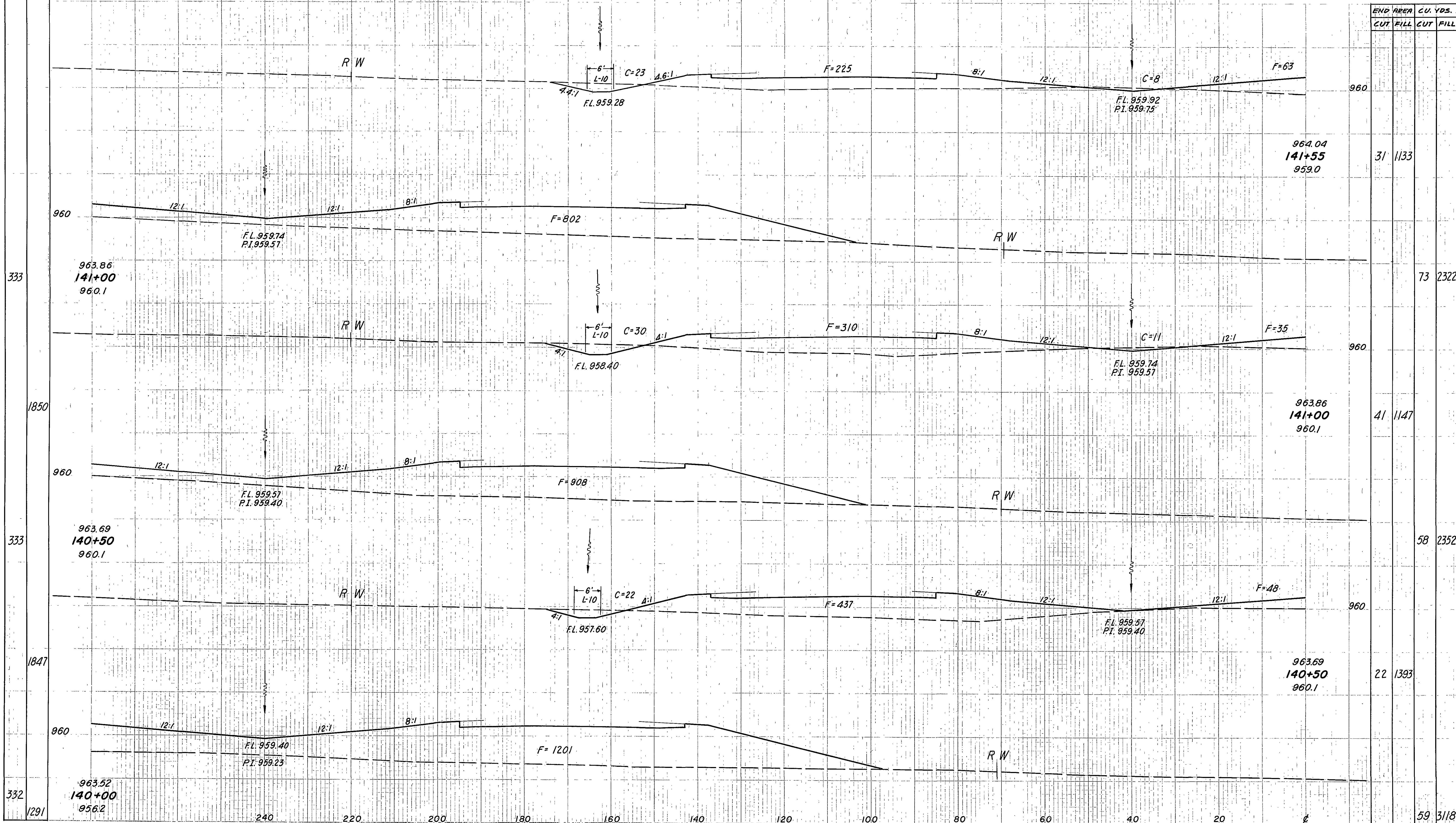
MONTGOMERY COUNTY
MOT.-25-0.49



Sta 138+50 Pt to Sta 140+00 ft

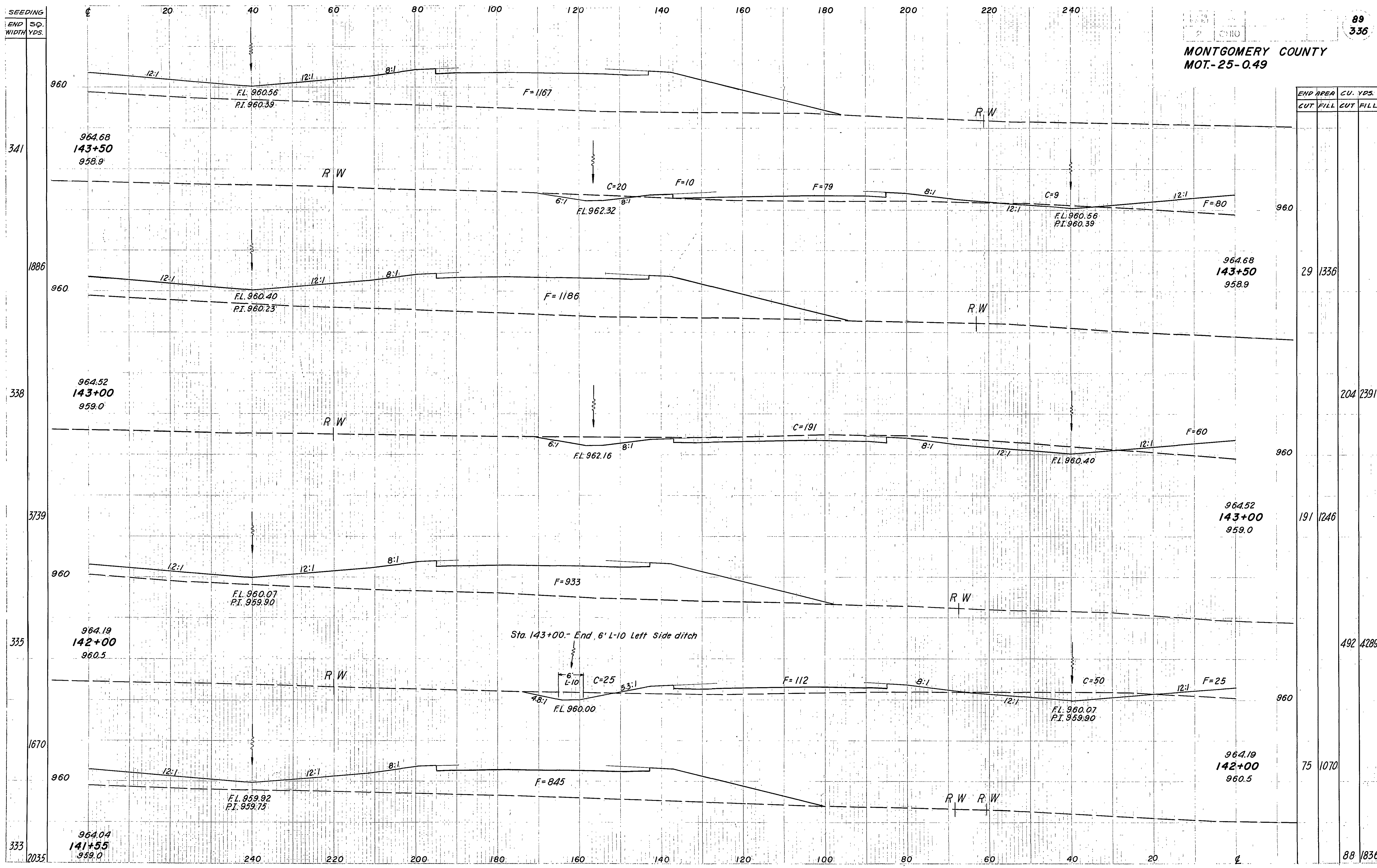
SEEDING
END
WIDTH
SP.
YDS.

MONTGOMERY COUNTY
MOT.-25-049



SEEDING
END SQ.
WIDTH YDS.

MONTGOMERY COUNTY
MOT.-25-0.49



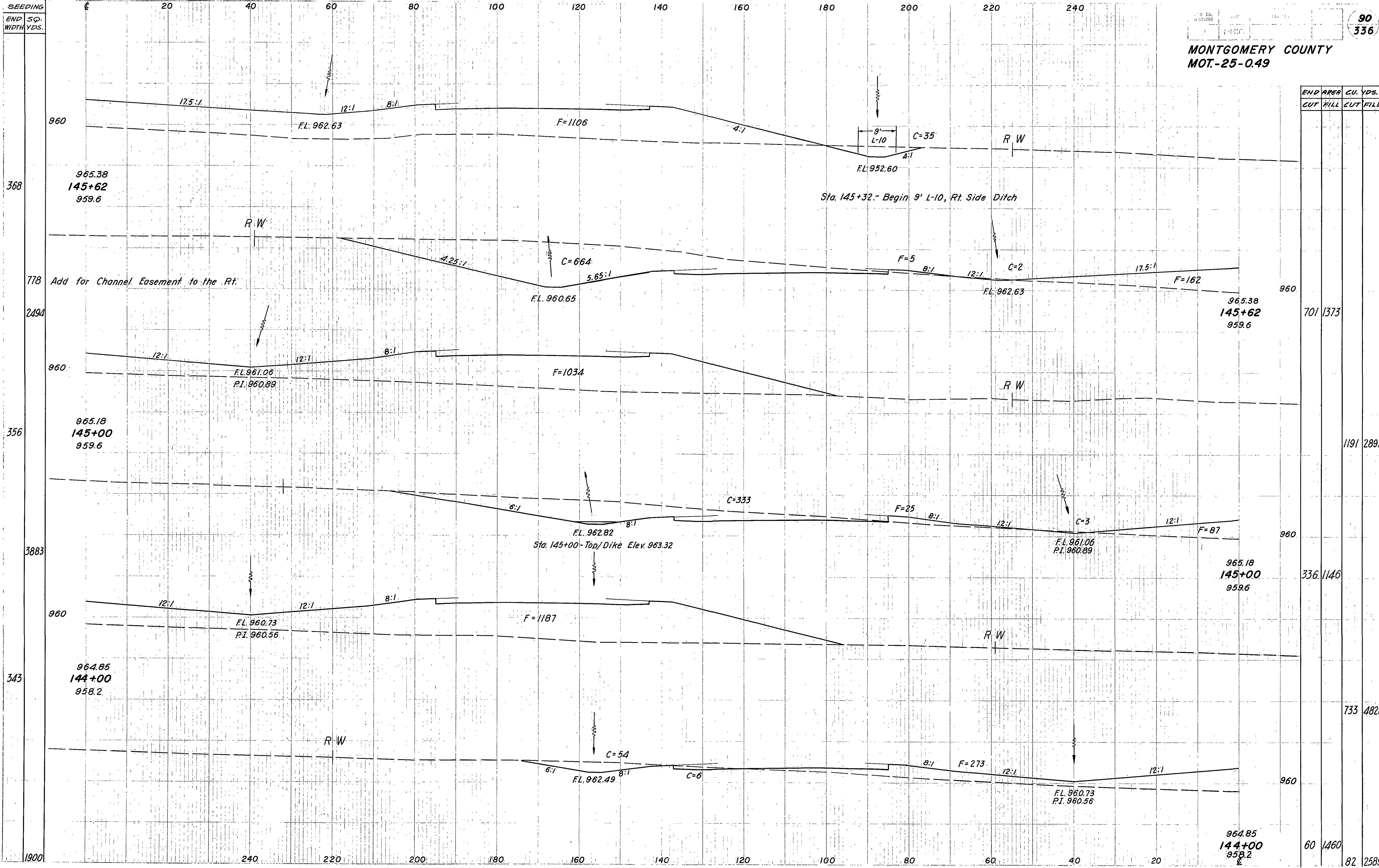
END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
29	1336		
		204	2391
191	1246		
		492	4289
75	1070		
		88	1836

Sta 141+55 Rt to Sta 143+50

SEEDING
END SQ.
WIDTH YDS.

MONTGOMERY COUNTY
MOT.-25-0.49

90
336

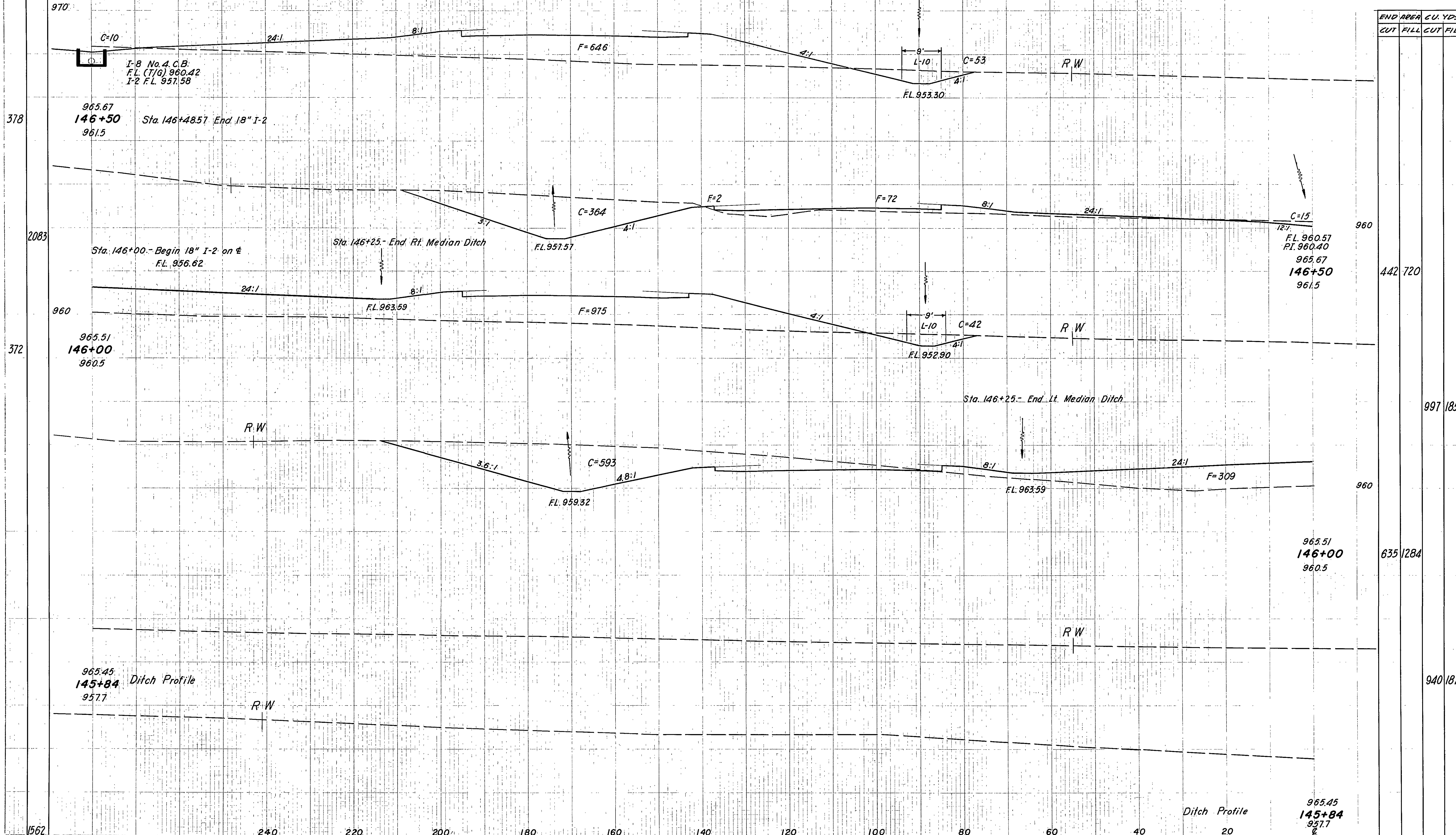


Sta. 144+00 to Sta. 145+62

SEEDING
END SQ.
WIDTH YDS.

91
336

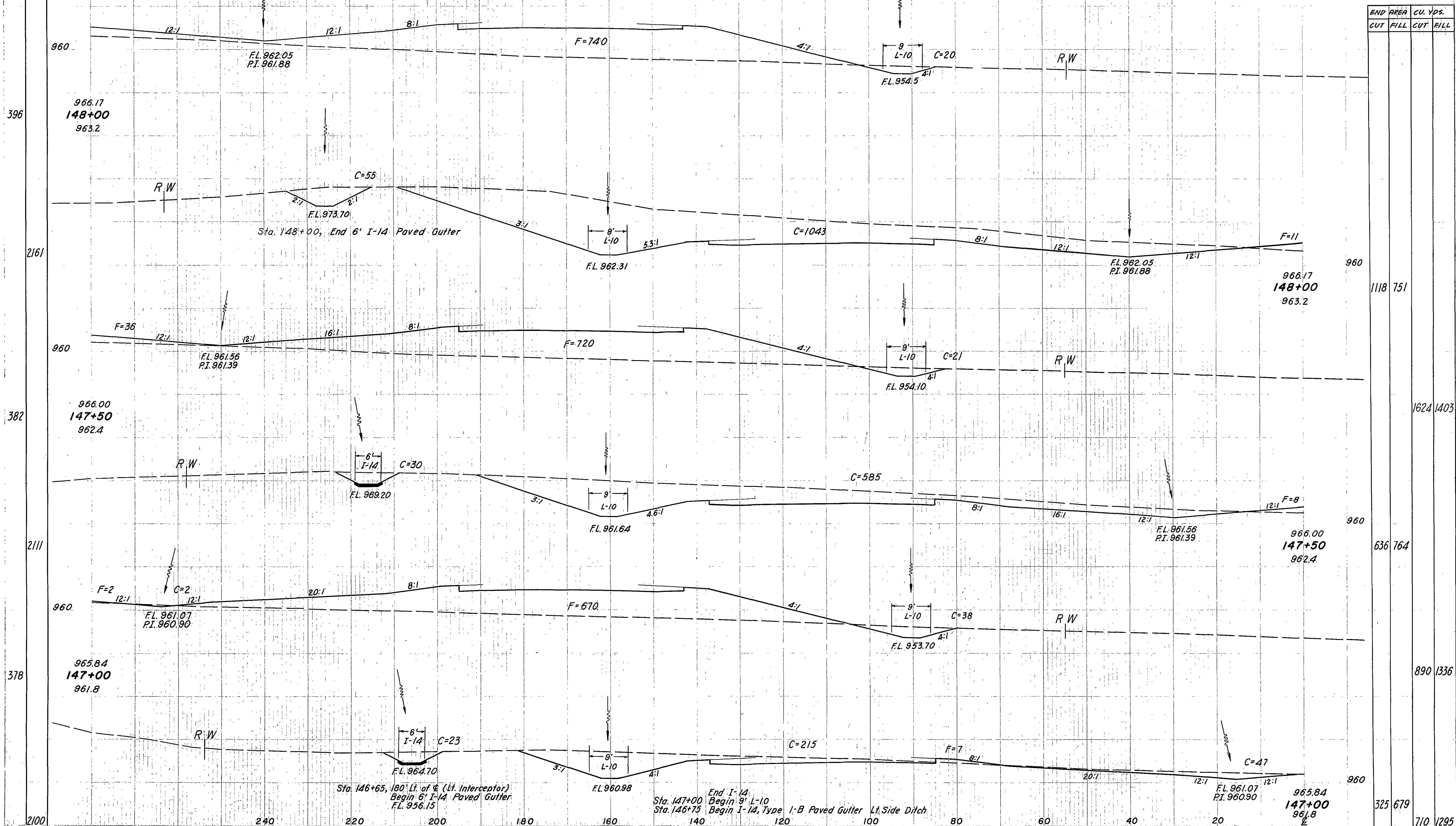
MONTGOMERY COUNTY
MOT.-25-049



SEEDING
END SQ.
WIDTH YDS.

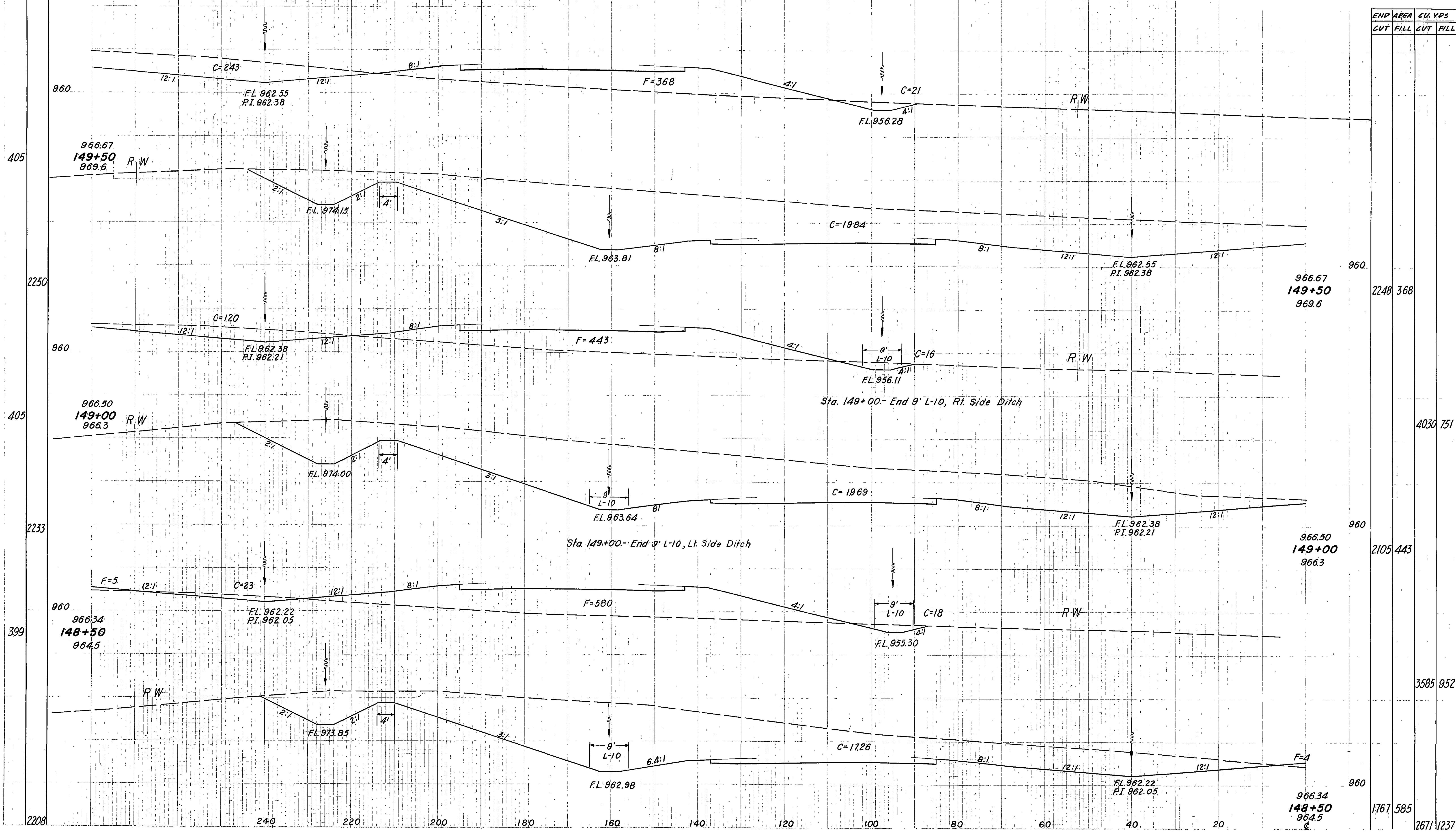
MONTGOMERY COUNTY
MOT.-25-049

92
336



SEEDING
END SP.
WIDTH YDS.

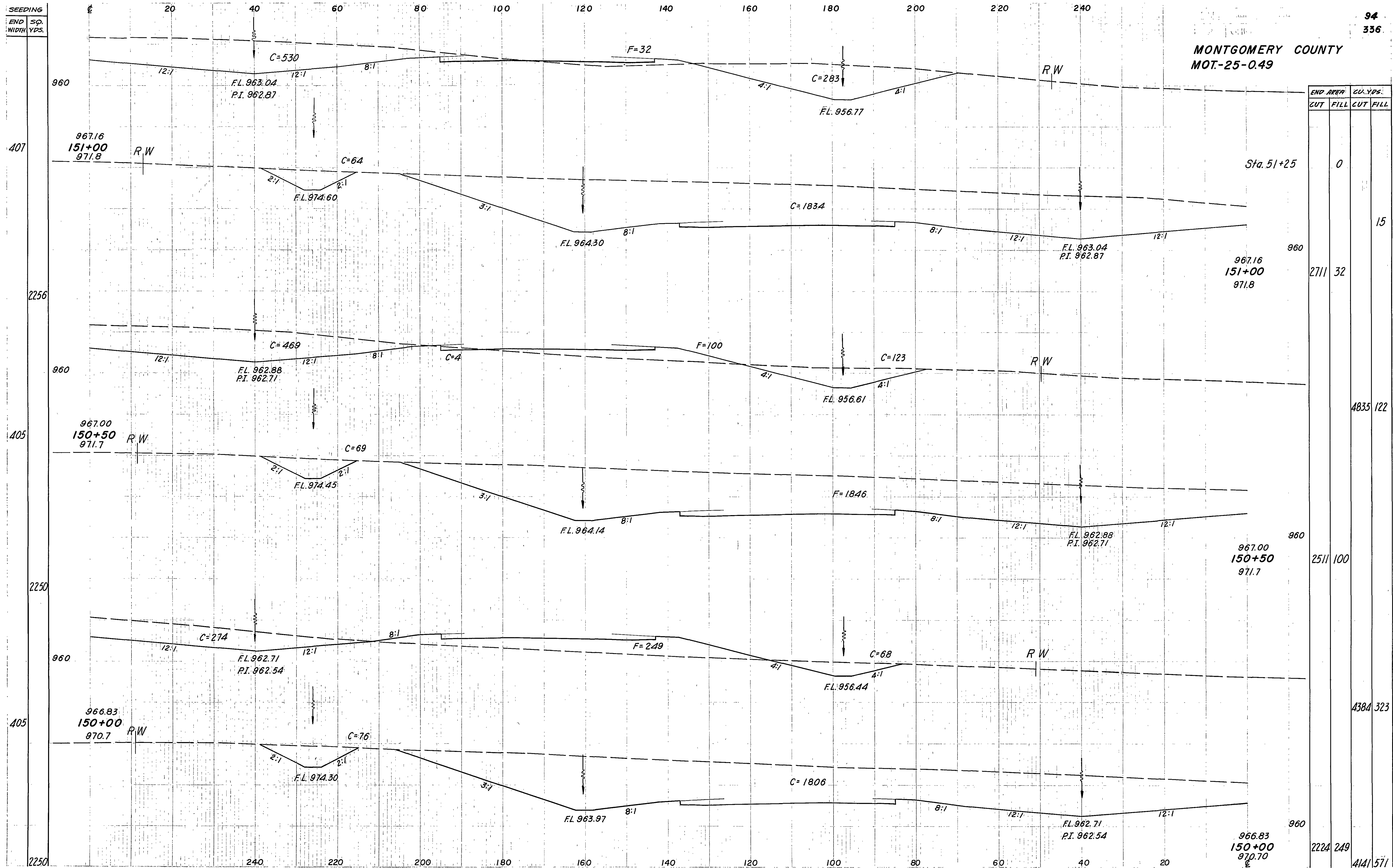
MONTGOMERY COUNTY
MOT.-25-049



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
2248	368		
4030	751		
2105	443		
3585	952		
1767	585		
2671	1237		

Sta 148+50 to Sta 149+50

MONTGOMERY COUNTY
MOT-25-0.49

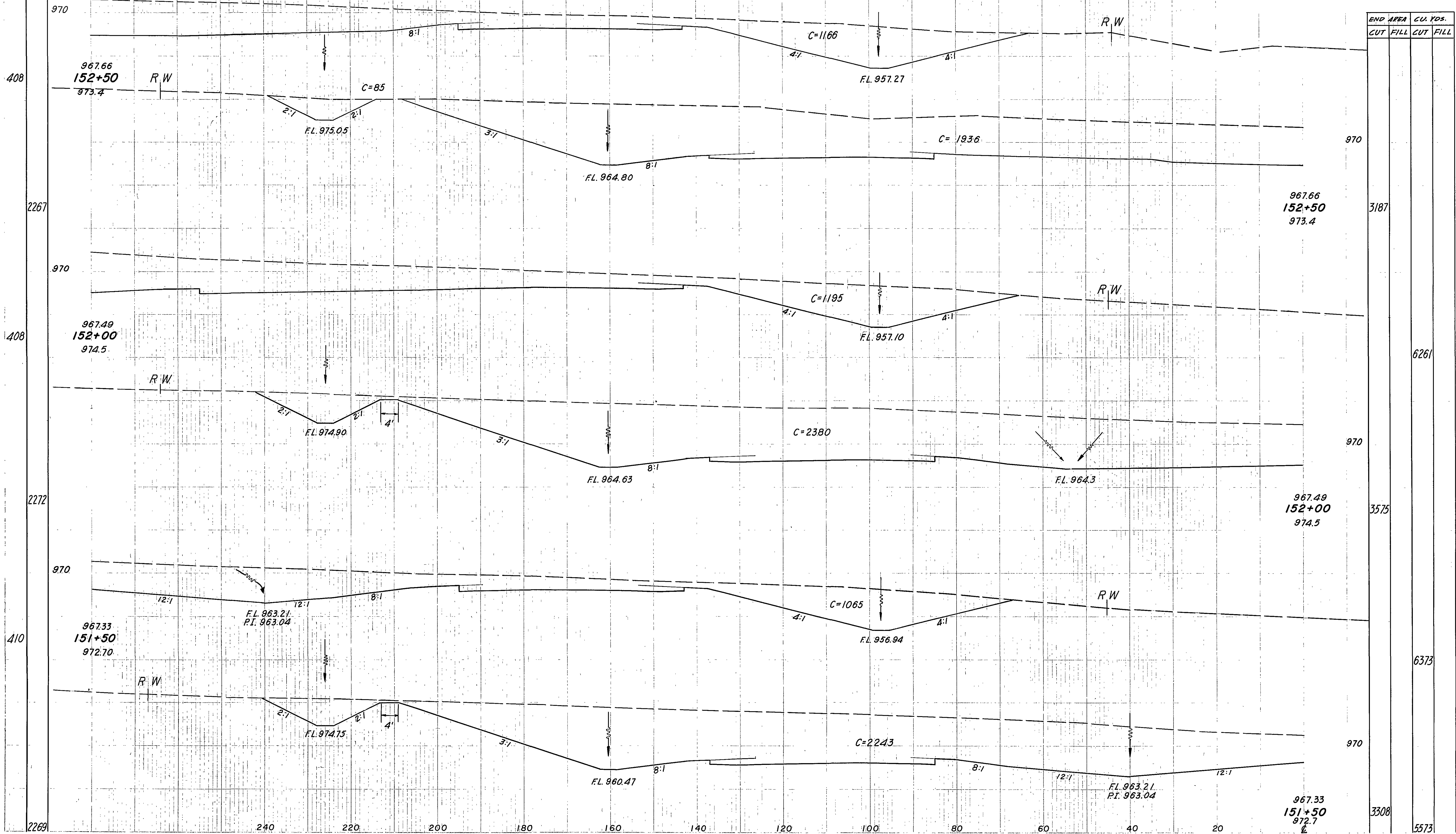


Sta 150+00 to Sta 151+00

SEEDING
END
WIDTH
SQ.
YDS.

MONTGOMERY COUNTY
MOT-25-0.49

95
336

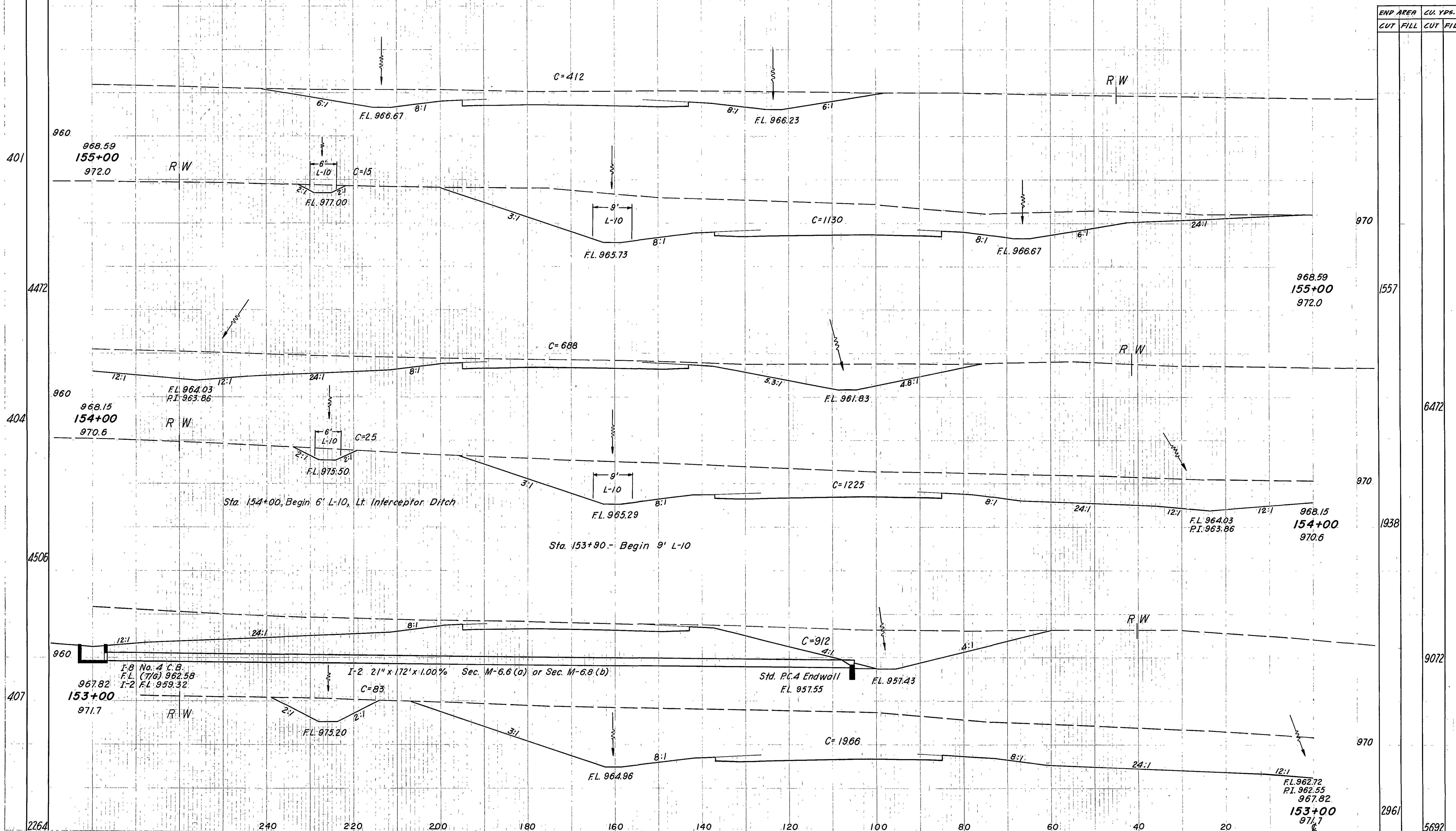


Sta 151+50 to Sta 152+50

SEEDING
END SP.
WIDTH YPS.

MONTGOMERY COUNTY
MOT.-25-0.49

96
336

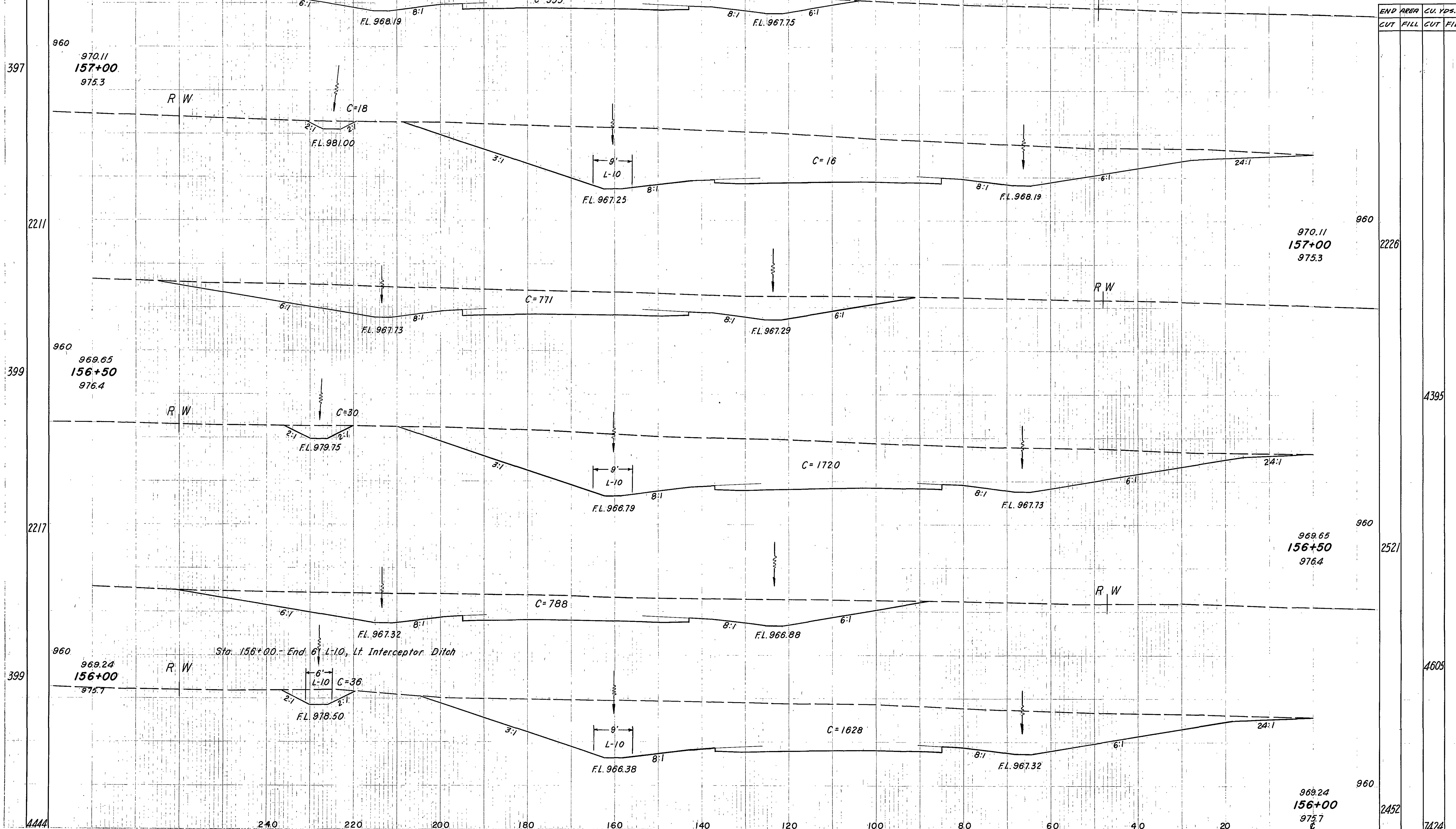


Sta. 153+00 to Sta. 155+00

SEEDING
END SQ.
WIDTH YDS.

MONTGOMERY COUNTY
MOT.-25-0.49

97
336

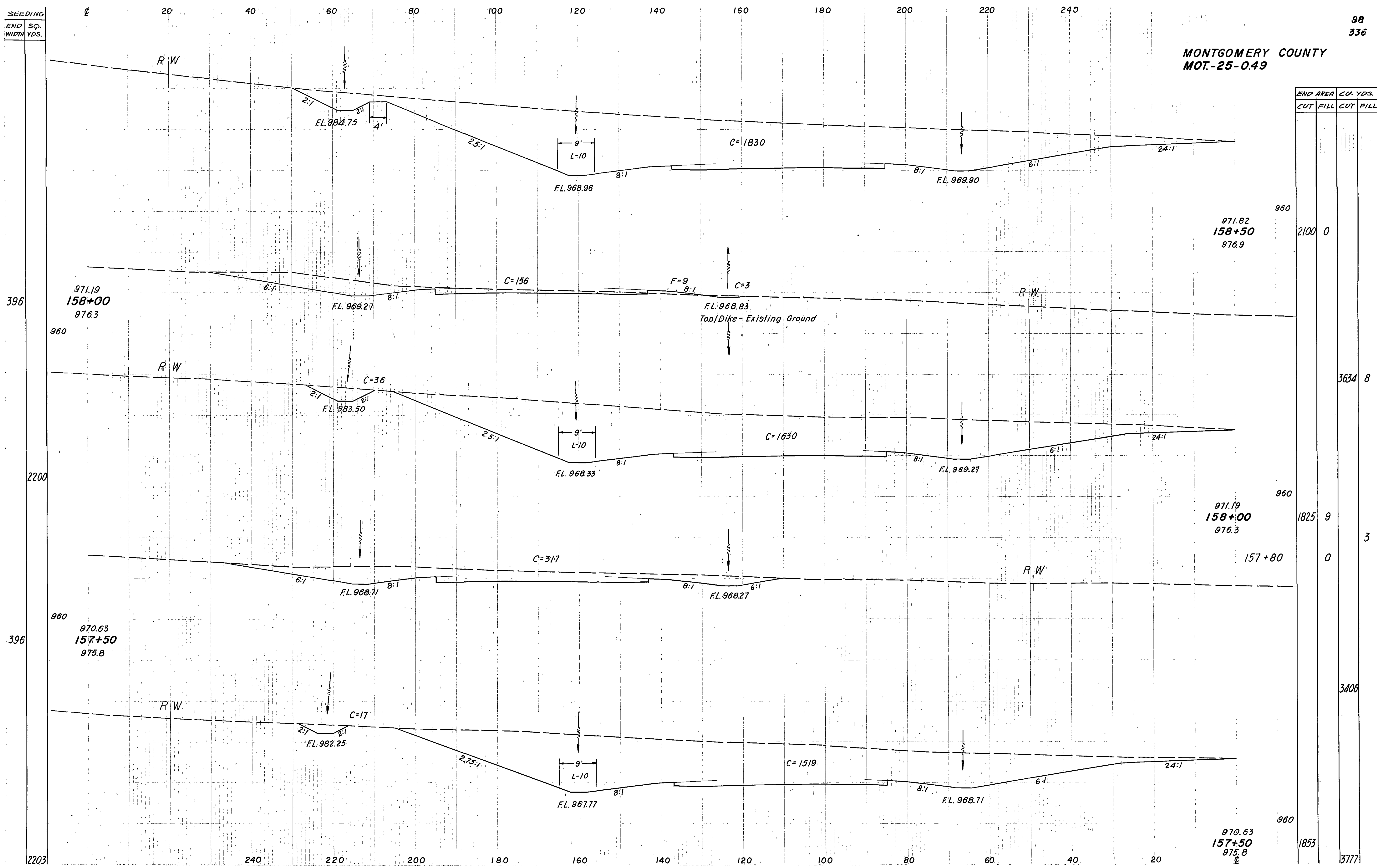


Sta 156+00 to Sta 157+00

SEEDING
END SQ.
WIDTH YDS.

98
336

MONTGOMERY COUNTY
MOT.-25-049

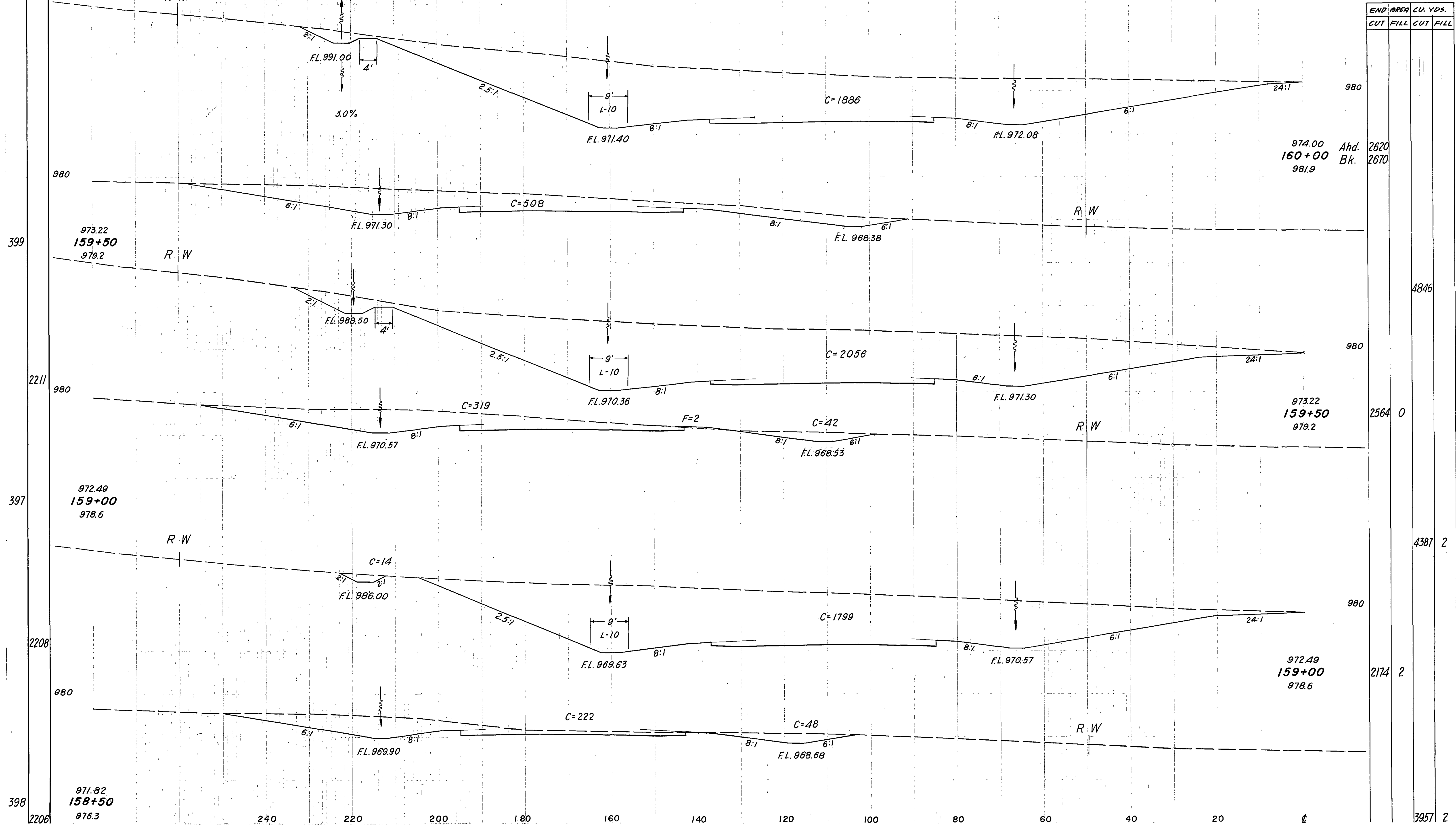


Sta 157+50 to Sta 158+50

SEEDING
END SQ.
WIDTH YDS.

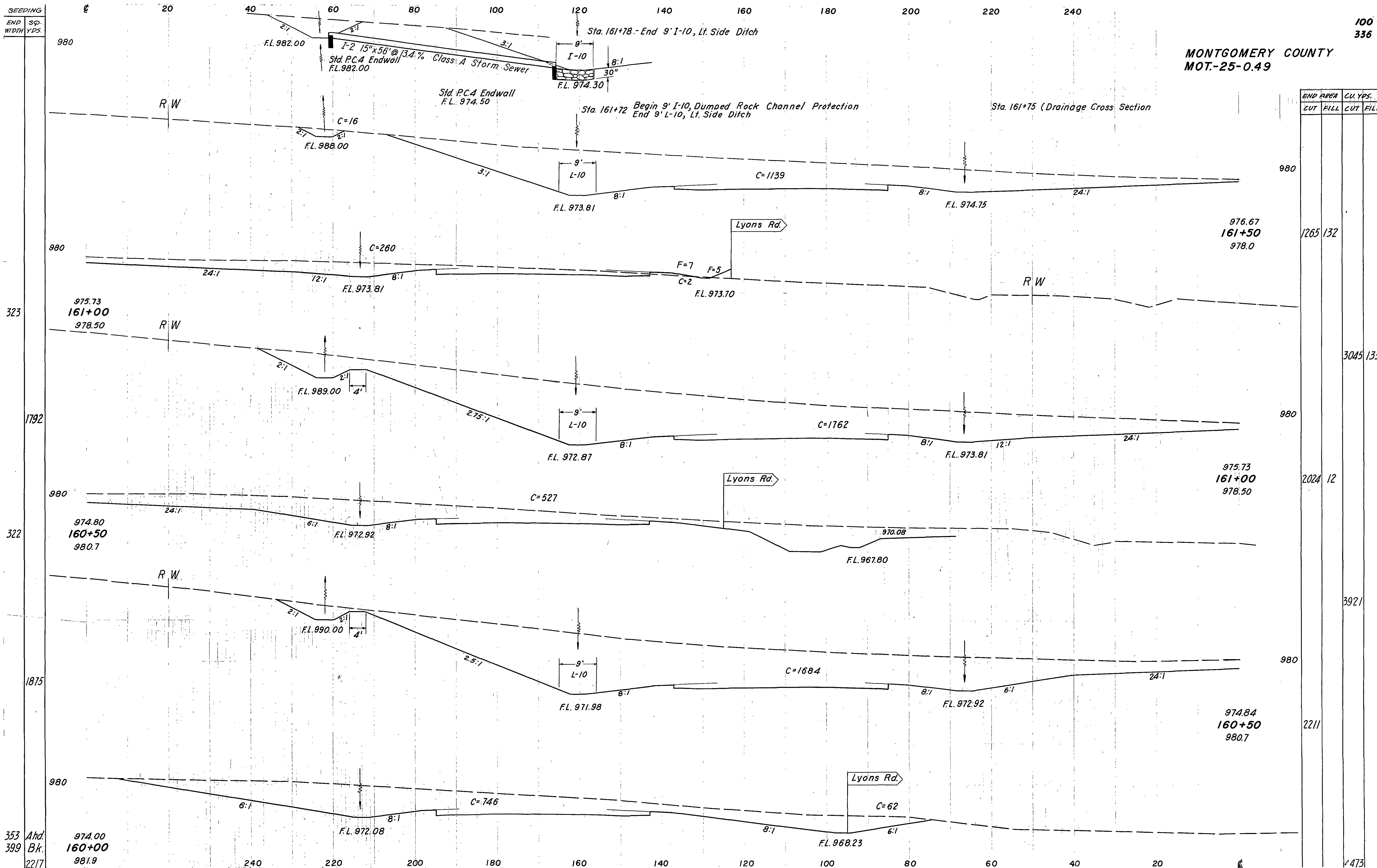
99
336

MONTGOMERY COUNTY
MOT.-25-0.49



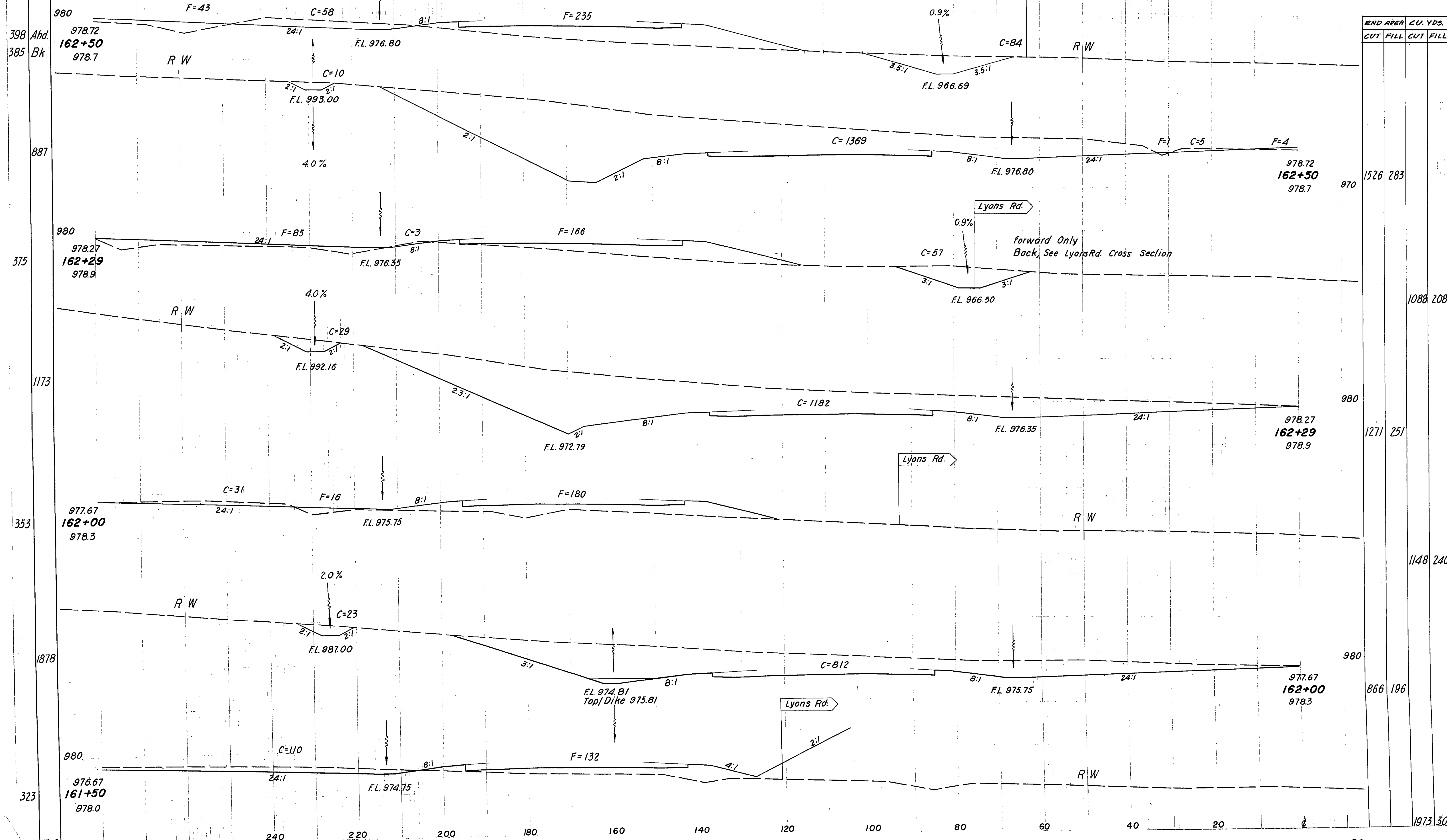
Sta 158+50 Rt To Sta 160+00 Lt

MONTGOMERY COUNTY
MOT-25-0.49



398	Ahd.
385	Bk

MONTGOMERY COUNTY
MOT.-25-049

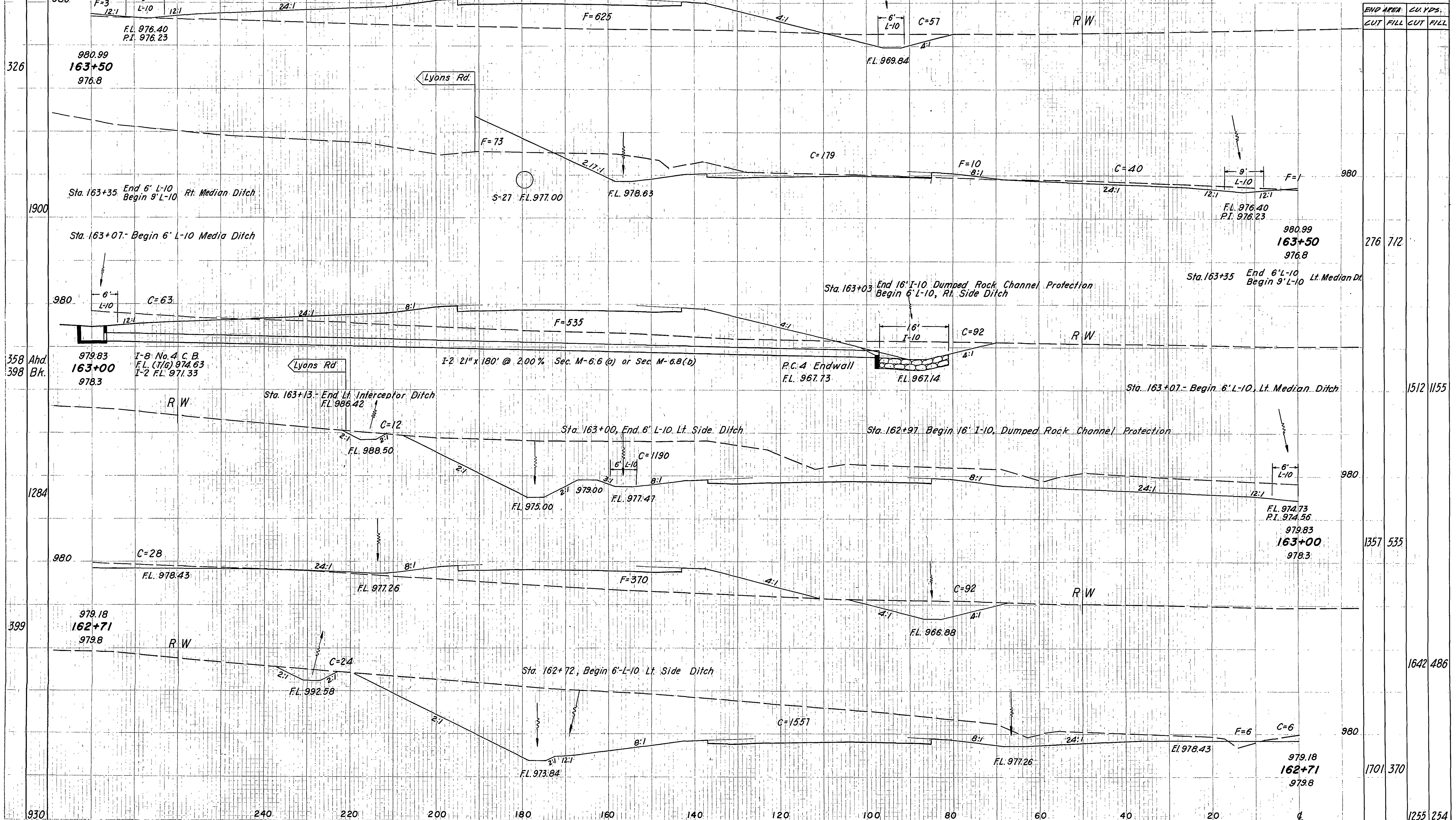


SEEDING
END SQ.
WIDTH VDS.

FED. RD. DIVISION
STATE
PROJECT

102
336

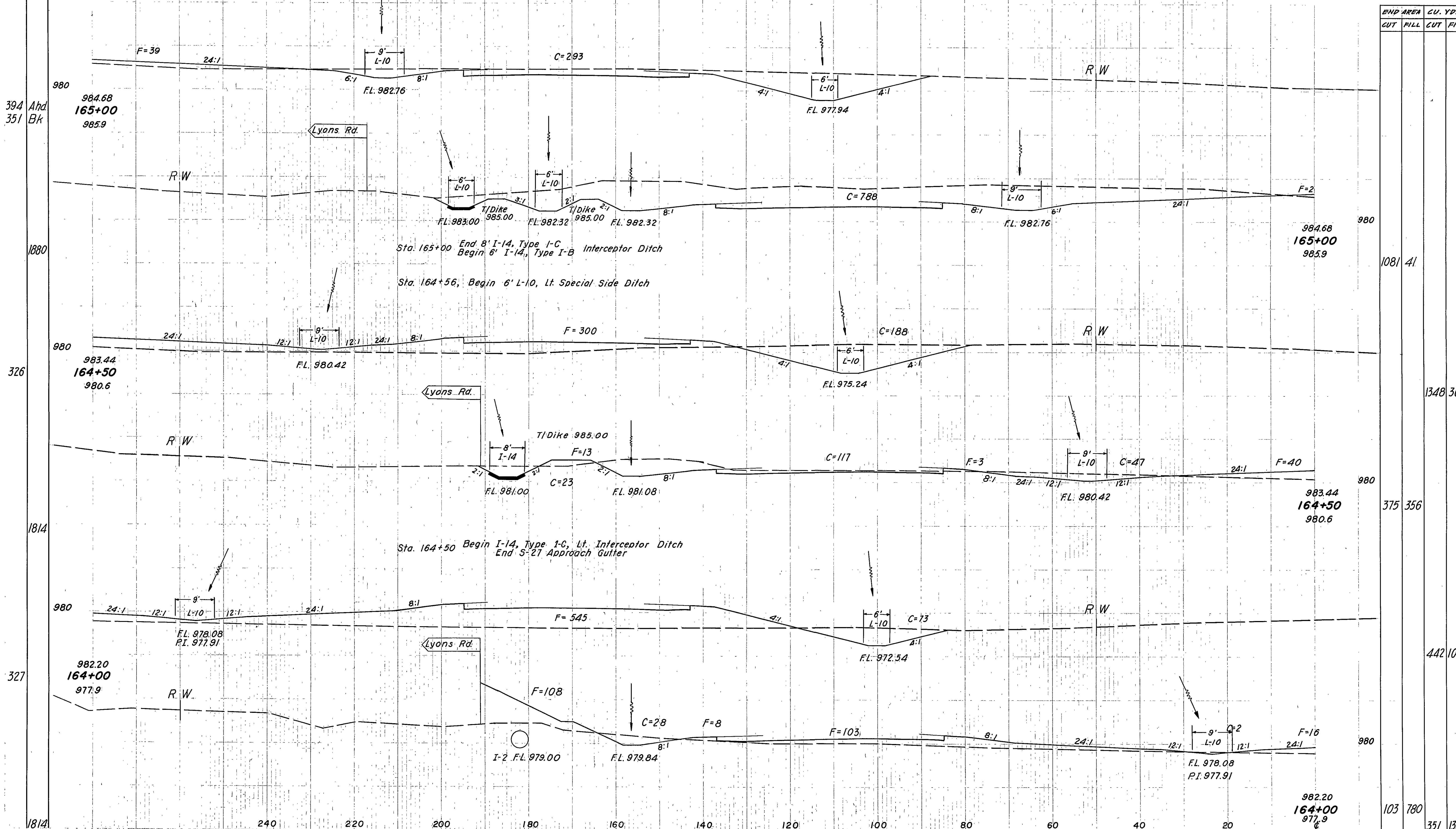
MONTGOMERY COUNTY
MOT-25-0.49



SEEDING	END SQ.
WIDTH YDS.	YDS.

MONTGOMERY COUNTY

MOT-25-0.49



END AREA	CUT	FILL	CUT	FILL
----------	-----	------	-----	------

1081	41	1348	368	375	356	442	1052	103	780	351	1381
------	----	------	-----	-----	-----	-----	------	-----	-----	-----	------

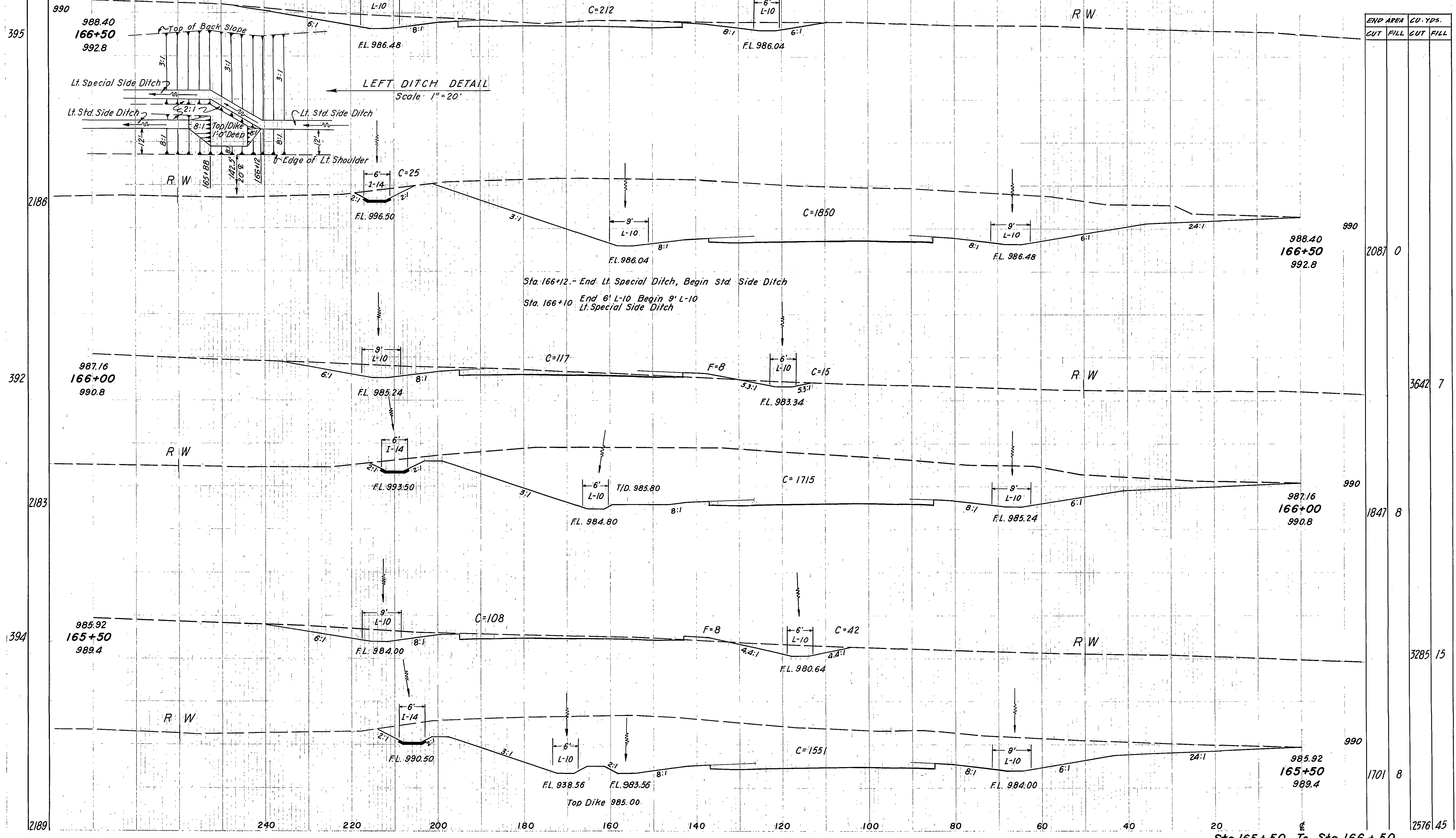
Sta. 164+00 to Sta. 165+00

SEEDING
END SP.
WIDTH YDS.

2 OHIO

104
336

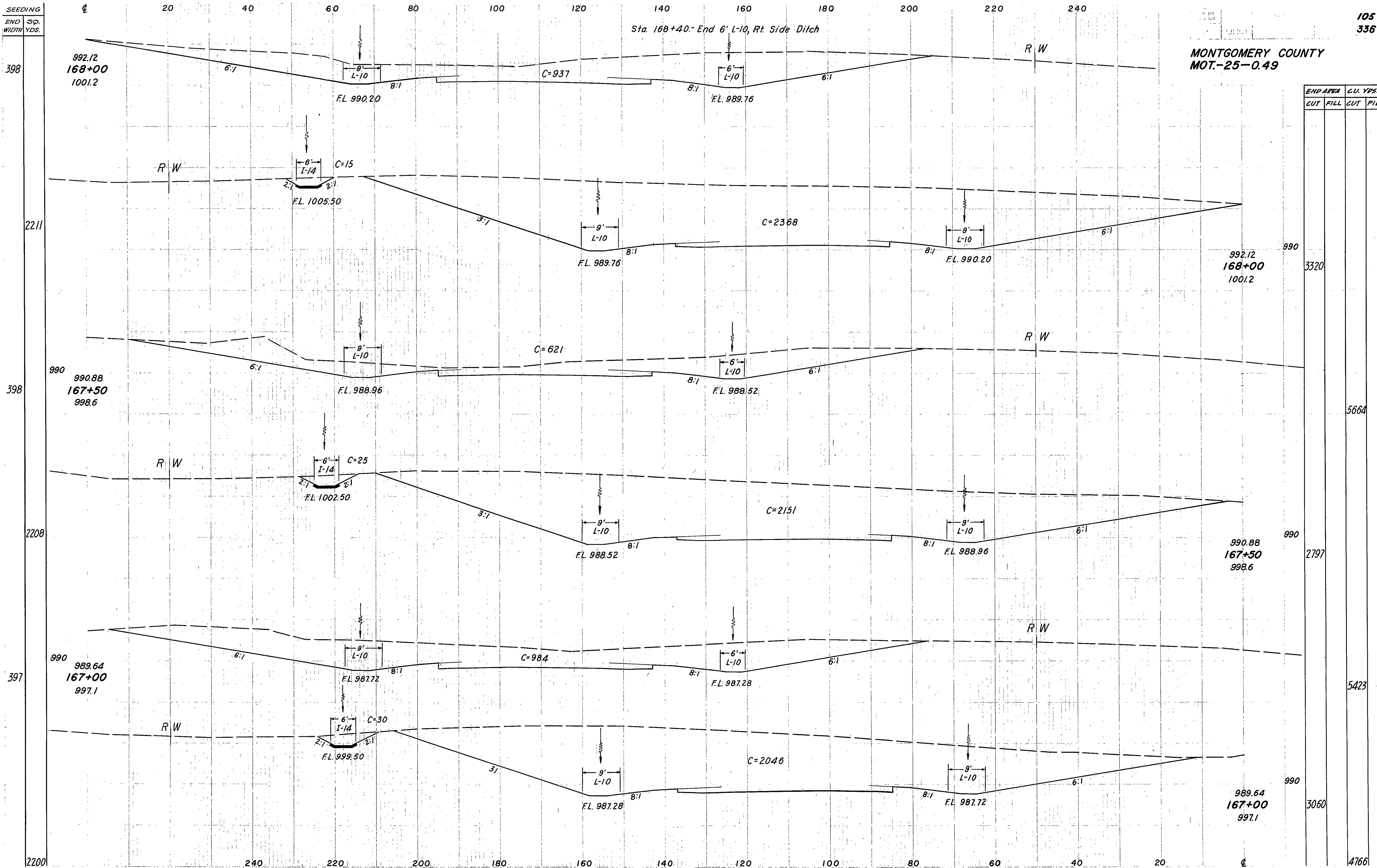
MONTGOMERY COUNTY
MOT.-25-0.49

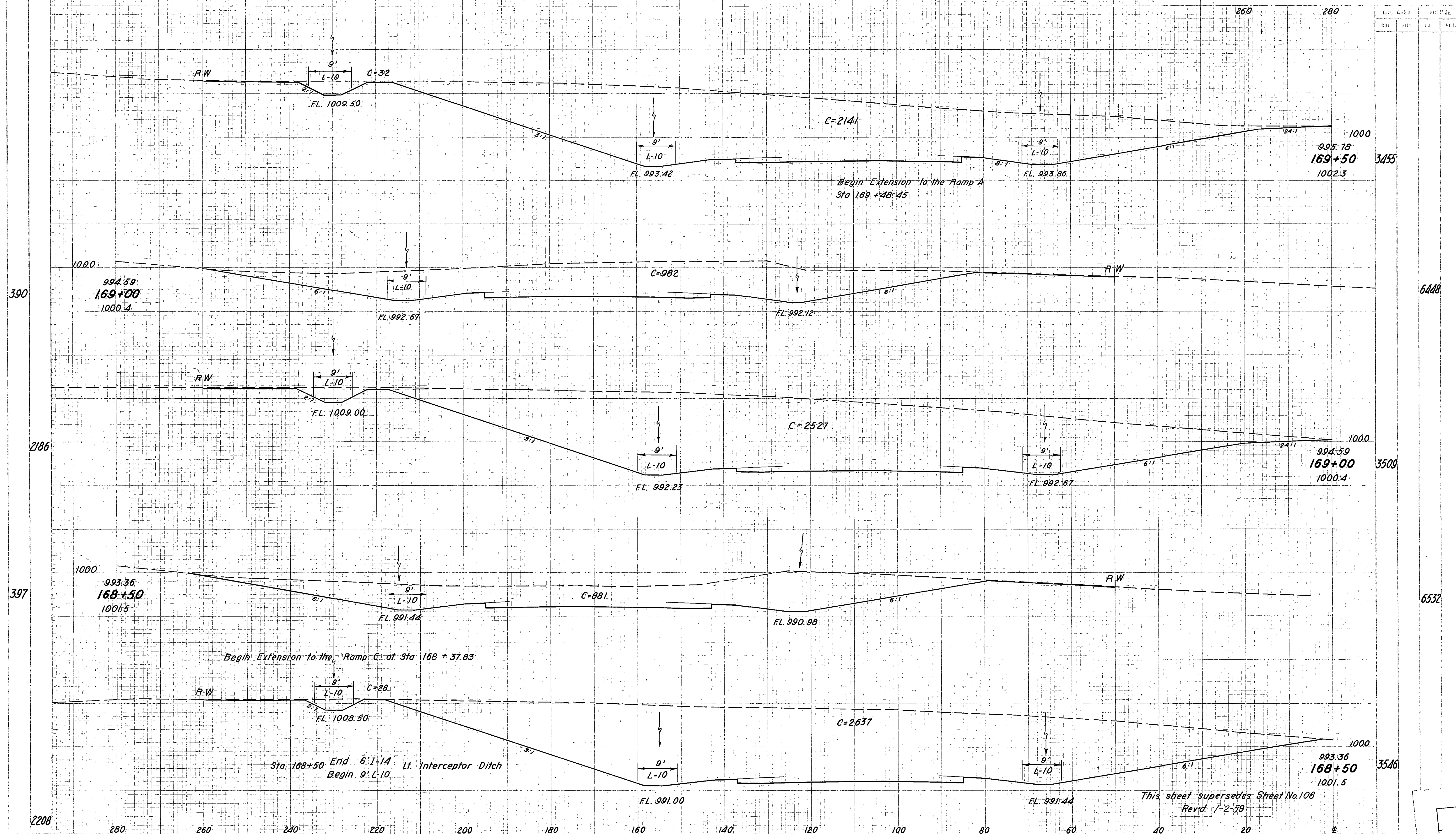


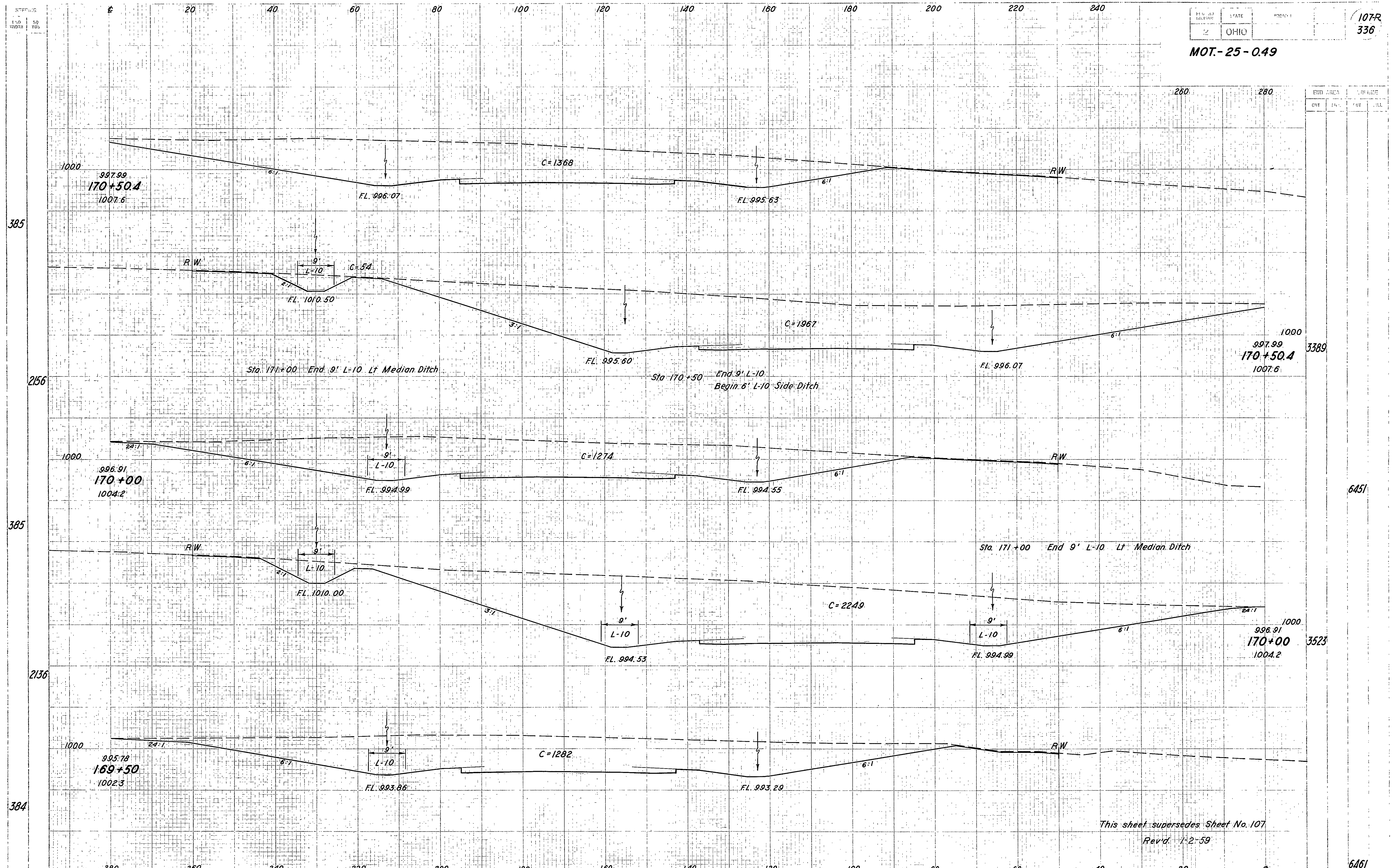
SEEDING
END SP.
WIDTH YDS.

105
336

MONTGOMERY COUNTY
MOT.-25-0.49







MOT.-25-049

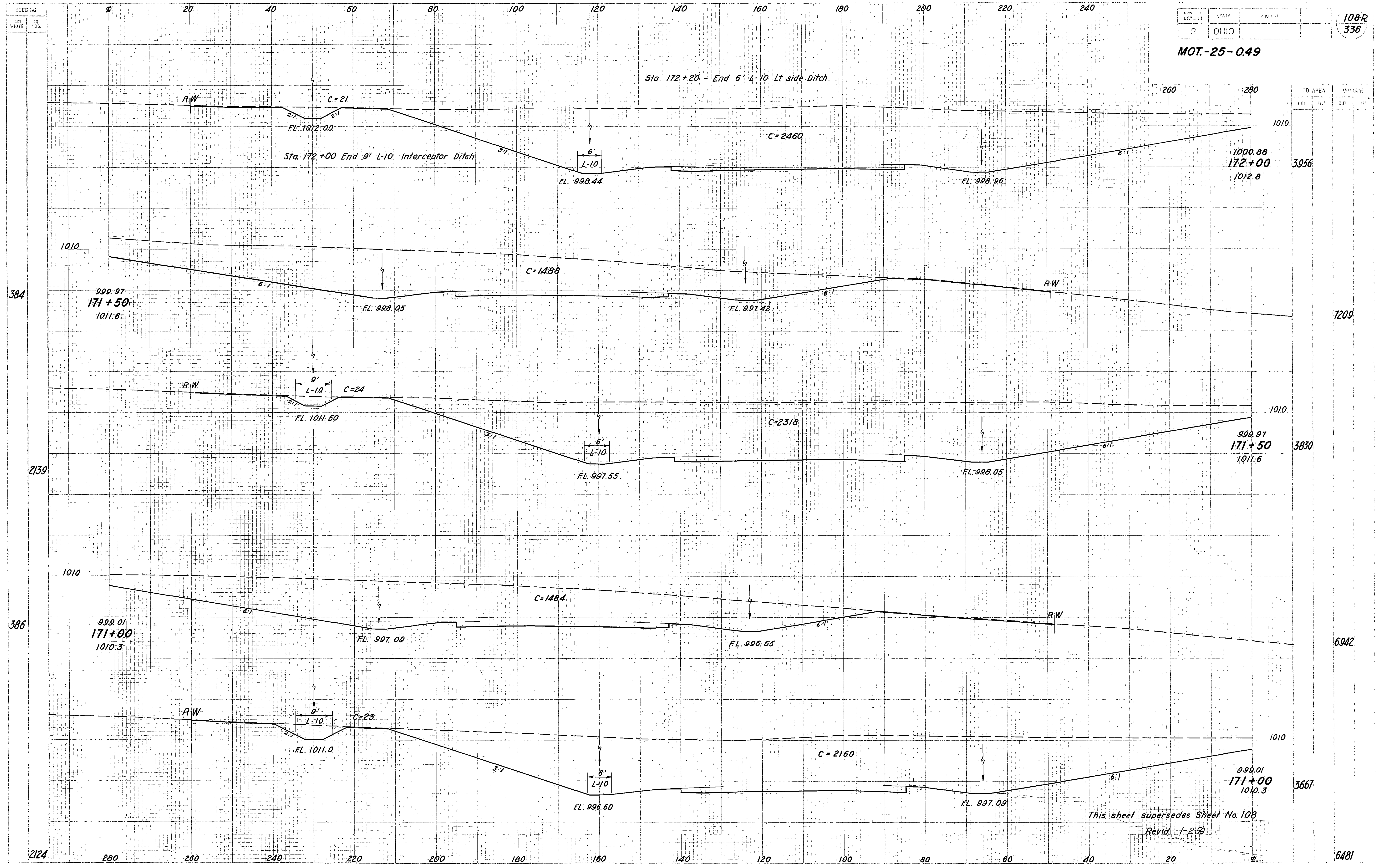
END AREA		CUT AREA	
CH	FT	CH	FT

1000
997.99
170+50.4
1007.6

1000
996.91
170+00
1004.2

This sheet supersedes Sheet No. 107
Rev'd 1-2-59

Sta 169+50 to Sta 170+50.4



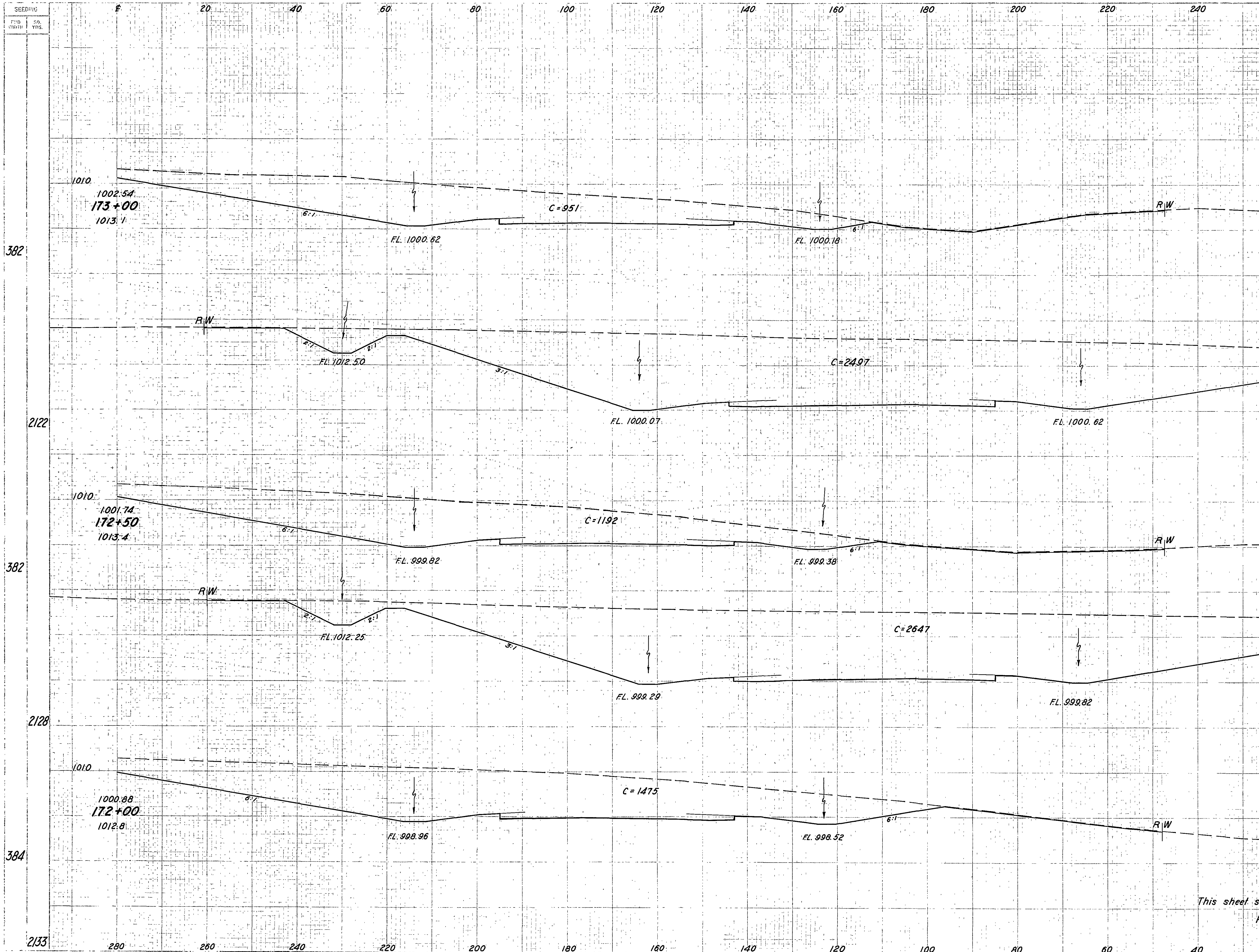
MOT-25-0.49

Sta. 172+20 - End 6' L-10 Lt side Ditch

Sta. 172+00 End 9' L-10 Interceptor Ditch

This sheet supersedes Sheet No. 108
Revised 1-2-59

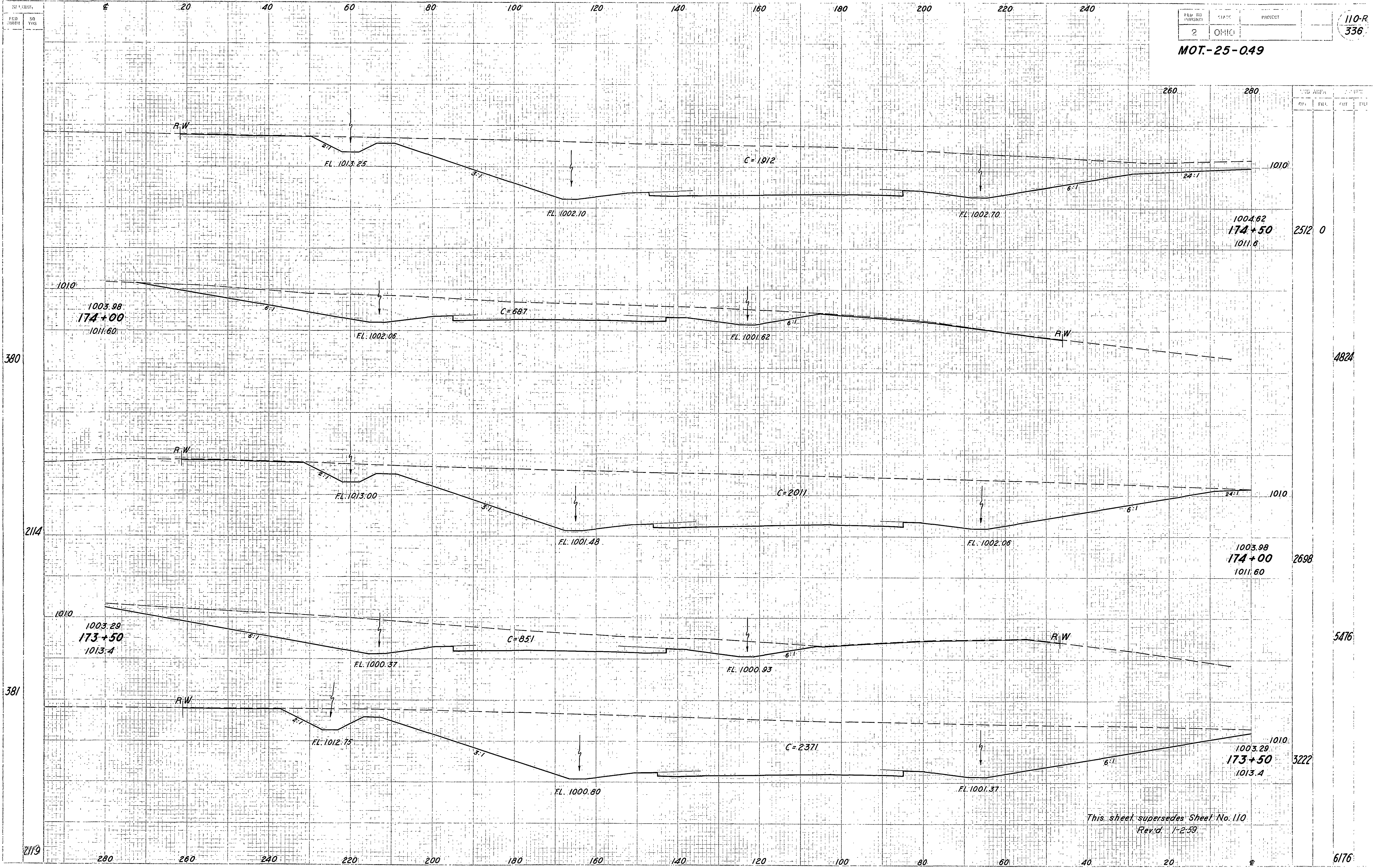
Sta 171+00 to Sta 172+00



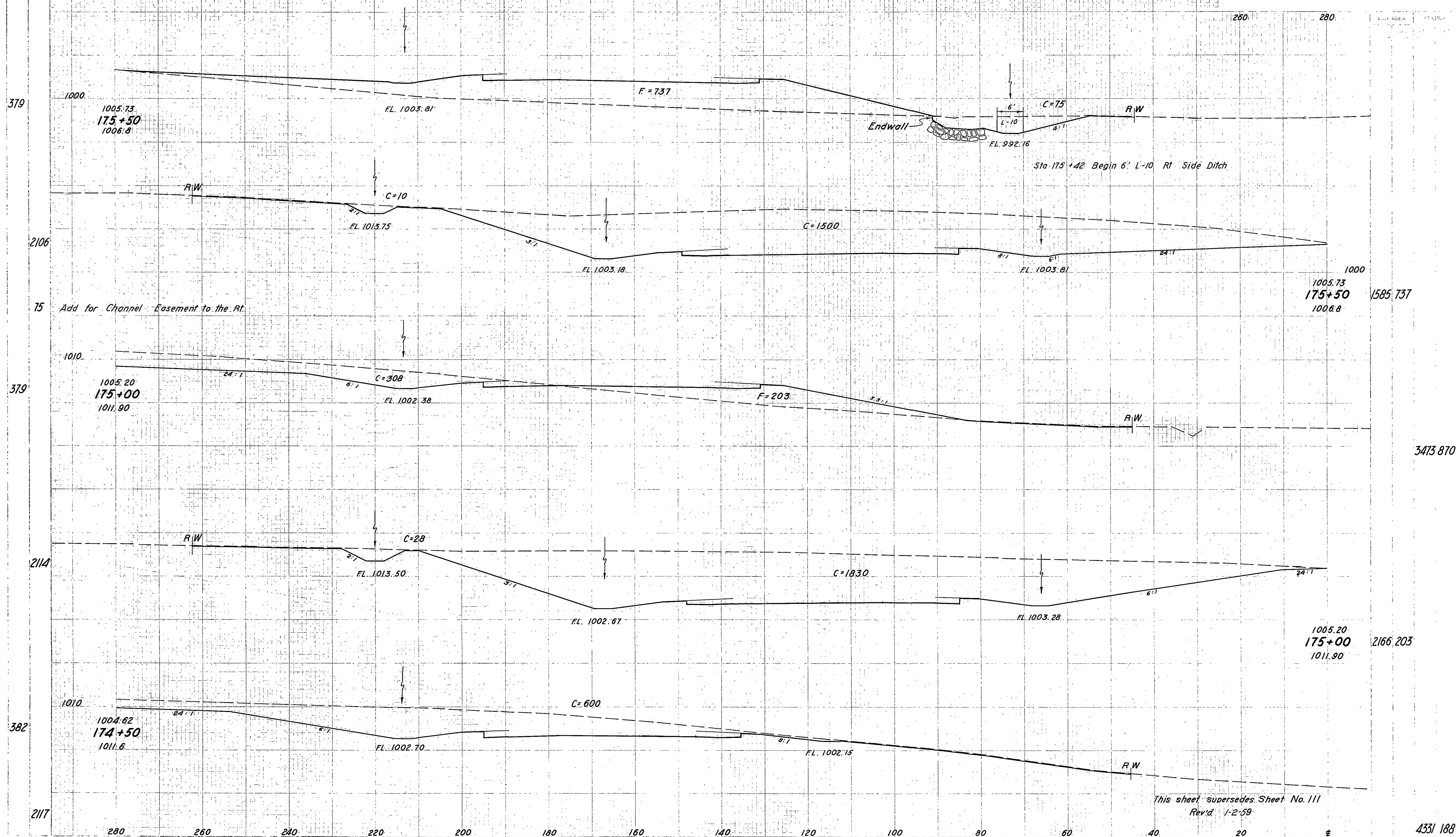
MOT.-25-049

This sheet supersedes Sheet No. 109
Revised 1-2-59

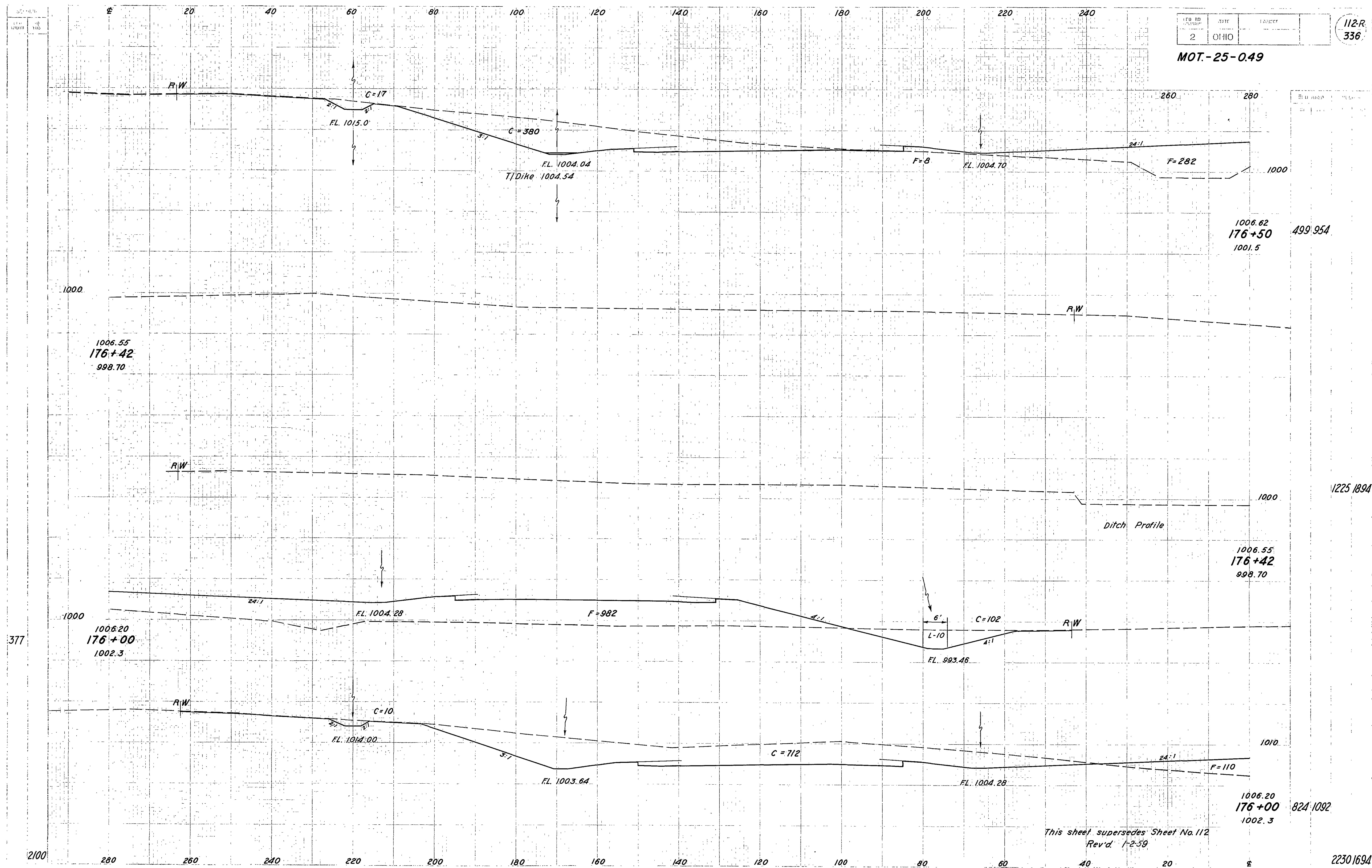
Sta 172+00 to Sta 173+00

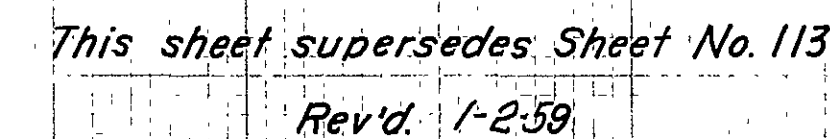


MOT.-25-0.49

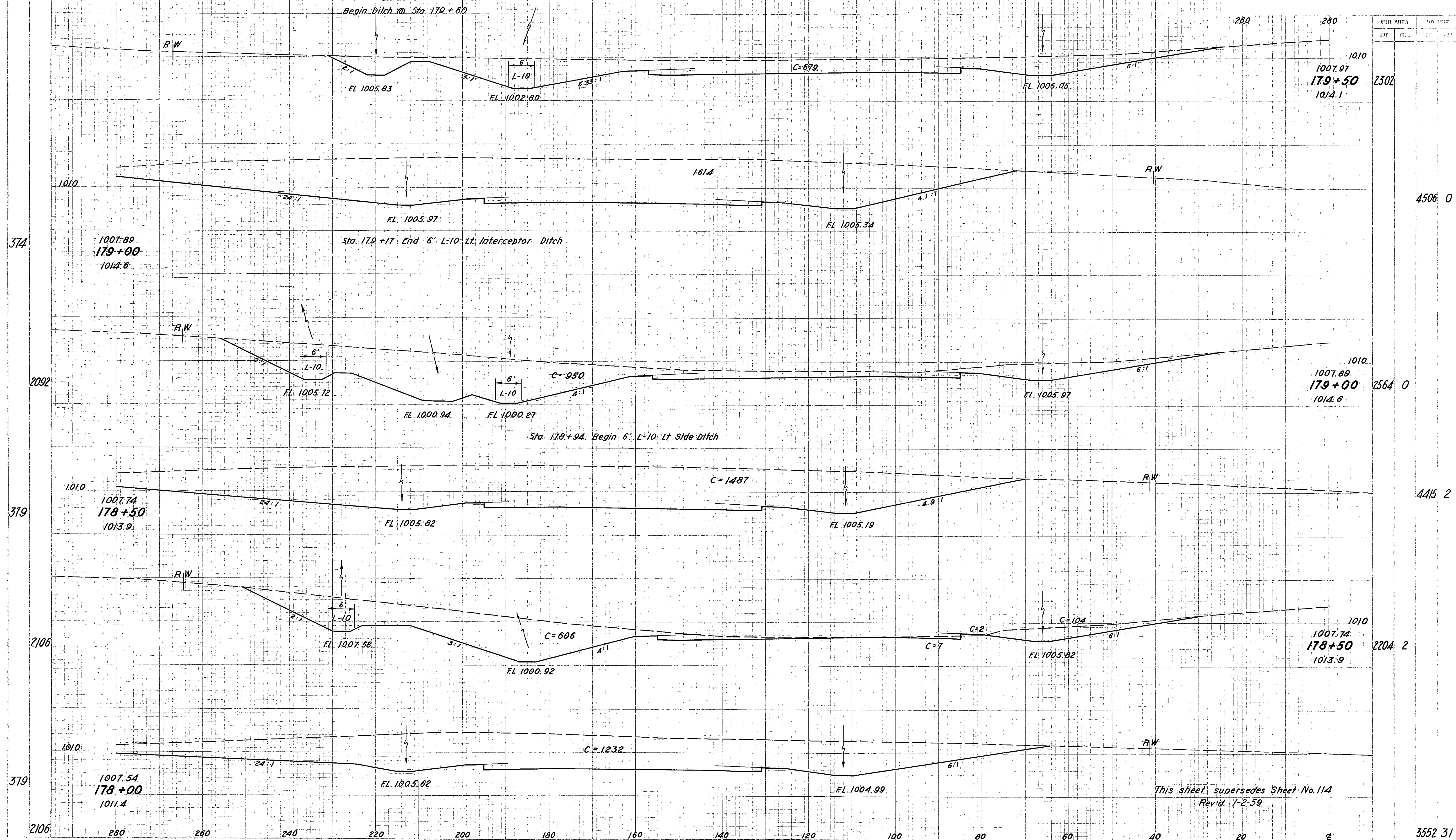


This sheet supersedes Sheet No. III
Rev'd 1-2-59

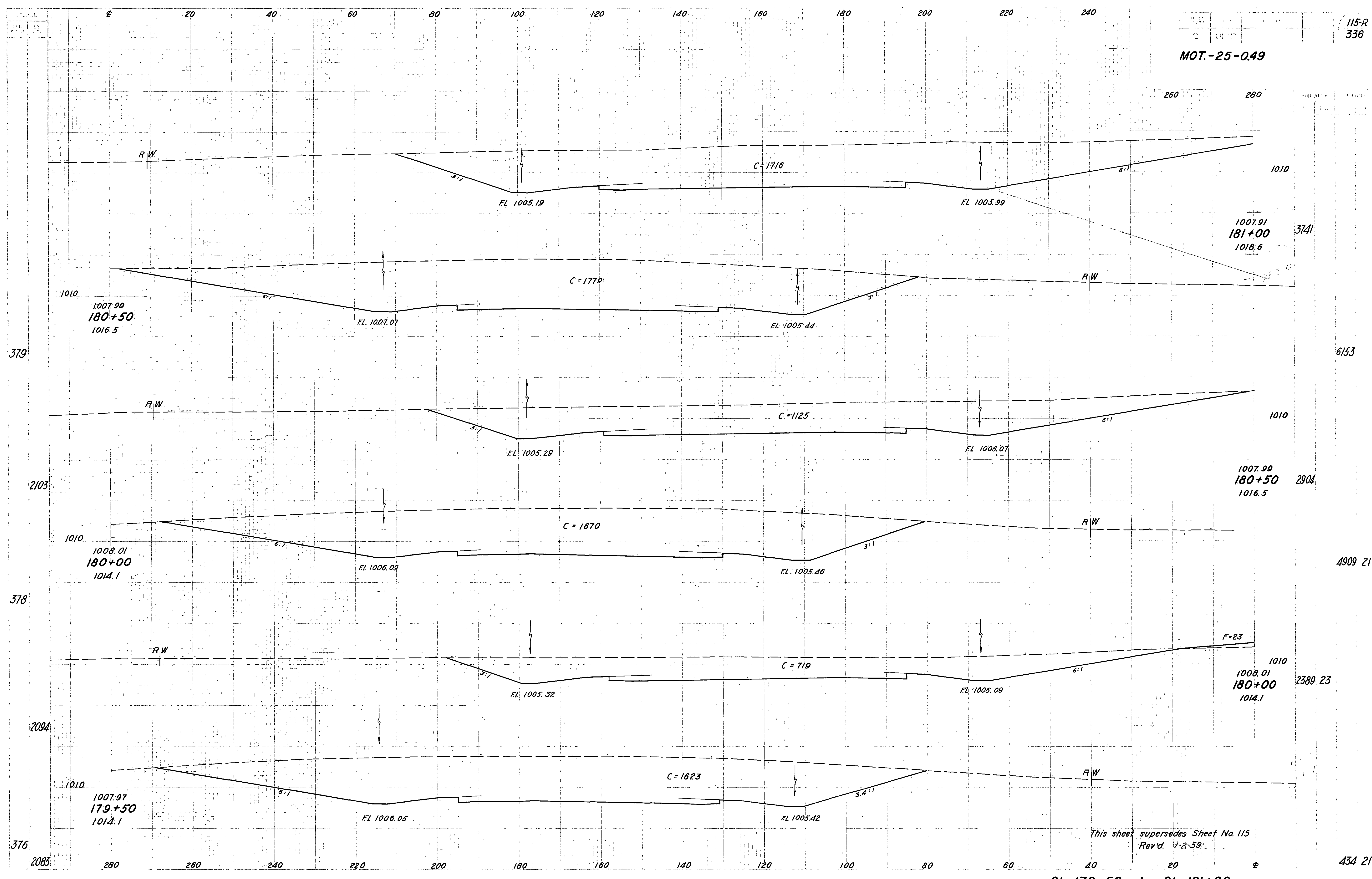




114-
336



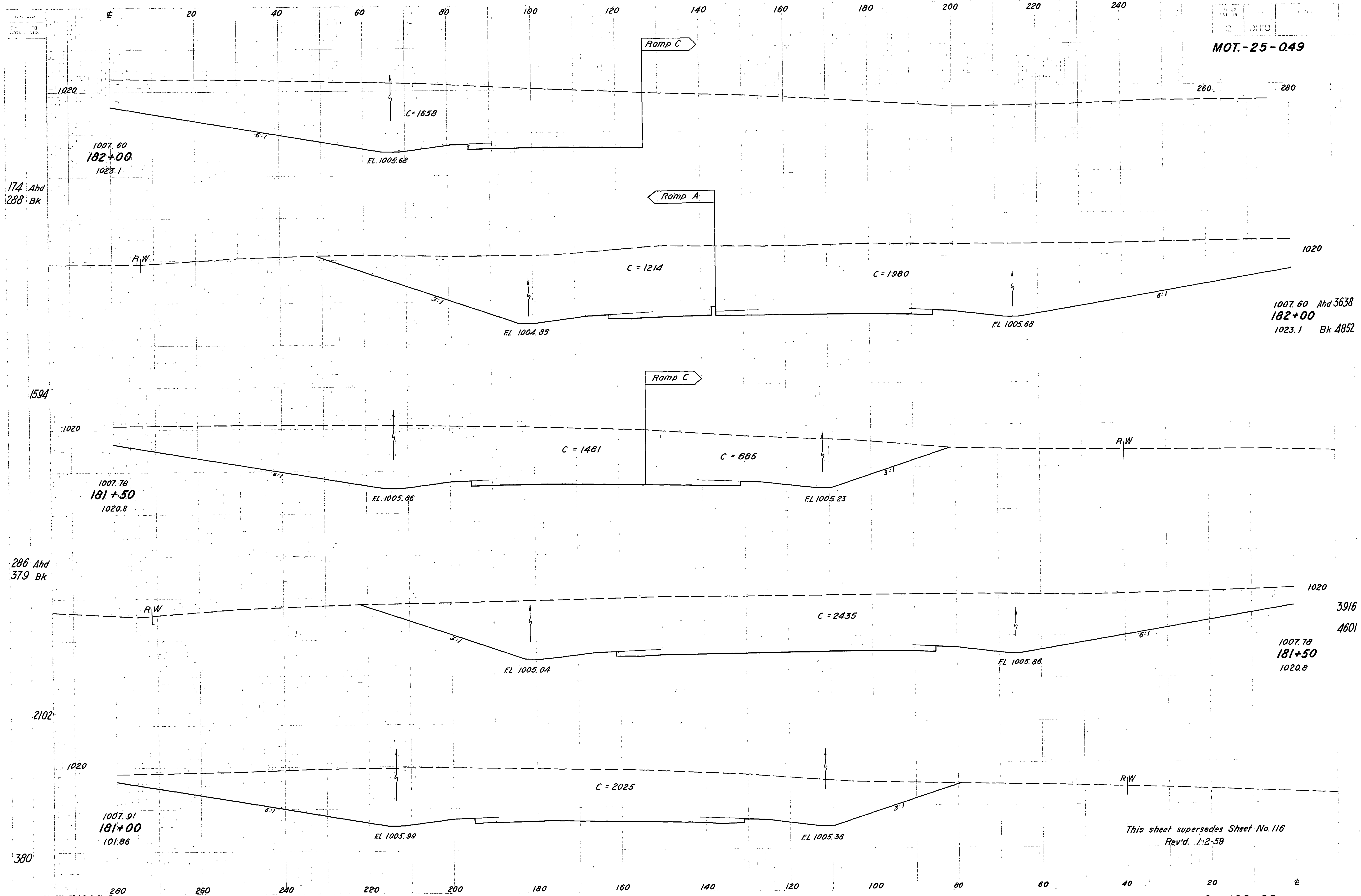
MOT.-25-049



This sheet supersedes Sheet No. 115
Rev'd. 1-2-59

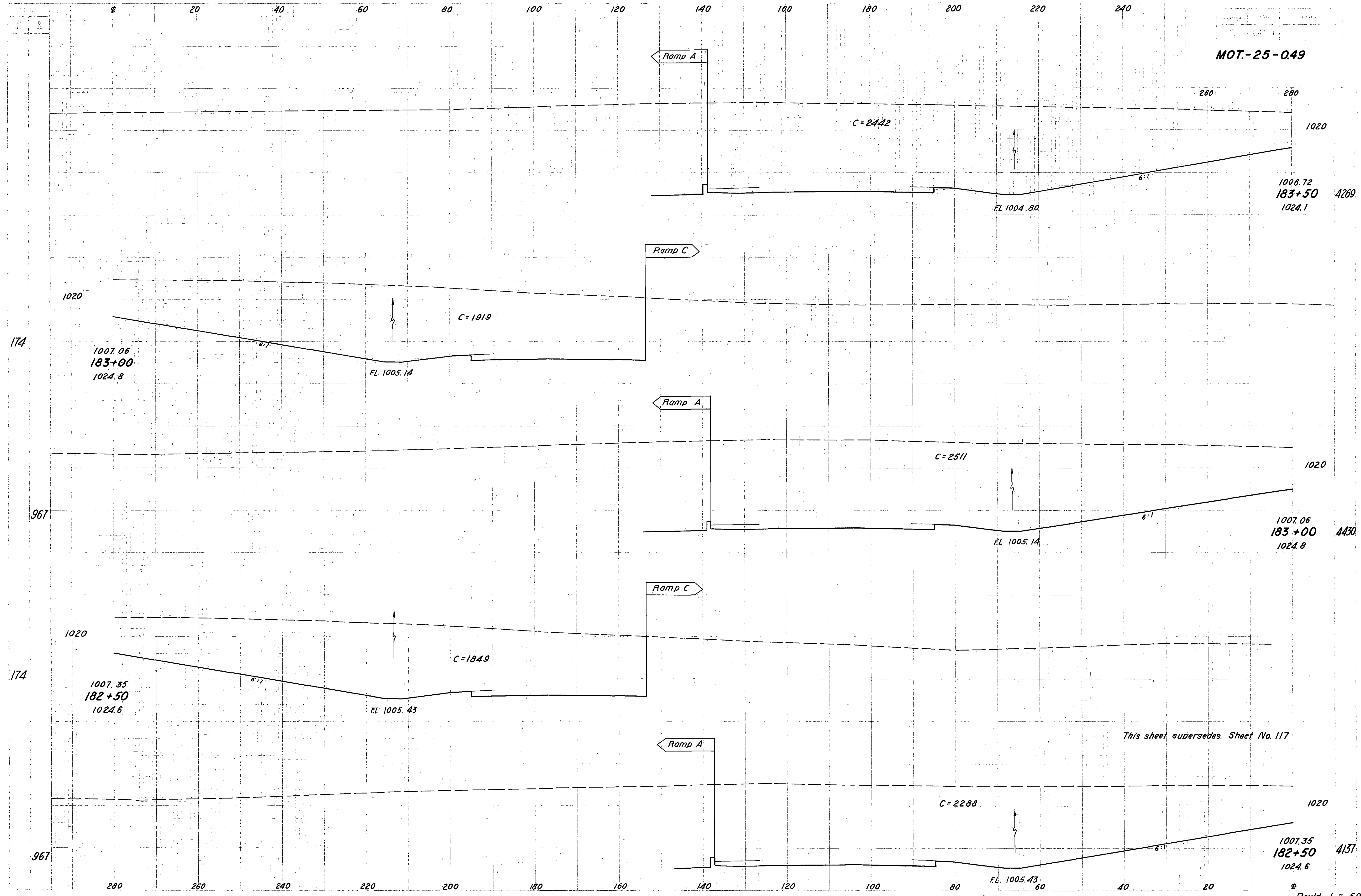
Sta 179+50 to Sta 181+00

MOT.-25-049



This sheet supersedes Sheet No. 116
Rev'd. 1-2-59

MOT.-25-049



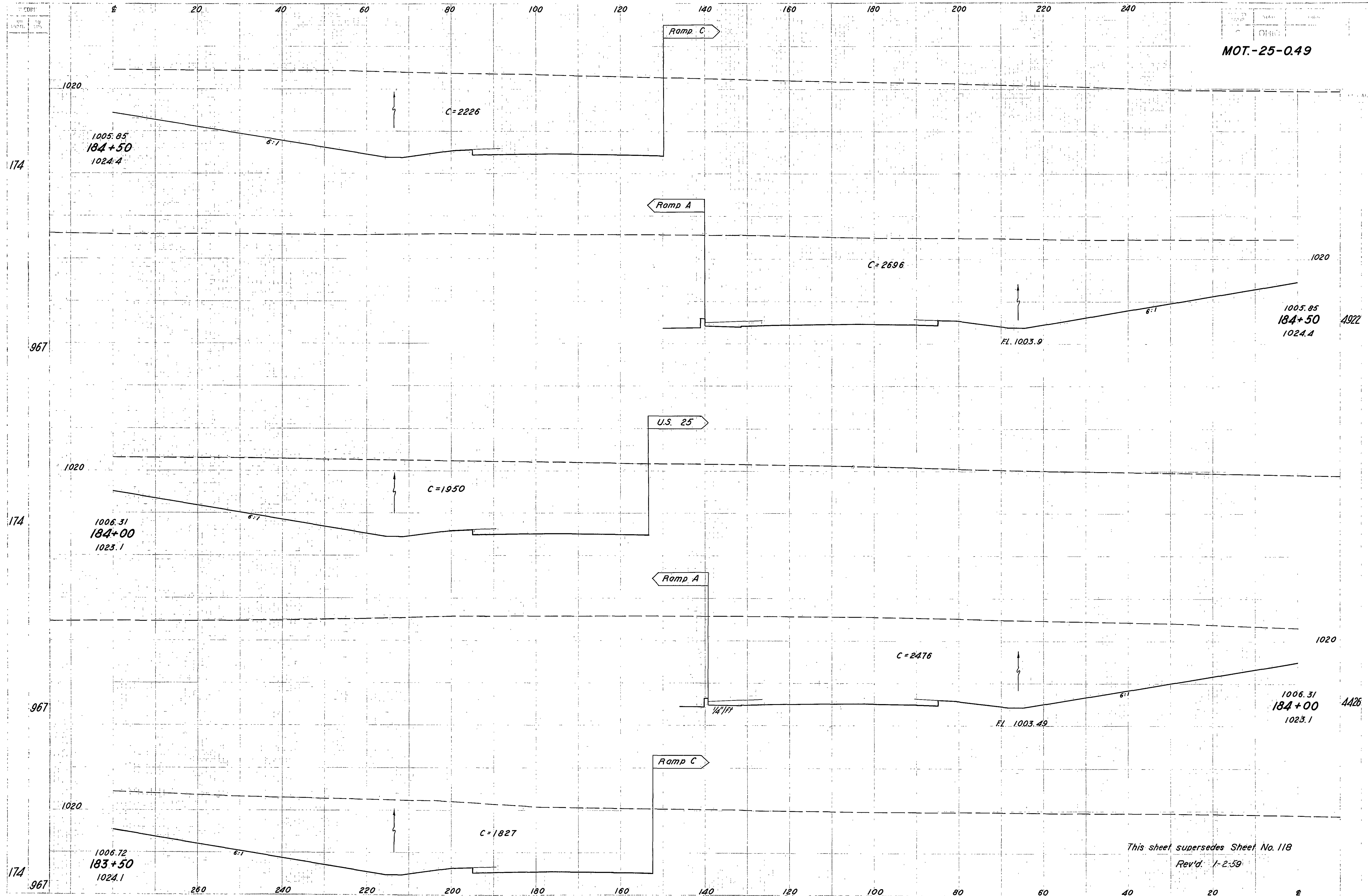
8055

7932

7199

This sheet supersedes Sheet No. 117

Rev'd. 1-2-59

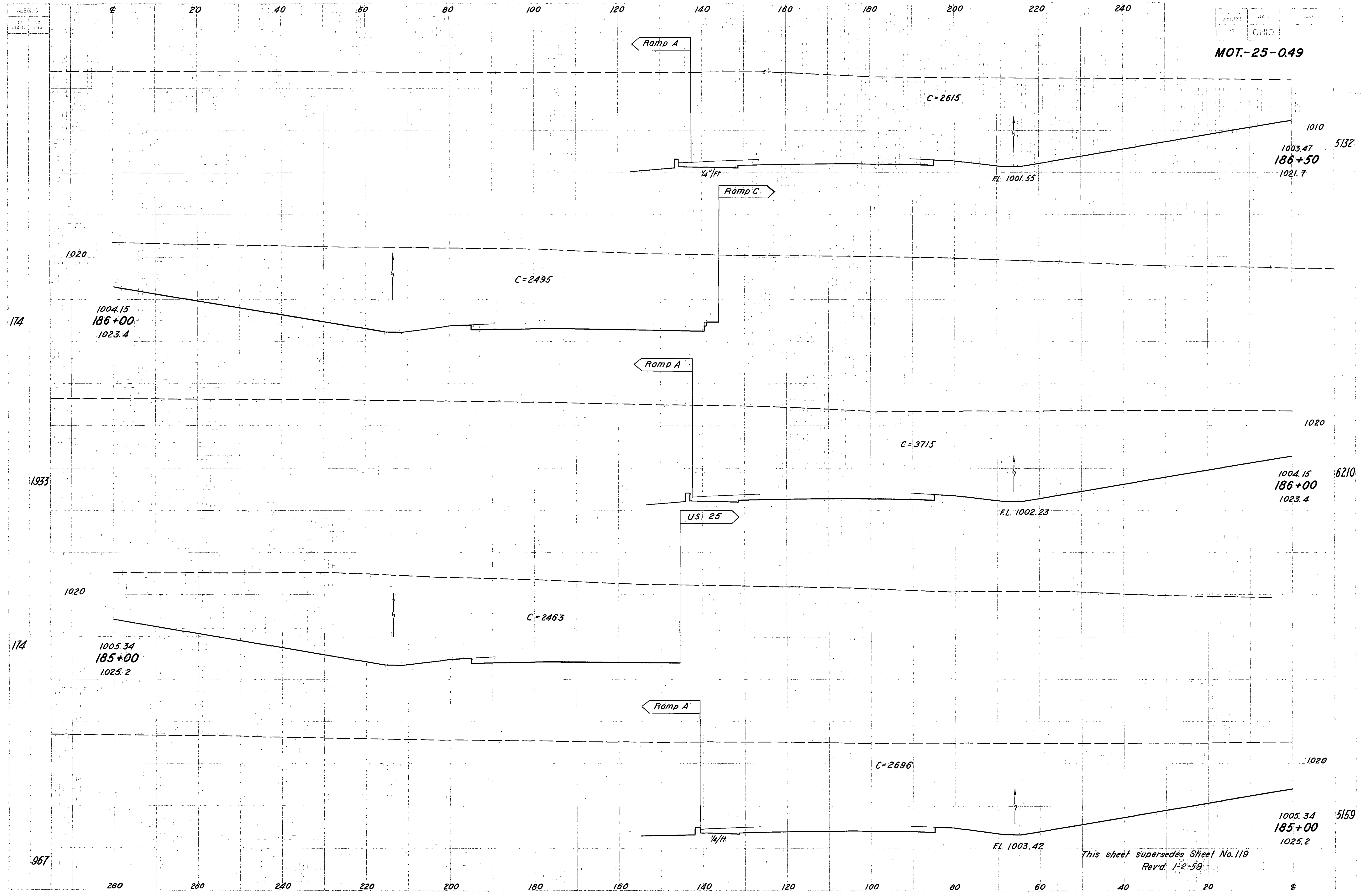


This sheet supersedes Sheet No. 118
Rev'd. 1-2-59

Sta 183+50 to Sta 184+50

8656

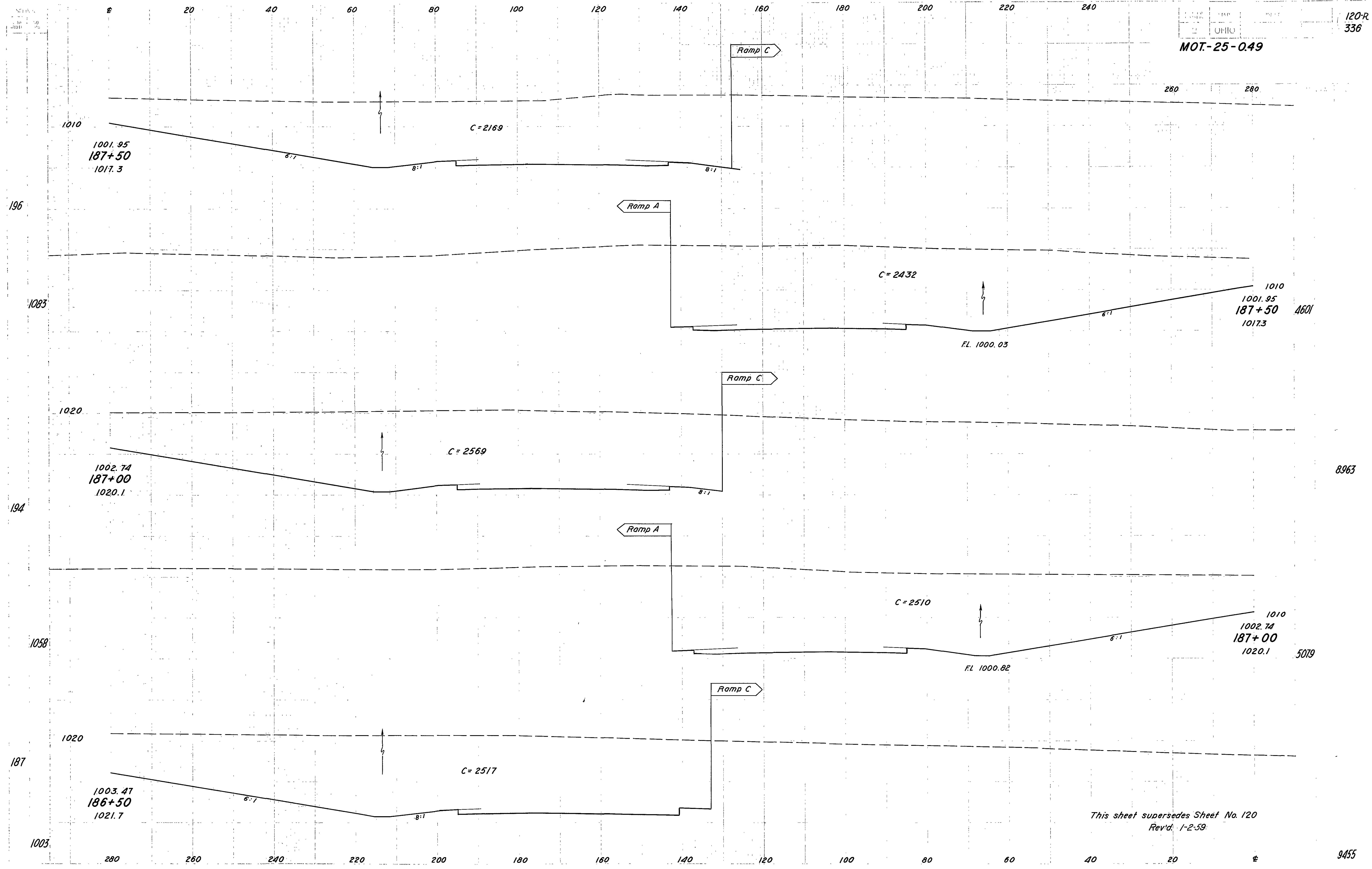
8051



MOT.-25-049

This sheet supersedes Sheet No. 119
Rev'd. 1-2-59

Sta 185+00 to Sta 186+50



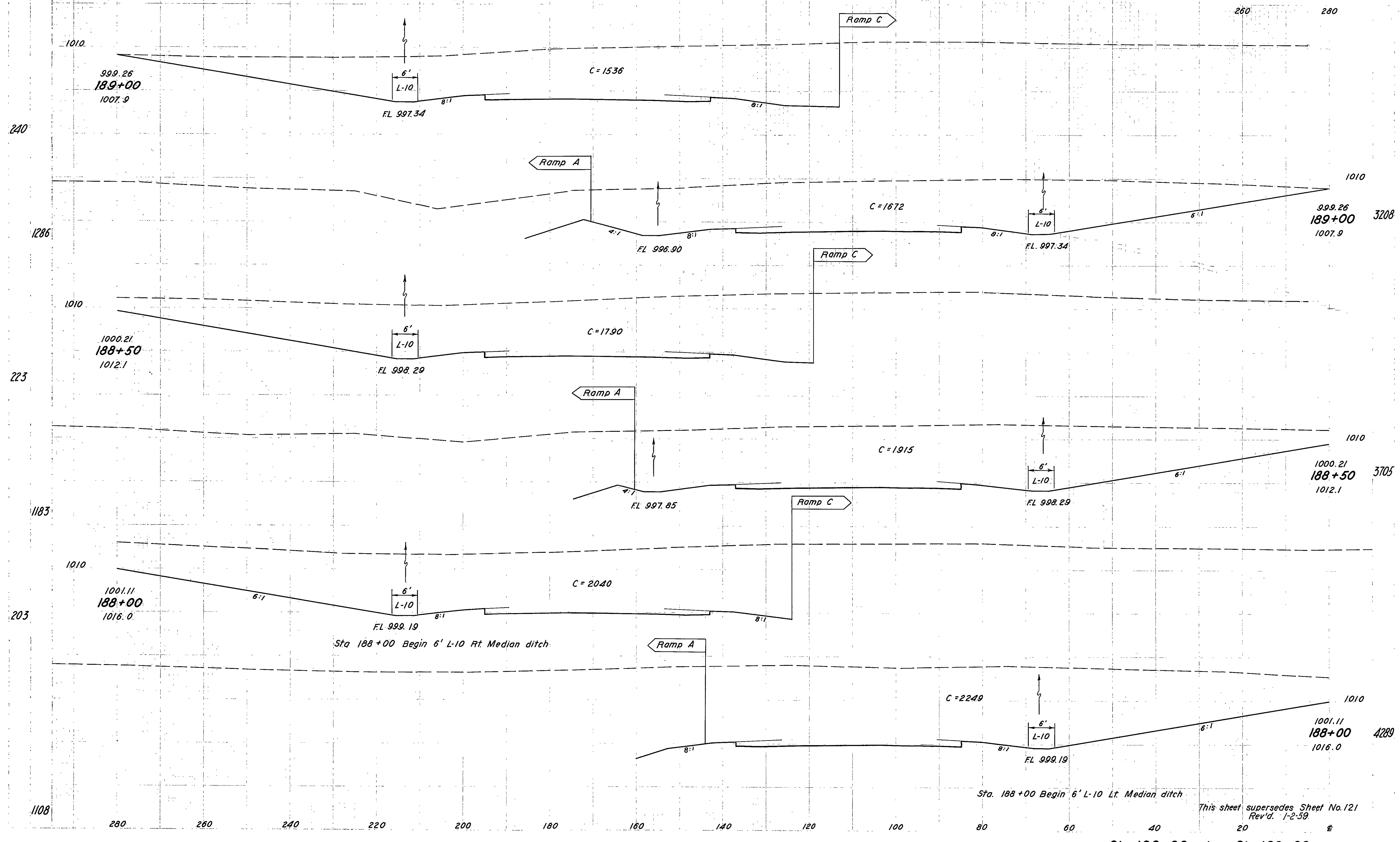
MOT-25-049

8963

This sheet supersedes Sheet No. 120
Rev'd. 1-2-59

9455

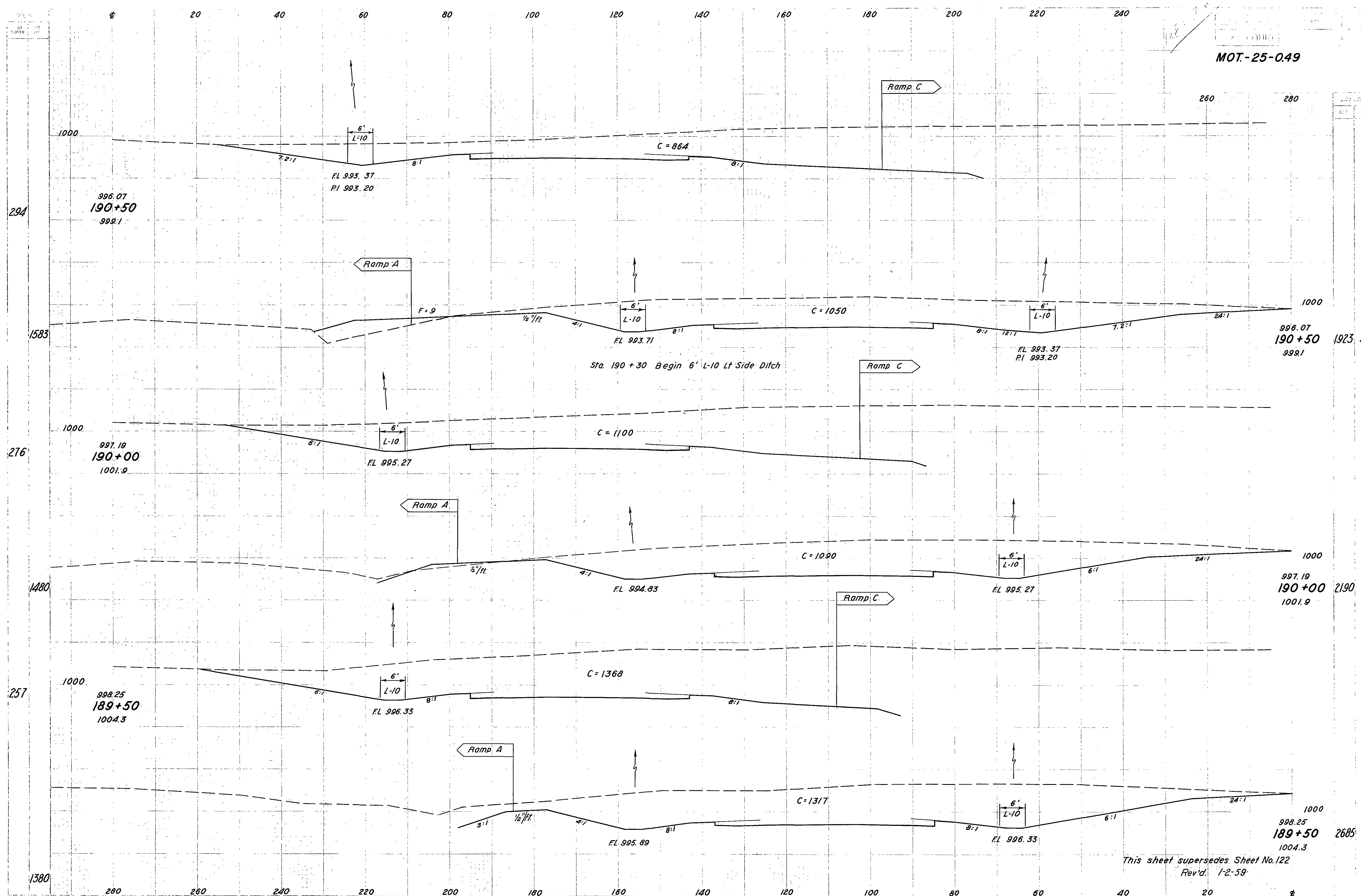
MOT.-25-0.49



This sheet supersedes Sheet No. 121
Rev'd. 1-2-59.

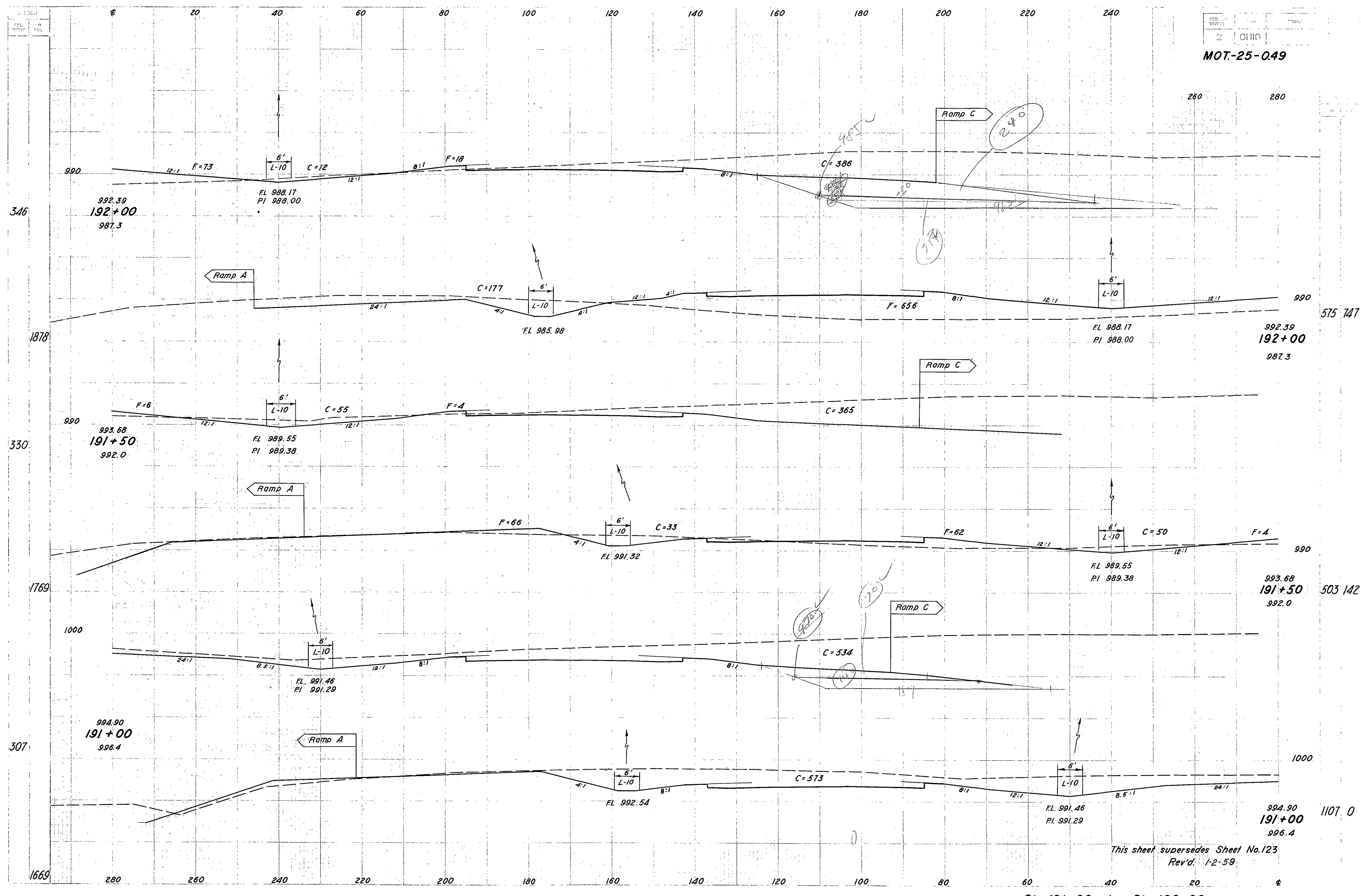
Sta 188+00 to Sta 189+00

MOT-25-049



This sheet supersedes Sheet No. 122
Rev'd. 1-2-59

Sta 189+50 to Sta 190+50



1998 823

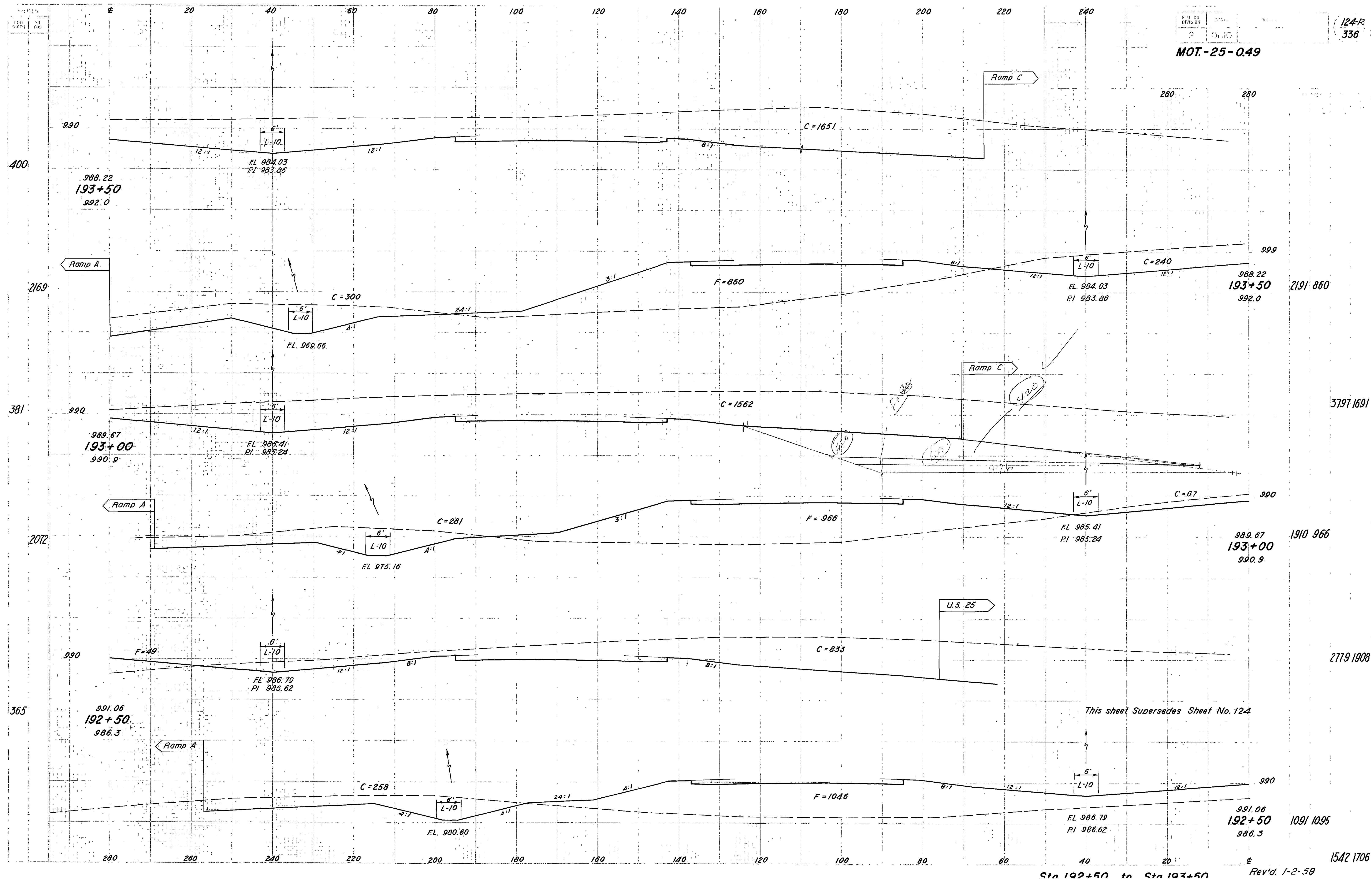
503 142

1492 131

1107 0

2806 8

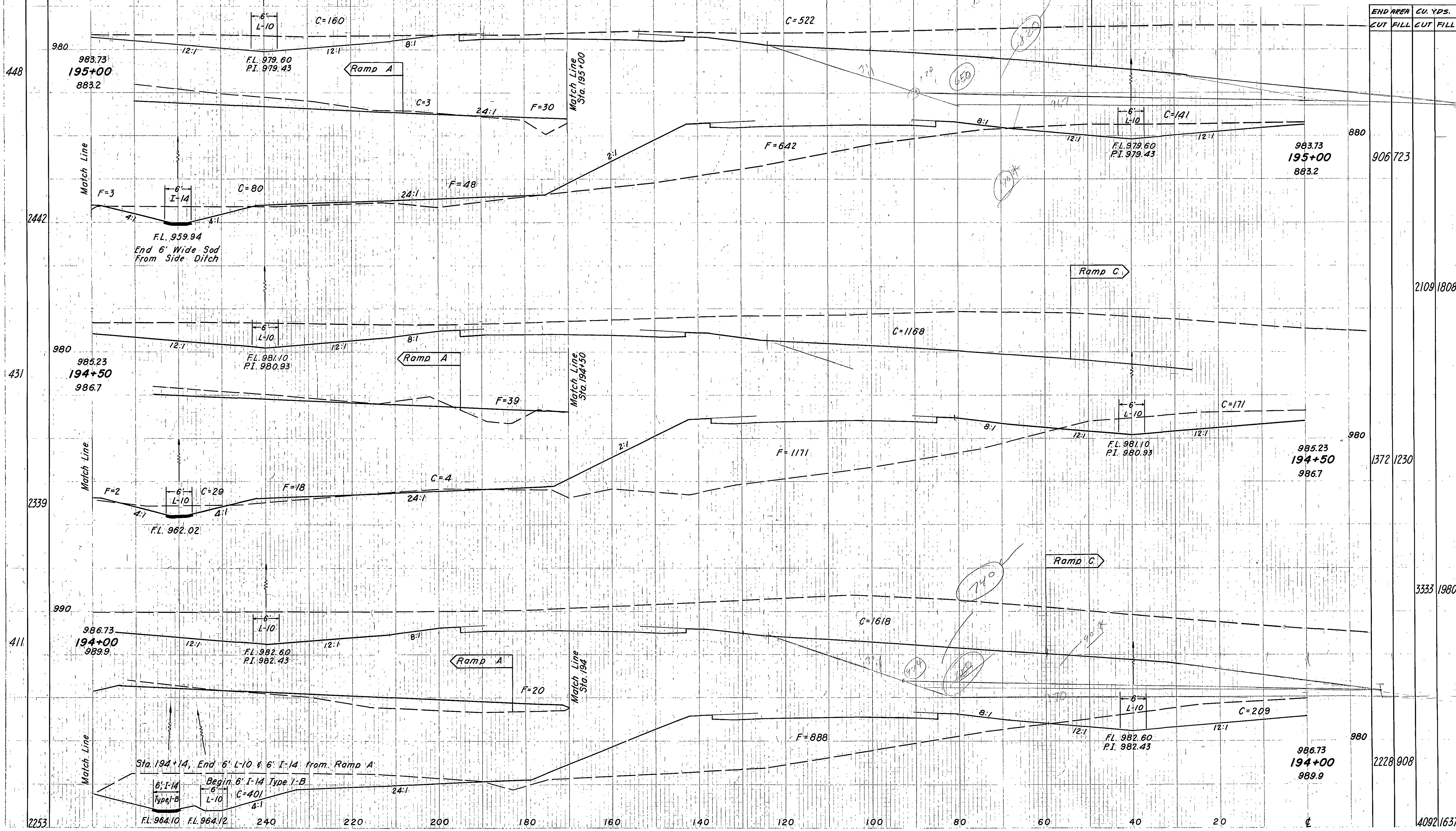
MOT.-25-0.49



SEEDING
END SQ.
WIDTH YDS.

