| DESIGN DESIGNATION |
|---|
| Current ADT (1964) - 1420 |
| Design Year ADT (1987) - 3050 |
| D.H.V. - 455 |
| D - 60% |
| T - 14% |
| V - 50 m.p.h. |

MICROFILMED
MAY 14 1969

S-170 (5)

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | S-170 (5) | |

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HOL-39-(13.22-13.62)

# STATE OF OHIO
# DEPARTMENT OF HIGHWAYS
# HOL-39-(13.22-13.62)
# MONROE & HARDY TOWNSHIPS
# HOLMES COUNTY

## CONVENTIONAL SIGNS

TOWNSHIP LINE
LOT LINE
CORPORATION LINE
CENTER LINE
PROPERTY LINE
POLE LINE — TELEPHONE — ELECTRIC
FENCE LINE
RAILROADS
GUARD RAIL — EXISTING — PROPOSED
EXISTING RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE — R/W

## INDEX OF SHEETS


| | |
|---|---|
| TITLE SHEET | 1 |
| SCHEMATIC LAYOUT AND MONUMENT ASSEMBLIES | 2 |
| TYPICAL SECTIONS | 3 |
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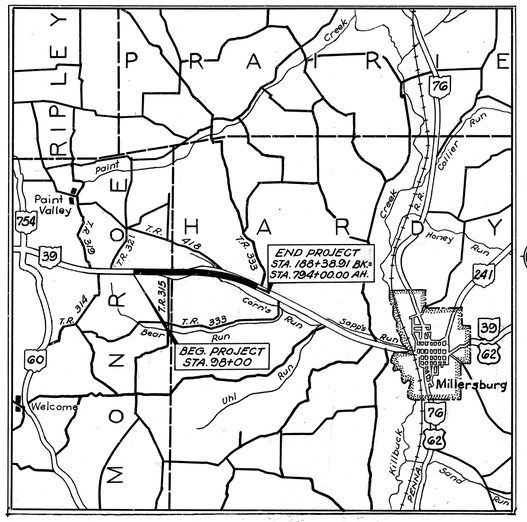
| GENERAL NOTES | 6-7 |
| PAVEMENT CALCULATIONS | 8 |
| GENERAL SUMMARY | 9-10 |
| PLAN AND PROFILE | 11-21 |
| SUPERELEVATION TABLES | 22 |
| CROSS SECTIONS | 23-47 |
| APPROACH DETAILS | 48-51 |
| STRUCTURES, 20 FT. AND UNDER | 52-60 |
| RIGHT OF WAY | 61-70 |


## LINE DATA

BEGIN PROJECT _____ STA. 98+00.00
END PROJECT _____ STA. 188+38.91
NO ADDITIONS OR DEDUCTIONS
NET LENGTH OF PROJECT = 9,038.91 LIN. FT. OR 1.711 MILES

ADD FOR APPROACHES:
LT. STA. 159+50 = 387.23 LIN. FT.

NET LENGTH OF WORK = 9,426.14 LIN. FT. OR 1.785 MILES




## LOCATION MAP

SCALE IN MILES 0 1 2

PORTION TO BE IMPROVED
FEDERAL HIGHWAYS
STATE HIGHWAYS
OTHER ROADS

~SCALES IN FEET~

PLAN 0 50 100
PROFILE HORZ. 0 50 100; VERT. 0 10 20
CROSS SECTIONS 0 10 20

## 1967 SPECIFICATIONS

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

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

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

Approved: Date: 3-4-68 — Division Deputy Director
Approved: Date: 4-8-68 — Engineer of Bridges
Approved: Date: 4-30-68 — Engineer of Location and Design
Approved: Date: 4-30-68 — Deputy Director of Design and Construction
Approved: Date: 5-13-68 — Deputy Director of Right of Way
Approved: Date: 5-13-68 — Deputy Director of Planning and Programming
Approved: Date: 5-13-68 — First Assistant Director
Approved: Date: 5-13-68 — Director of Highways

## STANDARD DRAWINGS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BP-5 | G-1-65 | HW-E | G-1-65 | SP-53 | G-30-61 | | |
| BP-6 | G-1-65 | | | | | | |
| | | L-1 | G-1-65 | | | | |
| CB-2-2A & B | G-1-65 | | | | | | |
| CB-5 | G-1-65 | MC-1 | 10-1-67 | | | | |
| FACI-1 | 9-15-67 | MC-3 | 5-1-66 | | | | |
| FACI-2 | G-1-65 | MC-4 | G-1-65 | | | | |
| | | MC-5 | G-1-65 | | | | |
| GR-1 | 1-1-67 | | | | | | |
| GR-2.8 | 2-15-68 | | | | | | |

## SUPPLEMENTAL SPECIFICATIONS

| | | | |
|---|---|---|---|
| 1001 | 3-21-66 | | |

| FILE No. | HOL-39-(13.22-13.62) |
|---|---|
| _____ | Date of Letting _____ 196 _____ |
| | Contract No. _____ |

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS

APPROVED:

DIVISION ENGINEER _____ DATE _____

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

HOL-39-(13.22-13.62)

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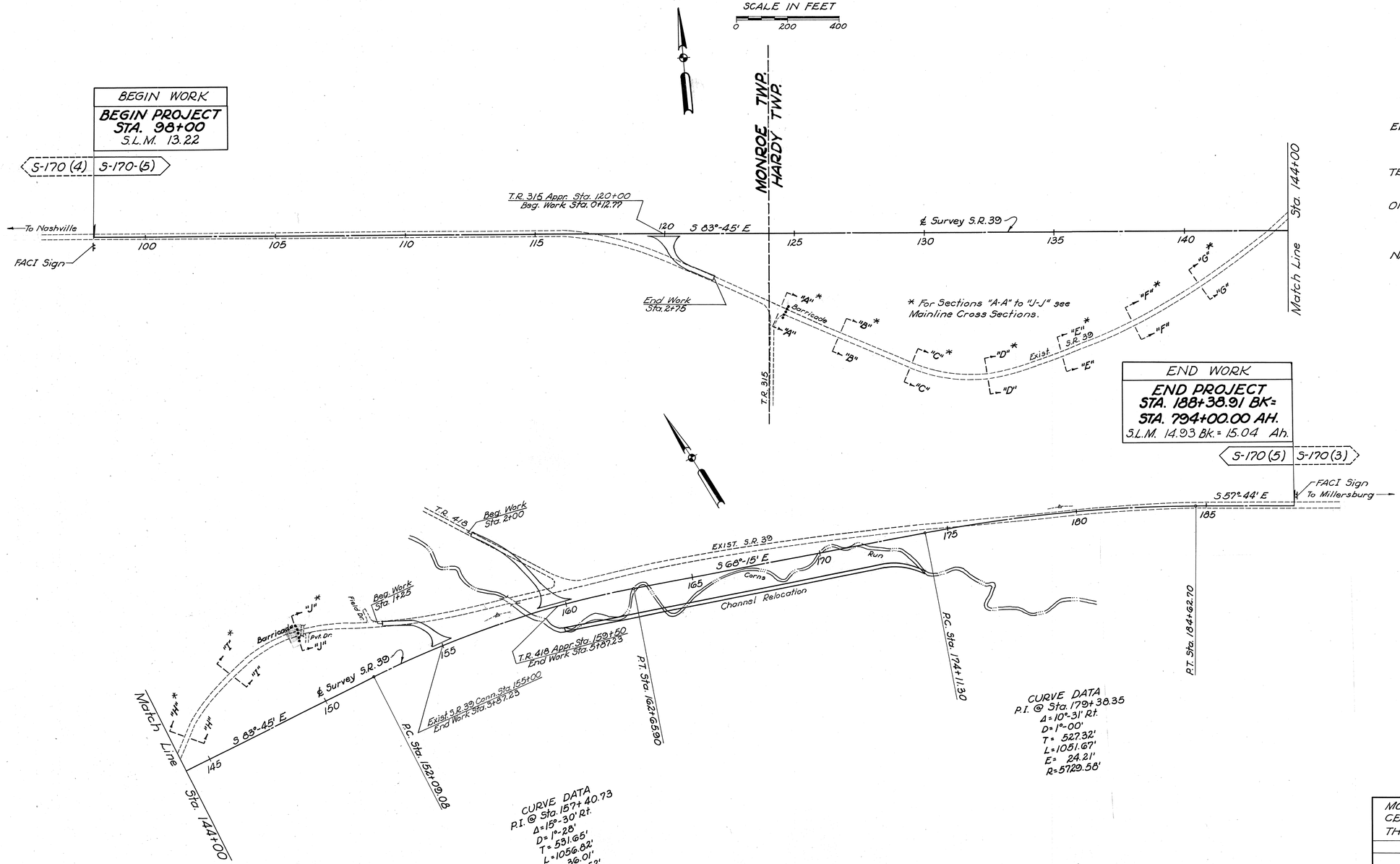
# SCHEMATIC LAYOUT
## MONROE & HARDY TOWNSHIPS

SCALE IN FEET
0 200 400




CURVE DATA
P.I. @ Sta. 157+40.73
Δ = 15°-30' Rt.
D = 1°-28'
T = 531.65'
L = 1056.82'
E = 36.01'
R = 3906.52'

CURVE DATA
P.I. @ Sta. 179+38.35
Δ = 10°-31' Rt.
D = 1°-00'
T = 527.32'
L = 1051.67'
E = 24.21'
R = 5729.58'

## PUBLIC UTILITIES

ELECTRIC POWER:
Holmes-Wayne Electric Co-op, Inc.
Rural Route #5,
Millersburg, Ohio.

TELEPHONE:
Ohio Central Telephone Co.
Wooster, Ohio.

OIL TRANSMISSION LINES:
Buckeye Pipe Line Co.
Dixie Hwy. & Buckeye Rd.
Lima, Ohio.

NATURAL GAS:
W. H. Patten Drilling Co.
Professional Bldg.
Millersburg, Ohio.

MONUMENT ASSEMBLIES WILL BE SET ON CENTERLINE, DURING CONSTRUCTION, AT THE FOLLOWING LOCATIONS:

| | |
|---|---|
| P.O.T. 99+00 | P.O.T. 146+00 |
| P.O.T. 104+00 | P.C. 152+09.08 |
| P.O.T. 110+00 | P.O.C. 157+50 |
| P.O.T. 116+00 | P.T. 162+65.90 |
| P.O.T. 122+00 | P.O.T. 168+00 |
| P.O.T. 128+00 | P.C. 174+11.03 |
| P.O.T. 134+00 | P.O.C. 179+50 |
| P.O.T. 140+00 | P.T. 184+62.70 |

TOTAL ITEM 604, STANDARD MONUMENT ASSEMBLIES = 16 EACH.

SCHEMATIC LAYOUT

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

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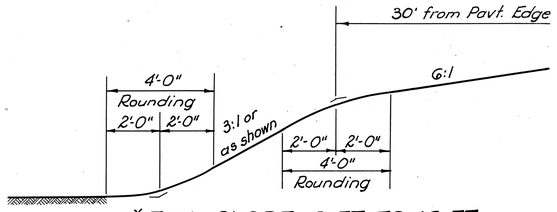
HOL-39-(13.22-13.62)

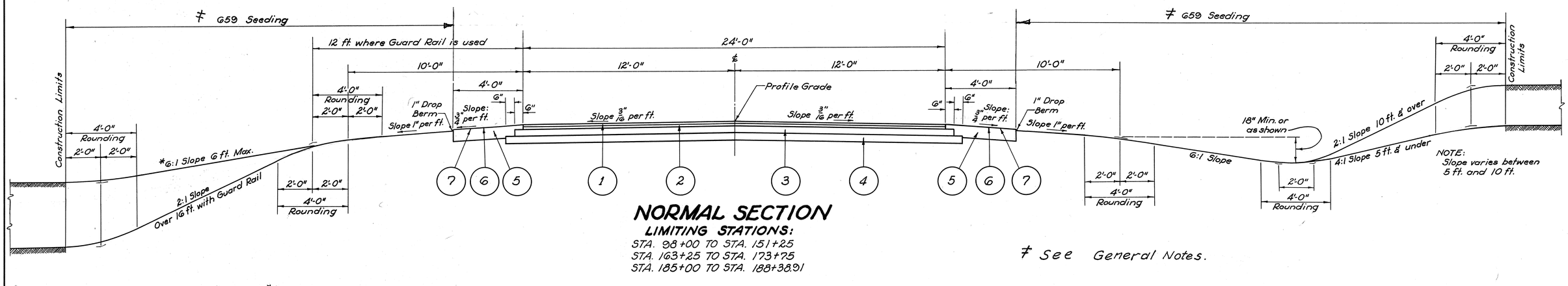
# TYPICAL SECTION

## TYPE 404 ON 301

SCALE IN FEET
0 1 2 3 4 5




*FILL SLOPE-6 FT. TO 16 FT.

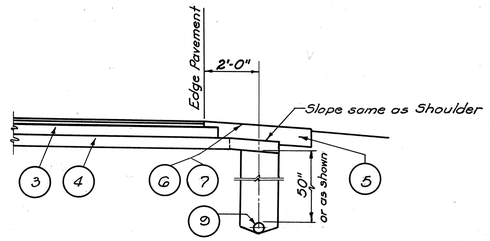



## NORMAL SECTION

**LIMITING STATIONS:**

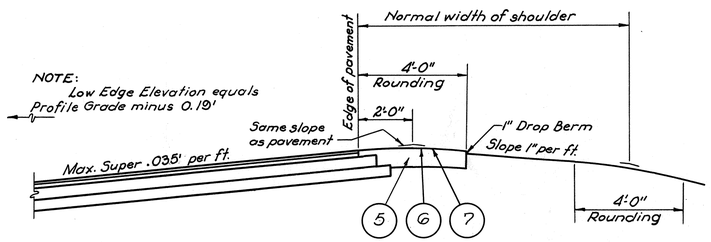
STA. 98+00 TO STA. 151+25
STA. 163+25 TO STA. 173+75
STA. 185+00 TO STA. 188+38.91

≠ See General Notes.




## PIPE UNDERDRAIN DETAIL

For Locations, see Plan & Profile Sheets

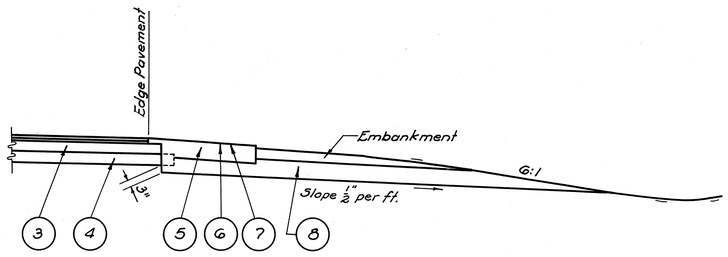



## SHOULDER TREATMENT ON HIGH SIDE OF SUPERELEVATED CURVES

**LIMITING STATIONS:**

STA. 151+25 TO STA. 163+25
STA. 173+75 TO STA. 185+00

For Edge Elevations, see Superelevation Tables, Sheet No. 22




## AGGREGATE DRAIN DETAIL

In lieu of Section 605.05 of the Specifications, the Aggregate Drains shall be constructed prior to the construction of the Aggregate Berms but after Item 310 has been placed.

### KEY

1. Item 404 1¼" Asphalt Concrete (70-85).
2. Item 402 1¼" Asphalt Concrete (70-85).
3. Item 301 5" Bituminous Aggregate Base, 702.01 (85-100) or 702.09 RT-10.
4. Item 310 5" Subbase.
5. Item 304 8" Aggregate Base.
6. Item 408 Bituminous Prime Coat, 702.09, RT-2 or RT-3, applied at the rate of 0.40 gal. per sq. yd.
7. Item 409 Seal Coat, using 0.008 cu. yd. No. 8 cover aggregate per sq. yd. and 0.30 gal. 702.09, RT-9 or RT-10 or 702.02, MC-800 or MC-3000 per sq. yd.
8. Item 605 Aggregate Drain (See General Note).
9. Item 605 6" Deep Pipe Underdrain.

# SPECIAL DETAILS

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

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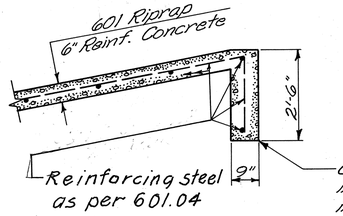
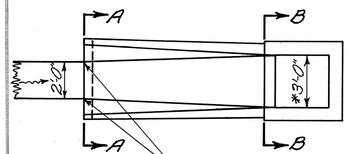


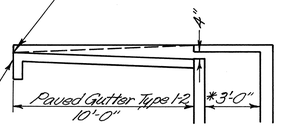

Cut-off wall is to be included for payment in the price bid for Item 601 Riprap using 6" Reinforced Concrete Slab.

CUT-OFF WALL DETAIL



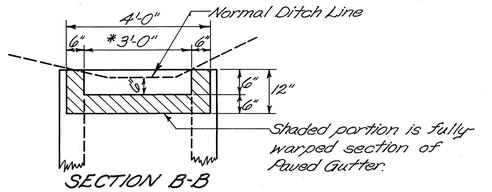

Begin Paved Gutter Warp

PLAN



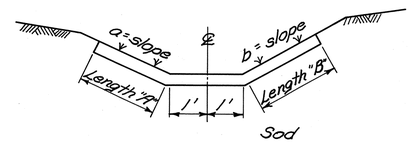

Std. Concrete Cut-off wall shall be constructed at the beginning of each Paved Gutter

ELEVATION




* Dimension varies as to the type of catch basin called for on the plan. Paved gutter width remains constant or flares to the various window width, and sides warp from 2:1 to vertical in 10 foot length.

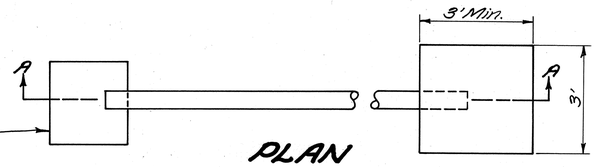
**DETAIL OF MOD. PAVED GUTTER TYPE 1-2 AT CATCH BASINS**



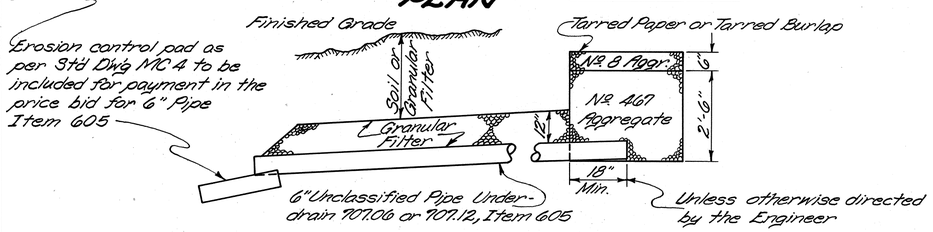

SOD DETAIL

| SOD TABLE | | | | |
|---|---|---|---|---|
| Slopes | "A" | "B" | Bottom Width | Total |
| a = 2:1; b = 2:1 | 2'-0" | 2'-0" | 2'-0" | 6'-0" |
| a = 2:1; b = 3:1 | 1'-7" | 2'-5" | 2'-0" | 6'-0" |
| a = 2:1; b = 4:1 | 1'-4" | 2'-8 | 2'-0" | 6'-0" |
| a = 6:1; b = 4:1 | 2'-5" | 1'-7" | 2'-0" | 6'-0" |

## SPRING DRAIN DETAIL




PLAN




SECTION A-A

NOTE:

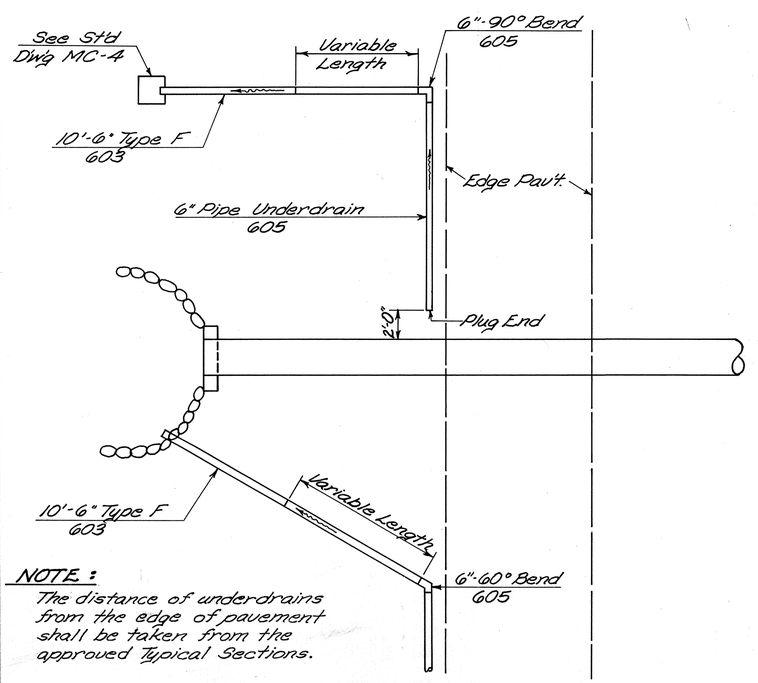
Aggregates, tarred paper or tarred burlap, and necessary excavation for spring drains shall be included for payment in the unit price bid per Lin. Ft. for "Item 605, Aggregate Drains for Springs, as per plan."

The 6" pipe 707.06 or 707.12 shall be covered with granular filter material [605.03(c)] to a height of one (1) foot above the top of the pipe. The remainder of the backfill for this item shall be soil or granular filter backfill placed in accordance with 603.08.

Spring drains shall be built in reasonably close conformity with the detail shown above. The lengths and exact locations of the drains shall be determined by the Engineer.

See note on Sheet No. 6

## UNDERDRAIN DETAIL




NOTE:

The distance of underdrains from the edge of pavement shall be taken from the approved Typical Sections.

| FED RD DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

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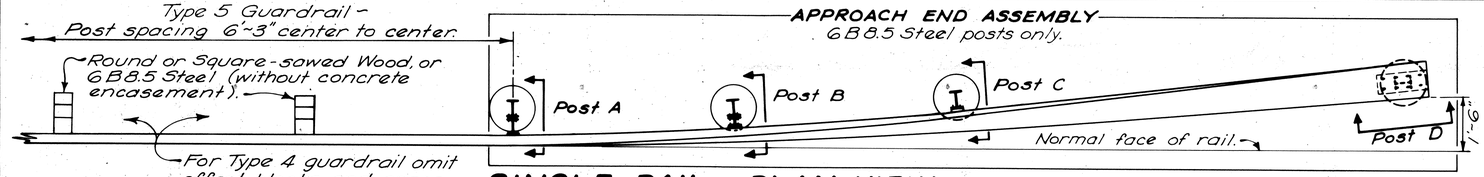
Type 5 Guardrail ~ Post spacing 6'-3" center to center.

Round or Square-sawed Wood, or 6 B 8.5 Steel (without concrete encasement).

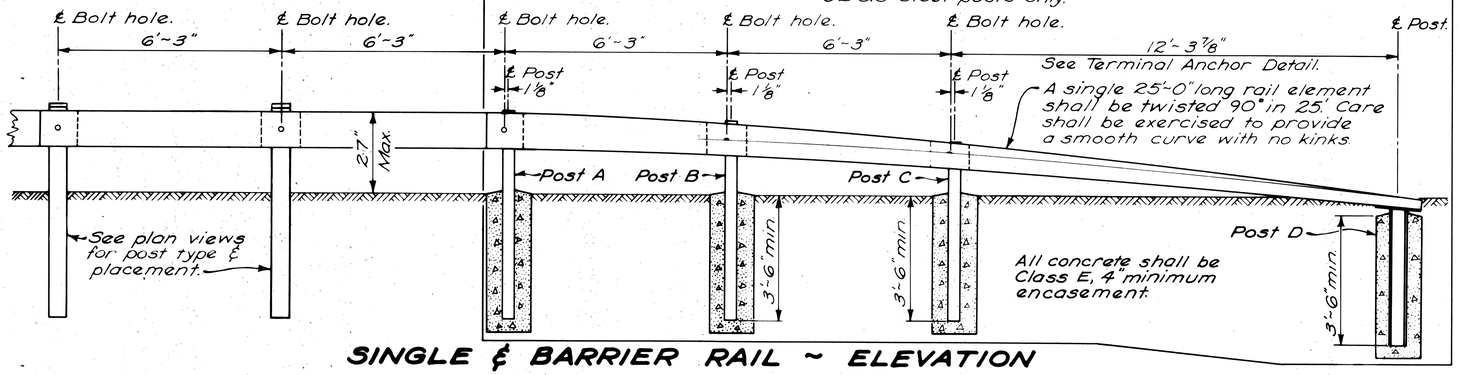
For Type 4 guardrail omit offset blocks and space posts at 12'-6" centers.

APPROACH END ASSEMBLY
6 B 8.5 Steel posts only.



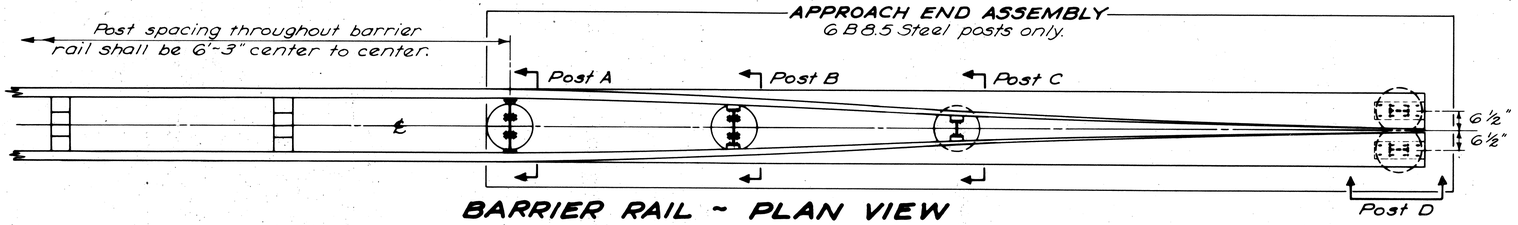

## SINGLE RAIL ~ PLAN VIEW

APPROACH END ASSEMBLY
6 B 8.5 Steel posts only.




## SINGLE & BARRIER RAIL ~ ELEVATION

APPROACH END ASSEMBLY
6 B 8.5 Steel posts only.



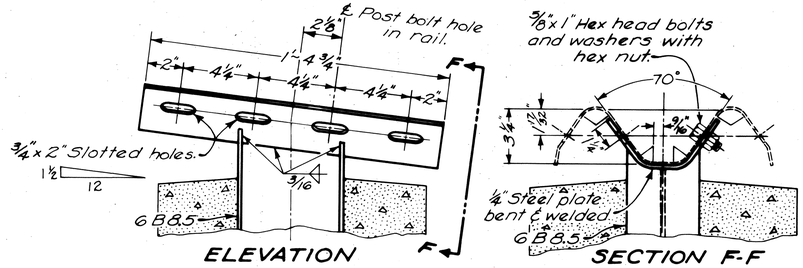

## BARRIER RAIL ~ PLAN VIEW

## NOTES

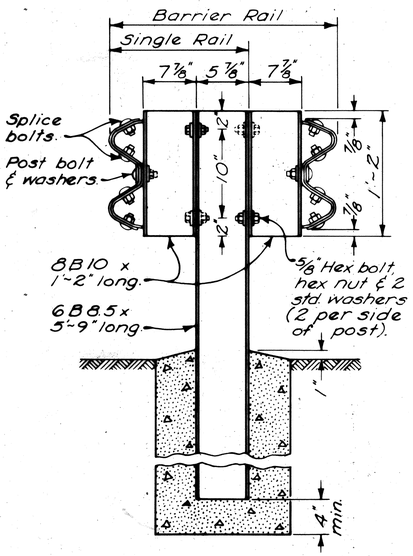
For details not shown, see Standard Drawings GR-2A and GR-2B.

All steel parts shall be galvanized in accordance with ASTM A123, A153 or A525, whichever may apply.

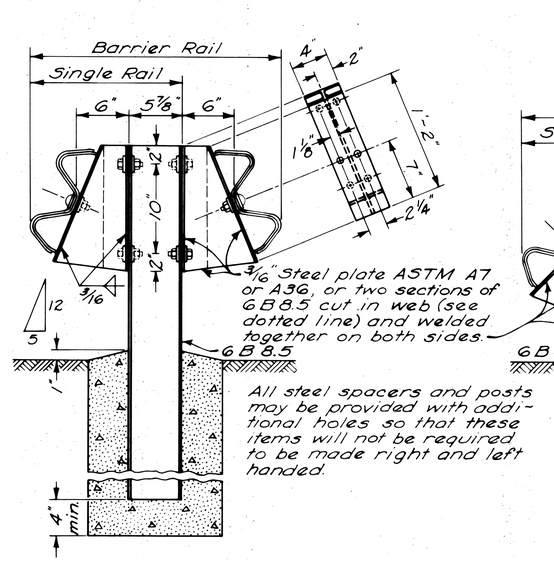
This drawing shall govern where a conflict arises.



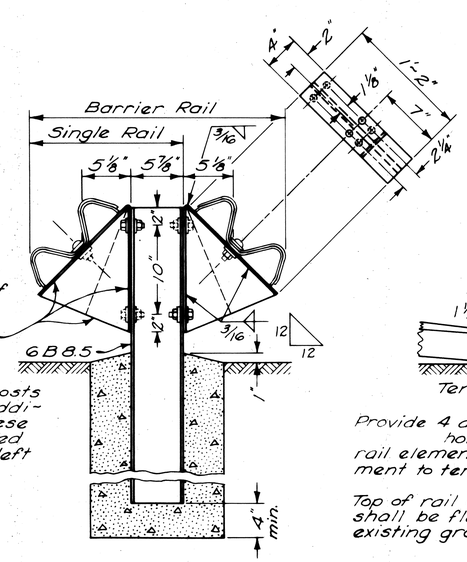

## TERMINAL ANCHOR DETAIL



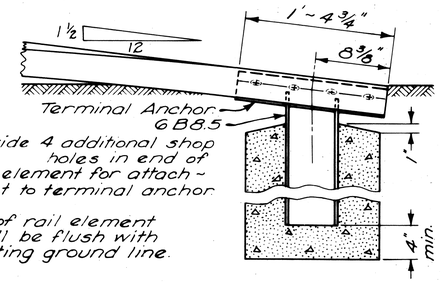

## POST A




## POST B




## POST C




## POST D

# GENERAL NOTES

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

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**FIELD OFFICE :~** The Contractor shall, in addition to the requirements of 105.152, provide a suitable field office having a minimum of 300 sq. ft. of floor space. The Contractor shall have a telephone installed and maintained in this field office during the construction of this project. The Contractor shall also provide and maintain sanitary provisions as per 107.06. All the above is included in the lump sum price bid for Field Office.

**ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS :~** The rounded corners shown on Standard Drawing MC-1, , apply to all cross sections, even though otherwise shown 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 does not guarantee their accuracy or completeness.

**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. These quantities shall not be ordered by the Contractor until requested by the Engineer.

**CONSTRUCTION LAYOUT STAKES :~** See note in proposal describing the work included in this lump sum pay item.

**SUPERELEVATION :~** Superelevated curves shall be built without crown. The crown shall be worked out of the pavement in the portion between the beginning of the transition and the point where the superelevation equals twice the crown.

**REMOVAL OF EXISTING PIPE :~** The removal of all existing pipe drains which would normally be removed in various excavation items shall be included for payment in the unit prices bid for the respective excavation items, unless otherwise itemized in the plans.

EROSION CONTROL

Items 601.04, 601.08, and 601.09 are provided in these plans for erosion control. Rock of a stable nature will not be removed in order to place any of these items. The Engineer shall check and non-perform quantities or adjust locations and quantities for these items where indicated by field conditions during construction.

**REMOVAL OF TREES AND STUMPS :~** All trees and stumps specifically marked for removal within the construction limits of this project shall be removed under the lump sum price bid for Item 201 Clearing and Grubbing, except that those trees for which protection and preservation work is indicated elsewhere in these plans shall not be removed.

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

| SIZE | Nº. TREES | Nº. STUMPS |
|---|---|---|
| 18" | 303 | 3 |
| 30" | 5 | 3 |
| 48" | 5 | 0 |
| 60" | 0 | 0 |

The above estimate is 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 the right-of-way and/or easement lines. Payment for the removal of these additional trees or stumps shall be included in the lump sum price bid for Item 201 Clearing and Grubbing.

**CUT-OFF WALLS FOR RIPRAP :~** The cut-off walls for Item 601, Riprap using 6" Reinforced Concrete Slab, as per plan, shall be included for payment with this 601 Item.

**DUMPED ROCK CHANNEL PROTECTION IN ROADWAY DITCHES :~** All dumped rock channel protection in roadway ditches shall be 18" thick. It shall be six (6) feet wide except where otherwise shown on plans.

**SOD PROTECTION IN ROADWAY DITCHES :~** All sod protection in roadway ditches shall be six (6) feet wide except where otherwise shown on plans.

**SEEDING :~** Quantities for seeding are calculated for the soil areas between the work limits, as shown on the cross sections.

**ITEM SPECIAL, DRILLED WELL ABANDONED :~** The existing concrete or stone slab well cover and pumping equipment shall be removed and disposed of. The casing shall be cut off at least two (2) feet below the proposed finished grade outside proposed pavement areas or at least two (2) feet below the proposed subgrade elevation inside proposed pavement areas and capped with Class "E" concrete or a standard threaded pipe cap.

The unit price bid for each "Drilled Well Abandoned" shall include payment for all labor, tools, materials, and incidentals necessary to complete this item.

An estimated quantity of 1 Each, has been included in the General Summary for Item Special, Drilled Well Abandoned.

**APPROACHES :~** Mail box approaches and the flared portion of residence drives shall be paved with 5" of Item 304 Aggregate Base and 2-1" courses of Item 404, the remaining length of residence drives beyond the flare shall be paved with 8" of Item 304 Aggregate Base unless otherwise shown in the plans. Field drives shall be paved with 6" of Item 304 from the edge of the bituminous treated shoulder.

Dimensions of drives shall be in accordance with Type 2 Driveway on Standard Drawing BP-6, unless otherwise shown in the plans.

**SPRING DRAINS :~** Reference is made to the detailed drawing on Sheet Nº. 4 showing the method of draining any spring that may be shown on the plan or encountered during construction as determined by the Engineer. The following estimated quantities have been included in the General Summary for this purpose :

| | |
|---|---|
| Item 605-6" Unclassified Pipe Underdrain, 707.06 or 707.12, as per plan | 400 Lin. Ft. |
| Item 605 - Aggregate Drains for springs, as per plan | 40 Lin. Ft. |

The Contractor shall not order materials for "Spring Drains" until authorized by the Engineer and in the event no springs are encountered, the item shall be non-performed.

**TREATED SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEMS:~**

Treated sanitary flow may be discharged into the highway drainage system provided the owner has secured the approval of the local health authorities and has acquired from the State Highway Department, the official permit to have the connection made.

**ITEM 404, 2 INCH ASPHALT CONCRETE :~** All 2 inch Item 404 Asphalt Concrete specified in these plans shall be placed in two-one inch courses.

**FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS :~**

The Contractor shall furnish, erect, maintain and subsequently remove Federal Aid construction identification signs at each of the following approximate locations :

1. On the right of Sta. 98+00
2. On the left of Sta. 138+38

Sign details shall be as specified on Standard Drawing FACI-1, "Code N-54(1)-96(2)".

The signs shall be erected in accordance with Standard Drawing FACI-2. Additional requirements shall be in accordance with notes in the proposal.

**PAVEMENT REMOVAL OUTSIDE NORMAL CONSTRUCTION LIMITS:~**

After the existing pavement as indicated on the plans has been removed, the old roadway shall be graded to the level of the surrounding ground, the old ditches filled and the disturbed areas sloped to drain and left in a neat condition ready for seeding. Seeding shall be measured and paid for in accordance with Item 659 Seeding and Mulching. Payment for all other work required shall be included in the unit price bid for Item 202 Existing pavement removed and Item 203 Excavation not including embankment construction.

**MAINTENANCE OF SEWER FLOWS :~** The Contractor shall conduct his operations so as to maintain at all times sewer flows through existing facilities to remain in place and through existing facilities to be replaced until new facilities are completed and placed into use.

Payment for any additional costs involved in maintaining these flows by pumping or by any other means approved by the Engineer shall be included in the unit price bid for the respective items of 603 Conduit.

# GENERAL NOTES

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

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CONNECTIONS TO EXISTING PIPE :~ At places where the plans provide for proposed pipe to be connected to existing pipe, 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 pipe. The cost of this operation shall be included in the unit price bid for the pertinent 603 conduit item.

FARM DRAINS :~ All farm drains which are encountered during construction shall be provided with unobstructed outlets under the direction of the Engineer. Existing collectors which are located below the roadway ditch elevations and which cross the roadway shall be replaced within the right-of-way limits by Item 603 Conduit, Type "B" with Class "B" Bedding, one commercial size larger than the existing conduit.

Existing collectors and isolated farm drains which are encountered above the elevation of the roadway ditches shall be outletted into the roadway ditch by 603 Type "F" Conduit. The optimum outlet elevation shall be, if possible, one foot above the flowline elevation of the ditch.

The location, type, size and grade of required replacements shall be determined by the Engineer during construction and payment shall be made on final measurements.

The following estimated quantities have been included in the General Summary for the work noted above :

| | | |
|---|---|---|
| Item 603- | 6" Conduit, Type "B" with Class "B" Bedding | 75 Lin.Ft. |
| Item 603- | 6" Conduit, Type "E" | 400 Lin.Ft. |
| Item 603- | 6" Conduit, Type "F" | 20 Lin.Ft. |
| Item 601, | Dumped Rock Channel Protection | 10 Cu.Yds. |

And necessary Pipe Specials which shall be included for payment in the pertinent conduit item.

None of the above materials shall be ordered by the Contractor until requested by the Engineer.

U.S.C.G.S. BENCH MARKS :~ Bench mark (N&Y258 1959) set in the northwest wingwall of the bridge over Corns Run will be destroyed by construction. The Division Office will furnish a new bronze tablet marked (Y 258 Reset 1968) which will be placed as directed by the Engineer, at the west end of the north headwall, of the proposed culvert located at Sta. 158+52. Accurate levels shall be run between the old and the new bench marks, in two (2) separate runnings. The elevation of the new B.M. shall be established and reported to the Division Location and Design office on special forms to be furnished by them. The old B.M. shall be destroyed and the bronze tablet removed and returned with the report to Location & Design.

The U.S.C.G.S. bench mark (D 259 1959) located in the west quadrant of the Twp. Rd. 315 Junction with existing S.R. 39 and bench mark (Z 258 1959) set in the north headwall of a culvert located 0.1 mile easterly along existing S.R. 39 from the Junction of Twp. Rd. 315 shall be left in place. The Contractor shall use extreme caution when removing the pavement, grading and seeding in the area of (Z 258 1959), in order to insure preservation of this bench mark for later resetting along relocated S.R. 39 by U.S.C.G.S. Engineers.

All cost of the above work is to be included in the price bid for Item 604 Monument Reset.

DRAINAGE OF BASE MATERIAL :~ Where the base material is drained by 605 Aggregate Drains, the Contractor shall finish, seed, and mulch the slopes so as not to impede drainage of the base material.

MAINTAINING TRAFFIC :~ The Contractor shall maintain two-way traffic at all times on S.R. 39. At least one-way traffic shall be maintained on all Township Roads. Traffic shall be maintained by use of the existing pavement, the proposed pavement and temporary roadways surfaced with Item 410 aggregate and stabilized with Item 616 calcium chloride.

One-way traffic will be permitted over the grade of the new highway, for minimum periods of time consistent with the requirements of the specifications for protection of completed asphalt concrete courses, during paving operations where construction overlaps existing pavement.

The length of one-way traffic zones shall be kept to a minimum consistent with the requirements of the work. Maximum use shall be made of the existing pavement for traffic maintenance, holding the length and duration of use of temporary traffic lanes to a minimum.

Temporary traffic lanes shall be surfaced with 410 aggregate, treated with 616 calcium chloride and the surface maintained daily in a manner satisfactory to the Engineer. Two-way traffic lanes shall be surfaced with aggregate at least twenty (20) feet wide and one-way traffic lanes shall have the surfacing aggregate not less than twelve (12) feet wide.

Payment for all of the above except for 410 aggregate and 616 calcium chloride shall be included in the price bid for Item 614 Maintaining Traffic.

ITEM 605 AGGREGATE DRAINS :~ Aggregate drains shall be placed at fifty (50) foot intervals on each side of normal crowned sections and at twenty-five (25) foot intervals on the low side only of superelevated sections except where Item 605 Pipe Underdrains have been provided. Additional aggregate drains may be required and shall be constructed at locations determined by the Engineer. An estimated quantity of 4,800 lin. ft. has been included in the General Summary for Item 605. Aggregate Drains

SEQUENCE OF CONSTRUCTION OPERATIONS : The Contractor shall limit his operations during the fall, winter and early spring of 1968-69 so that the existing pavement from Sta. 119+00 to the end of project shall not be disturbed. The existing pavement shall remain in place thruout this period for traffic maintenance, except that enough pavement may be removed at structure locations to permit their construction.

GUARD RAIL, MODIFIED AS PER PLAN

Type 4

All approach (entrance) ends of Type 4 Guard rail shall be constructed with new guard rail approach end assemblies as detailed on Sheet No. 5 unless otherwise shown on the plans. Both ends of all runs of deep beam guard rail shall be constructed with the new approach end assemblies when used on two-lane highways, unless otherwise shown on the plans.

Basis of Payment -

Type 4 guard with post spacing @ 6'-3", spacer blocks & new approach end assemblies, will be paid for as "606 Guard Rail, Type 4 modified as per plan," complete in place

# PAVEMENT CALCULATIONS

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

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LENGTH OF PAVEMENT

BEGIN PROJECT STA. 98+00
END PROJECT STA. 188+38.91

NET LENGTH = 9,038.91 LIN. FT.

ITEM 310 SUBBASE

9,038.91' x 26.0' x 0.4167' ÷ 27 = 3,627.0 Cu. Yds.
Add for extension over pipe underdrain 2,276' x 1.7' x 0.4167' ÷ 27 = 59.7 Cu. Yds.

TOTAL ITEM 310 = 3,687 CU. YDS.

ITEM 301 BITUMINOUS AGGREGATE BASE

9,038.91' x 25.0' x 0.4167' ÷ 27 = 3,487.5 Cu. Yds.

TOTAL ITEM 301 = 3,488 CU. YDS.

ITEM 402 ASPHALT CONCRETE (70-85)

9,038.91' x 24.0' x 0.1042' ÷ 27 = 837.2 Cu. Yds.

TOTAL ITEM 402 = 837 CU. YDS.

ITEM 404 ASPHALT CONCRETE (70-85)

9,038.91' x 24.0' x 0.1042' ÷ 27 = 837.2 Cu. Yds.

TOTAL ITEM 404 = 837 CU. YDS.

ITEM 304 AGGREGATE BASE

2 x 9,038.91' x 2.44□' ÷ 27 = 1,633.7 Cu. Yds.
Deduct for approaches 757' x 2.44□' ÷ 27 = − 68.4 Cu. Yds.

TOTAL ITEM 304 = 1,565 CU. YDS.

ITEM 408 BITUMINOUS PRIME COAT

2 x 9,038.91' x 4' ÷ 9 = 8,034.6 Sq. Yds.
Deduct for approaches 757' x 4' ÷ 9 = − 336.4 Sq. Yds.
Total = 7,698.2 Sq. Yds.
7,698.2 Sq. Yds. x 0.40 Gal/Sq. Yd. = 3,079.3 Gals.

TOTAL ITEM 408 = 3,079 GALS.

ITEM 409 SEAL COAT, BITUMINOUS MATERIAL

7,698.2 Sq. Yds. x 0.30 Gal./Sq. Yd. = 2,309.5 Gals.

TOTAL ITEM 409, BIT. MAT'L = 2,310 GALS.

ITEM 409 SEAL COAT, COVER AGGREGATE

7,698.2 Sq. Yds. x 0.008 Cu. Yd./Sq. Yd. = 61.6 Cu. Yds.

TOTAL ITEM 409, COVER AGGR. = 62 CU. YDS.

ITEM 203 SUBGRADE PREPARATION

9,038.91' x 24.0' ÷ 9 = 24,103.8 Sq. Yds.
Deduct for rock cut 1,650' x 24.0' ÷ 9 = − 4,400.0 Sq. Yds.

TOTAL ITEM 203 = 19,704 SQ. YDS.

ITEM 410 TRAFFIC COMPACTED SURFACE COURSE, TYPE A or B

Estimated Length = 7,000 Lin. Ft.
7,000' x 75 Cu. Yds./100 Lin. Ft. = 5,250 Cu. Yds.
5,250 Cu. Yds. x 25 % = 1,312 Cu. Yds.

TOTAL ITEM 410, TYPE A or B = 1,312 CU. YDS.

ITEM 410 TRAFFIC COMPACTED SURFACE COURSE, TYPE C

5,250 Cu. Yds. x 75 % = 3,938 Cu. Yds.

TOTAL ITEM 410, TYPE C = 3,938 CU. YDS.

ITEM 616 CALCIUM CHLORIDE

5,250 Cu. Yds. x 1 Ton/50 Cu. Yds. = 105 Tons

TOTAL ITEM 616, CALCIUM CHLORIDE = 105 TONS

ITEM 616 WATER

Estimated 60 M-Gals.

TOTAL ITEM 616, WATER = 60 M-GALS.