125
336

MONTGOMERY COUNTY
MOT-25-049

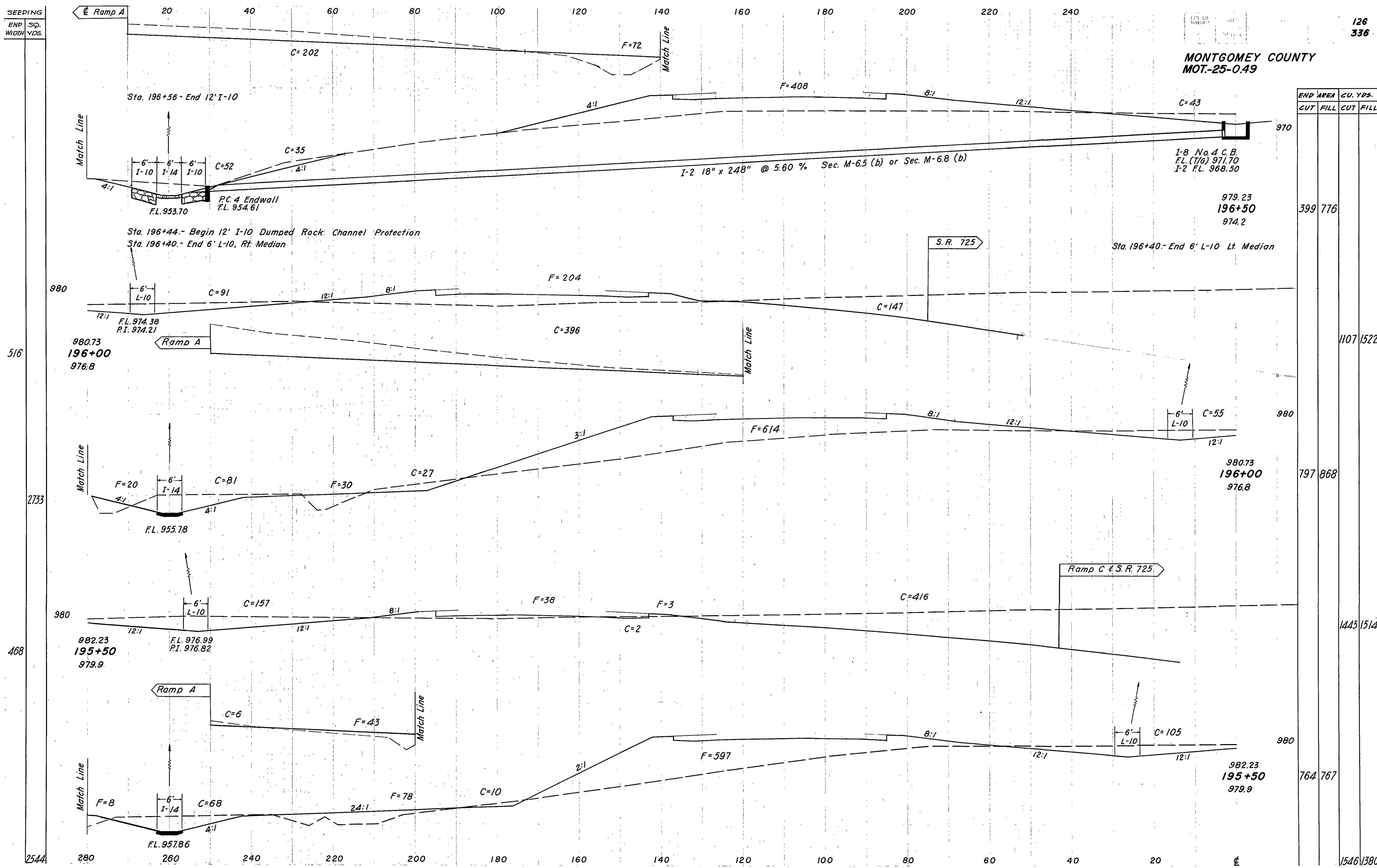


Sta. 194+00 to Sta. 195+00

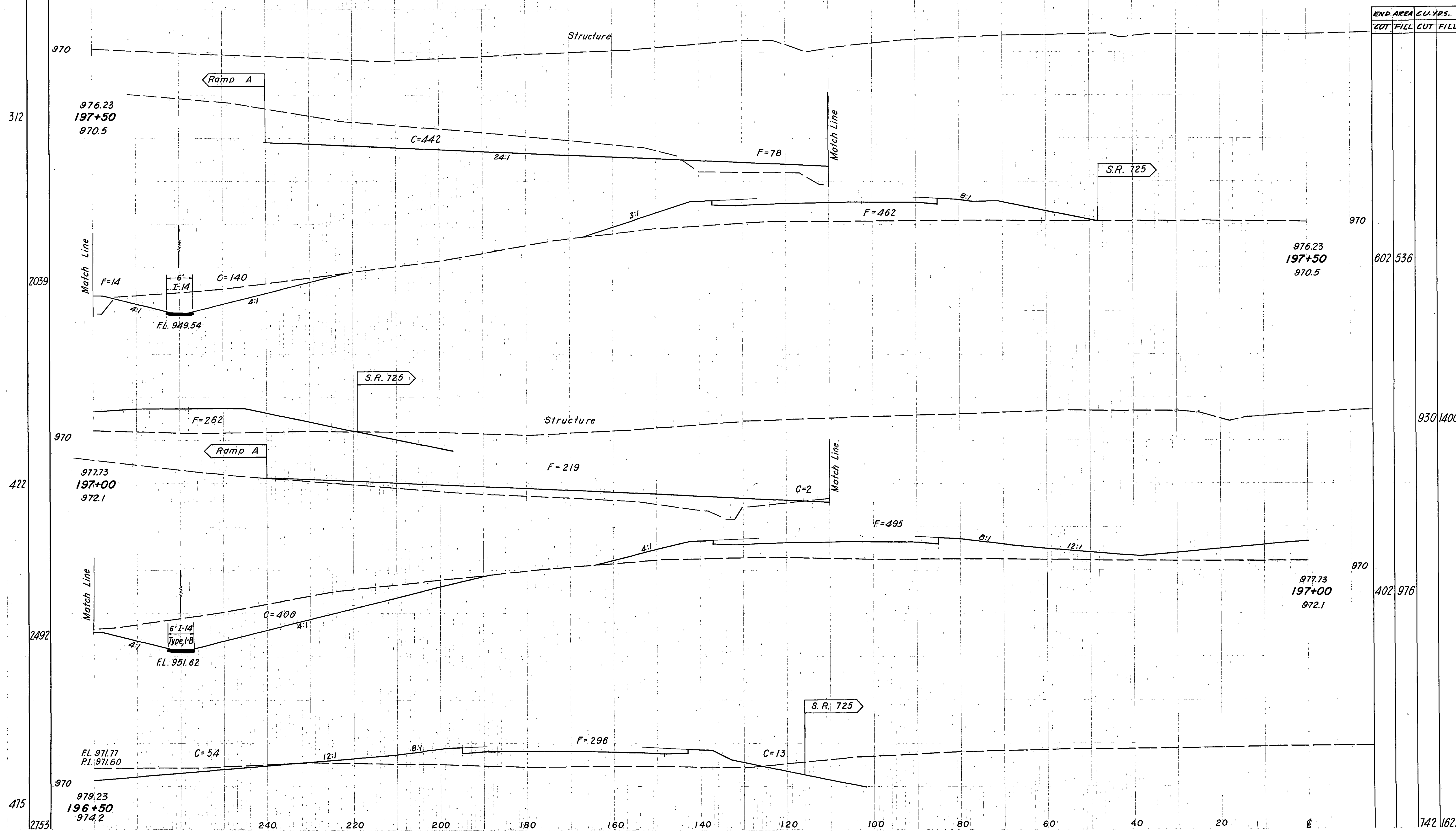
SEEDING
END SP.
WIDTH YDS.

126
336

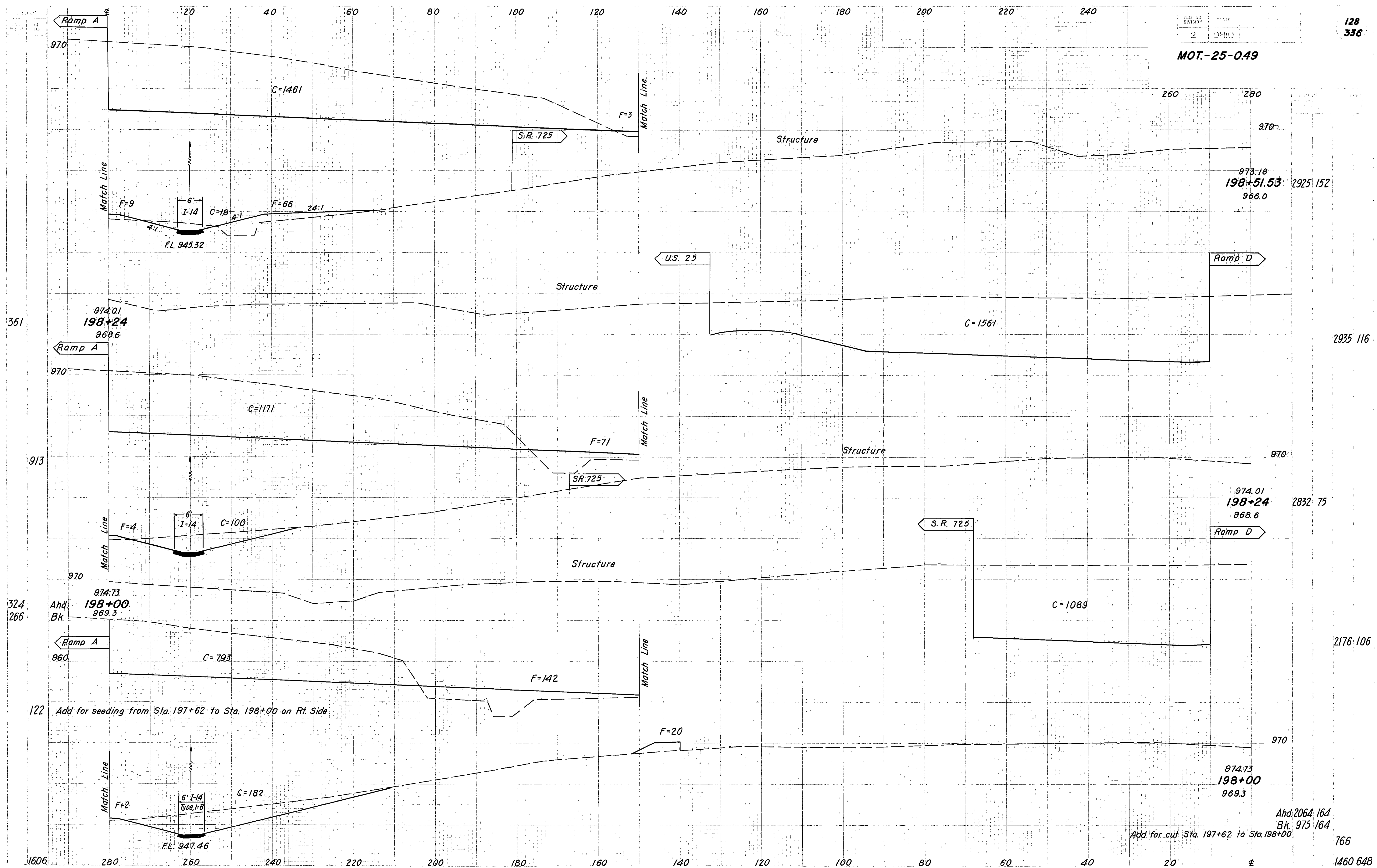
MONTGOMERY COUNTY
MOT-25-0.49



SEEDING
END SQ.
WIDTH YDS.



MOT-25-049



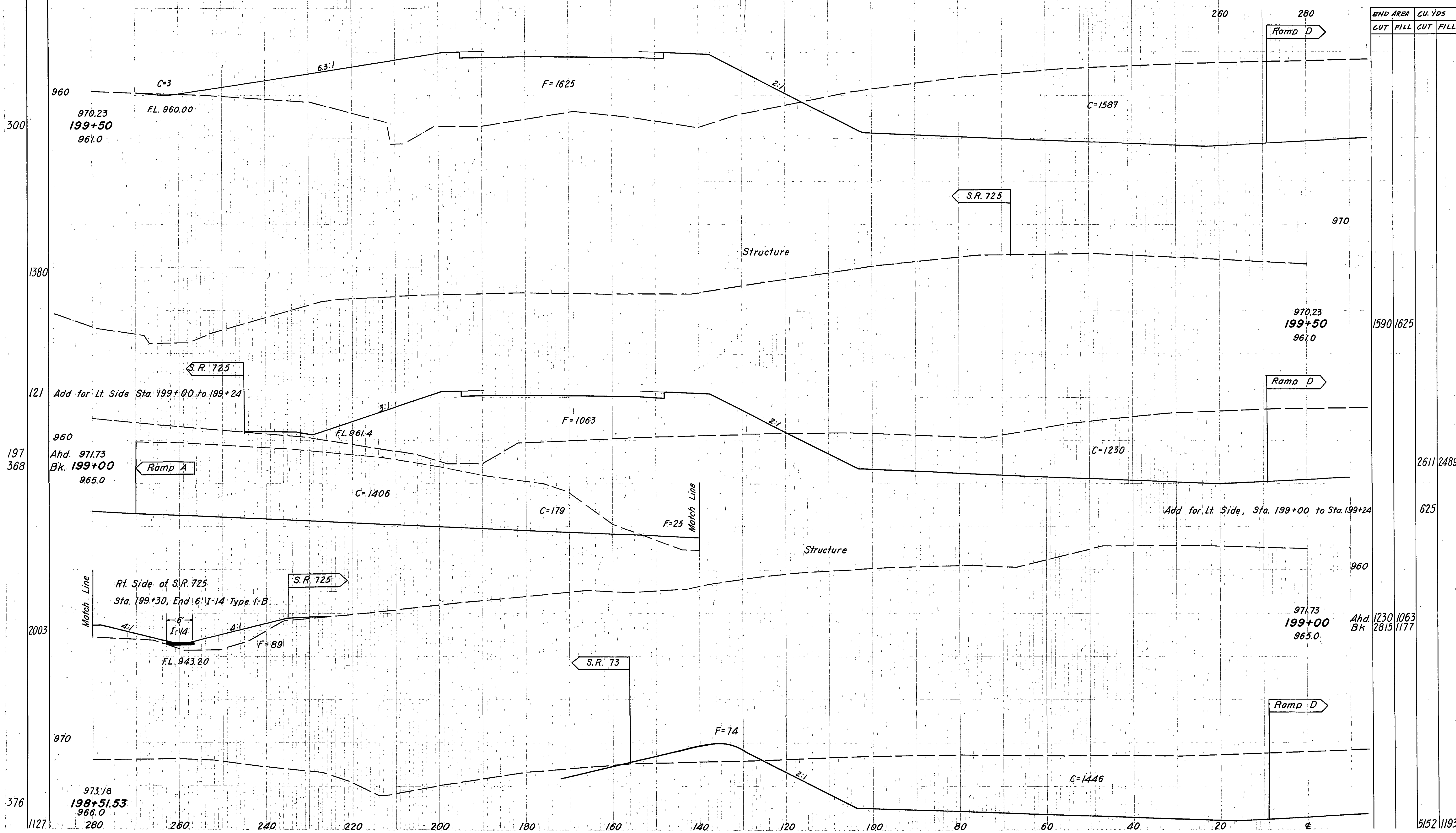
Add for cut Sta. 197+62 to Sta. 198+00

Sta. 198+00 to Sta. 198+51.53

SEEDING
END SP.
WIDTH YDS.

MONTGOMERY COUNTY
MOT-25-0.49

129
336



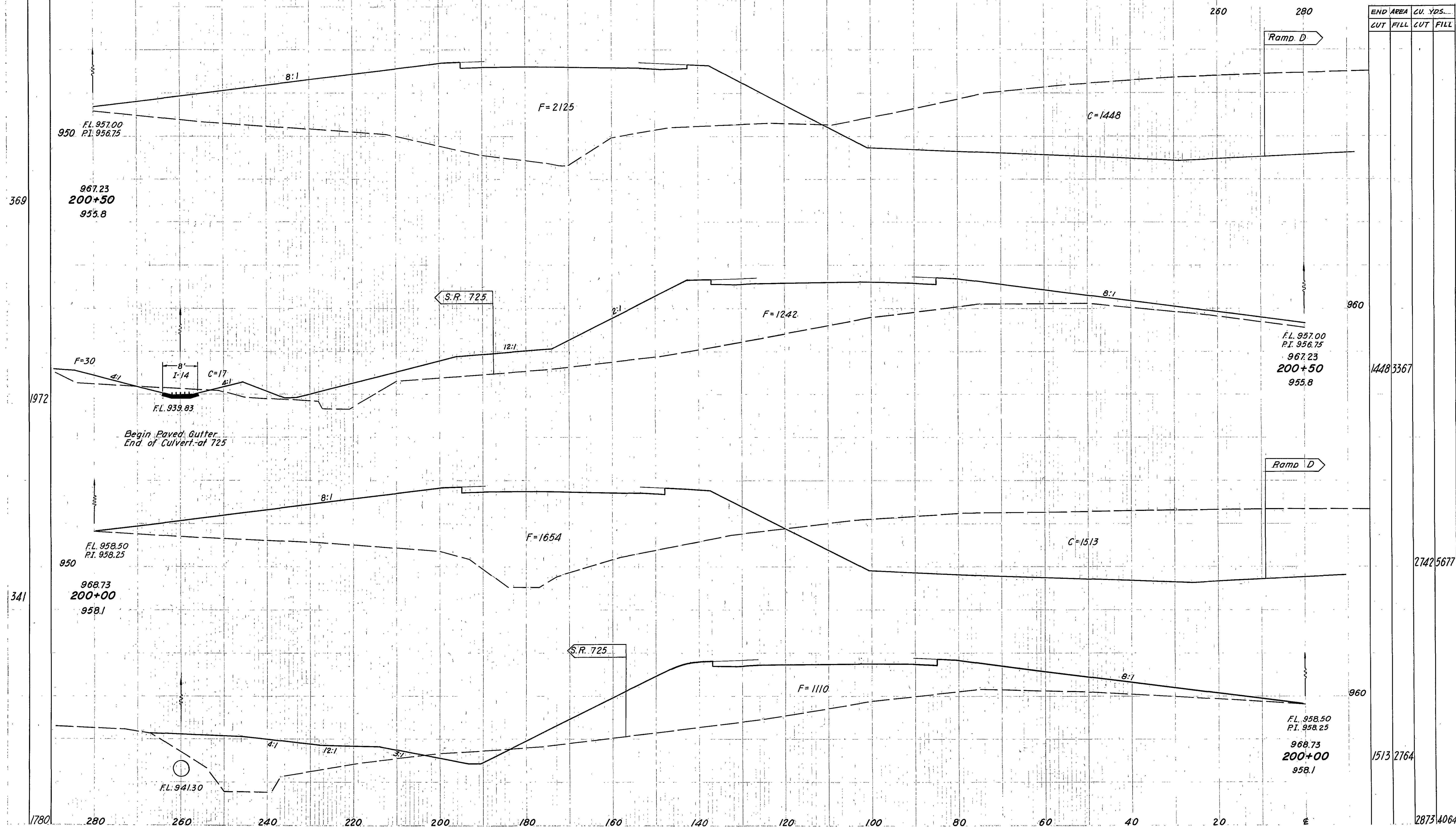
END AREA		CU. YDS	
CUT	FILL	CUT	FILL
1590	1625		
2611	2489		
625			
1230	1063		
2815	1177		
5152	1193		

Sta 198+51.53 to Sta 199+50

SEEDING
END SP.
WIDTH YDS.

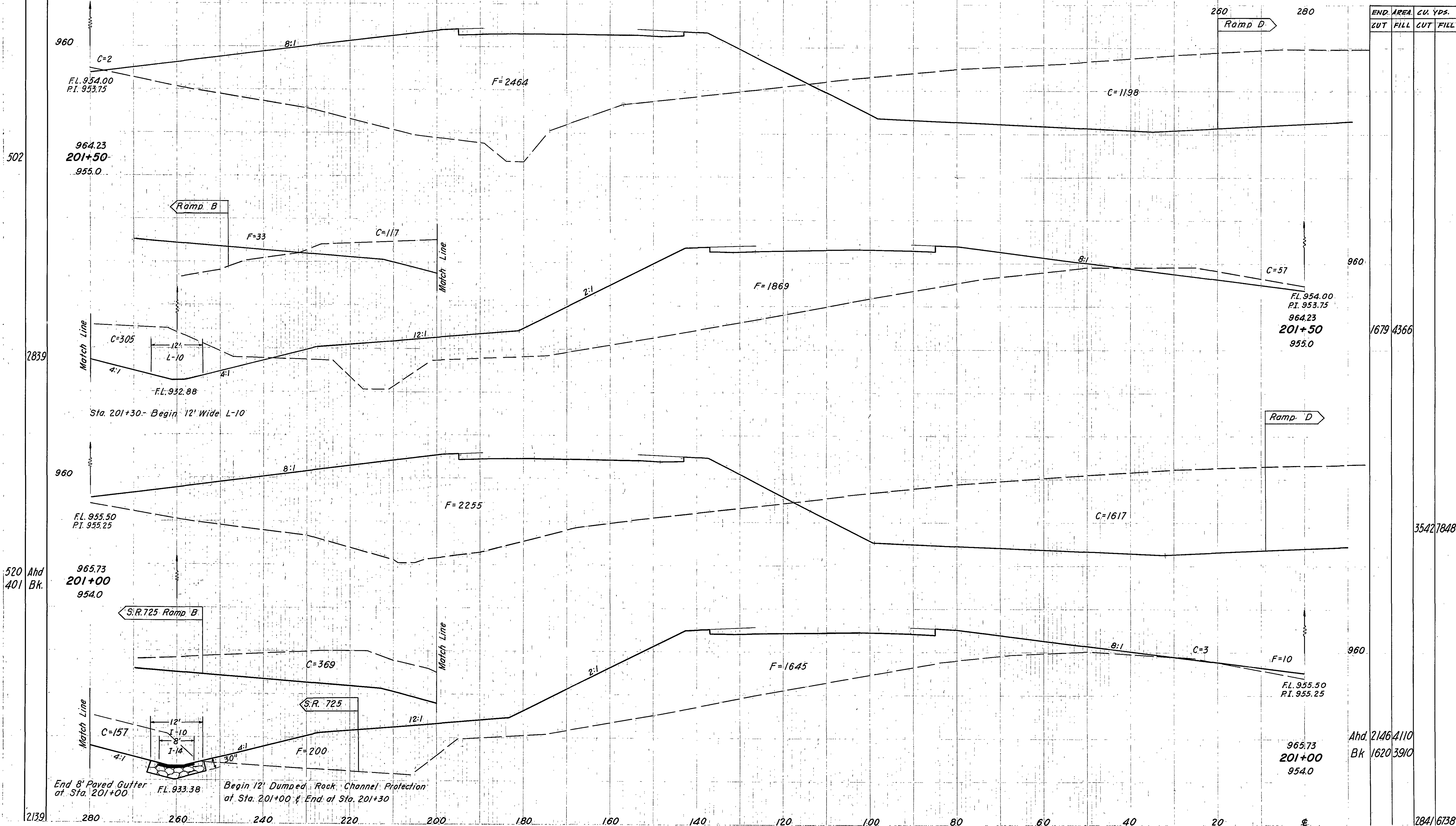
MONTGOMERY COUNTY
MOT-25-0.49

130
336



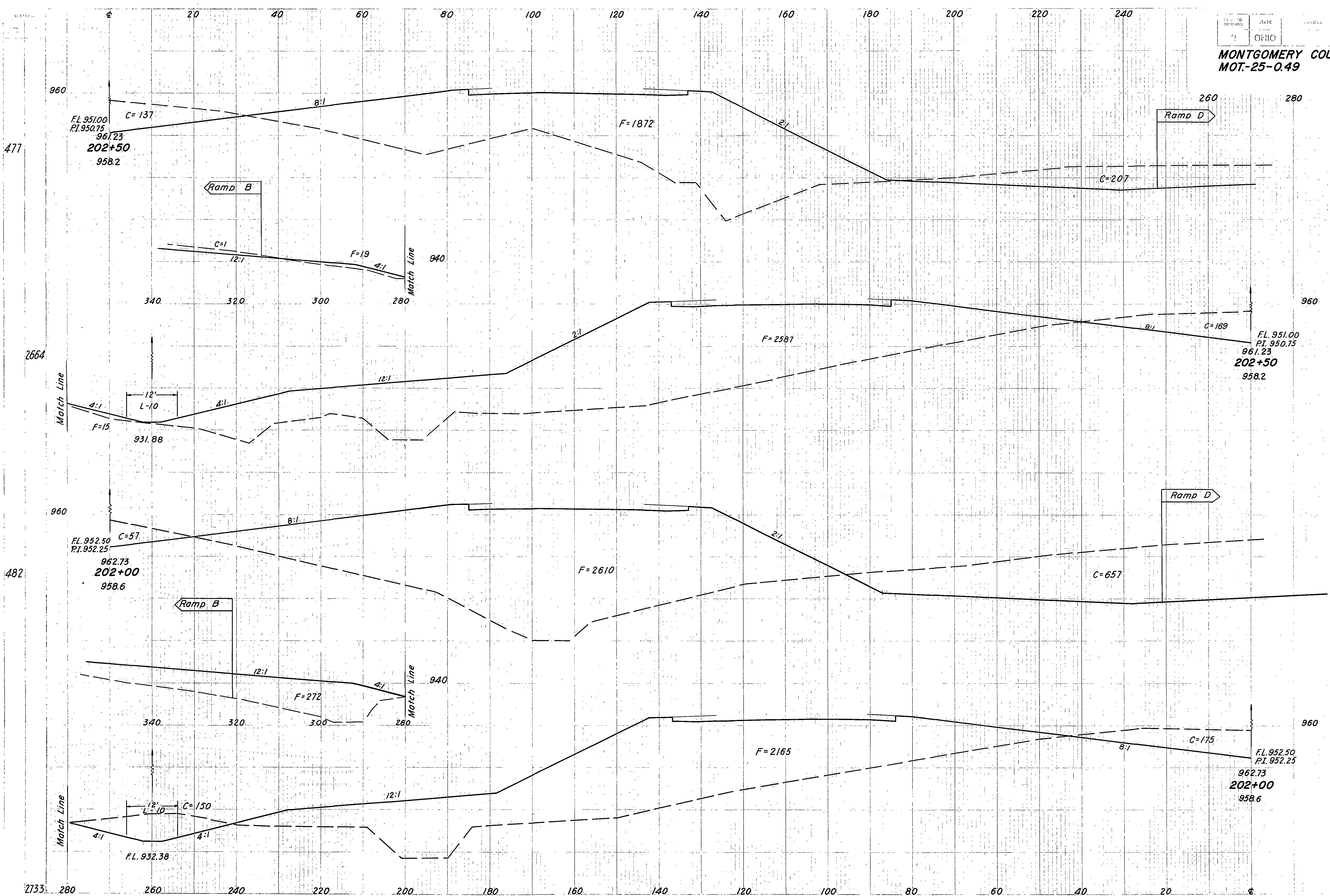
SEEDING
END SP.
WIDTH YDS.

MONTGOMERY COUNTY
MOT.-25-0.49



MONTGOMERY COUNTY

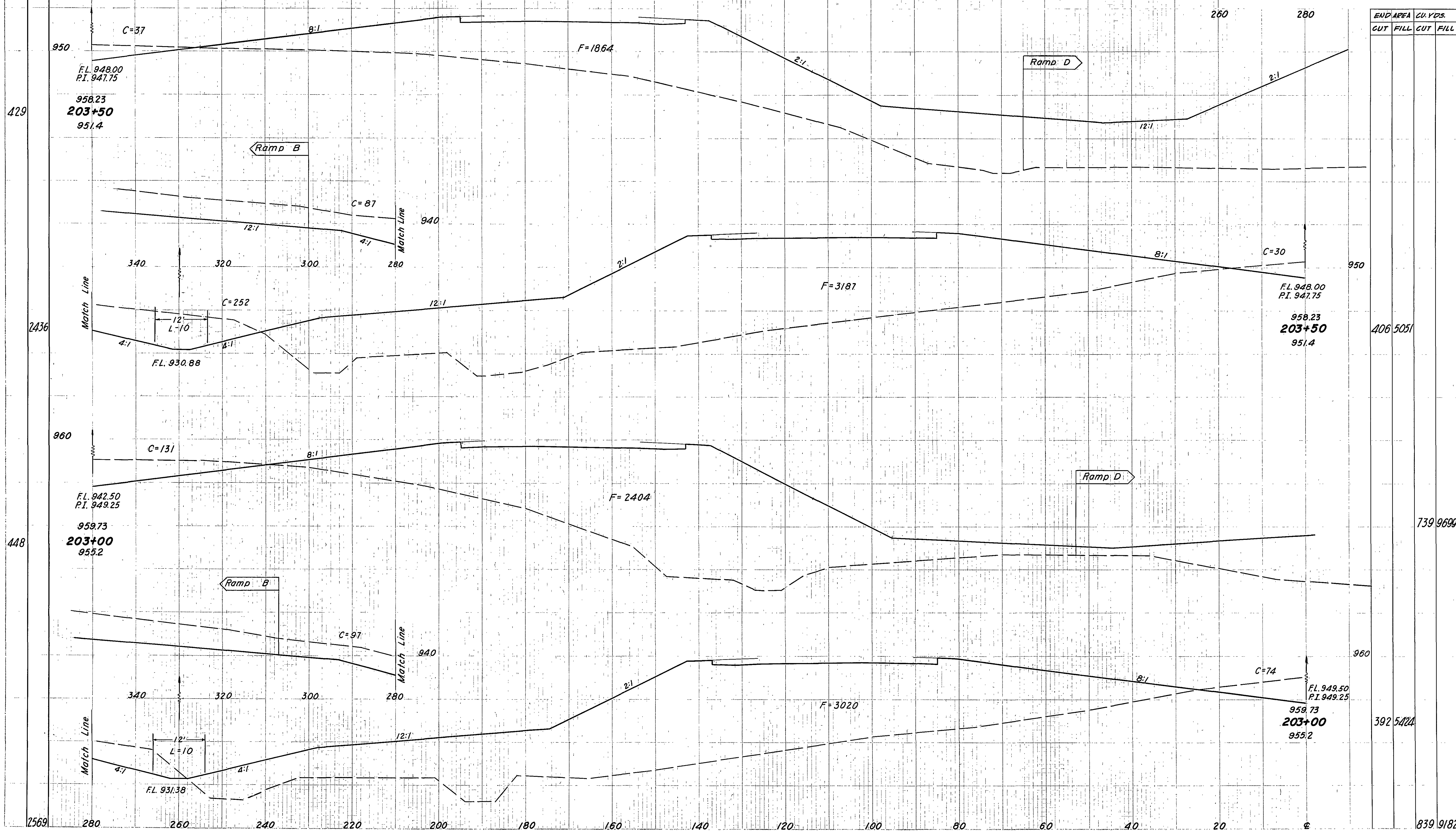
MOT-25-0.49



END AREA	ADJ. AREA
477	260
2664	514 4493
482	1438 8833
2733	1039 5047

SEEDING
END SP.
WIDTH YDS.

MONTGOMERY COUNTY
MOT.-25-0.49



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL

406 5051

739 9699

392 5124

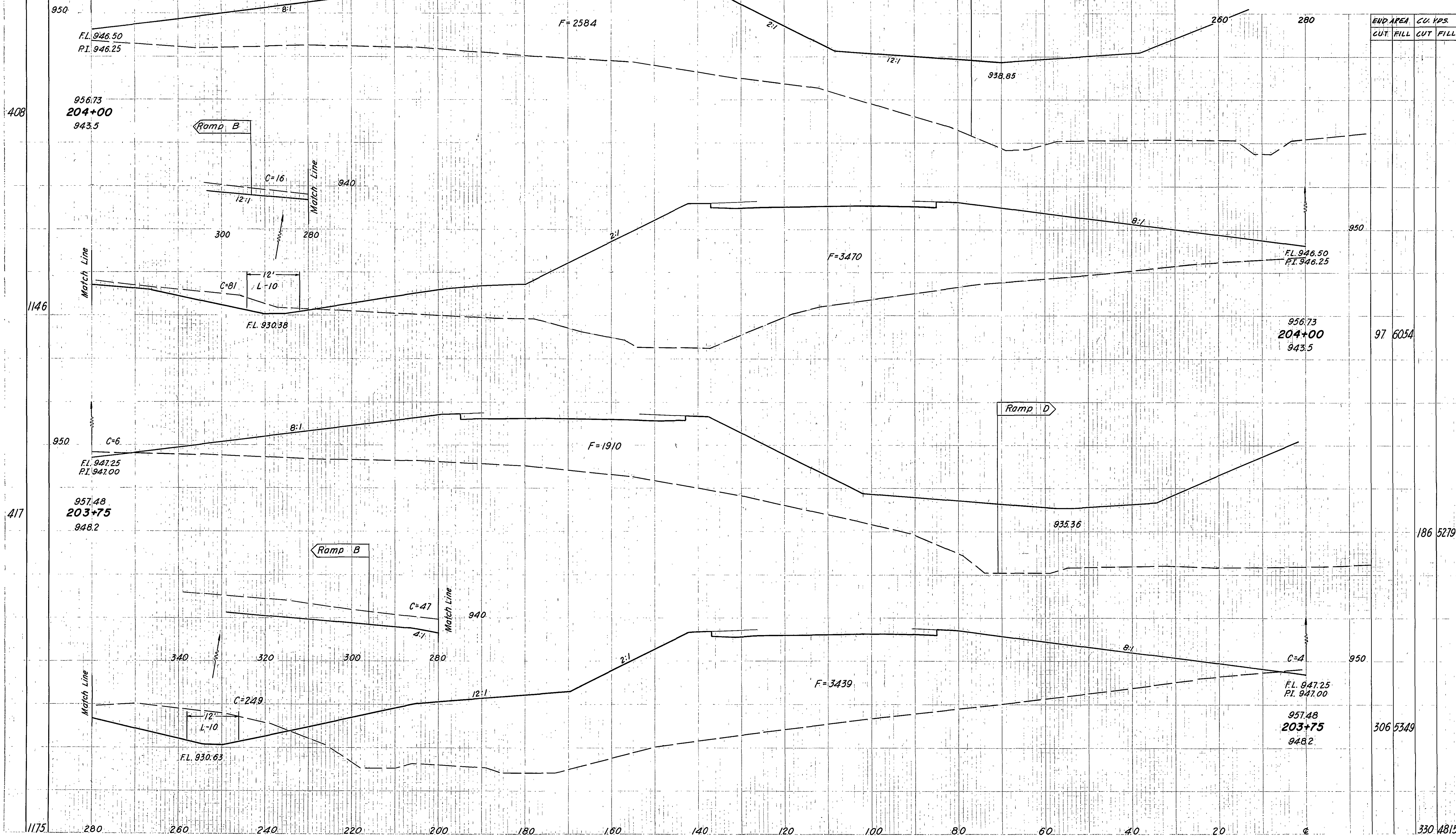
839 9182

SEEDING
END SQ.
WIDTH YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

134
336

MONTGOMERY COUNTY
MOT-25-0.49



END AREA	CUT	FILL	CUT	FILL

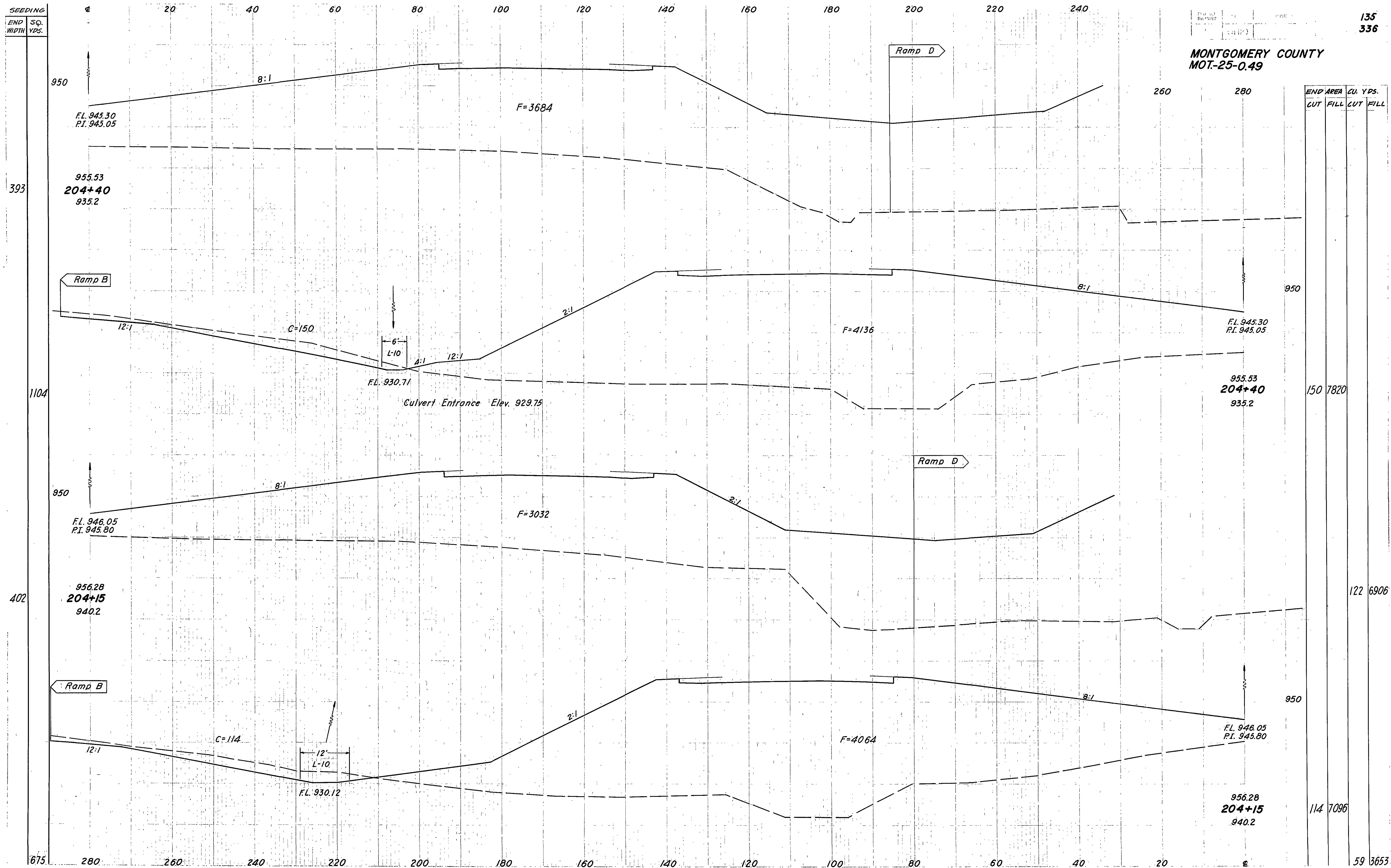
97 6054

186 5279

306 5349

330 4815

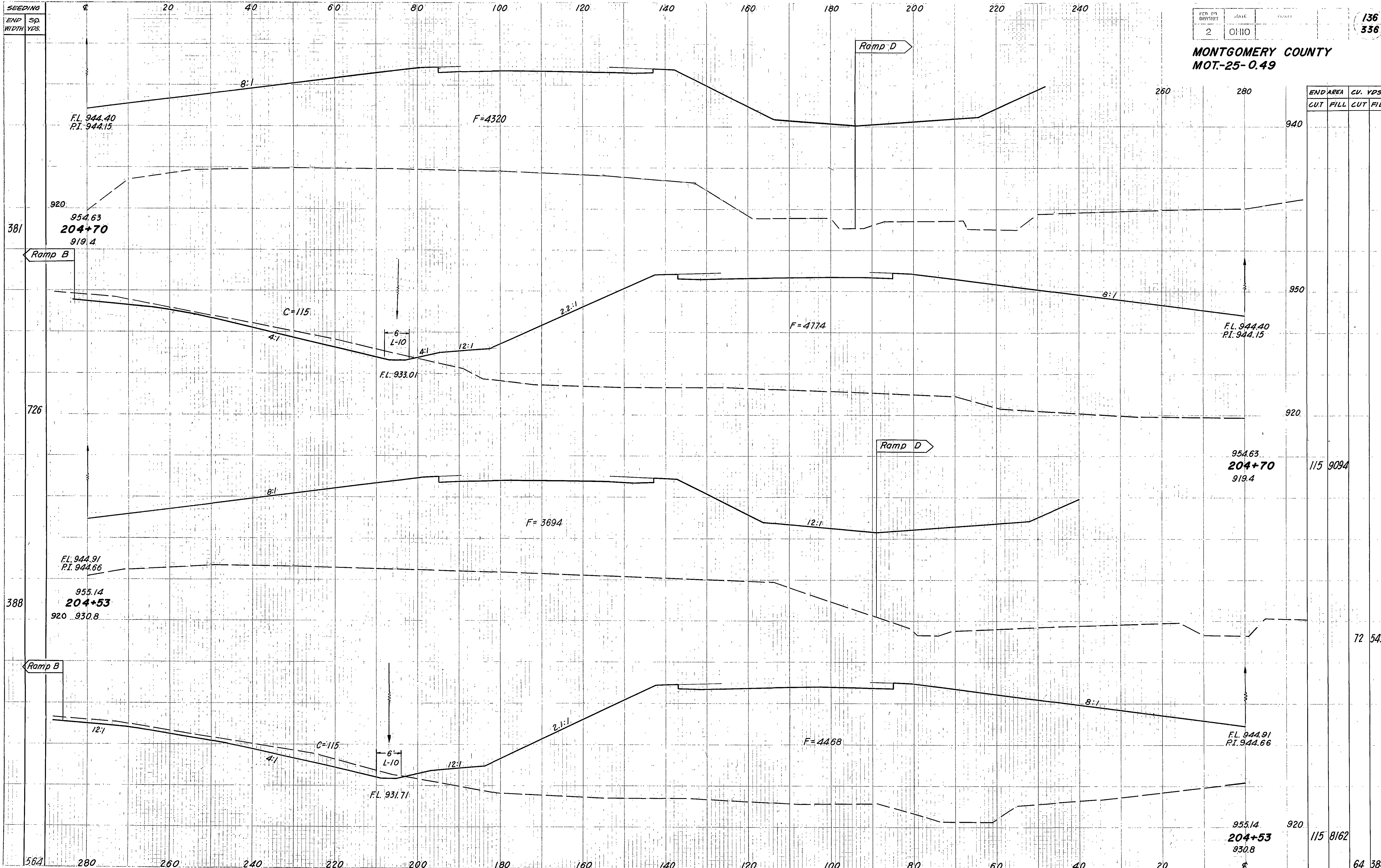
MONTGOMERY COUNTY
MOT-25-0.49



SEEDING
END SP.
WIDTH YRS.

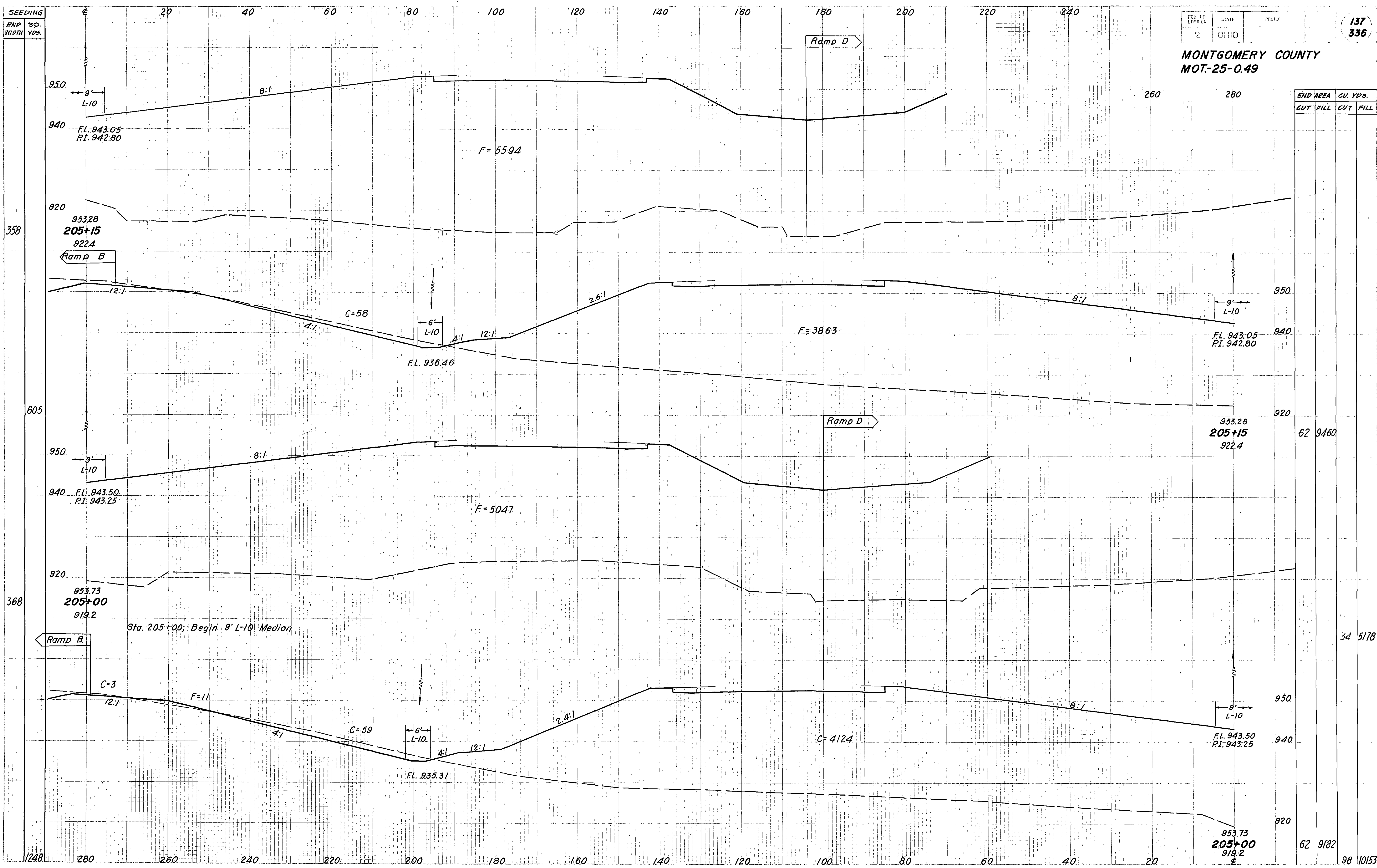
2 OHIO 136
336

MONTGOMERY COUNTY
MOT-25-0.49



SEEDING
END
WIDTH
SP.
YDS.

MONTGOMERY COUNTY
MOT-25-0.49



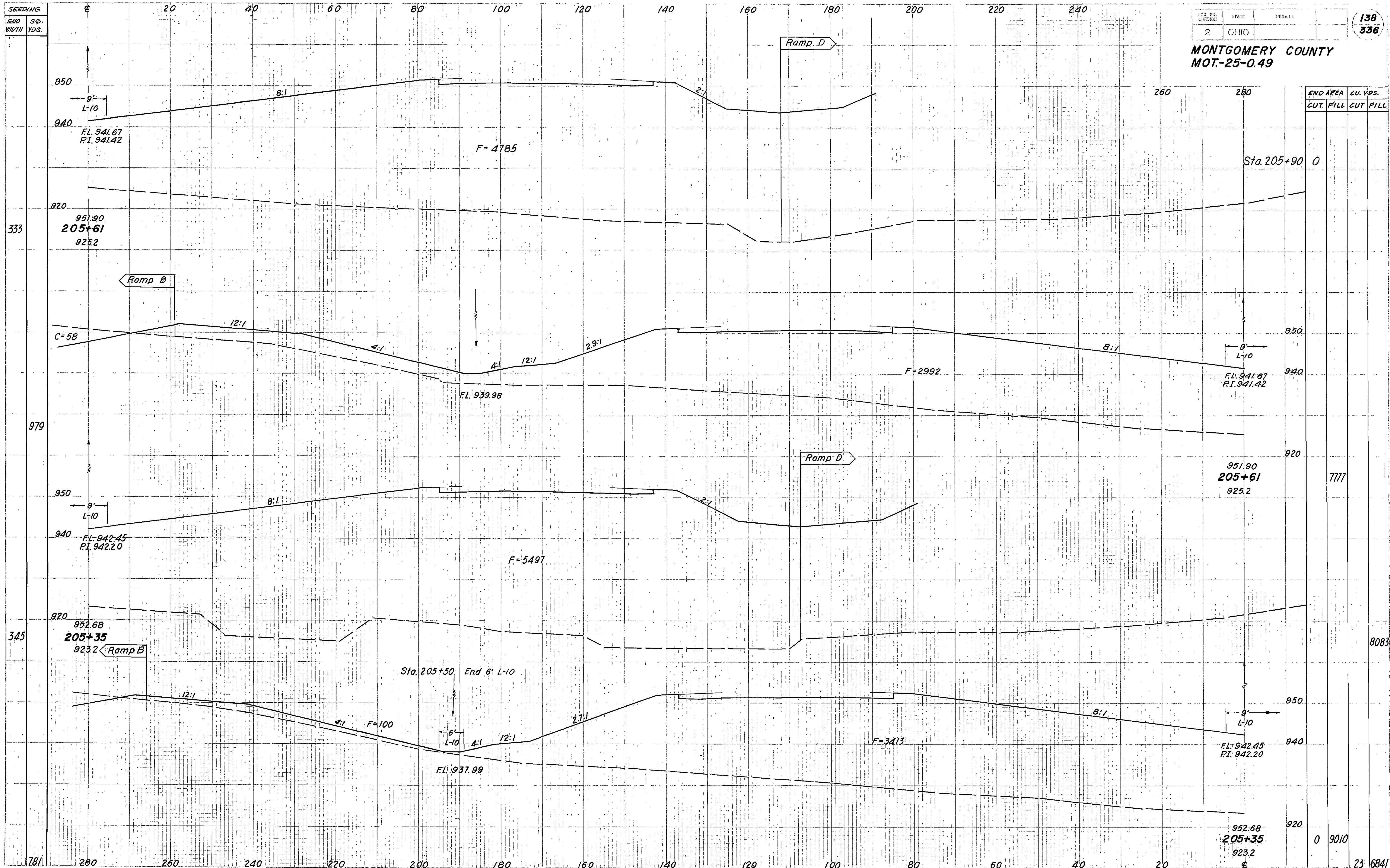
Sta 205+00 to Sta 205+15

SEEDING	
END WIDTH	SQ. YDS.

FED. RD. DIVISION	STATE	PRODUCT
2	OHIO	

138
336

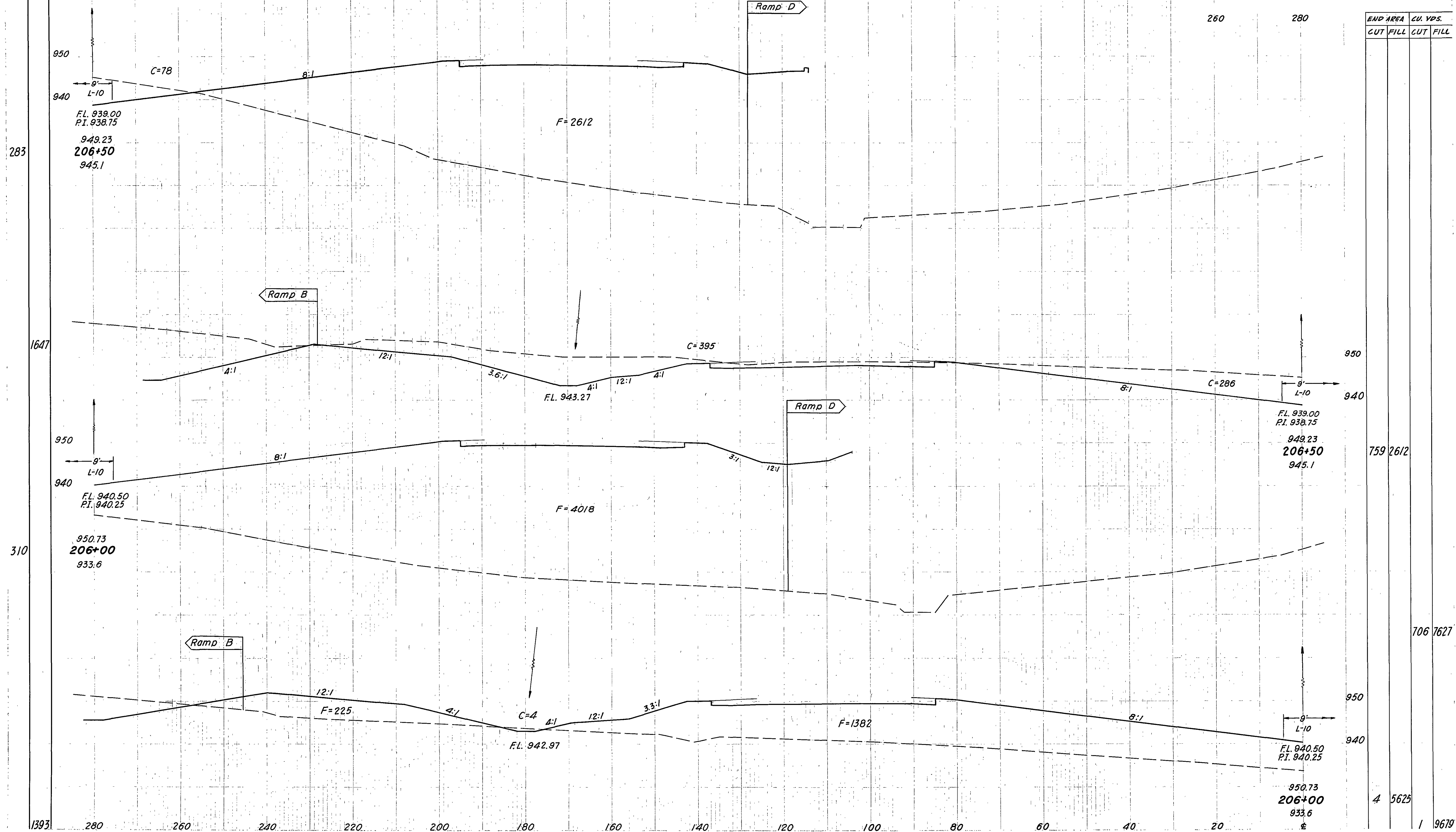
MONTGOMERY COUNTY
MOT.-25-0.49

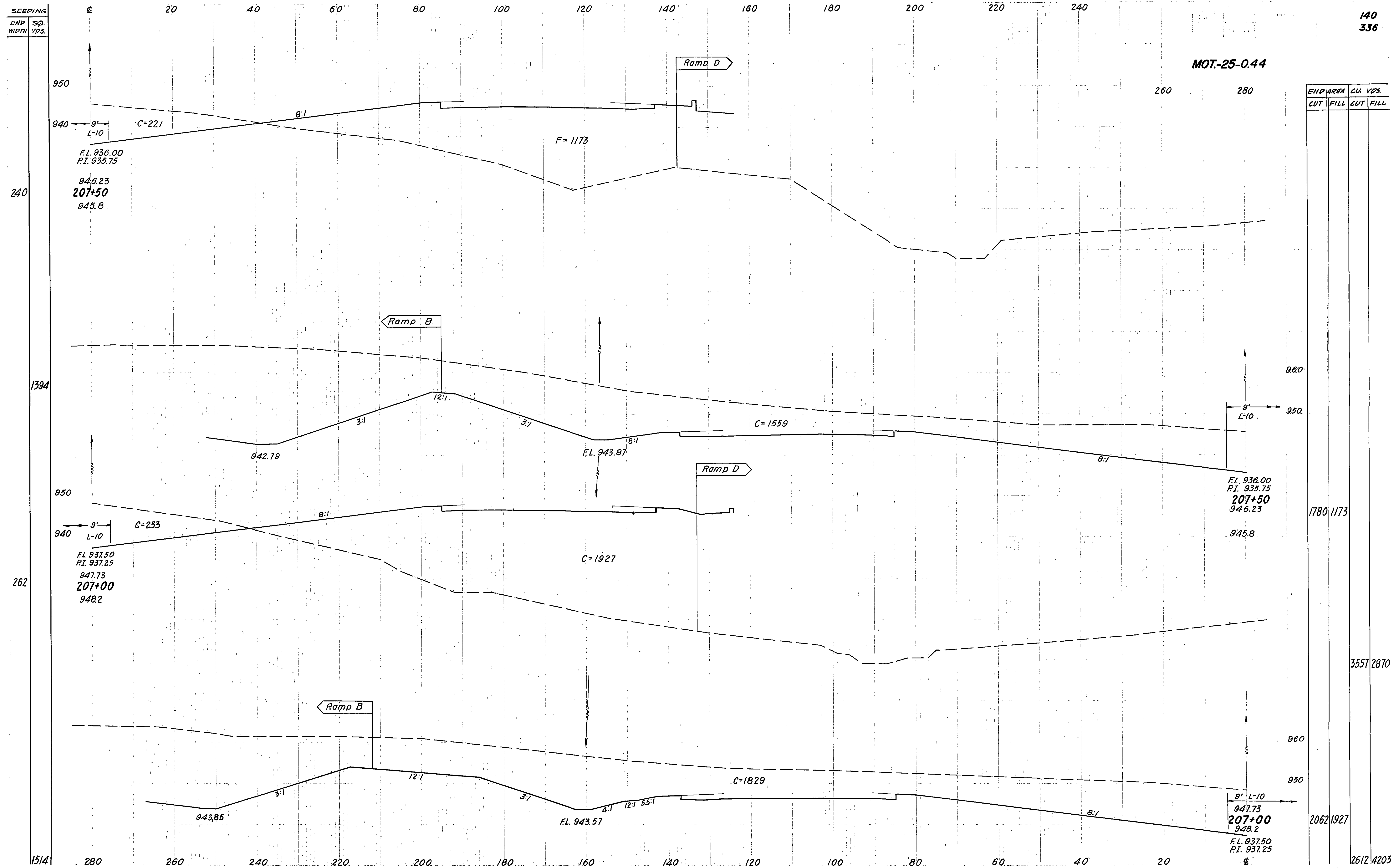


SEEDLING
END SQ.
WIDTH YDS.

139
336

MONTGOMERY COUNTY
MOT.-25-0.49





SEEDING
END SQ.
WIDTH YDS.

FED. RD. DISTRICT: 2 STATE: OHIO PROJECT: 141 336

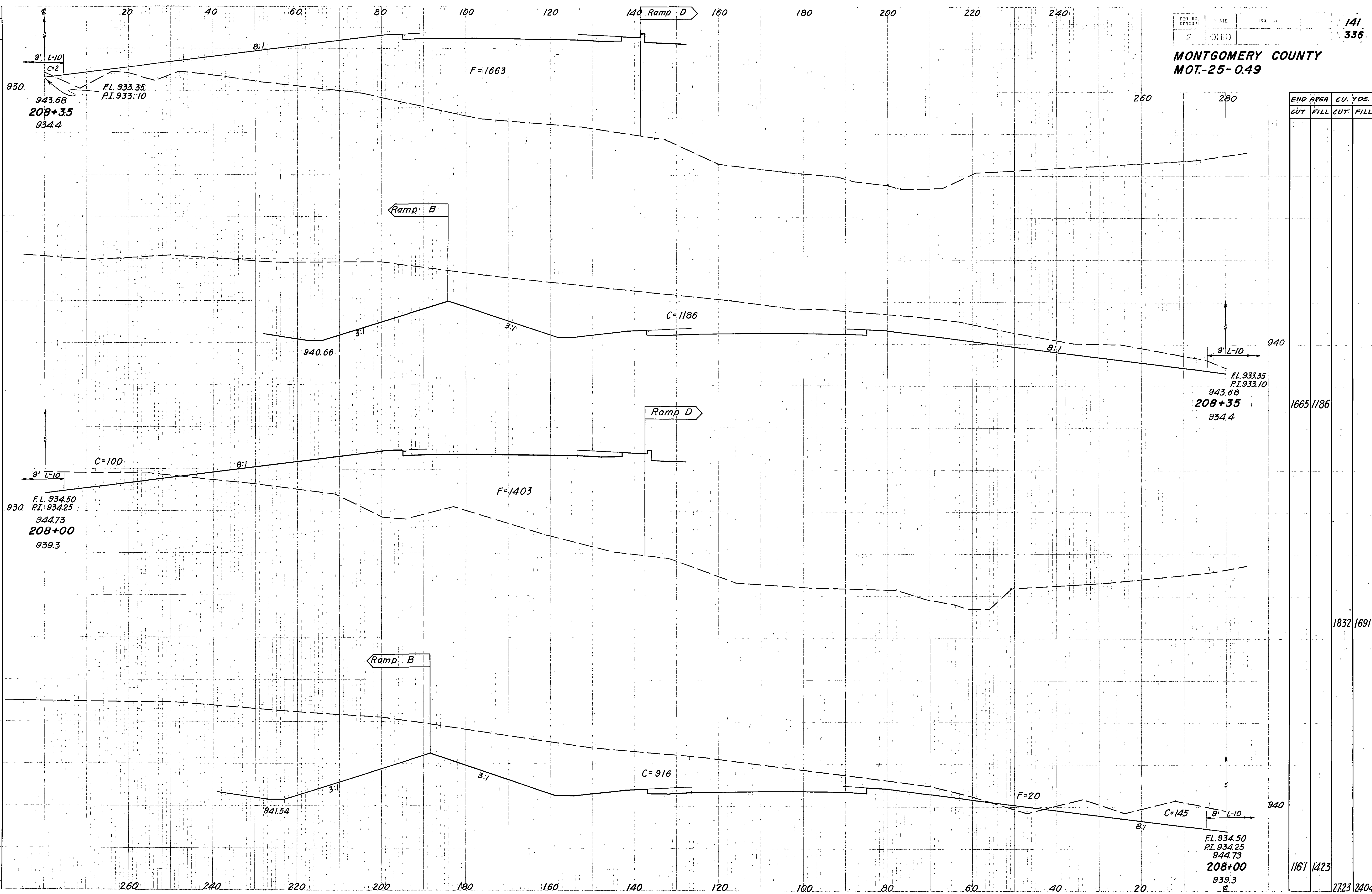
MONTGOMERY COUNTY
MOT-25-049

223

875

227

1297



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL

1665 1186

1832 1691

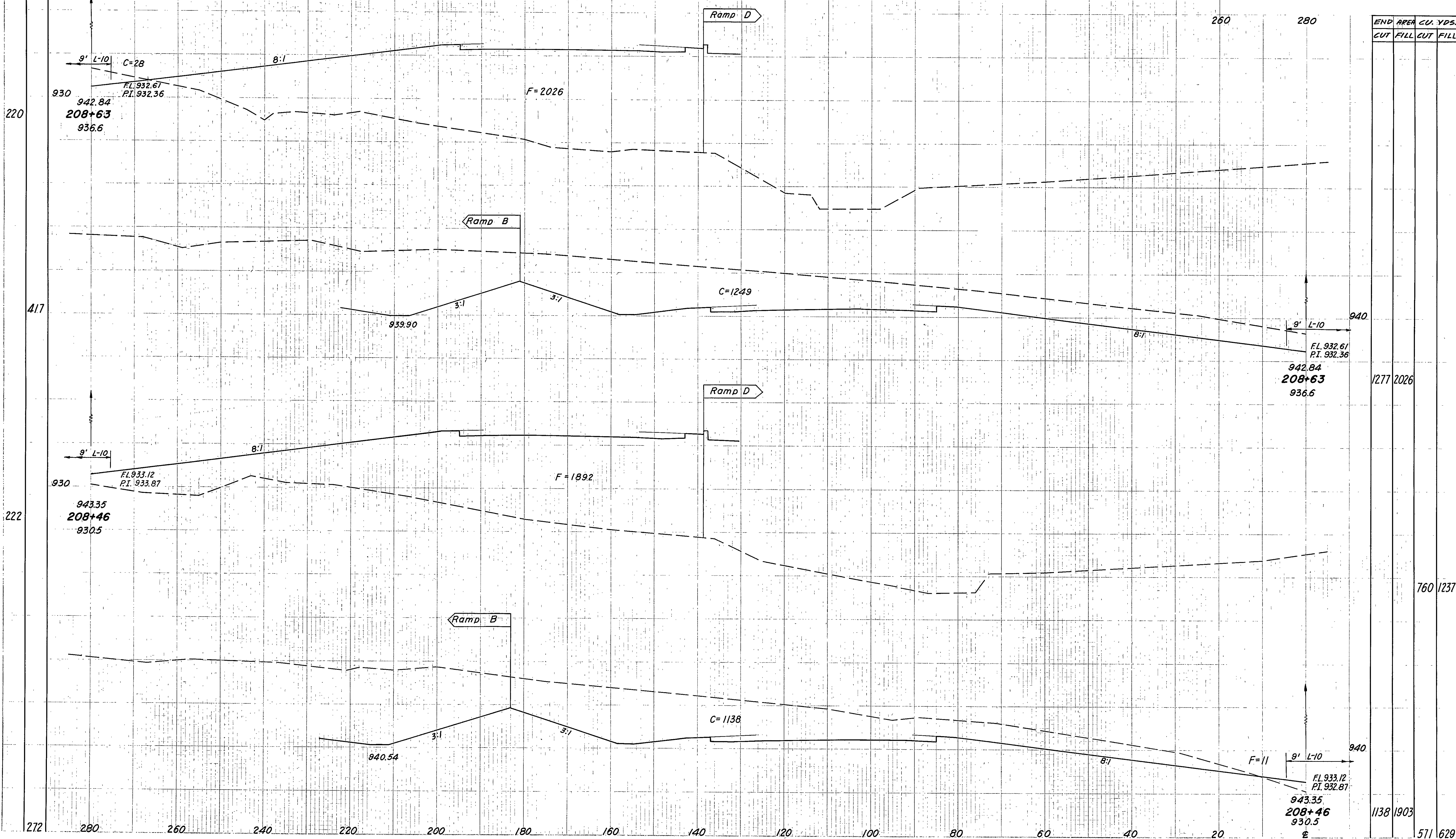
1161 1423

2723 2404

SEEDING
END SQ
WIDTH YDS.

2 0110 142
336

MONTGOMERY COUNTY
MOT-25-049

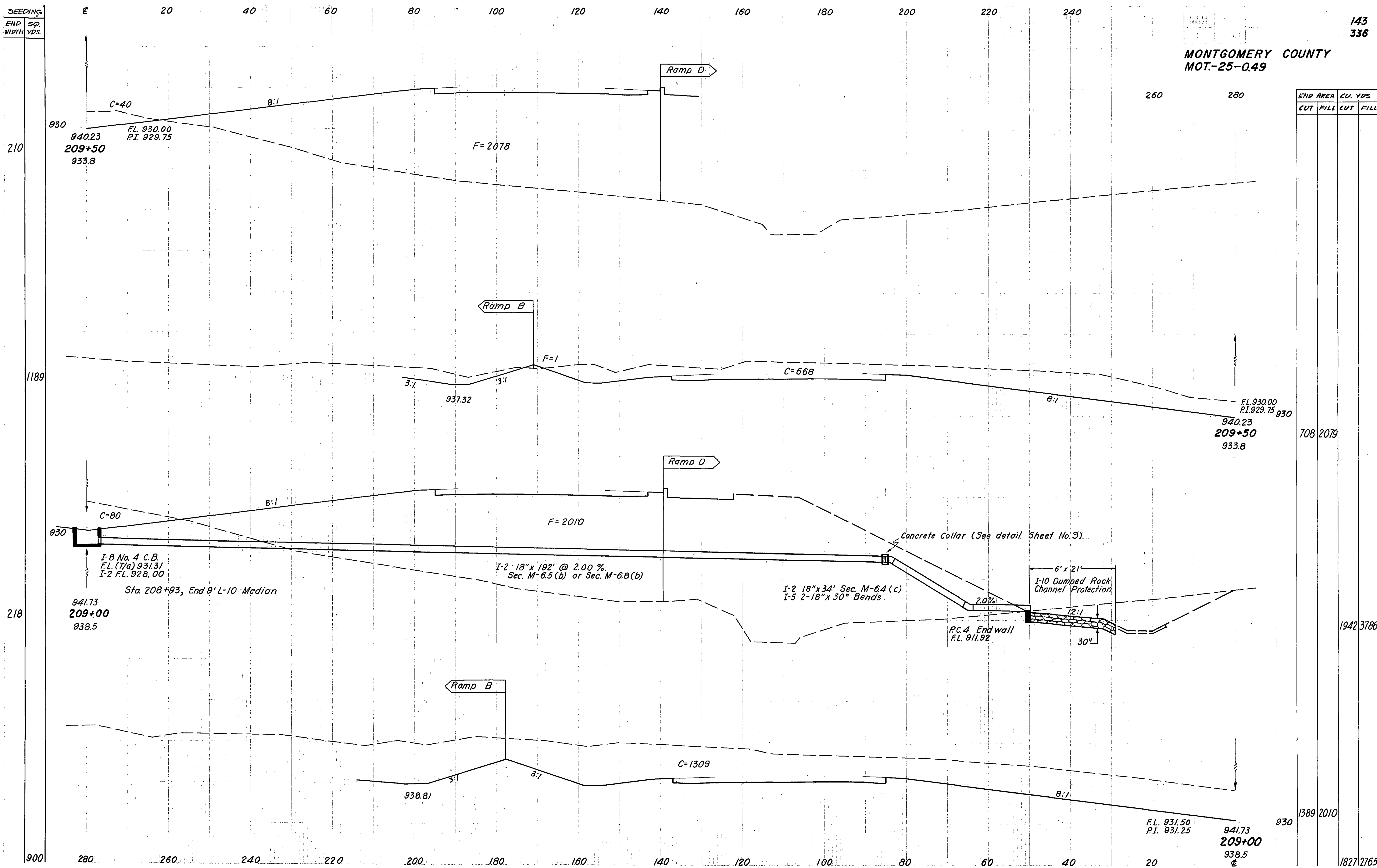


Sta 208+46 to Sta 208+63

SEEDING
END SP.
WIDTH YDS.

MONTGOMERY COUNTY
MOT-25-0.49

143
336



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
708	2079	1389	2010
1942	3786	1827	2765

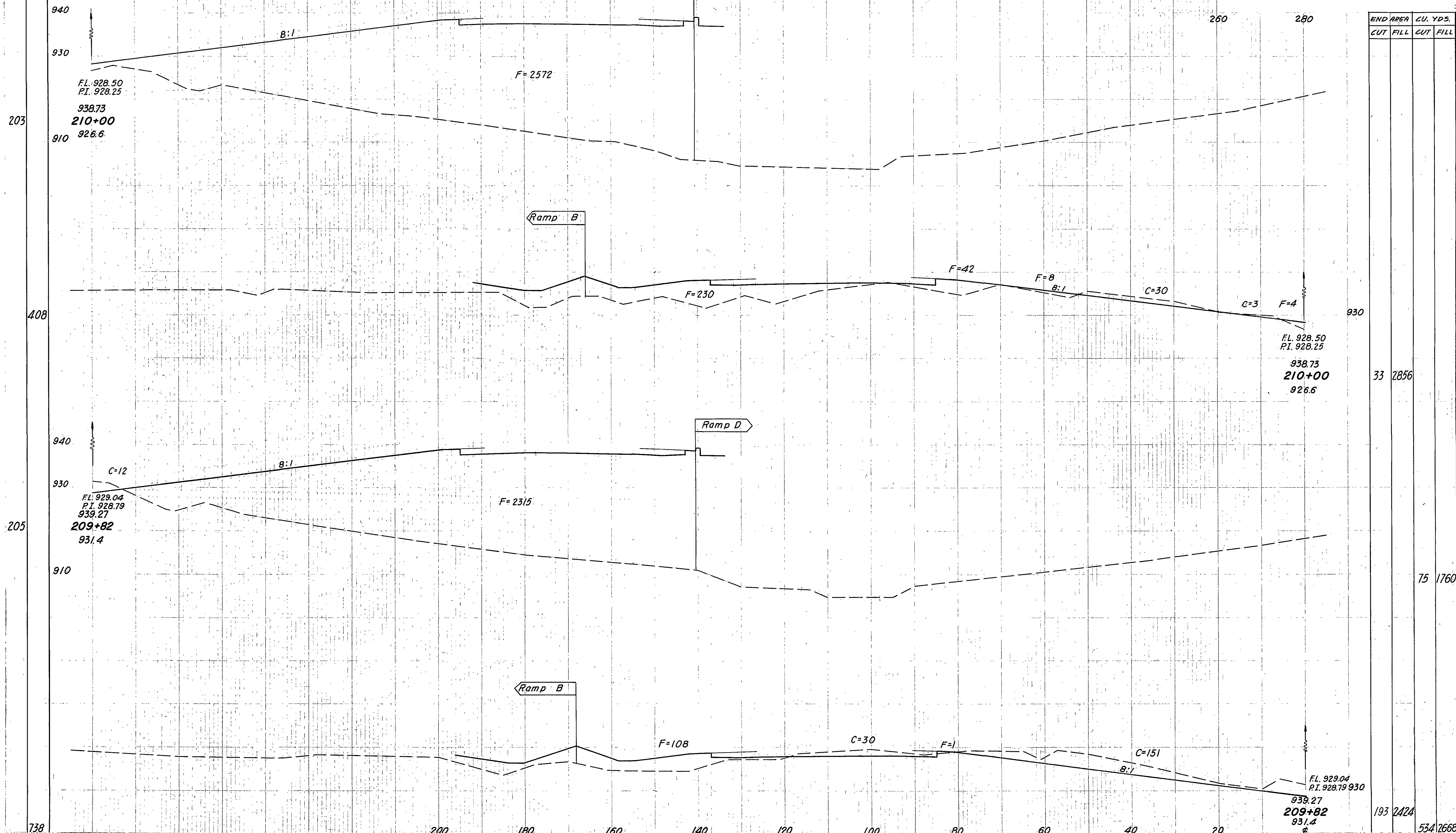
Sta. 209+00 to Sta. 209+50

SEEDING
END SP.
WIDTH YDS.

2 0110

144
336

MONTGOMERY COUNTY
MOT-25-0.49



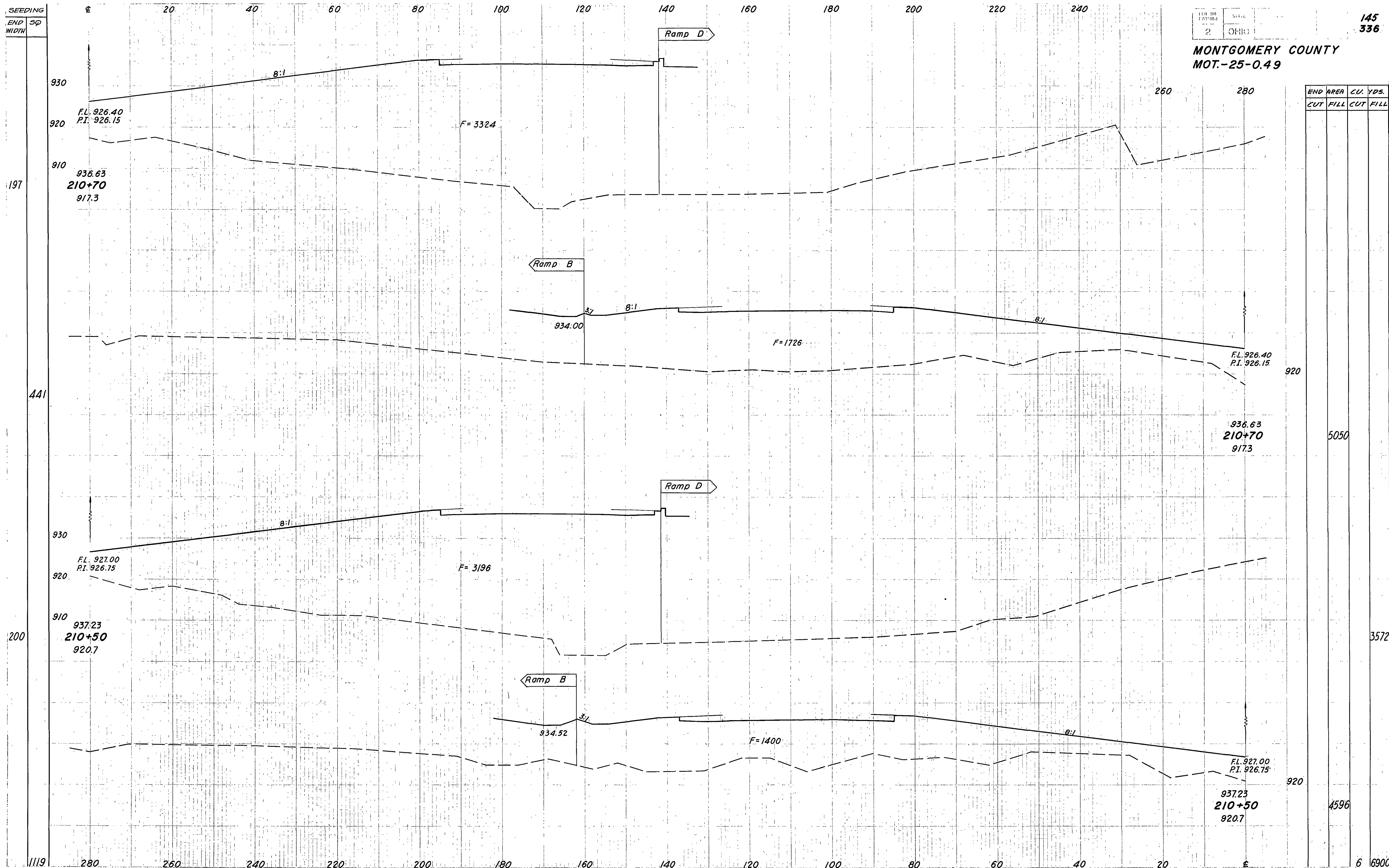
Sta 209+82 to Sta 210+00

SEEDING
END 30
WIDTH

2 OHIO

145
336

MONTGOMERY COUNTY
MOT.-25-0.49

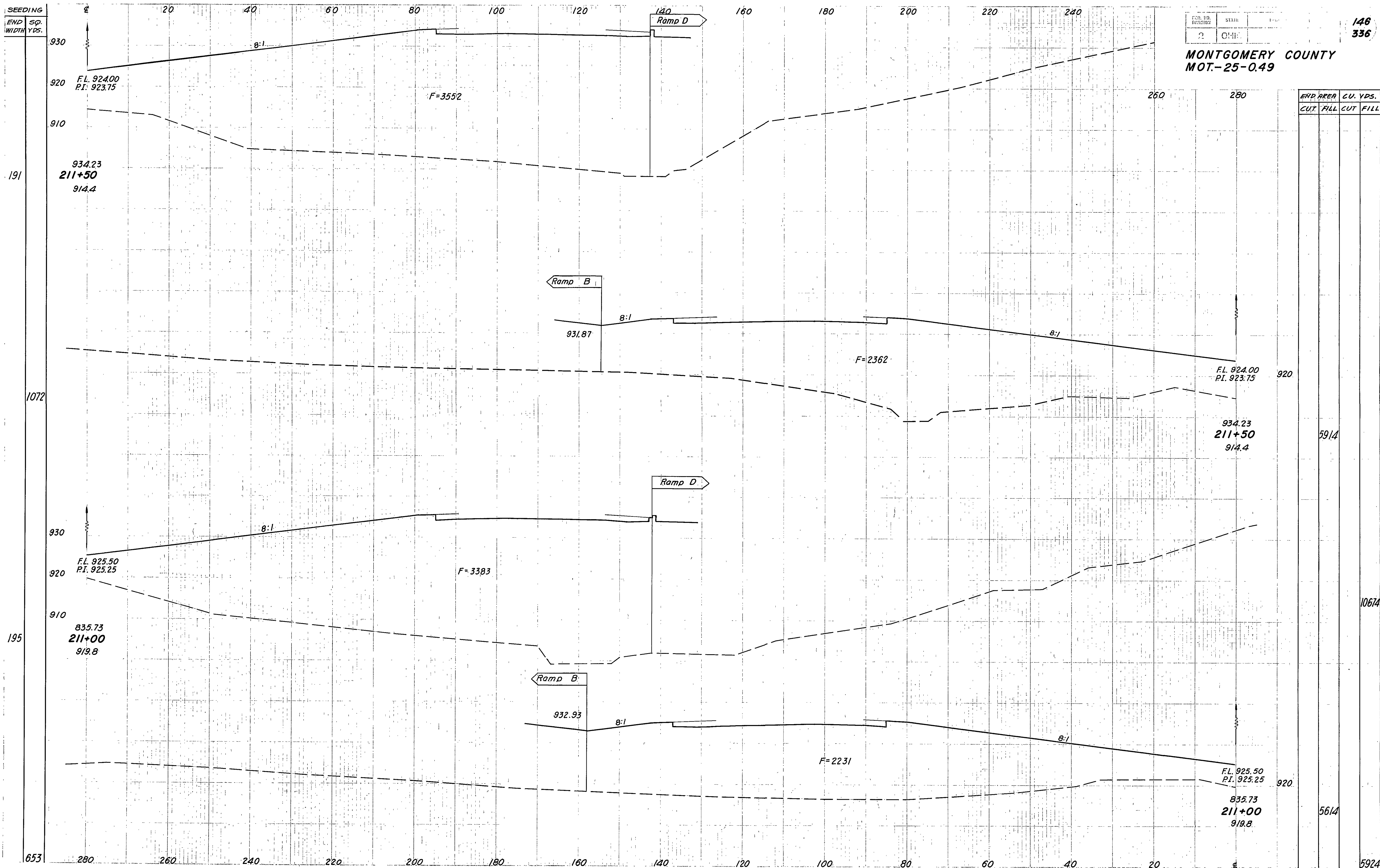


SEEDING	
END	SQ.
WIDTH	YDS.

FED. ID. DIVISION	STATE	F-
2	OHIO	

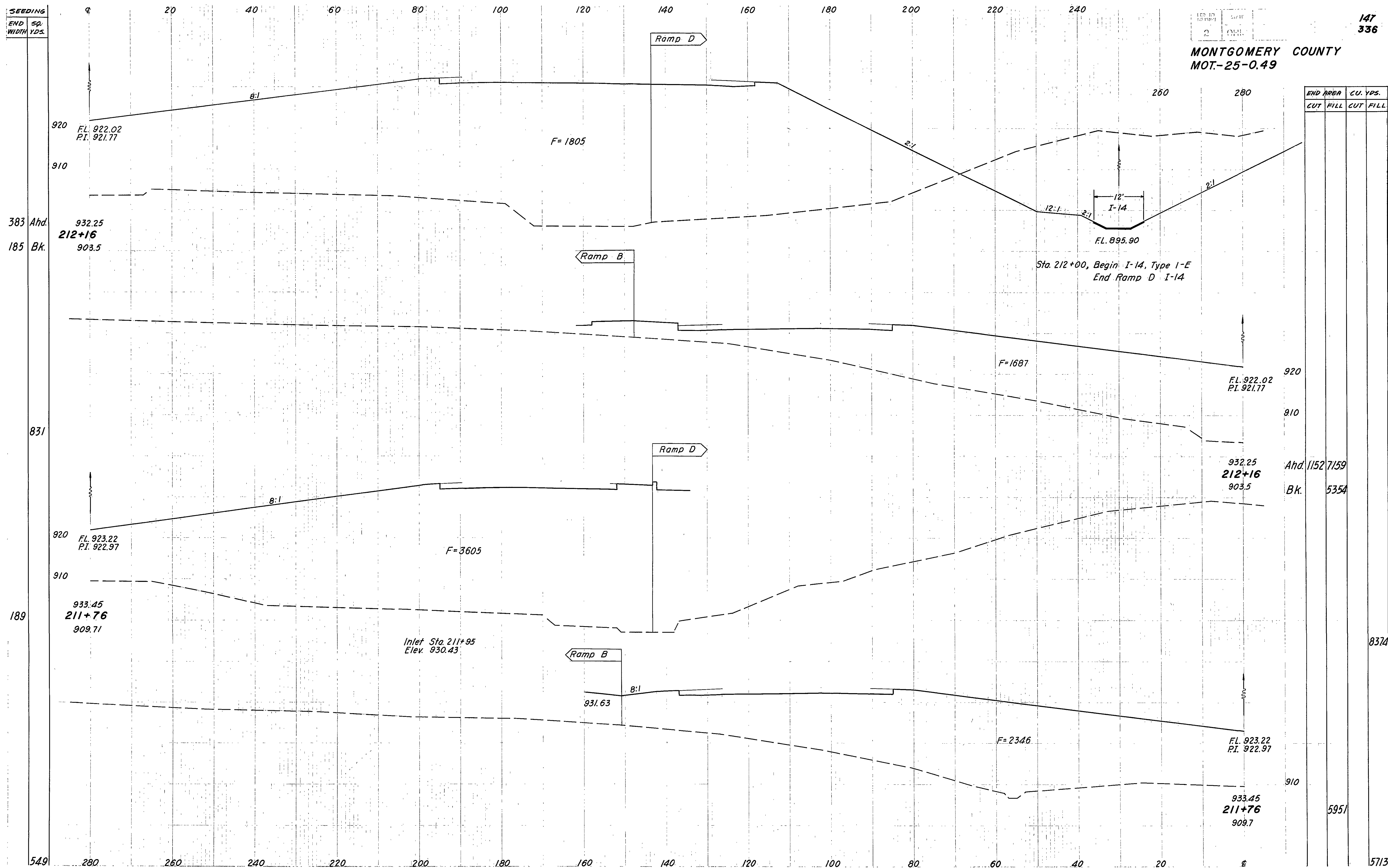
146
336

MONTGOMERY COUNTY
MOT.-25-0.49



Sta 211+00 to Sta 211+50

MONTGOMERY COUNTY
MOT.-25-0.49



SEEDING
END 50
WIDTH YDS.

FIELD NO. 148
STATE OHIO
COUNTY 336

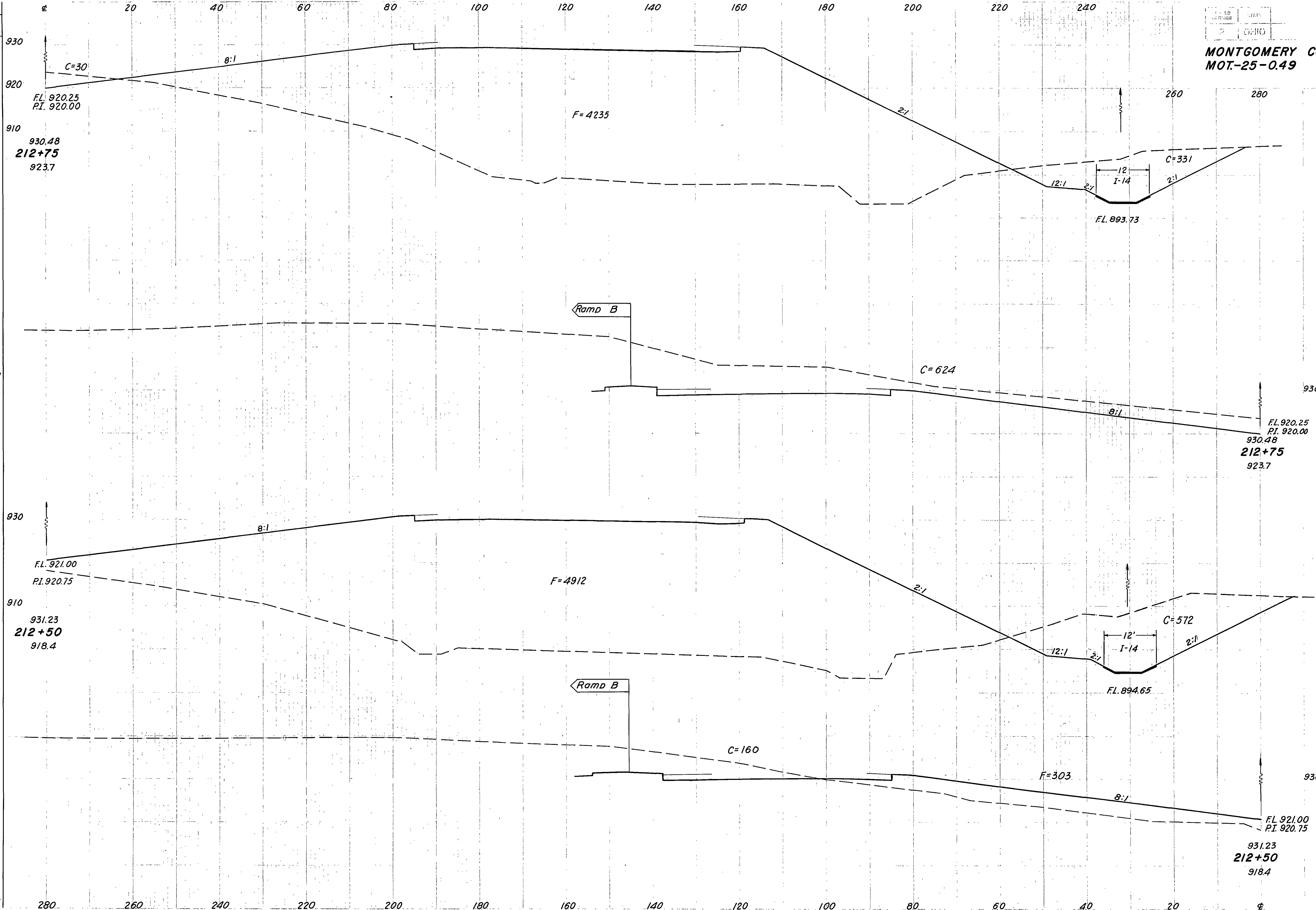
MONTGOMERY COUNTY
MOT-25-0.49

362

1011

366

1415



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
985	4235		
794	4375		
732	5215		
1186	7791		

SEEDING
END 50.
WIDTH YDS.

149
336

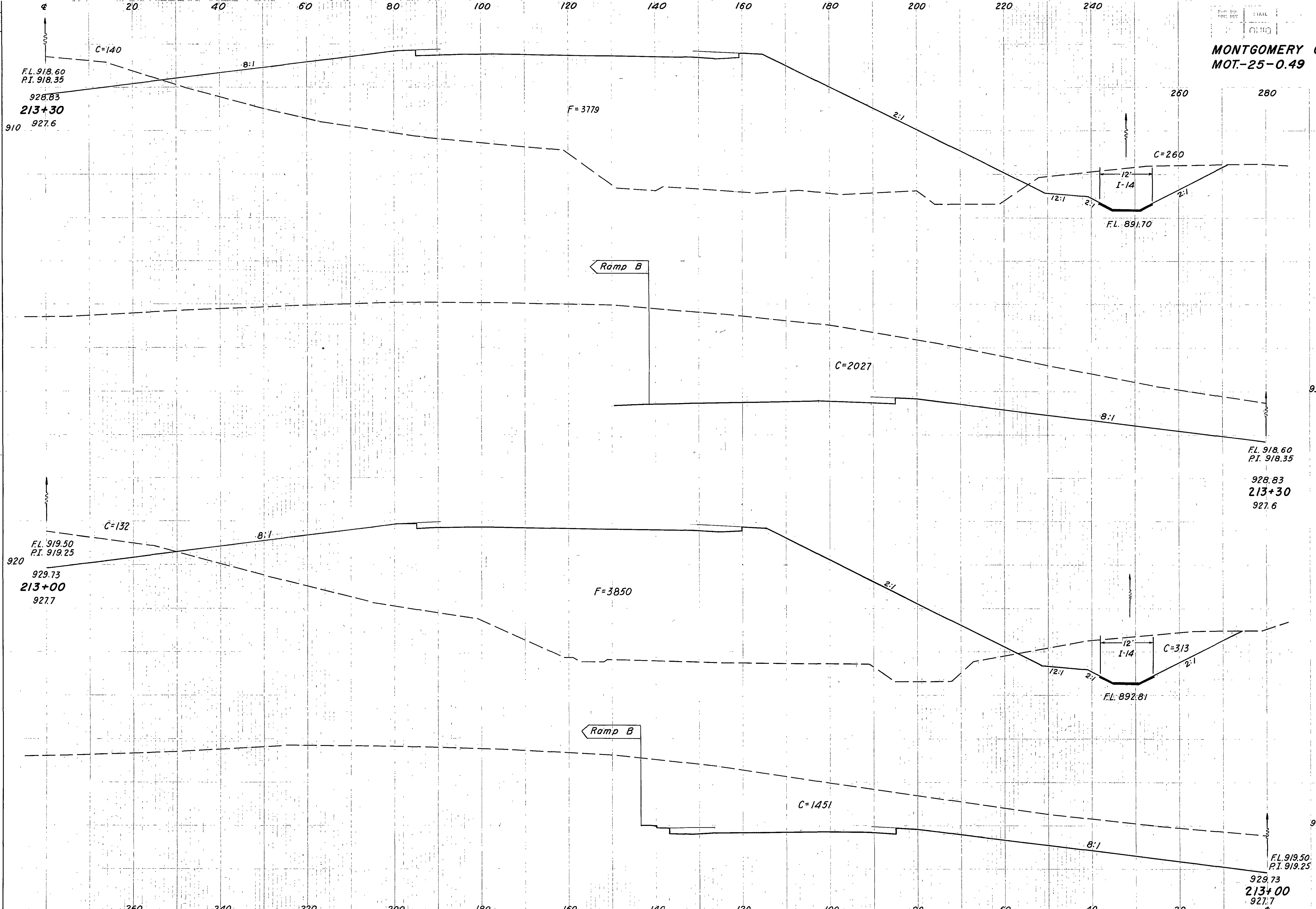
MONTGOMERY COUNTY
MOT-25-0.49

342

1163

356

997



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL

2427 3779

2402 4238

1896 3850

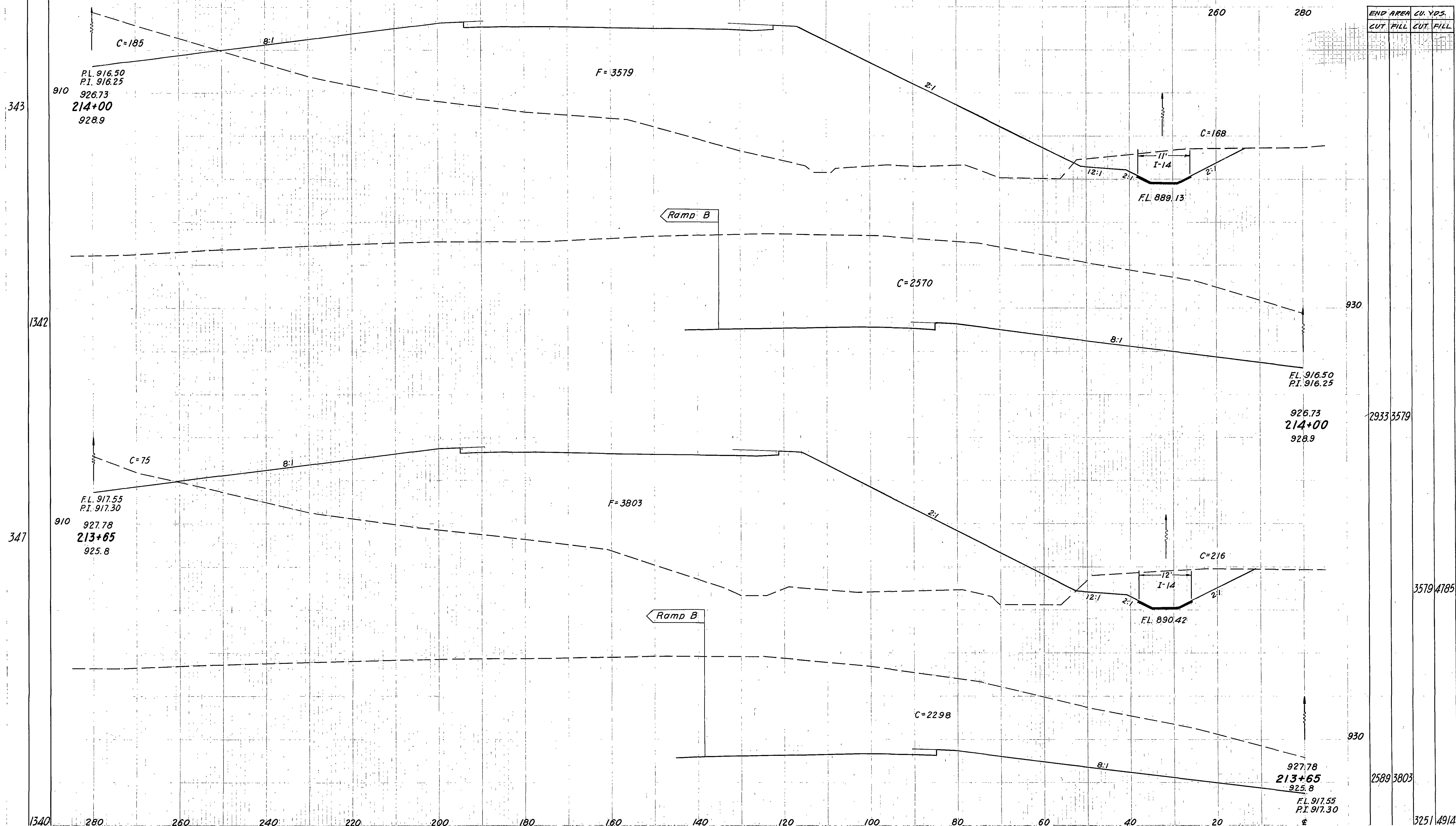
1334 3143

SEEDING	
END	SQ.
WIDTH	YDS.

150
336

MONTGOMERY COUNTY
MOT.-25-0.49

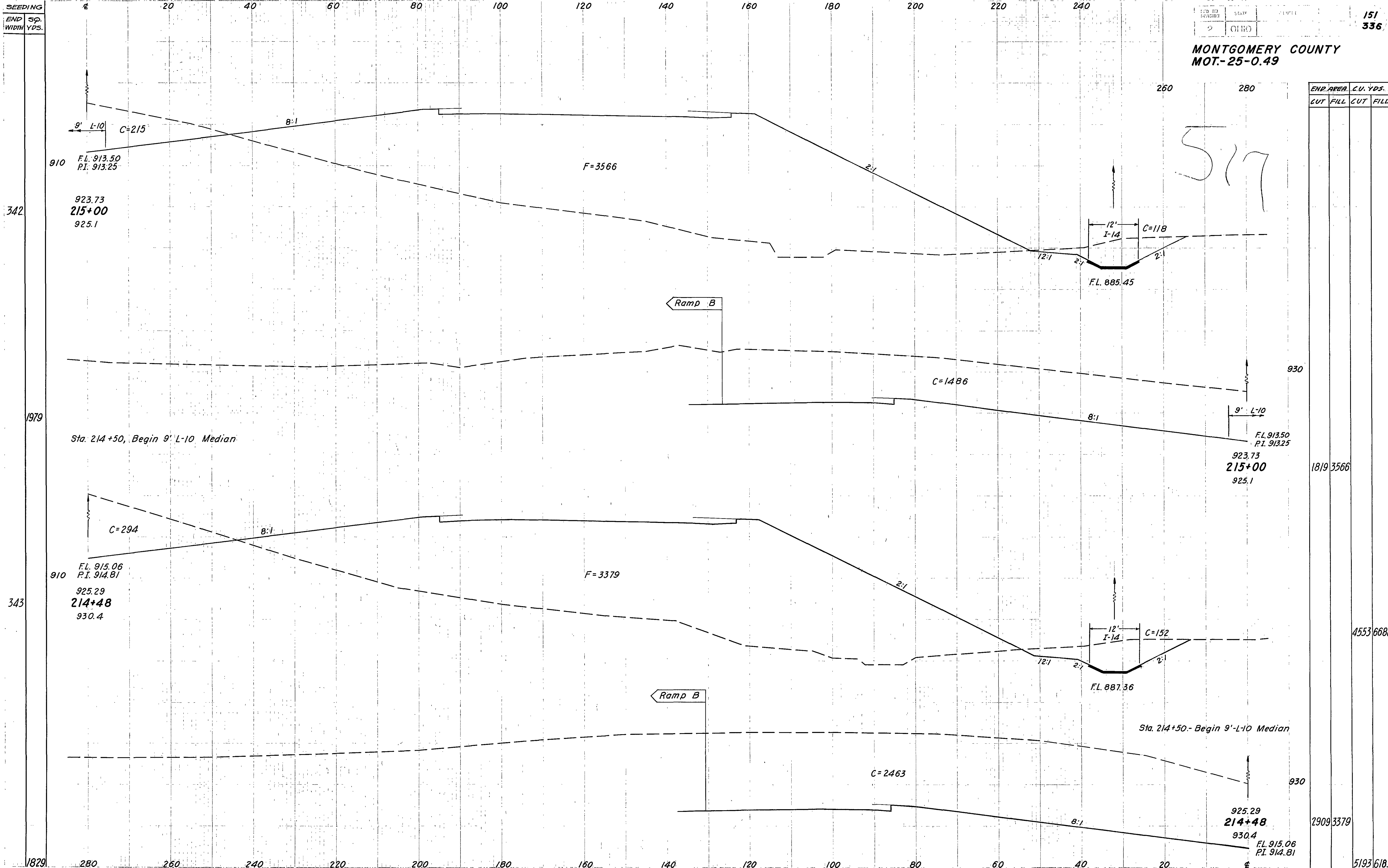
END AREA		CU. YDS.	
CUT	FILL	CUT	FILL



SEEDING
END SP.
WIDTH YDS.

151
336

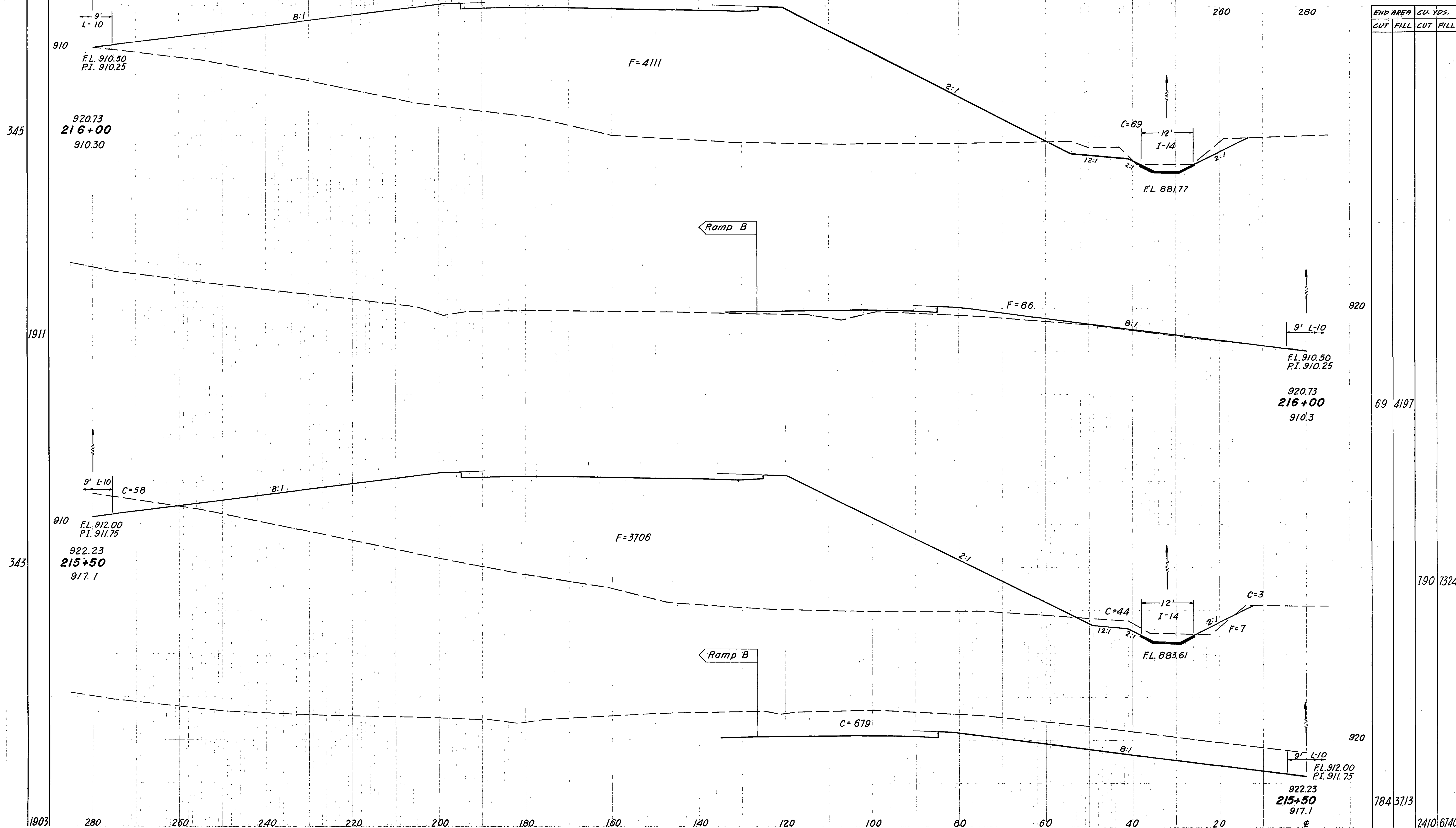
MONTGOMERY COUNTY
MOT.-25-0.49



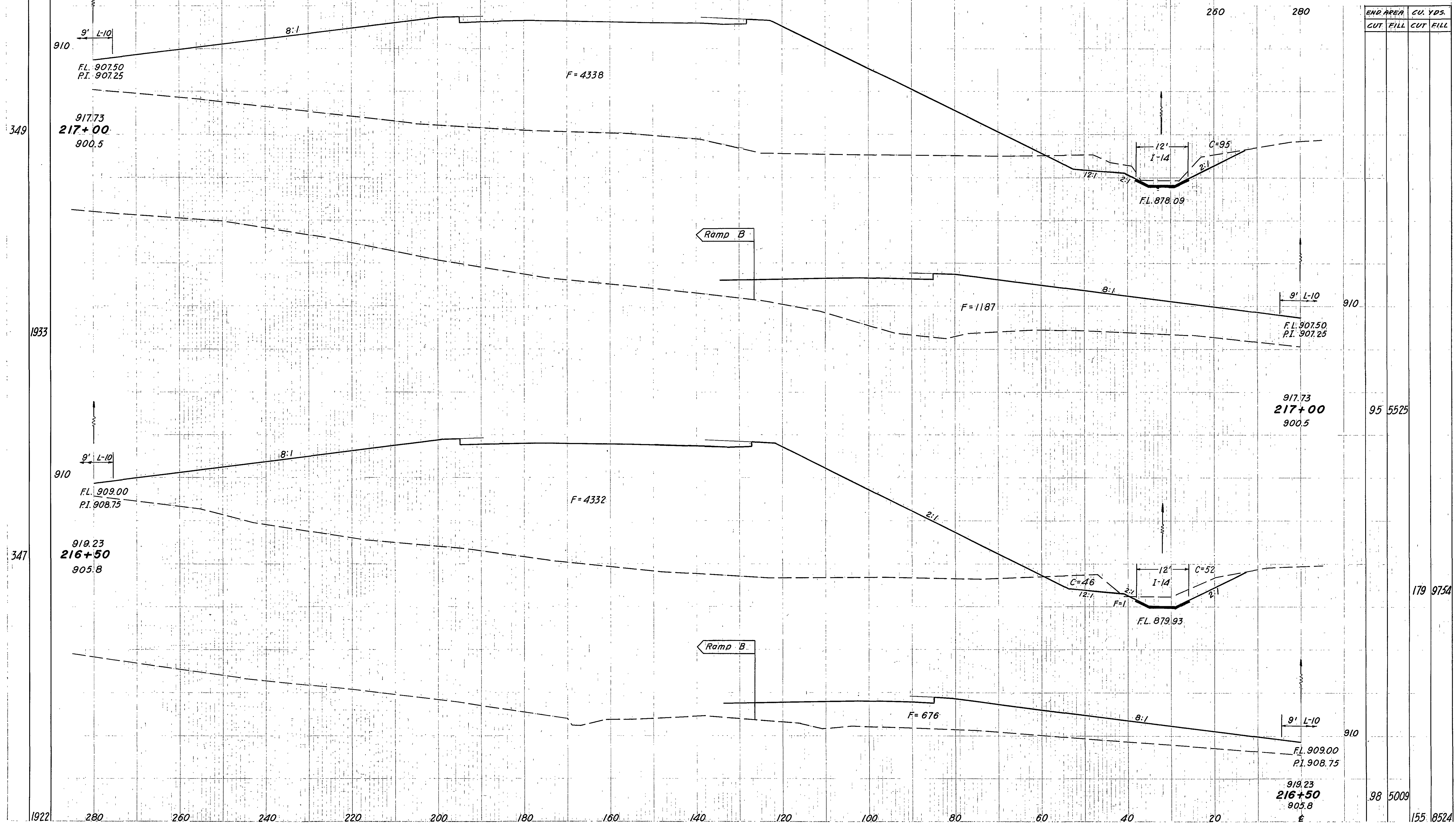
END AREA		C.U. YDS.	
CUT	FILL	CUT	FILL
1819	3566	4553	6688
2909	3379	5193	6185

SEEDING
END SQ.
WIDTH YDS.

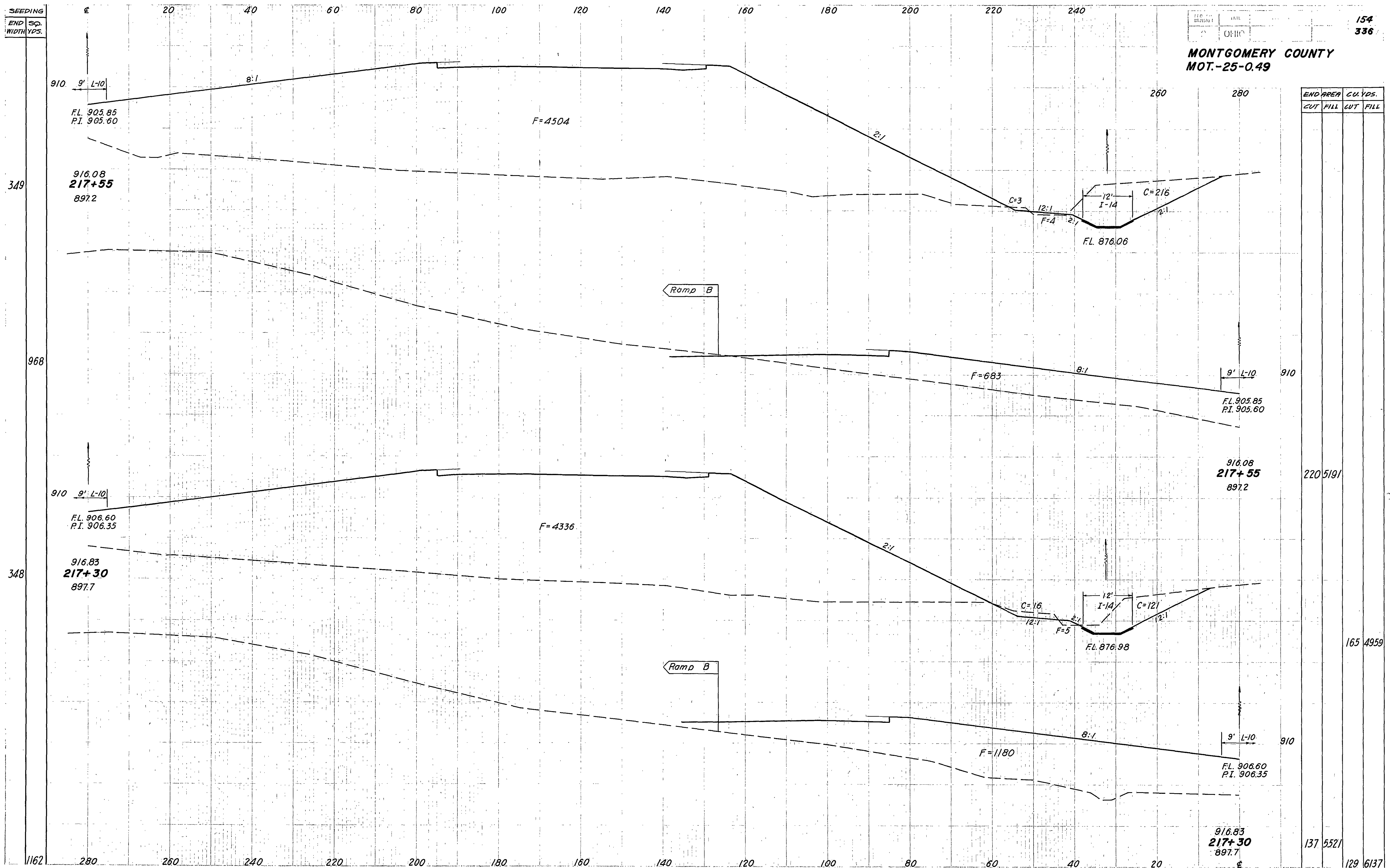
MONTGOMERY COUNTY
MOT.-25-0.49

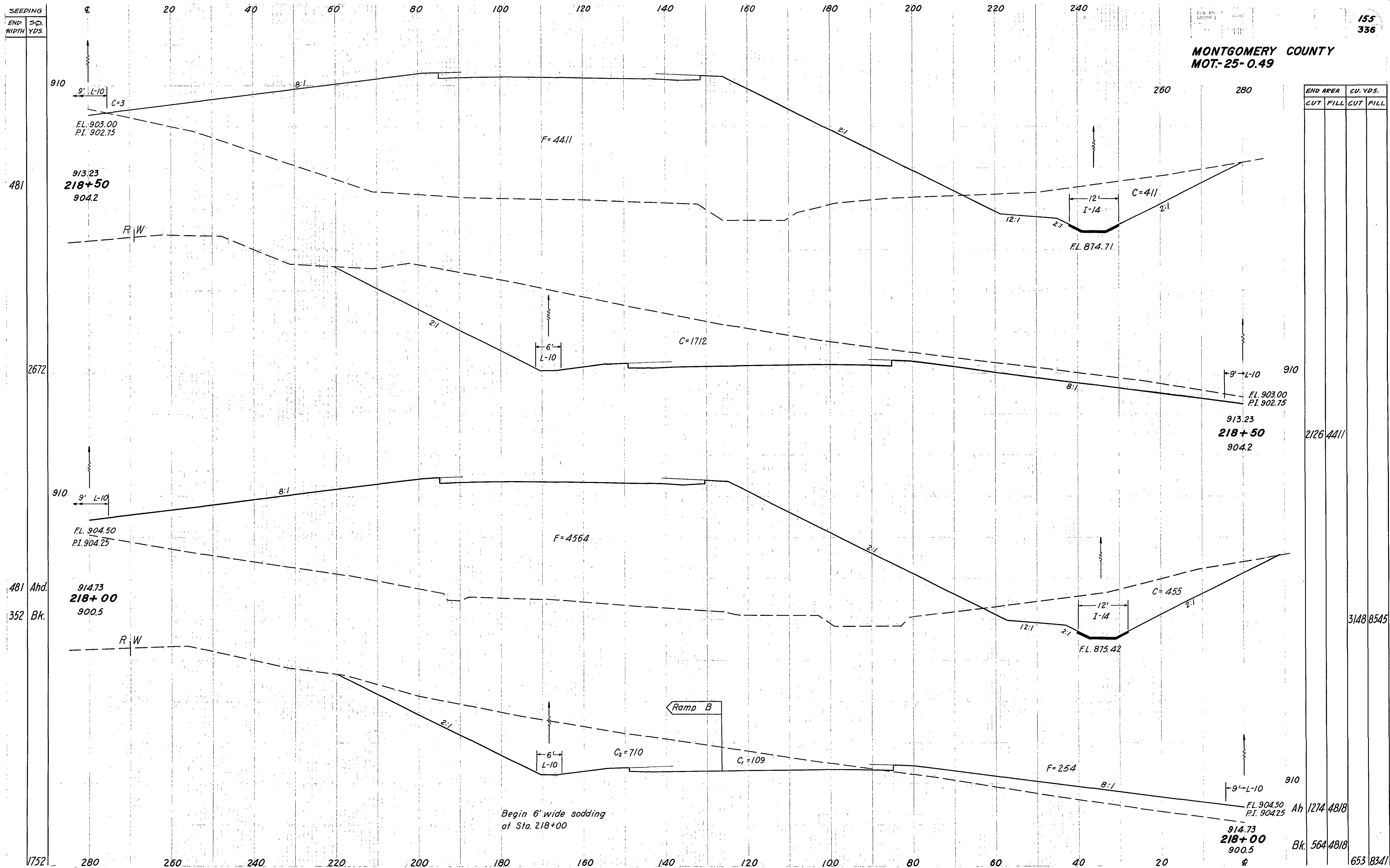


MONTGOMERY COUNTY
MOT.-25-0.49



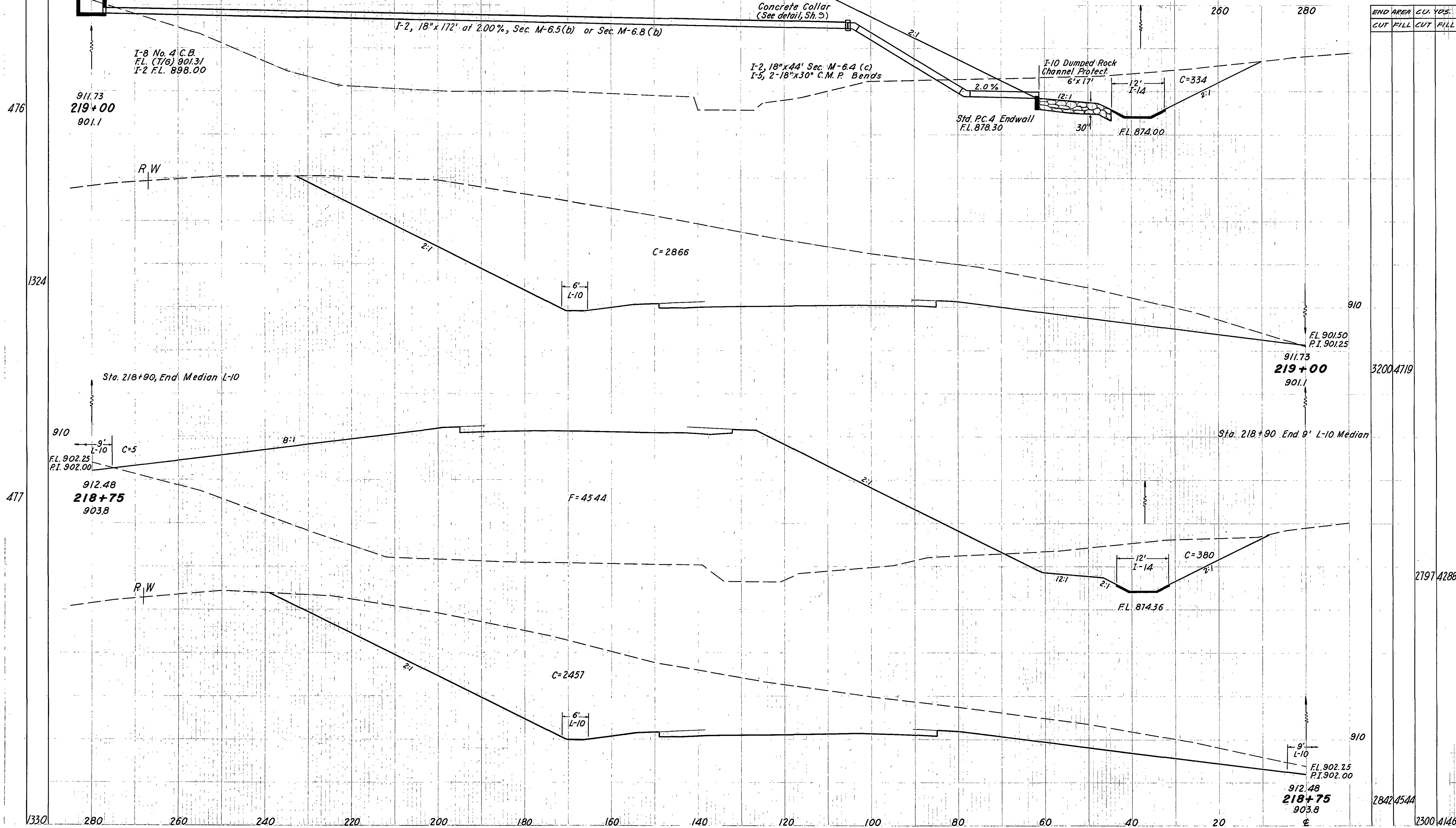
END AREA		CU. YDS.	
CUT	FILL	CUT	FILL





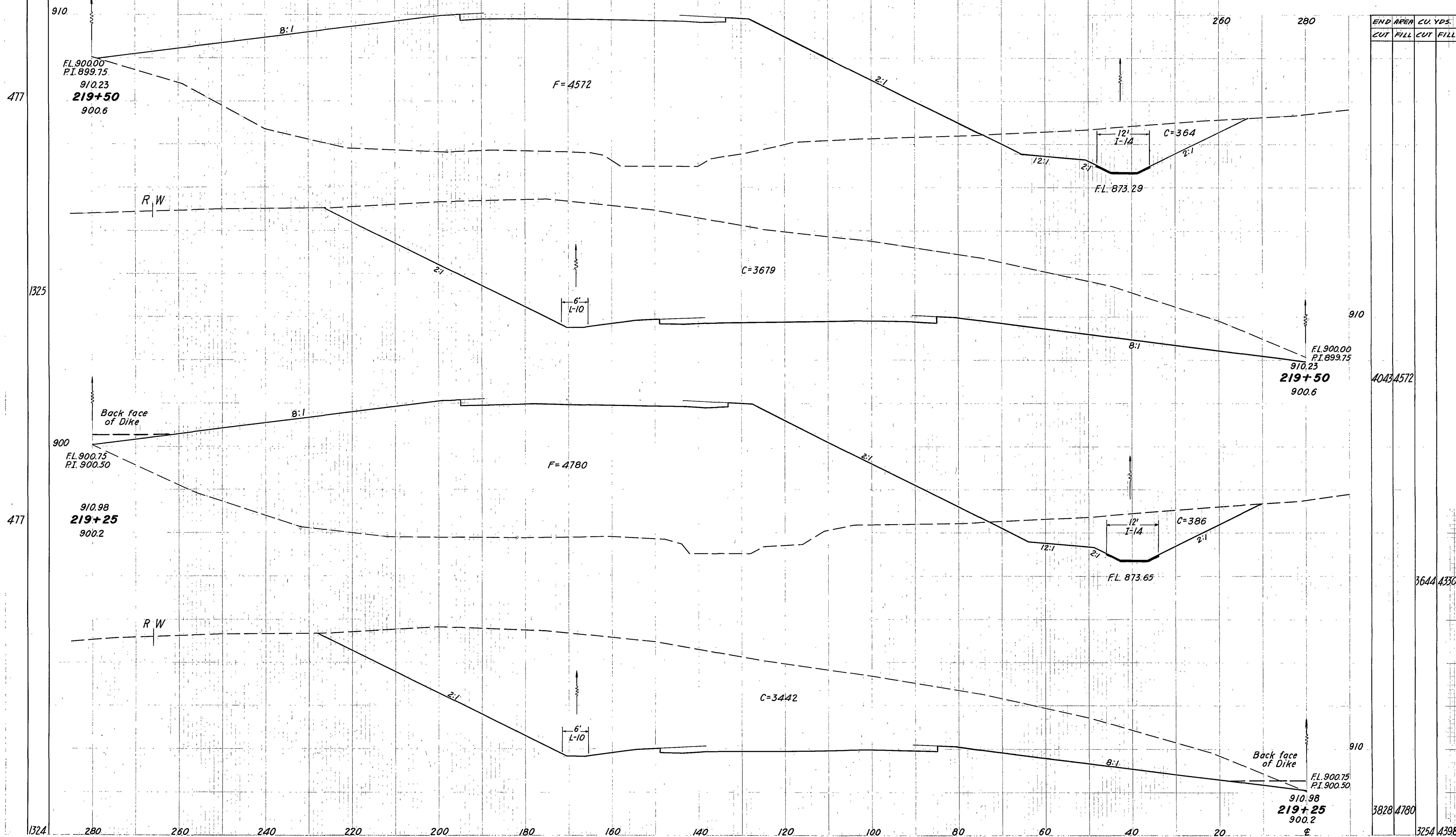
SEEDING
END SP.
WIDTH YDS.

MONTGOMERY COUNTY
MOT.-25-0.49



SEEDING
END 50
WIDTH YDS.

MONTGOMERY COUNTY
MOT-25-0.49

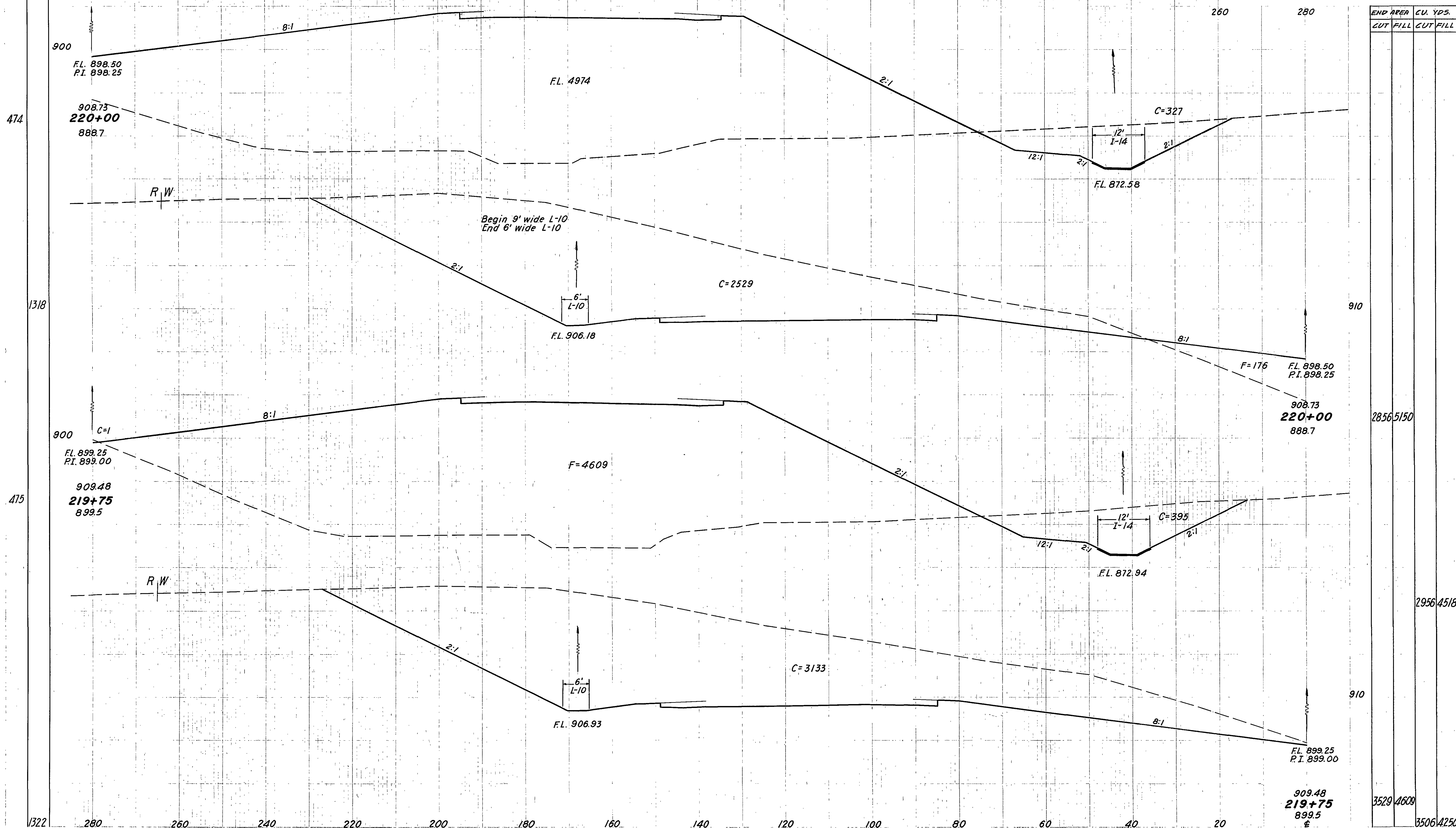


END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
4043	4572		
3644	4330		
3828	4780		
3254	4398		

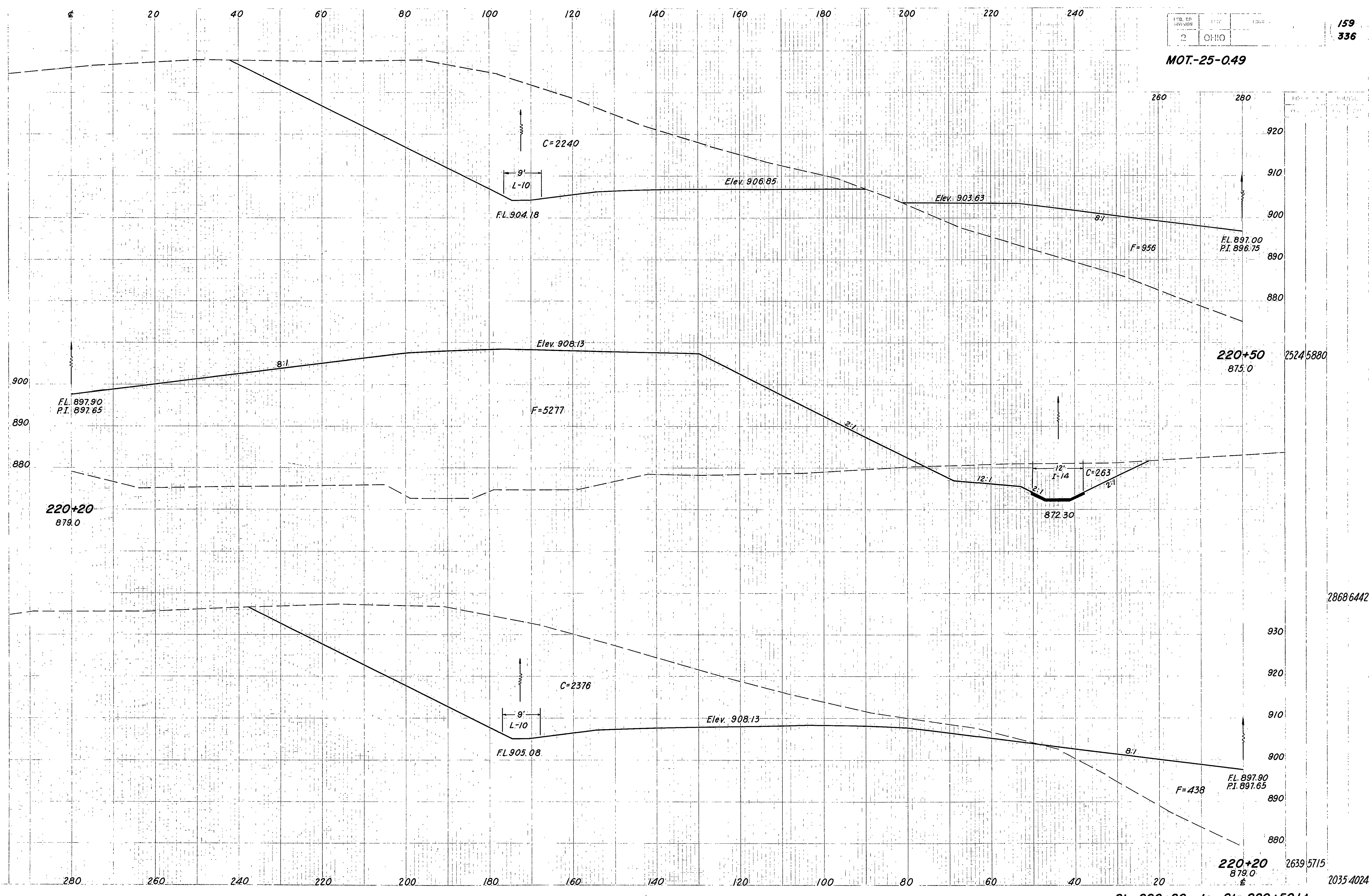
SEEDING
END 50.
WIDTH YDS.

2 OHIO 158
336

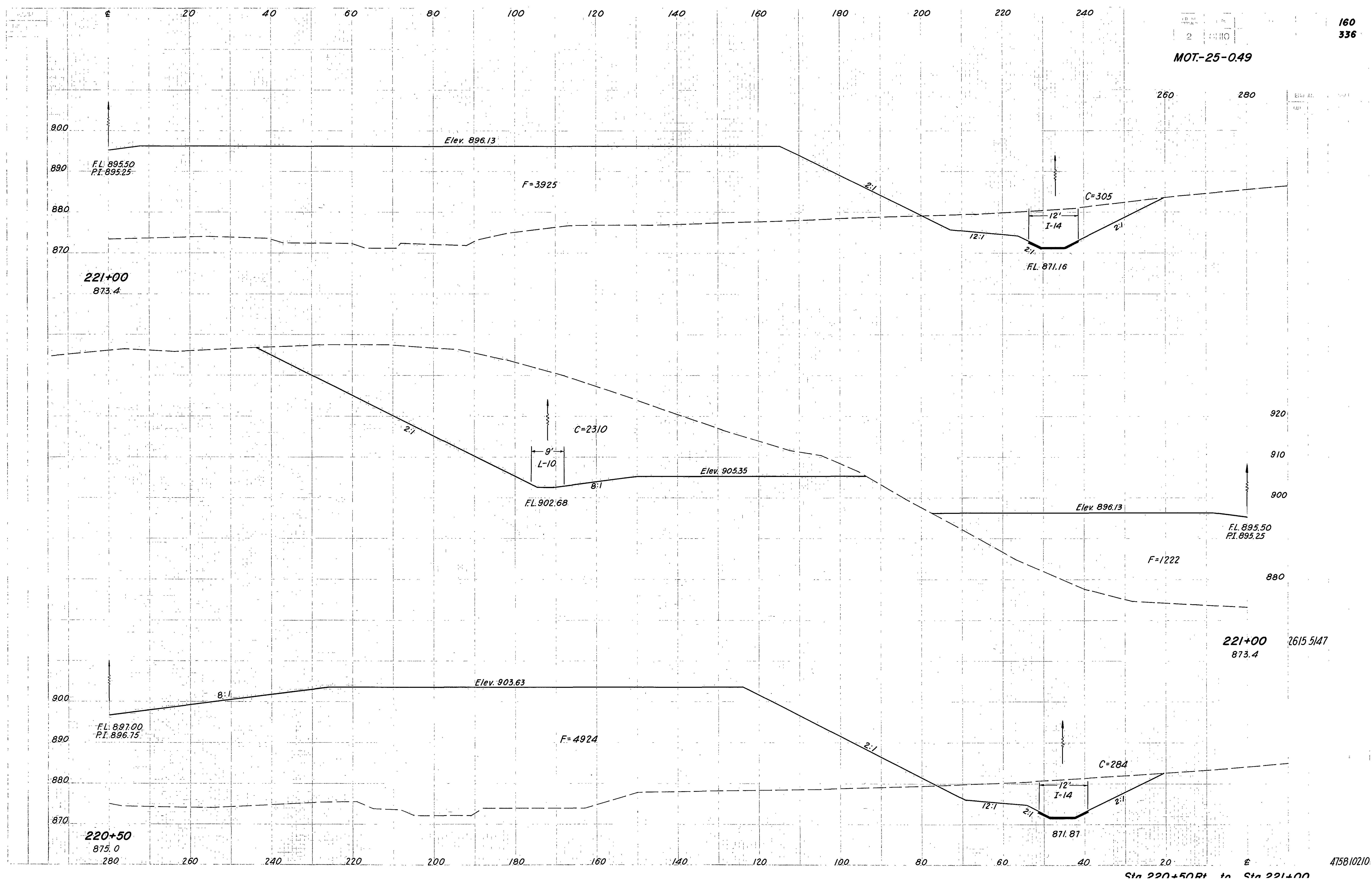
MONTGOMERY COUNTY
MOT.-25-0.49



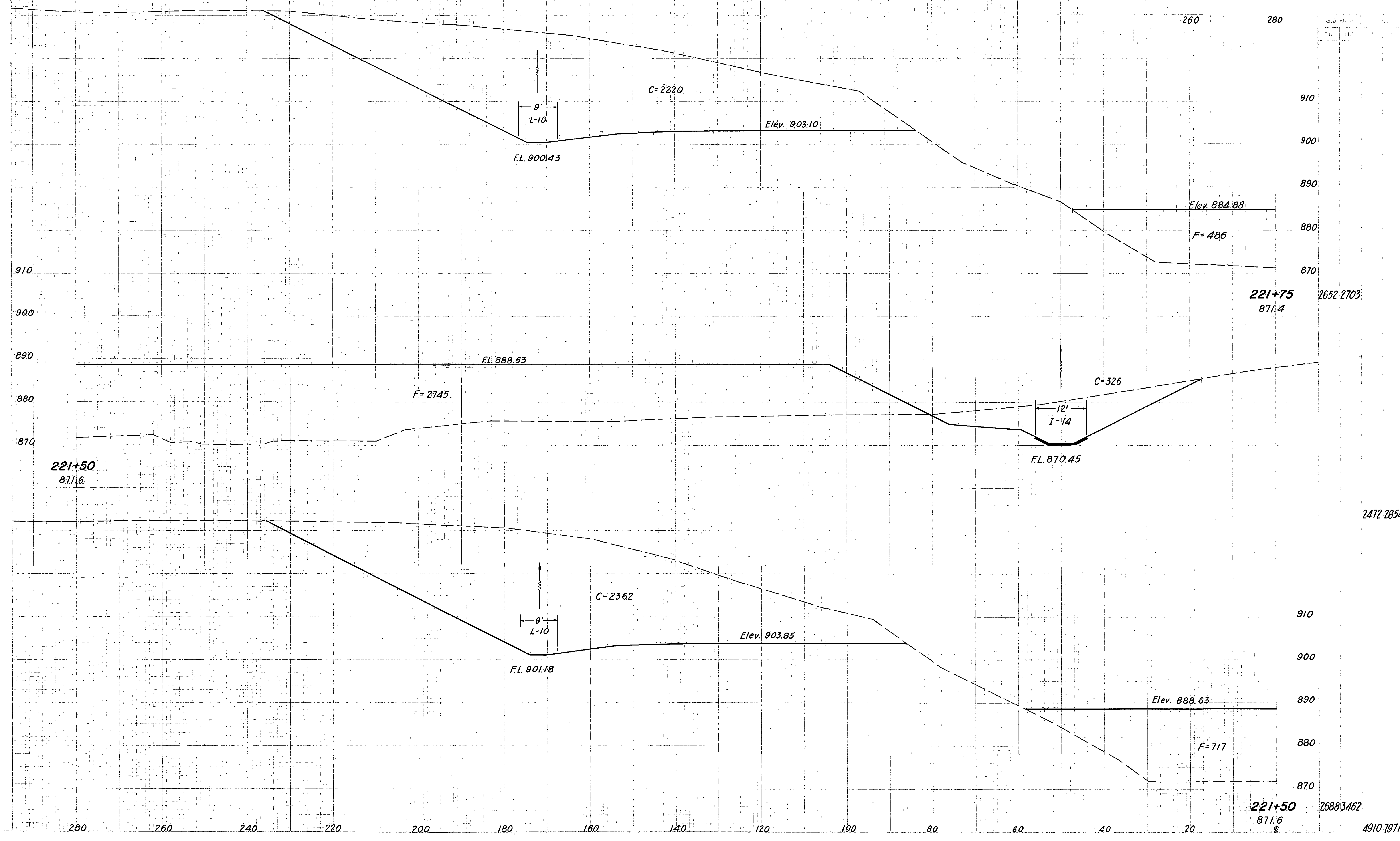
MOT-25-049



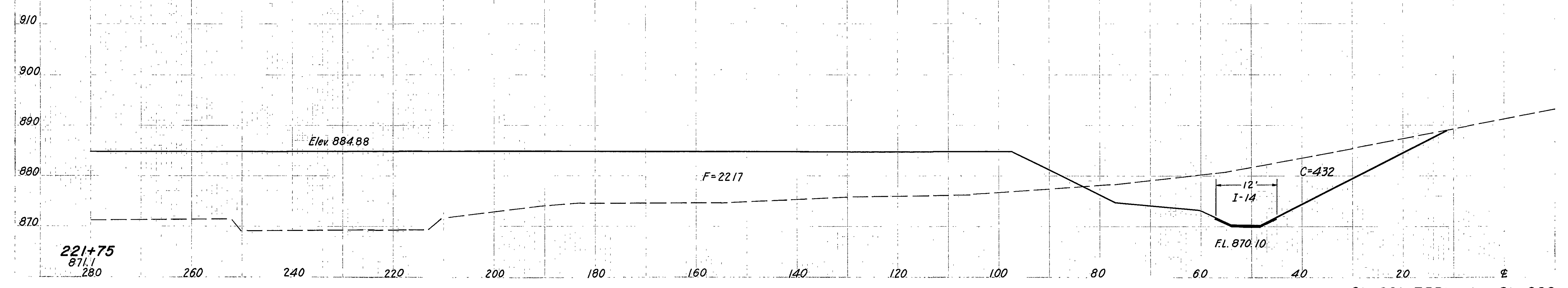
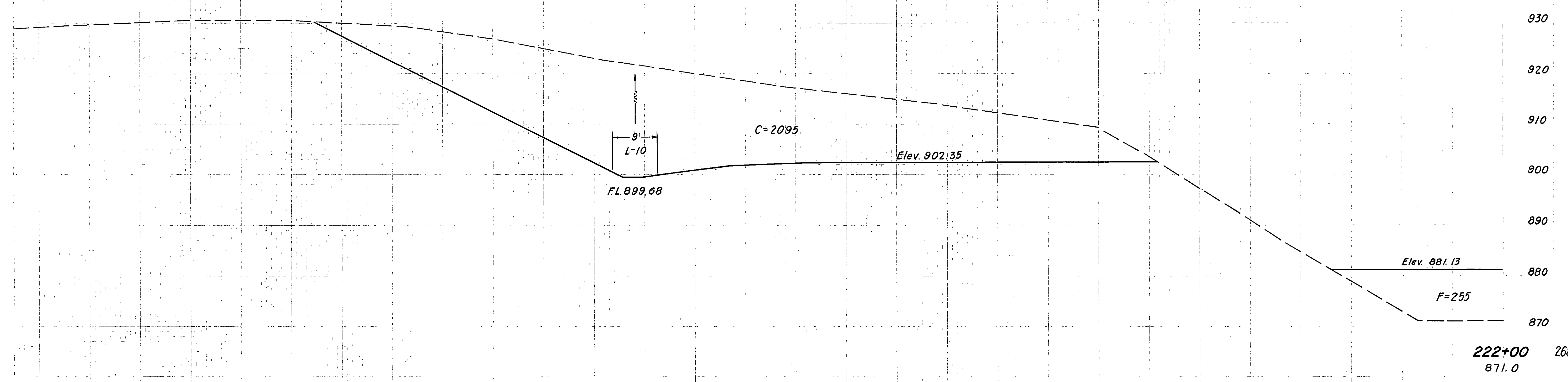
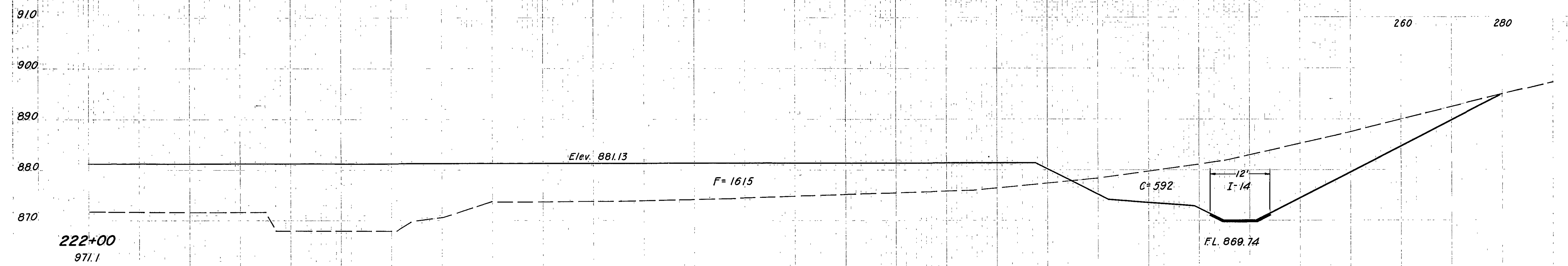
MOT-25-049



MOT-25-049

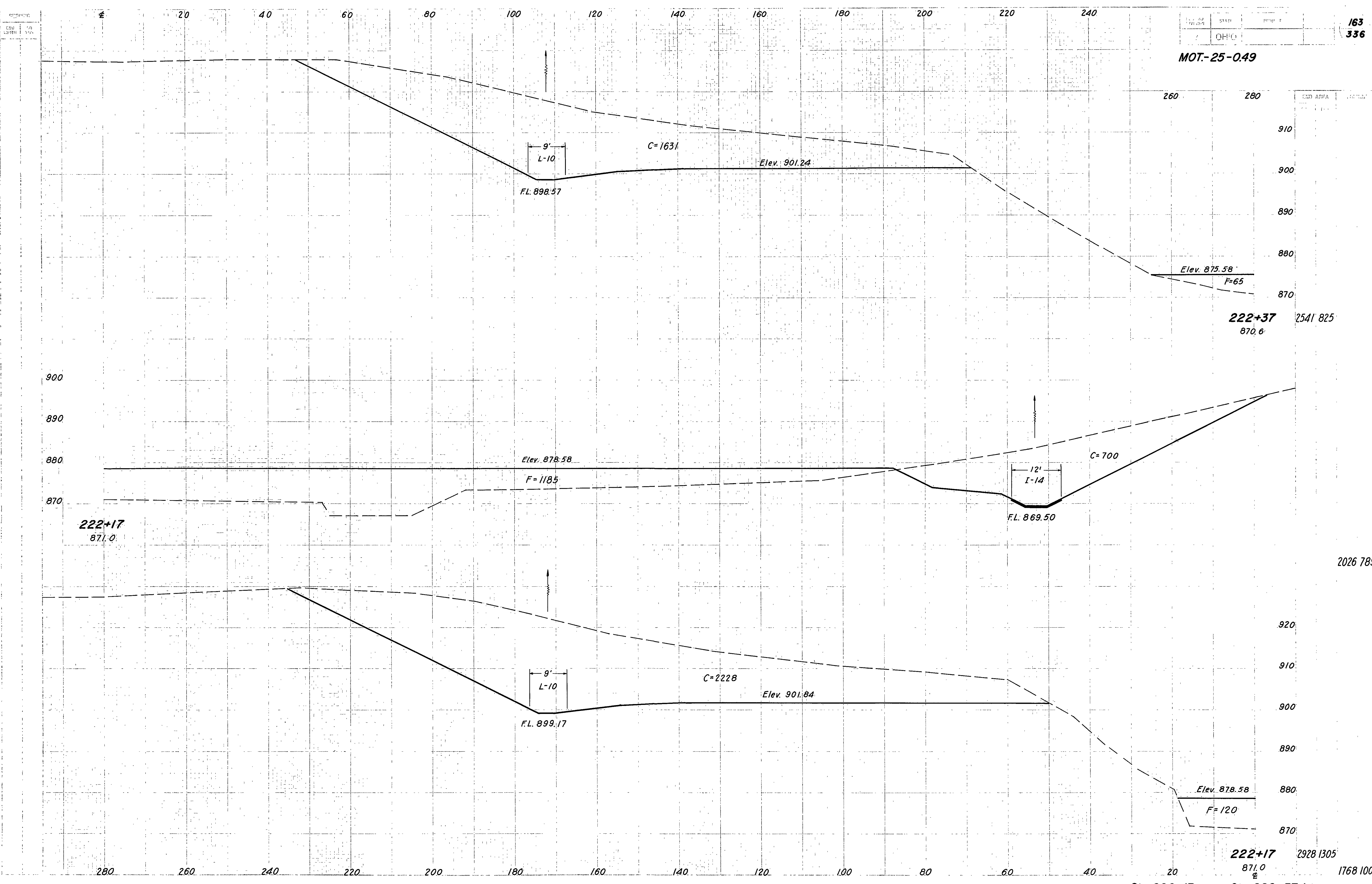


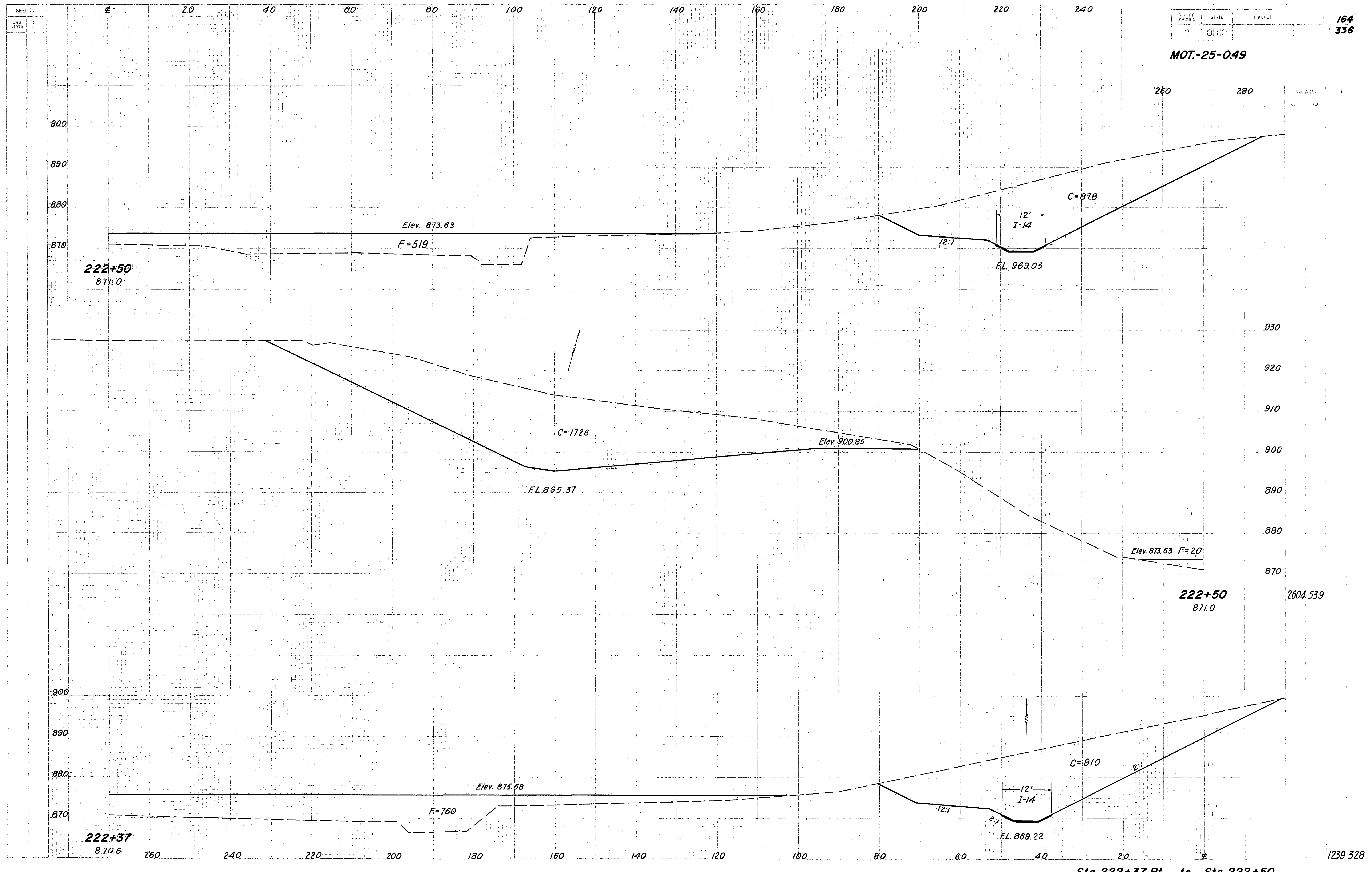
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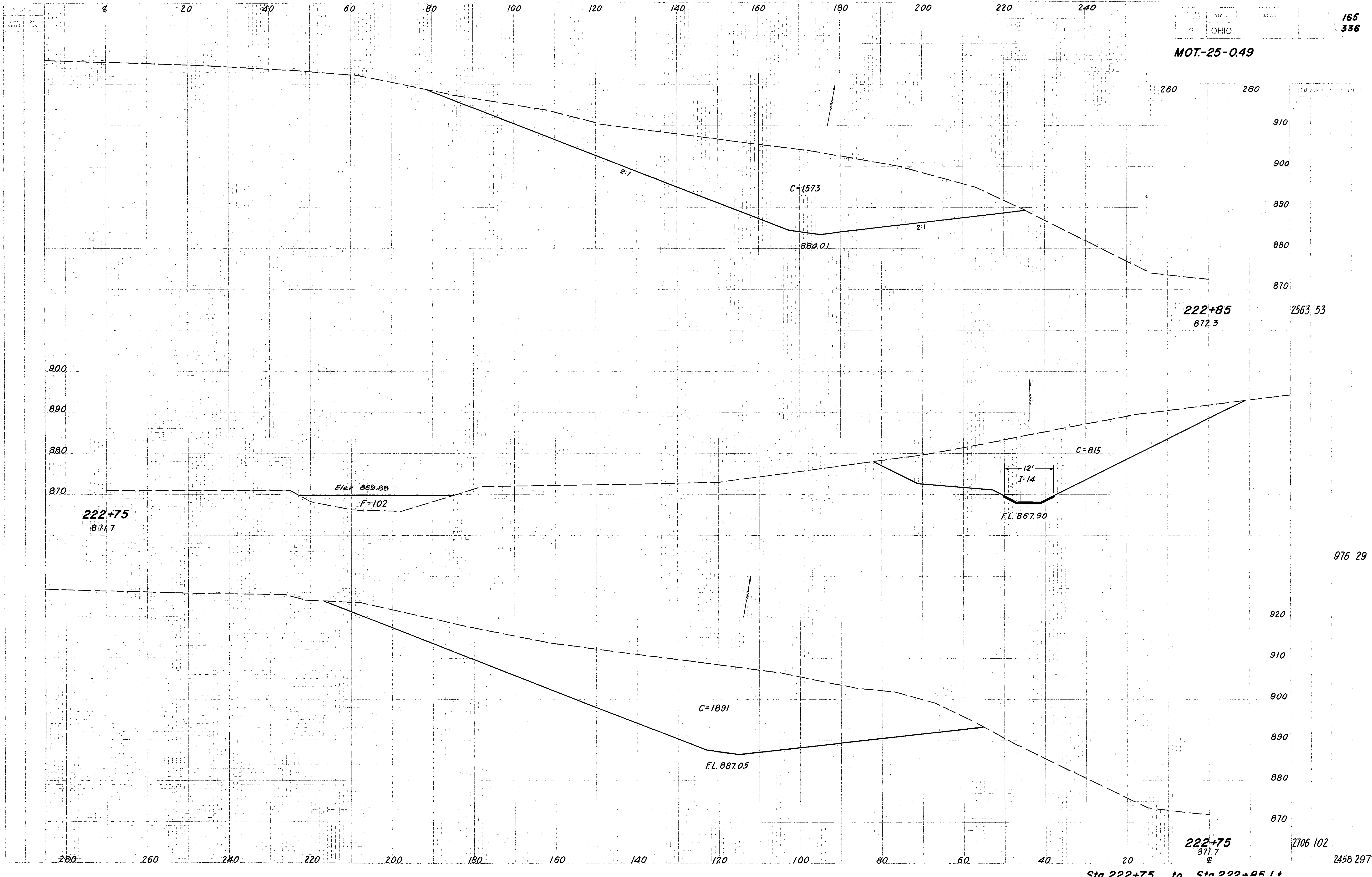


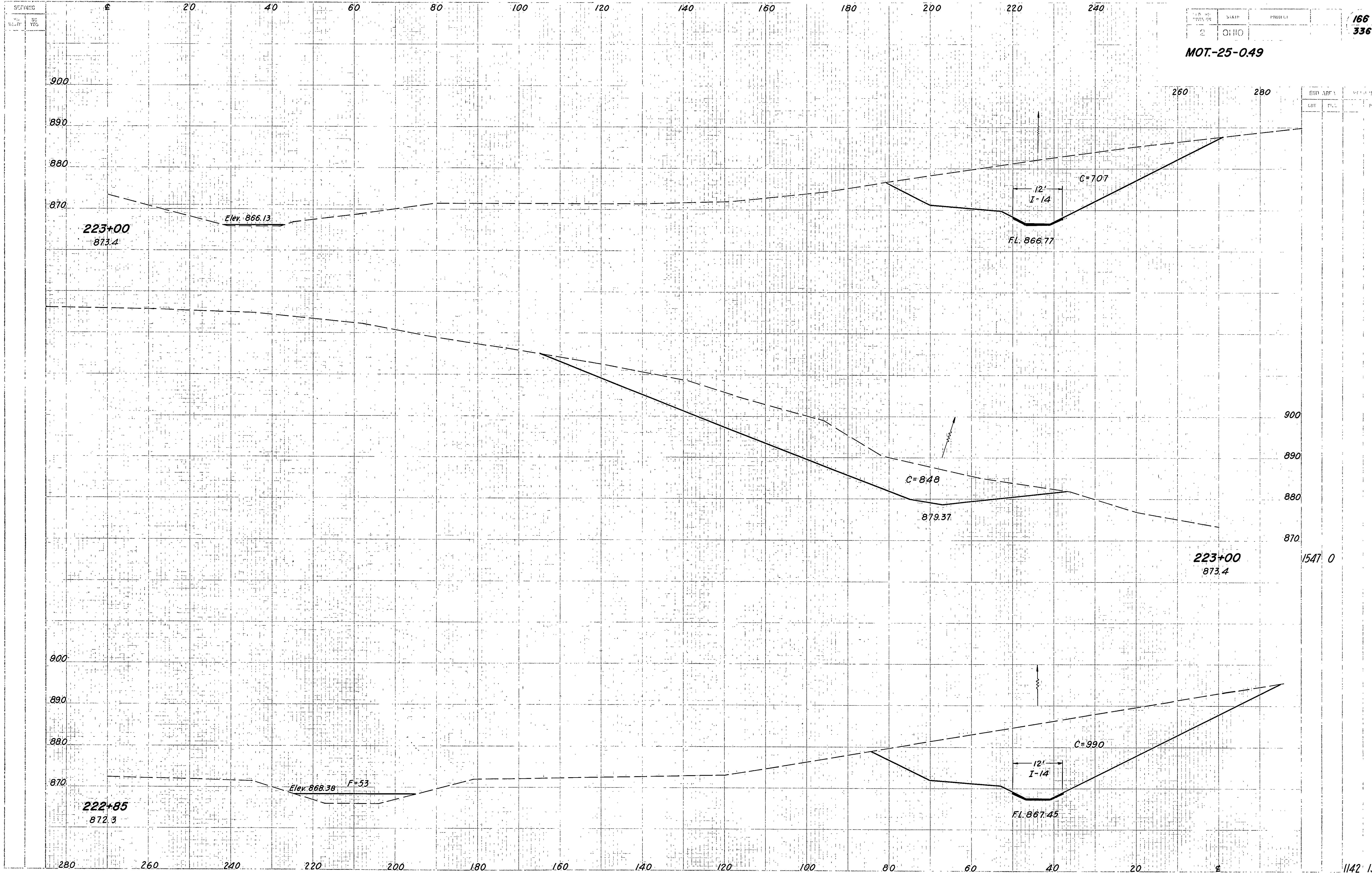
SECTION
EQU.
LENGTH

MOT-25-049

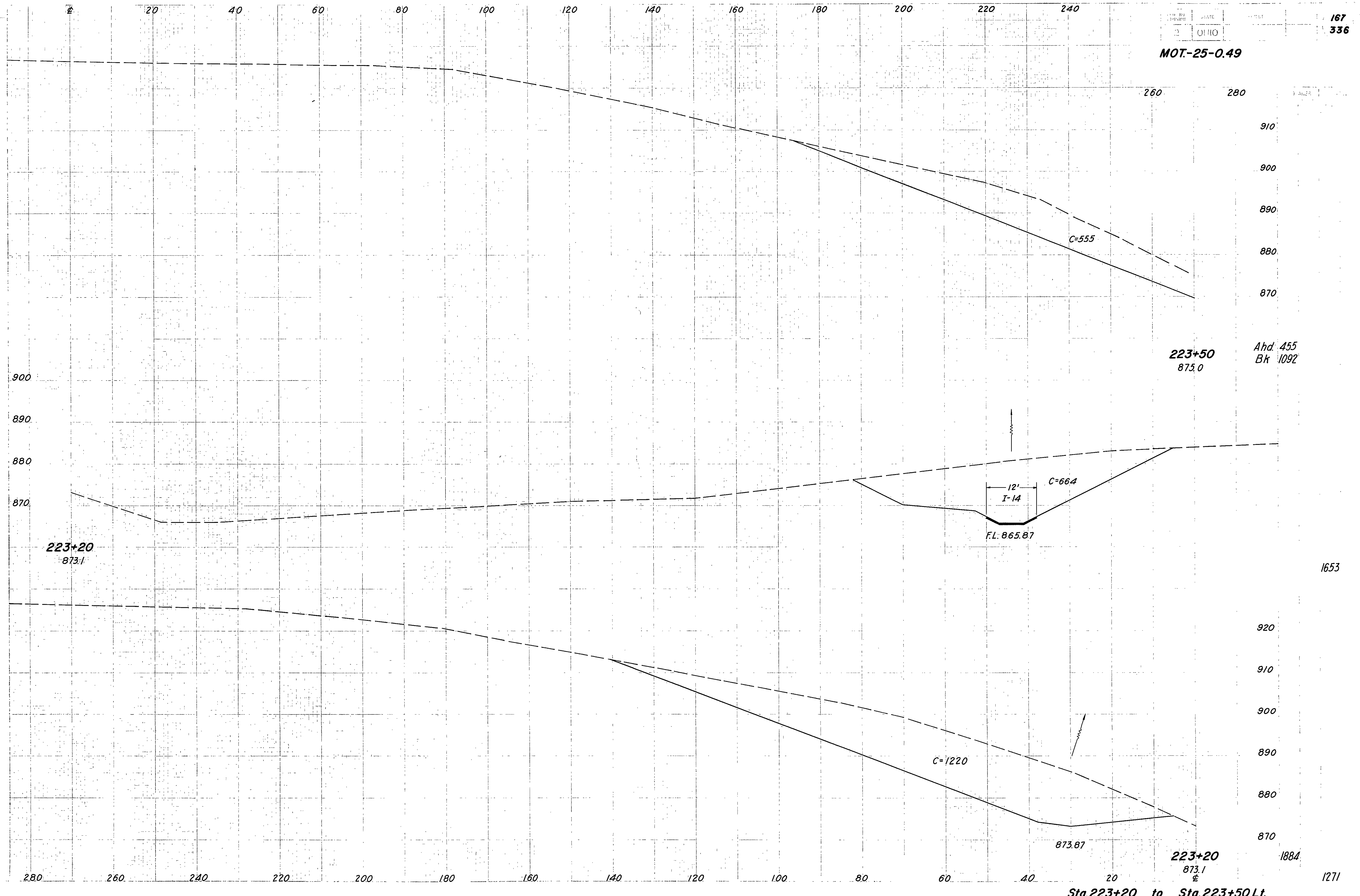


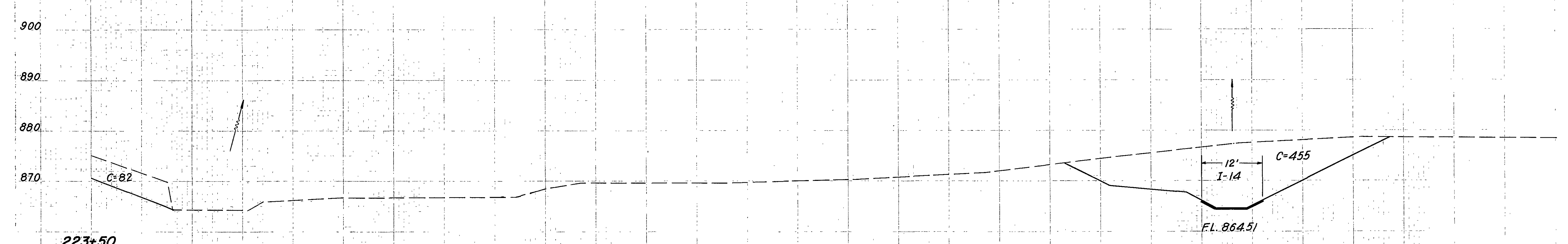
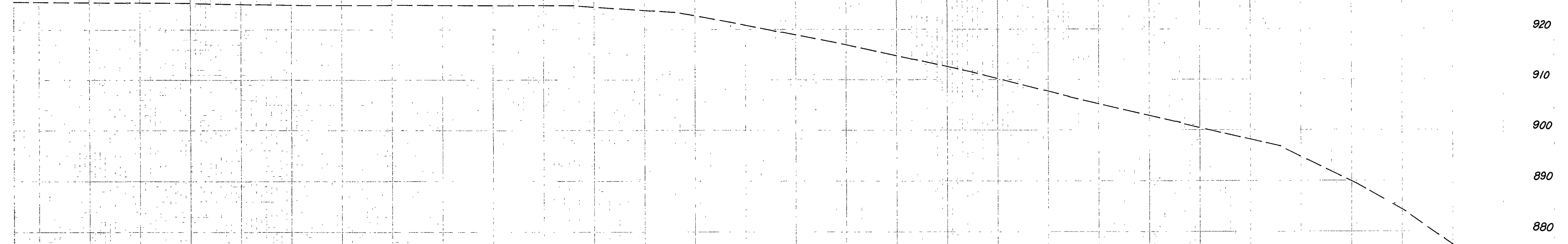
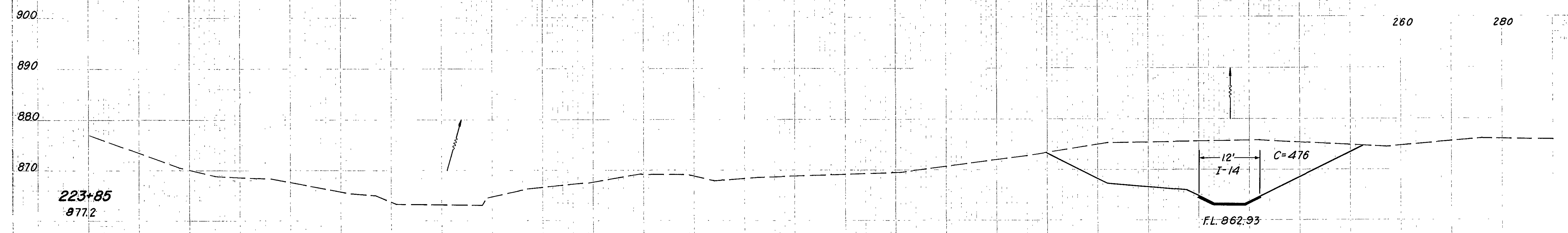


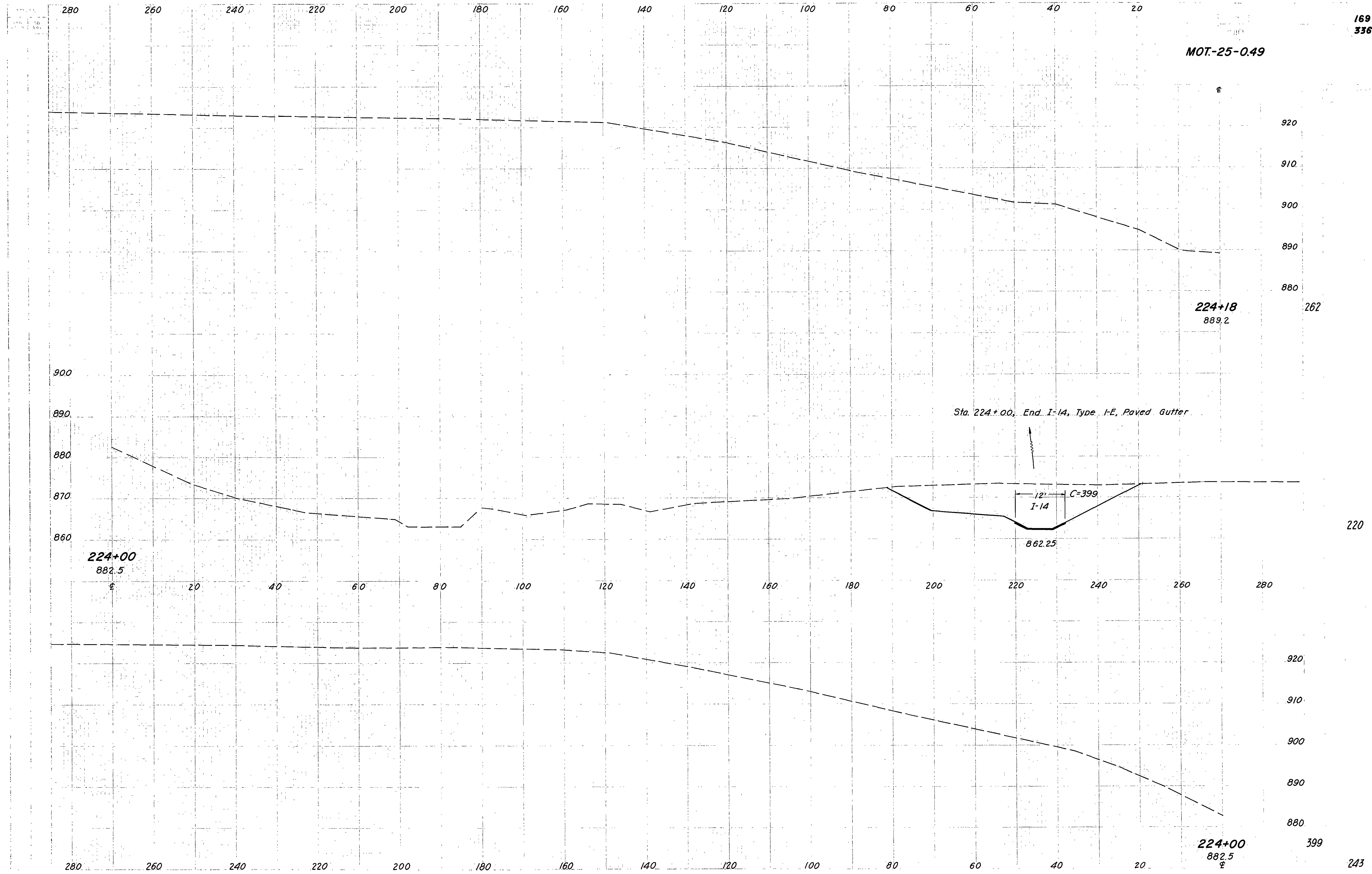




MOT.-25-0.49



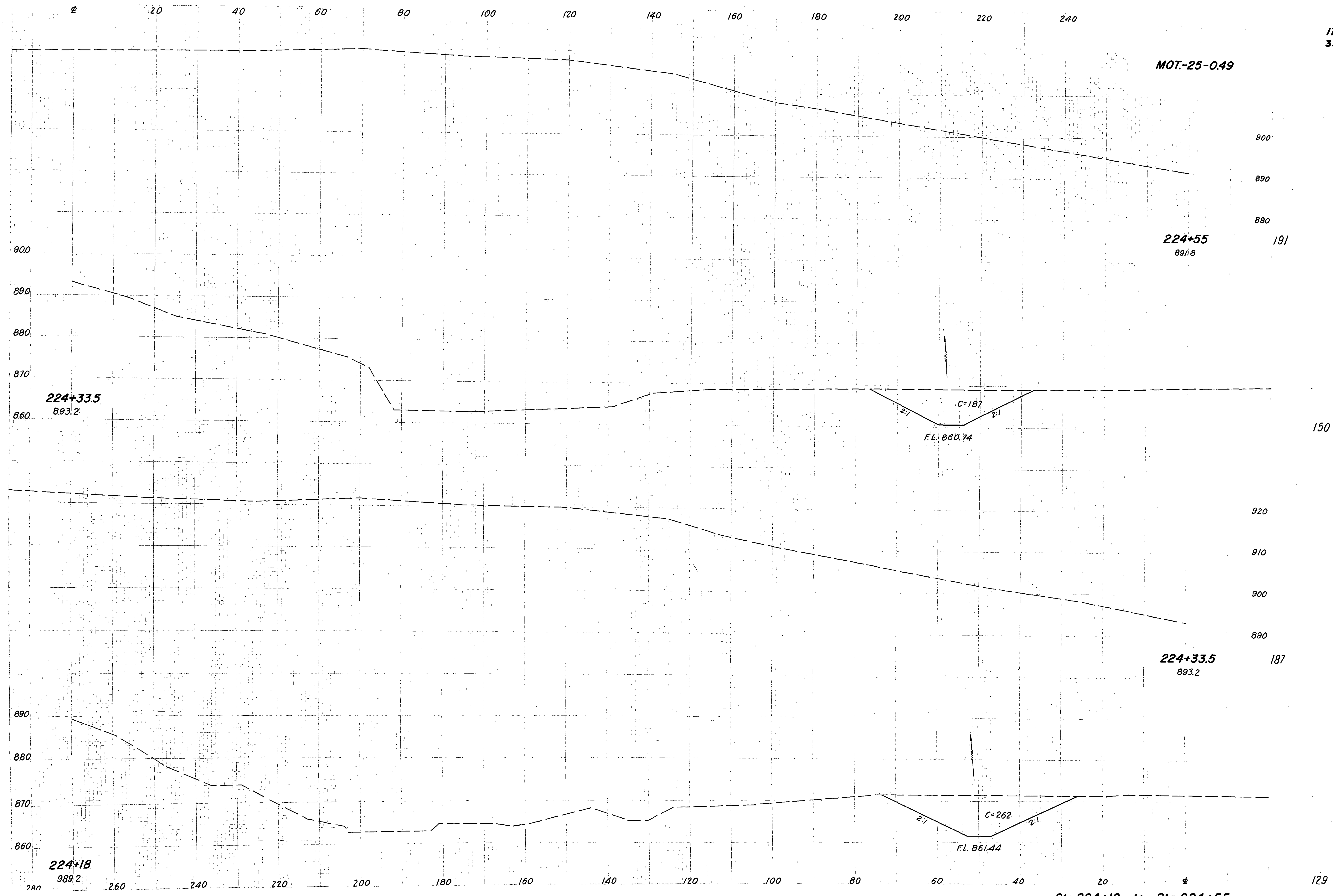




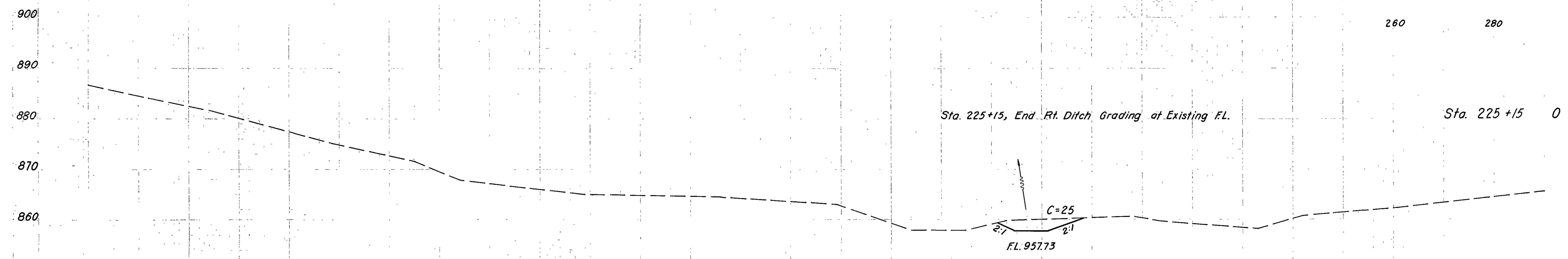
169
336

MOT-25-0.49

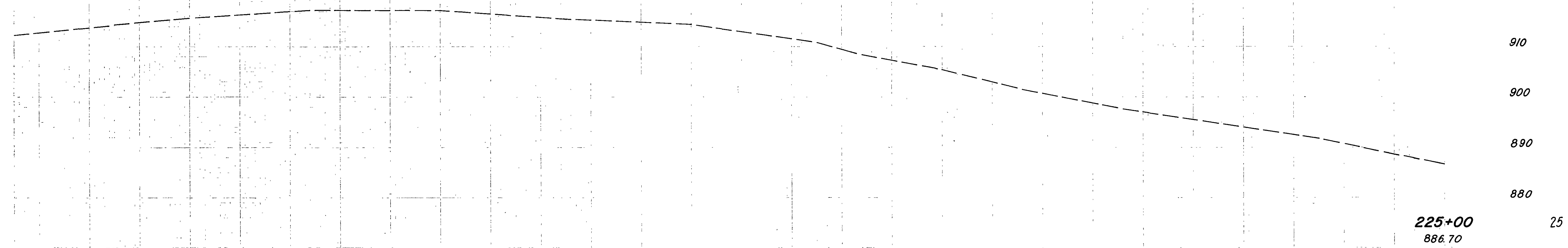
Sta 224+00 to Sta 224+18



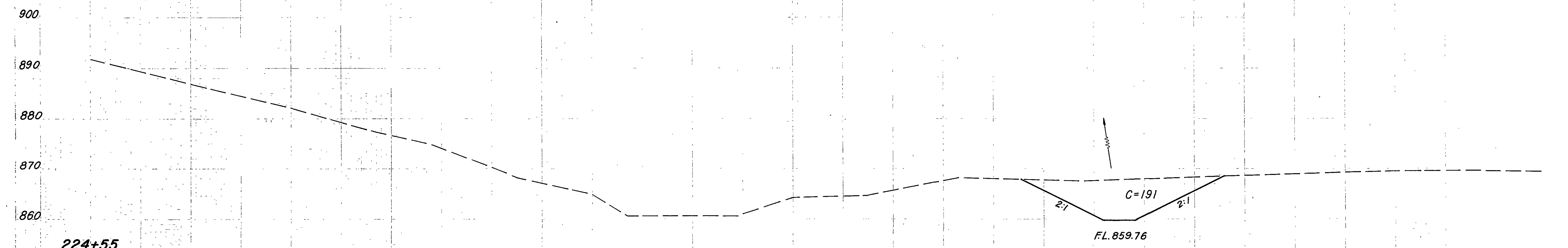
MOT.-25-0.49



225+00
886.70



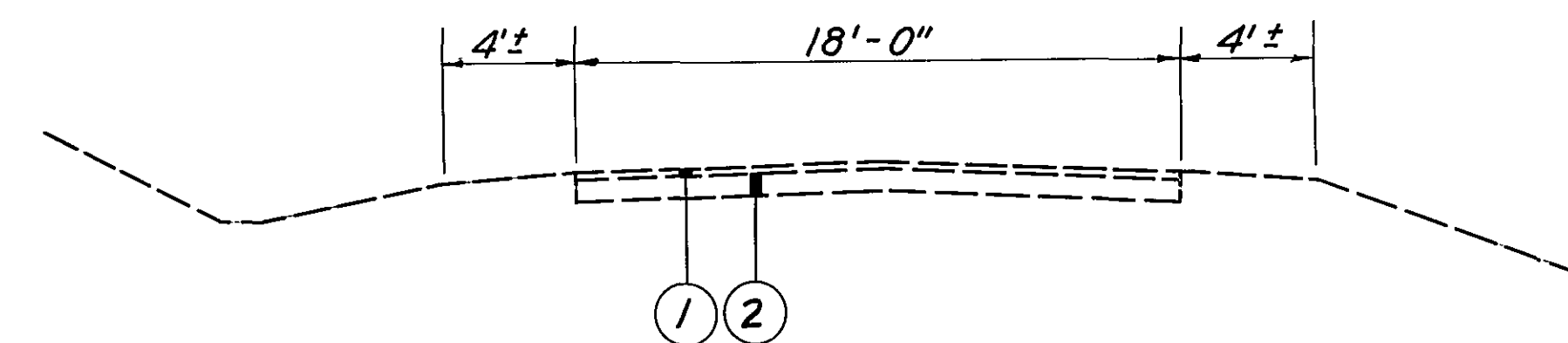
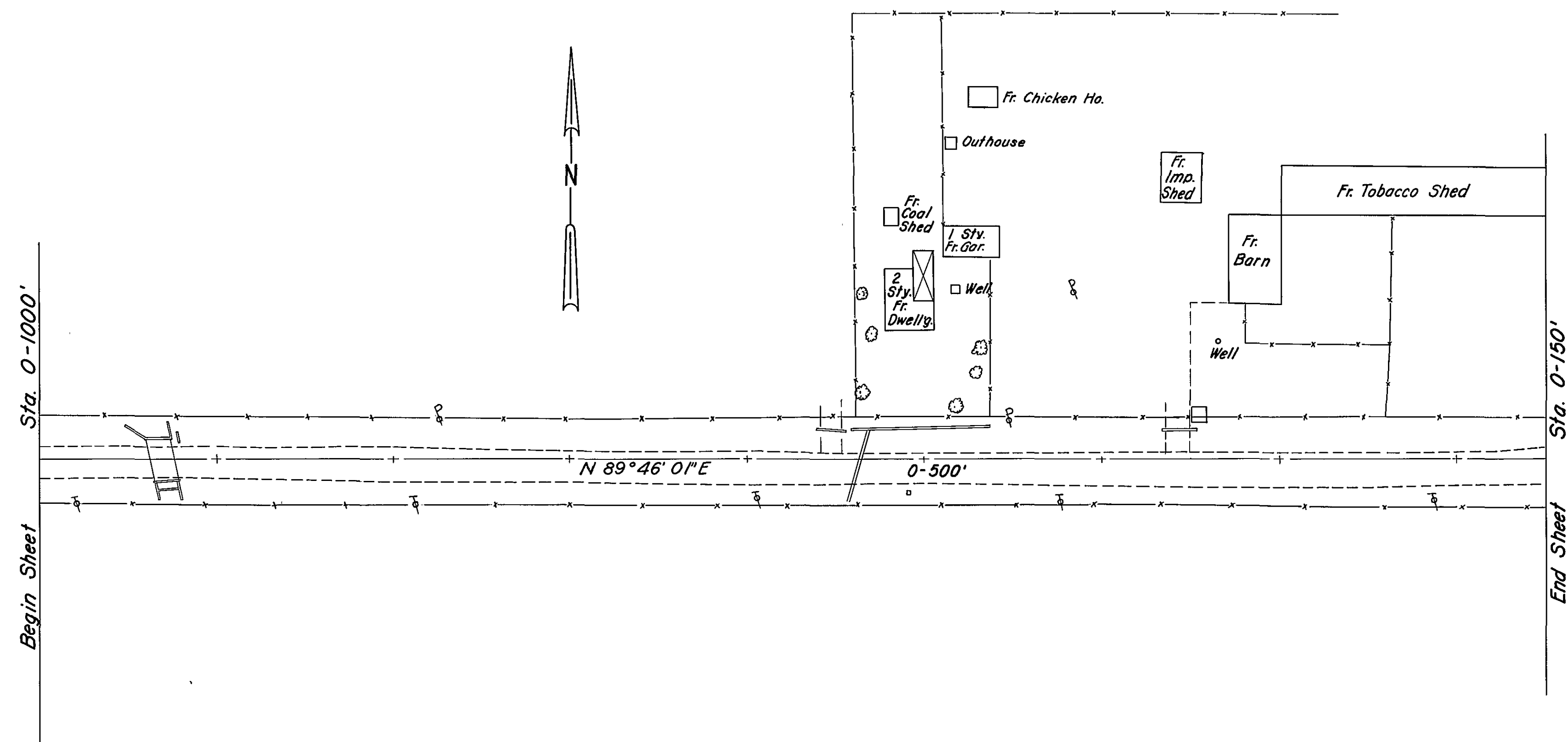
225+00
886.70 25



224+55
891.80

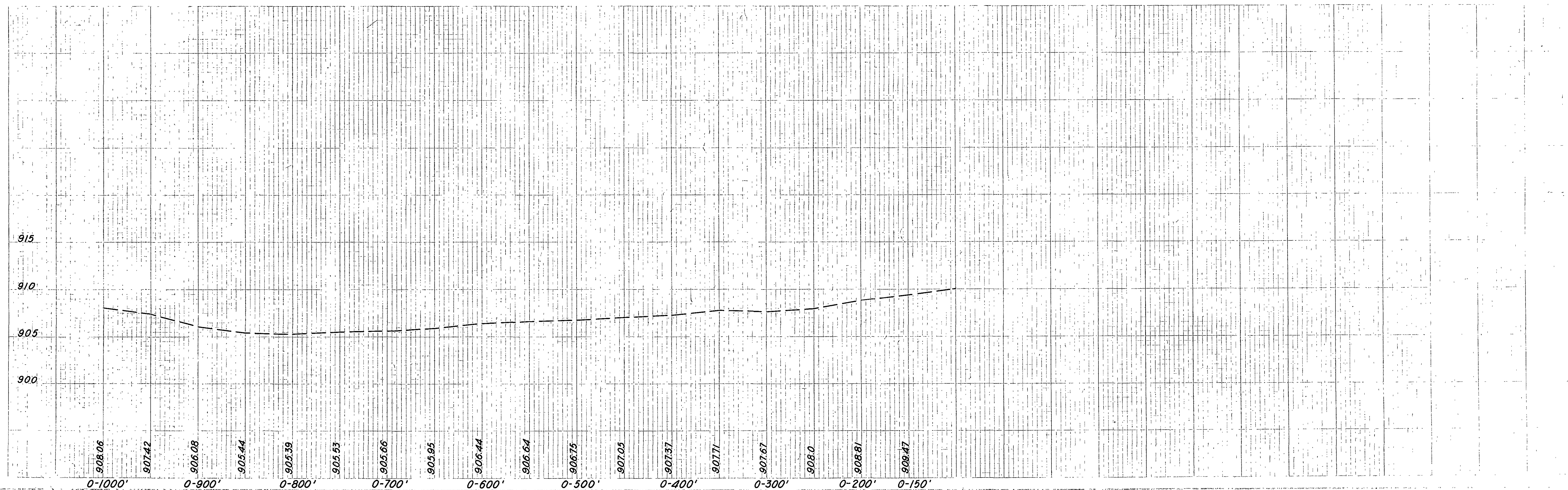
Sta. 224+55 to Sta. 225+00

MOT - 25- 049



- ① 2 1/2" Bituminous Surface Course
② 8" Gravel Base Course

TYPICAL SECTION OF ADJOINING PAVEMENT



MIAMISBURG- SPRINGBORO RD. Sta. 0-1000' to Sta. 0-150'

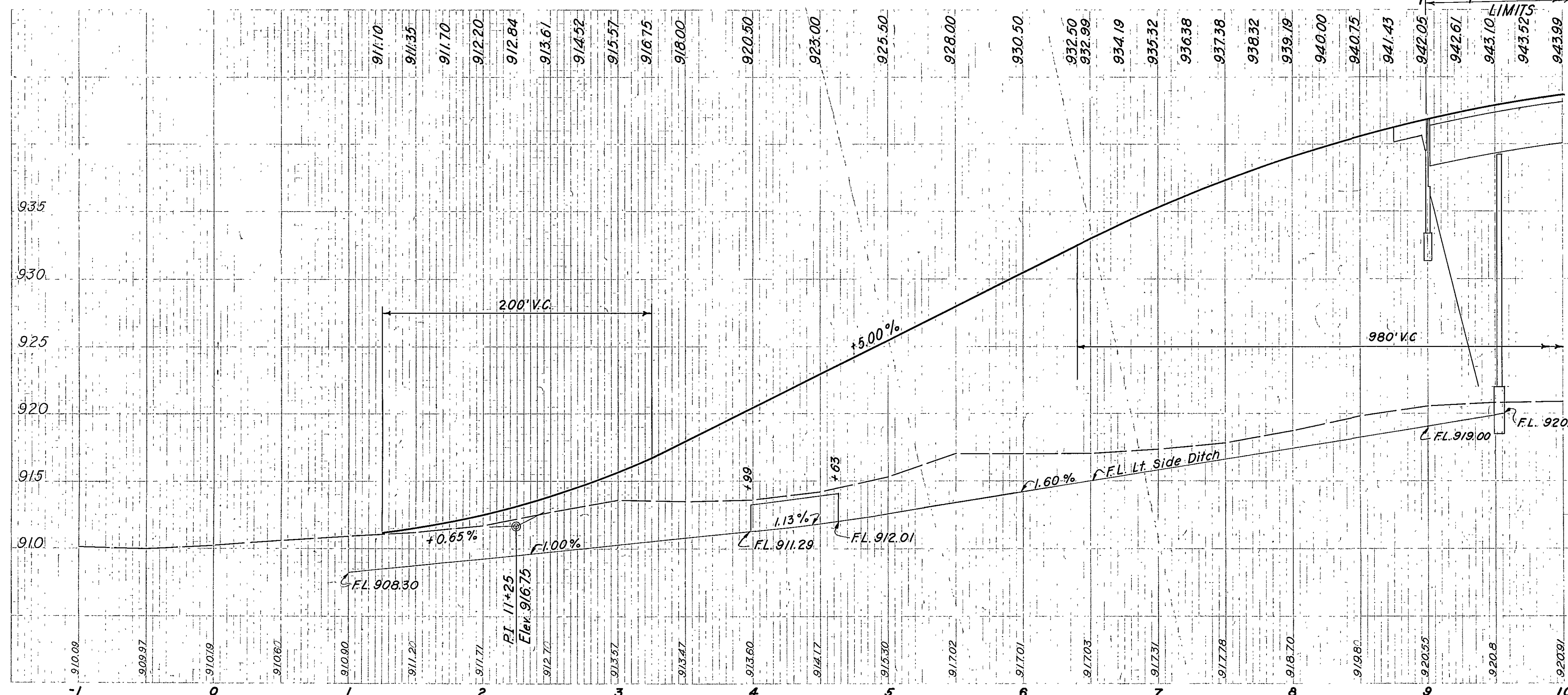
MONTGOMERY COUNTY
MOT. -25-0.49

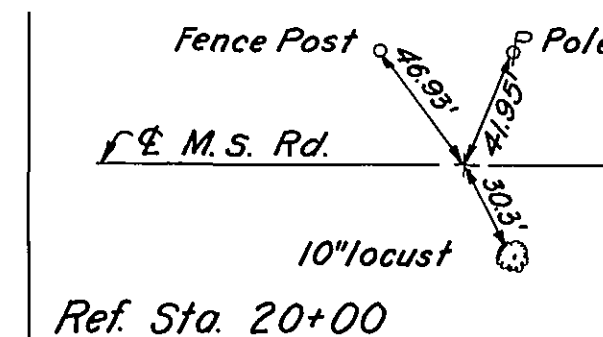


DRIVES AND APPROACHES								
Ref. No.	Station	Side	Length	T-35 Asphaltic Conc. Surf. Course	B-119 Crushed Agg. Base Course	T-10 Traffic Comp. Surf. Course	I-1 Pipe for Driveways	
				2" C.Y.	5" C.Y.	6" C.Y.		24" L.F.
1A	3+00	R	40	6.2	17			
2A	3+00	R	20			3		
3A	4+30	R		1.7	5			
4A	4+30	L	71	7.8	20			64
5A	4+30	L	160			40		
Totals				15.7	42	43		64

DRAINAGE								
Ref. No.	Station		Side	E-12 Pipe Removed 15" and Under L.F.	L-10 Sodding		I-10 Dumped Rock Channel Protection	
	From	To			Width L.F.	S.Y.	Depth inches	C.Y.
1 D	1 + 00	3 + 99	L		9	290		
2 D	3 + 43	3 + 52	L				30	7.5
3 D	5 + 76	5 + 94	L	18				
4 D	4 + 63	9 + 55	L		9	492		
5 D	7 + 50	8 + 91	L	141				
	Totals			159		782		7.5

ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type - Deep Standard L.F.
	From	To		
1 R	4 + 92	8 + 92	L	400
2 R	3 + 83	8 + 83	R	500
Totals				900





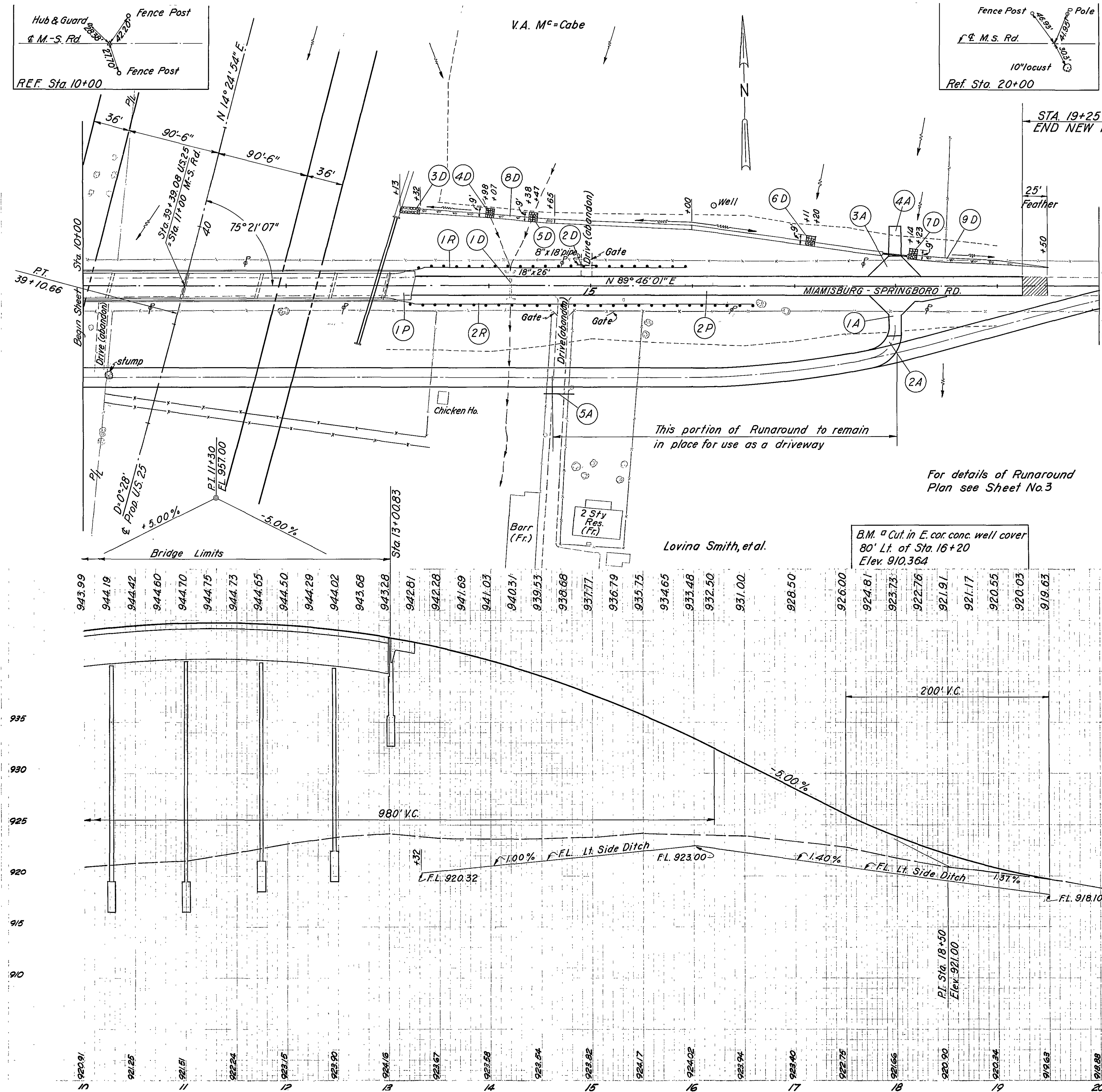
174
336

PAVEMENT									
Ref. No.	Station		Side	B-1/9 Crushed Agg. Base Course 6" C.Y.	T-30 Bituminous Prime Coat Gal.	T-35 Asph. Conc. Surface Course 1 1/2" C.Y.	I-22 Subbase 4" C.Y.	I-7 Reinf. Conc. App. Slab T=13" S.Y.	I-9 Stone Underdrain No.2 L.F.
	From	To							
1 P	13+00.83	13+25.83						75	
2 P	13+25.83	19+50		211	461	52	150		200
Totals				211	461	52	150	75	200

DRIVES AND APPROACHES							
Ref. No.	Station	Side	Length	T-35 Asphaltic Conc. Surf. Course 2" C.Y.	B-119 Crushed Agg. Base Course 5" C.Y.	T-10 Traffic Comp. Surf. Course 6" C.Y.	I-1 Pipe for Driveway 12" L.F.
1 A	18+00	R	40	6.2	17		
2 A	18+00	R	10			3	
3 A	18+00	L	20	4	11		
4 A	18+00	L	30			7	
5 A	14+63	R				1	30
Totals				10.2	28	11	30

DRAINAGE									
Ref. No.	Station		Side	F-12 Pipe Removed 15' and Under L.F	L-10 Sodding Width L.F	S.Y	I-10 Dumped Rock Channel Protection		S-24 Removal of Existing Structural lump
	From	To					Depth inches	C.Y	
1 D	14+21								
2 D	14+88	15+06	L	18					
3 D	13+13	13+32	L				30	11	
4 D	13+98	14+07	L				30	7.5	
5 D	14+38	14+47	L				30	7.5	
6 7	17+11	17+20	L				30	7.5	
7 D	18+14	18+23	L				30	7.5	
8 D	13+32	14+65	L		6	77			
9 D	18+23	19+50	L		6	85			
	Totals			18		162		48	lump

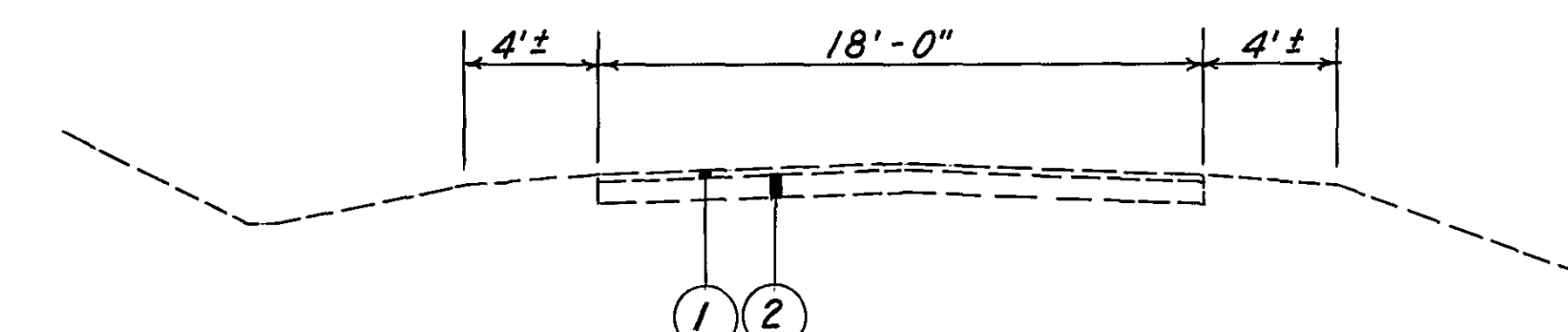
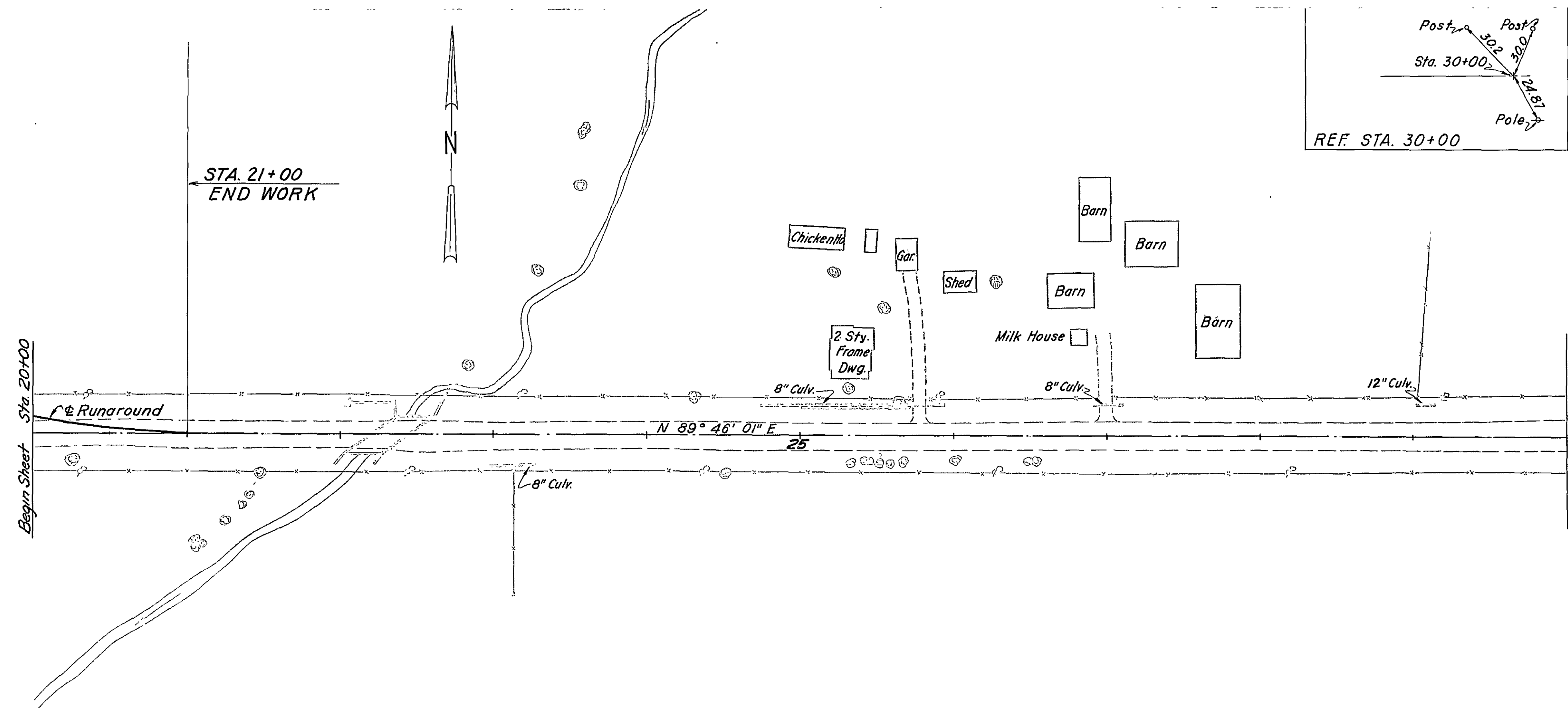
ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type - Dee Standard L.F.
	From	To		
1 R	13 + 18	15 + 93	L	275
2 R	13 + 10	16 + 60	R	350
Totals				625



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

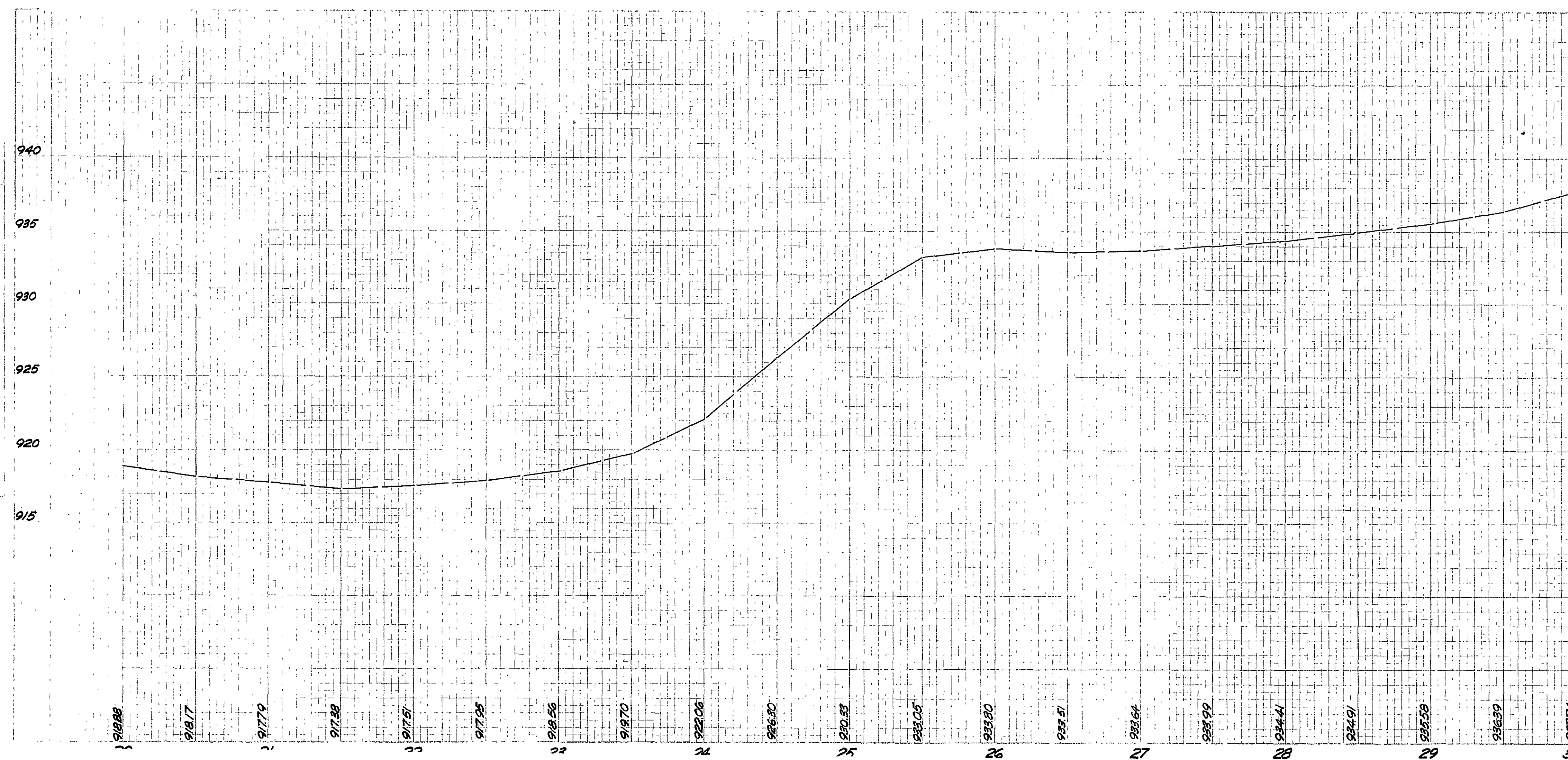
175
336

MONTGOMERY COUNTY
MOT.-25-0.49



- ① 2½" Bituminous Surface Course
- ② 8" Gravel Base Course

TYPICAL SECTION OF ADJOINING PAVEMENT



MOT.-25-0.49

63

328

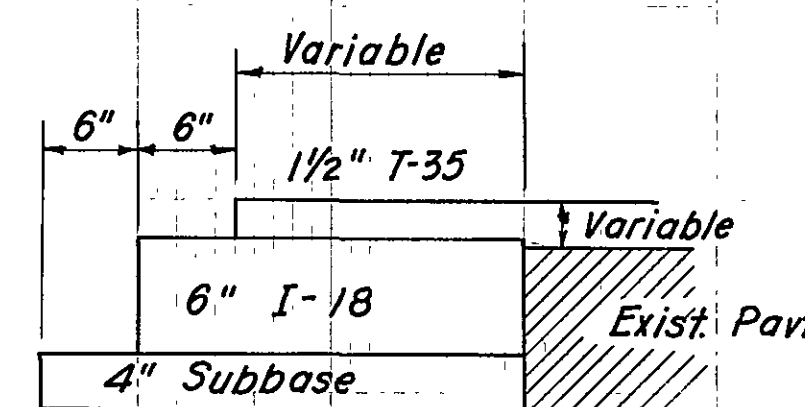
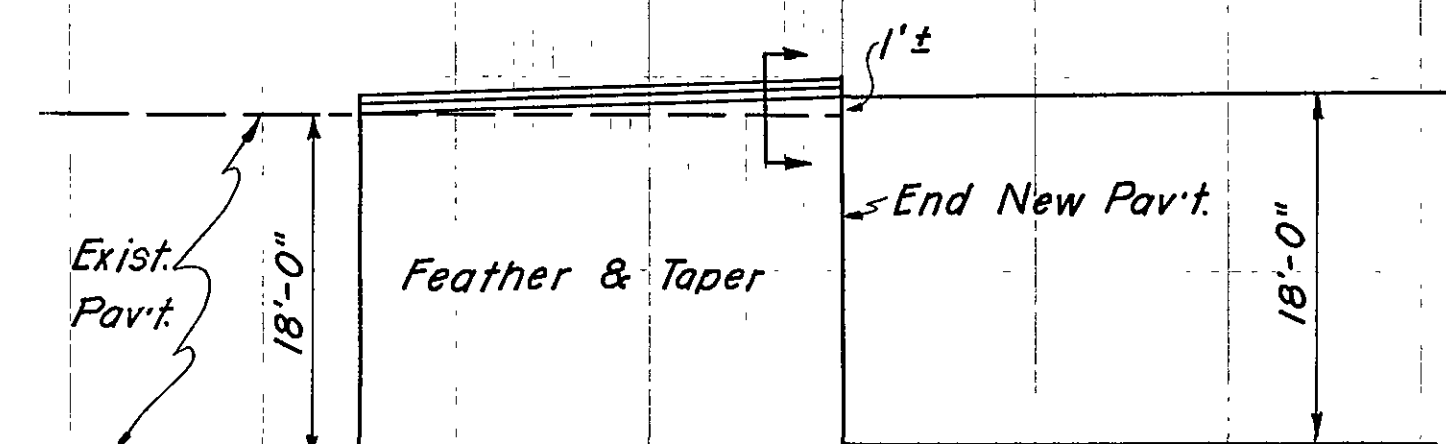
55

308

56

253

35



DETAIL OF TAPER
STA. 1+00 to STA. 1+25

140

120

100

80

60

40

20

0

20

40

60

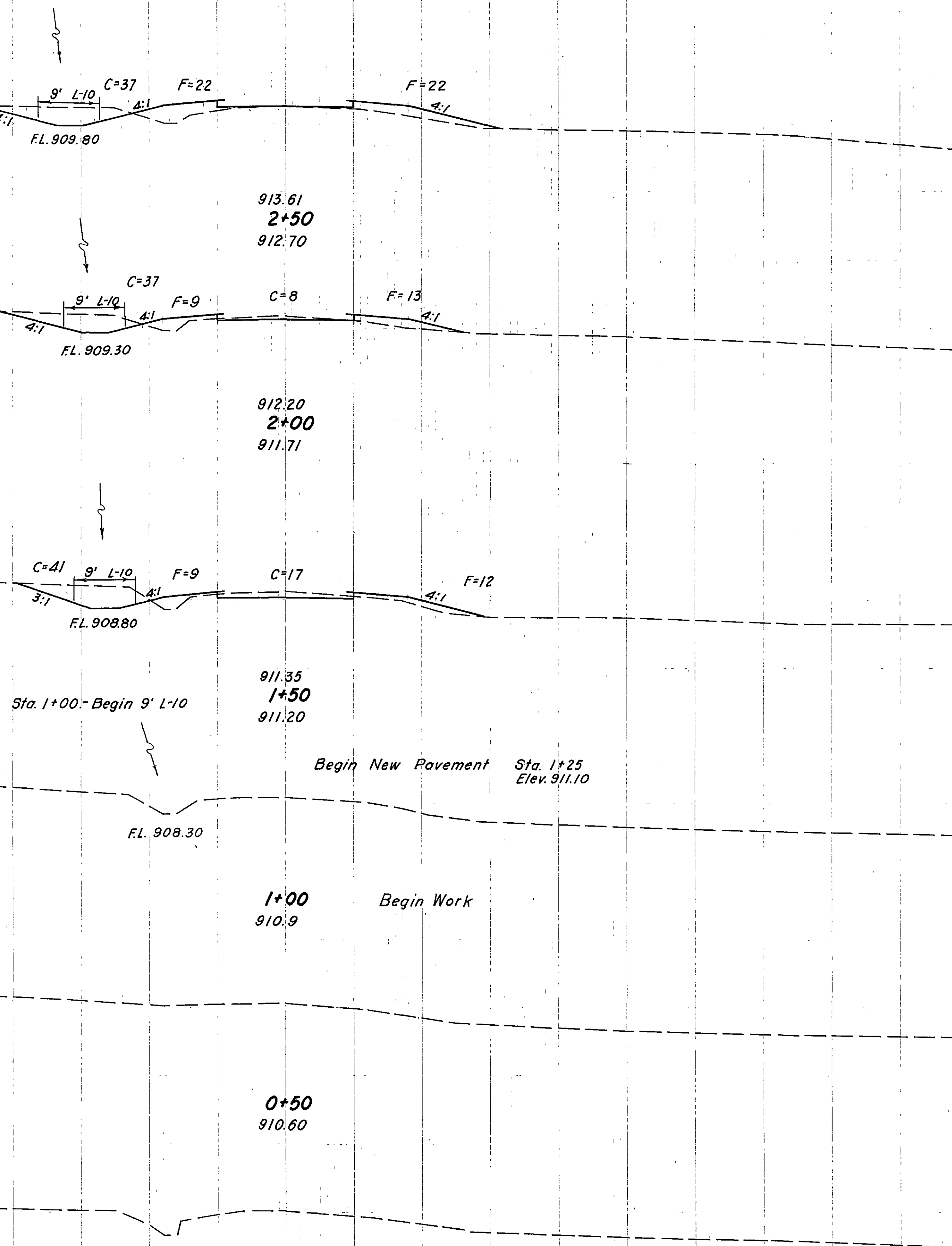
80

100

120

140

MIAMISBURG-SPRINGBORO ROAD Sta. 0+00 to Sta. 2+50



910

37 44

910

76 61

45 22

910

95 40

58 21

910

54 19

0 0

910

910

0+00
910.2

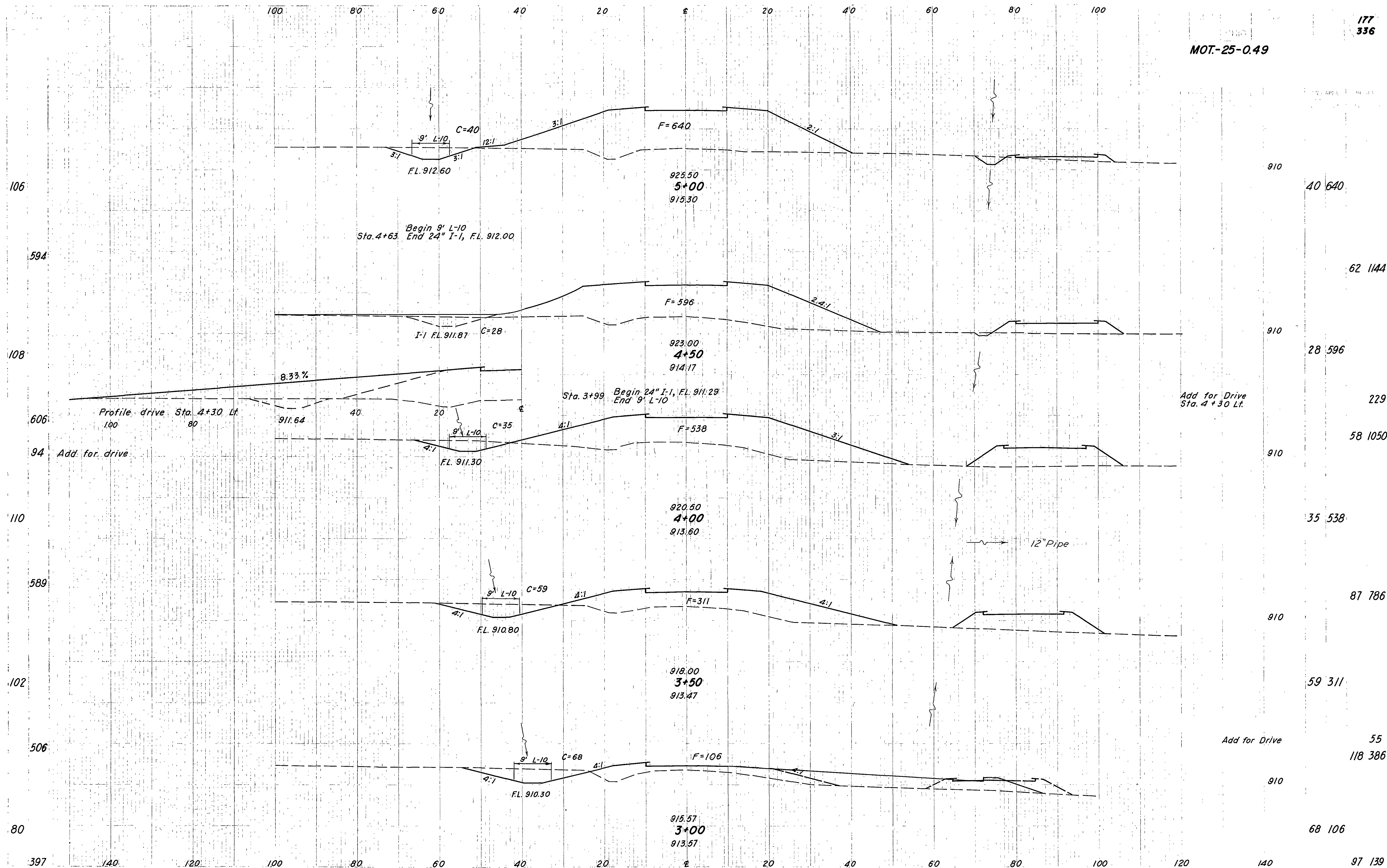
0+50
910.60

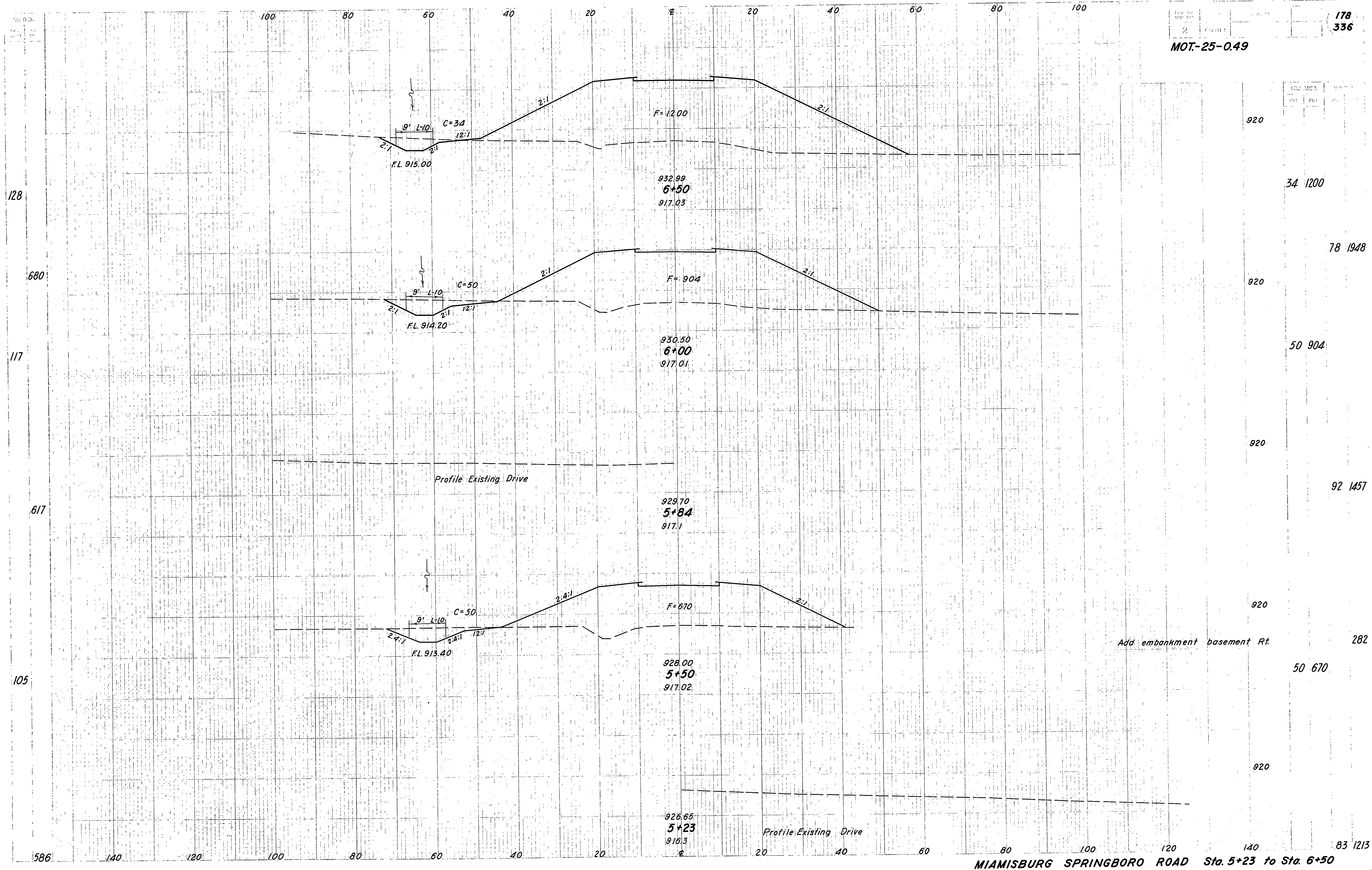
1+00
910.9

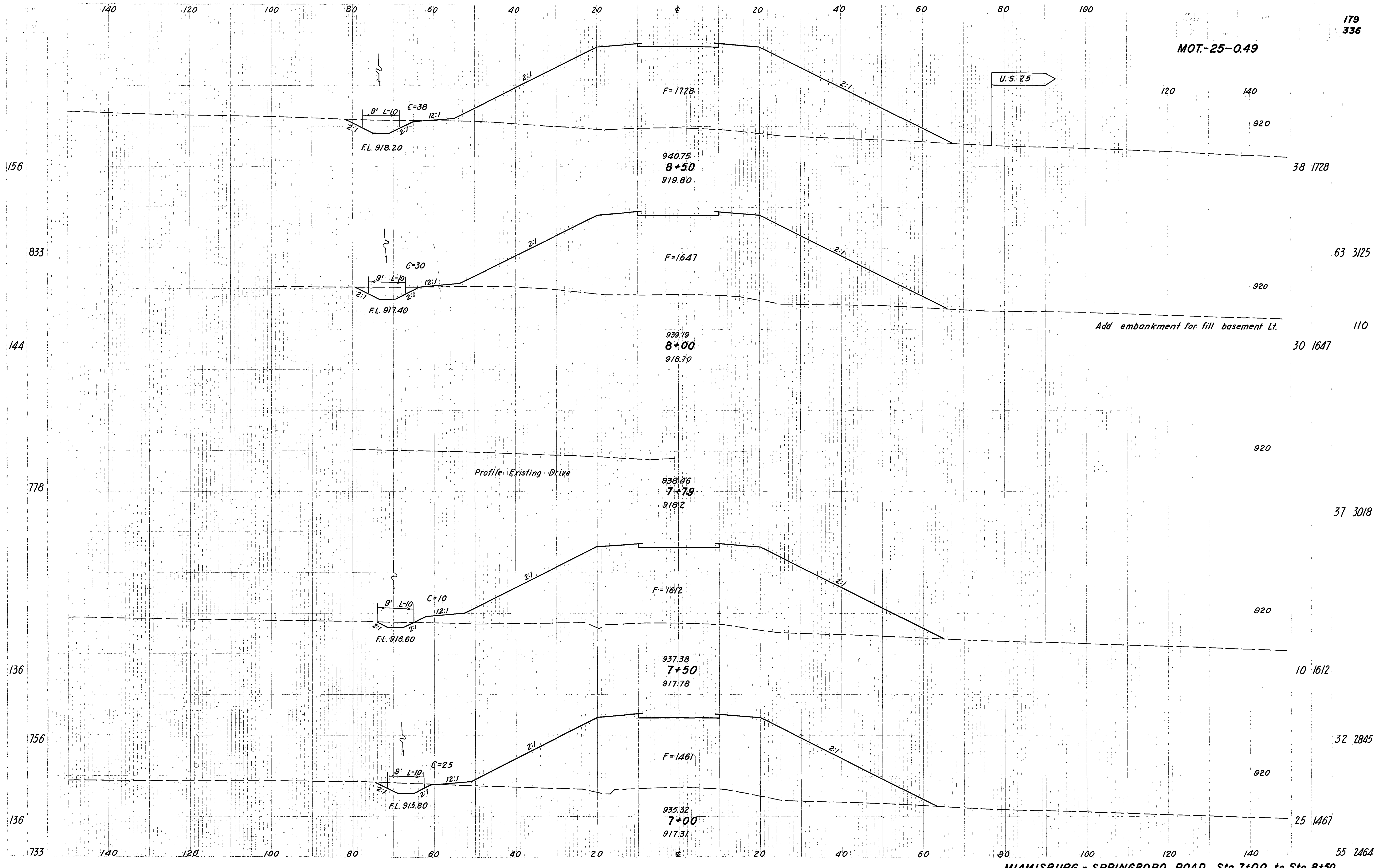
911.35
1+50
911.20

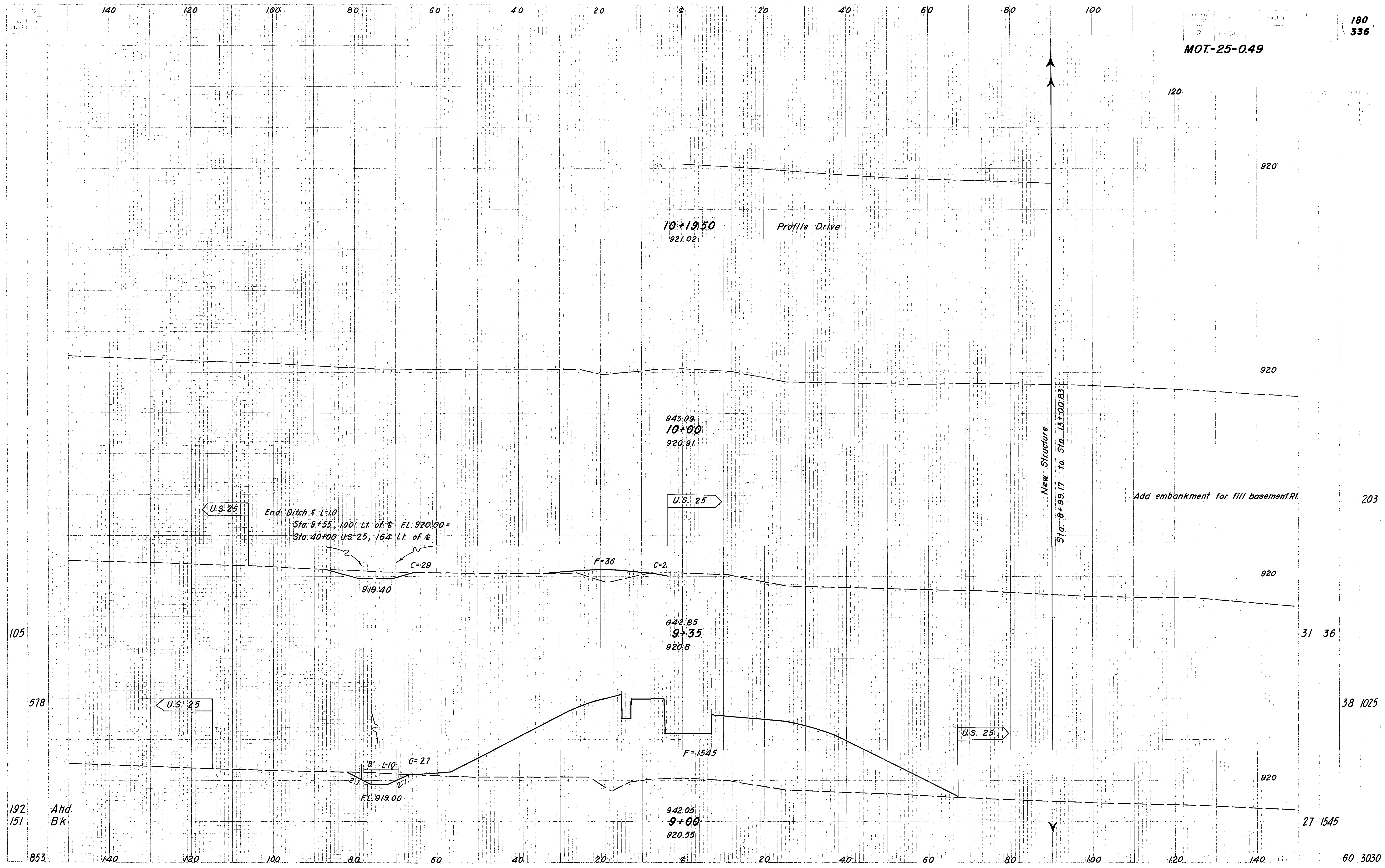
913.61
2+50
912.70

MOT-25-0.49









140

120

100

80

60

40

20

±

20

40

60

80

100

120

140

MOT-25-0.49

18/
336

944.02
12+50
923.90

944.50
12+00
923.15

944.73
11+50
922.24

944.70
11+00
921.74

944.42
10+50
921.25

New Structure
Sta. 8+99.17 to Sta. 13+00.83

920

920

920

920

920

140

120

100

80

60

40

20

±

20

40

60

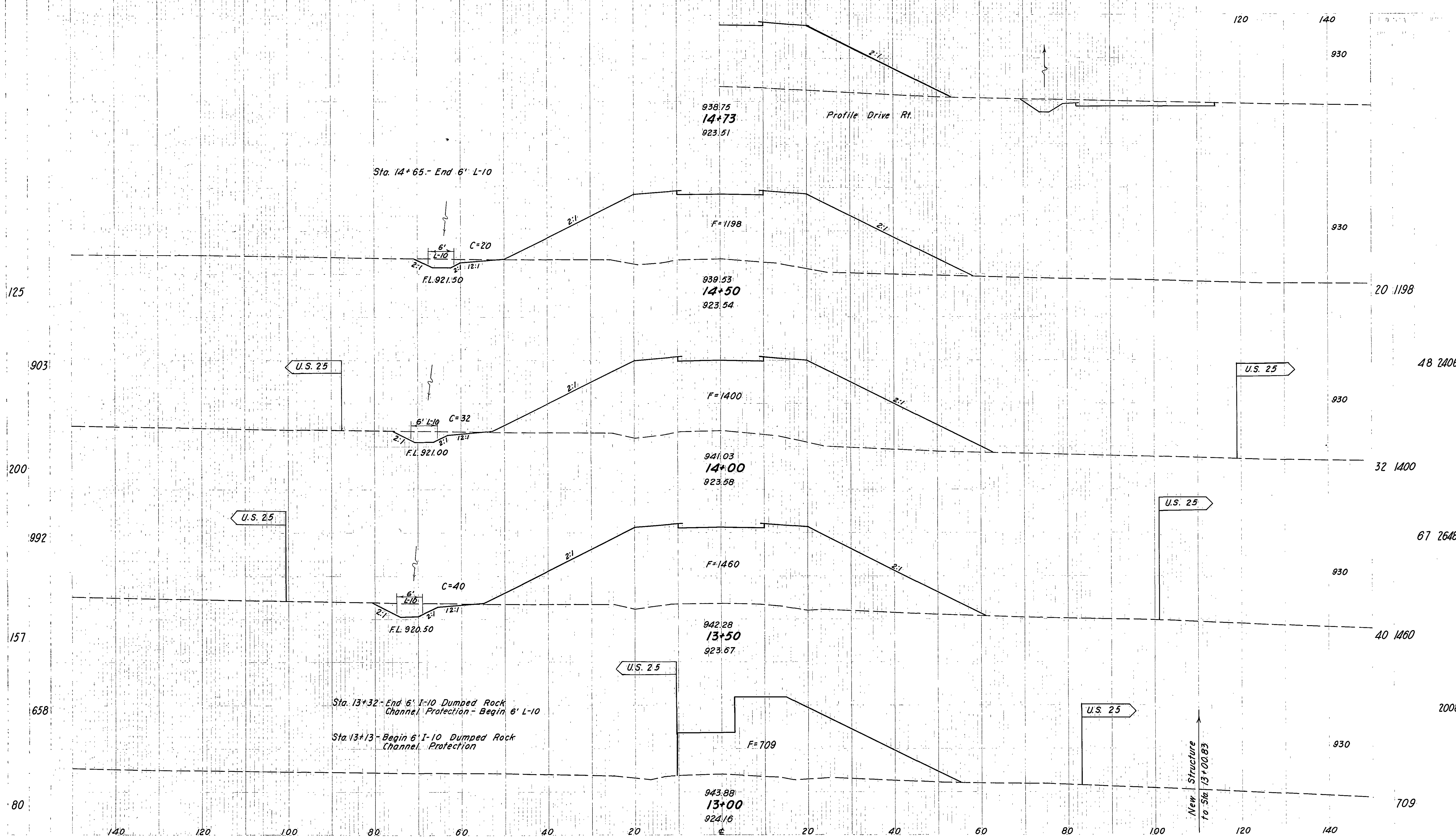
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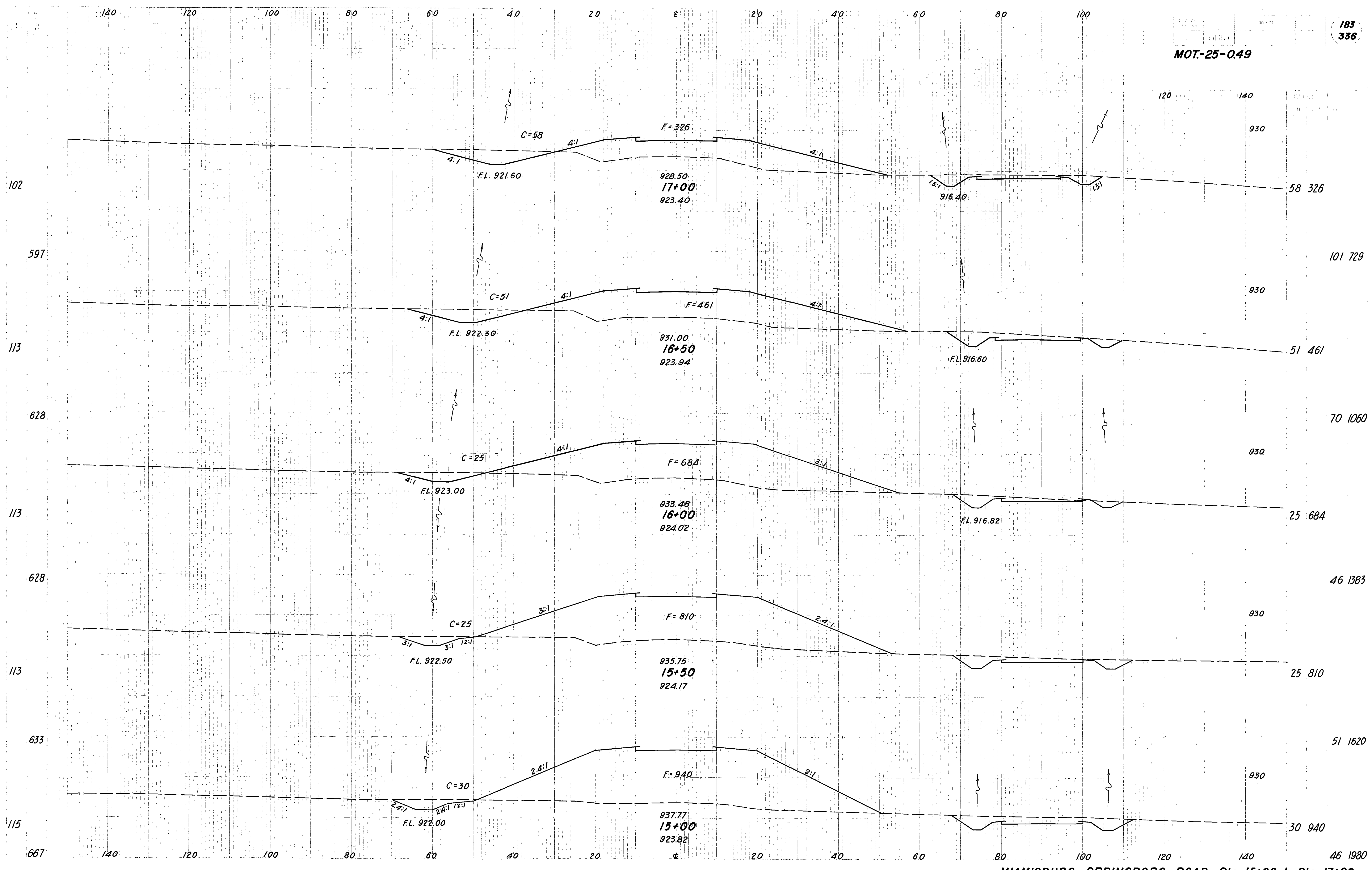
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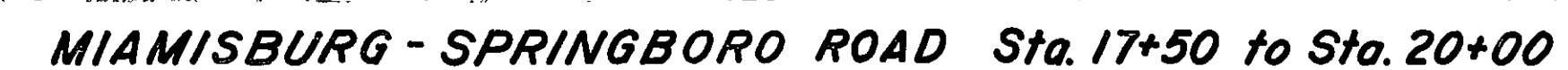
120

140

MIAMISBURG - SPRINGBORO ROAD Sta. 10+50 to Sta. 12+50



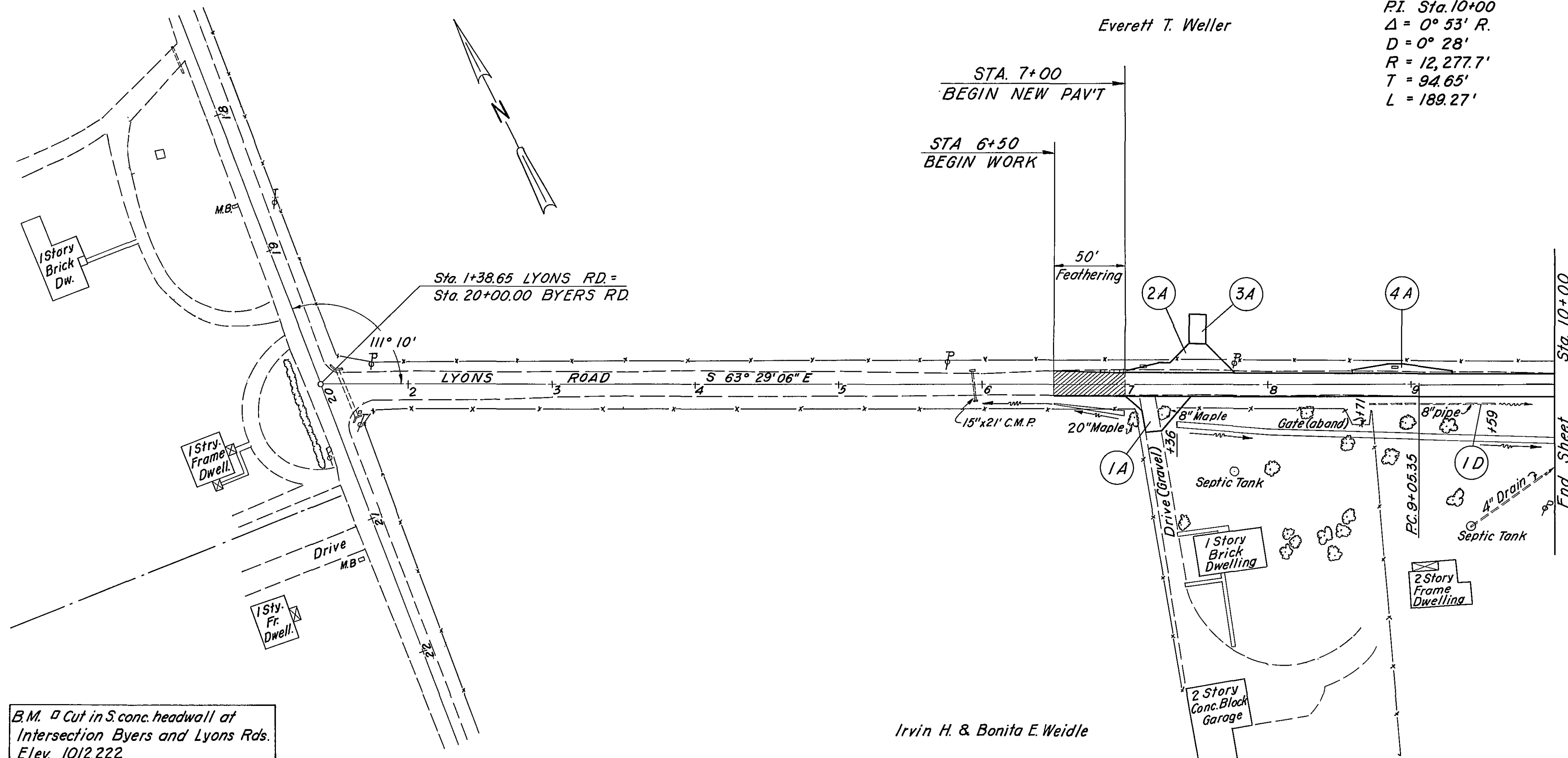




Everett T. Weller

PI Sta. 10+00
 $\Delta = 0^\circ 53' R$
 $D = 0^\circ 28'$
 $R = 12,277.7'$
 $T = 94.65'$
 $L = 189.27'$

MOT-25-049



PAVEMENT

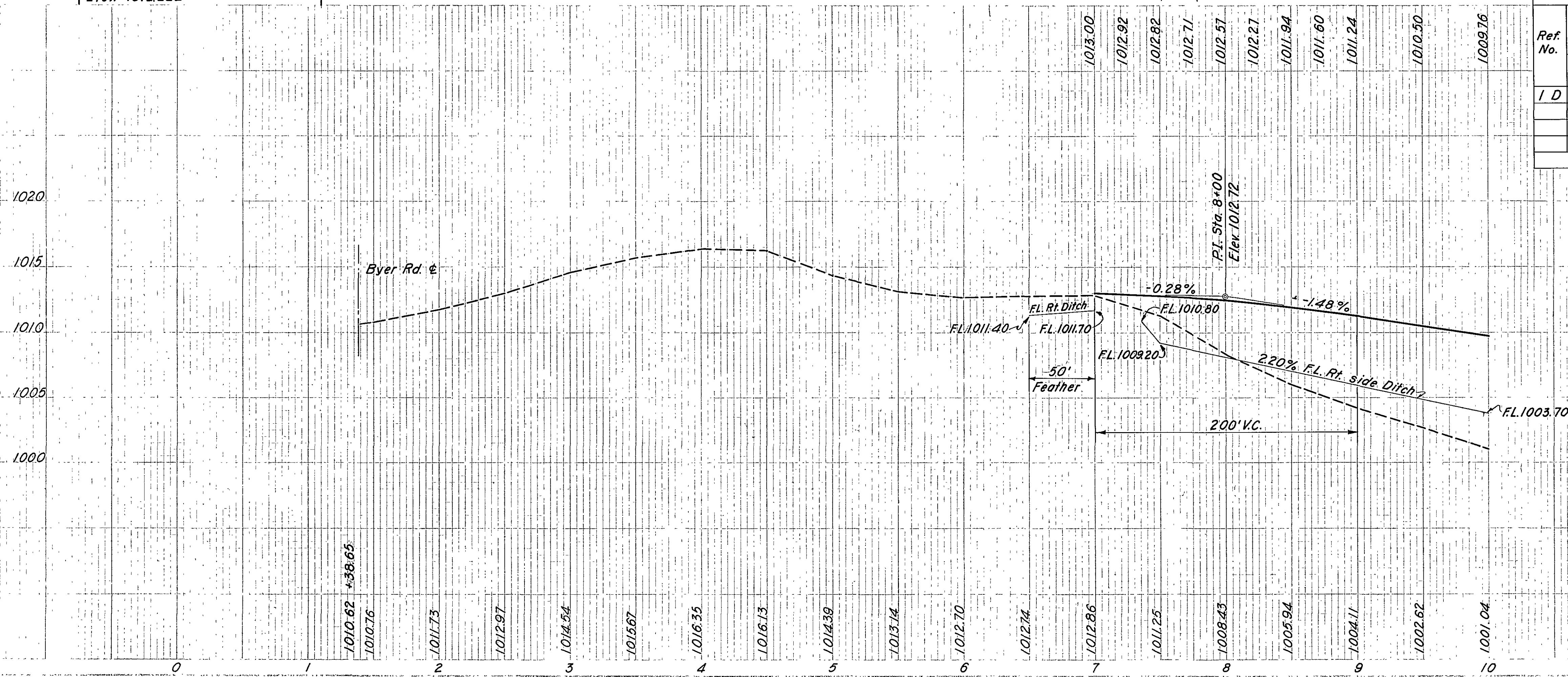
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	From	To						
1 P	6+50	10+00		95	230	25	67	84
Totals				95	230	25	67	84

DRIVES AND APPROACHES

Ref. No.	Station	Side	Length	B-119 Crushed Agg. Base Course		T-35 Asphaltic Conc. Surf. Course 2" C.Y.
				5" C.Y.	6" C.Y.	
1 A	7+13	R	26	11		4.2
2 A	7+51	L	20	12.5		4.6
3 A	7+51	L	20		4.5	
4 A	8+90	L	6	5		1.7
Totals				28.5	4.5	10.5

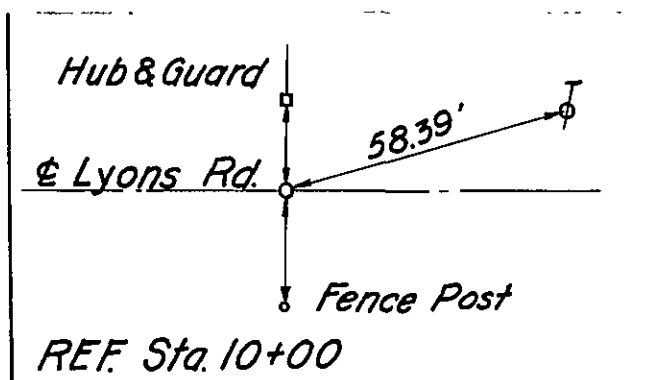
DRAINAGE

Ref. No.	Station		Side	E-12 Pipe Removed 15" and Under L.F.
	From	To		
1 D	8+71	9+59	R	88
Totals				88



LYONS RD. Sta. 0+00 to Sta. 10+00

Everett T. Weller



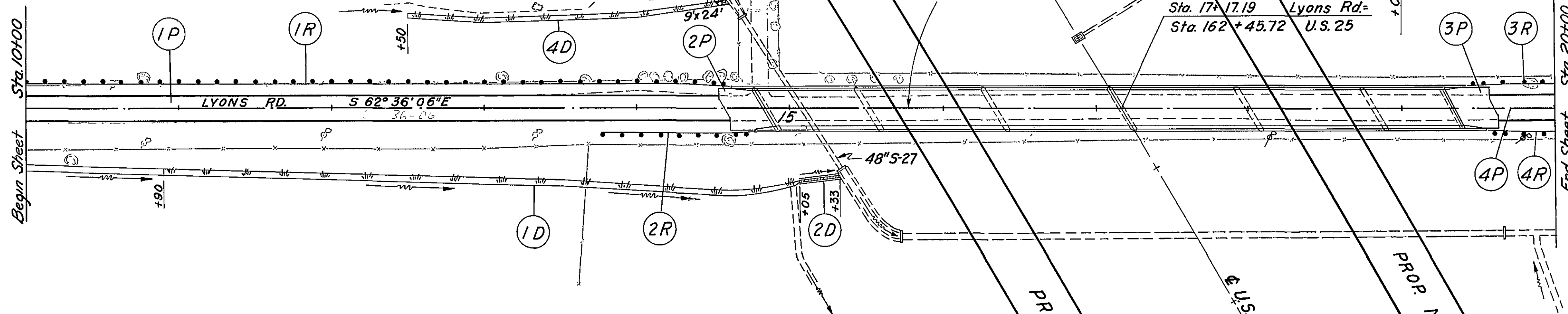
Everett T. Weller

BRIDGE NO. MOT-25-0306
Type - Continuous steel beam with reinf. conc.
deck and substructure.
Spans: 66'-6" 82'-9" 82'-9" 82'-9" and
49'-6" c/c bearings
Roadway: 24'-0" f/f 2'-0" safety curbs
Load Frequency: CF=130 (57)
Skew: 30°-45' R.F.
Wearing Surface: 3/4" monolithic concrete
Approach Slabs: 45'-1-54 (25' long)

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

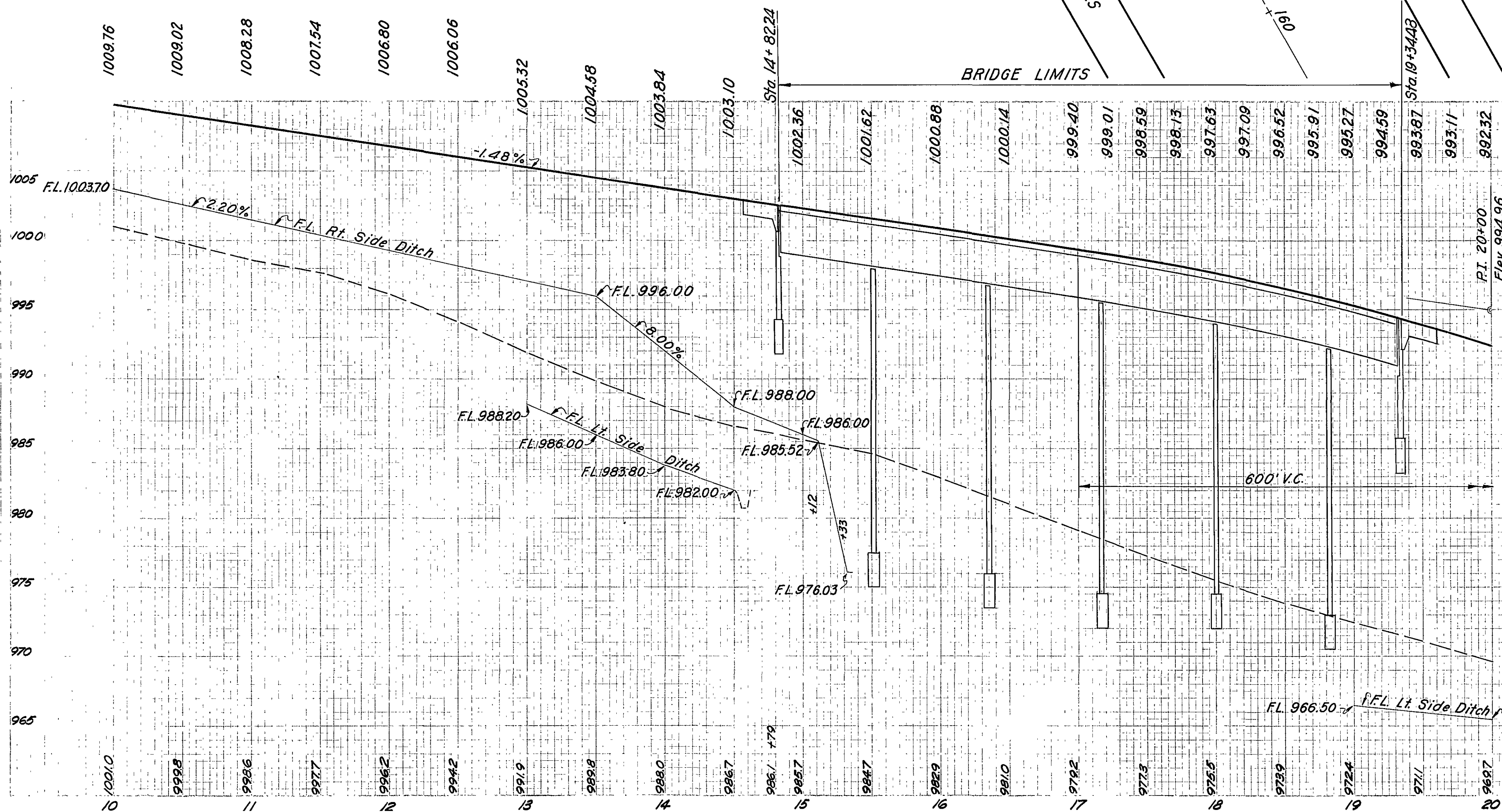
186
336

MONTGOMERY COUNTY
MOT-25-0.49



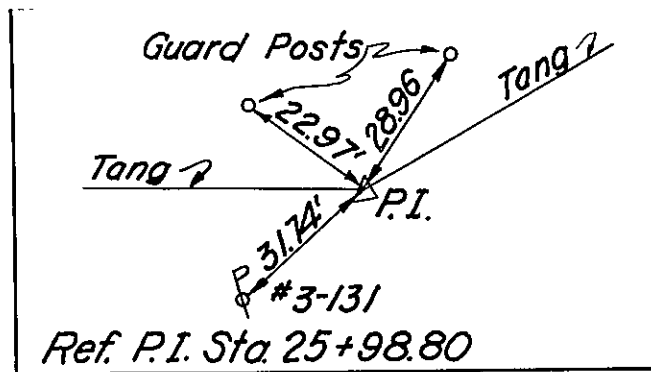
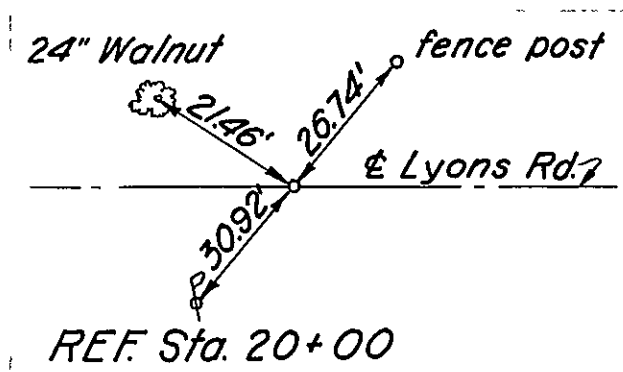
PAVEMENT									
Ref. No.	Station		Side	B-119 Crushed Agg. Base Course 6" C.Y.	T-30 Bituminous Prime Coat Gal.	T-35 Asph. Conc. Surface Course 1 1/2" C.Y.	I-22 Subbase 4" C.Y.	I-7 Reinf. Conc. Appr. Slab T = 13" S.Y.	I-9 Stone Underdrain No.2 L.F.
	From	To							
1 P	10+00	14+57.74		145	310	34	102		126
2 P	14+57.74	14+82.74						76	
3 P	19+34.98	19+59.98						76	
4 P	19+59.98	20+00		13	27	3	9		14
Totals				158	337	37	111	152	140

Irvin H. & Bonita E. Weidle

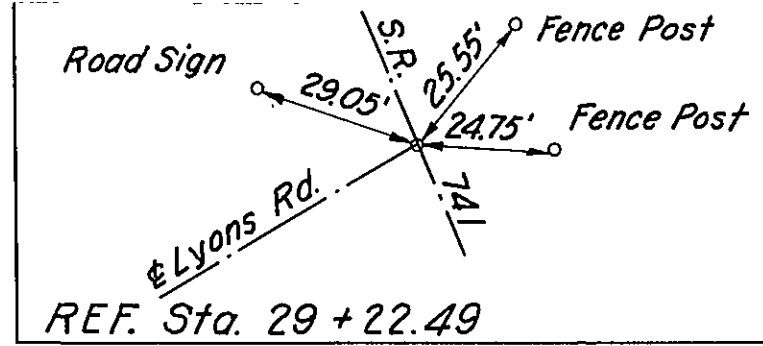


DRAINAGE						
Ref. No.	Station		Side	I-10 Dumped Rock Channel Protection Depth inches	I-14 Paved Gutter Type 1 L.F.	L-10 Sodding Width L.F.
	From	To				
1 D	10+90	15+05	R			6
2 D	15+05	15+33	R		30	
3 D	14+34	14+57	L	30	20	
4 D	12+50	14+50	L			3
5 D	19+00	20+00	L			6
Totals				20	30	411

ROADWAY			
Ref. No.	Station		I-15 Guard Rail Steel Beam Type-Deep Standard L.F.
	From	To	
1 R	10+00	14+62.5	462.5
2 R	13+77.5	14+77.5	100
3 R	19+42	20+00	58
4 R	19+55	20+00	45
Totals			665.5



STA. 29+00
END WORK
STA. 28+75
END NEW PAV'T.



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

187
336

MONTGOMERY COUNTY
MOT-25-0.49

Everett T. Weller

CURVE DATA
P.I. Sta. 25+98.80
D = 7° 30' 00"
Δ = 30° 02' 00"
R = 763.94'
T = 204.94'
L = 400.44'

Sta. 29+22.49 & Lyons Rd =
Sta. 5+00.00 & S.R. 741

DRAINAGE

Ref. No.	Station	Side	I-2 Storm Sewers Sec. M-6.6 (a) 48" L.F.	I-1 Pipe for Driveway 48" L.F.	I-4 Pipe Outlets for Rd'wy. Drainage 6" L.F.	I-10 Dumped Rock Channel Protection		I-14 Paved Gutter		L-10 Sadding Width L.F.	S.Y.	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class "E" C.Y.
						Depth Inches	C.Y.	Type I b	Type I c				
1 D	20+00	25+30	L										
2 D	25+30	26+00	L			30	75						
3 D	26+00	27+68	L							158			
4 D	20+00	23+55	R					355					
5 D	24+28	25+23	R					95					
6 D	25+80	27+35	R					168					
7 D	27+35	28+65	R	240								2	0.9
8 D	23+55	24+26	R		72								
9 D	27+00	27+05	R			10							
10 D	25+13	25+80	R		72								
Totals			240	144	10		75	618	158		519	2	0.9

PAVEMENT

Ref. No.	Station	Side	B-119 Crushed Agg. Base Course 6" C.Y.	T-30 Bituminous Prime Coat Gal.	T-35 Asphaltic Conc. Surf. Course 1 1/2" C.Y.	I-22 Subbase 4" C.Y.	I-9 Stone Underdrain No. 2 L.F.
1 P	20+00	29+00	280	600	67	195	252
Totals			280	600	67	195	252

ROADWAY

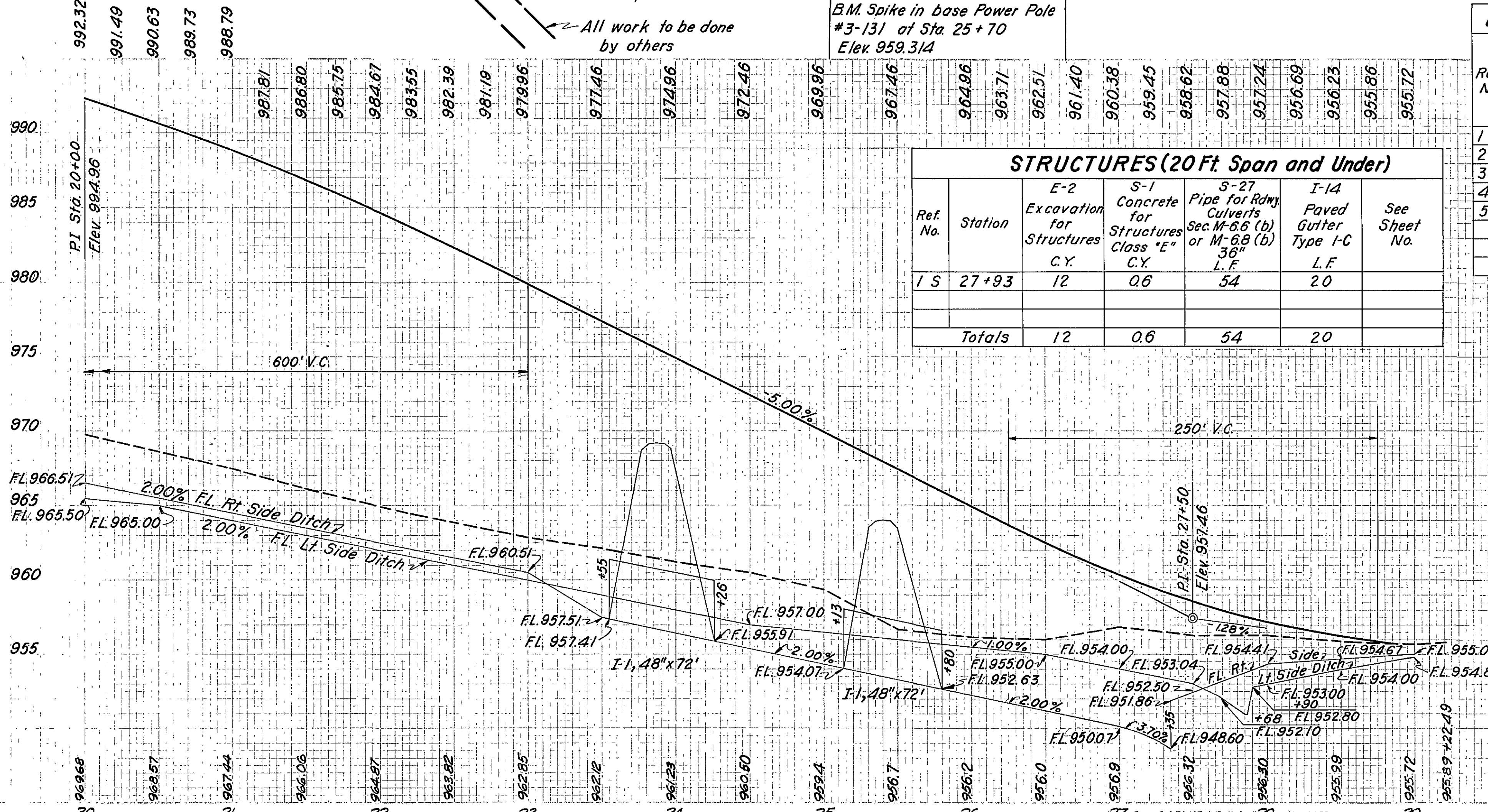
Ref. No.	Station	Side	I-15 Guard Rail Steel Beam Type Deep Standard L.F.	I-15 Wood Guard Rail Posts Without Rail Ea.
1 R	20+00	25+04.5	L	504.5
2 R	20+00	23+67.5	R	367.5
3 R	23+71	23+76	R	8
4 R	24+00	24+15	R	7
5 R	24+20	25+20	R	100
6 R	25+75	27+00	R	125
Totals			1097	15

DRIVES AND APPROACHES

Ref. No.	Station	Side	Length L.F.	B-119 Crushed Agg. Base Course		T-35 Asphaltic Conc. Surf. Course 2" C.Y.
				5" C.Y.	6" C.Y.	
1 A	24+05	R	23.75	14		5
2 A	24+05	R	88		20	
3 A	25+50	L	6	5		1.7
4 A	25+50	R	62	20		7
5 A	25+50	R	50		12	
Totals				39	32	13.7

STRUCTURES (20 Ft Span and Under)

Ref. No.	Station	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures Class "E" C.Y.	S-27 Pipe for Rdwy. Culverts Sec. M-6.6 (b) or M-6.8 (b) 36" L.F.	I-14 Paved Gutter Type I-C L.F.	See Sheet No.
1 S	27+93	12	0.6	54	20	
Totals		12	0.6	54	20	



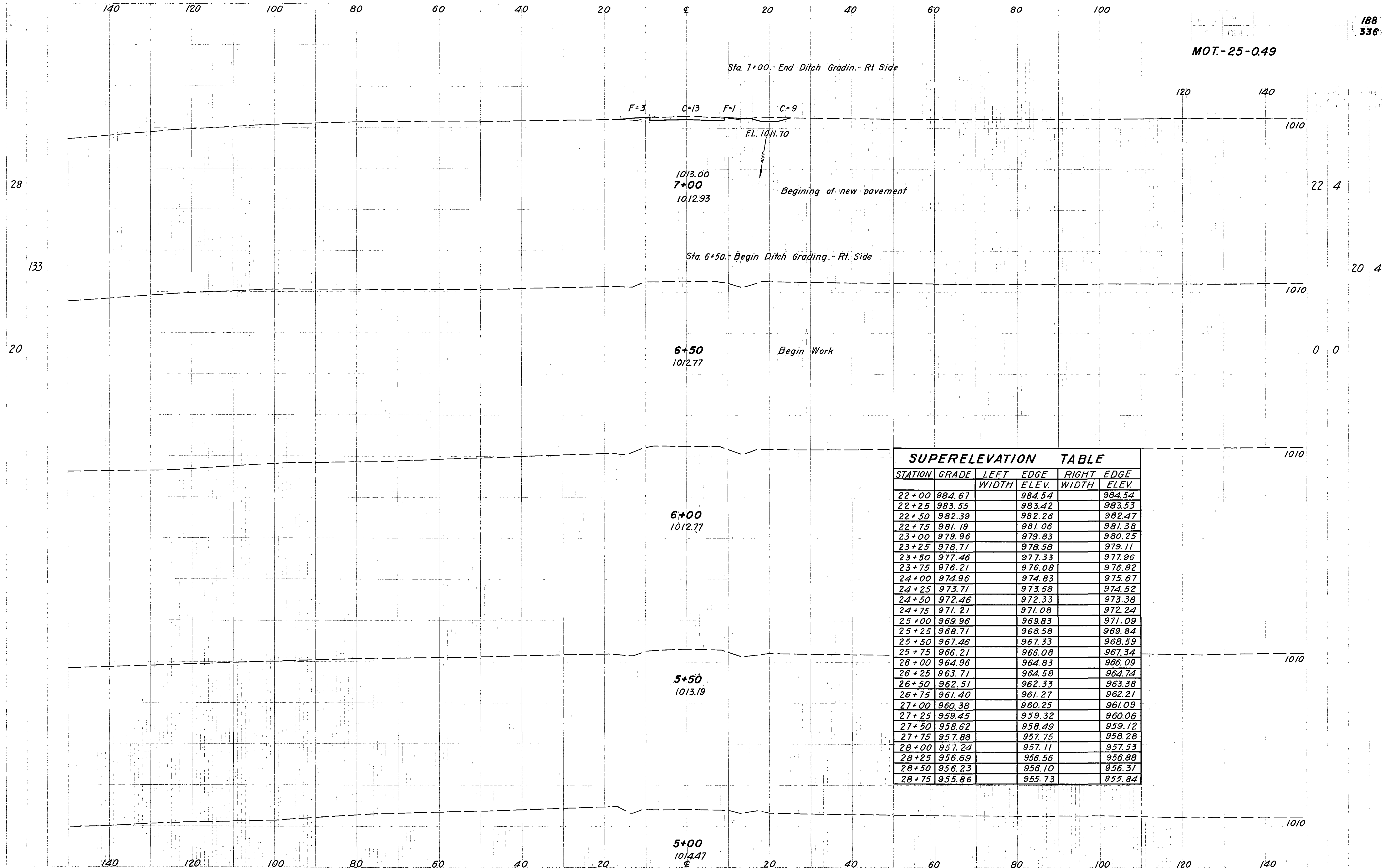
PROFILE @ S.R. 741

Scale: 1" = 100' horiz.
1" = 10' vert.