ITEM 659 COMMERCIAL FERTILIZER

127,075 Sq. Yds. x 20 lbs./1,000 Sq. Ft. x 9 ÷ 2,000 = 11.44 Tons

TOTAL ITEM 659, FERTILIZER = 11.44 TONS

ITEM 659 AGRICULTURAL LIMING

127,075 Sq. Yds. x 100 lbs./1,000 Sq. Ft. x 9 ÷ 2,000 = 57.18 Tons

TOTAL ITEM 659, LIMING = 57.18 TONS

EARTHWORK AND SEEDING

| STATION | | EXC. | EMB. | SEEDING |
|---|---|---|---|---|
| FROM | TO | CU. YDS. | CU. YDS. | SQ. YDS. |
| 98+00 | 107+00 | 2,239 | 883 | 5,378 |
| 107+00 | 117+00 | 1,967 | 43,959 | 11,062 |
| 117+00 | 128+00 | 52,843 | 1,222 | 14,003 |
| 128+00 | 139+00 | 79,348 | 163 | 23,444 |
| 139+00 | 149+00 | 8,515 | 65,751 | 18,192 |
| 149+00 | 159+00 | 37,218 | 30,819 | 16,430 |
| 159+00 | 169+00 | 5,566 | 30,820 | 19,208 |
| 169+00 | 179+00 | 5,862 | 17,015 | 12,976 |
| 179+00 | 188+38.91 | 2,671 | 1,154 | 6,382 |
| | | | | |
| TOTALS | | 196,229 | 191,786 | 127,075 |
| | | Deduct for Sodding | | 2,476 |
| | | Net Seeding Area | | 124,599 |

| QUANTITIES | Calculated By A.E.L. 10/5/67 | Checked By W.F.P. 11/2/68 |
|---|---|---|

PAVEMENT CALCULATIONS

# GENERAL SUMMARY

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

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* FARM DRAIN CROSSINGS

| TOTALS CARRIED FROM SHEET NO. | | | | | | | | | | | | | | | | | TOTALS CODE 6203 | TOTALS CODE Y005 | ITEM | GRAND TOTAL | UNIT | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 6 | 7 | 8 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | R/W | *7 | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | ~ ROADWAY ~ |
| | LUMP | | | | | | | | | | | | | | | | LUMP | | 201 | LUMP | LUMP | CLEARING AND GRUBBING |
| | | | | | | | | | LUMP | | | LUMP | | | | | LUMP | | 202 | LUMP | LUMP | EXISTING STRUCTURES REMOVED |
| | | | | | | | | 18 | | 44 | 37 | 18 | | | | | 117 | | 202 | 117 | LIN.FT. | PIPE REMOVED, 24" AND UNDER |
| | | | | 1039 | 183 | 1117 | 1430 | 991 | 621 | 1151 | 1234 | 1149 | | | | | 8915 | | 202 | 8915 | SQ.YD. | EXISTING PAVEMENT REMOVED AND DISPOSED OF, AS PER PLAN |
| | | | | | | | | | | | | | | | LUMP | | LUMP | | 202 | LUMP | LUMP | PARCEL NO 11 REMOVAL OF ONE-2 STORY FRAME RESIDENCE |
| | | | | | | | | | | | | | | | LUMP | | LUMP | | 202 | LUMP | LUMP | PARCEL NO 12-WA REMOVAL OF ONE FRAME BARN |
| | | | | | | | | | | | | | | | LUMP | | LUMP | | 202 | LUMP | LUMP | PARCEL NO 17 REMOVAL OF ONE-1 STORY FRAME RESIDENCE, ONE FRAME GARAGE, ONE FRAME PRIVY ONE CONCRETE BLOCK FRUIT CELLAR |
| | | | | | | | | | | | | | | | LUMP | | LUMP | | 202 | LUMP | LUMP | PARCEL NO 21 REMOVAL OF ONE FRAME BARN |
| | | | | | | | | | | | | | | | LUMP | | LUMP | | 202 | LUMP | LUMP | PARCEL NO 13 REMOVAL OF ONE SHED |
| | | | 196,229 | | | | | 13 | 206 | 46 | | 142 | | | | | 196,636 | | 203 | 196,636 | CU. YDS. | EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION, AS PER PLAN |
| | | | 191,786 | | | | | 9 | 8 | | | 23 | | | | | 191,826 | | 203 | 191,826 | CU. YDS. | EMBANKMENT |
| | | | 19,704 | | | 702 | | | 491 | 248 | | | | | | | 21,145 | | 203 | 21,145 | SQ. YDS. | SUBGRADE PREPARATION |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | 1312 | | | | | | | | | | | | | | 1312 | | 410 | 1312 | CU. YDS. | TRAFFIC COMPACTED SURFACE, TYPE A or B |
| | | | 3938 | | | | | | | | | | | | | | 3938 | | 410 | 3938 | CU. YDS. | TRAFFIC COMPACTED SURFACE, TYPE C |
| | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | 16 | | 604 | 16 | EACH | STANDARD MONUMENT ASSEMBLY |
| | | 1 | | | | | | | | | | | | | | | 1 | | 604 | 1 | EACH | MONUMENT RESET, AS PER PLAN |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | 1300 | 350 | | 1112.5 | 1210.0 | 100 | | | | | | | 4072.5 | | 606 | 4072.5 | LIN.FT. | GUARD RAIL, TYPE 4, MODIFIED AS PER PLAN |
| | | | | | | 5 | | 14 | 29 | | | | | | | | 48 | | 606 | 48 | EACH | GUARD POST |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | 105 | | | | | | | | | | | | | | 105 | | 616 | 105 | TONS | CALCIUM CHLORIDE |
| | | | 60 | | | | | | | | | | | | | | 60 | | 616 | 60 | M-GAL. | WATER |
| | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | 1 | | SPECIAL | 1 | EACH | DRILLED WELL ABANDONED |
| | | | | | | | | | | | | | | | | | | | | | | ~ EROSION CONTROL ~ |
| | | | | | | | | 33 | 44 | 16 | 6 | 38 | | | | | | 137 | 601 | 137 | SQ.YDS. | RIPRAP, USING 6" REINFORCED CONCRETE SLAB, AS PER PLAN |
| | | 10 | | | | | | 262 | 349 | 6 | 115 | 17 | | | | | | 749 | 601 | 759 | CU.YDS. | DUMPED ROCK CHANNEL PROTECTION |
| | | | | | | 126 | 1903 | 430 | 642 | 225 | 96 | 74 | | | | | | 3496 | 601 | 3496 | LIN.FT. | PAVED GUTTER, STANDARD TYPE 1-2 |
| | | | | | | | | | 20 | 20 | | | | | | | | 40 | 601 | 40 | LIN.FT. | PAVED GUTTER, STANDARD TYPE 1-2 MODIFIED, AS PER PLAN |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | 124,599 | | | | | | | | | | | | | | | 124,599 | 659 | 124,599 | SQ.YDS. | SEEDING AND MULCHING |
| | | | 11.44 | | | | | | | | | | | | | | | 11.44 | 659 | 11.44 | TONS | COMMERCIAL FERTILIZER (12-12-12) |
| | | | 57.18 | | | | | | | | | | | | | | | 57.18 | 659 | 57.18 | TONS | AGRICULTURAL LIMING |
| | | | | | | 455 | 834 | 245 | 412 | 149 | 233 | 148 | | | | | | 2476 | 660 | 2476 | SQ.YDS. | SODDING |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | DRAINAGE |
| | | | | | | | | | | | | | | | | 75 | 75 | | 603 | 75 | LIN.FT. | 6" CONDUIT, TYPE B WITH CLASS B BEDDING |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 6.1 | 38.5 | 1.7 | 1.0 | 3.3 | | | | | 50.6 | | 602 | 50.6 | CU.YDS. | CONCRETE MASONRY |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | 400 | | | | | | | | | | | | | | | 400 | | 603 | 400 | LIN.FT. | 6" CONDUIT, TYPE E |
| | | 20 | | | | | | 20 | 20 | | | 40 | | | | | 100 | | 603 | 100 | LIN.FT. | 6" CONDUIT, TYPE F |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 34 | | | | | | | | | | | | | 34 | | 603 | 34 | LIN.FT. | 12" CONDUIT, TYPE D, 707.01, or 707.02, GAGE 14 |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 112 | | | | | | | | 112 | | 603 | 112 | LIN.FT. | 18" CONDUIT, TYPE A WITH CLASS B BEDDING, 707.05 |
| | | | | | | | | | | 120 | | | | | | | 120 | | 603 | 120 | LIN.FT. | 18" CONDUIT, TYPE B WITH CLASS B BEDDING |
| | | | | | | | | | | | | 32 | | | | | 32 | | 603 | 32 | LIN.FT. | 18" CONDUIT, TYPE D |

# GENERAL SUMMARY

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

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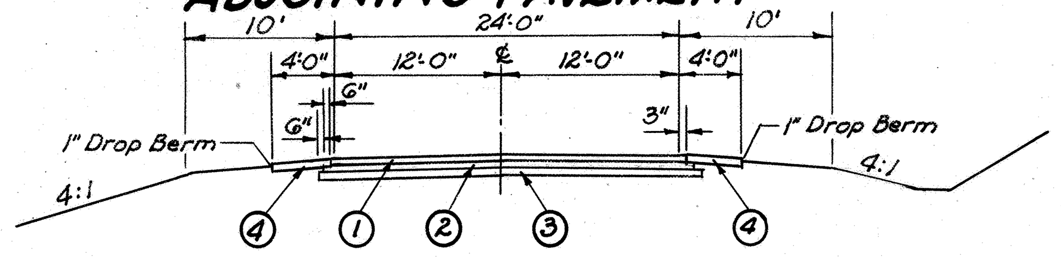
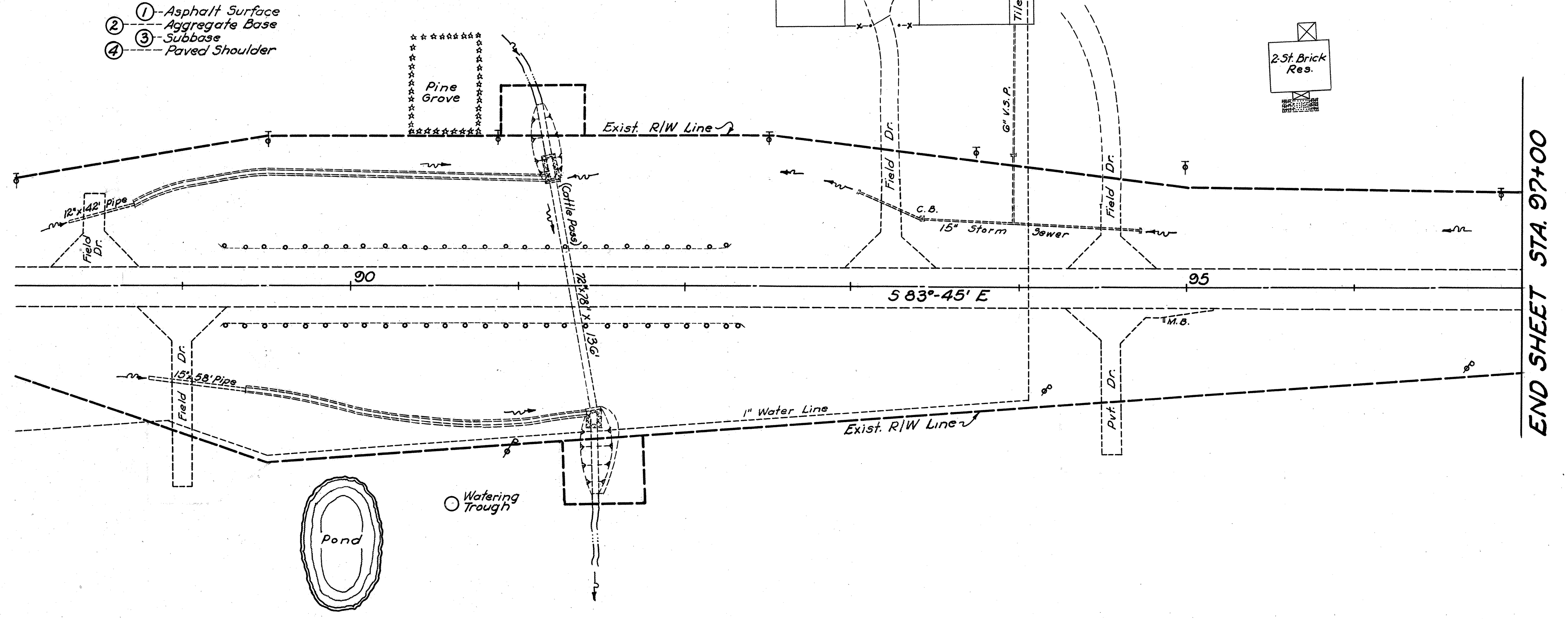
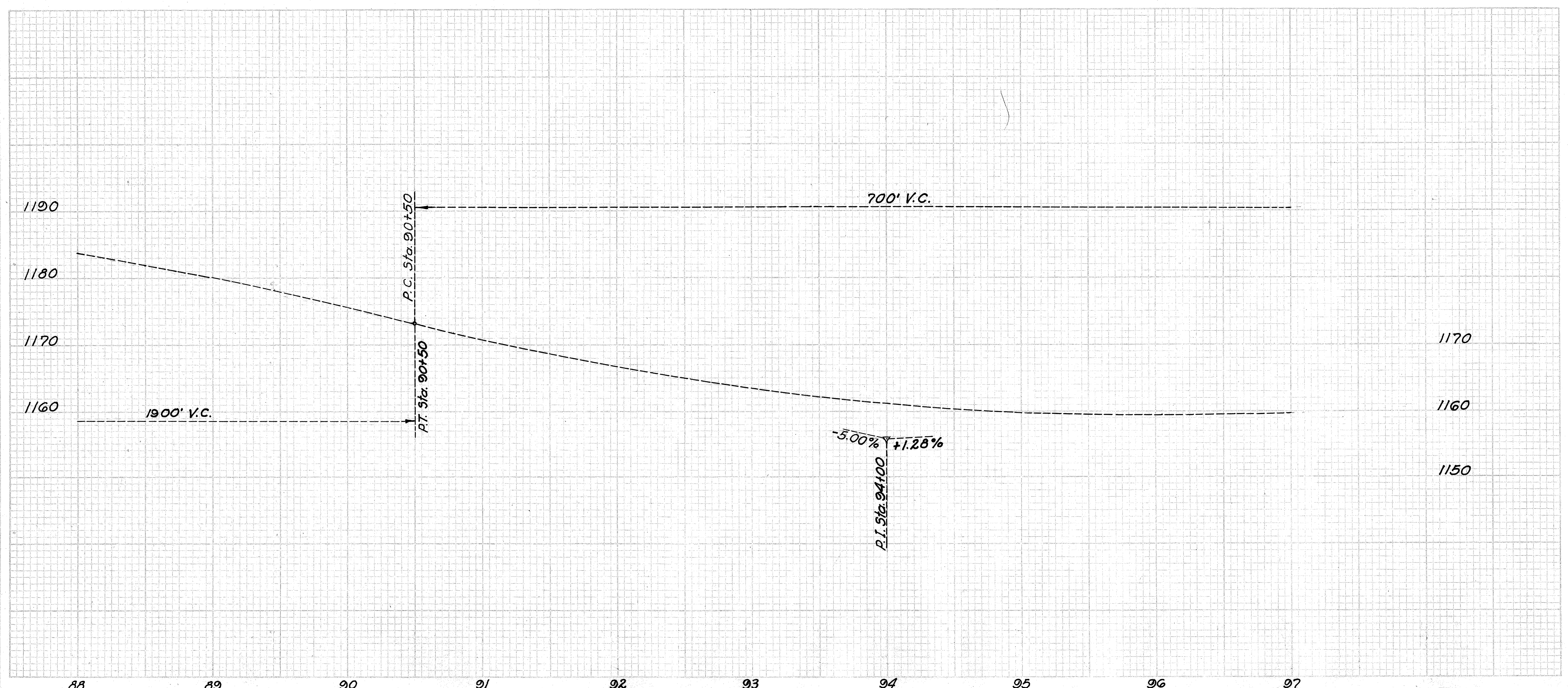
| TOTALS CARRIED FROM SHEET NO. | | | | | | | | | | | | | | TOTALS CODE 6203 | ITEM | GRAND TOTAL | UNIT | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 8 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | | |
| | | | | | | | | | | | | | | | | | | DRAINAGE (CONT'D) |
| | | | | | | | | | | | 92 | | | 92 | 603 | 92 | LIN.FT. | 21" CONDUIT, TYPE A WITH CLASS B BEDDING, 706.02 or 706.08 |
| | | | | | | | | | 144 | | | | | 144 | 603 | 144 | LIN.FT. | 21" CONDUIT, TYPE B WITH CLASS B BEDDING, 706.02 CLASS III or 706.08 |
| | | | | | | | 54 | 82 | | | | | | 136 | 603 | 136 | LIN.FT. | 24" CONDUIT, TYPE D |
| | | | | | | | | | 132 | 142 | | | | 274 | 603 | 274 | LIN.FT. | 30" CONDUIT, TYPE A WITH CLASS B BEDDING, 706.02 or 706.08 |
| | | | | | | | | | | | 88 | | | 88 | 603 | 88 | LIN.FT. | 48" x 76" CONDUIT, TYPE A WITH CLASS B BEDDING, 706.04, CLASS HE II |
| | | | | | | | 288 | | | | | | | 288 | 603 | 288 | LIN.FT. | 60" CONDUIT, TYPE A WITH CLASS B BEDDING, 707.03, GAGE 10-8 |
| | | | | | | | | 124 | | | | | | 124 | 603 | 124 | LIN.FT. | 144" CONDUIT, TYPE A WITH CLASS B BEDDING, 707.03, GAGE 7-5 |
| | | | | | | | | 1 | 1 | | | | | 2 | 604 | 2 | EACH | STANDARD NO. 2-2-A CATCH BASIN |
| | | | | | | | | | 1 | | | | | 1 | 604 | 1 | EACH | STANDARD NO. 5 CATCH BASIN |
| | | | | | | | 404 | 1112 | | | 997 | | | 2513 | 605 | 2513 | LIN.FT. | 6" DEEP PIPE UNDERDRAIN |
| 400 | | | | | | | | | | | | | | 400 | 605 | 400 | LIN.FT. | 6" UNCLASSIFIED PIPE UNDERDRAIN, 707.06 or 707.12, AS PER PLAN |
| 40 | | | | | | | | | | | | | | 40 | 605 | 40 | LIN.FT. | AGGREGATE DRAINS FOR SPRINGS, AS PER PLAN |
| | 4800 | | | | | | | | | | | | | 4800 | 605 | 4800 | LIN.FT. | AGGREGATE DRAINS |
| | | | | | | | | | | | | | | | | | | ~ PAVEMENT ~ |
| | | 3488 | | | | | | | | | | | | 3488 | 301 | 3488 | CU.YDS. | BITUMINOUS AGGREGATE BASE, 702.01 (85-100) or 702.09 RT-10 |
| | | 1565 | 41 | 40 | 157 | | 42 | 148 | 278 | 27 | 30 | | | 2328 | 304 | 2328 | CU.YDS. | AGGREGATE BASE |
| | | 3687 | | | | | | | | | | | | 3687 | 310 | 3687 | CU.YDS. | SUBBASE |
| | | 837 | | | 24 | | | 18 | 9 | | | | | 888 | 402 | 888 | CU.YDS. | ASPHALT CONCRETE (70-85) |
| | | 837 | 8 | | 20 | | 7 | 17 | 12 | | 6 | | | 907 | 404 | 907 | CU.YDS | ASPHALT CONCRETE (70-85) |
| | | 3079 | 55 | | 323 | | 49 | 245 | 147 | | 45 | | | 3943 | 408 | 3943 | GALS. | BITUMINOUS PRIME COAT, 702.09, RT-2 or RT-3 |
| | | 2310 | | | | | | | | | | | | 2310 | 409 | 2310 | GALS. | SEAL COAT BITUMINOUS MATERIAL, 702.09, RT-9 or RT-10 or 702.02, MC-800 or MC-3000 |
| | | 62 | | | | | | | | | | | | 62 | 409 | 62 | CU.YDS. | SEAL COAT COVER AGGREGATE, NO. 8 |
| | LUMP | | | | | | | | | | | | | LUMP | 614 | LUMP | LUMP | MAINTAINING TRAFFIC |
| LUMP | | | | | | | | | | | | | | LUMP | | LUMP | LUMP | CONSTRUCTION LAYOUT STAKES |
| LUMP | | | | | | | | | | | | | | LUMP | | LUMP | LUMP | FIELD OFFICE |

## TYPICAL SECTION ADJOINING PAVEMENT




(1)-Asphalt Surface
(2)-Aggregate Base
(3)-Subbase
(4)-Paved Shoulder




QUANTITIES

| SEE SHEET NO. |
|---|

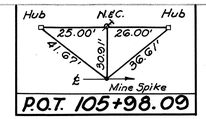
| REF. NO. | STATION TO STATION | SIDE | TOTALS |
|---|---|---|---|

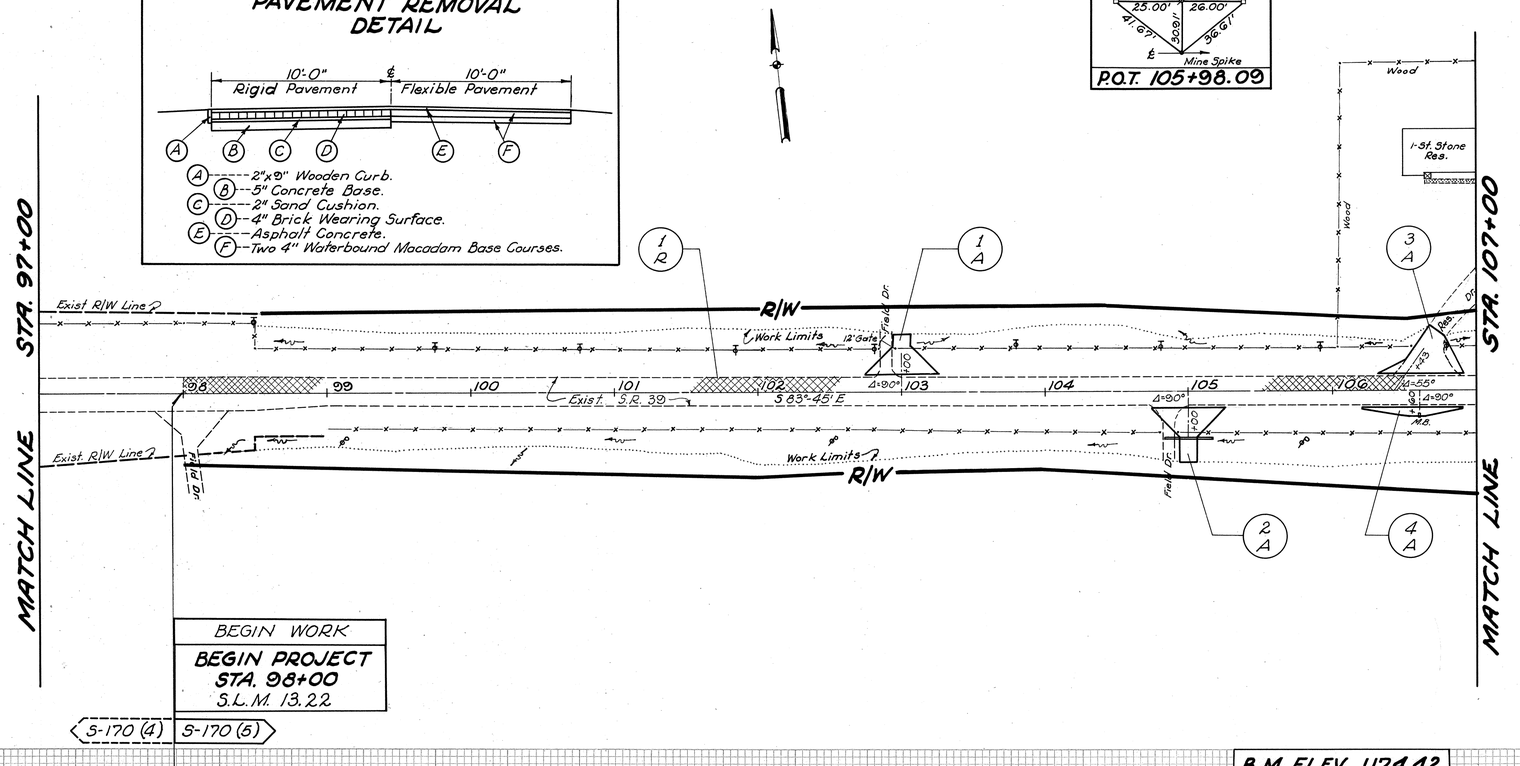
## PLAN & PROFILE STA. 88+00 TO STA. 97+00

## PAVEMENT REMOVAL DETAIL




(A) ----- 2"x8" Wooden Curb.
(B) -- 5" Concrete Base.
(C) ----- 2" Sand Cushion.
(D) -- 4" Brick Wearing Surface.
(E) ----- Asphalt Concrete.
(F) -- Two 4" Waterbound Macadam Base Courses.

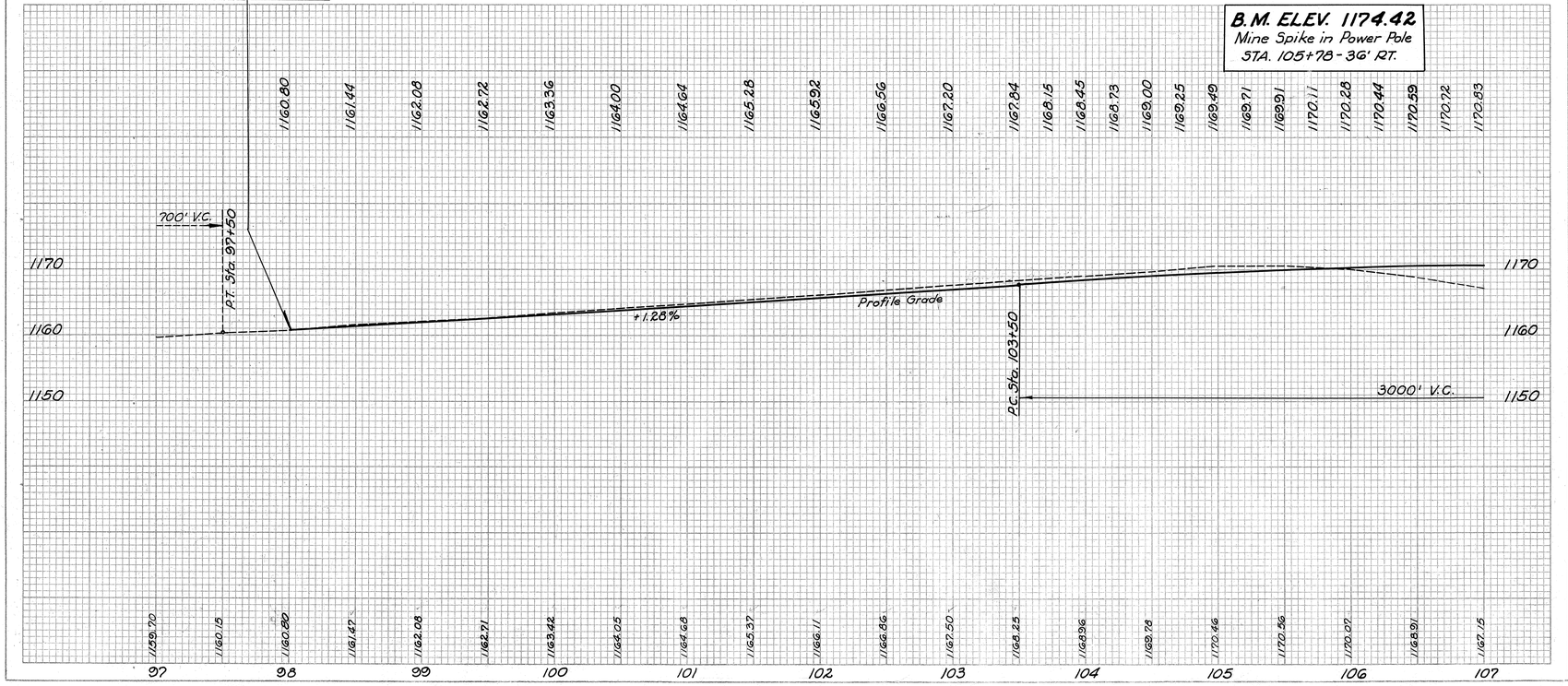



BEGIN WORK
**BEGIN PROJECT**
**STA. 98+00**
S.L.M. 13.22

S-170 (4) | S-170 (5)

**B.M. ELEV. 1174.42**
Mine Spike in Power Pole
STA. 105+78 - 36' RT.




## QUANTITIES

| REF. NO. | STATION TO STATION | SIDE | 202 EXIST. PAVT. REMOVED & DISPOSED SQ. YD. | 603 CONDUIT TYPE D GAGE 14 SPEC. 903.02 12" LIN. FT. | SEE SHEET NO. |
|---|---|---|---|---|---|
| 1-A | 103+00 | LT. | | 34 | 24 |
| 2-A | 105+00 | RT. | | | 24 |
| 3-A | 106+43 | LT. | | | 24 |
| 4-A | 106+60 | RT. | | | |
| 1-R | 98+00 TO 106+50 | LT & RT. | 1039 | | |
| TOTALS | | | 1039 | 34 | |

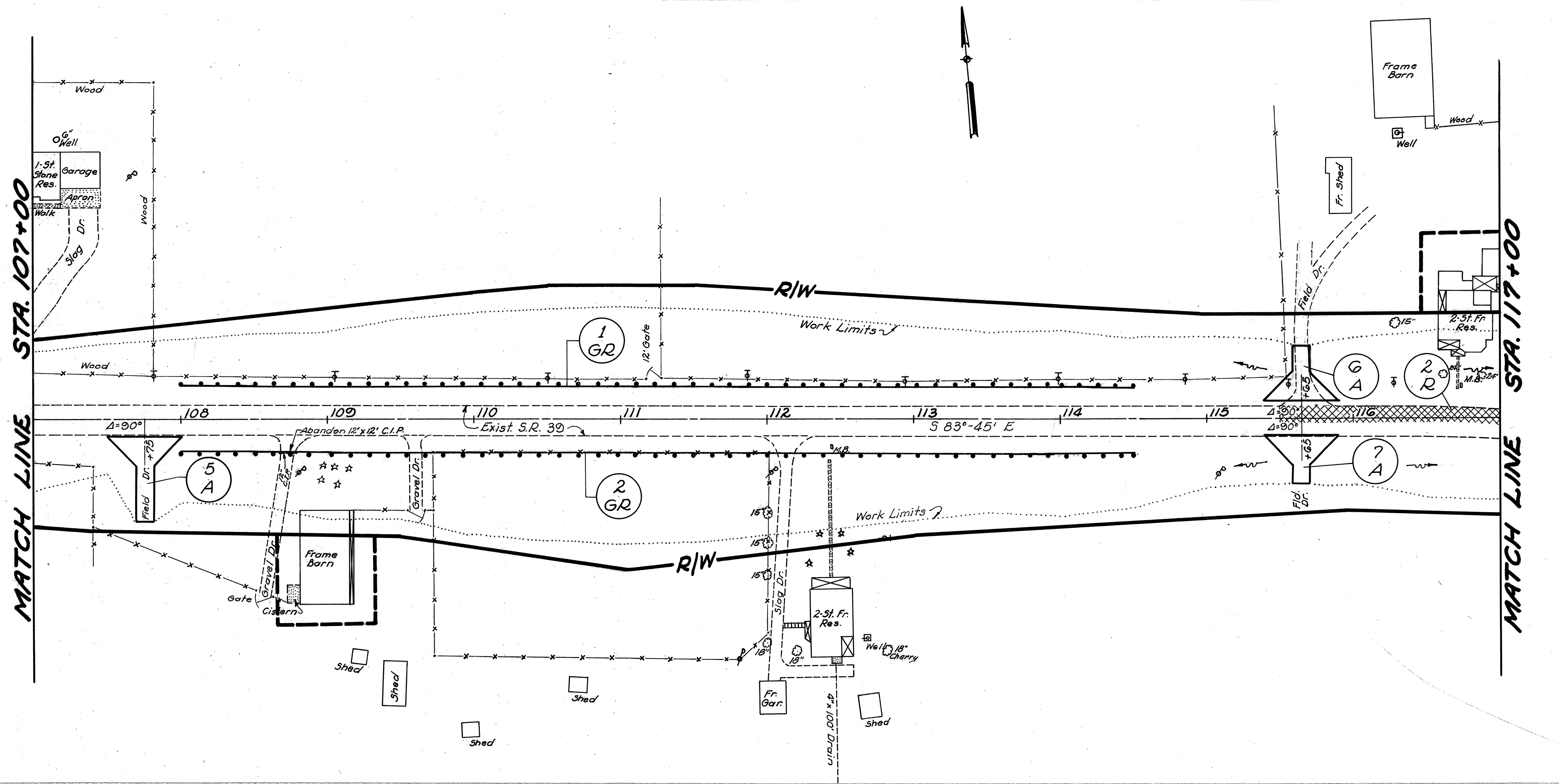
| | 304 AGGR. BASE CU. YD. | 404 ASPH. CONC. CU. YD. | 408 BIT. PRIME COAT GAL. | |
|---|---|---|---|---|
| | 10.1 | | | 24 |
| | 11.6 | | | 24 |
| | 14.7 | 5.9 | 42.3 | 24 |
| | 4.3 | 1.7 | 12.3 | |
| | 40.7 | 7.6 | 54.6 | |

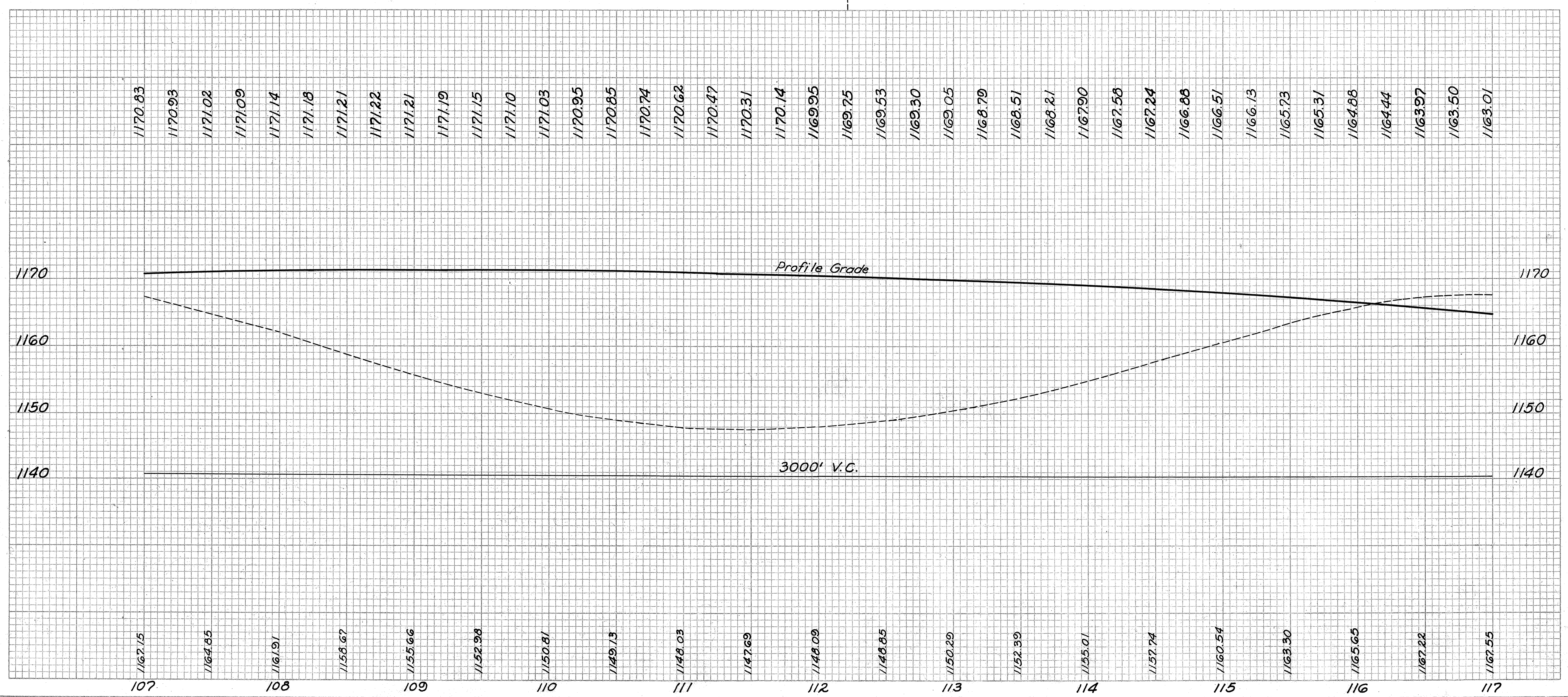
# PLAN & PROFILE -- STA. 97+00 to STA. 107+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |



HOL-39-(13.22-13.62)



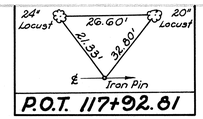




QUANTITIES

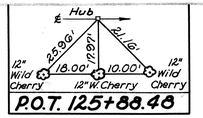
| REF. NO. | STATION TO STATION | SIDE | 202 EXIST. PAVT. REMOVED & DISPOSED SQ.YD. | 606 GUARD RAIL TYPE 4 MODIFIED LIN.FT. | 304 AGGR BASE CU.YD. | SEE SHEET NO. |
|---|---|---|---|---|---|---|
| 5-A | 107+75 | RT. | | | 16.7 | 24 |
| 6-A | 115+65 | LT. | | | 12.3 | 27 |
| 7-A | 115+65 | RT. | | | 11.2 | 27 |
| 1-GR | 108+00 TO 114+50 | LT. | | 650 | | |
| 2-GR | 108+00 TO 114+50 | RT. | | 650 | | |
| 2-R | 115+50 TO 117+00 | ℄ | 183 | | | |
| TOTALS | | | 183 | 1300 | 40.2 | |

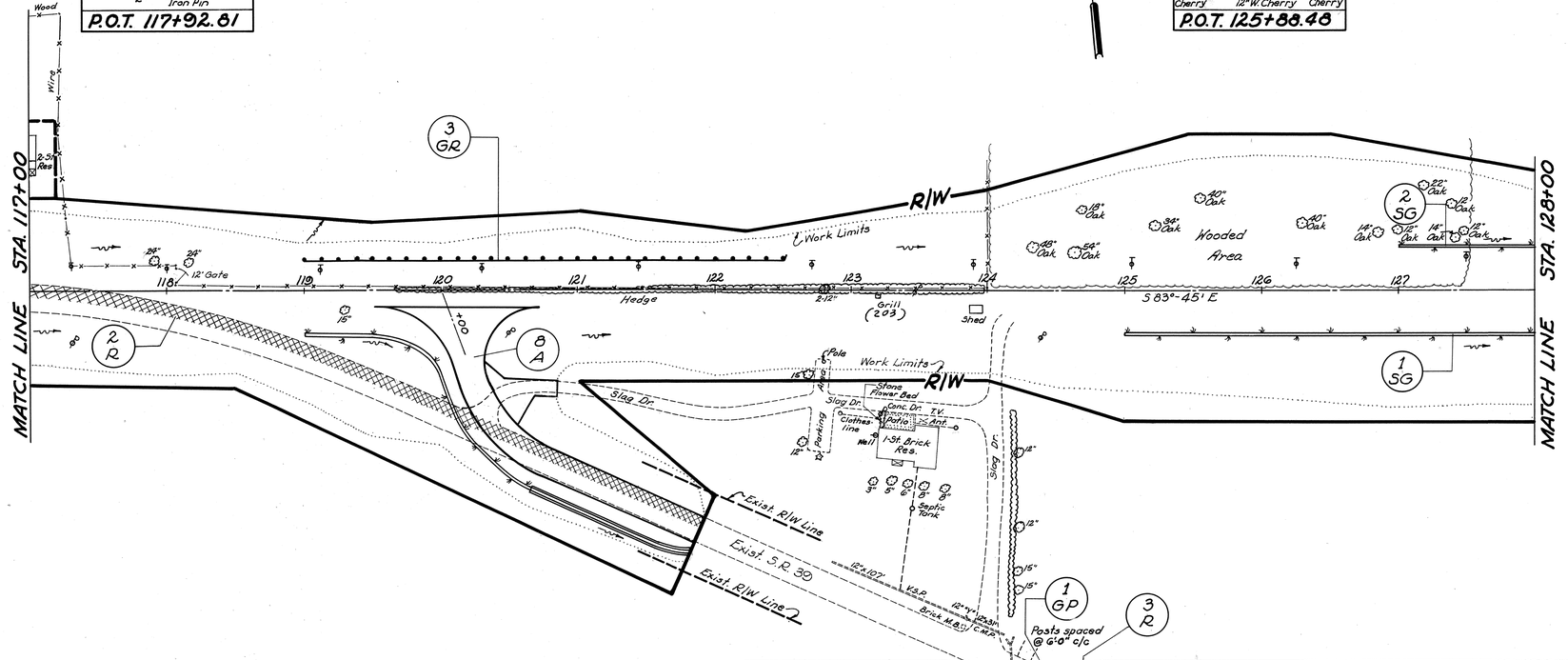
# PLAN & PROFILE -- STA. 107+00 to STA. 117+00

P.O.T. 117+92.81




P.O.T. 125+88.48



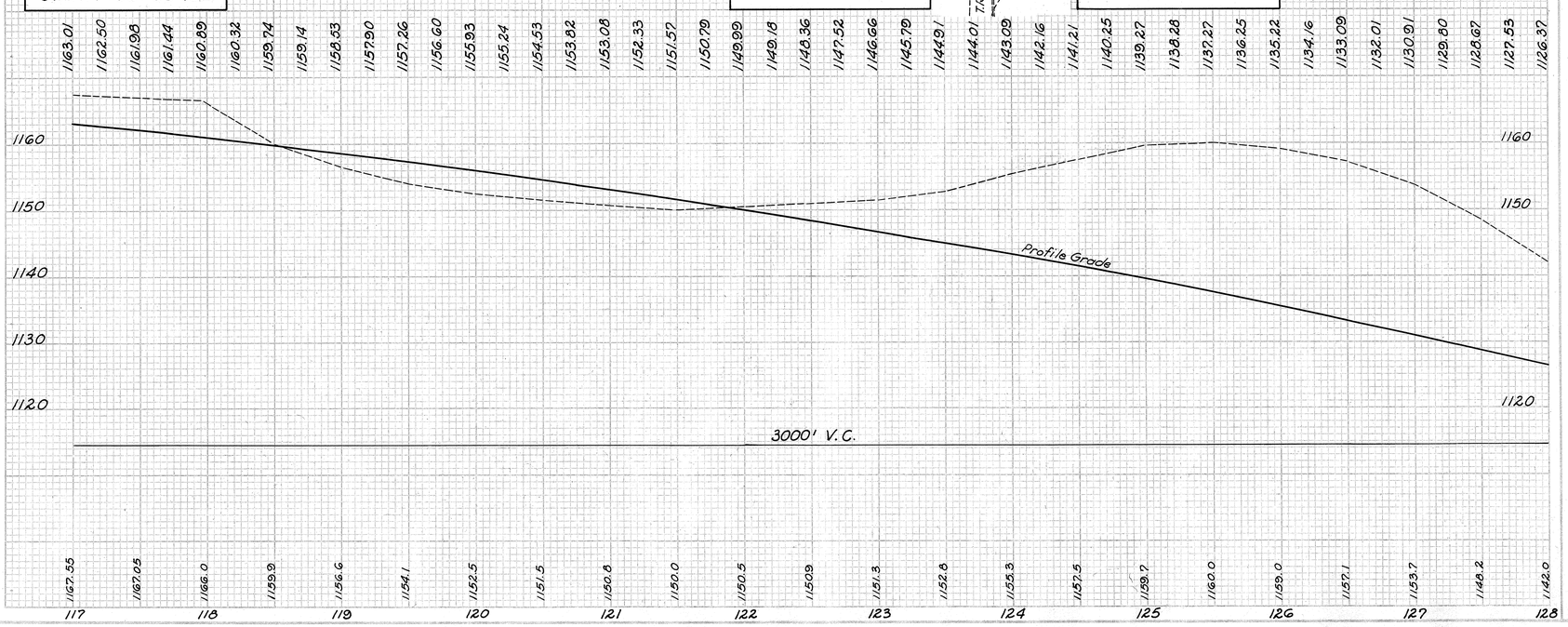




**B.M. ELEV. 1168.72**
Mine Spike in Power Pole
STA. 117+30 - 38' RT.

P.I. Sta. 118+50
Elev. 1187.04
+1.28% -6.00%

**B.M. ELEV. 1133.351**
U.S.C. & G.S. Disc No. D-259
S.W. Cor. T.R. 315 & S.R. 30

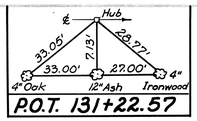
**B.M. ELEV. 1163.47**
Mine Spike in Root 42" Oak
STA. 124+73 - 24' LT.



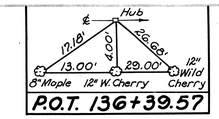

QUANTITIES

| REF. NO. | STATION TO STATION | SIDE | 601 RAMED GUTER TYPE 12 LIN.FT. | 606 GUARD RAIL TYPE 4 MODIFIED LIN.FT. | 606 GUARD POSTS EACH | 609 SUBGRADE PREPARA-ATION SQ. YD. | 610 SODDING SQ. YD. | 202 EXIST. PAVT. REMOVED & DISPOSED SQ.YD. | 203 EXCAVATION CU. YD. | 304 AGGR. BASE CU. YD. | 402 ASPH. CONC. CU. YD. | 404 ASPH. CONC. CU. YD. | 408 BIT. PRIME COAT GAL. | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B-A | 120+00 | RT. | 126 | | | | 188 | | 701.7 | | | | | 46 |
| 1-6P | 124+50 | RT. | | | 5 | | | | | | | | | |
| 3-6R | 119+00 TO 122+50 | LT. | | 350 | | | | | | | | | | |
| 2-R | 117+00 TO APPR. STA. 2+75 | LT. & RT. | | | | | | G42. | | | | | | |
| 3-R | 124+50 TO 128+00 | RT. | | | | | | 475 | | | | | | |
| 1-SG | 125+00 TO 128+00 | RT. | | | | | 200 | | | | | | | |
| 2-SG | 127+00 TO 128+00 | LT. | | | | | G7 | | | | | | | |
| | 1117 | | 126 | 5 | 350 | 455 | | | 701.7 | 157.3 | 24.4 | 19.6 | 323.0 | |

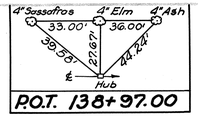
PLAN & PROFILE-STA. 117+00 TO STA. 128+00



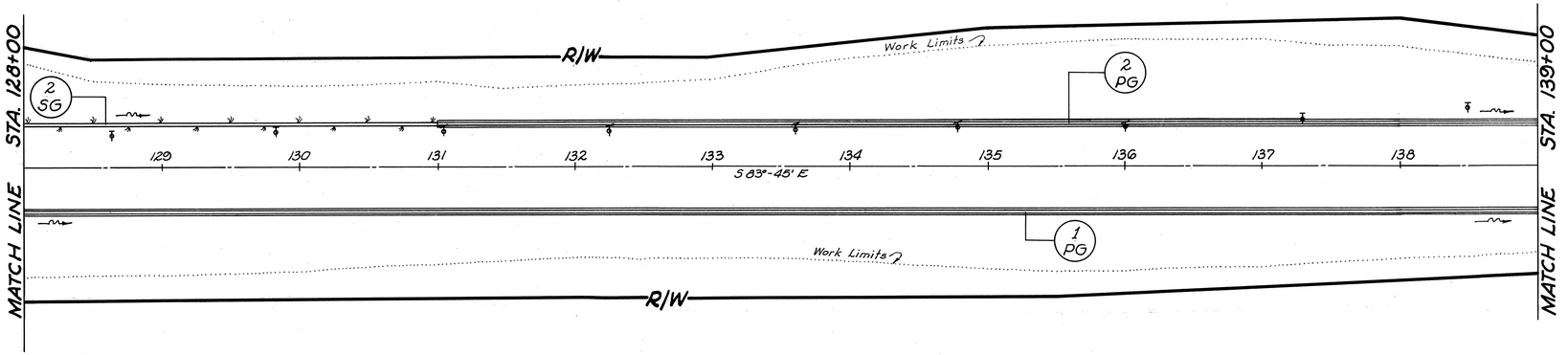

P.O.T. 131+22.57

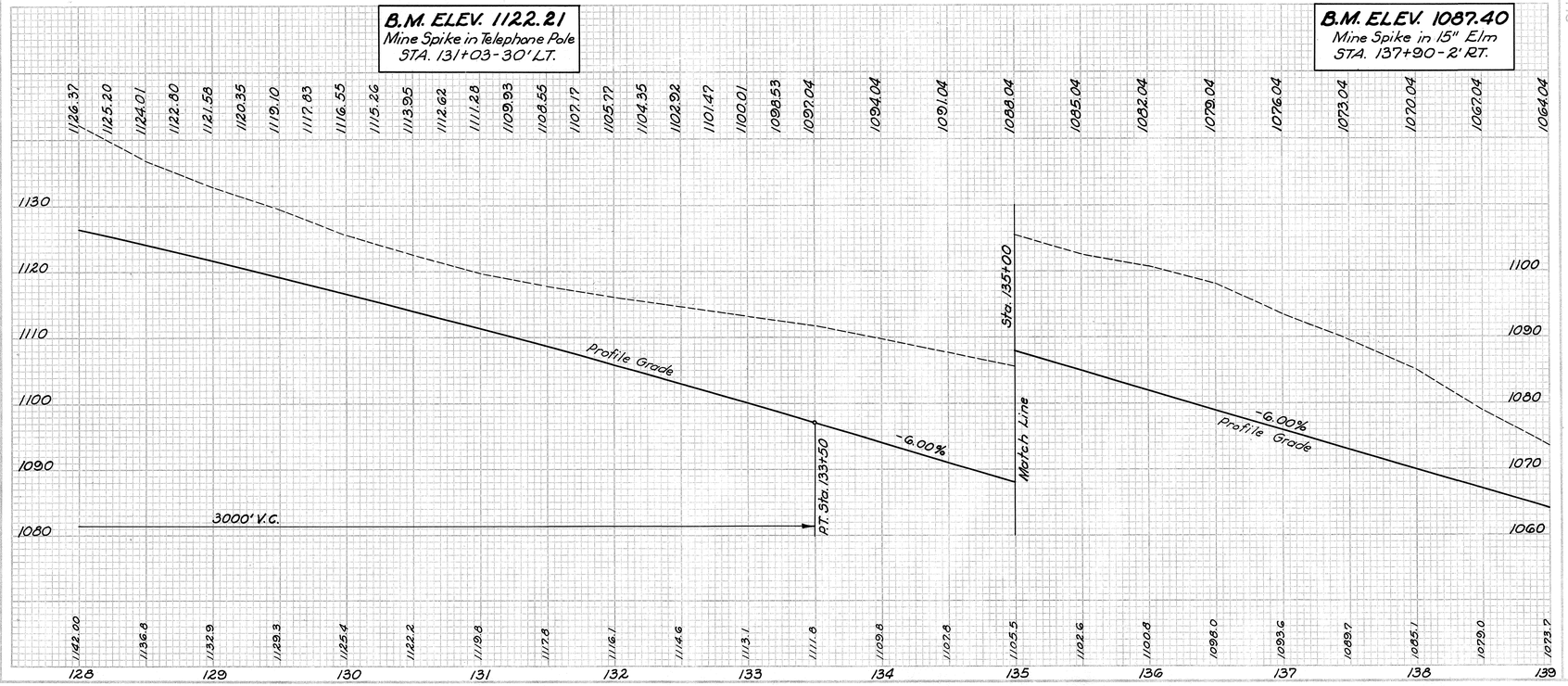



P.O.T. 136+39.57




P.O.T. 138+97.00




| REF NO. | STATION TO STATION | SIDE | 202 EXIST. PAVT. REMOVED & DISPOSED SQ. YD. | 660 SODDING SQ. YD. | 601 PAVED GUTTER TYPE 1-2 LIN. FT. | QUANTITIES |
|---|---|---|---|---|---|---|
| 1-PG | 128+00 TO 139+00 | RT. | | 367 | 1102 | |
| 2-PG | 131+00 TO 139+00 | LT. | | 267 | 801 | |
| 3-2 | 128+00 TO 139+00 | RT. | 1430 | | | |
| 2-SG | 128+00 TO 131+00 | LT. | | 200 | | |
| TOTALS | | | 1430 | 834 | 1903 | |

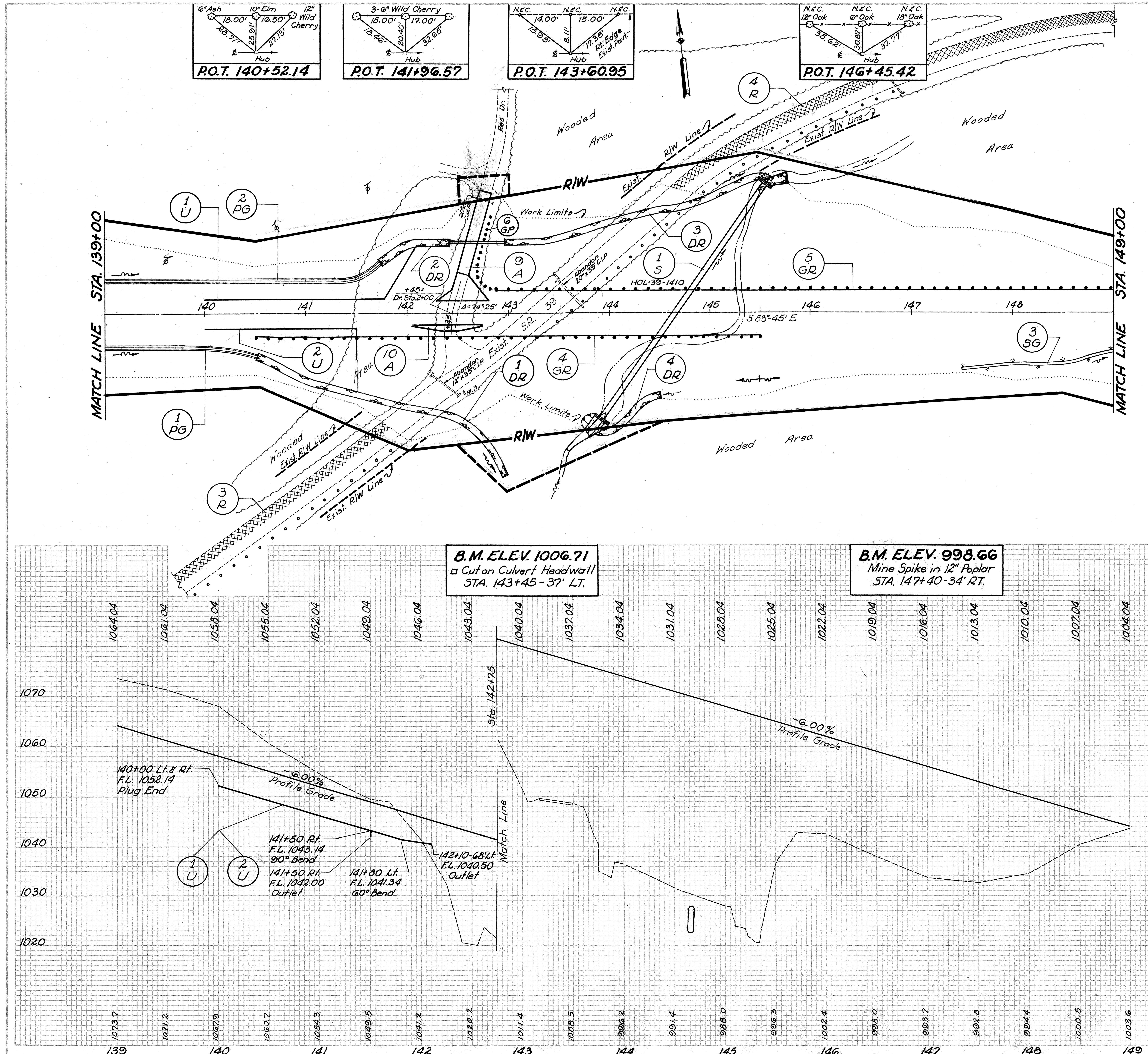
PLAN & PROFILE - STA. 128+00 TO STA. 139+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

15
70

HOL-39-(13.22-13.62)

SEE SHEET NO.