TYPICAL SECTION OF ADJOINING PAVEMENT

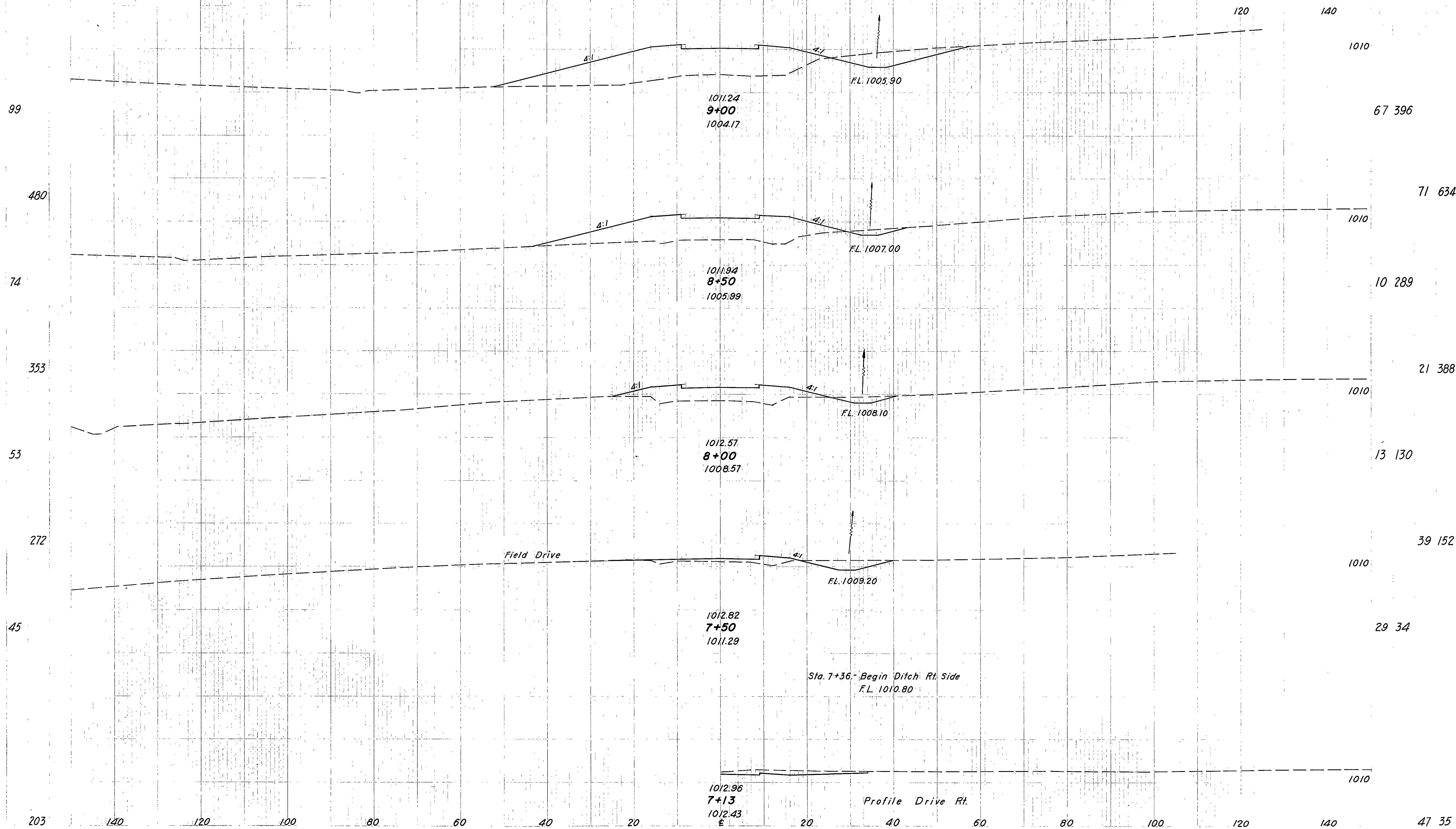
- 1. 2" Bituminous Treated Surface Cours.
- 2. 12" Gravel Base

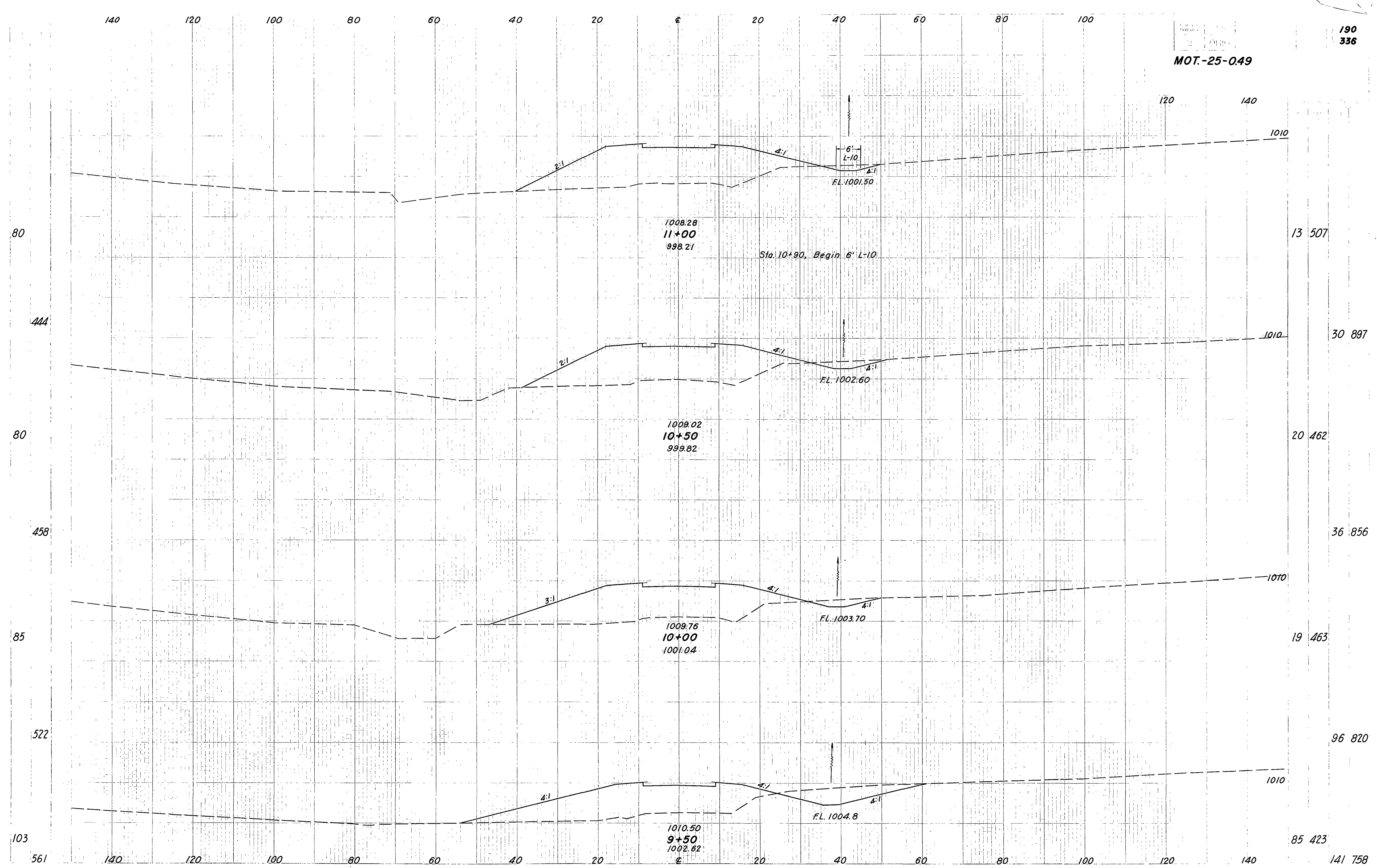
MOT.-25-0.49



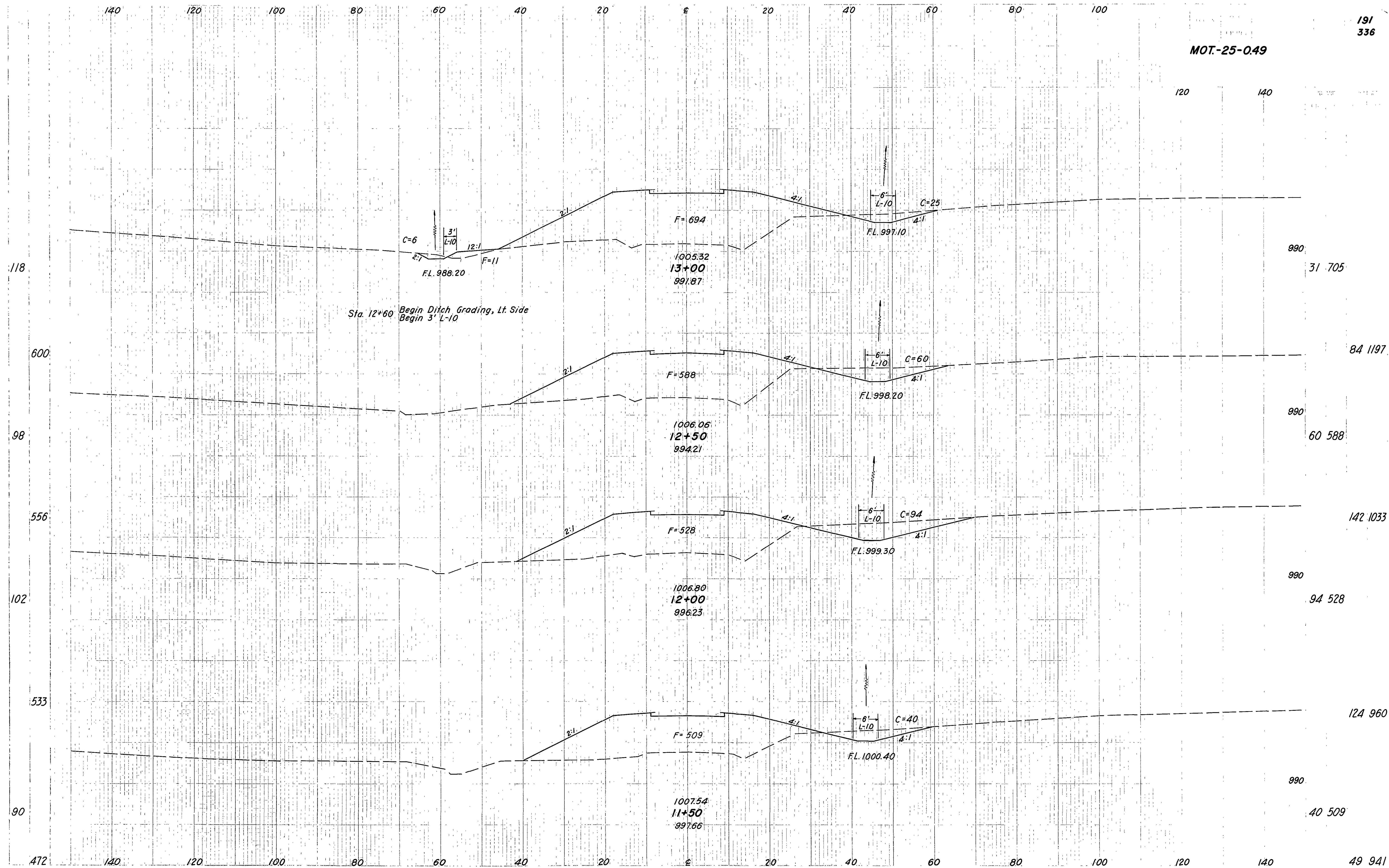
SUPERELEVATION TABLE					
STATION	GRADE	LEFT EDGE		RIGHT EDGE	
		WIDTH	ELEV.	WIDTH	ELEV.
22+00	984.67		984.54		984.54
22+25	983.55		983.42		983.53
22+50	982.39		982.26		982.47
22+75	981.19		981.06		981.38
23+00	979.96		979.83		980.25
23+25	978.71		978.58		979.11
23+50	977.46		977.33		977.96
23+75	976.21		976.08		976.82
24+00	974.96		974.83		975.67
24+25	973.71		973.58		974.52
24+50	972.46		972.33		973.38
24+75	971.21		971.08		972.24
25+00	969.96		969.83		971.09
25+25	968.71		968.58		969.84
25+50	967.46		967.33		968.59
25+75	966.21		966.08		967.34
26+00	964.96		964.83		966.09
26+25	963.71		963.58		964.74
26+50	962.51		962.33		963.38
26+75	961.40		961.27		962.21
27+00	960.38		960.25		961.09
27+25	959.45		959.32		960.06
27+50	958.62		958.49		959.12
27+75	957.88		957.75		958.28
28+00	957.24		957.11		957.53
28+25	956.69		956.56		956.88
28+50	956.23		956.10		956.31
28+75	955.86		955.73		955.84

MOT.-25-049





MOT.-25-0.49





MOT.-25-049

193
336

120

970

997.63
18+00
975.64

970

998.59
17+50
977.29

970

999.40
17+00
979.18

970

1000.14
16+50
980.97

980

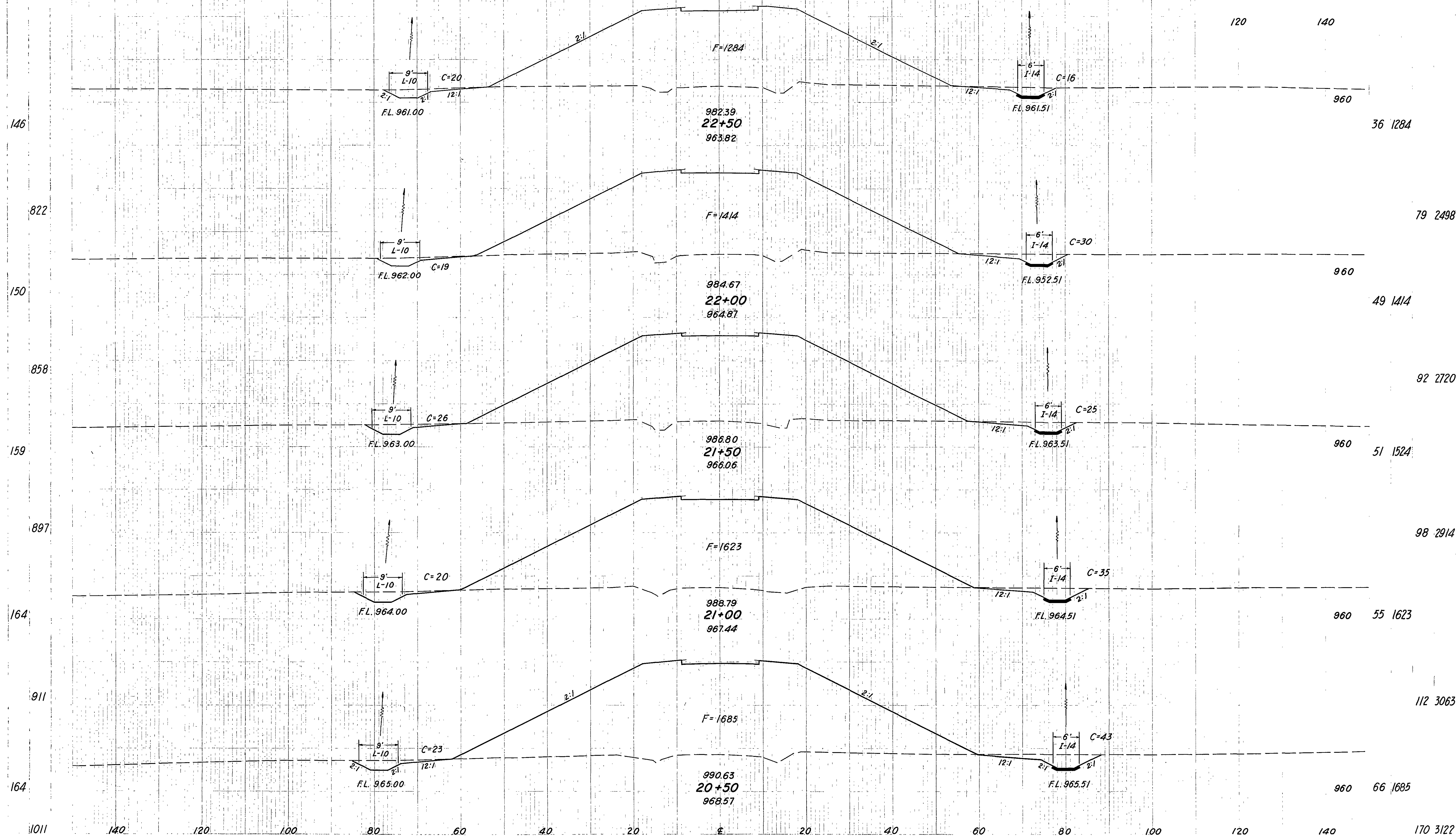
1000.88
16+00
982.88

New Structure
Sta. 14+82.74 to Sta. 19+34.98

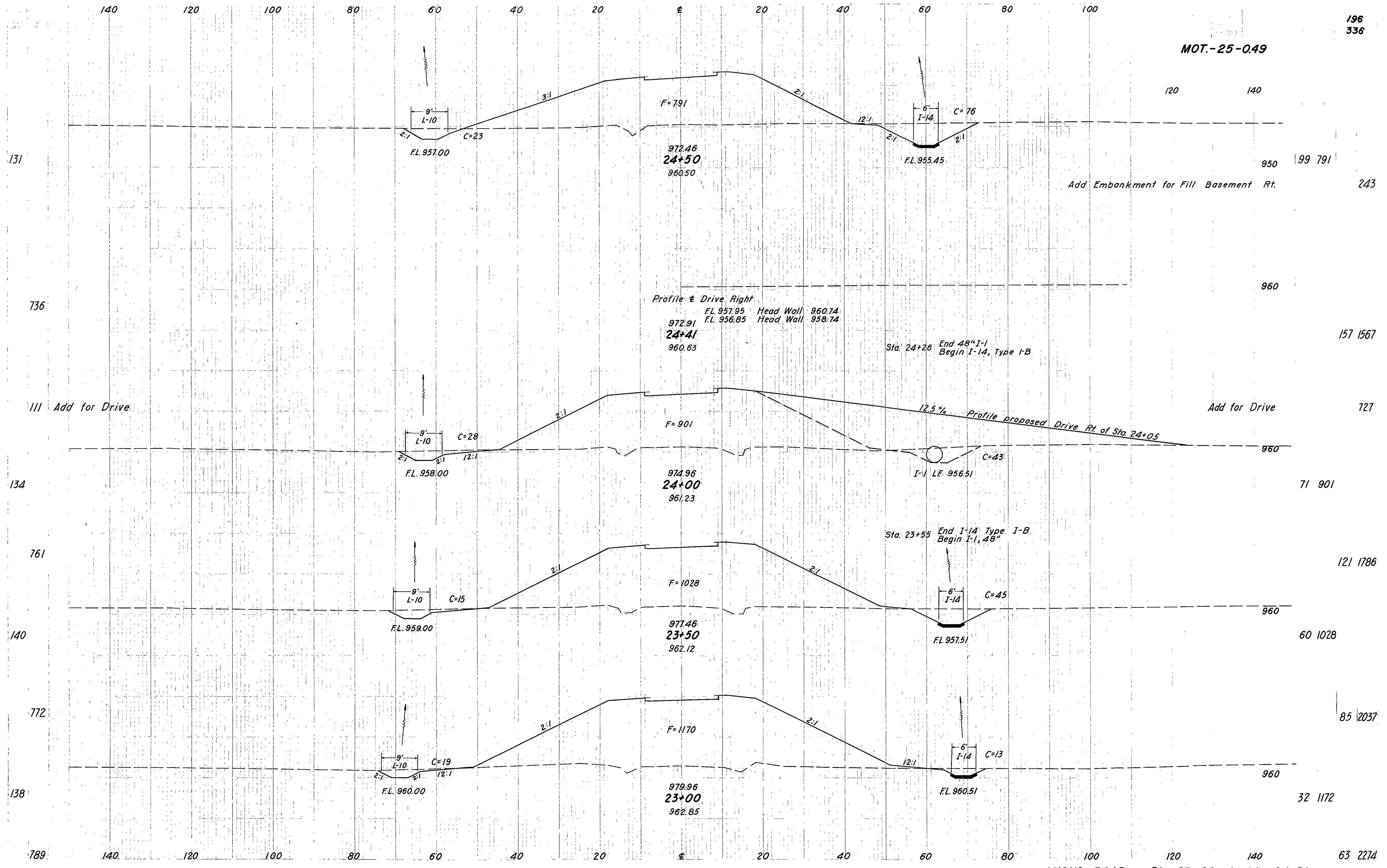
LYONS ROAD STA. 16+00 TO STA. 19+00

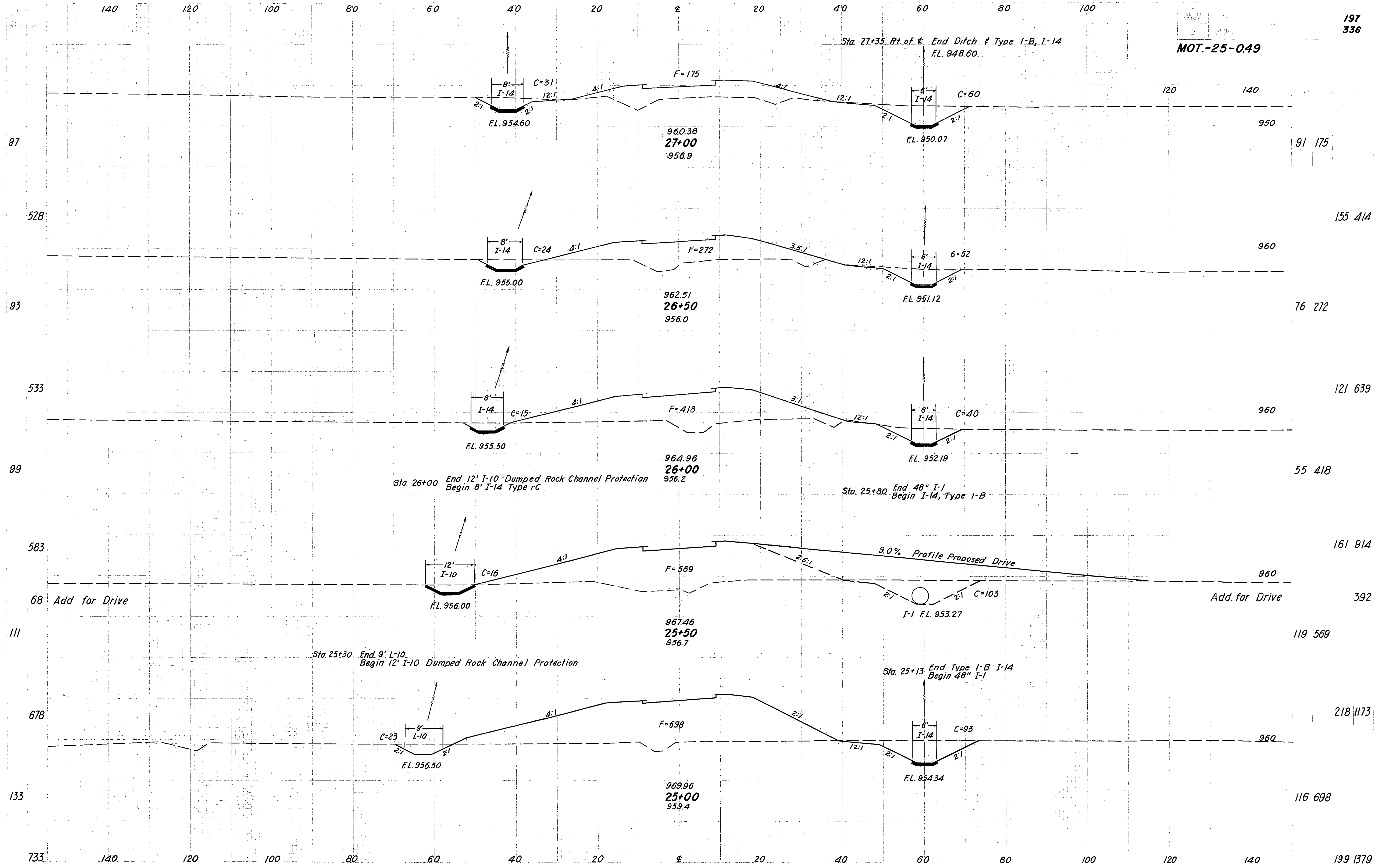


MOT.-25-049



MOT.-25-049





Sta. 27+35 Rt. of d. End Ditch f. Type I-B, I-14
FL. 948.60

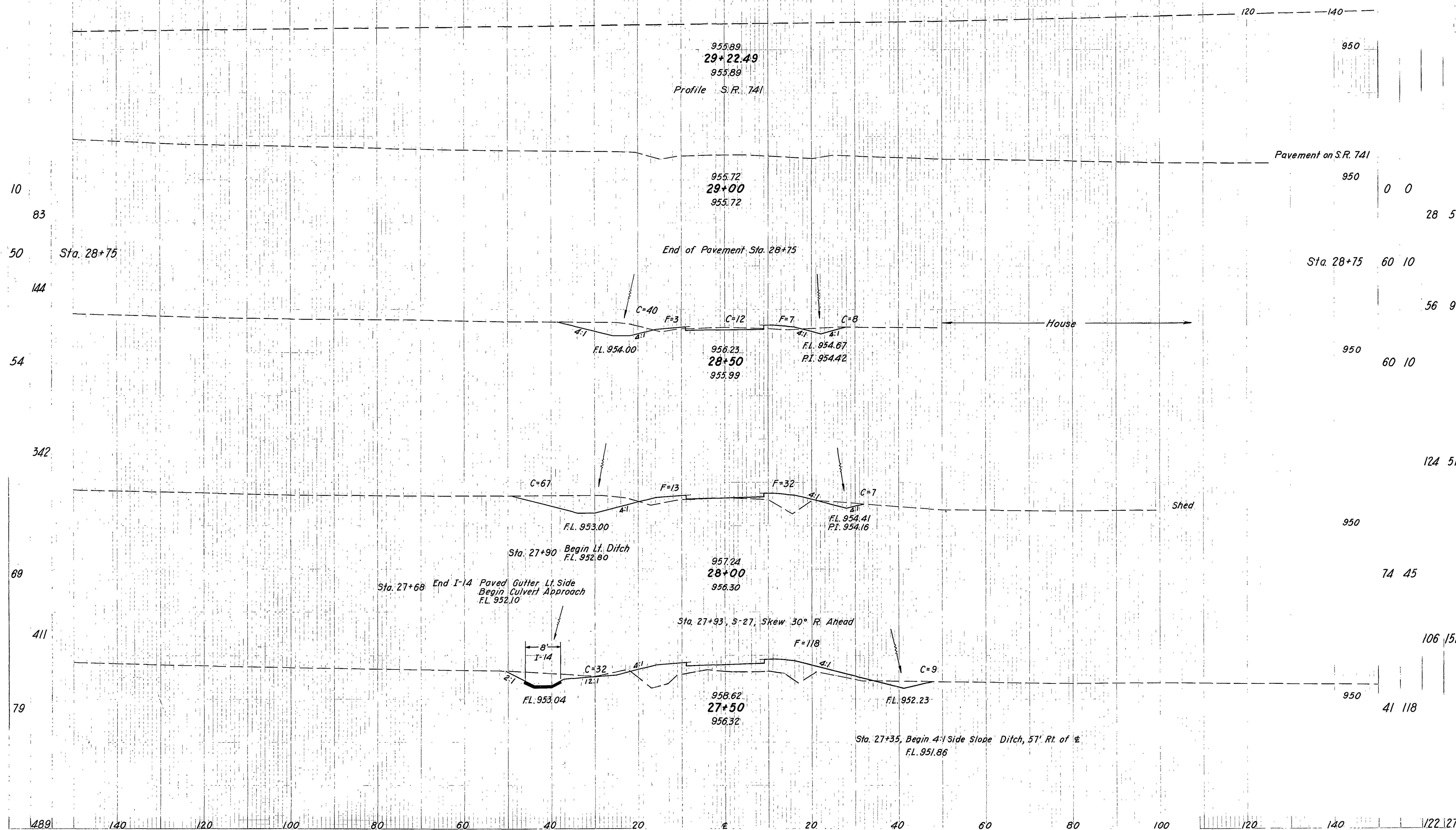
Sta. 26+00 End 12' I-10 Ditched Rock Channel Protection
Begin 8' I-14 Type I-C

Sta. 25+80 End 48" I-1
Begin I-14 Type I-B

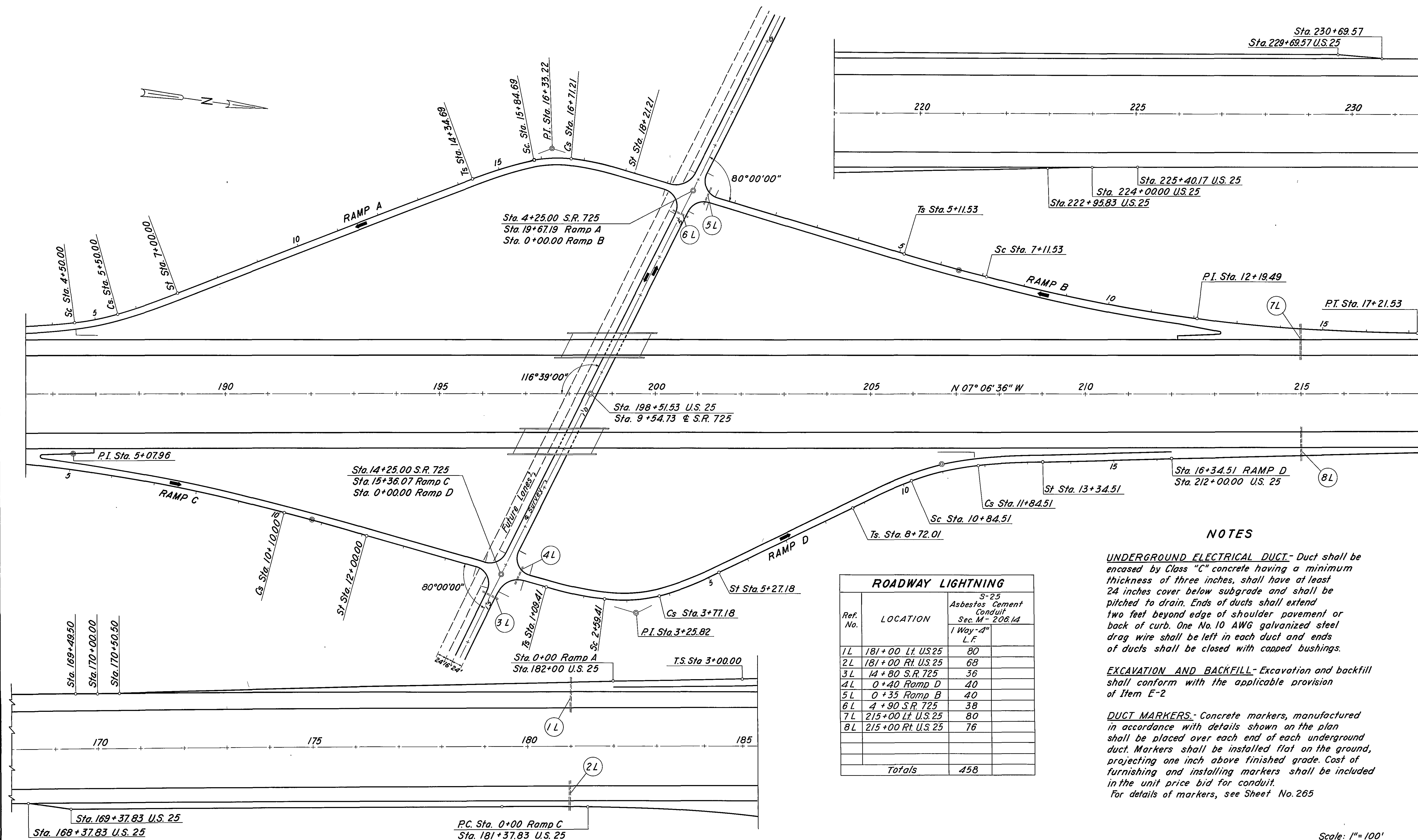
Sta. 25+30 End 9' I-10
Begin 12' I-10 Ditched Rock Channel Protection

Sta. 25+13 End Type I-B I-14
Begin 48" I-1

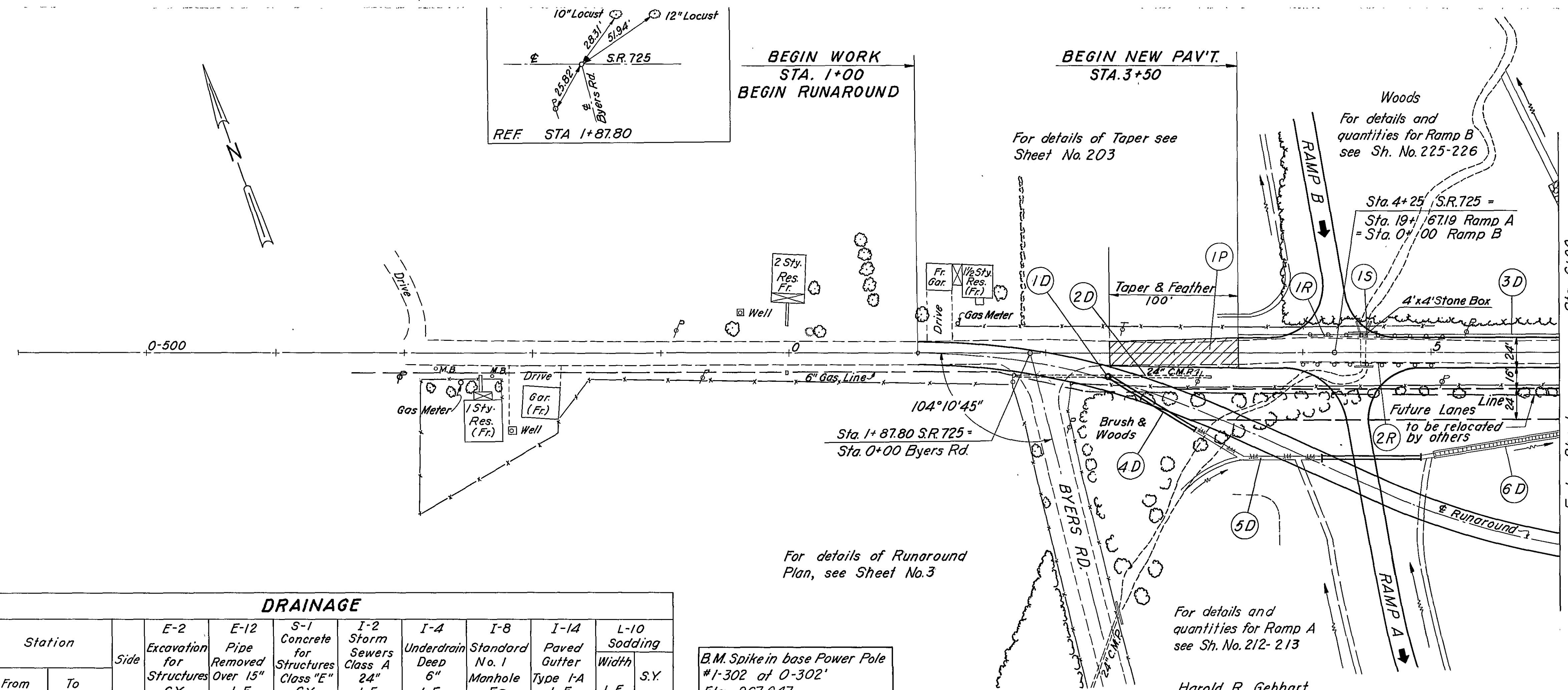
MOT.-25-049



MOT.- 25-0.49



MOT.-25-0.49



DRAINAGE											
Ref. No.	Station		Side	E-2	E-12	S-1	I-2	I-4	I-8	I-14	L-10
	From	To		Excavation for Structures C.Y.	Pipe Removed Over 15" L.F.	Concrete for Structures Class "E" C.Y.	Storm Sewers Class A 24" L.F.	Underdrain Deep 6" L.F.	Standard No. 1 Manhole Ea.	Paved Gutter Type I-A L.F.	Sodding Width L.F.
1 D	2 + 50		R						1		
2 D	2 + 50	3 + 28	R		78						
3 D	3 + 50	6 + 00	L					250			
4 D	2 + 50	3 + 16	R	1		0.4	80				
5 D	3 + 16	4 + 04	R								6 60
6 D	5 + 02	6 + 00	R							98	
Totals				1	78	0.4	80	250	1	98	60

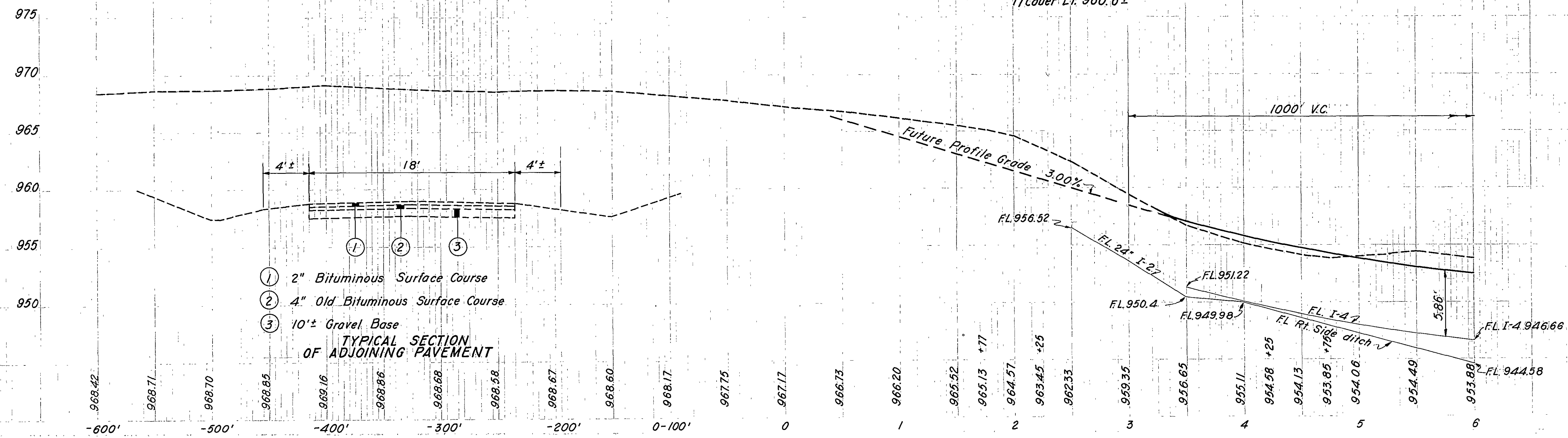
ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Removed and Stored L.F.
	From	To		
1 R	4+06	5+09	L	103
2 R	3+30	5+00	R	170
Totals				273

STRUCTURES (20' span and under)			
Ref. No.	Station		S-24 Removal of Existing Structures Lump Sum
	From	To	
1 S	4+47		Lump Sum
Totals			Lump Sum

B.M. Spike in base Power Pole
#1-302 at 0-302'
Elev. 967.647

Harold R. Gebhart

ROADWAY						
Ref. No.	Station		Side	B-119 Crushed Agg. Base Course 6" C.Y.	T-30 Bituminous Prime Coat Gal.	T-35 Asphaltic Conc. Surf. Course 1" (ave.) C.Y.
	From	To				
1 P	2+50	3+50	E	8	86	6.5
Totals				8	86	6.5



DRAINAGE											
Ref. No.	Station		Side	I-4 Underdrain		I-5 for I-4		I-4 Pipe Outlet for Underdrain 8" L.F.	L-10 Sodding		
	From	To		Shallow 6" L.F.	Deep 6" L.F.	6"x6" x6" Ea.			Width L.F.	S.Y.	
1 D	6+00	6+70	L		70	1					
2 D	6+30	to L			36			10			
3 D	6+74	17+00	L		1026	1					
4 D	7+00	to L			30			10			
5 D	6+34	11+00	L						6	318	
6 D	14+82	15+00	R						6	12	
7 D	16+57	16+70	R						6	9	
	Totals				1162	2		20		339	

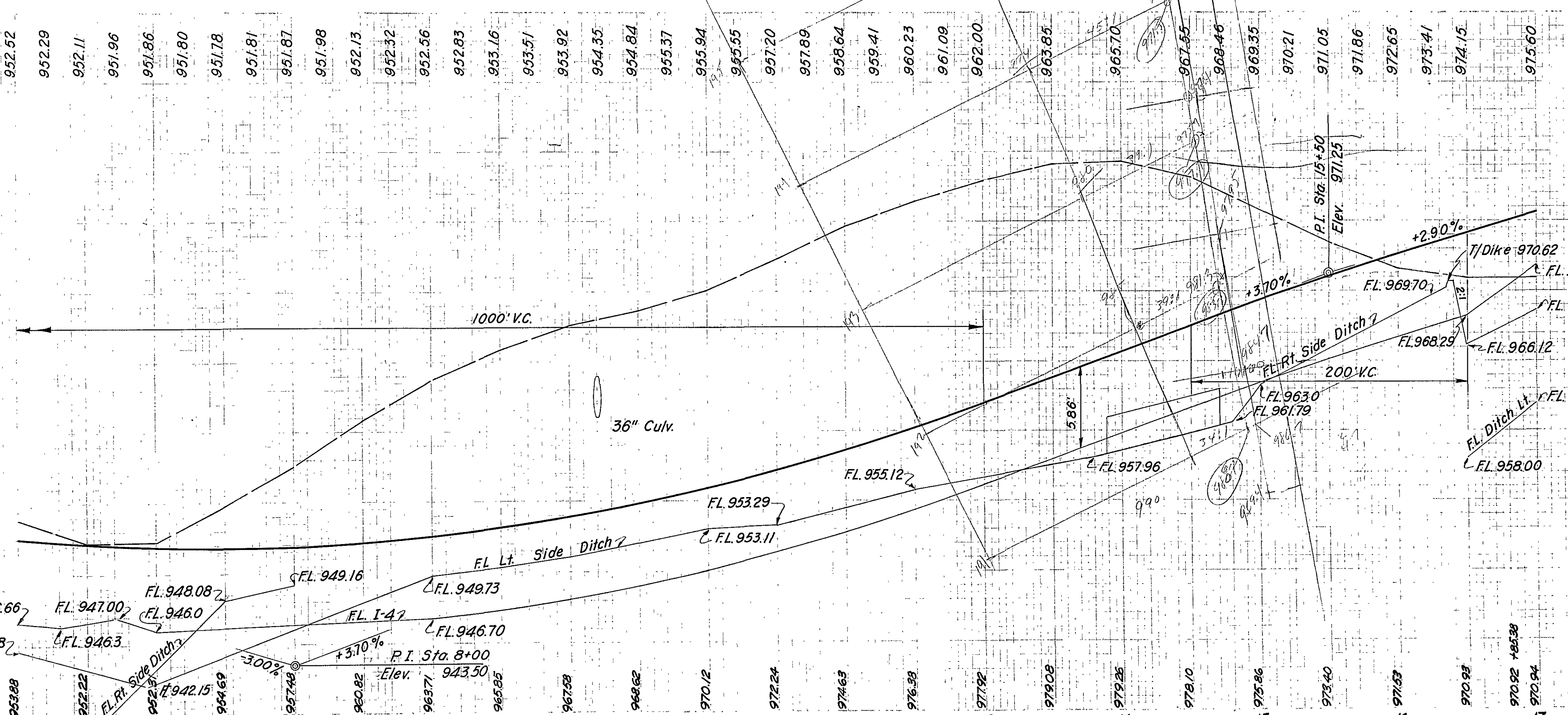
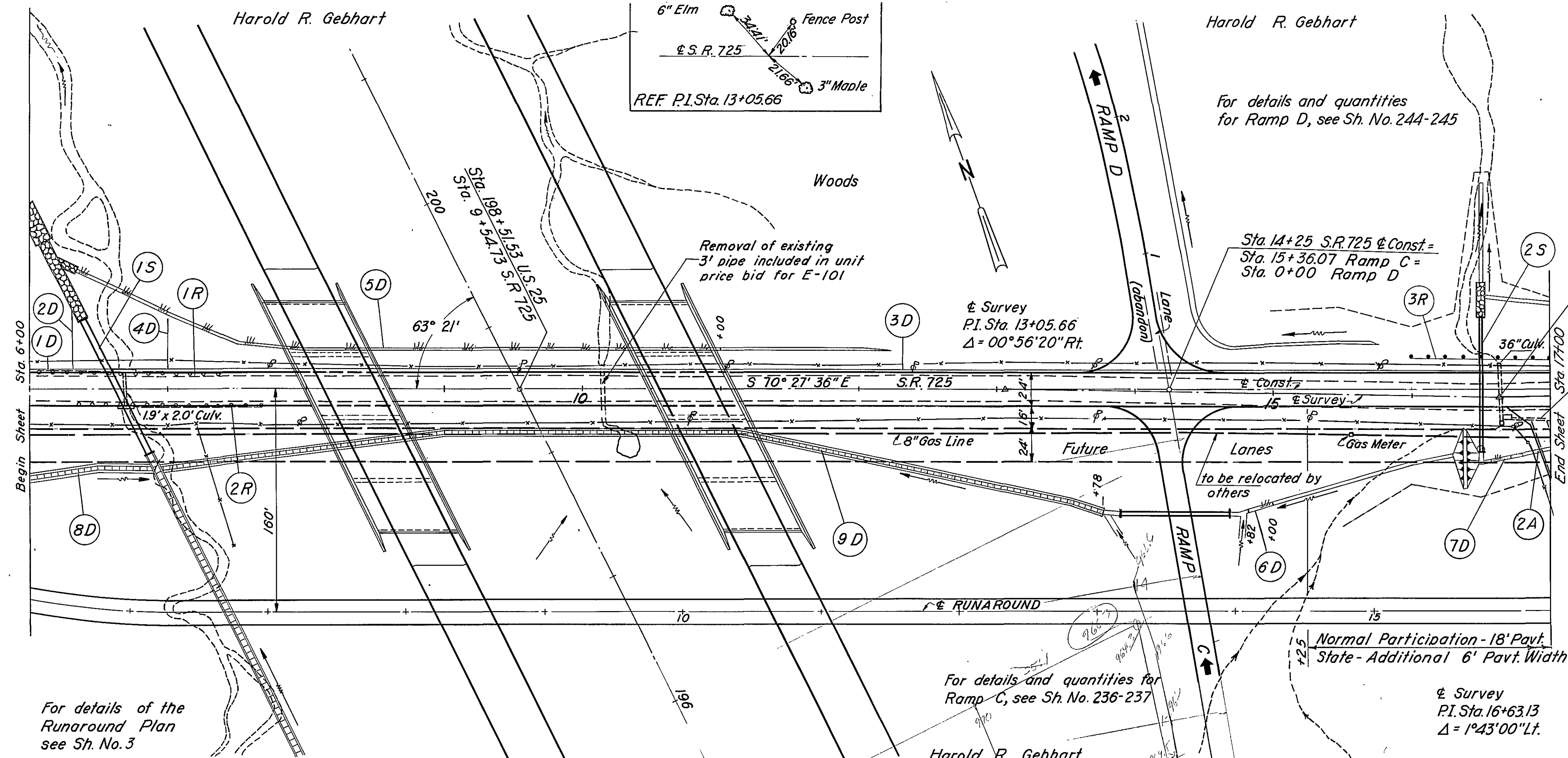
DRAINAGE (Cont.)				
Ref. No.	Station		Side	I-14 Paved Gutter Type I-A
	From	To		
8 D	6+00	6+90	R	90
9 D	6+96	13+78		686
	Totals			776

STRUCTURES (20 Ft. Span and Under)						
Ref. No.	Station	E-2 Excavation for Structures C.Y.	E-3 Channel for Excavation C.Y.	S-1 Concrete for Structures C.Y.	S-24 Removal of Existing Structures Lump Sum	S-27 Pipe for Roadway Culverts Sec. M-66(b) 42" L.F. Sec. M-64(d) 33" L.F.
1-S	6+63.87	142	10	2.3	L.S.	110
2-S	16+50	93	28	1.1		98
3-S	16+50				L.S.	
	Totals	235	38	3.4	L.S.	110 98

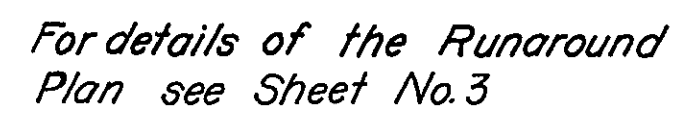
STRUCTURES (Cont.)					
Ref. No.	Station		I-10 Dumped Rock Channel Protection C.Y.	I-14 Paved Gutter Type I-B L.F.	L-10 Sodding S.Y.
	From	To			
1-S	6+63.87		85	26	
2-S	16+50		14		22
	Totals		99	26	22

ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Removed and Stored L.F.
	From	To		
1 R	6+08	7+37	L	129
2 R	6+36	7+68	R	132
3 R	16+00	17+00	L	100
	Totals			261 100

DRIVES AND APPROACHES				
Ref. No.	Station	Side	Length	I-1 Pipe for Driveways 24" L.F.
1 A	16+85	R	32	
2 A	16+85	R		30
	Totals			9 32 30



Harold R Gebhart

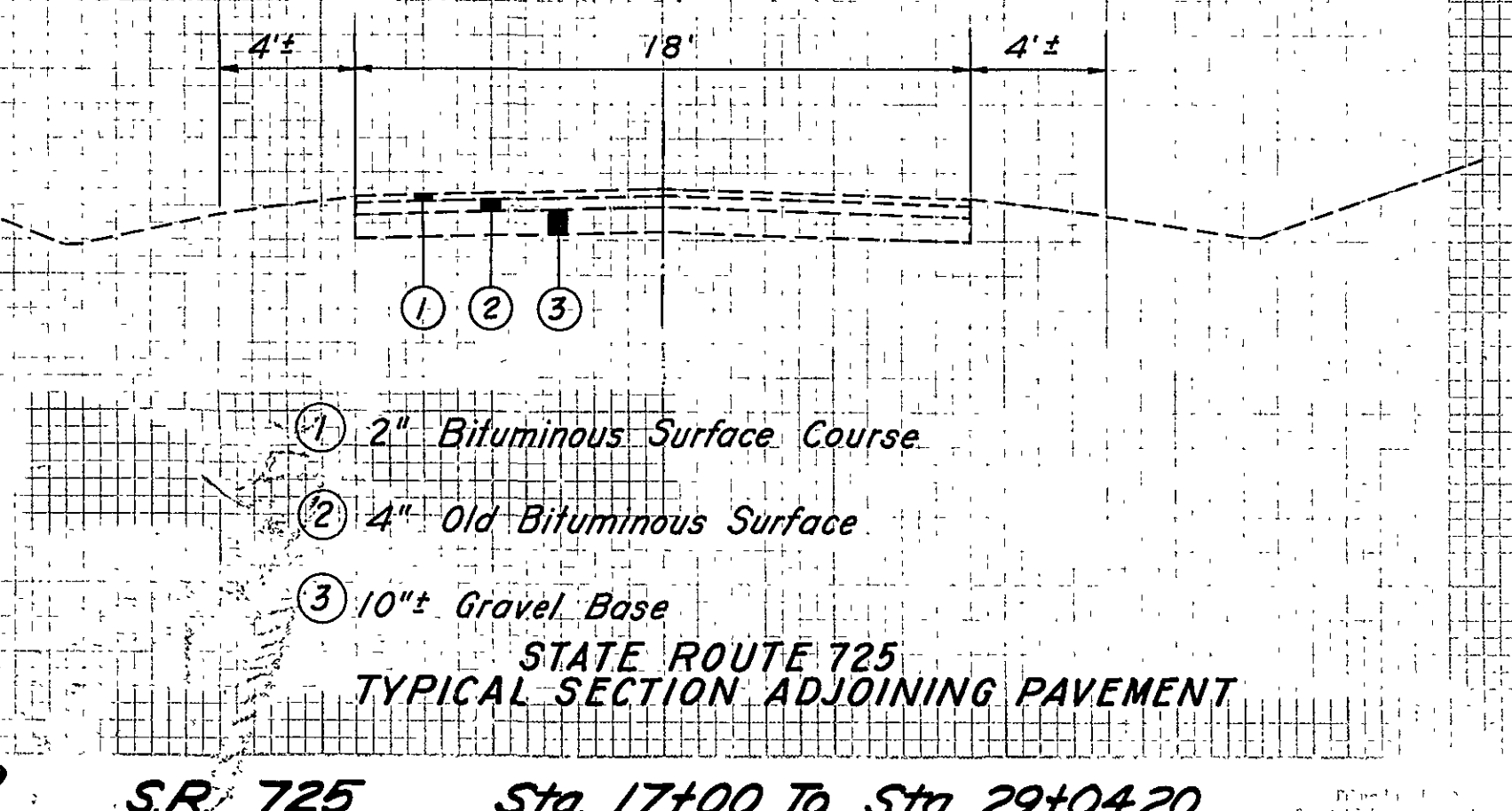
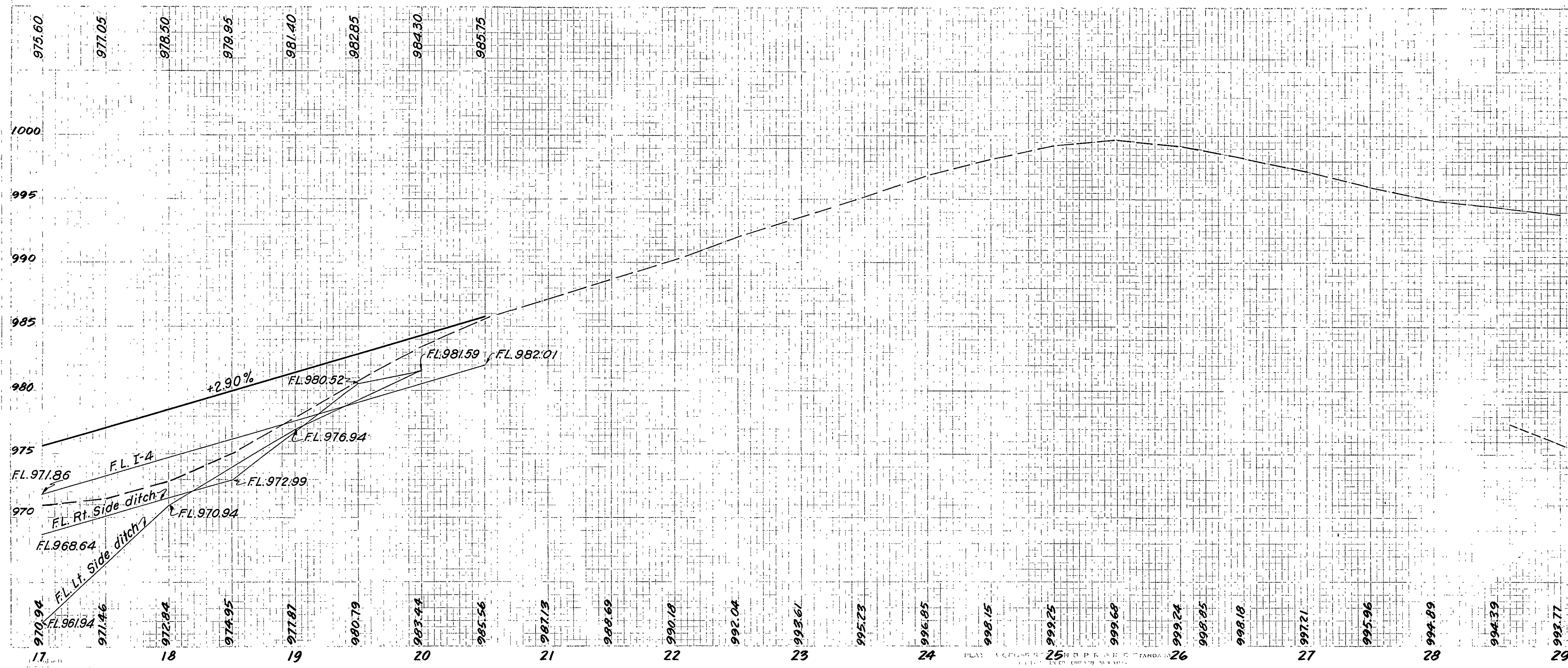


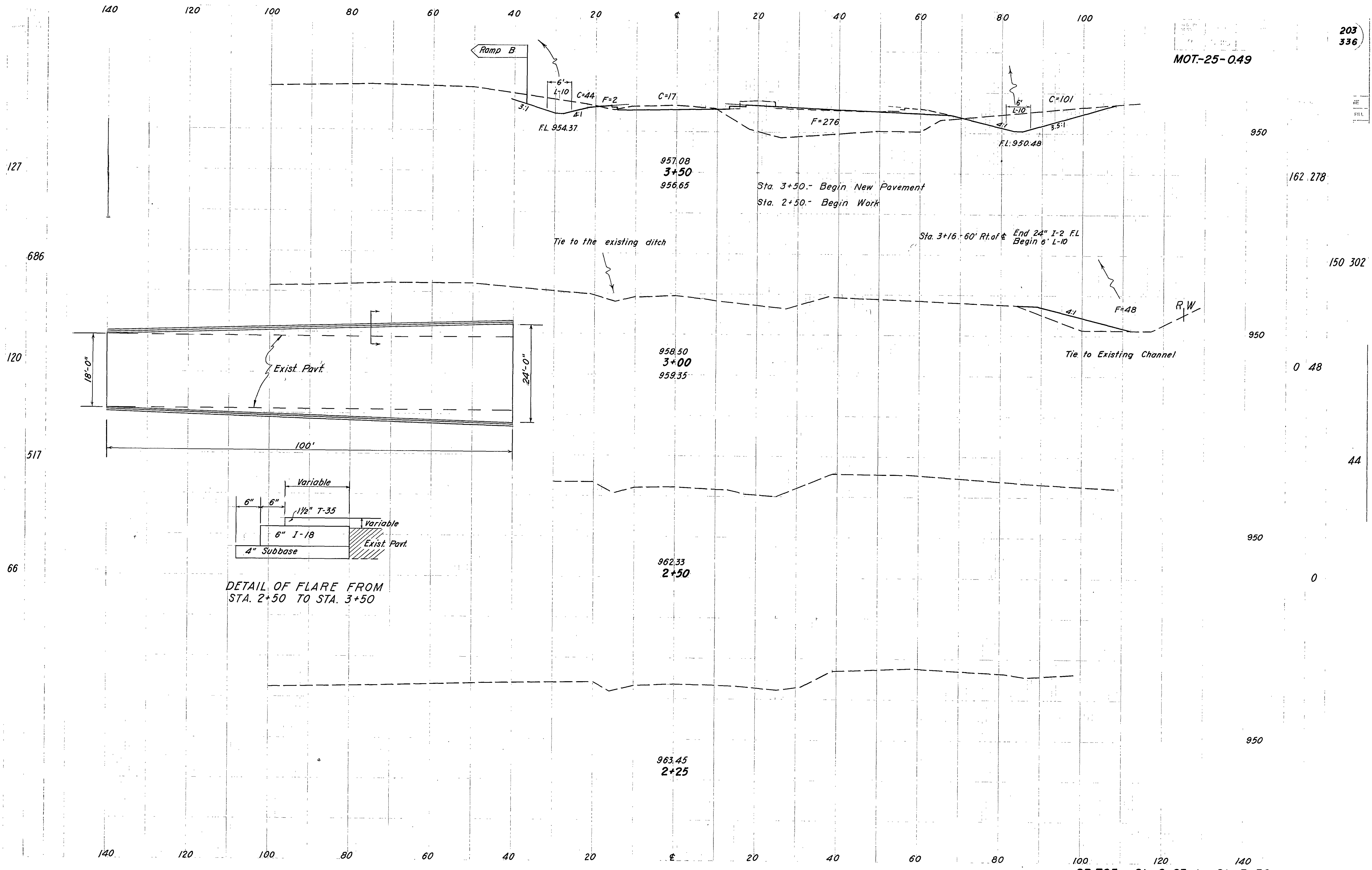
Harold R. Gebhart

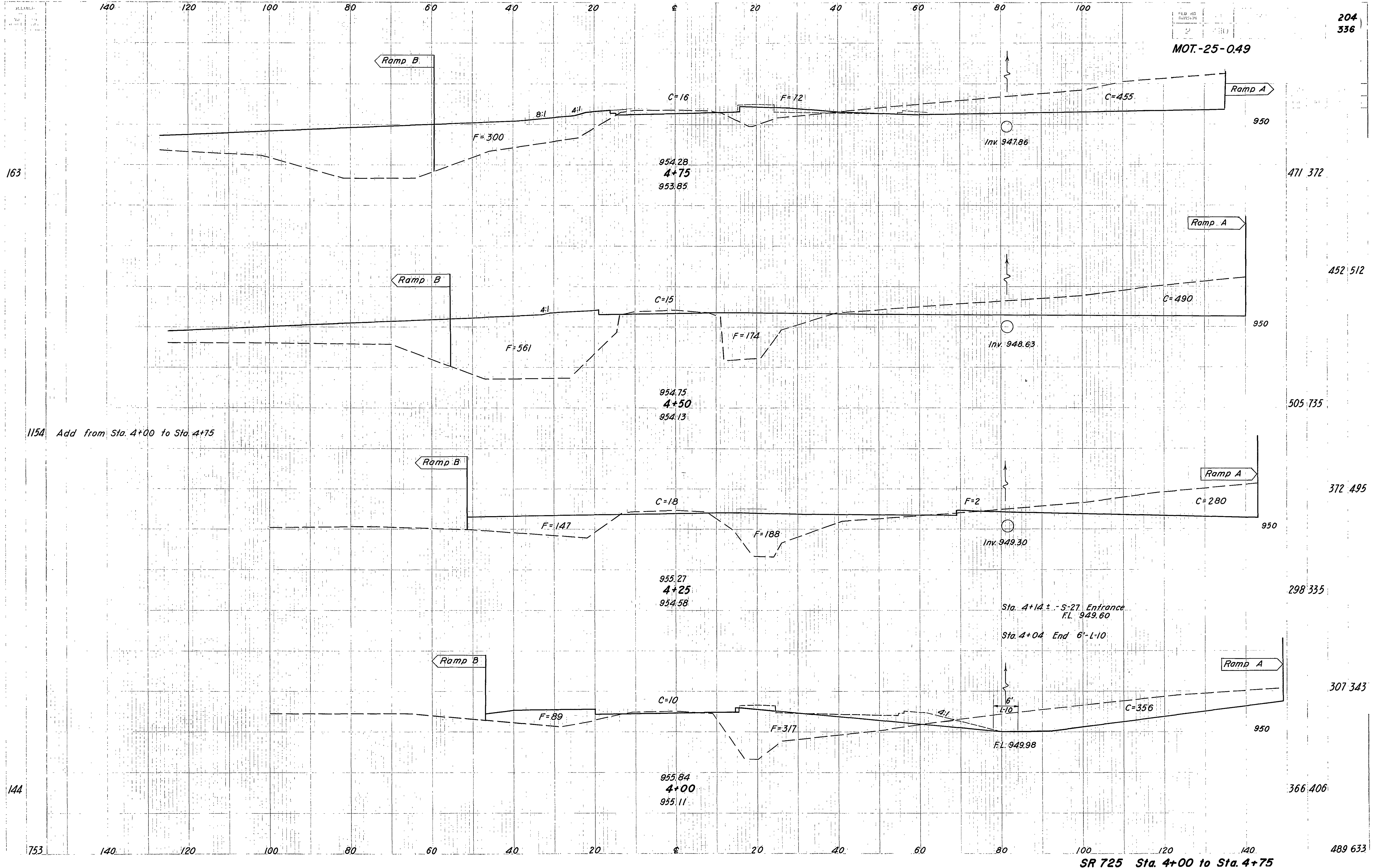
DRIVES AND APPROACHES									
Ref. No	Station	Side	Length	B-119 Crushed Aggregate Base Course		T-35 Asphaltic Concrete Surface Course	E-12 Pipe Removed Over 15"	I-1 Pipe for Driveways	
				5" C.Y.		2" C.Y.		15" L.F.	24" L.F.
1 A	17+00	R	60	19		6.9	15		18
2 A	17+00	R	40						
3 A	19+55	L	40	15		5.5		20	
4 A	19+62	R	6	5		1.7			
Totals				39		14.1	15	20	18

ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type Deep Standard L.F
	From	To		
IR	17+00	18+00	L	100
	Totals			100

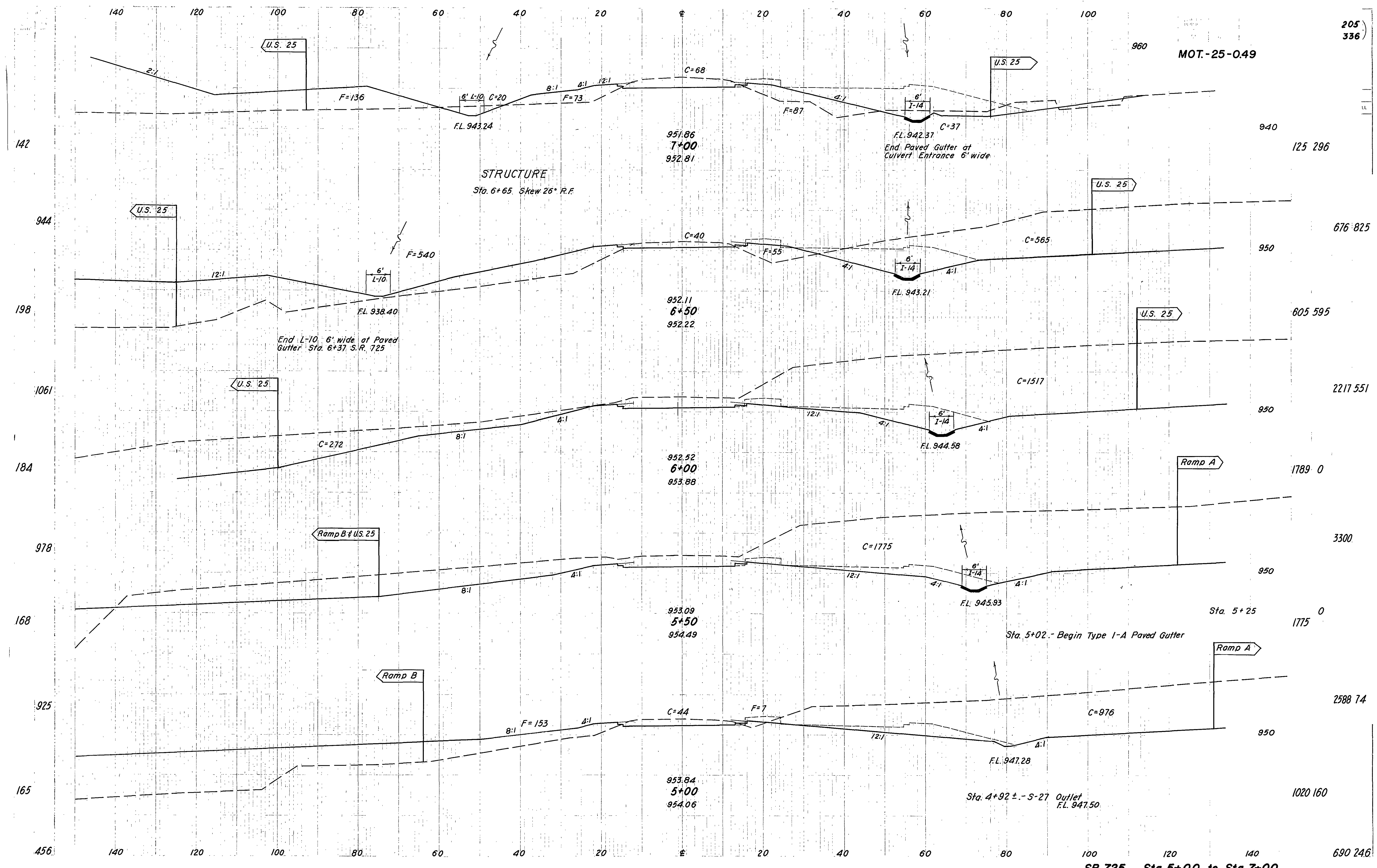
PAVEMENT								
Ref. No.	Station		Side	B-119 Crushed Agg. Base Course 6" C.Y.	T-30 Bituminous Prime Coat Gals.	T-35 Asphaltic Concrete Surf. Course 1"(ave) C.Y.	I-22 Subbase 4" C.Y.	See Sheet No.
	From	To						
1 P	20+50	21+00	E	5	52	4	4	211
	Totals			5	52	4	4	

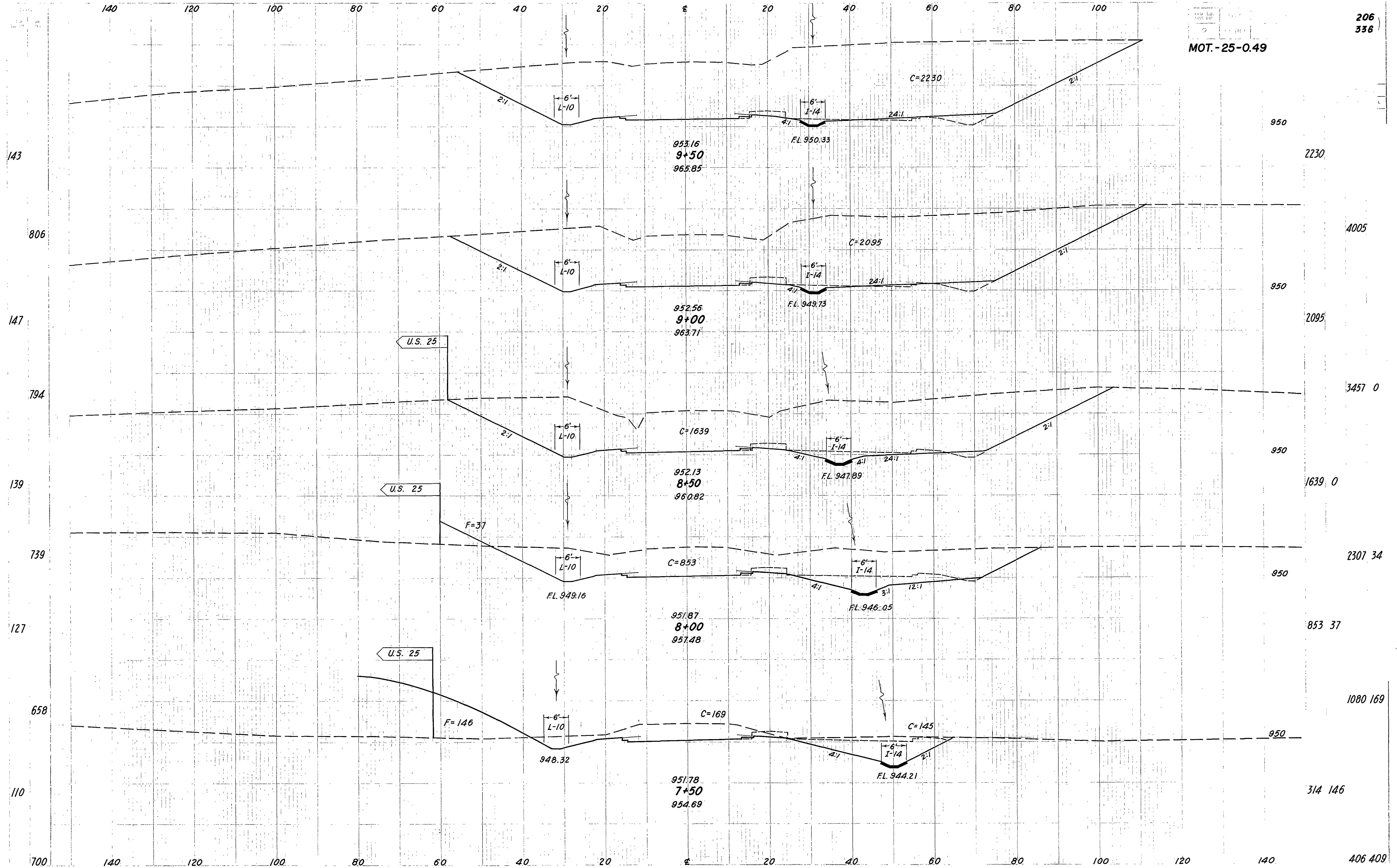






MOT.-25-049

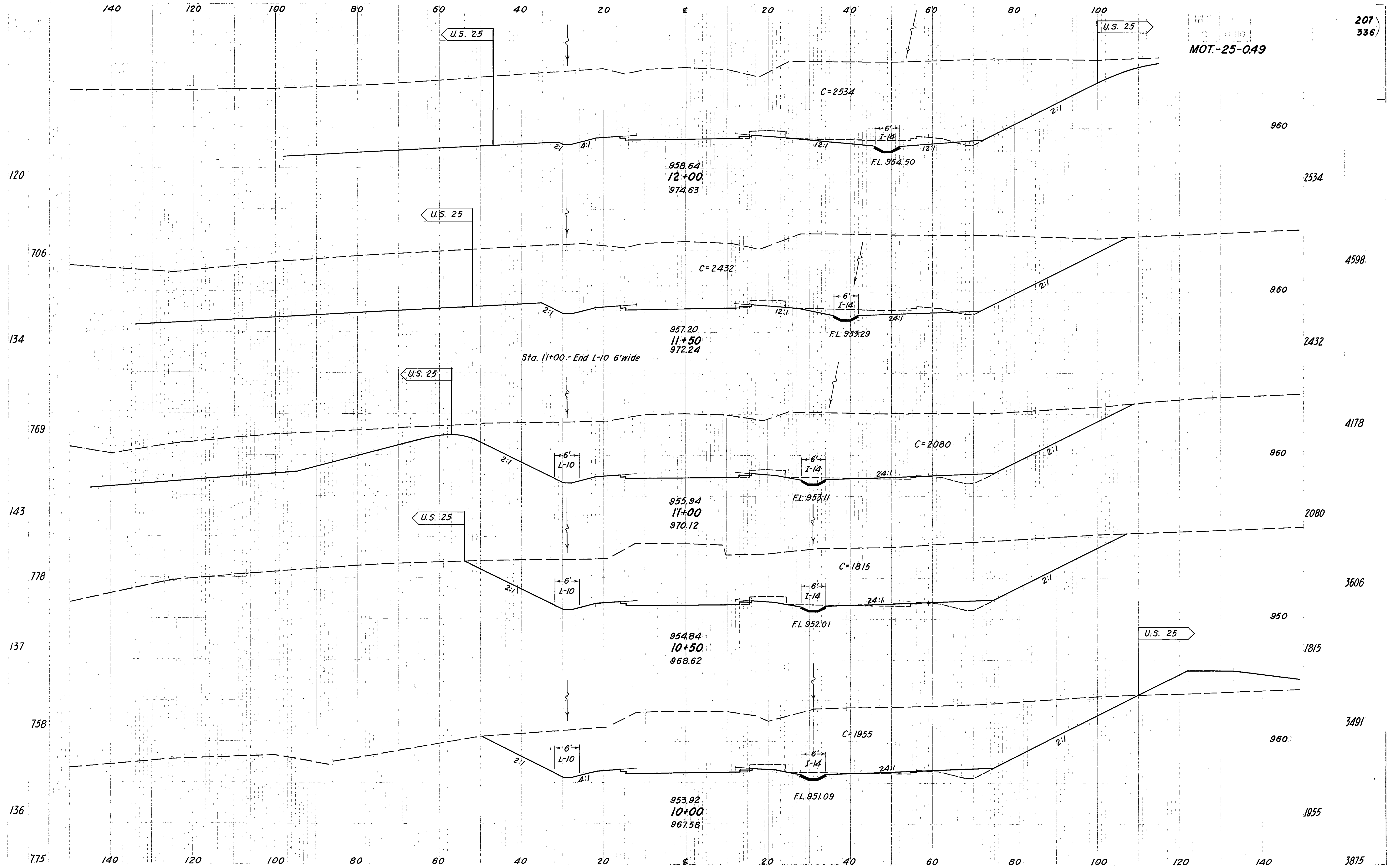


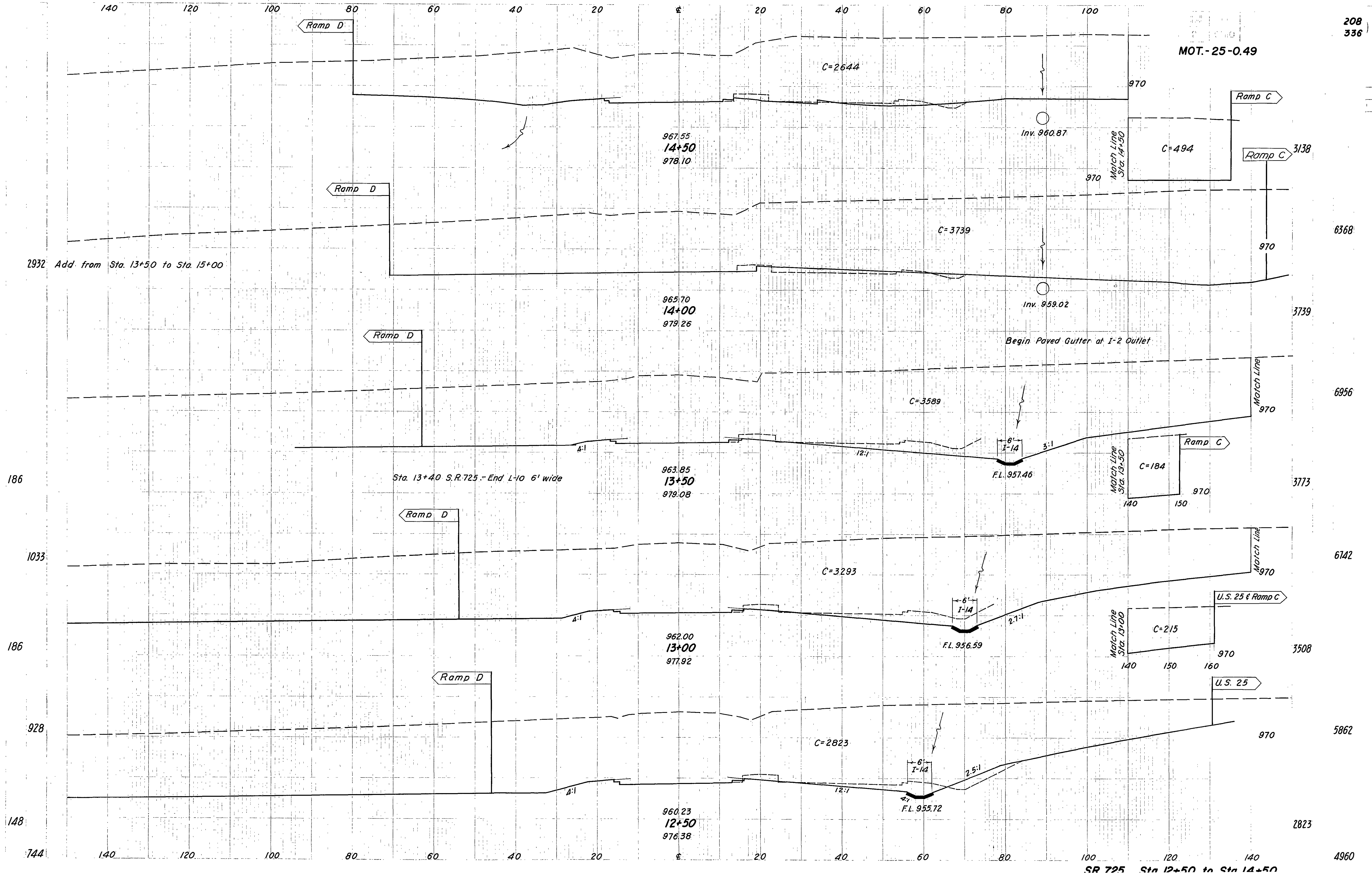


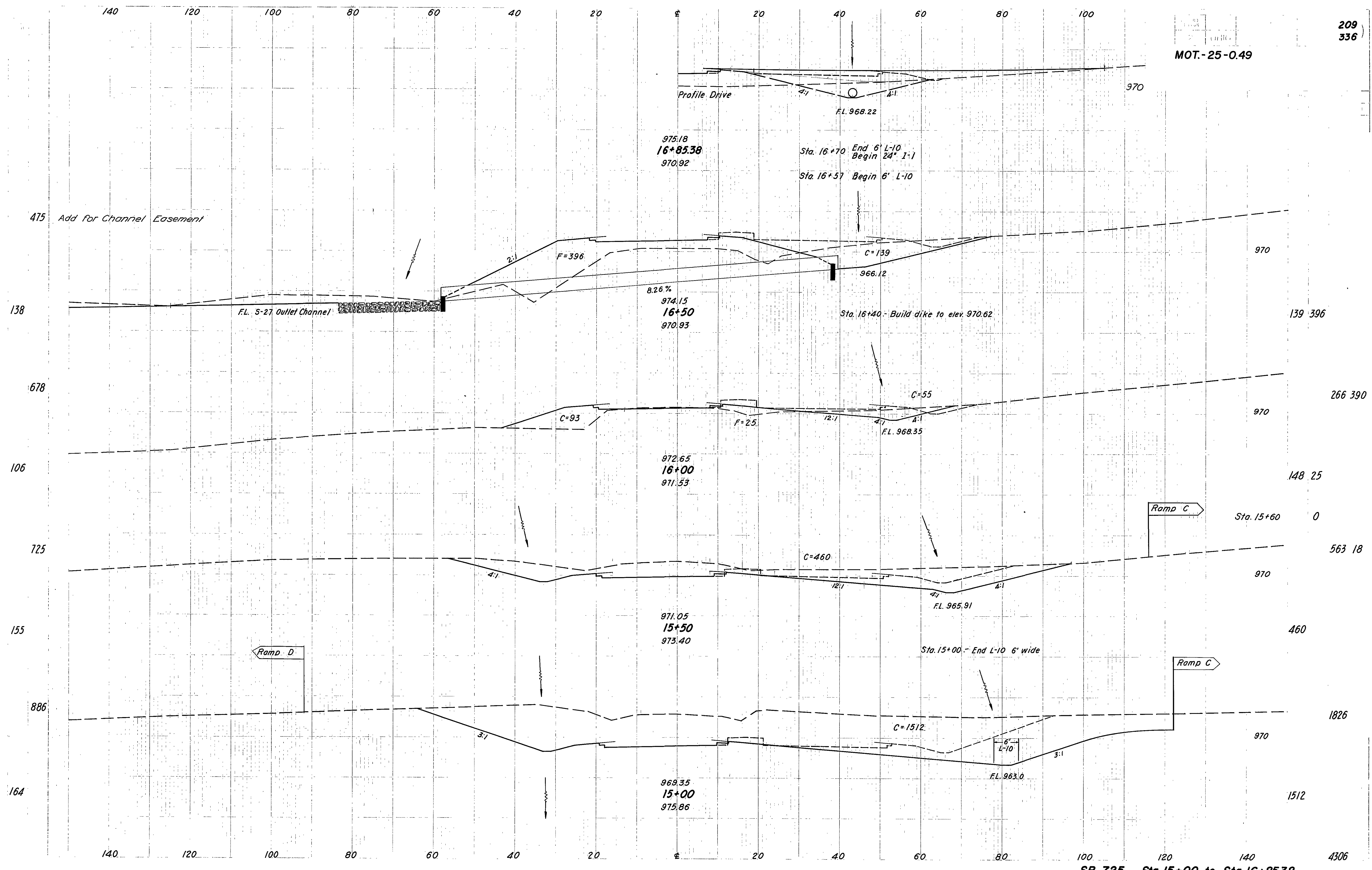
MOT.-25-0.49

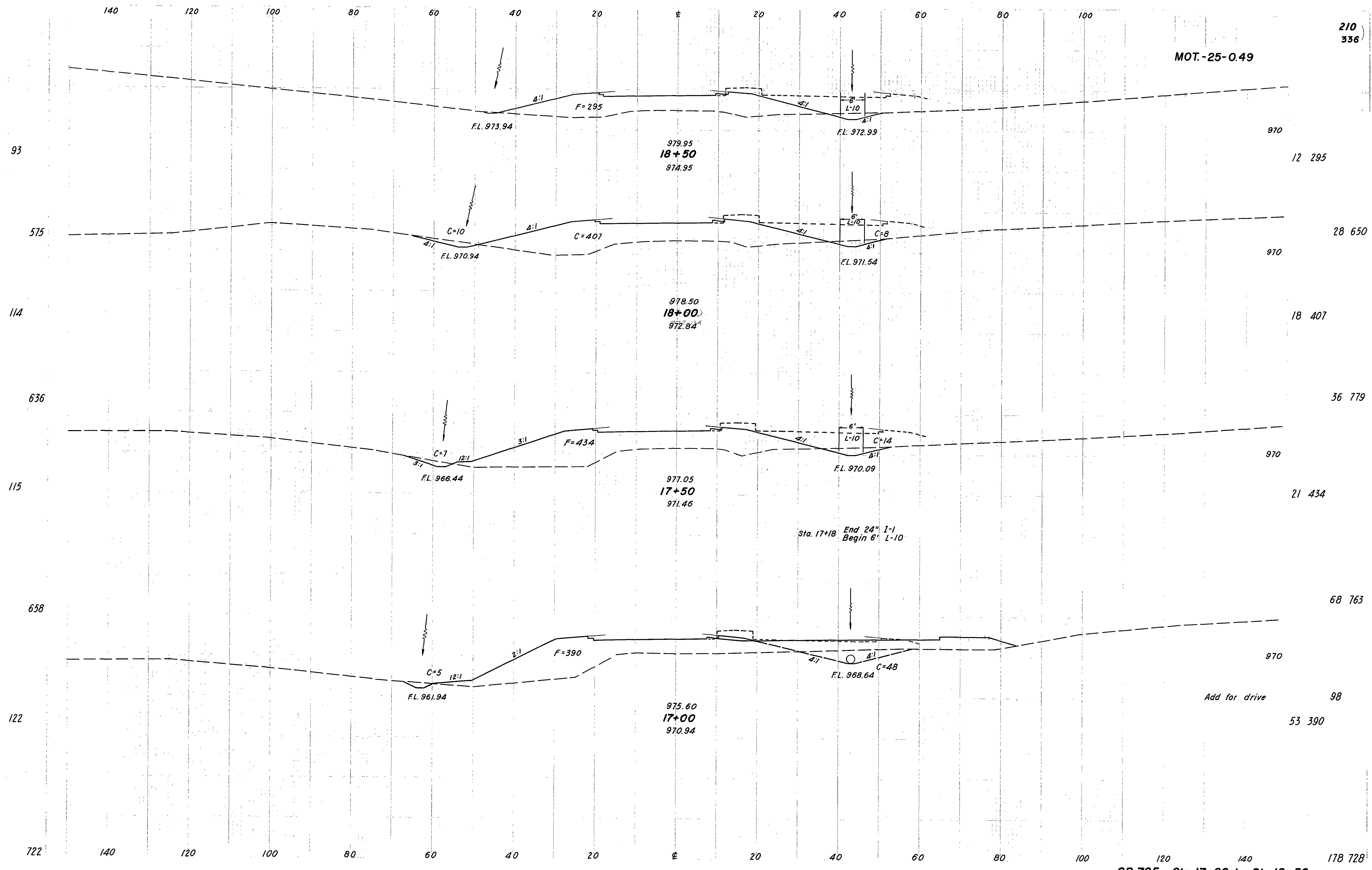
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336

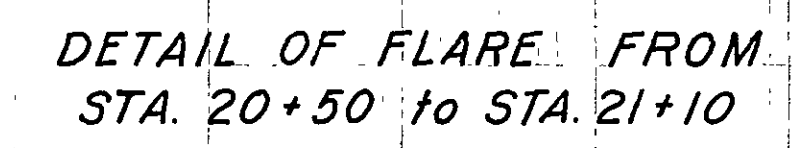
406 409







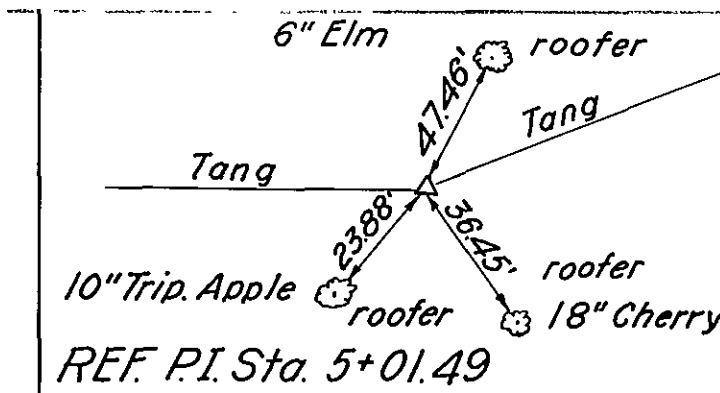
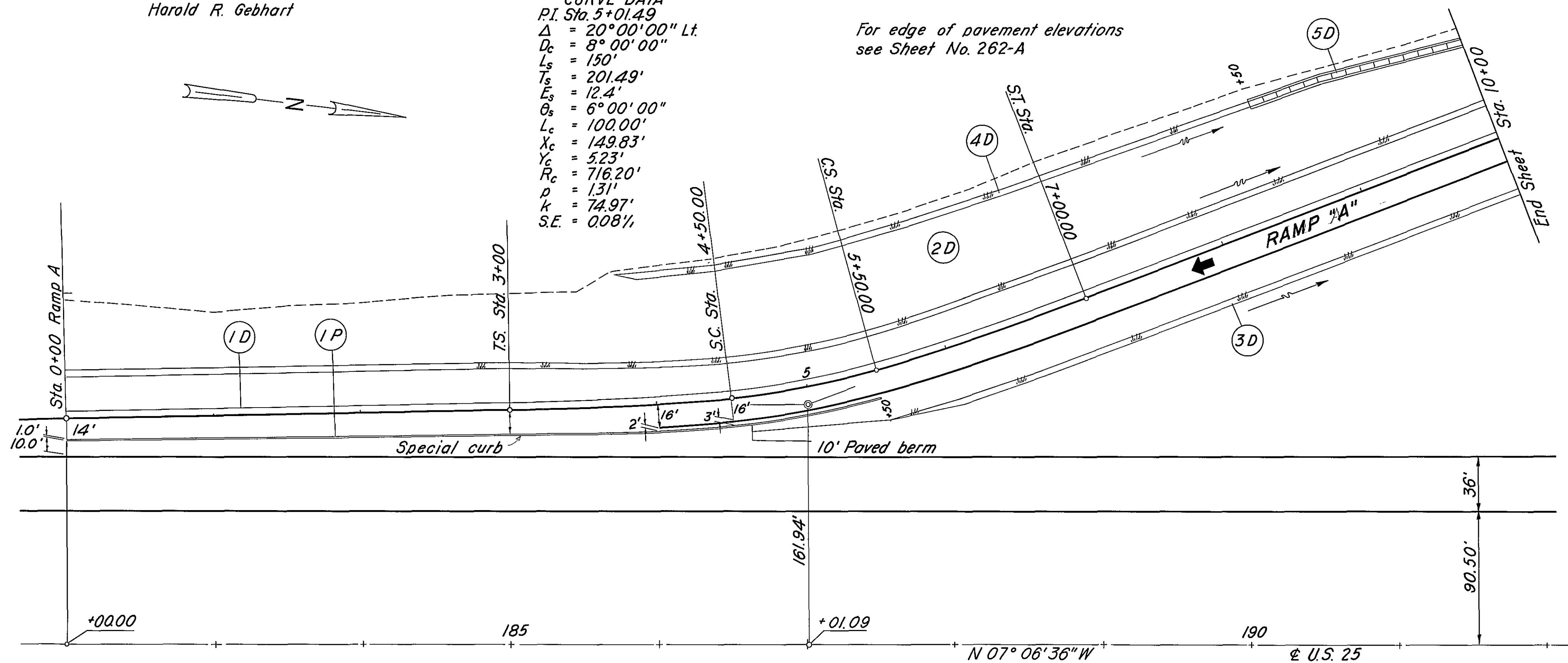




Harold R. Gebhart

CURVE DATA
 P.I. Sta. 5+01.49
 $\Delta = 20^\circ 00' 00''$ Lt.
 $D_c = 8^\circ 00' 00''$
 $L_s = 150'$
 $E_s = 201.49'$
 $E_c = 12.4'$
 $O_s = 6^\circ 00' 00''$
 $L_c = 100.00'$
 $X_c = 149.83'$
 $Y_c = 5.23'$
 $R_c = 716.20'$
 $P_k = 1.31'$
 $S.E. = 0.08\%$

For edge of pavement elevations
 see Sheet No. 262-A



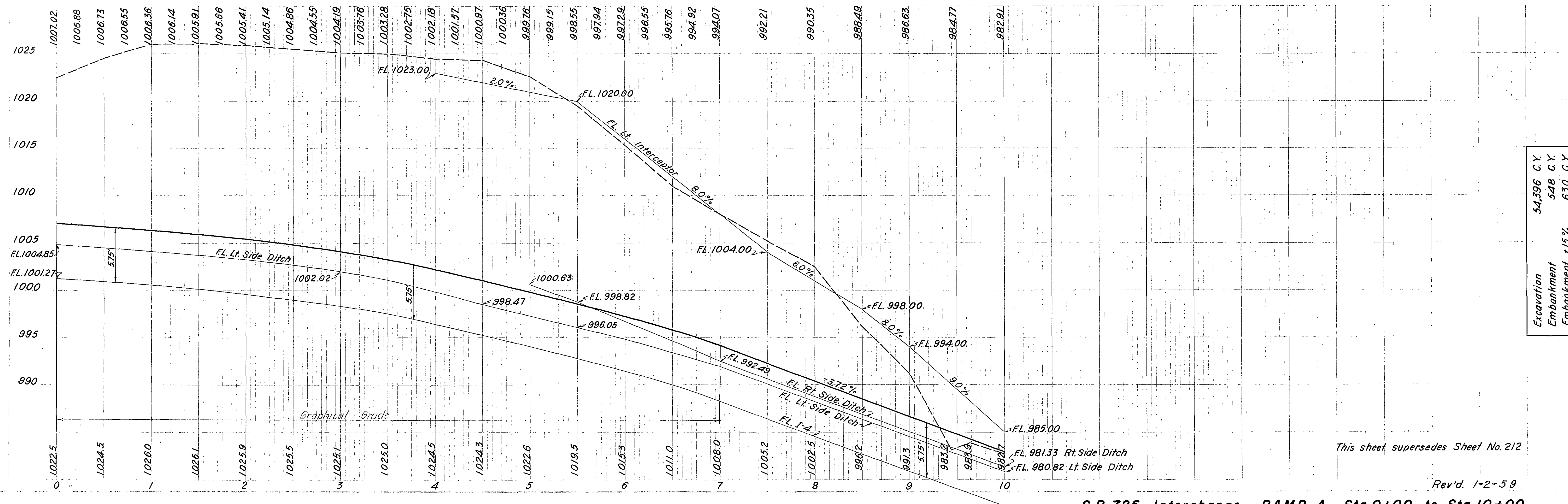
FED. RD. DIVISION	STATE	PROJECT	212-R 336
2	OHIO		

MOT.-25-0.49

DRAINAGE						
Ref. No.	Station		Side	I-4 Underdrain Deep 6\" L.F.	I-14 Paved Gutter Type I-B L.F.	L-10 Sodding Width L.F. S.Y.
	From	To				
1 D	0+00	10+00	L	1000		
2 D	2+75	10+00	L			6 483
3 D	5+50	10+00	R			6 300
4 D	3+75	8+50	L			6 317
5 D	8+50	10+50			150	2 @ 1.5 50
Totals				1000	150	1150

PAVEMENT				
Ref. No.	Station		Side	See Sheet No.
	From	To		
1 P	0+00	5+50	R	265
Totals				550

Harold R. Gebhart

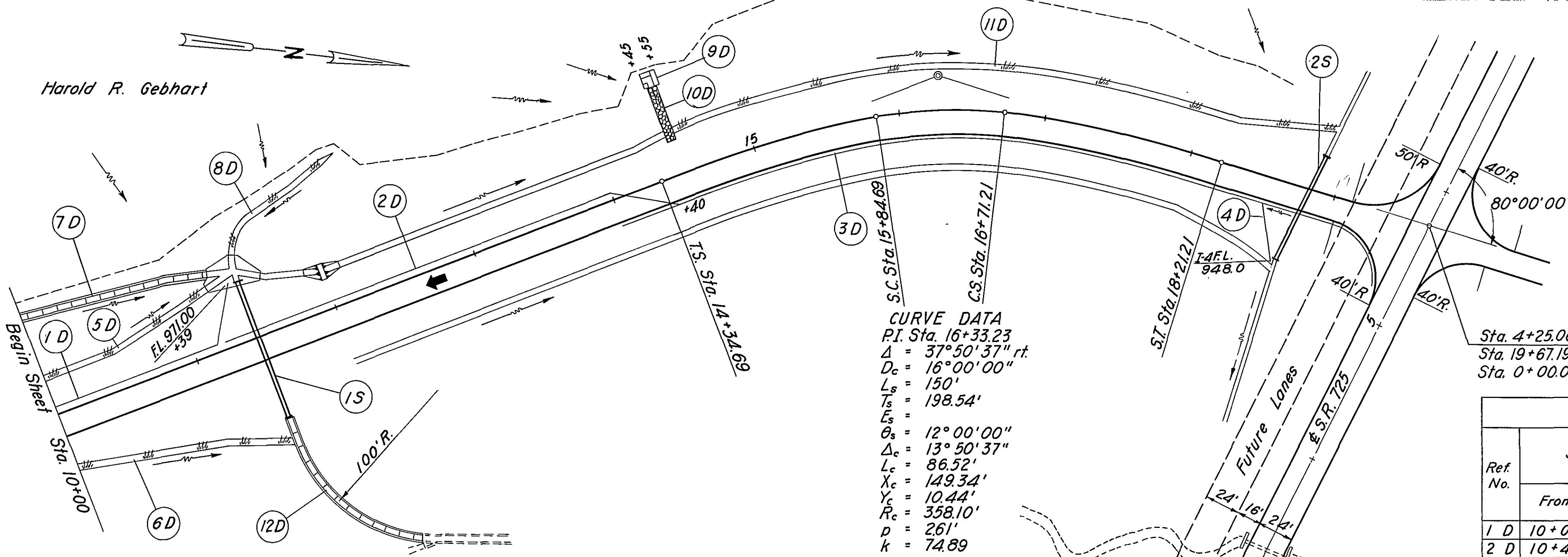
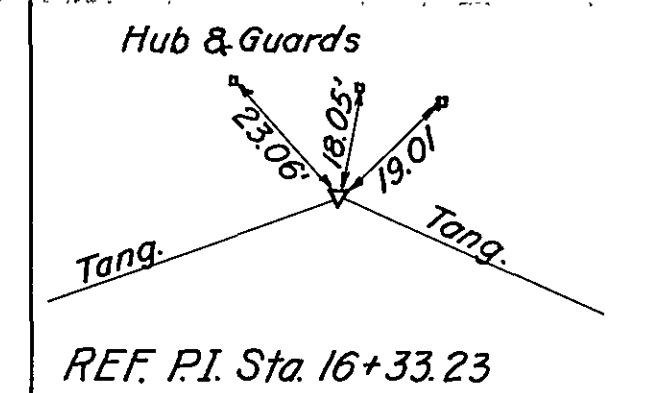


This sheet supersedes Sheet No. 212

Rev'd. 1-2-59

S.R. 725 Interchange RAMP A Sta 0+00 to Sta 10+00

MOT.-25-0.49

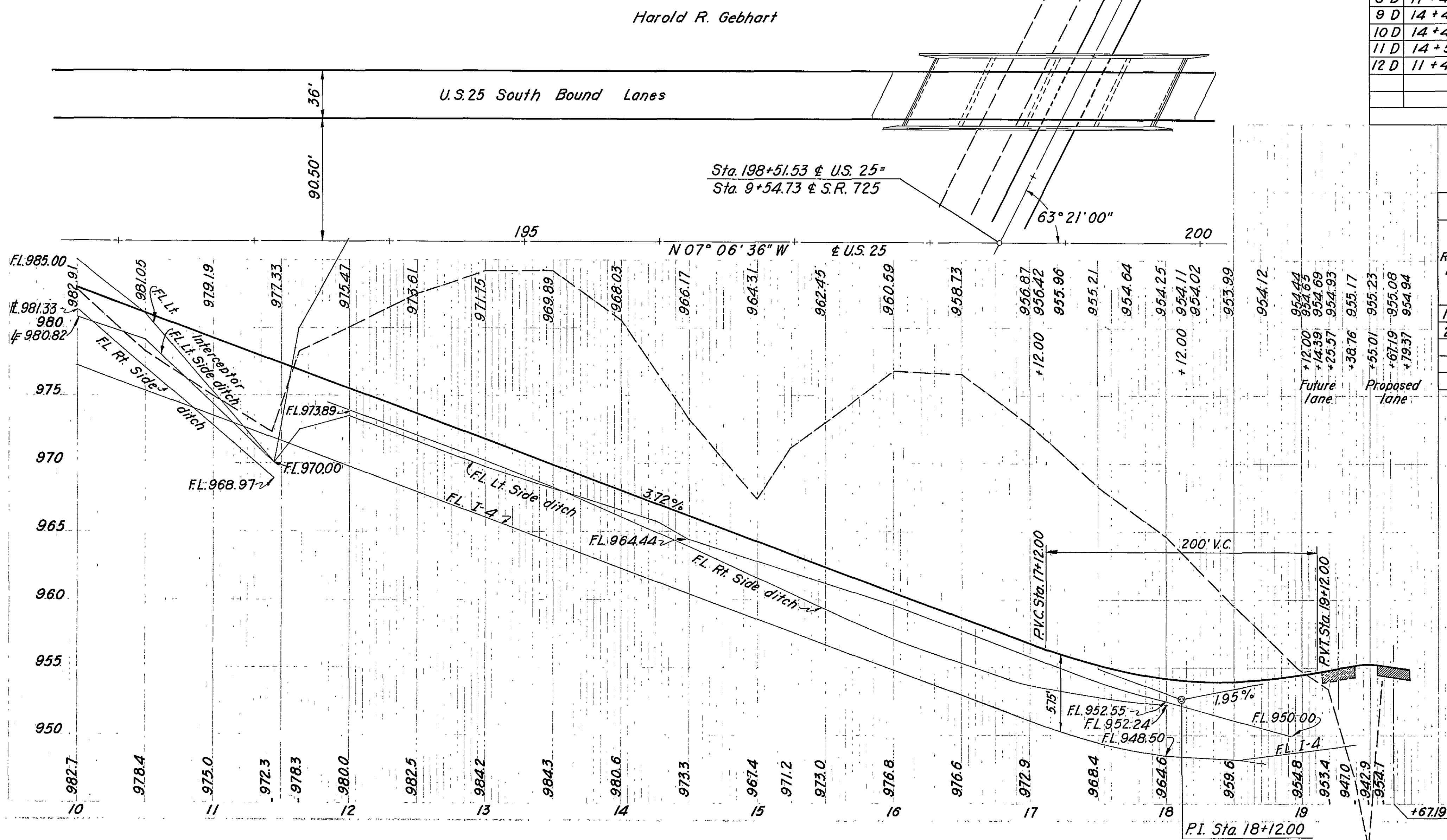


CURVE DATA
P.I. Sta. 16+33.23
 $\Delta = 37^\circ 50' 37''$ rt.
 $D_c = 16^\circ 00' 00''$
 $L_s = 150'$
 $L_h = 198.54'$
 $G_s = 12^\circ 00' 00''$
 $\Delta_c = 13^\circ 50' 37''$
 $L_c = 86.52'$
 $X_c = 149.34'$
 $Y_c = 10.44'$
 $R_c = 358.10'$
 $p = 261'$
 $k = 74.69$

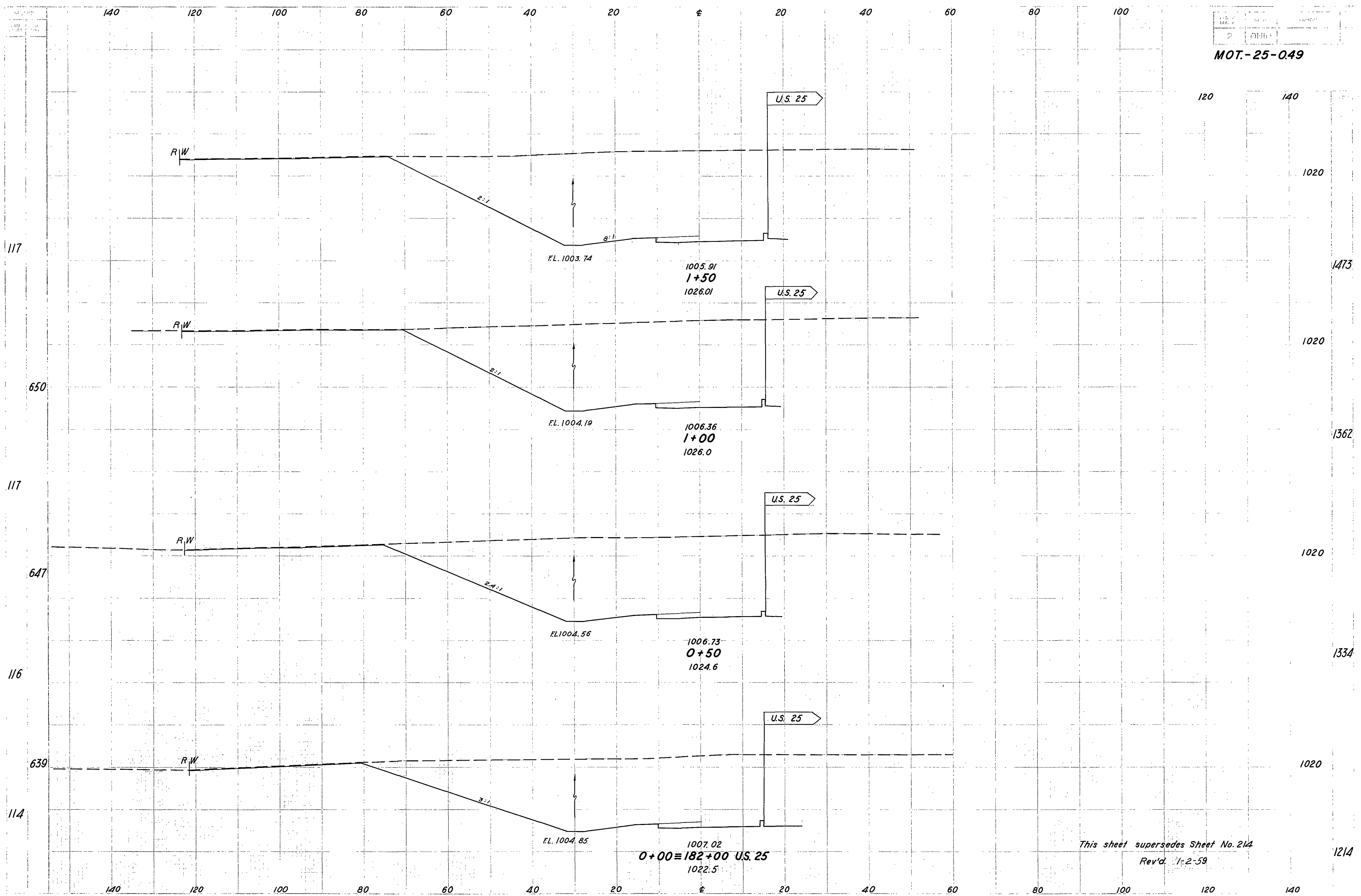
Sta. 4+25.00 \pm S.R. 725
Sta. 19+67.19 Ramp A
Sta. 0+00.00 Ramp B.

DRAINAGE															
Ref. No.	Station		Side	I-4 Underdrain Deep 6" L.F.	I-5 for I-4		I-4		I-4	I-10	I-10		I-14	L-10	
	From	To		Bend 60° 6" Ea.	Bend 30° 6" Ea.	Wye 60° 6" x 6" Ea.	Wye 30° 6" x 6" Ea.	Pipe Outlets for Underdrains 8" L.F.	Type A Riprap (6" reinf.) Concrete S.Y.	Dumped Rock Channel Protection Depth In.	C.Y.	Paved Gutter Type I-B L.F.	Width L.F.	Sodding S.Y.	
1 D	10+00	10+39	L	149	1				10						
2 D	10+43	14+40	L & R	403		1		1							
3 D	14+00	19+40	R	550			1								
4 D	18+55	18+72	R	26					10						
5 D	10+00	11+25	L											6	83
6 D	10+00	11+41	R											6	94
7 D	10+00	11+26	L										128		
8 D	11+45	12+35	L											6	66
9 D	14+45	14+55	L							11					
10 D	14+47	14+53	L								30	25			
11 D	14+53	18+90	L											6	293
12 D	11+44	12+00	R										115		
Totals				1128	1	1	1	1	20	11		25	243		536

STRUCTURES (20 Ft. Span and Under)									
Ref. No.	Station	E-2 Excavation for Structures C.Y.	E-3 Channel Excavation C.Y.	S-1 Concrete for Structures Class "E" C.Y.	S-27 Pipe for Roadway Culverts Sec. M-6.6(b) or M-6.8(b) 30" L.F.	I-10 Type "A" Riprap (6" Reinf.) Concrete S.Y.	I-14 Paved Gutter Type I-B L.F.	L-10 Sodding S.Y.	See Sheet No
1 S	11+44	57	20	1	98	62	10		
2 S	18+84	79	10	1.2		78	7	7	
Totals		136	30	2.2	98	78	69	10	7

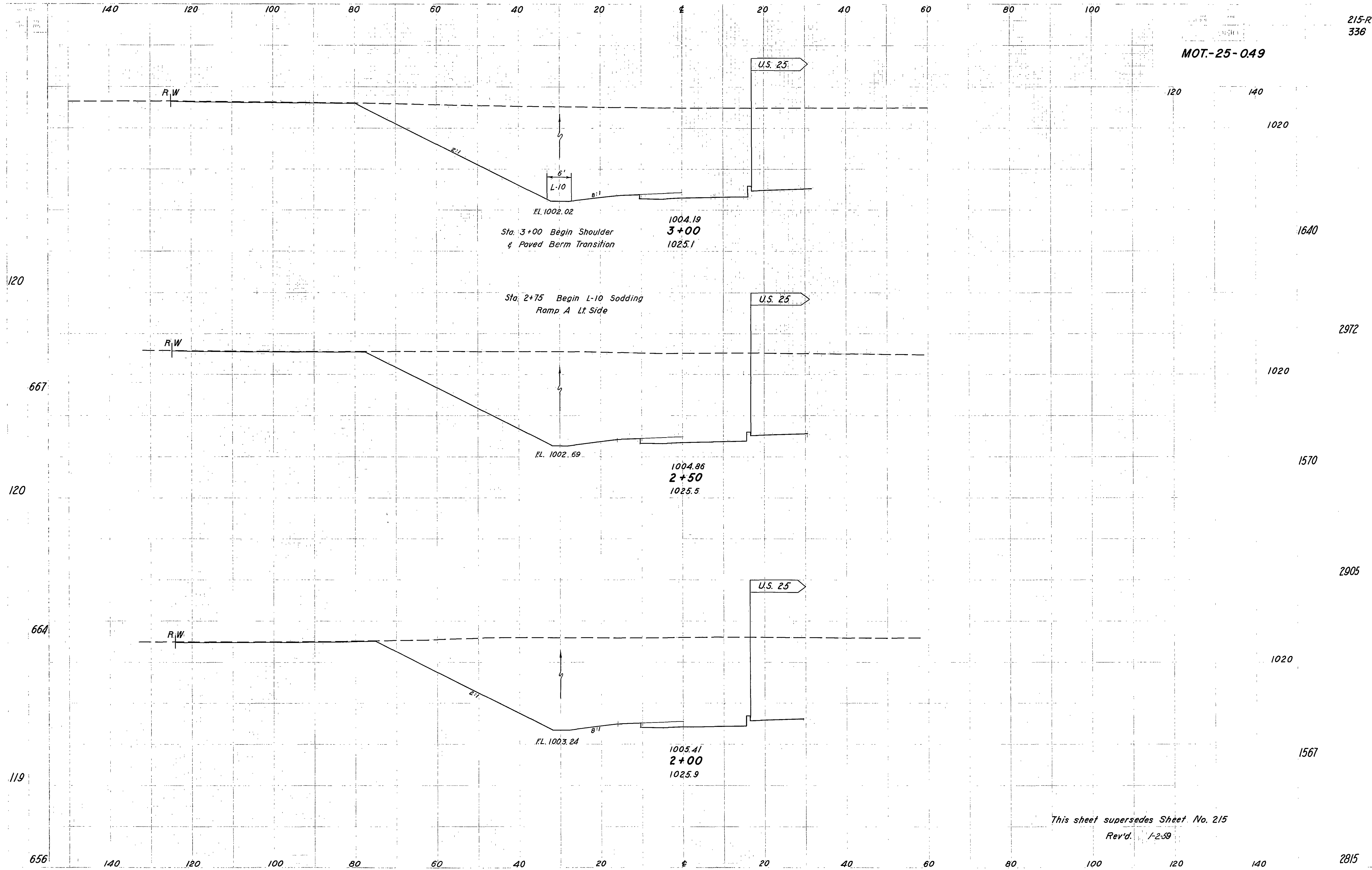


MOT.-25-049

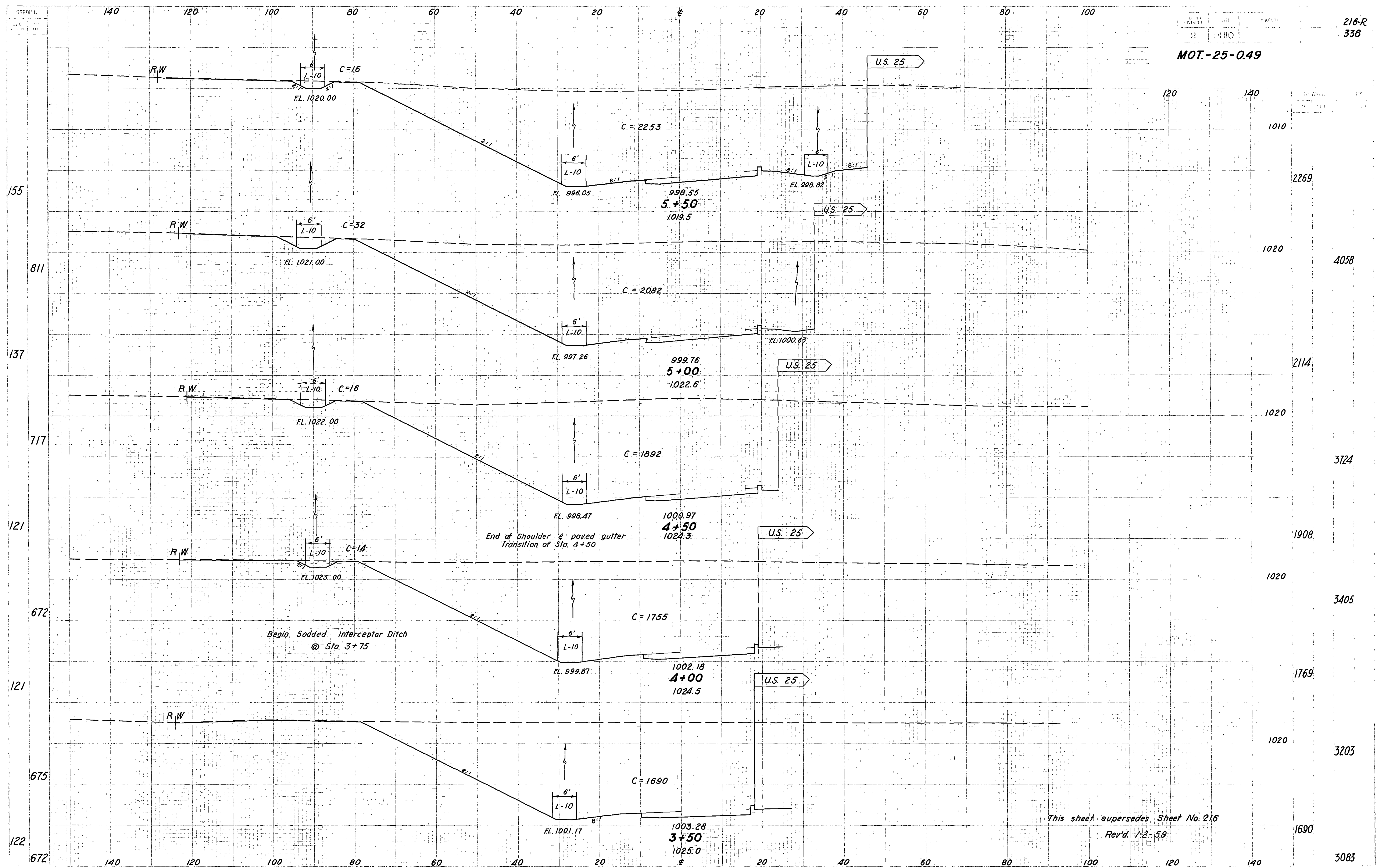


This sheet supersedes Sheet No. 214
Rev'd 1-2-59

MOT.-25-049

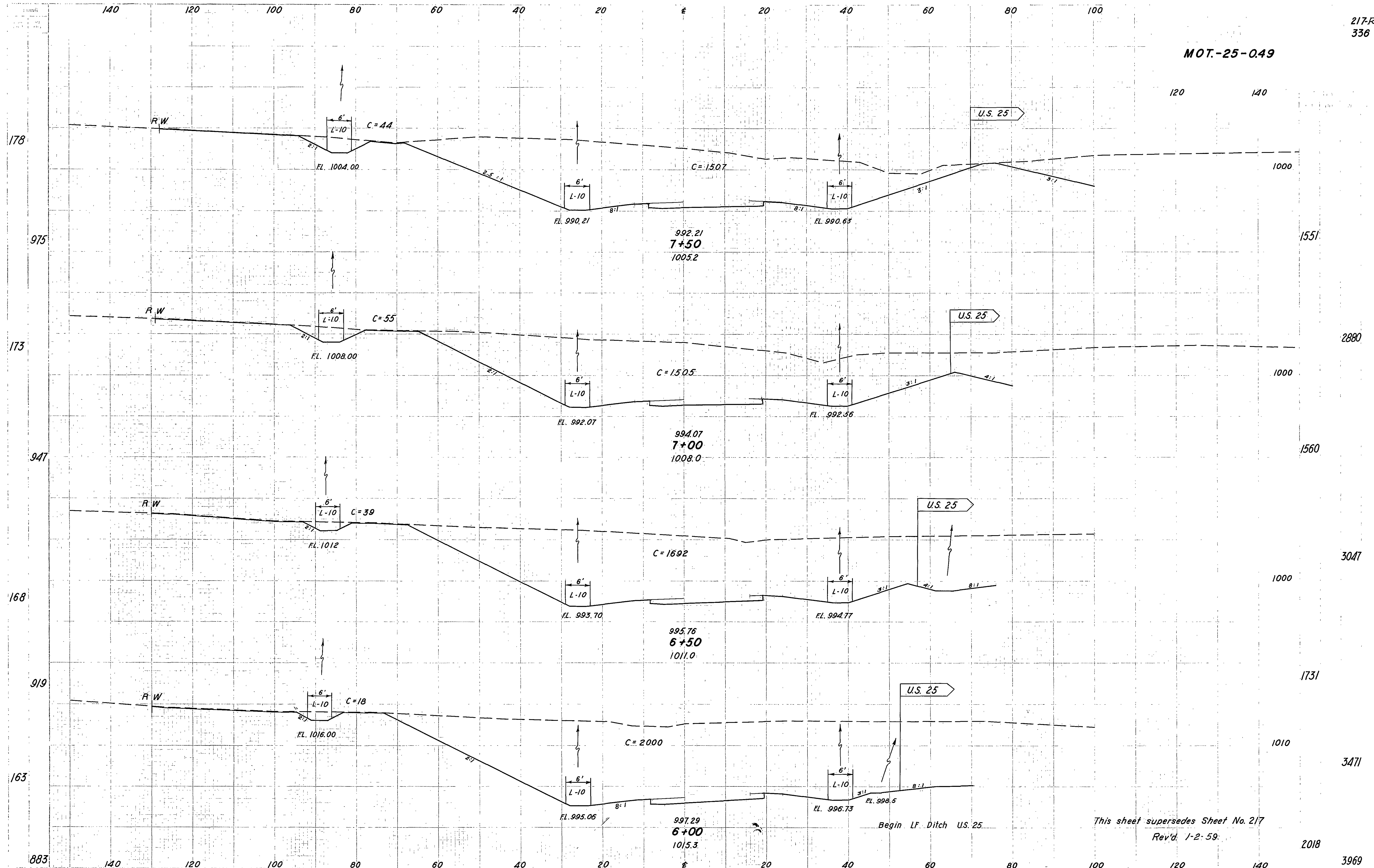


MOT.-25-049



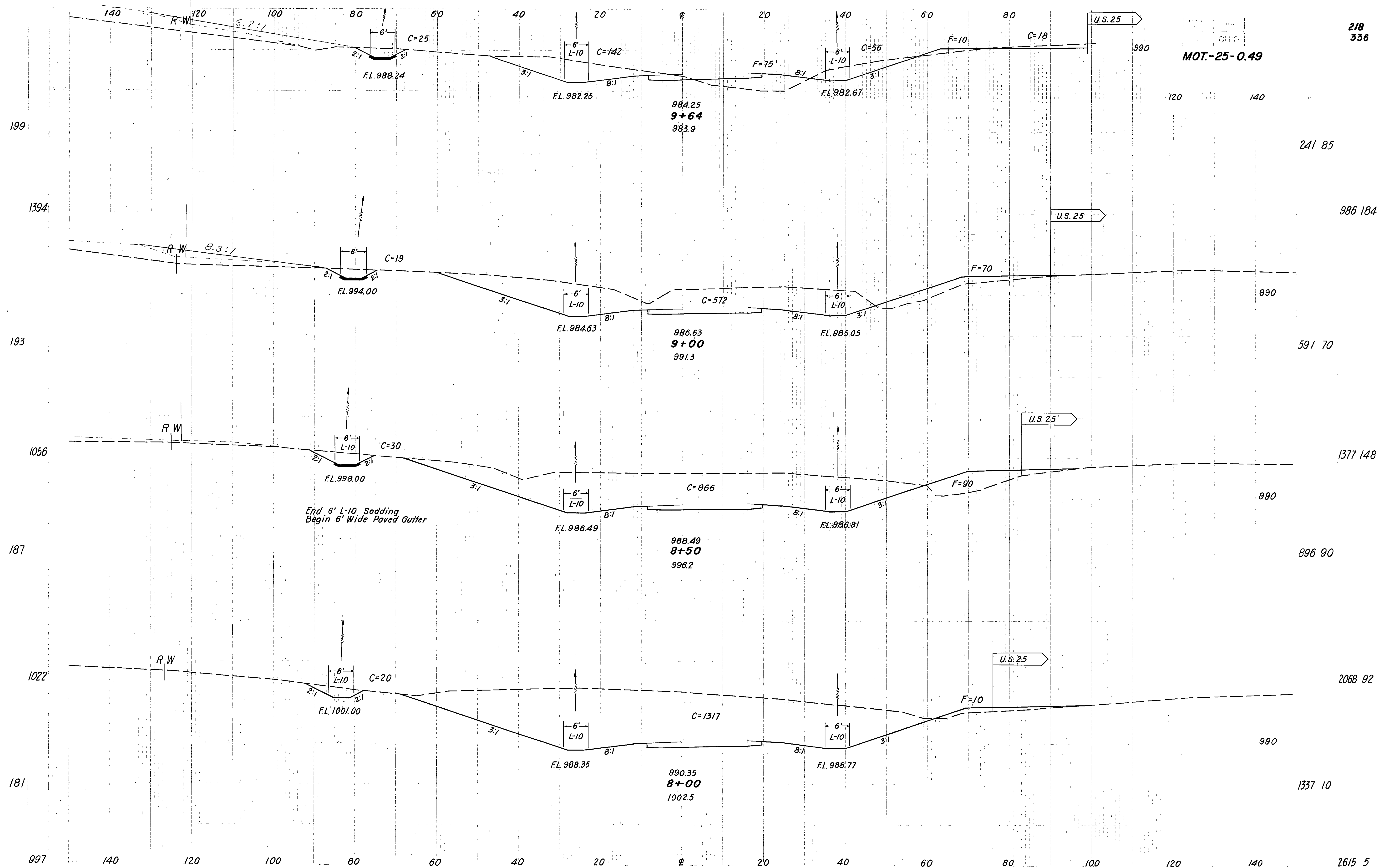
This sheet supersedes Sheet No. 216
Rev'd 1-2-58

MOT.-25-049

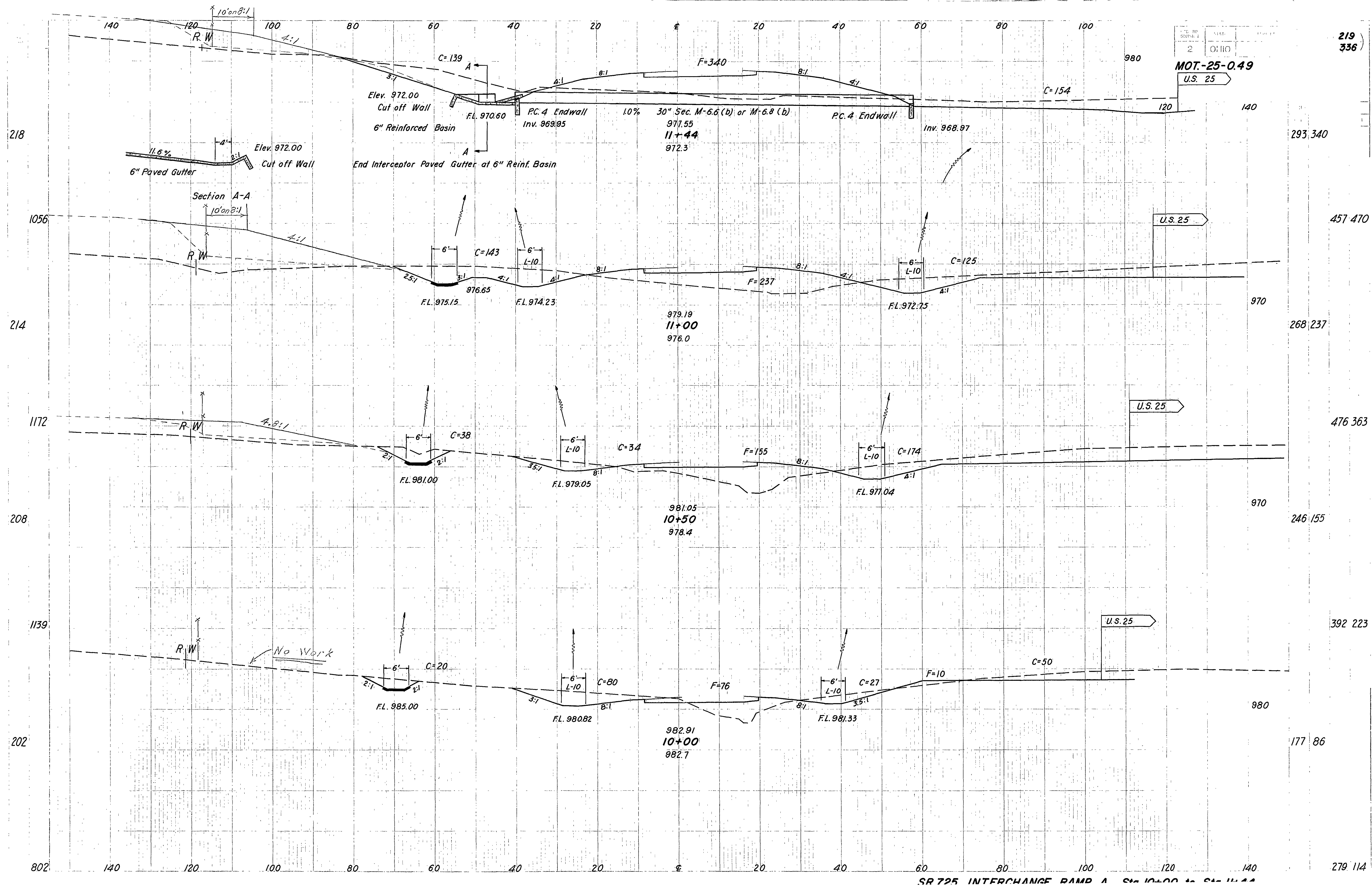


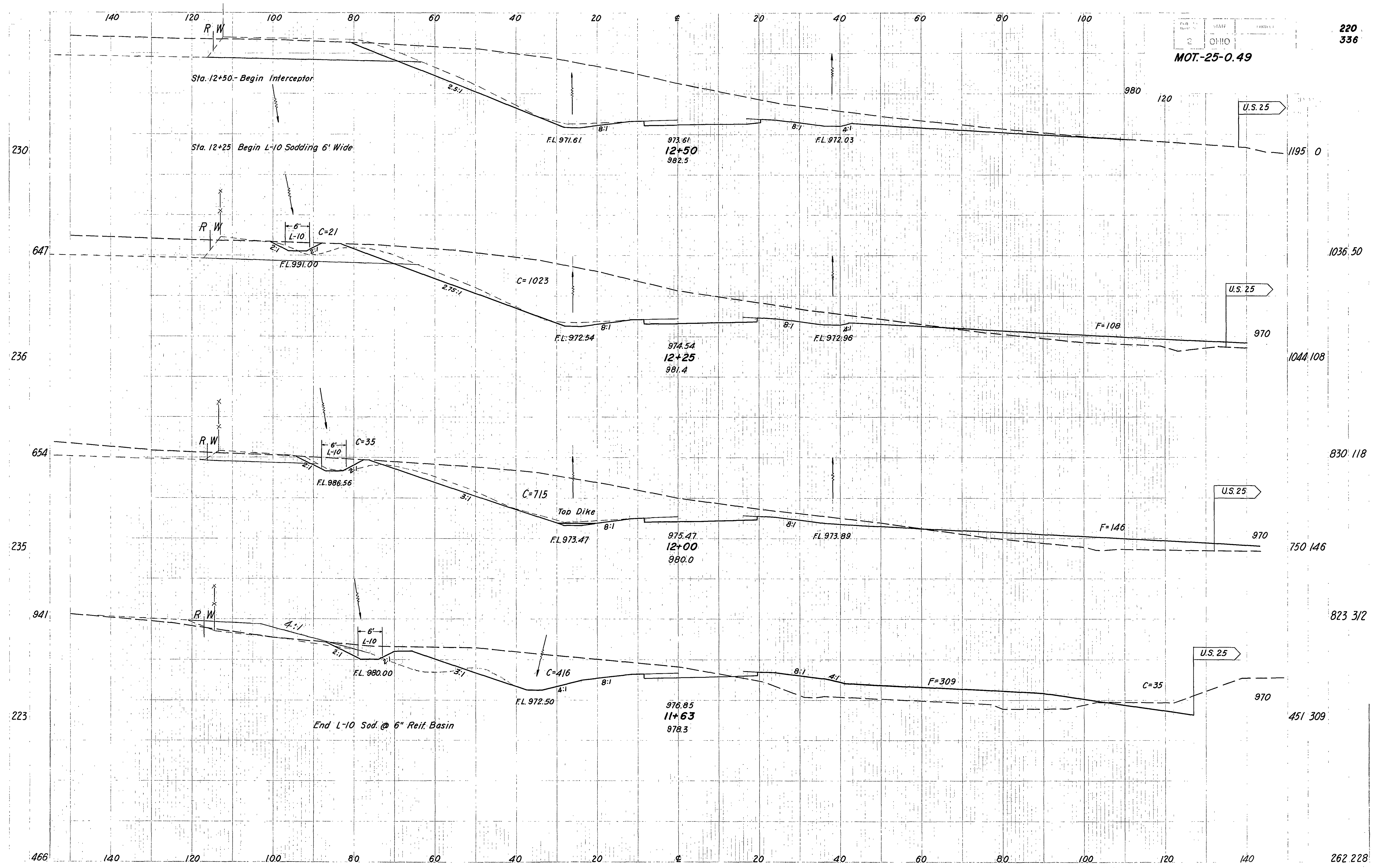
This sheet supersedes Sheet No. 217
Rev'd. 1-2-59.

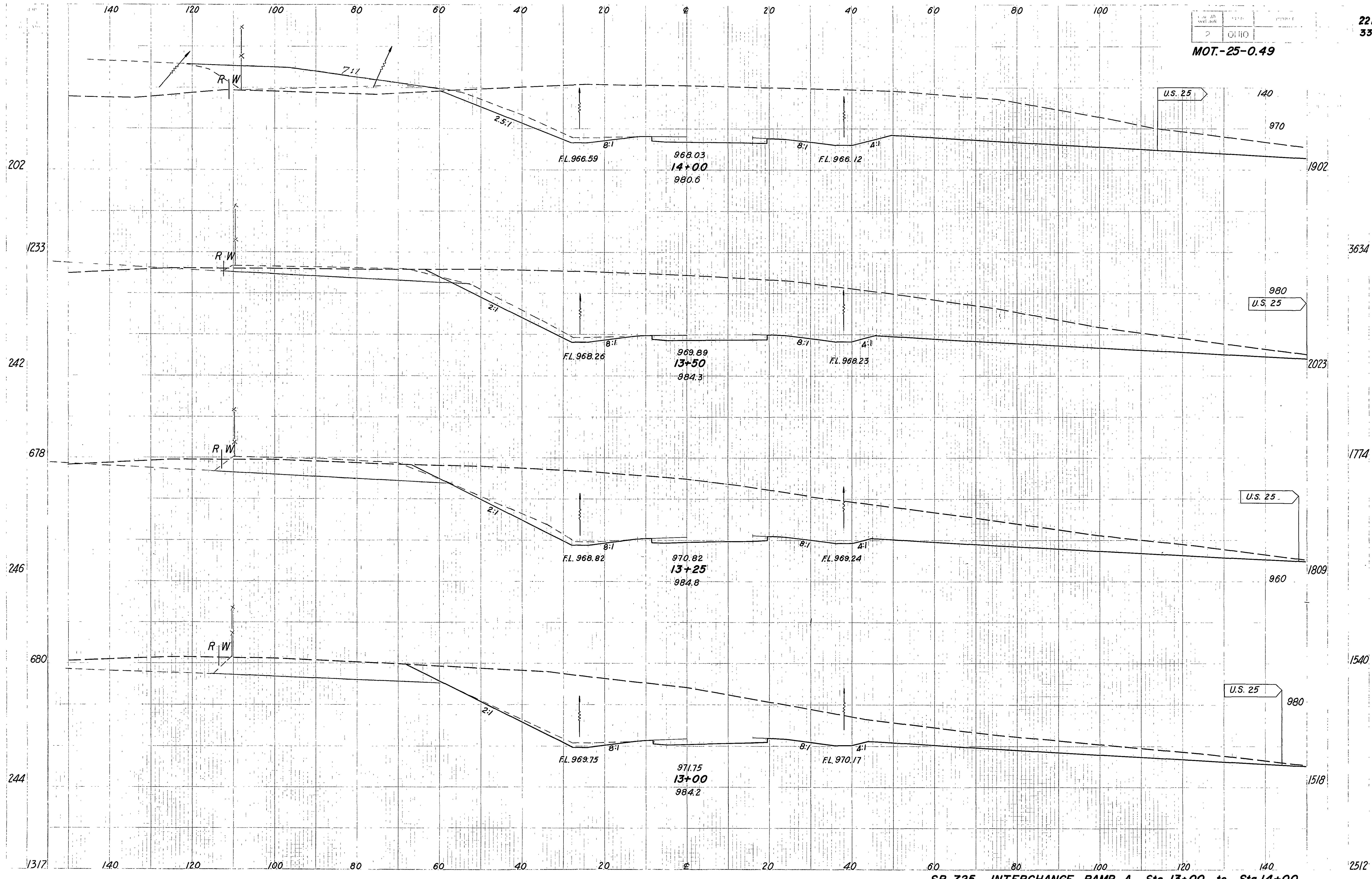
Begin LF Ditch U.S. 25

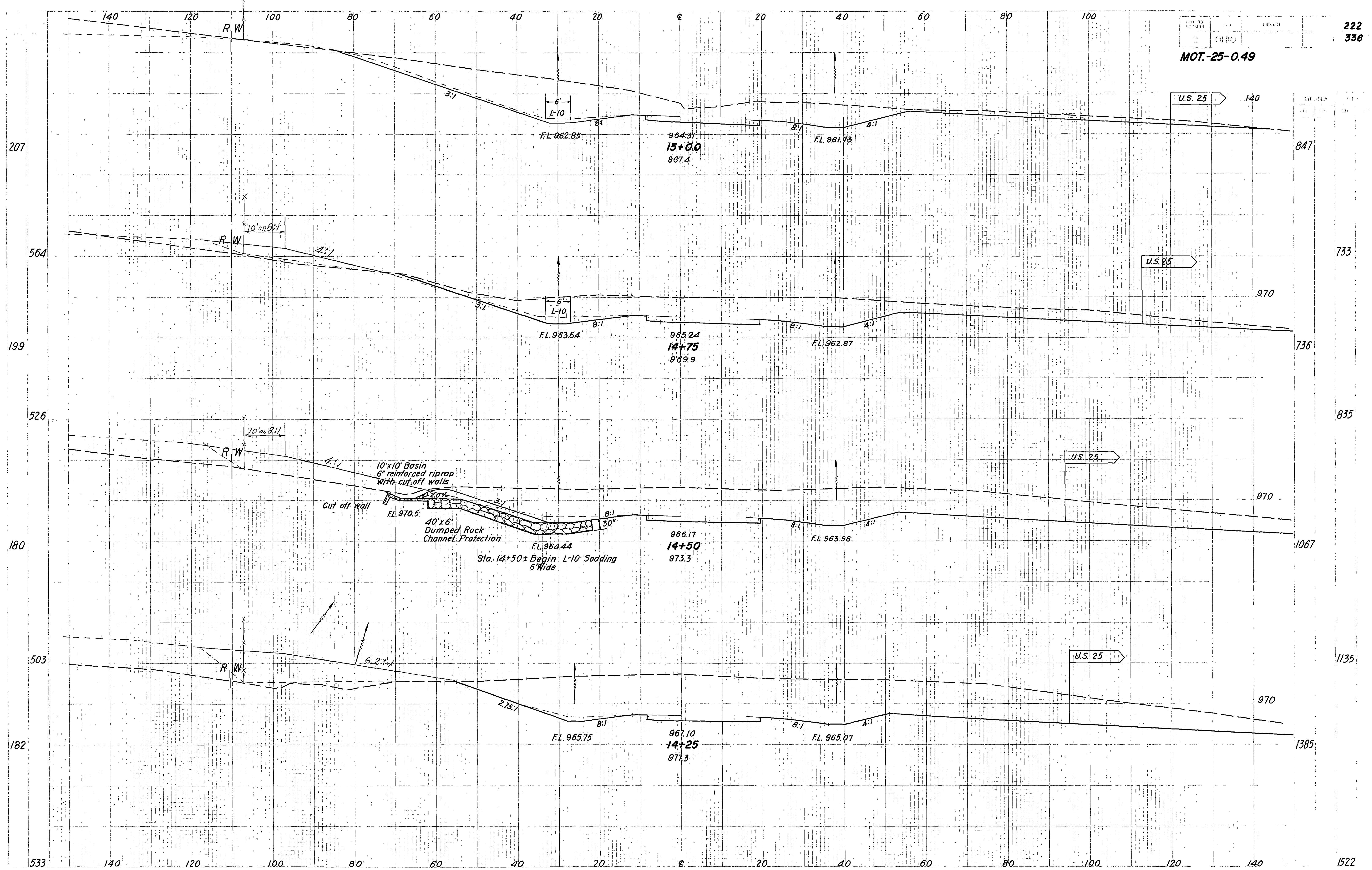


SR 725 INTERCHANGE RAMP A Sta. 8+00 to Sta. 9+64

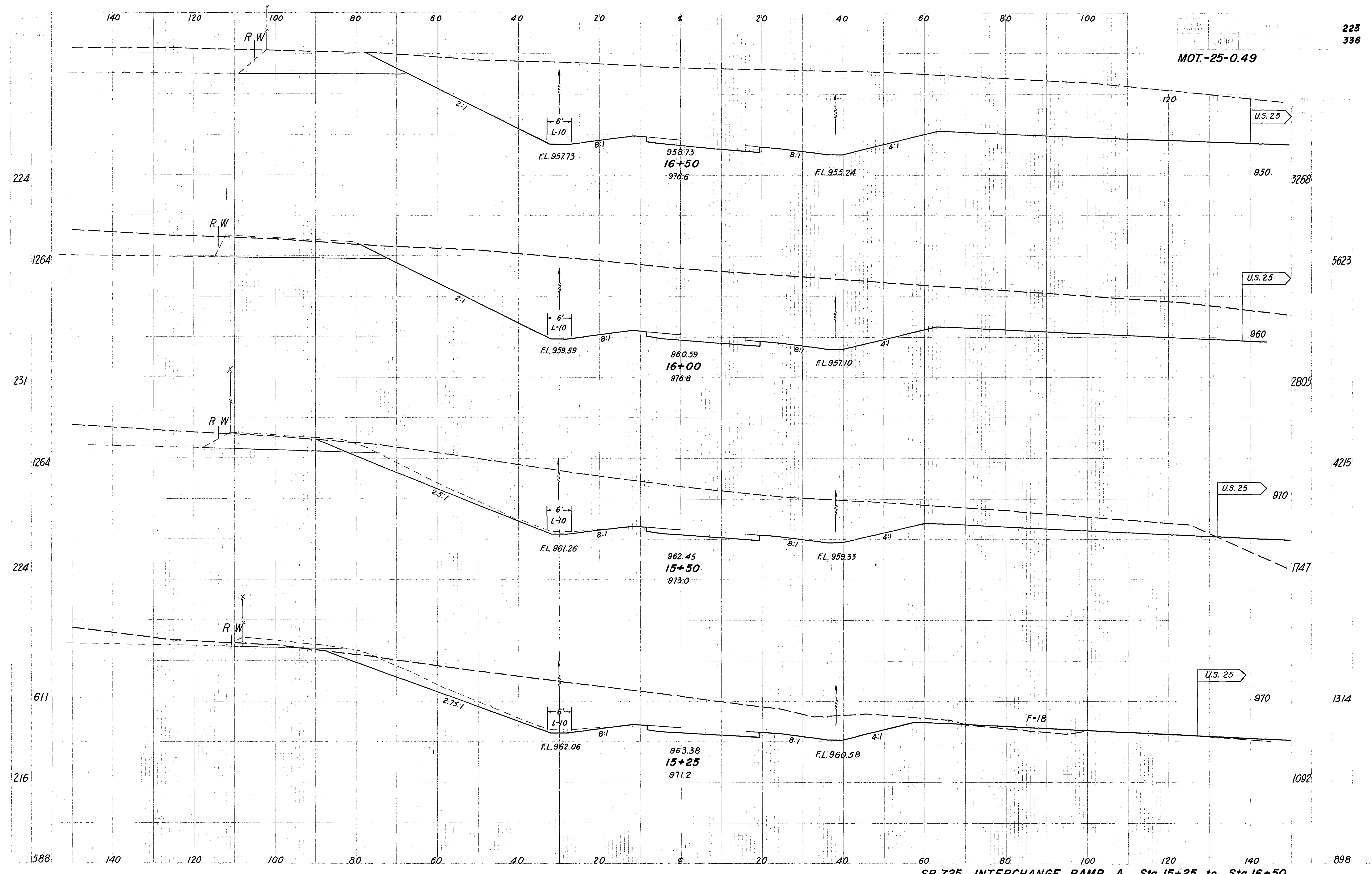








SR 725 INTERCHANGE RAMP A Sta 14+25 to Sta 15+00



SR 725 INTERCHANGE RAMP A Sta. 15+25 to Sta. 16+50

MOT-25-049

U.S. 25 # S.R. 725

U.S. 25

U.S. 25

U.S. 25

SR 725 INTERCHANGE RAMP A Sta. 17+00 to Sta. 18+25

181

1733

515

1798

190

2151

1119

4586

213

2802

1175

5373

210

3001

1206

5805

140

120

100

80

60

40

20

0

20

40

60

80

100

140

120

100

80

60

40

20

0

20

40

60

80

100

120

140

R.W.

5:1

3.25:1

6' L=10

FL. 951.8

4:1

8:1

954.02
18+25
962.2

8:1

4:1

FL. 950.82

4:1

R.W.

7.3:1

3:1

6' L=10

FL. 952.55

8:1

954.25
18+00
964.6

8:1

4:1

FL. 952.02

R.W.

2.5:1

6' L=10

FL. 953.78

8:1

955.21
17+50
968.4

8:1

4:1

FL. 952.57

R.W.

2:1

6' L=10

FL. 955.71

8:1

956.87
17+00
972.9

8:1

4:1

FL. 953.69

$L_s = 200'$
 $\theta_s = 1^\circ 30' 00''$
 $p = 0.44'$
 $k = 100.00'$
 $X_c = 199.99'$
 $Y_c = 1.75'$
 $L.T. = 133.34'$
 $S.T. = 66.67'$
 $L.C. = 199.99'$

REF. 0+00 RAMP B

Ramp A₁

Ramp B₁

Ramp B

S.R.

725 ±

61.89'

42.63'

36.91'

0+00

REF. Sta. 2+35.86

Pvt. Edge

10" W. Cherry

Ramp B

12" Oak

10" Maple

7.61'

106.1'

13.81'

200'

1° 30' 00"

p = 0.44'

k = 100.00'

X_c = 199.99'

Y_c = 1.75'

L.T. = 133.34'

S.T. = 66.67'

L.C. = 199.99'

Woods

Future Lane & Survey

S.R. 725

Sta. 4+25.00 ± S.R. 725

Sta. 0+00.00 Ramp B

Sta. 19+67.19 Ramp A

24' 16"

24'

36'

150'

Southbound Lanes

RAMP B

Sta. 5+11.53

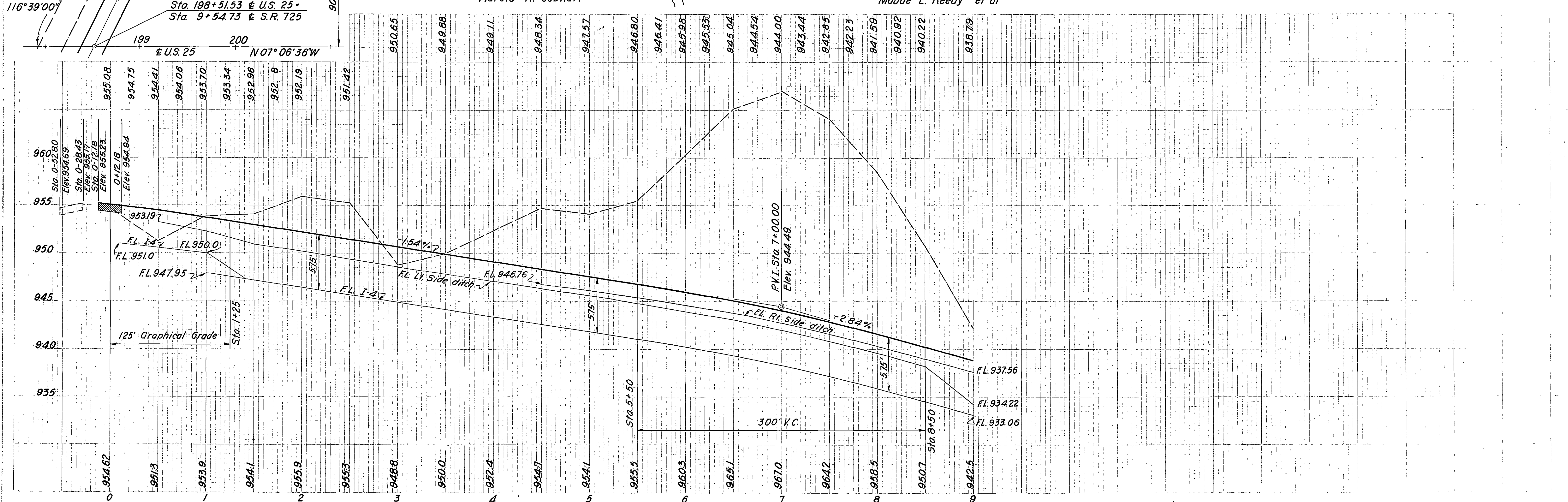
Sta. 7+11.53

Sta. 9+00

End Sheet

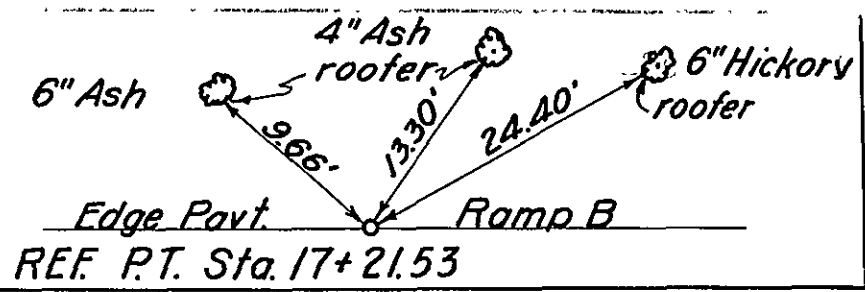
Harold R. Gebhart

Maude L. Ready, et al.

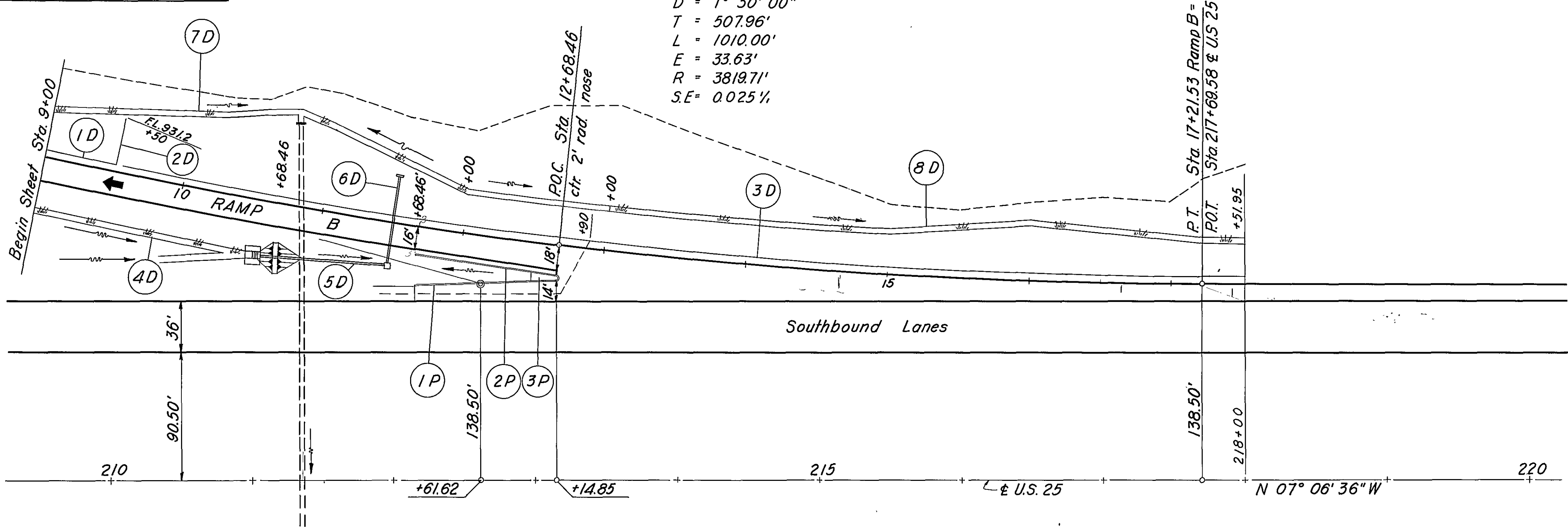
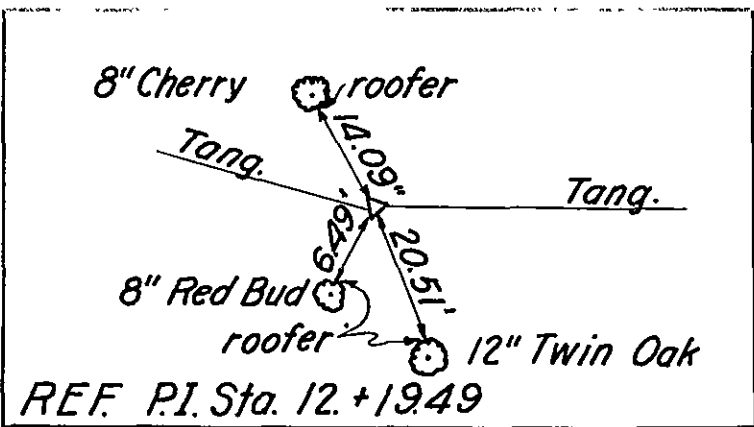


MOT-25-049

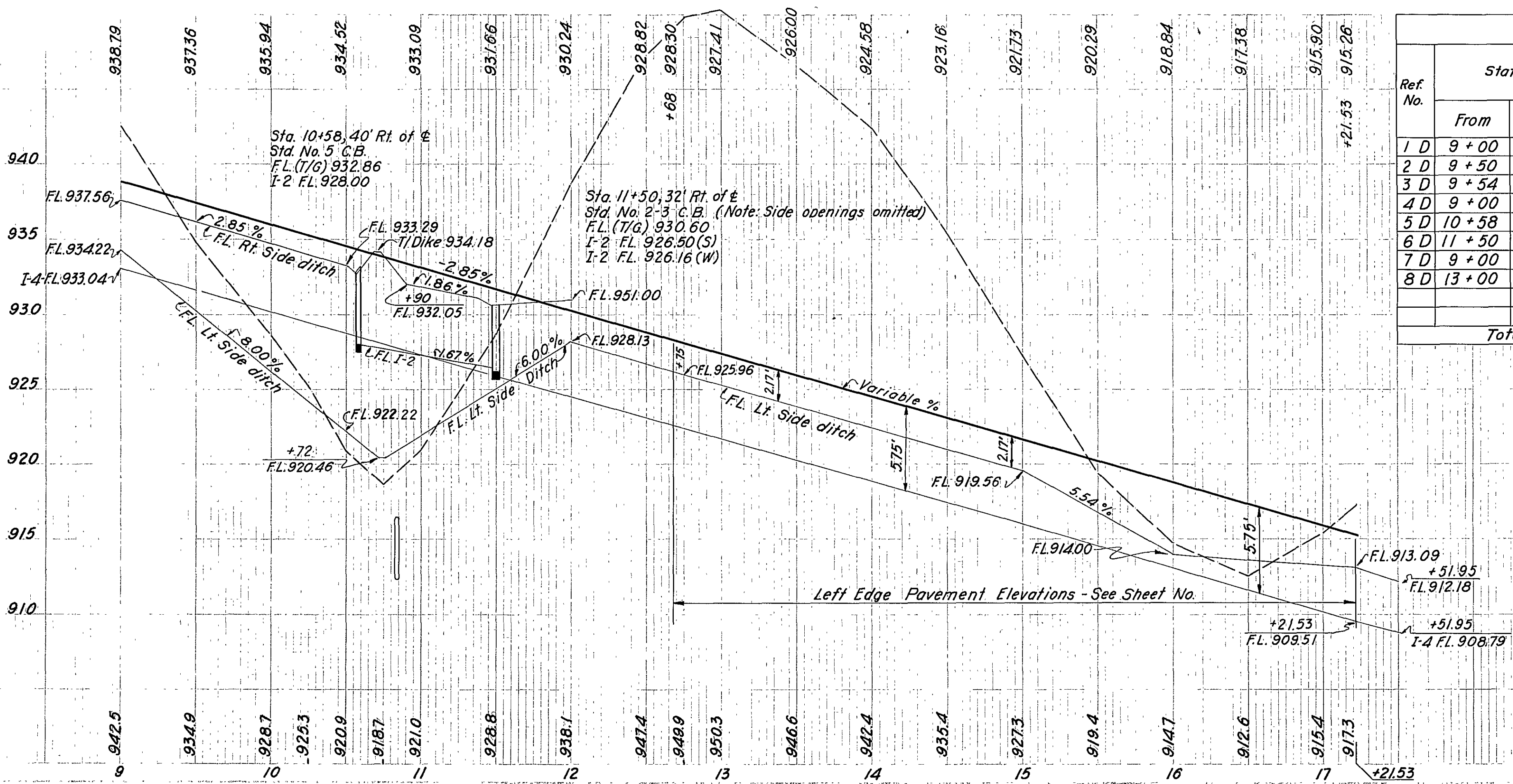
PAVEMENT						
Ref. No.	Station		Side	I-12 Standard Type 2A Concrete Curb L.F.	I-12 Standard Type 6 Concrete Curb L.F.	I-21 Port. Cem. Concrete Median Part Type 1 S.Y.
	From	To				See Sheet No.
1 P	11+68.46	12+68.46	R	104		260
2 P	11+68.46	12+68.46	R		100	"
3 P	12+50	12+70	R			11
Totals				104	100	11




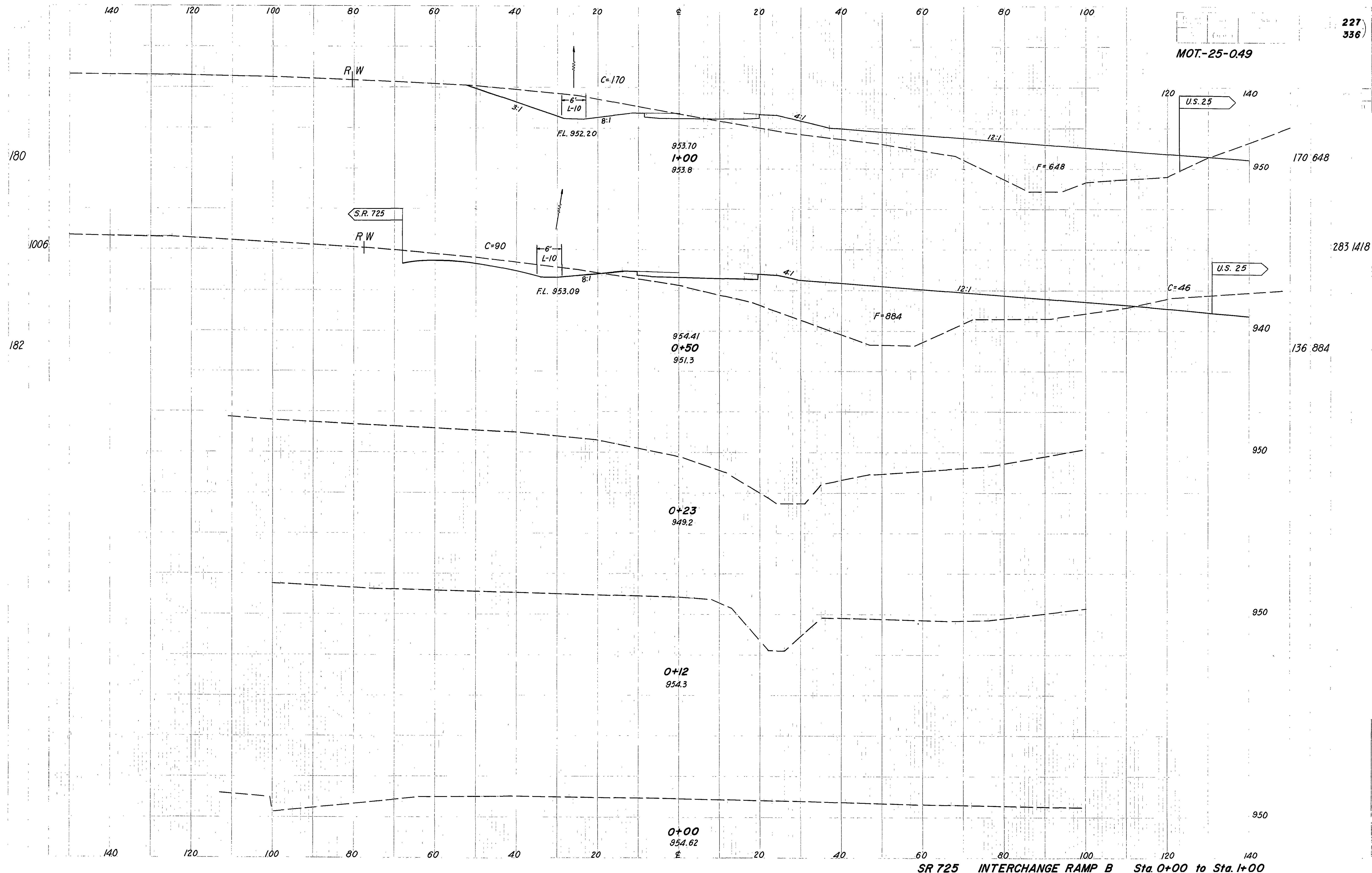
PI = Sta 12+19.49
 $\Delta = 15^\circ 09' 00''$ Lt.
 $D = 1^\circ 30' 00''$
 $T = 507.96'$
 $L = 1010.00'$
 $E = 33.63'$
 $R = 3819.71'$
 $S.E. = 0.025\%$



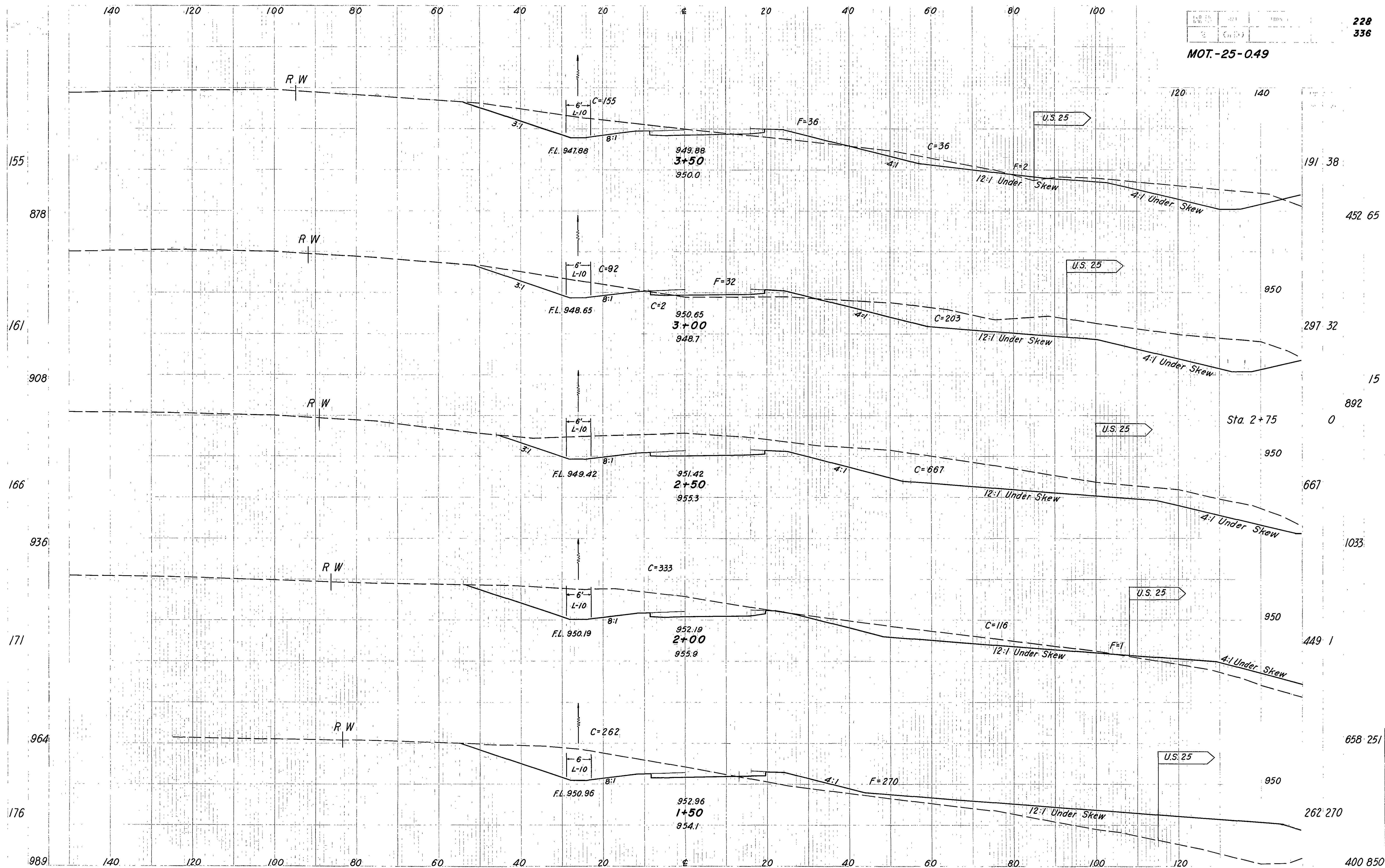
DRAINAGE														
Ref. No.	Station		Side	I-4 Underdrain Deep 6"	I-4 Pipe Outlets for Underdrains 8"	I-5 for I-4		I-2 24" Storm Sewers Sec. M-6.6(a) Sec. M-6.6(b)	E-2 Excavation for Structures	S-1 Concrete for Structures Class "E"	I-8 Standard No. 2-3 Catch Basin Ea.	I-8 Standard No. 5 Catch Basin Ea.	L-10 Sodding Width	See Sheet No.
	From	To		L.F.	L.F.	Bend 90° 6"	Wye 60° 6"x6"	L.F.	D.P.	C.Y.	C.Y.	Ea.	Ea.	
1 D	9 + 00	9 + 50	L	50		1								
2 D	9 + 50	Lt.		22	10									
3 D	9 + 54	17 + 51.95	L	798			1							
4 D	9 + 00	10 + 51	R										6	101
5 D	10 + 58	11 + 50	R					90			1	1		
6 D	11 + 50	Lt.						64	1	0.4				
7 D	9 + 00	12 + 00	L										6	201
8 D	13 + 00	17 + 51.95	L										6	301
Totals				870	10	1	1	90	64	1	0.4	1	1	603



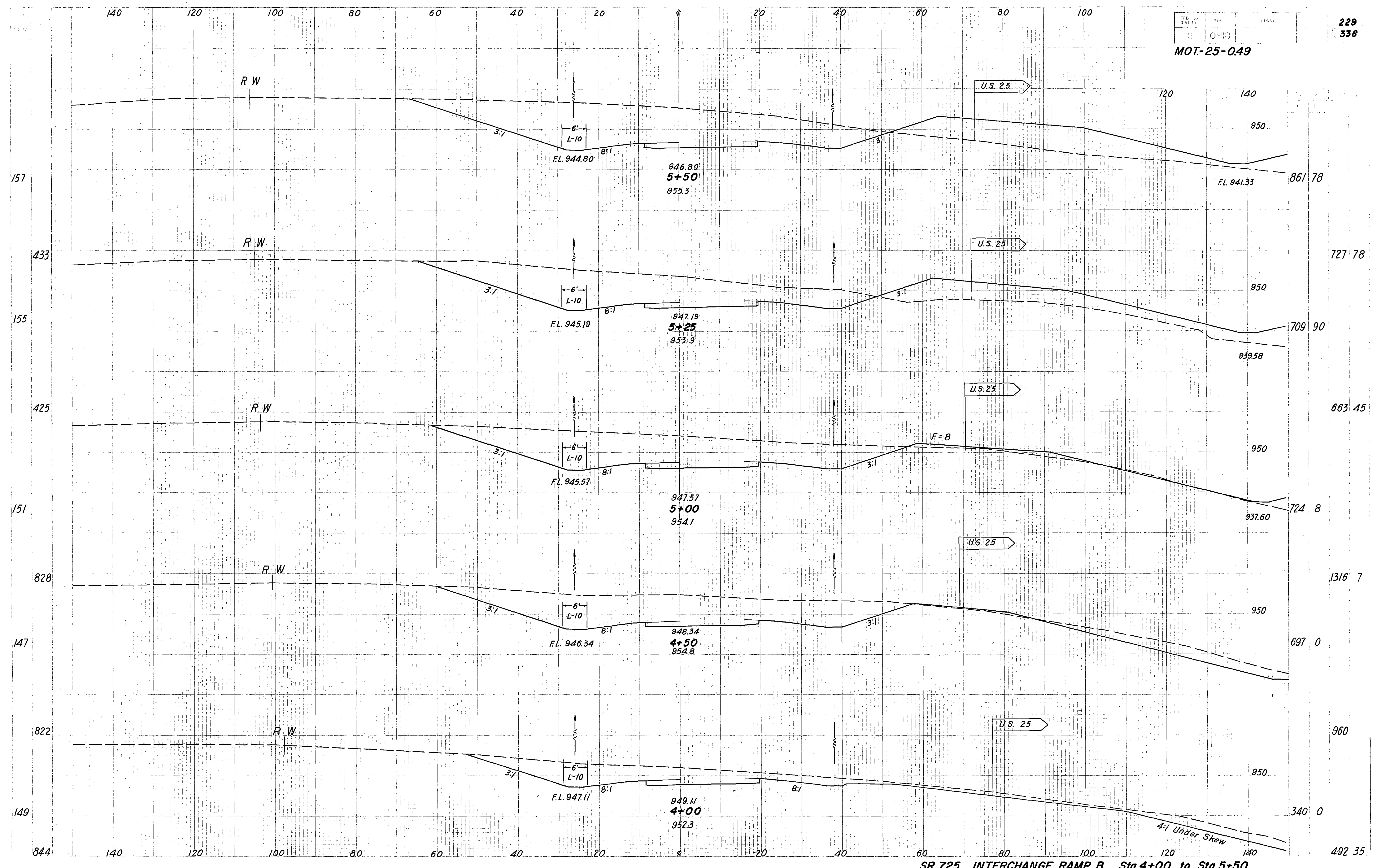
120  140



MOT.-25-0.49



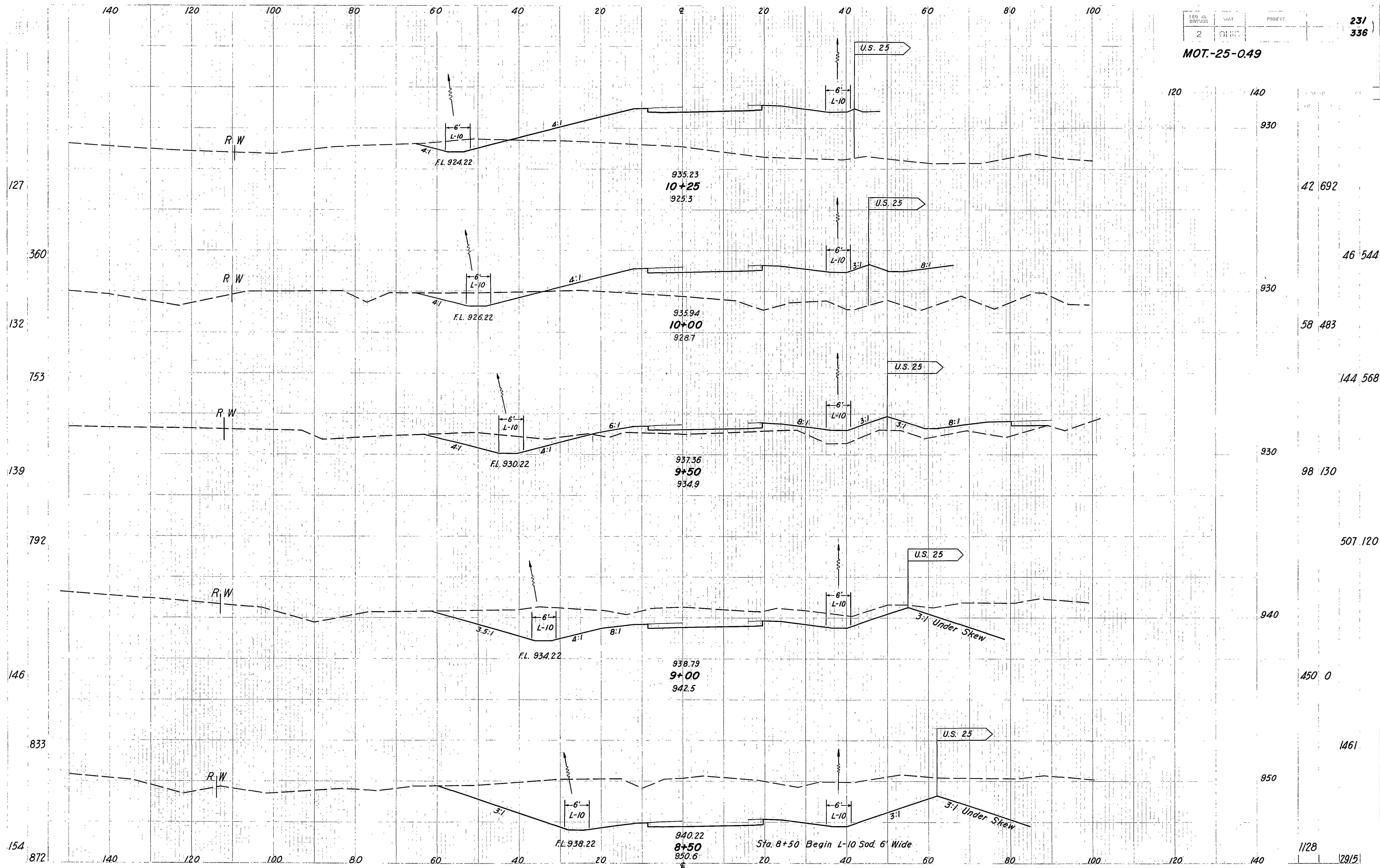
SR 725 INTERCHANGE RAMP B Sta.1+50 to Sta.3+50



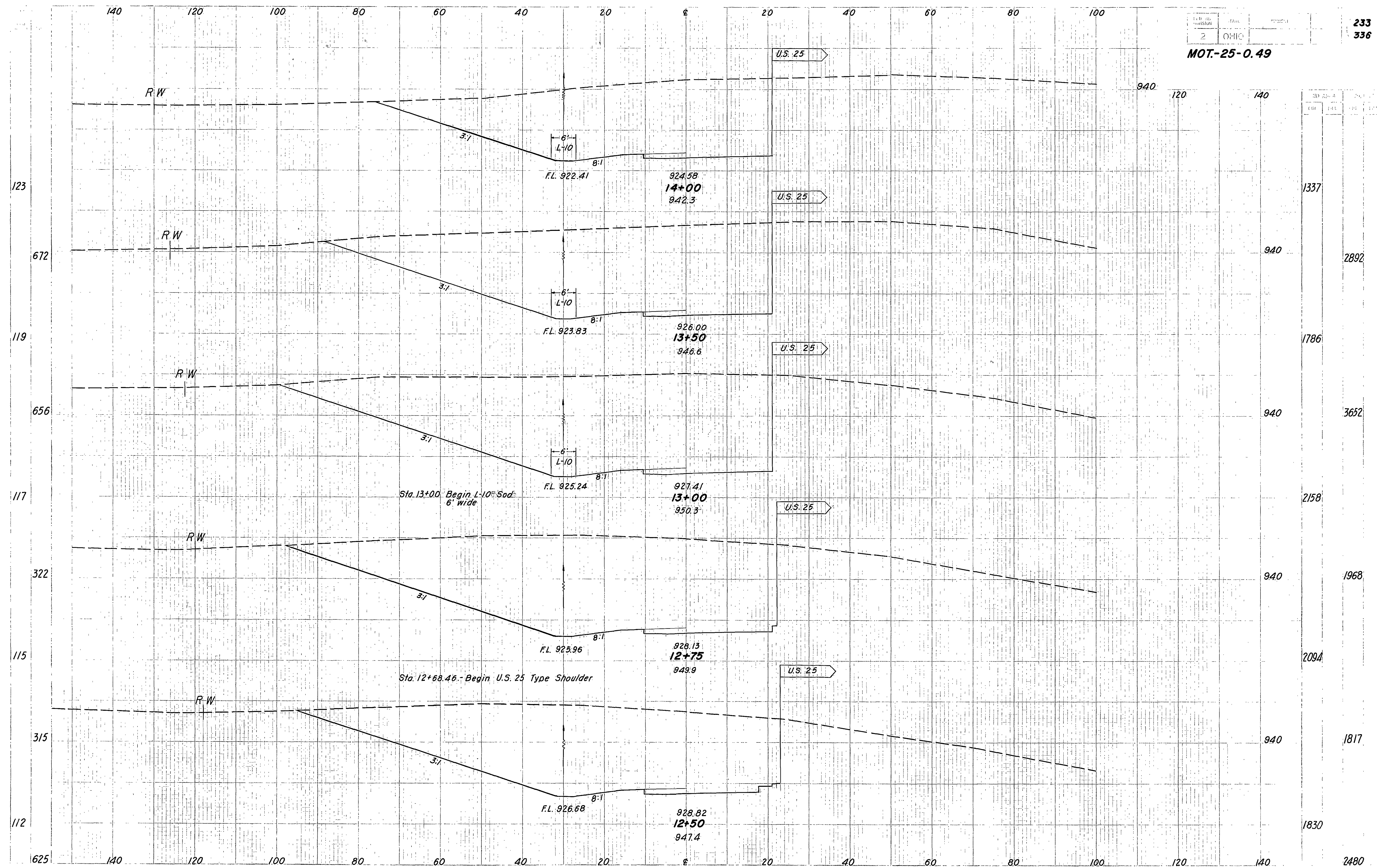
U.S. 25

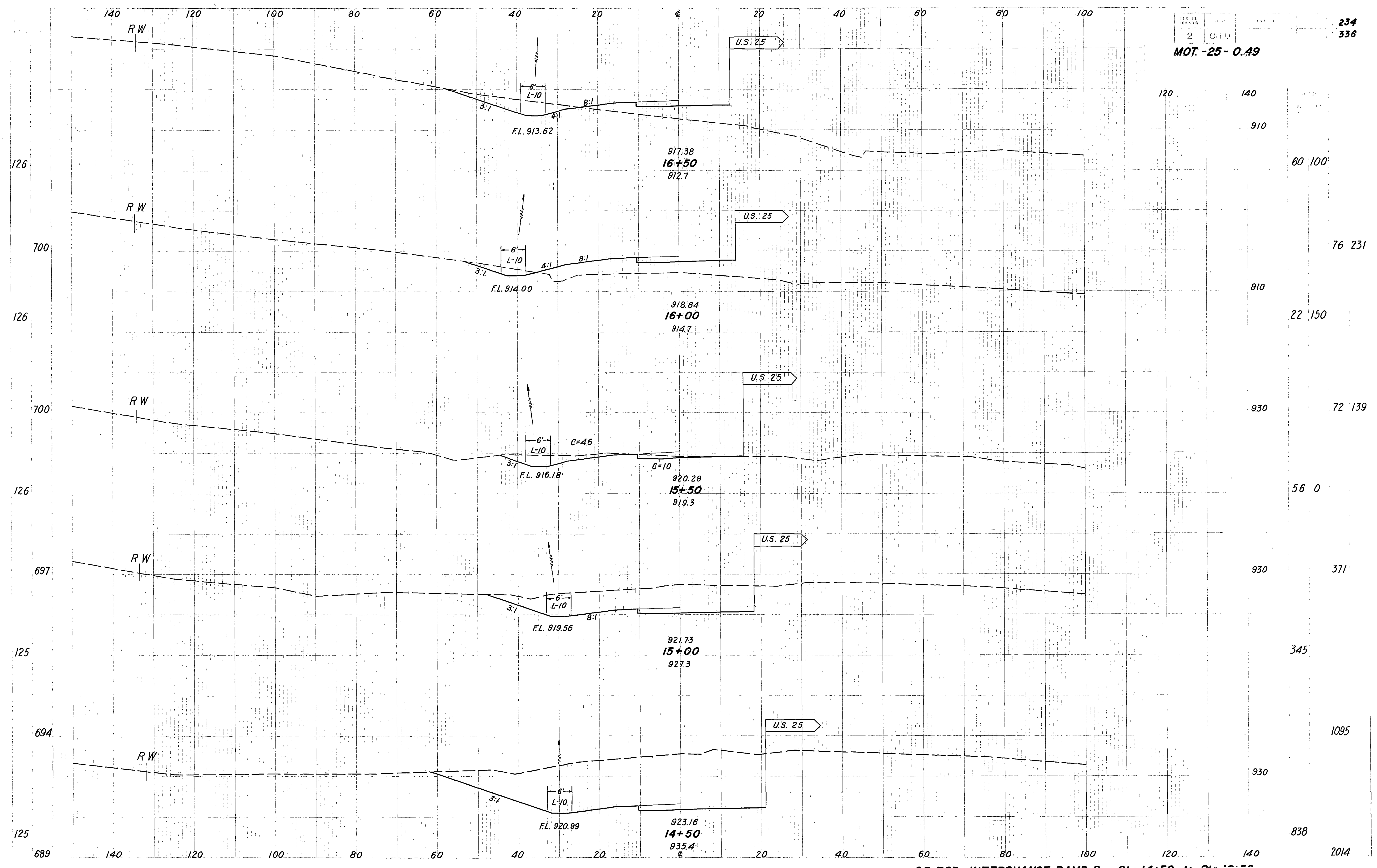


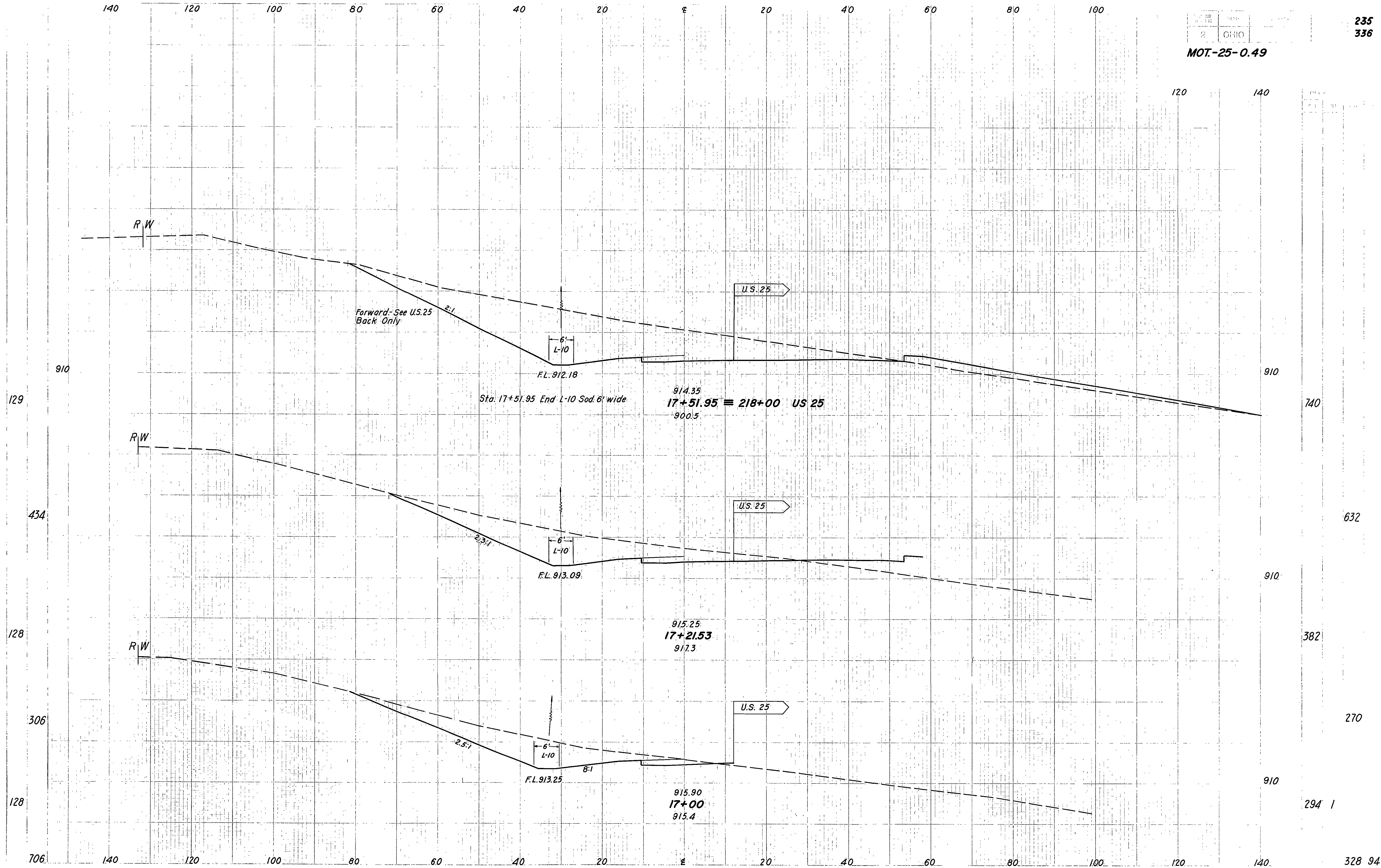
MOT.-25-049



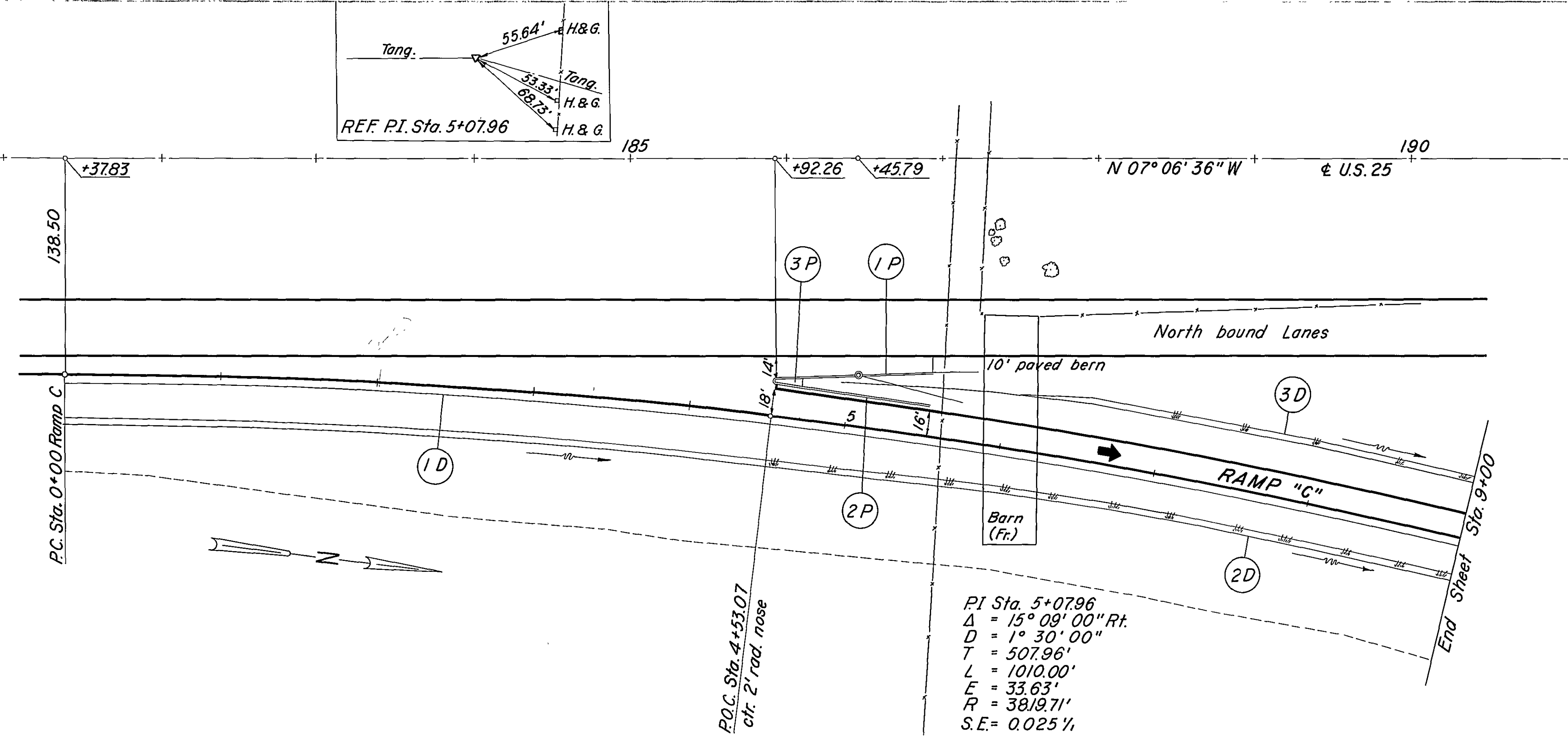






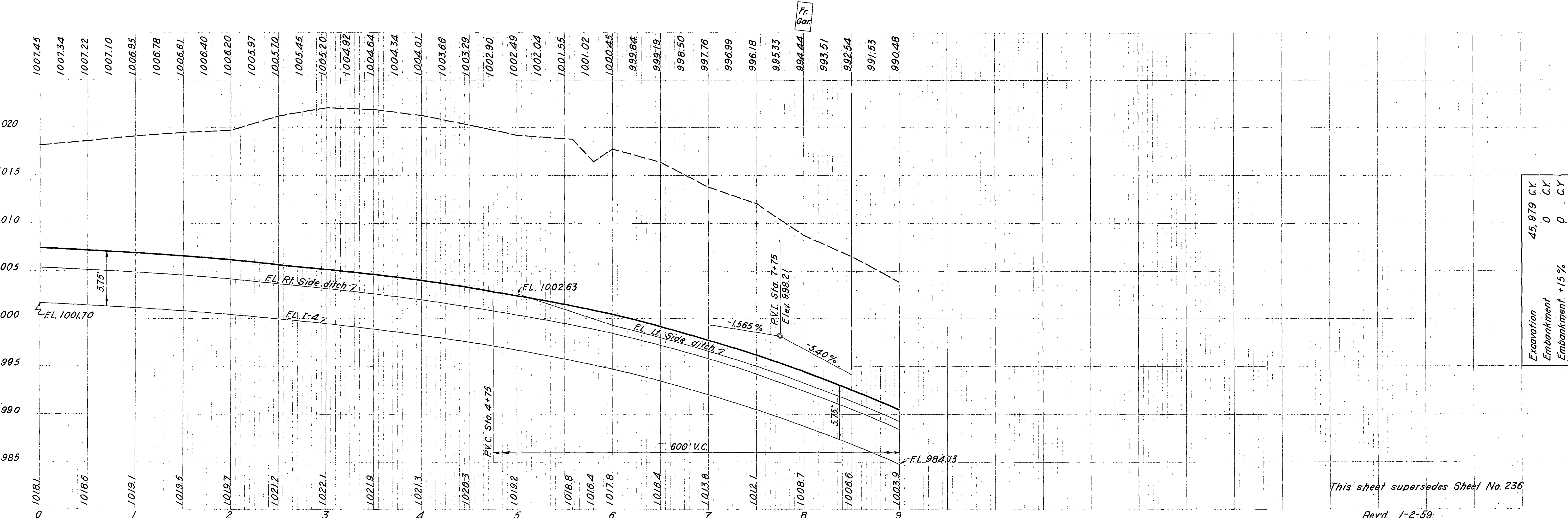


MOT-25-0.49



DRAINAGE					
Ref. No.	Station		I-4 Underdrain Deep 6" L.F.	L-10 Sodding	
	From	To		Width L.F.	S.Y.
1 D	0+00	9+00	R	900	
2 D	4+53	9+00	R	6'	300
3 D	7+00	9+00	L	6'	133
Totals				900	433

PAVEMENT						
Ref. No.	Station		Side	I-12 Standard Type 2-A Concrete Curb L.F.	I-12 Standard Type 6 Concrete Curb L.F.	I-21 Port. Cem. Concrete Median Pavement Type 1 S.Y.
	From	To				See Sheet No.
1 P	4+53.07	5+53.07	L	104		261-A
2 P	4+53.07	5+53.07	L		100	261-A
3 P	4+51	4+69.5	L			11 261-A
Totals				104	100	11



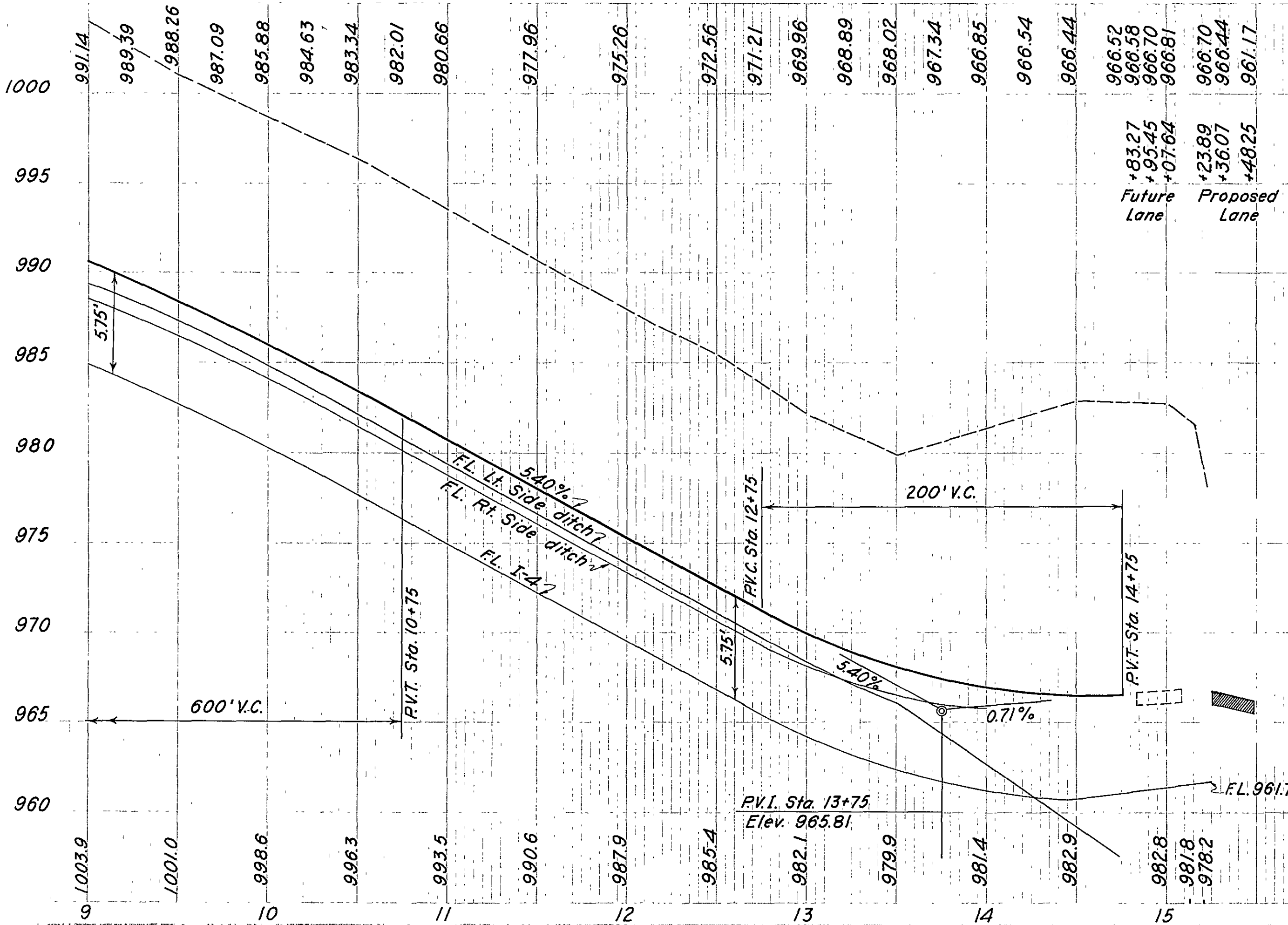
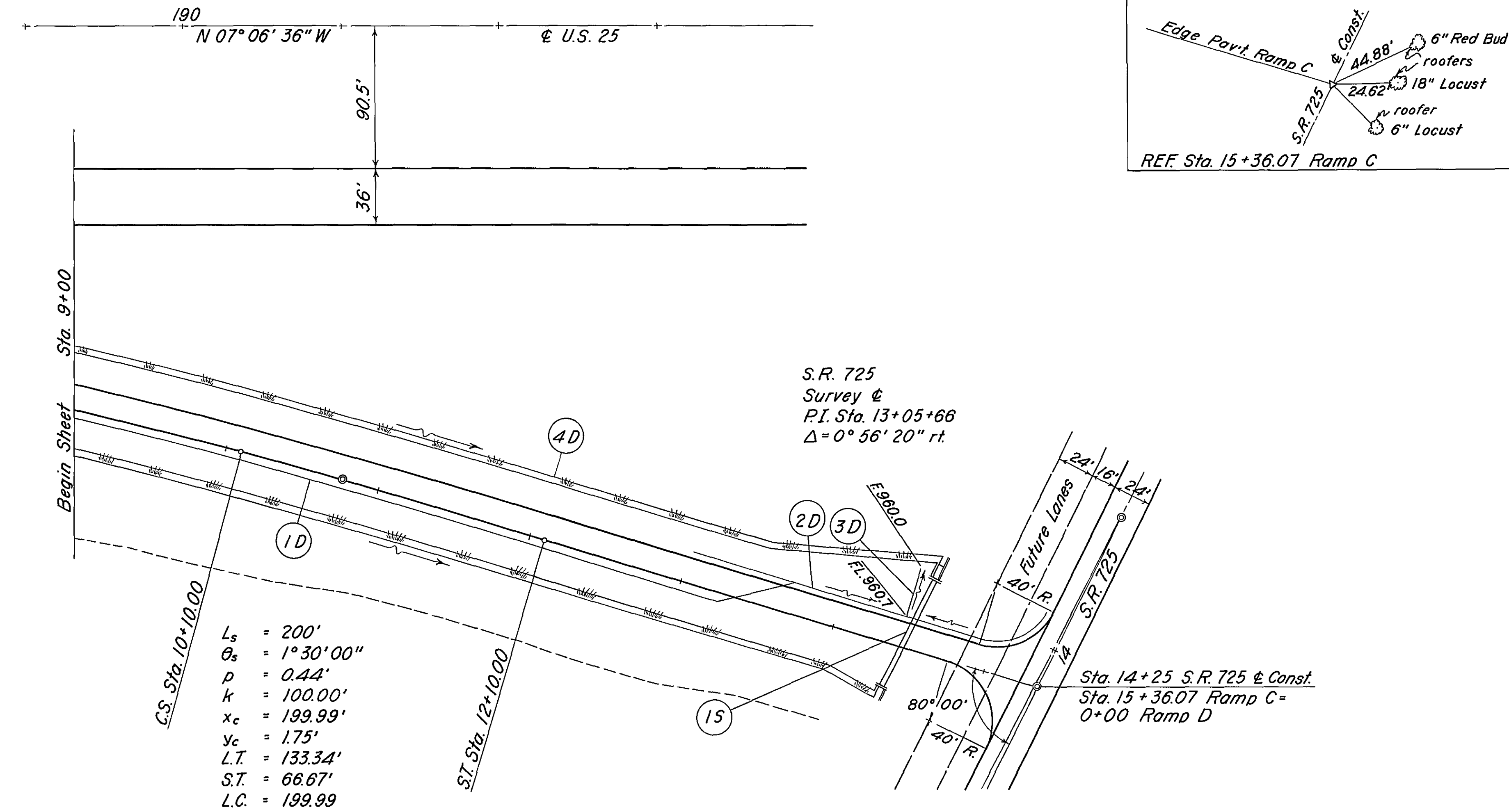
Excavation	45,979 C.Y.
Embankment	0 C.Y.
Embankment +15%	0 C.Y.

This sheet supersedes Sheet No. 236

Rev'd. 1-2-59

DRAINAGE									
Ref. No.	Station		Side	I-4 Underdrain Deep 6" L.F.	I-4 Pipe Outlets for Underdrains 8" L.F.	I-5 Bend 30° 6" Ea.	I-5 for Wye 30° 6"x6" Ea.	I-4 Tee 6"x6" x6"	L-10 Sodding Width L.F.
	From	To							S.Y.
1 D	9+00	13+70	R-L	475		1			
2 D	13+00	15+25	L	235			1	1	
3 D	14+42	Lt		24	10				
4 D	9+00	14+52							6 368
Totals				734	10	1	1	1	368

STRUCTURES (20 Ft. Span and Under)							
Ref. No.	Station	E-2 Excavation for Structures C.Y.	E-3 Channel Excavation C.Y.	S-1 Concrete for Structures Class "E" C.Y.	S-27 Pipe for Rdwy. Culv. 30" Sec. M-68(b) L.F.	I-10 Type A Riprap 6" Reinf. Concrete S.Y.	See Sheet No.
1 S	14-46	52	10	1	84	14	284
Totals		52	10	1	84	14	

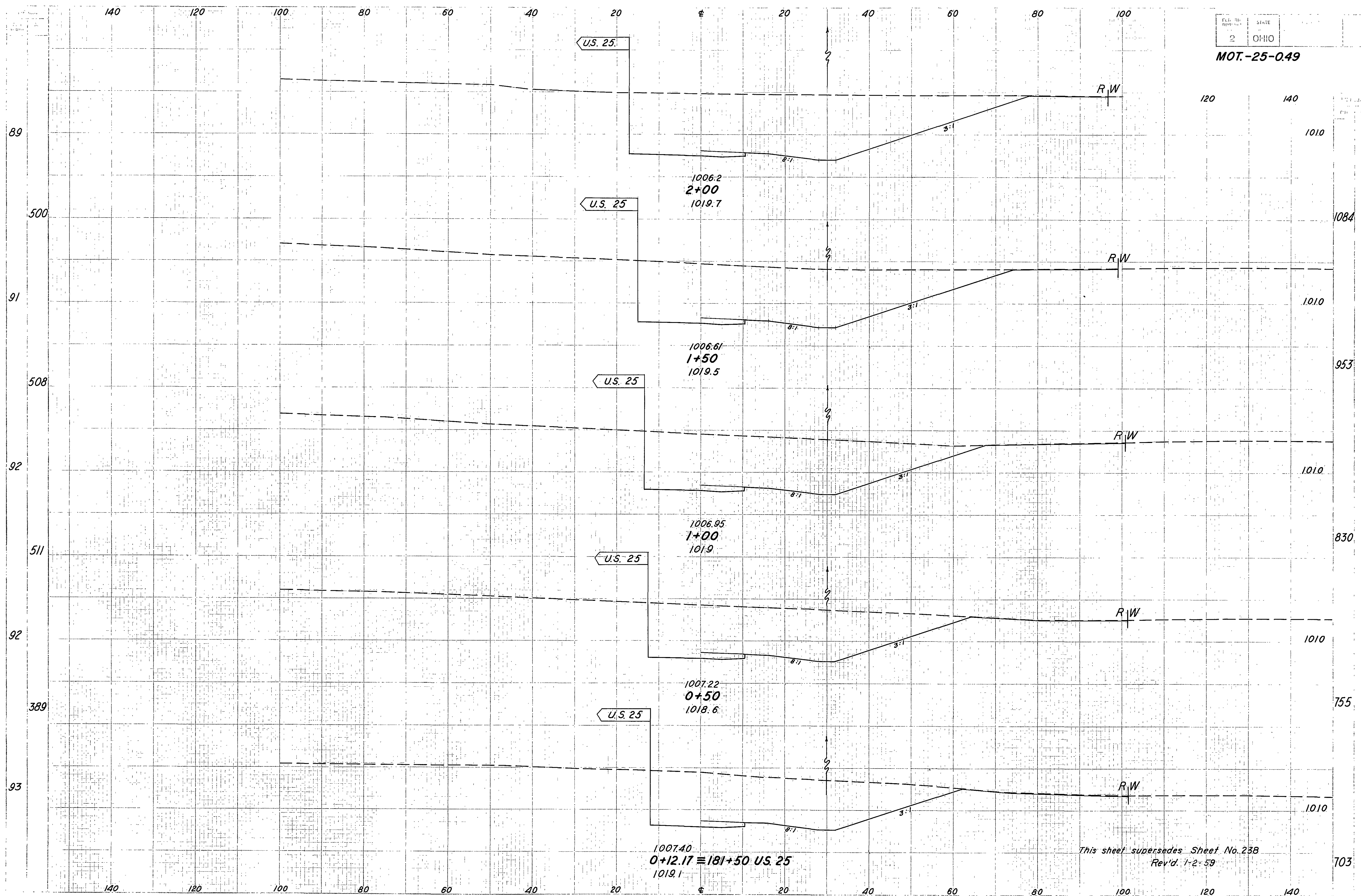


Excavation	36,549	C.Y.
Embankment	0	C.Y.
Embankment + 15 %	0	C.Y.

This sheet supersedes Sheet No. 237

Revd. 1-2-59

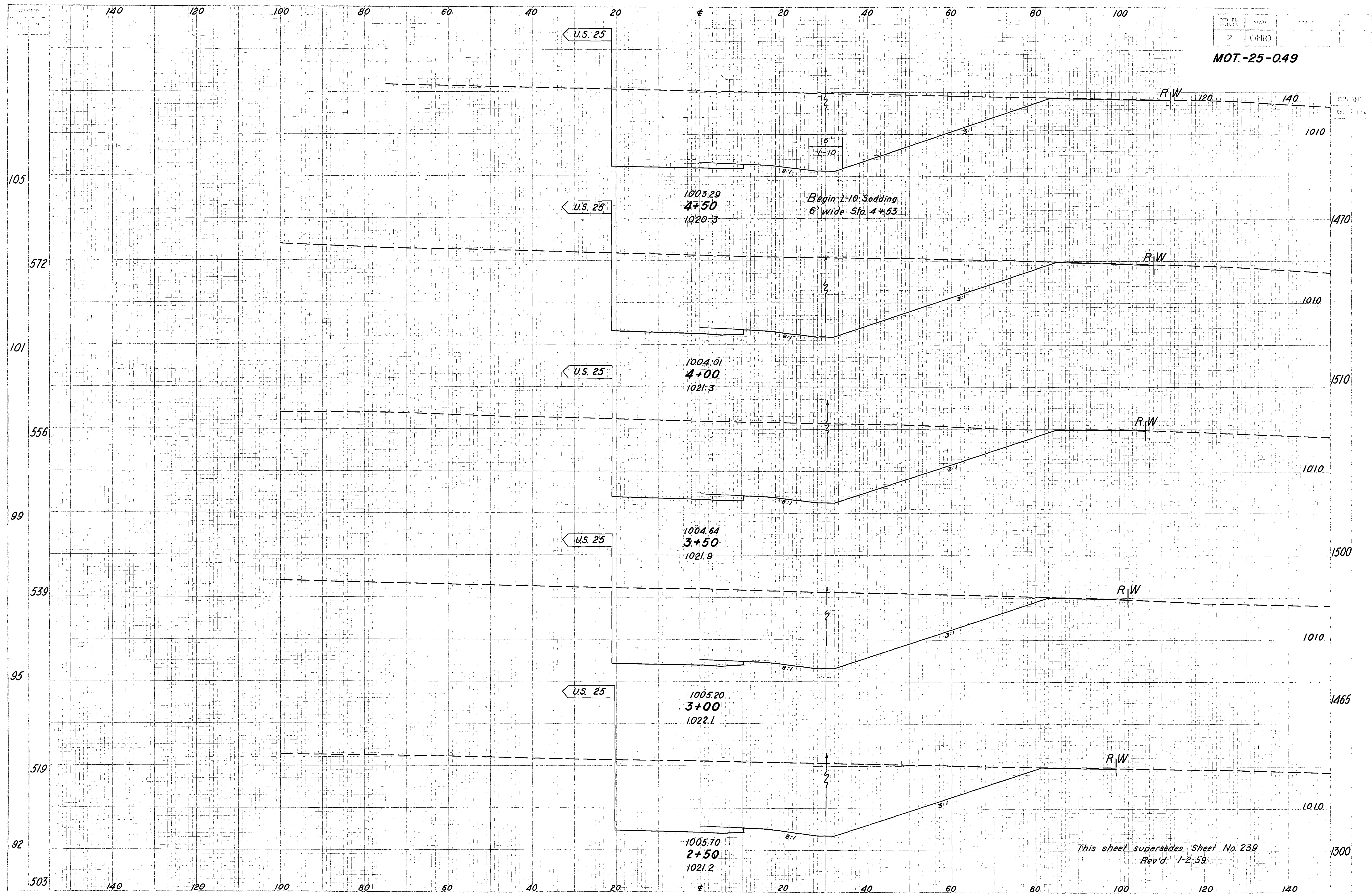
MOT.-25-0.49



1007.40
0+12.17 = 181+50 US 25
1019.1

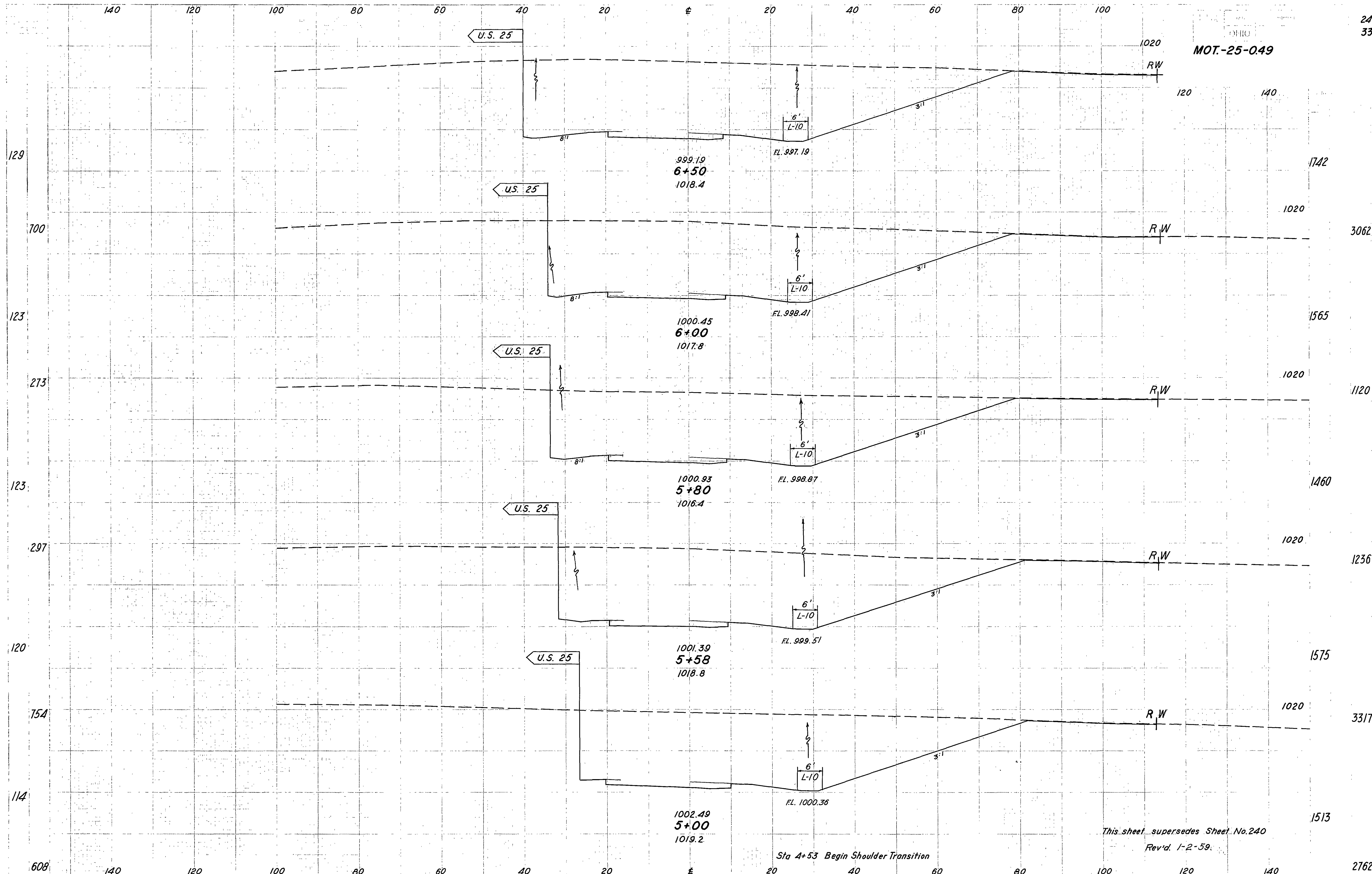
This sheet supersedes Sheet No. 238
Rev'd. 1-2-59

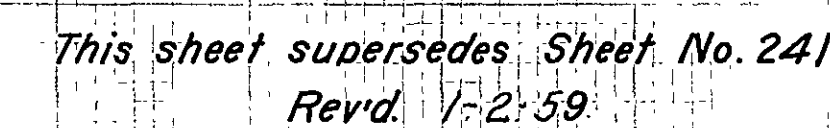
MOT.-25-049



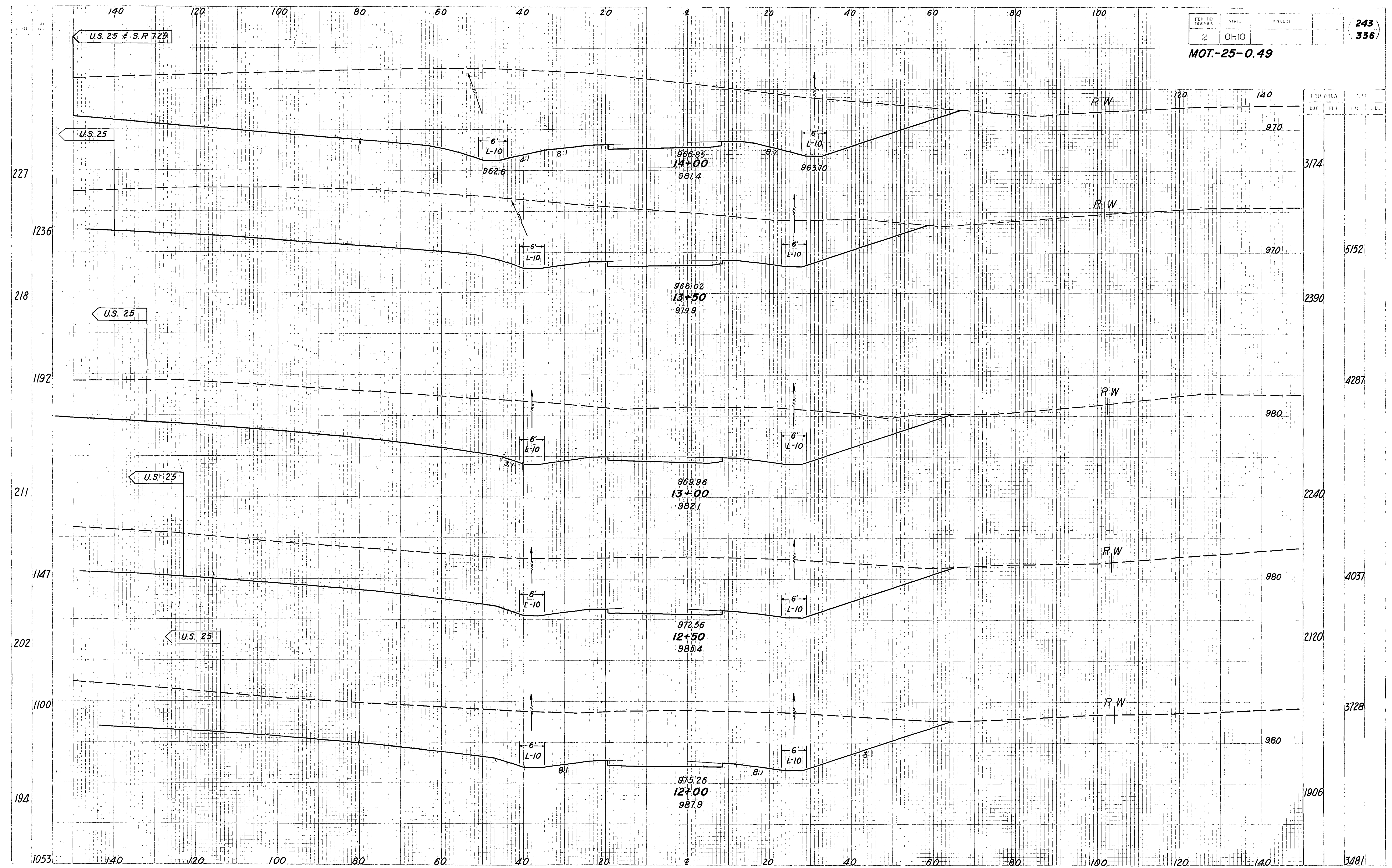
This sheet supersedes Sheet No. 239
Rev'd. 1-2-59

MOT-25-0.49

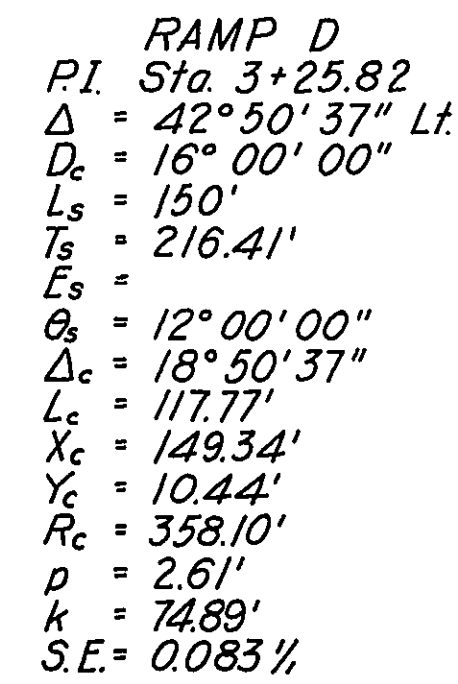








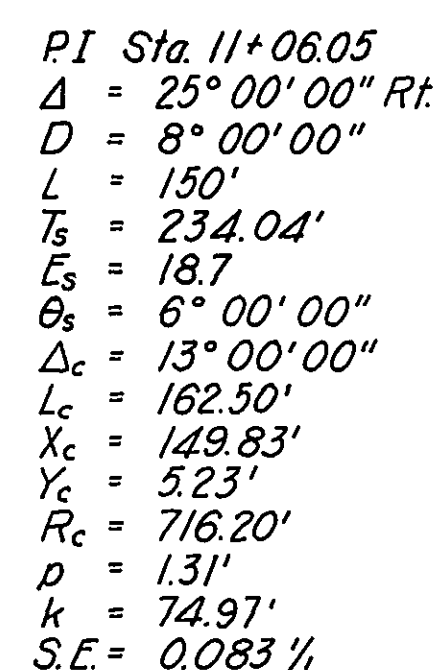
SR 725 INTERCHANGE RAMP C Sta 12+00 to Sta 14+00



DRAINAGE (Cont.)										
Ref. No.	Station		Side	E-2 Excavation for Structures	S-1 Concrete for Structures Class "E"	I-2 Storm Sewers		I-5 for I-2 Sec. M-64c Bends 45°	I-8 Standard No. 2-3 Catch Basin	See Sheet No.
	From	To		C.Y.	C.Y.	Sec. M-68(c) 24"	Sec. M-64(c) 24"	Each	Each	
11-D	8+00	L to R		1	0.4	118	22	2	1	
	Totals			1	0.4	118	22	2	1	

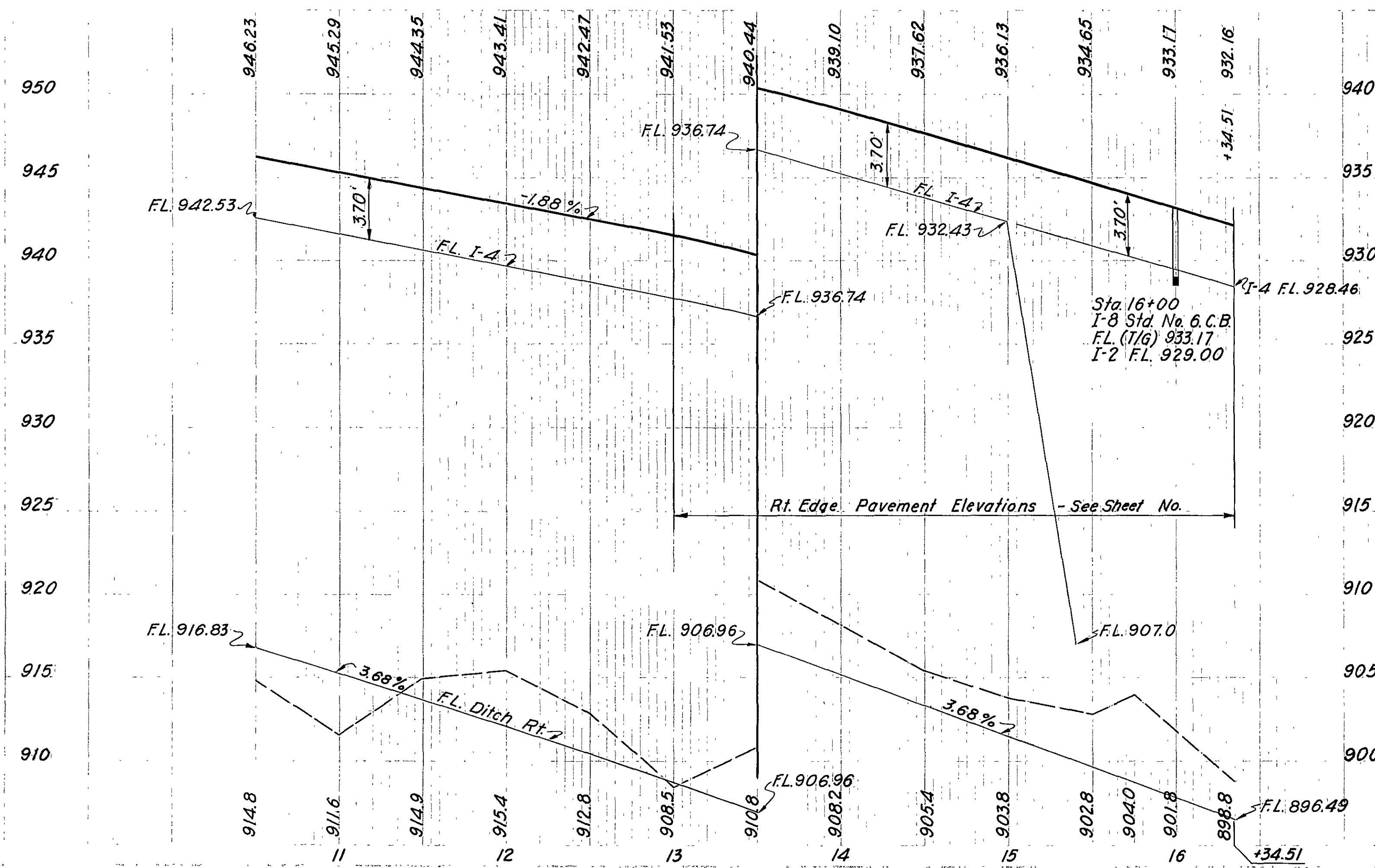
Diagram illustrating the layout of the Edge Point station, showing the intersection of the Edge Point line and the 6" Elm Roofer Ramp D. The diagram includes the following details:

- Edge P.vt.
- 6" Elm Roofer Ramp D
- 4" Elm Roofers
- 8" Twin Ash
- REF. P.O.T. Sta. 16+34.51

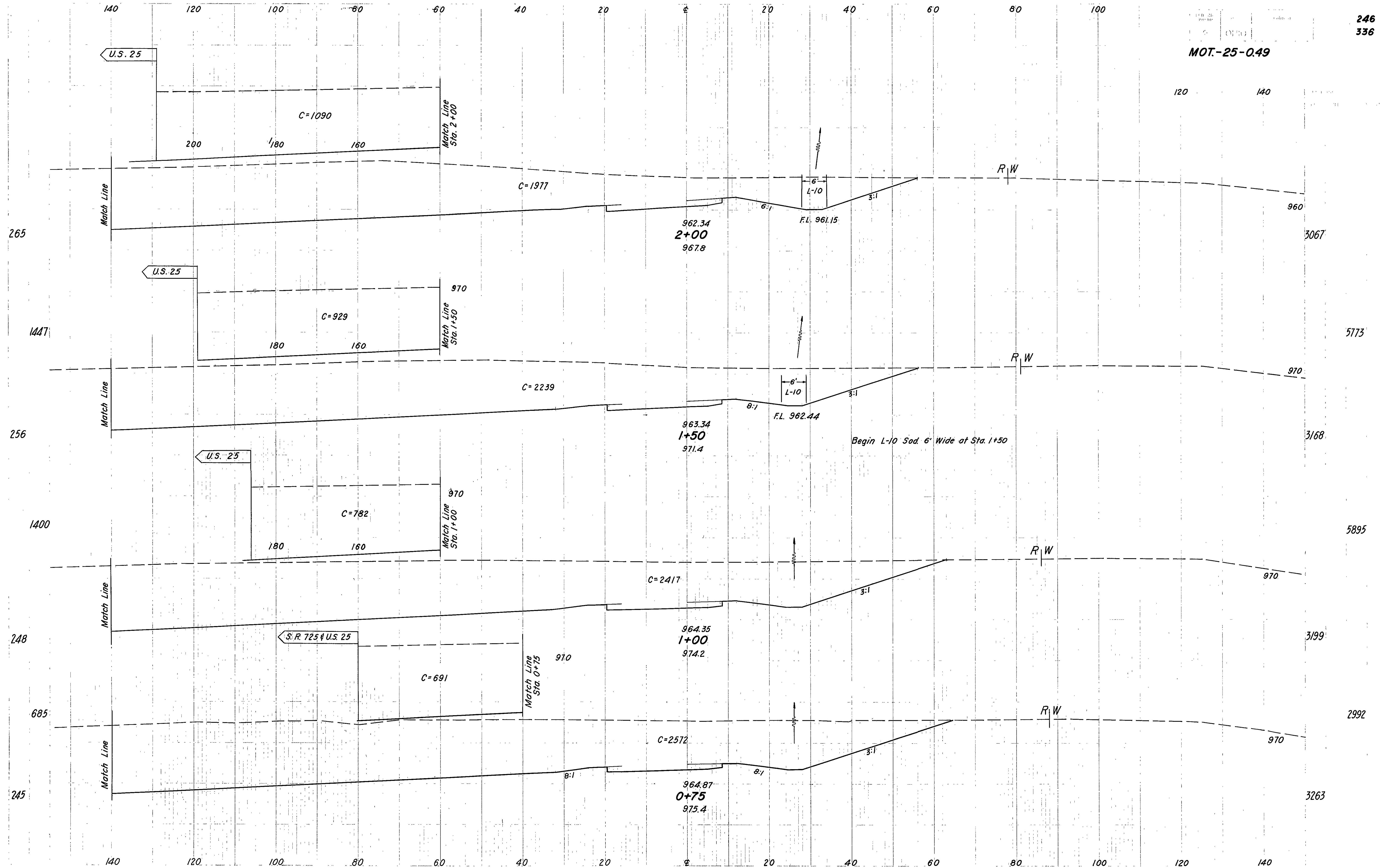


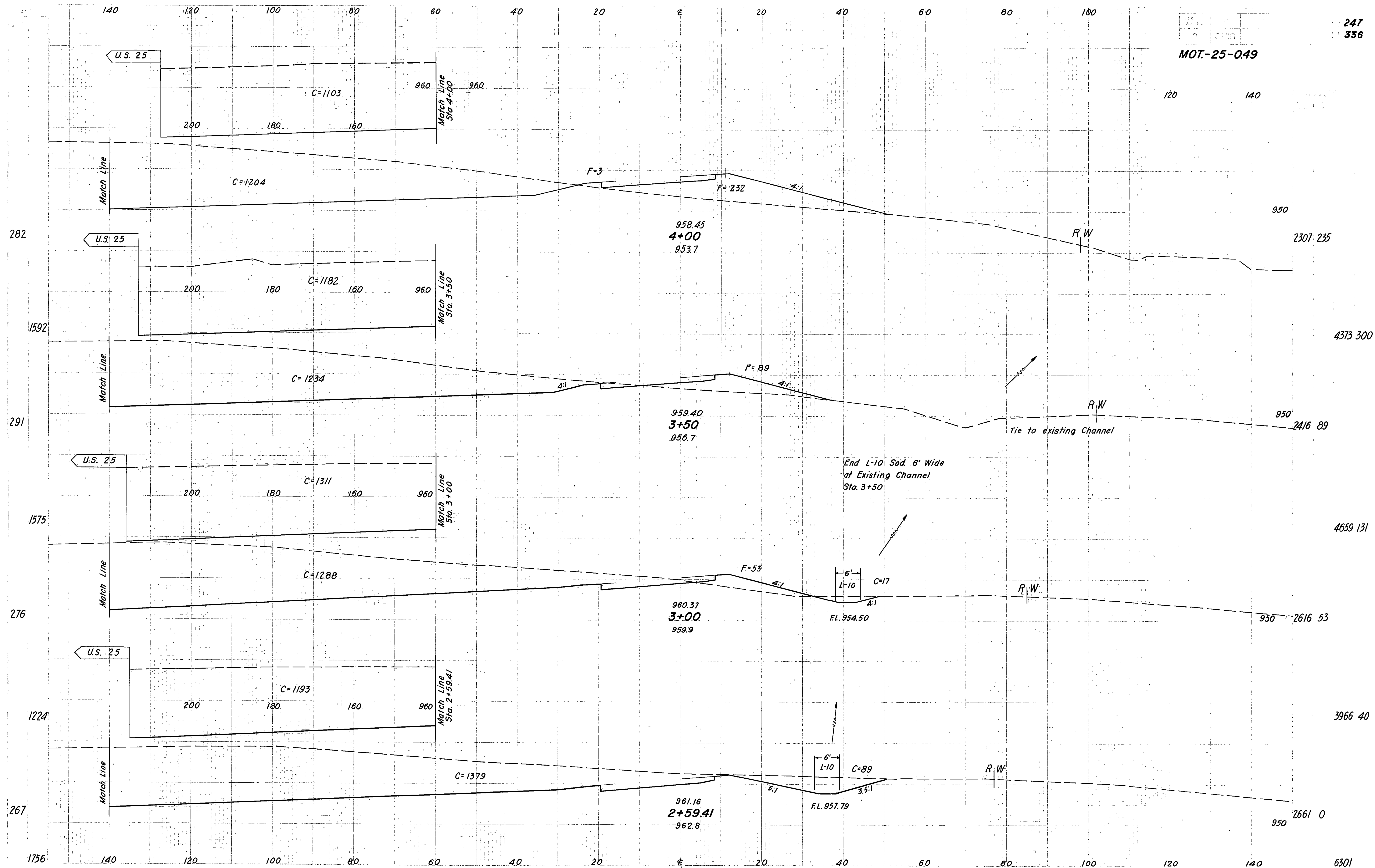
PAVEMENT					
Ref. No.	Station		Side	I-12 Special Port. Cem. Concrete Curb L.F.	See Sheet No.
	From	To			
1 P	10+84.51	16+34.51	R	550	265
Totals				550	

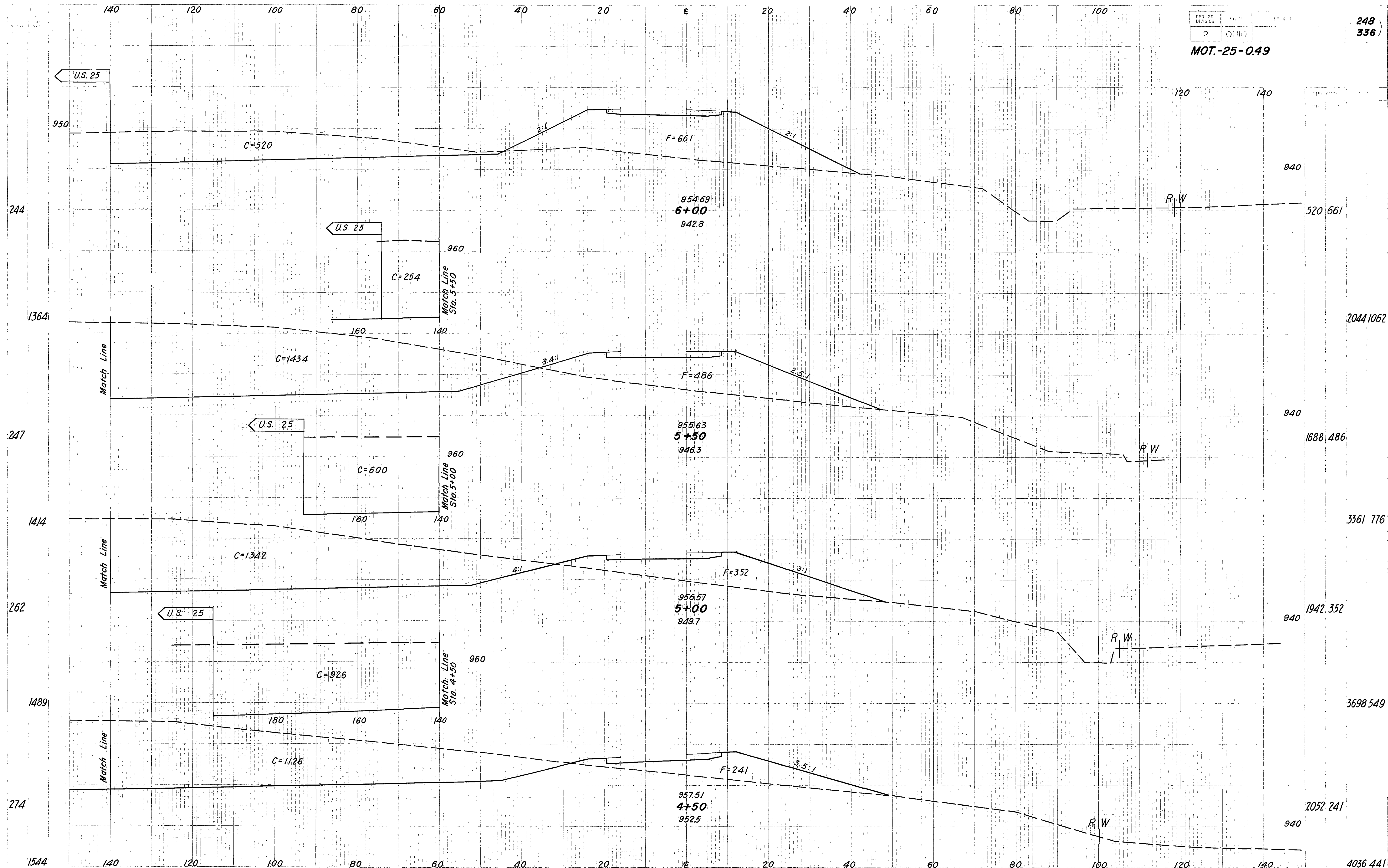
ROADWAY				
Ref. No.	Station		Side	I-15 Guard Rail Steel Beam Type Deep Standard L.F.
	From	To		
1R	10 + 50	16 + 34.5	R	584.5
Totals				584.5

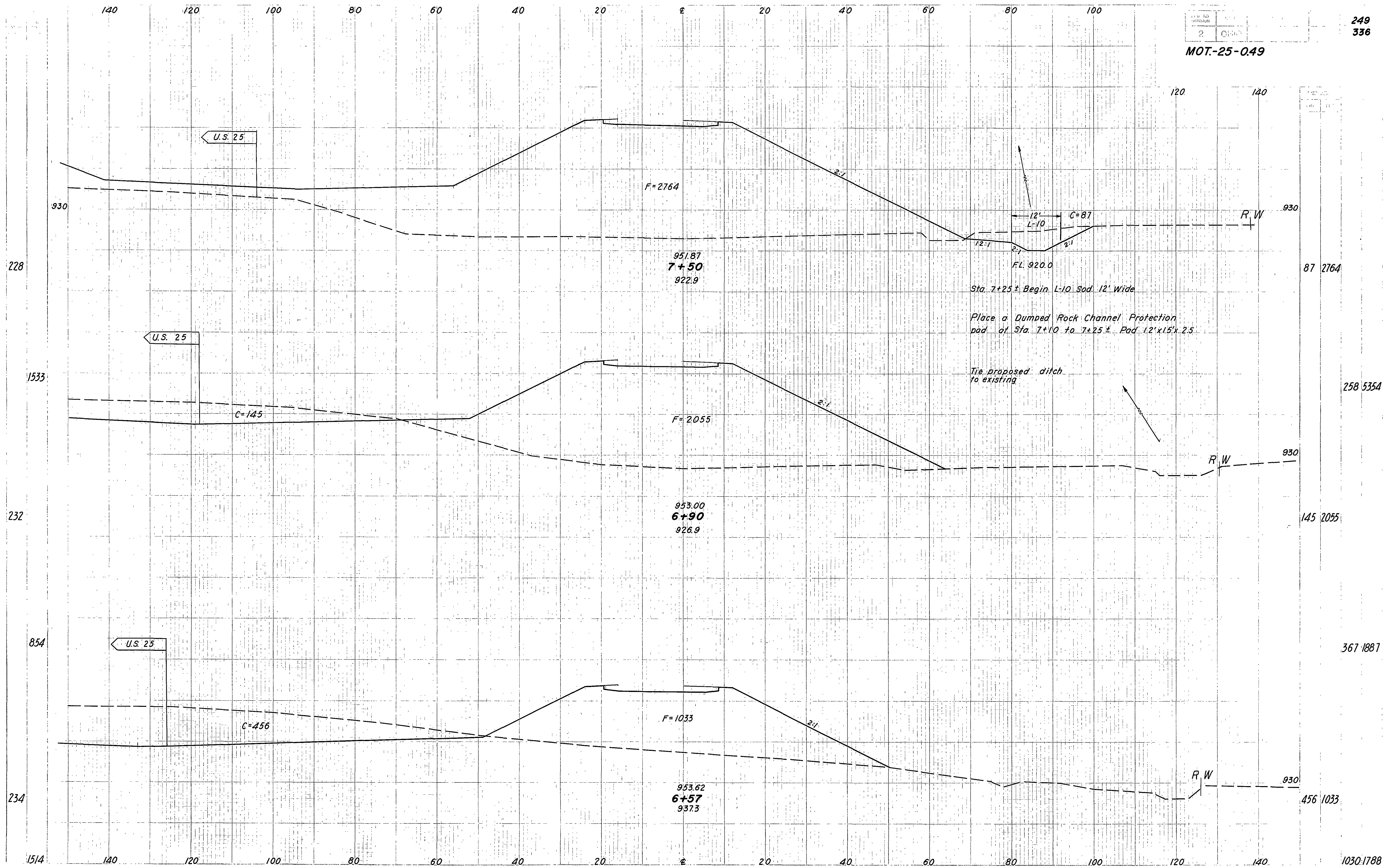


DRAINAGE (CONT.)										
Ref. No.	Station		Side	I-8 Standard No. 6 Catch Basin Each	E-2 Excavation for Structures C.Y.	S-1 Concrete for Structures C.Y.	I-2 Storm Sewers Sec. M-65 (b) or Sec. M-68 (b) 15" L.F.	I-2 Storm Sewers Sec. M-64 (c) 15" L.F.	I-5 for I-2 Sec. M-64 (c) 30° Bend 15" Each	I-10 Dumped Rock Channel Protection Depth Inches C.Y.
	From	To								
7D	16+00			1	2	0.3	30	68	2	30 7
Totals				1	2	0.3	30	68	2	7

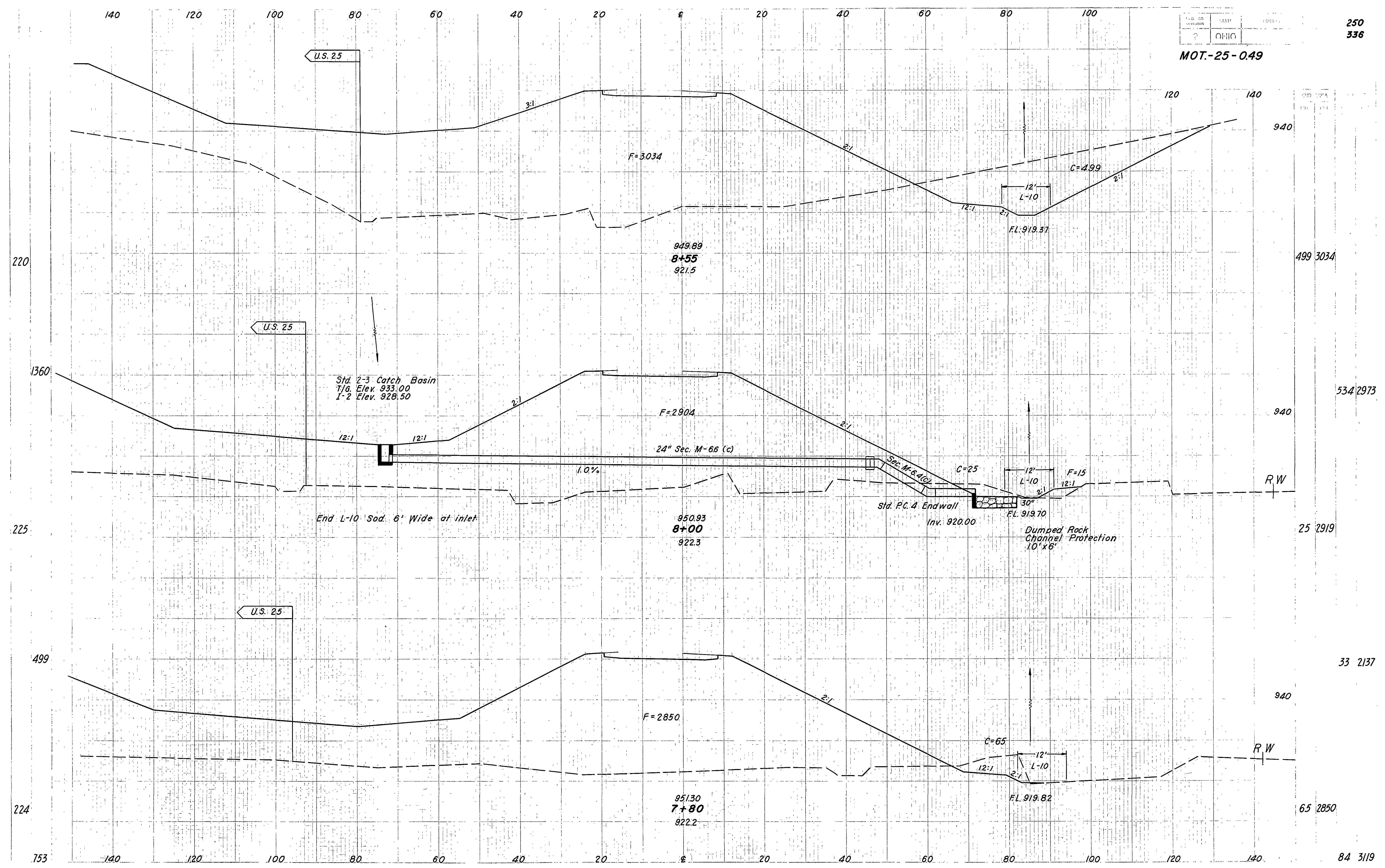






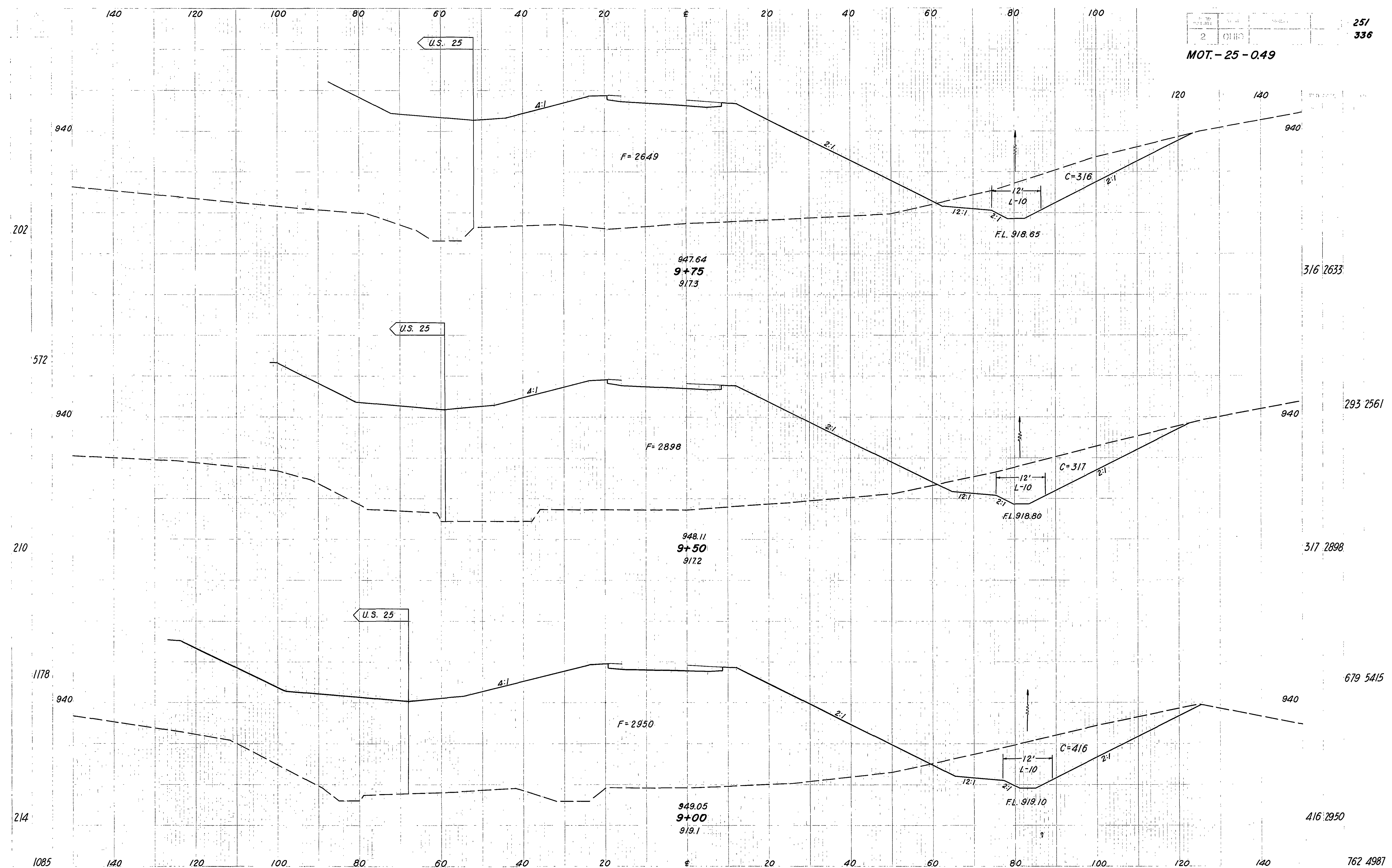


MOT.-25-049

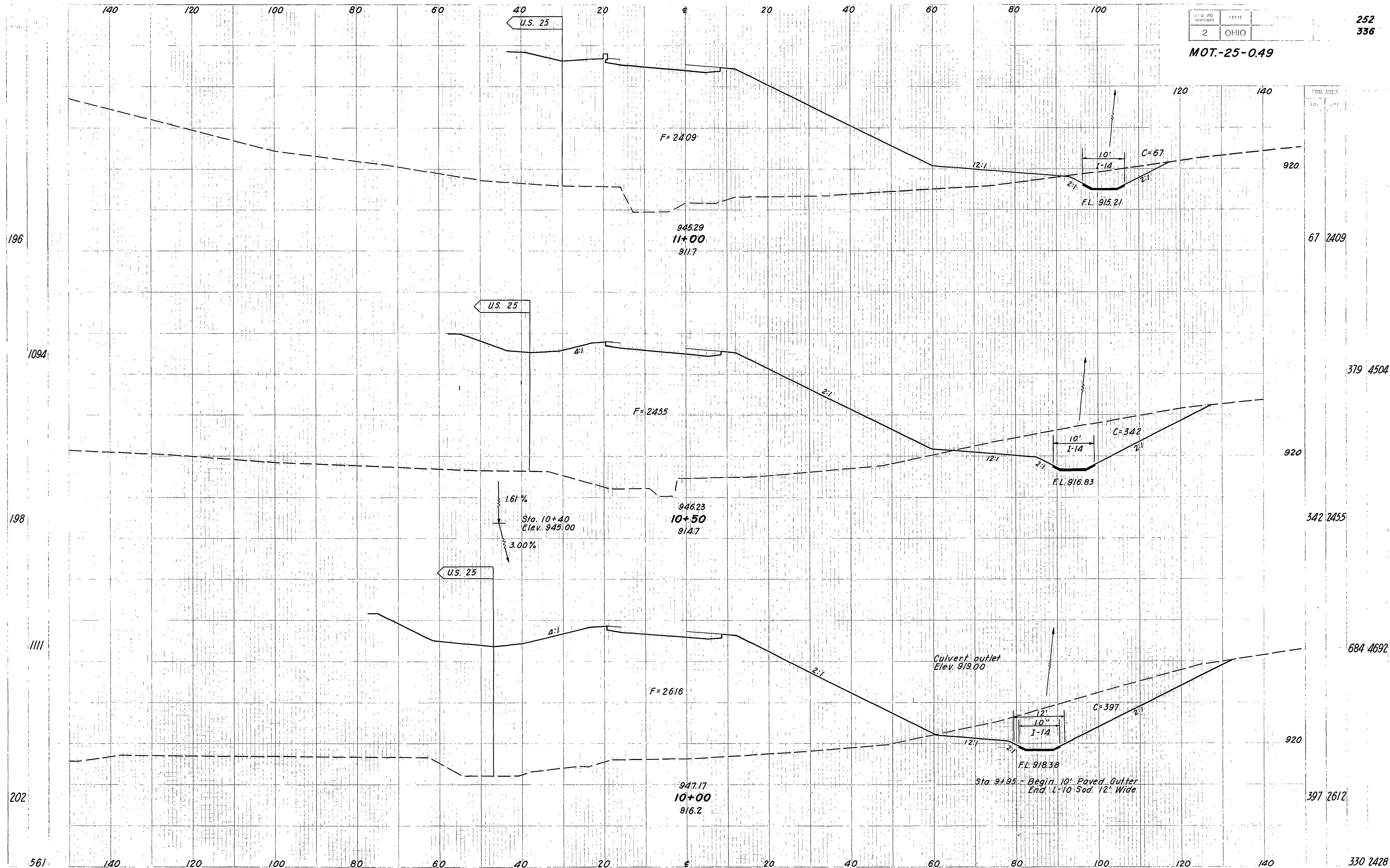


SR 725 INTERCHANGE RAMP D, Sta 7+80 to Sta 8+55

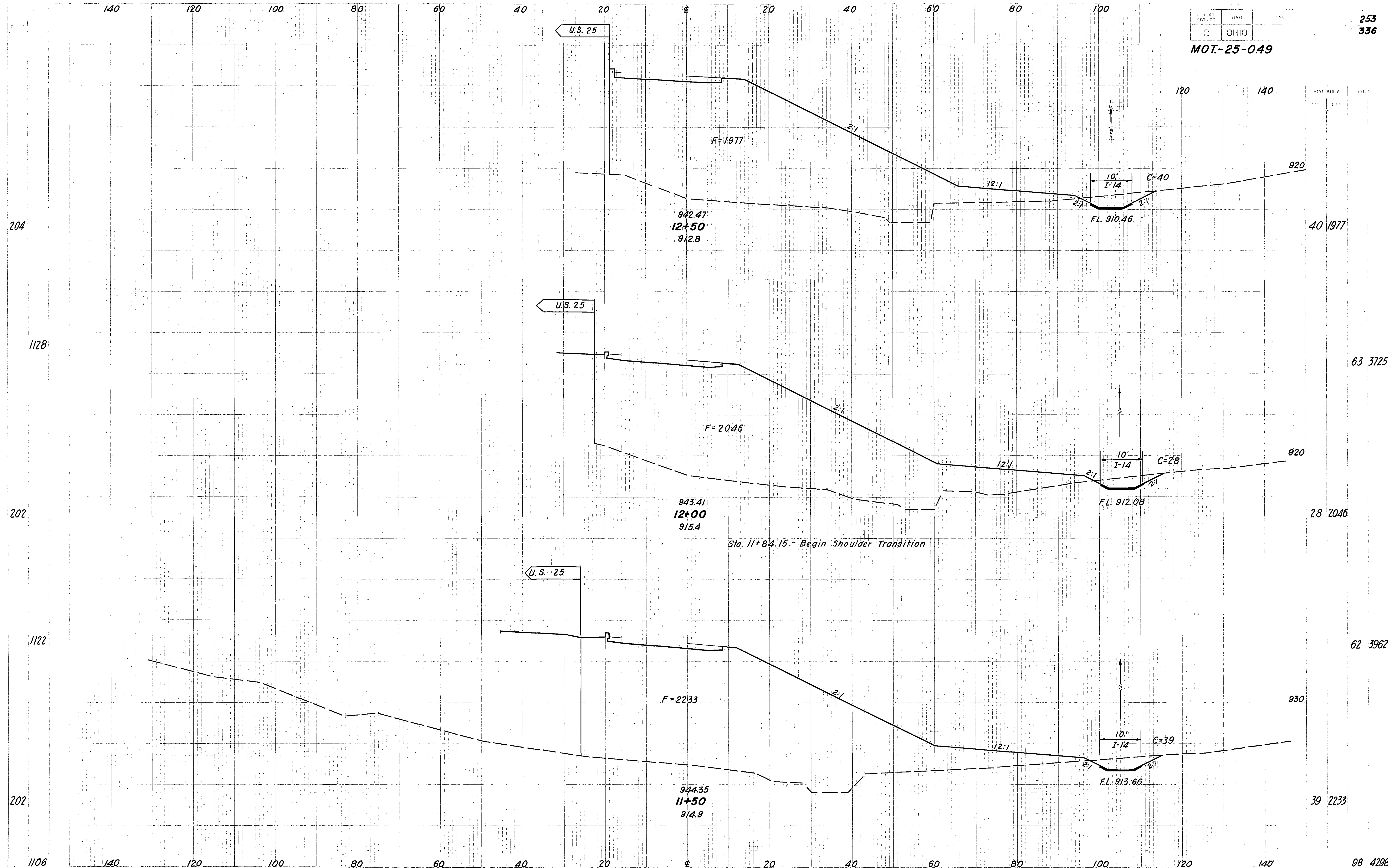
MOT. - 25 - 0.49



MOT-25-049

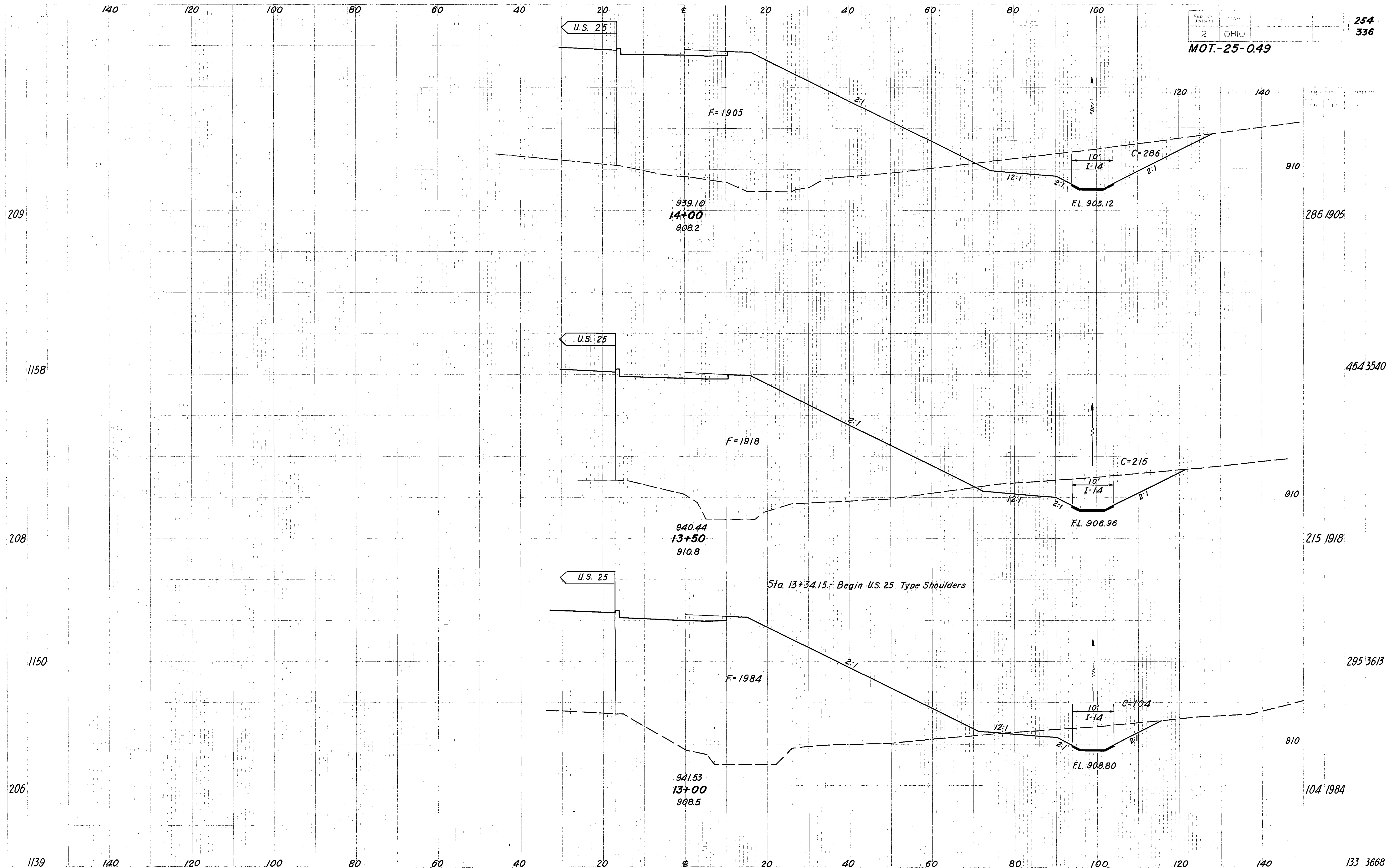


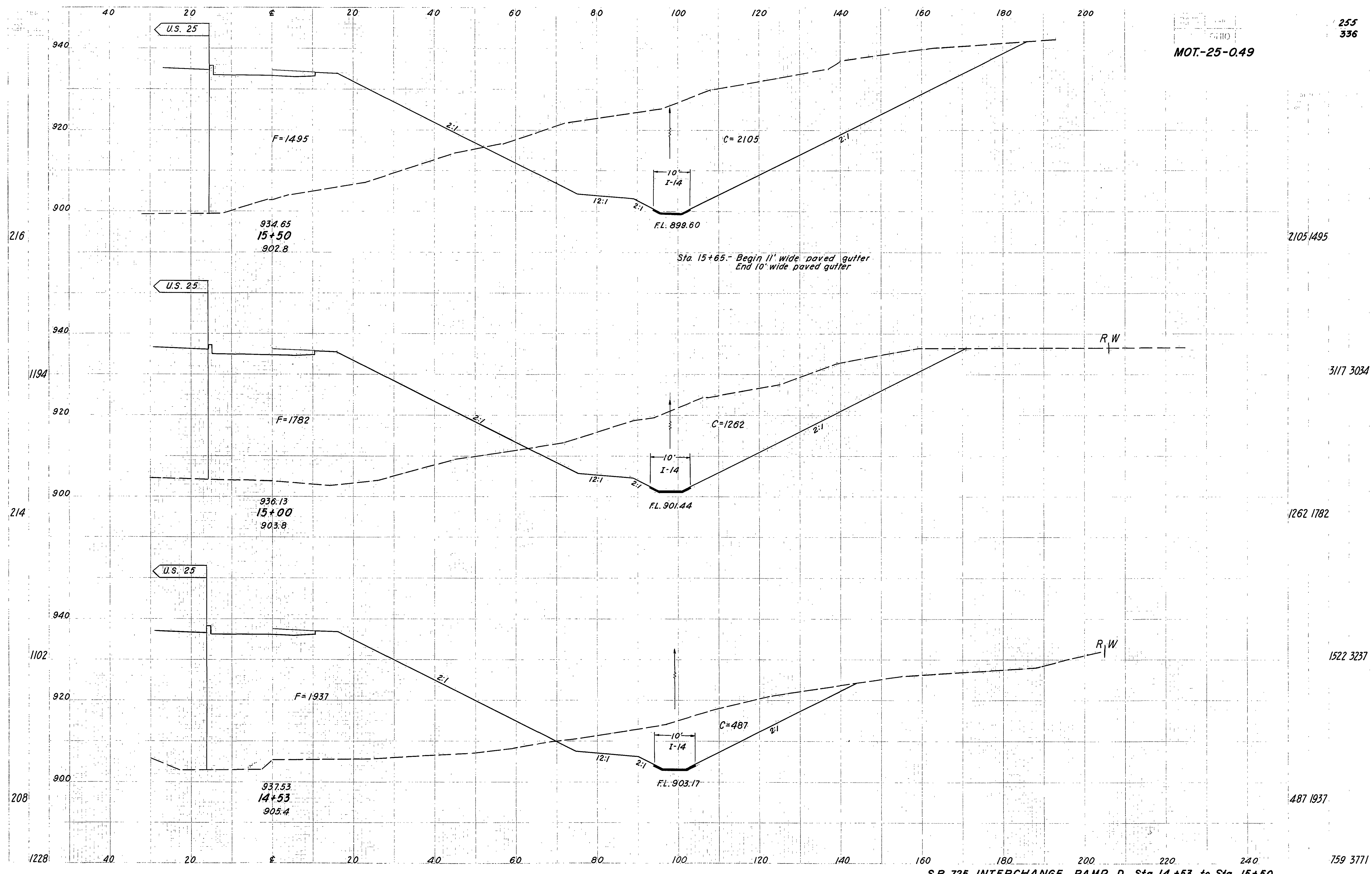
MOT-25-049

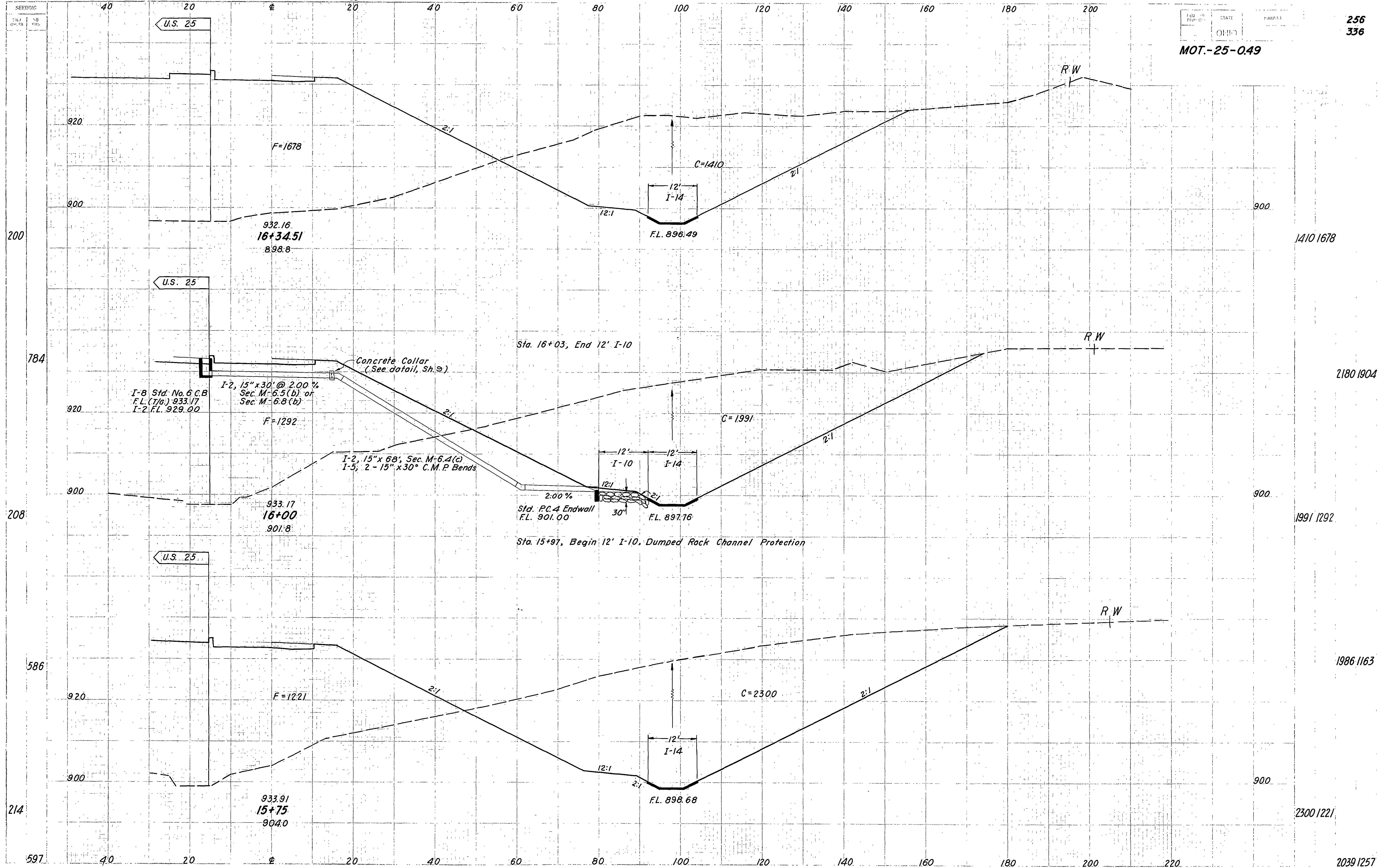


SR 725 INTERCHANGE RAMP D Sta. 11+50 to Sta. 12+50

MOT.-25-049





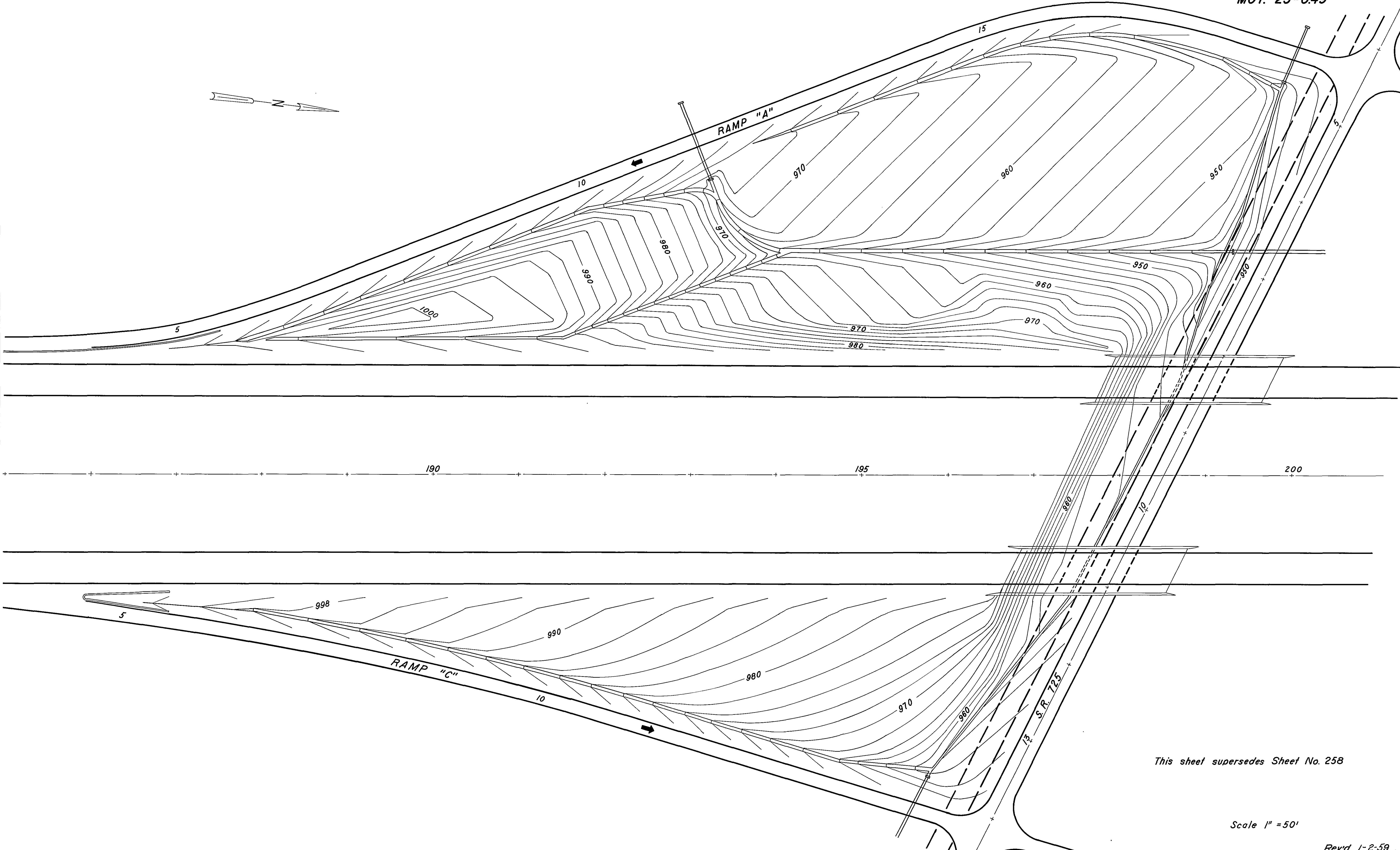




FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

258-A
336

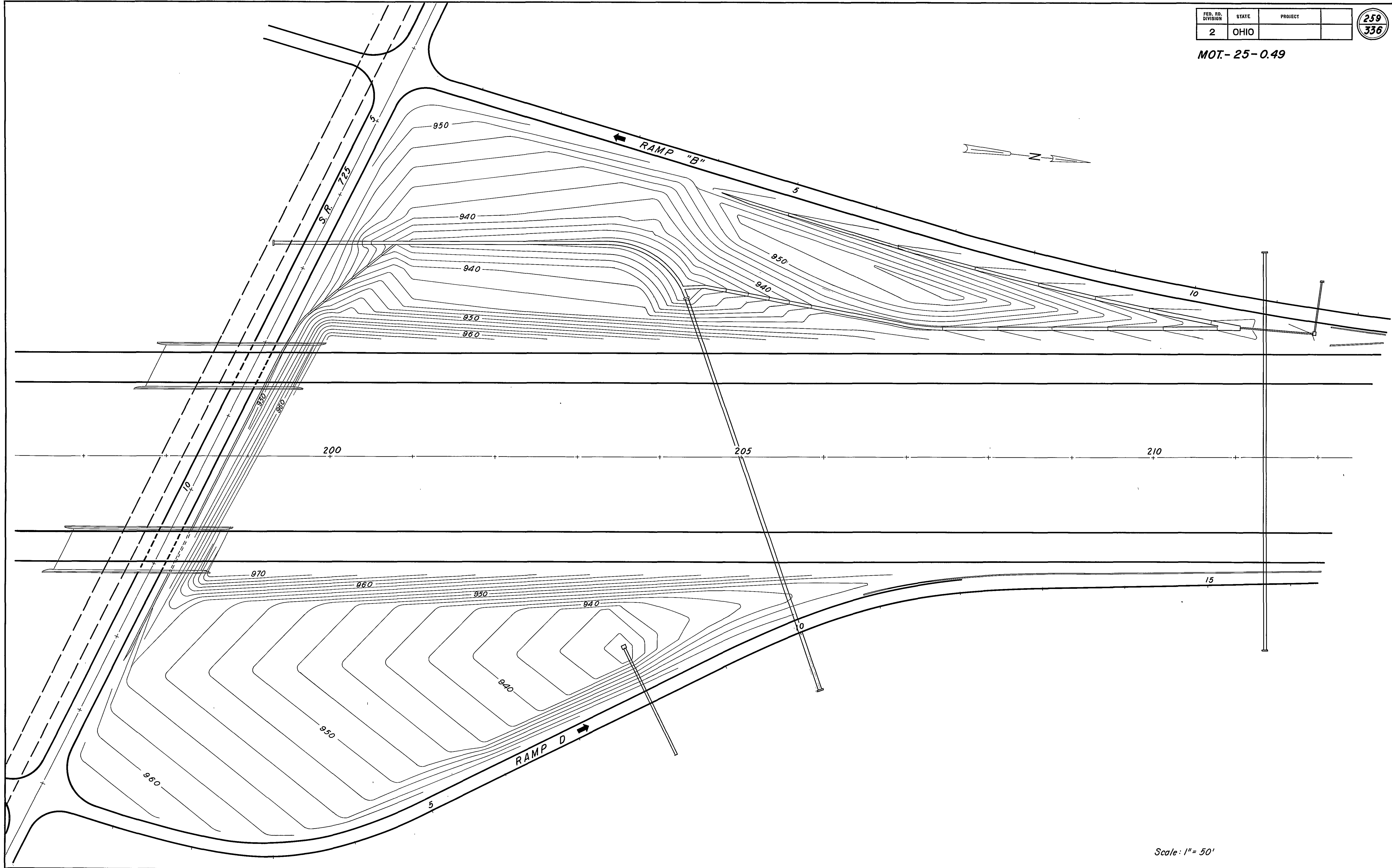
MOT.-25-049



FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

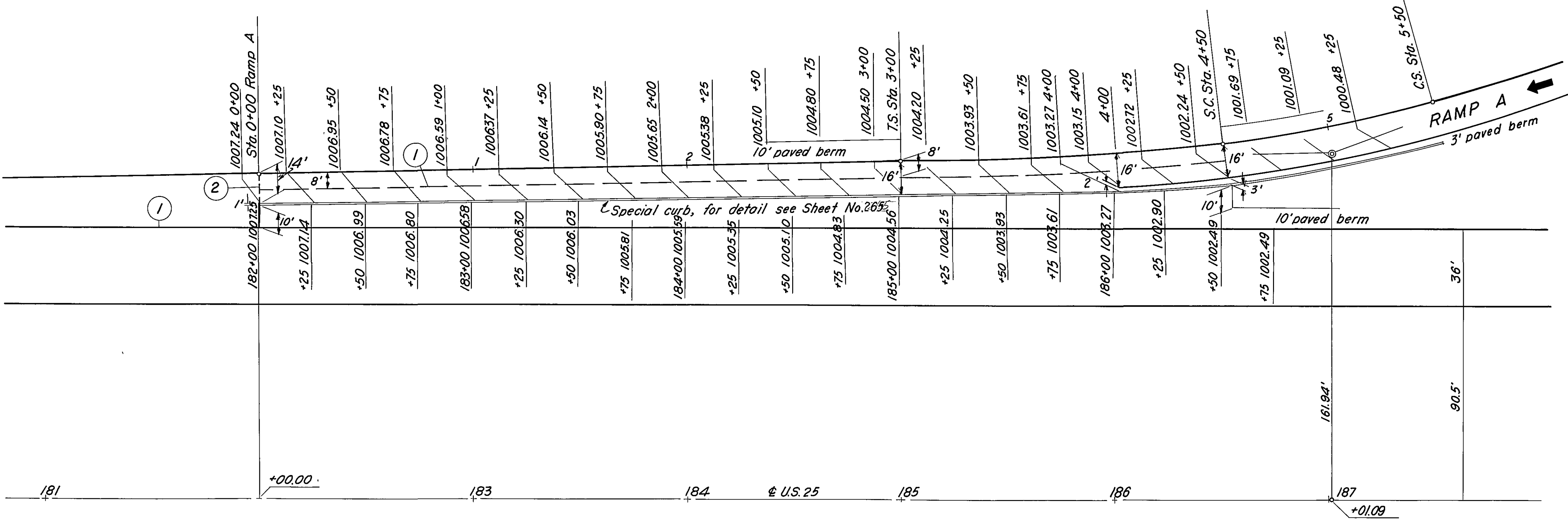
259
336

MOT.- 25- 0.49

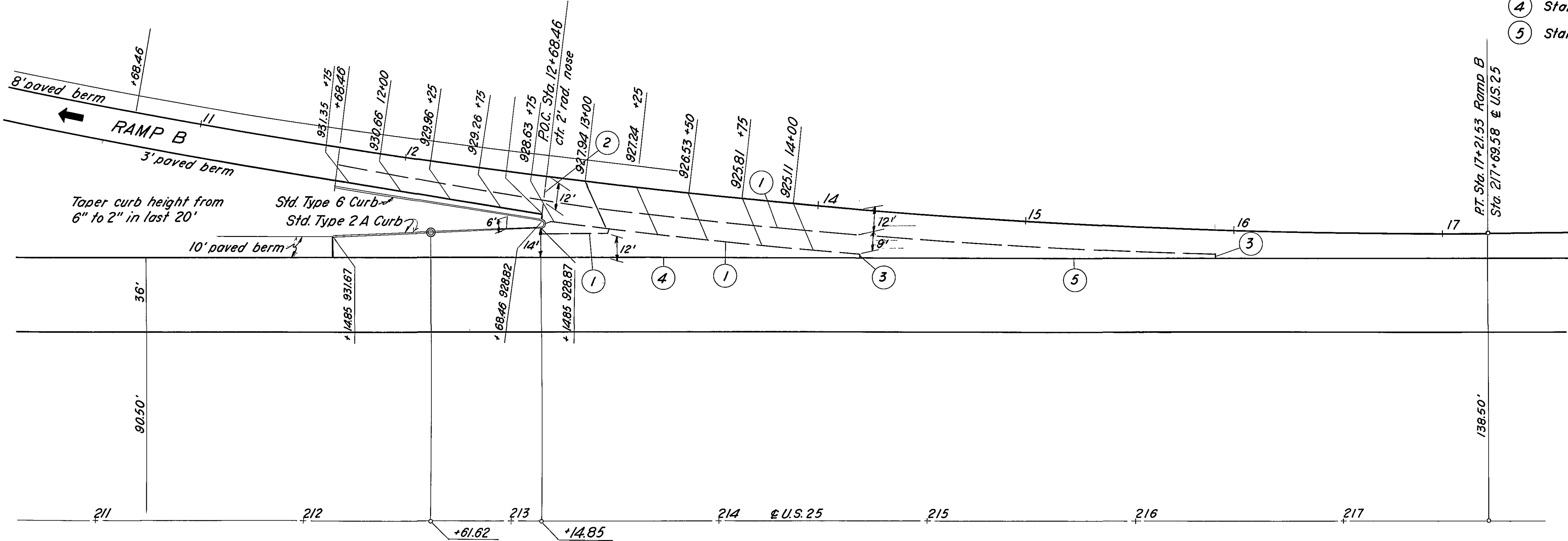


Scale: 1" = 50'

MOT.-25-0.49



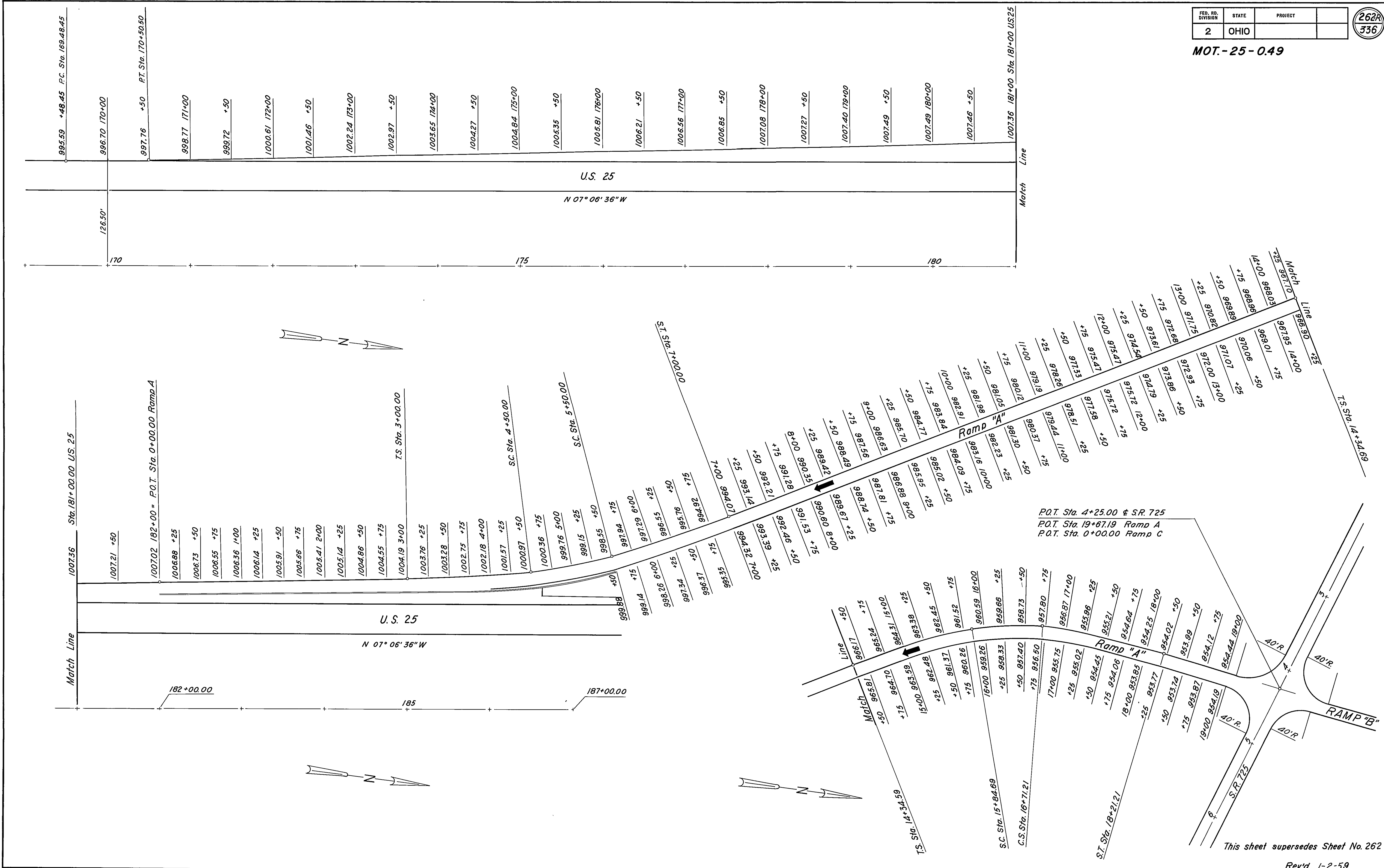
- LEGEND
- ① Standard Longitudinal Joint
 - ② Standard Expansion Joint
 - ③ Standard Expansion Joint Without dowels
 - ④ Standard Key Joint without tie bars
 - ⑤ Standard Longitudinal Key Joint