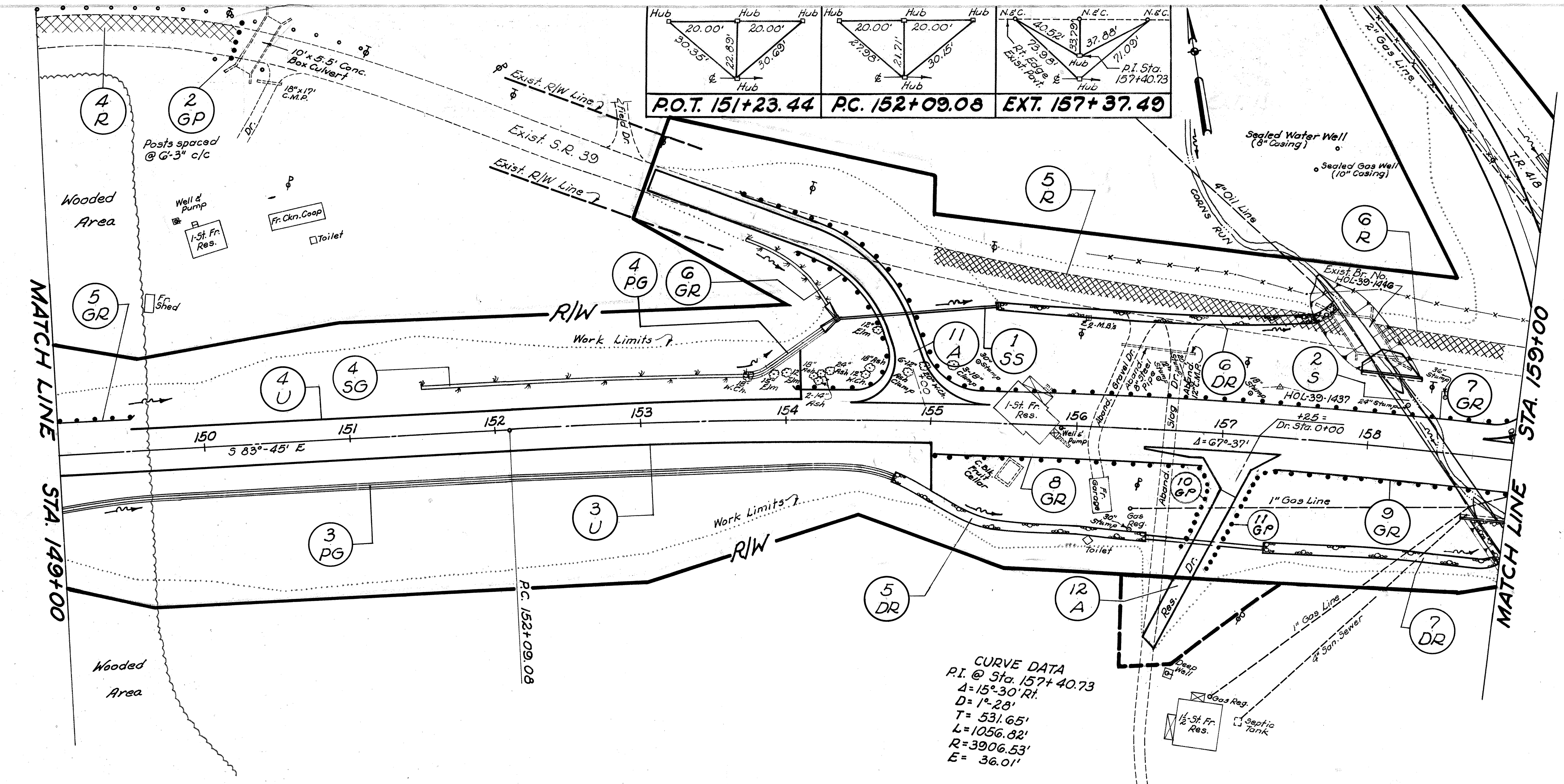


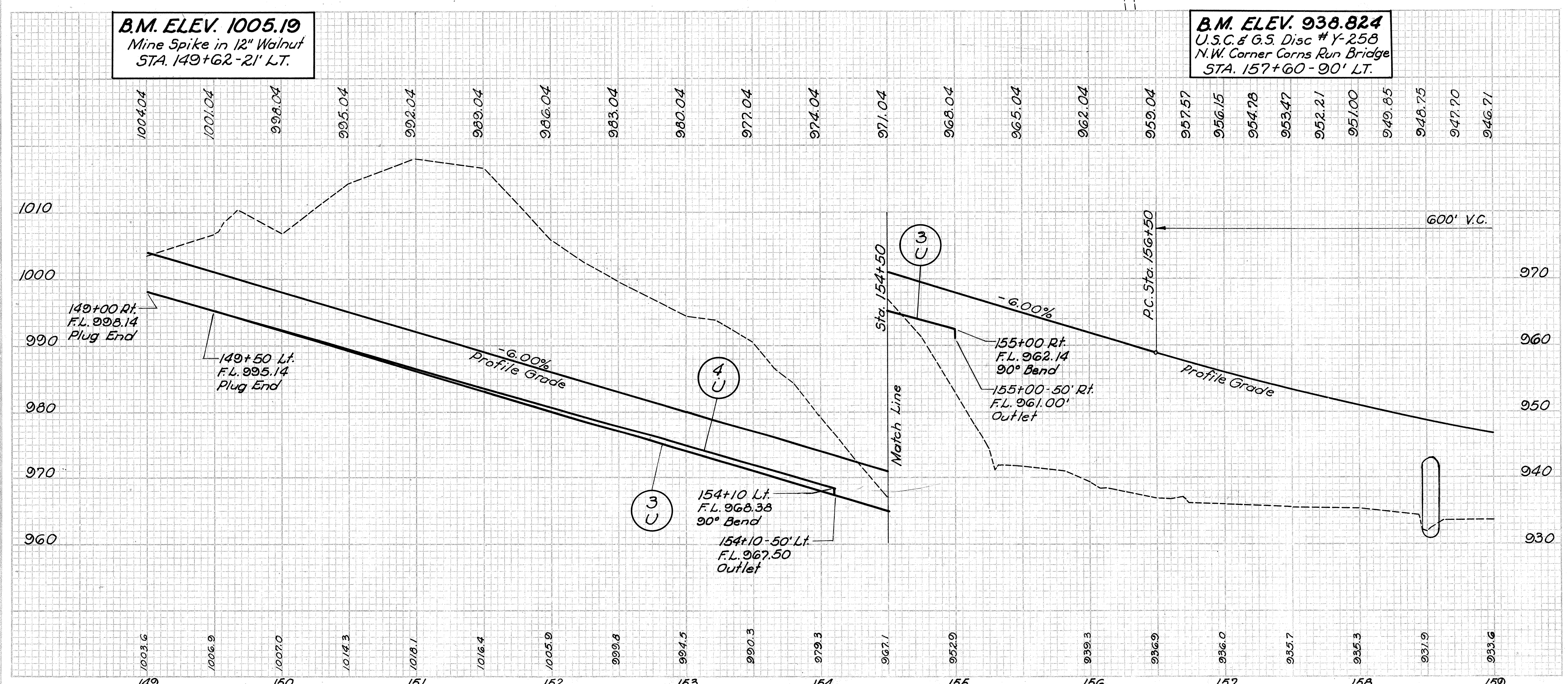

QUANTITIES

| REF. NO. | STATION TO STATION | SIDE | 202 PIPE REMOVED 24" & under (LIN. FT.) | 202 EXIST. PAVT. REMOVED & DISPOSED (SQ. YD.) | 203 EXCAVATION NOT INCL. EMBANKMENT CONSTR. (CU. YD.) | 203 EMBANKMENT (CU. YD.) | 606 GUARD RAIL TYPE 4 MODIFIED (LIN. FT.) | 660 SODDING (SQ. YD.) | 606 Guard Posts (Each) | 601 RIP-RAP 6" REINF. (SQ. YD.) | 601 DUMPED ROCK CHAN. PROT. (CU. YD.) | 601 PAVED GUTTER TYPE 1-2 (LIN. FT.) | 602 CONC. MASONRY (CU. YD.) | 603 CONDUIT TYPE D 24" (LIN. FT.) | 603 CONDUIT TYPE A* 707.03 GAGE 10-8 60" (LIN. FT.) | 603 CONDUIT TYPE F 6" (LIN. FT.) | 605 DEEP PIPE UNDERDRAIN 6" (LIN. FT.) | 304 AGGR. BASE (CU. YD.) | 404 ASPH. CONC. (CU. YD.) | 408 BIT. PRIME COAT (GAL.) | BENDS & BRANCHES 90° BEND | BENDS & BRANCHES 60° BEND | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9-A | 142+45 | LT. | 18 | | | | | | | | | | | 54 | | | | 37.2 | 5.0 | 36.2 | | | 35 |
| 10-A | 142+45 | RT. | | | | | | | | | | | | | | | | 4.3 | 1.7 | 12.3 | | | |
| 1-DR | 140+50 TO 143+00 | RT. | | | | | | | | | 97 | | | | | | | | | | | | |
| 2-DR | 141+75 TO 142+43 | LT. | | | | | | | | | 26 | | | | | | | | | | | | |
| 3-DR | 142+97 TO 145+62 | LT. | | | | | | | | | 92 | | | | | | | | | | | | |
| 4-DR | 143+93 TO 144+50 | RT. | | | | | | | | | 27 | | | | | | | | | | | | |
| 4-GR | 140+50 TO 145+50 | RT. | | | | | 500 | | | | | | | | | | | | | | | | |
| 5-GR | 142+87.5 TO 149+00 | LT. | | | | | 612.5 | | | | | | | | | | | | | | | | |
| 6GP | 142+81.5 To Dr. Sta. 0+96±Lt. | LT. | | | | | | | 14 | | | | | | | | | | | | | | |
| 1-PG | 139+00 TO 140+50 | RT. | | | | | | 50 | | | | 151 | | | | | | | | | | | |
| 2-PG | 139+00 TO 141+75 | LT. | | | | | | 93 | | | | 279 | | | | | | | | | | | |
| 3-R | 139+00 TO 141+80(±) | RT. | | 410 | | | | | | | | | | | | | | | | | | | |
| 4-R | 144+70(±) TO 149+00 | LT. | | 581 | | | | | | | | | | | | | | | | | | | |
| 1-S | 144+66 | LT. & RT. | | | 13 | 9 | | | | 33 | 20 | | 6.05 | | 288 | | | | | | | | 52 |
| 3-SG | 147+50 TO 149+00 | RT. | | | | | | 102 | | | | | | | | | | | | | | | |
| 1-U | 140+00 TO 142+10 | LT. | | | | | | | | | | | | | | 10 | 233 | | | | | 1 | |
| 2-U | 140+00 TO 141+50 | RT. | | | | | | | | | | | | | | 10 | 171 | | | | 1 | | |
| TOTALS | | | 18 | 991 | 13 | 9 | 1112.5 | 245 | 14 | 33 | 262 | 430 | 6.05 | 54 | 288 | 20 | 404 | 41.5 | 6.7 | 48.5 | | | |

*WITH CL. B BEDDING

# PLAN & PROFILE - STA. 139+00 TO STA. 149+00



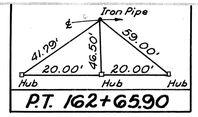

QUANTITIES

| REF. NO. | STATION TO STATION | SIDE | 202 EXIST. STRUCTURES REMOVED (LUMP) | 202 EXIST. PAVT. REMOVED & DISPOSED (SQ. YD.) | 203 EXCAVATION (CU. YD.) | 203 EMBANKMENT (CU. YD.) | SUBGRADE PREPARATION (SQ. YD.) | 606 GUARD RAIL TYPE 4 MODIFIED STRT. (L.F.) | 606 GUARD RAIL TYPE 4 MODIFIED CIRC. (L.F.) | 606 GUARD POSTS (EACH) | 660 SODDING (SQ. YD.) | RIP-RAP 6" REINF. (SQ. YD.) | 601 PAVED GUTTER TYPE 1-2 STD. (LIN. FT.) | 601 PAVED GUTTER TYPE 1-2 MODIFIED (LIN. FT.) | DUMPED ROCK CHAN. PROT. (CU. YD.) | 602 CONC. MASONRY (CU. YD.) | BENDS & BRANCHES 90° BEND | 603 CONDUIT TYPE F 6" (LIN. FT.) | 603 CONDUIT TYPE D 24" (LIN. FT.) | 603 CONDUIT TYPE A* 707.05 18" (LIN. FT.) | 603 CONDUIT TYPE A* 707.03 GAGE 7-5 144" (LIN. FT.) | 605 DEEP PIPE UNDERDRAIN 6" (LIN. FT.) | 604 STD. CATCH BASIN No. 2-2A (EACH) | 304 AGGR. BASE (CU. YD.) | 402 ASPH. CONC. (CU. YD.) | 404 ASPH. CONC. (CU. YD.) | 408 BIT. PRIME COAT (GAL.) | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11-A | 155+00 | LT. | | | | | 491.3 | | | | 48 | | | | | | | | | | | | | 98.3 | 17.7 | 11.3 | 202.2 | 49&51 |
| 12-A | 157+25 | RT. | | | | | | | | | | | | | | | | | 82 | | | | | 49.2 | | 5.9 | 42.3 | 41 |
| 5-DR | 154+75 TO 156+53 | RT. | | | | | | | | | | | | | 62 | | | | | | | | | | | | | |
| 6-DR | 155+44 TO 157+75 | LT. | | | | | | | | | | | | | 80 | | | | | | | | | | | | | |
| 7-DR | 157+36 TO 159+00 | RT. | | | | | | | | | | | | | 54 | | | | | | | | | | | | | |
| 2-GP | 150+40 | LT. | | | | | | | | 5 | | | | | | | | | | | | | | | | | | |
| 5-GR | 149+00 TO 149+50 | LT. | | | | | | 50.0 | | | | | | | | | | | | | | | | | | | | |
| 6-GR | 154+07.7 TO EX.S.R.39 APPR. 2+37±RT. | LT. | | | | | | 37.5 | 137.5 | | | | | | | | | | | | | | | | | | | |
| 7-GR | EX. S.R. 39 APPR. 1+88(±) LT TO T.R. 418 STA. 5+25 RT. | LT. | | | | | | 42.5 | 212.5 | | | | | | | | | | | | | | | | | | | |
| 8-GR | 155+00 TO 155+87.5 | RT. | | | | | | 187.5 | | | | | | | | | | | | | | | | | | | | |
| 9-GR | 157+40 TO 159+00 | RT. | | | | | | 160 | | | | | | | | | | | | | | | | | | | | |
| 10GP | DR. STA. 0+54 TO 0+93 ± | RT. | | | | | | | | 10 | | | | | | | | | | | | | | | | | | |
| 11GP | DR. STA. 0+22 TO 1+00 ± | LT. | | | | | | | | 14 | | | | | | | | | | | | | | | | | | |
| 3-PG | 149+00 TO 154+75 | RT. | | | | | | | | | 192 | | 576 | | | | | | | | | | | | | | | |
| 4-PG | 153+75 TO 154+26 | LT. | | | | | | | | | 22 | | 66 | | | | | | | | | | | | | | | |
| 4-R | 149+00 TO 150+40(±) | LT. | | 171 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5-R | 155+00 TO 157+75(±) | LT. | | 346 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6-R | 158+00 TO 158+85 | LT. | | 104 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-SS | EXIST. S.R.39 APPR. STA. 3+21 | LT.&RT. | | | | | | | | | | | | 20 | | 0.30 | | | | 112 | | | 1 | | | | | 60 |
| 2-S | 158+52 | LT.&RT. | LUMP | | 206 | 8 | | | | | | 44 | | | 153 | 38.14 | | | | | 124 | | | | | | | 53 |
| 4-SG | 151+50 TO 153+75 | LT. | | | | | | | | | 150 | | | | | | | | | | | | | | | | | |
| 3-U | 149+00 TO 155+00 | RT. | | | | | | | | | | | | | | | 1 | 10 | | | | 625 | | | | | | |
| 4-U | 149+50 TO 154+10 | LT. | | | | | | | | | | | | | | | 1 | 10 | | | | 487 | | | | | | |
| | | | LUMP | 621 | 206 | 8 | 491.3 | 1210.0 | | 29 | 412 | 44 | 642 | 20 | 349 | 38.44 | | 20 | 82 | 112 | 124 | 1112 | 1 | 147.5 | 17.7 | 17.2 | 244.5 | |

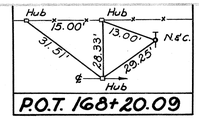
*WITH CL. B BEDDING

# PLAN & PROFILE-STA. 149+00 TO STA. 159+(

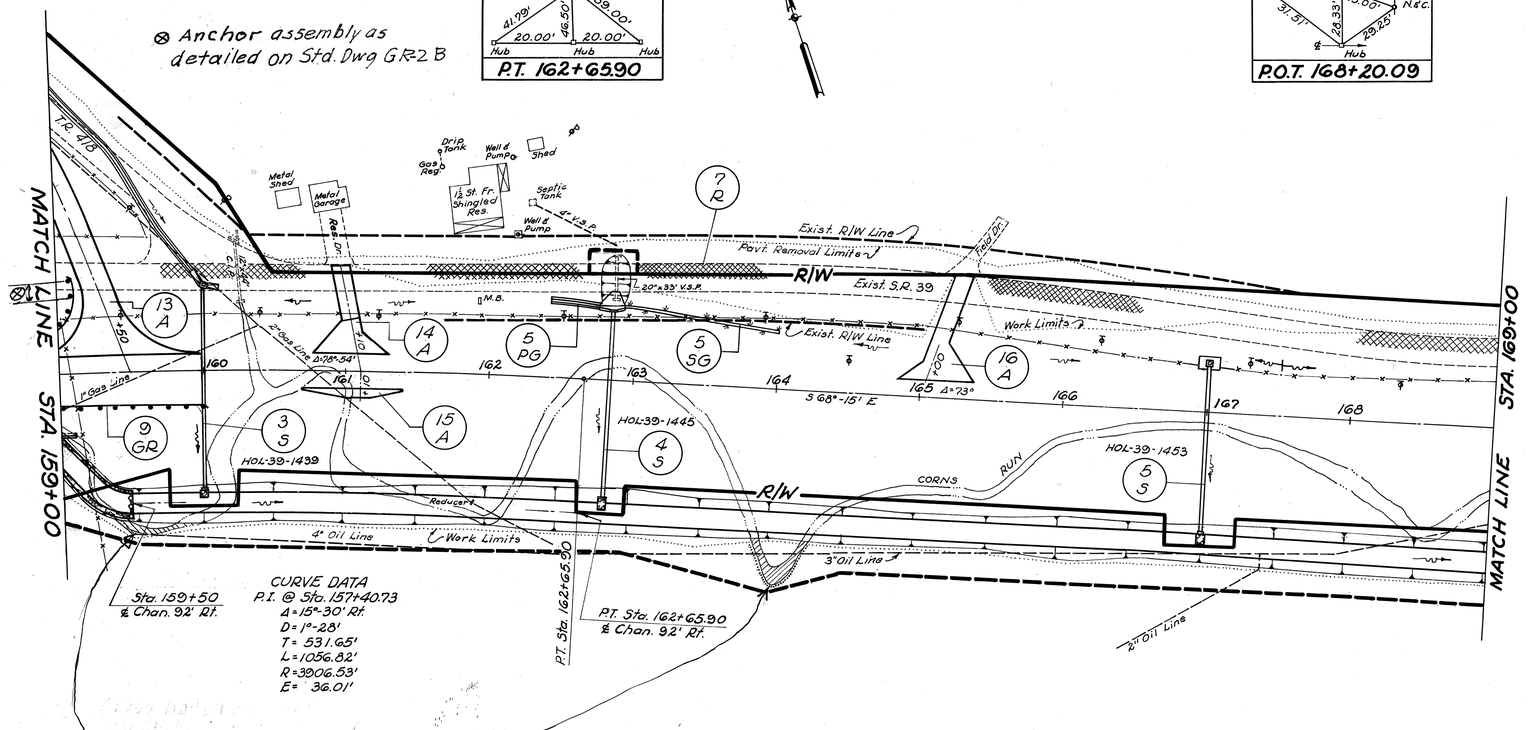
⊗ Anchor assembly as detailed on Std. Dwg. GR-2 B




P.T. 162+65.90

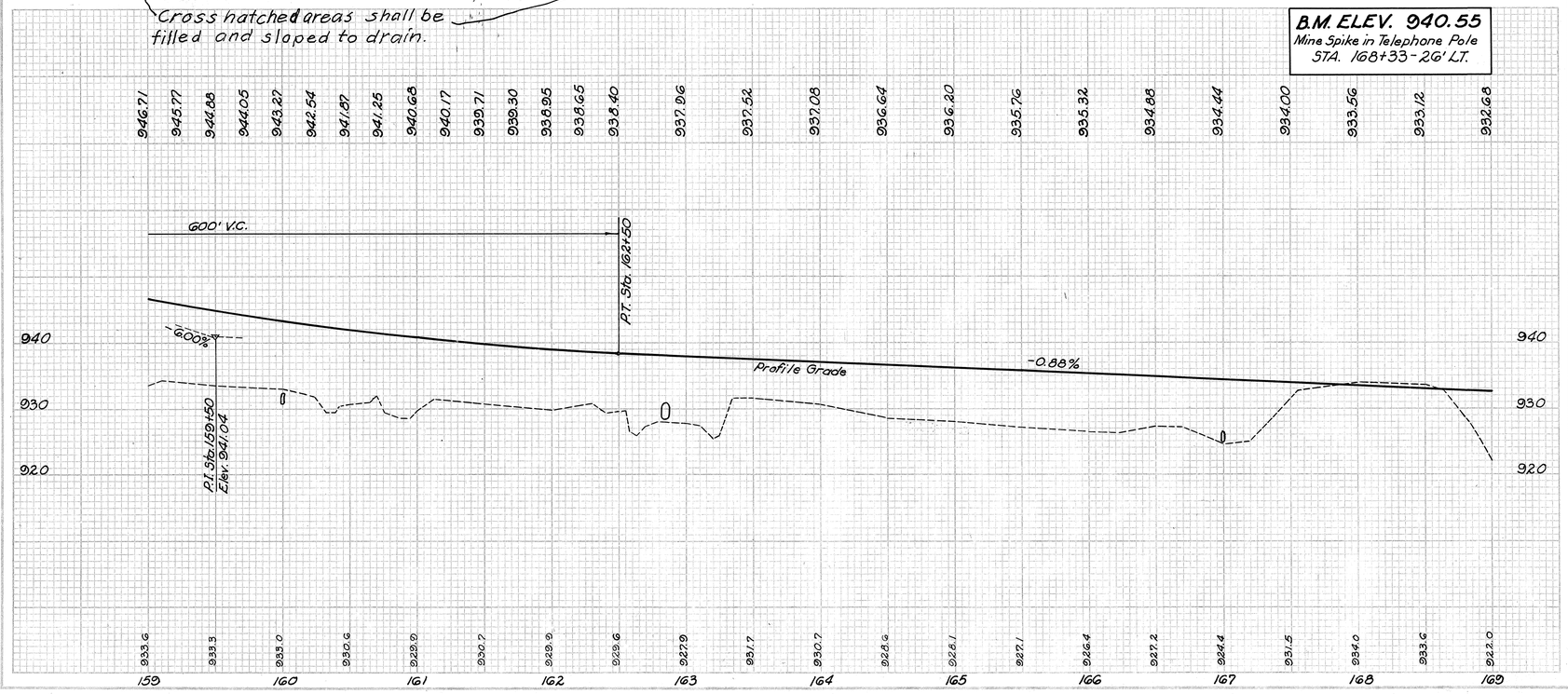



P.O.T. 168+20.09




Cross hatched areas shall be filled and sloped to drain.

**B.M. ELEV. 940.55**
Mine Spike in Telephone Pole
STA. 168+33-26' LT.




QUANTITIES

| REF. NO. | STATION TO STATION | SIDE | 202 PIPE REMOVED 24"ø UNDER LIN.FT. | 202 EX.ST. PAV'T. REMOVED & DISPOSED SQ.YD. | 203 EXCAV-ATION CU.YD. | 203 SUBGRADE PREPAR-ATION SQ.YD. | 606 GUARD RAIL TYPE 4 MODIFIED LIN.FT. | 606 GUARD RAIL TYPE 4 MODIFIED S.Y. | 609 RIP-RAP REINF. S.Y. | 601 PAVED GUTTER TYPE 1-2 STD. L.F. | 601 PAVED GUTTER TYPE 1-2 MOD. L.F. | 601 DUMP. ED. ROCK MASON-RY C.Y. | 601 CONC. ROCK MASON-RY PROT. C.Y. | 602 | 603 CONDUIT TYPE B* TYPE 706.02 706.04 706.06 18" L.F. | 603 CONDUIT TYPE B* TYPE 706.02 706.04 706.06 24" L.F. | 603 CONDUIT TYPE B* TYPE 706.02 706.04 706.06 30" L.F. | 604 STD. CATCH BASIN No. 2 EA. | 604 STD. CATCH BASIN No. 2A EA. | 304 AGGR. BASE CU.YD. | 402 ASPH. CONC. CU.YD. | 404 ASPH. CONC. CU.YD. | 408 B.T. PRIME COAT GAL. | SEE SHEET NO. | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | 239.0 | 8.6 | 5.2 | 101.1 | 50&51 | |
| | | | | | | | | | | | | | | | | | | | | 22.6 | | 4.6 | 35.2 | 42 | |
| | | | | | | | | | | | | | | | | | | | | 4.3 | | 1.7 | 12.3 | | |
| | | | | | | | | | | | | | | | | | | | | 22.0 | | | | 43 | |
| 13-A | 159+50 | LT. | | | | | | | | | | | | | | | | | | | | | | | |
| 14-A | 161+10 | LT. | | | | | | | | | | | | | | | | | | | | | | | |
| 15-A | 161+10 | RT. | | | | | | | | | | | | | | | | | | | | | | | |
| 16-A | 165+00 | LT. | | | | | | | | | | | | | | | | | | | | | | | |
| 9-GR | 159+00 TO 160+00.57 | RT. | | | | | 100 | | | | | | | | | | | | | | | | | | |
| 5-PG | 162+40 TO 162+78 | LT. | | | | | | 13 | | 39 | | | | | | | | | | | | | | | |
| 7-R | 159+70 TO 169+00 | LT. | | 1151 | | | | 74 | | | | | | | | | | | | | | | | | |
| 3-S | 160+00 | LT. & RT. | 44 | | 46 | | | | 16 | | 20 | 2 | 2 | | | 144 | | 132 | | | | | | | |
| 4-S | 162+84 | LT. & RT. | | | | | | | | | | 2 | 2 | | | | | | | | | | | | |
| 5-S | 167+00 | LT. & RT. | | | | | | | | | | 2 | 2 | | | | | 180 | | | | | | | |
| 5-SG | 162+92 TO 164+00 | LT. | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 44 | 1151 | 46 | 248.1 | 100 | 149 | 16 | 225.80 | | 6 | 6 | 1.68 | 120 | 144 | 132 | 180 | 1 | 1 | 277.9 | 8.6 | 11.5 | 146.6 | | |

*WITH CL.B BEDDING

PLAN & PROFILE-STA. 159+00 TO STA. 169+0

| FED. RD. DIVISION | STATE | PROJECT | | 19 / 70 |
|---|---|---|---|---|
| 2 | OHIO | | | |

HOL-39-(13.22-13.62)



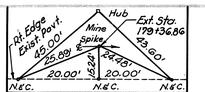




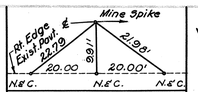
| QUANTITIES | REF NO. | STATION TO STATION | SIDE | 202 PIPE REMOVED 24" & UNDER LIN. FT. | 202 EXIST. CAT. REMOVED & DISPOSED SQ. YD. | 660 SODDING SQ. YD. | 601 RIP-RAP CL. B TYPE REINF. S.Y. | 601 PAVED GUTTER FOR ROCK CHAN. PROT. 1-2 STD. L.F. | 601 DUMP-ED ROCK CHAN. PROT. C.Y. | 602 CONC. MASON-RY C.Y. | 603 CON-DUIT TYPE A # 706.02 706.08 30" L.F. | 304 AGGR. BASE CU. YD. | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 45 | |
| | | | | | | | | | | | | | 57 |
| | | | | | | | | | | | | 26.7 | |
| | | | | | | | | | | | | | 26.7 |
| | | | | | | | | | | 1.02 | 142 | | |
| | | | | | | | | | | | | | 142 |
| | | | | | | | | | | | | | 1.02 |
| | 12-A | 174+00 | RT. | | | | | | 115 | | | | |
| | 8-DR | 172+70 TO 173+85 | RT. | | | | | | | | | | |
| | G-RG | 172+00 TO 172+95 | LT. | | | | 96 | | | | | | |
| | 7-R | 169+00 TO 179+00 | LT. | | 1234 | | 32 | | | | | | |
| | G-S | 173+00 | LT&RT. | 37 | | | | G | | | | | |
| | G-SG | 170+00 TO 172+00 | LT. | | | | | | | | | | |
| | 7-SG | 173+00 TO 179+00 | LT. | | | | 134 G7 | | | | | | |
| TOTALS | | | | 37 | 1234 | 233 | G 96 | 115 | | | | | |

* WITH CL. B BEDDING

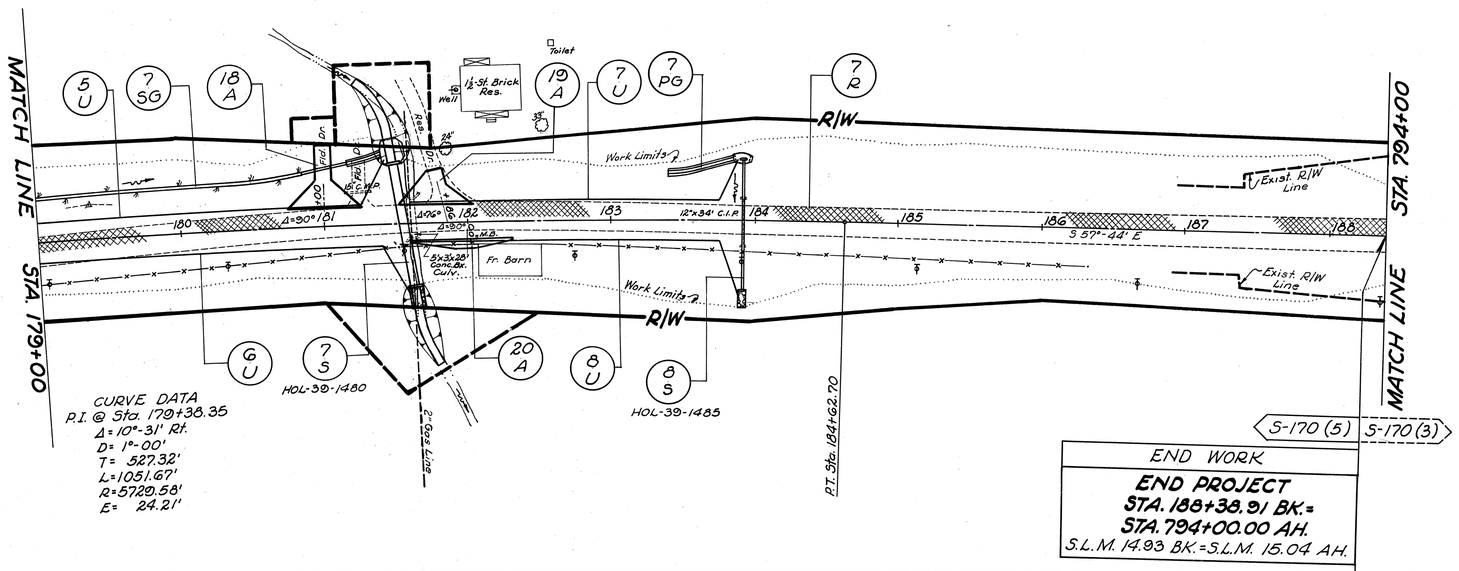
# PLAN & PROFILE - STA. 169+00 TO STA. 179+00




P.I. 179+38.35




P.T. 184+62.70

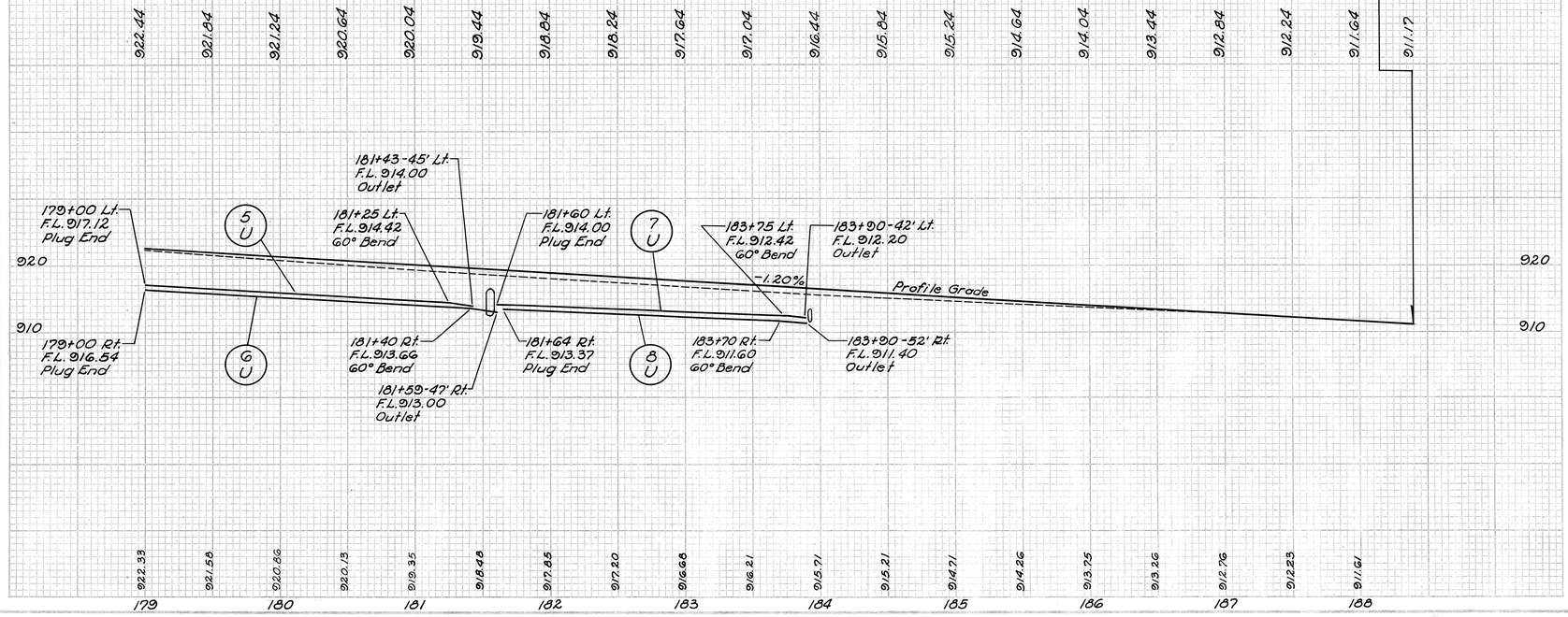



CURVE DATA
P.I. @ Sta. 179+38.35
Δ = 10°-31' Rt.
D = 1°-00'
T = 527.32'
L = 1051.67'
R = 5720.58'
E = 24.21'

END WORK

**END PROJECT**
**STA. 188+38.91 BK. =**
**STA. 794+00.00 AH.**
S.L.M. 14.93 BK. = S.L.M. 15.04 AH.

**B.M. ELEV. 919.01**
□ Cut on Culvert Headwall
STA. 181+57 - 17' LT.




| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

20
70

HOL-39-(13.22-13.62)

QUANTITIES

| REF. NO. | STATION TO STATION | SIDE | 601 RIP-RAP AND PAVED GUTTER REINF. 1-2 S.Y. | 601 RIP-RAP DUMPED L.F. | 601 RIP-RAP DUMPED C.Y. | 602 CONC. MASONRY C.Y. | 603 CONDUIT TYPE F 6" L.F. | 603 CONDUIT TYPE D 18" L.F. | 603 CONDUIT TYPE A* 706.02, 706.04, 706.08 12" L.F. | 603 CONDUIT TYPE A* 706.02, 706.04, 706.08 24" L.F. | 605 DEEP PIPE UNDERDRAIN 6" LIN. FT. | 304 AGGR. BASE CU. YD. | 404 ASPH. CONC. CU. YD. | 408 BIT. PRIME COAT GAL. | BENDS & BREAKINGS 60° BEND | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18-A | 181+00 | LT. | | | | | | 32 | | | | 13.9 | 4.6 | 33.1 | | 46 |
| 19-A | 181+86 | LT. | | | | | | | | | | 11.5 | 4.6 | 12.3 | | 46 |
| 20-A | 182+00 | RT. | | | | | | | | | | 4.3 | 1.7 | | | |
| 7-PG | 183+40 TO 183+86 | LT. | 48 | | | | | | | | | | | | | |
| 7-R | 179+00 TO 180+39.91 & LT. | | | | | | | | 1149 | | | | | | | |
| 7-S | 181+56 | LT. & RT. | 26 | 14 | 2.62 | | | | | 88 | | | | | | 58 |
| 8-S | 183+92 | LT. & RT. | 10 | 3 | 0.72 | | | | | 92 | | | | | | 59 |
| 7-SG | 179+00 TO 180+85 | LT. | | | | | | | | | | | | | | |
| 5-U | 179+00 TO 181+43 | LT. | | | | | 10 | | | | 252 | | | | 1 | |
| 6-U | 179+00 TO 181+59 | RT. | | | | | 10 | | | | 268 | | | | 1 | |
| 7-U | 181+60 TO 183+90 | LT. | | | | | 10 | | | | 238 | | | | 1 | |
| 8-U | 181+64 TO 183+90 | RT. | | | | | 10 | | | | 230 | | | | 1 | |
| | | | 601 RIP-RAP AND PAVED GUTTER REINF. 1-2 S.Y. | 601 RIP-RAP DUMPED L.F. | 601 RIP-RAP DUMPED C.Y. | 602 CONC. MASONRY C.Y. | 603 CONDUIT TYPE F 6" L.F. | 603 CONDUIT TYPE D 18" L.F. | 603 CONDUIT TYPE A* 706.02, 706.04, 706.08 12" L.F. | 603 CONDUIT TYPE A* 706.02, 706.04, 706.08 24" L.F. | 605 DEEP PIPE UNDERDRAIN 6" LIN. FT. | 304 AGGR. BASE CU. YD. | 404 ASPH. CONC. CU. YD. | 408 BIT. PRIME COAT GAL. | BENDS & BREAKINGS 60° BEND | SEE SHEET NO. |
| | | | 48 | 26 | 5.34 | 40 | 32 | 92 | 88 | 88 | 997 | 20.7 | 6.3 | 45.4 | | |

* WITH CL. B BEDDING

| REF. NO. | STATION TO STATION | SIDE | 202 EXIST. STRUCT. REMOVED LUMP | 202 PIPE REMOVED 24" & UNDER LIN. FT. | 202 EX. IST. PAVT. REMOVED & DISPOSED SQ. YD. | 203 EXCAV. ATION CU. YD. | 203 EMBANK. MENT CU. YD. | 660 SOD. ING S.Y. | 601 RIP-RAP AND PAVED GUTTER REINF. 1-2 S.Y. | 601 RIP-RAP DUMPED L.F. | 601 RIP-RAP DUMPED C.Y. | 602 CONC. MASONRY C.Y. | 603 CONDUIT TYPE F 6" L.F. | 603 CONDUIT TYPE D 18" L.F. | 603 CONDUIT TYPE A* 706.02, 706.04, 706.08 12" L.F. | 603 CONDUIT TYPE A* 706.02, 706.04, 706.08 24" L.F. | 605 DEEP PIPE UNDERDRAIN 6" LIN. FT. | 304 AGGR. BASE CU. YD. | 404 ASPH. CONC. CU. YD. | 408 BIT. PRIME COAT GAL. | BENDS & BREAKINGS 60° BEND | SEE SHEET NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LUMP | 18 | 1149 | 142 | 23 | 148 | 38 | 74 | 17 | 334 | 40 | 32 | 92 | 88 | | | | | | |

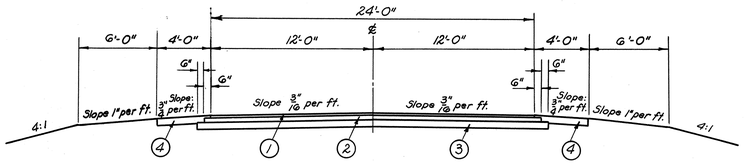
# PLAN & PROFILE - STA. 179+00 TO STA. 794+0

| FED. RD DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

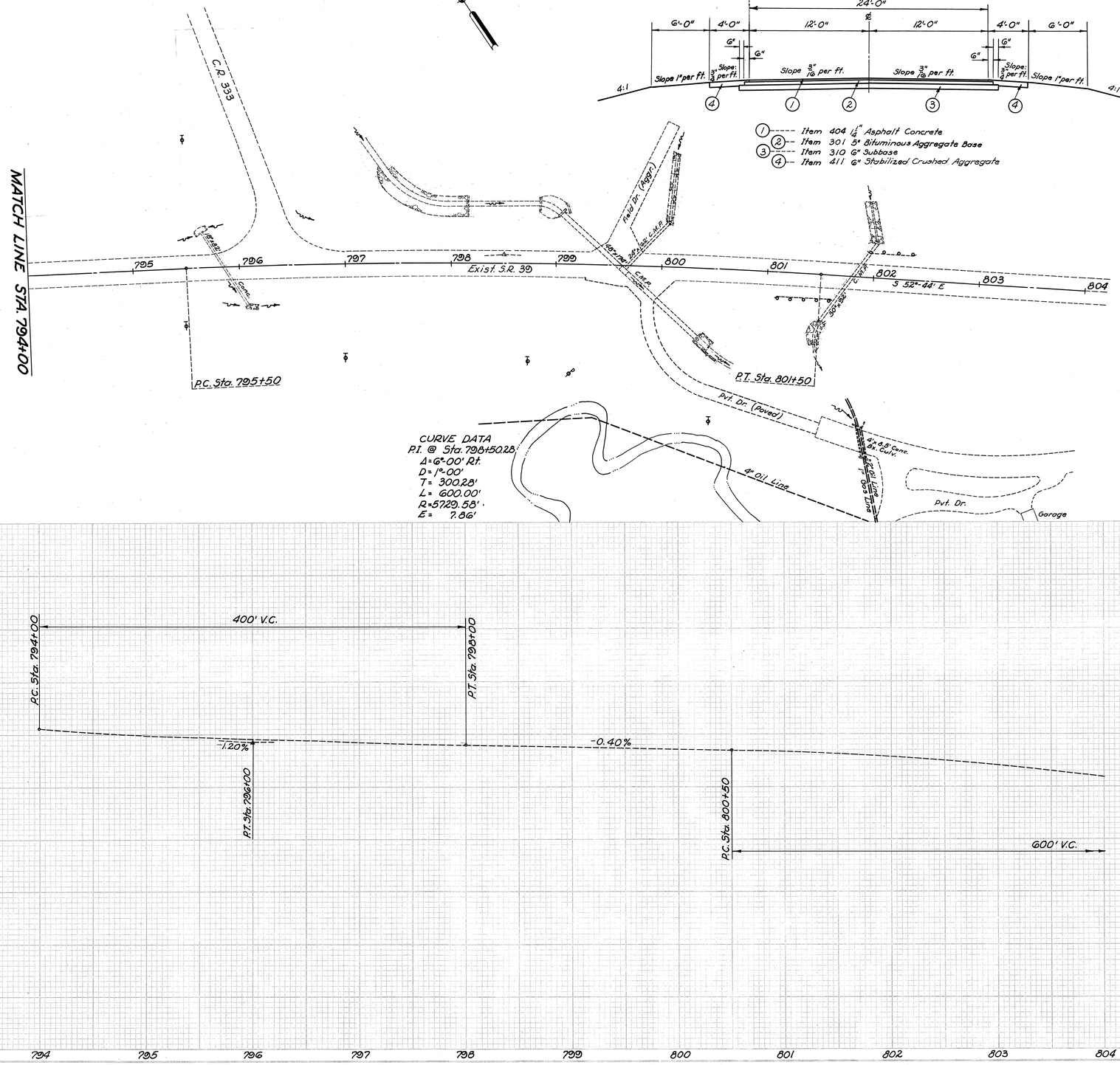
21
70

HOL-39-(13.22-13.62)

## TYPICAL SECTION ADJOINING PAVEMENT




1 ---- Item 404 1 1/4" Asphalt Concrete
2 ---- Item 301 5" Bituminous Aggregate Base
3 ---- Item 310 6" Subbase
4 ---- Item 411 6" Stabilized Crushed Aggregate




SEE SHEET NO.