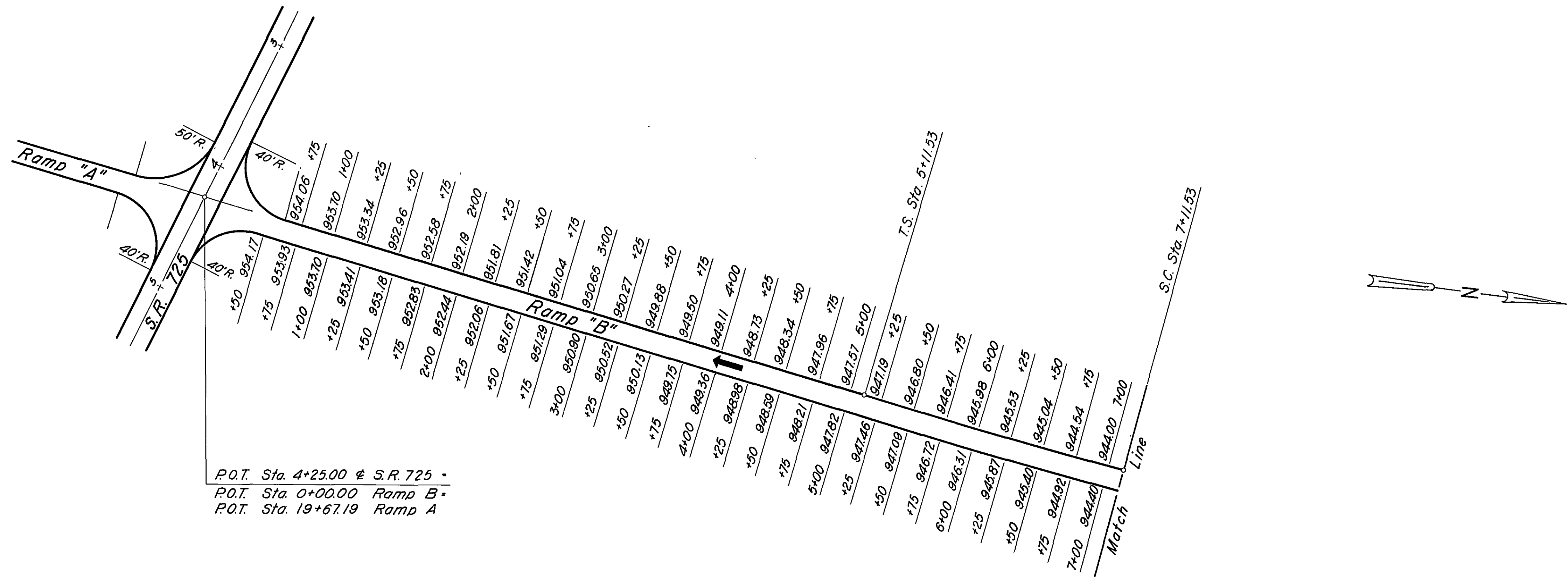
This sheet supersedes Sheet No. 260

Scale: 1" = 30'
Rev'd. 1-2-59

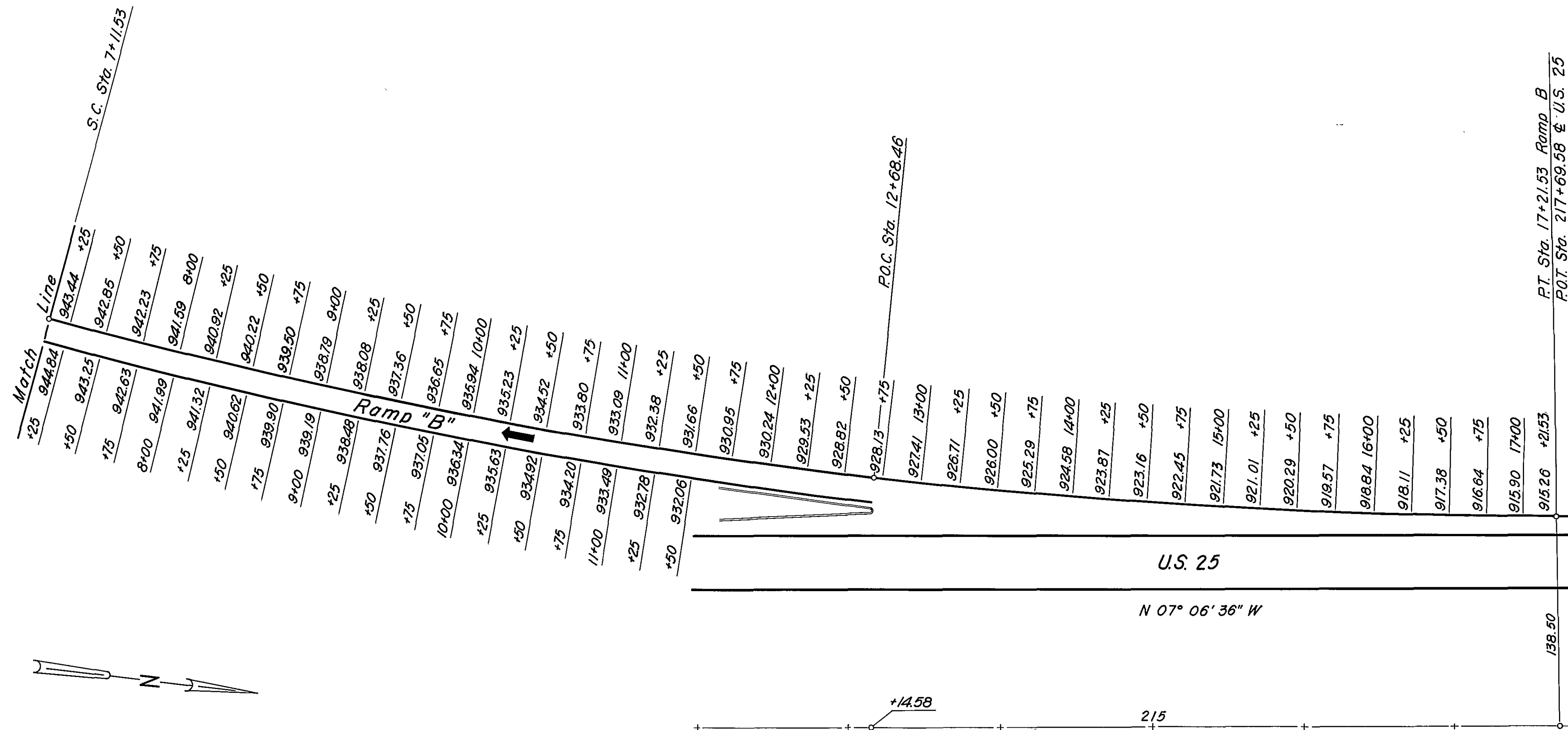
MOT.-25-0.49



MOT.-25-049



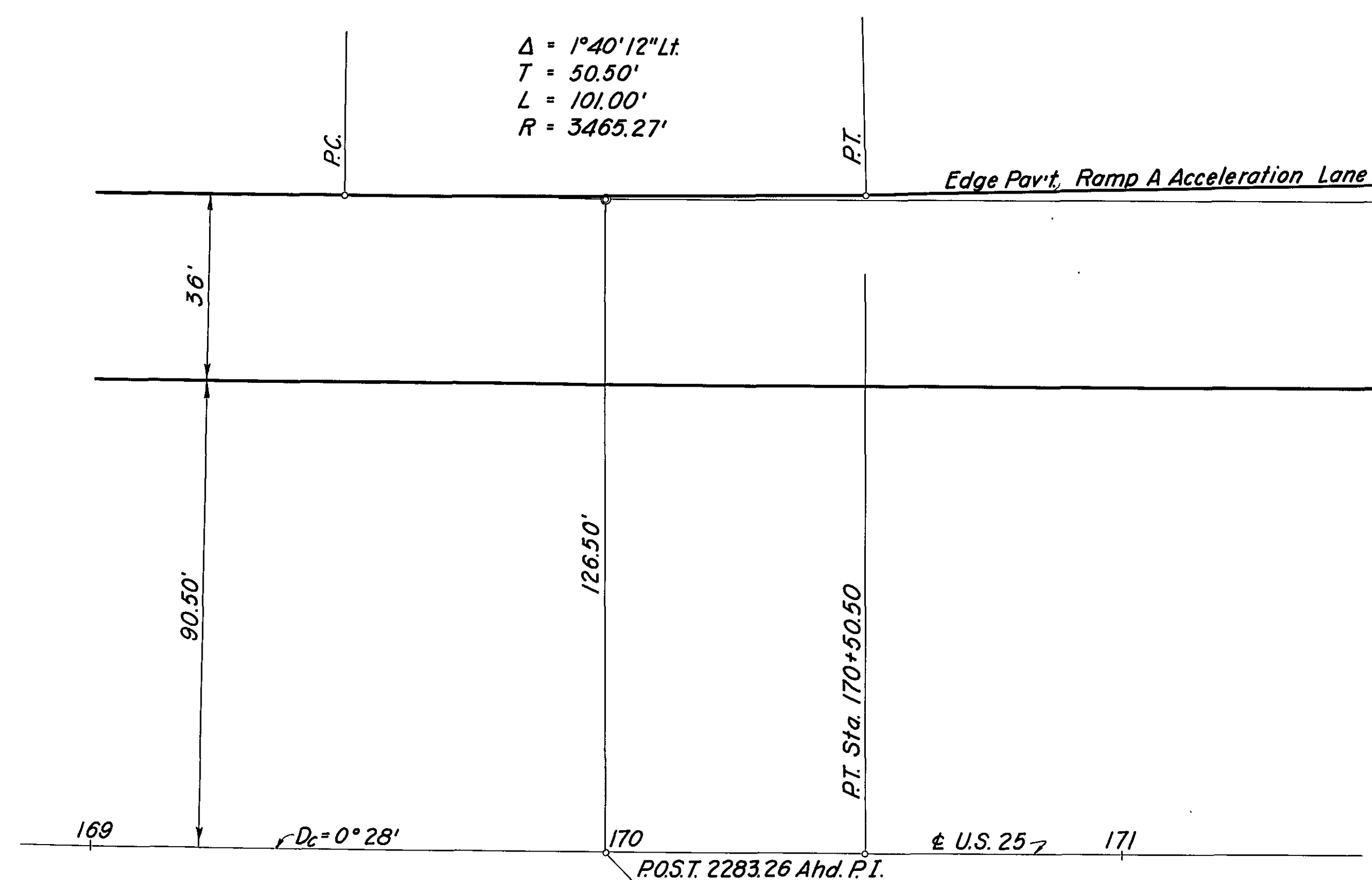
P.O.T. Sta. 4+25.00 @ S.R. 725 =
P.O.T. Sta. 0+00.00 Ramp B =
P.O.T. Sta. 19+67.19 Ramp A



MOT.-25-0.49

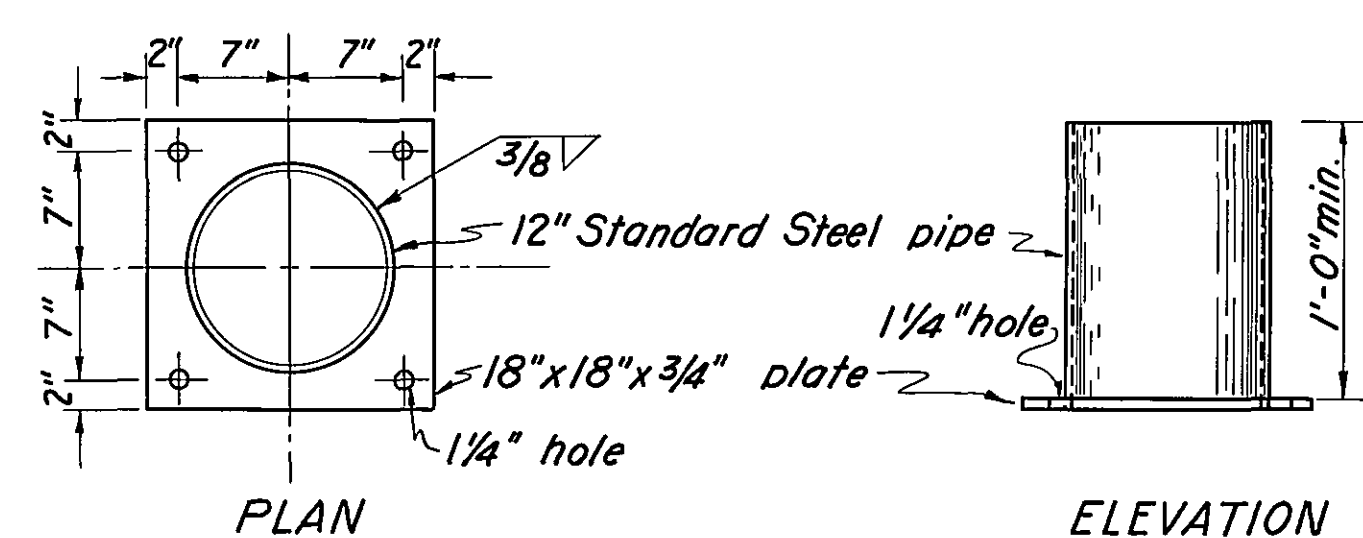


MOT-25-0.49

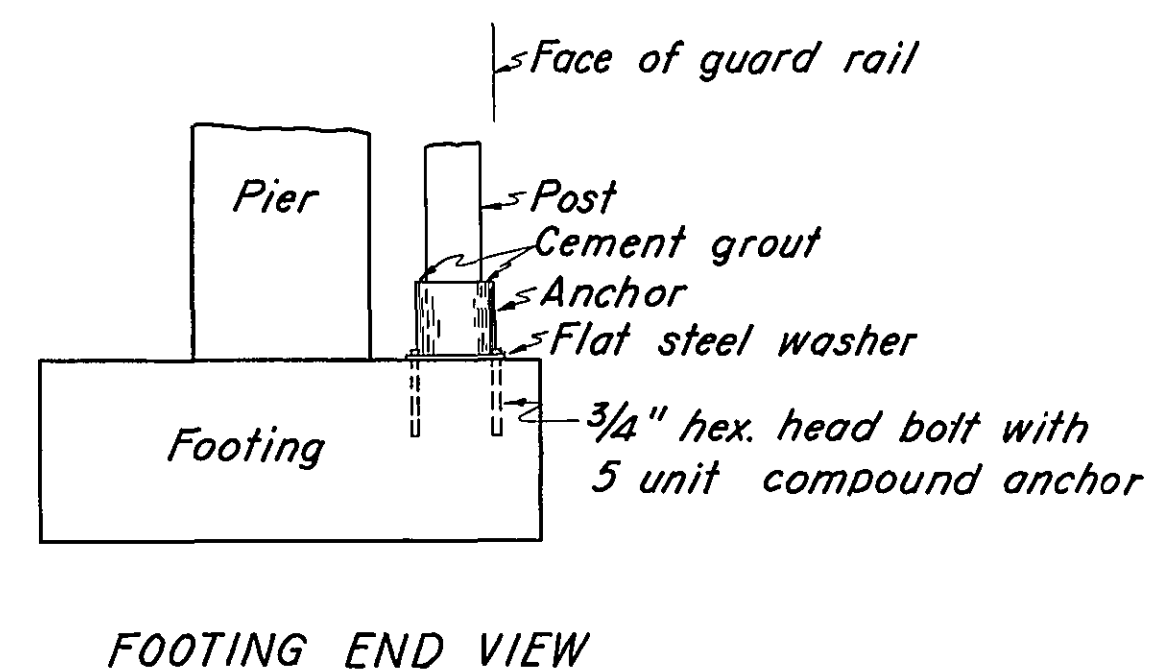


**TERMINAL DETAIL
RAMP A ACCELERATION LANE**

Scale: 1"=20'

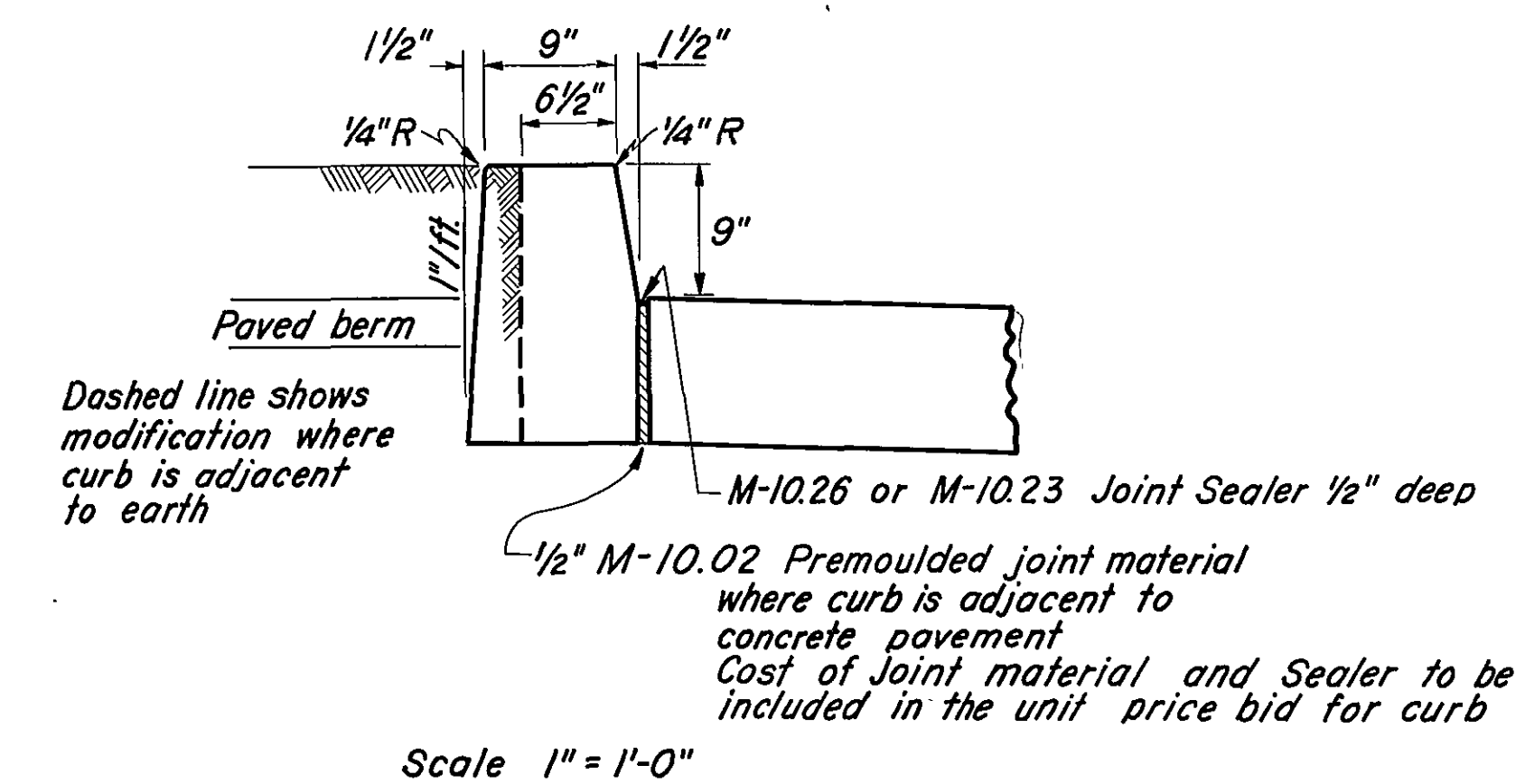


FOOTING ANCHOR

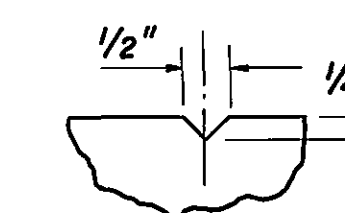


FOOTING END VIEW

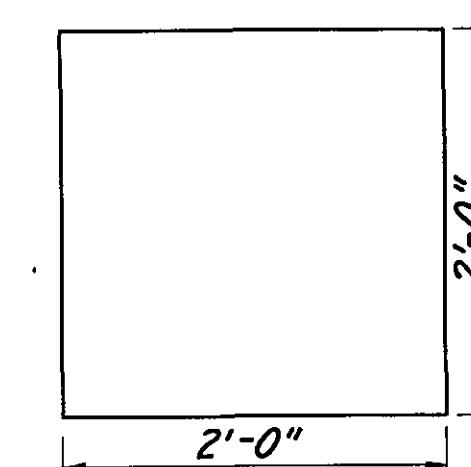
NOTE: Footing anchors to be used where post are over footing and less than 3'-0" of earth is provided above the top of the footing



SPECIAL PORTLAND CEMENT CONCRETE CURB DETAIL

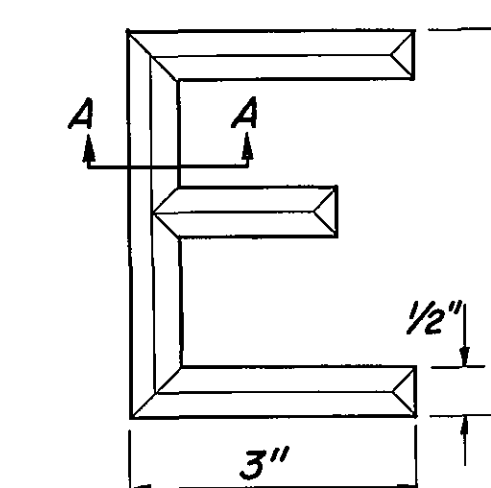


SECTION A-A



BEVEL 1"x45°
ALL AROUND

CONCRETE MARKER
Scale: 1"=1'



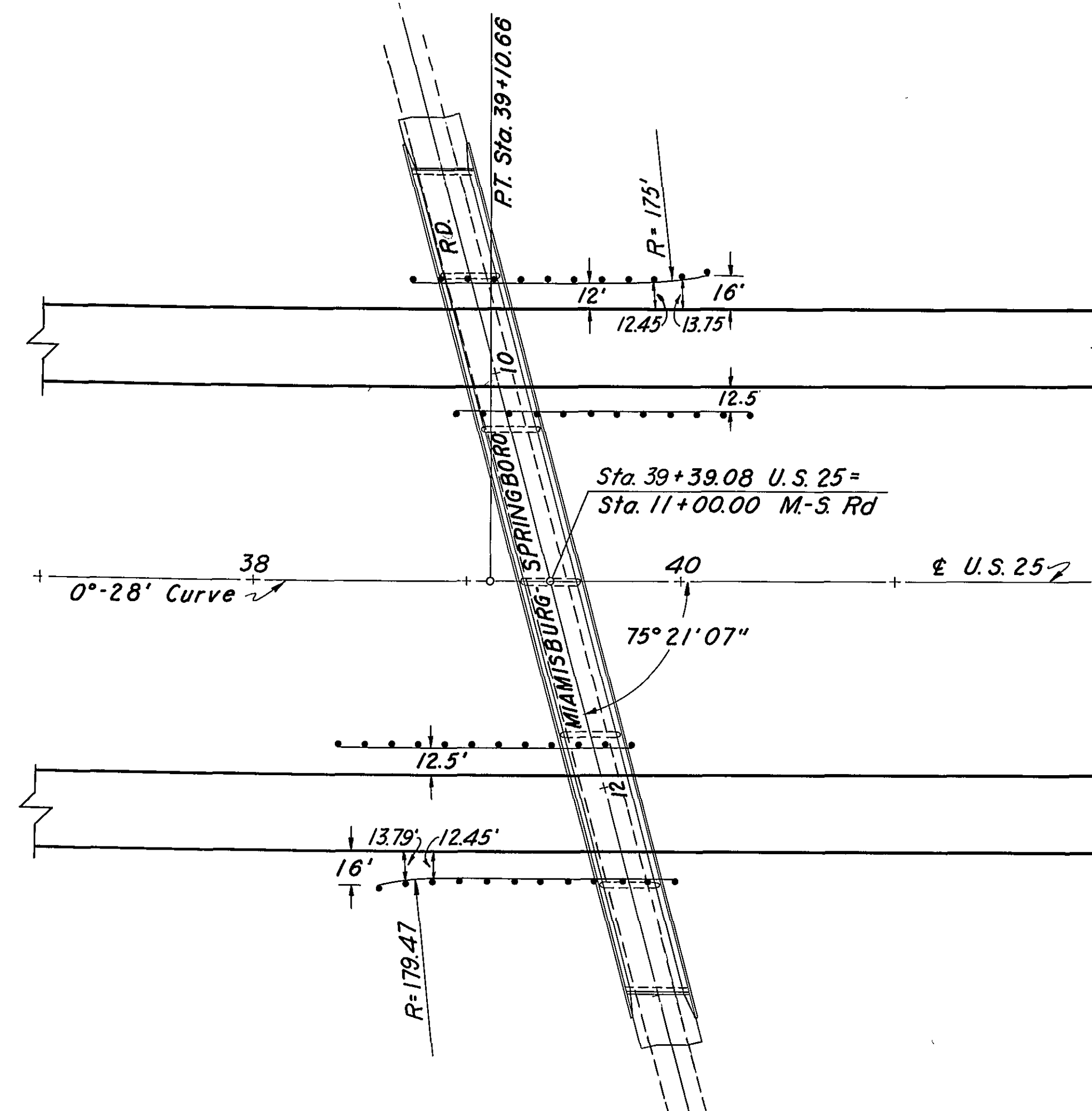
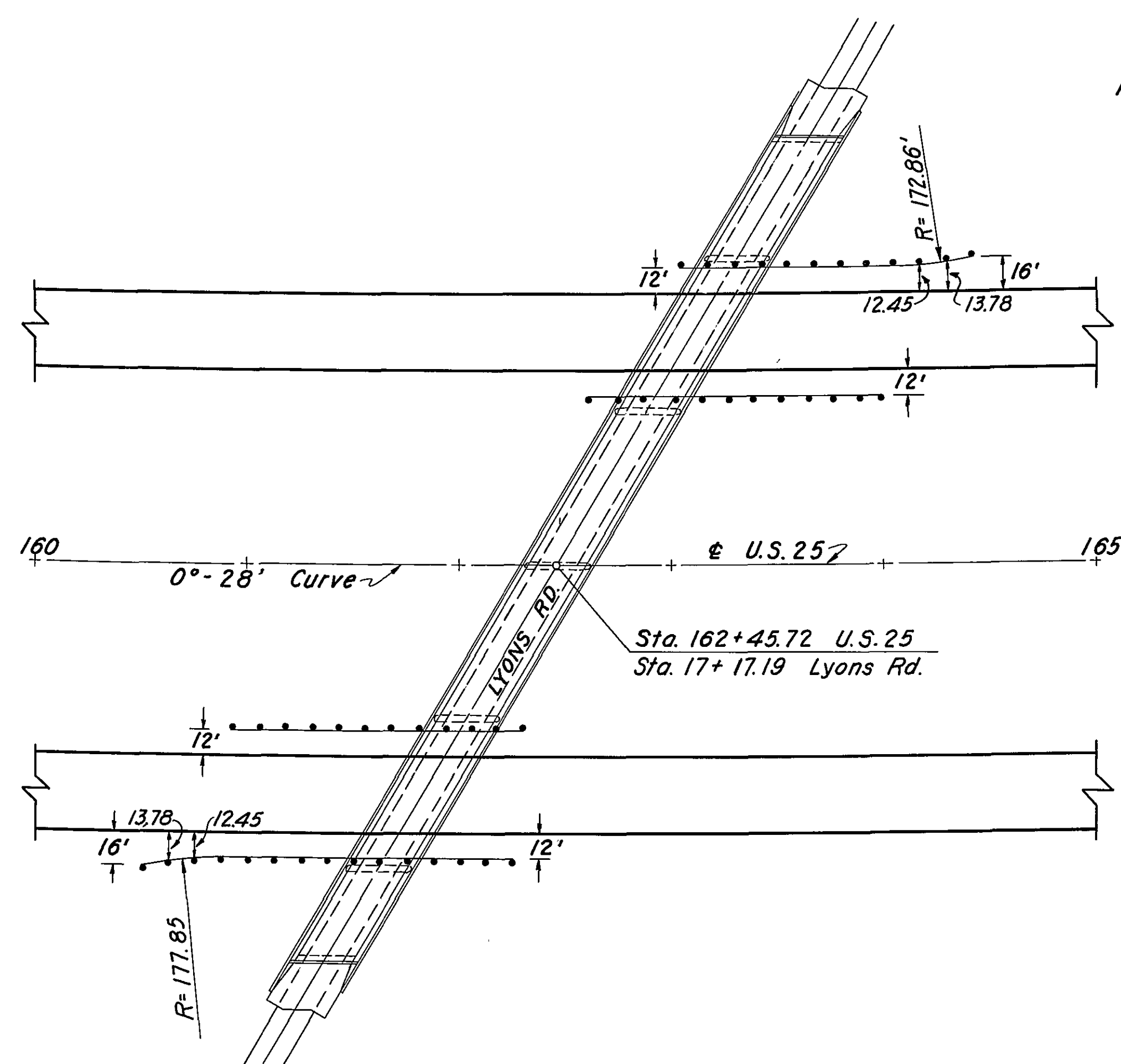
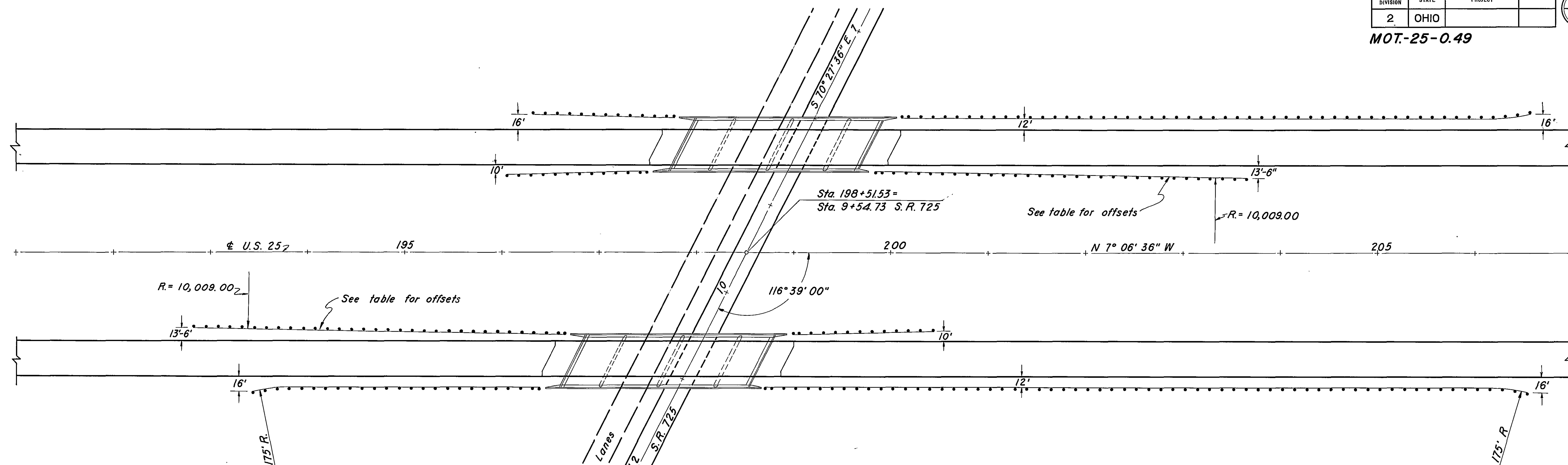
TYPICAL SYMBOL
Scale: 1/2" = 1"

DIMENSIONS SHOWN ARE FOR
ALL SYMBOLS IMPRESSED IN
CONCRETE MARKER

NOTE: IMPRESS THE WORD " DUCT" IN THE TOP OF THE CONCRETE MARKER USING LETTERS OF THE TYPE AND DIMENSIONS AS PER DETAILS.

MARKER DETAILS

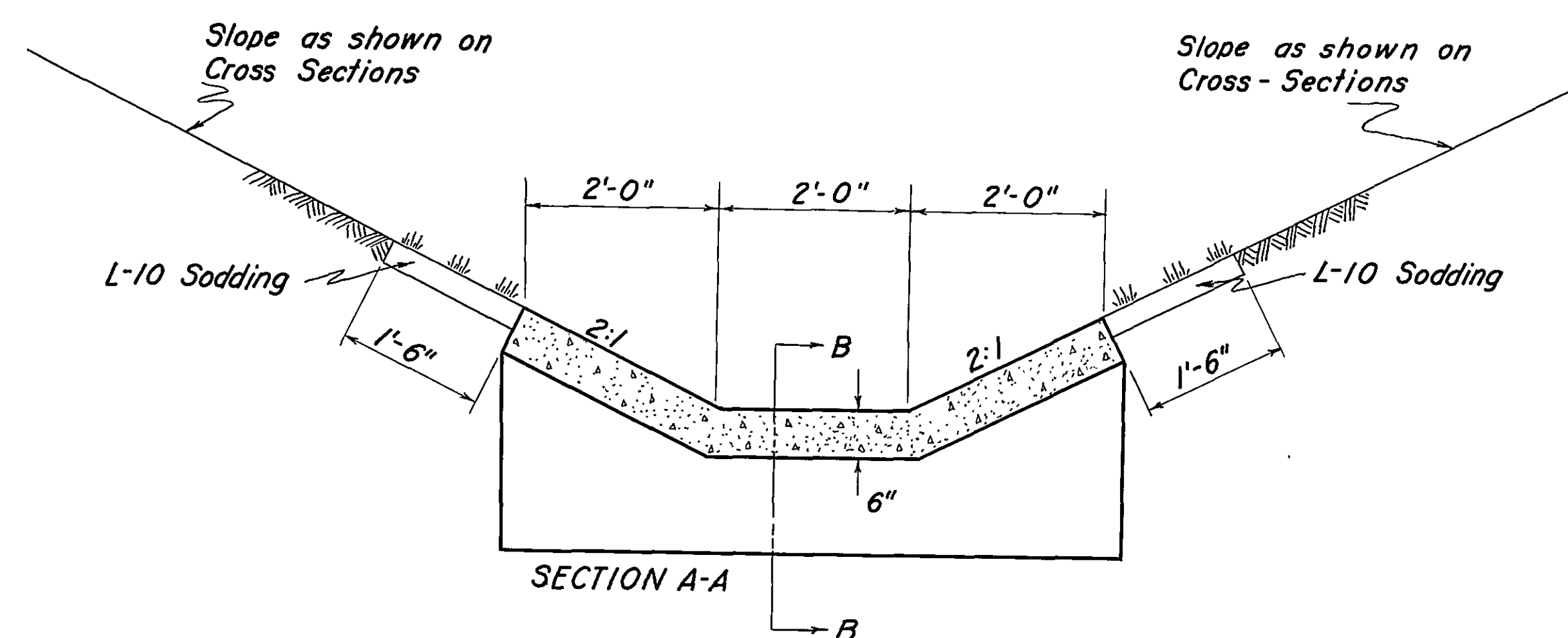
MOT-25-0.49



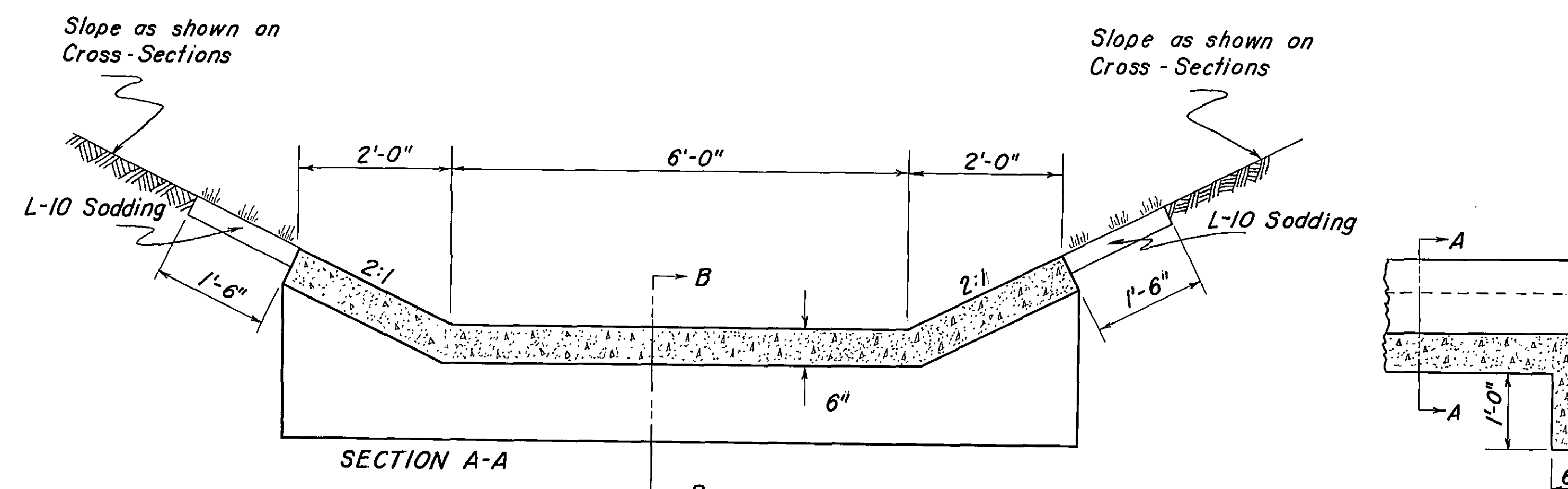
DISTANCE BETWEEN EDGE OF PAVEMENT AND FACE OF GUARD RAIL (MEDIAN)

POST	OFFSET	POST	OFFSET
1/2	6.00	16	7.94
1	6.01	17	8.26
2	6.03	18	8.53
3	6.07	19	8.82
4	6.13	20	9.12
5	6.20	21	9.44
6	6.28	22	9.78
7	6.38	23	10.13
8	6.50	24	10.50
9	6.63	25	10.98
10	6.78	26	11.28
11	6.94	27	11.69
12	7.12	28	12.12
13	7.31	29	12.56
14	7.53	30	13.02
15	7.76	31	13.50

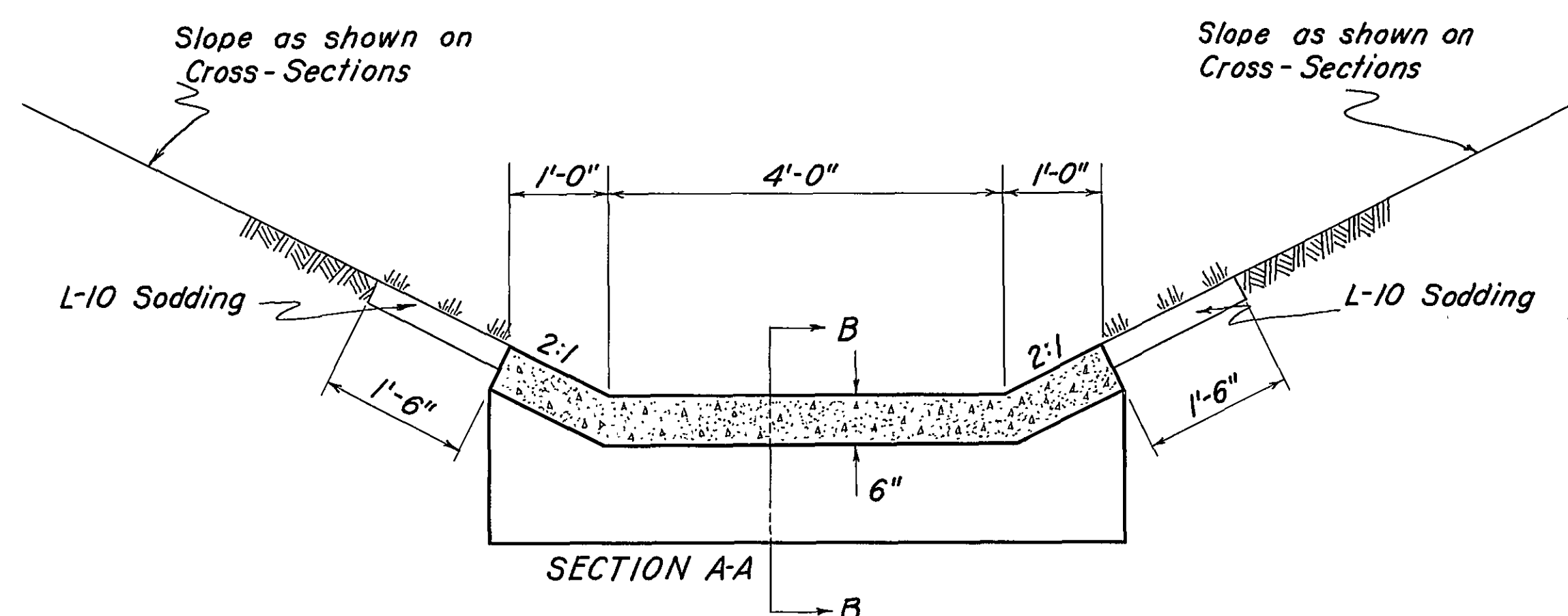
MOT.-25-049



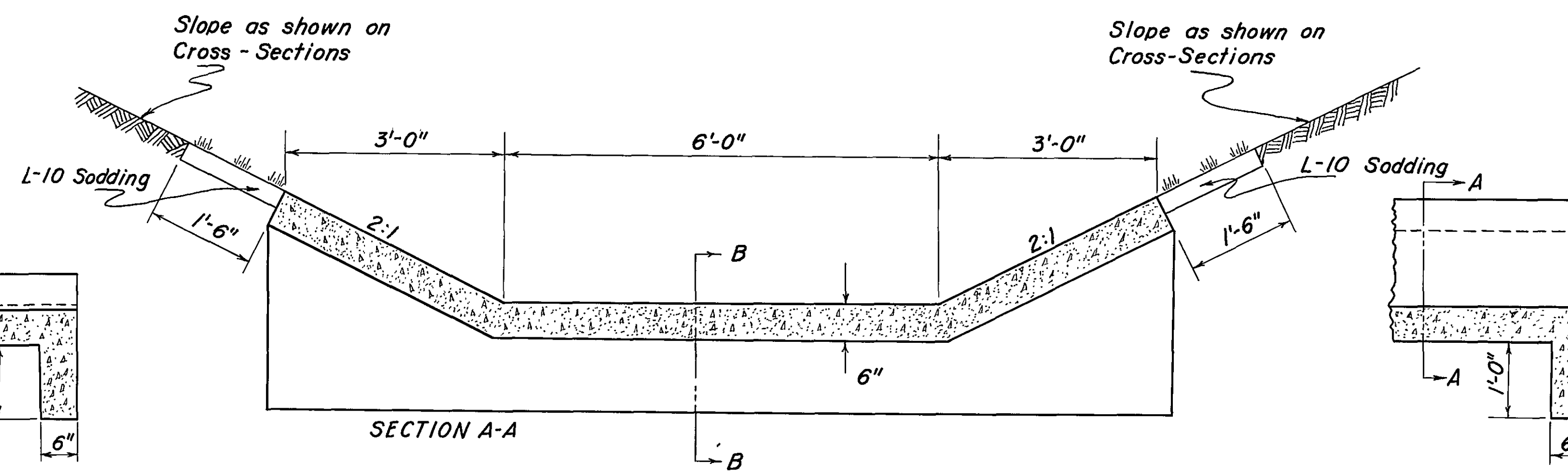
I-14 TYPE I-A PAVED GUTTER
Scale: $\frac{3}{4}$ " = 1'-0"



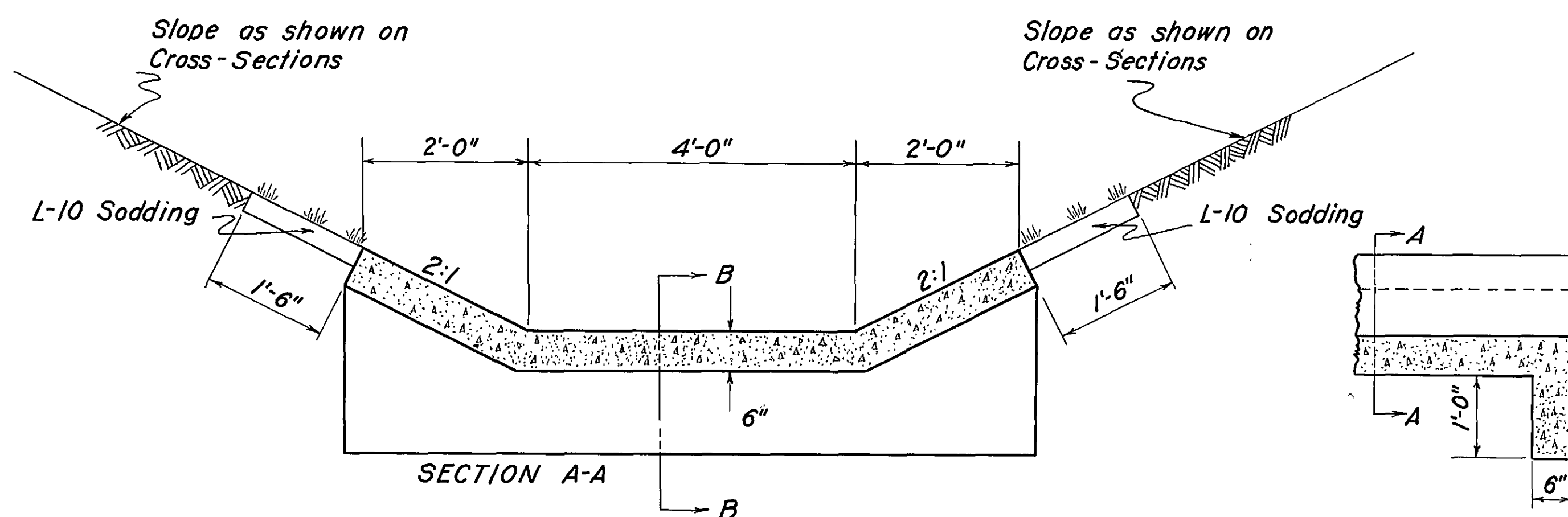
I-14 TYPE I-D PAVED GUTTER
Scale: $\frac{3}{4}$ " = 1'-0"



I-14 TYPE I-B PAVED GUTTER
Scale: $\frac{3}{4}$ " = 1'-0"

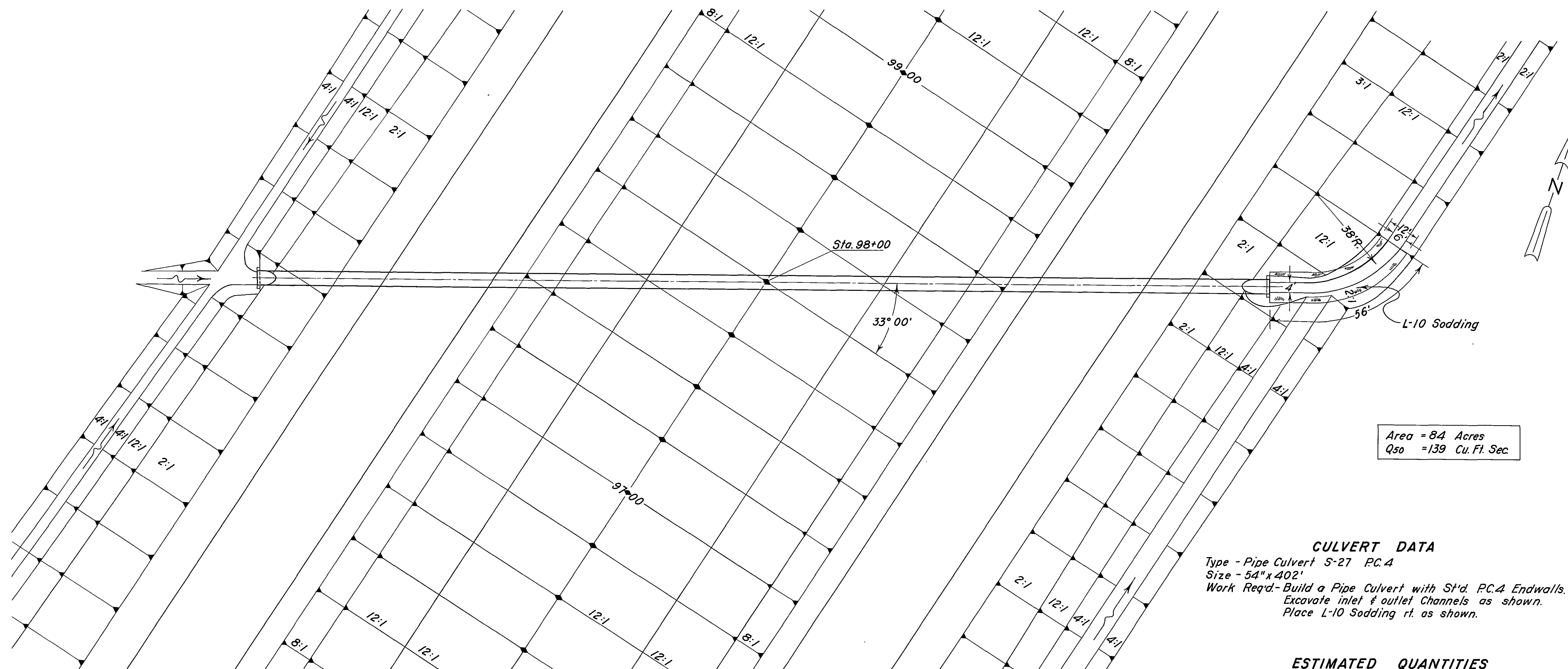


I-14 TYPE I-E PAVED GUTTER
Scale: $\frac{3}{4}$ " = 1'-0"



I-14 TYPE I-C PAVED GUTTER
Scale: $\frac{3}{4}$ " = 1'-0"

MOT.-25-049

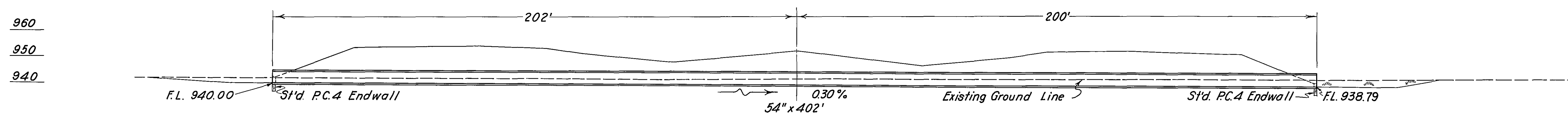


CULVERT DATA

Type - Pipe Culvert S-27 PC.4
 Size - 54" x 402'
 Work Req'd. - Build a Pipe Culvert with St'd. PC.4 Endwalls.
 Excavate inlet & outlet Channels as shown.
 Place L-10 Sodding rt. as shown.

ESTIMATED QUANTITIES

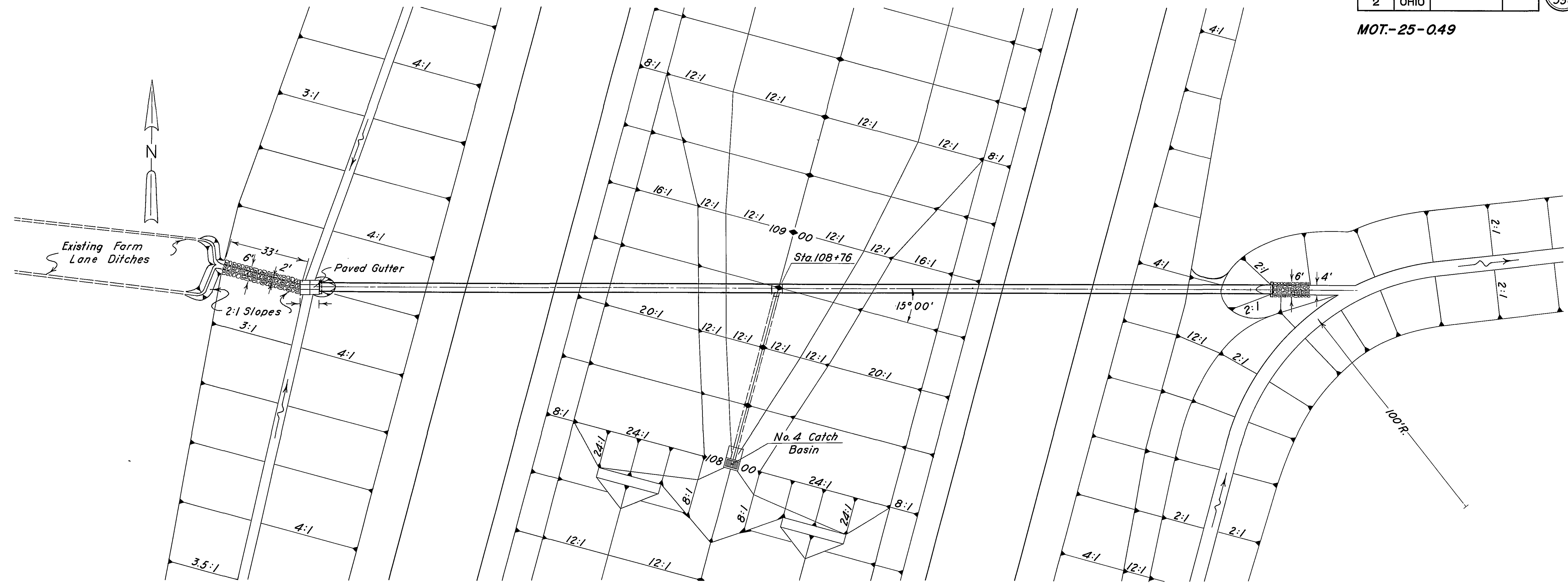
E - 2	Excavation for Structures	420	Cu. Yds.
E - 3	Channel Excavation	90	Cu. Yds.
S - 1	Concrete for Structures (Class E)	1.9	Cu. Yds.
S - 27	54" Pipe for Roadway Culverts	402	Lin. Ft.
	Sec. M-66 (b)	75	Sq. Yds.
L - 10	Sodding		



Scale: 1" = 20'

PIPE CULVERT Sta 98+00 Skew 33°00' R.F.

MOT.-25-0.49



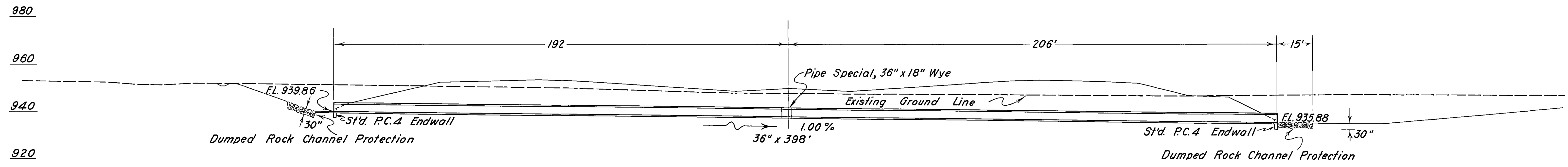
CULVERT DATA

Type - Pipe Culvert S-27 P.C.4
 Size - 36" x 398'
 Work Req'd. - Build a Pipe Culvert with st'd. P.C.4
 Endwalls. Place Dumped Rock Channel
 Protection Rt. & Lt. as shown. Place Paved
 Gutter Lt. as shown.

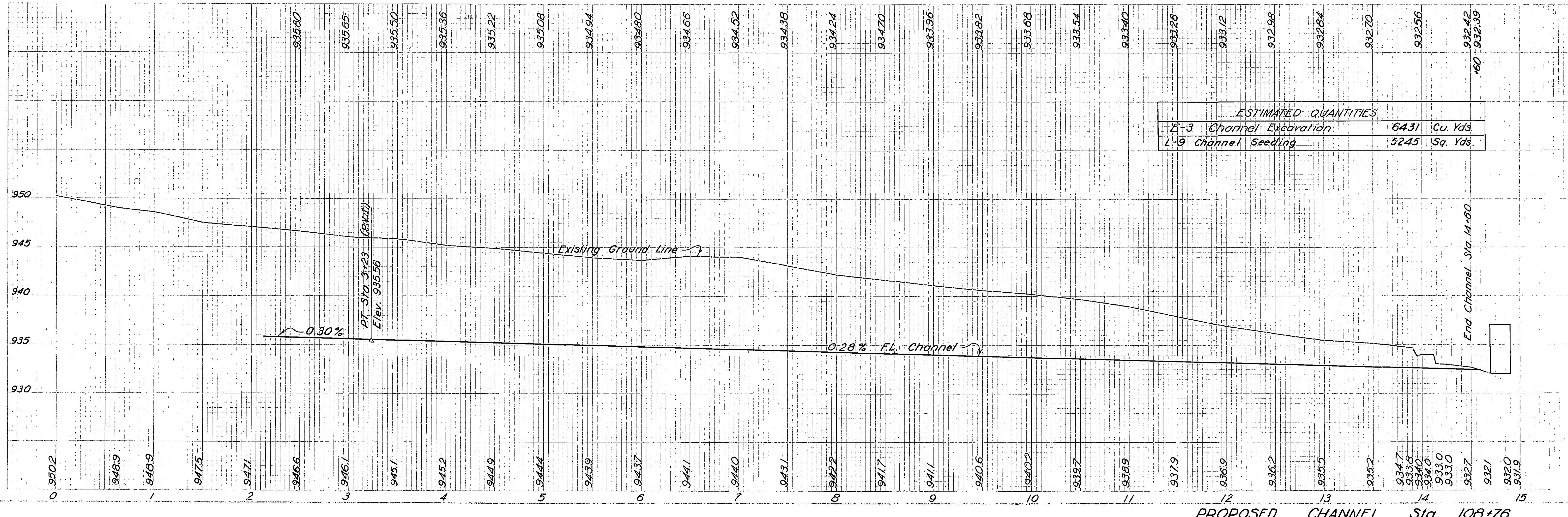
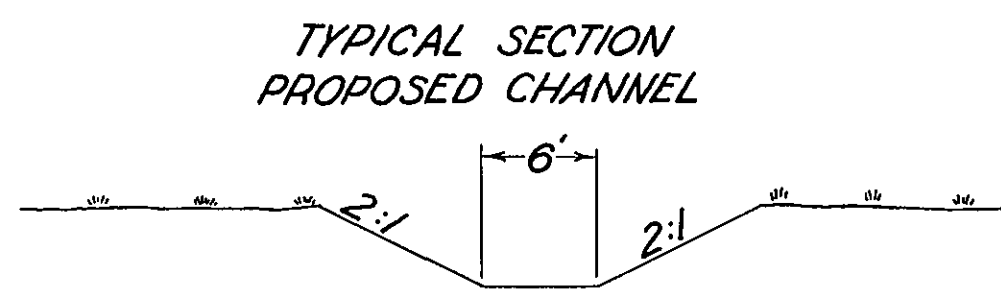
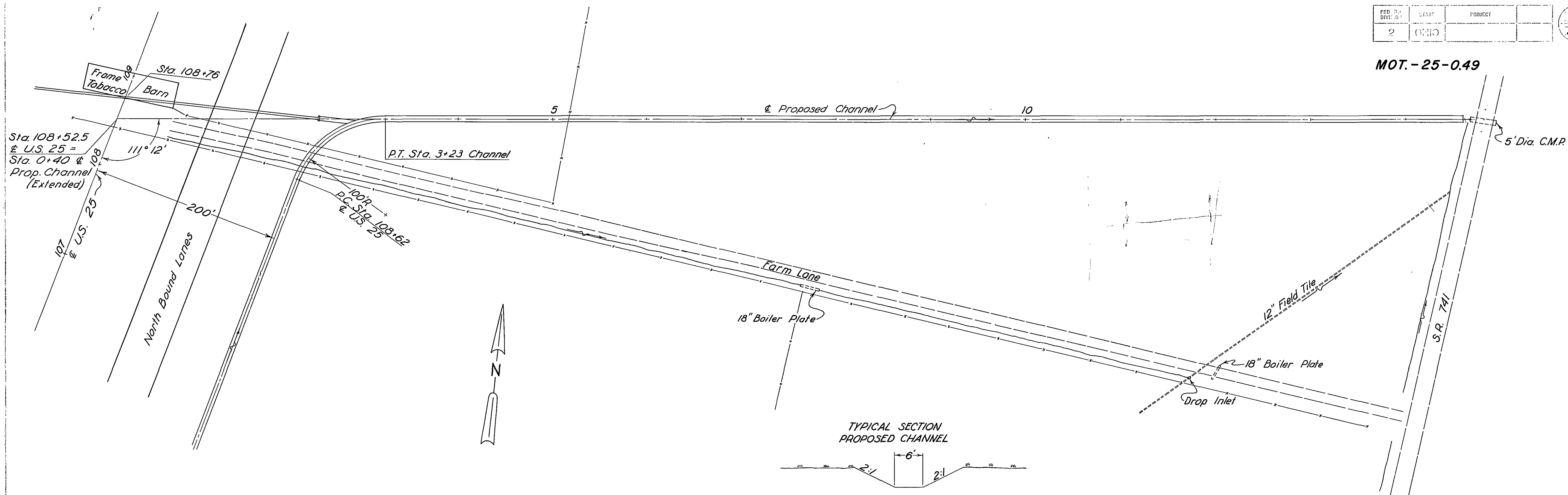
ESTIMATED QUANTITIES

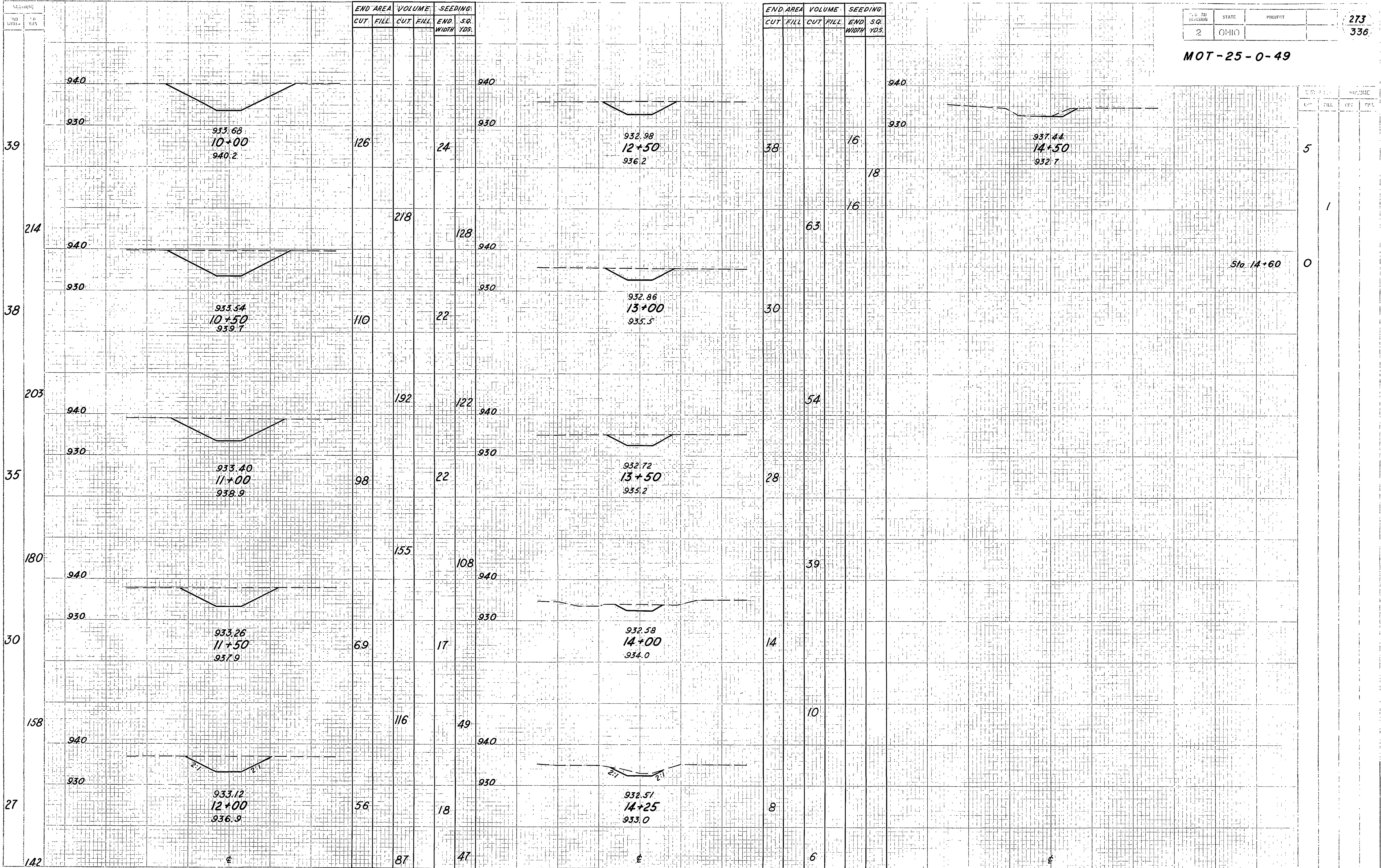
E - 2	Excavation for Structures	692	Cu. Yds.
E - 3	Channel Excavation	346	Cu. Yds.
S - 1	Concrete for Structures (Class E)	12	Cu. Yds.
S - 27	36" Pipe for Roadway Culverts		
	Sec. M-6.6(b), or M-6.8(b)	394	Lin. Ft.
I - 5	36" Pipe Special for Roadway Culvert Sec. M-6.6(b)	1	Ea.
I - 10	Dumped Rock Channel Protection	24	Cu. Yds.
I - 14	Paved Gutter (Type I-A)	8	Lin. Ft.

Area = 26 Acres
 Q50 = 64 Cu. Ft. Sec.



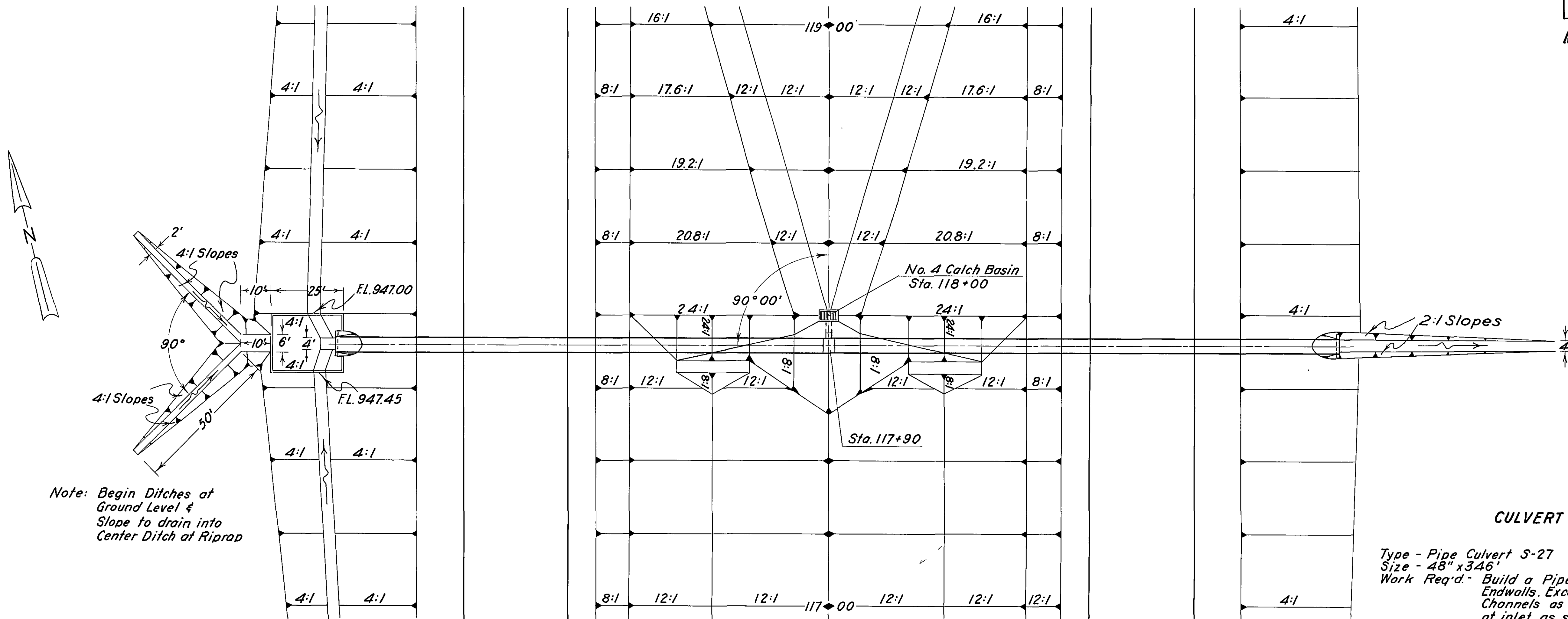
Scale: 1" = 20'





MOT-25-0-49

MOT.-25-049



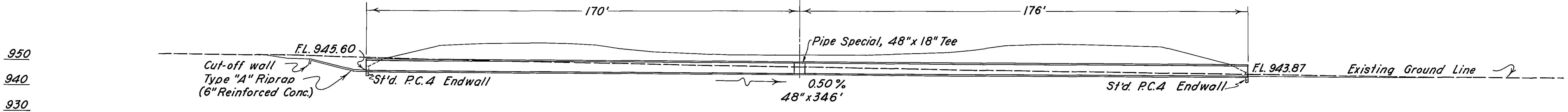
CULVERT DATA

Type - Pipe Culvert S-27 P.C.4
 Size - 48" x 346"
 Work Req'd - Build a Pipe Culvert with st'd P.C.4 Endwalls. Excavate inlet and outlet Channels as shown. Place Type "A" Riprap at inlet as shown.

ESTIMATED QUANTITIES

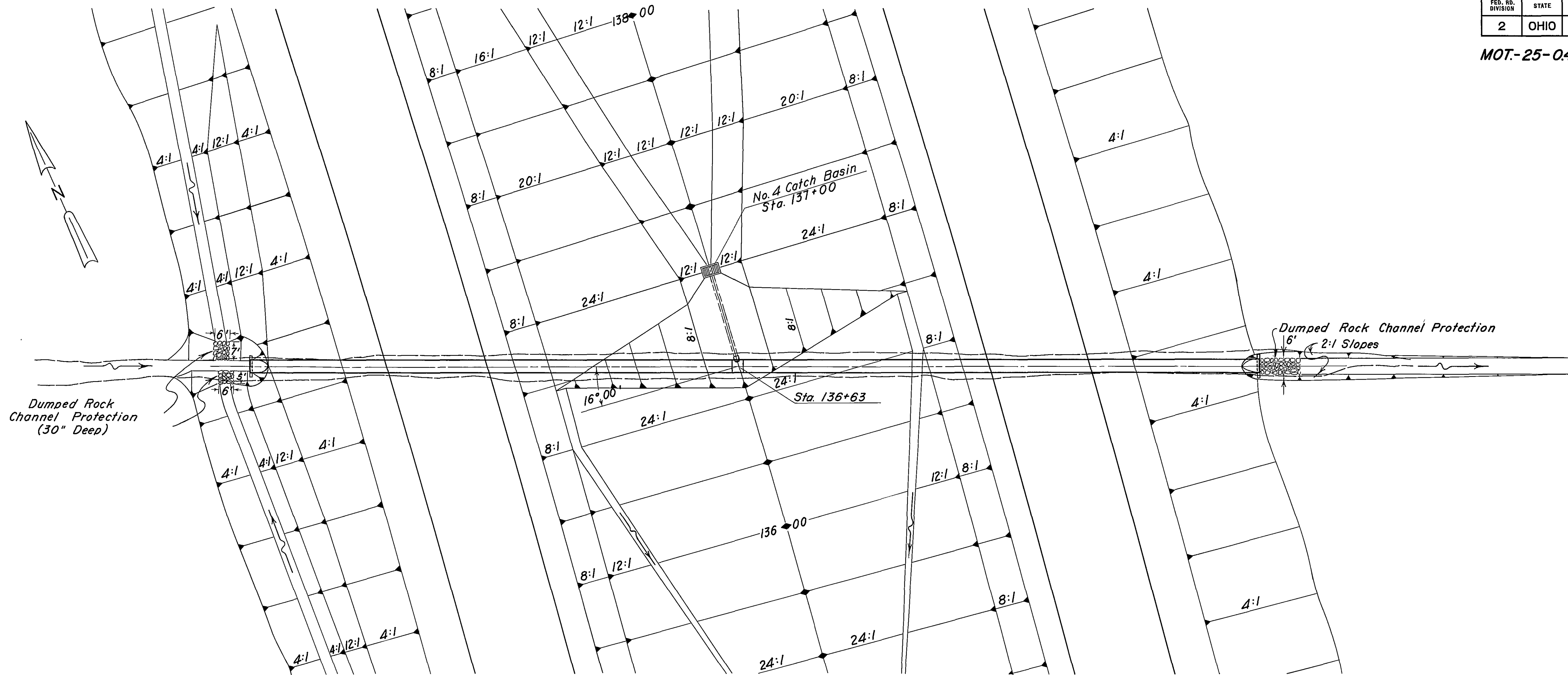
E - 2	Excavation for Structures	357	Cu. Yds.
E - 3	Channel Excavation	32	Cu. Yds.
S - 1	Concrete for Structures (Class E)	1.7	Cu. Yds.
S - 27	48" Pipe for Roadway Culverts		
	Sec. M-6.6(b)	342	Lin. Ft.
I - 5	48" Pipe Special for Rdwy. Culv. Sec. M-6.6(b)	1	Ea.
I - 10	Type "A" Riprap (6" Reinforced Concrete)	45	Sq. Yds.

Area = 55 Acres
 Q₅₀ = 132 Cu. Ft. Sec.



Scale: 1" = 20'

MOT-25-049



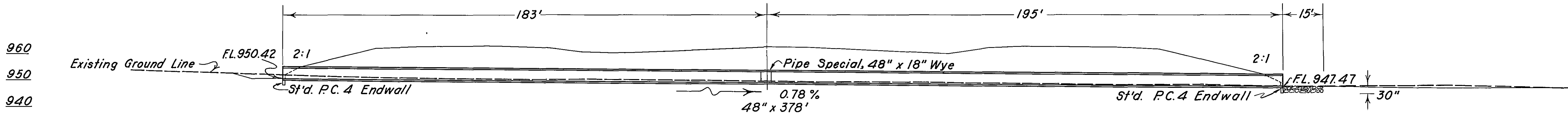
CULVERT DATA

Type - Pipe Culvert S-27 P.C.4
 Size - 48" x 378'
 Work Req'd. - Build a Pipe Culvert with St'd. P.C.4 Endwalls
 Place Dumped Rock Channel Protection Lt. & Rt.
 & Excavate Inlet & Outlet Channels as shown

Area = 75 Acres
 Q₅₀ = 131 Cu. Ft. Sec.

ESTIMATED QUANTITIES

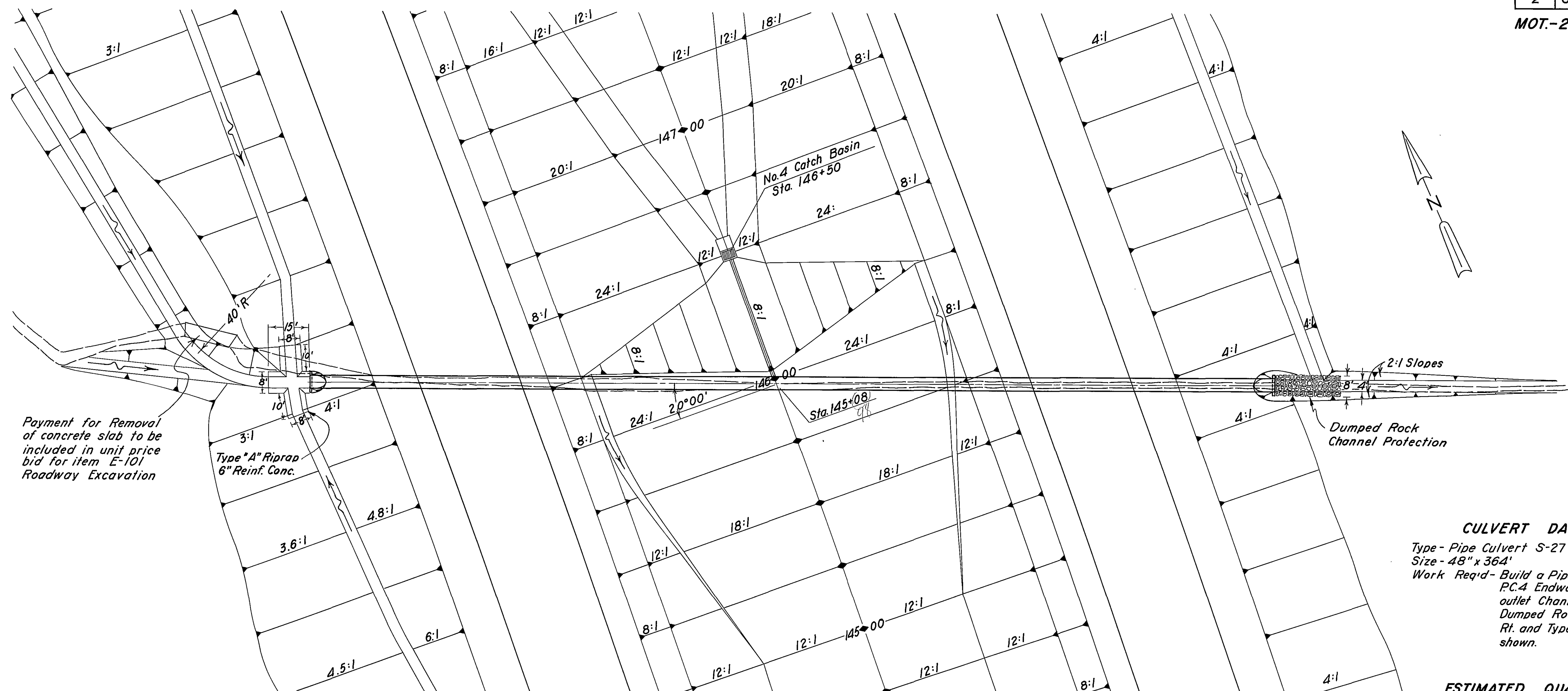
E - 2	Excavation for Structures	208	Cu. Yds.
E - 3	Channel Excavation	30	Cu. Yds.
S - 1	Concrete for Structures (Class E)	1.7	Cu. Yds.
S - 27	48" Pipe for Roadway Culverts Sec. M-6.6(b)	374	Lin. Ft.
I - 5	48" Pipe Special for Roadway Culverts, Sec. M-6.6(b)	1	Ea.
I - 10	Dumped Rock Channel Protection	15	Cu. Yds.



Scale: 1" = 20'

PIPE CULVERT Sta. 136+63 Skew 16°00' L.F.

MOT.-25-049



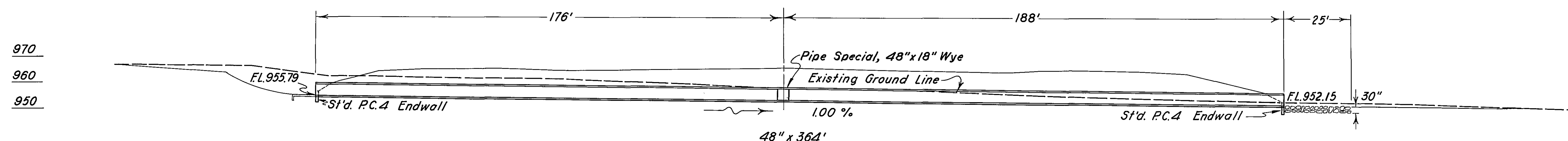
Area = 63 Acres
Q₅₀ = 119 Cu. Ft. Sec.

CULVERT DATA

Type - Pipe Culvert S-27 P.C.4
Size - 48" x 364"
Work Req'd - Build a Pipe Culvert with St'd. P.C.4 Endwalls. Excavate inlet & outlet Channels as shown. Place Dumped Rock Channel Protection Rt. and Type A Riprap on Left as shown.

ESTIMATED QUANTITIES

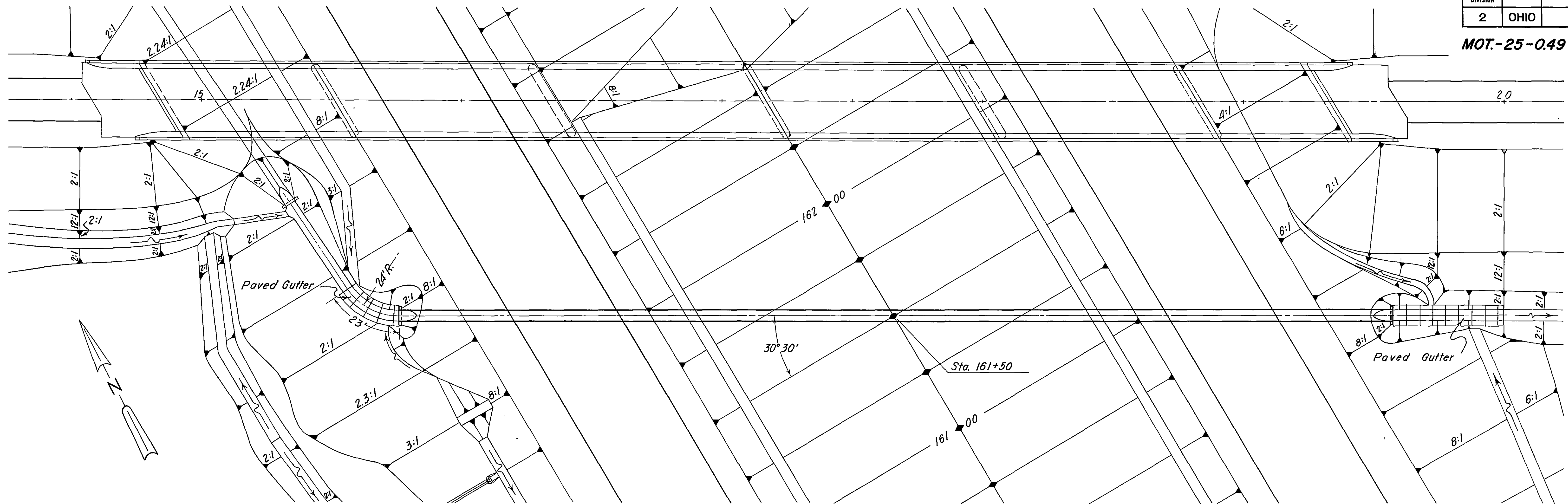
E - 2	Excavation for Structures	660	Cu. Yds.
E - 3	Channel Excavation	153	Cu. Yds.
S - 1	Concrete for Structures (Class E)	7.1	Cu. Yds.
S - 27	48" Pipe for Roadway Culverts		
	Sec. M-6.6(b)	360	Lin. Ft.
I - 10	Dumped Rock Channel Protection	19	Cu. Yds.
I - 5	48" Pipe Special for Roadway Culverts, Sec. M-6.6(b)	1	Ea.
I - 10	Type "A" Riprap (6" Reinforced Concrete)	31	Sq. Yd.



Scale: 1" = 20'

PIPE CULVERT Sta. 145+98 Skew 20° L.F.

MOT.-25-049



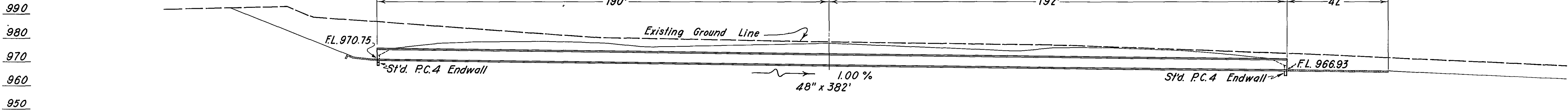
CULVERT DATA

Type - Pipe Culvert St'd. P.C.4
Size - 48" x 382"
Work Req'd. - Build a Pipe Culvert with St'd. P.C.4 Endwalls. Place Paved Gutter Rt. & Lt. as shown.

Area = 51 acres
Q₅₀ = 106 Cu. Ft. Sec.

ESTIMATED QUANTITIES

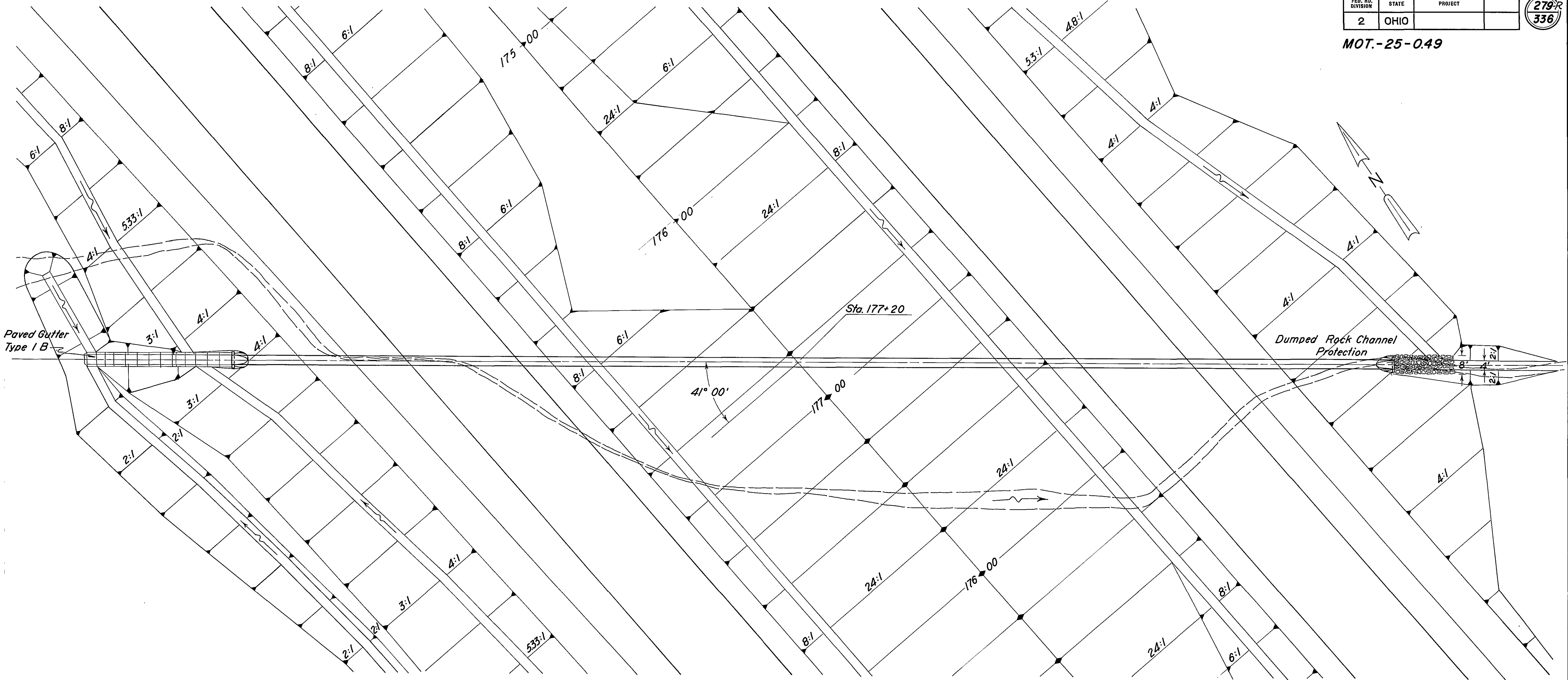
E - 2	Excavation for Structures	816	Cu. Yds.
E - 3	Channel Excavation	17	Cu. Yds.
S - 1	Concrete for Structures (Class E)	1.7	Cu. Yds.
S - 27	48" Pipe for Roadway Culverts	382	Lin. Ft.
	Sec. M-6.6(b)	65	Lin. Ft.
I - 14	Paved Gutter (Type I-C)	22	Sq. Yds.
L - 10	Sodding		



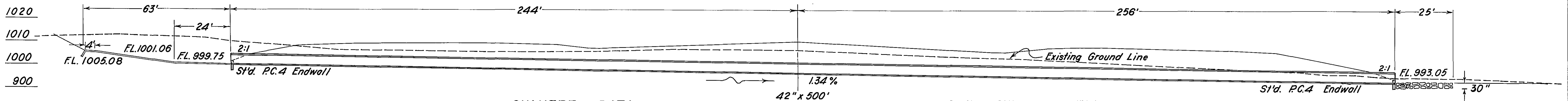
Scale : 1"=20'

PIPE CULVERT Sta 161+50 Skew 30° 30' L F

MOT.-25-049



Area = 36 Acres
Q25 = 83 Cu. Ft. Sec.



CULVERT DATA

Type - Pipe Culvert S-27 P.C.4
Size - 42" x 500'
Work Req'd. - Build a Pipe Culvert with Std. P.C.4 Endwalls. Place Paved Gutter Lt. as Shown. Place Dumped Rock Channel Protection Rt. as Shown. Excavate inlet & outlet Channels as Shown

ESTIMATED QUANTITIES

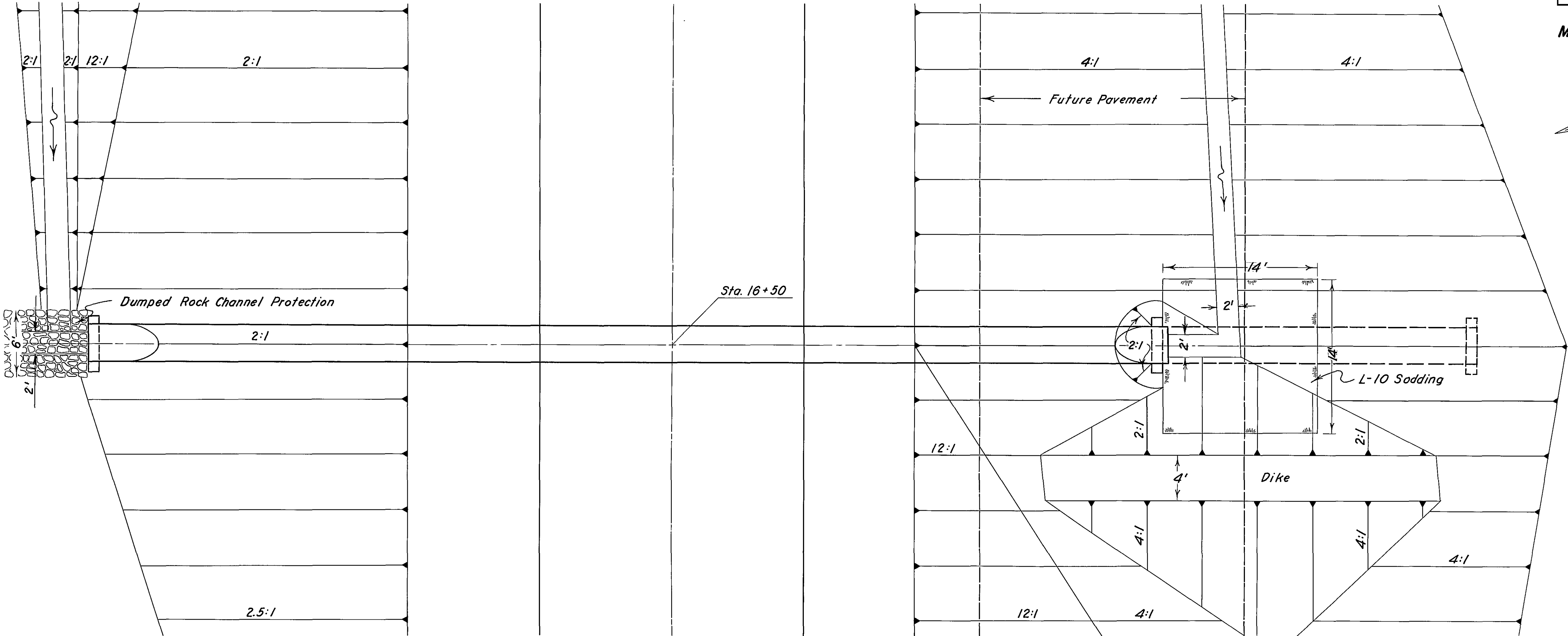
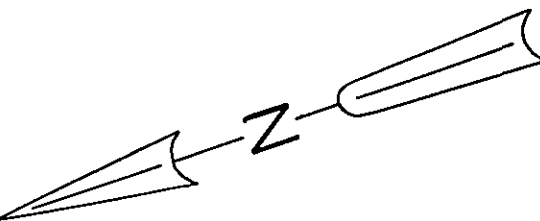
E - 2	Excavation for Structures	639	Cu. Yds.
E - 3	Channel Excavation	34	Cu. Yds.
I - 14	Paved Gutter (Type I B)	63	Lin. Ft.
I - 10	Dumped Rock Channel Protection	19	Cu. Yds.
S - 1	Concrete for Structures	1.5	Cu. Yds.
S - 27	42" Pipe for Roadway Culverts	500	Lin. Ft.

This sheet supersedes Sheet No. 279

Rev'd. 1-2-59

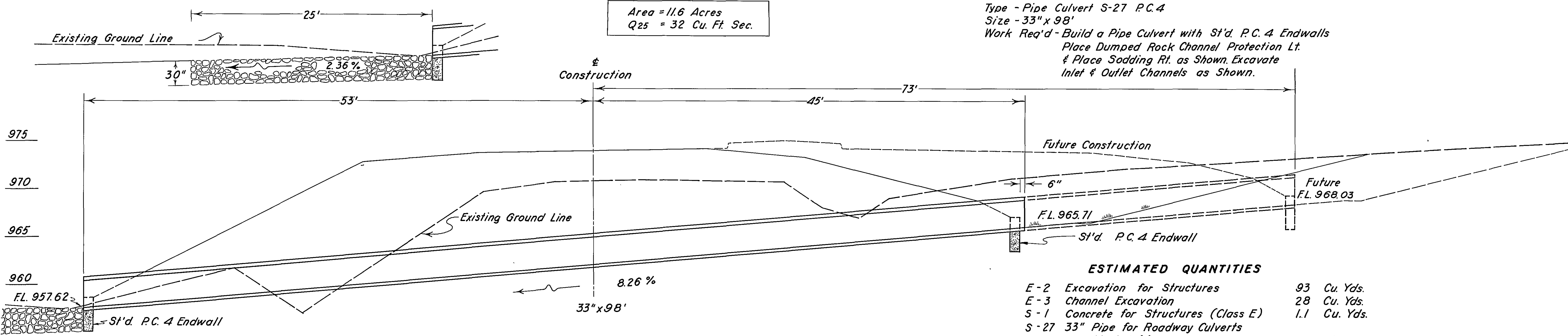
PIPE CULVERT Sta. 177+20 Skew 41° L.F.

MOT. - 25 - 0.49



CULVERT DATA

Type - Pipe Culvert S-27 P.C.4
 Size - 33" x 98"
 Work Req'd - Build a Pipe Culvert with St'd. P.C. 4 Endwalls
 Place Dumped Rock Channel Protection Lt.
 & Place Sodding Rt. as Shown. Excavate
 Inlet & Outlet Channels as Shown.

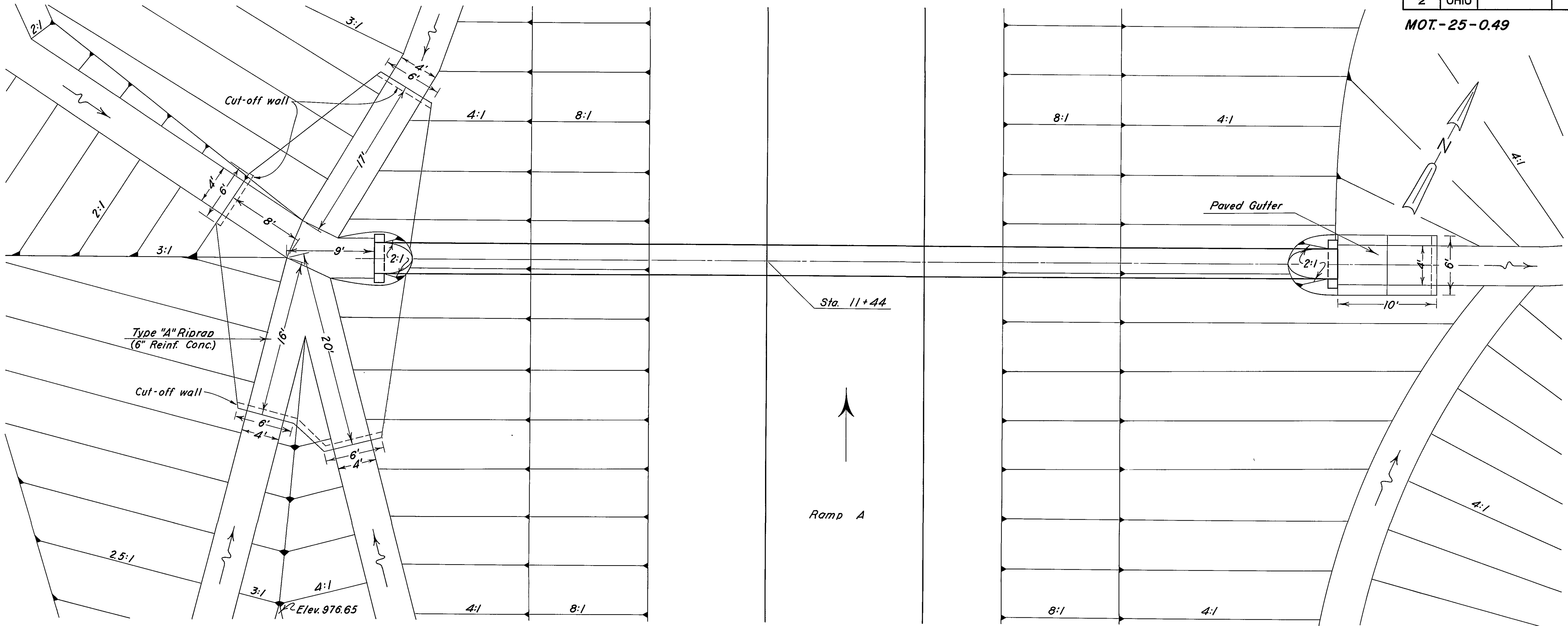


ESTIMATED QUANTITIES

E-2	Excavation for Structures	93	Cu. Yds.
E-3	Channel Excavation	28	Cu. Yds.
S-1	Concrete for Structures (Class E)	1.1	Cu. Yds.
S-27	33" Pipe for Roadway Culverts		
	Sec. M-6.4 (d)	98	Lin. Ft.
I-10	Dumped Rock Channel Protection	14	Cu. Yds.
L-10	Sodding	22	Sq. Yds.

Scale: 1"=5'

MOT-25-0.49



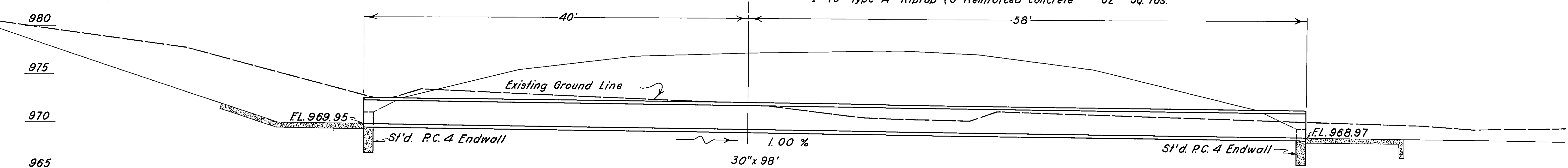
CULVERT DATA

Type-Pipe Culvert S-27 P.C. 4
 Size- 30"x 98'
 Work Req'd.- Build a Pipe Culvert with St'd. P.C. 4
 Endwalls. Place Paved Gutter Rt. & Type
 "A" Riprap Lt. as Shown.

ESTIMATED QUANTITIES

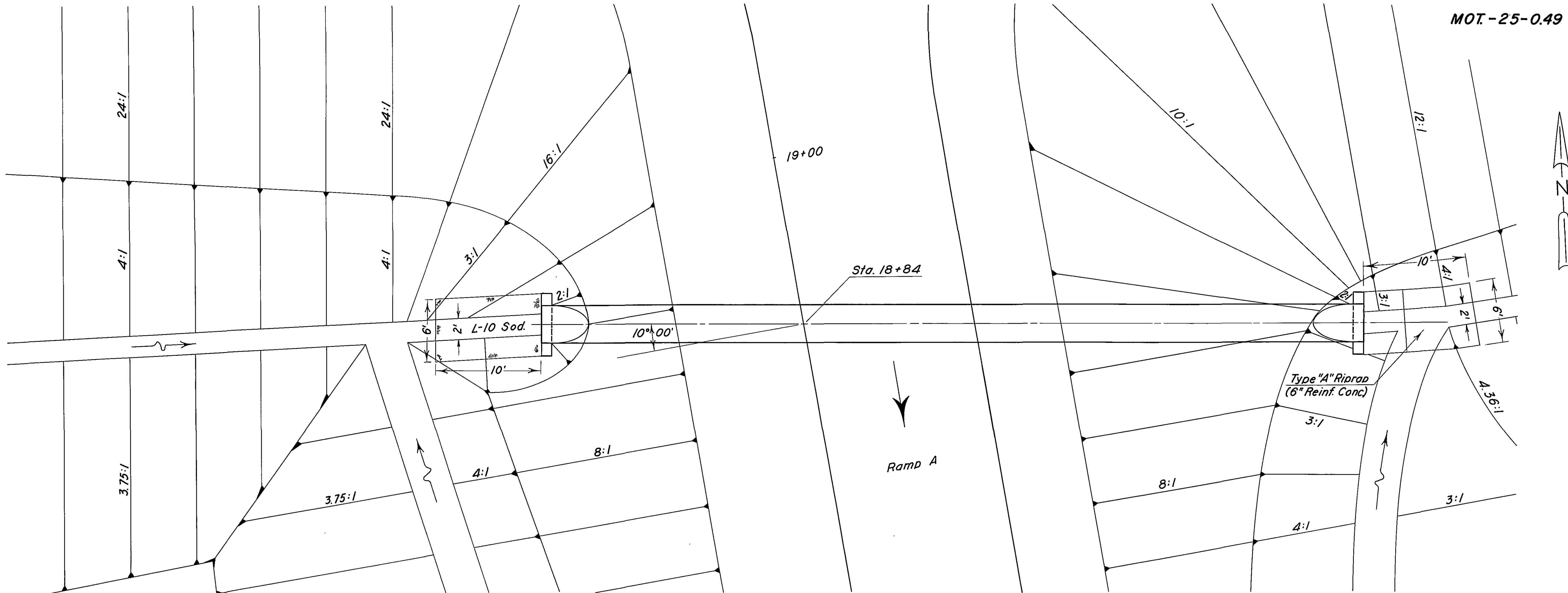
E-2	Excavation for Structures	57	Cu. Yds.
E-3	Channel Excavation	20	Cu. Yds.
S-1	Concrete Structures (Class E)	1.0	Cu. Yds.
S-27	30" Pipe for Roadway Culverts		
	Sec. M-6.6 (b), or Sec. M-6.6 (b)	98	Lin. Ft.
I-14	Paved Gutter (Type I-B)	10	Lin. Ft.
I-10	Type "A" Riprap (6" Reinforced Concrete)	62	Sq. Yds.

Area = 15 Acres
 Q₂₅ = 59 Cu. Ft. Sec.



Scale : 1" = 5'

MOT-25-049



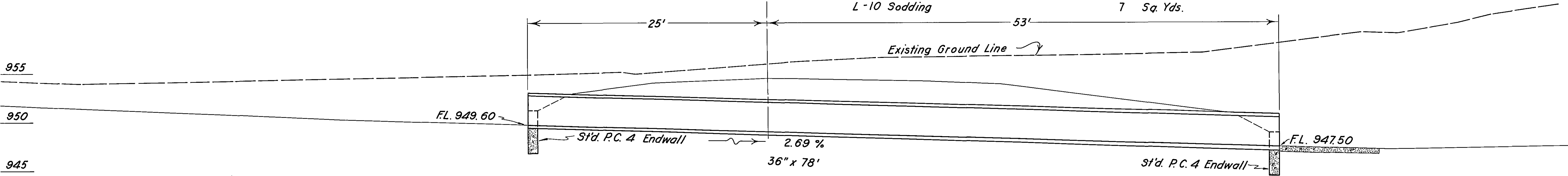
CULVERT DATA

Type - Pipe Culvert S-27 P.C. 4
 Size - 36" x 78"
 Work Req'd - Build a Pipe Culvert with St'd.
 P.C. 4 Endwalls. Place Type "A"
 Riprap Rt & Sodding Lt. as
 Shown

ESTIMATED QUANTITIES

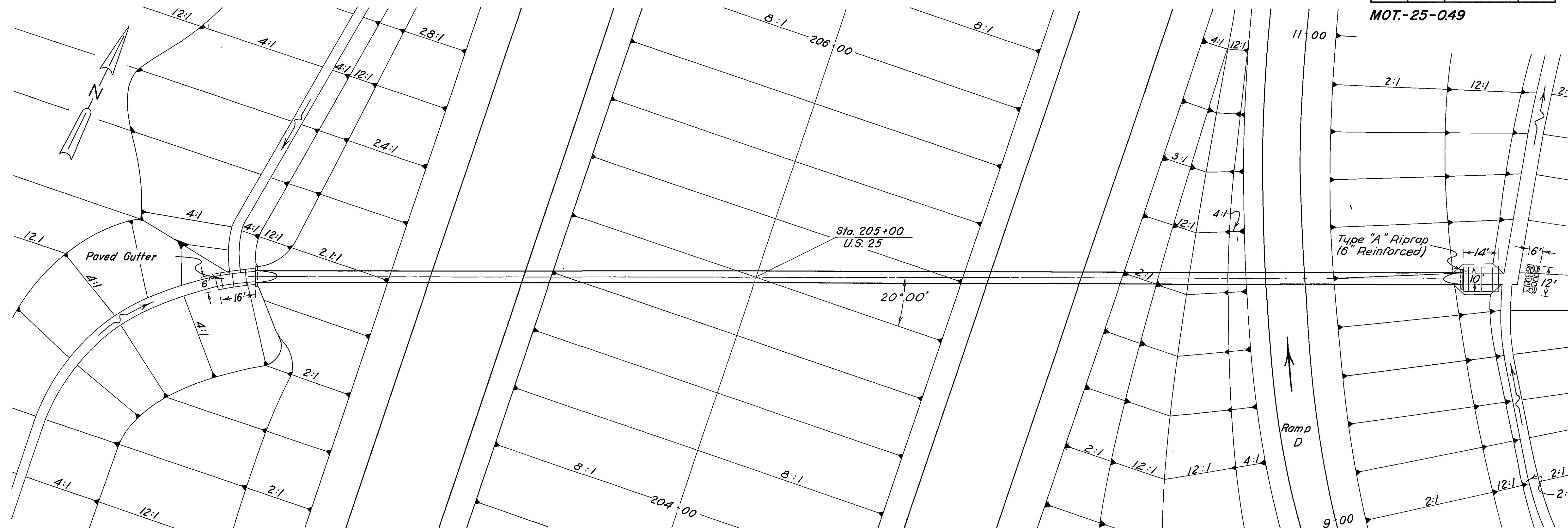
E-2	Excavation for Structures	79	Cu. Yds.
E-3	Channel Excavation	10	Cu. Yds.
S-1	Concrete for Structures (Class E)	12	Cu. Yds.
S-27	36" Pipe for Roadway Culverts		
	Sec. M-66 (b)	78	Lin. Ft.
I-10	Type "A" Riprap (6" Reinforced concrete)	7	Sq. Yds.
L-10	Sodding	7	Sq. Yds.

Area = 28.3 Acres
 Q25 = 58 Cu. Ft. Sec.



Scale = 1" = 5'

MOT.-25-049



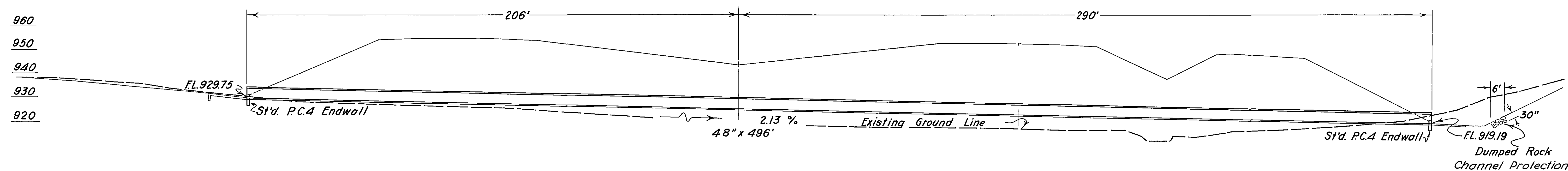
CULVERT DATA

Type - Pipe Culvert S-27 P.C.4
 Size - 48"x 496'
 Work Req'd. Build a Pipe Culvert with St'd. P.C.4 Endwalls
 Place Type "A" Riprap (6" Reinforced) Rt. as shown. Place Dumped Rock Channel Protection Rt. & Paved Gutter Lt. as Shown.

ESTIMATED QUANTITIES

E -2	Excavation for Structures	20	Cu. Yds.
E -3	Channel Excavation	20	Cu. Yds.
S -1	Concrete for Structures (Class E)	1.7	Cu. Yds.
S -27	48" Pipe for Roadway Culverts		
	Sec. M-6.4 (d) 8 gage, or Sec. M-106.6 (d).	496	Lin. Ft.
I -10	Type "A" Riprap (6" Reinforced Concrete)	16	Sq. Yds.
I -10	Dumped Rock Channel Protection	7	Cu. Yds.
I -14	Paved Gutter (Type I B)	16	Lin. Ft.

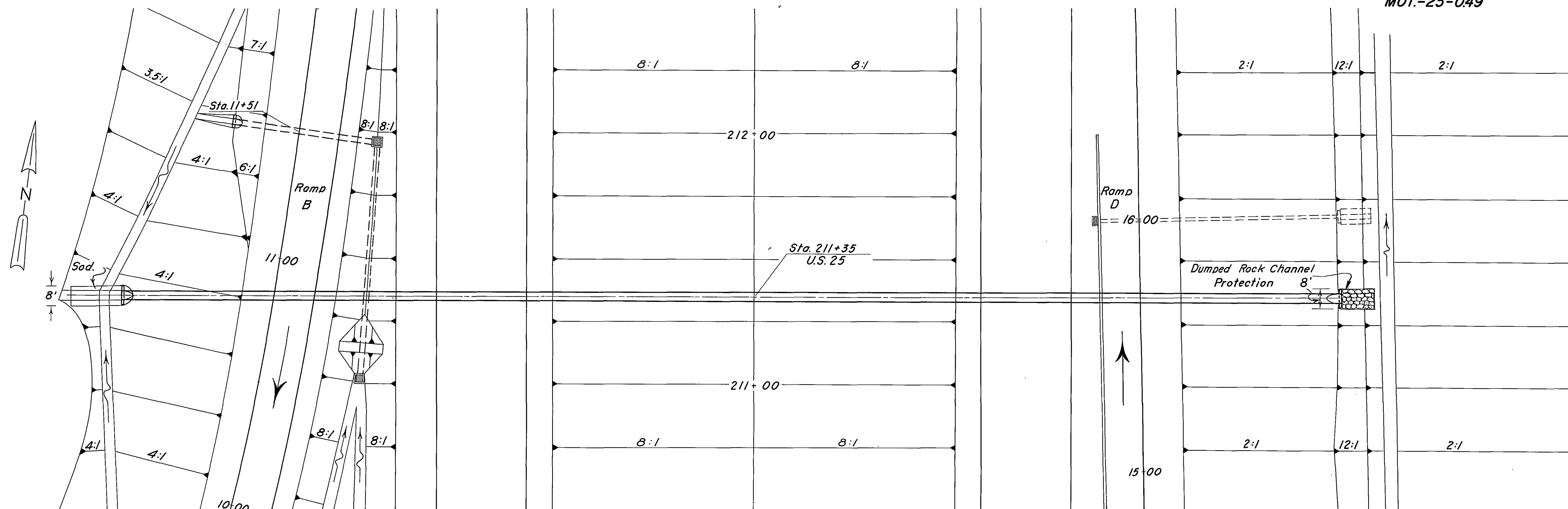
Area = 92 Acres
 Q₅₀ = 182 Cu. Ft. Sec.



Scale: 1" = 20'

PIPE CULVERT Sta. 205+00 Skew 20°00' R.F.

MOT.-25-049



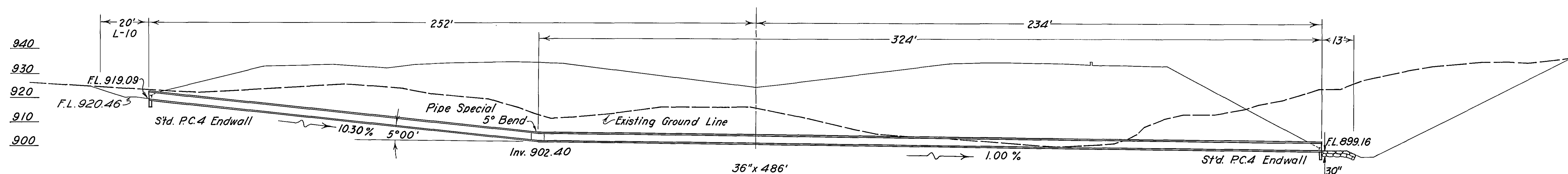
CULVERT DATA

Type-Pipe Culvert S-27 P.C.4
 Size - 36" x 486'
 Work Req'd - Build a Pipe Culvert with St'd. P.C.4
 Endwalls. Place Dumped Rock Channel
 Protection Rt. & Sodding Lt. as
 Shown.

ESTIMATED QUANTITIES

E - 2	Excavation for Structures	1034	Cu. Yds.
E - 3	Channel Excavation	42	Cu. Yds.
S - 1	Concrete for Structures (Class E)	1.2	Cu. Yds.
S - 27	36" Pipe for Roadway Culverts	482	Lin. Ft.
	Sec. M-6.4 (d) 10 gage, or Sec. M-106.6 (d)	18	Sq. Yds.
L - 10	Sodding	10	Cu. Yds.
I - 10	Dumped Rock Channel Protection	1	Each
I - 5	36" Pipe Special for Roadway Culverts		
	Sec. M-6.4 (d) 10 gage - 5° Bend		

Area = 21 Acres
 Q₅₀ = 54 Cu. Ft. Sec.



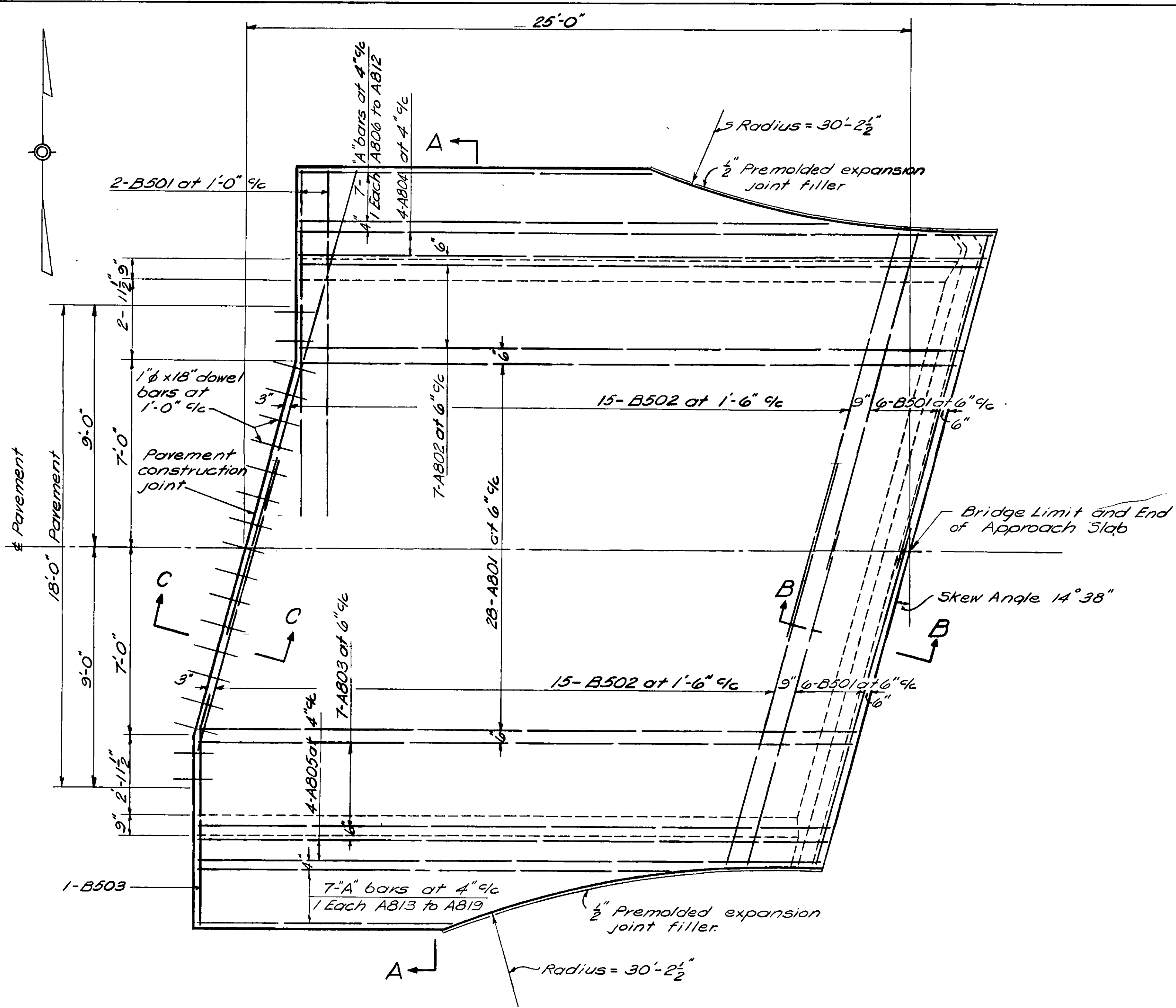
Scale: 1" = 20'

PIPE CULVERT Sta. 211+35 Skew Normal

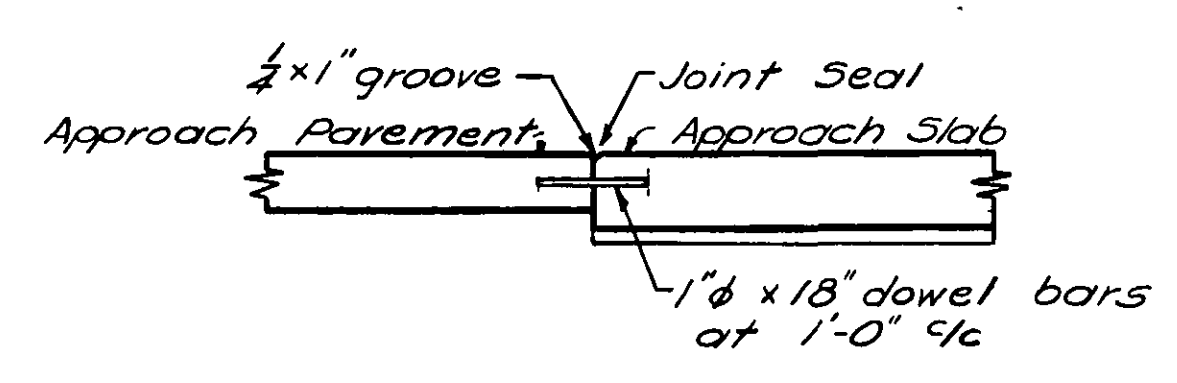
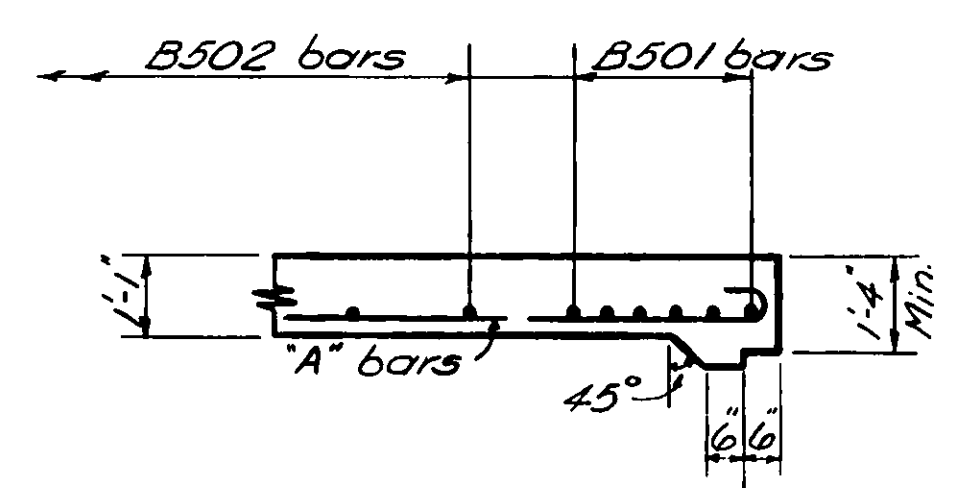
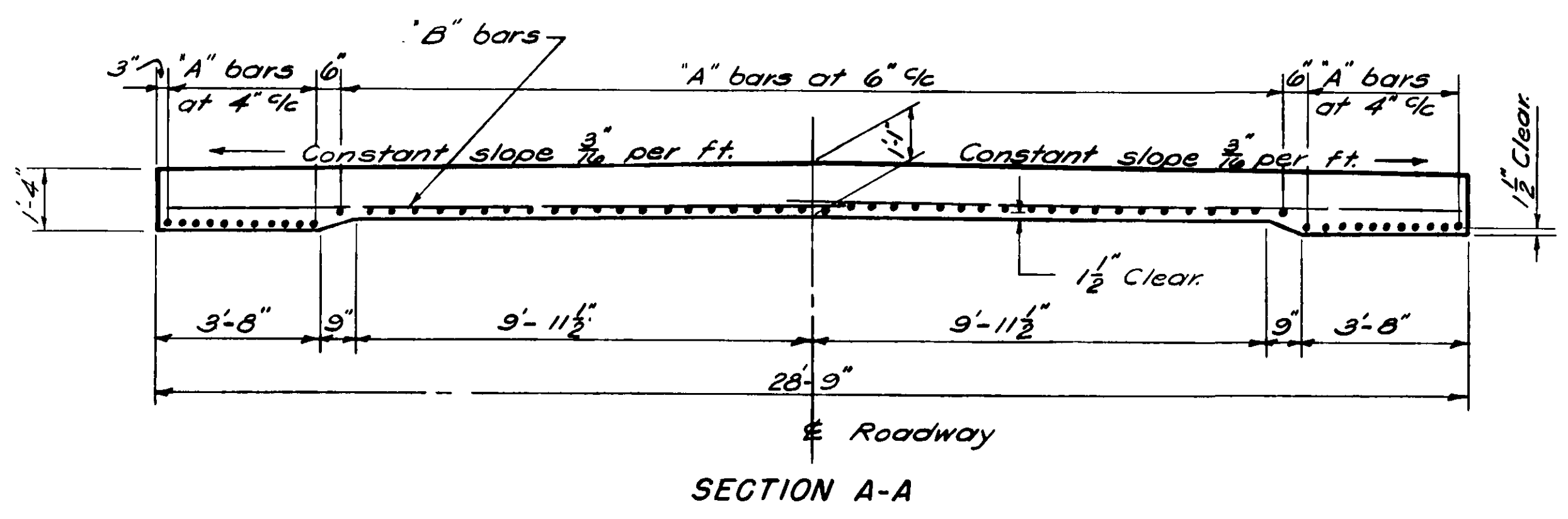
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

287
336

MONTGOMERY COUNTY
MOT-25-0.49



PLAN-REAR APPROACH SLAB
Forward approach slab - similar by rotation



REINFORCING STEEL					
2 Approach Slabs					
Mark	No.	Length	Weight	Shp	Bending Diagram
A801	56	25'-7"	*	B	
A802	2 Series of 7	25'-8" to 26'-5"		B	
A803	2 Series of 7	24'-9" to 25'-6"		B	
A804	2 Series of 4	26'-7" to 26'-10"		B	
A805	2 Series of 4	24'-5" to 24'-8"		B	
A806	2	13'-4"		S	
A807	2	14'-6"		S	
A808	2	15'-4"		S	
A809	2	16'-6"		S	
A810	2	17'-9"		S	
A811	2	19'-6"		S	
A812	2	21'-3"		S	
A813	2	9'-6"		S	
A814	2	10'-3"		S	
A815	2	11'-3"		S	
A816	2	12'-4"		S	
A817	2	13'-7"		S	
A818	2	14'-10"		S	
A819	2	17'-6"		S	
B501	28	13'-0"		S	
B502	60	15'-6"		S	
B503	2	8'-10"	*	B	
REPLACEMENT BARS					
RE801	1	6'-6"	*	S	
RE501	1	5'-7"	*	S	

* Included with approach slab for payment.

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, indicates the bar size number. For example, A801 is a No. 8 size bar and A501 is a No. 5 size.

REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.

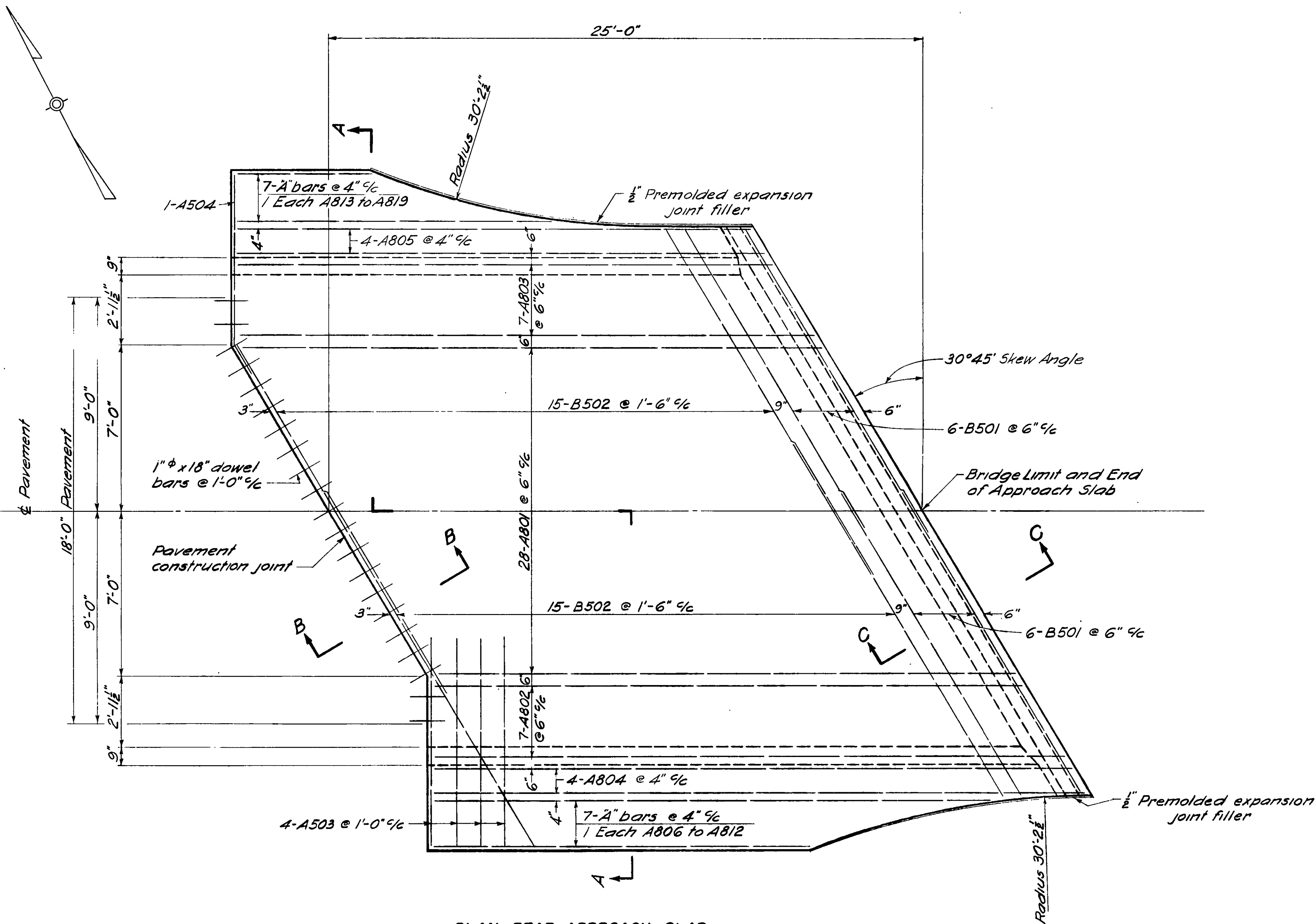
CONCRETE shall be Class "C".

PREMOLDED EXPANSION JOINT FILLER at the edges of the approach slabs shall be included with the approach slabs for payment.

DOWEL BARS are included in the price per Sq Yd. bid for the approach pavement.

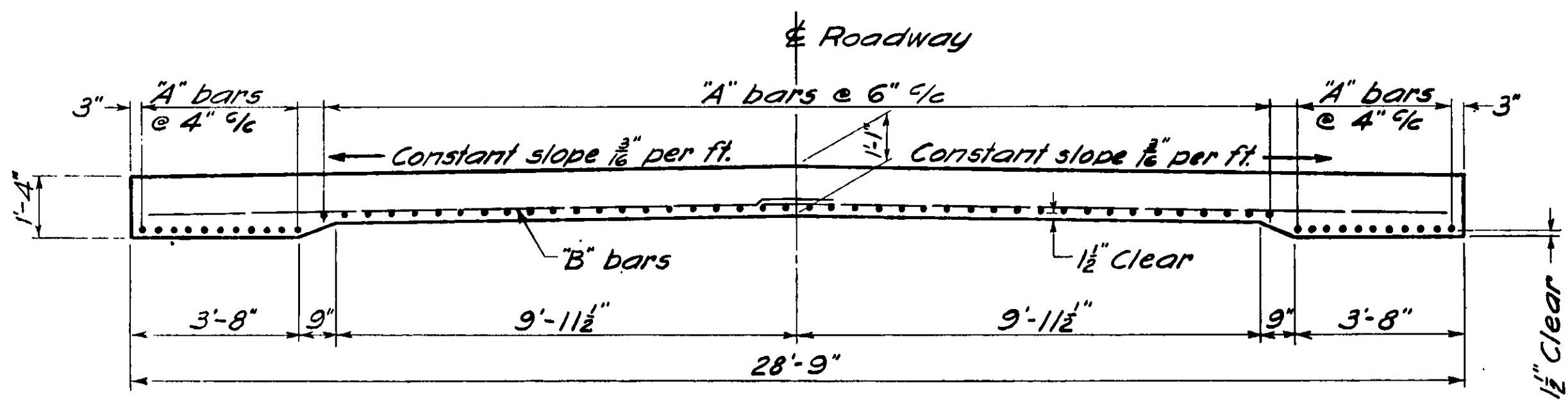
2 APPROACH SLABS: 150 Sq. Yds. Total.

YULE, STICKLEN, JORDAN & MCNEE COLUMBUS ENGINEERS OHIO			
APPROACH SLABS			
BRIDGE NO. MOT-25-0074 US 25 UNDER MIAMISBURG SPRINGBORO RD. MONTGOMERY COUNTY STA. 39 + 39.08			
DESIGNED	DRAWN	TRACED	CHECKED
W.J.W.	H.M.G.	H.M.G.	E.W.T.
REVIEWED	DATE	REVISED	
JCL	8-12-58		

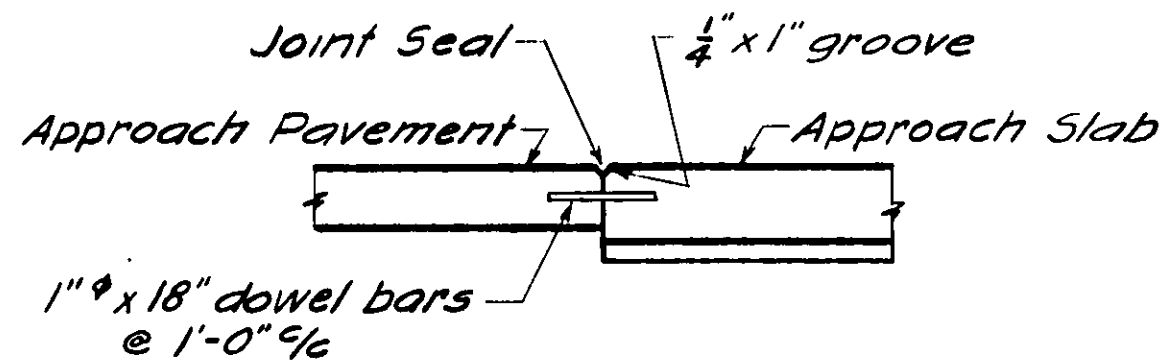


PLAN-REAR APPROACH SLAB

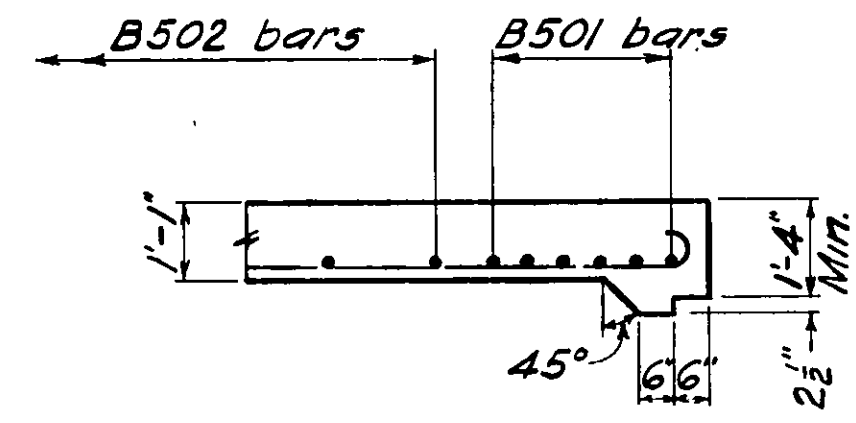
Forward approach slab similar by rotation



SECTION A-A



SECTION B-B



SECTION C-C

REINFORCING STEEL					
2 Approach Slabs					
Mark	No.	Length	Weight	Shp.	Bending Diagram
A801	56	25'-7"	*	B	<p>24'-6" % A801 24'-8" to 26'-5" % A802 22'-7" to 24'-4" % A803 26'-9" to 27'-3" % A804 21'-9" to 22'-3" % A805</p> <p>7'-3" 1'-7" B504</p> <p>* Included with approach slab for payment.</p>
A802	2 series of 7	25'-9" to 27'-6"		B	
A803	2 series of 7	23'-8" to 25'-4"		B	
A804	2 series of 4	27'-10" to 28'-4"		B	
A805	2 series of 4	22'-10" to 23'-4"		B	
A806	2	16'-9"		S	
A807	2	17'-8"		S	
A808	2	18'-9"		S	
A809	2	20'-0"		S	
A810	2	21'-6"		S	
A811	2	22'-8"		S	
A812	2	25'-3"		S	
A813	2	5'-3"		S	
A814	2	6'-3"		S	
A815	2	7'-3"		S	
A816	2	8'-3"		S	
A817	2	9'-7"		S	
A818	2	11'-2"		S	
A819	2	12'-9"		S	
B501	24	14'-8"		S	
B502	60	17'-4"		S	
B503	8	8'-10"		S	
B504	2	8'-10"	*	B	
REPLACEMENT BARS					
RE 801	1	6'-6"	*	S	
RE 501	1	5'-7"	*	S	

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, indicates the bar size number. For example, A801 is a No. 8 size bar and A501 is a No. 5 size.

REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.


CONCRETE shall be Class "C".

PREMOLDED EXPANSION JOINT FILLER at the edges of the approach slabs shall be included with the approach slabs for payment.

DOWEL BARS are included in the price per Sq. Yd. bid for the approach pavement.

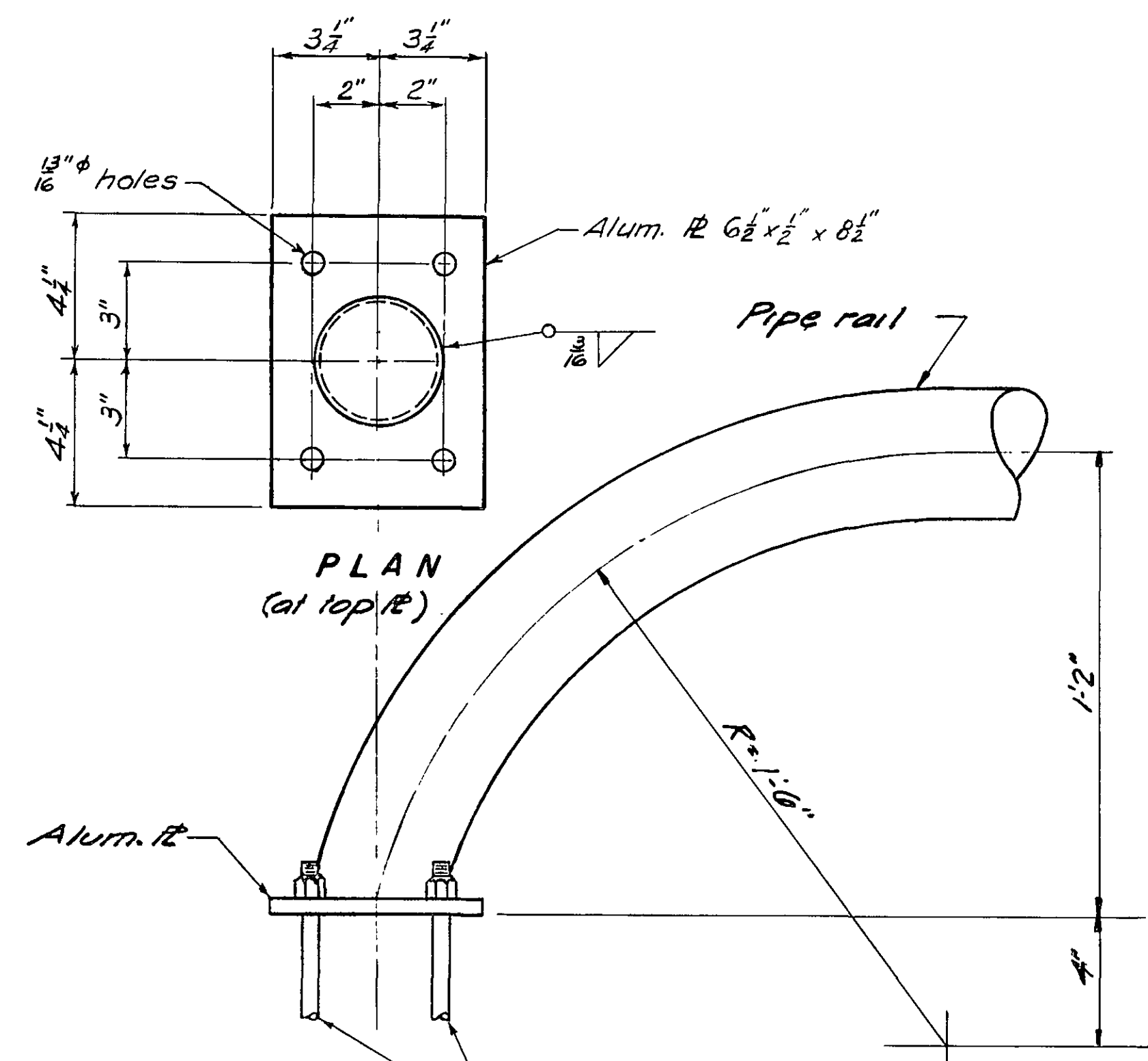
2 APPROACH SLABS: 152 Sq. Yds. Total.

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

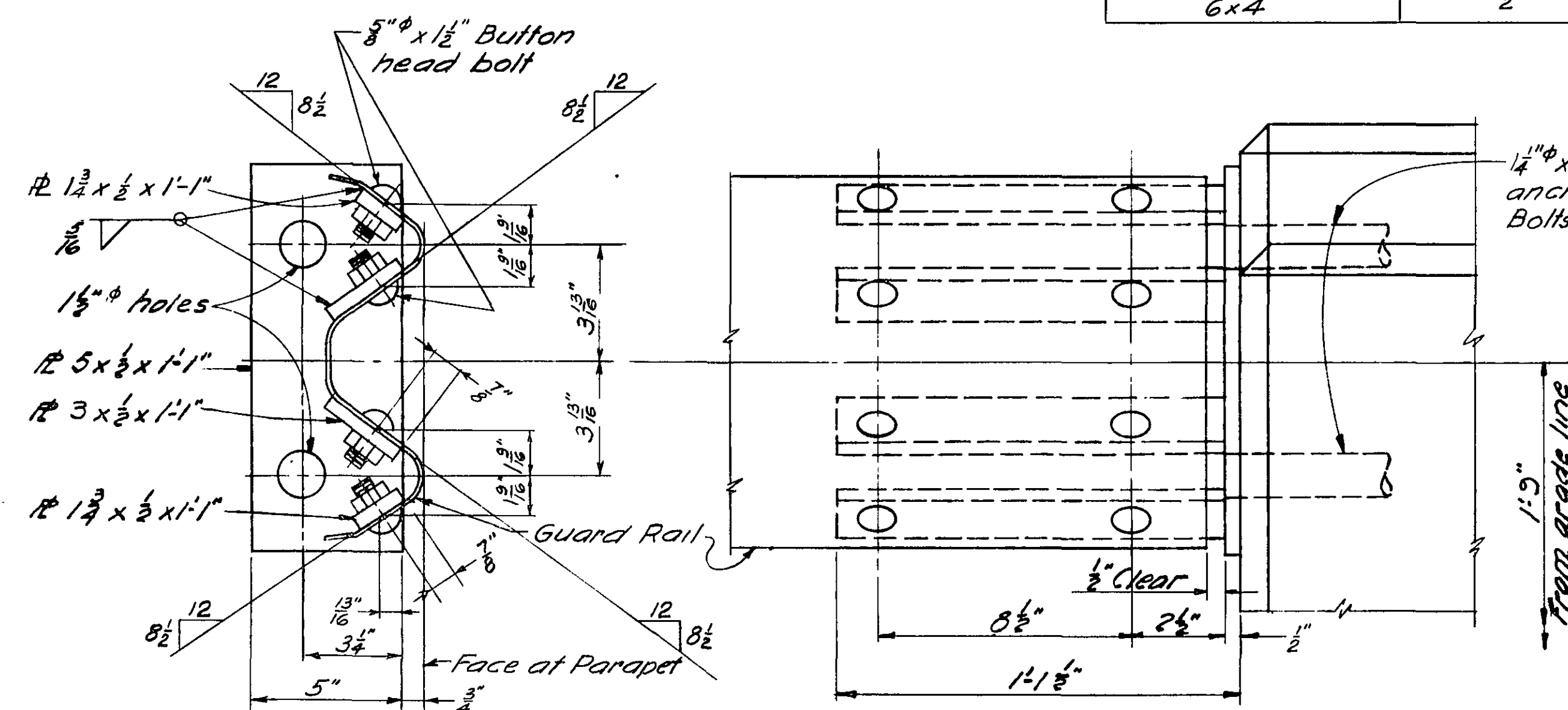


MONTGOMERY COUNTY
MOT-25 - 0.49

ROADWAY END DAM DATA			
Member	Thickness or spacing of member for Bridge Nos.		
	MOT-25-0074	MOT-25-0306	MOT-25-0374 E. & W. Bridges
Main angle 8x4	$\frac{3}{4}"$	$\frac{3}{4}"$	1"
2x $\frac{1}{2}$ x 1'-6" anchor bar spacing	18" sp.	18" sp.	12" sp.
Supporting angle 6x4	$\frac{1}{2}"$	$\frac{1}{2}"$	$\frac{3}{4}"$

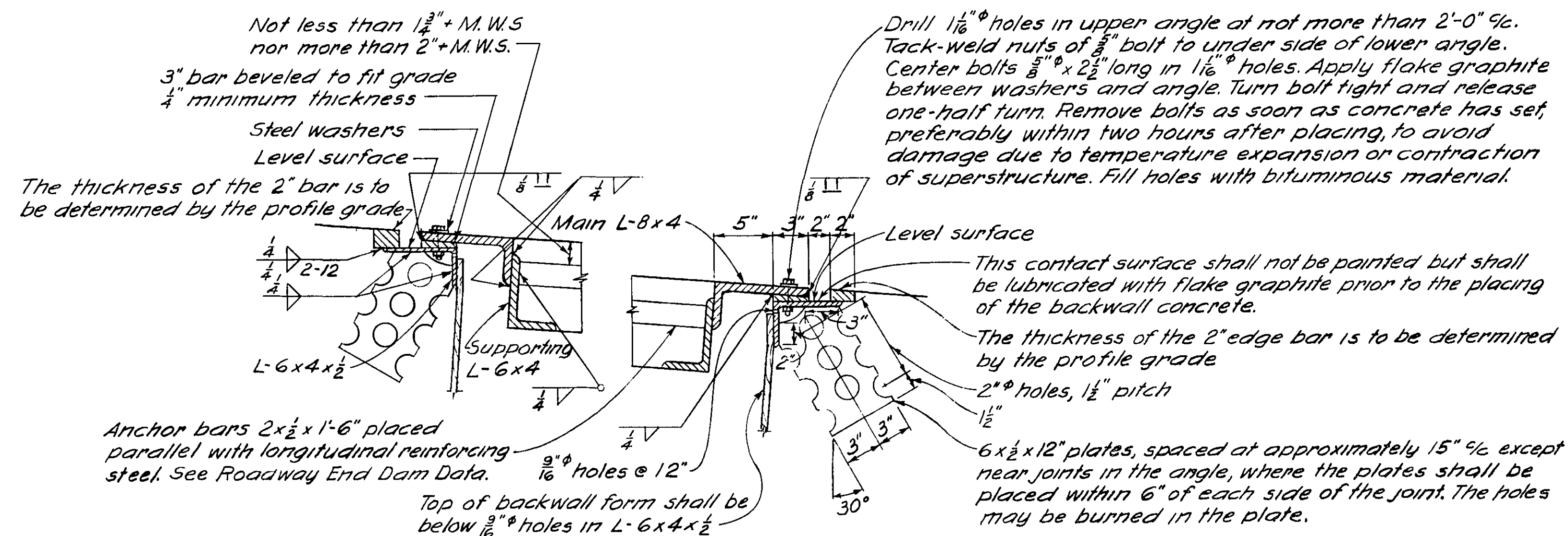


RAILING END DETAIL

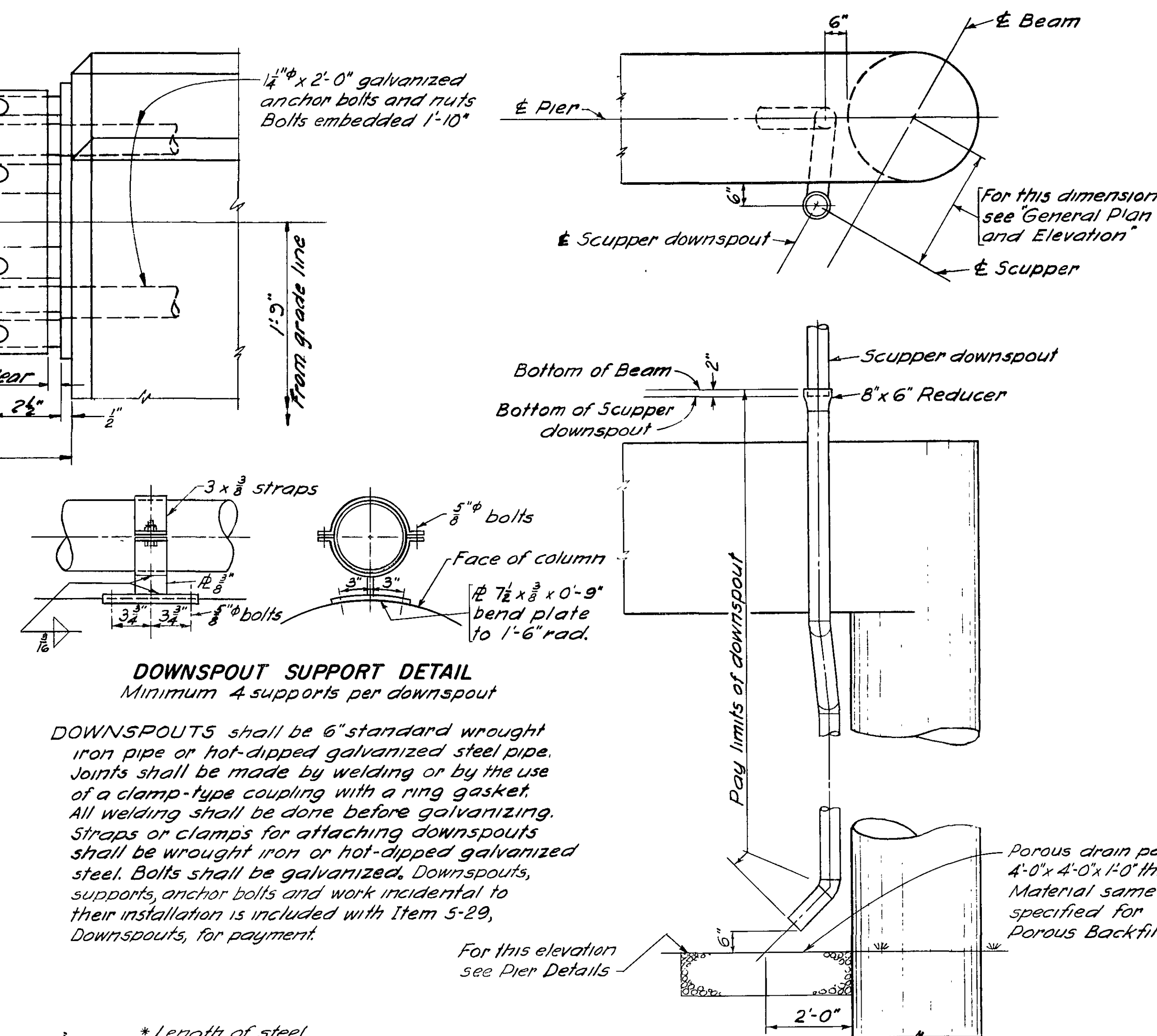


GUARD RAIL CONNECTION DETAIL

As seen from pavement side
Payment is included with Item S-14

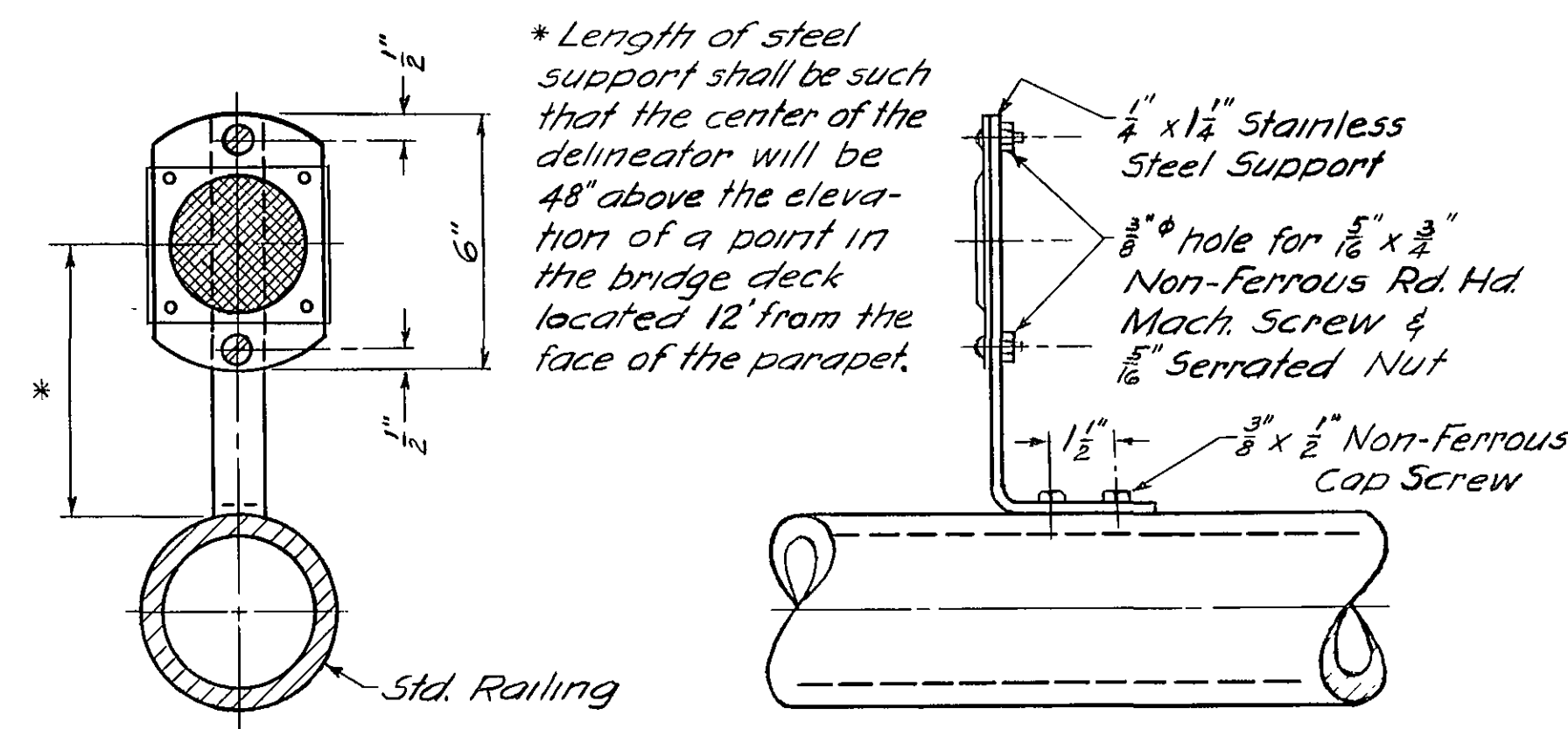


ROADWAY END DAM DETAIL



DOWNSPOUT DETAIL

For locations of downspouts
see General Plan



BRIDGE DELINEATOR

Omit shop coat on all portions of end dam. Portions in contact with steel or with concrete shall not be painted. All other portions shall be cleaned and given the shop coat in the field as well as the two field coats.

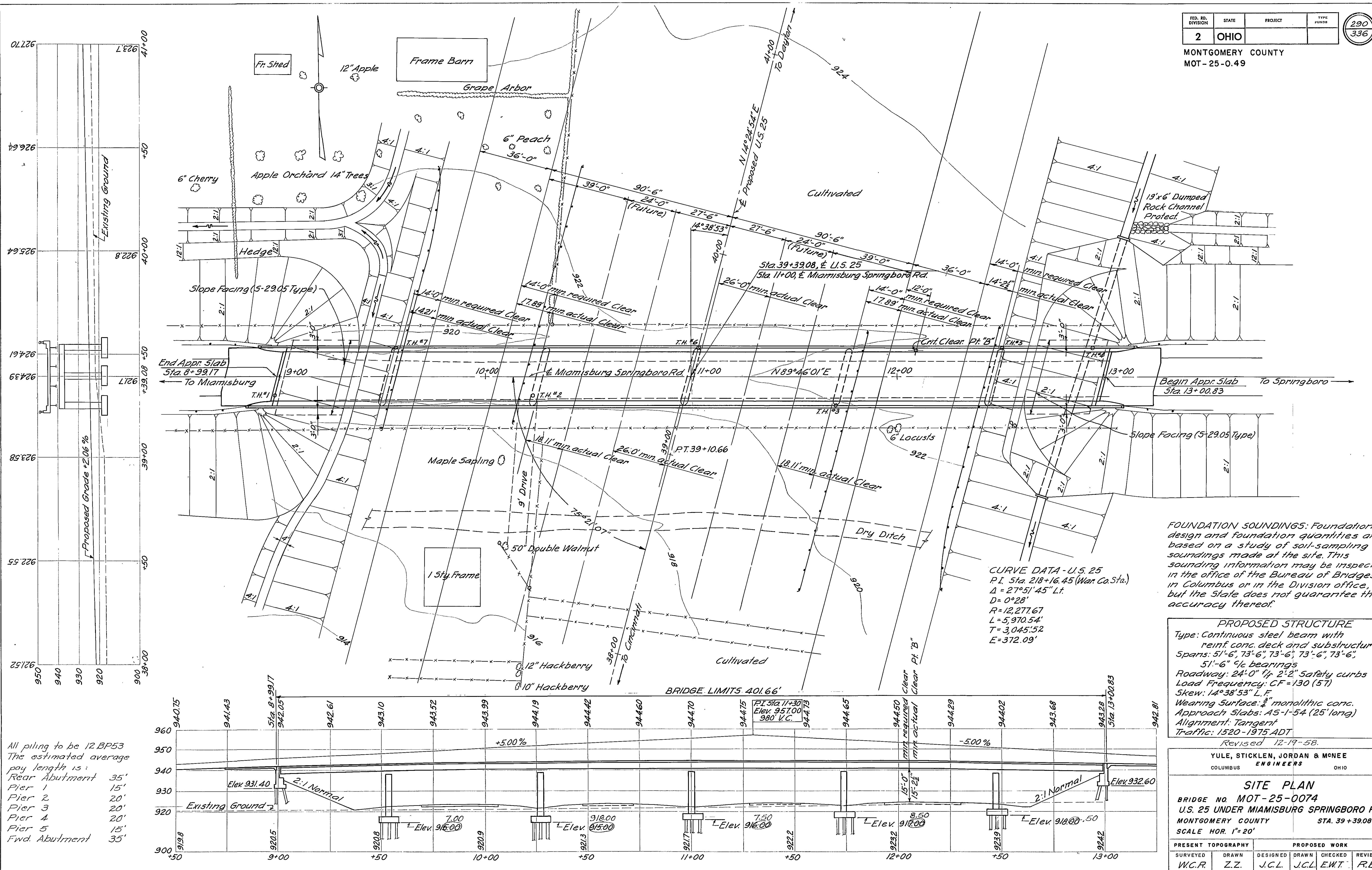
A welded butt joint in the end dam along the centerline of roadway, will be required for that portion of the end dam attached to the superstructure. The portion attached to the backwall shall be placed in segments not less than 6'-0" in length, with one of the joints at the apex of the crown. These shall be closely butted but shall not be welded.

YULE, STICKLEN, JORDAN & McNEE
ENGINEERS
COLUMBUS OHIO

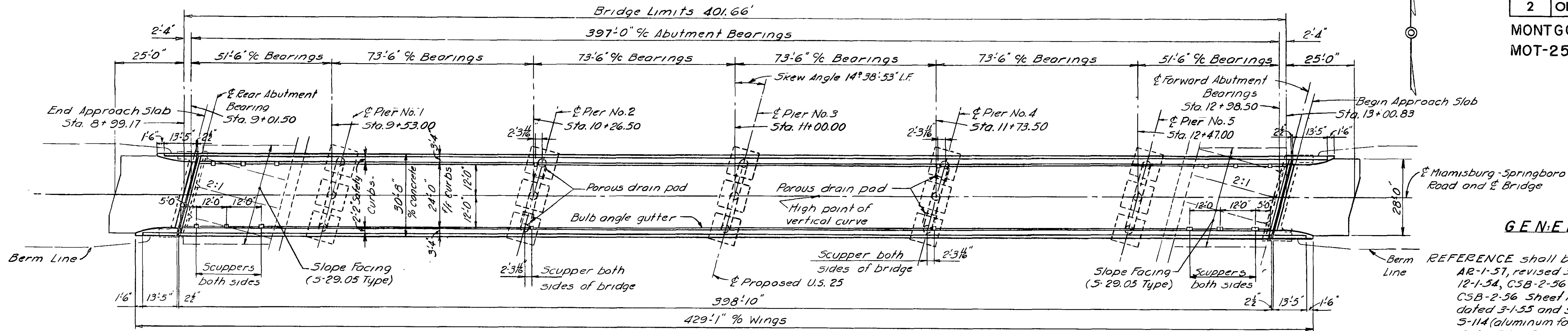
TYPICAL DETAILS

BRIDGE NOS. MOT-25-0074
MOT-25-0306
MOT-25-0374

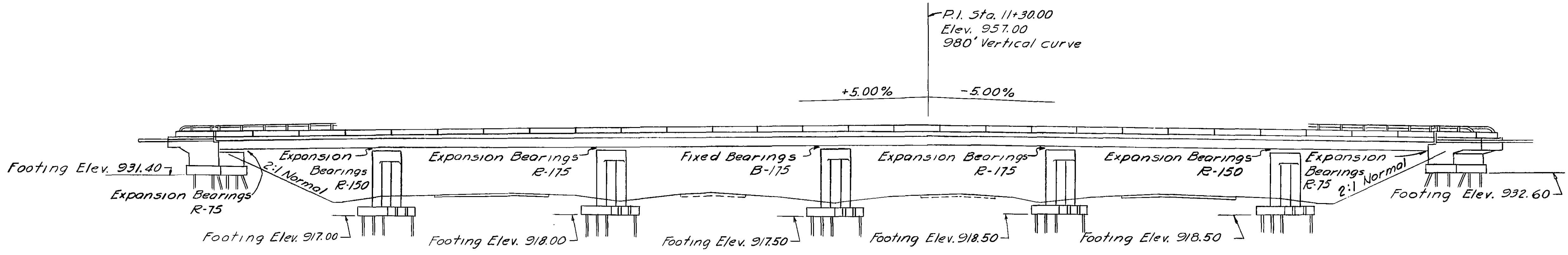
MONTGOMERY COUNTY					U.S. 25	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
A.M.	A.M.	A.M.	E.W.T.	R.B.Y.	10/4/58	



All piling to be 12 BP53
 The estimated average
 pile length is:
 Rear Abutment 35'
 Pier 1 15'
 Pier 2 20'
 Pier 3 20'
 Pier 4 20'
 Pier 5 15'
 Fwd. Abutment 35'



GENERAL PLAN



ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings AR-1-57, revised 3-1-58 (Type A), AS-1-54, revised 12-1-54, CSB-2-56 Sheet No. 2, revised 3-1-58 CSB-2-56 Sheet No. 3, revised 3-1-58, RB-1-55 dated 3-1-55 and supplemental specifications 5-114 (aluminum for bridge railing) revised 8-1-57.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with the revisions thereof, dated 2-21-58.

EXCAVATION QUANTITY includes the removal of fill material for construction of the abutments.

WELDED STEEL: The steel for the 36W160 beams shall conform to ASTM designation A-373. All other structural steel shall conform to either ASTM A-7 (as per Sec. M7.4 (a) of the Construction and Material Specification) or to A-373.

WELDING of structural steel shall be class 'A' except as otherwise shown. Class 'B' welds shown thus . Any welds shown as field welds may, at the option of the Contractor, be made in the shop.

SLOPE FACING (S-29.05 TYPE) shall be provided under the structure of both abutments. The slope facing shall 12" thick and shall extend from the face of the abutment to the flow line of the ditch and transversely to 3 feet outside of the edge of the superstructure.

FOUNDATION BEARING PRESSURE: Abutment footings are designed for a maximum bearing load of 30 tons per pile. Pier footings are designed for a maximum bearing load of 25 tons per pile.

PROCEDURE: The embankments for the abutments shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade before driving piles.

PILES shall be driven "with a hammer of not less than 11,000 ft. lb. per blow", to firm contact with shale. If the length of penetration is approximately equal to the depth to shale according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. 5-18.05 is not less than the following value for a pile hammer of the indicated energy rating.

For the abutment piles
35 tons per pile using an 11,000 ft. lb. hammer
30 " " " " a 15,000 ft. lb. hammer

For the piers
33 tons per pile using an 11,000 ft. lb. hammer
32 " " " " a 15,000 ft. lb. hammer

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

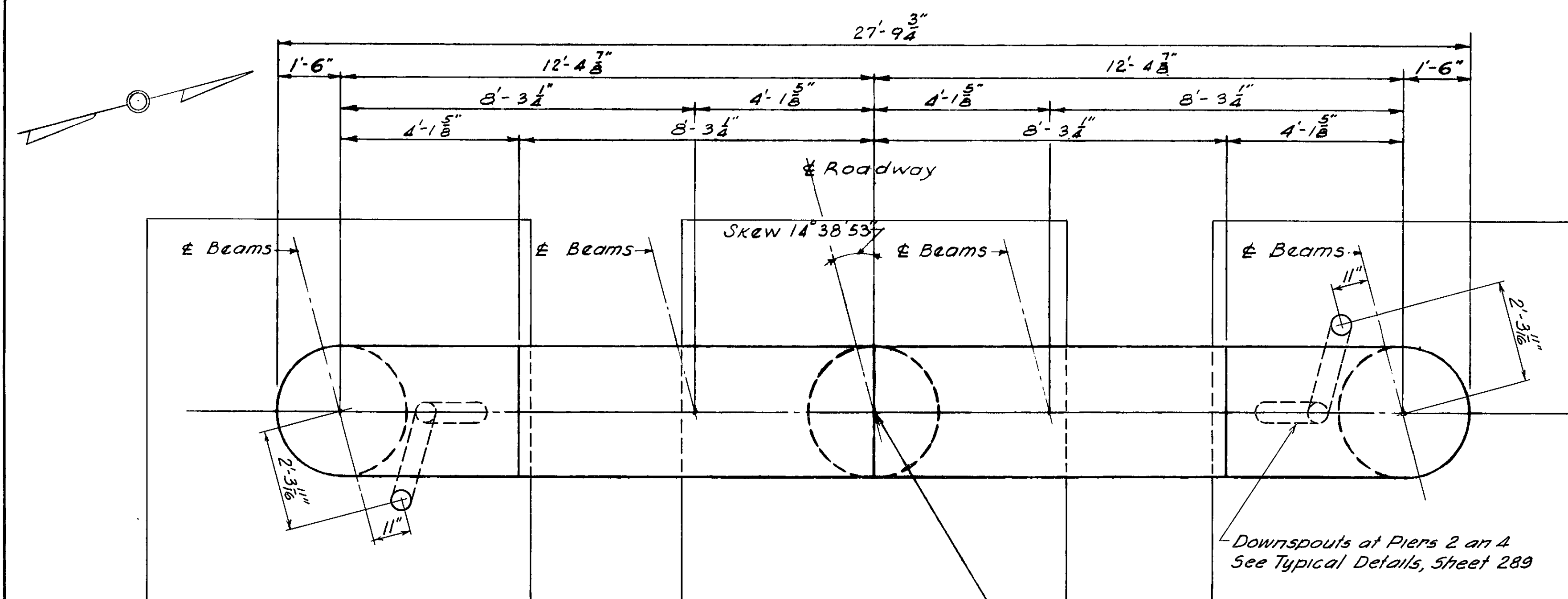
This sheet supersedes Sheet 291.
12-19-58.

ESTIMATED QUANTITIES													
Item	Total	Unit	Description	Super-struct.	Rear Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Forward Abut.	General	
E-2	555	Cu.Yds.	Unclassified Excavation		95	80	65	75	70	75	95		
S-1	381	Cu.Yds.	Class "C" Concrete-Superstructure	381									
S-1	112	Cu.Yds.	Class "C" Concrete-Piers Above Footings			23	22	23	22	22			
S-1	122	Cu.Yds.	Class "E" Concrete-Abutments		61						61		
S-1	135	Cu.Yds.	Class "E" Concrete-Pier Footings			27	27	27	27	27			
S-4	139,985	Lbs.	Reinforcing Steel	101,049	3602	6332	6334	6497	6332	6237	3602		
S-7	316,000	Lbs.	Structural Steel	316,000									
S-8	316,000	Lbs.	Field Painting Of Structural Steel	316,000									
S-14	852	Lin.Ft.	Railing (Aluminum Rail, Supports, & Concrete Parapet)	798	27						27		
S-16	Lump	Sum	First Test Pile 12 BP53									Lump	
S-18	3140	Lin.Ft.	Steel Piles		410	390	520	510	510	400	400		
S-29	94	Cu.Yds.	Slope Facing (S-29.05 Type)		47						47		
S-29	32	Cu.Yds.	Porous Backfill		15		1		1		15		
S-29	80	Lin.Ft.	Downspouts (6" Wrought Iron or Hot Dipped Galv. Steel)				40		40				

YULE, STICKLEN, JORDAN & MCNEE
COLUMBUS ENGINEERS OHIO

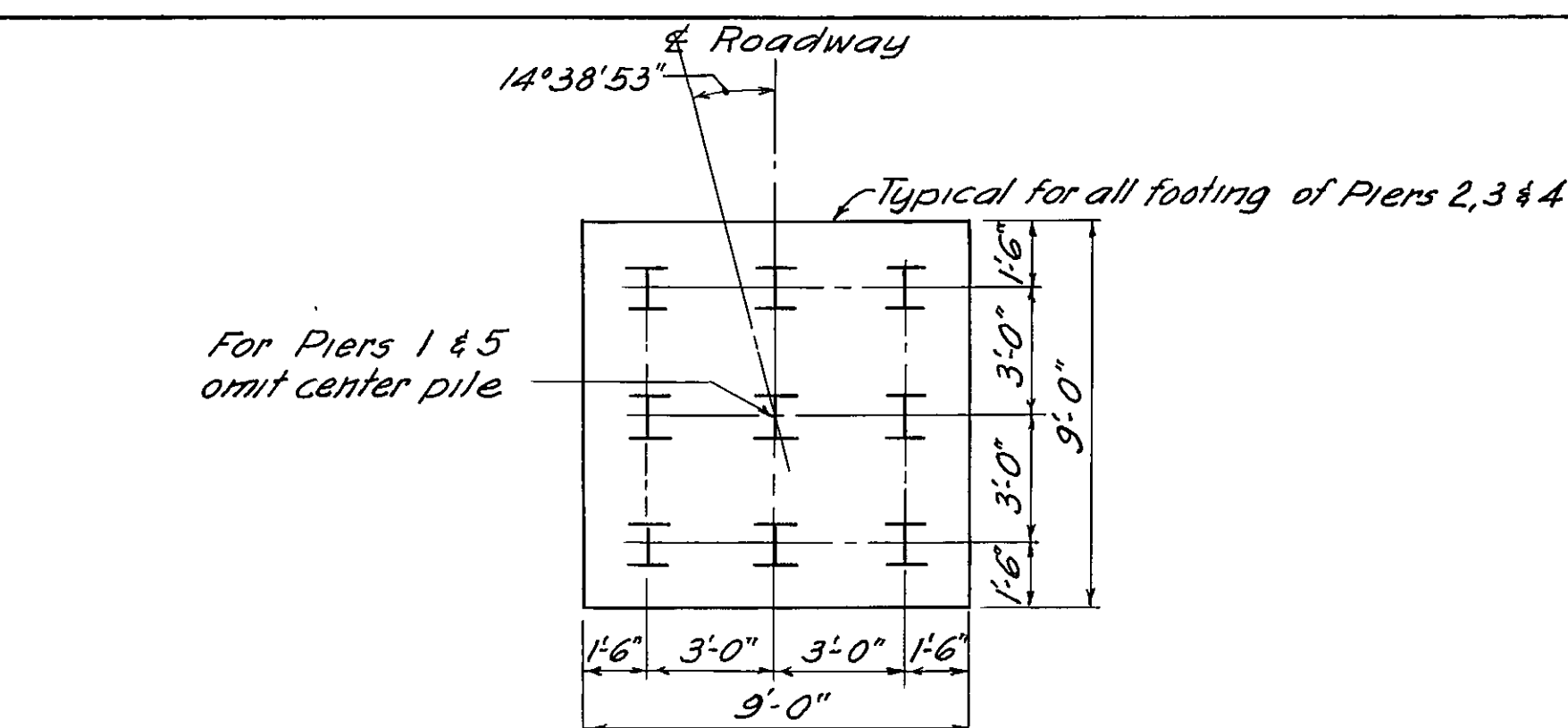
GENERAL PLAN & ELEVATION
ESTIMATED QUANTITIES
BRIDGE NO. MOT- 25-0074
US 25 UNDER MIAMISBURG SPRINGBORO RD.
MONTGOMERY COUNTY STA. 39 + 39.08

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GPK	JMM	HAG	EWI	RBV	12-15-58	

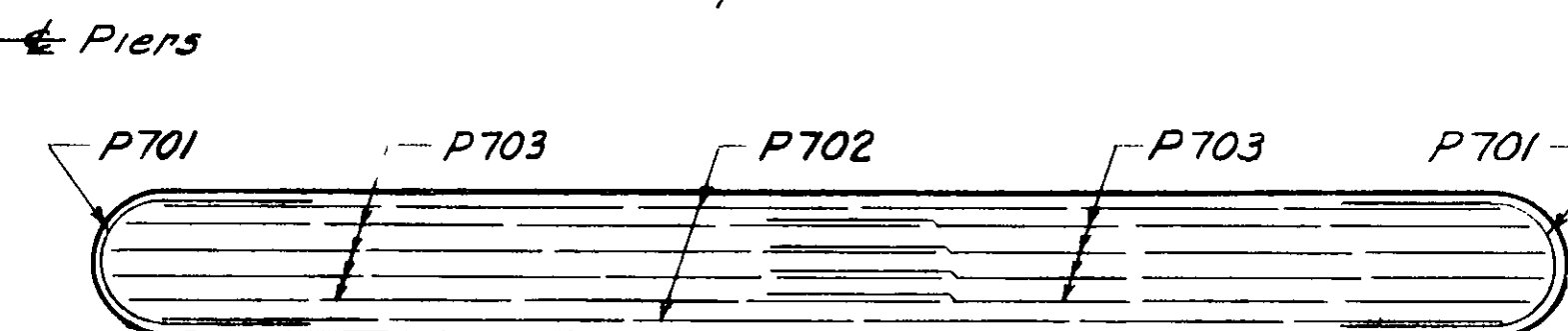


PLAN

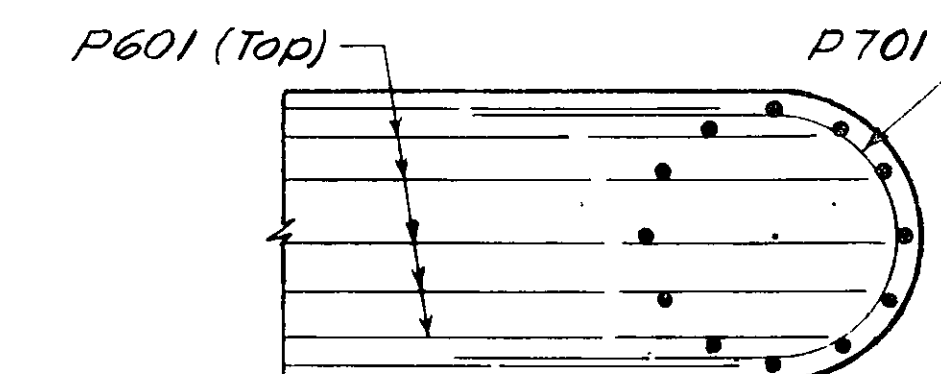
Sta. 9+53.00 Pier 1
Sta. 10+26.50 Pier 2
Sta. 11+00.00 Pier 3
Sta. 11+73.50 Pier 4
Sta. 12+47.00 Pier 5



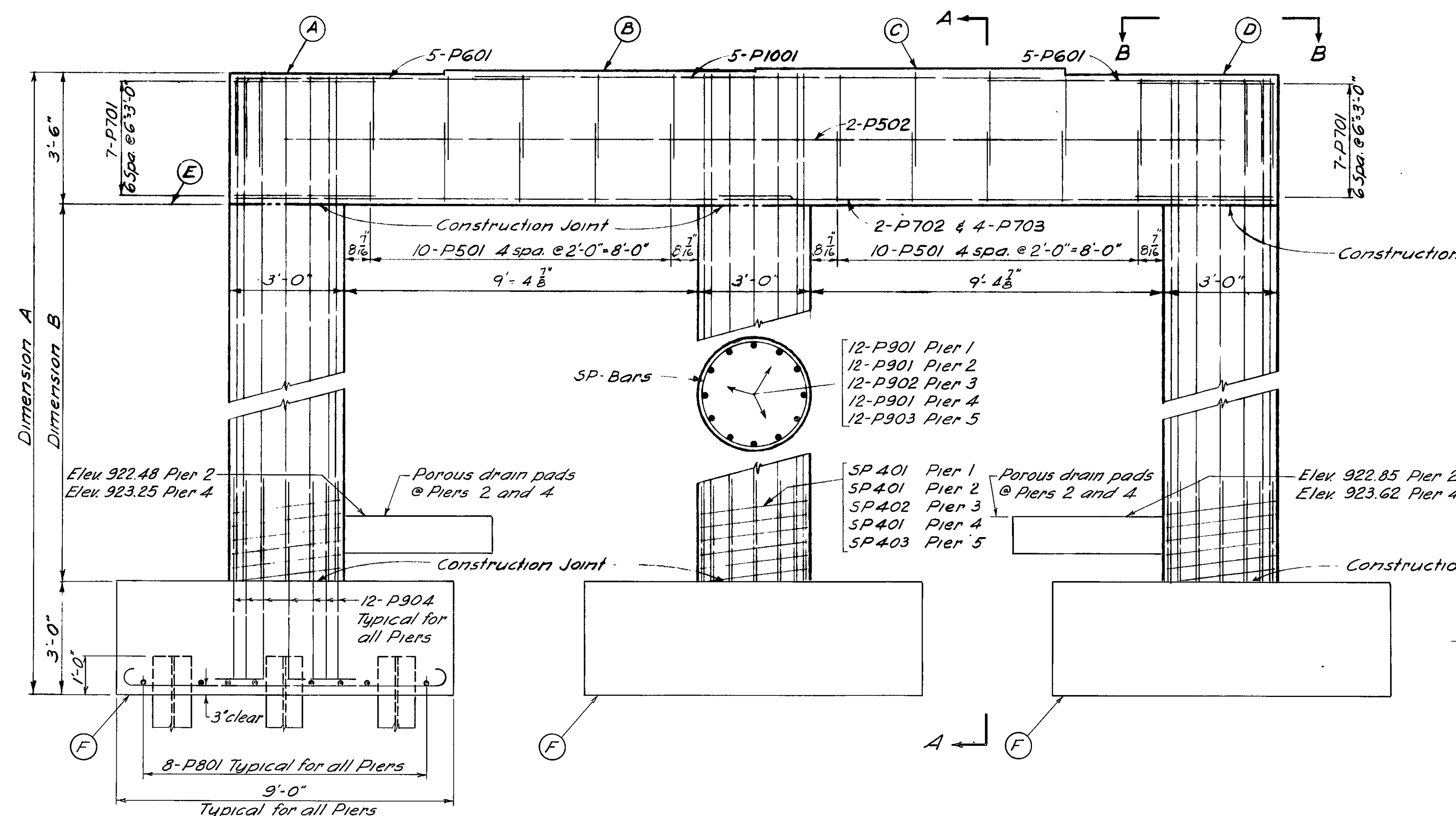
PILING LAYOUT
All piles H 12 BP 53



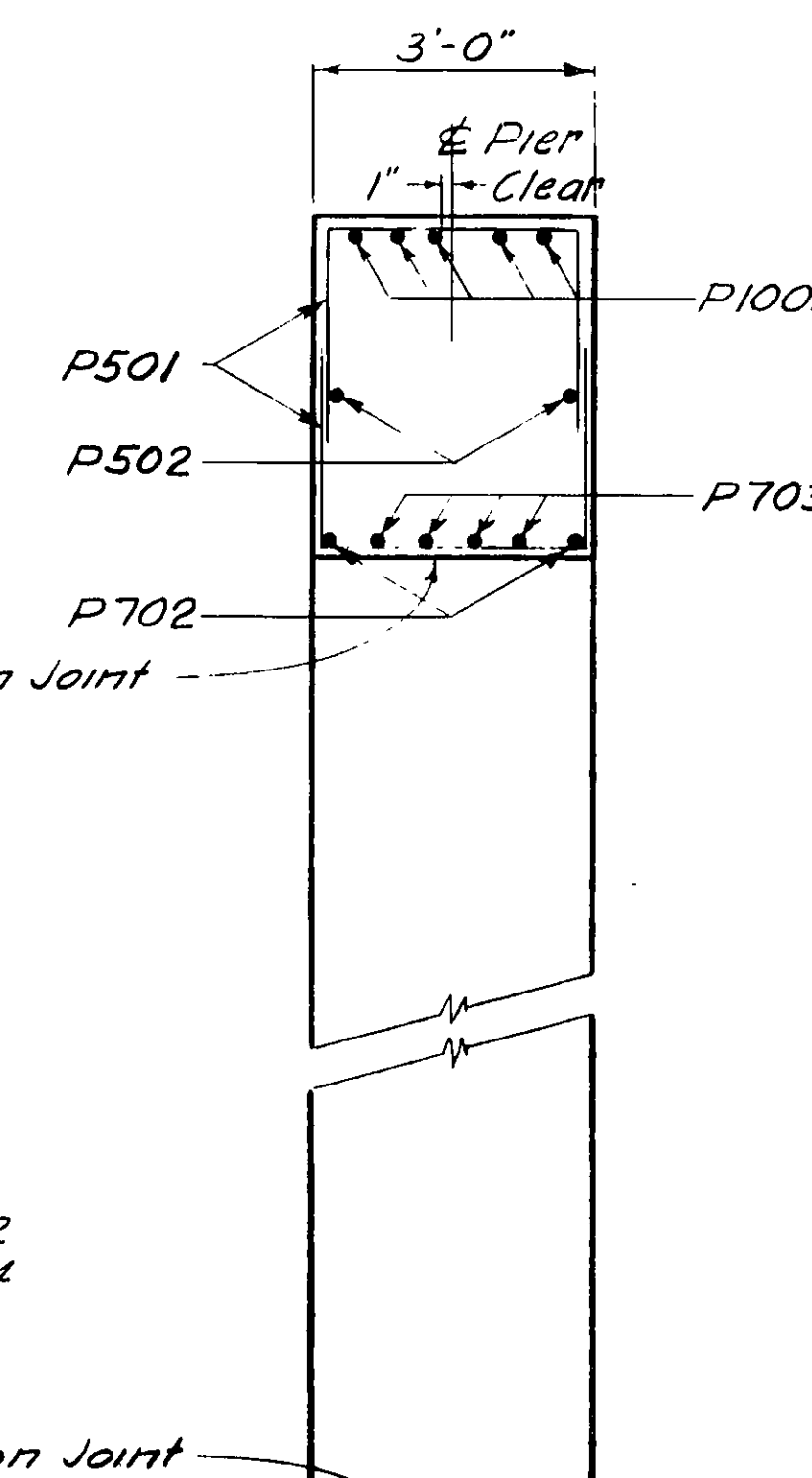
REINFORCING IN BOTTOM OF CAP



VIEW B-B



ELEVATION



SECTION A-A

	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5
Elevation A	938.05	938.91	939.54	939.47	939.05
Elevation B	938.22	939.12	939.67	939.59	939.15
Elevation C	938.25	939.14	939.68	939.58	939.12
Elevation D	938.17	939.04	939.56	939.44	938.97
Elevation E	934.55	935.47	936.04	935.97	935.55
Elevation F	917.00	918.00	917.50	918.50	918.50
Dimension A	21'-0 5/8"	20'-11 3/8"	22'-0 5/8"	20'-11 3/8"	20'-6 5/8"
Dimension B	14'-6 5/8"	14'-5 5/8"	15'-6 1/2"	14'-5 5/8"	14'-0 5/8"

REINFORCING STEEL in pier caps shall be placed so that it will not interfere with anchor bolts.

This sheet supersedes Sheet 234.
12-19-58.

YULE, STICKLEN, JORDAN & McNEE COLUMBUS ENGINEERS OHIO				
PIER DETAILS BRIDGE NO. MOT-25-0074 US 25 UNDER MIAMISBURG SPRINGBORO RD. MONTGOMERY COUNTY STA. 39+39.08				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED
CPT	A.M.	A.M.	E.W.T.	RBY 12-15-58

For spacing of S502 bars, see
Part Plan of Abutments, Sheet 296

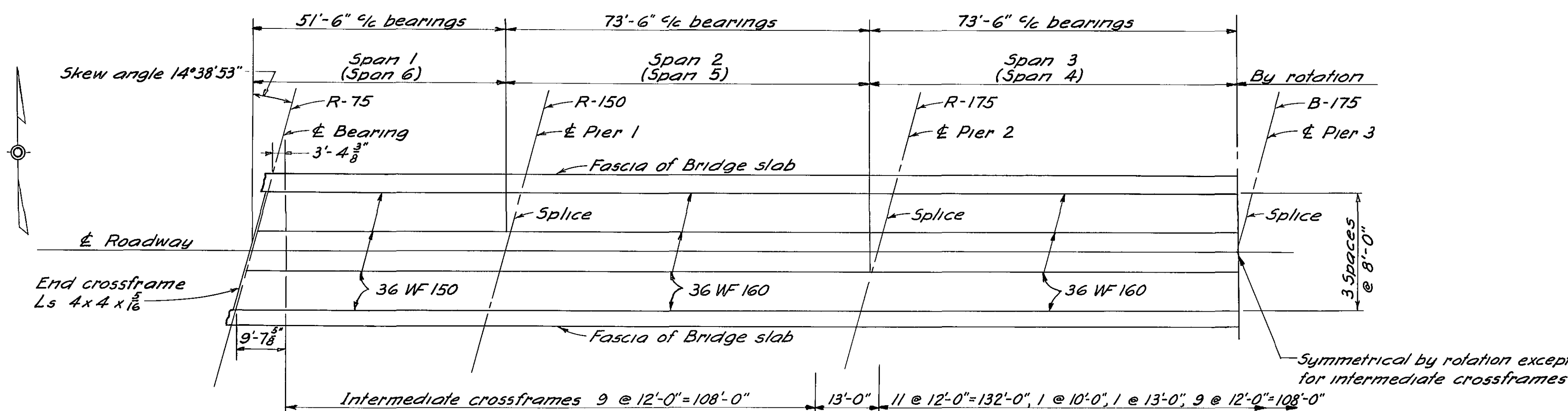
Concrete above this
construction joint
included with railing
for payment

NOTE: For bulb angle
gutter support, scupper
and curb plate details, see
Standard Drawing
CSB-2-56 Sheet 3,
revised 3-1-58.

All longitudinal bars are
S602, except as otherwise
noted. Lap S602 bars 1'-11" min.

*Slab thickness over the beams is $7\frac{3}{4}"$ for
intermediate spans and
 $7\frac{1}{2}"$ for end spans.

HALF TRANSVERSE SECTION



HALF STEEL FRAMING PLAN

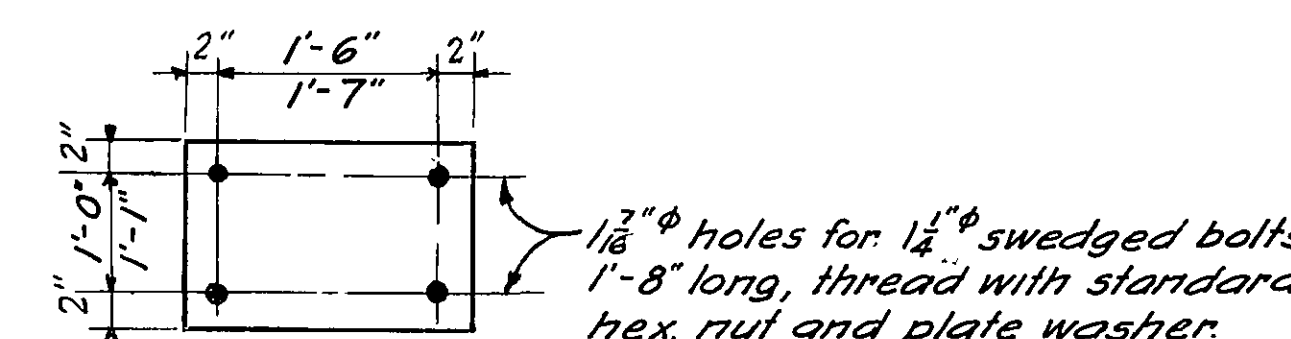
CONCRETE DECK PLACING: In order to facilitate water
curing of the concrete of the deck slab, the placing of concrete
shall progress up grade. The slab may be placed in sections,
between transverse construction joints which are normal to
the centerline of bridge and are located near the center
of any span.

For details of end crossframes, beam cut-off at backwall and
welded built joint in superstructure end dam angles, see Standard
Drawing No. CSB-2-56 Sheet 2, revised 3-1-58.
For details of roadway end dam see Typical Detail Sheet 289.
For details of Aluminum railing posts, see Standard Drawing
No. AR-1-57, revised 3-1-58, Type A.

DEFLECTION AND CAMBER

Outside beams						
	Span 1	Span 2	Span 3	Span 4	Span 5	Span 6
Deflection due to weight of steel	0"	$\frac{1}{16}"$	$\frac{1}{16}"$	$\frac{1}{16}"$	$\frac{1}{16}"$	0"
Deflection due to remaining dead load	$\frac{3}{16}"$	$\frac{7}{16}"$	$\frac{5}{16}"$	$\frac{5}{16}"$	$\frac{7}{16}"$	$\frac{3}{16}"$
Convexity required for vertical curve	$\frac{3}{8}"$	$\frac{13}{16}"$	$\frac{13}{16}"$	$\frac{13}{16}"$	$\frac{13}{16}"$	$\frac{3}{8}"$
Sum of deflection and convexity	$\frac{9}{16}"$	$\frac{11}{16}"$	$\frac{11}{16}"$	$\frac{11}{16}"$	$\frac{11}{16}"$	$\frac{9}{16}"$
Required camber (place mill camber up)	0"	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	0"

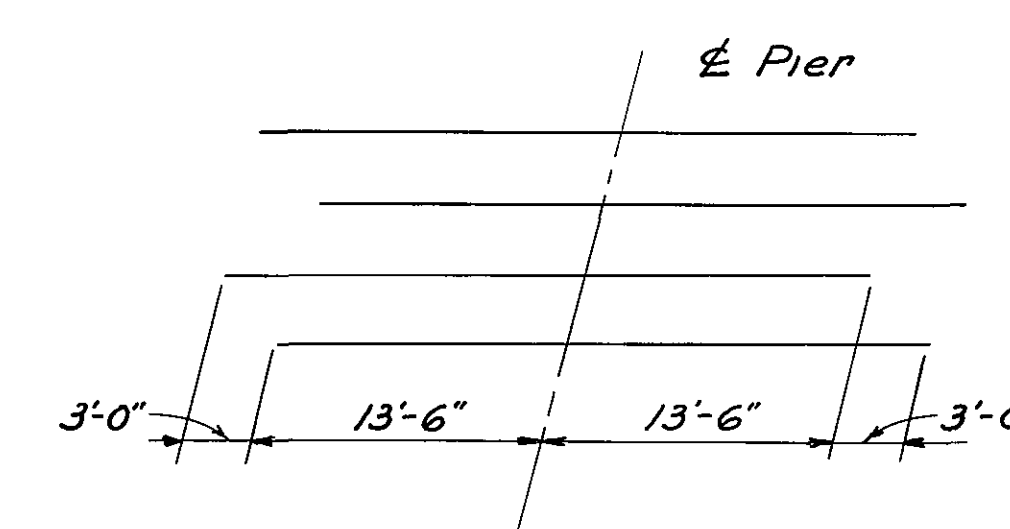
Inside beams						
	Span 1	Span 2	Span 3	Span 4	Span 5	Span 6
Deflection due to weight of steel	0"	$\frac{1}{16}"$	$\frac{1}{16}"$	$\frac{1}{16}"$	$\frac{1}{16}"$	0"
Deflection due to remaining dead load	$\frac{1}{8}"$	$\frac{3}{8}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{3}{8}"$	$\frac{1}{8}"$
Convexity required for vertical curve	$\frac{3}{8}"$	$\frac{3}{4}"$	$\frac{13}{16}"$	$\frac{13}{16}"$	$\frac{3}{4}"$	$\frac{3}{8}"$
Sum of deflection and convexity	$\frac{1}{2}"$	$\frac{11}{16}"$	$\frac{11}{16}"$	$\frac{11}{16}"$	$\frac{11}{16}"$	$\frac{1}{2}"$
Required camber (place mill camber up)	0"	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	0"



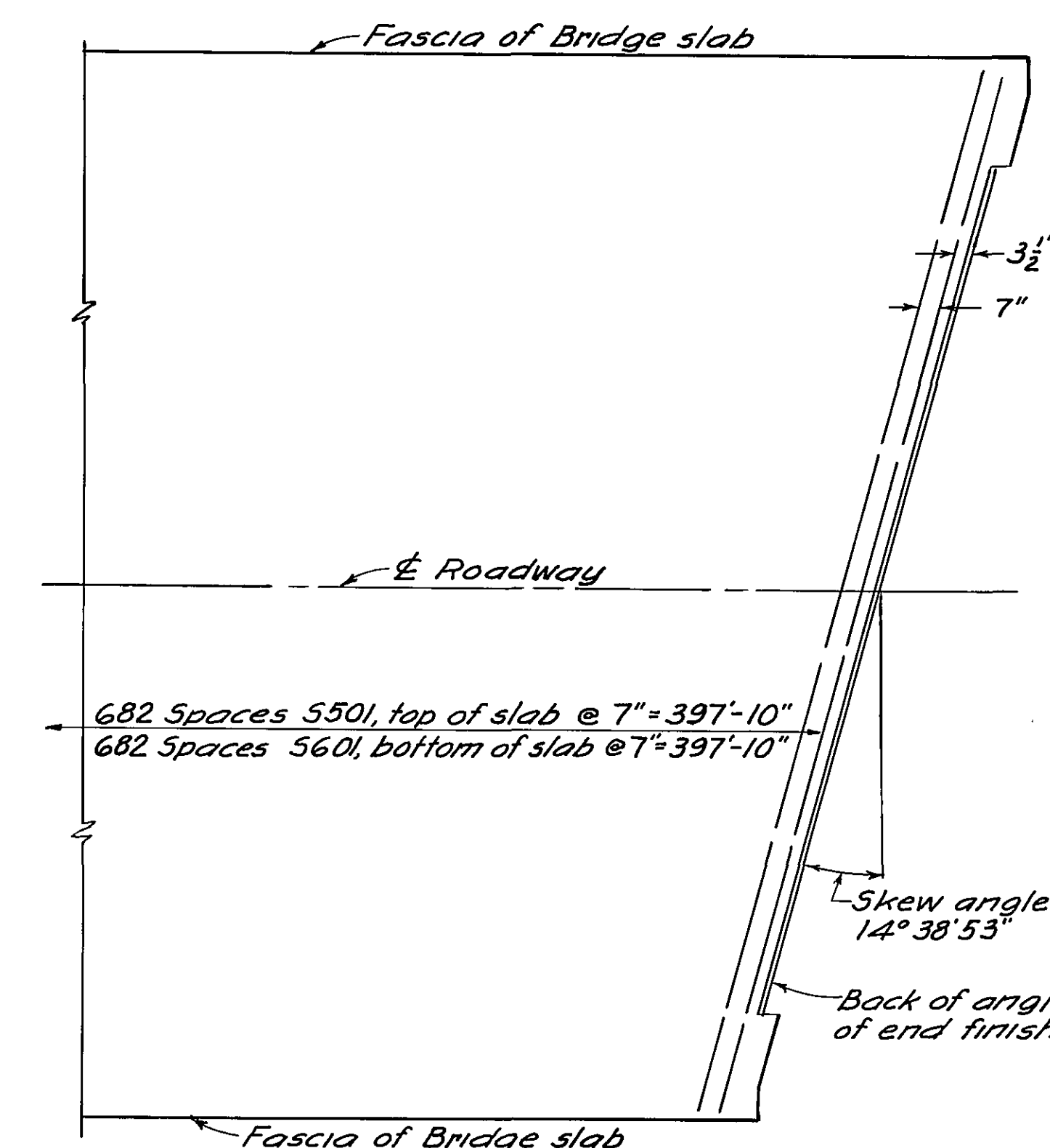
ROCKER BED-PLATE DETAILS

For details of anchor bolts see Standard
Drawing RB-1-55, dated 3-1-55

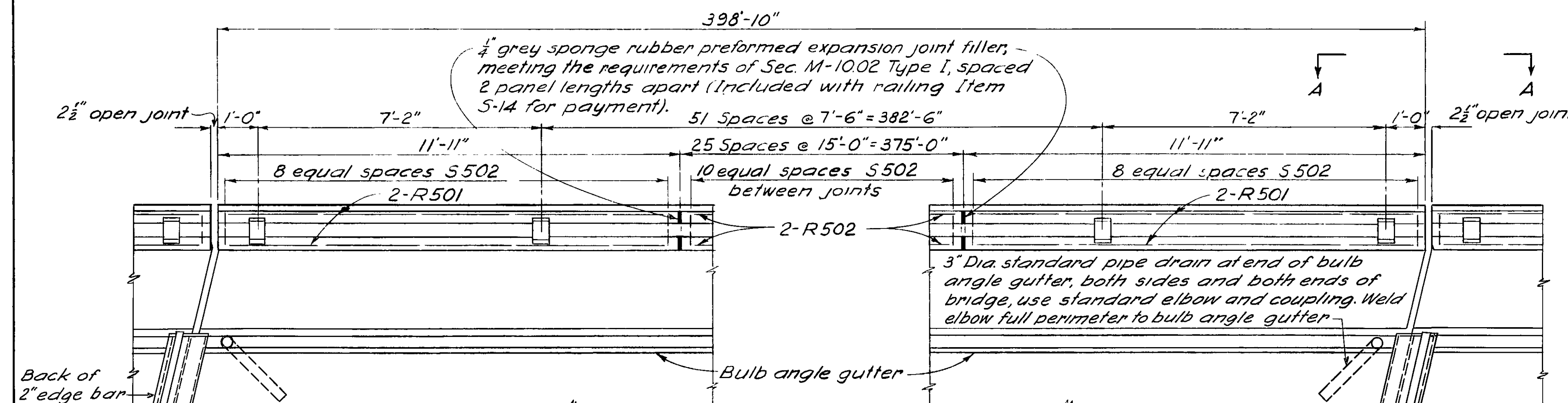
BRIDGE ROADWAY CROWN



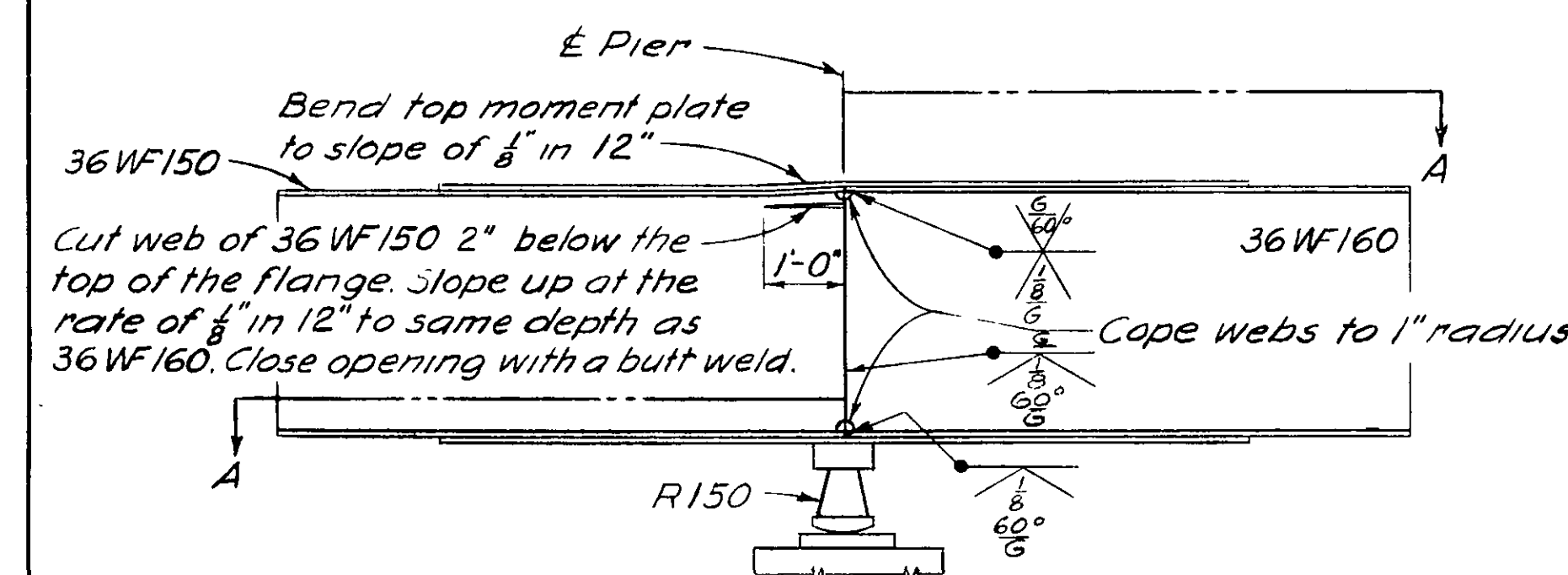
STAGGER OF S603 BARS OVER PIERS



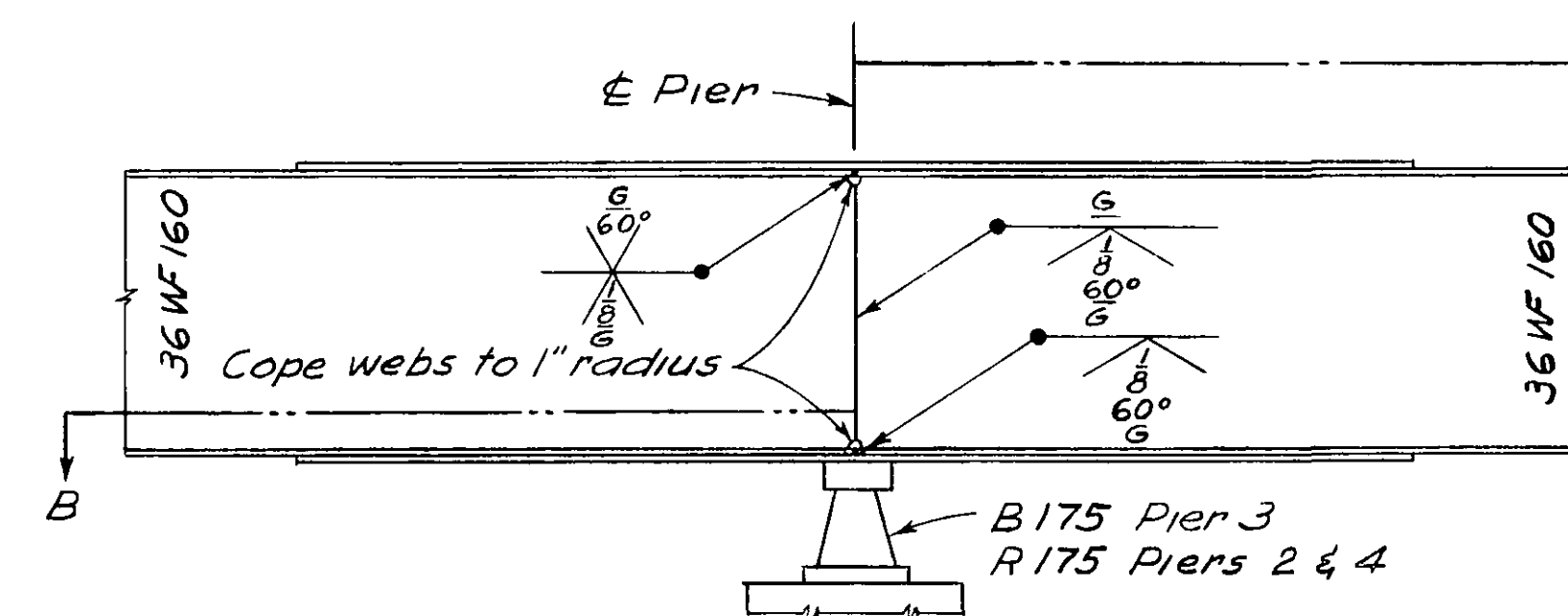
REINFORCING STEEL LAYOUT
AT END OF SUPERSTRUCTURE



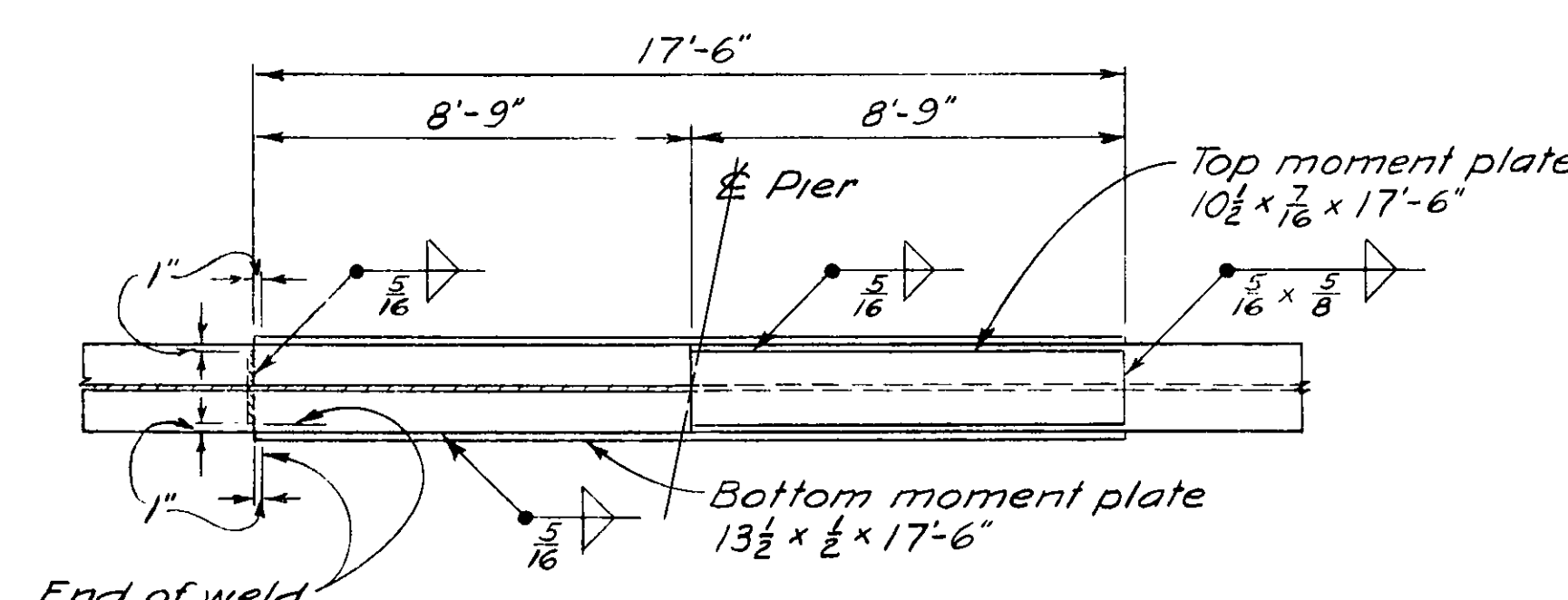
PART PLAN AT ABUTMENTS



ELEVATION

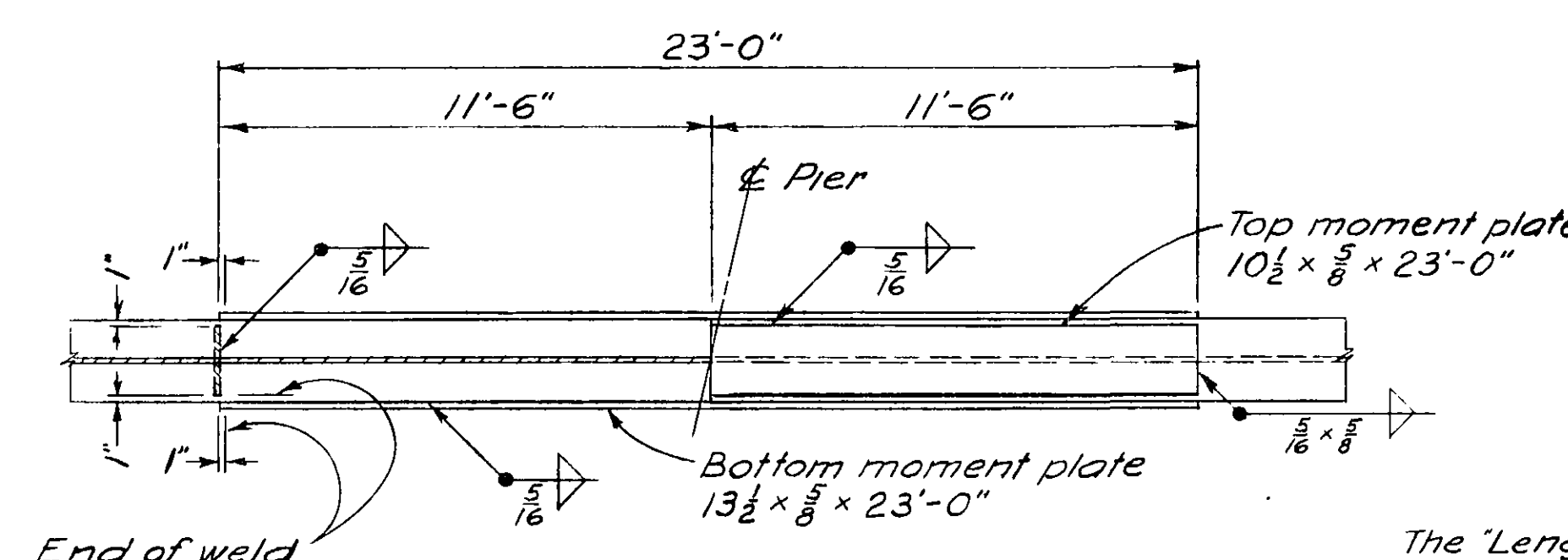


ELEVATION



SECTION A-A

BEAM SPLICE DETAILS AT PIER 1 AS SHOWN
AT PIER 5 OPPOSITE HAND

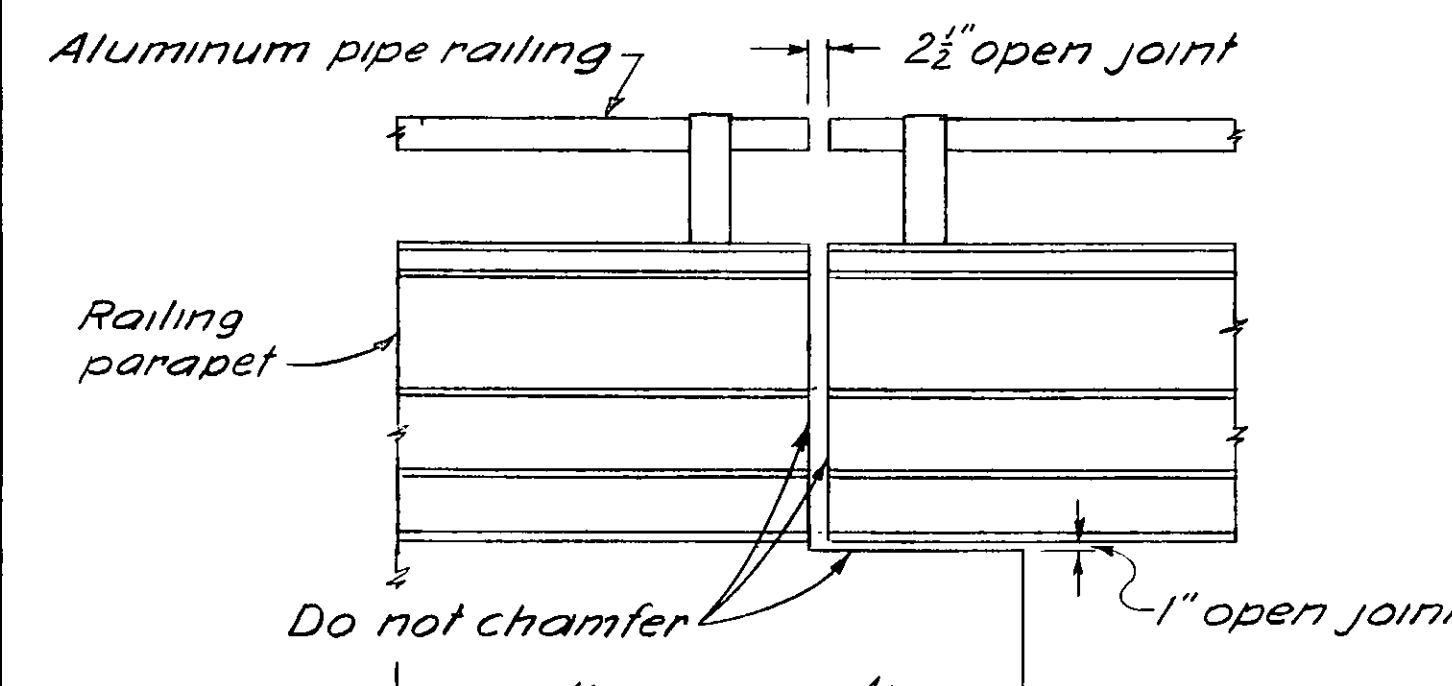


SECTION B-B

BEAM SPLICE DETAILS AT PIER 2, 3 AND 4

BEAM SPLICE WELDING PROCEDURE

1. Raise end of beam at fourth pier 2 1/4".
2. Butt-weld beam flanges and web at third pier using following sequence: make one pass on each flange, then one on web; repeat until welds are completed.
3. Weld top and bottom flange moment plates at third pier.
4. Lower end of beam at fourth pier.
5. Raise ends of beams at first and fifth piers 1 5/8".
6. Make splice at second and fourth piers in the same manner.
7. Lower ends of beams at first and fifth piers.
8. Raise ends of beams at abutments 3/4".
9. Make splice at first and fifth piers in the same manner.



VIEW A - A

REINFORCING STEEL LIST									
Mark	No.	Length	Weight	Shp.	Bending Diagram				
Abutments					Piers				
A501	10	29'-0"	302 S		7'-2" ±	A608	3'-5" ±		
A502	52	6'-9"	367 B		14'-6" ±	A610		A505	
A503	62	2'-7"	167 S		17'-7" ±	A616			
A504	6	30'-8"	192 S						
A505	58	4'-5"	286 B						
A506	4	30'-0"	125 S						
A507	8	15'-0"	125 S						
A508	16	5'-1"	84 B						
A509	16	6'-2"	103 S						
A510	32	7'-6"	250 S						
A511	6	9'-5"	59 S						
A512	6	8'-11"	56 S						
A513	12	7'-6"	94 B						
A514	4	16'-9"	70 S						
A515	4	16'-6"	69 S						
A516	20	7'-2"	149 B						
A517	4	8'-2"	34 B						
A518	4	8'-8"	36 B						
A519	88	4'-5"	405 B						
A520	16	3'-1"	51 B						
A521	8	2'-5"	20 B						
A522	56	4'-8"	273 B						
A523	56	6'-5"	375 B						
A524	28	4'-2"	122 B						
A601	52	15'-3"	1191 B						
A602	40	5'-0"	300 S						
A603	12	12'-0"	216 B						
A604	20	5'-4"	161 B						
A605	20	7'-9"	233 S						
A606	6	7'-5"	67 S						
A607	8	6'-2"	75 S						
A608	2	7'-10"	24 B						
A609	6	12'-9"	115 S						
A610	6	15'-2"	137 B						
A611	8	14'-7"	175 S						
A612	4	14'-3"	86 S						
A613	2	12'-9"	38 S						
A614	4	15'-4"	92 S						
A615	2	13'-8"	41 S						
A616	16	18'-3"	439 B						
P501	100	7'-6"	782 B						
P502	10	24'-10"	259 S						
P601	50	9'-8"	726 B						
P701	70	8'-3"	1180 B						
P702	10	24'-10"	508 S						
P703	40	14'-11"	1220 S						
P801	240	10'-8"	6835 B						
P901	108	17'-4"	6363 S						
P902	36	18'-4"	2244 S						
P903	36	16'-10"	2060 S						
P904	180	6'-6"	3978 B						
P1001	25	14'-0"	1506 S						
Superstructure					Railing				
S501	683	31'-0"	22083 S						
S502	586	4'-8"	2852 B						
S503	586	2'-10"	1732 S						
S504	1172	2'-3"	2750 B						
S601	683	31'-0"	31802 S						
S602	611	38'-0"	34873 S						
S603	110	30'-0"	4957 S						
Replacement bars					Spiral Reinforcing List				
RE1001	1	7'-2"			Mark	No.	Core Dia. % Spiral	Length	Pitch
RE901	1	6'-10"							No Turns
RE801	1	6'-6"							Weight
RE701	1	6'-2"							
RE601	4	5'-11"							
RE501	2	5'-7"							
RE401	1	5'-3"							
SP401	9	32"	14'-6 1/2"	4 1/2"	42	2439			
SP402	3	32"	15'-6 1/2"	4 1/2"	45	855			
SP403	3	32"	14'-0 1/2"	4 1/2"	40	777			

The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the underside of the pier cap.
The "No. of Turns" shown in the steel list for the spiral bars is the "Length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number.
Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 5-4.
1 1/2 closed coils shall be provided at the end of each spiral unit.
Four steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four digits are used, indicates the bar size number. For example, P901 is a No. 9 size bar and No. 1001 is a No. 10 size bar.
REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.

*Included with railing for payment.

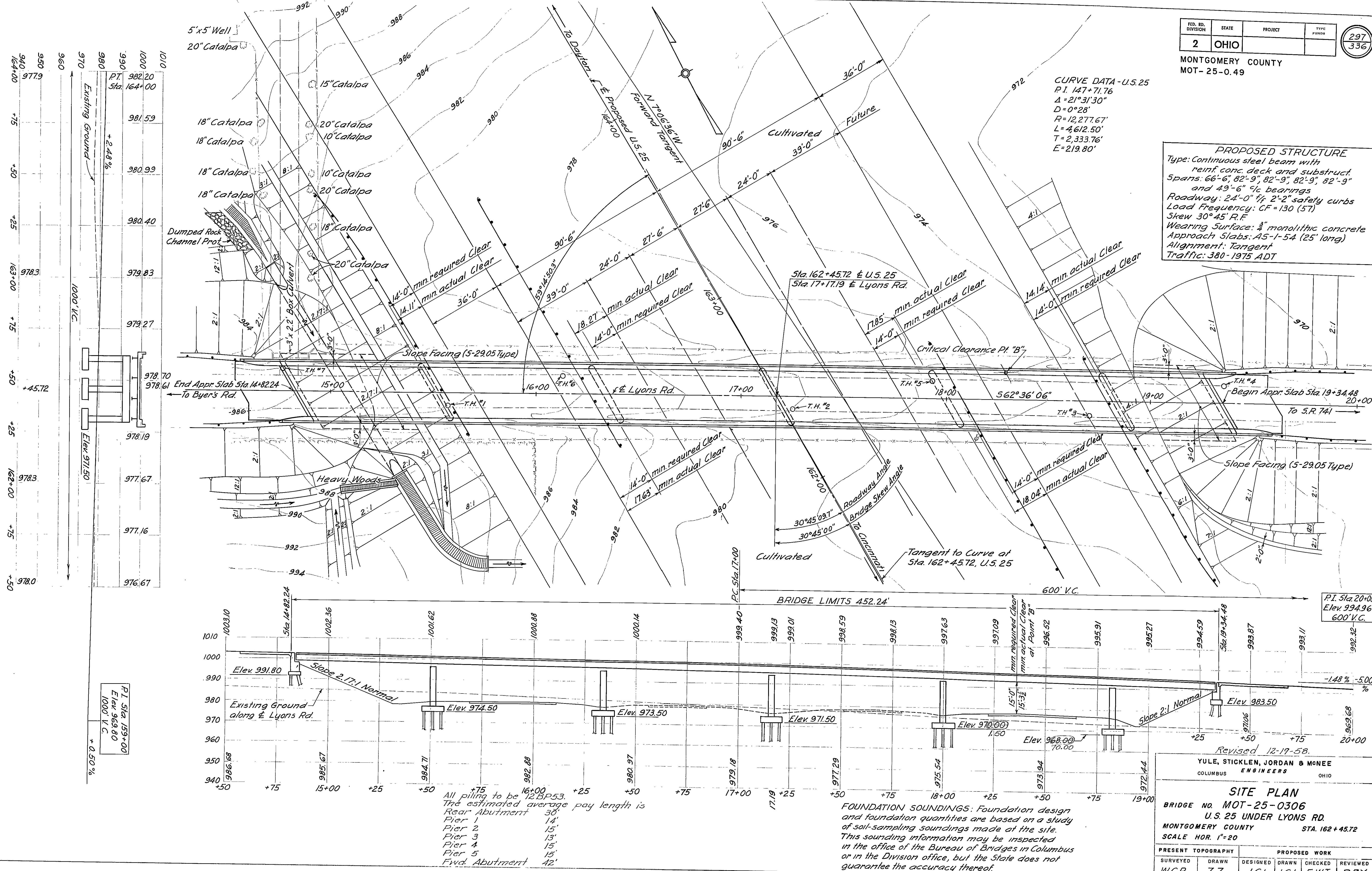
This sheet supersedes Sheet 296.
12-13-58.

YULE, STICKLEN, JORDAN & McNEE			
COLUMBUS	ENGINEERS		OHIO
SUPERSTRUCTURE DETAILS REINFORCING STEEL LIST			
BRIDGE NO. MOT-25-0074			
US 25 UNDER MIAMISBURG SPRINGBORO RD.			
MONTGOMERY COUNTY		STA. 39+39.08	
DESIGNED	DRAWN	TRACED	CHECKED
G.P.K.	A.M.	A.M.	E.W.T.
REVIEWED	DATE	REVISED	
	12-15-58		

MONTGOMERY COUNTY
MOT-25-0.49

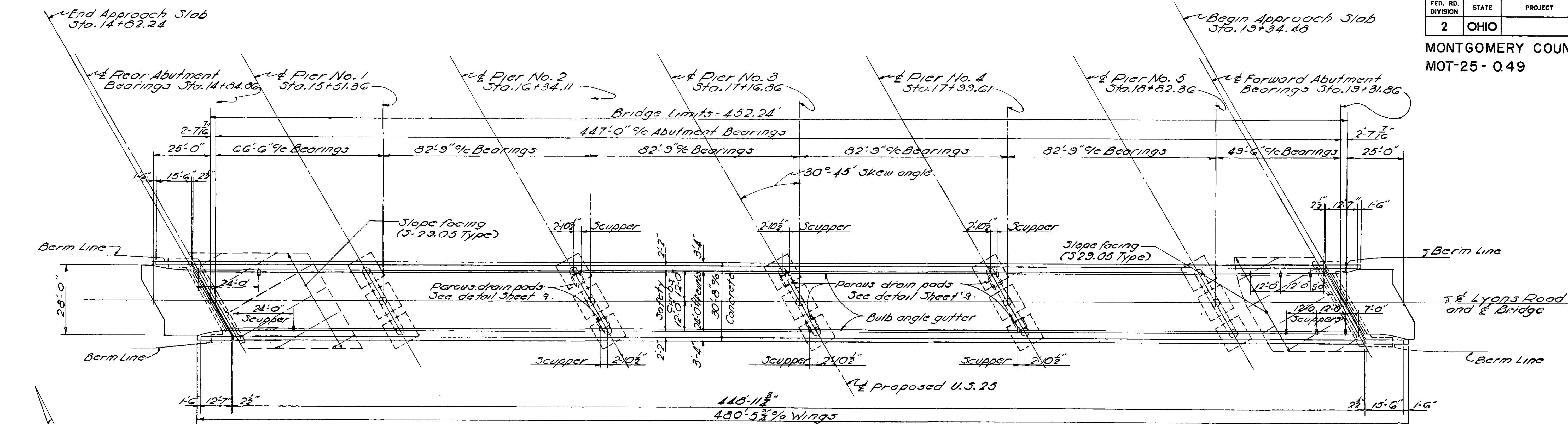
CURVE DATA - U.S. 25
P.I. 147+71.76
 $\Delta = 21^\circ 31' 30''$
 $D = 0^\circ 28'$
 $R = 12,277.67'$
 $L = 4,612.50'$
 $T = 2,333.76'$
 $E = 219.80'$

PROPOSED STRUCTURE
Type: Continuous steel beam with
reinf. conc. deck and substruct.
Spans: 66'-6", 82'-9", 82'-9", 82'-9", 82'-9"
and 49'-6" % bearings
Roadway: 24'-0" f/f 2'-2" safety curbs
Load Frequency: CF=130 (57)
Skew 30°45' R.F.
Wearing Surface: $\frac{3}{4}$ " monolithic concrete
Approach Slabs: A5-1-54 (25' long)
Alignment: Tangent
Traffic: 380-1975 ADT

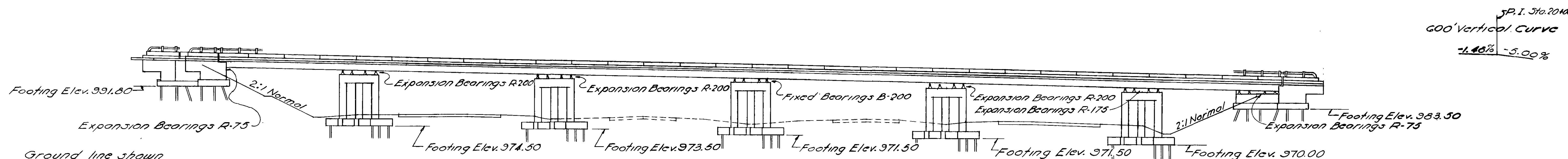


298A
336

MONTGOMERY COUNTY
MOT-25- 0.49



GENERAL PLAN



ELEVATION

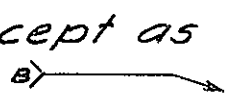
GENERAL NOTES

REFERENCE shall be made to Standard Drawings AR-1-57, revised 3-1-58 (Type A), AS-1-54 revised 12-1-54, CSB-2-56 Sheet No. 2, revised 3-1-58, CSB-2-56 Sheet No. 3, revised 3-1-58, RB-1-55 dated 3-1-55 and supplemental specifications 5-114 (aluminum for bridge railing), revised 8-1-57.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with the revisions thereof, dated 2-21-58.

EXCAVATION QUANTITY includes the removal of fill material for construction of the abutments.

WELDED STEEL: The steel for the 36 WF 194 beams shall conform to ASTM Designation A-373. All other structural steel shall conform to either ASTM A-7 (as per Sec. M-7.4 (a) of the Construction and Material Specifications) or to A-373.

WELDING of structural steel shall be class "A" except as otherwise shown. Class "B" welds shown thus . Any welds shown as field welds may, at the option of the Contractor be made in the shop.

GENERAL NOTES
SLOPE FACING (5-29.05 TYPE) shall be provided under the structure at both abutments. The slope facing shall be 12" thick and shall extend from the face of the abutment to the flow line of the ditch and transversely to 3 feet outside of the edge of the superstructure.

PROCEDURE: The embankment at the abutments shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade before driving piles.

FOUNDATION BEARING LOADS are as follows:

Rear abutment maximum design pile load	320 tons per pile
Forward abutment	" " " 340 tons per pile
Pier 1 maximum design pile load	24.0 tons per pile
Piers 2 and 4 maximum design pile load	25.0 tons per pile
Pier 3	" " " 26.0 " " "
Pier 5	" " " 21.0 " " "

PILE5 shall be driven to firm contact with shale. If the length of penetration is approximately equal to the depth to shale according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. 5-1805 is not less than the following value for a pile hammer of the indicated energy rating.
 Rear abutment 55 tons per pile using a 15,000 ft.lb hammer
 Forward abutment 60 tons per pile using a 15,000 ft.lb hammer
 All piers 34 tons per pile using an 11,000 ft.lb hammer
 All piers 32 " " " " a 15,000 ft.lb hammer
 If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation.

*This sheet supersedes Sheet 298.
12-19-58.*

YULE, STICKLEN, JORDAN & MCNEE
ENGINEERS
COLUMBUS OHIO

GENERAL PLAN & ELEVATION

BRIDGE NO. MOT-25-0306
US 25 UNDER LYONS RD.
MONTGOMERY COUNTY STA. 162 + 45.72

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CPT	JD	JD	EWT	RBY	12-15-58	

MONTGOMERY COUNTY
MOT-25 - 0.49

REINFORCING STEEL LIST

Superstructure					Abutments					Abutments					Piers					Spiral Reinforcing List						
Mark	No.	Length	Weight	Shp	Mark	No.	Length	Weight	Shp	Mark	No.	Length	Weight	Shp	Mark	No.	Length	Weight	Shp	Mark	No.	Core Dia	Length	Pitch	No. Turns	Weight
S501	741	30'-0"	23186	S	A501	70	6'-5"	468	B	A525	6	9'-4"	58	S	P501	120	7'-4"	918	B	SP401	3	32"	15'-2"	4 1/2"	44	832
S502	652	4'-7"	3117	B	A502	22	2'-7"	60	S	A526	6	13'-9"	86	S	P502	10	28'-0"	292	S	SP402	3	32"	14'-11"	4 1/2"	43	834
S503	632	2'-10"	1927	S	A503	46	2'-9"	132	S	A527	6	3'-8"	24	B	P801	240	10'-8"	6835	B	SP403	3	32"	15'-8"	4 1/2"	45	874
S504	1304	2'-3"	3060	B	A504	17	6'-9"	120	B	A528	6	7'-10"	50	B	P901	60	16'-9"	3417	S	SP404	3	32"	14'-2"	4 1/2"	41	794
S505	2	28'-0"	58	S	A505	41	6'-11"	286	B	A529	15	8'-6"	133	B	P902	50	18'-6"	2295	B	SP405	3	32"	13'-10"	4 1/2"	40	775
S506	2 1/2 of very from	26'-5"	640	S	A506	10	33'-6"	350	S	A530	34	4'-2"	148	B	P1101	36	18'-5"	3523	S							
S507	20	13'-9"	287	S	A507	10	32'-0"	334	S	A601	56	14'-9"	1240	B	P1102	36	18'-2"	3475	S							
S508	2	34'-9"	72	S	A508	8	17'-0"	142	S	A602	20	5'-0"	150	S	P1103	36	18'-11"	3618	S							
S601	741	30'-0"	33389	S	A509	62	4'-5"	236	B	A603	24	5'-4"	192	B	P1104	36	17'-5"	3331	S							
S602	564	39'-2"	33179	S	A510	16	5'-1"	84	B	A604	8	11'-0"	132	S	P1105	36	17'-1"	3268	S							
S603	110	33'-0"	5452	S	A511	4	6'-5"	27	S	A605	18	8'-0"	216	S	RE401	1	5'-3"		B							
S604	2	28'-0"	84	S	A512	20	7'-8"	160	S	A606	6	9'-9"	88	S	RE301	2	5'-7"		B							
S605	2 1/2 of very from	26'-5"	921	S	A513	15	10'-2"	159	B	A607	8	16'-9"	202	S	RE601	4	5'-11"		S							
S606	20	13'-9"	413	S	A514	6	3'-2"	20	B	A608	4	16'-8"	100	S	RE801	1	6'-6"		S							
S607	2	34'-9"	105	S	A515	6	7'-0"	44	B	A609	2	12'-3"	38	S	RE901	1	6'-10"		S							
R501	16	11'-9"	*	S	A516	6	11'-2"	70	S	A610	4	17'-7"	106	S	RE1101	2	7'-7"		S							
R502	224	14'-10"	*	S	A517	6	16'-8"	104	S	A612	6	7'-10"	70	S												
R503	8	12'-3"	*	S	A518	8	2'-5"	20	B	A613	6	4'-3"	38	S												
R504	8	15'-2"	*	S	A519	16	3'-1"	50	B	A614	4	13'-9"	82	S												
					A520	32	4'-5"	424	B	AG15	2	10'-6"	32	S												
					A521	38	4'-8"	282	B	AG16	4	12'-5"	76	S												
					A522	13	6'-2"	96	S	AG17	16	20'-0"	480	B												
					A523	5	6'-8"	35	S	AG18	12	9'-0"	162	S												
					A524	16	7'-9"	130	S																	

*Included with railing for payment

SPIRAL REINFORCING BARS: The "length" shown in the steel list for the spiral is the distance from the top of the footing to the bottom of the pier cap. The "No. of Turns" shown is the "length" divided by the pitch, plus 3 turns (total number of closed coils) expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 3-4. 15 closed coils shall be provided at the ends of each spiral unit. Four steel channels, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

BAR SIZE is indicated in the bar mark. The first digit where three digits are used and the first two digits where four digits are used, indicate the bar size number. For example, A601 is a No. 6 size bar and P1101 is a No. 11 size bar.

REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 3-4.02 need not be furnished and replacement bars will not be required.

ESTIMATED QUANTITIES

[illegible]

*This sheet supersedes Sheet 299.
12-19-58.*

YULE, STICKLEN, JORDAN & McNEE					
COLUMBUS			ENGINEERS		OHIO
ESTIMATED QUANTITIES & REINFORCING STEEL LIST BRIDGE NO. MOT - 25-0306 US 25 UNDER LYONS RD. MONTGOMERY COUNTY STA. 162 + 45.72					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
JD	JD	JD	EWT	RBV	12-15-58

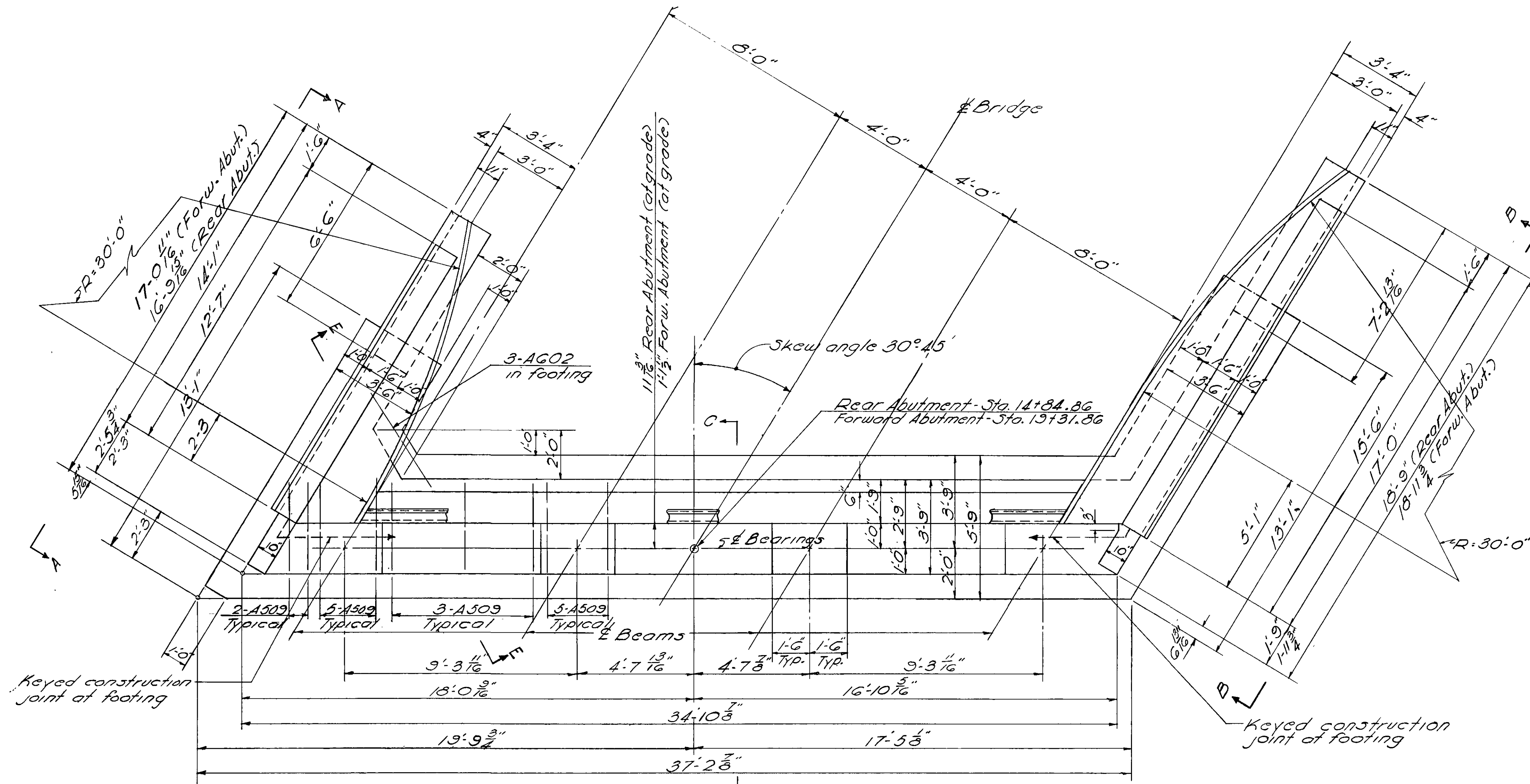
ELEVATIONS

Point	Rear Abutment	Forward Abutment
A	1002.31	994.37
B	1002.60	994.36
C	1002.52	993.97
D	997.79	989.96
E	997.99	989.95
F	998.06	989.81
G	998.00	989.55
H	991.80	983.50
J	1001.46	993.58
K	1001.42	993.64
L	1001.75	993.26
M	1001.68	993.15
N	1001.71	993.10
P	1002.04	992.68

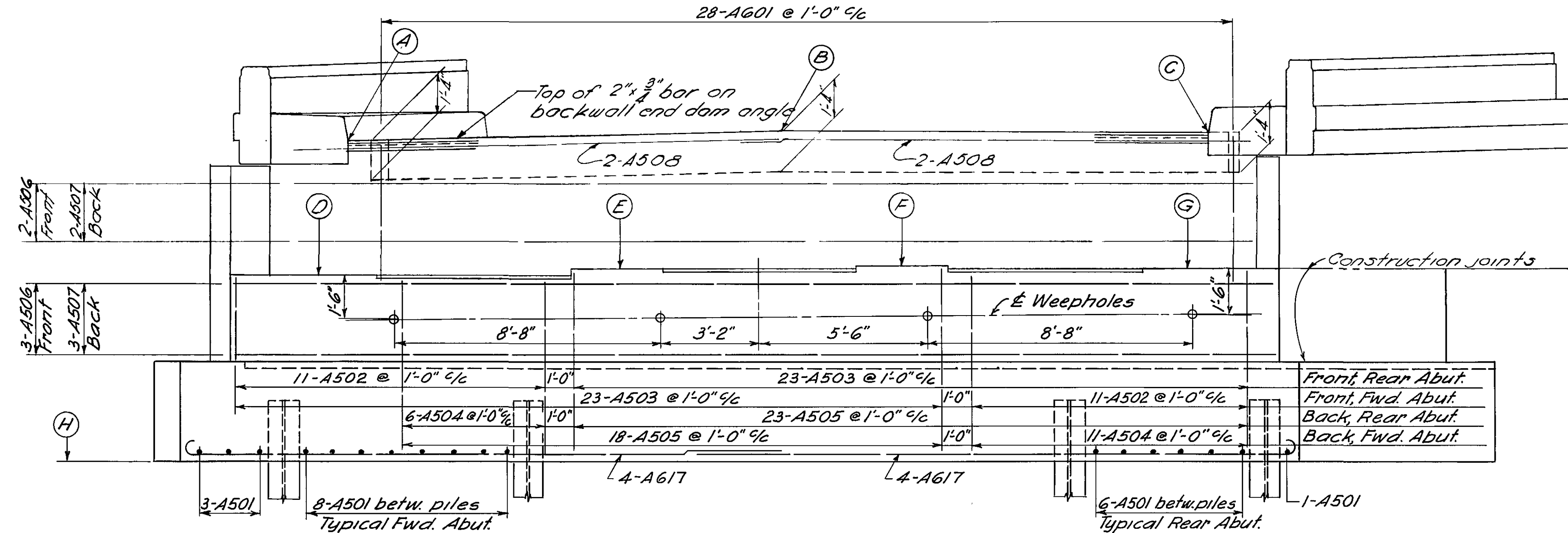
For Elevations A-A and B-B and Section E-E see Sheet 301 A

For locations of points J, K, L, M, N and P see Sheet 301 A

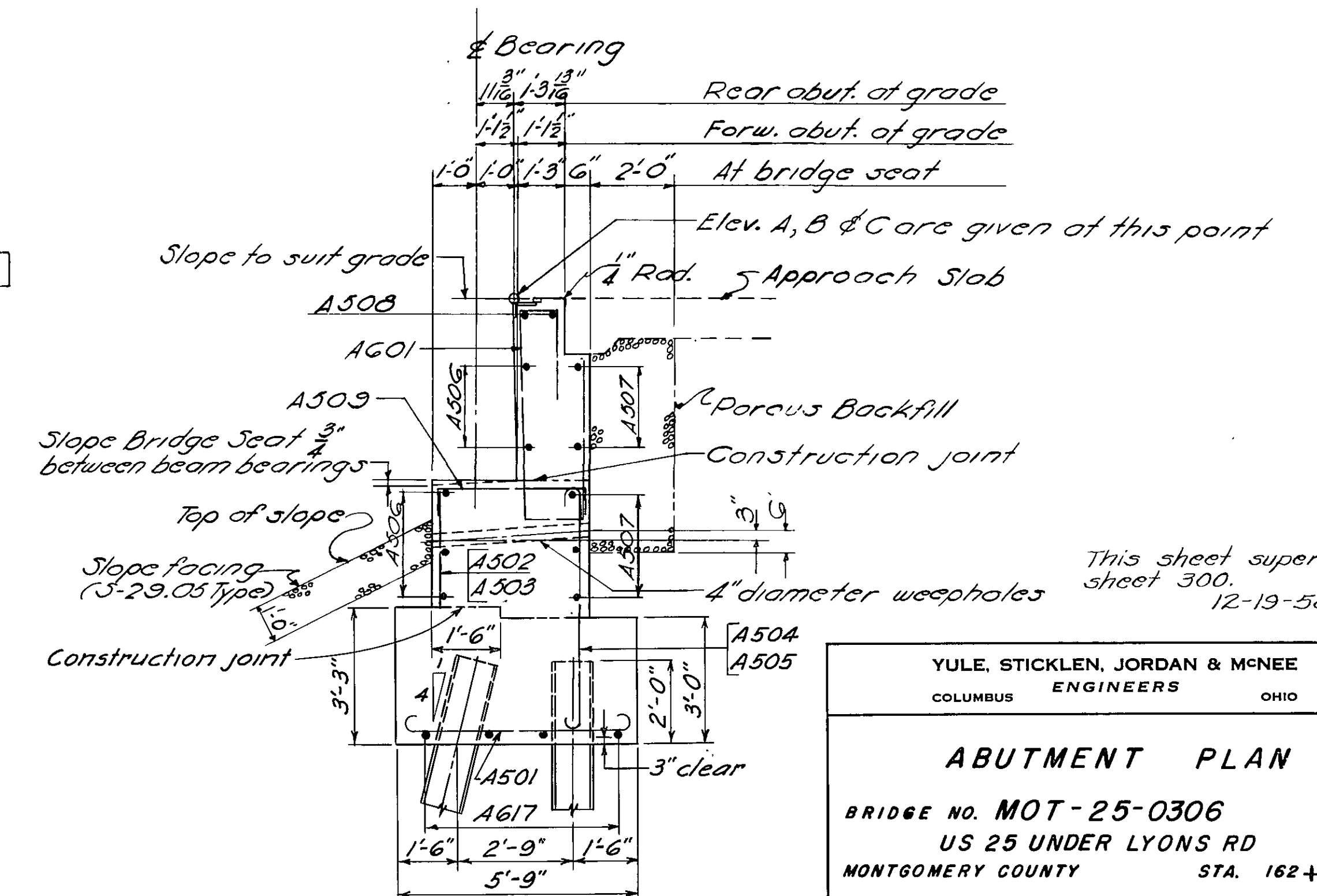
POROUS BACKFILL, 2 feet thick, full length of abutment and wings, shall extend up to the underside of the approach slab.



ABUTMENT PLAN
Piles not shown



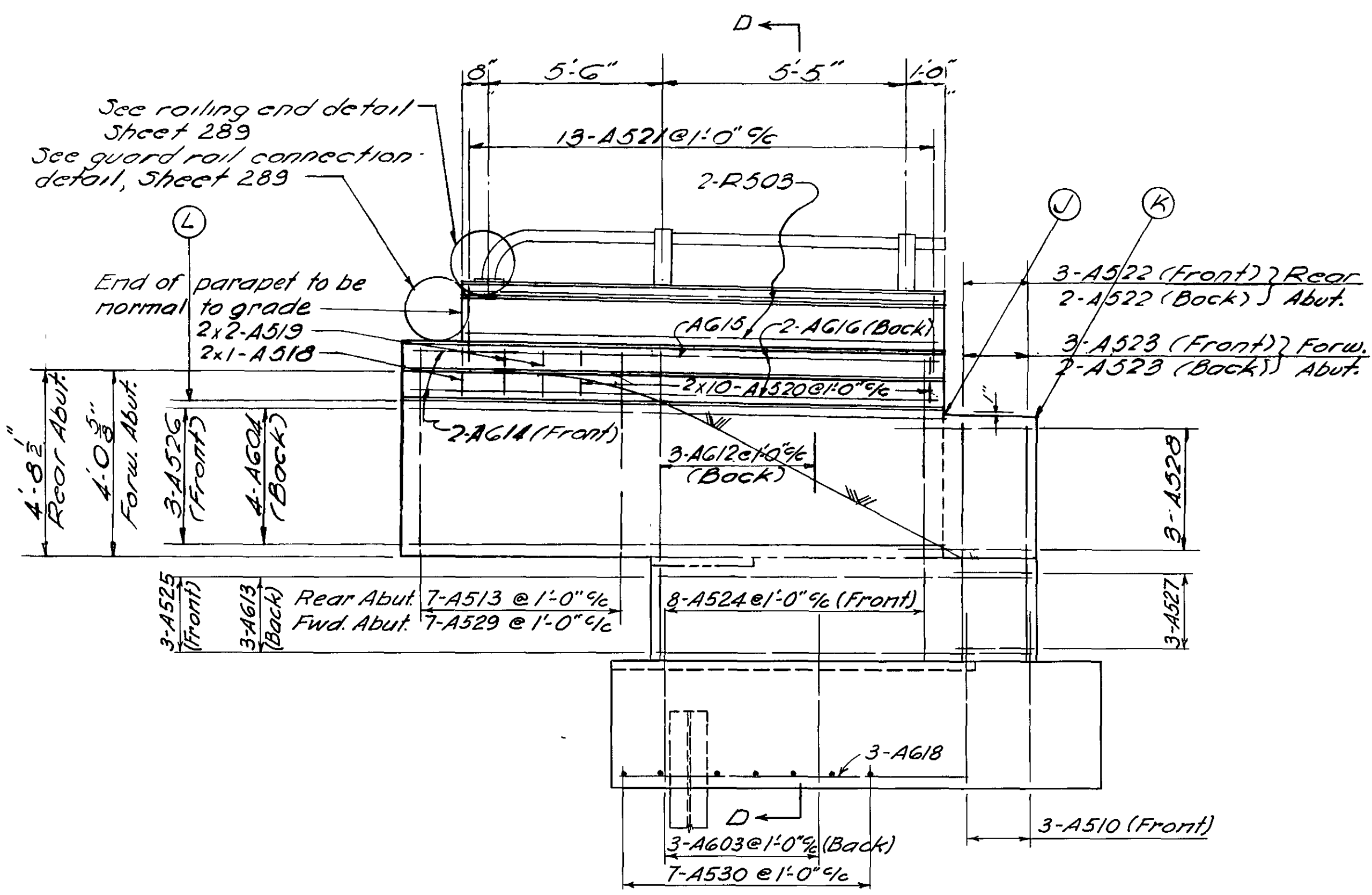
ABUTMENT ELEVATION



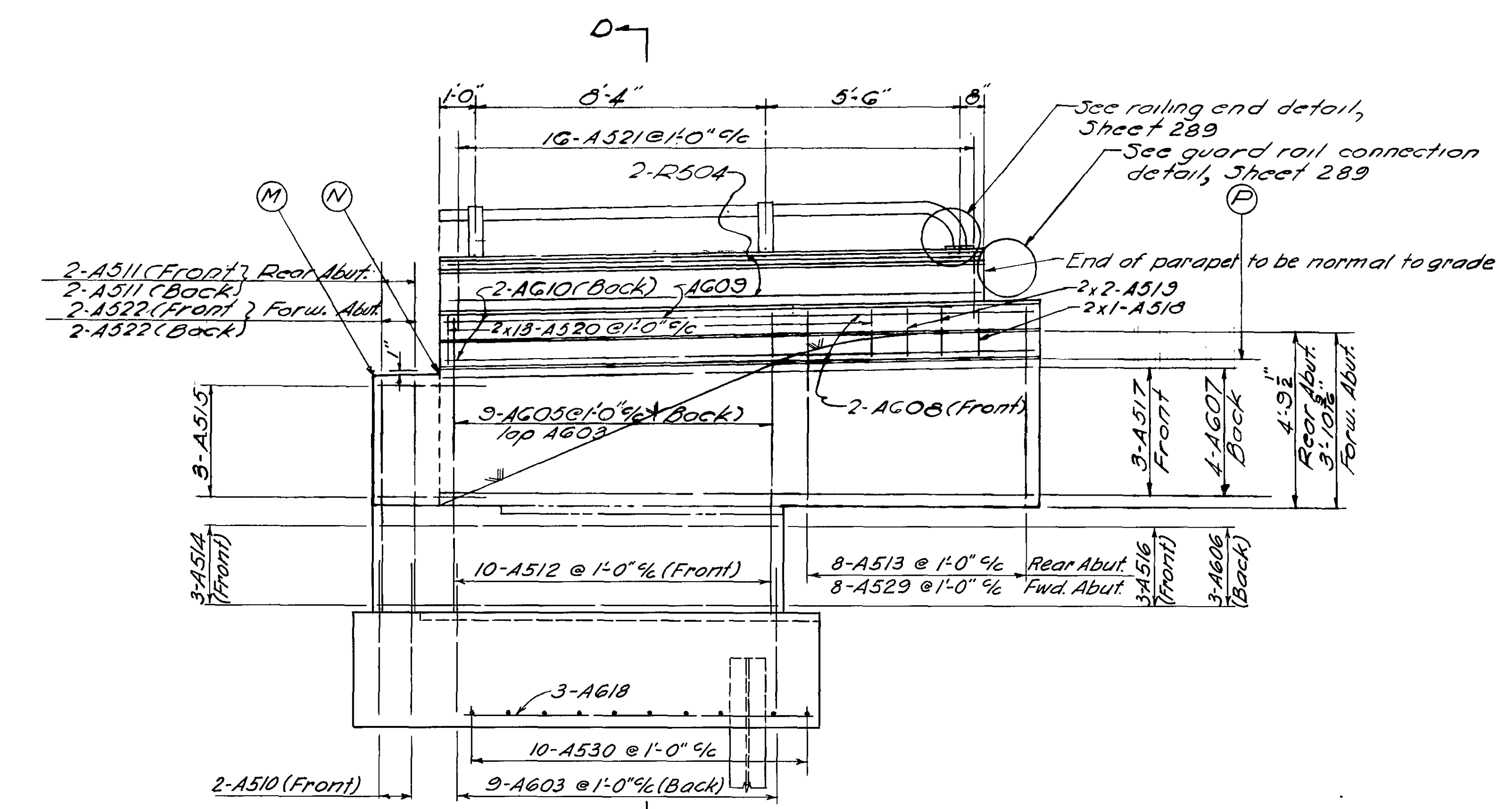
SECTION C-C

YULE, STICKLEN, JORDAN & McNEE COLUMBUS ENGINEERS OHIO			
ABUTMENT PLAN			
BRIDGE NO. MOT-25-0306			
US 25 UNDER LYONS RD			
MONTGOMERY COUNTY STA. 162 + 45.72			
DESIGNED	DRAWN	TRACED	CHECKED
JJD	JJD	JJD	EWI
REVIEWED		DATE	REVISED
		RBY/12/15-58	

This sheet supersedes sheet 300. 12-19-58.

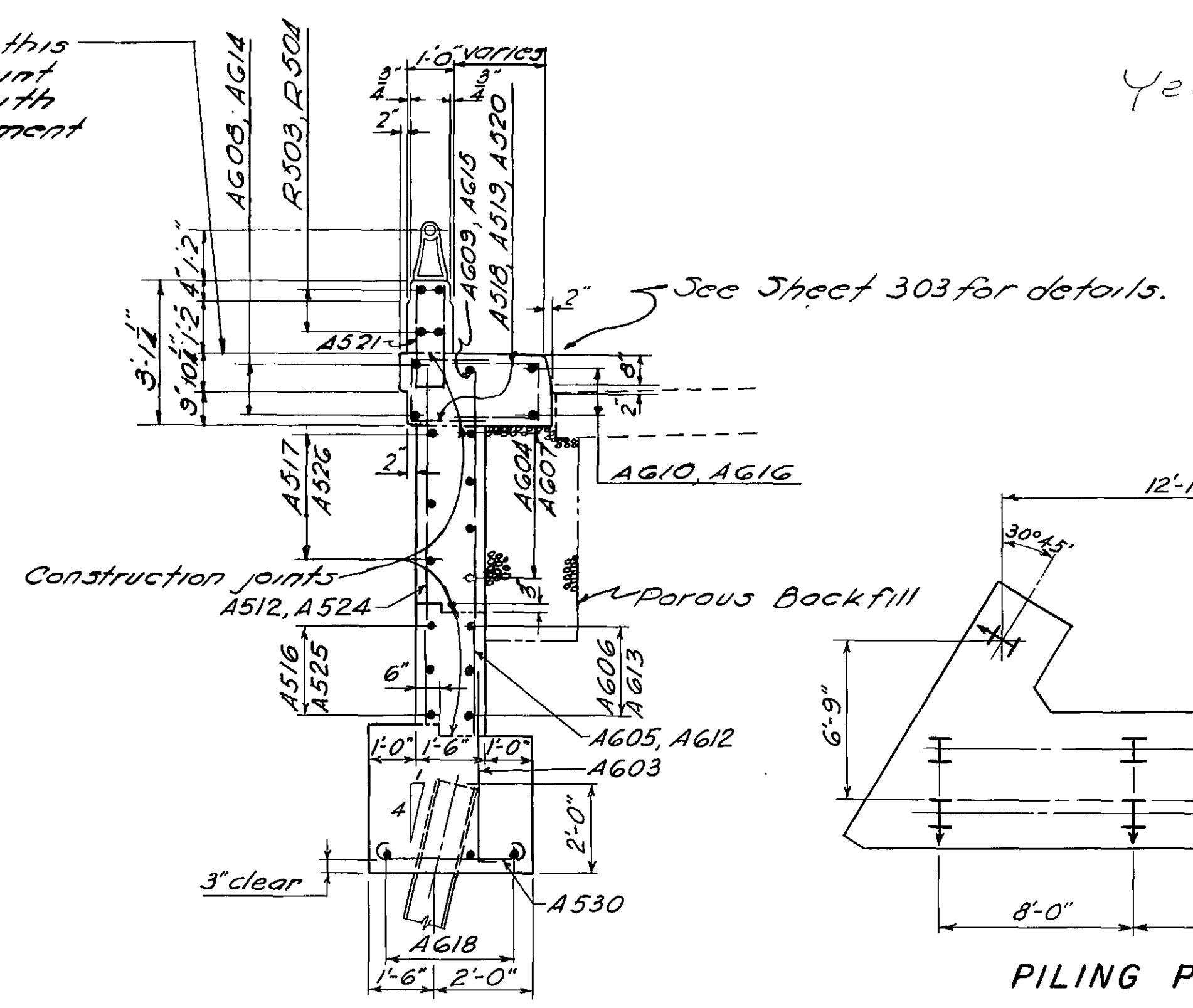


ELEVATION A-A

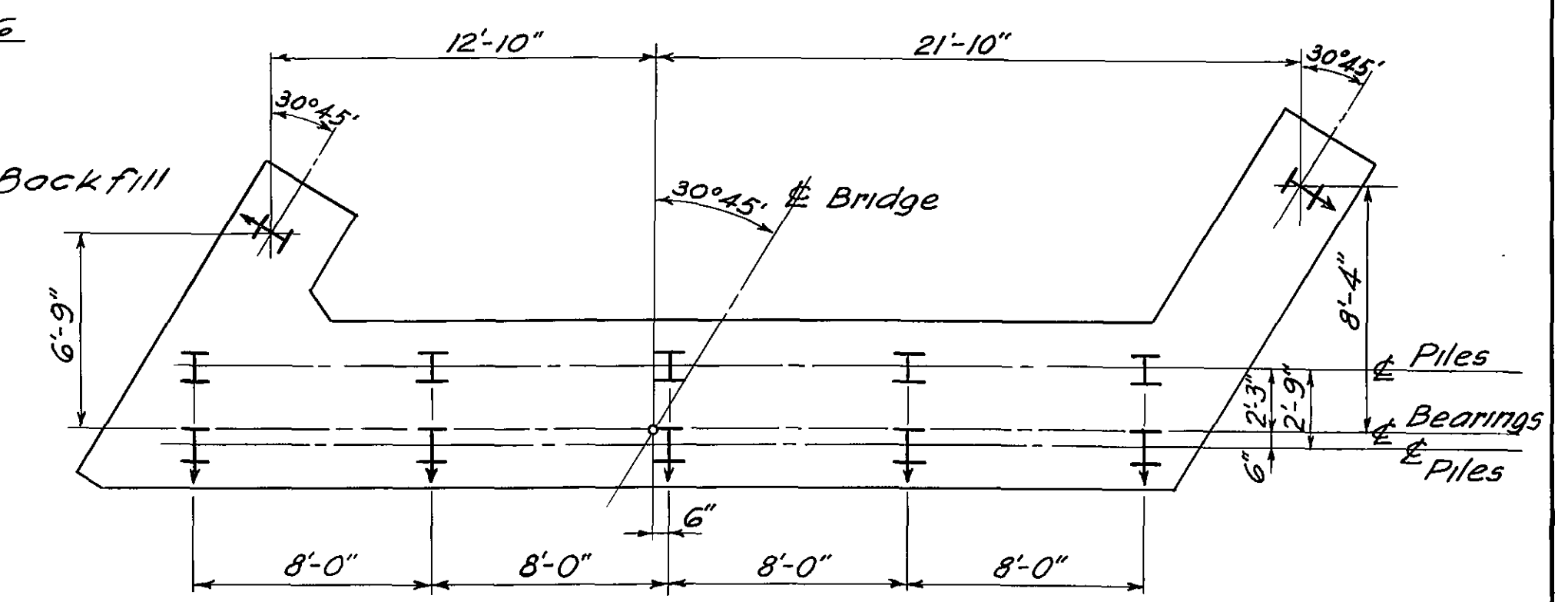


ELEVATION B-B

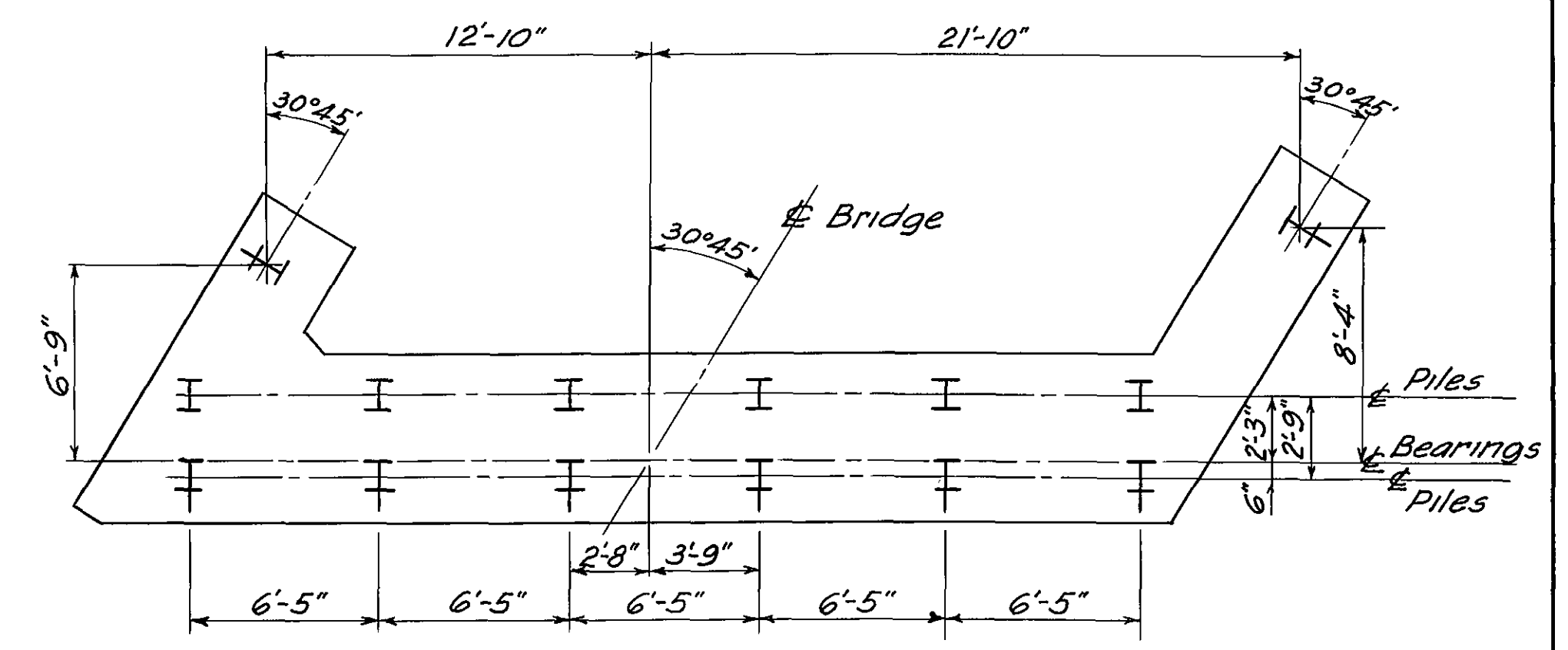
Concrete above this construction joint is included with railing for payment



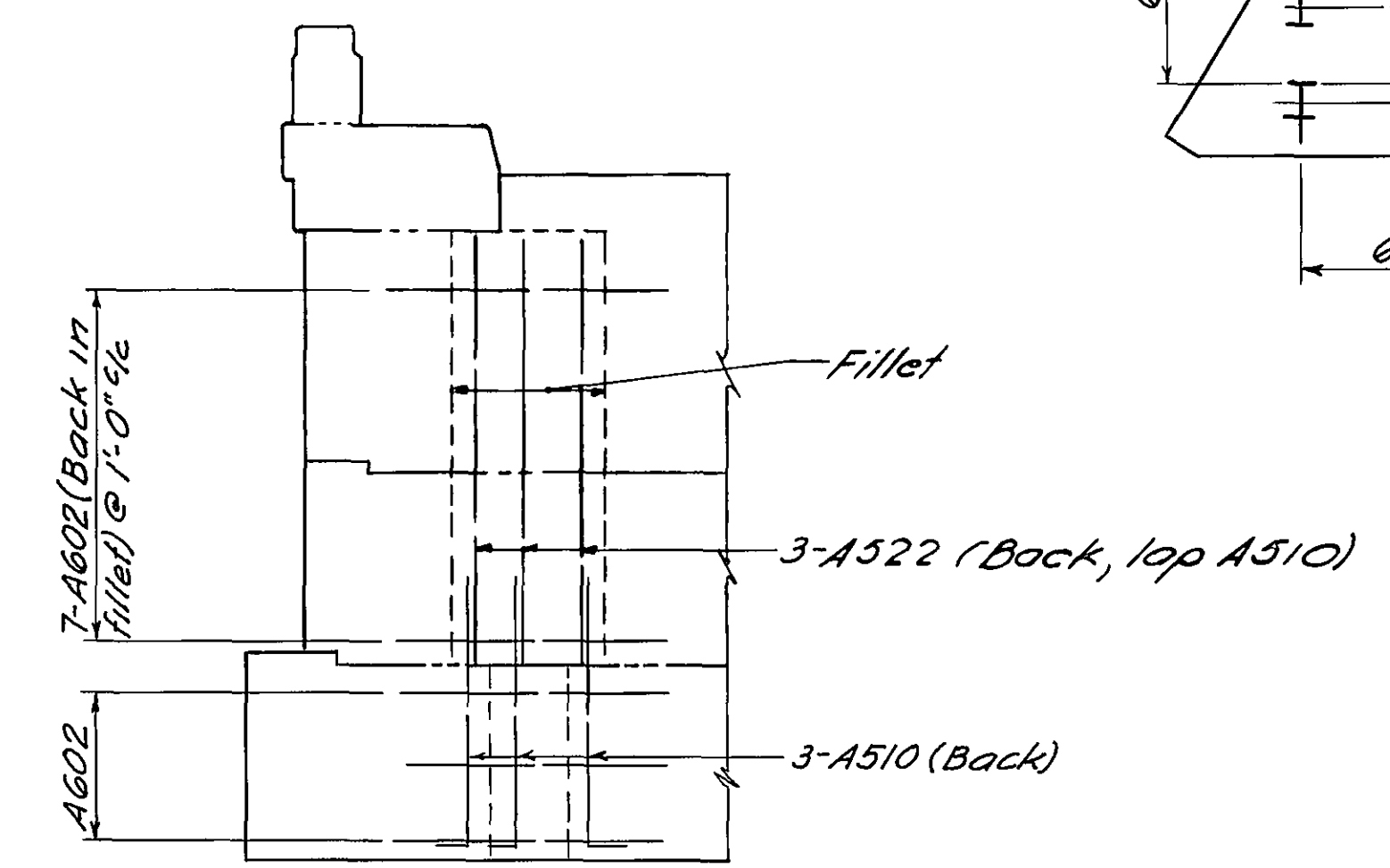
SECTION D-D



PILING PLAN - FORWARD ABUTMENT
At bottom of footing



PILING PLAN - REAR ABUTMENT
At bottom of footing



SECTION E-E

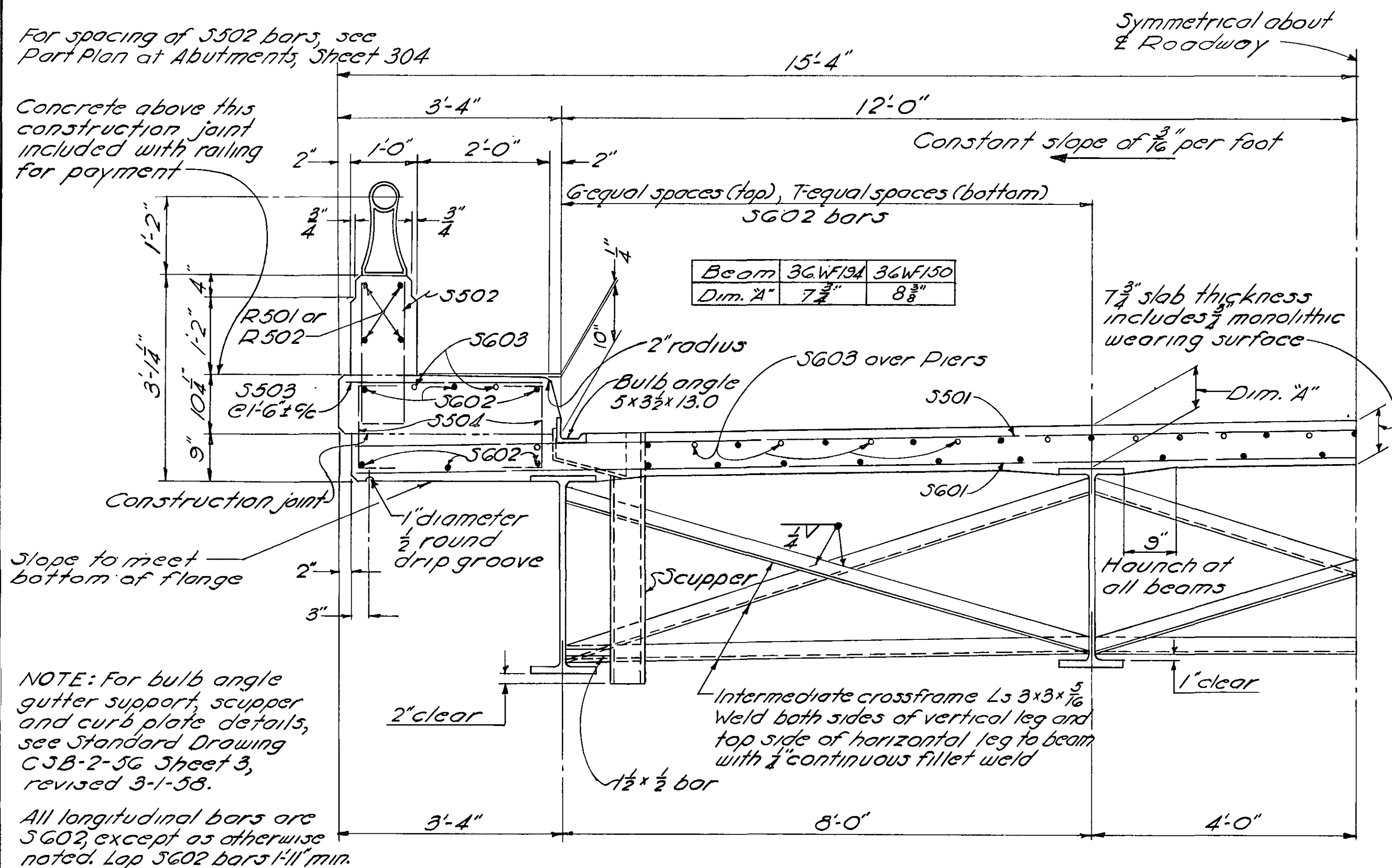
For locations of Elevations and Sections see Sheet 300A
For elevations of points J, K, L, M, N and P see Sheet 300A

This sheet supersedes Sheet 301, 12-19-58.

YULE, STICKLEN, JORDAN & McNEE ENGINEERS COLUMBUS OHIO						
ABUTMENT DETAILS						
BRIDGE NO. MOT-25-0306						
US 25 UNDER LYONS RD.						
MONTGOMERY COUNTY STA. 162 + 45.72						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JD	JD	JD	EW	RB	12/15/58	

For spacing of S502 bars, see Part Plan at Abutments, Sheet 304

Concrete above this construction joint included with railing for payment



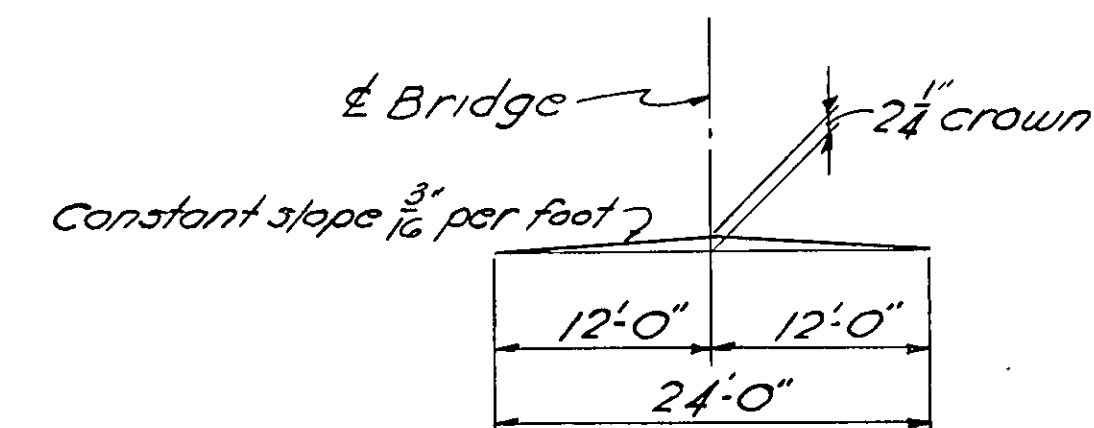
HALF TRANSVERSE SECTION

DEFLECTION AND CAMBER

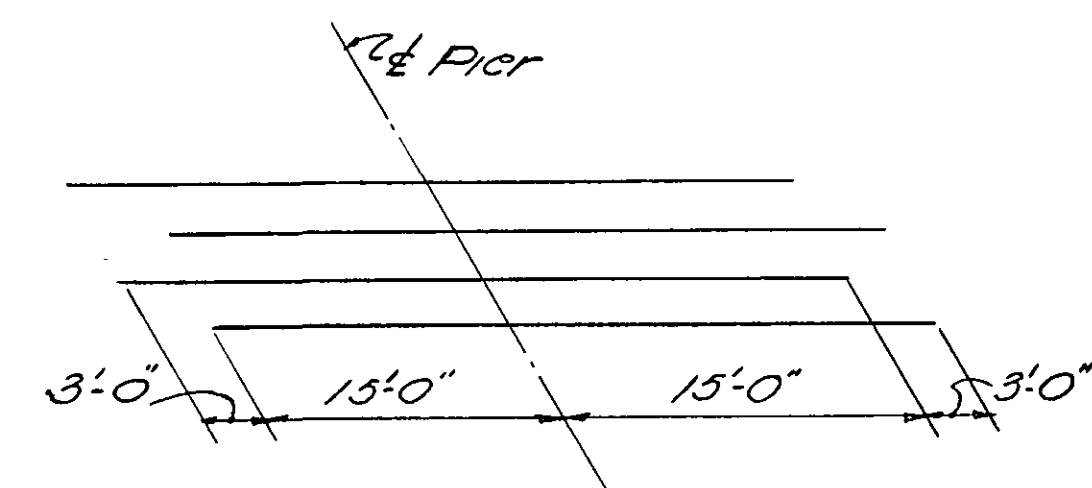
Outside beams						
	Span 1	Span 2	Span 3	Span 4	Span 5	Span 6
Deflection due to weight of steel	1/8"	1/8"	1/8"	1/8"	3/16"	0"
Deflection due to remaining dead load	1/2"	5/8"	5/8"	7/8"	13/16"	1/16"
Convexity required for vertical curve	0"	0"	0"	5/8"	5/8"	3/16"
Sum of deflection and convexity	5/8"	3/4"	3/4"	1 5/16"	1 3/8"	1/4"
Required camber	0"*	0"*	0"*	1 1/4"	1 1/2"	0"*

Inside beams						
	Span 1	Span 2	Span 3	Span 4	Span 5	Span 6
Deflection due to weight of steel	1/8"	1/8"	1/8"	1/8"	3/16"	0"
Deflection due to remaining dead load	3/8"	1/2"	1/2"	7/16"	5/8"	1/16"
Convexity required for vertical curve	0"	0"	0"	5/8"	5/8"	3/16"
Sum of deflection and convexity	1/2"	5/8"	5/8"	1 3/16"	1 7/16"	1/4"
Required camber	0"*	0"*	0"*	1 1/4"	1 1/2"	0"*

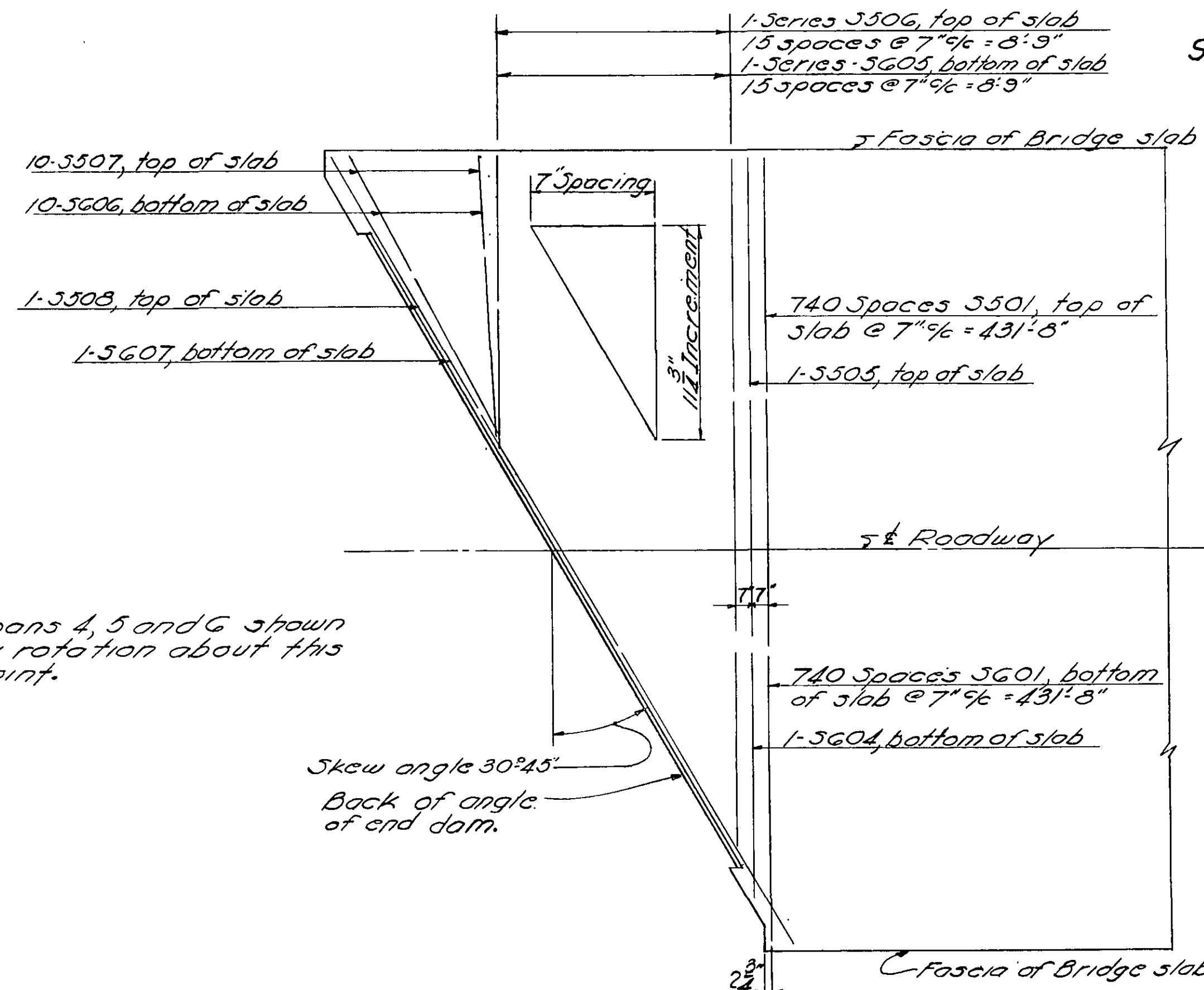
* Place mill camber up



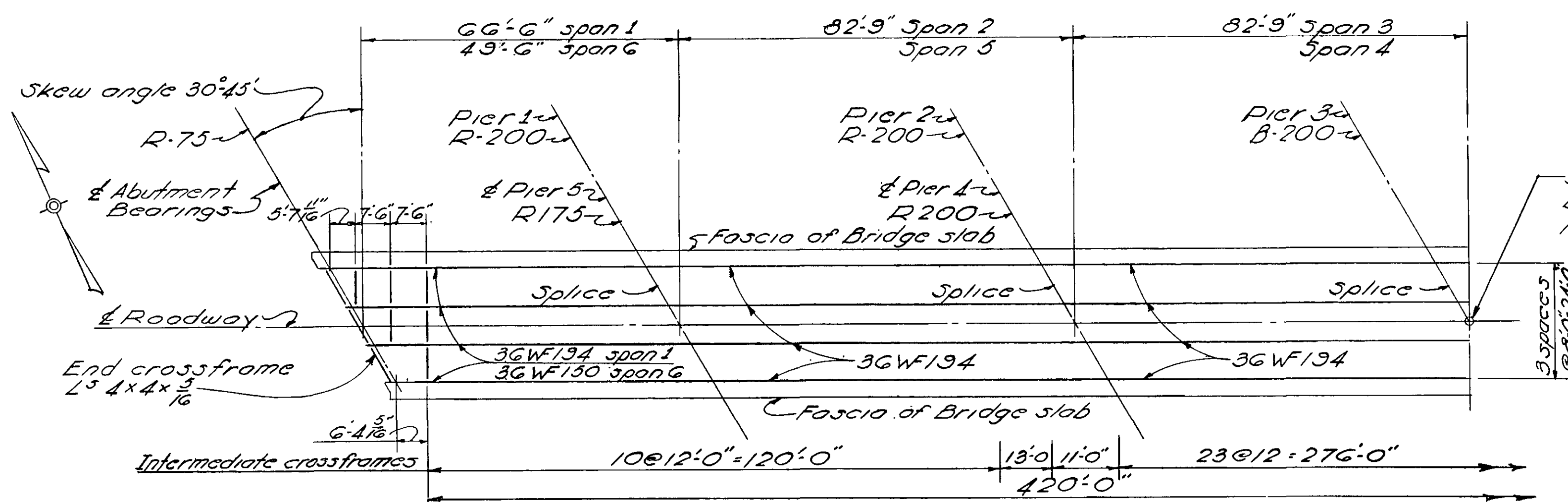
BRIDGE ROADWAY CROWN



STAGGER OF S605 BARS OVER PIERS



REINFORCING STEEL LAYOUT AT END OF SUPERSTRUCTURE



STEEL FRAMING PLAN

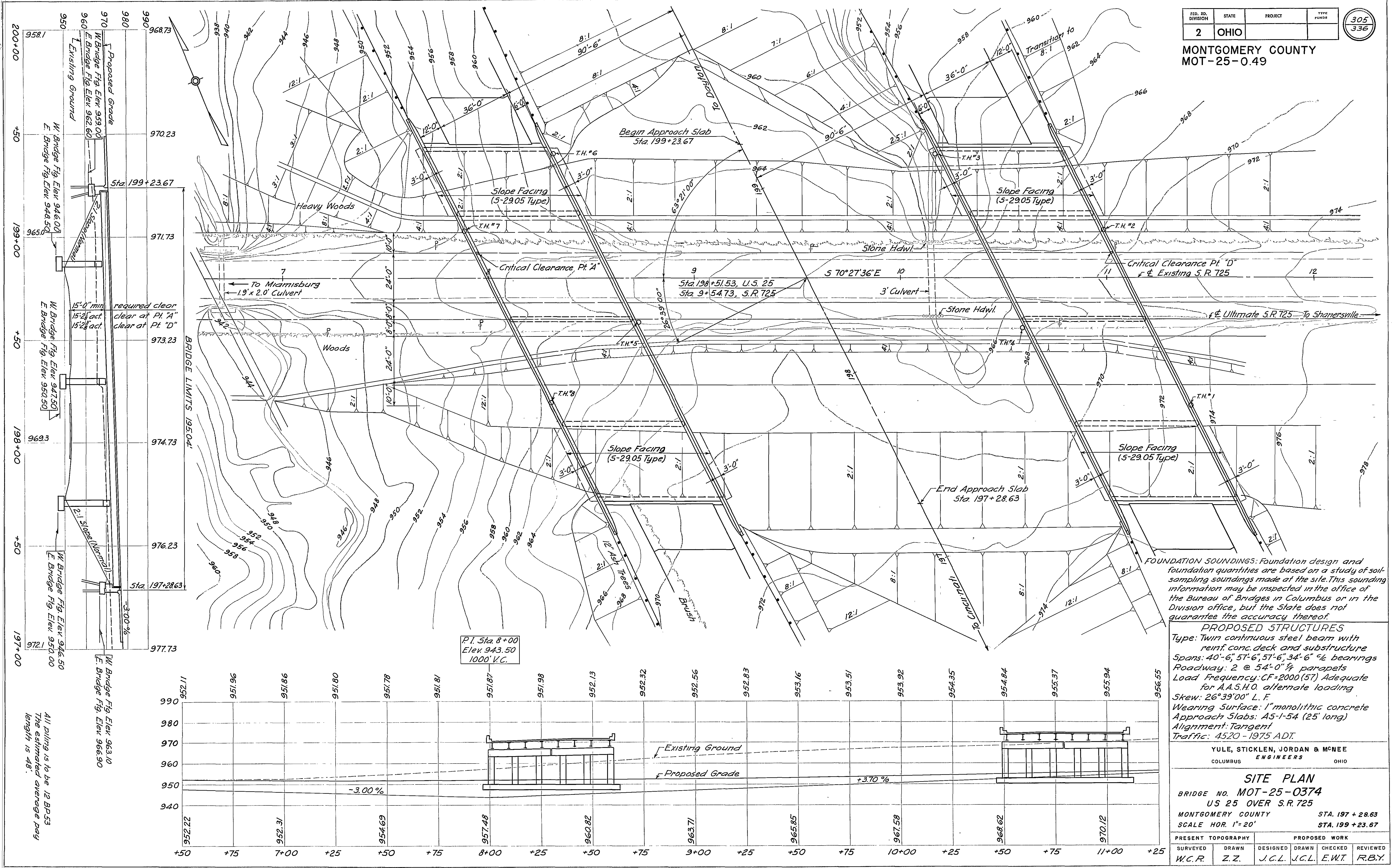
CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are normal to the centerline of bridge and are located near the center of any span.