QUANTITIES

| REF. NO. | STATION TO STATION | SIDE |
|---|---|---|
| | | |

TOTALS

PLAN & PROFILE - STA. 794+00 TO STA. 804+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

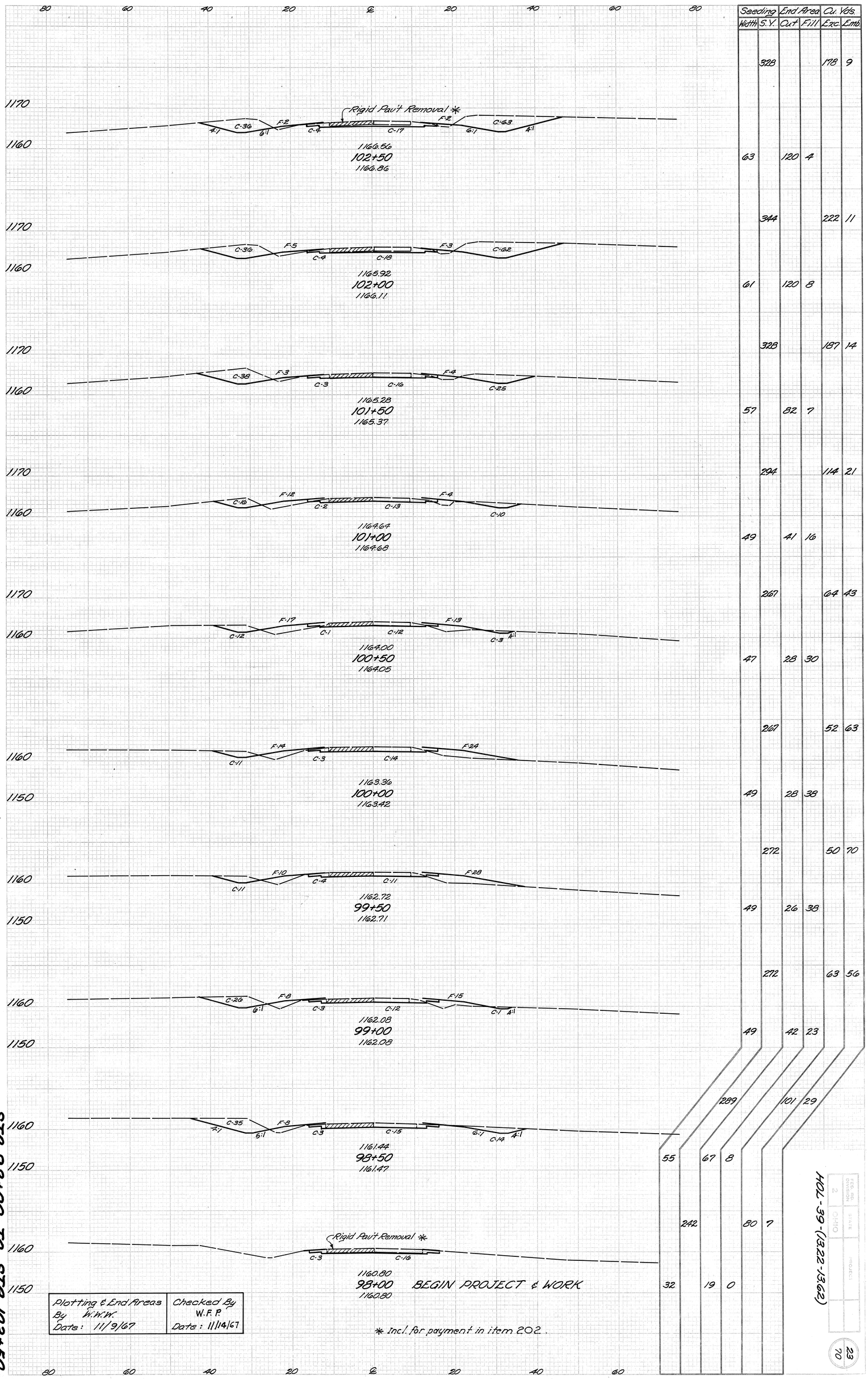
22/70

HOL-39-(13.22-13.62)

# SUPERELEVATION TABLES

| P.C. 152+09.08 | | | D = 1°-28' RT. | | P.T. 162+65.90 | | |
|---|---|---|---|---|---|---|---|
| LEFT | | | | | RIGHT | | |
| Edge Elevation | Add Super. | Width | Profile Elevation | ℄ Station | Width | Deduct Crown | Edge Elevation |
| 993.35 | -.19 | 12' | 993.54 | 150+75 | 12' | -.19 | 993.35 |
| 991.89 | ↑ | | 992.04 | 151+00 | | | 991.85 |
| 990.45 | | | 990.54 | +25 | | | 990.35 |
| 989.08 | | | 989.04 | +50 | | | 988.85 |
| 987.69 | | | 987.54 | +75 | | | 987.35 |
| 986.31 | | | 986.04 | 152+00 | | | 985.85 |
| 985.82 | Obtained | | 985.50 | P.C.+09.08 | | | 985.31 |
| 984.94 | | | 984.54 | +25 | | | 984.35 |
| 983.56 | Graphically | | 983.04 | +50 | | | 982.85 |
| 982.16 | | | 981.54 | +75 | | | 981.35 |
| 980.69 | +0.84 | | 980.04 | 153+00 | | | 979.85 |
| 979.19 | | | 978.54 | +25 | | | 978.35 |
| 977.69 | | | 977.04 | +50 | | | 976.85 |
| 976.19 | | | 975.54 | +75 | | | 975.35 |
| 974.69 | | | 974.04 | 154+00 | | | 973.85 |
| 973.19 | | | 972.54 | +25 | | | 972.35 |
| 971.69 | | | 971.04 | +50 | | | 970.85 |
| 970.19 | | | 969.54 | +75 | | | 969.35 |
| 968.69 | | | 968.04 | 155+00 | | | 967.85 |
| 967.19 | | | 966.54 | +25 | | | 966.35 |
| 965.69 | | | 965.04 | +50 | | | 964.85 |
| 964.19 | | | 963.54 | +75 | | | 963.35 |
| 962.69 | | | 962.04 | 156+00 | | | 961.85 |
| 961.19 | | | 960.54 | +25 | | | 960.35 |
| 959.69 | | | 959.04 | +50 | | | 958.85 |
| 958.22 | | | 958.57 | +75 | | | 957.38 |
| 956.80 | | | 956.15 | 157+00 | | | 955.96 |
| 955.43 | | | 954.78 | +25 | | | 954.59 |
| 954.12 | | | 953.47 | +50 | | | 953.28 |
| 952.86 | | | 952.21 | +75 | | | 952.02 |
| 951.65 | | | 951.00 | 158+00 | | | 950.81 |
| 950.50 | | | 949.85 | +25 | | | 949.66 |
| 949.40 | | | 948.75 | +50 | | | 948.56 |
| 948.35 | | | 947.70 | +75 | | | 947.51 |
| 947.36 | | | 946.71 | 159+00 | | | 946.52 |
| 946.42 | | | 945.77 | +25 | | | 945.58 |
| 945.53 | | | 944.88 | +50 | | | 944.69 |
| 944.70 | | | 944.05 | +75 | | | 943.86 |
| 943.92 | | | 943.27 | 160+00 | | | 943.08 |
| 943.19 | | | 942.54 | +25 | | | 942.35 |
| 942.52 | | | 941.87 | +50 | | | 941.68 |
| 941.90 | | | 941.25 | +75 | | | 941.06 |
| 941.33 | | | 940.68 | 161+00 | | | 940.49 |
| 940.82 | | | 940.17 | +25 | | | 939.98 |
| 940.36 | | | 939.71 | +50 | | | 939.52 |
| 939.95 | +0.84 | | 939.30 | +75 | | | 939.11 |
| 939.57 | ↑ | | 938.95 | 162+00 | | | 938.76 |
| 939.19 | | | 938.65 | +25 | | | 938.46 |
| 938.80 | | | 938.40 | +50 | | | 938.21 |
| 938.57 | Obtained | | 938.26 | P.T.+65.90 | | | 938.07 |
| 938.43 | | | 938.18 | +75 | | | 937.99 |
| 938.07 | Graphically | | 937.96 | 163+00 | | | 937.77 |
| 937.75 | | | 937.74 | +25 | | | 937.55 |
| 937.43 | | | 937.52 | +50 | | | 937.33 |
| 937.15 | ↓ | | 937.30 | +75 | | | 937.11 |
| 936.89 | -.19 | 12' | 937.08 | 164+00 | 12' | -.19 | 936.89 |

| P.C. 174+11.03 | | | D = 1°-00' RT. | | P.T. 184+62.70 | | |
|---|---|---|---|---|---|---|---|
| LEFT | | | | | RIGHT | | |
| Edge Elevation | Add Super. | Width | Profile Elevation | ℄ Station | Width | Deduct Crown | Edge Elevation |
| 928.97 | -.19 | 12' | 929.16 | 173+00 | 12' | -.19 | 928.97 |
| 928.79 | ↑ | | 928.94 | +25 | | | 928.75 |
| 928.63 | | | 928.72 | +50 | | | 928.53 |
| 928.50 | | | 928.50 | +75 | | | 928.31 |
| 928.40 | | | 928.26 | 174+00 | | | 928.07 |
| 928.36 | | | 928.15 | P.C.+11.03 | | | 927.96 |
| 928.30 | Obtained | | 928.02 | +25 | | | 927.83 |
| 928.11 | | | 927.76 | +50 | | | 927.57 |
| 927.89 | Graphically | | 927.50 | +75 | | | 927.31 |
| 927.61 | | | 927.22 | 175+00 | | | 927.03 |
| 927.33 | | | 926.94 | +25 | | | 926.75 |
| 927.03 | | | 926.64 | +50 | | | 926.45 |
| 926.73 | | | 926.34 | +75 | | | 926.15 |
| 926.43 | | | 926.04 | 176+00 | | | 925.85 |
| 926.13 | | | 925.74 | +25 | | | 925.55 |
| 925.83 | | | 925.44 | +50 | | | 925.25 |
| 925.53 | | | 925.14 | +75 | | | 924.95 |
| 925.23 | | | 924.84 | 177+00 | | | 924.65 |
| 924.93 | | | 924.54 | +25 | | | 924.35 |
| 924.63 | | | 924.24 | +50 | | | 924.05 |
| 924.33 | | | 923.94 | +75 | | | 923.75 |
| 924.03 | | | 923.64 | 178+00 | | | 923.45 |
| 923.73 | | | 923.34 | +25 | | | 923.15 |
| 923.43 | | | 923.04 | +50 | | | 922.85 |
| 923.13 | | | 922.74 | +75 | | | 922.55 |
| 922.83 | | | 922.44 | 179+00 | | | 922.25 |
| 922.53 | | | 922.14 | +25 | | | 921.95 |
| 922.23 | | | 921.84 | +50 | | | 921.65 |
| 921.93 | | | 921.54 | +75 | | | 921.35 |
| 921.63 | | | 921.24 | 180+00 | | | 921.05 |
| 921.33 | | | 920.94 | +25 | | | 920.75 |
| 921.03 | | | 920.64 | +50 | | | 920.45 |
| 920.73 | | | 920.34 | +75 | | | 920.15 |
| 920.43 | | | 920.04 | 181+00 | | | 919.85 |
| 920.13 | | | 919.74 | +25 | | | 919.55 |
| 919.83 | | | 919.44 | +50 | | | 919.25 |
| 919.53 | | | 919.14 | +75 | | | 918.95 |
| 919.23 | | | 918.84 | 182+00 | | | 918.65 |
| 918.93 | | | 918.54 | +25 | | | 918.35 |
| 918.63 | | | 918.24 | +50 | | | 918.05 |
| 918.33 | | | 917.94 | +75 | | | 917.75 |
| 918.03 | | | 917.64 | 183+00 | | | 917.45 |
| 917.73 | | | 917.34 | +25 | | | 917.15 |
| 917.43 | | | 917.04 | +50 | | | 916.85 |
| 917.13 | | | 916.74 | +75 | | | 916.55 |
| 916.83 | +0.58 | | 916.44 | 184+00 | | | 916.25 |
| 916.50 | ↑ | | 916.14 | +25 | | | 915.95 |
| 916.10 | | | 915.84 | +50 | | | 915.65 |
| 915.88 | Obtained | | 915.69 | P.T.+62.70 | | | 915.50 |
| 915.67 | | | 915.54 | +75 | | | 915.35 |
| 915.24 | Graphically | | 915.24 | 185+00 | | | 915.05 |
| 914.83 | | | 914.94 | +25 | | | 914.75 |
| 914.48 | | | 914.64 | +50 | | | 914.45 |
| 914.15 | -.19 | 12' | 914.34 | +75 | 12' | -.19 | 914.15 |




| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Vols. Exc. | Cu. Vols. Emb. |
|---|---|---|---|---|---|
| | 328 | | | 178 | 9 |
| 63 | | 120 | 4 | | |
| | 344 | | | 222 | 11 |
| 61 | | 120 | 8 | | |
| | 328 | | | 187 | 14 |
| 57 | | 82 | 7 | | |
| | 294 | | | 114 | 21 |
| 49 | | 41 | 16 | | |
| | 267 | | | 64 | 43 |
| 47 | | 28 | 30 | | |
| | 267 | | | 52 | 63 |
| 49 | | 28 | 38 | | |
| | 272 | | | 50 | 70 |
| 49 | | 26 | 38 | | |
| | 272 | | | 63 | 56 |
| 49 | | 42 | 23 | | |
| | 289 | | | 101 | 29 |
| 55 | | 67 | 8 | | |
| | 242 | | | 80 | 7 |
| 32 | | 19 | 0 | | |

| Plotting & End Areas | Checked By |
|---|---|
| By W.W.W. | W.F.P. |
| Date: 11/9/67 | Date: 11/14/67 |

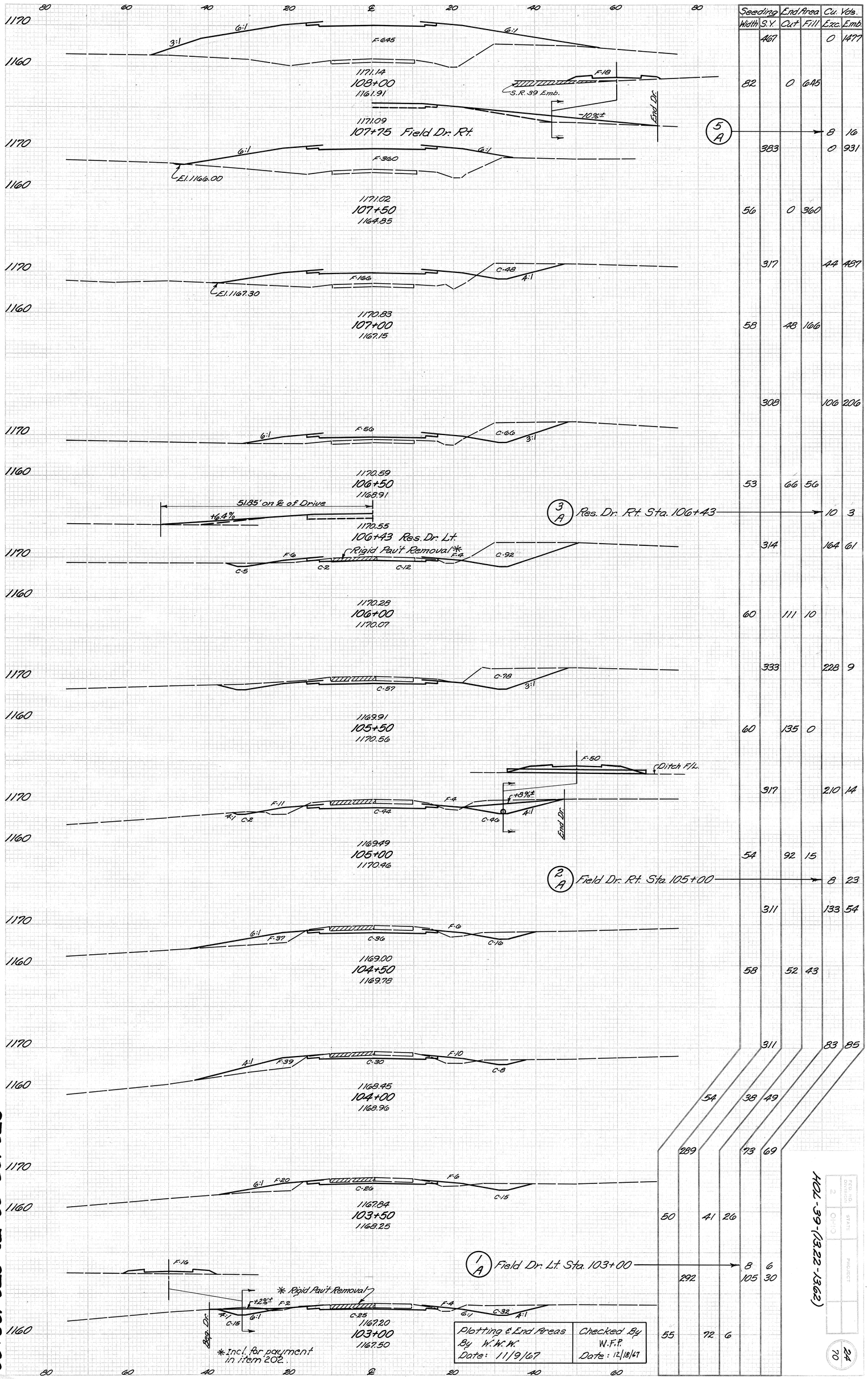
* Incl. for payment in item 202.

HOL-39-(13.22-13.62)

OHIO | STATE | PROJECT | NO. OF SHEETS 2

23
70

STA. 98+00 TO STA. 102+50


80 60 40 20 ℄ 20 40 60 80
1170
1160
6:1
3:1
F-645
1171.14
108+00
1161.91
F-18
S.R. 39 Emb.
End Dr.
-10%±
1171.09
107+75 Field Dr. Rt.
F-360
El. 1166.00
1171.02
107+50
1164.85
C-48
4:1
F-166
El. 1167.30
1170.83
107+00
1167.15
F-56
C-66
3:1
1170.59
106+50
1168.91
51.85' on ℄ of Drive
+6.4%
1170.55
106+43 Res. Dr. Lt.
Rigid Pav't Removal*
F-6
C-5
C-2
C-12
F-4
C-92
1170.28
106+00
1170.07
C-78
C-57
1169.91
105+50
1170.56
F-50
Ditch F/L.
+3%±
F-11
C-42
C-46
End Dr.
1169.49
105+00
1170.96
F-37
C-96
C-16
1169.00
104+50
1169.78
F-39
C-30
F-10
C-8
1168.45
104+00
1168.96
F-80
C-26
C-15
1167.84
103+50
1168.25
F-16
+2%±
F-2
C-25
C-32
Bop. Dr.
C-15
1167.20
103+00
1167.50
* Incl. for payment in item 202.
Seeding Width
S.Y.
End Area Cut
Fill
Cu. Yds. Exc.
Emb.
467 0 1477
82 0 645
5 A → 8 16
383 0 931
56 0 360
317 44 487
58 48 166
308 106 206
53 66 56
3 A Res. Dr. Rt. Sta. 106+43 → 10 3
314 164 61
60 111 10
333 228 9
60 135 0
317 210 14
54 92 15
2 A Field Dr. Rt. Sta. 105+00 → 8 23
311 133 54
58 52 43
311 83 85
54 38 49
289 73 69
50 41 26
1 A Field Dr. Lt. Sta. 103+00 → 8 6
292 105 30
55 72 6
Plotting & End Areas By W.W.W. Date: 11/9/67
Checked By W.F.P. Date: 12/18/67
STA. 103+00 TO STA. 108+00
HDL-39-1(322-1362)
FED. NO. DIVISION 2 OHIO STATE PROJECT
24 70

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

25
70

HOL-39-(13.22-13.62)

120 100 80 60 40 20 ℄ 20 40 60 80 100 120

1170
1160
1150

2:1 F-2376 2:1

1170.85
110+50
1149.13

1170
1160
1150

F-2,082

1171.03
110+00
1150.81

1170
1160
1150

F-1,694

1171.15
109+50
1152.98

1170
1160
1150

2:1 F-1,318 3:1

1171.21
109+00
1155.66

1170
1160
1150

3:1 F-950 6:1 3:1

1171.21
108+50
1158.67

120 100 80 60 40 20 ℄ 20 40 60 80 100 120

| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Yds. Exc. | Cu. Yds. Emb. |
|---|---|---|---|---|---|
| | 775 | | | 0 | 4459 |
| 138 | | 0 | 2376 | | |
| | 739 | | | 0 | 4128 |
| 128 | | 0 | 2082 | | |
| | 669 | | | 0 | 3490 |
| 113 | | 0 | 1694 | | |
| | 594 | | | 0 | 2789 |
| 101 | | 0 | 1318 | | |
| | 519 | | | 0 | 2100 |
| 86 | | 0 | 950 | | |

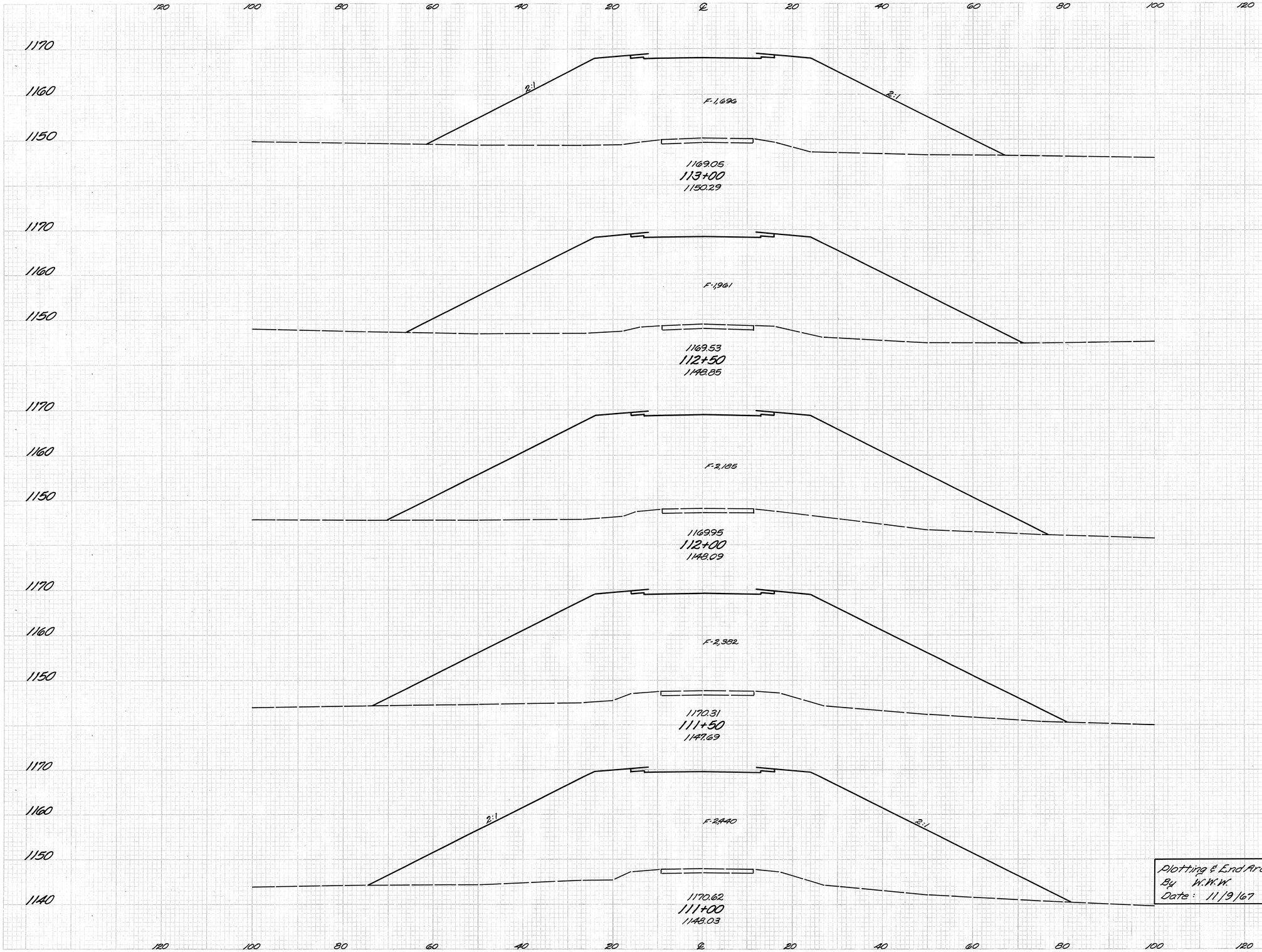
| Plotting & End Areas | Checked By |
|---|---|
| By W.W.W. | W.F.P. |
| Date: 11/9/67 | Date: 12/18/67 |

STA. 108+50 TO STA. 110+50

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

26
70

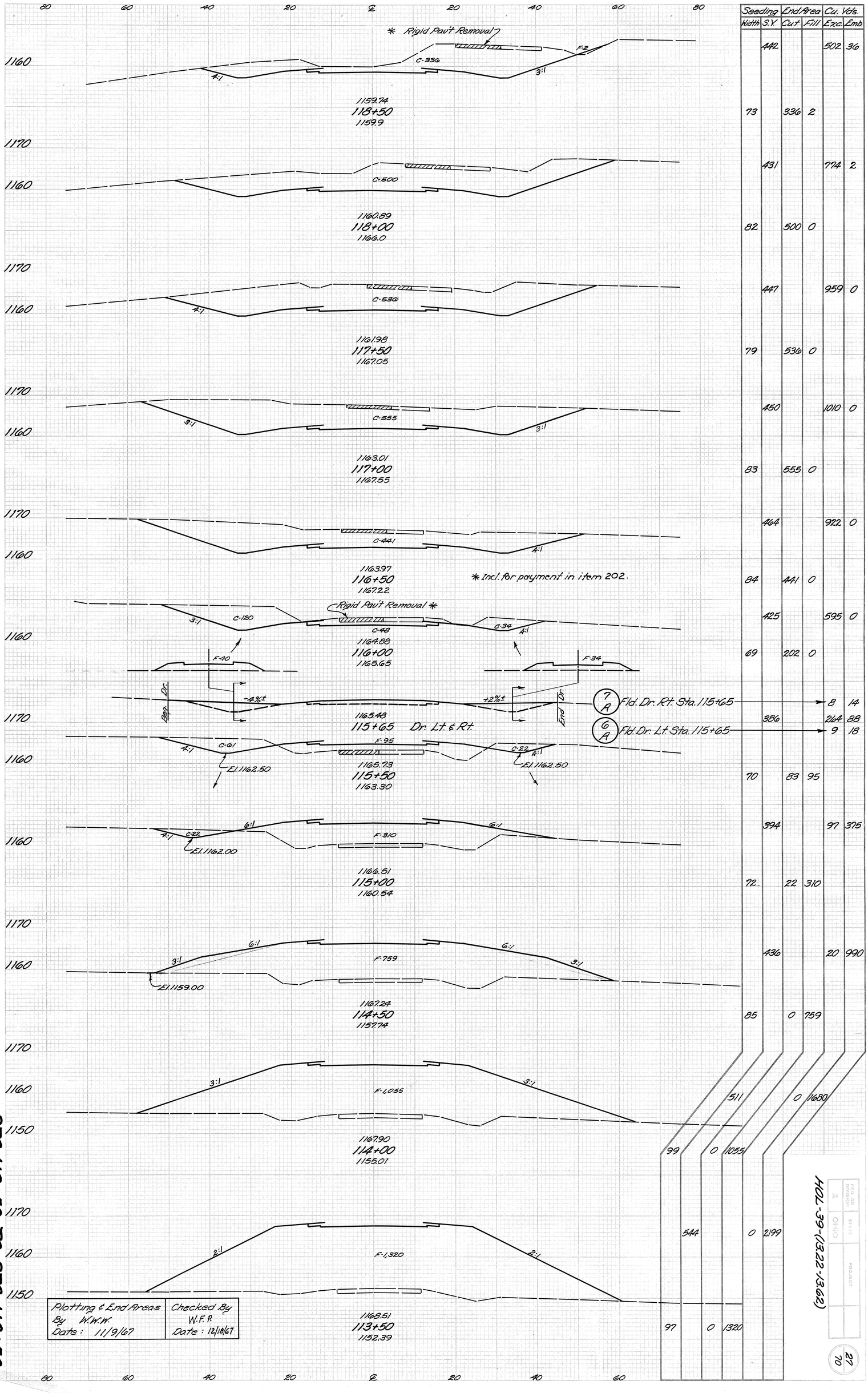
HOL-39-(13.22-13.62)




| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Yds. Exc. | Cu. Yds. Emb. |
|---|---|---|---|---|---|
| | 575 | | | 0 | 2793 |
| 110 | | 0 | 1696 | | |
| | 639 | | | 0 | 3386 |
| 120 | | 0 | 1961 | | |
| | 697 | | | 0 | 3839 |
| 131 | | 0 | 2185 | | |
| | 750 | | | 0 | 4229 |
| 139 | | 0 | 2382 | | |
| | 778 | | | 0 | 4465 |
| 141 | | 0 | 2440 | | |

| Plotting & End Areas | Checked By |
|---|---|
| By W.W.W. | W.F.P. |
| Date: 11/9/67 | Date: 12/18/67 |

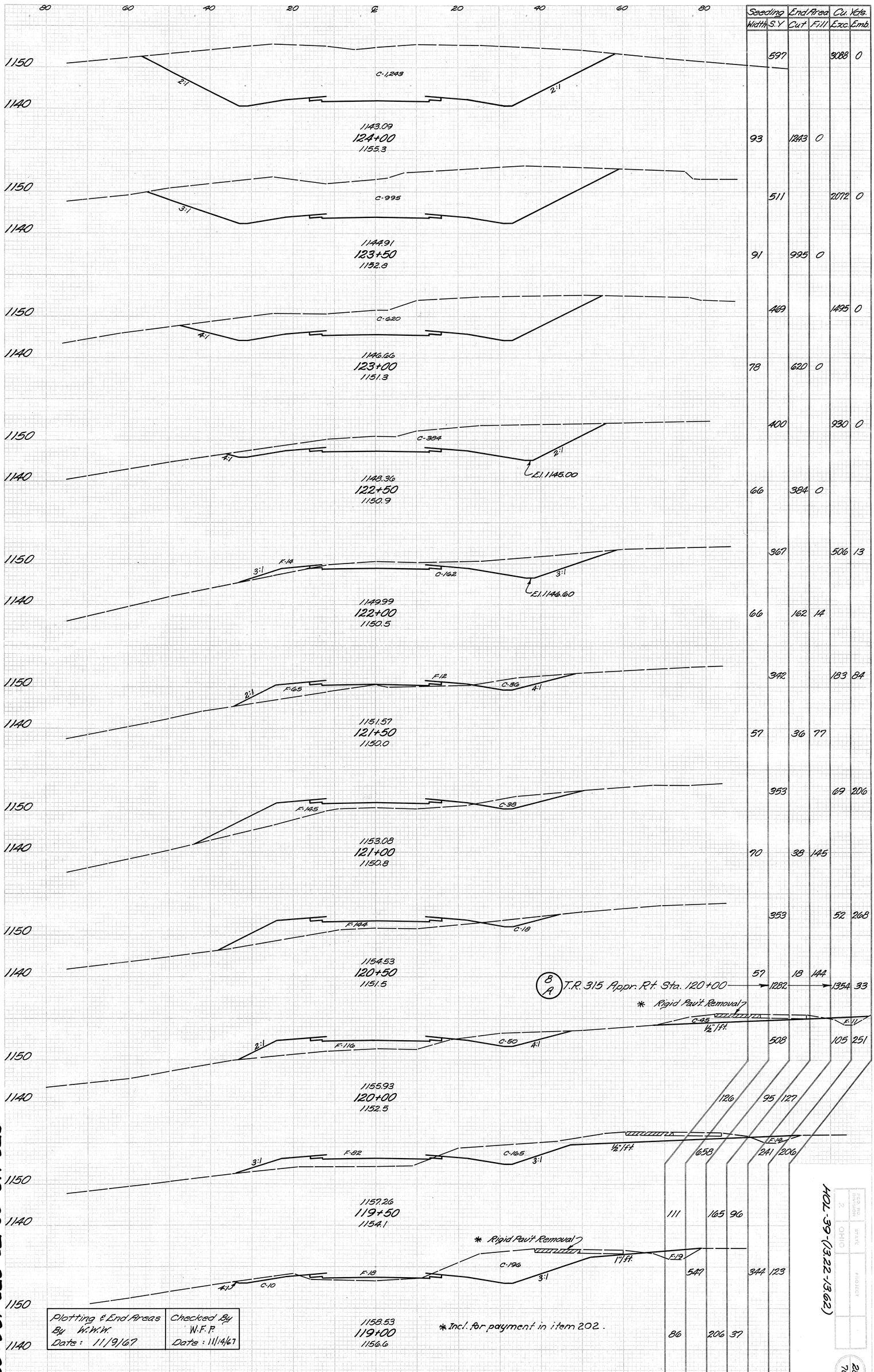
STA. 111+00 TO STA. 113+00




| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Vols. Exc. | Cu. Vols. Emb. |
|---|---|---|---|---|---|
| | 442 | | | 502 | 36 |
| 73 | | 336 | 2 | | |
| | 431 | | | 774 | 2 |
| 82 | | 500 | 0 | | |
| | 447 | | | 959 | 0 |
| 79 | | 530 | 0 | | |
| | 450 | | | 1010 | 0 |
| 83 | | 555 | 0 | | |
| | 464 | | | 922 | 0 |
| 84 | | 441 | 0 | | |
| | 425 | | | 595 | 0 |
| 69 | | 202 | 0 | | |
| | | | | 8 | 14 |
| | 386 | | | 264 | 88 |
| | | | | 9 | 18 |
| 70 | | 83 | 95 | | |
| | 394 | | | 97 | 375 |
| 72 | | 22 | 310 | | |
| | 436 | | | 20 | 990 |
| 85 | | 0 | 759 | | |
| | 511 | | 0 | 1680 | |
| 99 | | 0 | 1055 | | |
| | 544 | | 0 | 2199 | |
| 97 | | 0 | 1320 | | |

HOL-39-(132)-(130)

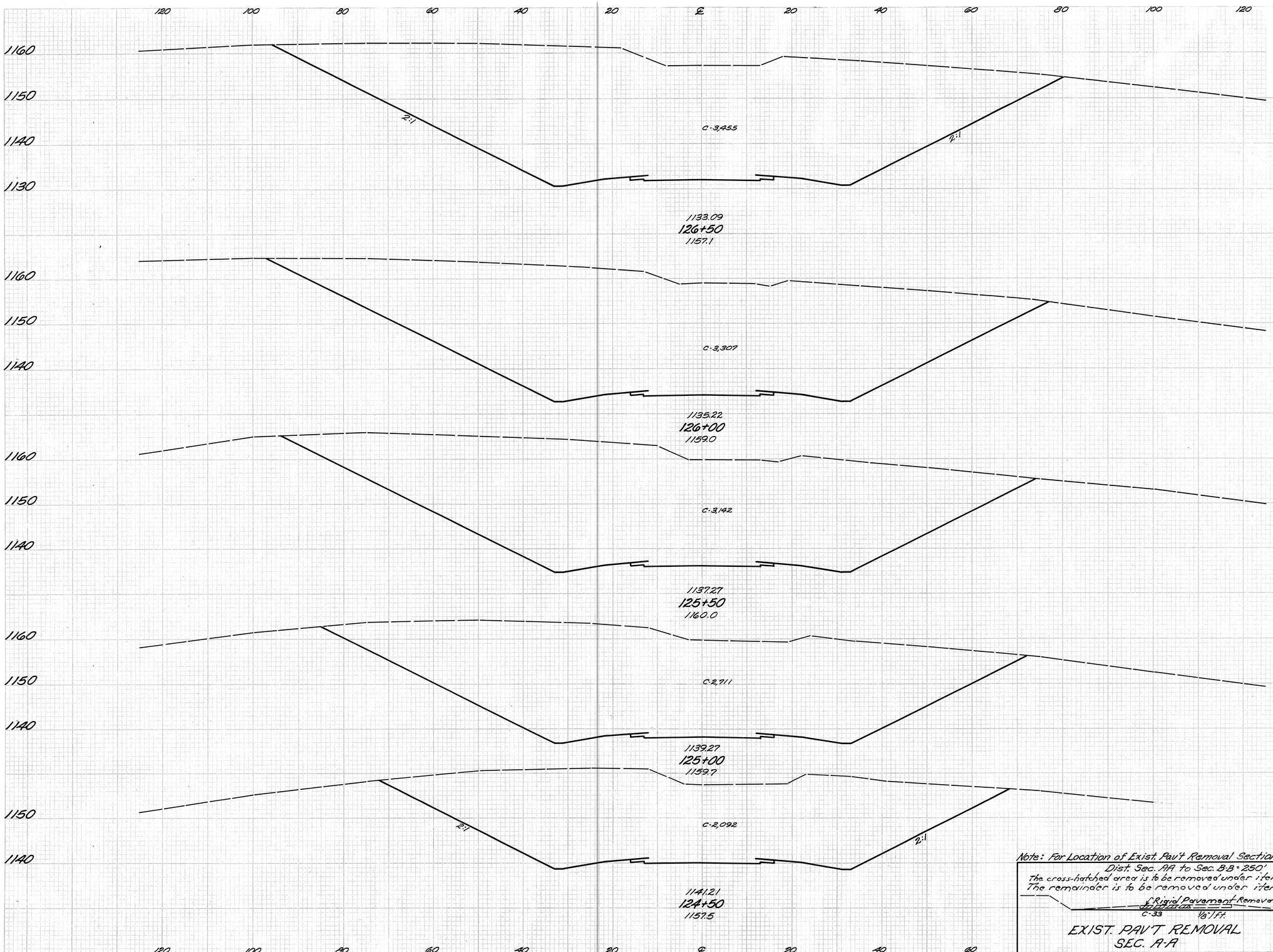
STATE OF OHIO | PROJECT | SHEET NO. 2 | SHEETS 21


80 60 40 20 ℄ 20 40 60 80
1150
1140
C-1,243
2:1
2:1
1143.09
124+00
1155.3
C-995
3:1
1144.91
123+50
1152.8
C-620
4:1
1146.66
123+00
1151.3
C-334
4:1
2:1
El. 1145.00
1148.36
122+50
1150.9
F-14
3:1
C-162
3:1
El. 1146.60
1149.99
122+00
1150.5
F-65
2:1
F-12
C-36
4:1
1151.57
121+50
1150.0
F-145
C-38
1153.08
121+00
1150.8
F-144
C-18
1154.53
120+50
1151.5
F-116
2:1
C-50
4:1
1155.93
120+00
1152.5
F-82
3:1
C-165
3:1
1157.26
119+50
1154.1
F-18
4:1
C-10
C-196
3:1
1158.53
119+00
1156.6
Seeding
Width
S.Y.
End Area
Cut
Fill
Cu. Yds.
Exc.
Emb.
597
3088
0
93
1243
0
511
2072
0
91
995
0
469
1495
0
78
620
0
400
930
0
66
384
0
367
506
13
66
162
14
342
183
84
57
36
77
353
69
206
70
38
145
353
52
268
57
18
144
8/A T.R. 315 Appr. Rt. Sta. 120+00
1282
1354
33
* Rigid Pavit Removal
C-45
1/2 ft.
F-11
508
105
251
126
95
127
F-19
1/2 ft.
658
241
206
111
165
96
* Rigid Pavit Removal
1" ft.
F-19
549
344
123
86
206
37
Plotting & End Areas
By W.W.W.
Date: 11/9/67
Checked By
W.F.P.
Date: 11/14/67
* Incl. for payment in item 202.
STR. 119+00 TO STR. 124+00
HOL-39-(13.22-13.62)
RED RD. DIVISION
STATE
OHIO
PROJECT
28
70

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

29
70

HOL-39-(13.22-13.62)




| Seeding | | End Area | | Cu. Yds. | |
|---|---|---|---|---|---|
| Width | S.Y. | Cut | Fill | Exc. | Emb. |
| | 892 | | | 6299 | 0 |
| 161 | | 3455 | 0 | | |
| | 892 | | | 6261 | 0 |
| 160 | | 3307 | 0 | | |
| | 867 | | | 5971 | 0 |
| 152 | | 3142 | 0 | | |
| | 814 | | | 5419 | 0 |
| 141 | | 2711 | 0 | | |
| | 731 | | | 4447 | 0 |
| 122 | | 2092 | 0 | | |

Checked By W.F.P. Date: 11/14/67

Plotting & Excl Areas By K.W.W. Date: 11/9/67

Note: For Location of Exist. Pav't Removal Sections, See Sh. No. 2

Dist. Sec. AA to Sec. B-B = 250'

The cross-hatched area is to be removed under item 202; The remainder is to be removed under item 203.

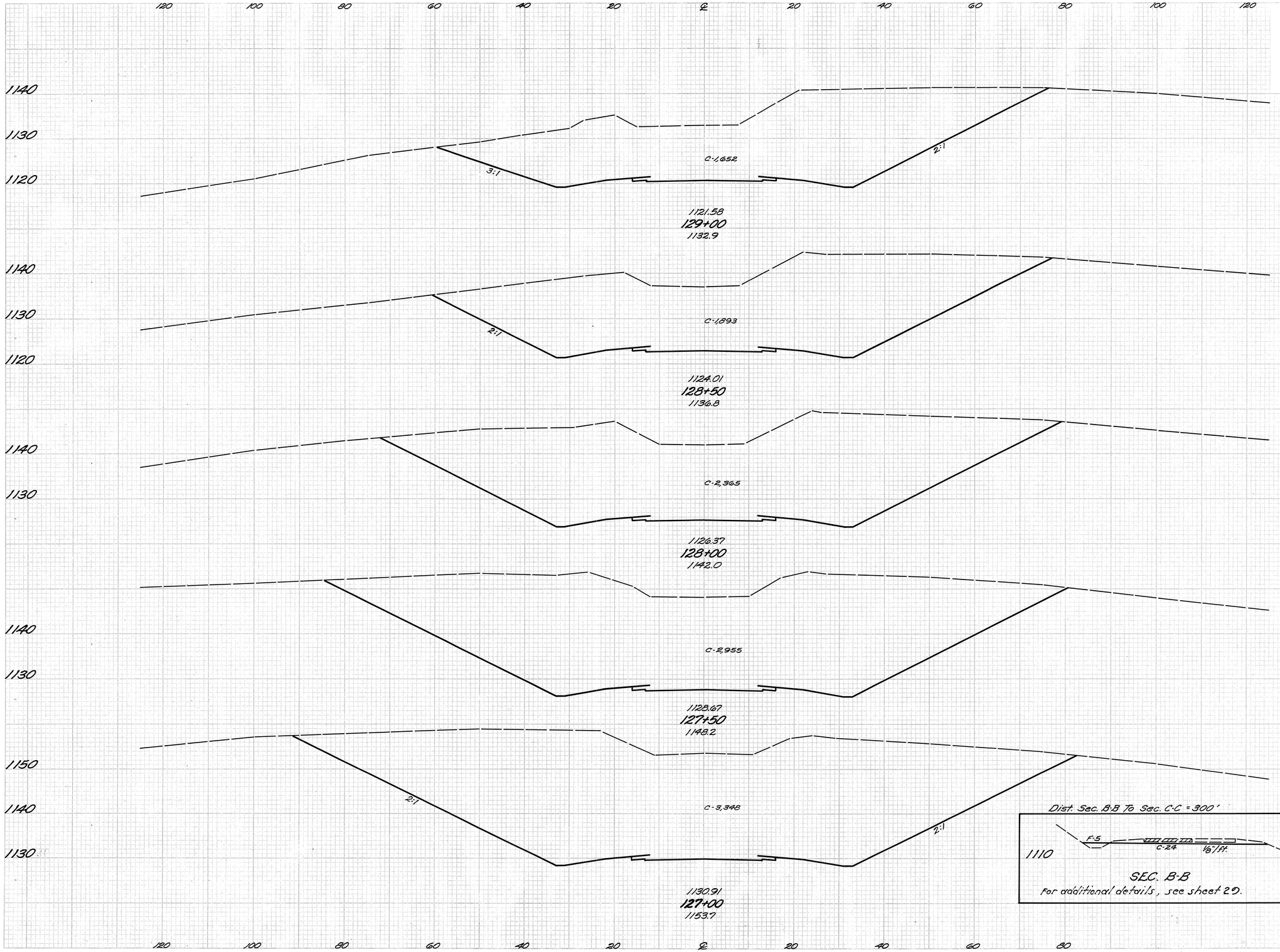
EXIST. PAV'T REMOVAL
SEC. A-A

STA. 124+50 TO STA. 126+50

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

30
70

HOL-39-(13.22-13.62)




| Seeding Width | S.Y. | End Area Cut | Fill | Cu. Yds. Exc. | Emb. |
|---|---|---|---|---|---|
| | 631 | | | 2950 | 0 |
| 115 | | 1652 | 0 | | |
| | 650 | | | 3282 | 0 |
| 119 | | 1893 | 0 | | |
| | 703 | | | 3943 | 0 |
| 134 | | 2365 | 0 | | |
| | 789 | | | 4926 | 0 |
| 150 | | 2955 | 0 | | |
| | 861 | | | 5836 | 0 |
| 160 | | 3348 | 0 | | |

Checked By W.F.P. Date: 11/14/67

Plotting & End Areas By W.W.W. Date: 11/9/67

Dist. Sec. B-B To Sec. C-C = 300'




SEC. B-B

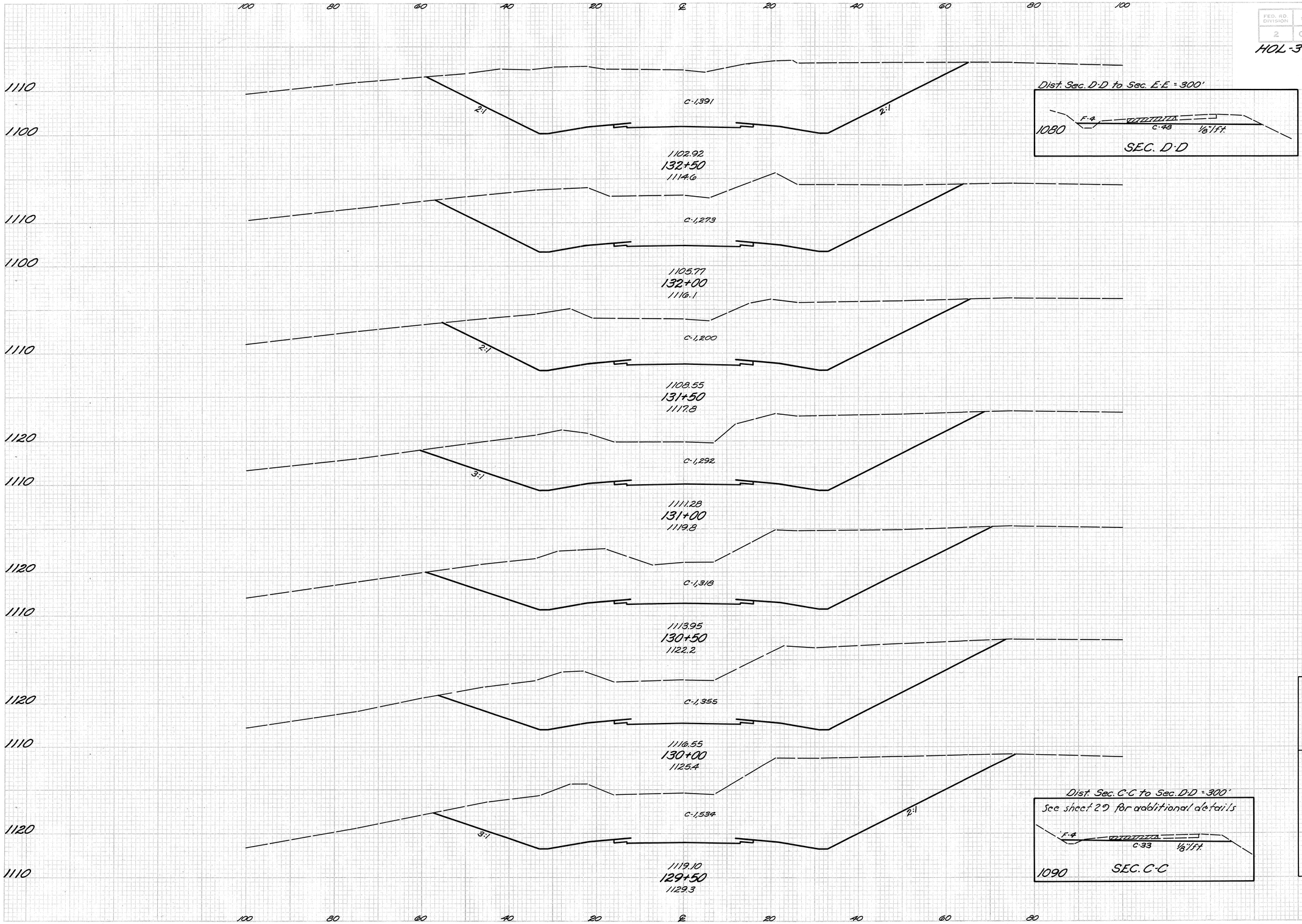
for additional details, see sheet 29.

STA. 127+00 TO STA. 129+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

31
70

HOL-39-(13.22-13.62)




Dist. Sec. D-D to Sec. E-E = 300'




SEC. D-D

Dist. Sec. C-C to Sec. D-D = 300'

See sheet 29 for additional details




SEC. C-C

| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Yds. Exc. | Cu. Yds. Emb. |
|---|---|---|---|---|---|
| | 578 | | | 2656 | 0 |
| 103 | | 1391 | 0 | | |
| | 564 | | | 2467 | 0 |
| 100 | | 1273 | 0 | | |
| | 556 | | | 2290 | 0 |
| 100 | | 1200 | 0 | | |
| | 578 | | | 2307 | 0 |
| 108 | | 1292 | 0 | | |
| | 600 | | | 2417 | 0 |
| 108 | | 1318 | 0 | | |
| | 603 | | | 2475 | 0 |
| 109 | | 1355 | 0 | | |
| | 614 | | | 2675 | 0 |
| 112 | | 1534 | 0 | | |

Checked By W.F.P. Date: 11/14/67

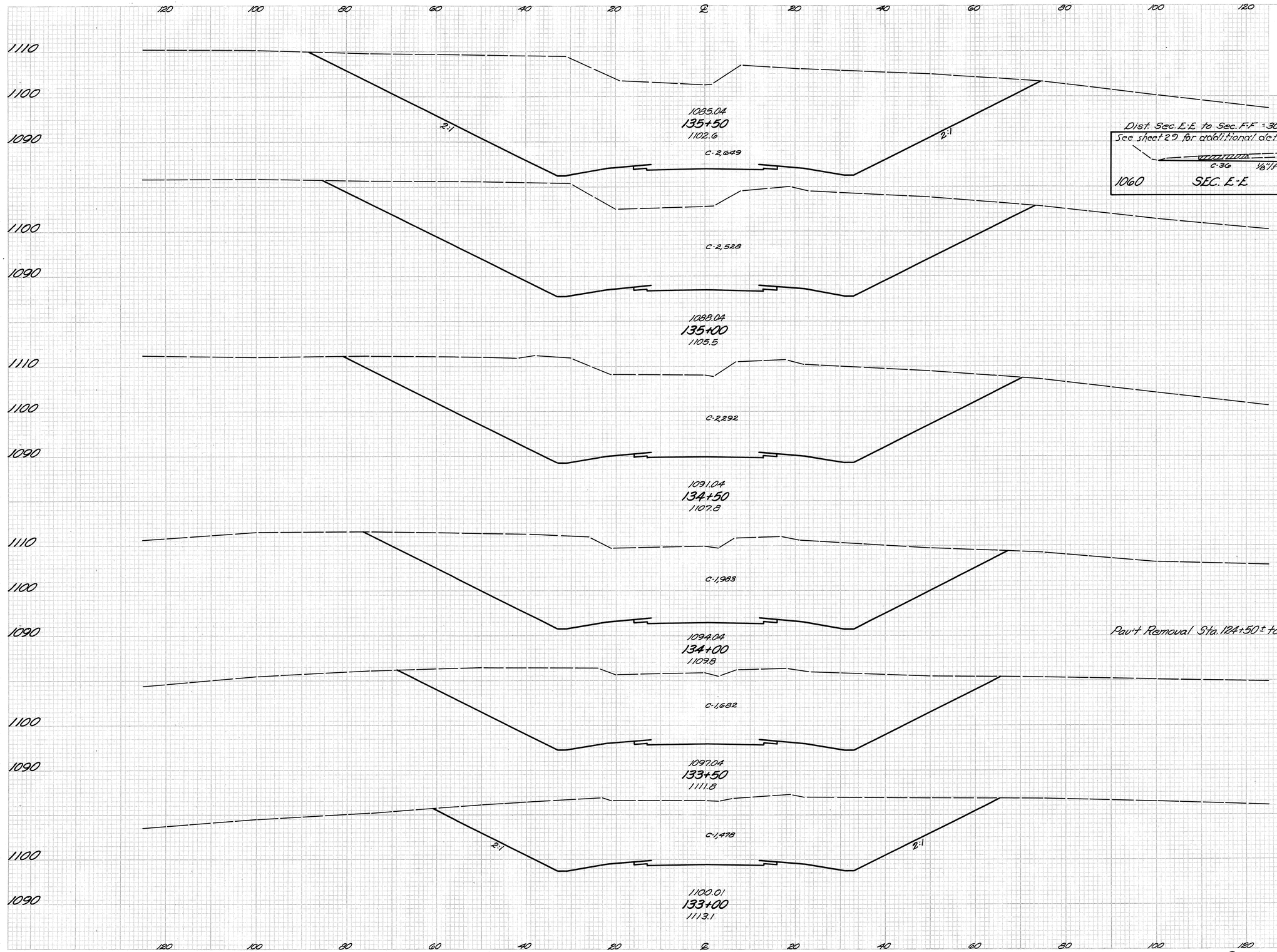
Plotting & End Areas By W.W.W. Date: 11/9/67

STA. 129+50 TO STA. 132+50

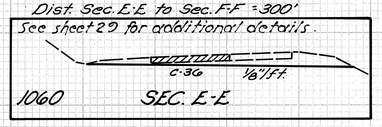
| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

32
70

HOL-39-(13.22-13.62)




Dist. Sec. E-E to Sec. F-F = 300'
See sheet 29 for additional details.




| Seeding Width | S.Y. | End Area Cut | Fill | Cu. Yds. Exc. | Emb. |
|---|---|---|---|---|---|
| 147 | | 2649 | 0 | | |
| | 800 | | | 4194 | 0 |
| 141 | | 2528 | 0 | | |
| | 764 | | | 4463 | 0 |
| 134 | | 2292 | 0 | | |
| | 719 | | | 3958 | 0 |
| Pav't Removal Sta. 124+50± to Sta. 141+90± Rt. | | 8494 | | 2505 | 163 |
| 125 | | 1983 | 0 | | |
| | 667 | | | 3394 | 0 |
| 115 | | 1682 | 0 | | |
| | 611 | | | 2926 | 0 |
| 105 | | 1478 | 0 | | |

Checked By W.F.P. Date: 11/14/67

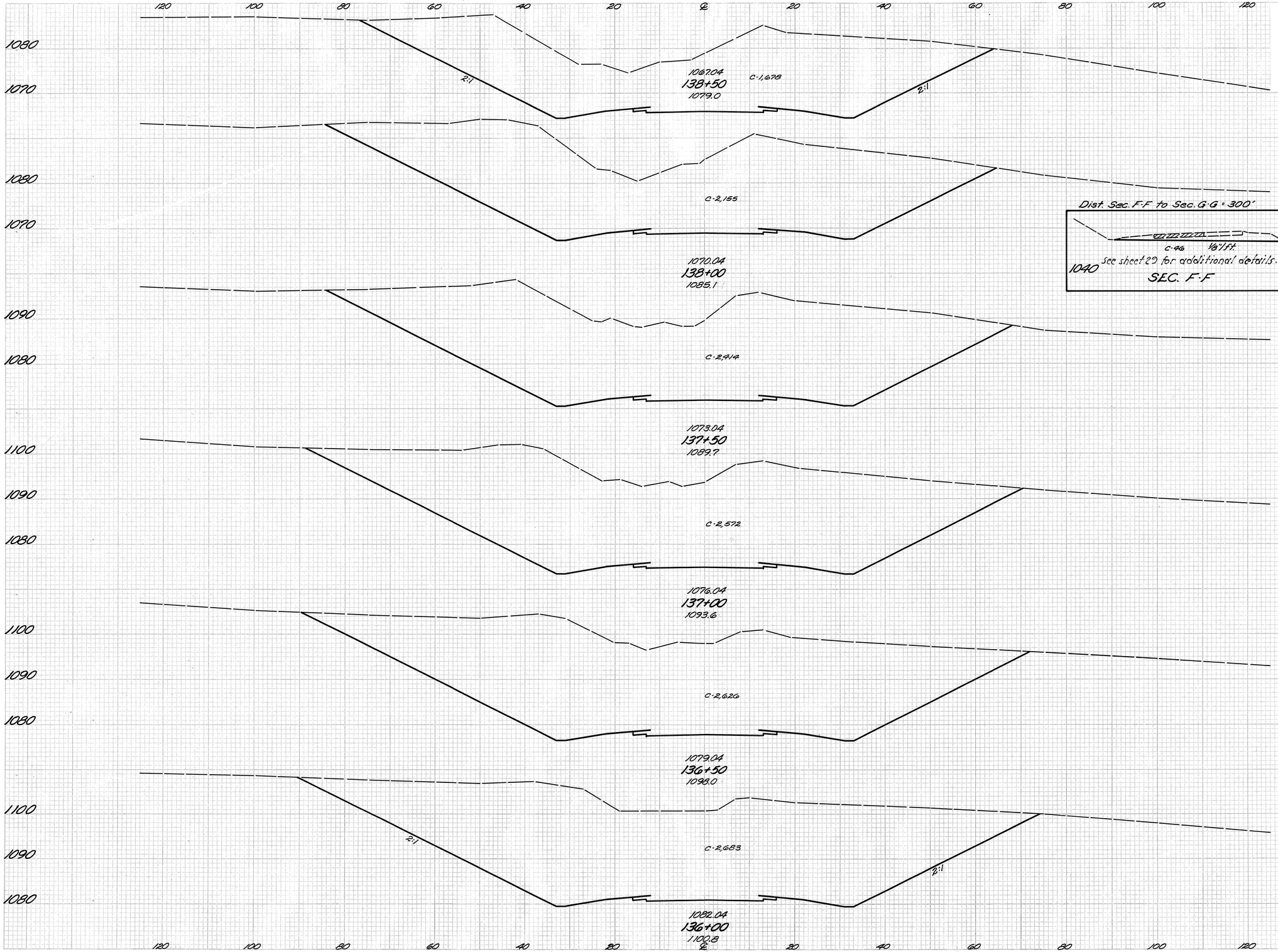
Plotting & End Areas By W.W.W. Date: 11/9/67

STA. 133+00 TO STA. 135+50

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

33
70

HOL-39-(13.22-13.62)




| Seeding | | End Areas | | Cu. Yds. | |
|---|---|---|---|---|---|
| Width | S.Y. | Cut | Fill | Exc. | Emb |
| 122 | | 1618 | 0 | | |
| | 706 | | | 3549 | 0 |
| 132 | | 2155 | 0 | | |
| | 742 | | | 4231 | 0 |
| 135 | | 2414 | 0 | | |
| | 772 | | | 4617 | 0 |
| 143 | | 2572 | 0 | | |
| | 803 | | | 4813 | 0 |
| 146 | | 2626 | 0 | | |
| | 817 | | | 4916 | 0 |
| 148 | | 2683 | 0 | | |
| | 819 | | | 4937 | 0 |

Plotting & End Areas
By K.W.K.
Date : 11/9/67

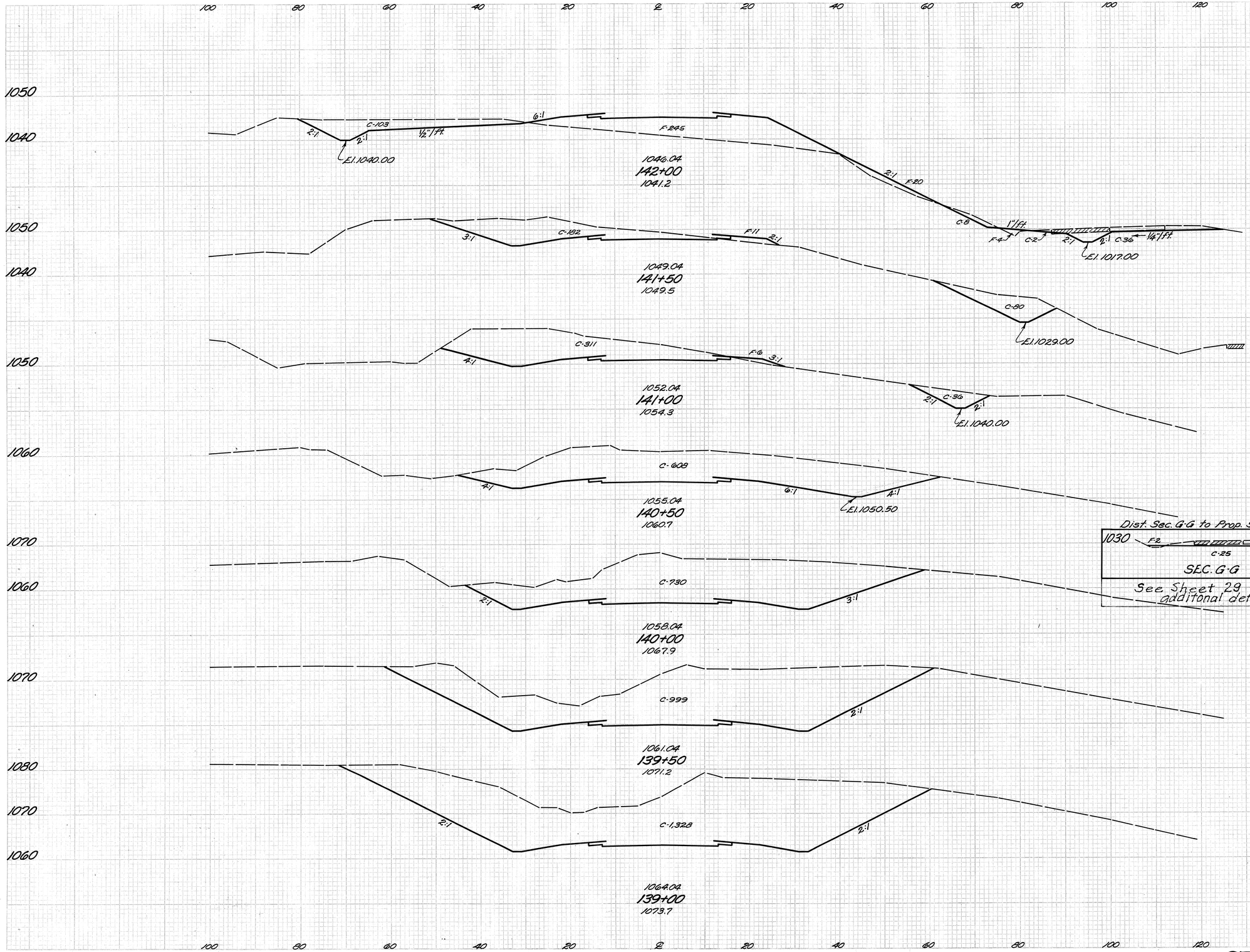
Checked By
W.F.P.
Date : 12/18/67

STA. 136+00 TO STA. 138+50

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

34
70

HOL-39-(13.22-13.62)




| Seeding Width | S.Y. | End Area Cut | Fill | Cu. Yds. Exc. | Emb. |
|---|---|---|---|---|---|
| | 1053 | | | 169 | 2534 |
| 187 | | 149 | 269 | | |
| | 844 | | | 381 | 259 |
| 117 | | 262 | 11 | | |
| | 597 | | | 564 | 16 |
| 98 | | 347 | 6 | | |
| | 489 | | | 884 | 6 |
| 78 | | 608 | 0 | | |
| | 433 | | | 1239 | 0 |
| 78 | | 730 | 0 | | |
| | 497 | | | 1601 | 0 |
| 101 | | 999 | 0 | | |
| | 594 | | | 2155 | 0 |
| 113 | | 1328 | 0 | | |
| | 653 | | | 2783 | 0 |

Checked By W.F.P. Date: 12/18/67

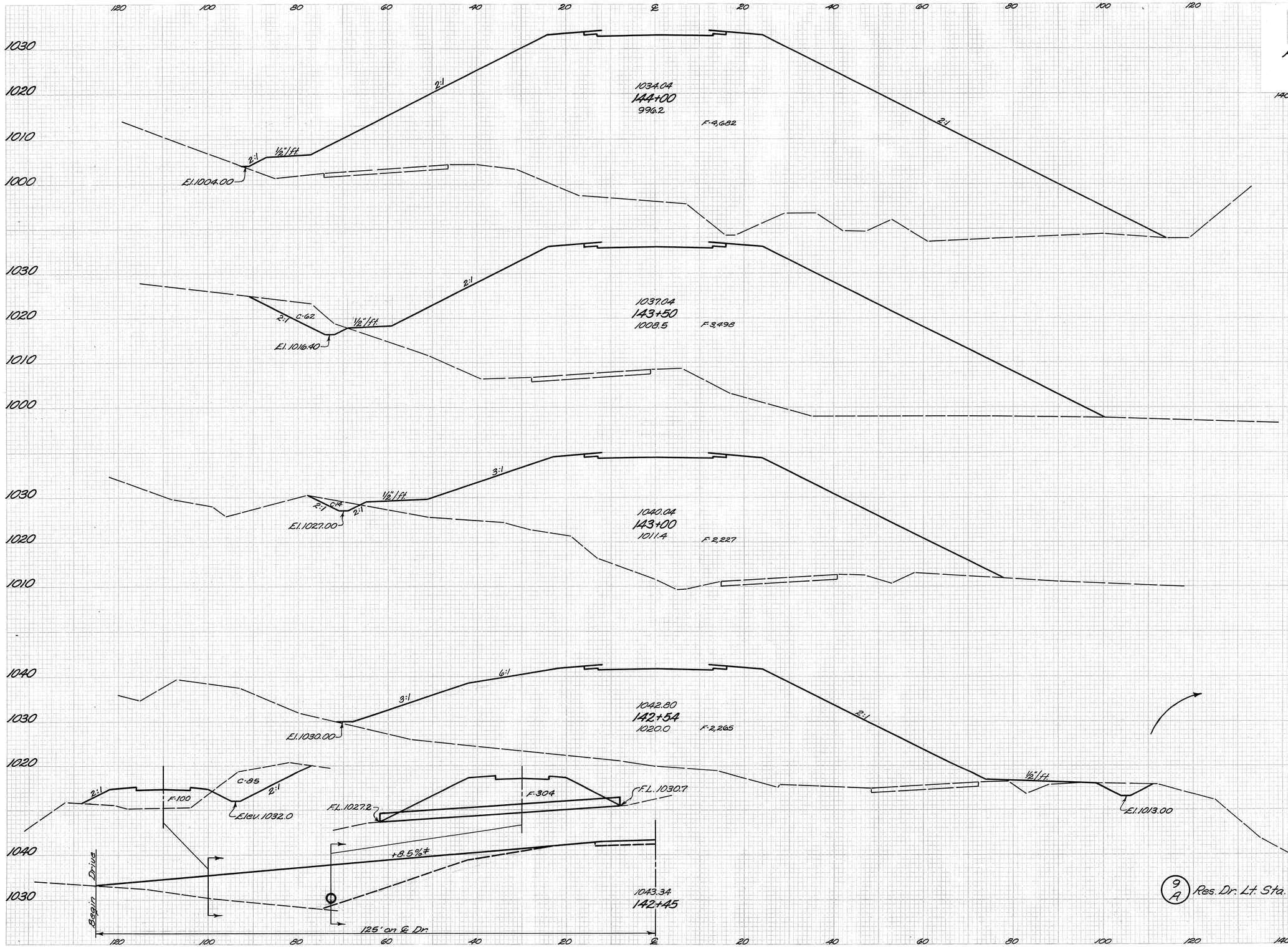
Plotting & End Areas By W.W.W. Date: 11/9/67

STA. 139+00 TO STA. 142+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

35
70

HOL-39-(13.22-13.62)




| Seeding | | End Area | | Cu. Vols. | |
|---|---|---|---|---|---|
| Width | S.Y. | Cut | Fill | Exc. | Emb. |
| 196 | | 0 | 4682 | | |
| | 1042 | | | 57 | 7574 |
| 179 | | 62 | 3498 | | |
| | 881 | | | 70 | 5301 |
| 138 | | 14 | 2227 | | |
| | 772 | | | 29 | 3827 |
| 164 | | 20 | 2265 | | |
| 9/A Res. Dr. Lt. Sta. 142+45 | | 216 | | 116 | 529 |

Checked By W.F.P. Date: 12/18/67

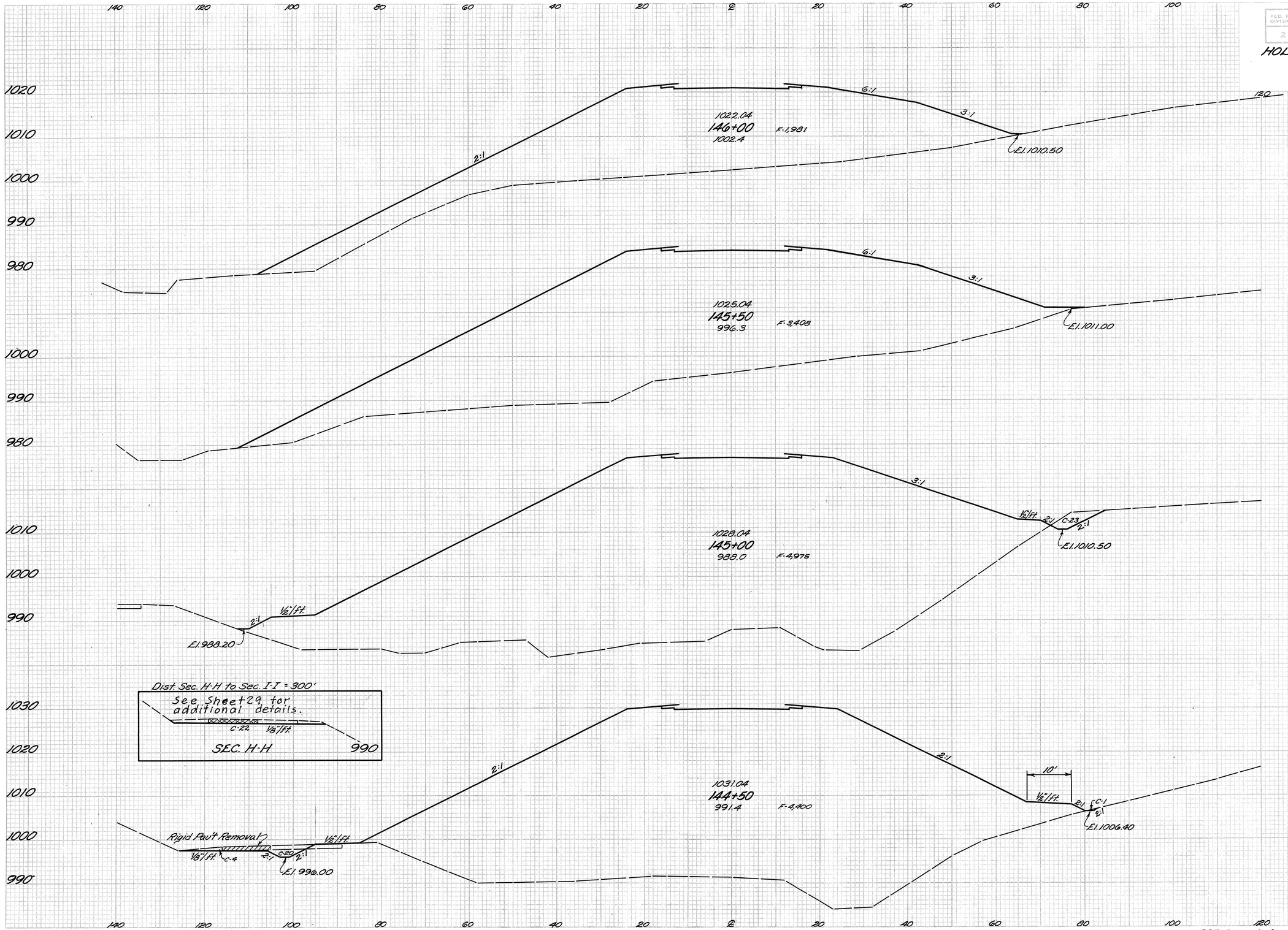
Plotting of End Areas By W.W.W. Date: 11/9/67

STA. 142+54 TO STA. 144+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

36
70

HOL-39-(13.22-13.62)




| Seeding | | End Area | | Cu. Yds. | |
|---|---|---|---|---|---|
| Width | S.Y. | Cut | Fill | Exc. | Emb |
| 158 | | 0 | 1981 | | |
| | 933 | | | 0 | 4990 |
| 178 | | 0 | 3408 | | |
| | 1000 | | | 21 | 7762 |
| 182 | | 23 | 4975 | | |
| | 1044 | | | 44 | 8681 |
| 194 | | 25 | 4400 | | |
| | 1083 | | | 23 | 8409 |

Checked By W.F.P. Date: 12/18/67

Plotting & End Areas By W.W.W. Date: 11/9/67

STA. 144+50 TO STA. 146+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

37
70

HOL-39-(13.22-13.62)

| Seeding Width | S.Y. | End Areas Cut | Fill | Cu. Yds. Exc. | Emb. |
|---|---|---|---|---|---|
| | 625 | | | 151 | 1569 |
| 124 | | 26 | 1244 | | |
| | 672 | | | 24 | 2801 |
| 118 | | 0 | 1781 | | |
| | 672 | | | 0 | 3531 |
| Paut Removal Sta. 144+75 to Sta. 150+30 ±Lt. → | 2617 | → | | 522. | 0 |
| 124 | | 0 | 2032 | | |
| | 753 | | | 0 | 3754 |
| 147 | | 0 | 2022 | | |
| | 847 | | | 0 | 3706 |

Checked By W.F.P. Date: 12/8/67

Plotting & End Areas By K.W.M. Date: 11/9/67

STA. 146+50 TO STA. 148+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

38
70

HOL-39-(13.22-13.62)

100 80 60 40 20 ℄ 20 40 60 80 100 120

1020
1010
1000
990

C-3,188

3:1

2:1

992.04
151+00
1018.1

1020
1010
1000
990

C-2,419

3:1

995.04
150+50
1014.3

See Sheet 29 for additional details

1½"/ft. C-28

960

SEC. J-J

1020
1010
1000
990

C-1,244

4:1

998.04
150+00
1007.0

1020
1010
1000
990

C-935

1001.04
149+50
1006.9

1010
1000
990

C-365

2:1 F-91

1004.04
149+00
1003.6

E.1.1000.50

1010
1000
990
980

C-137

6:1

2:1

2:1 1000 F-451

E.1.1003.00

1007.04
148+50
1000.5

100 80 60 40 20 ℄ 20 40 60 80 100 120

| Seeding Width | Seeding S.Y. | End Areas Cut | End Areas Fill | Cu. Yds. Exc. | Cu. Yds. Emb. |
|---|---|---|---|---|---|
| | 797 | | | 6044 | 0 |
| 142 | | 3188 | 0 | | |
| | 781 | | | 5192 | 0 |
| 139 | | 2419 | 0 | | |
| | 694 | | | 3392 | 0 |
| 111 | | 1244 | 0 | | |
| | 614 | | | 2018 | 0 |
| 110 | | 935 | 0 | | |
| | 553 | | | 1204 | 84 |
| 89 | | 365 | 91 | | |
| | 528 | | | 465 | 502 |
| 101 | | 137 | 451 | | |

Checked By W.F.P. Date: 12/18/67

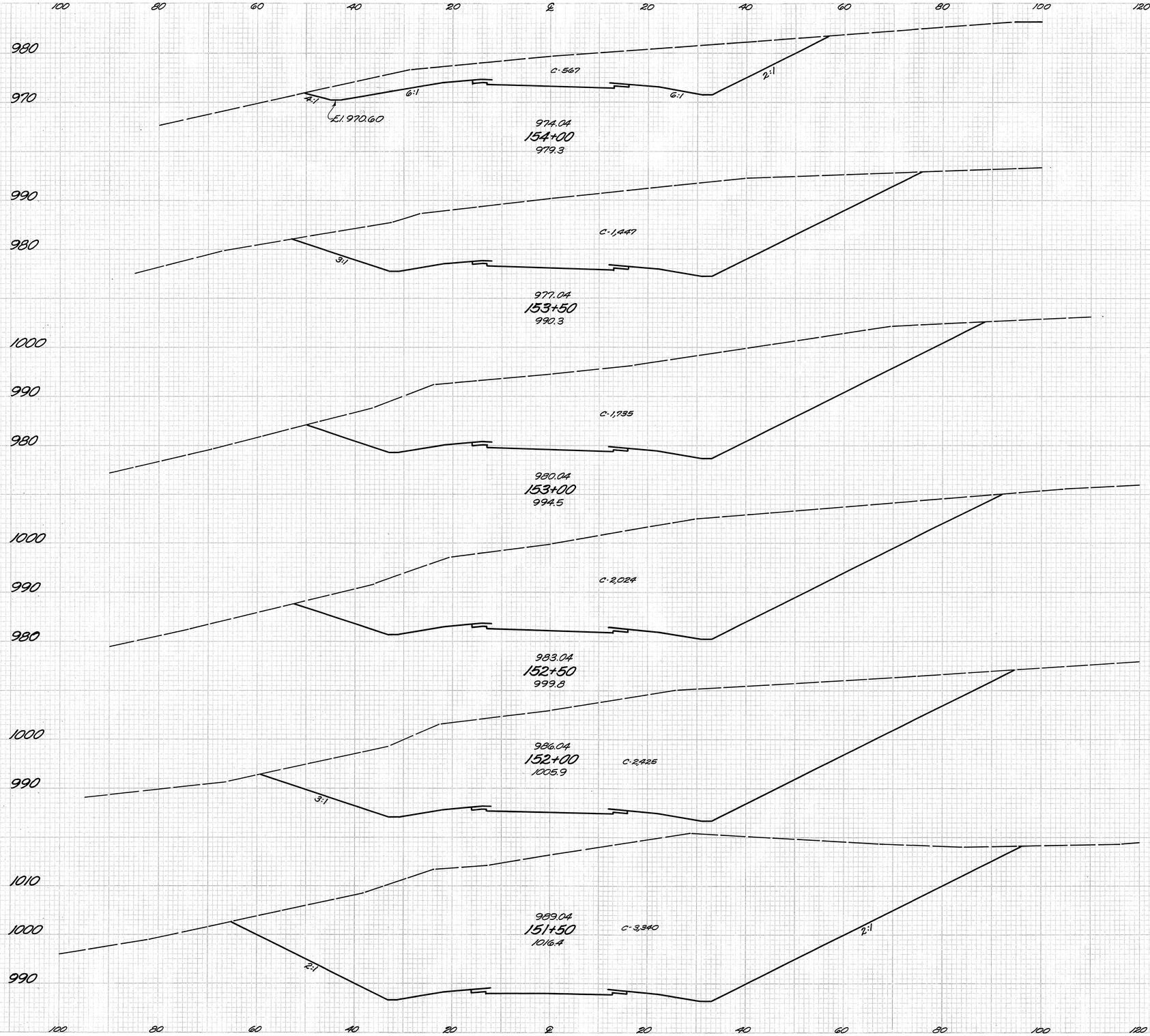
Plotting & End Areas By W.W.W. Date: 11/9/67

STA. 148+50 TO STA. 151+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

39
70

HOL-39-(13.22-13.62)




| Station | Seeding Width | Seeding S.Y. | End Areas Cut | End Areas Fill | Cu. Yds. Exc. | Cu. Yds. Emb. |
|---|---|---|---|---|---|---|
| 154+00 | 83 | | 567 | 0 | | |
| | | 528 | | | 1865 | 0 |
| 153+50 | 107 | | 1447 | 0 | | |
| | | 628 | | | 2946 | 0 |
| 153+00 | 119 | | 1735 | 0 | | |
| | | 678 | | | 3481 | 0 |
| 152+50 | 125 | | 2024 | 0 | | |
| | | 722 | | | 4119 | 0 |
| 152+00 | 135 | | 2425 | 0 | | |
| | | 778 | | | 5338 | 0 |
| 151+50 | 145 | | 3340 | 0 | | |

Checked By W.F.P. Date: 12/18/67

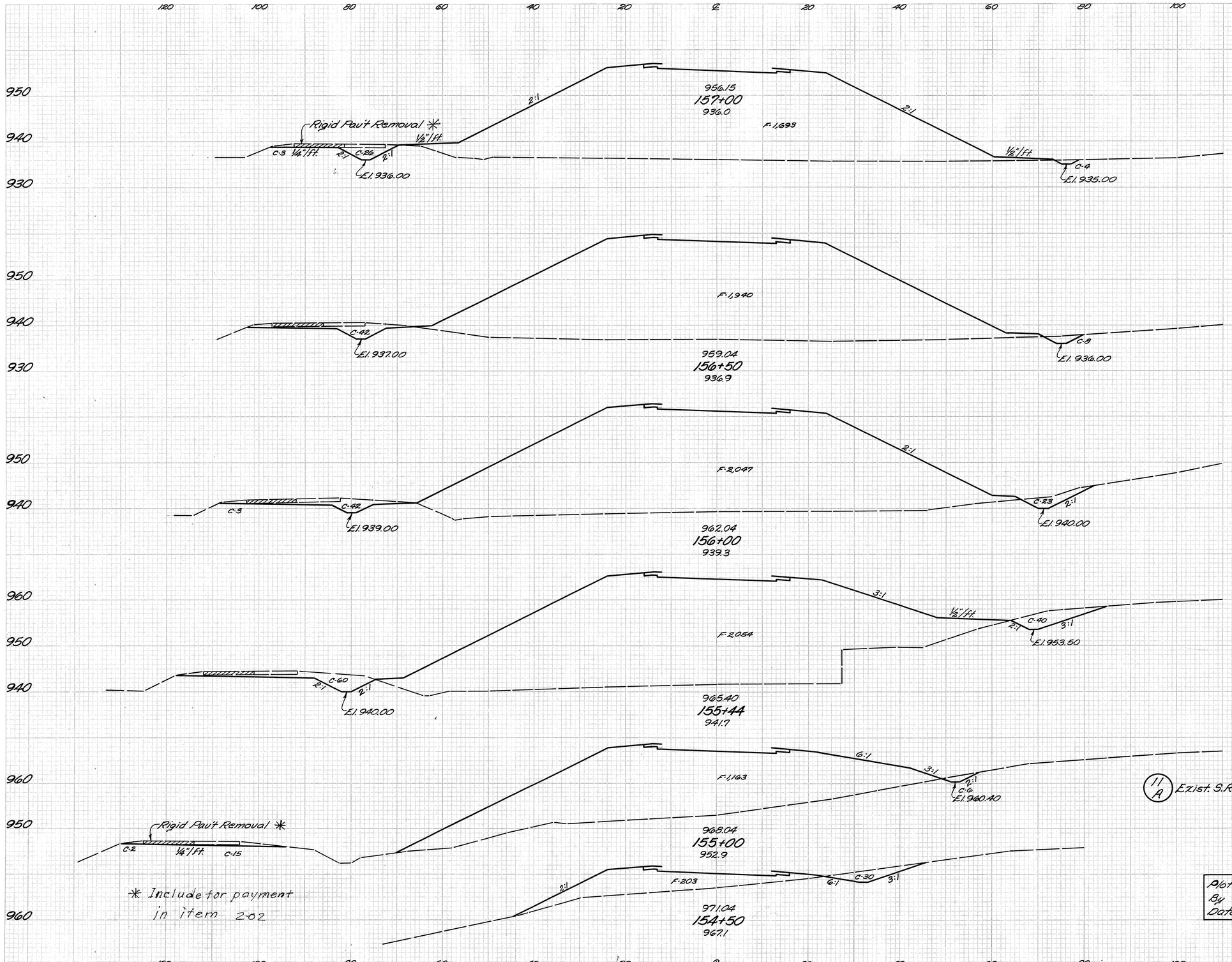
Plotting & End Areas By W.W.W. Date: 11/9/67

STA. 151+50 TO STA. 154+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

40
70

HOL-39-(13.22-13.62)




✳ Include for payment in item 2-02

| Seeding | | End Area | | Cu. Yds. | |
|---|---|---|---|---|---|
| Width | S.Y. | Cut | Fill | Exc. | Emb. |
| 159 | | 33 | 1693 | | |
| | 903 | | | 77 | 3364 |
| 166 | | 50 | 1940 | | |
| | 947 | | | 109 | 3692 |
| 175 | | 68 | 2047 | | |
| | 1120 | | | 174 | 4253 |
| 185 | | 100 | 2054 | | |
| | 812 | | | 100 | 2621 |
| | 1452 | | | 225 | 4075 |
| 147 | | 23 | 1163 | | |
| | 592 | | | 49 | 1265 |
| 66 | | 30 | 203 | | |
| | 414 | | | 553 | 188 |

(11 A) Exist. S.R. 39 Appr. Lt. Sta. 155+00

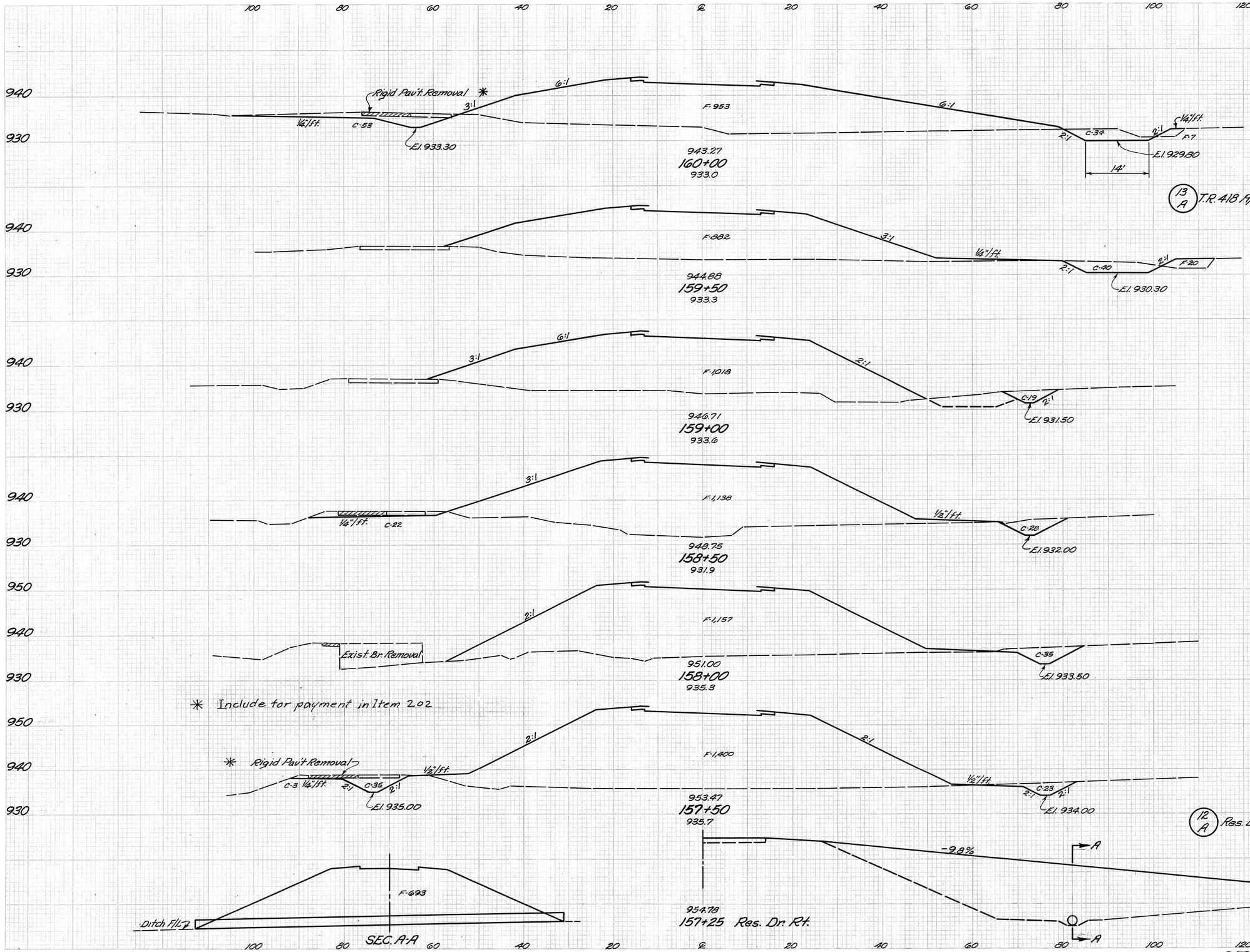
| Plotting & End Areas | Checked By |
|---|---|
| By W.W.W. | W.F.P. |
| Date: 11/9/67 | Date: 12/18/67 |

STA. 154+50 TO STA. 157+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

41
70

HOL-39-(13.22-13.62)




| Seeding Width | S.Y. | End Area Cut | Fill | Cu. Yds. Exc. | Emb. |
|---|---|---|---|---|---|
| | 875 | | | 119 | 1778 |
| 175 | | 83 | 960 | | |
| | 2256 | | | 332 | 4109 |
| | 856 | | | 114 | 1724 |
| 133 | | 40 | 902 | | |
| | 647 | | | 55 | 1778 |
| 100 | | 19 | 1018 | | |
| | 683 | | | 64 | 1996 |
| 146 | | 50 | 1138 | | |
| | 747 | | | 79 | 2125 |
| 123 | | 35 | 1157 | | |
| | 775 | | | 89 | 2368 |
| 156 | | 61 | 1400 | | |
| | 337 | | | 13 | 1924 |
| | 875 | | | 87 | 2864 |

(13 A) T.R. 418 Appr. Lt. Sta. 159+50

(12 A) Res. Dr. Rt. Sta. 157+25

Checked By W.F.P. Date: 12/19/67

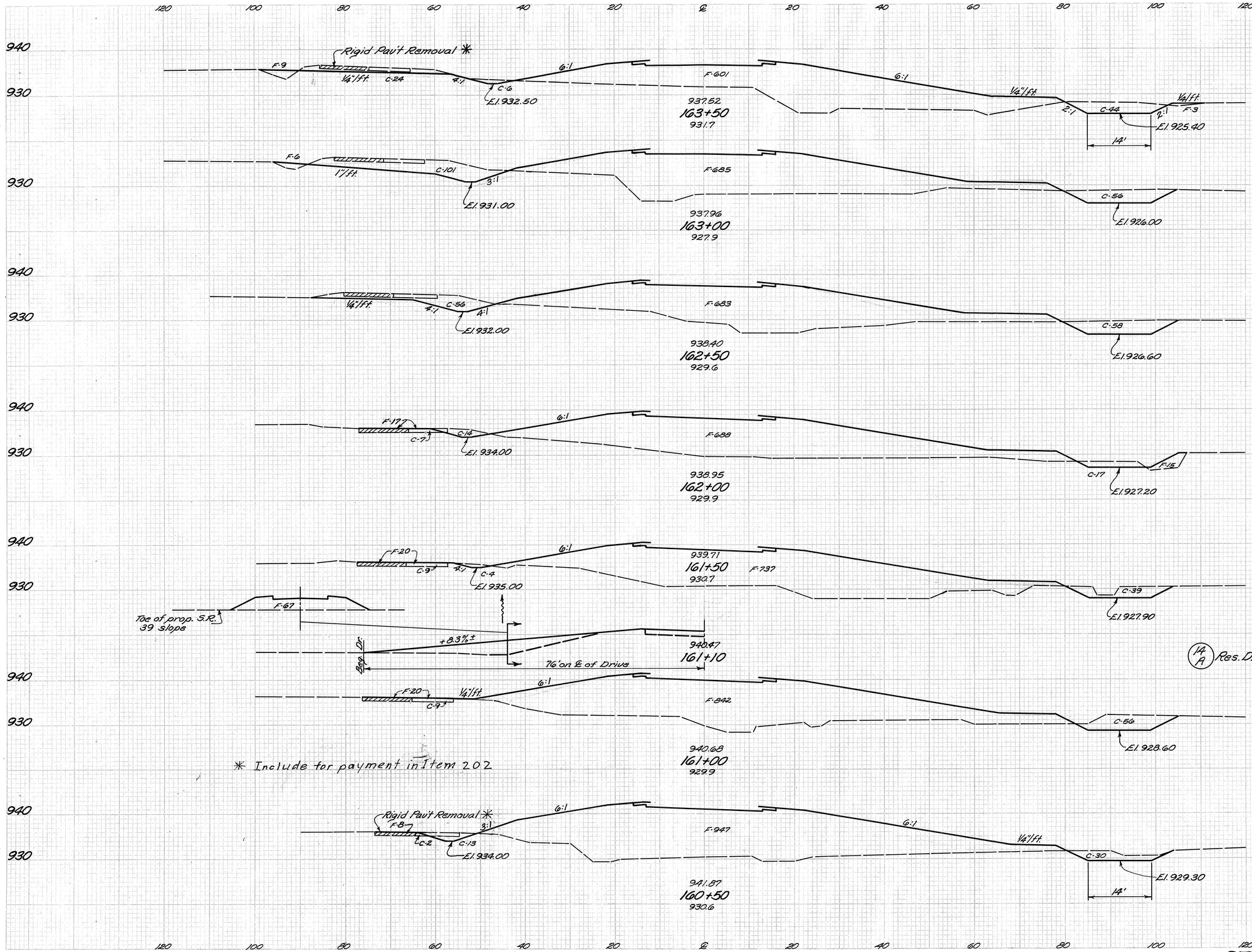
Plotting & End Areas By W.M.W. Date: 11/9/67

STA. 157+50 TO STA. 160+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

42
70

HOL-39-(13.22-13.62)




| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Yds. Exc. | Cu. Yds. Emb. |
|---|---|---|---|---|---|
| 171 | | 74 | 613 | | |
| | 931 | | | 214 | 1207 |
| 164 | | 157 | 691 | | |
| | 886 | | | 251 | 1272 |
| 155 | | 114 | 683 | | |
| | 833 | | | 141 | 1299 |
| 145 | | 38 | 720 | | |
| | 800 | | | 83 | 1368 |
| 143 | | 52 | 757 | | |
| | 794 | | | 108 | 1499 |
| | | | | 9 | 66 |
| 143 | | 65 | 862 | | |
| | 786 | | | 102 | 1687 |
| 140 | | 45 | 960 | | |

(14 A) Res. Dr. Lt. Sta. 161+10 →

Checked By W.F.P. Date: 12/18/67

Plotting & End Areas By M.W.W. Date: 11/9/67

STA. 160+50 TO STA. 163+50

| FED. RD. DIVISION | STATE | PROJECT | | 43 |
|---|---|---|---|---|
| 2 | OHIO | | | 70 |

HOL-39-(13.22-13.62)

120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

940
930

Rigid Pavt Removal *
1/4"/ft.
3:1
C-24.1
6:1
El. 931.40
F-55.5
6:1
C-57
El. 921.20
14'
934.44
167+00
924.4

940
930

3:1
C-12.0
El. 932.00
F-58.3
C-72
El. 921.80
934.88
166+50
927.2

940
930

1/4"/ft.
C-5.1
4:1
El. 932.60
F-69.6
1/4"/ft.
C-79
El. 922.40
935.32
166+00
926.4

940
930

C-3
1"/ft.
1/4"/ft.
C-15
El. 933.20
F-86.2
F-6.0
935.76
165+50
927.1
C-44
El. 923.00
-2% ±
936.20
165+00
928.1
Bgn. Dr.
90' on ℄ of Drive
Field Dr. Lt.
F-3
C-4
1/2"/ft.
C-18
1/4"/ft.
El. 933.70
F-75.0
C-36
El. 923.60

940
930

F-4
C-4
1/2"/ft.
C-16
1/4"/ft.
El. 933.40
F-69.9
C-30
El. 924.20
936.64
164+50
928.6

930

Rigid Pavt Removal *
F-5
C-22
1/4"/ft.
F-1.4
4:1
6:1
El. 933.10
F-50.6
6:1
1/4"/ft.
1/4"/ft.
F-5.6
C-16
El. 924.80
14'
937.08
164+00
930.7

* Include for payment in Item 202

(16/A) Field Dr. Lt. Sta. 165+00

| Plotting & End Areas | Checked By |
|---|---|
| By W.W.W. | W.F.P. |
| Date: 11/9/67 | Date: 12/18/67 |

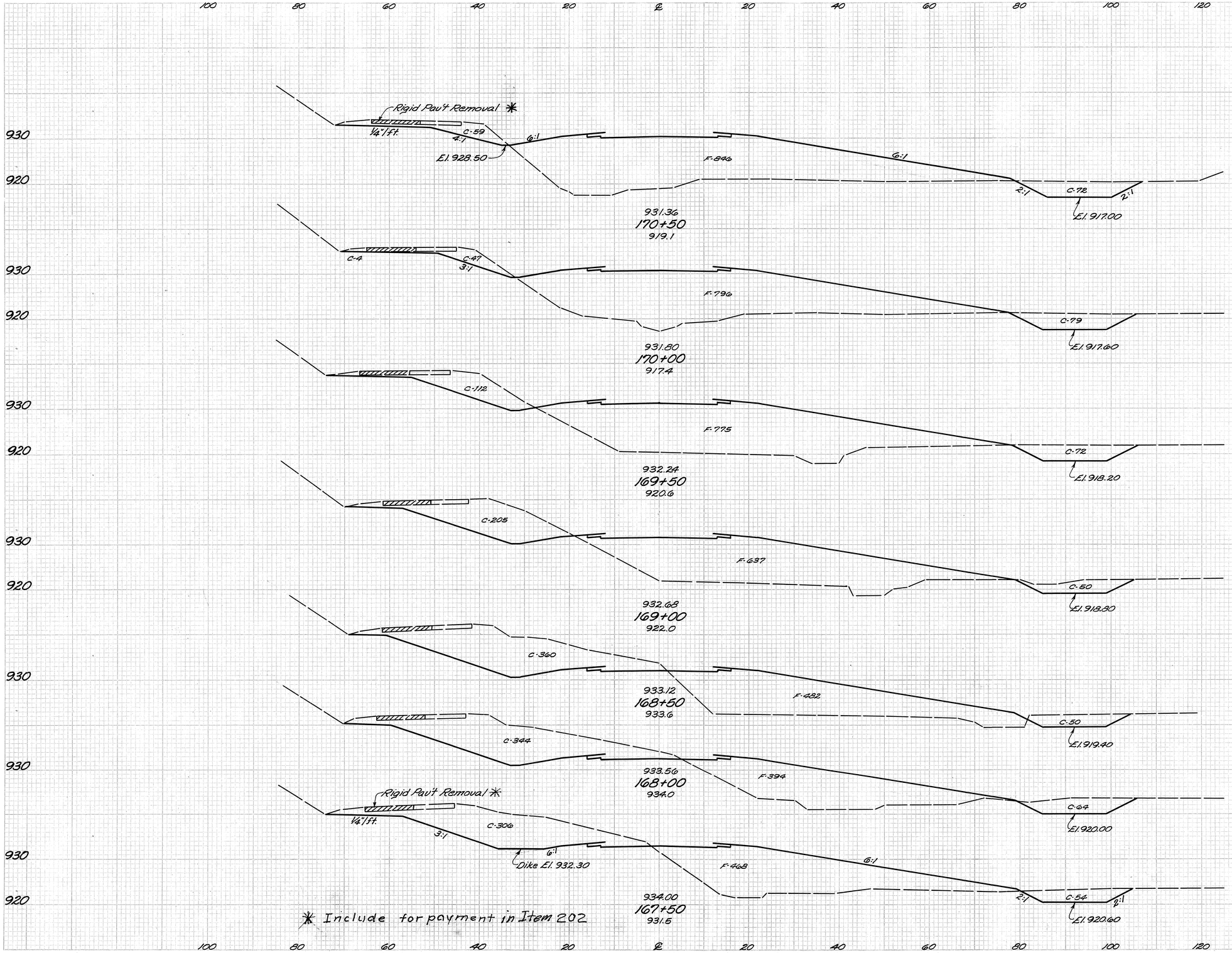
| Seeding | | End Area | | Cu. Yds. | |
|---|---|---|---|---|---|
| Width | S.Y. | Cut | Fill | Exc. | Emb. |
| | 797 | | | 609 | 947 |
| 145 | | 298 | 555 | | |
| | 828 | | | 454 | 1054 |
| 153 | | 192 | 583 | | |
| | 886 | | | 298 | 1184 |
| 166 | | 130 | 690 | | |
| | 900 | | | 178 | 1443 |
| 158 | | 62 | 862 | | |
| | 903 | | | 111 | 1495 |
| 167 | | 58 | 753 | | |
| | 925 | | | 100 | 1348 |
| 166 | | 50 | 703 | | |
| | 997 | | | 81 | 1189 |
| 193 | | 38 | 581 | | |
| | 1011 | | | 104 | 1106 |

STA. 164+00 TO STA. 167+00

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

44
70

HOL-39-(13.22-13.62)




| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Vds. Exc. | Cu. Vds. Emb. |
|---|---|---|---|---|---|
| | 814 | | | 253 | 1612 |
| 141 | | 131 | 846 | | |
| | 778 | | | 242 | 1520 |
| 139 | | 130 | 796 | | |
| | 1058 | | | 291 | 1455 |
| 142 | | 184 | 775 | | |
| | 775 | | | 406 | 1307 |
| 137 | | 255 | 637 | | |
| | 758 | | | 616 | 1036 |
| 136 | | 410 | 482 | | |
| | 761 | | | 757 | 811 |
| 138 | | 408 | 394 | | |
| | 778 | | | 711 | 798 |
| 142 | | 360 | 468 | | |

Checked By W.F.P. Date: 12/18/87

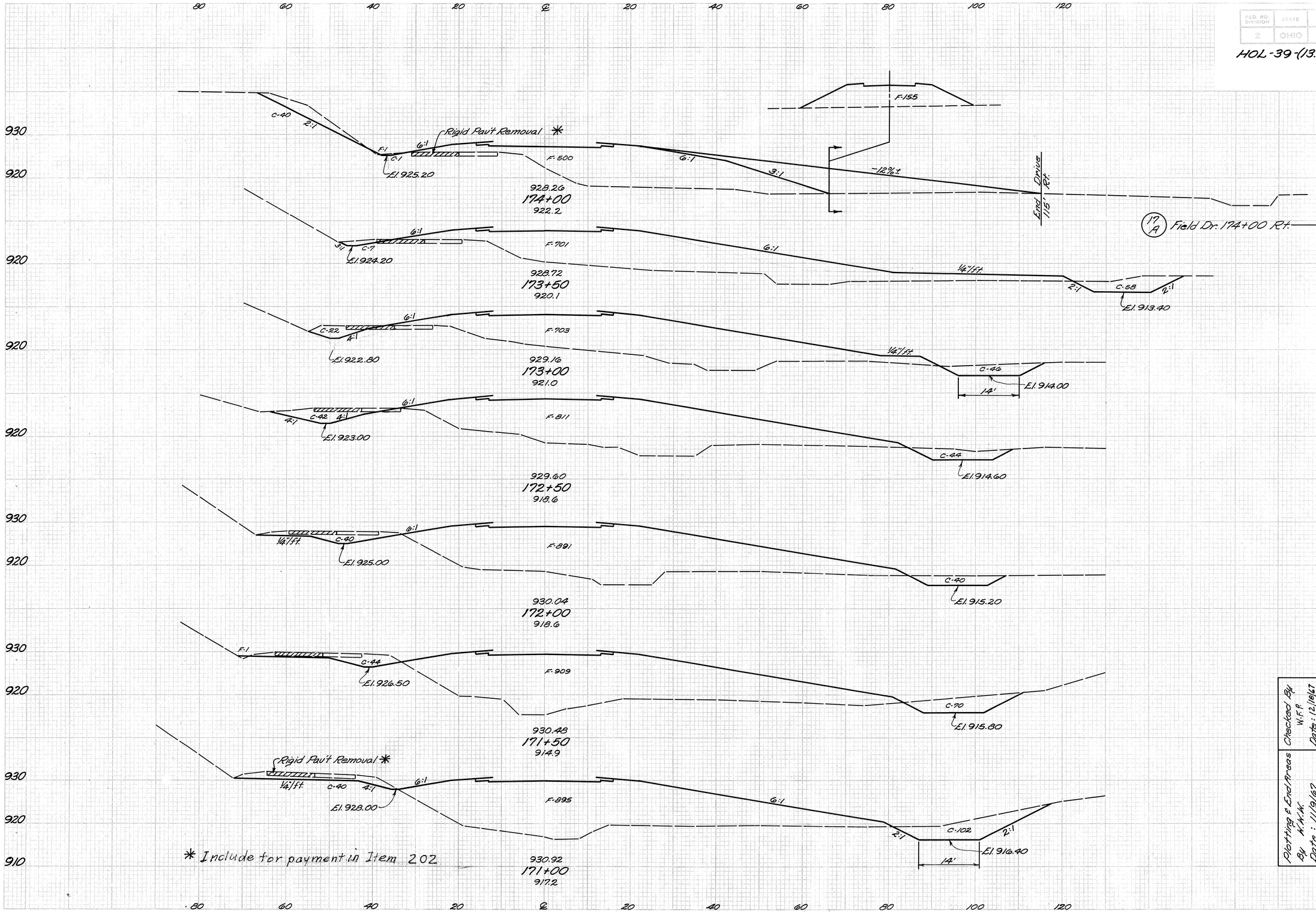
Plotting & End Areas By W.W.W. Date: 11/19/87

STA. 167+50 to STA. 170+50

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

45/70

HOL-39-(13.22-13.62)

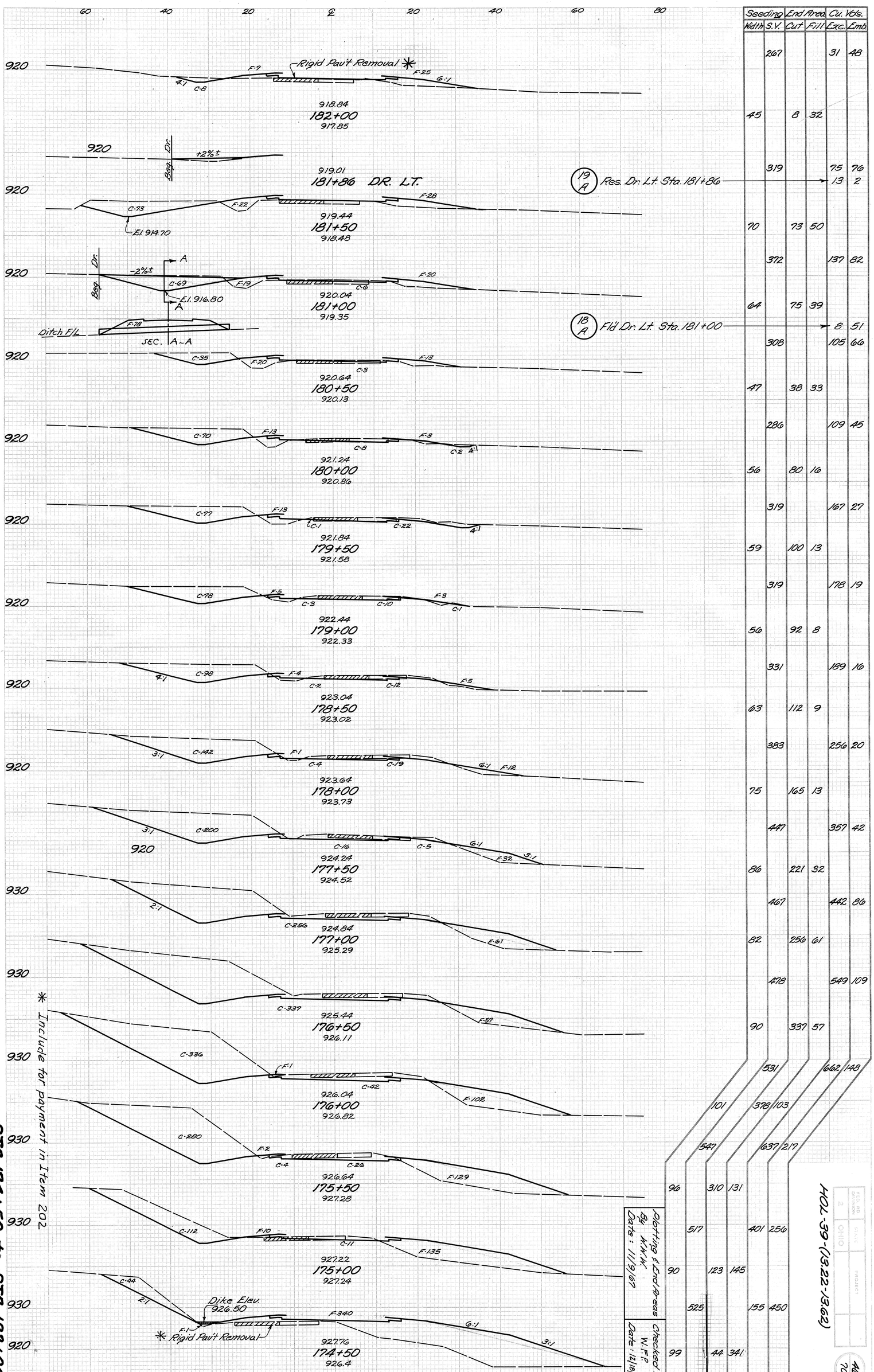


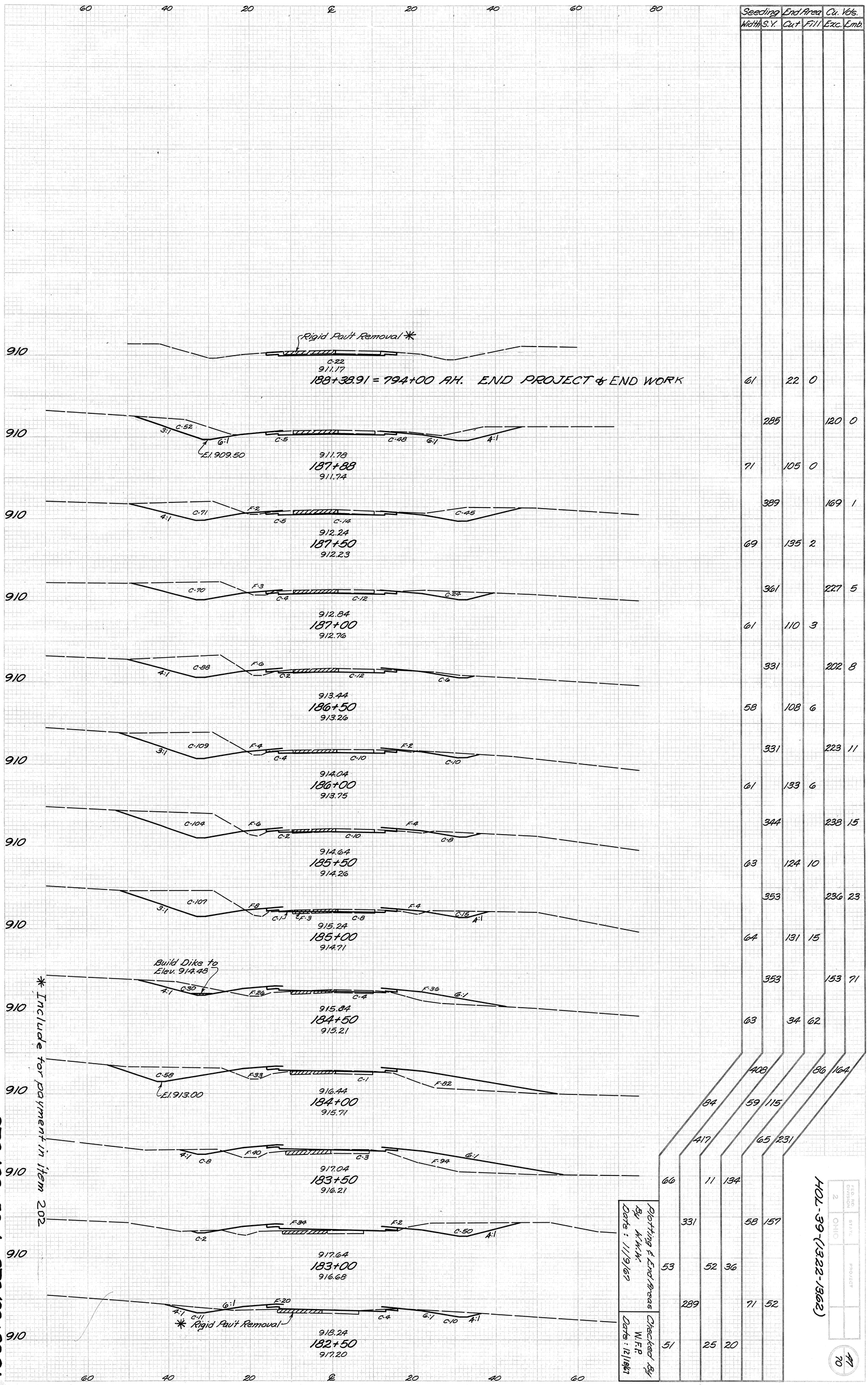

| Seeding Width | S.Y. | End Area Cut | Fill | Cu. Yds. Exc. | Emb. |
|---|---|---|---|---|---|
| | 581 | | | 79 | 780 |
| 110 | | 44 | 501 | | |
| | 742 | | | 98 | 1113 |
| 157 | | 65 | 701 | | |
| | 808 | | | 123 | 1300 |
| 134 | | 68 | 703 | | |
| | 747 | | | 143 | 1402 |
| 135 | | 86 | 811 | | |
| | 750 | | | 154 | 1576 |
| 135 | | 80 | 891 | | |
| | 772 | | | 180 | 1668 |
| 143 | | 114 | 910 | | |
| | 819 | | | 237 | 1671 |
| 152 | | 142 | 895 | | |

Checked By W.F.P. Date: 12/19/67

Plotting & End Areas By W.W.W. Date: 11/19/67

STA. 171+00 to STA. 174+00


60 40 20 ℄ 20 40 60 80
920
Rigid Pavt Removal *
F-9
F-25
4:1
C-8
6:1
918.84
182+00
917.85
920
Beg Dr.
+2%±
919.01
181+86 DR. LT.
19 A Res. Dr. Lt. Sta. 181+86
920
C-13
F-22
F-28
El. 914.70
919.44
181+50
918.48
920
Beg Dr.
-2%±
A
A
C-69
F-19
C-6
F-20
El. 916.80
920.04
181+00
919.35
Ditch F/L
F-18
SEC. A-A
18 A F/d Dr. Lt. Sta. 181+00
920
C-35
F-20
C-3
F-13
920.64
180+50
920.13
920
C-70
F-18
C-8
F-3
C-2
4:1
921.24
180+00
920.80
920
C-77
F-13
C-1
C-22
4:1
921.84
179+50
921.58
920
C-78
F-5
C-3
C-10
F-3
C-1
922.44
179+00
922.33
920
4:1
C-98
F-4
C-2
C-12
F-5
923.04
178+50
923.02
920
3:1
C-142
F-1
C-4
C-19
6:1
F-12
923.64
178+00
923.73
920
3:1
C-200
C-16
C-5
6:1
F-32
3:1
924.24
177+50
924.52
930
2:1
C-256
924.84
177+00
925.29
F-61
930
C-337
925.44
176+50
926.11
F-57
930
C-336
F-1
C-42
926.04
176+00
926.82
F-102
930
C-280
F-2
C-4
C-26
926.64
175+50
927.28
F-129
930
C-112
F-10
C-11
927.22
175+00
927.24
F-135
930
C-44
2:1
Dike Elev. 926.50
F-1
* Rigid Pavt Removal
F-340
6:1
3:1
927.76
174+50
926.4
920
60 40 20 ℄ 20 40 60
* Include for payment in Item 202
STR. 174+50 to STR. 182+00
Seeding
Width S.V.
End Areas
Cut Fill
Cu. Yds.
Exc. Emb.
267 31 48
45 8 32
319 75 76
13 2
70 73 50
372 137 82
64 75 39
8 51
308 105 66
47 38 33
286 109 45
56 80 16
319 167 27
59 100 13
319 178 19
56 92 8
331 169 16
63 112 9
383 256 20
75 165 13
447 357 42
86 221 32
467 442 86
82 256 61
478 549 109
90 337 57
531 662 148
101 398 103
547 637 217
96 310 131
517 401 256
90 123 145
525 155 450
99 44 341
Plotting of End Areas By M.W.K. Date: 11/9/67
Checked By W.F.P. Date: 12/18/67
HOL-59-(13.22-13.62)
OHIO
DIVISION 2
DISTRICT
46
70




| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Yds. Exc. | Cu. Yds. Emb. |
|---|---|---|---|---|---|
| | | | | | |
| 61 | | 22 | 0 | | |
| | 285 | | | 120 | 0 |
| 71 | | 105 | 0 | | |
| | 389 | | | 169 | 1 |
| 69 | | 195 | 2 | | |
| | 361 | | | 227 | 5 |
| 61 | | 110 | 3 | | |
| | 331 | | | 202 | 8 |
| 58 | | 108 | 6 | | |
| | 331 | | | 223 | 11 |
| 61 | | 133 | 6 | | |
| | 344 | | | 238 | 15 |
| 63 | | 124 | 10 | | |
| | 353 | | | 236 | 23 |
| 64 | | 131 | 15 | | |
| | 353 | | | 153 | 71 |
| 63 | | 34 | 62 | | |
| | 408 | | | 86 | 164 |
| 84 | | 59 | 115 | | |
| | 417 | | | 65 | 231 |
| 66 | | 11 | 134 | | |
| | 331 | | | 58 | 157 |
| 53 | | 52 | 36 | | |
| | 289 | | | 71 | 52 |
| 51 | | 25 | 20 | | |

Plotting & End Areas By M.W.M. Date: 11/9/67

Checked By W.F.P. Date: 12/1967

HOL-39-(13.22-13.62)

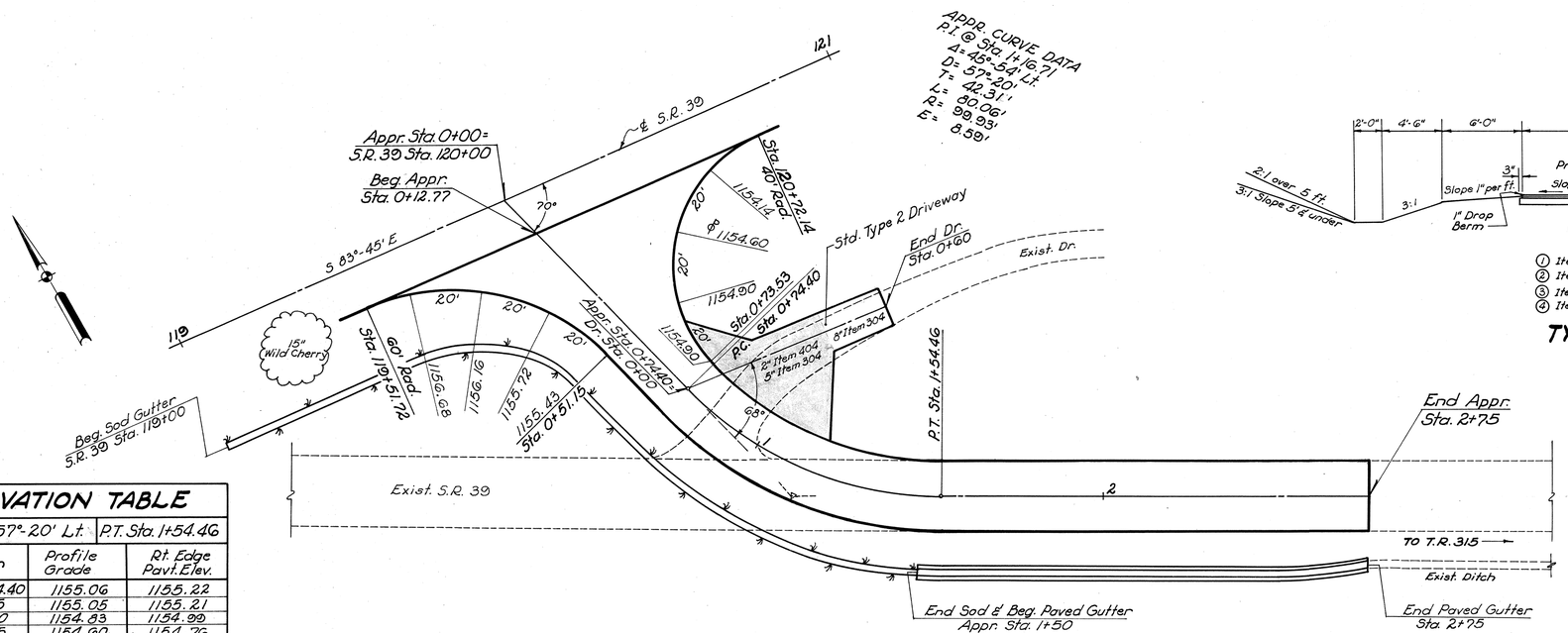
| DIST. | DIVISION | STATE | ADDITION |
|---|---|---|---|
| 2 | OHIO | | |

47
70

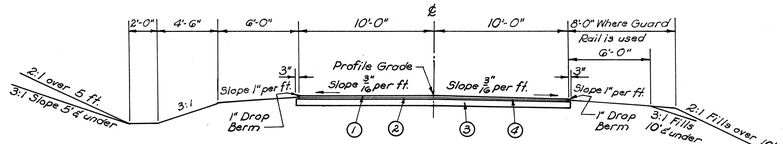
| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

48
70

HOL-39-(13.22-13.62)




PLAN
SCALE IN FEET
0 20 40




1 Item 404 3/16" Asphalt Concrete (70-85)
2 Item 402 1/4" Asphalt Concrete (70-85)
3 Item 304 7" Aggregate Base
4 Item 408 Prime Coat @ 0.4 gal. per sq. yd.

## TYPICAL SECTION

## SUPERELEVATION TABLE

P.C. Sta. 0+74.40 | D=57°-20' Lt. | P.T. Sta. 1+54.46

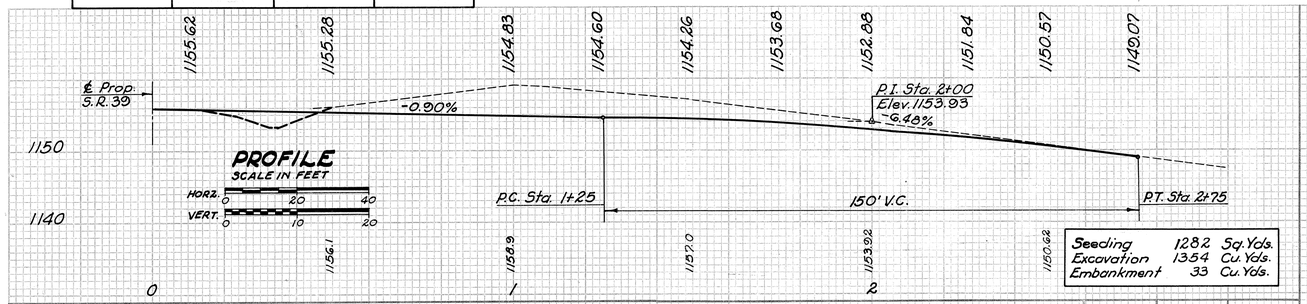
| Lt. Edge Pavt. Elev. | Station | Profile Grade | Rt. Edge Pavt. Elev. |
|---|---|---|---|
| 1154.90 | P.C. 0+74.40 | 1155.06 | 1155.22 |
| 1154.89 | +75 | 1155.05 | 1155.21 |
| 1154.67 | 1+00 | 1154.83 | 1154.99 |
| 1154.44 | +25 | 1154.60 | 1154.76 |
| 1154.10 | +50 | 1154.26 | 1154.36 |
| 1154.02 | P.T. +54.46 | 1154.18 | 1154.26 |
| 1153.52 | +75 | 1153.68 | 1153.75 |
| 1152.72 | 2+00 | 1152.88 | 1152.84 |
| 1151.68 | +25 | 1151.84 | 1151.68 |
| 1150.31 | +50 | 1150.57 | 1150.41 |
| 1148.73 | +75 | 1149.07 | 1148.90 |

## APPROACH QUANTITIES

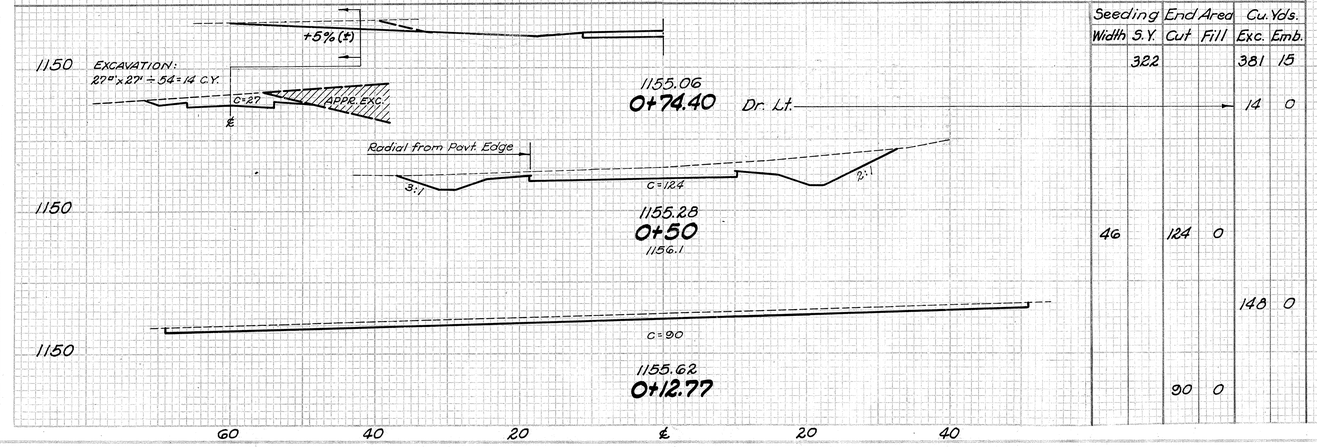
| | |
|---|---|
| Item 203 Subgrade Preparation | 701.7 Sq. Yds. |
| Item 304 Aggregate Base | 139.5 Cu. Yds. |
| Item 402 Asphalt Concrete | 24.4 Cu. Yds. |
| Item 404 Asphalt Concrete | 14.6 Cu. Yds. |
| Item 408 Bituminous Prime Coat @ 0.4 gal. per sq. yd. | 287.1 Gals. |
| Item 660 Sodding | 188 Sq. Yds. |
| Item 601 Paved Gutter, Type 1-2 | 126 Lin. Ft. |

## DRIVE QUANTITIES

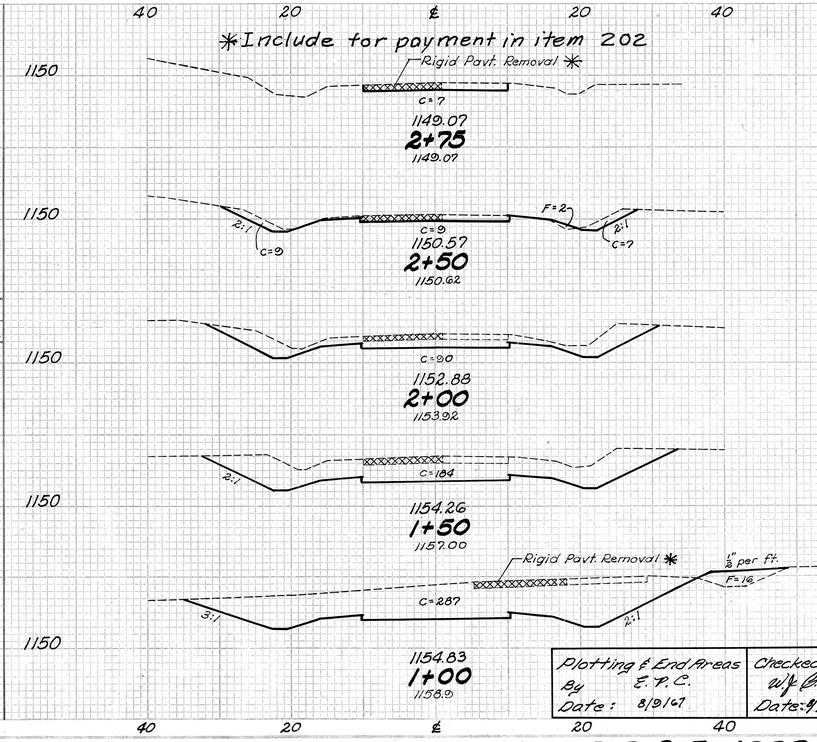
| | |
|---|---|
| Item 304 Aggregate Base | 17.8 Cu. Yds. |
| Item 404 Asphalt Concrete | 5.0 Cu. Yds. |
| Item 408 Bit. Prime Coat @ 0.4 gal. per sq. yd. | 35.9 Gals. |




| Seeding | 1282 | Sq. Yds. |
|---|---|---|
| Excavation | 1354 | Cu. Yds. |
| Embankment | 33 | Cu. Yds. |




| | Seeding | End Area | | Cu. Yds. | |
|---|---|---|---|---|---|
| | Width | S.Y. | Cut | Fill | Exc. | Emb. |
| | | 322 | | | 381 | 15 |
| | | | | | 14 | 0 |
| | 46 | | 124 | 0 | | |
| | | | | | 148 | 0 |
| | | | 90 | 0 | | |

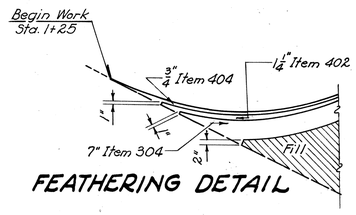



| Plotting & End Areas By E.P.C. Date: 8/9/67 | Checked By W.F.B. Date: 8/9/67 |
|---|---|

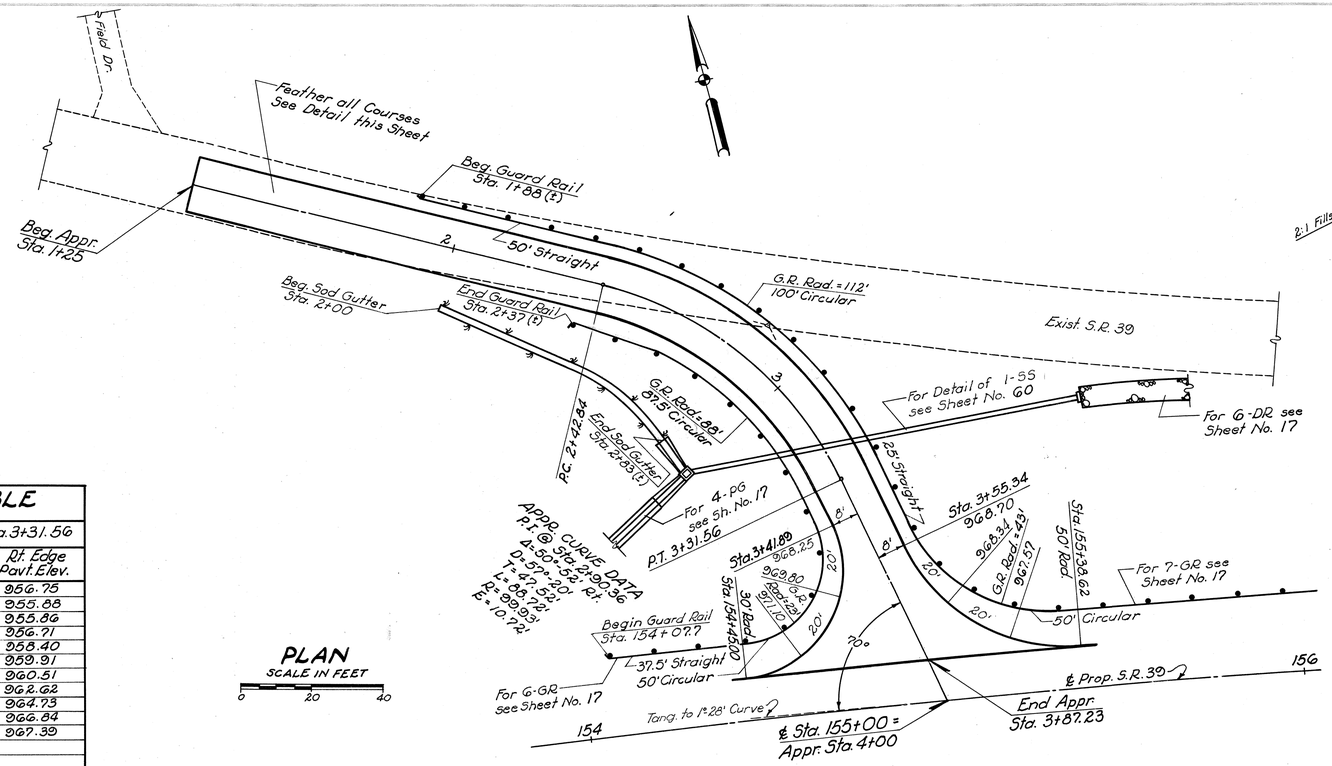
| Seeding | End Area | | Cu. Yds. | |
|---|---|---|---|---|
| Width | S.Y. | Cut | Fill | Exc. | Emb. |
| 4 | | 7 | 0 | | |
| | 68 | | | 15 | 1 |
| 45 | | 25 | 2 | | |
| | 264 | | | 106 | 2 |
| 50 | | 90 | 0 | | |
| | 286 | | | 254 | 0 |
| 53 | | 184 | 0 | | |
| | 342 | | | 436 | 15 |
| 70 | | 287 | 16 | | |

8A

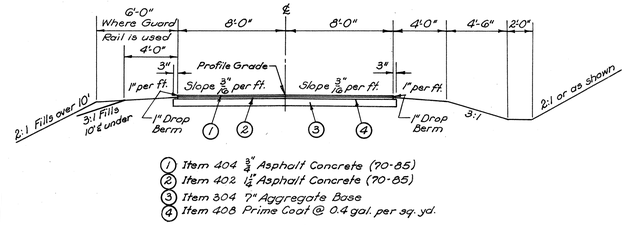
T.R. 315 APPR. - STA. 120+00 RT.




## FEATHERING DETAIL




## PLAN
SCALE IN FEET
0 20 40




① Item 404 3/4" Asphalt Concrete (70-85)
② Item 402 1 1/4" Asphalt Concrete (70-85)
③ Item 304 7" Aggregate Base
④ Item 408 Prime Coat @ 0.4 gal. per sq. yd.

## TYPICAL SECTION

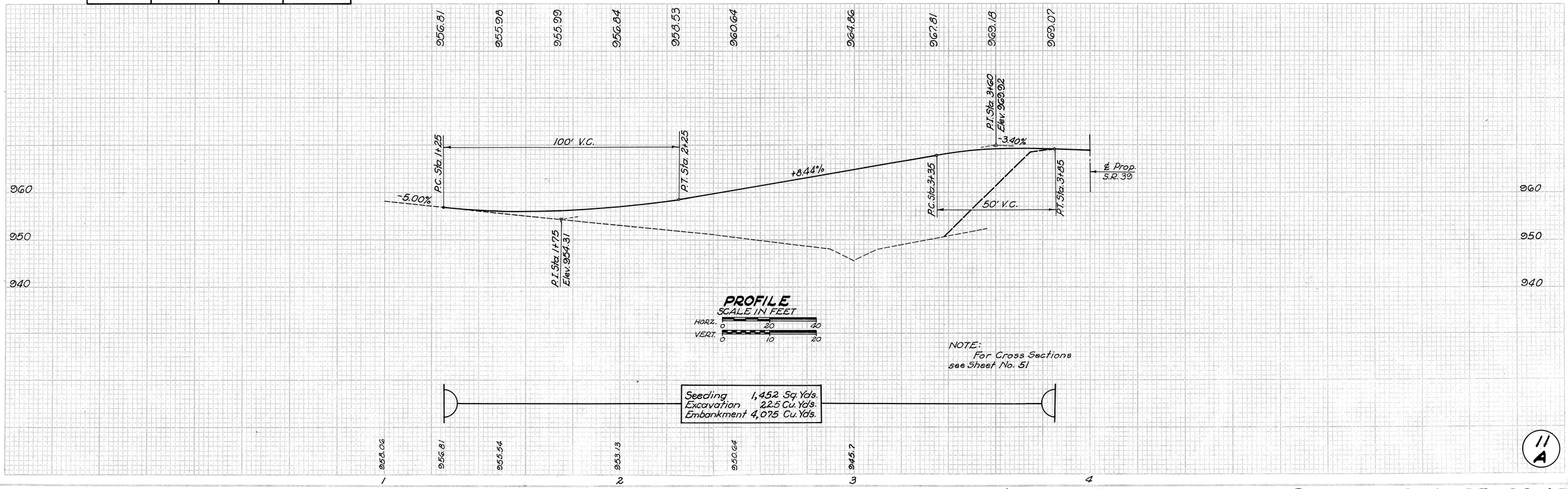
## SUPERELEVATION TABLE

| P.C. Sta. 2+42.84 | D = 57°-20' Rt. | P.T. Sta. 3+31.56 |
|---|---|---|

| Lt. Edge Pavt. Elev. | Station | Profile Grade | Rt. Edge Pavt. Elev. |
|---|---|---|---|
| 956.67 | 1+25 | 956.81 | 956.75 |
| 955.85 | +50 | 955.98 | 955.88 |
| 955.95 | +75 | 955.99 | 955.86 |
| 956.84 | 2+00 | 956.84 | 956.71 |
| 958.60 | +25 | 958.53 | 958.40 |
| 960.11 | P.C. +42.84 | 960.04 | 959.91 |
| 960.77 | +50 | 960.64 | 960.51 |
| 962.88 | +75 | 962.75 | 962.62 |
| 964.99 | 3+00 | 964.86 | 964.73 |
| 967.08 | +25 | 966.97 | 966.84 |
| 967.59 | P.T. +31.56 | 967.52 | 967.39 |
| | | | |
| | | | |

## QUANTITIES

| | | |
|---|---|---|
| Item 304 | Aggregate Base | 98.3 Cu. Yds. |
| Item 402 | Asphalt Concrete (70-85) | 17.7 Cu. Yds. |
| Item 404 | Asphalt Concrete (70-85) | 11.3 Cu. Yds. |
| Item 408 | Bit. Prime Coat @ 0.4 gal. per sq. yd. | 202.2 Gals. |
| Item 660 | Sodding | 48 Sq. Yds. |
| Item 203 | Subgrade Preparation | 491.3 Sq. Yds. |




## PROFILE
SCALE IN FEET
HORZ. 0 20 40
VERT. 0 10 20

NOTE:
For Cross Sections see Sheet No. 51

| | |
|---|---|
| Seeding | 1,452 Sq. Yds. |
| Excavation | 225 Cu. Yds. |
| Embankment | 4,075 Cu. Yds. |

11
A

# PLAN & PROFILE - EXIST. S.R. 39 APPR. - STA. 155+00 LT.

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

50
70

HOL-39-(13.22-13.62)

Begin Paved Gutter Lt.
Sta. 3+75

Beg. Appr.
Sta. 2+00

71.25' Taper

10'
10'

3

4

Exist. T.R. 418 (Slag)

End Paved Gutter
Sta. 5+47

for 3-3, see Sheet No. 54

Sta. 159+97.52
60° Road

## QUANTITIES

| | | | |
|---|---|---|---|
| Item 203 | Subgrade Preparation | 248.1 | Sq. Yds. |
| Item 304 | Aggregate Base | 229.0 | Cu. Yds. |
| Item 402 | Asphalt Concrete | 8.6 | Cu. Yds. |
| Item 404 | Asphalt Concrete | 5.2 | Cu. Yds. |
| Item 408 | Bituminous Prime Coat @ 0.4 gal. per sq. yd. | 101.1 | Gals. |
| Item 660 | Sodding | 62 | Sq. Yds. |
| Item 601 | Paved Gutter, Type 1-2 | 186 | Lin. Ft. |

P.C. Sta. 2+71.25

⊗ Anchor assembly as detailed on Std. Dwg. G.R.-2.B

5

Sta. 5+49.17
946.10

945.70

944.42

20'

10'

P.I. Sta. 4+95.69

End Guard Rail
Sta. 5+25

Exist. S.R. 39

Sta. 5+27.16
946.15

62.5' Circ.
946.42

32° G.R. Rad.
946.90

942.53

40' Rad.
Sta. 159+79.03

For 7-GR see Sheet No. 17&18

Tang. to 1°-26' Curve

70°

159

End Appr.
Sta. 5+87.23

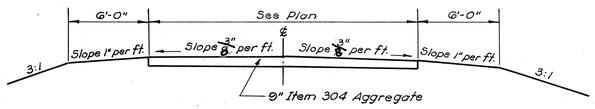
Appr. Sta 6+00 = S.R. 39 Sta. 159+50

160 ℄ S.R. 39

## SUPERELEVATION TABLE

P.C. Sta. 2+71.25 | D = 12°-00' Rt. | P.T. Sta. 4+95.69

| Lt. Edge Pavt. Elev. | Station | Profile Grade | Rt. Edge Pavt. Elev. |
|---|---|---|---|
| 950.00 | 2+00 | 950.50 | 950.00 |
| 949.00 | +25 | 949.24 | 948.88 |
| 948.18 | +50 | 948.18 | 947.89 |
| 947.56 | P.C. +71.25 | 947.41 | 947.10 |
| 947.45 | +75 | 947.29 | 946.98 |
| 946.86 | 3+00 | 946.60 | 946.29 |
| 946.40 | +25 | 946.09 | 945.78 |
| 946.09 | +50 | 945.78 | 945.47 |
| 945.95 | +75 | 945.64 | 945.33 |
| 946.01 | 4+00 | 945.70 | 945.39 |
| 946.16 | +25 | 945.85 | 945.54 |
| 946.31 | +50 | 946.00 | 945.69 |
| 946.41 | +75 | 946.15 | 945.84 |
| 946.42 | P.T. +95.69 | 946.27 | 945.96 |
| 946.42 | 5+00 | 946.30 | 945.99 |
| 946.34 | +25 | 946.45 | 946.14 |
| | | | |
| | | | |



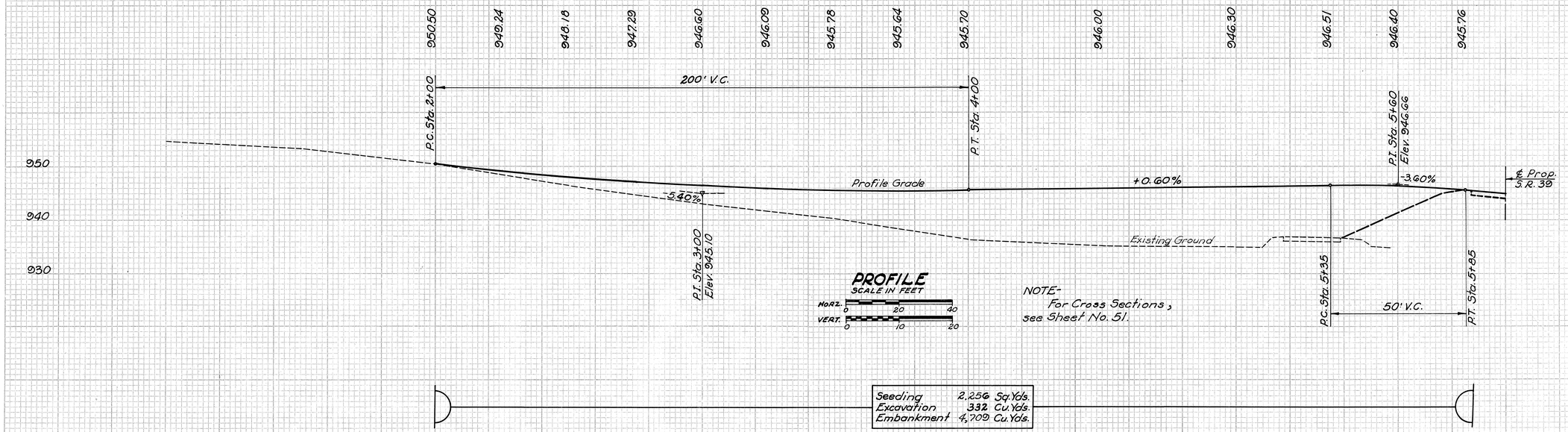

## TYPICAL SECTION

STA. 2+00 TO STA. 5+27.16
(FOR STA. 5+27.16 TO STA. 5+87.23 SEE SHEET No. 48).

APPR. CURVE DATA
P.I. @ Sta. 3+85.58
Δ = 26°-56' Rt.
D = 12°-00'
T = 114.33'
L = 224.44'
E = 13.50'
R = 477.46'

## PLAN

SCALE IN FEET
0 20 40




## PROFILE

SCALE IN FEET
HORZ. 0 20 40
VERT. 0 10 20

NOTE-
For Cross Sections, see Sheet No. 51.

| | | |
|---|---|---|
| Seeding | 2,256 | Sq. Yds. |
| Excavation | 332 | Cu. Yds. |
| Embankment | 4,709 | Cu. Yds. |

954.8 953.3 950.5 946.5 943.1 940.3 936.5 935.3 934.9

2 3 4 5 6

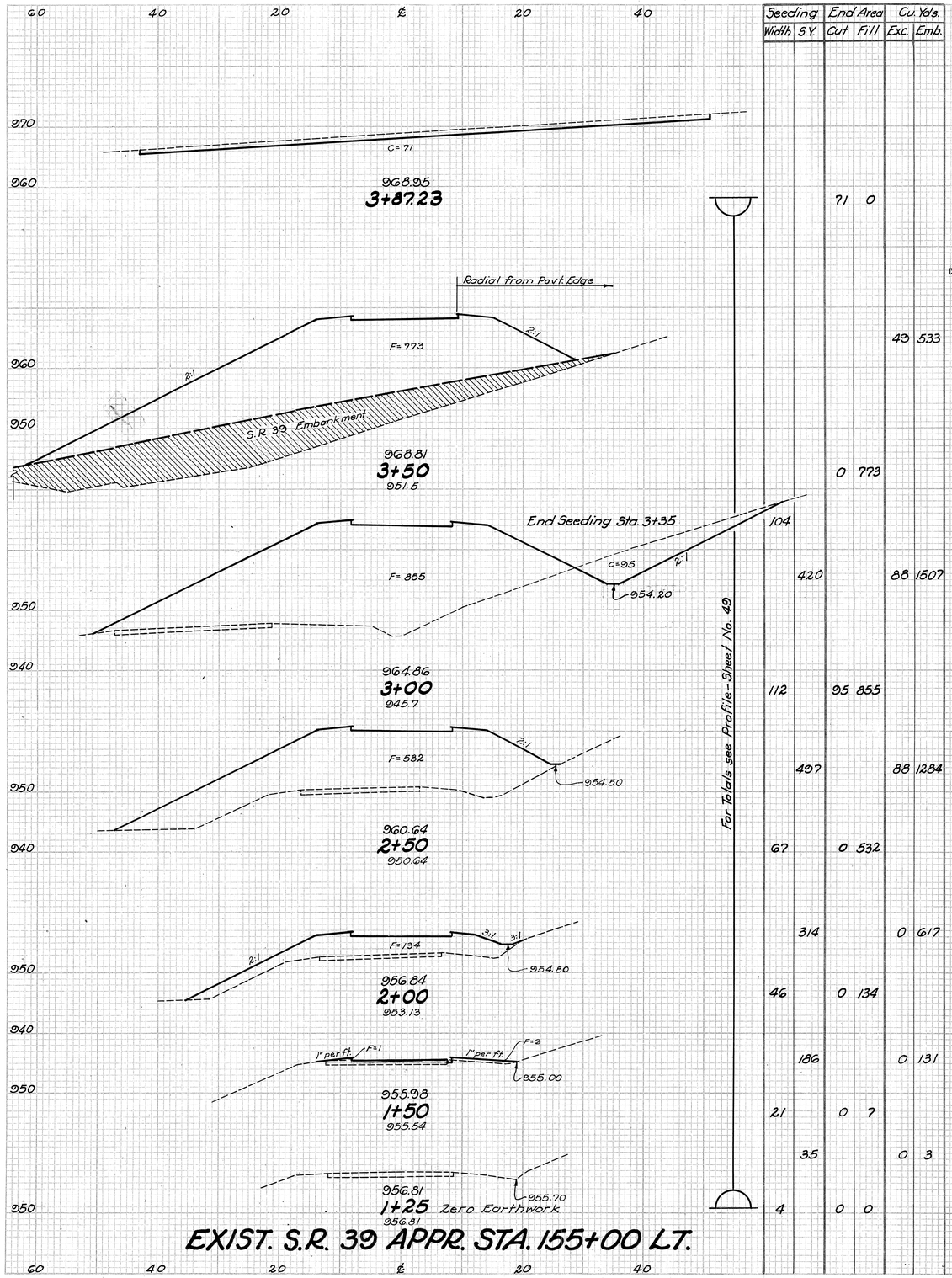
13
A

PLAN & PROFILE-T.R. 418 APPR.-STA. 159+50 LT.

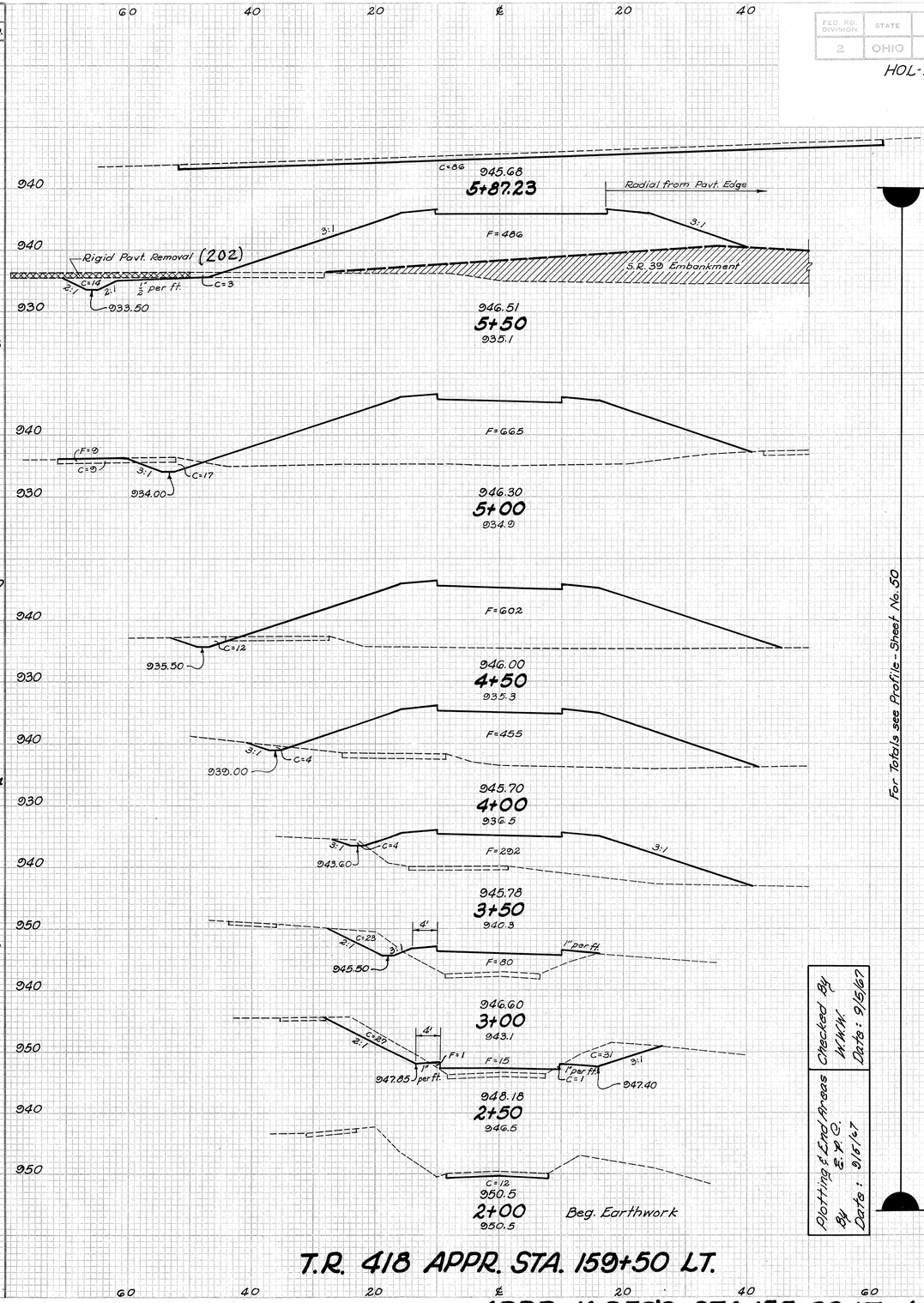
| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

51
70

HOL-39-(13.22-13.62)




| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Yds. Exc. | Cu. Yds. Emb. |
|---|---|---|---|---|---|
| | | 71 | 0 | | |
| | | | | 49 | 533 |
| | | 0 | 773 | | |
| 104 | | | | | |
| | 420 | | | 88 | 1507 |
| 112 | | 95 | 855 | | |
| | 407 | | | 88 | 1284 |
| 67 | | 0 | 532 | | |
| | 314 | | | 0 | 617 |
| 46 | | 0 | 134 | | |
| | 186 | | | 0 | 131 |
| 21 | | 0 | 7 | | |
| 35 | | | | 0 | 3 |
| 4 | | 0 | 0 | | |




| Seeding Width | Seeding S.Y. | End Area Cut | End Area Fill | Cu. Yds. Exc. | Cu. Yds. Emb. |
|---|---|---|---|---|---|
| | | 86 | 0 | | |
| | | | | 71 | 335 |
| 46 | | 17 | 486 | | |
| | 406 | | | 40 | 1074 |
| 100 | | 26 | 674 | | |
| | 517 | | | 35 | 1181 |
| 86 | | 12 | 602 | | |
| | 433 | | | 15 | 979 |
| 70 | | 4 | 455 | | |
| | 344 | | | | 602 |
| 54 | | 4 | 292 | | |
| | 231 | | | 25 | 344 |
| 29 | | 23 | 80 | | |
| | 197 | | | 76 | 89 |
| 42 | | 59 | 16 | | |
| | 128 | | | 66 | 15 |
| 4 | | 12 | 0 | | |

Plotting of End Areas By: S.H.C. Date: 9/15/67

Checked By: W.M.W. Date: 9/15/67

11 A

13 A

# EXIST. S.R. 39 APPR. STA. 155+00 LT.

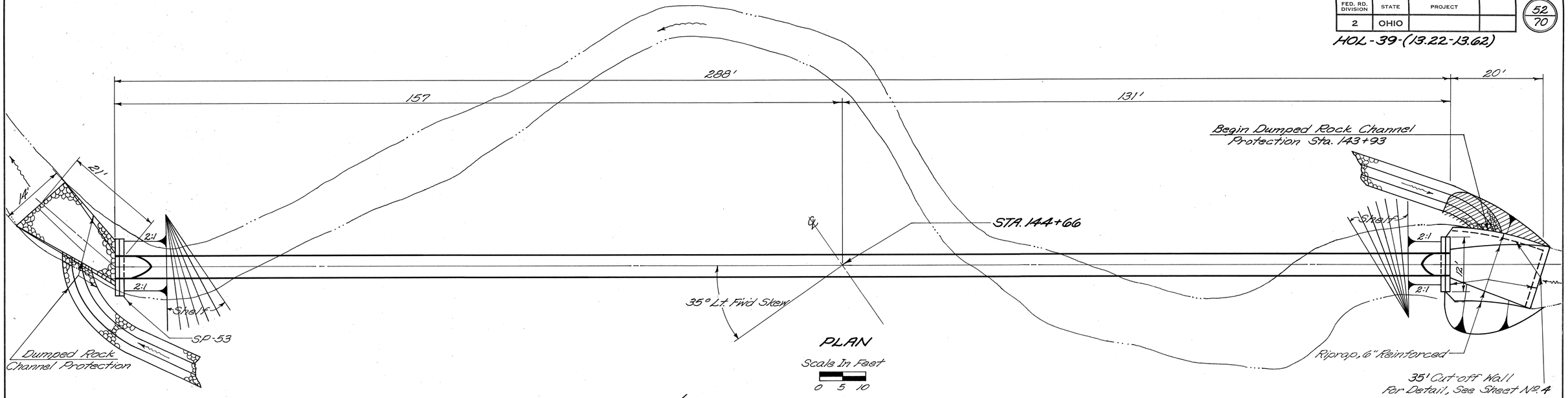
# T.R. 418 APPR. STA. 159+50 LT.

# APPR. X-SEC'S.-STA. 155+00 LT. & STA. 159+50 LT.

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

52/70

HOL-39-(13.22-13.62)




PLAN

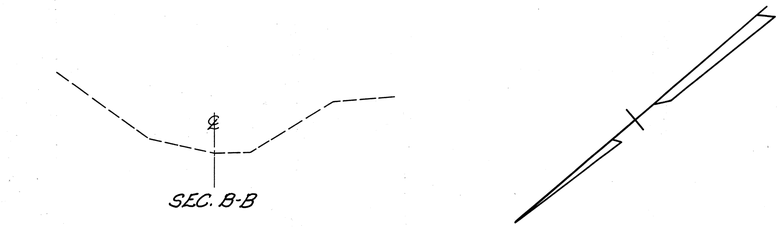
Scale In Feet

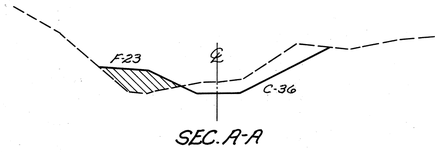
0 5 10

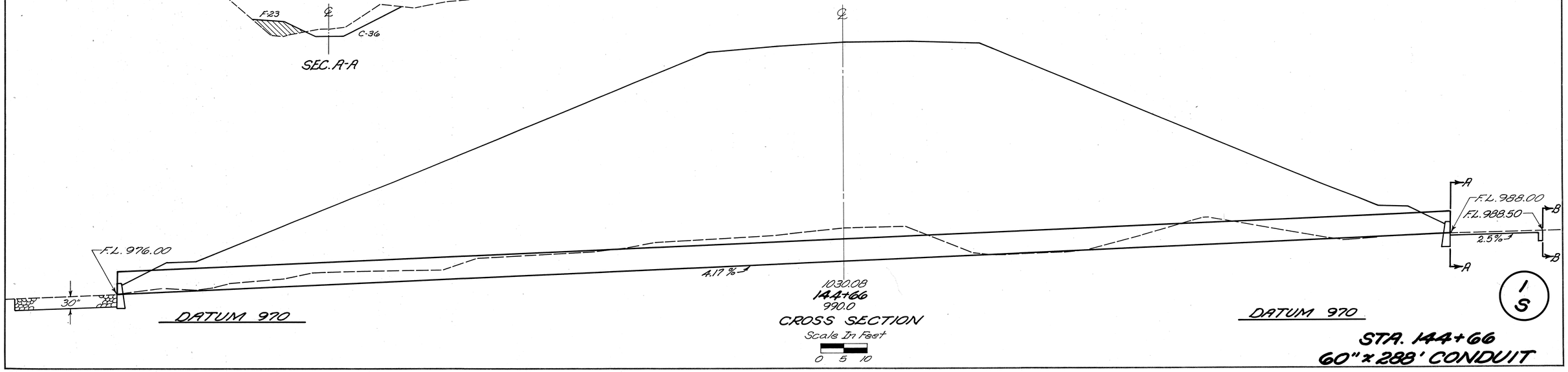
## QUANTITIES

| | |
|---|---|
| 60" Conduit, Type A with Class B" Bedding 707.03, gage 10-8 | 288 Lin. Ft. |
| Concrete Masonry | 6.05 Cu. Yd |
| Dumped Rock Channel Protection | 20 Cu. Yds. |
| Riprap, 6" Reinforced | 33 Sq. Yds. |
| Excavation | 13 Cu. Yds. |
| Embankment | 9 Cu. Yds. |

Area : 91 acres
$Q_{25}$ : 168 c.f.s.




CROSS SECTION

Scale In Feet

0 5 10

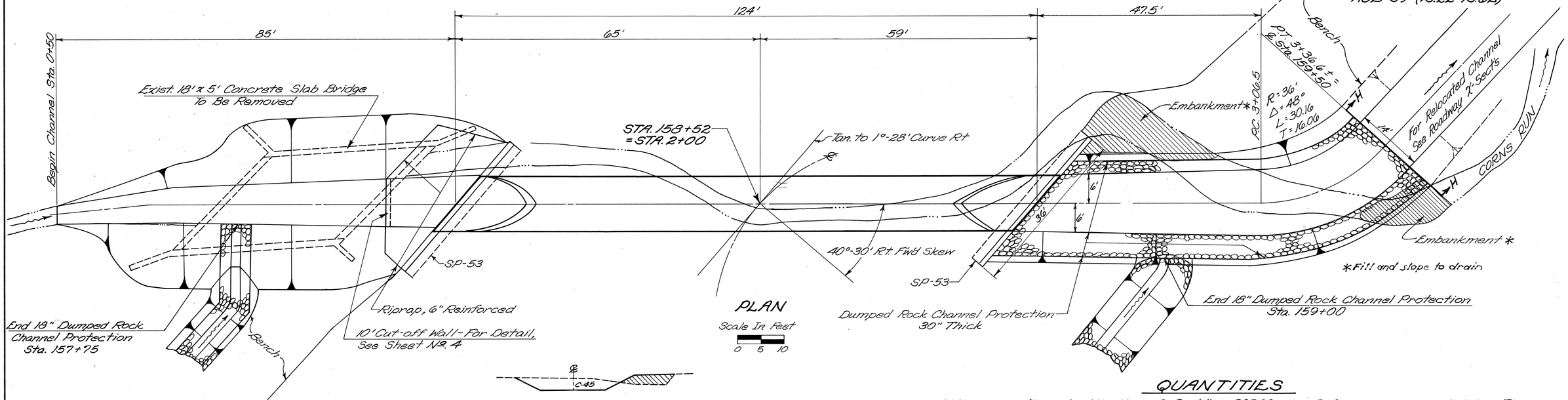
1/S

STA. 144+66
60" x 288' CONDUIT

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

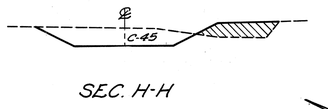
53
70

HOL-39-(13.22-13.62)

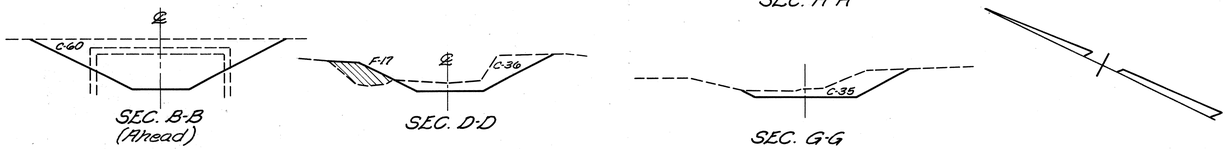



PLAN

Scale In Feet
0 5 10



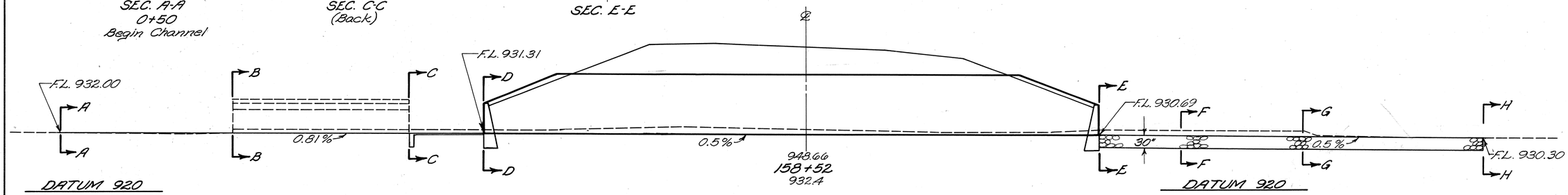

SEC. H-H




## QUANTITIES

| | |
|---|---|
| 144" Conduit, Type A with Class B Bedding, 707.03, gage 7-5 | 124 Lin. Ft. |
| Concrete Masonry | 38.14 Cu. Yd. |
| Riprap, 6" Reinforced | 44 Sq. Yds. |
| Dumped Rock Channel Protection | 153 Cu. Yds. |
| Existing Structure Removed | Lump Sum |
| Excavation | 206 Cu. Yds. |
| Embankment | 8 Cu. Yds. |

Area : 746 acres
$Q_{25}$ : 820 c.f.s.




CROSS SECTION

Scale In Feet
0 5 10

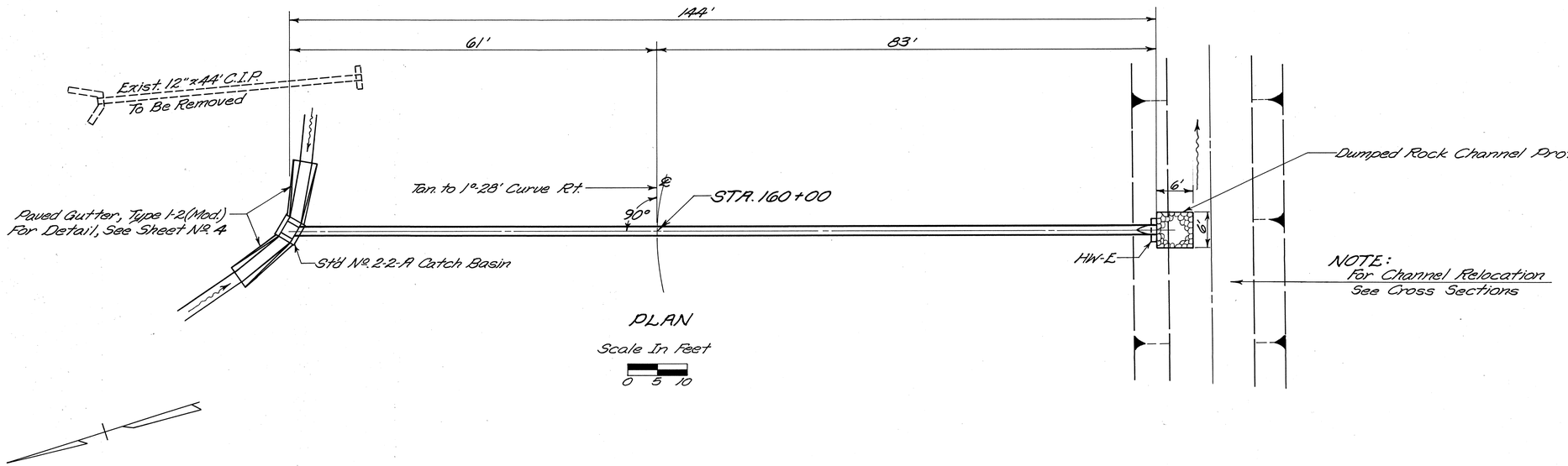
2
S

STA. 158+52
144" x 124' CONDUIT

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

54
70

HOL-39-(13.22-13.62)




PLAN

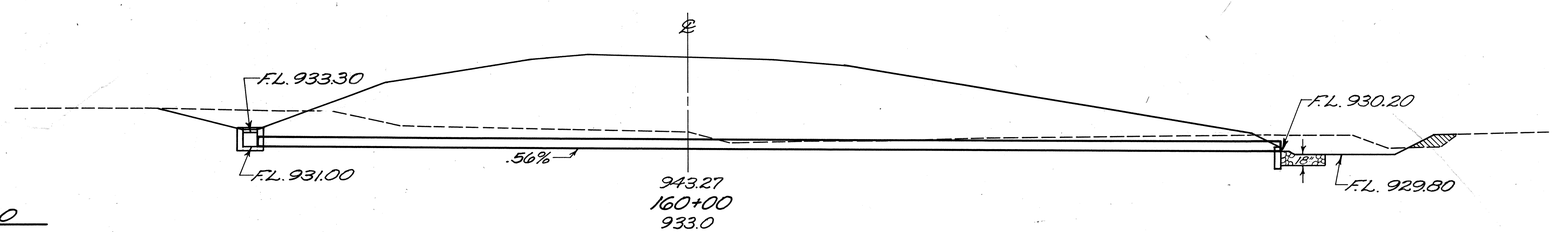
Scale In Feet

0 5 10

## QUANTITIES

| | |
|---|---|
| 21" Conduit, Type B with Class B Bedding, 706.02 Class III or 706.03 | 144 Lin. Ft. |
| Concrete Masonry | 0.36 Cu. Yd. |
| Std. No. 2-2-A Catch Basin | 1 Each |
| Paved Gutter, Type 1-2 (Mod.) | 20 Lin. Ft. |
| Dumped Rock Channel Protection | 2 Cu. Yds. |
| 12" Pipe Removed | 44 Lin. Ft. |

Area : 4 acres
$Q_{25}$ : 17 c.f.s.




DATUM 920

DATUM 920

CROSS SECTION

Scale In Feet

0 5 10

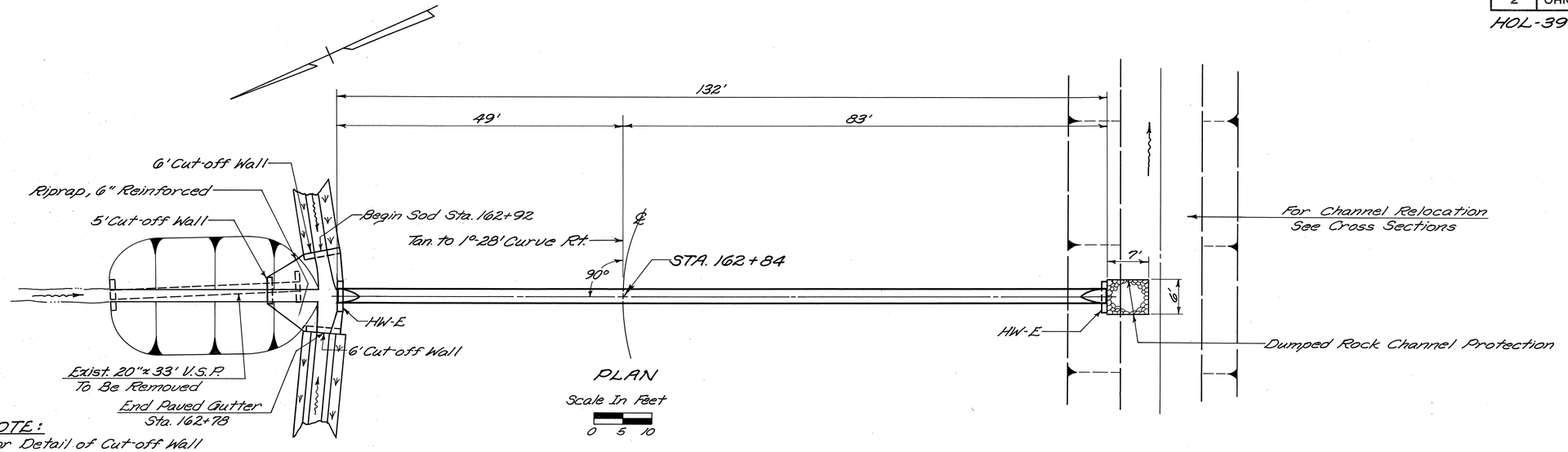
3
S

STA. 160+00
21" x 144' CONDUIT

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

55
70

HOL-39-(13.22-13.62)




PLAN

Scale In Feet

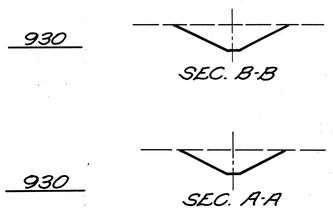
0 5 10

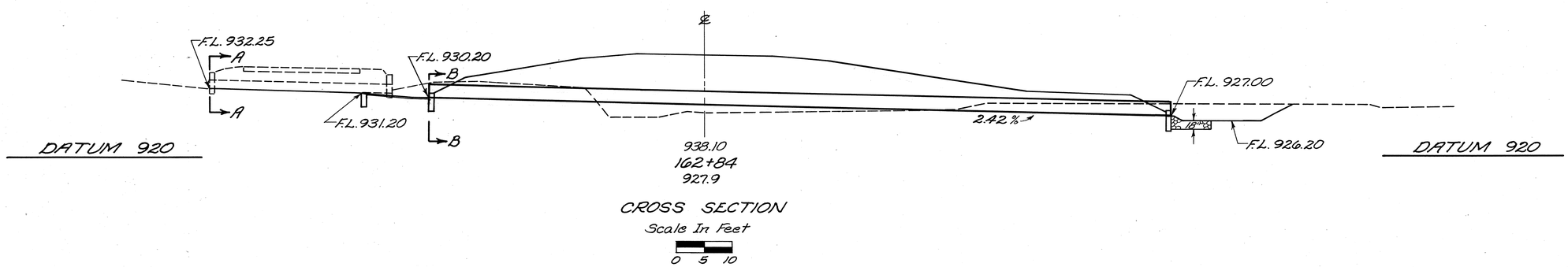
NOTE:
For Detail of Cut-off Wall
See Sheet No. 4

## QUANTITIES

| | |
|---|---|
| 30" Conduit, Type A with Class B Bedding 706.02 or 706.08 | 132 Lin. Ft. |
| Concrete Masonry | 1.02 Cu. Yds. |
| Riprap, 6" Reinforced | 16 Sq. Yds. |
| Dumped Rock Channel Protection | 2 Cu. Yds. |
| Excavation | 46 Cu. Yds. |

Area : 12 acres
$Q_{25}$ : 36 c.f.s.




CROSS SECTION

Scale In Feet

0 5 10

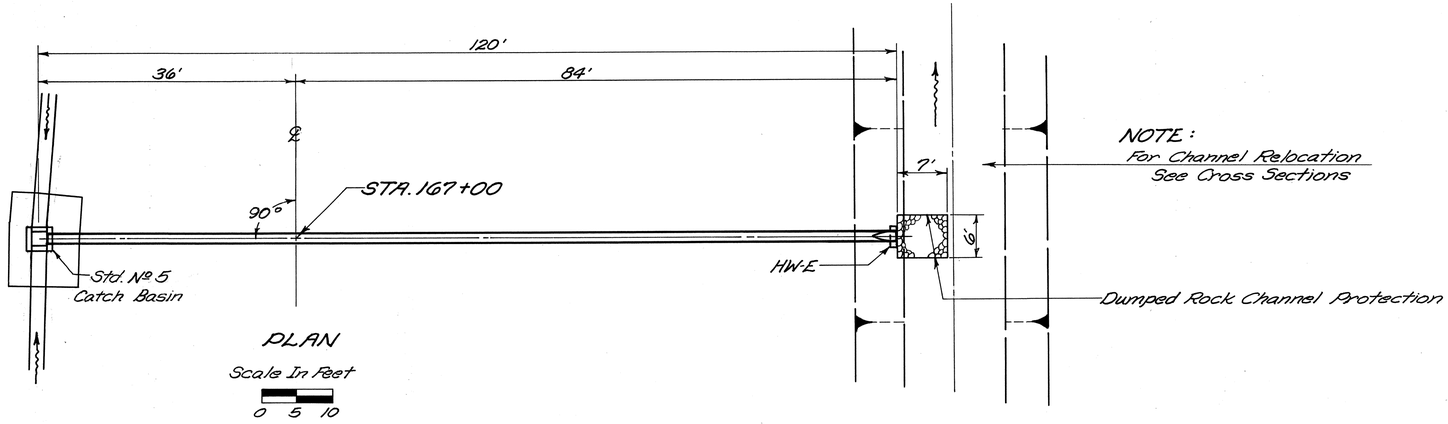
4
S

STA. 162+84
30"x 132' CONDUIT

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

56/70

HOL-39-(13.22-13.62)




PLAN

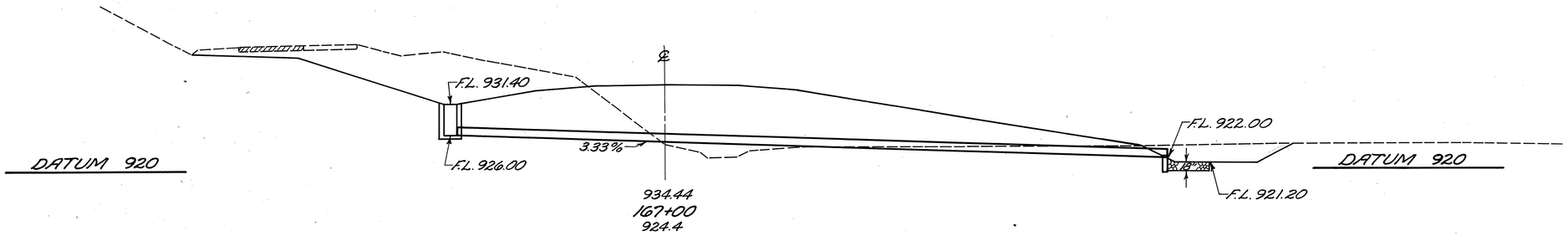
Scale In Feet

0 5 10

## QUANTITIES

| | |
|---|---|
| 18" Conduit, Type B with Class B Bedding | 120 Lin. Ft. |
| Concrete Masonry | 0.30 Cu. Yds. |
| Std No. 5 Catch Basin | 1 Each |
| Dumped Rock Channel Protection | 2 Cu. Yds. |

Area : 4 acres
$Q_{25}$ : 17 c.f.s.




CROSS SECTION

Scale In Feet

0 5 10

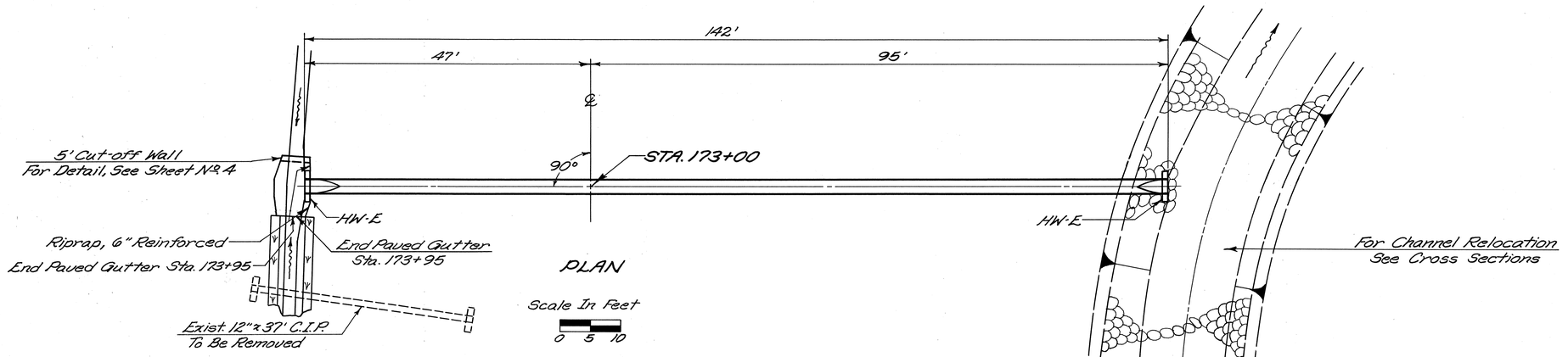
5/5

STA. 167+00
18" x 120' CONDUIT

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

HOL-39-(13.22-13.62)

57
70




PLAN

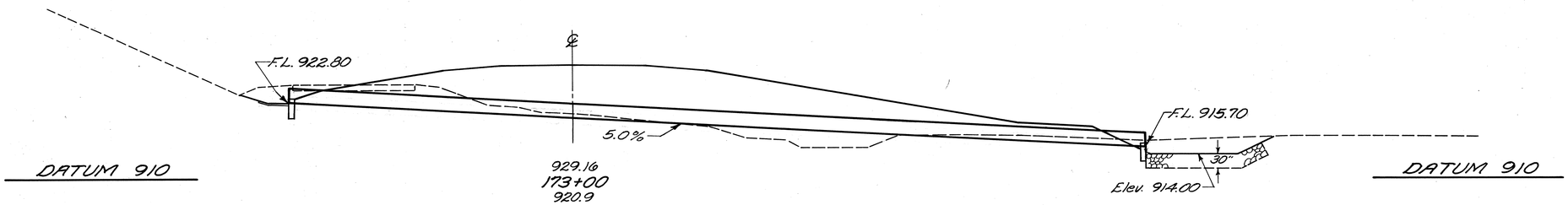
Scale In Feet

0 5 10

## QUANTITIES

| | | |
|---|---|---|
| 30" Conduit, Type A with Class B Bedding, 706.02 or 706.08 | 142 | Lin. Ft. |
| Concrete Masonry | 1.02 | Cu. Yds. |
| 12" Pipe Removed | 37 | Lin. Ft. |
| Riprap, 6" Reinforced | 6 | Sq. Yds. |

Area : 15 acres
$Q_{25}$ : 36 c.f.s.




CROSS SECTION

Scale In Feet

0 5 10

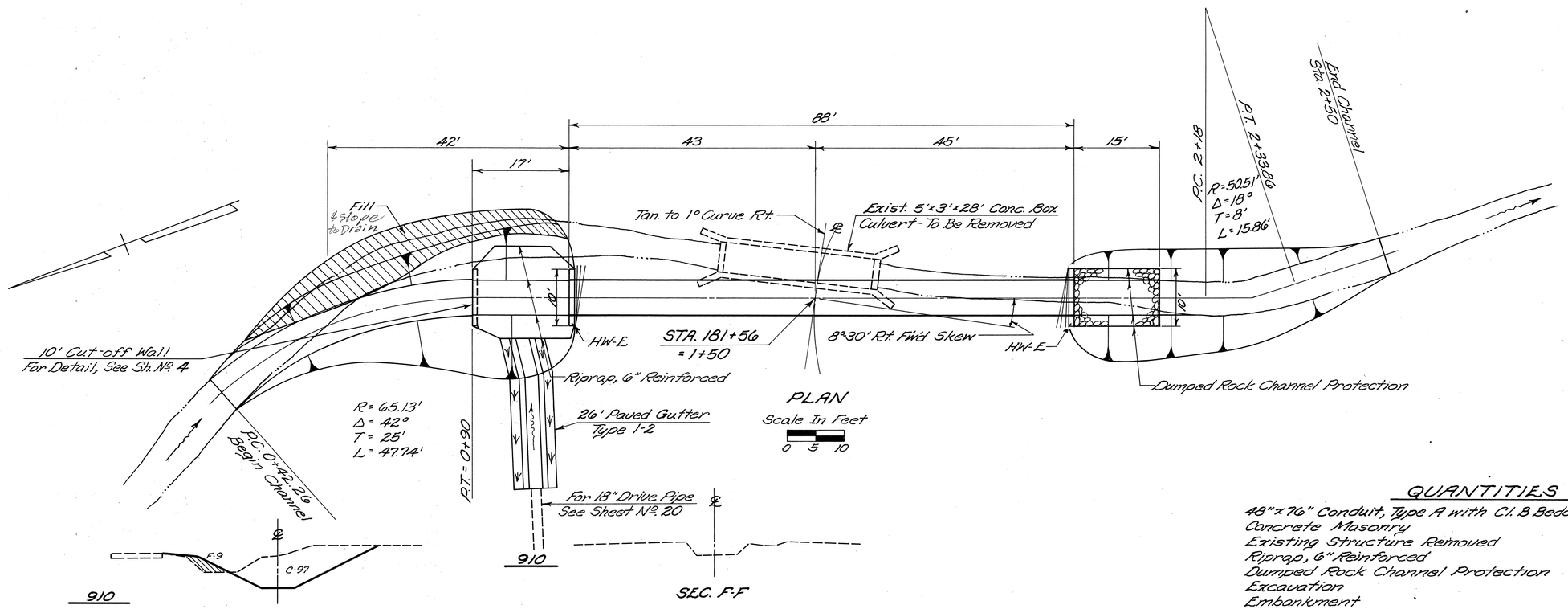
6
S

STA. 173+00
30" x 142' CONDUIT

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

58/70

HOL-39-(13.22-13.62)




## QUANTITIES

| | |
|---|---|
| 48"x76" Conduit, Type A with Cl. B Bedding, 706.04, Cl. HE II | 88 Lin. Ft. |
| Concrete Masonry | 2.62 Cu. Yd. |
| Existing Structure Removed | Lump Sum |
| Riprap, 6" Reinforced | 28 Sq. Yds. |
| Dumped Rock Channel Protection | 14 Cu. Yds. |
| Excavation | 142 Cu. Yds. |
| Embankment | 23 Cu. Yds. |
| Paved Gutter, Type 1-2 | 26 Lin. Ft. |
| Sodding | 9 Sq. Yds. |

Area : 74 acres
$Q_{25}$ : 144 c.f.s.

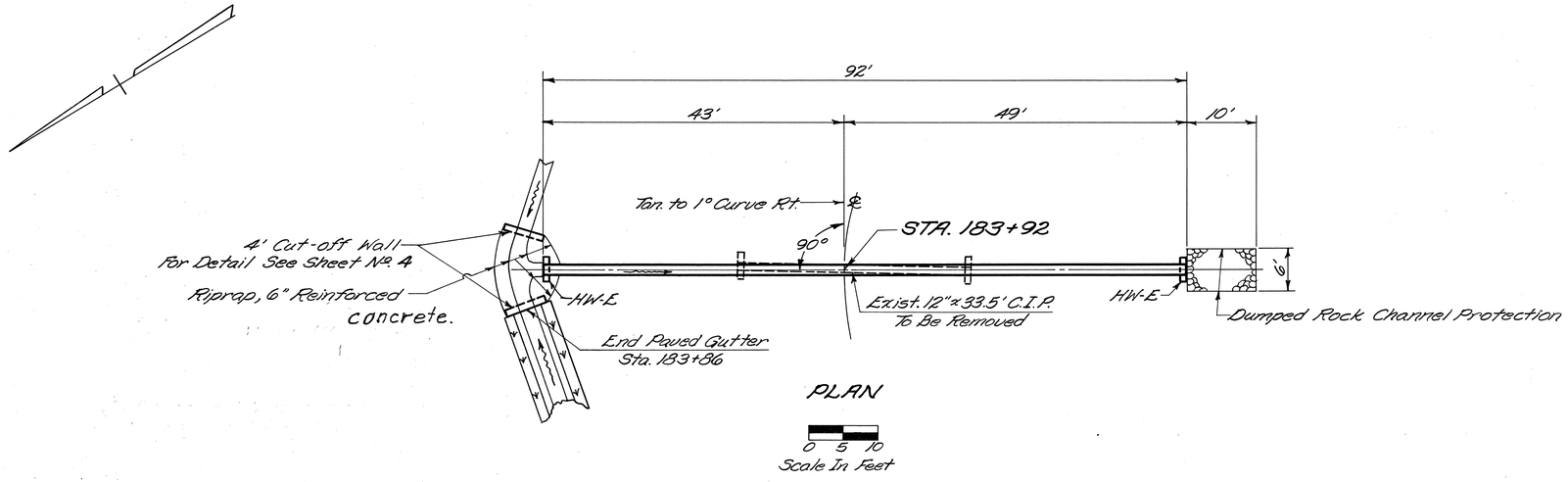
7/S

STA. 181+56
48"x76"x88' CONDUIT

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

59/70

HOL-39-(13.22-13.62)



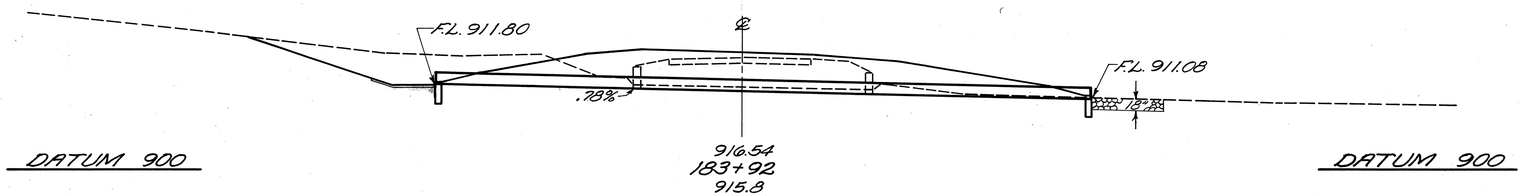

PLAN

0 5 10
Scale In Feet

## QUANTITIES

| | |
|---|---|
| 21" Conduit, Type A with Class B Bedding, 706.02 or 706.08 | 92 Lin. Ft. |
| Concrete Masonry | 0.72 Cu. Yds. |
| Dumped Rock Channel Protection | 3 Cu. Yds. |
| Riprap, 6" Reinforced concrete | 10 Sq. Yds. |

Area : 4 acres
$Q_{25}$ : 17 c.f.s.




CROSS SECTION

0 5 10
Scale In Feet

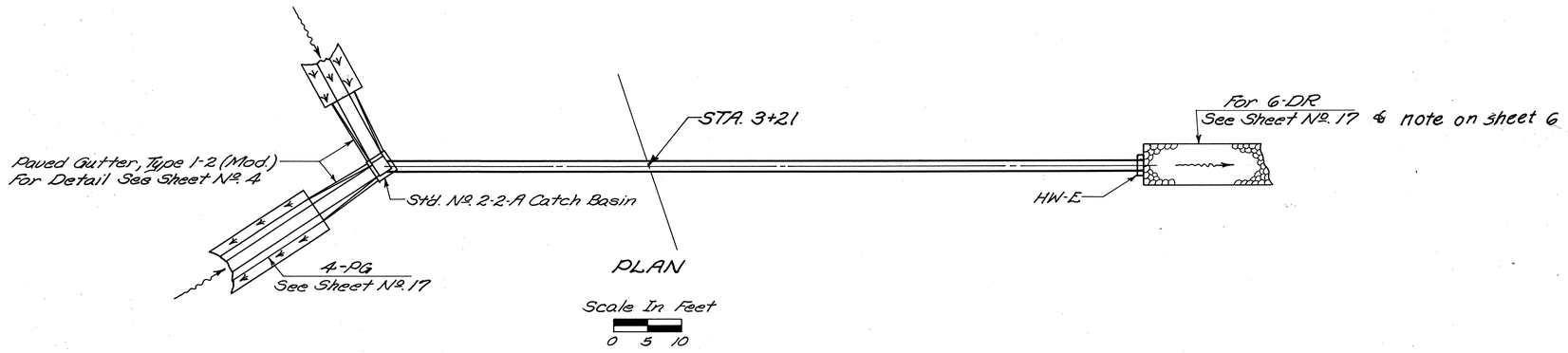
8/S

STA. 183+92
21"x 92' CONDUIT

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

60
70

HOL-39-(13.22-13.62)



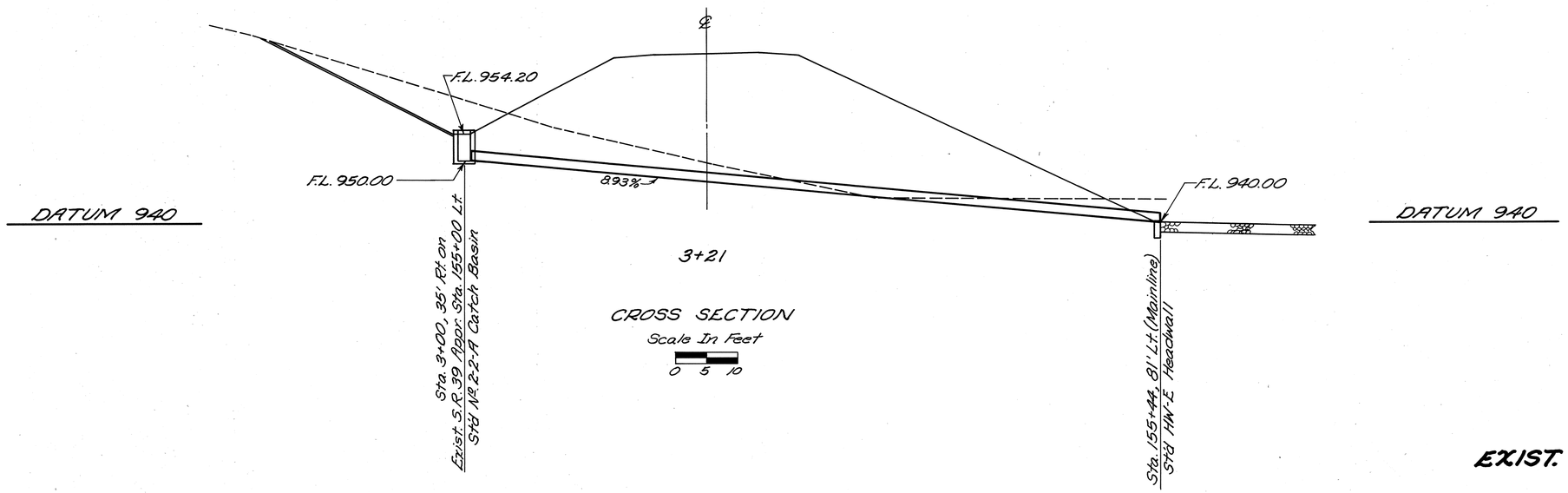

PLAN

Scale In Feet

0 5 10

## QUANTITIES

| | |
|---|---|
| 18" Conduit, Type A with Class "B" Bedding, 707.05 | 112 Lin. Ft. |
| Concrete Masonry | 0.30 Cu. Yd. |
| Paved Gutter, Type 1-2 (Mod.) | 20 Lin. Ft. |
| Std. No. 2-2-A Catch Basin | 1 Each |




CROSS SECTION

Scale In Feet

0 5 10

1
SS

**EXIST. S.R. 39 APPR. STA. 155+00 LT.**
**STA. 3+21**
**18" x 112' CONDUIT**

# CENTER LINE SURVEY PLAT
## STATE ROUTE 39 SEC.(13.22-13.62)
## HOLMES COUNTY, OHIO
MONROE TWP. T-9-N R-8-W-2&3 ; HARDY TWP. T-9-N R-7-W-18, 29, 30, 33&34

2 OHIO

61/70

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

1/10

Scale In Feet 0 400 800

N.

Received for Record _____ 196__
Recorded _____ 196__
Recorded Book _____ Pages _____
Of the Holmes County Records.

County Recorder

LOT 12 | LOT 3 | LOT 34 | LOT 29 | LOT 19

BEGIN PROJECT STA.98+00.00

96+89.00 N 35°54'E 1679.30' Lot Cor. to Lot Cor.

To Nashville

95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 S68°15'E 170 175 180 185 S 35°44'E To Millersburg

S83°45'E

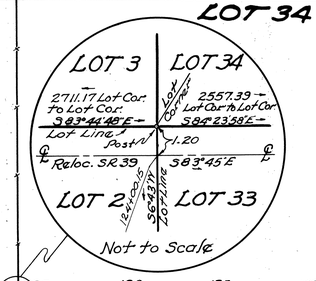
S83°34'13"E (2573.08')

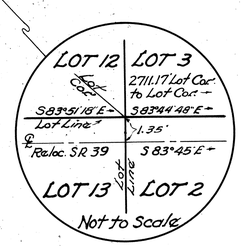
LOT 13 | LOT 2 | LOT 33 | LOT 30 | LOT 18

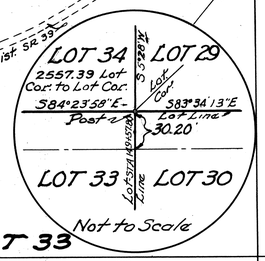
Exist. SR 39

Typ. Rd. 418

Typ. Rd. 416




CURVE DATA
PI-157+40.73
Δ = 15°30' RT.
D = 1°28'
T = 531.65'
L = 1056.82'
E = 36.01'
R = 3906.52'

PC 152+09.08

PT 162+65.90

PC 174+11.03

175+98.72 N 0°35'E 1112.64'

323.30'

PT 184+62.70

END PROJECT
STA.188+38.91 BK=
STA.794+00.00 Ah.

CURVE DATA
PI-179+38.35
Δ = 10°31' RT.
D = 1°00'
T = 527.32'
L = 1051.67'
E = 24.21'
R = 5729.58'

T-9-N R-8-W MONROE TWP.
T-9-N R-7-W HARDY TWP.

| CENTER LINE REFERENCE MONUMENT ASSEMBLIES TO BE SET DURING CONSTRUCTION AT THE FOLLOWING STATIONS | |
|---|---|
| P.O.T. 99+00 | P.O.T. 146+00 |
| P.O.T. 104+00 | P.C. 152+09.08 |
| P.O.T. 110+00 | P.O.C. 157+50 |
| P.O.T. 116+00 | P.T. 162+65.90 |
| P.O.T. 122+00 | P.O.T. 168+00 |
| P.O.T. 128+00 | P.C. 174+11.03 |
| P.O.T. 134+00 | P.O.C. 179+50 |
| P.O.T. 140+00 | P.T. 184+62.70 |

Signed: Levi Kimbrough
Division Deputy Director
Date: 12-18-67

I here by certify that this plat is a true delineation of a survey made for the Ohio Department of Highways in 1967 by the State of Ohio.

Sherman J. Truce
Registered Surveyor

12-18-67
Date

# PROPERTY AND UTILITY PLAN

MONROE TWP. T-9-N-R-8-W-LOTS 2&3; HARDY TWP. T-9-N-R-7-W-LOTS 18, 29, 30, 33&34

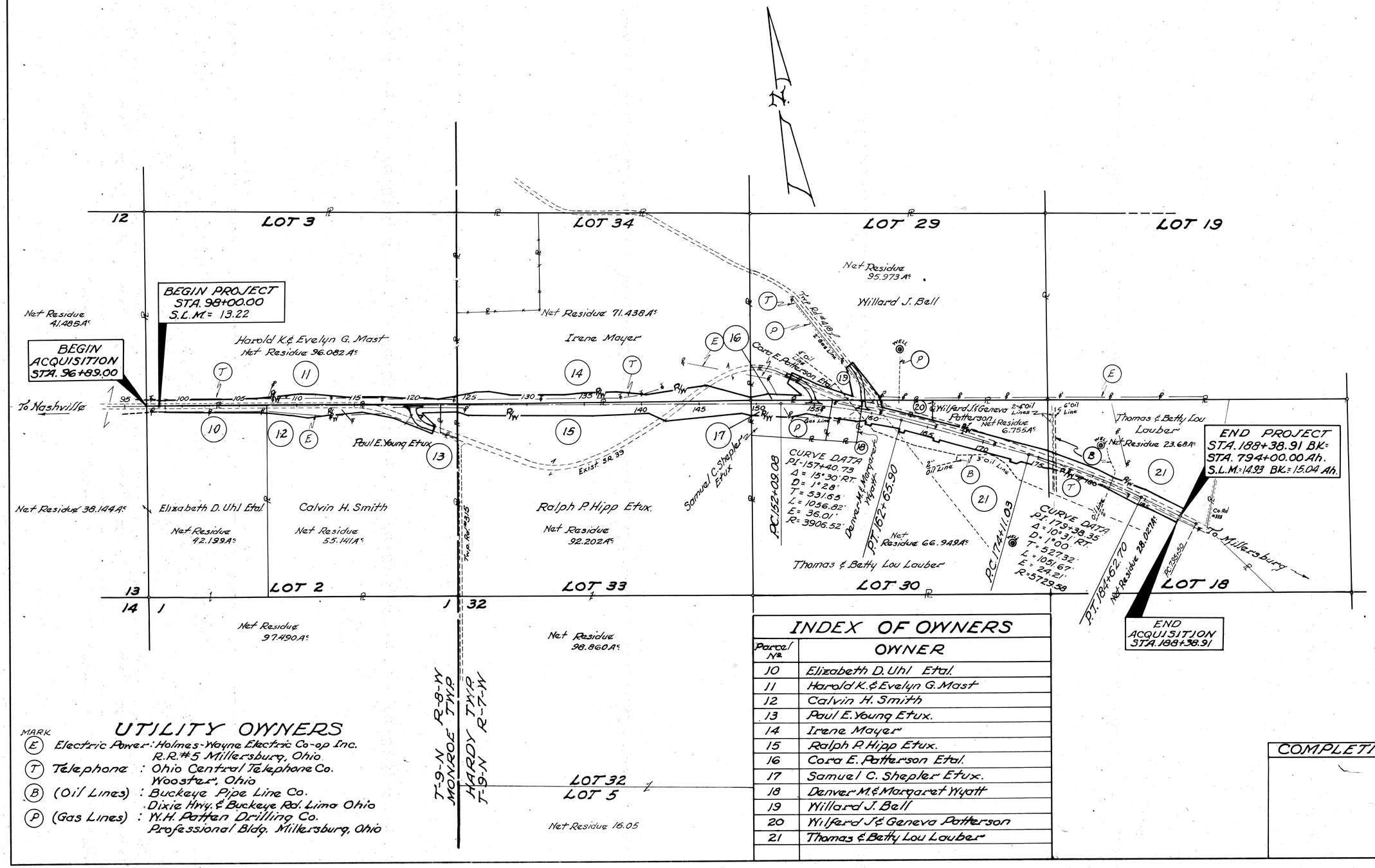
| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

62/70

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

2/10

Scale In Feet 0 400 800




## UTILITY OWNERS

MARK

(E) Electric Power: Holmes-Wayne Electric Co-op Inc. R.R.#5 Millersburg, Ohio

(T) Telephone: Ohio Central Telephone Co. Wooster, Ohio

(B) (Oil Lines): Buckeye Pipe Line Co. Dixie Hwy. & Buckeye Rd. Lima Ohio

(P) (Gas Lines): W.H. Patten Drilling Co. Professional Bldg. Millersburg, Ohio

## INDEX OF OWNERS

| Parcel No. | OWNER |
|---|---|
| 10 | Elizabeth D. Uhl Etal. |
| 11 | Harold K.& Evelyn G. Mast |
| 12 | Calvin H. Smith |
| 13 | Paul E. Young Etux. |
| 14 | Irene Mayer |
| 15 | Ralph P. Hipp Etux. |
| 16 | Cora E. Patterson Etal. |
| 17 | Samuel C. Shepler Etux. |
| 18 | Denver M.& Margaret Wyatt |
| 19 | Willard J. Bell |
| 20 | Wilford J.& Geneva Patterson |
| 21 | Thomas & Betty Lou Lauber |

| COMPLETION DATE: | 12-18-67 |
|---|---|
| | |

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

63/70

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

3/10

TOTAL Nº OF OWNERS - 12 - TOTAL Nº OF OWNERS WITH STRUCTURES - 4 -

# SUMMARY OF RIGHT OF WAY REQUIRED

| PARCEL Nº | OWNER | DEED RECORD BOOK | DEED RECORD PAGE | RECORD ACREAGE | TOTAL P.R.O. | GROSS TAKE | P.R.O. IN TAKE | NET TAKE | NET RESIDUE LEFT | NET RESIDUE RIGHT | BLD'G | SHEET Nº | REMARKS | TYPE FUNDS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | Elizabeth D. Uhl Etal. | 122 | 341 | 43.63 | 0.83 | 1.431 | 0.83 | 0.601 | ~ | 42.199 | ~ | 4 | Pt. Lot #2 | |
| | " " " | 122 | 341 | 43.22 | 1.735 | ~ | ~ | ~ | 41.485 | ~ | ~ | | Pt. Lot #12 | |
| | " " " | 122 | 341 | 40.00 | 1.856 | ~ | ~ | ~ | ~ | 38.144 | ~ | | Pt. Lot #13 | |
| | " " " | 117 | 343 | 100.00 | .51 | ~ | ~ | ~ | ~ | 97.490 | ~ | | Lot #1 | |
| 11 | Harold K. & Evelyn G. Mast | 133 | 271 | 100.00 | 1.47 | 3.917 | 1.47 | 2.447 | 96.083 | ~ | Yes | 4&5 | | |
| 11-WA | " " " | | | | | | | | | | | 5 | To remove Res. | |
| 12 | Calvin H. Smith | 130 | 61 | 59.33 | 2.33 | 3.239 | 1.38 | 1.859 | ~ | 55.141 | Yes | 4&5 | | |
| 12-WA | " " | | | | | | | | | | | 4 | To remove Barn | |
| 13 | Paul E. Young Etux. | 121 | 408 | 0.66* | 0.20 | 0.215 | ~ | 0.215 | ~ | 0.405 | ~ | 5 | *Cal. 0.82 Ac | |
| 13-T | " " " " | 121 | 408 | | | 0.016 | ~ | 0.016 | ~ | ~ | ~ | 5 | To provide additional Working Area | |
| 14 | Irene Mayer | 117 | 491 | 78.00 | 2.59 | 4.912 | 0.29 | 4.622 | 71.438 | ~ | ~ | 5,6&7 | Residue includes 0.65 Ac P.R.O. Vacated Rdwy. | |
| 14-WA | " " | | | | | | | | | | | 7 | To build drive | |
| 15 | Ralph P. Hipp Etux. | 117 | 547 | 100.00 | 4.33 | 6.568 | 0.34 | 6.228 | ~ | 92.202 | ~ | 5,6&7 | Residue includes 2.76 Ac P.R.O. Vacated Rdwy. | |
| 15-X | " " " | 117 | 547 | 100.00 | ~ | 0.119 | ~ | 0.119 | ~ | ~ | ~ | 7 | | |
| | " " " | 117 | 547 | 100.00 | 1.14 | ~ | ~ | ~ | ~ | 98.86 | ~ | | Lot #32 | |
| | " " " | 117 | 547 | 18.05 | 2.00 | ~ | ~ | ~ | ~ | 16.05 | ~ | | Pt. Lot #5 | |
| 16 | Cora E. Patterson Etal. | 98 | 567 | 1.00* | 0.60 | 1.025 | 0.32 | 0.705 | 1.409 | ~ | ~ | 7&8 | Deed Area Cal.* To be 2.434 Ac) Residue incl. 0.28 Ac P.R.O. Vacated Rdwy. | |
| 17 | Samuel C. Shepler Etux. | 119 | 189 | 5.00 | ~ | 2.150 | ~ | 2.150 | ~ | 2.850 | Yes | 7&8 | | |
| 17-WA | " " " | | | | | | | | | | | 8 | To build Drive | |
| 18 | Denver M. & Margaret Wyatt | 157 | 531 | 2.00* | 0.15 | 0.972 | 0.15 | 0.822 | ~ | 1.097 | ~ | 8 | *Deed Area Cal to be 2.069 Ac | |
| 18-X | " " " | 157 | 531 | ~ | | 0.008 | ~ | 0.008 | ~ | ~ | ~ | 8 | | |
| 18-WA | " " " | | | | | | | | | | | 8 | To build Drive | |
| 19 | Willard J. Bell | 112 | 556 | 99.00 | 2.83 | 1.347 | 0.89 | 0.457 | 95.973 | ~ | ~ | 7&8 | Residue includes 0.26 Ac P.R.O. Vacated Rdwy. | |
| 20 | Wilferd J. Geneva Patterson | 134 | 295 | 1.00* | 0.359 | 0.060 | 0.059 | 0.001 | 1.128 | ~ | ~ | 8 | *Deed Area Cal. To be 1.188 Ac) Residue incl. 0.30 Ac P.R.O. Vacated Rdwy. | |
| 20-X | " " " | 134 | 295 | 1.00* | ~ | 0.013 | ~ | 0.013 | ~ | ~ | ~ | 8 | | |
| 21 | Thomas & Betty Lou Lauber | 143 | 242 | 79.9 | 2.05 | 6.196 | 1.98 | 4.216 | 6.755 | 66.949 | ~ | 8&9 | Residue includes 0.07 Ac P.R.O. Vacated Rdwy (Lt.) | |
| 21 | " " " | 143 | 242 | 57.09 | 3.570 | 3.623 | 1.81 | 1.813 | 23.68 | 28.027 | Yes | 9&10 | Pt. Lot 18 (Pt. Lot 30) | |
| 21-Y | " " " | 143 | 242 | 57.09 | ~ | 0.105 | ~ | 0.105 | ~ | ~ | ~ | 9 | | |
| 21-Z | " " " | 143 | 242 | 57.09 | ~ | 0.087 | ~ | 0.087 | ~ | ~ | ~ | 9 | | |
| 21-WA | " " " | | | | | | | | | | | 9 | To build Drive | |
| 21-WA1 | " " " | | | | | | | | | | | 9 | To build Drive | |
| 21-X | " " " | 143 | 242 | 79.9 | ~ | 1.710 | ~ | 1.710 | ~ | ~ | ~ | 8&9 | | |

Note: NET RESIDUE = Deed Area - Total P.R.O. - Net Take + Vacated Rdwy (If Noted)

| COMPLETION DATE: | 12-18-67 |
|---|---|
| | |

# MONROE TWP. LOTS 2 & 3
## 1ST. QR. T-9-N R-8-W

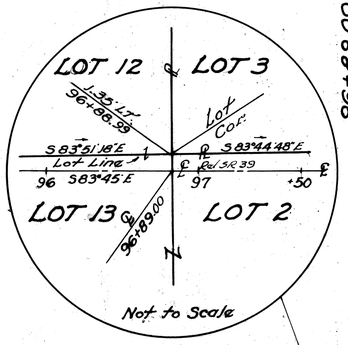
Scale In Feet 0 50 100

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

64/70

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

4/10




96+89.00 ℄ LOT 12 LOT 3 N 5°54' E

Septic Tank

Harold K. & Evelyn G. Mast

BEGIN ACQUISITION STA. 96+89.00

96+88.65 57.31' Lt.

98+50 55' Lt.

Exist. R/W

96+89.39 1.35' Lt.

R/W

11

104+50 60' Lt.

Wood

Gambrel

1 sty. Stone Res.

Conc. Walk

Gar. Shed

100±

106+50 50' Lt.

(Strip) Rel. to ℄

Const. Limits

Wood

107+40.65 12.9' Lt.

STA 110+00

MATCH LINE SH. No 5

95 96 To Nashville 97 98 99 100 ℄ 101 Exist. SR 39 102 S 83°45' E 103 104 LOT LINE ℄ 105 S 83°44'48" E 106 107 108 ℄ 109

Lot 3

Lot 2

Exist. R/W ℄

Const. Limits ℄

Exist. R/W Line ℄

R/W

R/W ACQUIRED UNDER HOL-39-11.64

96+89.32 51.61' Rt.

98+00 43.61' Rt.

98+00 50' Rt.

BEGIN PROJECT STA. 98+00

10

102+00 60' Rt.

104+00 55' Rt.

12

107+40.83 75' Rt.

108+65 77.97' Rt.

108+65 140' Rt.

109+30 19.52' Lt.

109+30 80' Rt.

109+30 140' Rt.

12" Vit. C.M.P.

Barn (12-WA)

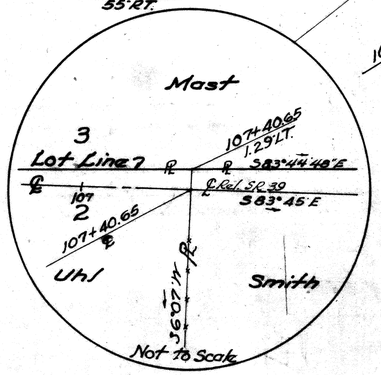
Const. Cor.

Concr. Cor.

Lot 13

Lot 2

Elizabeth D. Uhl Etal.




107+40.65 S 6°07' W

Calvin H. Smith

| COMPLETION DATE:- | 12-15-67 |
|---|---|
| | |

# MONROE TWP. LOTS 2 & 3
## 1ST. QR. T-9-N R-8-W
# HARDY TWP. LOTS 33 & 34
## 2ND. QR. T-9-N R-7-W

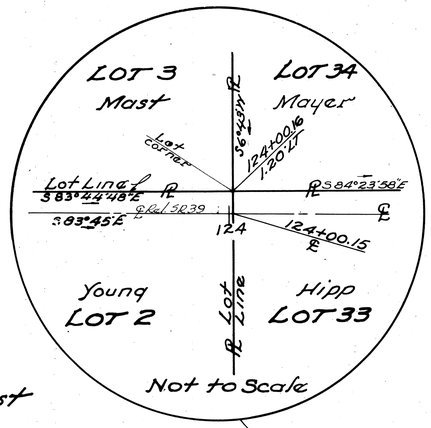
Scale In Feet 0 50 100

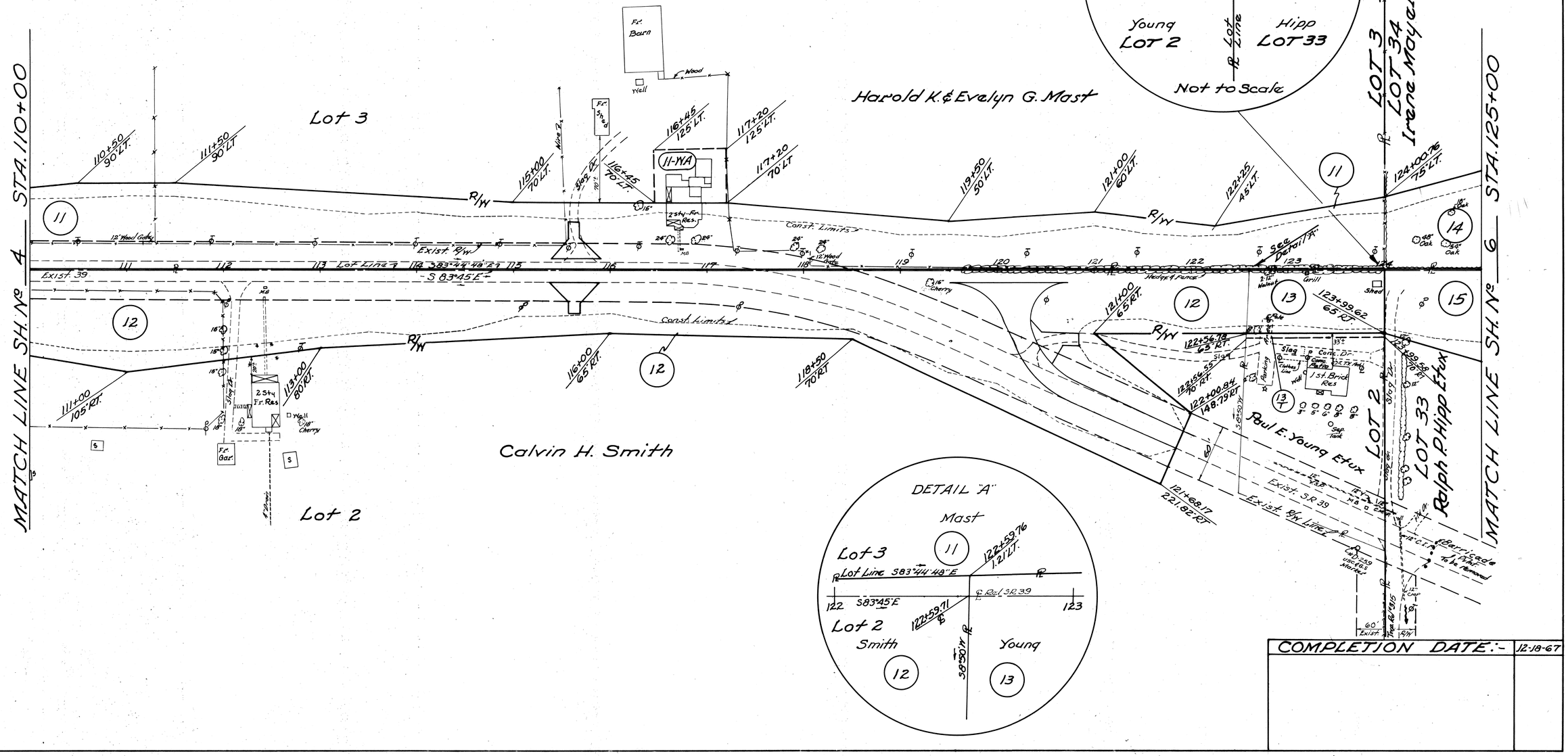
| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

65/70

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

5/10







COMPLETION DATE:- 12-18-67

# HARDY TWP. LOTS 33 & 34
## 2ND. QR. T-9-N R-7-W

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

66/70

6/10

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

0 50 100
Scale In Feet

N

Lot 34

Irene Mayer

STA. 125+00

125+50 115' LT.

126+50 115' LT.

128+50 80' LT.

133+00 80' LT.

135+00 100' LT.

138+00 105' LT.

STA. 140+00

R/W

Const. Limits

40" Oak
24" Oak
Wooded Area
30" Oak
14" Oak
12" Oak
14" Oak
22" Oak
12" Oak

14

Lot Line ( S 84° 23' 58" E )

126 127 128 129 130 131 132 133 134 135 136 137 138 139

S 83° 45' E

15

Const. Limits

R/W

125+00 95' RT.

195+50 95' RT.

MATCH LINE SH. No 5

MATCH LINE SH. No 7

Ralph P. Hipp Etux

Lot 33

Exist. R/W

Exist. S.R. 39

Exist. R/W

30'

30'

Part To be removed

Exist. R/W

Exist. S.R. 39

Part To be removed

Exist. R/W

| COMPLETION DATE:- | 12-18-67 |
|---|---|
| | |

# HARDY TWP. LOTS 29, 30, 33 & 34
## 2ND. QR. T-9-N R-7-W

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

61/70

7/10

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

Scale In Feet 0 50 100

N

MATCH LINE SH. Nº 6 STA. 140+00

STA. 155+00 MATCH LINE SH. Nº 8

Irene Mayer LOT 34 LOT 29 Willard J. Bell

Irene Mayer

Wooded Area

Wooded Area

Exist. R/W

Exist. S.R. 39

60'

Pavmt. to be Removed

Conc. Box Cul.

18" C.M.P.

Drive

Fld. Dr.

2 STY. Fr. Res.

1 STY. Fr. Res.

Fr. Ch. Nsa

Cora E. Patterson Etal

R/W

ABANDONED

PAVMT. TO BE REMOVED

Prop. 60" Pipe Cul.

Const. Limits

Lot Line 33 34

S 84°23'58"E

S 83°45'E

LOT LINE S 83°34'13"E

S 55°28'W

Ralph P. Hipp Etux LOT 33 LOT 30 Samuel C. Shepler Etux

Ralph P. Hipp Etux

Samuel C. Shepler Etux

Thomas & Betty Lou Lauber

P.C. 152+09.08

R. 1348.14'

L.R.

Pavmt. to be removed

Wooded Area

Area

14 WA

14

15

15-X

16

17

19

140+50 70'LT.

142+50 135'LT.

142+50 106'LT.

143+00 135'LT.

143+00 115'LT.

145+50 160'LT.

149+56.98 60'LT.

149+57.89 30.20'LT.

149+57.80 ℄

151+00 80'LT.

153+11.02 170.55'LT.

153+25 210'LT.

153+00 140'LT.

154+00 80'LT.

155+00 170'LT.

155+00 143'LT.

140+50 75'RT.

142+00 140'RT.

142+50 134.00'RT.

143+00 180'RT.

144+50 110'RT.

148+50 80'RT.

149+59.30 110'RT.

153+00 110'RT.

154+50 65'RT.

CURVE DATA
P.I. 157+40.73
Δ = 15°30' RT.
D = 1°28'
R = 3906.52'
T = 531.65'
L = 1056.82'
E = 36.01'

| COMPLETION DATE:- | 12-18-67 |
|---|---|
| | |

# HARDY TWP. LOTS 29 & 30
## 2ND. QR. T-9-N R-7-W

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

68/70 — 8/10

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

Scale In Feet
0 50 100

N

Lot 29
Willard J. Bell
Thomas & Betty Lou Lauber
Lot 30

Willard J. Bell

Willard J. Bell

Wilferd J. & Geneva Patterson

Thomas & Betty Lou Lauber

Denver M. & Margaret Wyatt

Samuel C. Shepler Etux

STA. 155+00

MATCH LINE SH. No 7

MATCH LINE SH. No 9

STA. 170+00

Exist. St. R/W

Twp. Rd. #418

Const. Limits

R/W

Sealed Water Well 8" Casing

Sealed Oil Well 10" Casing

4" Oil Line

2" Gas Line

Prop. 144" Pipe Cul.

Prop. 21" Pipe Cul.

Prop. 30" Pipe Cul.

Prop. 18" Pipe Cul.

Exist. R/W

Pavement Removal Limits

Slope Limits

Toe of Slope

Coms Run

Septic Tank

Water Gar

Drip Tank

Hut (Water)

1½ Sty Shingle Res.

1½ Sty Fr. Res

Fr. Gar

Fr. Shed

Gas Mkr

Gas Vlv

Gas Line

Water Line

Catch Basin

Curve Data
P.I. - 157+40.73
Δ = 15°30' RT.
D = 1°28'
R = 3906.52'
T = 531.65'
L = 1056.82'
E = 36.01'

| COMPLETION DATE:- | 12-18-67 |
|---|---|
| | |

# HARDY TWP. LOTS 18 & 30
## 2ND. QR. T-9-N R-7-W

Scale In Feet 0 50 100

| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

69/70

9/10

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

Willard J. Bell
Lot 29
Lot 30
Thomas & Betty Lou Lauber

Thomas & Betty Lou Lauber

Lot 18

STA. 170+00

MATCH LINE SH. No. 8

STA. 185+00

MATCH LINE SH. No. 10

175+98.72
S 5° 35' W

175+71.26
85.64 Lt.

171+50
85 Lt.

Permit Removal Line 1 Exist. R/W

Exist. S.R. 39 slope Lines

Exist. R/W

Prop. 30" Pipe Cul.

Bench

Const. Limits

Encased

Exist. R/W

Prop. 48" RCP Pipe Cul.

Prop. 24" Pipe Cul.

Exist. R/W

S 68° 15' E +

Corns

Fld. Dr.

Work Limits

3" Oil Line

2-4" Oil Lines

6" Oil Line

2" Oil Line

Pic. Path No. 3

Barn

Barn

1½ Sty. Brick Res.

Fr.

Lot 30

Lot 18
Lot 30

Thomas & Betty Lou Lauber

172+75 75 Rt.
172+75 100 Rt.
172+50 125 Rt.
173+25 100 Rt.
173+50 75 Rt.
173+75 130 Rt.
174+00 150 Rt.
174+25 120 Rt.
174+50 80 Rt.
176+22.70 72.62 Rt.
178+50 55 Rt.
180+00 65 Lt.
180+80 75 Lt.
180+80 57.46 Lt.
181+10 110 Lt.
181+40 75 Lt.
181+40 54.33 Lt.
181+75 110 Lt.
181+75 50 Lt.
181+00 55 Rt.
181+50 120 Rt.
182+50 64.25 Rt.
184+00 70 Lt.
184+00 70 Rt.
P.T. 184+62.70

21 WA
21 WA:1
21 X
21 Y
21 N
21

CURVE DATA
P.I.-179+38.35
Δ = 10° 31' Rt.
D = 1° 00'
R = 5729.58'
T = 527.32'
L = 1051.67'
E = 24.21'

| COMPLETION DATE:- | 12-18-67 |
|---|---|
| | |

# HARDY TWP. LOT 18
## 2ND QR. T-9-N R-7-W

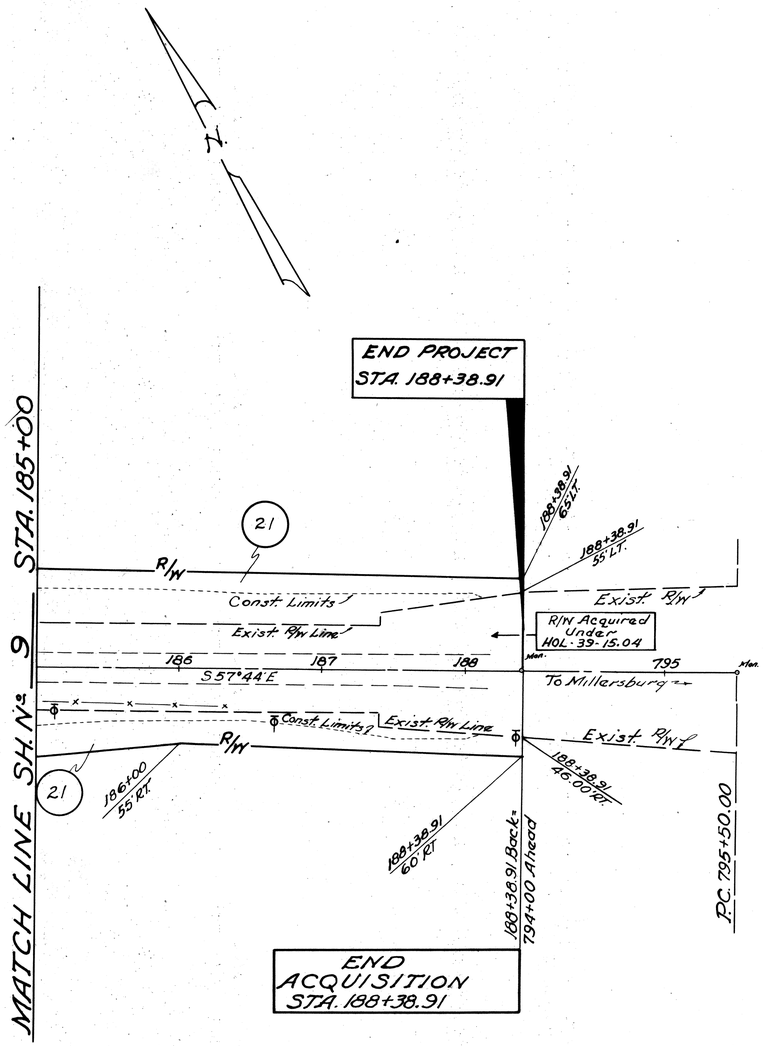
| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

70/70

HOL-39-(13.22-13.62)
RIGHT OF WAY PLAN

10/10

0 50 100
Scale In Feet




| COMPLETION DATE:- | 12-18-67 |
|---|---|
| | |

# SOIL PROFILE

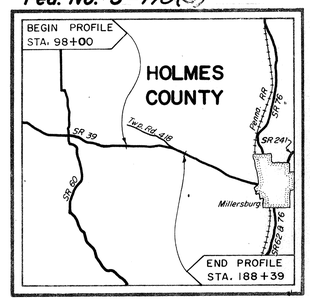
**HOLMES COUNTY**
**HOL – 39 – (13.22 – 1.362)**

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

1/5

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA AND IT IS NOT TO BE CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.

**Fed. No. S-170(5)**




LOCATION MAP

Recon – J.F.S. – 6/15/67.
Drilling – Auger – L.M.D. – 8/11/67 to 8/18/67.
Drilling – Core – W.F.H. – 8/23/67 to 8/29/67.
Drafting – C.L.I. – 10/19/67.

## GENERAL INFORMATION

### INTRODUCTION

THE PROJECT CONSISTS OF THE ALIGNMENT AND GRADE IMPROVEMENT OF 1.71 MILES OF SR 39, BEGINNING AT EXISTING SR 39, APPROXIMATELY 4 MILES WEST OF MILLERSBURG, EXTENDING EASTWARD AND TERMINATING ON EXISTING SR 39, APPROXIMATELY 2.3 MILES WEST OF MILLERSBURG.

PROPOSED GRADE INDICATES MAXIMUM PROPOSED 32-FOOT CUTS AND 42-FOOT FILL EMBANKMENTS.

### GEOLOGY OF THE PROJECT

THE ALIGNMENT TRAVERSES A DISSECTED PORTION OF THE GLACIATED ALLEGHENY PLATEAU, IN AN AREA WHERE MODERATELY DEEP TO THIN GLACIAL DERIVED SOILS OVERLIE SHALE, SANDSTONE, AND COAL, OF PENNSYLVANIAN AGE.

### EXPLORATION

EXPLORATORY BORINGS WERE MADE BY MEANS OF TRUCK-MOUNTED MECHANICAL SOIL AUGER, HAND AUGER (IN AREAS OF DIFFICULT ACCESS), AND ROTARY-TYPE DRILL RIG, BETWEEN AUGUST 11 AND 29, 1967.

### INVESTIGATIONAL FINDINGS

MATERIALS ENCOUNTERED IMMEDIATELY BELOW PROPOSED GRADE ARE PREDOMINANTLY COMPRISED OF SANDY SILTS (A-4a) AND SILT CLAYS (A-6a), GENERALLY HAVING MOISTURE CONTENTS IN THE LOWER PORTIONS OF THE PLASTIC RANGE, AS WELL AS SHALE AND SANDSTONE BEDROCK.

BEDROCK IS ANTICIPATED IN THE FOLLOWING EXCAVATION AREAS:

BETWEEN STATIONS 123+50 AND 129+50 - SHALE AT GRADE AND IN THE DITCHES AND BACKSLOPES.

BETWEEN STATIONS 128+50 AND 131+00 - SHALE AT GRADE AND IN THE DITCHES.

BETWEEN STATIONS 131+00 AND 140+00 - SANDSTONE AT GRADE AND IN THE DITCHES AND BACKSLOPES.

IN THE EMBANKMENT FOUNDATION AREAS, MATERIALS ARE PREDOMINANTLY COMPRISED OF SANDY SILTS (A-4a), WITH SOME SANDY GRAVELS (A-1-b AND A-2-4) AND SILT CLAYS (A-6a), GENERALLY HAVING LOW MOISTURE CONTENTS AND MOISTURE CONTENTS IN THE LOWER PORTIONS OF THE PLASTIC RANGE.

WET MATERIALS WERE ENCOUNTERED AT STATIONS 158+25, 160+50, AND 175+00.

## LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS — 115 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 | 55 | 16 | 14 | 11 | 4 | NP | NP | 13 | 1 |
| GRAVEL OR STONE FRAGMENTS WITH SAND | A-1-b(0) | A-1-b | 55 | 9 | 15 | 14 | 7 | NP | NP | 13 | 8 |
| GRAVEL OR STONE FRAGMENTS WITH SAND AND SILT | A-2-4(0) | A-2-4 | 40 | 13 | 18 | 17 | 12 | 25 | 5 | 15 | 13 |
| SANDY SILT | A-4(3) | A-4a | 26 | 7 | 17 | 31 | 19 | 25 | 6 | 13 | 62 |
| SILT | A-4(8) | A-4b | 7 | 3 | 10 | 59 | 21 | 28 | 3 | 18 | 4 |
| ELASTIC SILT AND CLAY | A-5(8) | A-5 | 17 | 1 | 8 | 39 | 35 | 41 | 8 | 28 | 1 |
| SILT AND CLAY | A-6(7) | A-6a | 20 | 4 | 9 | 35 | 32 | 33 | 12 | 16 | 15 |
| CLAY | A-7-6(8) | A-7-6 | 28 | 4 | 5 | 24 | 39 | 42 | 14 | 15 | 1 |
| WEATHERED SHALE | | | | VISUAL CLASSIFICATION | | | | | | | 6 |
| WEATHERED SANDSTONE | | | | VISUAL CLASSIFICATION | | | | | | | 4 |
| SHALE | | | | VISUAL CLASSIFICATION | | | | | | | - |
| SANDSTONE | | | | VISUAL CLASSIFICATION | | | | | | | - |
| VARIOUS OTHER MATERIALS | | | | VISUAL CLASSIFICATION | | | | | | | - |

- AUGER BORING-PLAN VIEW.
- DRIVE SAMPLE AND/OR CORE BORING-PLAN VIEW.
- AUGER BORING PLOTTED TO VERTICAL SCALE ONLY.
- DRIVE SAMPLE AND/OR CORE BORING PLOTTED TO VERTICAL SCALE ONLY.

NOTE: FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PERCENT. E.G. 15

- ● WATER CONTENT NEARLY EQUAL TO OR GREATER THAN LIQUID LIMIT.
- ⊖ INDICATES A NON-PLASTIC MATERIAL WITH A HIGH WATER CONTENT.
- ——W FREE WATER.
- (X/Y) NUMBER OF BLOWS FOR "STANDARD PENETRATION" TEST. X=NUMBER OF BLOWS FOR FIRST 6 INCHES. Y=NUMBER OF BLOWS FOR SECOND 6 INCHES.

## SUMMARY OF SOIL TEST DATA

NOTE: NP SHOWN IN LIQUID LIMIT AND PLASTICITY INDEX COLUMNS INDICATES THAT THE MATERIAL IS NON-PLASTIC.
*DENOTES TEST SAMPLE TAKEN AT OR NEAR GRADE.

| STATION & OFFSET | DEPTH FROM | DEPTH TO | % AGG. | % C.S. | % F.S. | % SILT | % CLAY | L.L. | P.I. | % W.C. | SHTL CLASS. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 98+00 20'Lt | 0.0 | 5.0 | 29 | 2 | 3 | 23 | 43 | 39 | 13 | 14 | A-6a |
| | 5.0 | 10.0 | 12 | 0 | 2 | 49 | 37 | 33 | 11 | 13 | A-6a |
| 102+00 20'Lt | 0.0 | 5.0 | 10 | 6 | 19 | 36 | 29 | 23 | 6 | 12 | A-4a |
| | 5.0 | 10.0 | 4 | 5 | 22 | 45 | 24 | 22 | 4 | 14 | A-4a |
| | 10.0 | 11.5 | 9 | 4 | 6 | 31 | 50 | 34 | 11 | 18 | A-6a |
| 106+00 20'Lt | 0.0 | 4.0 | (23 GRAY WEATHERED SHALE | 3 | 10 | 40 | 24 | 30 | 7 | 9) | VISUAL |
| | 4.0 | 8.5 | (50 GRAY WEATHERED SHALE | 6 | 8 | 23 | 13 | 31 | 9 | 6) | VISUAL |
| 111+00 45'Lt | 0.0 | 5.0 | 0 | 1 | 3 | 44 | 52 | 39 | 11 | 21 | A-6a |
| | 5.0 | 9.0 | 14 | 6 | 20 | 37 | 23 | 26 | 6 | 17 | A-4a |
| | 9.0 | 11.0 | 23 | 10 | 19 | 29 | 19 | 25 | 7 | 17 | A-4a |
| | 11.0 | 14.0 | (45 GRAY WEATHERED SHALE | 2 | 6 | 31 | 16 | NP | NP | 15) | VISUAL |
| | 14.0 | 18.0 | (33 GRAY WEATHERED SHALE | 3 | 5 | 35 | 24 | 32 | 10 | 16) | VISUAL |
| 111+00 45'Rt | 0.0 | 6.0 | 0 | 1 | 3 | 56 | 40 | 40 | 14 | 27 | A-6a |
| | 6.0 | 11.0 | 15 | 6 | 25 | 37 | 17 | NP | NP | 18 | A-4a |
| | 11.0 | 14.0 | (28 GRAY WEATHERED SHALE | 2 | 4 | 40 | 26 | 31 | 7 | 10) | VISUAL |
| 117+00 20'Rt | 0.0 | 2.0 | 28 | 3 | 12 | 33 | 24 | 25 | 9 | 12 | A-4a |
| | 2.0 | 7.0 | 9 | 1 | 5 | 48 | 37 | 31 | 11 | 11 | A-6a |
| | 7.0 | 8.5 | (64 GRAY WEATHERED SHALE | 1 | 3 | 20 | 12 | 27 | 6 | 6) | VISUAL |
| 121+00 35'Lt | 0.0 | 5.0 | 19 | 4 | 10 | 44 | 23 | 28 | 7 | 17 | A-4a |
| | 5.0 | 10.0 | 27 | 4 | 7 | 38 | 24 | 30 | 7 | 13 | A-4a |
| | 10.0 | 15.0 | 43 | 7 | 6 | 27 | 17 | 32 | 10 | 11 | A-4a |
| 123+00 8'Lt* | 0.0 | 4.5 | 32 | 2 | 5 | 45 | 16 | 31 | 9 | 8 | A-4a |
| 127+00 CL | 0.0 | 6.0 | 38 | 6 | 8 | 31 | 17 | 29 | 9 | 6 | A-4a |
| 130+00 CL | 0.0 | 4.0 | 36 | 6 | 7 | 30 | 21 | 33 | 11 | 9 | A-6a |
| | 4.0 | 7.5 | 38 | 4 | 5 | 30 | 23 | 37 | 11 | 11 | A-6a |

| STATION & OFFSET | DEPTH FROM | DEPTH TO | % AGG. | % C.S. | % F.S. | % SILT | % CLAY | L.L. | P.I. | % W.C. | SHTL CLASS. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 134+00 10'Lt | 0.0 | 5.0 | 28 | 4 | 5 | 24 | 39 | 42 | 14 | 15 | A-7-6 |
| | 5.0 | 10.0 | 23 | 8 | 19 | 30 | 20 | 25 | 8 | 13 | A-4a |
| | 10.0 | 11.5 | 33 BLACK COAL AND BROKEN SHALE | 21 | 15 | 17 | 14 | NP | NP | 11) | VISUAL |
| 138+00 60'Lt | 0.0 | 4.0 | 13 | 6 | 14 | 39 | 23 | 28 | 10 | 12 | A-4a |
| | 4.0 | 7.0 | 22 | 6 | 17 | 29 | 26 | 23 | 6 | 11 | A-4a |
| | 7.0 | 9.0 | 17 | 1 | 8 | 39 | 35 | 41 | 8 | 28 | A-5 |
| | 9.0 | 14.0 | (12 BROWN WEATHERED SANDSTONE | 7 | 67 | - 14 - | | NP | NP | 7) | VISUAL |
| | 14.0 | 20.0 | (12 BROWN WEATHERED SANDSTONE | 12 | 54 | 10 | 12 | NP | NP | 13) | VISUAL |
| | 20.0 | 23.0 | (61 BROWN WEATHERED SANDSTONE | 2 | 10 | 16 | 11 | 27 | 7 | 18) | VISUAL |
| 138+00 15'Lt | 0.0 | 4.5 | 23 | 5 | 21 | 28 | 23 | 28 | 7 | 26 | A-4a |
| 140+75 58'Lt | 0.0 | 4.0 | 26 | 8 | 18 | 30 | 18 | 23 | 6 | 8 | A-4a |
| | 4.0 | 7.0 | 24 | 8 | 22 | 27 | 19 | 21 | 4 | 8 | A-4a |
| | 7.0 | 12.0 | 23 | 7 | 18 | 29 | 23 | 24 | 7 | 9 | A-4a |
| | 12.0 | 17.0 | 21 | 6 | 16 | 30 | 27 | 24 | 6 | 12 | A-4a |
| | 17.0 | 22.0 | 26 | 5 | 13 | 26 | 30 | 28 | 9 | 16 | A-4a |
| 145+00 70'Lt | 0.0 | 4.5 | 5 | 8 | 20 | 40 | 26 | 31 | 6 | 11 | A-4a |
| 145+00 CL | 0.0 | 6.5 | 40 | 10 | 18 | 20 | 12 | NP | NP | 10 | A-2-4 |
| 148+00 20'Lt | 0.0 | 5.0 | 17 | 6 | 15 | 50 | 12 | 23 | 1 | 7 | A-4b |
| 148+00 50'Rt | 0.0 | 6.0 | 22 | 10 | 23 | 26 | 19 | 24 | 4 | 11 | A-4a |
| 140+60 CL | 0.0 | 5.0 | 20 | 5 | 24 | 33 | 18 | 24 | 4 | 7 | A-4a |
| | 5.0 | 9.0 | 11 | 1 | 19 | 39 | 30 | 24 | 6 | 8 | A-4a |
| | 9.0 | 13.0 | 13 | 4 | 9 | 36 | 38 | 26 | 11 | 10 | A-6a |
| | 13.0 | 18.0 | 40 | 7 | 18 | 22 | 13 | 21 | 4 | 9 | A-2-4 |
| | 18.0 | 22.0 | 26 | 9 | 20 | 28 | 17 | 22 | 5 | 11 | A-4a |
| | 22.0 | 24.0 | 29 | 12 | 19 | 24 | 16 | 23 | 6 | 13 | A-4a |
| 149+60 80'Rt | 0.0 | 5.0 | 33 | 6 | 11 | 30 | 20 | 25 | 8 | 8 | A-4a |
| | 5.0 | 10.0 | 19 | 10 | 20 | 29 | 22 | 25 | 7 | 7 | A-4a |
| | 10.0 | 14.0 | 11 | 10 | 20 | 35 | 24 | 26 | 9 | 11 | A-4a |

| STATION & OFFSET | DEPTH FROM | DEPTH TO | % AGG. | % C.S. | % F.S. | % SILT | % CLAY | L.L. | P.I. | % W.C. | SHTL CLASS. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 151+25 40'Rt | 0.0 | 5.0 | 36 | 9 | 15 | 22 | 18 | 30 | 10 | 10 | A-4a |
| | 5.0 | 10.0 | 15 | 11 | 20 | 28 | 25 | 30 | 14 | 16 | A-6a |
| | 10.0 | 15.0 | 27 | 10 | 19 | 27 | 17 | 23 | 6 | 11 | A-4a |
| | 15.0 | 18.0 | 52 | 9 | 15 | 15 | 9 | NP | NP | 9 | A-1-b |
| 153+70 CL | 0.0 | 5.0 | 24 | 9 | 17 | 29 | 21 | 25 | 7 | 10 | A-4a |
| | 5.0 | 10.0 | 20 | 9 | 22 | 30 | 19 | 24 | 7 | 10 | A-4a |
| | 10.0 | 16.0 | 37 | 9 | 18 | 20 | 16 | 32 | 12 | 14 | A-6a |
| | 16.0 | 19.5 | 26 | 9 | 19 | 27 | 19 | 28 | 7 | 12 | A-4a |
| 158+25 CL | 0.0 | 4.0 | 17 | 5 | 26 | 31 | 21 | 23 | 8 | 24 | A-4a |
| | 4.0 | 8.0 | 50 | 9 | 16 | 18 | 7 | NP | NP | 18 | A-1-b |
| | 8.0 | 13.0 | 0 | 0 | 5 | 77 | 18 | NP | NP | 26 | A-4b |
| | 13.0 | 18.0 | 44 | 1 | 14 | 32 | 9 | 24 | 7 | 16 | A-4a |
| | 18.0 | 23.0 | 28 | 8 | 15 | 36 | 13 | NP | NP | 16 | A-4a |
| 160+50 80'Rt | 0.0 | 2.5 | 1 | 2 | 14 | 56 | 27 | 31 | N | 29 | A-4b |
| | 2.5 | 6.0 | 43 | 6 | 17 | 21 | 13 | 28 | 6 | 27 | A-2-4 |
| | 6.0 | 9.0 | 27 | 2 | 9 | 48 | 14 | 24 | 2 | 22 | A-4a |
| | 9.0 | 15.0 | 36 | 8 | 11 | 30 | 15 | 26 | 5 | 21 | A-4a |
| 163+00 CL | 0.0 | 2.0 | 49 | 16 | 17 | 12 | 6 | NP | NP | 11 | A-1-b |
| | 2.0 | 6.0 | 56 | 16 | 14 | 11 | 4 | NP | NP | 13 | A-1-a |
| | 6.0 | 9.0 | 32 | 12 | 18 | 24 | 14 | NP | NP | 11 | A-4a |
| | 9.0 | 14.0 | 28 | 8 | 18 | 30 | 16 | 23 | 5 | 14 | A-4a |
| 166+00 80'Rt | 0.0 | 2.5 | 18 | 7 | 26 | 37 | 12 | NP | NP | 23 | A-4a |
| | 2.5 | 6.0 | 39 | 12 | 10 | 18 | 12 | NP | NP | 19 | A-2-4 |
| | 6.0 | 9.0 | 60 | 7 | 14 | 12 | 7 | NP | NP | 9 | A-1-b |
| 167+00 20'Rt | 0.0 | 2.0 | 22 | 11 | 24 | 29 | 14 | NP | NP | 24 | A-4a |
| | 2.0 | 7.0 | 56 | 6 | 11 | 11 | 5 | 24 | 5 | 13 | A-1-b |
| | 7.0 | 8.0 | 24 | 8 | 17 | 36 | 15 | NP | NP | 15 | A-4a |
| 170+00 80'Rt | 0.0 | 3.0 | 27 | 5 | 18 | 29 | 21 | 31 | 11 | 16 | A-6a |
| | 3.0 | 7.0 | 49 | 14 | 17 | 10 | 10 | 22 | 9 | 17 | A-2-4 |
| | 7.0 | 12.0 | 49 | 10 | 16 | 16 | 9 | 25 | 7 | 15 | A-2-4 |
| | 12.0 | 13.5 | 45 | 3 | 7 | 27 | 17 | 27 | 7 | 18 | A-4a |
| 171+00 20'Rt | 0.0 | 2.5 | 25 | 7 | 20 | 30 | 18 | 26 | 9 | 12 | A-4a |
| | 2.5 | 7.0 | 40 | 10 | 15 | 15 | 11 | 23 | 8 | 15 | A-2-4 |
| | 7.0 | 9.0 | 59 | 6 | 11 | 16 | 8 | 26 | 6 | 12 | A-1-b |

| STATION & OFFSET | DEPTH FROM | DEPTH TO | % AGG. | % C.S. | % F.S. | % SILT | % CLAY | L.L. | P.I. | % W.C. | SHTL CLASS. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 173+50 90'Rt | 0.0 | 2.0 | 32 | 10 | 22 | 25 | 11 | 27 | 5 | 14 | A-4a |
| | 2.0 | 7.0 | 45 | 11 | 17 | 9 | NP | NP | 15 | 16 | A-1-b |
| | 7.0 | 12.0 | 52 | 2 | 5 | 34 | 7 | 23 | 2 | 15 | A-4a |
| | 12.0 | 16.0 | 25 | 4 | 21 | 34 | 16 | 19 | 4 | 11 | A-4a |
| 175+00 40'Rt | 0.0 | 3.0 | 9 | 3 | 5 | 56 | 27 | 31 | 6 | 10 | A-4b |
| | 3.0 | 6.0 | 33 | 9 | 20 | 21 | 17 | 23 | 4 | 12 | A-4a |
| | 6.0 | 10.0 | 19 | 11 | 30 | 26 | 14 | NP | NP | 20 | A-4a |
| | 10.0 | 16.0 | 38 | 9 | 14 | 24 | 15 | 22 | 5 | 17 | A-4a |
| | 16.0 | 18.0 | 39 | 8 | 17 | 22 | 14 | 20 | 3 | 15 | A-4a |
| 176+00 40'Lt | 0.0 | 5.0 | 31 | 11 | 10 | 32 | 16 | 26 | 6 | 7 | A-4a |
| | 5.0 | 10.0 | 40 | 14 | 17 | 18 | 11 | NP | NP | 11 | A-2-4 |
| | 10.0 | 15.0 | 29 | 15 | 23 | 18 | 15 | 18 | 2 | 11 | A-2-4 |
| | 15.0 | 18.5 | 32 | 11 | 16 | 20 | 21 | 24 | 6 | 14 | A-4a |
| 180+00 30'Lt | 0.0 | 5.0 | 22 | 1 | 8 | 38 | 31 | 35 | 11 | 16 | A-6a |
| | 5.0 | 10.0 | 22 | 2 | 10 | 41 | 25 | 28 | 11 | 21 | A-6a |
| | 10.0 | 15.0 | 29 | 6 | 13 | 31 | 21 | 28 | 9 | 20 | A-4a |
| 183+90 20'Lt | 0.0 | 6.0 | 27 | 14 | 14 | 21 | 24 | 33 | 13 | 20 | A-6a |
| | 6.0 | 11.0 | 41 | 14 | 17 | 17 | 11 | 26 | 10 | 20 | A-2-4 |
| | 11.0 | 15.0 | 25 | 6 | 14 | 31 | 24 | 23 | 6 | 12 | A-4a |
| 187+50 20'Rt | 0.0 | 5.0 | 32 | 13 | 16 | 25 | 14 | 25 | 6 | 9 | A-4a |
| | 5.0 | 10.0 | 28 | 22 | 18 | 19 | 13 | 26 | 7 | 12 | A-2-4 |

DRIVE SAMPLE SOIL TEST DATA

| STATION & OFFSET | DEPTH FROM | DEPTH TO | % AGG. | % C.S. | % F.S. | % SILT | % CLAY | L.L. | P.I. | % W.C. | SHTL CLASS. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 151+30 CL | 5.0 | 6.0 | 33 | 17 | 27 | 15 | 8 | NP | NP | 17 | A-1-b |
| | 10.0 | 11.0 | 31 | 8 | 12 | 30 | 19 | 24 | 7 | 12 | A-4a |
| | 15.0 | 16.0 | 42 | 1 | 5 | 28 | 24 | 33 | 13 | 14 | A-6a |
| | 20.0 | 21.0 | 31 | 9 | 19 | 28 | 15 | 22 | 4 | 10 | A-4a |
| | 25.0 | 25.9 | 35 | 9 | 17 | 25 | 14 | 25 | 3 | 12 | A-4a |
| | 30.0 | 30.7 | 27 | 11 | 20 | 32 | 10 | NP | NP | 13 | A-4a |
| | 35.0 | 35.7 | 41 | 11 | 15 | 20 | 13 | 21 | 4 | 8 | A-2-4 |
| | 40.0 | 40.5 | 43 | 9 | 19 | 19 | 10 | NP | NP | 11 | A-2-4 |

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# SOIL PROFILE

HOLMES COUNTY
HOL - 39 - (13.22 - 13.62)

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

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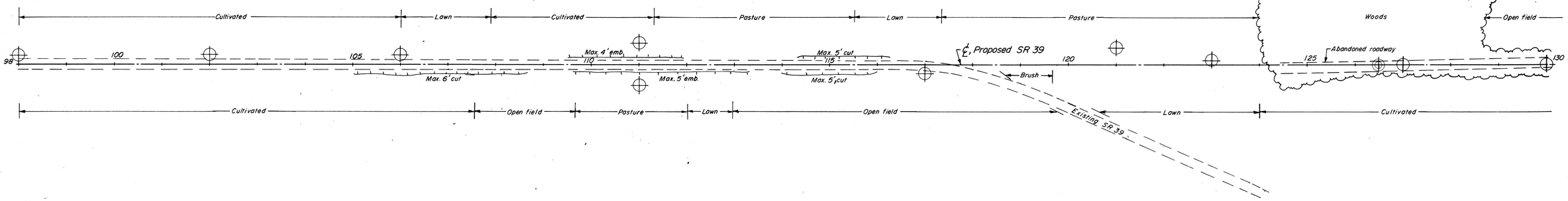
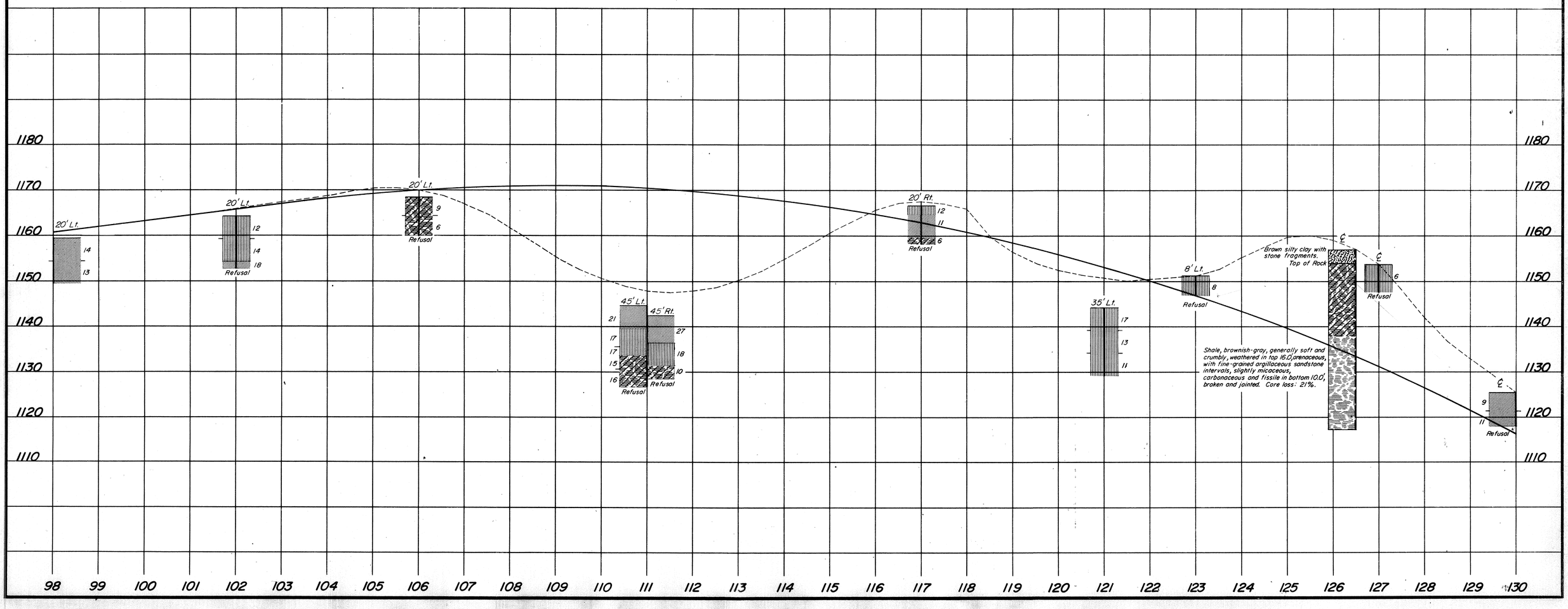


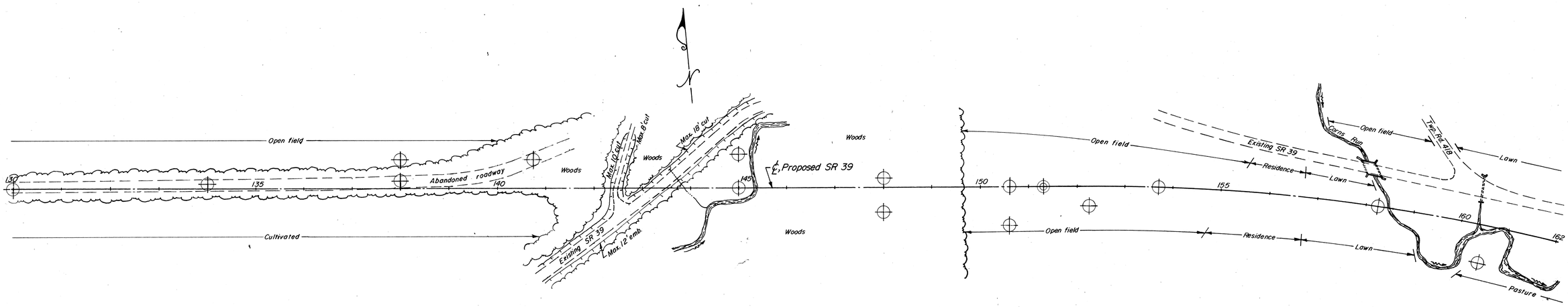



# SOIL PROFILE

**HOLMES COUNTY**
**HOL – 39 – (13.22 - 13.62)**

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS 23, OHIO

3/5



# SOIL PROFILE

**HOLMES COUNTY**
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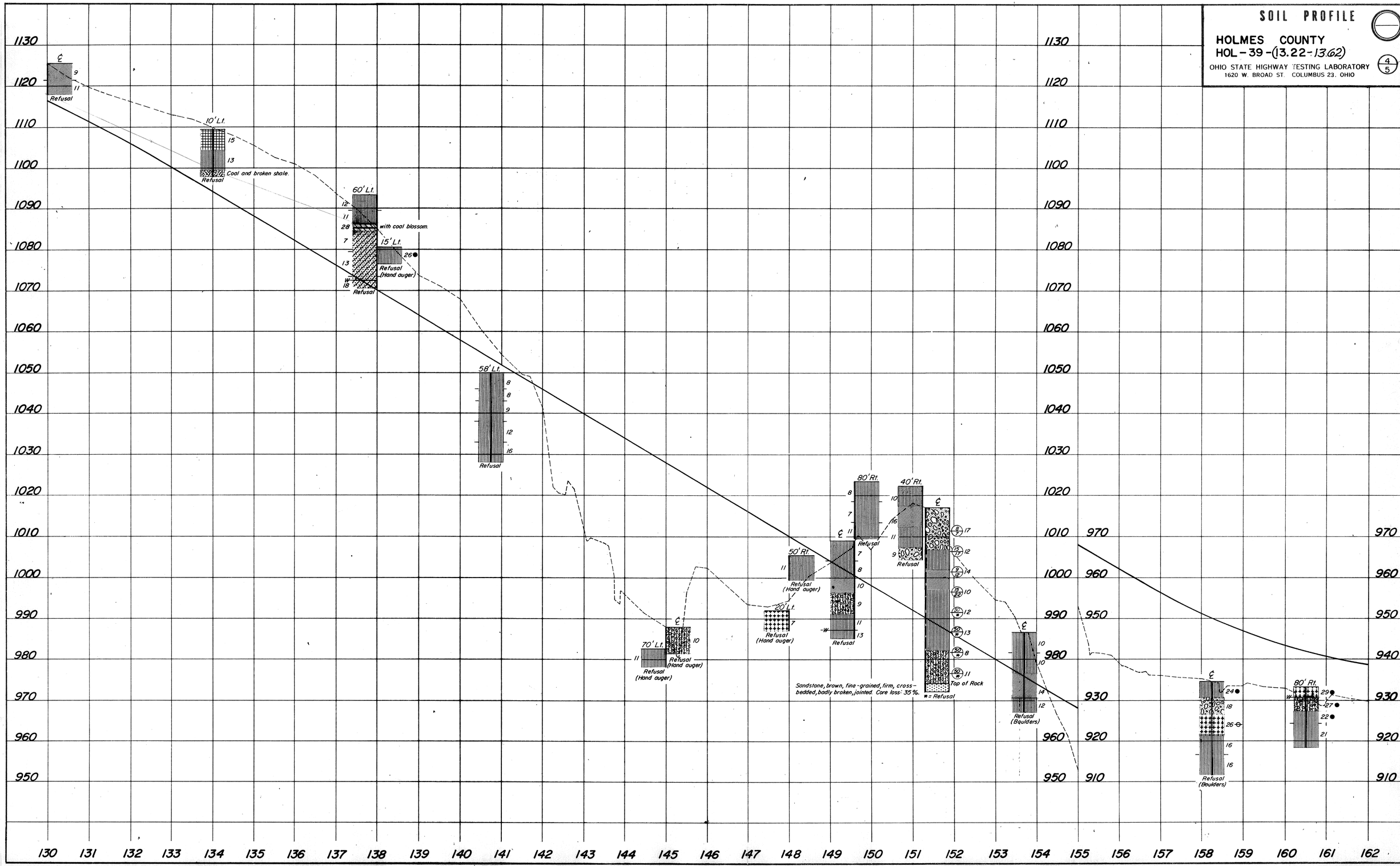
1620 W. BROAD ST. COLUMBUS 23, OHIO

4/5



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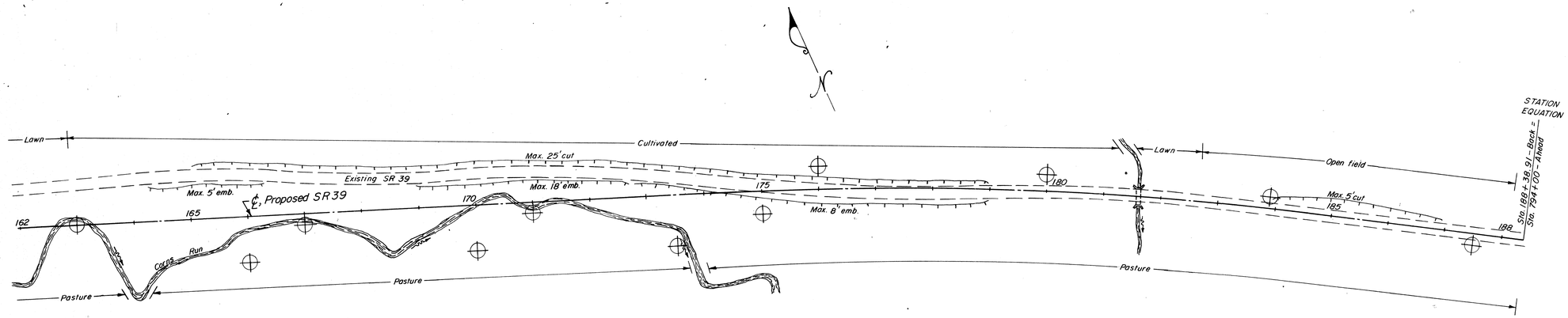
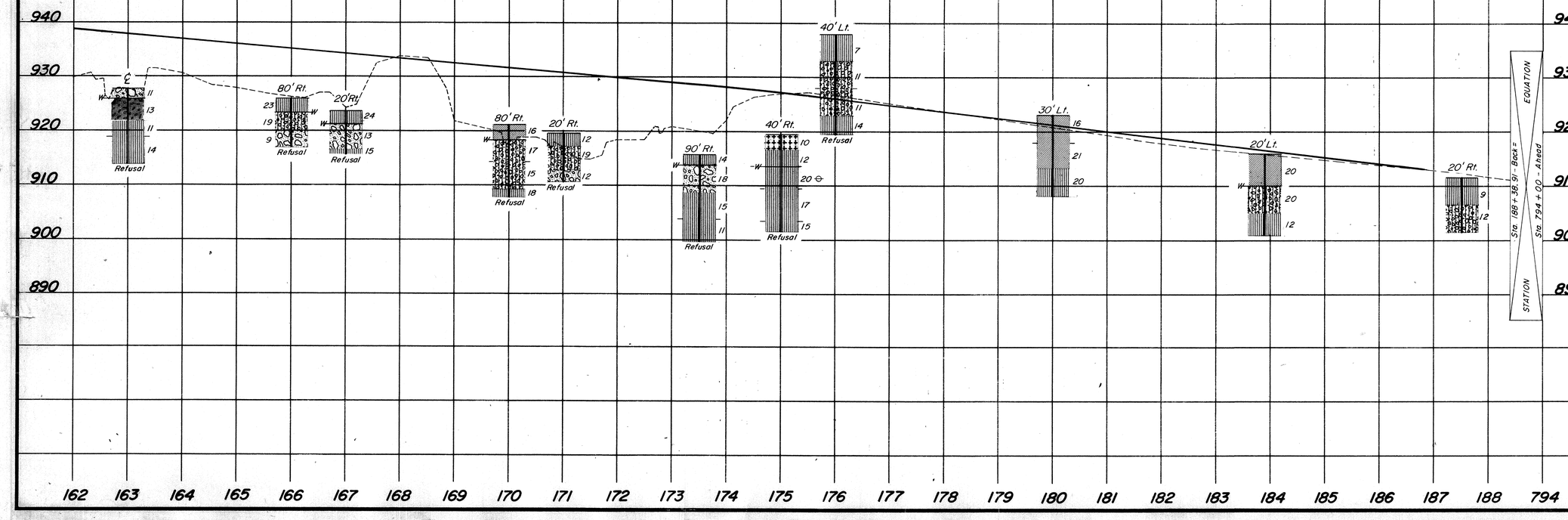
# SOIL PROFILE

**HOLMES COUNTY**
**HOL – 39 – (13.22 – 13.62)**

OHIO STATE HIGHWAY TESTING LABORATORY
1620 W. BROAD ST. COLUMBUS, OHIO 43223

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