For details of end crossframes, beam cut-off at back wall and welded butt-joint in superstructure end dam angles, see Standard Drawing No. C3B-2-5G Sheet 2, revised 3-1-58. For details of roadway end dam see Typical Details Sheet 289. For details of Aluminum railing posts see Standard Drawing No. AR-1-57, revised 3-1-58, Type A.

YULE, STICKLEN, JORDAN & MCNEE
COLUMBUS ENGINEERS OHIO

SUPERSTRUCTURE DETAILS
BRIDGE NO. MOT-25-0306
US 25 UNDER LYONS RD.
MONTGOMERY COUNTY STA. 162 + 45.72

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CPT	JD	JD	EW	R.B.Y.	10/4/58	



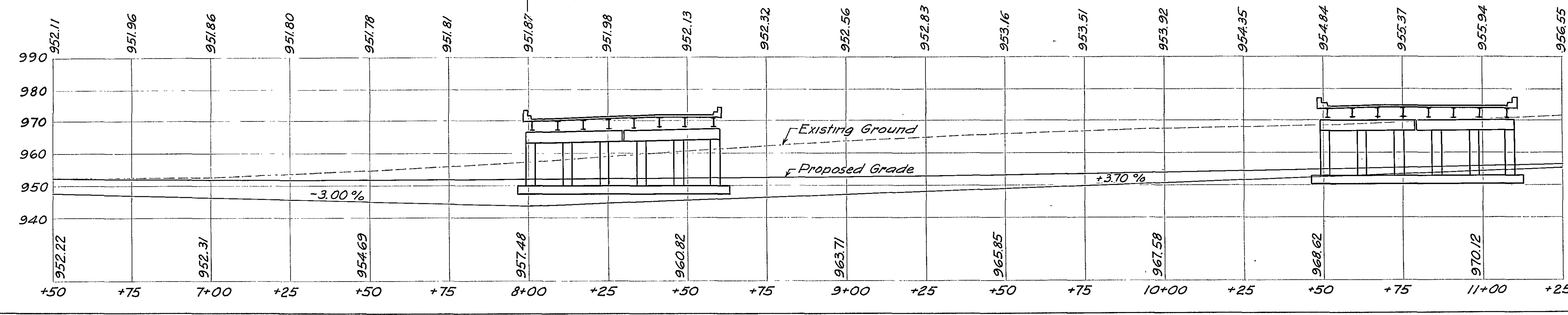
FOUNDATION SOUNDINGS: Foundation design and foundation quantities are based on a study of soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the Division office, but the State does not guarantee the accuracy thereof.

PROPOSED STRUCTURES
Type: Twin continuous steel beam with reinf. conc. deck and substructure
Spans: 40'-6", 57'-6", 57'-6", 34'-6" c/c bearings
Roadway: 2 @ 54'-0" $\frac{1}{4}$ parapets
Load Frequency: CF=2000 (57) Adequate for A.A.S.H.O. alternate loading
Skew: 26°39'00" L.F.
Wearing Surface: 1" monolithic concrete
Approach Slabs: AS-1-54 (25' long)
Alignment: Tangent
Traffic: 4520 - 1975 ADT.

YULE, STICKLEN, JORDAN & McNEE
ENGINEERS
COLUMBUS OHIO

SITE PLAN
BRIDGE NO. MOT-25-0374
US 25 OVER S.R. 725
MONTGOMERY COUNTY
SCALE HOR. 1"=20'
STA. 197 + 28.63
STA. 199 + 23.67

PRESENT TOPOGRAPHY			PROPOSED WORK		
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
W.C.R.	Z.Z.	J.C.L.	J.C.L.	E.W.T.	R.B.Y.

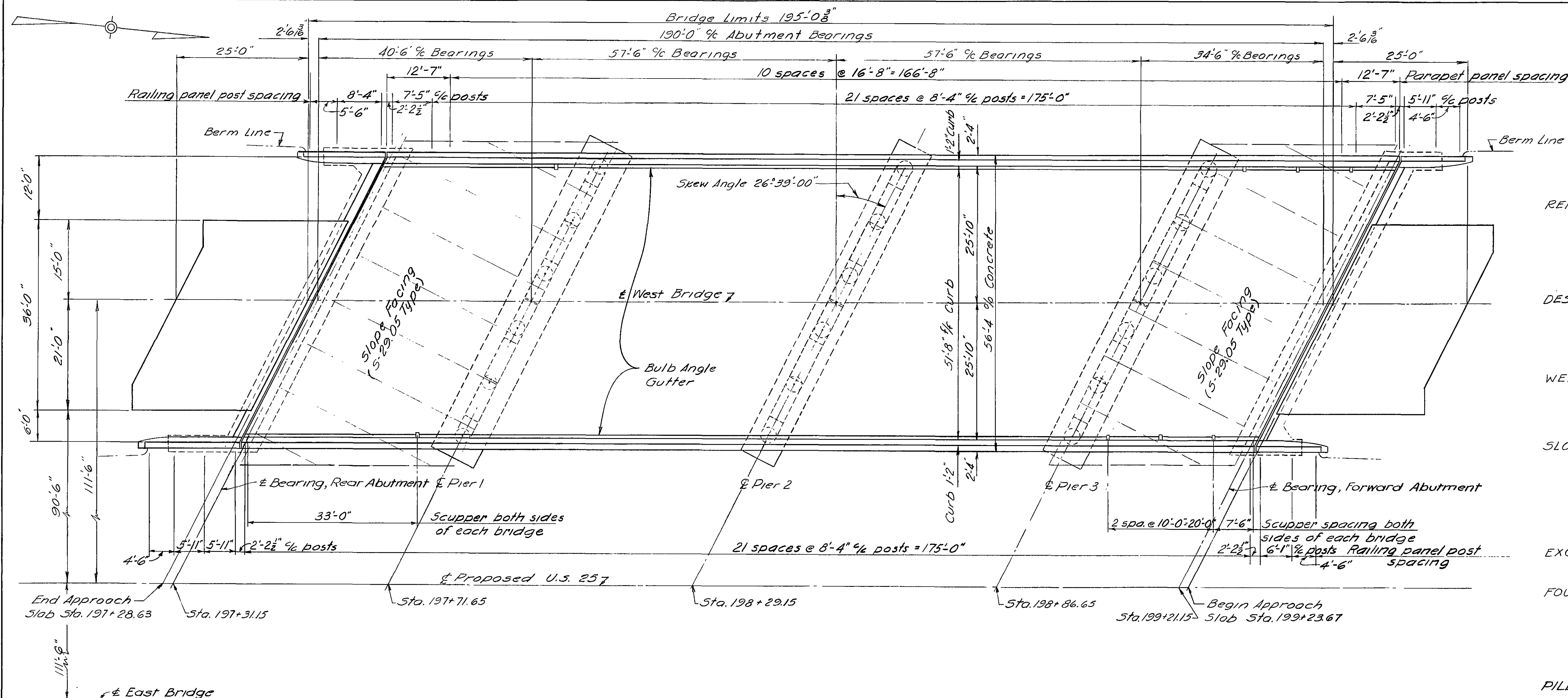


All piling is to be 12 BP-53
The estimated average pay length is 48'.

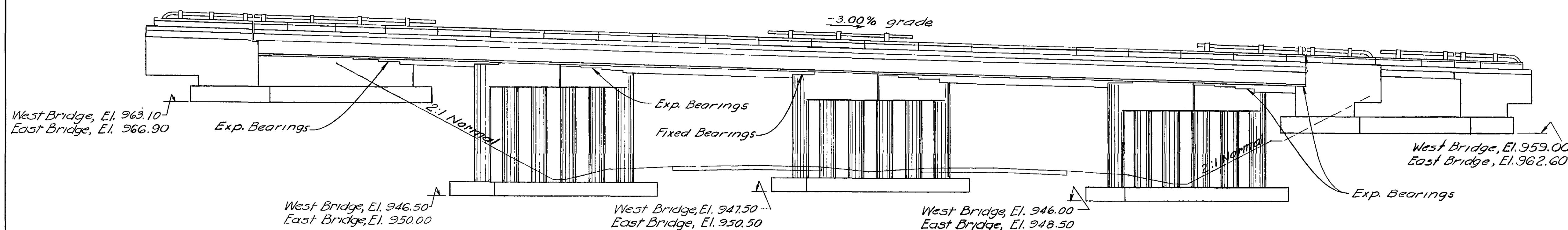
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

306
336

MONTGOMERY COUNTY
MOT-25-0.49



GENERAL PLAN
West Bridge shown
East Bridge similar except
for location of approach slab



ELEVATION
Piles of Abutments not shown

REFERENCE shall be made to Standard Drawing AR-1-57 revised 3-1-58 (Type A), AS-1-54 revised 12-7-54, CSB-2-56 Sheet No. 2, revised 3-1-58, CSB-2-56 Sheet No. 3, revised 3-1-58 and supplemental specifications 5-114 (aluminum for bridge railings) revised 8-1-57, and I-127 Delineators rev. 11-16-57.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications For Highway Structures" of the State of Ohio, Department of Highways dated 9-1-57 together with revisions thereof dated 2-21-58.

WELDING of structural steel shall be Class 'A' except as otherwise shown. Class 'B' welds shown thus $\overline{\text{B}}$. Any welds shown as field welds, may at the option of the contractor, be made in the shop.

SLOPE FACING (5-29.05 Type) shall be provided under the structure at both abutments. The slope facing shall be 12" thick and shall extend from the face of the abutment to the flow line of the ditch and transversely to 3 feet outside of the edge of the superstructure.

EXCAVATION QUANTITY includes the removal of the fill material for the construction of the abutments.

FOUNDATION BEARING PRESSURE: Abutment footings are designed for a maximum pile load of 40 tons. Piers are designed for the following maximum bearing pressure: Pier 1 - 2.15 tons per sq. ft. Pier 2 - 1.72 tons per sq. ft. and Pier 3 - 2.26 tons per sq. ft.

PILES shall be driven "with a hammer of not less than 15,000 ft.-lb. per blow", to the firm contact with shale. If the length of penetration is approximately equal to the depth to shale according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. 5-18.05 is not less than the following value for a pile hammer of the indicated energy rating: abutment piles 45 tons per pile using a 15,000 ft.-lb. hammer.

PROCEDURE: The embankment at the abutments shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade before driving piles.

YULE, STICKLEN, JORDAN & McNEE
COLUMBUS ENGINEERS OHIO

GENERAL PLAN & ELEVATION
BRIDGE NO MOT-25-0374
US 25 OVER S.R. 725
MONTGOMERY COUNTY STA. 197+28.63
STA. 199+23.67

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
CPT	HAG	HAG	E.W.T.	R.B.Y.	10/1/58	

REINFORCING STEEL LIST																							
Superstructure					Abutments					Abutments					Piers								
Mark	No.	Length	Weight	Shp	Mark	No.	Length	Weight	Shp	Mark	No.	Length	Weight	Shp	Mark	No.	Length	Weight	Shp				
5501	1032	2'-4"	2512	B	A501	104	31'-4"	3399	S	A546	4	8'-4"	35	B	P501	136	7'-8"	1088	B				
5502	516	1'-10"	987	S	A502	18	6'-9"	127	B	A547	45	4'-6"	211	S	P502	136	8'-8"	1229	B				
5503	552	4'-6 1/2"	2615	B	A503	16	7'-0"	117	B	A548	8	4'-3"	35	S	P503	68	9'-8"	686	B				
5601	234	22'-0"	7732	S	A504	48	7'-3"	363	B	A549	9	4'-0"	38	S	P504	432	8'-4"	4276	B				
5602	1056	33'-9"	53531	S	A505	9	7'-5"	70	B	A550	45	8'-8"	407	B	P505	24	28'-8"	718	S				
5603	530	21'-5"	17049	S	A506	8	7'-8"	64	B	A551	8	8'-5"	70	B	P601	140	9'-10"	2068	B				
5604	494	36'-2"	26835	S	A507	15	7'-10"	123	B	A552	4	8'-2"	34	B	P602	72	7'-10"	847	B				
5605	4 1/2 9	34'-2" to 12'-10"	1271	S	A508	18	2'-7"	48	S	A553	13	9'-9"	132	S	P603	72	8'-10"	955	B				
5606	36	14'-0"	757	S	A509	16	2'-10"	47	S	A554	8	12'-1"	101	S	P801	96	18'-3"	4678	B				
5607	4 1/2 9	40'-2" to 18'-10"	1595	S	A510	53	3'-1"	170	S	A555	8	9'-6"	79	S	P802	48	37'-3"	4774	S				
5608	4 1/2 14	30'-0" to 12'-8"	1794	S	A511	9	3'-3"	31	S	A556	9	5'-11"	56	S	P803	96	24'-0"	6152	B				
5609	32	11'-6"	553	S	A512	8	3'-6"	29	S	A557	11	8'-8"	99	S	P804	48	25'-9"	3300	S				
5610	8	32'-10"	395	S	A513	20	3'-8"	76	S	A558	28	8'-8"	253	B	P901	240	6'-1"	4964	B				
5701	530	25'-4"	27444	S	A514	8	22'-6"	188	S	A559	4	19'-1"	80	S	P902	24	18'-6"	1510	S				
5702	494	32'-8"	32985	S	A515	4	13'-6"	56	S	A560	4	16'-7"	70	S	P903	24	19'-9"	1612	S				
5703	36	17'-9"	1306	S	A516	7	6'-5"	47	S	A561	2	7'-3"	15	S	P904	24	19'-11"	1625	S				
5704	4 1/2 9	38'-0" to 16'-8"	2011	S	A517	196	4'-6"	920	B	A562	11	8'-6"	98	S	P905	48	17'-1"	2788	S				
5705	4 1/2 9	29'-10" to 8'-6"	1410	S	A518	32	3'-2"	106	B	A563	244	6'-5"	1633	B	P906	48	17'-9"	2897	S				
5706	4 1/2 14	30'-0" to 12'-8"	2442	S	A519	16	2'-6"	42	B	A601	34	14'-7"	745	B	P907	24	16'-10"	1374	S				
5707	32	11'-6"	752	S	A520	122	4'-7"	583	B	A602	80	14'-5"	1732	B	P908	24	17'-11"	1462	S				
5708	4	28'-2"	230	S	A521	244	4'-5"	1124	B	A603	66	5'-0"	496	S	P909	12	17'-5"	711	S				
5709	4	36'-5"	298	S	A522	34	5'-1"	180	B	A604	6	9'-0"	81	S	P910	12	18'-1"	738	S				
Railing					A523	14	7'-6"	110	S	A605	54	5'-4"	433	B	P911	24	28'-8"	2339	S				
R501	32	12'-3"	*	S	A524	15	6'-11"	108	S	A606	17	7'-7"	193	S	P912	36	29'-9"	3641	S				
R502	160	16'-4"	*	S	A525	21	6'-9"	148	S	A607	6	3'-10"	35	S	P913	60	24'-6"	4998	S				
R503	8	11'-9"	*	S	A526	10	8'-1"	84	S	A608	14	7'-0"	147	S	P914	60	11'-3"	2295	B				
R504	8	11'-11"	*	S	A527	90	4'-2"	391	B	A609	3	8'-4"	38	S	P915	64	9'-3"	2013	B				
R505	8	17'-8"	*	S	A528	22	6'-10"	157	B	A610	32	33'-0"	1586	S	P916	32	9'-3"	1006	B				
R506	8	15'-2"	*	S	A529	14	4'-11"	72	B	A611	10	13'-0"	195	S	P1101	192	7'-0"	7141	B				
					A530	14	5'-10"	85	B	A612	18	10'-10"	293	S	P1102	12	21'-2"	1349	S				
					A531	24	8'-0"	200	B	A613	10	13'-6"	203	S	P1103	12	20'-9"	1323	S				
					A532	4	13'-2"	55	S	A614	15	10'-0"	225	S	P1104	12	18'-2"	1158	S				
					A533	4	13'-4"	56	S	A615	4	13'-2"	79	S	P1105	12	18'-9"	1195	S				
					A534	13	9'-0"	122	S	A616	4	12'-6"	75	S	P1106	24	20'-5"	2604	S				
					A535	26	5'-3"	142	S	A617	6	8'-9"	79	S	P1107	24	20'-7"	2625	S				
					A536	9	5'-1"	48	S	A618	8	12'-0"	144	S	P1108	24	17'-6"	2231	S				
					A537	8	4'-10"	40	S	A619	10	18'-11"	284	S	P1109	24	18'-7"	2370	S				
					A538	8	4'-8"	39	S	A620	14	14'-6"	305	S	P1110	12	20'-1"	1280	S				
					A539	8	4'-5"	37	S	A621	4	19'-5"	117	S	P1111	12	20'-3"	1291	S				
					A540	9	4'-2"	39	S	A622	6	15'-11"	143	S	P1112	12	17'-2"	1094	S				
					A541	20	9'-5"	197	B	A623	4	16'-5"	99	S	P1113	12	18'-3"	1164	S				
					A542	9	9'-3"	87	B	A624	34	14'-9"	753	B									
					A543	8	9'-0"	75	B	A625	80	14'-4"	1722	B									
					A544	8	8'-10"	74	B	A626	11	9'-3"	153	S									
					A545	8	8'-7"	72	B														

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

MONTGOMERY COUNTY
MOT-25-0.49

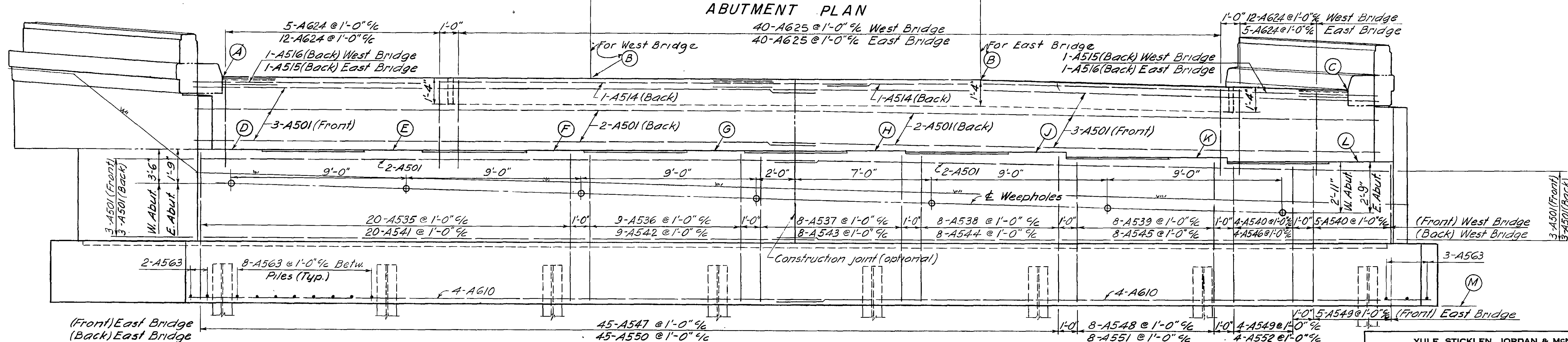
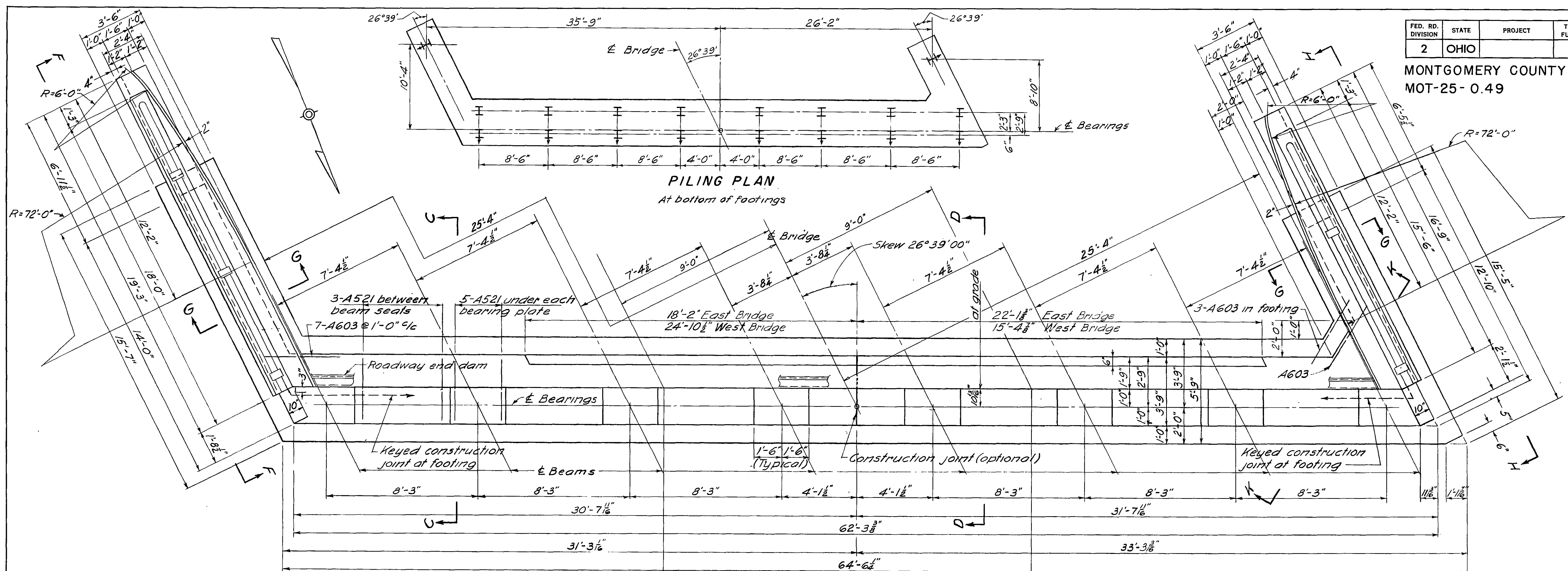
Spiral Reinforcing List						
Mark	No.	Core Dia. % Spiral	Length	Pitch	No. Turns	Weight
SP401	6	32"	16'-11 1/8"	4 1/2"	49	1898
SP402	6	32"	17'-0 1/8"	4 1/2"	49	1901
SP403	6	32"	14'-3 1/8"	4 1/2"	41	1590
SP404	6	32"	14'-11 1/8"	4 1/2"	43	1668
SP405	6	32"	13'-11 1/8"	4 1/2"	41	1585
SP406	6	32"	15'-1 1/8"	4 1/2"	44	1704

SPIRAL REINFORCING BARS: The "length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap. The "No. of turns" shown is the "length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 5-4. 1 1/2 closed coils shall be provided at the ends of each spiral unit. Four steel channels, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

BAR SIZE is indicated in the bar mark. The first digit where three digits are used and the first two digits where four digits are used, indicate the bar size number. For example, A601 is a No. 6 size bar and P1101 is a No. 11 size bar.
REPLACEMENT BARS: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.

* Included with railing for payment

ESTIMATED QUANTITIES																
WEST BRIDGE																
Item	Total Est. W. Bridge	Unit	Description	Super-Struc.	Rear Abut.	Pier 1	Pier 2	Pier 3	Forward Abut.	General	Super-Struc.	Rear Abut.	Pier 1	Pier 2	Pier 3	Forward Abut.
E-2	1450	Cu.Yds.	Unclassified excavation		180	145	120	140	150			170	145	120	140	140
5-1	642	Cu.Yds.	Class "C" Concrete Superstructure	321							321					
5-1	308	Cu.Yds.	Class "C" Concrete Piers above footings			55	50	50					53	50	50	
5-1	444	Cu.Yds.	Class "E" Concrete Abutments		125				100			121				98
5-1	296	Cu.Yds.	Class "E" Concrete Pier footings			56	43	49					56	43	49	
5-4	314563	Lbs.	Reinforcing steel	93252	6566	19099	14999	17513	5563		93252	6476	19122	15214	17969	5544
5-7	514000	Lbs.	Structural steel	257000							257000					
5-8	514000	Lbs.	Field painting of structural steel	257000							257000					
5-14	882	Lin.Ft.	Railing (aluminum rail, supports and concrete parapet)	384	33				24		384	33				24
5-16	Lump	Sum	First Test Pile													Lump
5-18	3450	Lin.Ft.	Steel Piles 12 BP 53		800				860			865				925
5-29	392	Cu.Yds.	Slope facing (5-29.05 Type)		107				89			107				89
5-29	120	Cu.Yds.	Porous backfill		38				25			32				25
5-127	4	Each	Bridge Delineators						2							2



For Elevations F-F and H-H, Sections C-C, D-D, G-G and K-K see Sheet 310
For locations of points N, P, Q, R, S and T, see Sheet 310

REINFORCING STEEL shall be placed so that it will not interfere with anchor bars for bearing plates

POROUS BACKFILL, 2 feet thick, full length of abutment and wings, shall extend up to the underside of the approach slab and to grade.

ABUTMENT	ELEVATIONS																
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
West Bridge	975.46	975.47	974.41	971.76	971.77	971.77	971.61	971.38	971.16	970.93	970.71	963.10	975.08	974.59	974.54	973.44	973.99
East Bridge	978.54	978.56	978.04	974.84	974.84	974.85	974.85	974.86	974.80	974.57	974.34	966.90	978.16	977.67	977.62	977.07	977.63

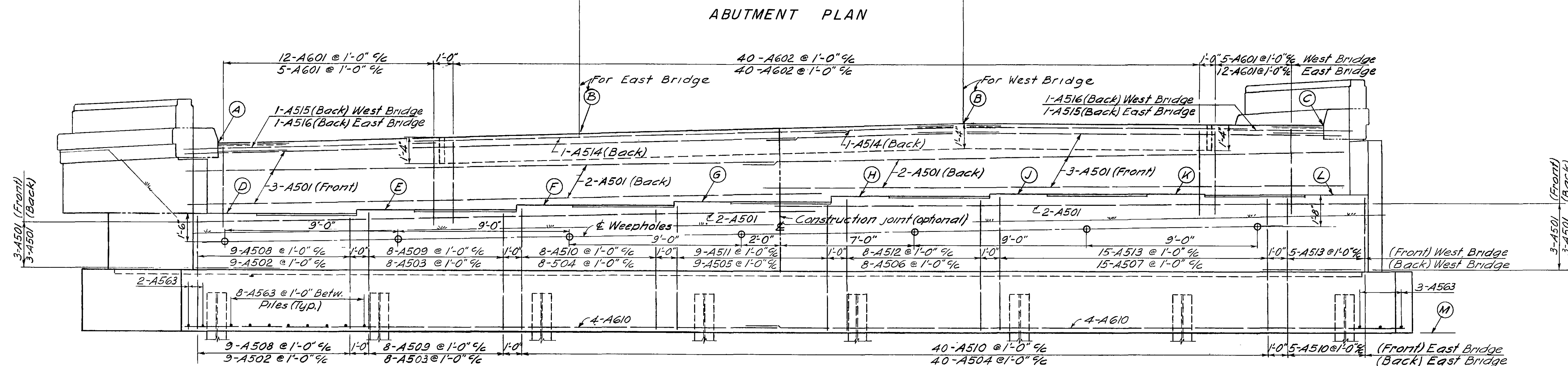
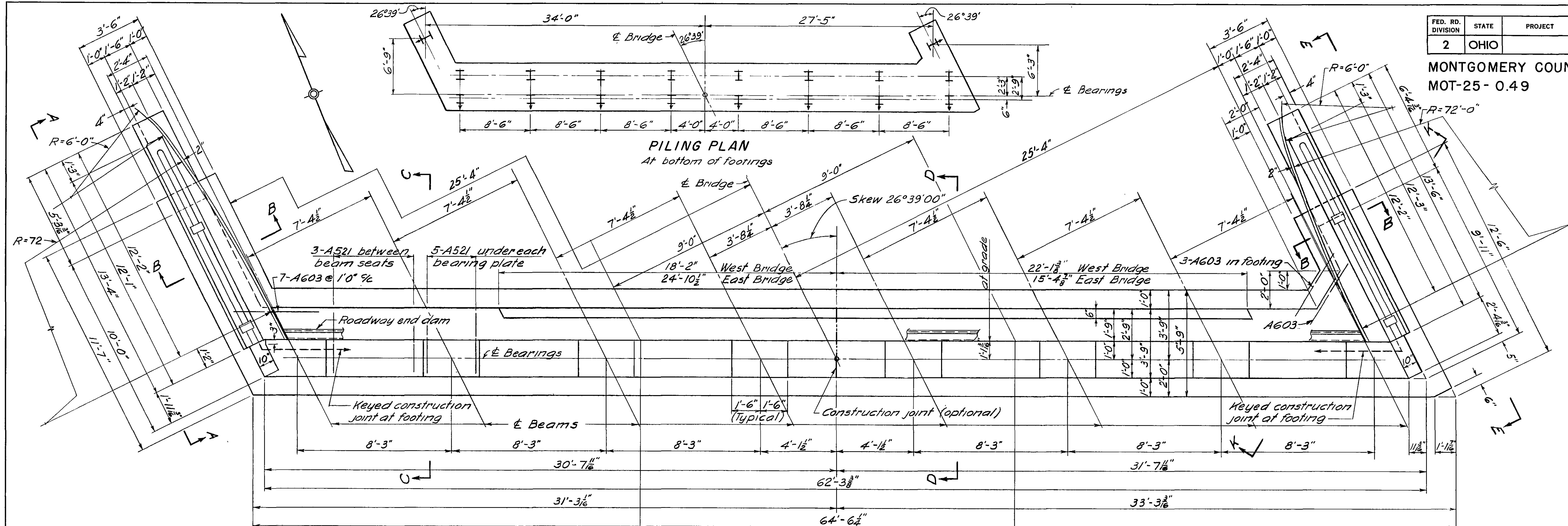
YULE, STICKLEN, JORDAN & McNEE
ENGINEERS OHIO

REAR ABUTMENT PLAN AND ELEVATION

BRIDGE NO. MOT-25-0374
US 25 OVER S.R. 725
MONTGOMERY COUNTY

STA. 197+28.63
STA. 199+23.67

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
A.M.	A.M.	A.M.	E.W.T.	R.B.Y.	10/4/58	



For Elevations A-A and E-E, Sections B-B, C-C, D-D and K-K, see Sheet 310
For locations of points N, P, Q, R, S and T see Sheet 310

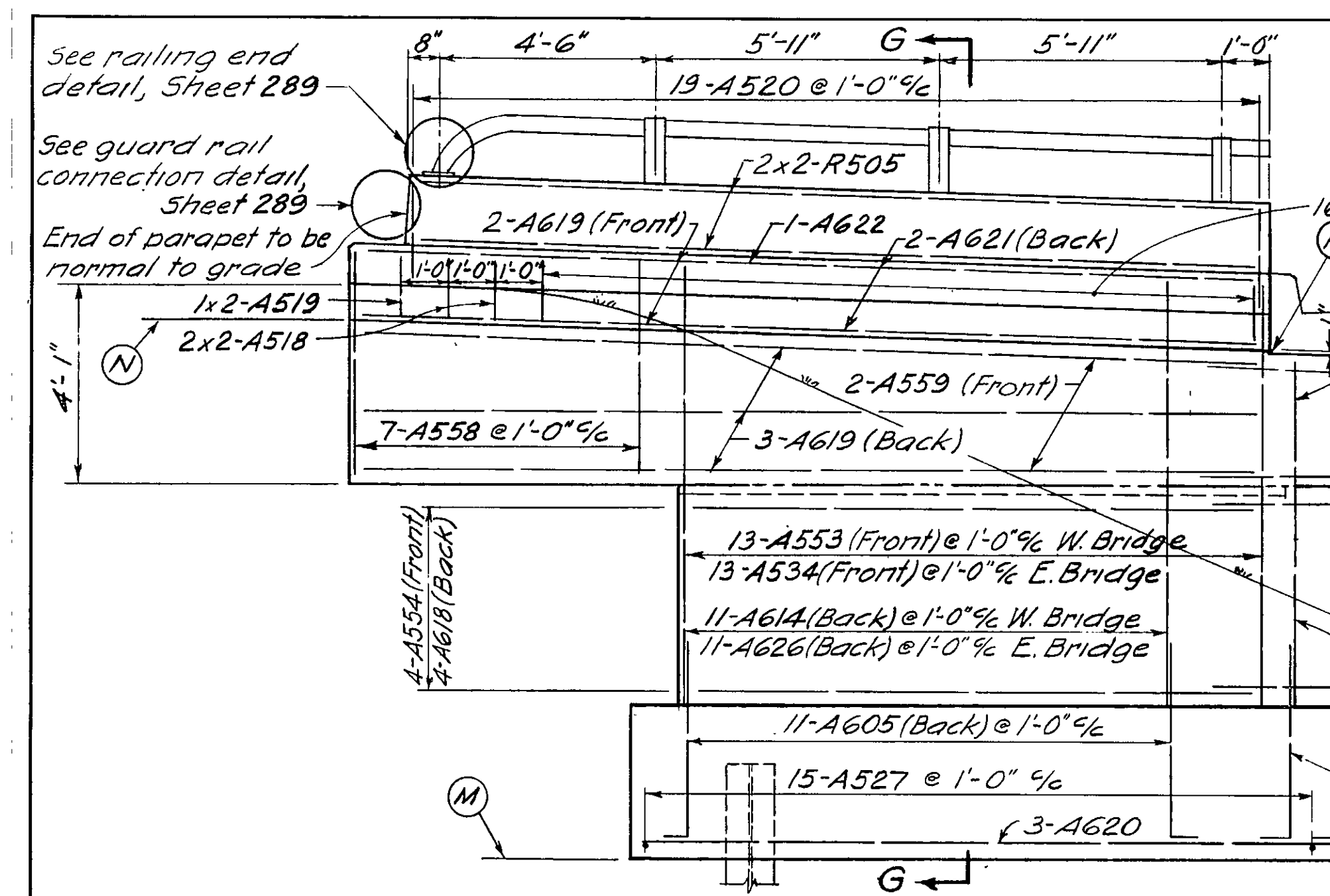
REINFORCING STEEL shall be placed so that it will not interfere with anchor bars for bearing plates

POROUS BACKFILL, 2 feet thick, full length of abutment and wings, shall extend up to the underside of the approach slab and to grade.

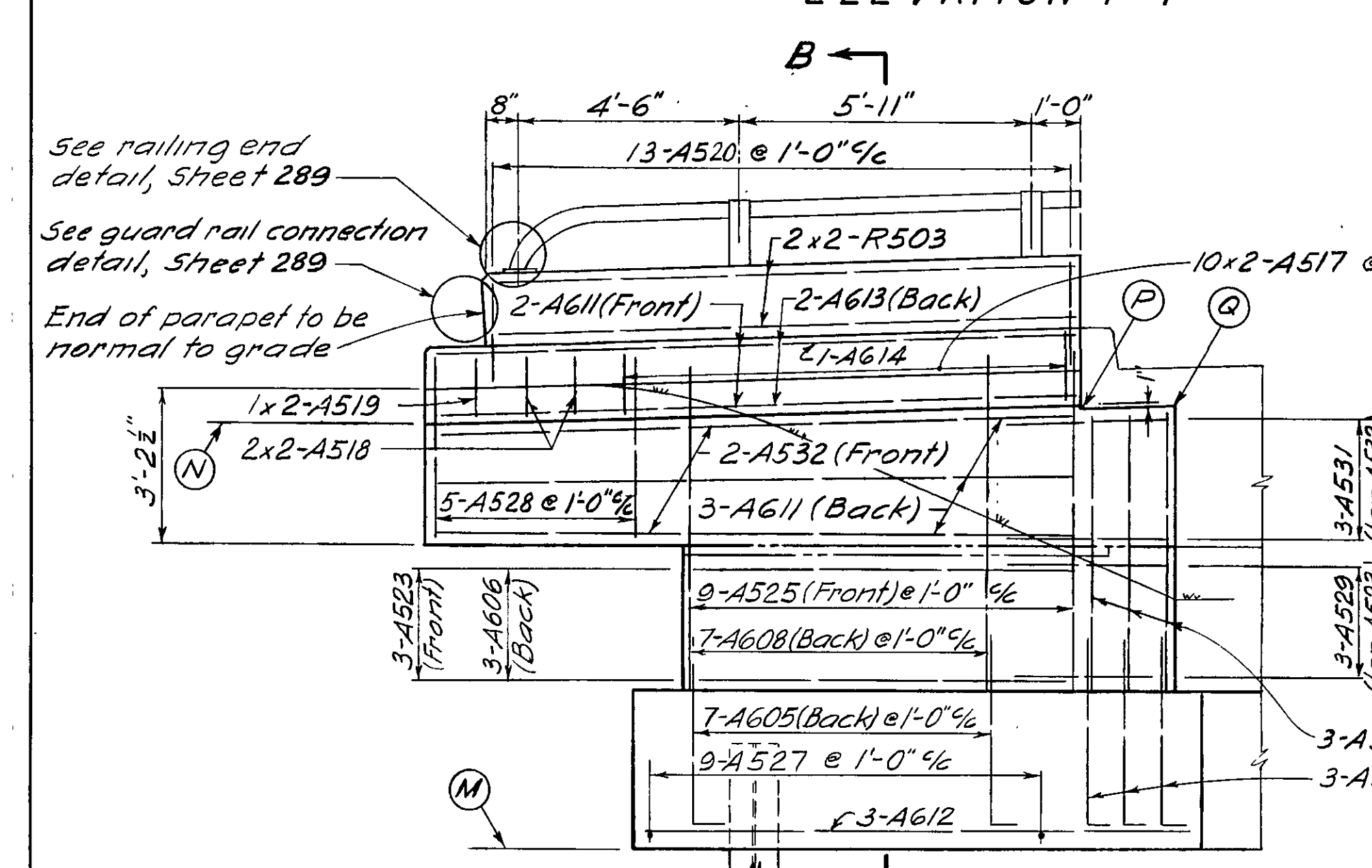
ABUTMENT	ELEVATIONS																
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
West Bridge	968.64	969.71	969.70	965.01	965.23	965.46	965.68	965.91	966.07	966.07	966.06	959.00	967.41	967.73	967.79	968.90	968.50
East Bridge	972.28	972.79	972.77	968.64	968.87	969.10	969.16	969.15	969.15	969.14	969.14	962.60	971.05	971.37	971.43	971.97	971.58

YULE, STICKLEN, JORDAN & McNEE ENGINEERS COLUMBUS OHIO			
FORWARD ABUTMENT PLAN AND ELEVATION			
BRIDGE NO. MOT-25-0374 US 25 OVER S.R. 725			
MONTGOMERY COUNTY		STA. 197+28.63 STA. 199+23.67	
DESIGNED	DRAWN	TRACED	CHECKED
A.M.	A.M.	A.M.	E.W.T.
REVIEWED		DATE	
R.B.Y.		10/15/58	

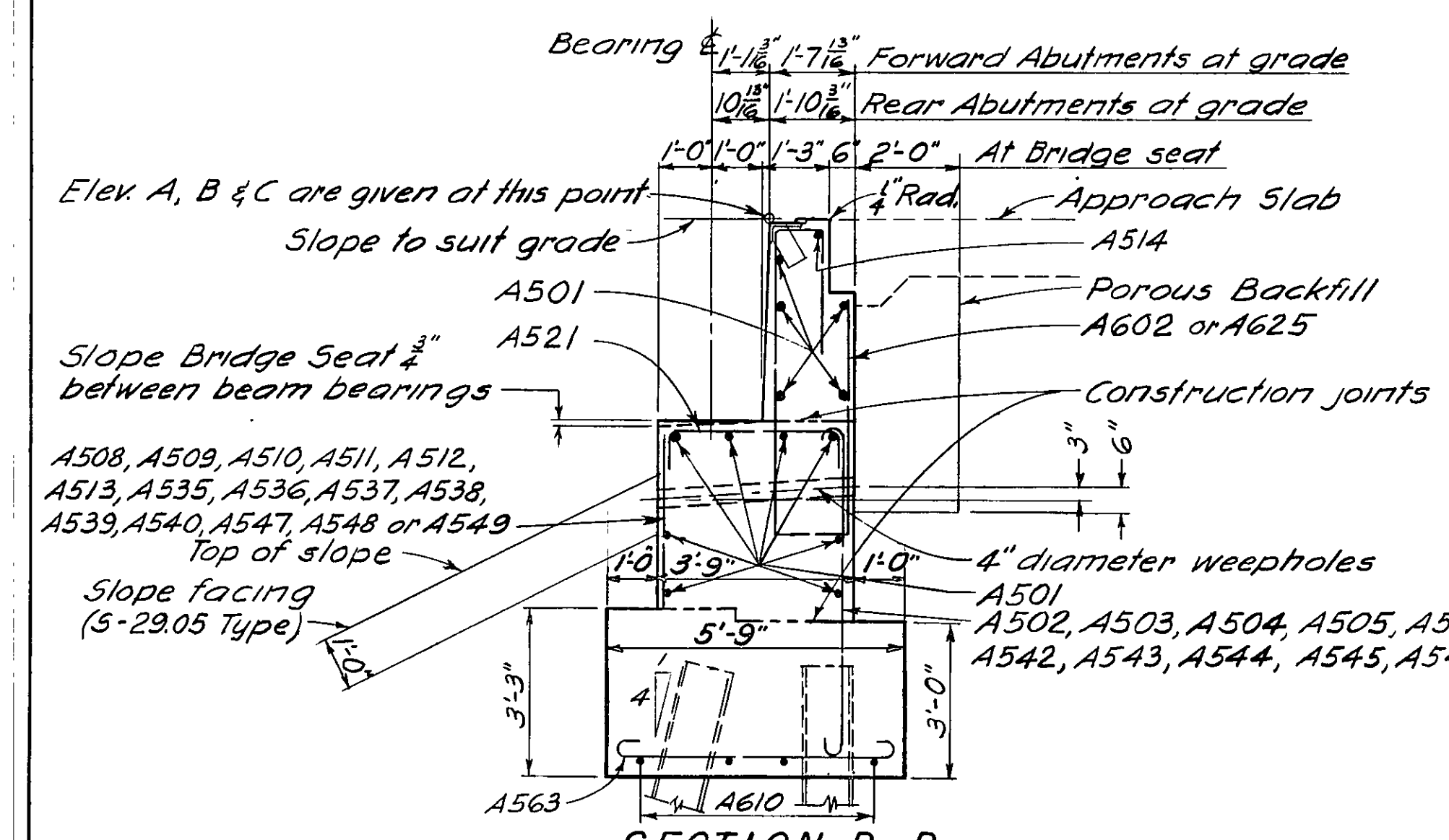
MONTGOMERY COUNTY
MOT-25-0.49



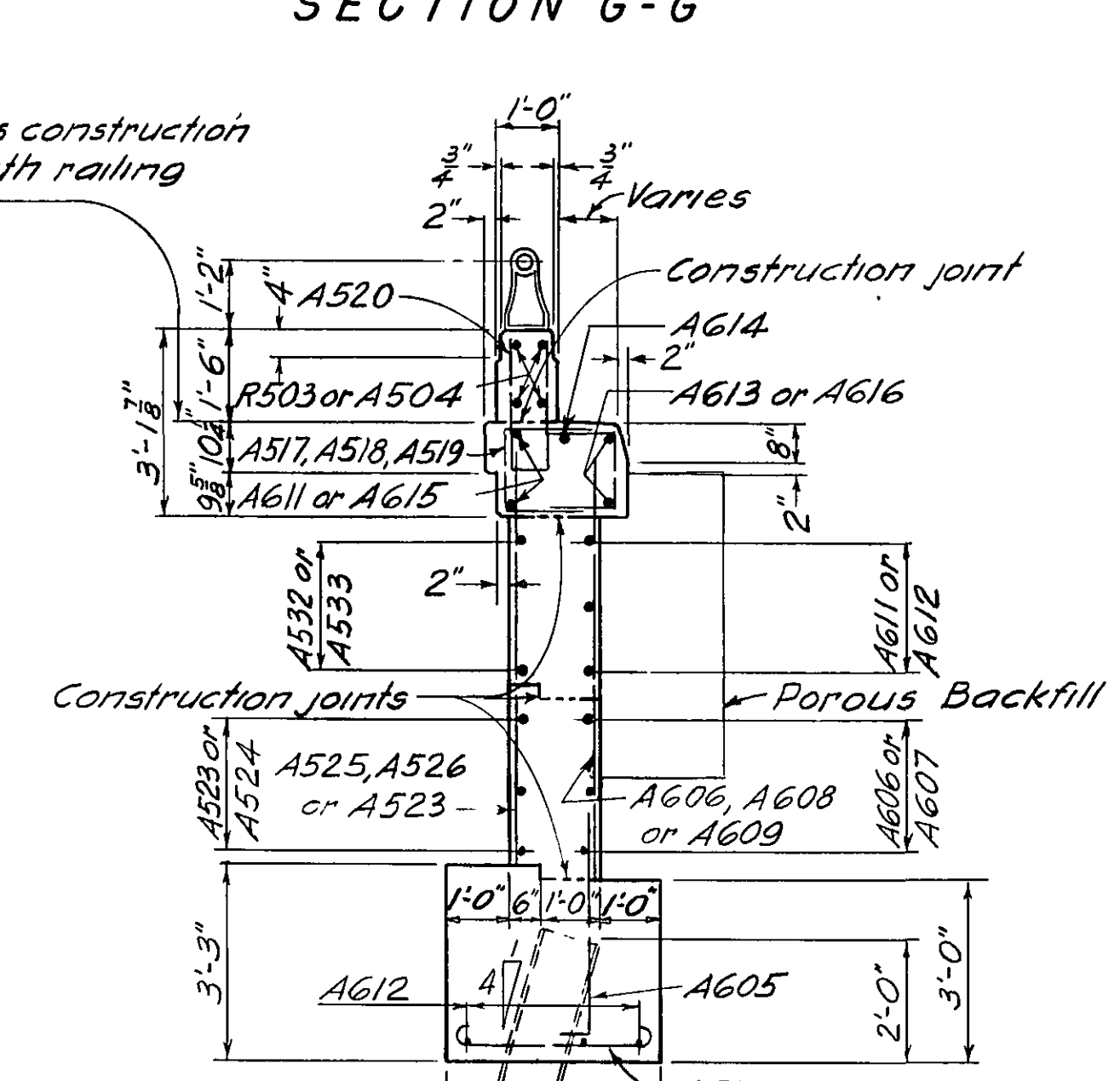
ELEVATION F-F



ELEVATION A-A

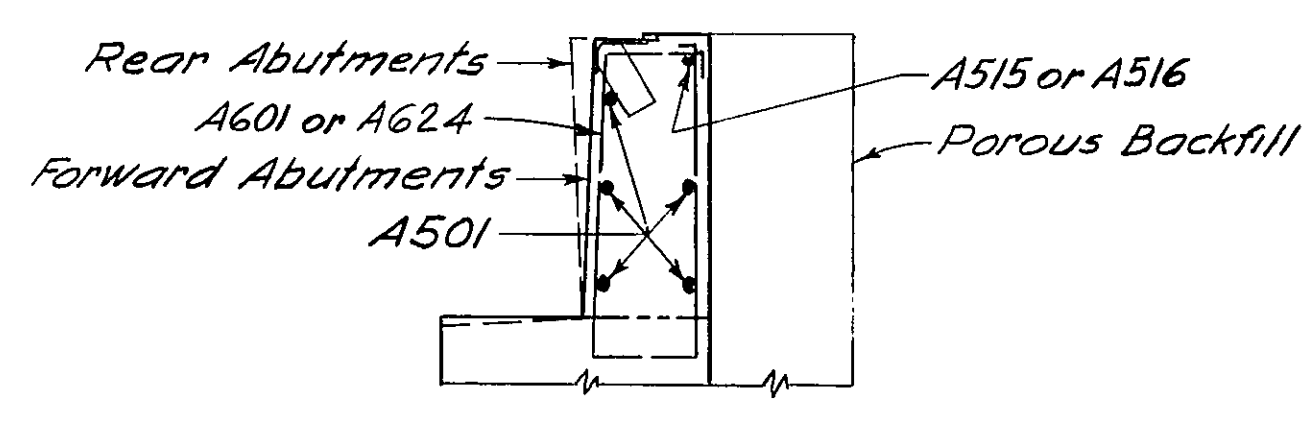


SECTION D-D

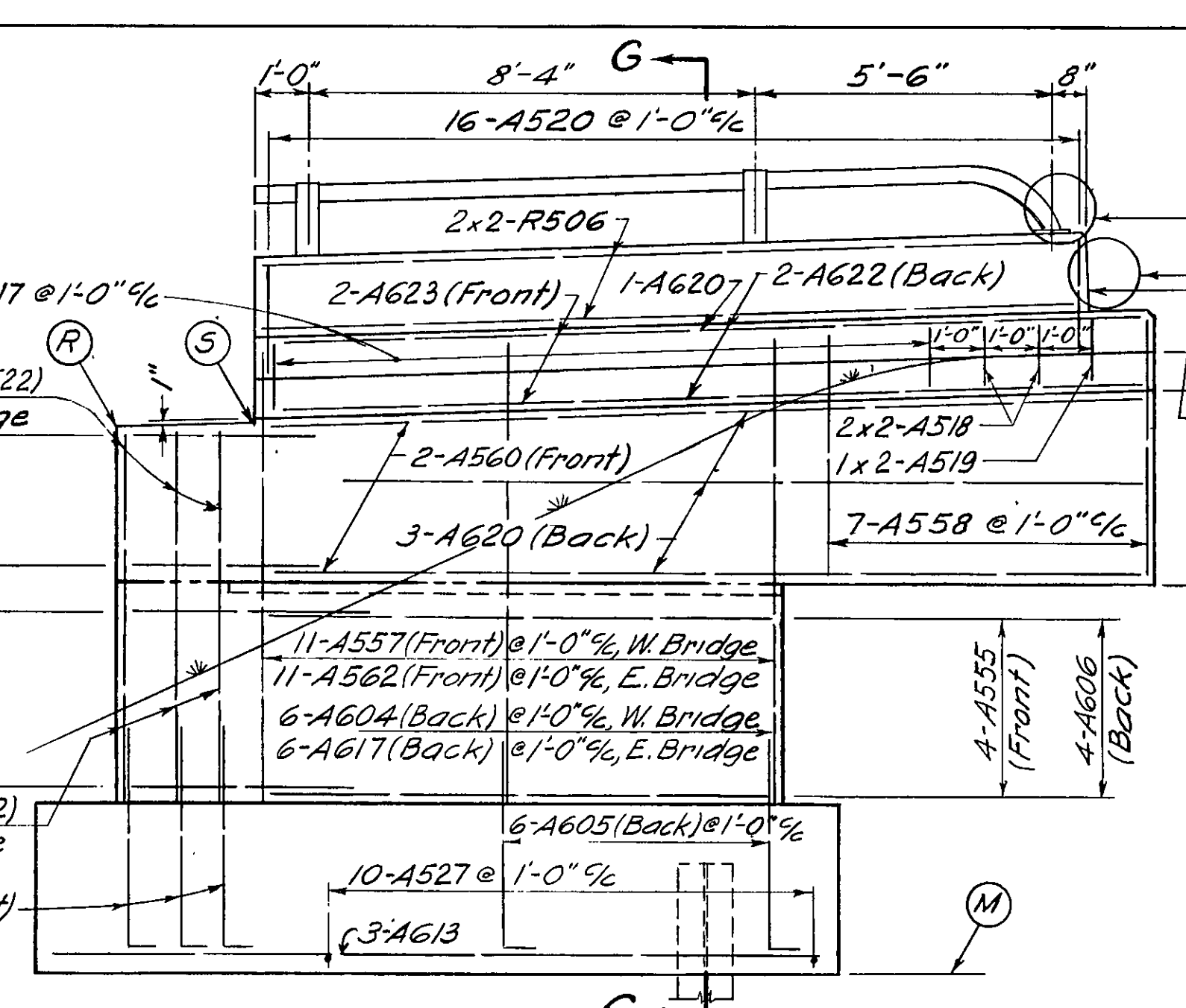


SECTION B-B

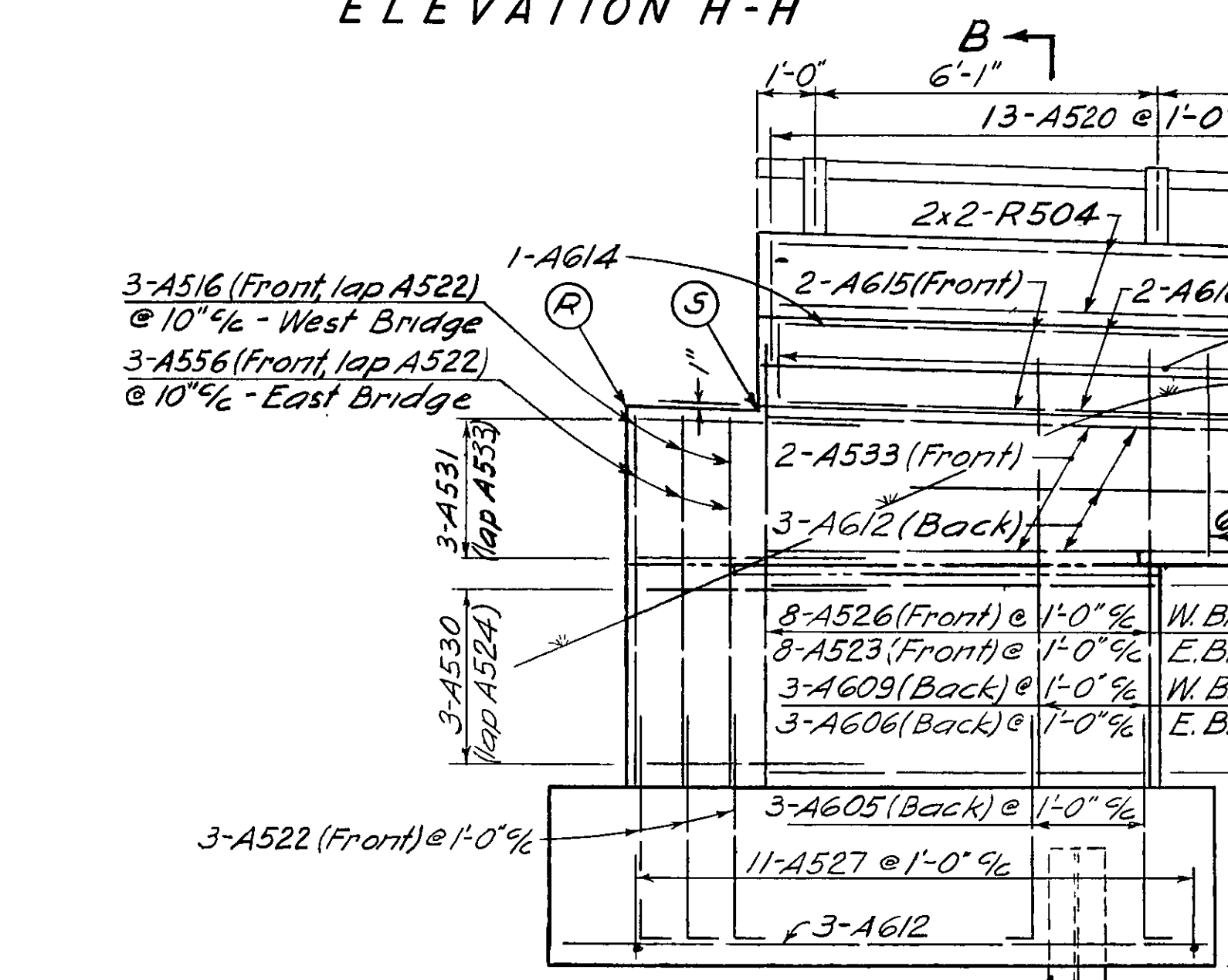
For Elevations M, N, P, Q, R, S and T, see Sheets 308 and 309



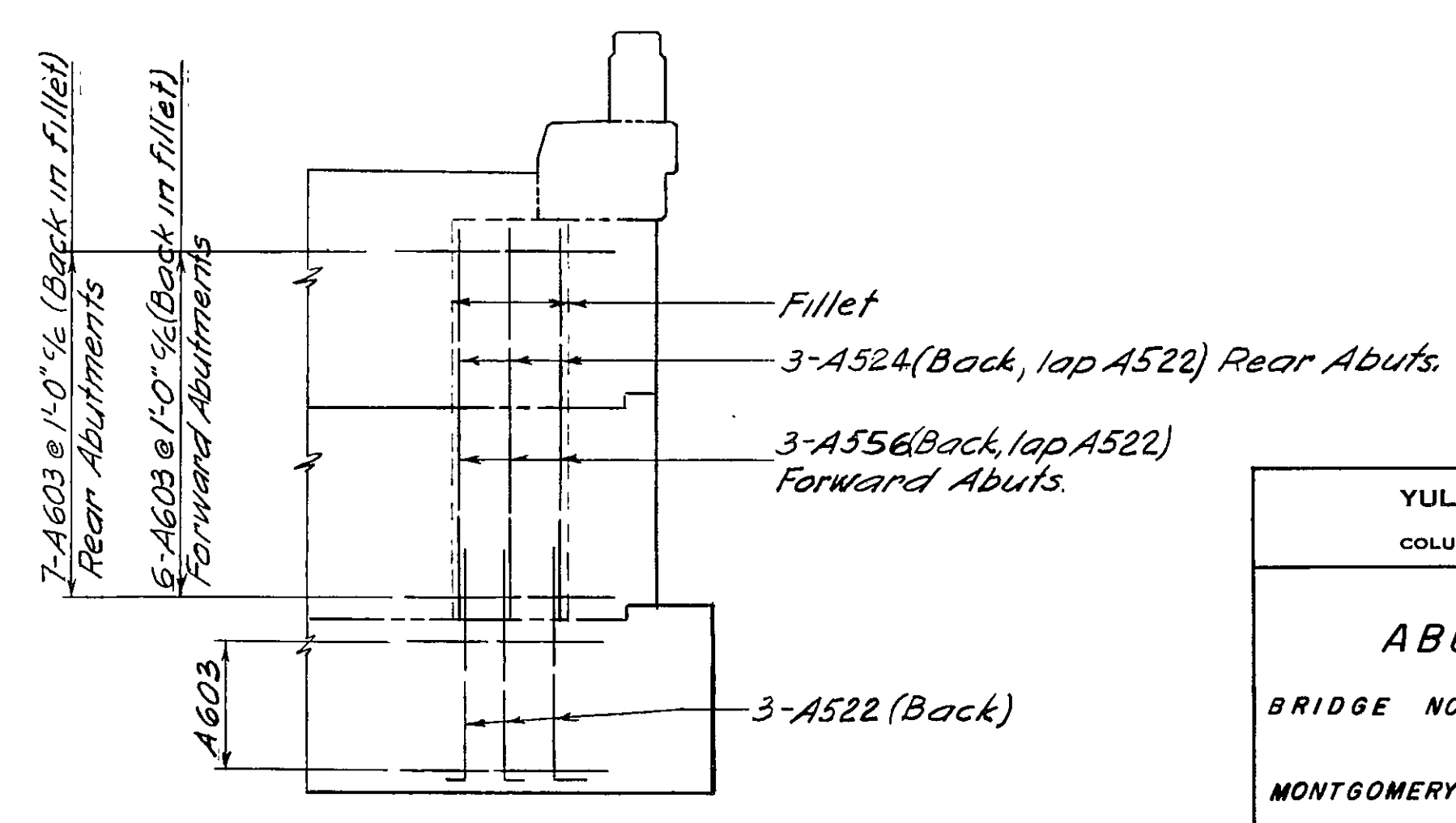
SECTION C-C



ELEVATION H-H



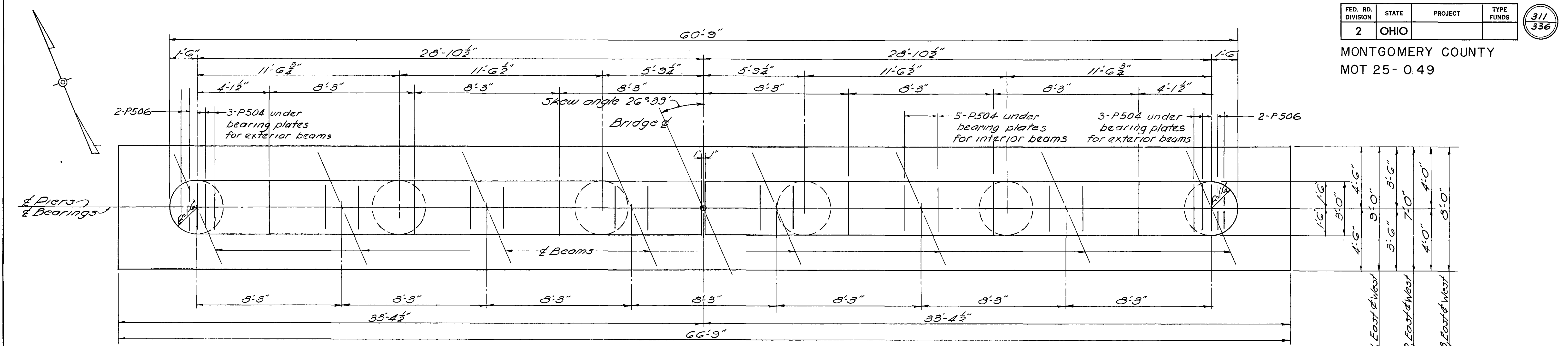
ELEVATION E-E



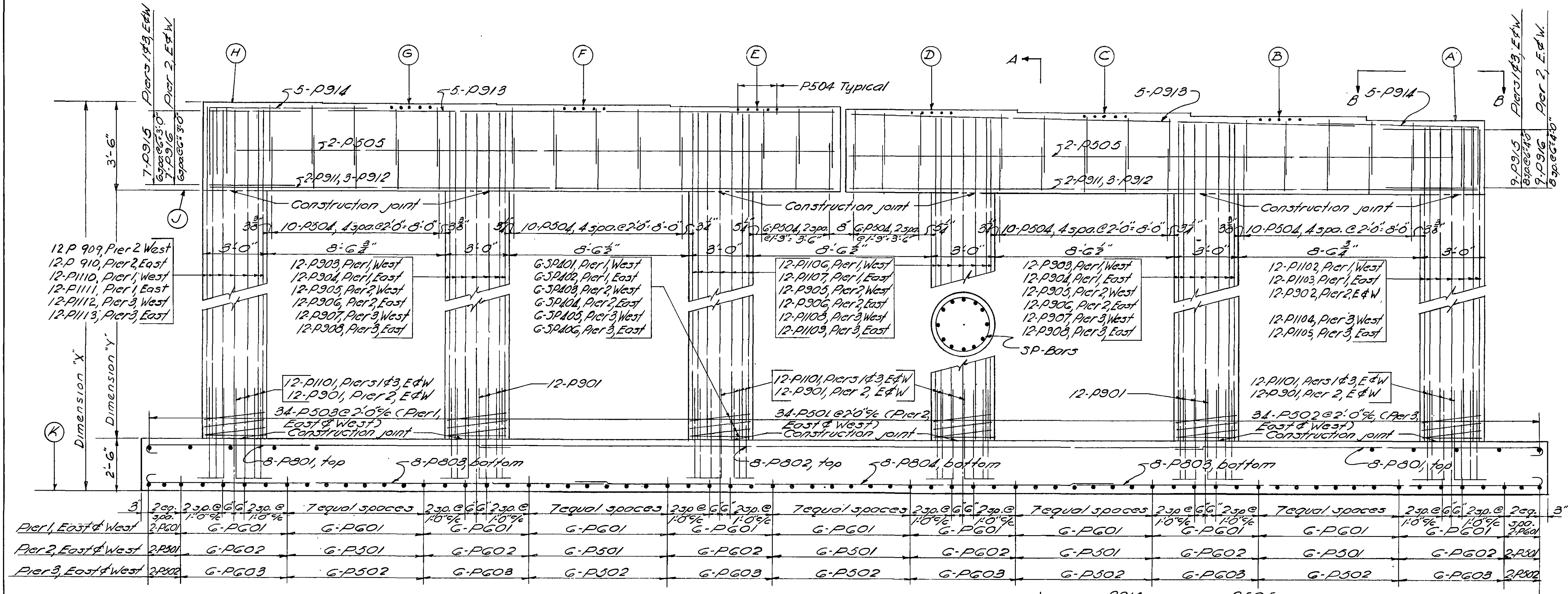
SECTION K-K

YULE, STICKLEN, JORDAN & MCNEE COLUMBUS ENGINEERS OHIO						
ABUTMENT DETAILS						
BRIDGE NO. MOT-25-0374						
US 25 OVER S.R. 725						
MONTGOMERY COUNTY STA. 197+28.63						
STA. 199+23.67						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVIS
A.M.	A.M.	A.M.	E.W.T.	R.B.Y.	10/4/58	

MONTGOMERY COUNTY
MOT 25- 0.49



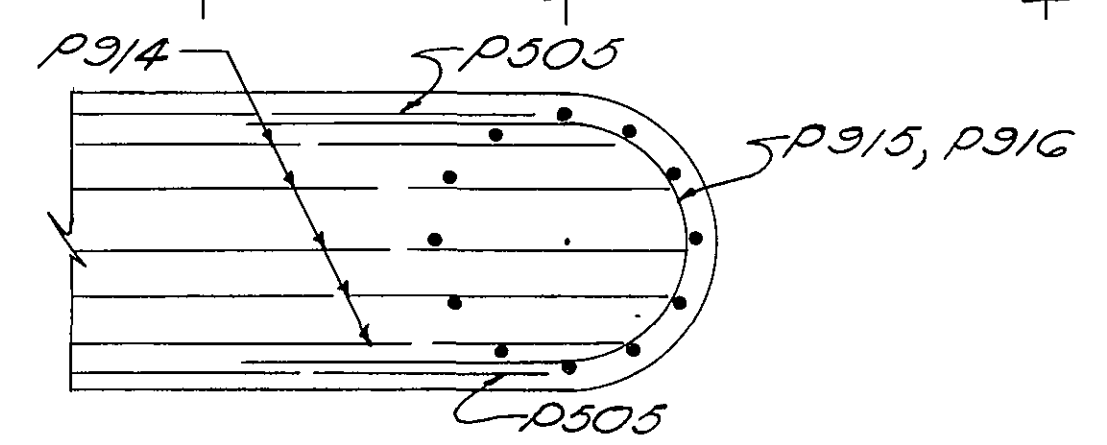
PLAN



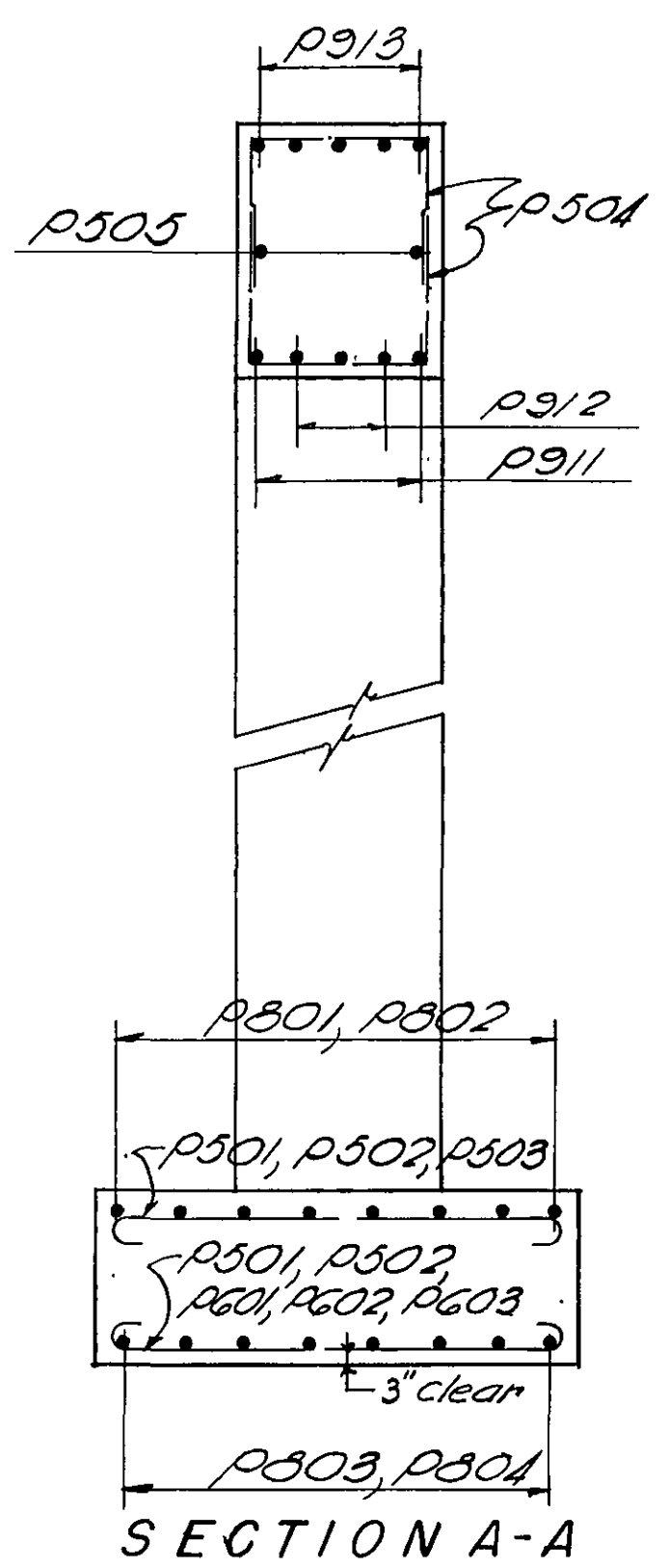
ELEVATION

	A	B	C	D	E	F	G	H	J	K	Dim. X	Dim. Y
Pier 1, West Bridge	970.49	970.49	970.49	970.33	970.11	969.88	969.63	969.43	969.33	946.50	22'-11 1/8"	16'-11 1/8"
Pier 1, East Bridge	978.56	978.57	978.57	978.38	978.58	978.52	978.29	978.07	969.57	950.00	23'-0 3/8"	17'-0 3/8"
Pier 2, West Bridge	968.85	968.85	968.85	968.69	968.46	968.24	968.01	967.79	964.29	947.50	20'-3 1/2"	14'-3 1/2"
Pier 2, East Bridge	971.92	971.93	971.93	971.93	971.93	971.88	971.65	971.43	967.93	950.50	20'-11 1/8"	14'-11 1/8"
Pier 3, West Bridge	967.04	967.04	967.04	966.88	966.66	966.43	966.20	965.98	962.48	946.00	19'-11 1/8"	13'-11 1/8"
Pier 3, East Bridge	970.11	970.12	970.12	970.13	970.13	970.07	969.84	969.62	966.12	948.50	21'-1 1/8"	15'-1 1/8"

REINFORCING STEEL in pier caps shall be placed so that it will not interfere with anchor bars for bearing plates



SECTION B-B



SECTION A-A

YULE, STICKLEN, JORDAN & McNEE
ENGINEERS
COLUMBUS OHIO

PIER DETAILS

BRIDGE NO. MOT-25-0374
US 25 OVER S.R. 725

MONTGOMERY COUNTY STA. 197 + 28.63
STA. 199 + 23.67

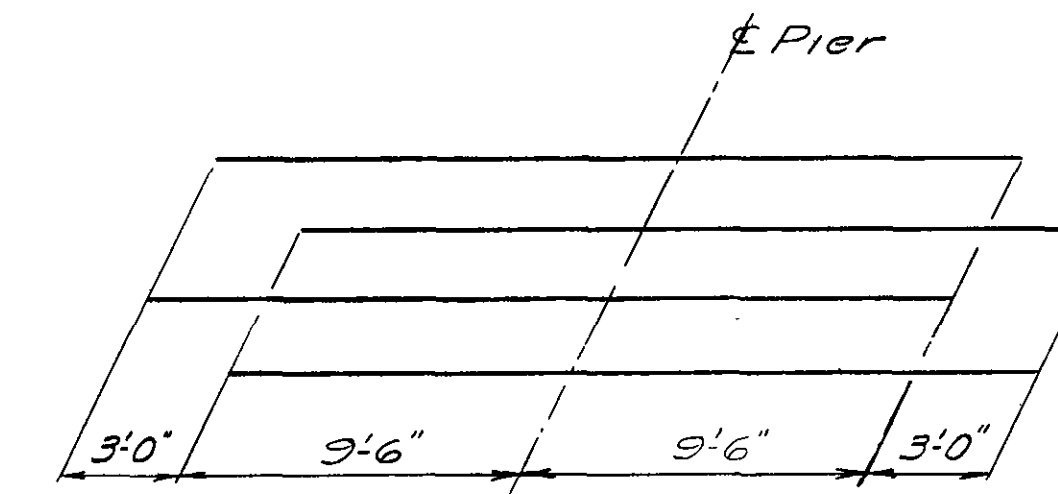
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CPT	JHD	JHD	E.W.T.	R.B.Y.	10/4/58	

DEFLECTION AND CAMBER

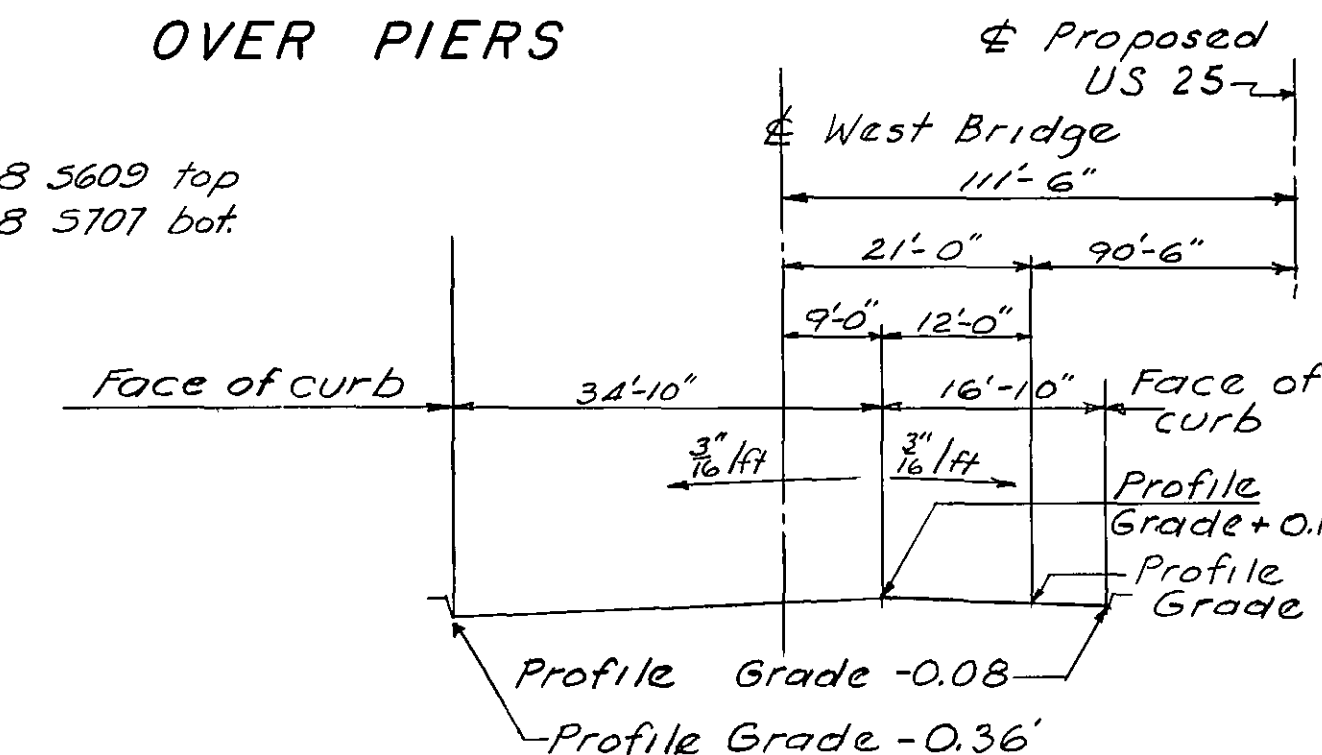
Outside Beams				
	Span 1	Span 2	Span 3	Span 4
Deflection due to weight of steel	0"	$\frac{1}{16}$ "	$\frac{1}{16}$ "	0"
Deflection due to remaining dead load	$\frac{1}{8}$ "	$\frac{1}{4}$ "	$\frac{1}{4}$ "	0"
Sum of deflection	$\frac{1}{8}$ "	$\frac{5}{16}$ "	$\frac{5}{16}$ "	0"
Required Camber*	0"	0"	0"	0"

Inside Beams				
	Span 1	Span 2	Span 3	Span 4
Deflection due to weight of steel	0"	$\frac{1}{16}$ "	$\frac{1}{16}$ "	0"
Deflection due to remaining dead load	$\frac{1}{16}$ "	$\frac{3}{16}$ "	$\frac{7}{16}$ "	0"
Sum of deflection	$\frac{1}{16}$ "	$\frac{4}{16}$ "	$\frac{5}{16}$ "	0"
Required Camber*	0"	0"	0"	0"

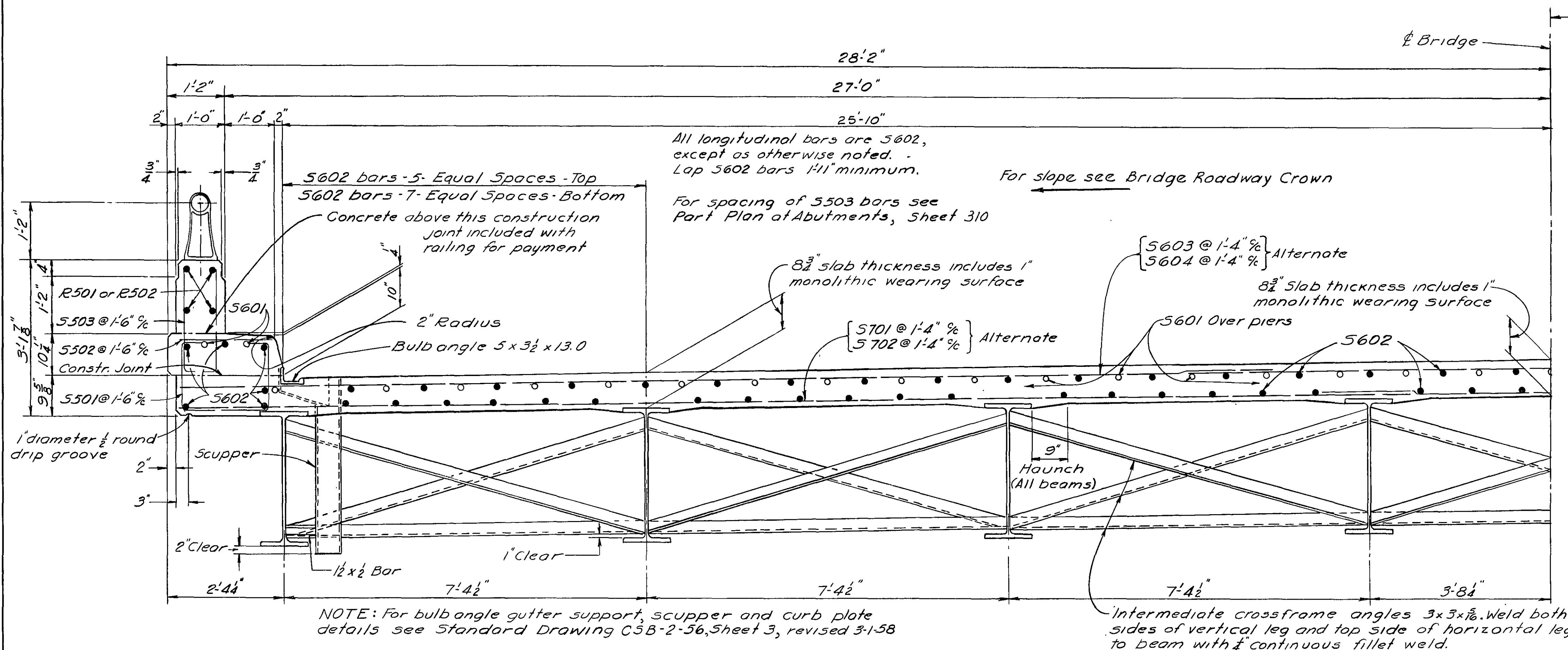
* Place mill camber up



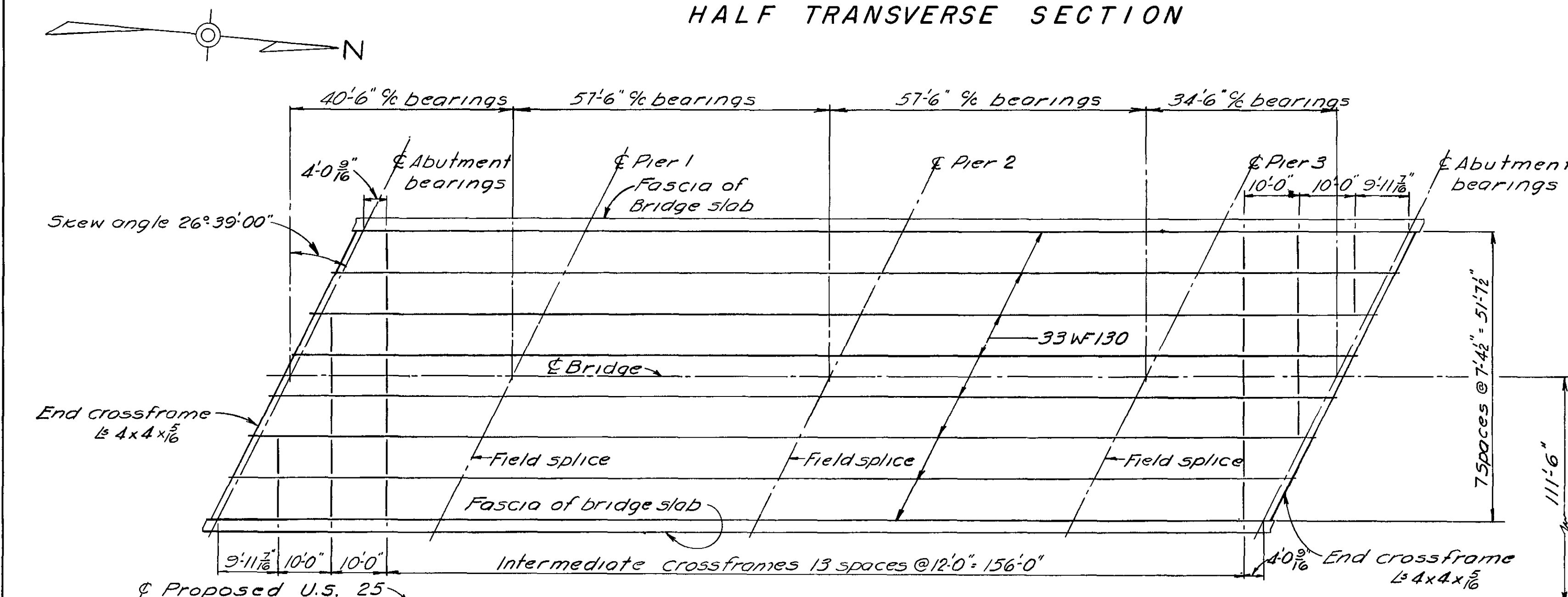
STAGGER OF S601 BARS OVER PIERS



BRIDGE ROADWAY CROWN
West Bridge as shown
East Bridge opposite hand



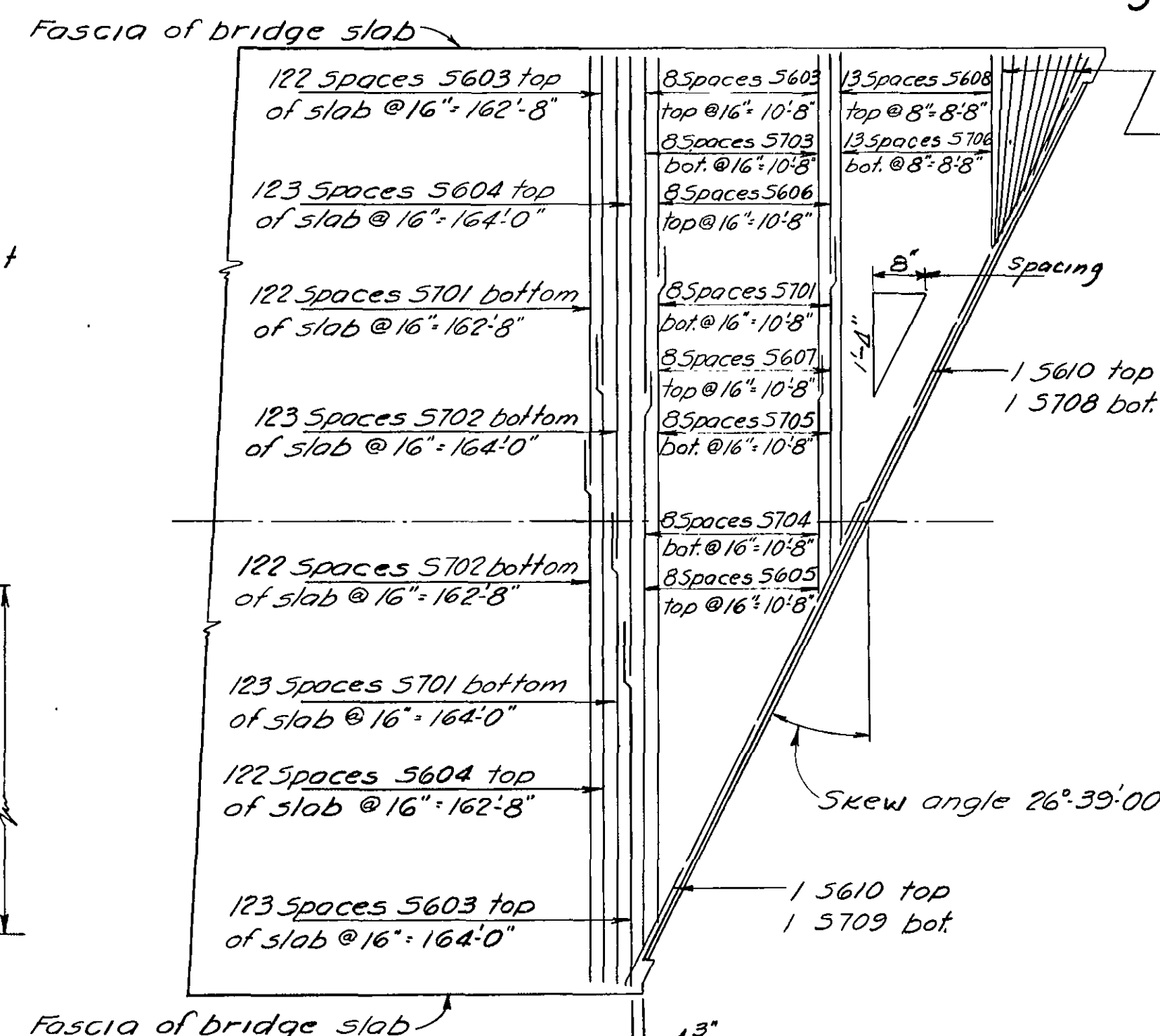
HALF TRANSVERSE SECTION



STEEL FRAMING PLAN, WEST BRIDGE

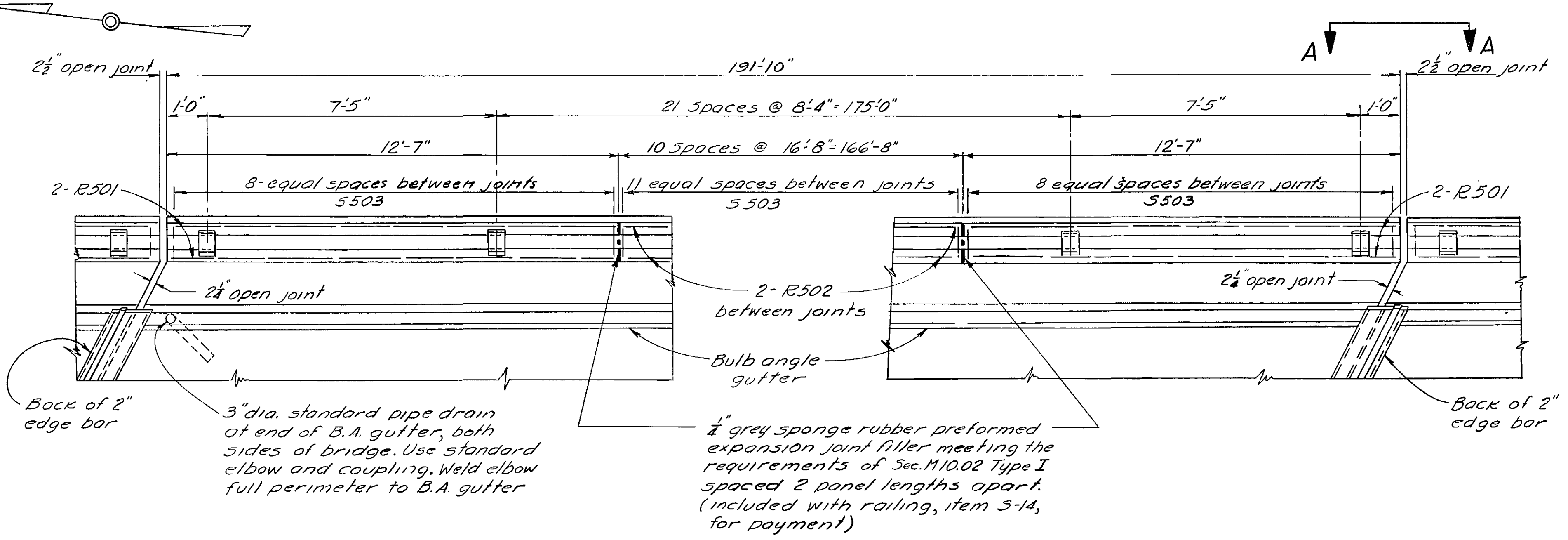
CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress up grade. The slab may be placed in sections, between transverse construction joints which are normal to the centerline of bridge and are located near the center of any span

For details of end crossframes, beam cut-off at backwall and welded joint in superstructure end dam, see Standard Drawing No. CSB-2-56 Sheet 2, revised 3-1-58. For details of roadway end dam see Typical Details, Sheet 289. For aluminum railing post see Standard Drawing No. AR-1-57, revised 3-1-58, Type 'A'.

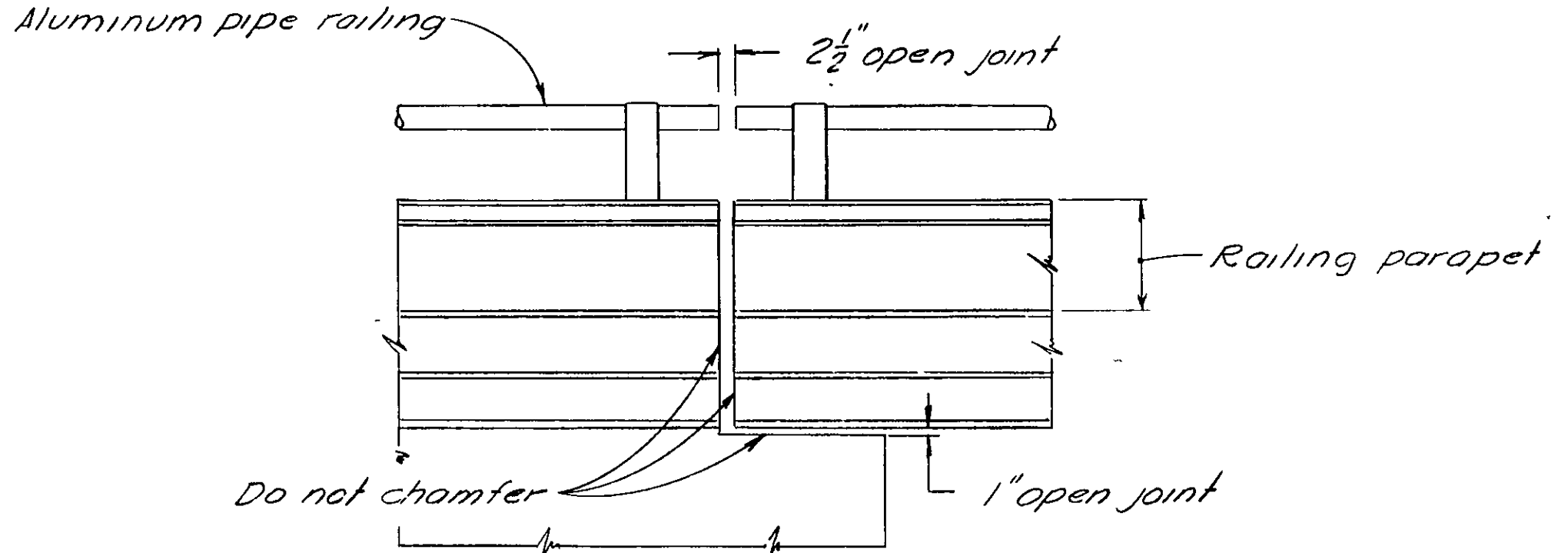


REINFORCING STEEL LAYOUT AT END OF SUPERSTRUCTURE

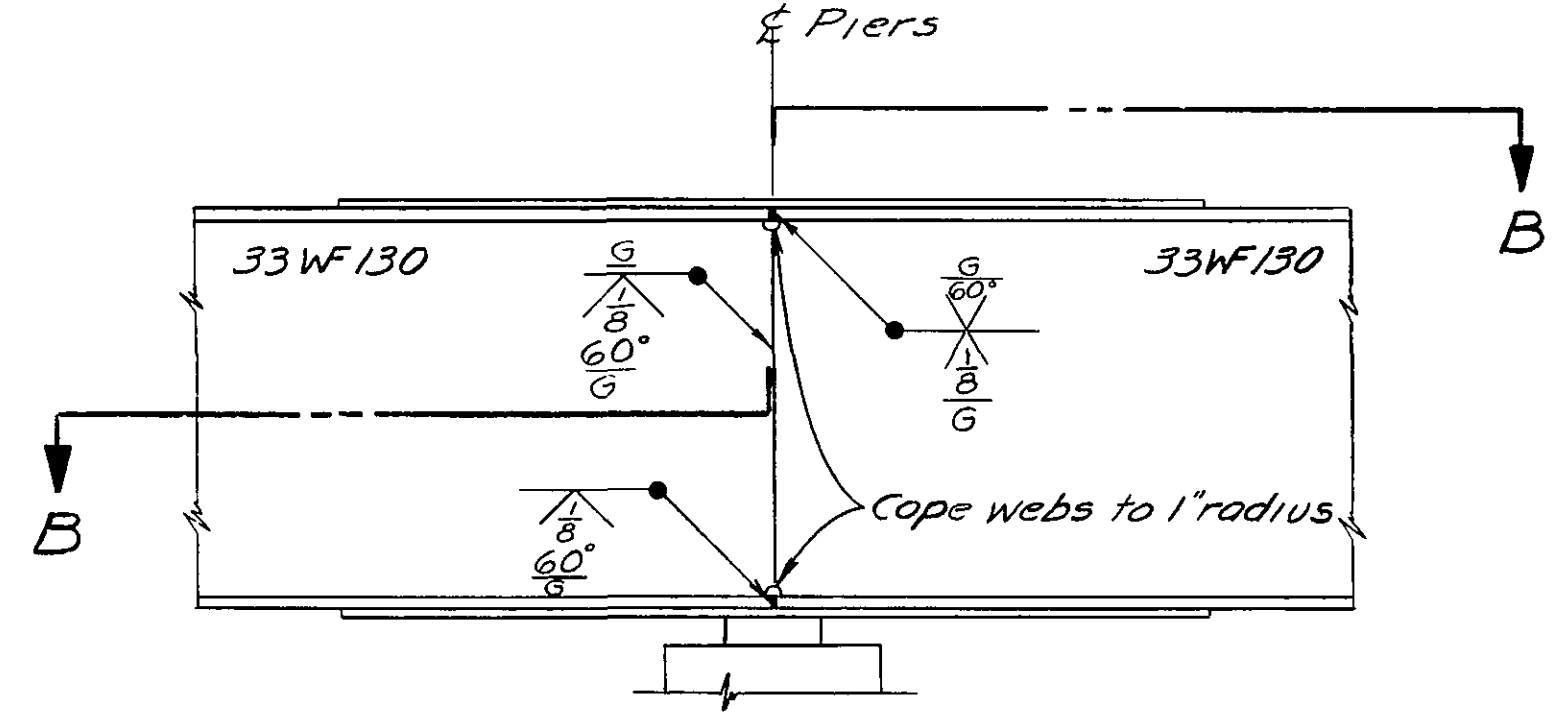
YULE, STICKLEN, JORDAN & McNEE ENGINEERS COLUMBUS OHIO					
SUPERSTRUCTURE DETAILS					
BRIDGE NO. MOT-25-0374					
US 25 OVER S.R 725					
MONTGOMERY COUNTY			STA. 197 + 28.63		
			STA. 199 + 23.67		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
C.P.T.	H.A.G.	H.A.G.	E.W.T.	R.B.Y.	10/4/58



PART PLAN AT ABUTMENT



VIEW A-A

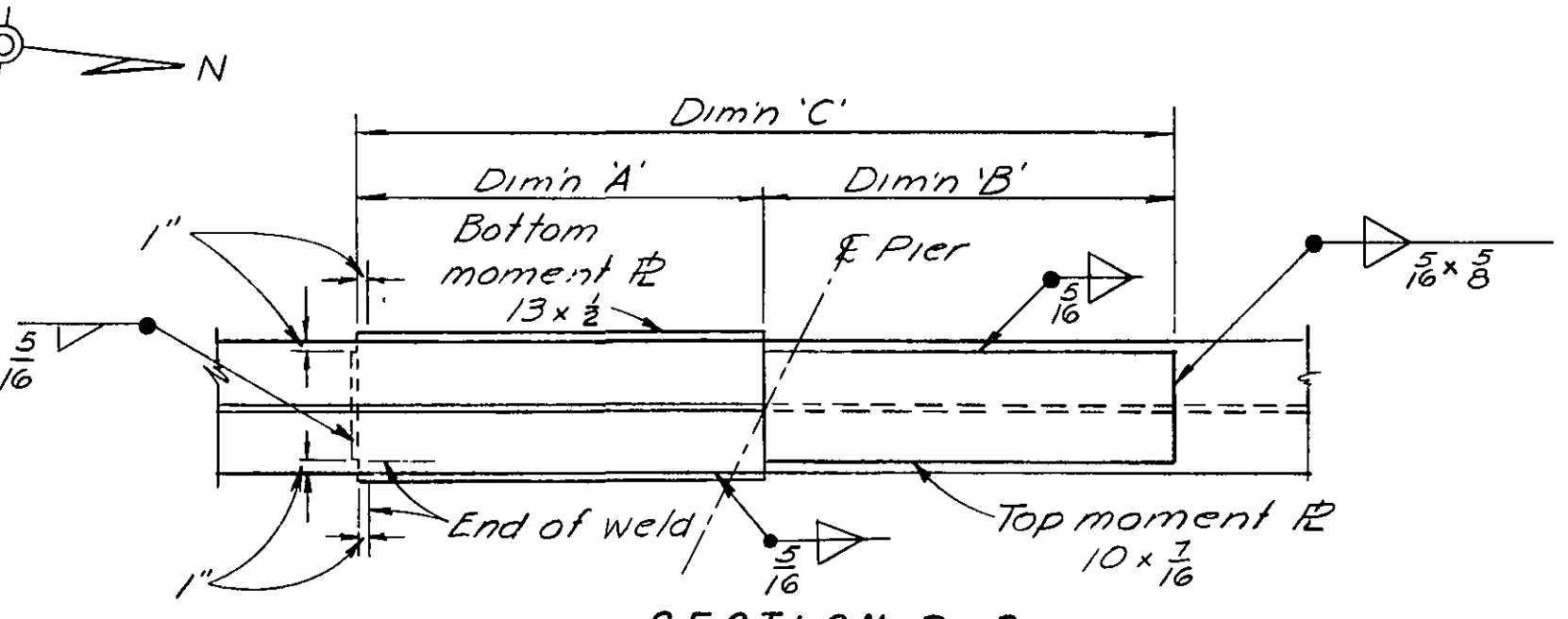


ELEVATION

BEAM SPLICE WELDING PROCEDURE

- 1- Raise end of beam at third pier 1/16".
- 2- Butt weld beam flanges and web at second pier using the following sequence: make one pass on each flange, then one on the web; repeat until welds are completed.
- 3- Weld top and bottom flange moment plates of second pier.
- 4- Lower end of beam at third pier.
- 5- Make splice at first and third pier in the same manner raising the ends of the beams 5/16" at the rear abutment and 1/4" at the forward abutment.

NOTE
For details of bearing plates see Standard: Drawing CSB-2-56 Sheet No. 3 revised 3-1-58
Bevel top bearing plate at abutments and expansion piers and bevel plate at fixed pier @ 3/8" per foot. All plate thicknesses are measured at the centerline of bearings



SECTION B-B

	Dim'n 'A'	Dim'n 'B'	Dim'n 'C'
Pier 1	9'-0"	9'-0"	18'-0"
Pier 2	10'-9"	10'-9"	21'-6"
Pier 3	7'-0"	9'-0"	16'-0"

BEAM SPLICE DETAILS AT PIERS

YULE, STICKLEN, JORDAN & MCNEE COLUMBUS ENGINEERS OHIO					
SUPERSTRUCTURE DETAILS					
BRIDGE NO. MOT-25- 0374					
US 25 OVER S.R. 725					
MONTGOMERY COUNTY					
STA. 197 + 28.63 STA. 199 + 23.67					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
C.P.T.	H.A.G.	H.A.G.	E.W.T.	R.B.Y.	10/4/58

LEGEND FOR PROJECT - AVERAGE RESULTS OF TESTS - 118 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	60	19	16	3	2	NP	NP	11	1
Gravel with sand	A-1-b(0)	A-1-b	39	21	20	13	7	NP	NP	12	7
Gravel with sand and silt	A-2-4(0)	A-2-4	33	15	18	22	12	NP	NP	12	2
Sandy silt	A-4(4)	A-4a	17	10	18	35	20	19	5	13	54
Silt	A-4(8)	A-4b	1	3	6	61	29	26	6	21	7
Silt and clay	A-6(9)	A-6a	9	4	7	37	43	31	13	17	20
Silty clay	A-6(11)	A-6b	5	4	12	38	41	37	18	20	16
Elastic clay	A-7-5(12)	A-7-5	0	2	7	52	39	48	17	30	1
Clay	A-7-6(14)	A-7-6	6	2	4	42	46	46	22	23	10
Overburden	Visual Classification	Auger boring plotted to vertical scale only.	—W Free water								
Shale	Visual Classification	Auger boring—plan view.	Sod & Topsoil=X ¹ / ₂ Approx. dept ¹ / ₂ .								
Limestone	Visual Classification	Core boring—plan view.	Berm material								

Samples Taken
Lab. Nos. So.
55859-55863 incl.
55867-55874 incl.
55898-55900 incl.
72173-72201 incl.
72292-72364 incl.

• 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.

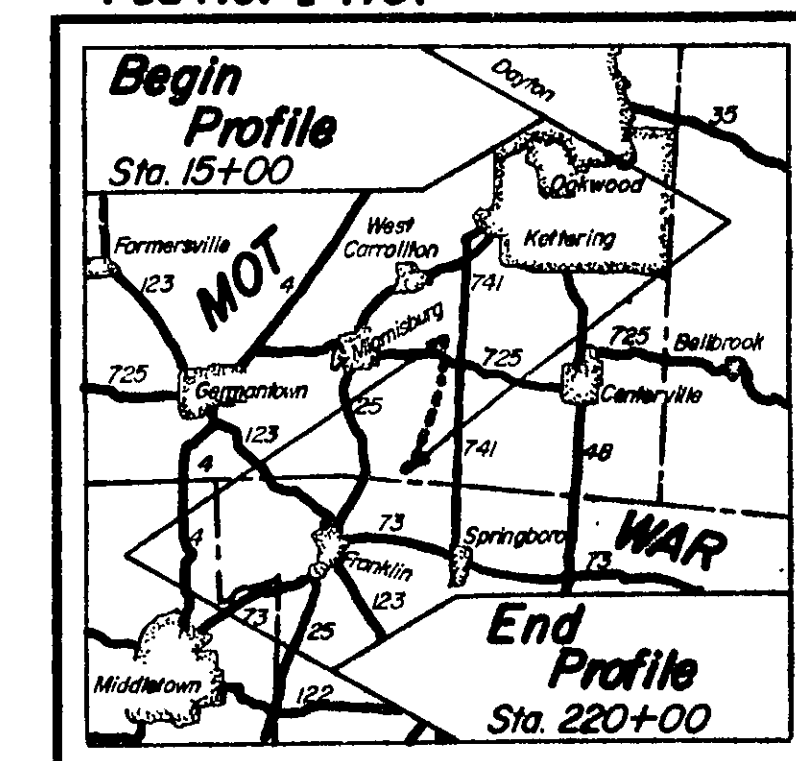
Note: Figures beside borings indicate water content in percent.

SOIL PROFILE
MONTGOMERY COUNTY
MOT-25-0.49
STATE HIGHWAY TESTING AND
RESEARCH LABORATORY
O. S. U. CAMPUS, COLUMBUS, OHIO



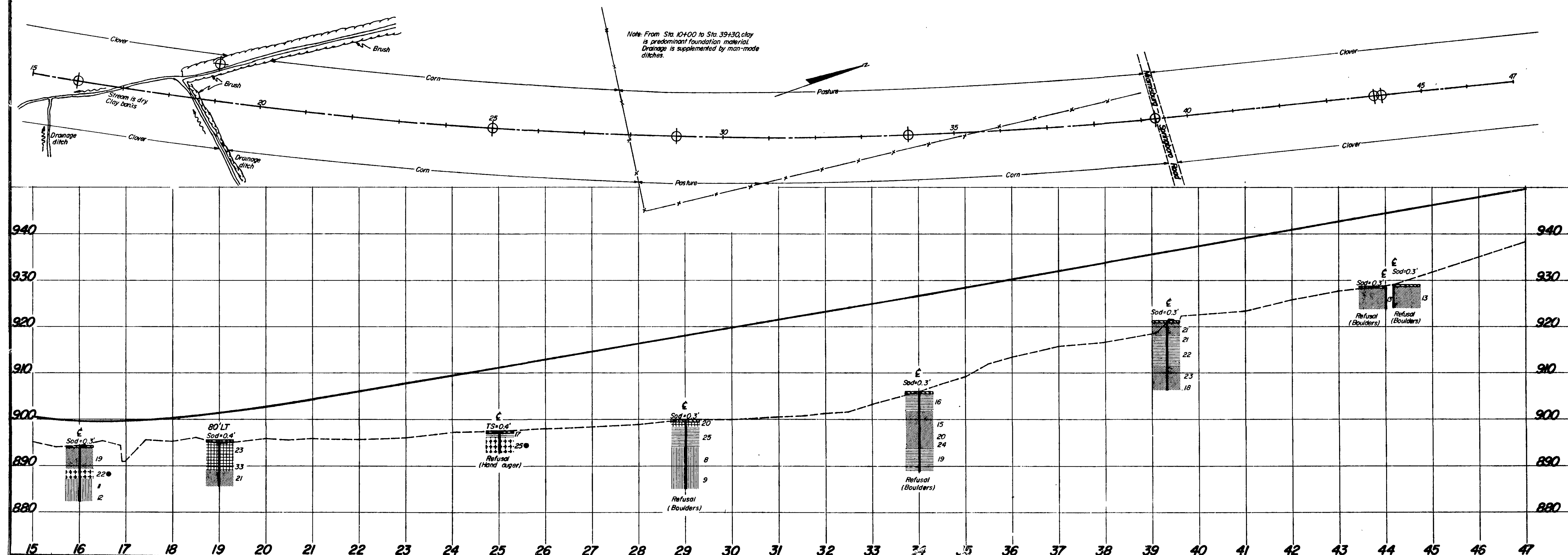
NOTE: THE INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS SECURED FOR THE USE OF THE STATE OF OHIO AND IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING THE CONSTRUCTION OF THE PROJECT.

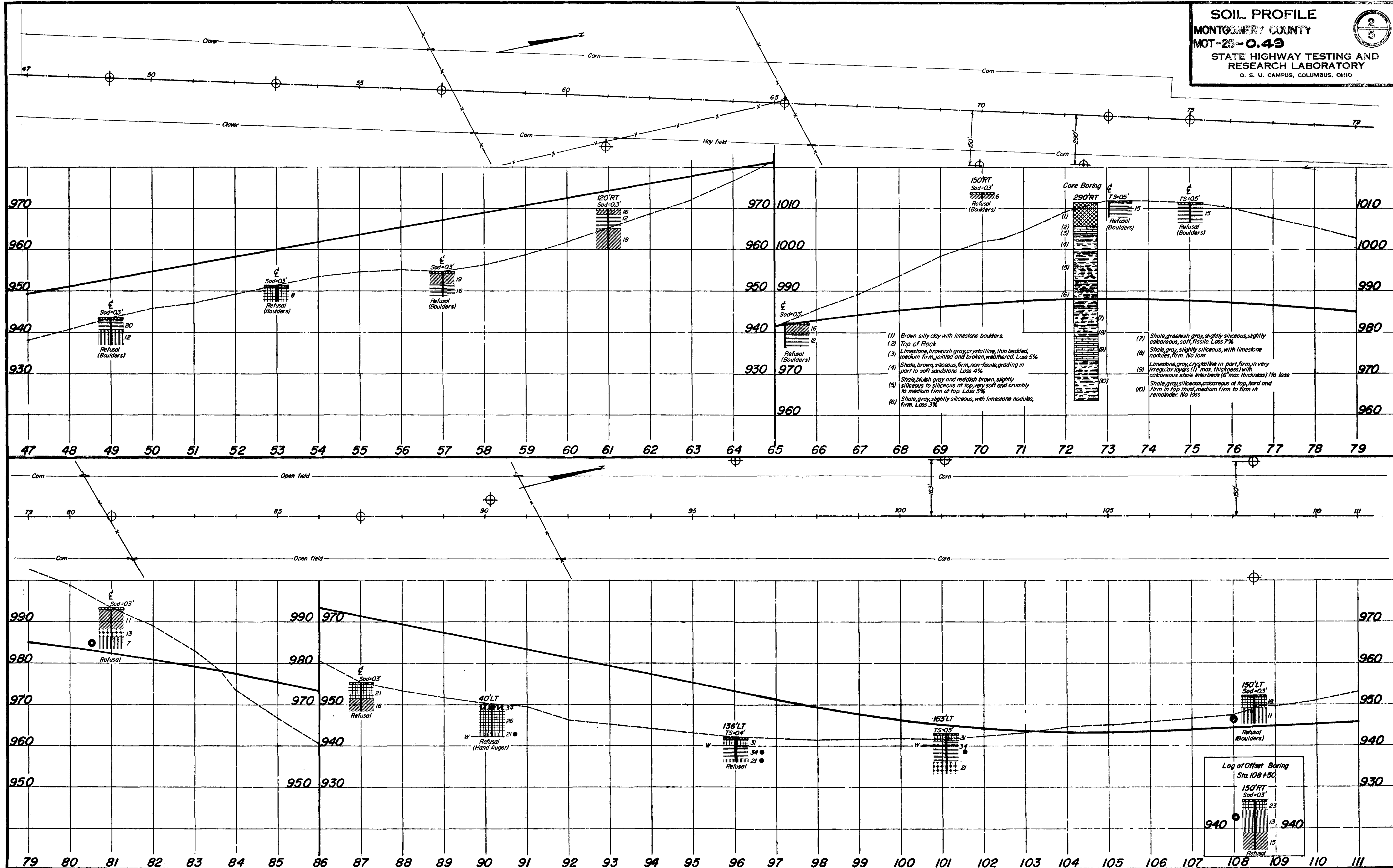
Fed No. 1-1101

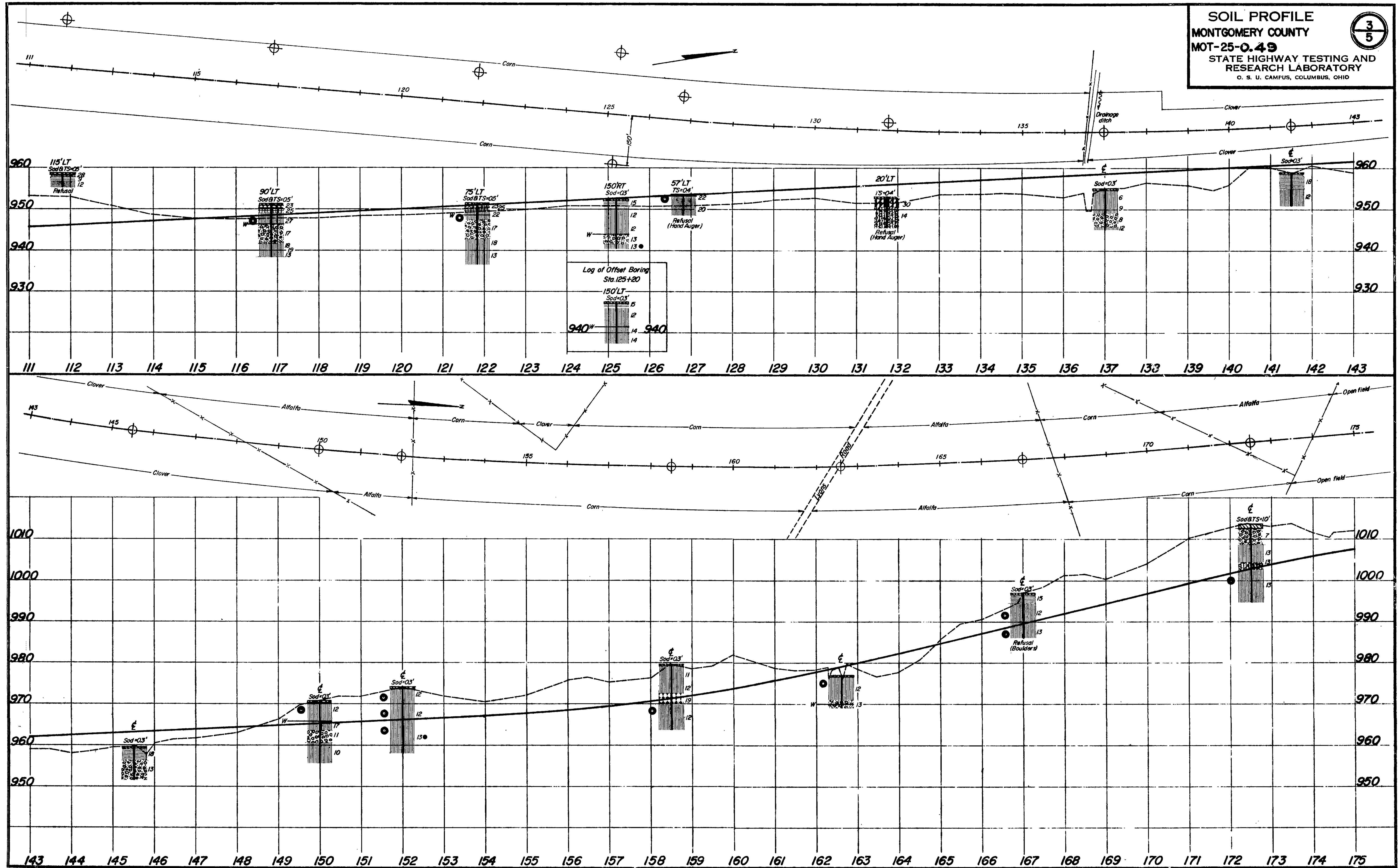


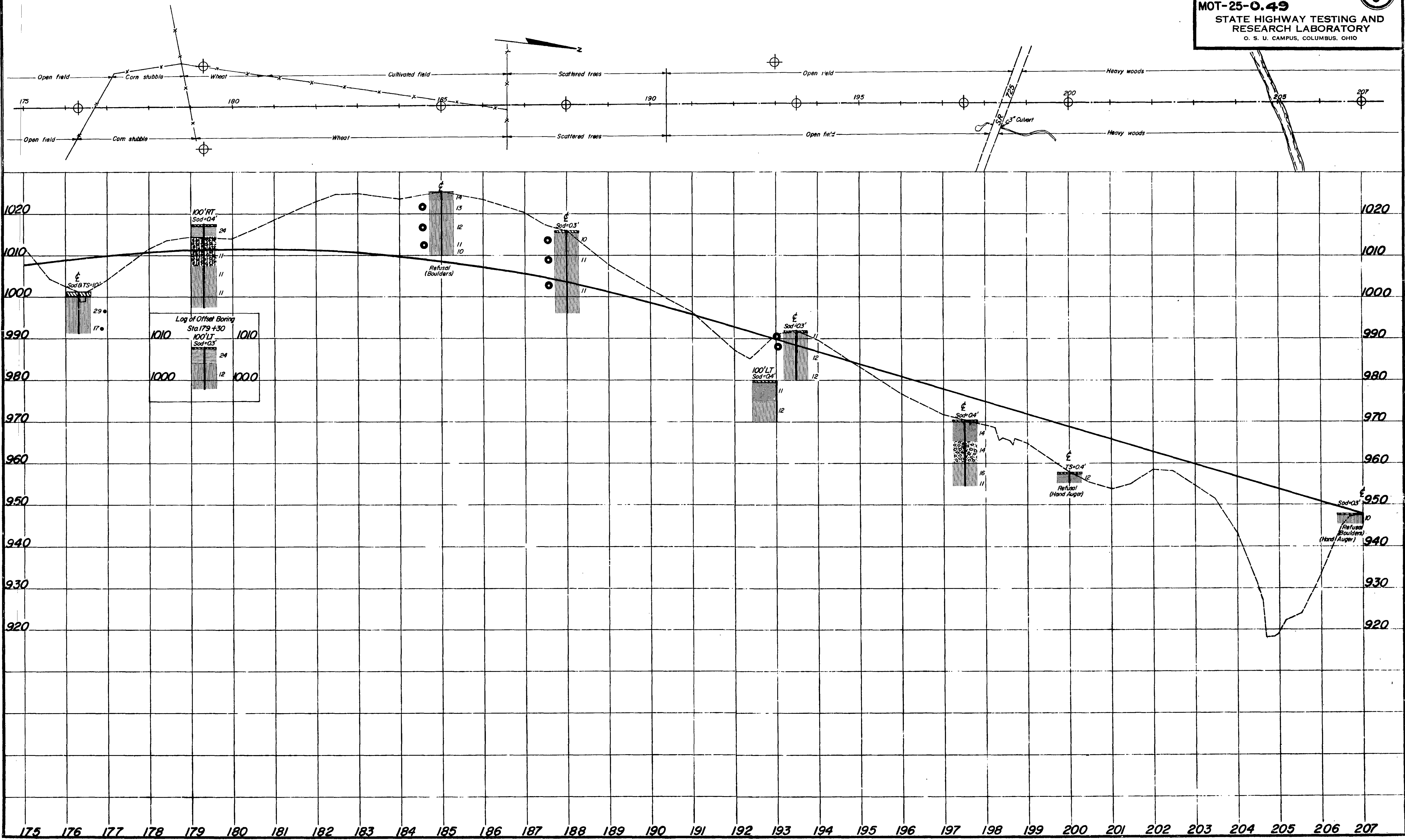
LOCATION MAP

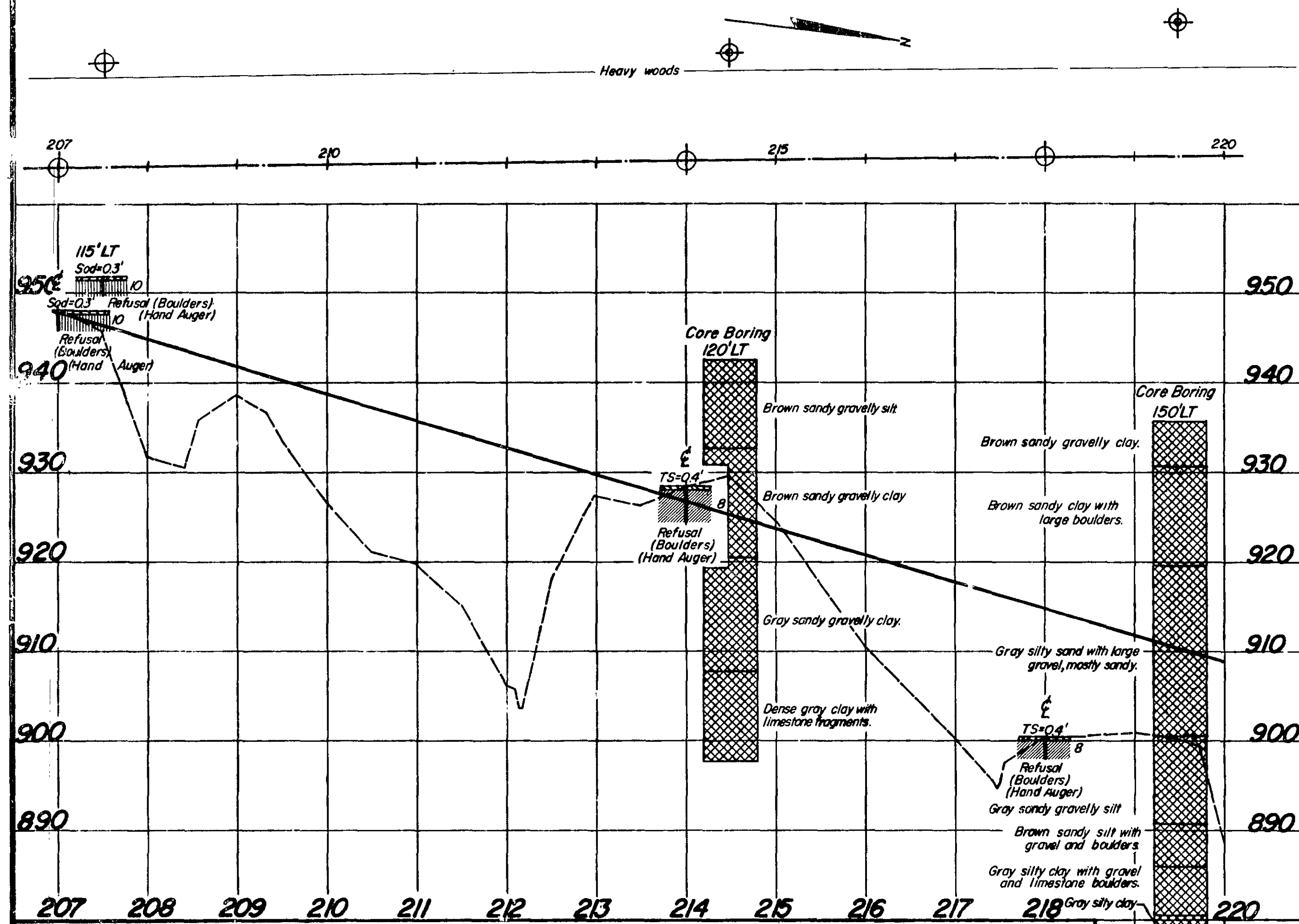
Recon - L.D.T. - 8/15/57
Drilling - Auger - CAG, D.J.H., BEB - 8/30/57
Core - L.W.T., J.R.H., W.A.M. - 9/19/57
Drafting - D.M. - 9/30/57











Summary of Soil Test Data

Station & Offset	Depth From-To	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	% W.C.	SHTL Class.
16+00 CL	0.3-5.0'	0	0	1	31	68	35	14	19	A-6a
	5.0-7.0'	0	2	4	74	20	23	6	11	A-4a
	7.0-10.0'	32	10	14	29	16	18	5	11	A-4a
	10.0-12.0'	10	11	15	36	28	20	5	12	A-4a
19+00 80' Lt.	0.3-4.0'	0	1	4	41	54	47	22	23	A-7-6
	4.0-7.0'	0	0	3	37	60	49	25	33	A-7-6
	7.0-10.0'	0	0	0	38	62	33	15	21	A-6a
25+00 CL	0.3-1.5'	0	2	8	52	38	38	19	17	A-6b
	1.5-4.5'	7	10	12	53	19	28	8	25	A-4b
29+00 CL	0.3-3.5'	0	1	3	54	42	42	20	20	A-7-6
	3.5-6.0'	0	4	11	45	40	37	21	25	A-6b
	6.0-11.0'	35	14	20	27	14	17	5	8	A-4a
	11.0-15.0'	10	12	18	33	27	24	10	9	A-4a
34+00 CL	0.3-4.0'	1	2	3	47	47	37	17	16	A-6b
	4.0-9.0'	13	7	10	34	36	26	11	25	A-6a
	9.0-11.0'	0	2	4	33	61	34	14	20	A-4a
	11.0-12.0'	0	4	13	55	28	33	13	24	A-6a
	12.0-17.0'	0	7	19	27	47	37	-19	19	A-6b
39+30 CL	0.3-3.0'	0	2	6	61	31	35	14	21	A-6a
	3.0-4.5'	4	7	17	22	50	38	19	21	A-6b
	4.5-10.0'	2	4	9	33	52	36	17	22	A-6b
	10.0-14.0'	5	3	8	36	48	33	13	23	A-6a
	14.0-15.0'	0	0	0	45	55	32	14	18	A-6a
44+00 CL	0.3-5.0'	14	5	16	27	38	30	13	13	A-6a
49+00 CL	0.3-3.0'	2	3	13	45	39	36	16	20	A-6a
	3.0-6.5'	18	11	12	29	30	24	9	12	A-4a
53+00 CL	0.3-4.0'	35	7	9	22	27	42	22	8	A-7-6
57+00 CL	0.3-3.0'	8	3	5	36	49	27	12	19	A-6a
	3.0-6.0'	39	7	5	29	40	35	16	16	A-6b
61+00 120' Rt.	5.0-10.0'	0	1	1	34	64	34	11	18	A-6a
65+00 CL	0.3-2.5'	10	2	6	38	44	37	15	16	A-6a
	2.5-6.0'	7	2	2	36	53	35	16	12	A-6b

Station & Offset	Depth From-To	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	% W.C.	SHTL Class.
70+00 100' Rt.	0.3-1.5'	19	19	14	26	22	31	14	6	A-6a
73+05 CL	0.3-4.0'	0	5	14	44	37	40	20	15	A-6b
81+00 CL	0.3-5.0'	6	2	4	42	46	30	12	11	A-6a
	5.0-7.0'	0	0	2	50	48	28	9	13	A-4b
	7.0-10.0'	35	6	4	31	24	22	6	7	A-4a
87+00 CL	0.3-4.0'	23	1	3	28	45	53	25	21	A-7-6
	4.0-7.0'	14	3	3	32	48	31	12	16	A-6a
90+15 40' Lt.	1.5-2.0'	0	0	5	51	49	48	25	26	A-7-6
	2.0-8.0'	44	5	8	36	7	33	5	27	A-4a
96+05 136' Lt.	0.3-2.0'	0	1	3	49	47	41	16	31	A-7-6
	2.0-5.5'	0	1	16	55	28	37	18	34	A-6b
101+10 163' Lt.	7.0-10.0	0	1	4	54	41	22	6	21	A-4b
108+50 150' Lt.	0.3-3.0'	0	3	11	34	52	46	24	18	A-7-6
	3.0-7.0'	15	8	11	33	33	26	8	11	A-4a
108+50 150' Rt.	0.3-2.5'	0	1	4	53	42	44	17	33	A-7-6
	2.5-8.0'	11	10	14	33	32	24	8	13	A-4a
	8.0-12.0'	0	0	0	37	63	34	14	15	A-6a
116+85 90' Lt.	0.5-1.0'	0	2	8	56	34	31	9	23	A-4b
	1.0-2.5'	0	1	5	50	44	46	25	25	A-7-6
	2.5-5.0'	12	5	16	46	21	25	4	27	A-4a
	5.0-10.0'	40	19	21	15	5	NP	NP	NP	A-1-b
	10.0-11.0'	16	8	14	48	14	17	1	18	A-4a
	11.0-13.0'	11	7	11	43	28	19	4	13	A-4a
	13.0-15.0'	1	4	6	69	20	20	2	19	A-4b
121+83 75' Lt.	0.3-4.0'	5	9	25	46	15	22	5	22	A-4a
125+20 150' Lt.	0.3-1.5'	5	11	32	22	30	34	16	15	A-6b
	1.5-5.0'	18	22	31	17	17	2	12	12	A-4a
	5.0-9.0'	18	26	25	13	18	3	14	14	A-4a
	9.0-10.0'	22	8	18	13	19	4	14	14	A-4a
125+20 150' Lt.	6.0-8.5'	14	11	19	31	25	22	6	12	A-4a
	8.5-11.0'	21	31	35	8	5	NP	NP	NP	A-1-b
	11.0-12.0'	12	12	20	38	13	16	2	13	A-4a

Station & Offset	Depth From-To	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	% W.C.	SHTL Class.
126+82 57' Lt.	0.3-1.0'	7	4	15	40	25	28	8	22	A-4a
	1.0-5.0'	37	5	12	26	20	28	8	20	A-6a
131+75 20' Lt.	0.3-2.5'	0	2	7	52	39	48	17	30	A-7-5
137+00 CL	0.3-3.5'	14	12	22	32	20	22	7	6	A-4a
	3.5-6.0'	17	13	23	30	17	17	4	9	A-4a
	6.0-8.0'	40	19	19	18	4	NP	NP	NP	A-1-b
	8.0-10.0'	13	11	22	39	15	16	2	12	A-4a
141+50 CL	4.0-8.0'	25	10	18	32	15	18	3	12	A-4a
145+50 CL	0.3-3.5'	0	1	3	50	46	42	19	18	A-6b
	3.5-8.0'	38	20	21	14	7	NP	NP	NP	A-1-b
150+00 CL	0.3-4.0'	9	8	29	34	20	21	4	12	A-4a
	4.0-7.0'	18	13	31	29	9	NP	NP	NP	A-4a
	7.0-10.0'	60	19	16	3	2	NP	NP	NP	A-1-a
	10.0-15.0'	20	13	21	28	18	17	5	10	A-4a
158+00 CL	4.5-9.0'	15	9	16	39	21	19	4	12	A-4a
	9.0-16.0'	0	9	27	43	21	16	2	13	A-4a
158+50 CL	0.3-4.0'	20	15	26	25	14	NP	NP	NP	A-4a
	4.0-7.0'	14	11	21	34	20	20	6	12	A-4a
	7.0-10.0'	0	1	3	82	14	NP	NP	NP	A-4b
	10.0-16.0'	11	14	24	37	14	NP	NP	NP	A-4a
162+60 CL	0.3-5.0'	17	10	21	29	23	17	4	12	A-4a
	5.0-8.0'	55	10	12	14	9	18	4	13	A-1-b
167+00 CL	0.3-2.5'	5	5	22	27	41	37	17	15	A-6b
	2.5-8.0'	14	10	22	32	22	20	6	12	A-4a
	8.0-11.0'	11	9	18	41	21	20	5	13	A-4a
172+50 CL	1.0-5.0'	46	19	13	10	12	NP	NP	NP	A-1-b
	5.0-9.0'	37	7	14	32	14	19	3	13	A-4a
	9.0-11.0'	27	17	22	24	10	NP	NP	NP	A-2-a
	11.0-19.0'	20	10	19	31	20	19	4	13	A-4a
176+30 CL	1.0-8.0'	12	7	21	35	25	28	10	29	A-4a
	8.0-10.0'	19	10	13	38	20	19	5	17	A-4a
179+30 100' Lt.	0.3-4.0'	0	2	11	52	35	37	17	24	A-6b
	4.0-10.0'	14	11	20	38	17	17	3	12	A-4a

Station & Offset	Depth From-To	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	% W.C.	SHTL Class.
179+30 100' Rt.	0.3-3.0'	30	8	10	29	23	38	20	24	A-6b
	3.0-10.0'	39	12	14	21	14	NP	NP	NP	A-2-a
	10.0-14.0'	14	10	19	37	20	17	3	11	A-4a
	14.0-20.0'	17	10	18	37	18	18	4	11	A-4a
185+00 CL	0.3-2.0'	14	7	12	39	28	27	11	14	A-6a
	2.0-6.0'	26	5	12	37	20	20	6	13	A-4a
	6.0-11.5'	20	12	25	26	17	20	5	12	A-4a
	11.5-14.0'	11	8	16	39	26	19	5	11	A-4a
	14.0-15.0'	24	10	19	34	13	16	3	10	A-4a
188+00 CL	0.3-4.0'	24	8	16	32	20	21	6	10	A-4a
	4.0-10.0'	20	9	20	35	16	16	2	11	A-4a
	10.0-20.0'	25	8	13	31	23	40	4	11	A-4a
193+00 100' Lt.	0.3-5.5'	28	6	11	33	22	27	12	11	A-6a
	5.5-10.0'	11	9	21	38	21	19	5	12	A-4a
193+50 CL	0.3-2.0'	12	10	20	35	23	23	8	11	A-4a
	2.0-10.0'	16	10	18	37	19	21	8	12	A-4a
	10.0-12.0'	19	4	9	45	23	18	4	12	A-4a
197+50 CL	0.3-5.0'	13	10	16	36	25	24	11	14	A-6a
	5.0-10.0'	32	27	23	12	6	NP	NP	NP	A-1-b
	10.0-15.0'	11	9	14	40	26	20	5	16	A-4a
	15.0-16.0'	11	10	19	37	23	19	5	11	A-4a
200+00 CL	0.3-2.5'	7	3	20	48	40	32	12	12	A-6a
207+00 CL	0.3-2.5'	8	8	20	25	35	31	5	10	A-4a
214+00 CL	0.3-4.0'	9	7	17	34	33	28	11	8	A-6a

NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic.