

DESIGN DESIGNATION

CURRENT A.D.T. (1992) 2297
DESIGN YEAR A.D.T. (2012) 3214
D.H.V. 321
D 60 %
T 22 %
V (DESIGN SPEED) 55 M.P.H./40 M.P.H.*
LEGAL SPEED LIMIT 55 M.P.H./40 M.P.H.*
FUNCTIONAL CLASSIFICATION MINOR COLLECTOR (RURAL)

DESIGN EXCEPTIONS APPROVED
NONE

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
UNI-739-2.01
LIBERTY TOWNSHIP
UNION COUNTY

CALC. BY DATE
DESIGN BY DATE
OHIO
FHWA REGION 5
177

P&D
8007-94
1993 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS SHOWN ON SHEET NO. 12.

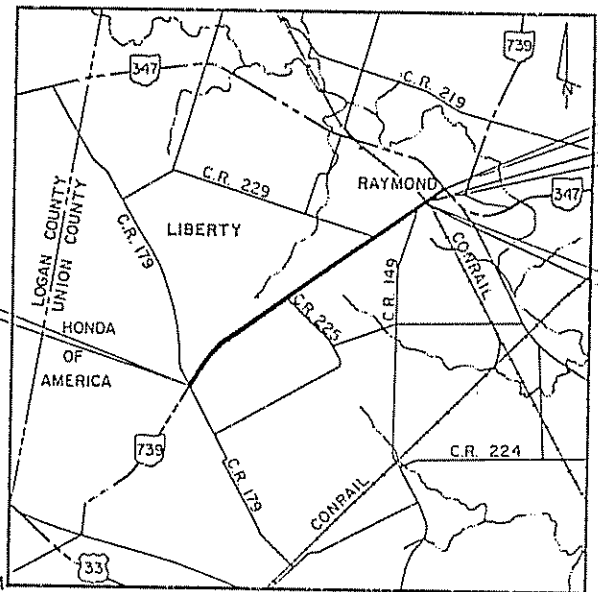
CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE
FENCE LINE (EXISTING) PROPOSED
CENTERLINE
TREES, STUMPS, (TO BE REMOVED)
UTILITY POLE: TELEPHONE, POWER, LIGHT

LIMITED ACCESS (ONLY)
RIGHT OF WAY (ONLY)
LIMITED ACCESS & RIGHT OF WAY
EXISTING RIGHT OF WAY
PROPERTY LINE (IN EXISTING FENCE)
RAILROAD
GUARDRAIL (EXISTING) (PROPOSED)

INDEX OF SHEETS

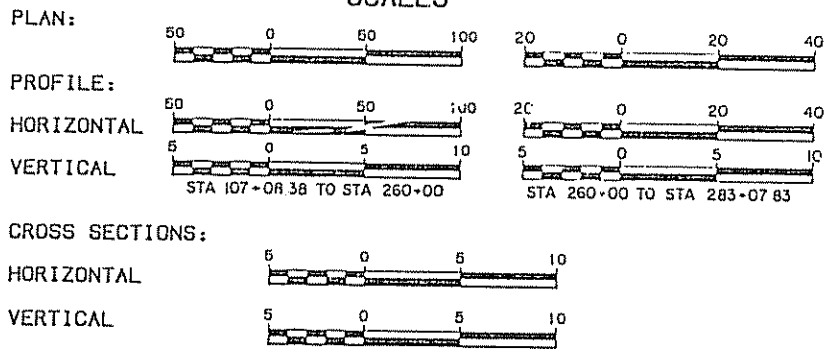
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LOCATION MAP
SCALE IN MILES

PORTIONS TO BE IMPROVED
STATE & FEDERAL ROUTES
OTHER ROADS

SCALES



LINE DATA

BEGIN PROJECT STA 107+08.38
SUSPEND PROJECT STA 270+79.75
RESUME PROJECT STA 270+84.50
END PROJECT STA 283+07.83
LENGTH OF PROJECT 17,594.70 L.F. OR 3.332 MILES
BEGIN WORK (OUTFALL STORM SEWER) STA 0+00.00
END WORK (PLAN - SEE SHEET 129) STA 10+98.00
LENGTH OF WORK 1,098.00 L.F.
TOTAL LENGTH OF WORK 18,692.70 L.F. OR 3.540 MILES

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG...
CALL 800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-1.1	2-21-92	CB-2-2-A&B	5-1-79
BP-2.1	2-21-92	CB-2-3 & 2-4	5-1-79
BP-2.2	2-21-92	CB-3A	5-1-79
BP-3.1	2-21-92	CB-3	5-1-79
BP-4.1	2-21-92	HW-4B	4-1-80
BP-5.1	2-21-92	MH-1	12-18-84
BP-6.1	2-21-92	MH-3	12-18-84
BP-7.1	10-30-92	MH-2	6-12-75
BP-8.1	2-21-92	TC-41.10	8-29-84
MC-1	6-13-69	TC-41.20	3-26-79
MC-4	7-26-76	TC-42.20	3-26-79
MC-8	6-12-75	TC-52.10	4-3-79
MC-10	5-1-75	TC-92.20	4-3-79
MC-11	8-1-78	TC-71.10	9-10-91
		TC-42.10	8-19-77
		MT-99.10	11-14-86
		MT-105.10	7-1-92
		MT-105.11	7-1-92
		LA-1	6-1-74

SUPPLEMENTAL SPECIFICATIONS

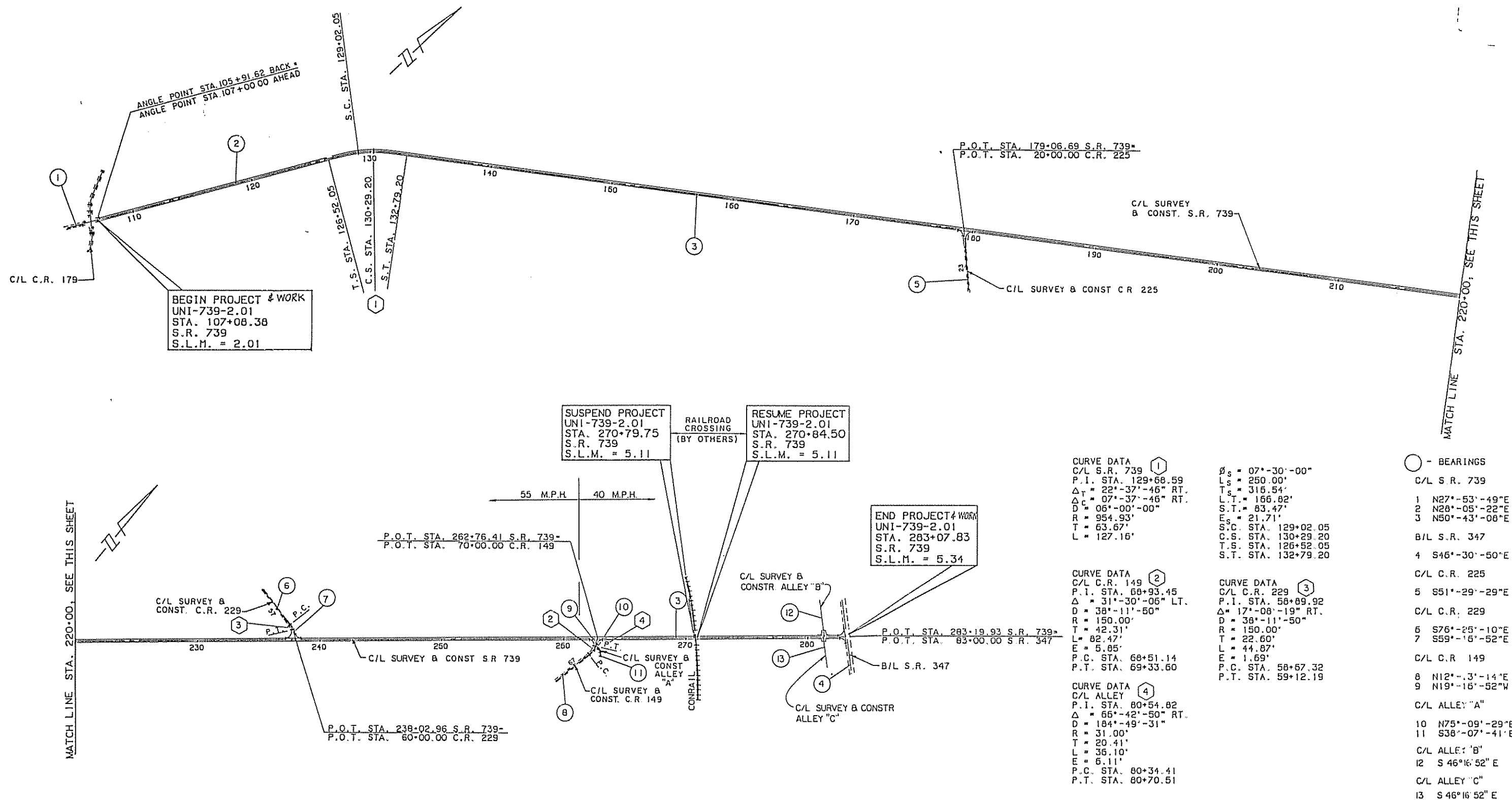
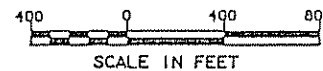
931	3-18-92
942	3-18-92
944	3-18-92
841	5-18-84
843	7-29-88
820	3-18-92

PREPARED BY:
R. D. ZANDE & ASSOCIATES, LTD.
1237 DUBLIN ROAD
COLUMBUS, OHIO 43215

REGISTERED ENGINEER #19587
DATE
PROJECT: UNI-739-2.01

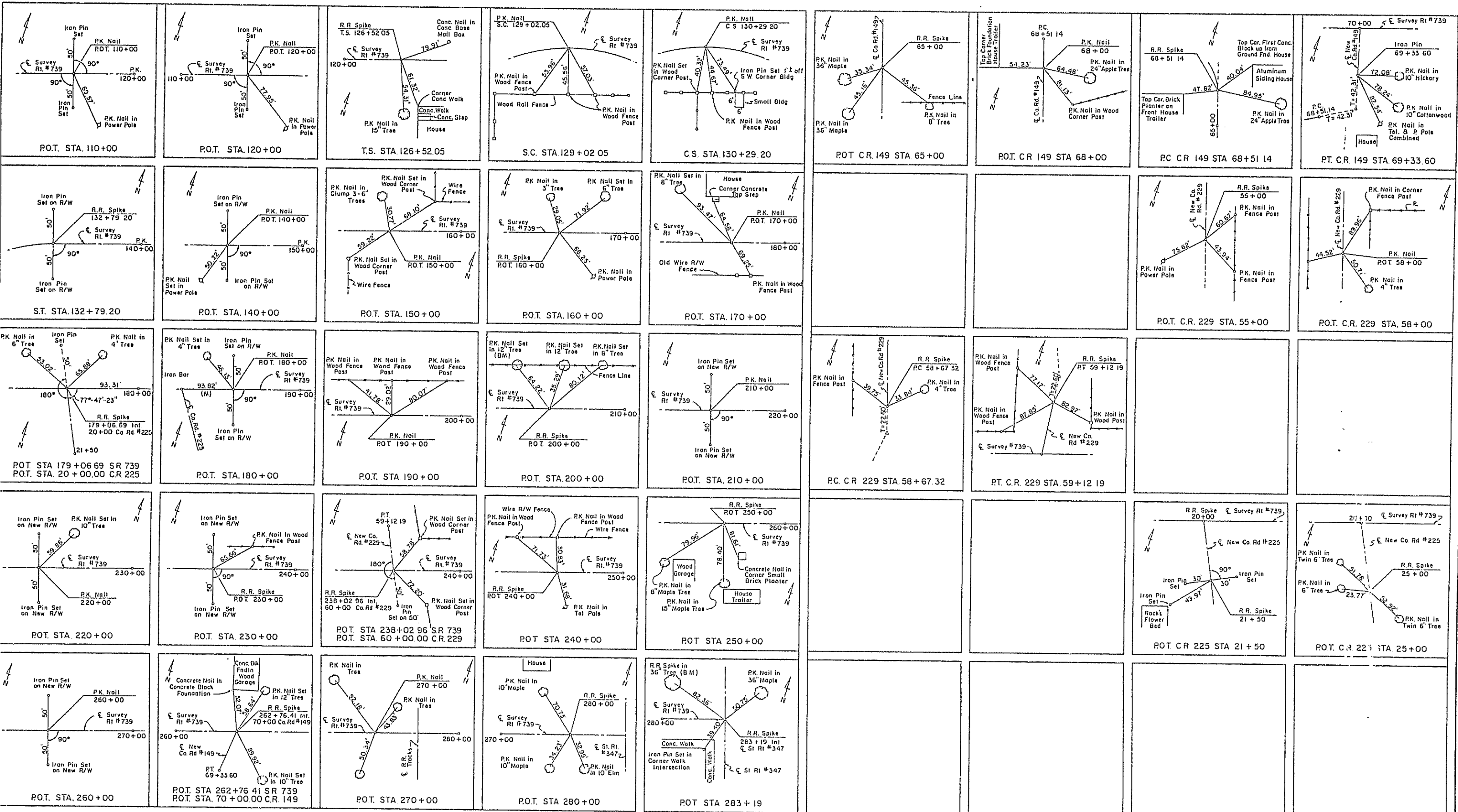
DATE OF LETTING
CONTRACT NO.
ENGINEER'S SEAL

SCHEMATIC PLAN

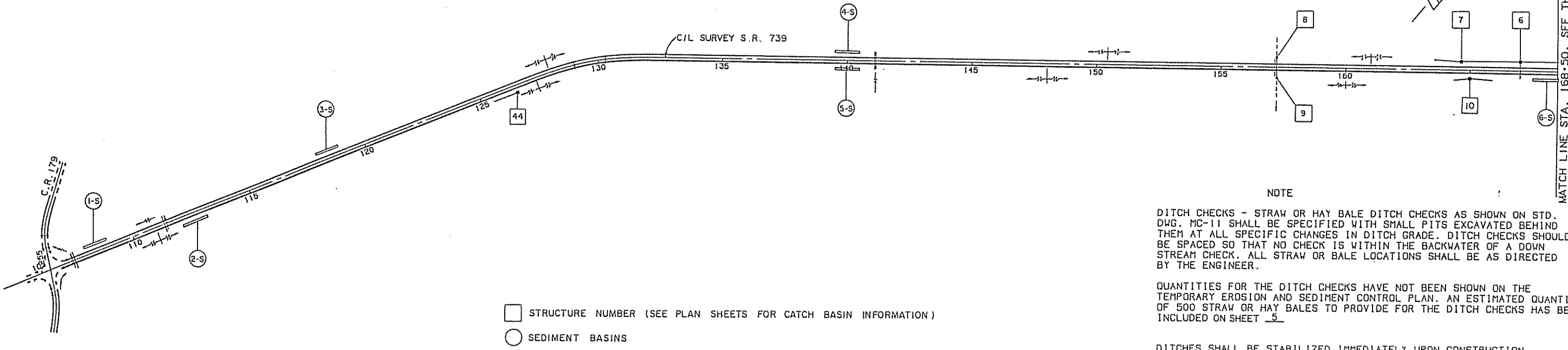
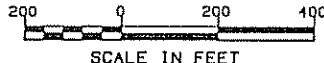


REFERENCE POINTS

STATE ROUTE #739



TEMPORARY EROSION CONTROL PLAN

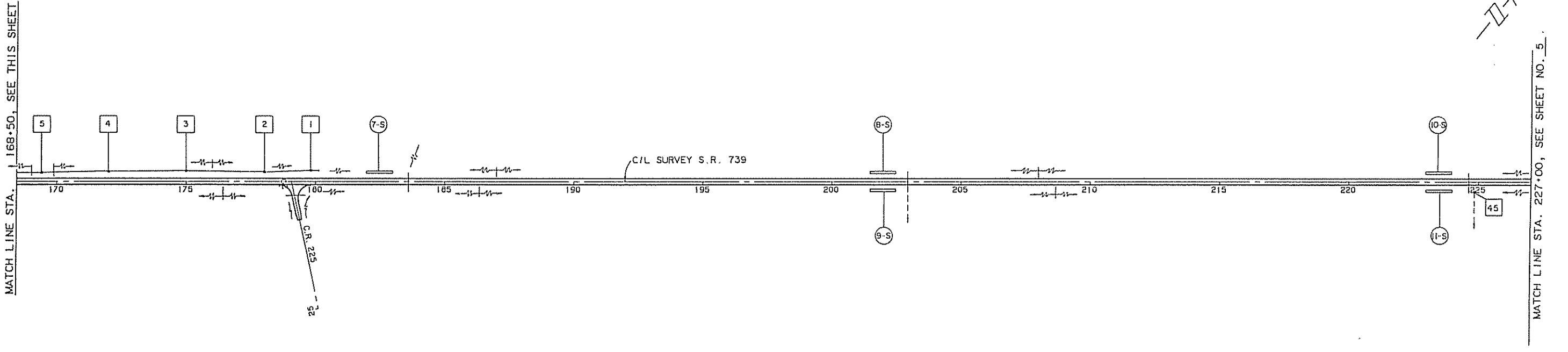


NOTE

DITCH CHECKS - STRAW OR HAY BALE DITCH CHECKS AS SHOWN ON STD. DWG. MC-11 SHALL BE SPECIFIED WITH SMALL PITS EXCAVATED BEHIND THEM AT ALL SPECIFIC CHANGES IN DITCH GRADE. DITCH CHECKS SHOULD BE SPACED SO THAT NO CHECK IS WITHIN THE BACKWATER OF A DOWN STREAM CHECK. ALL STRAW OR BALE LOCATIONS SHALL BE AS DIRECTED BY THE ENGINEER.

QUANTITIES FOR THE DITCH CHECKS HAVE NOT BEEN SHOWN ON THE TEMPORARY EROSION AND SEDIMENT CONTROL PLAN. AN ESTIMATED QUANTITY OF 500 STRAW OR HAY BALES TO PROVIDE FOR THE DITCH CHECKS HAS BEEN INCLUDED ON SHEET 5.

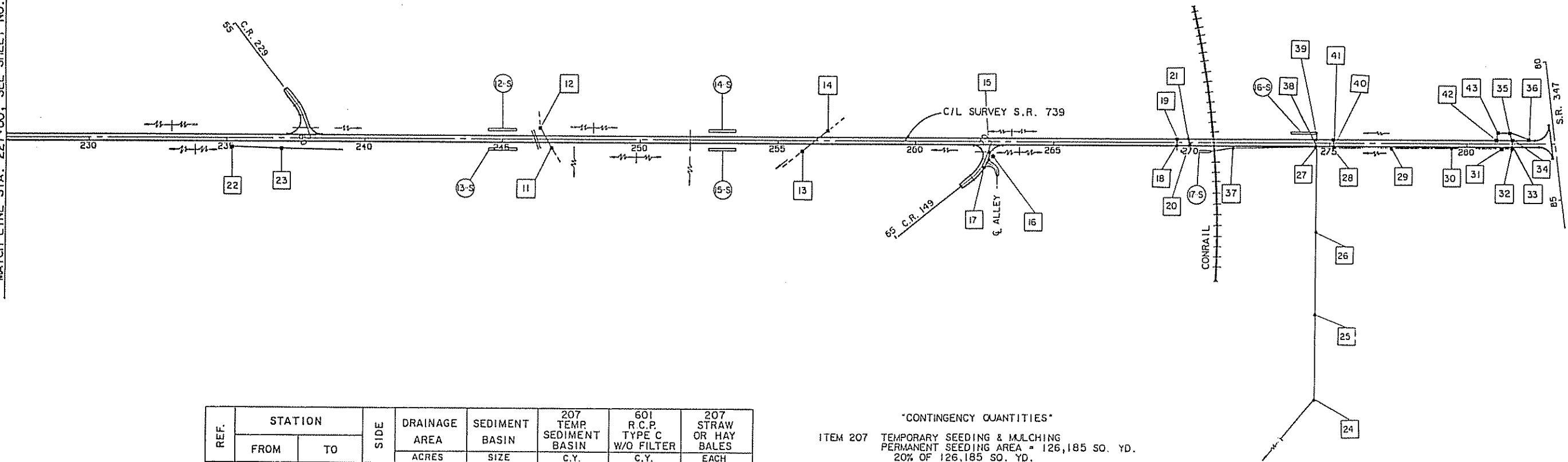
DITCHES SHALL BE STABILIZED IMMEDIATELY UPON CONSTRUCTION.



TEMPORARY EROSION CONTROL PLAN

200 0 200 100
SCALE IN FEET

MATCH LINE STA. 227+00, SEE SHEET NO. 4



REF.	STATION		SIDE	DRAINAGE AREA ACRES	SEDIMENT BASIN SIZE	207 TEMP SEDIMENT BASIN C.Y.	601 R.C.P. TYPE C W/O FILTER C.Y.	207 STRAW OR HAY BALES EACH
	FROM	TO						
1-S	108+00	109+00	LT.	1.15	3' x 7' x 100'	78	1	
2-S	112+00	113+00	RT.	1.76	3' x 11' x 100'	122	2	
3-S	118+00	119+00	LT.	1.15	3' x 7' x 100'	78	1	
4-S	139+50	140+50	LT.	1.32	3' x 8' x 100'	89	1	
5-S	139+50	140+50	RT.	1.39	3' x 9' x 100'	100	2	
6-S	167+50	168+50	RT.	1.08	3' x 7' x 100'	78	1	
7-S	182+00	183+00	LT.	2.41	4' x 11' x 100'	163	2	
8-S	201+50	202+50	LT.	1.66	3' x 10' x 100'	111	2	
9-S	201+50	202+50	RT.	1.75	3' x 11' x 100'	122	2	
10-S	223+00	224+00	LT.	1.72	3' x 11' x 100'	122	2	
11-S	223+00	224+00	RT.	1.64	3' x 10' x 100'	111	2	
12-S	244+50	245+50	LT.	1.32	3' x 8' x 100'	89	1	
13-S	244+50	245+50	RT.	1.22	3' x 8' x 100'	89	1	
14-S	252+50	253+50	LT.	1.26	3' x 8' x 100'	89	1	
15-S	252+50	253+50	RT.	1.30	3' x 8' x 100'	89	1	
16-S	273+52	274+52	LT.	1.88	35' x 10' x 100'	130	2	
17-S	269+71	270+71	RT.	1.15	3' x 7' x 100'	78	1	
BAFFLE FILTER DIKE								
	107+50	118+00	LT.					300
	135+00	145+00	LT.					286
	152+00	165+50	LT.					385
	187+00	206+00	LT.					543
	220+00	230+00	LT.					286
	240+00	245+00	LT.					143
	250+00	260+00	LT.					286
	268+00	270+50	LT.					72
	271+50	276+00	LT.					129
	103' S OF 179 & 739	113+00	RT.					209
	177+00	21+00 (225)	RT.					68
	21+50 (225)	185+00	RT.					186
FOR USE AS DIRECTED BY THE ENGINEER (DITCH CHECKS)								500
34 CATCH BASIN @ 8 PER BASIN								272

QUANTITIES CARRIED TO
GENERAL NOTES 1738 25 3665

"CONTINGENCY QUANTITIES"

ITEM 207 TEMPORARY SEEDING & MULCHING
PERMANENT SEEDING AREA = 126,185 SQ. YD.
20% OF 126,185 SQ. YD.
.2 X 126,185 SQ. YD. = 25,237 SQ. YD.
TOTAL TO GENERAL NOTES = 25,237 SQ. YD.

ITEM 559 COMMERCIAL FERTILIZER (12-12-12)
A) TEMPORARY SEEDING AREA = 25,237 SQ. YD.
25,237 SQ. YD. X (9 SQ. FT./1 SQ. YD.) X
(10 LBS./1000 SQ. FT.) = 2272 LBS.
2272 LBS. X (1 TON/2000 LBS.) = 1.14 TONS

B) PERMANENT SEEDING AREA = 126,185 SQ. YD.
126,185 SQ. YD. X (9 SQ. FT./1 SQ. YD.) X
(7.5 LBS./1000 SQ. FT.) = 8518 LBS.
8518 LBS. X (1 TON/2000 LBS.) = 4.3 TONS

TOTAL TO GENERAL NOTES TOTAL = 5.4 TONS
= 6.0 TONS

ITEM 659 REPAIR SEEDING & MULCHING
5% OF THE PERMANENT SEEDING AREA
.05 X 126,185 SQ. YD. = 6309 SQ. YD.

TOTAL TO GENERAL NOTES = 6309 SQ. YD.

ITEM 659 WATER
25,237 SQ. YD. X (9 SQ. FT./1 SQ. YD.) X
(240 GAL./1000 SQ. FT.) = 54,512 GAL.

= 55 M. GAL.

TOTAL TO GENERAL NOTES = 55 M. GAL.

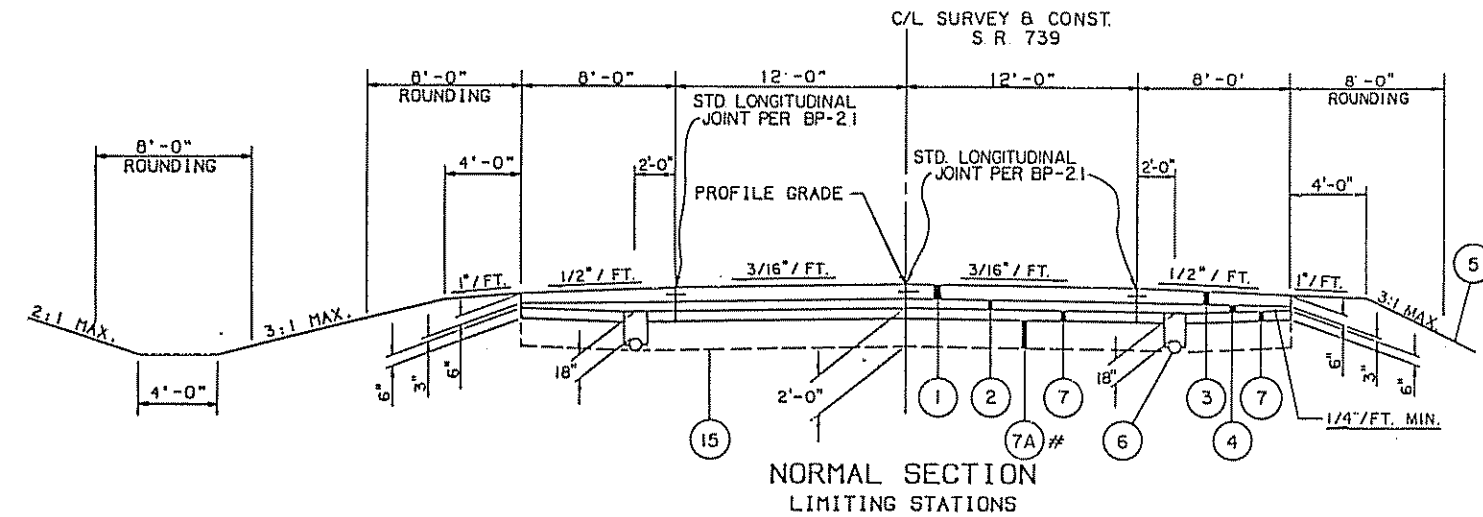
ITEM 659 MOWING
25% OF PERMANENT SEEDING AREA
0.25 X 126,185 SQ. YD. = 31,547 SQ. YD. X
9 SQ. FT./1 SQ. YD. = 283,917 SQ. FT.

283,917 SQ. FT./1000 = 284 M. SQ. FT.

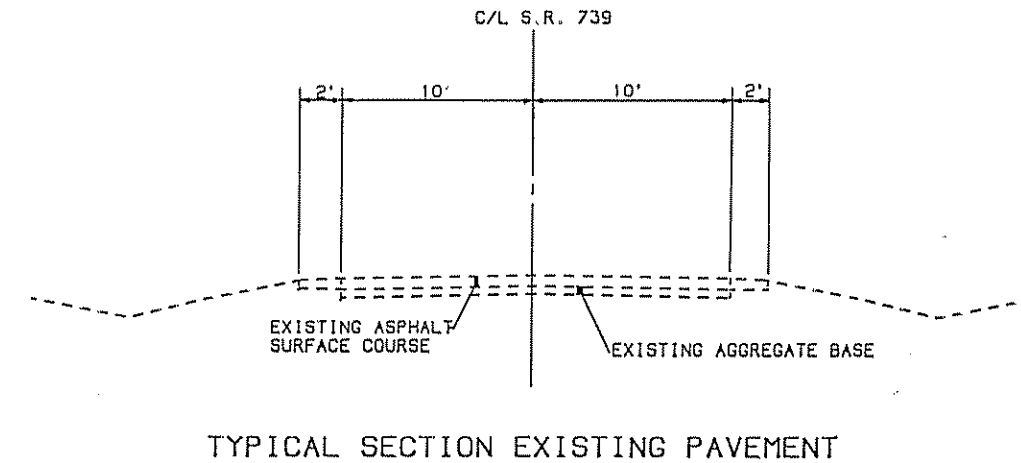
TOTAL TO GENERAL NOTES = 284 M. SQ. FT.

TYPICAL SECTIONS

TYPE 451



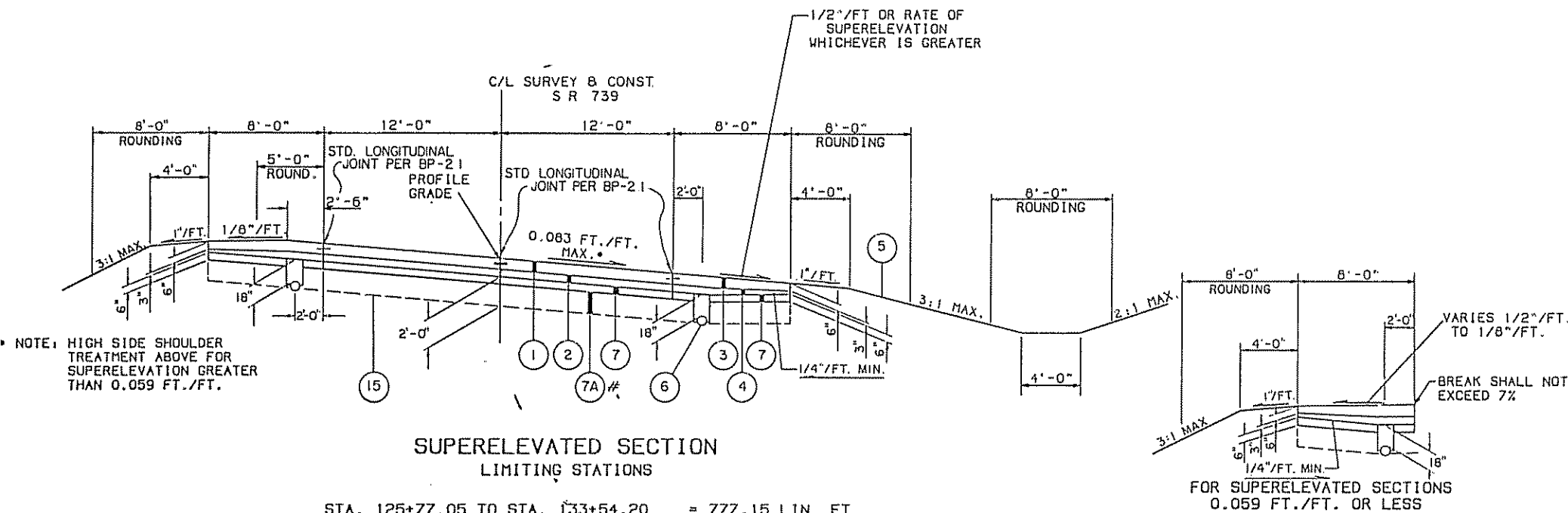
STA. 107+08.38 TO STA. 125+77.05 = 1,868.67 LIN. FT.
 STA. 133+54.20 TO STA. 261+00.00 = 12,745.80 LIN. FT.
 = 14,614.47 LIN. FT.



STA. 107+08.38 TO STA. 263+07.99

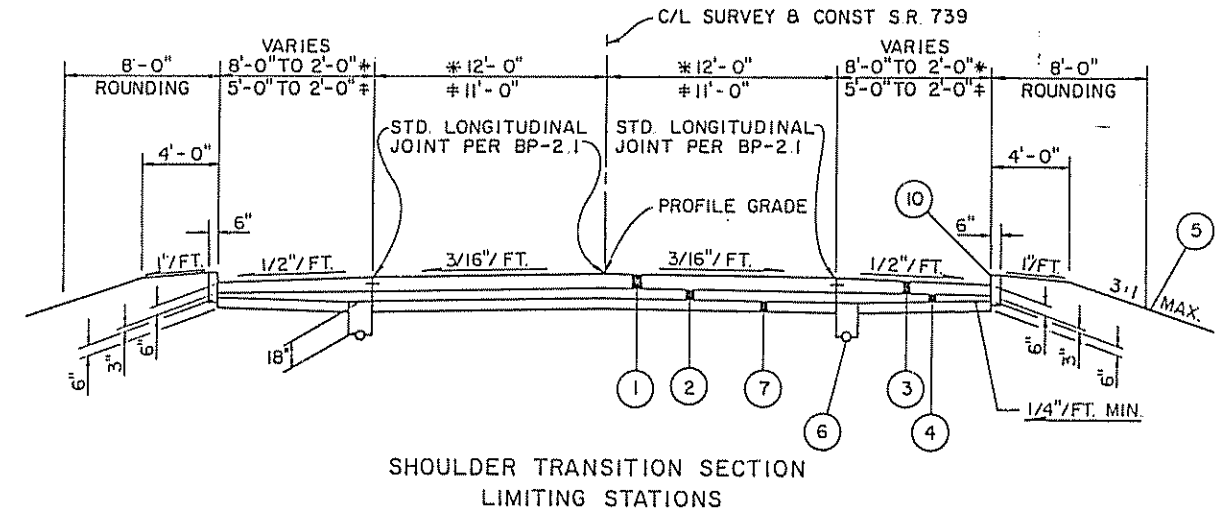
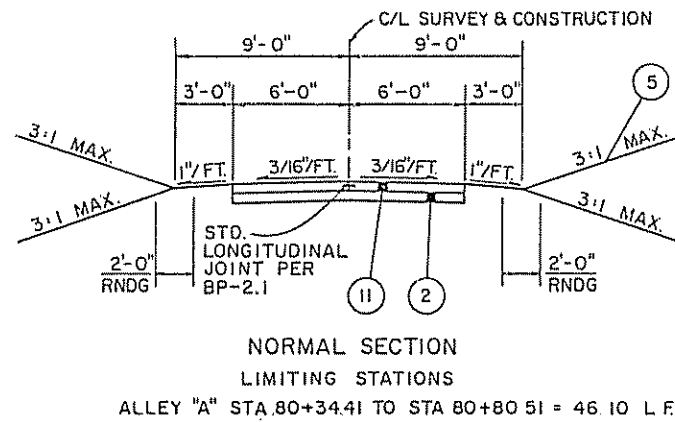
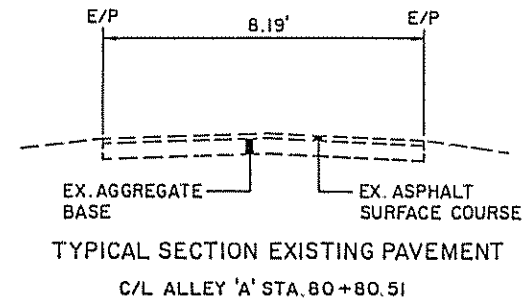
LEGEND

- (1) ITEM 451 - 9" REINFORCED CONCRETE PAVEMENT
- (2) ITEM 310 - 6" SUBBASE, TYPE II, AS PER PLAN (SEE GENERAL NOTES)
- (3) ITEM 452 - 6" - 9" PLAIN CONCRETE PAVEMENT
- (4) ITEM 310 - 3" - 6" SUBBASE, TYPE II, AS PER PLAN (SEE GENERAL NOTES)
- (5) ITEM 659 - SEEDING & MULCHING
- (6) ITEM 605 - 6" PIPE UNDERDRAIN (SEE GENERAL NOTES)
- (7) ITEM SPEC - 6" LIME / SOIL STABILIZED SUBGRADE
- (7A) ITEM 203 - EMBANKMENT USING GRANULAR MATERIAL (2'-0" THICK)
 STA 132+50 TO STA 134+00
 STA 181+00 TO STA 185+00
 STA 193+00 TO STA 205+00
 STA 221+00 TO STA 222+00
 STA 251+00 TO STA 253+00
 # THIS ITEM REPLACES THE 6" LAYER OF ITEM SPECIAL,
 6" LIME/SOIL STABILIZED SUBGRADE PLUS AN ADDITIONAL
 18" BELOW THE SUBGRADE AT THE FIVE LOCATIONS LISTED ABOVE
- (8) ITEM 605 - AGGREGATE DRAINS
- (9) ITEM 608 - 4" CONCRETE WALK
- (10) ITEM 609 - CURB, TYPE 6
- (11) ITEM 452 - 6' PLAIN CONCRETE PAVEMENT
- (12) ITEM 310 - 9" SUBBASE, TYPE II, AS PER PLAN, (SEE GENERAL NOTES)
- (13) ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2
- (14) ITEM 660 - SODDING
- (15) ITEM 203 - SUBGRADE COMPACTION (SEE GENERAL NOTES)

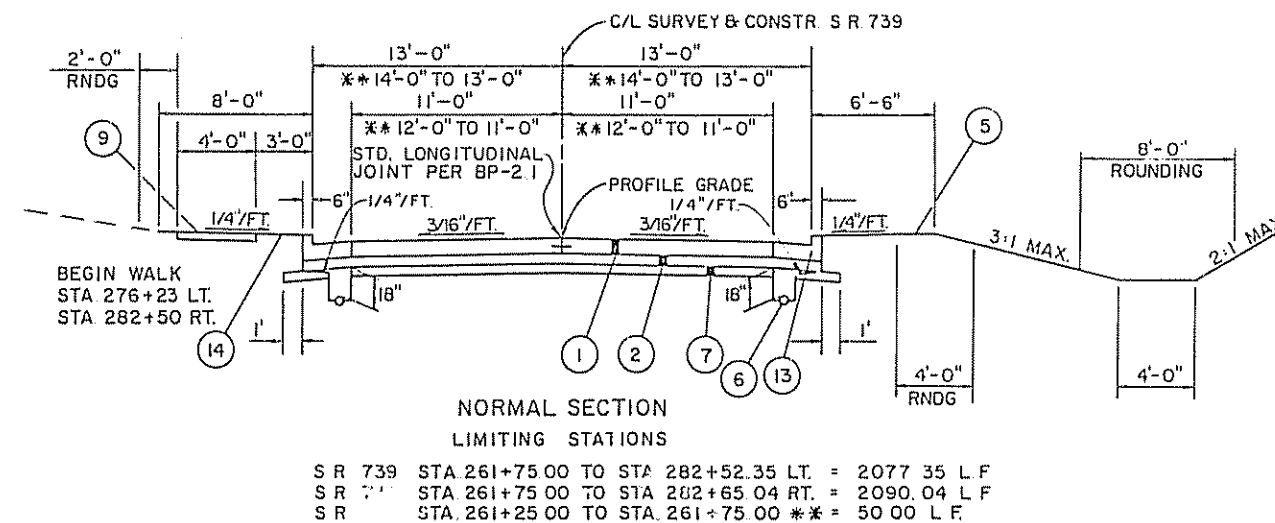
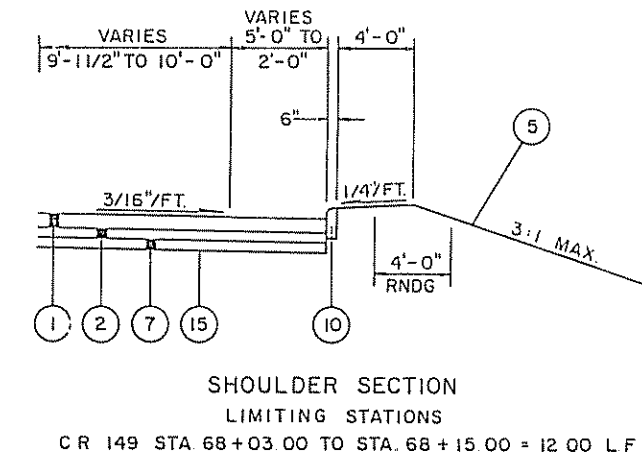
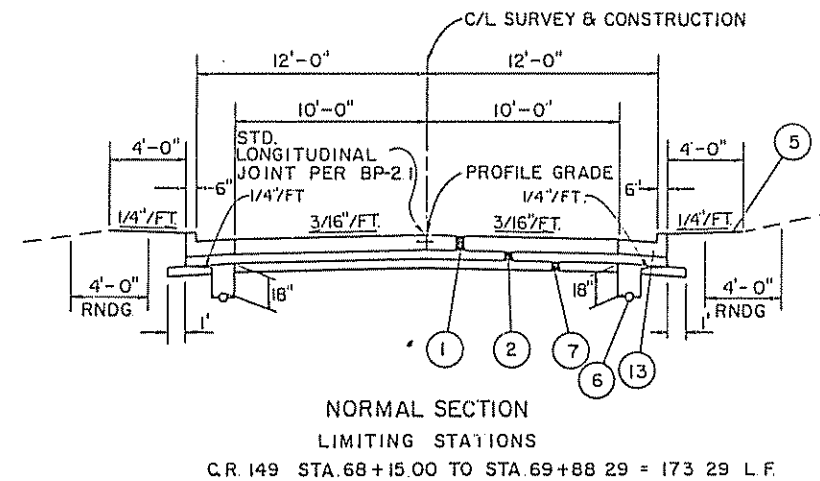
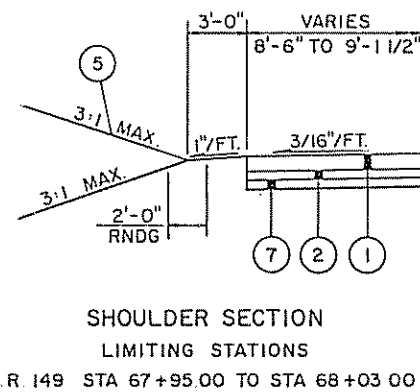


STA. 125+77.05 TO STA. 133+54.20 = 777.15 LIN. FT.

TYPICAL SECTIONS

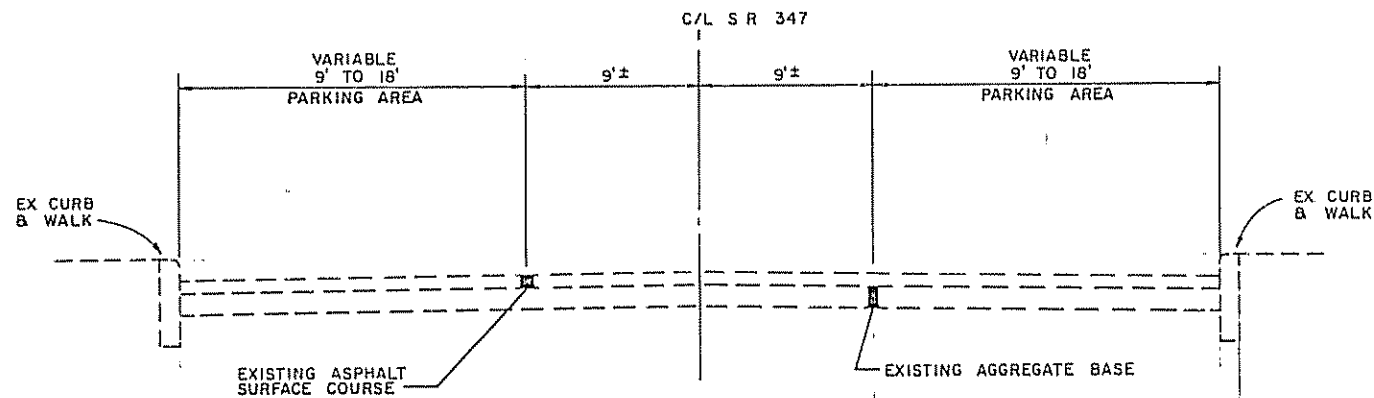


* STA. 261+00 TO STA. 261+25 = 25.00 L.F.
 * STA. 270+53 TO STA. 270+77.88 LT. = 24.88 L.F.
 * STA. 270+58 TO STA. 270+77.88 RT. = 19.88 L.F.
 * STA. 270+86.38 TO STA. 271+02 LT. = 15.62 L.F.
 * STA. 270+86.38 TO STA. 271+07 RT. = 20.62 L.F.

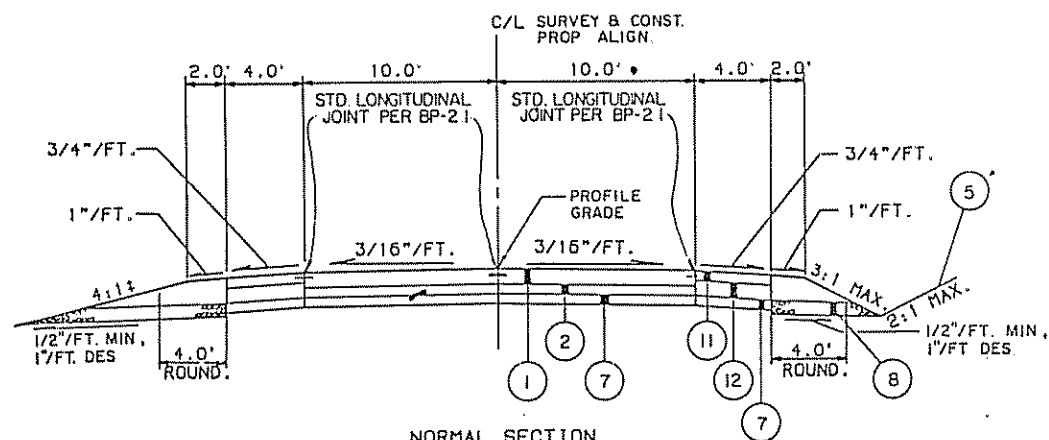


FOR LEGEND SEE SHEET 6
 FOR DRIVEWAY PAVEMENT COMPOSITION SEE SHEET 120

TYPICAL SECTIONS



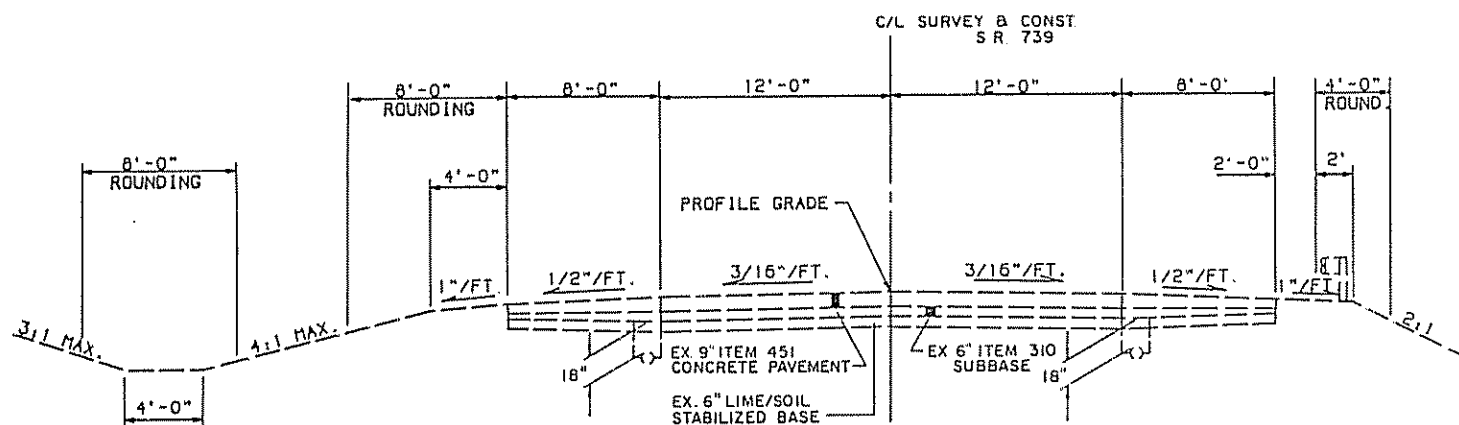
TYPICAL SECTION EXISTING PAVEMENT
S.R. 347



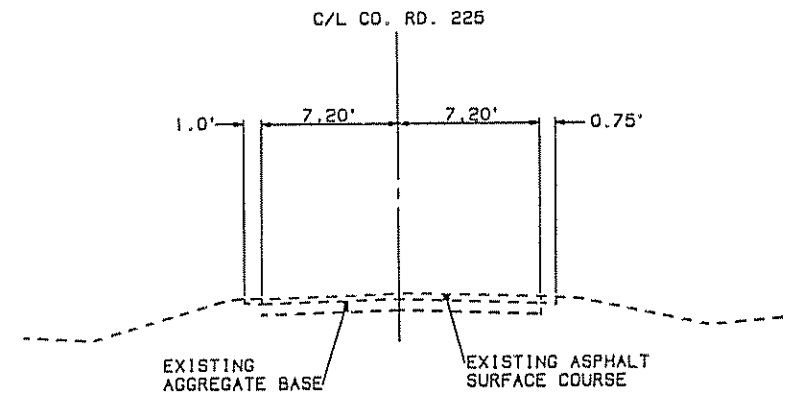
NORMAL SECTION

CO. RD. 225 STA. 20+12.28 TO STA. 21+50
CO. RD. 229 STA. 58+00 TO STA. 59+87.23

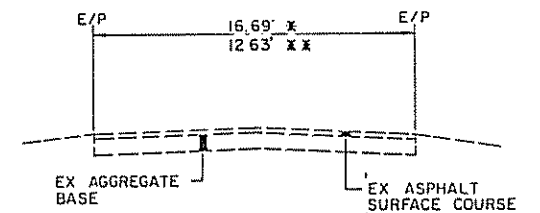
† EXCEPT AS OTHERWISE SHOWN ON
THE CROSS SECTIONS



TYPICAL SECTION ADJOINING PAVEMENT
S.R. 739 (UN1-739-0.02)

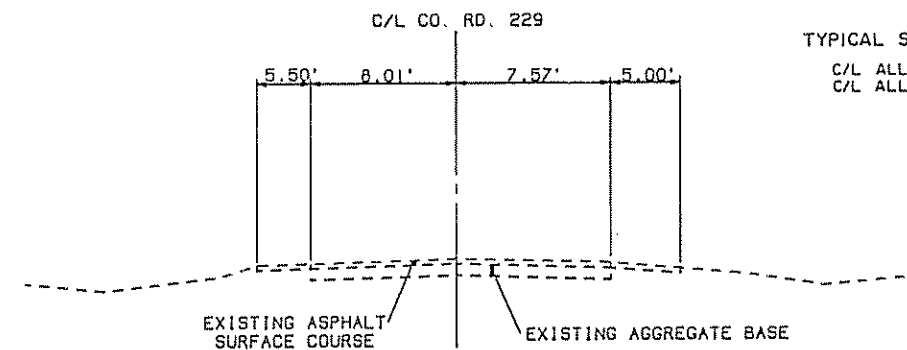


TYPICAL SECTION EXISTING PAVEMENT
CO. RD. 225

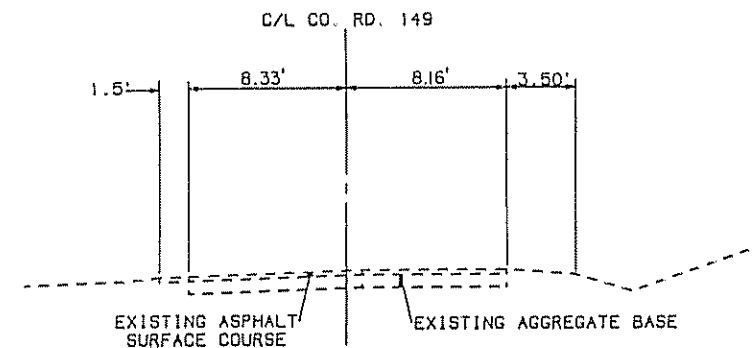


TYPICAL SECTION-EXISTING PAVEMENT

C/L ALLEY "B" STA. 281+37.26 LT. *
C/L ALLEY "C" STA. 281+38.16 RT. **



TYPICAL SECTION EXISTING PAVEMENT
CO. RD. 229



TYPICAL SECTION EXISTING PAVEMENT
CO. RD. 149

NOTE: FOR LEGEND SEE SHEET NO. 6
FOR DRIVEWAY PAVEMENT COMPOSITION
SEE SHEET NO. 120.

GENERAL NOTES

CALC. BY DATE 11-92	UNI-739-2.01	OHIO	9
CHECKED BY DATE 12-92		FHWA REGION 5	177

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

UNITED TELEPHONE COMPANY 127 NORTH MAIN STREET BELLEFONTAINE, OHIO 43311 (613) 599-9276	UNION RURAL ELECTRIC COOP. 15461 S.R. 36 P.O. BOX 393 MARYSVILLE, OHIO 43040 (513) 642-1826
--	---

DAYTON POWER & LIGHT COMPANY
P.O. BOX 1247
DAYTON, OHIO 45401
(513) 227-2496

SHELL PIPELINE
8500 NORTH MICHIGAN AVE.
P.O. BOX 68099
INDIANAPOLIS, INDIANA 46268
(317) 872-7440

BUCKEYE PIPELINE
100 BUCKEYE RD.
P.O. BOX 368
EMMAUS, PENNSYLVANIA 18049
(800) 523-9420

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS. EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEERS DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN TEN (10) FEET OUTSIDE THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS, OR TO THE RIGHT-OF-WAY LINE, IF SUCH LINE IS LESS THAN TEN (10) FEET FROM THE WORK LIMITS.

WATERING AND MOWING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09:

659 WATER	137 M. GAL.
659 MOWING	285 M. SQ. FT.

REMOVAL OF TREES OR 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:

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	53	7	60
30"	4	1	5
48"	3		3

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.

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, 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. LATERAL TILE FIELDS WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 603, TYPE E CONDUIT, AND CARRIED IN A LONG-ITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

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	8" CONDUIT, TYPE B	50 LIN. FT.
ITEM 603	8" CONDUIT, TYPE E	50 LIN. FT.
ITEM 603	8" CONDUIT, TYPE F 707.17, NON-PERFORATED, ASTM D 3034 SDR 35 OR SS 931 OR SS 944	50 LIN. FT.
ITEM 601, ROCK CHANNEL PROTECTION TYPE C WITH FILTER		10 CU. YD.

NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR IS ADVISED OF THE PRESENCE OF OTHER CONSTRUCTION CONTRACTS WITHIN THE WORK LIMITS OR THE VICINITY OF THIS PROJECT.

THESE CONTRACTS MAY BE GOING ON CONCURRENTLY WITH THIS PROJECT AND CLOSE COOPERATION BETWEEN CONTRACTORS IS REQUIRED TO INSURE THAT TRAFFIC MAINTENANCE OPERATIONS AND OTHER CONSTRUCTION ACTIVITIES FOR EACH PROJECT ARE AT ALL TIMES COMPATIBLE.

ANY CONFLICTS SHALL BE RESOLVED BY THE ENGINEER.

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 OHIO DEPARTMENT OF TRANSPORTATION, THE OFFICIAL PERMIT TO HAVE THE CONNECTION MADE.

IN EACH CASE WHERE A PERMIT HAS BEEN ISSUED FOR A SANITARY CONNECTION TO BE MADE INTO A HIGHWAY DRAINAGE CONDUIT, IT SHALL BE PROVIDED WITH AN INSPECTION WELL, IN ACCORDANCE WITH THE DETAIL SHOWN ON STANDARD DRAWING MC-8.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER, IN MAKING THE ABOVE DESCRIBED CONNECTIONS:

ITEM 603, 8" CONDUIT, TYPE C	100 LIN. FT.
ITEM 604, INSPECTION WELLS	5 EACH

NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

• NO INSPECTION WELL IS REQUIRED IF EFFLUENT IS DISCHARGED INTO AN OPEN DITCH, CHANNEL, CATCH BASIN OR MANHOLE.

CROWN AT RAILROAD CROSSING

THE CROWN SHALL BE WORKED OUT OF THE PROPOSED FULL-DEPTH PAVEMENT ON EACH SIDE OF THE RAILROAD CROSSING, BEGINNING 50 FEET FROM THE CROSSING, BY RAISING THE EDGE OF THE NEW PAVEMENT TO MEET THE RAIL ELEVATION.

EROSION CONTROL

ITEMS 601, 660 AND 670 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS, AND TURF OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE 660 AND 670. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

ITEM 605, PIPE UNDERDRAINS

UNDERDRAINS SHALL BE INSTALLED AFTER LIME STABILIZATION HAS BEEN PERFORMED.

MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN ON STANDARD CONSTRUCTION DRAWING MC-1, FOR LOCATIONS. SEE SHEET NO. 144-146.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER, FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

207	TEMPORARY SEEDING AND MULCHING	25,237 SQ. YD.
207	STRAW OR HAY BALES	3,665 EACH
207	TEMPORARY BENCHES, DAMS AND SEDIMENT BASINS	1,738 CU. YD.
601	TYPE C ROCK CHANNEL PROTECTION (WITHOUT FILTER)	25 CU. YD.
659	MOWING	284 M. SQ. FT.
659	COMMERCIAL FERTILIZER	6 TON
659	REPAIR SEEDING AND MULCHING	6,309 SQ. YD.
659	WATER	55 M. GAL.

ITEM 310-SUBBASE, TYPE II, AS PER PLAN/ITEM 304-AGGREGATE BASE, AS PER PLAN

MATERIALS FURNISHED FOR THESE ITEMS SHALL EXCLUDE ALL SLAG EXCEPT GRANULATED SLAG OR CRUSHED AIR-COOLED BLAST FURNACE SLAG.

ITEM 203 - EMBANKMENT, USING GRANULAR MATERIAL

IN ORDER TO PREVENT SATURATION OF THE SUBGRADE BY FLOODING IN SOME AREAS, 2' OF 203.02 GRANULAR MATERIAL IS TO BE PLACED BELOW THE TOP OF THE SUBGRADE IN THESE AREAS. FOR THE LOCATIONS OF THE AREAS AND CORRESPONDING QUANTITIES SEE SHEET 6 AND 16.

ITEM 203 - PROOF ROLLING, AS PER PLAN

THE SUBGRADE IN AREAS OF LIME STABILIZATION SHALL BE TEST ROLLED AFTER ROUGH GRADING AND PRIOR TO THE ADDITION OF LIME, USING A GRADER HAVING A MINIMUM WEIGHT OF 15 TONS. AREAS LACKING SUFFICIENT STABILITY IN THE OPINION OF THE ENGINEER, SHALL BE TREATED AS SOFT SUBGRADE.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS PURPOSE:

ITEM 203 - PROOF ROLLING, AS PER PLAN	32 HOURS
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SOFT SUBGRADE

SOFT SUBGRADE IS ANTICIPATED AT VARIOUS LOCATIONS ALONG S.R. 739, TO ELIMINATE ANY SOFT SUBGRADE, ADDITIONAL QUANTITIES OF EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION AND EMBANKMENT SHALL BE INCLUDED IN THE GENERAL SUMMARY. THESE QUANTITIES SHALL INCLUDE AN UNDERCUT AND REPLACEMENT TWO FEET DEEP, ONE FOOT OUTSIDE THE PAVED SHOULDER. AREAS OF SOFT SUBGRADE WILL BE IDENTIFIED USING ITEM 203, PROOF ROLLING, AS PER PLAN.

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	21,900 CU. YD.
ITEM 203 - EMBANKMENT	21,900 CU. YD.

ITEM 203 - SUBGRADE COMPACTION

THE CONTRACTOR SHALL BE REQUIRED TO PERFORM SUBGRADE COMPACTION ONLY IN THE AREAS WHERE ITEM 203 - EMBANKMENT USING GRANULAR MATERIAL IS SPECIFIED.

GENERAL NOTES

CALC. BY DATE 11-41	UNI-739-2.01	OHIO	10 177
CHECKED BY DATE 12-41		FHWA REGION 5	

ITEM SPECIAL - 6" LIME-SOIL STABILIZED SUBGRADE

DESCRIPTION - THIS ITEM SHALL CONSIST OF AN ADMIXTURE OF HYDRATED LIME WITH THE SUBGRADE SOIL CONSTRUCTED IN ACCORDANCE WITH THESE SPECIFICATIONS AND IN CONFORMITY WITH THE LINES, GRADES, AND TYPICAL CROSS-SECTIONS AS SHOWN ON THE PLANS, MIXED, SPREAD, COMPACTED AND FINISHED, READY FOR ACCEPTANCE.

THE SUBGRADE SHALL BE TREATED TO THE LINES SHOWN ON THE PLANS.

MATERIALS - HYDRATED LIME SHALL MEET THE REQUIREMENTS OF 712.04 (B). WEIGHT OF THE LIME USED SHALL BE BETWEEN 3 AND 8 PERCENT OF THE DRY WEIGHT OF THE SUBGRADE SOIL AS DIRECTED BY THE ENGINEER.

CONSTRUCTION METHODS - LIME STABILIZATION WORK SHALL BE DONE WHEN THE AIR TEMPERATURE IS 40 DEGREES F. OR ABOVE AND THE MATERIAL TO BE TREATED IS NOT FROZEN. NO WORK SHALL BE DONE DURING WET OR UNSUITABLE WEATHER. THE SUBGRADE IN THE AREAS TO BE STABILIZED WITH LIME, SHALL BE SHAPED TO THE PLAN LINES PRIOR TO ADMIXTURE OF LIME SO AS TO PERMIT CONSTRUCTION OF A UNIFORMLY COMPACTED COURSE OF LIME TREATED SOIL OF THE THICKNESS SHOWN ON THE PLANS. THE LIME SHALL THEN BE APPLIED AT THE RATE SET BY THE ENGINEER USING A BULK DISTRIBUTOR, APPROVED HYDRAULIC METHODS OR BY MANUAL METHODS. CARE SHALL BE EXERCISED DURING THE SPREADING AND MIXING OPERATION TO PREVENT EXCESSIVE LOSS OF LIME BY DUSTING. IMMEDIATELY AFTER SPREADING DRY LIME, IF THE BULK DISTRIBUTOR OR MANUAL METHODS ARE USED, THE LIME SHALL BE SPRINKLED WITH WATER USING A PRESSURE DISTRIBUTOR. THE SPREADING OF THE LIME SHALL BE FOLLOWED IMMEDIATELY BY AN INITIAL MIXING OPERATION CONSISTING OF THE USE OF A SPRING TOOTH OR DISC HARROW FOLLOWED BY AN APPROVED POWER DRIVEN ROTARY TYPE MIXER. DURING THIS INITIAL MIXING OPERATION, WATER SHALL BE ADDED IF NECESSARY TO BRING THE MIXED MATERIAL TO OPTIMUM. MIXING SHALL BE CONTINUED UNTIL THE LIME HAS BEEN THOROUGHLY INCORPORATED INTO THE MIX AND ALL SOIL CLODS HAVE BEEN REDUCED TO A MAXIMUM SIZE OF 2 INCHES.

FOLLOWING THE INITIAL MIXING, THE MATERIAL SHALL BE LIGHTLY COMPACTED WITH A STEEL WHEELED OR PNEUMATIC TIRED ROLLER TO SEAL IT AGAINST RAIN OR EXCESSIVE DRYING. THE PARTIALLY MIXED MATERIAL SHALL BE PERMITTED TO STAND FOR A PERIOD OF NOT LESS THAN 24 HOURS NOR MORE THAN 7 DAYS PRIOR TO FINAL MIXING. IF CONDITIONS DURING CONSTRUCTION ARE SUCH THAT MORE THAN 7 DAYS ELAPSE BETWEEN INITIAL MIXING AND FINAL COMPACTION AN ADDITIONAL 1/2 PERCENT OF LIME SHALL BE ADDED DURING THE FINAL MIXING.

THE ADDED LIME SHALL BE FURNISHED AT THE CONTRACTOR'S EXPENSE UNLESS THE DELAY BEYOND THE 7 DAY LIMIT IS CAUSED BY CONDITIONS BEYOND THE CONTROL OF THE CONTRACTOR. THE FINAL MIXING SHALL BE DONE WITH APPROVED POWER DRIVEN ROTARY TYPE EQUIPMENT UNTIL THE SOIL HAS BECOME COMPLETELY PULVERIZED WITH ALL CLODS REDUCED TO A MAXIMUM SIZE OF 1 INCH AND AT LEAST 60% OF THE CLODS REDUCED TO SUCH A SIZE THAT THEY WILL PASS A NO. 4 SIEVE. MIXING SHALL BE CONTINUED UNTIL THE LIME HAS BEEN UNIFORMLY DISTRIBUTED THROUGH THE PULVERIZED SOIL. THE MIXTURE SHALL AGAIN BE BROUGHT TO OPTIMUM MOISTURE CONTENT DURING THE FINAL MIXING AND THE MIXTURE SHALL THEN BE SHAPED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS OF 203.13, EXCEPT THAT ON THIS PROJECT, SOILS WITH MAXIMUM LABORATORY DRY WEIGHTS OF NOT LESS THAN 90 POUNDS WILL BE PERMITTED IN THE SUBGRADE AND SHOULD BE COMPACTED TO 100% OF LABORATORY MAXIMUM DRY WEIGHT. FINAL ROLLING SHALL BE DONE WITH A STEEL WHEELED ROLLER MEETING THE REQUIREMENTS OF 401.11. THE COMPACTED LIME SOIL MIXTURE SHALL BE SHAPED TO PLAN LINES WITHIN TOLERANCES SET UP IN 203.06 FOR SUBGRADE.

THE COMPACTED LIME STABILIZED SUBGRADE SHALL BE PERMITTED TO CURE FOR A PERIOD OF AT LEAST 5 DAYS PRIOR TO PLACEMENT OF THE OVERLAYING PAVEMENT COURSE. THE SURFACE SHALL BE LIGHTLY SPRINKLED DURING HOT, DRY WEATHER THROUGH THE CURING PERIOD TO PREVENT EXCESSIVE MOISTURE LOSS, AS DIRECTED BY THE ENGINEER. DURING THE CURING PERIOD, HEAVY EQUIPMENT SHOULD BE KEPT OFF THE TREATED SUBGRADE. THE LIME STABILIZED SUBGRADE SHALL BE COVERED BY THE OVERLYING PAVEMENT COURSE WITHIN FOUR WEEKS OF THE FINAL MIXING OPERATION, OR PROTECTED BY A BITUMINOUS PRIME COAT AT NO ADDITIONAL COST TO THE STATE IF MORE THAN FOUR WEEKS ELAPSE BEFORE PLACING THE OVERLYING COURSE. THE BITUMINOUS PRIME SHALL CONSIST OF 0.2 GALLON PER SQUARE YARD OF 702.02 RC-70 OR RC-250 OR 702.04 RS-1.

MEASUREMENT AND PAYMENT - THE QUANTITIES TO BE PAID FOR SHALL BE AS FOLLOWS:

- A. ITEM SPECIAL, 6" LIME - SOIL STABILIZED SUBGRADE, PER SQUARE YARD - INCLUDES SPREADING, MIXING, SHAPING AND COMPACTING LIME SOIL STABILIZED MIXTURE.
- B. ITEM SPECIAL, HYDRATED LIME, PER TON - DELIVERED HYDRATED LIME FOR THE LIME SOIL STABILIZATION
- C. ITEM 616, WATER, PER THOUSAND GALLONS (M. GAL.)

PAYMENT FOR THE ABOVE ITEMS SHALL INCLUDE FULL COMPENSATION FOR FURNISHING LIME AND WATER, HAULING, SCARIFYING, BLADING, SPREADING, MIXING, SHAPING AND COMPACTING LIME WITH THE SOIL, AND FOR ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM. ANY WATER REQUIRED FOR THIS ITEM SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE REQUIREMENTS OF 616. EXCEPT THAT WATER USED FOR SPREADING LIME HYDRAULICALLY SHALL NOT BE MEASURED FOR PAYMENT IF IT BRINGS THE SOIL TO MORE THAN 6 PERCENT ABOVE OPTIMUM IMMEDIATELY AFTER THE APPLICATION OF THE LIME. ALL PAY QUANTITIES SHALL BE DETERMINED BY FINAL MEASUREMENT. SEE SHEET 15 & 16 FOR QUANTITIES.

TOPSOIL REPLACEMENT

ROADWAY BORINGS SHOWED 1' OF TOPSOIL OVER MOST OF THE PROJECT AREA. THE TOPSOIL SHALL BE REMOVED AND REPLACED WITH ITEM 203 - EMBANKMENT WHEREVER EXISTING GROUND SURFACE IS 3' OR LESS BELOW SUBGRADE. LATERAL LIMITS OF REMOVAL ARE 1' OUTSIDE OF THE OUTER EDGES OF THE PROPOSED PAVED SHOULDERS. THE APPROXIMATE LOCATIONS OF THESE TOPSOIL REPLACEMENTS ARE SHOWN ON THE CROSS-SECTIONS. EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION AND AN EQUAL AMOUNT OF ITEM 203 - EMBANKMENT HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS PURPOSE.

EXCAVATED TOPSOIL MAY BE USED IN THE TOP 12" OF THE FILL SLOPE OUTSIDE A POINT 4' BEYOND THE EDGES OF THE PROPOSED PAVED SHOULDERS. IT SHALL BE COMPACTED BUT THE MOISTURE/DENSITY REQUIREMENTS SHOULD BE WAIVED FOR THIS UPPER 12".

THE TOPSOIL MAY ALSO BE USED FOR EMBANKMENT OUTSIDE A POINT 8' BEYOND THE PAVED SHOULDER, BUT SHALL BE SUBJECT TO MOISTURE/DENSITY REQUIREMENTS. MAXIMUM LABORATORY DRY WEIGHT SHOULD NOT BE LESS THAN 85 POUNDS PER CUBIC FOOT AND THE MINIMUM COMPACTION REQUIREMENT SHOULD BE 90% OF THE MAXIMUM LABORATORY DRY WEIGHT. THE CONTRACTOR MAY BLENDO THE TOPSOIL WITH SUITABLE EMBANKMENT MATERIALS TO MEET THE MOISTURE/DENSITY REQUIREMENTS.

PLACEMENT OF TOPSOIL AS DETAILED ABOVE SHALL BE PAID FOR AS EMBANKMENT.

THE BITUMINOUS COURSES OF THE EXISTING ROADWAY MUST BE REMOVED WHERE THEY OCCUR WITHIN 3' BELOW PROPOSED SUBGRADE (BOTTOM OF THE 310 SUBBASE) AND REPLACED WITH SOIL. THE ESTIMATED QUANTITIES OF EXCAVATION, NOT INCLUDING EMBANKMENT AND EMBANKMENT PROVIDED ABOVE FOR TOPSOIL REPLACEMENT INCLUDE QUANTITIES FOR THIS PURPOSE ALSO.

THE FOLLOWING ESTIMATED QUANTITIES OF TOPSOIL EXCAVATION AND EMBANKMENT HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS PURPOSE:

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	9,700 CU. YD.
ITEM 203 - EMBANKMENT	9,700 CU. YD.

ITEM 605 AGGREGATE DRAINS

AGGREGATE DRAINS SHALL BE PLACED AT EACH TRANSVERSE JOINT, WHERE THE DEPTH OF ADJACENT DITCH ALLOWS FOR PROPER DRAINAGE. LOCATION OF THE AGGREGATE DRAINS ARE AS FOLLOWS:

C.R. 149	C.R. 229	C.R. 225
STA. 69+50 RT.	STA. 59+51 LT.	STA. 20+65 LT.
STA. 69+44 LT.	STA. 59+31 LT.	STA. 20+18 L&R
STA. 69+27 LT.	STA. 59+27 RT.	STA. 20+28 L&R
STA. 69+07 LT.	STA. 59+11 L&R	
STA. 68+87 LT.	STA. 58+91 L&R	

ADDITIONAL AGGREGATE DRAINS MAY BE PLACED AT THE DISCRETION OF THE PROJECT ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO COMPLETE THE WORK NOTED ABOVE:

ITEM 605 - AGGREGATE DRAINS	180 LIN. FT.
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CONNECTION TO EXISTING PIPE

WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS EITHER OVER OR UNDER AN EXISTING SEWER, 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 CONDUIT.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEMS.

HOUSE CONNECTIONS

EXISTING ROOF DRAINS, FOOTER DRAINS OR YARD DRAINS, DISTURBED BY THE PROPOSED WORK, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING TO A STORM SEWER, MANHOLE, CATCH BASIN, OR THROUGH THE CURB.

THE LOCATION, TYPE, SIZE AND GRADE OF REQUIRED REPLACEMENTS WILL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603 4" CONDUIT, TYPE E, 711.29	100 LIN. FT.
ITEM 603 4" CONDUIT, TYPE E, 706.01, 706.02 OR 706.08	100 LIN. FT.
ITEM 603 4" CONDUIT, TYPE F, 707.17 NON-PERFORATED ASTM D 3034 SDR 35, SS 931 OR SS 944	100 LIN. FT.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL REQUESTED BY THE ENGINEER.

ITEM 452 - PLAIN CONCRETE PAVEMENT, AS PER PLAN

PLAIN CONCRETE PAVEMENT SHALL MEET ALL THE REQUIREMENTS OF 452 AND STANDARD DRAWING BP-3 AND BP-4 WITH THE FOLLOWING EXCEPTIONS:

- VOID
1. THE MAXIMUM SPACING BETWEEN CONTRACTION/EXPANSION JOINTS SHALL BE TWENTY (20) FEET AND SHALL BE ALIGNED WITH THE MAINLINE JOINTS.
 2. ALL JOINTS SHALL BE SKEWED 4 FEET RIGHT FORWARD FOR A 24 FOOT WIDTH.
 3. THE WIDTH OF THE CONTRACTION JOINTS SHALL BE 5/8" +/- 1/16" AND THE MINIMUM DEPTH SHALL BE 2-1/4". PREFORMED ELASTIC JOINT SEALER SHALL BE USED. SHALL MEET THE REQUIREMENTS OF 705.11, AND SHALL HAVE A MINIMUM WIDTH OF 1-1/4". DRAWINGS AND SPECIFICATIONS OF THE MATERIAL PROPOSED FOR USE SHALL BE SUBMITTED TO THE DIRECTOR FOR REVIEW AND APPROVAL.
 4. THE JOINT BETWEEN THE INSIDE AND OUTSIDE SHOULDERS AND MAINLINE PAVEMENT SHALL BE TIED AT 30 INCH SPACINGS.

ITEM SPECIAL - MAILBOX SUPPORT

DESCRIPTION. THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX, AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

MATERIALS. WOOD POSTS SHALL BE NOMINAL 4" x 4" SQUARE OR 4 1/2" DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2" I.D., AND CONFORM TO AASHTO M 181.

HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL - GRADE GALVANIZED STEEL.

SETTING POSTS. POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

MOUNTING BOXES. SUPPORT HARDWARE SHALL ACCOMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

BASIS OF PAYMENT. PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO THE PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.12. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR THE TYPE SPECIFIED, COMPLETE IN PLACE.

PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	MAILBOX SUPPORT, SINGLE

A QUANTITY OF 10 MAILBOX SUPPORTS HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR MAILBOXES FOUND IN VIOLATION OF FHWA REGULATIONS.

GENERAL NOTES

CALC BY DATE MK 11-11-12	UN1-739-2.01	OHIO	11 177
CHECKED BY DATE CHC 11-11-12		FHWA REGION 5	

ITEM 603 - CONDUIT BORED OR JACKED, 18" TYPE B, 706.02, 3000 D-LOAD, UNDER RAILROAD, AS PER PLAN

AS A PART OF THIS CONTRACT, IT WILL BE NECESSARY TO INSTALL AN 18" CONDUIT UNDER THE EXISTING RAILROAD AT STA. 270+79.75 BY THE METHOD OF BORING AND JACKING.

NO TRENCH EXCAVATION OR EQUIPMENT SHALL BE CLOSER THAN 15 FEET TO ANY TRACK. TRENCHES SHALL BE ADEQUATELY SUPPORTED AND THE SPECIFICATION REQUIREMENT FOR CLASS B BEDDING SHALL BE DISREG

IF A CASING PIPE IS USED IN THE BORING AND JACKING OPERATION THE VOID BETWEEN IT AND THE INTERIOR CASING PIPE SHALL BE COMPLETELY FILLED WITH SAND, GROUT OR OTHER MATERIAL APPROVED BY THE ENGINEER.

ALL WORK SHALL FOLLOW ALL REQUIREMENTS OF CSX TRANSPORTATION, INC. AND THE AMERICAN RAILWAY ENGINEERING ASSOCIATION (AREA) "MANUAL FOR RAILWAY ENGINEERING", LATEST EDITION.

U.S.G.S. DATUM

ALL ELEVATIONS ARE BASED ON THE U.S.G.S. BENCH MARK 0.80 +/- MILES SOUTHWEST OF RAYMOND ON S.R. # 739, 310' +/- SOUTH OF INTERSECTION C.R. #229 & 80' +/- SOUTHEAST OF S.R. #739 IN CONCRETE WALK. ELEVATION = 1072.76

DESIGNATED LOCAL DETOUR ROUTE

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE". THIS ROUTE IS SHOWN ON SHEET NO. 12. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTE:

ITEM	QUANTITY	DESCRIPTION
301	CU YD	BITUMINOUS AGGREGATE BASE, AC-20
304	CU YD	AGGREGATE BASE
404	275 CU YD	ASPHALT CONCRETE, AC-20
404	44 CU.YD.	BITUMINOUS CONCRETE, FOR MAINTAINING TRAFFIC
407	770 GAL.	TACK COAT
408	GAL.	BITUMINOUS PRIME COAT
616	8 M.GAL	WATER
616	TON	CALCIUM CHLORIDE
617	97 CU.YD.	COMPACTED AGGREGATE, TYPE A
617	2 M.GAL	WATER
642	1 MILE	CENTER LINE, TYPE 2

CONSTRUCTION INITIATION

THE CONTRACTOR WILL ADVISE THE DISTRICT COMMUNICATIONS OFFICER AT (614) 363-1251 EXTENSION 261 OR BY FAX AT (614) 469-0235 SEVEN DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE PROJECT ENGINEER WILL PROVIDE ASSISTANCE/CLARIFICATION FOR ANY QUESTIONS.

LOCAL INGRESS & EGRESS

CALC. BY: JLC DATE: 11-92 CHECKED BY: JLC DATE: 12-92	UN1-739-2.01	OHIO FHWA REGION 5	12 177
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PHASE I CONSTRUCTION

THE CONTRACTOR SHALL CONSTRUCT 6.0' OF TRAFFIC COMPACTED SURFACE ADJACENT TO EXISTING SOUTH BOUND LANE;

THE CONTRACTOR SHALL REMOVE 2.0' OF EXISTING SOUTH BOUND PAVEMENT AND ALL OF EXISTING NORTH BOUND PAVEMENT;

THE CONTRACTOR SHALL GRADE PROPOSED NORTH BOUND SUBGRADE, SHOULDER, AND DITCHES;

LOCAL TRAFFIC SHALL BE MAINTAINED ON TRAFFIC COMPACTED SURFACE AND REMAINING SOUTH BOUND PAVEMENT;

PHASE II CONSTRUCTION

THE CONTRACTOR SHALL CONSTRUCT 14.0' OF TRAFFIC COMPACTED SURFACE ON PROPOSED NORTH BOUND SUBGRADE;

THE CONTRACTOR SHALL REMOVE EXISTING SOUTH BOUND PAVEMENT AND TRAFFIC COMPACTED SURFACE CONSTRUCTED IN PHASE I;

THE CONTRACTOR SHALL GRADE PROPOSED SOUTH BOUND SUBGRADE, SHOULDERS, AND DITCHES;

LOCAL TRAFFIC SHALL BE MAINTAINED ON 14.0' OF TRAFFIC COMPACTED SURFACE CONSTRUCTED ON NORTH BOUND SUBGRADE;

PHASE III CONSTRUCTION

THE CONTRACTOR SHALL CONSTRUCT 9.0' OF TRAFFIC COMPACTED SURFACE ON PROPOSED SOUTH BOUND SUBGRADE;

THE CONTRACTOR SHALL REMOVE 5.0' OF TRAFFIC COMPACTED SURFACE CONSTRUCTED IN PHASE II;

THE CONTRACTOR SHALL PLACE PROPOSED NORTH BOUND AND SOUTH BOUND PAVEMENT;

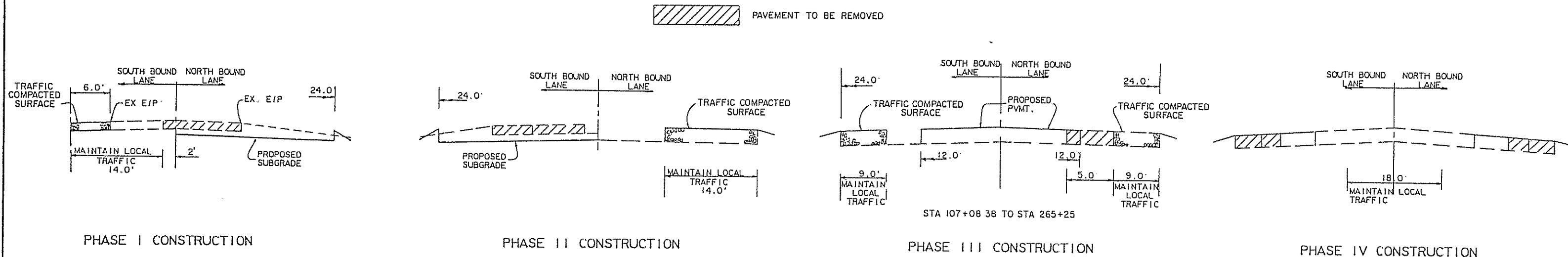
LOCAL TRAFFIC SHALL BE MAINTAINED ON 9.0' OF TRAFFIC COMPACTED SURFACE CONSTRUCTED ON NORTH BOUND AND SOUTH BOUND SUBGRADE;

PHASE IV CONSTRUCTION

THE CONTRACTOR SHALL REMOVE 9.0' OF TRAFFIC COMPACTED SURFACE FROM NORTH BOUND SHOULDER CONSTRUCTED IN PHASE II AND 9.0' OF TRAFFIC COMPACTED SURFACE FROM SOUTH BOUND SHOULDER CONSTRUCTED IN PHASE III;

THE CONTRACTOR SHALL PLACE 8.0' OF PAVED SHOULDER AND 4.0' OF TURF SHOULDER TO NORTH BOUND AND SOUTH BOUND LANES;

LOCAL TRAFFIC SHALL BE MAINTAINED ON PROPOSED PAVEMENT PLACED IN PHASE III.



PHASE I CONSTRUCTION

PHASE II CONSTRUCTION

PHASE III CONSTRUCTION

PHASE IV CONSTRUCTION

GENERAL NOTES :

LIQUIDATED DAMAGES

LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH SECTION 108.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATION FOR EACH CALENDAR DAY THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

DETOUR LIMITATIONS, MAINTAINING TRAFFIC AND LOCAL INGRESS AND EGRESS

THROUGH TRAFFIC SHALL BE DETOURED FOR A PERIOD NOT TO EXCEED 270 CALENDAR DAYS. THE CONTRACTOR SHALL NOTIFY THE DISTRICT TRAFFIC ENGINEER IN WRITING A MINIMUM OF SEVEN (7) DAYS IN ADVANCE OF THE DATE THE DETOUR IS NEEDED THE STATE OF OHIO WILL INSTALL, MAINTAIN AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING. THROUGH TRAFFIC WILL BE DETOURED AS SHOWN ON THIS SHEET.

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO BE USED AS DIRECTED TO MAINTAIN LOCAL TRAFFIC FOR EGRESS AND INGRESS.

ITEM 404 - BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	50 CU. YD.
ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE A OR B	16,500 CU. YD.
ITEM 616 - CALCIUM CHLORIDE	330 TONS
ITEM 616 - WATER	330 M. GAL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC MAINTENANCE AT ALL TIMES IN ACCORDANCE WITH THE REQUIREMENTS OF ITEM 614, MAINTAINING TRAFFIC EXCEPT FOR THE ABOVE ITEMS, PAYMENT FOR ALL MAINTENANCE OF TRAFFIC SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC

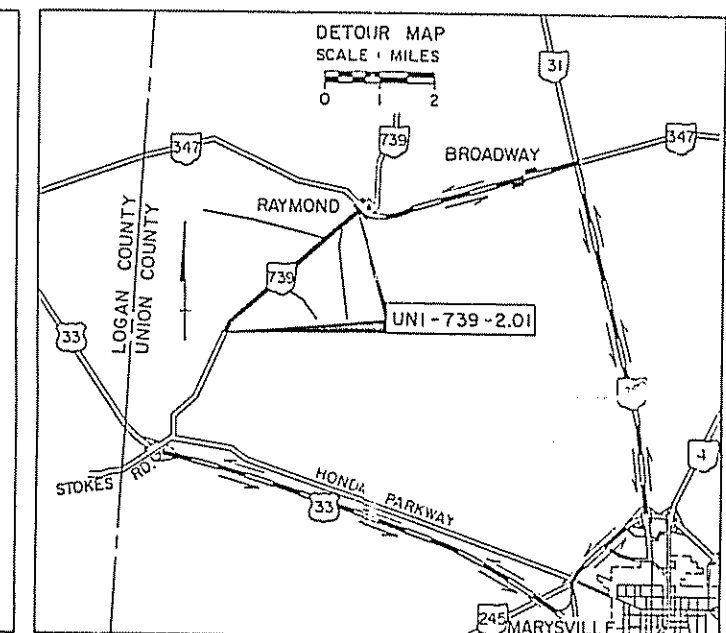
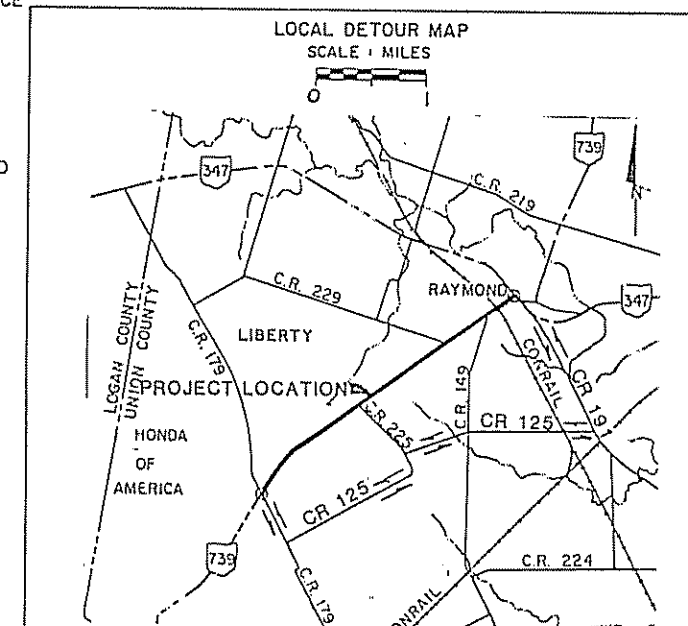
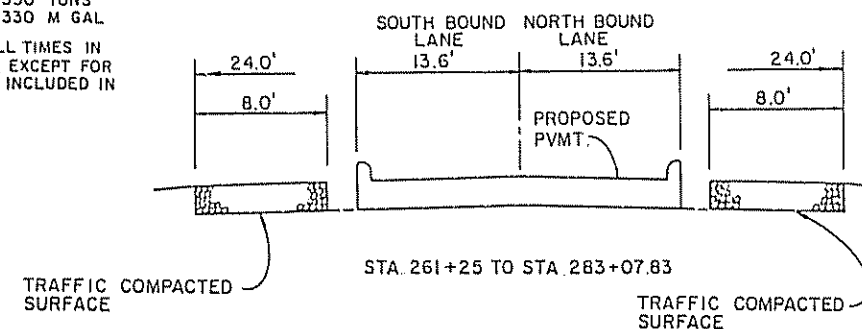
PHASE III CONSTRUCTION

THE CONTRACTOR SHALL CONSTRUCT 8.0' OF TRAFFIC COMPACTED SURFACE ON PROPOSED SOUTH BOUND SUBGRADE;

THE CONTRACTOR SHALL REMOVE 5.0' OF TRAFFIC COMPACTED SURFACE CONSTRUCTED IN PHASE II;

THE CONTRACTOR SHALL PLACE PROPOSED NORTH BOUND AND SOUTH BOUND PAVEMENT;

LOCAL TRAFFIC SHALL BE MAINTAINED ON 8.0' OF TRAFFIC COMPACTED SURFACE CONSTRUCTED ON NORTH BOUND AND SOUTH BOUND SUBGRADE;



PAVEMENT CALCULATIONS

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM 451 - 9" REINFORCED CONCRETE PAVEMENT	S.Y.	SQ. YD.
STATE ROUTE #739 - PAVEMENT		
STA. 107+08.38 TO STA. 261+25.00 15,416.62 L.F. x 24.0' = 369,998.88 S.F.		
STA. 261+25.00 TO STA. 261+75.00 50.00 L.F. x ((24.0' + 22.0') /2) = 1,150.00 S.F.		
STA. 261+75.00 TO STA. 270+77.88 902.88 L.F. x 22.0' = 19,863.36 S.F.		
STA. 270+86.38 TO STA. 282+52.35 1,165.97 L.F. x 22.0' = 25,651.34 S.F.		
STA. 282+52.35 TO STA. 283+07.99, LT. 1,549.90 S.F. (BY COMPUTER) = 1,549.90 S.F.		
STA. 282+52.35 TO STA. 282+65.04, RT. 12.69 L.F. x 22.0' = 279.18 S.F.		
STA. 282+65.04 TO STA. 283+07.99, RT. 1,086.30 S.F. (BY COMPUTER) = 1,086.30 S.F.		
TOTAL = 419,578.96 S.F.		
419,578.96 S.F. /9 = 46,619.9		
COUNTY ROAD #225 - PAVEMENT		
STA. 20+12.28 TO STA. 21+50.00 4,077.87 S.F. (BY COMPUTER) /9 = 453.1		
COUNTY ROAD #229 - PAVEMENT		
STA. 58+00.00 TO STA. 59+87.23 5,298.07 S.F. (BY COMPUTER) /9 = 588.7		
COUNTY ROAD #149 - PAVEMENT		
STA. 67+95.00 TO STA. 68+03.00 28.00 L.F. x ((17.0' + 18.2') /2) = 140.80 S.F.		
STA. 68+03.00 TO STA. 68+15.00 12.00 L.F. x ((28.2' + 24.0') /2) = 313.20 S.F.		
STA. 68+15.00 TO STA. 69+33.60 118.60 L.F. x 20.0' = 2,372.00 S.F.		
STA. 69+33.60 TO STA. 69+88.00 2,005.80 S.F. x (BY COMPUTER) = 2,005.80 S.F.		
TOTAL = 4,831.80 S.F.		
4,831.80 S.F. /9 = 536.9		

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM 451 - 9" REINFORCED CONCRETE PAVEMENT (CONT.)	S.Y.	SQ. YD.
ALLEY "B" - PAVEMENT 555.07 S.F. (BY COMPUTER) /9 = 61.7		
ALLEY "C" - PAVEMENT 471.23 S.F. (BY COMPUTER) /9 = 52.4		
TOTAL ITEM 451 - 9" REINF. CONC. PAVEMENT = 48,312.7		
GRAND TOTAL TO GENERAL SUMMARY = 48,313		
ITEM 452 - 6" - 9" PLAIN CONCRETE PAVEMENT	S.Y.	SQ. YD.
STATE ROUTE #739 - LEFT SHOULDER		
STA. 107+08.38 TO STA. 237+15.79 13,007.41 L.F. x 8.0' = 104,059.28 S.F.		
STA. 238+43.52 TO STA. 261+00.00 2,256.48 L.F. x 8.0' = 18,051.84 S.F.		
STA. 261+00.00 TO STA. 261+25.00 25.00 L.F. x ((8.0' + 2.0') /2) = 125.00 S.F.		
STA. 270+53.00 TO STA. 270+65.00 12.00 L.F. x ((2.0' + 5.0') /2) = 42.00 S.F.		
STA. 270+65.00 TO STA. 270+76.50 11.50 L.F. x 5.0' = 57.50 S.F.		
STA. 270+84.50 TO STA. 270+90.00 5.50 L.F. x 5.0' = 27.50 S.F.		
STA. 270+90.00 TO STA. 271+02.00 12.00 L.F. x ((5.0' + 2.0') /2) = 42.00 S.F.		
TOTAL = 122,405.12 S.F.		
122,405.12 S.F. /9 = 13,600.6		
STATE ROUTE #739 - RIGHT SHOULDER		
STA. 107+08.38 TO STA. 178+59.15 7,150.77 L.F. x 8.0' = 57,206.16 S.F.		
STA. 179+81.93 TO STA. 261+00.00 8,118.07 L.F. x 8.0' = 64,944.56 S.F.		
STA. 261+00.00 TO STA. 261+25.00 25.00 L.F. x ((8.0' + 2.0') /2) = 125.00 S.F.		

PAVEMENT CALCULATIONS

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM 452 - 6" - 9" PLAIN CONCRETE PAVEMENT (CONT.)	S.Y.	SQ. YD.
STATE ROUTE #739 - RIGHT SHOULDER (CONT.)		
STA. 270+58.00 TO STA. 270+70.00 12.00 L.F. x [(2.0' + 5.0') /2]	= 42.00 S.F.	
STA. 270+70.00 TO STA. 270+79.00 9.00 L.F. x 5.0'	= 45.00 S.F.	
STA. 270+87.00 TO STA. 270+95.00 8.00 L.F. x 5.0'	= 40.00 S.F.	
STA. 270+95.00 TO STA. 271+07.00 12.00 L.F. x [(5.0' + 2.0') /2]	= 42.00 S.F.	
TOTAL = 122,444.72 S.F.		
122,444.72 S.F. /9	= 13,605.0	
TOTAL ITEM 452 - 6" - 9" PLAIN CONC. PAVEMENT	=	27,205.5
GRAND TOTAL TO GENERAL SUMMARY	=	27,206
ITEM 452 - 6" PLAIN CONCRETE PAVEMENT	S.Y.	SQ. YD.
COUNTY ROAD #225 - LEFT SHOULDER		
STA. 20+12.28 TO STA. 21+50.00 712.21 S.F. (BY COMPUTER)	= 712.21 S.F.	
COUNTY ROAD #225 - RIGHT SHOULDER		
STA. 20+12.28 TO STA. 21+50.00 709.46 S.F. (BY COMPUTER)	= 709.46 S.F.	
TOTAL = 1,421.67 S.F.		
1,421.67 S.F. (BY COMPUTER) /9	= 158.0	
COUNTY ROAD #229 - LEFT SHOULDER		
STA. 58+00.00 TO STA. 59+87.23 919.24 S.F. (BY COMPUTER)	= 919.24 S.F.	
COUNTY ROAD #229 - RIGHT SHOULDER		
STA. 58+00.00 TO STA. 59+87.23 802.51 S.F. (BY COMPUTER)	= 802.51 S.F.	
TOTAL = 1,801.75 S.F.		
1,801.75 S.F. /9	= 200.2	

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM 452 - 6" PLAIN CONCRETE PAVEMENT (CONT.)	S.Y.	SQ. YD.
ALLEY "A" - PAVEMENT		
STA. 80+10.00 TO STA. 80+34.41 536.80 S.F. (BY COMPUTER)	= 536.80 S.F.	
STA. 80+34.41 TO STA. 80+46.41 12.00 L.F. x [(16.0' + 22.0') /2]	= 228.00 S.F.	
STA. 80+46.41 TO STA. 80+70.51 24.10 L.F. x 12.0'	= 289.20 S.F.	
STA. 80+70.51 TO STA. 80+80.50 9.99 L.F. x 12.0'	= 99.90 S.F.	
TOTAL = 1,153.90 S.F.		
1,153.90 L.F. /9	= 128.2	
TOTAL ITEM 452 - 6" PLAIN CONC. PAVEMENT	=	486.4
GRAND TOTAL TO GENERAL SUMMARY	=	487
ITEM 310 - 3" - 6" SUBBASE, TYPE II, AS PER PLAN	C.Y.	CU. YD.
STATE ROUTE #739 - LEFT SHOULDER		
STA. 107+08.38 TO STA. 237+15.79 13,007.41 L.F. x 8.0'	= 104,059.28 S.F.	
STA. 238+43.52 TO STA. 261+00.00 2,256.48 L.F. x 8.0'	= 18,051.84 S.F.	
STA. 261+00.00 TO STA. 261+25.00 25.00 L.F. x [(8.0' + 2.0') /2]	= 125.00 S.F.	
STA. 270+53.00 TO STA. 270+65.00 12.00 L.F. x [(2.0' + 5.0') /2]	= 42.00 S.F.	
STA. 270+65.00 TO STA. 270+76.50 11.50 L.F. x 5.0'	= 57.50 S.F.	
STA. 270+84.50 TO STA. 270+90.00 5.50 L.F. x 5.0'	= 27.50 S.F.	
STA. 270+90.00 TO STA. 271+02.00 12.00 L.F. x [(5.0' + 2.0') /2]	= 42.00 S.F.	
TOTAL = 122,405.12 S.F.		
122,405.12 S.F. x 0.375' AVG. /27	= 1,700.1	

PAVEMENT CALCULATIONS

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM 310 - 3" - 6" SUBBASE, TYPE II, AS PER PLAN (CONT.)	C.Y.	CU. YD.
STATE ROUTE #739 - RIGHT SHOULDER		
STA. 107+08.38 TO STA. 178+59.15 7.150.77 L.F. x 8.0' = 57,206.16 S.F.		
STA. 179+81.93 TO STA. 261+00.00 8.118.07 L.F. x 8.0' = 64,944.56 S.F.		
STA. 261+00.00 TO STA. 261+25.00 25.00 L.F. x [(8.0' + 2.0') /2] = 125.00 S.F.		
STA. 270+58.00 TO STA. 270+70.00 12.00 L.F. x [(2.0' + 5.0') /2] = 42.00 S.F.		
STA. 270+70.00 TO STA. 270+79.00 9.00 L.F. x 5.0' = 45.00 S.F.		
STA. 270+87.00 TO STA. 270+95.00 8.00 L.F. x 5.0' = 40.00 S.F.		
STA. 270+95.00 TO STA. 271+07.00 12.00 L.F. x [(5.0' + 2.0') /2] = 42.00 S.F.		
TOTAL = 122,444.72 S.F.		
122,444.72 S.F. x 0.375' /27 =	1,700.6	
TOTAL ITEM 310 - 3" - 6" SUBBASE, TYPE II, AS PER PLAN =		3,400.7
GRAND TOTAL TO GENERAL SUMMARY =		3,401
ITEM 310 - 6" SUBBASE, TYPE II, AS PER PLAN	C.Y.	CU. YD.
STATE ROUTE #739 - PAVEMENT		
STA. 107+08.38 TO STA. 261+25.00 15.416.62 L.F. x 24.0' = 369,998.88 S.F.		
STA. 261+25.00 TO STA. 261+75.00 50.00 L.F. x [(29.0' + 27.0') /2] = 1,400.00 S.F.		
STA. 261+75.00 TO STA. 270+77.88 902.88 L.F. x 27.0' = 24,377.76 S.F.		
STA. 270+86.38 TO STA. 282+52.35 1,165.97 L.F. x 27.0' = 31,481.19 S.F.		
STA. 282+52.35 TO STA. 283+07.99, LT. 1,687.30 S.F. (BY COMPUTER) = 1,687.30 S.F.		

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM 310 - 6" SUBBASE, TYPE II, AS PER PLAN (CONT.)	C.Y.	CU. YD.
STATE ROUTE #739 - PAVEMENT (CONT.)		
STA. 282+52.35 TO STA. 282+65.04, RT. 12.69 L.F. x 13.5' = 171.32 S.F.		
STA. 282+65.04 TO STA. 283+07.99, RT. 1,213.50 S.F. (BY COMPUTER) = 1,213.50 S.F.		
TOTAL = 430,329.95 S.F.		
430,329.95 S.F. x 0.50' /27 =	7,969.1	
COUNTY ROAD #225 - PAVEMENT		
STA. 20+12.28 TO STA. 21+50.00 4,077.87 S.F. (BY COMPUTER) x 0.50' /27 =	75.5	
COUNTY ROAD #229 - PAVEMENT		
STA. 58+00.00 TO STA. 59+87.23 5,298.07 S.F. (BY COMPUTER) x 0.50' /27 =	98.1	
COUNTY ROAD #149 - PAVEMENT		
STA. 67+95.00 TO STA. 68+03.00 8.00 L.F. x [(17.0' + 18.2') /2] = 140.80 S.F.		
STA. 68+03.00 TO STA. 68+15.00 12.00 L.F. x [(29.2' + 25.0') /2] = 325.20 S.F.		
STA. 68+15.00 TO STA. 69+33.60 118.60 L.F. x 25.0' = 2,965.00 S.F.		
STA. 69+33.60 TO STA. 69+85.50 2,366.24 S.F. (BY COMPUTER) = 2,366.24 S.F.		
TOTAL = 5,797.24 S.F.		
5,797.24 S.F. x 0.50' /27 =	107.4	
ALLEY "A" - PAVEMENT		
STA. 80+12.50 TO STA. 80+34.70, LT. 301.00 S.F. (BY COMPUTER) = 301.00 S.F.		
STA. 80+12.50 TO STA. 80+32.39, RT. 259.30 S.F. (BY COMPUTER) = 259.30 S.F.		
STA. 80+32.39 TO STA. 80+44.39, RT. 12.00 L.F. x [(8.0' + 11.0') /2] = 114.00 S.F.		

PAVEMENT CALCULATIONS

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM 310 - 6" SUBBASE, TYPE II, AS PER PLAN (CONT.)	C.Y.	CU. YD.
ALLEY "A" - PAVEMENT (CONT.)		
STA. 80+34.70 TO STA. 80+46.70, LT. 12.00 L.F. x ((8.0' + 11.0') /2)	= 114.00 S.F.	
STA. 80+44.39 TO STA. 80+46.70, RT. 2.31 L.F. x 6.0'	= 13.86 S.F.	
STA. 80+46.70 TO STA. 80+70.51 23.81 L.F. x 12.0'	= 285.72 S.F.	
STA. 80+70.51 TO STA. 80+80.50 9.99 L.F. x ((12.0' + 8.0') /2)	= 99.90 S.F.	
TOTAL	= 1,187.78 S.F.	
1,187.78 S.F. x 0.50' /27	= 22.0	
ALLEY "B" - PAVEMENT		
570.50 S.F. (BY COMPUTER) x 0.50' /27	= 10.6	
ALLEY "C" - PAVEMENT		
481.60 S.F. (BY COMPUTER) x 0.50' /27	= 8.9	
TOTAL ITEM 310 - 6" SUBBASE, TYPE II, AS PER PLAN	=	8,291.6
GRAND TOTAL TO GENERAL SUMMARY	=	8,292
ITEM 310 - 9" SUBBASE, TYPE II, AS PER PLAN	C.Y.	CU. YD.
COUNTY ROAD #225 - LEFT SHOULDER		
STA. 20+12.28 TO STA. 21+50.00 712.21 S.F. (BY COMPUTER)	= 712.21 S.F.	
COUNTY ROAD #225 - RIGHT SHOULDER		
STA. 20+12.28 TO STA. 21+50.00 709.46 S.F. (BY COMPUTER)	= 709.46 S.F.	
TOTAL	= 1,421.67 S.F.	
1,421.67 S.F. x 0.75' /27	= 39.5	

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM 310 - 9" SUBBASE, TYPE II, AS PER PLAN (CONT.)	C.Y.	CU. YD.
COUNTY ROAD #229 - LEFT SHOULDER		
STA. 58+00.00 TO STA. 59+87.23 919.24 S.F. (BY COMPUTER)	= 919.24 S.F.	
COUNTY ROAD #229 - RIGHT SHOULDER		
STA. 58+00.00 TO STA. 59+87.23 882.51 S.F. (BY COMPUTER)	= 882.51 S.F.	
TOTAL	= 1,801.75 S.F.	
1,801.75 S.F. x 0.75' /27	= 50.1	
TOTAL ITEM 310 - 9" SUBBASE		89.6
GRAND TOTAL TO GENERAL SUMMARY		90
ITEM SPECIAL - 6" LIME / SOIL STABILIZED SUBGRADE	S.Y.	SQ. YD.
STATE ROUTE #739 - PAVEMENT		
STA. 107+08.38 TO STA. 132+50.00 2,541.62 L.F. x 24.0'	= 60,998.88 S.F.	
STA. 134+00.00 TO STA. 181+00.00 4,700.00 L.F. x 24.0'	= 112,800.00 S.F.	
STA. 185+00.00 TO STA. 193+00.00 800.00 L.F. x 24.0'	= 19,200.00 S.F.	
STA. 205+00.00 TO STA. 221+00.00 1,600.00 L.F. x 24.0'	= 38,400.00 S.F.	
STA. 222+00.00 TO STA. 251+00.00 2,900.00 L.F. x 24.0'	= 69,600.00 S.F.	
STA. 253+00.00 TO STA. 261+25.00 825.00 L.F. x 24.0'	= 19,800.00 S.F.	
STA. 261+25.00 TO STA. 261+75.00 50.00 L.F. x ((31.0' + 29.0') /2)	= 1,500.00 S.F.	
STA. 261+75.00 TO STA. 270+77.88 902.88 L.F. x 29.0'	= 26,183.52 S.F.	
STA. 270+86.38 TO STA. 282+52.35 1,165.97 L.F. x 29.0'	= 33,813.13 S.F.	
STA. 282+52.35 TO STA. 283+07.99, LT. 1,739.90 S.F. (BY COMPUTER)	= 1,739.90 S.F.	

PAVEMENT CALCULATIONS

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM SPECIAL - 6" LIME / SOIL STABILIZED SUBGRADE (CONT.)	S.Y.	SQ. YD.
STATE ROUTE #739 - PAVEMENT (CONT.)		
STA. 282+52.35 TO STA. 282+65.04, RT. 12.69 L.F. x 29.0'	= 368.01 S.F.	
STA. 282+65.04 TO STA. 283+07.99 1,252.90 S.F. (BY COMPUTER)	= 1,252.90 S.F.	
TOTAL	= 385,656.34 S.F.	
385,656.34 S.F. /9	= 42,850.7	
COUNTY ROAD #225 - PAVEMENT		
STA. 20+12.28 TO STA. 21+50.00 4,077.87 S.F. (BY COMPUTER) /9	= 453.1	
COUNTY ROAD #229 - PAVEMENT		
STA. 58+00.00 TO STA. 59+07.23 5,298.07 S.F. (BY COMPUTER) /9	= 588.7	
COUNTY ROAD #149 - PAVEMENT		
STA. 67+95.00 TO STA. 68+03.00 8.00 L.F. x [(19.0' + 20.2') /2]	= 156.80 S.F.	
STA. 68+03.00 TO STA. 68+15.00 12.00 L.F. x [(31.2' + 27.0') /2]	= 174.60 S.F.	
STA. 68+15.00 TO STA. 69+33.60 118.60 L.F. x 27.0'	= 3,202.20 S.F.	
STA. 69+33.60 TO STA. 69+04.50 2,109.80 S.F. (BY COMPUTER)	= 2,109.80 S.F.	
TOTAL	= 5,643.40 S.F.	
5,643.40 S.F. /9	= 627.0	
ALLEY "A" - PAVEMENT		
STA. 80+13.50 TO STA. 80+32.39, RT. 259.30 S.F. (BY COMPUTER)	= 259.30 S.F.	
STA. 80+13.50 TO STA. 80+34.70, LT. 301.00 S.F. (BY COMPUTER)	= 301.00 S.F.	
TOTAL	= 560.30 S.F.	
560.30 S.F. /9	= 62.3	

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM SPECIAL - 6" LIME / SOIL STABILIZED SUBGRADE (CONT.)	S.Y.	SQ. YD.
ALLEY "B" - PAVEMENT		
563.10 S.F. (BY COMPUTER) /9	= 62.6	
ALLEY "C" - PAVEMENT		
487.20 S.F. (BY COMPUTER) /9	= 54.1	
STATE ROUTE #739 - LEFT SHOULDER		
STA. 107+08.38 TO STA. 132+50.00 2,541.62 L.F. x 8.0'	= 20,332.96 S.F.	
STA. 134+00.00 TO STA. 181+00.00 4,700.00 L.F. x 8.0'	= 37,600.00 S.F.	
STA. 185+00.00 TO STA. 193+00.00 800.00 L.F. x 8.0'	= 6,400.00 S.F.	
STA. 205+00.00 TO STA. 221+00.00 1,600.00 L.F. x 8.0'	= 12,800.00 S.F.	
STA. 222+00.00 TO STA. 237+15.79 1,515.79 L.F. x 8.0'	= 12,126.32 S.F.	
STA. 238+43.52 TO STA. 251+00.00 1,256.48 L.F. x 8.0'	= 10,051.84 S.F.	
STA. 253+00.00 TO STA. 261+00.00 800.00 L.F. x 8.0'	= 6,400.00 S.F.	
STA. 261+00.00 TO STA. 261+25.00 25.00 L.F. x [(8.0' + 2.0') /2]	= 125.00 S.F.	
TOTAL	= 105,836.12 S.F.	
105,836.12 S.F. /9	= 11,759.6	
STATE ROUTE #739 - RIGHT SHOULDER		
STA. 107+08.38 TO STA. 132+50.00 2,541.62 L.F. x 8.0'	= 20,332.96 S.F.	
STA. 134+00.00 TO STA. 178+59.15 4,459.15 L.F. x 8.0'	= 35,673.20 S.F.	
STA. 179+01.93 TO STA. 181+00.00 118.07 L.F. x 8.0'	= 944.56 S.F.	
STA. 185+00.00 TO STA. 193+00.00 800.00 L.F. x 8.0'	= 6,400.00 S.F.	

CALC BY DATE 11-92	UNI-739-2.01	OHIO	18 177
CALC BY DATE 11-92		FHWA REGION 5	

DESCRIPTION	SUB-TOTAL	TOTAL
ITEM 203 - EMBANKMENT USING GRANULAR MATERIAL	C.Y.	CU. YD.
STATE ROUTE #739 - PAVEMENT		
STA. 132+50.00 TO STA. 134+00.00 150.00 L.F. x 24.0' = 3,600.00 S.F.		
STA. 181+00.00 TO STA. 185+00.00 400.00 L.F. x 24.0' = 9,600.00 S.F.		
STA. 193+00.00 TO STA. 205+00.00 1,200.00 L.F. x 24.0' = 28,800.00 S.F.		
STA. 221+00.00 TO STA. 222+00.00 100.00 L.F. x 24.0' = 2,400.00 S.F.		
STA. 251+00.00 TO STA. 253+00.00 200.00 L.F. x 24.0' = 4,800.00 S.F.		
TOTAL = 49,200.00 S.F.		
49,200.00 S.F. x 2.0' /27 =	3,644.4	
STATE ROUTE #739 - LEFT & RIGHT SHOULDERS		
STA. 132+50.00 TO STA. 134+00.00 150.00 L.F. x 16.0' = 2,400.00 S.F.		
STA. 181+00.00 TO STA. 185+00.00 400.00 L.F. x 16.0' = 6,400.00 S.F.		
STA. 193+00.00 TO STA. 205+00.00 1,200.00 S.F. x 16.0' = 19,200.00 S.F.		
STA. 221+00.00 TO STA. 222+00.00 100.00 L.F. x 16.0' = 1,600.00 S.F.		
STA. 251+00.00 TO STA. 253+00.00 200.00 L.F. x 16.0' = 3,200.00 S.F.		
TOTAL = 32,800.00 S.F.		
32,800.00 S.F. x 2.0' /27 =	2,429.6	
TOTAL ITEM 203 - EMBANKMENT USING GRANULAR MATERIAL =		6,074.0
GRAND TOTAL TO GENERAL SUMMARY =		6,074

CALC BY DATE 11/1/92	UNI-739-2.01	OHIO	
CHRG BY DATE 8/16/92		FHWA REGION 5	

[illegible]

MISCELLANEOUS CALCULATIONS

ITEM 670 - DITCH EROSION PROTECTION

SHEET NO. 26

1-EC STA. 107 + 50 - STA. 115 + 00
(385.0 L.F. x 16.0') + (365.0 L.F. x 12.0') / 9 = 1,172 S.Y.

2-EC STA. 111 + 35 - STA. 115 + 00
365.0 L.F. x 12.0' / 9 = 487 S.Y.

3-EC STA. 107 + 50 - STA. 110 + 37
287.0 L.F. x 12.0' / 9 = 383 S.Y.

SHEET NO. 27

1-EC STA. 115 + 00 - STA. 125 + 00
1,000.0 L.F. x 12.0' / 9 = 1,334 S.Y.

2-EC STA. 115 + 00 - STA. 118 + 00
300.0 L.F. x 12.0' / 9 = 400 S.Y.

3-EC STA. 121 + 00 - STA. 122 + 00
100.0 L.F. x 8.0' / 9 = 89 S.Y.

SHEET NO. 28

1-EC STA. 125 + 00 - STA. 126 + 00
100.0 L.F. x 8.0' / 9 = 89 S.Y.

SHEET NO. 29

1-EC STA. 135 + 00 - STA. 137 + 00
200.0 L.F. x 12.0' / 9 = 267 S.Y.

SHEET NO. 31

1-EC STA. 155 + 00 - STA. 157 + 22
222.0 L.F. x 12.0' / 9 = 296 S.Y.

SHEET NO. 33

1-EC STA. 180 + 15 - STA. 183 + 60
(85.0 L.F. x 12.0') + (260.0 L.F. x 16.0') / 9 = 576 S.Y.

2-EC STA. 179 + 65 - STA. 183 + 60
395.0 L.F. x 12.0' / 9 = 527 S.Y.

3-EC STA. 176 + 50 - STA. 178 + 93
243.0 L.F. x 12.0' / 9 = 324 S.Y.

SHEET NO. 34

1-EC STA. 188 + 00 - STA. 190 + 00
200.00 L.F. x 8.0' / 9 = 178 S.Y.

SHEET NO. 35

1-EC STA. 202 + 00 - STA. 205 + 00
300.0 L.F. x 8.0' / 9 = 267 S.Y.

SHEET NO. 36

1-EC STA. 205 + 00 - STA. 206 + 00
100.0 L.F. x 8.0' / 9 = 89 S.Y.

SHEET NO. 37

1-EC STA. 224 + 62 - STA. 225 + 00
38.0 L.F. x 12.0' / 9 = 51 S.Y.

SHEET NO. 38

1-EC STA. 225 + 00 - STA. 226 + 00
100.0 L.F. x 12.0' / 9 = 134 S.Y.

2-EC STA. 229 + 00 - STA. 231 + 00
200.0 L.F. x 8.0' / 9 = 178 S.Y.

SHEET NO. 39

1-EC STA. 235 + 00 - STA. 237 + 36
(200.0 L.F. x 8.0') + (36.0 L.F. x 12.0') / 9 = 226 S.Y.

2-EC STA. 238 + 16 - STA. 245 + 00
684.0 L.F. x 12.0' / 9 = 912 S.Y.

SHEET NO. 40

1-EC STA. 245 + 00 - STA. 246 + 33
133.0 L.F. x 12.0' / 9 = 178 S.Y.

2-EC STA. 245 + 00 - STA. 245 + 95
95.0 L.F. x 8.0' / 9 = 85 S.Y.

3-EC STA. 249 + 00 - STA. 255 + 00
(100.0 L.F. x 10.0') + (183.0 L.F. x 12.0') + (217.0 L.F. x 16.0') + (100.0 L.F. x 20.0') / 9 = 964 S.Y.

SHEET NO. 41

1-EC STA. 255 + 00 - STA. 260 + 00
(200.0 L.F. x 20.0') + (300.0 L.F. x 12.0') / 9 = 845 S.Y.

SHEET NO. 42

1-EC STA. 260 + 00 - STA. 262 + 06
206.0 L.F. x 12.0' / 9 = 275 S.Y.

2-EC STA. 262 + 45 - STA. 263 + 00
55.0 L.F. x 12.0' / 9 = 74 S.Y.

SHEET NO. 44

1-EC STA. 269 + 00 - STA. 270 + 65
165.0 L.F. x 6.0' / 9 = 110 S.Y.

2-EC STA. 269 + 94 - STA. 270 + 71
77.0 L.F. x 8.0' / 9 = 69 S.Y.

SHEET NO. 45

1-EC STA. 274 + 00 - STA. 274 + 52
52.0 L.F. x 8.0' / 9 = 47 S.Y.

ITEM 659 - COMMERCIAL FERTILIZER

126,185 S.Y. x (9.0 S.F. / S.Y.) x
(20 Lbs. / 1000 S.F.) x (1 Ton / 2000 Lbs.) = 12 TONS

QUANTITY CARRIED TO GENERAL SUMMARY

MISCELLANEOUS CALCULATIONS

ITEM 608 - 4" CONCRETE WALK

SHEET NO. 42

1-R STA. 263+93, LT.
27.0 L.F. X 3.0' = 81 S.F.

SHEET NO. 43

1-R STA. 264+22, RT.
23.0 L.F. X 3.0' = 69 S.F.

SHEET NO. 46

2-R STA. 279+29, LT.
7.0 L.F. X 2.0' = 14 S.F.

3-R STA. 280+00, LT.
6.0 L.F. X 3.0' = 18 S.F.

4-R STA. 276+35, RT.
3.0 L.F. X 6.0' = 18 S.F.

5-R STA. 276+23 TO STA. 276+42, LT.
19.0 L.F. X 4.0' = 76 S.F.

6-R STA. 276+70 TO STA. 277+76, LT.
106.0 L.F. X 4.0' = 424 S.F.

7-R STA. 277+88 TO STA. 278+32, LT.
44.0 L.F. X 4.0' = 176 S.F.

8-R STA. 278+44 TO STA. 278+92, LT.
48.0 L.F. X 4.0' = 192 S.F.

9-R STA. 279+12 TO STA. 279+70, LT.
58.0 L.F. X 4.0' = 232 S.F.

10-R STA. 279+82 TO STA. 280+00, LT.
18.0 L.F. X 4.0' = 72 S.F.

SHEET NO. 47

3-R STA. 280+91, LT.
6.0 L.F. X 3.0' = 18 S.F.

6-R STA. 280+00 TO STA. 281+16, LT.
118.0 L.F. X 4.0' = 472 S.F.

7-R STA. 281+48 TO STA. 281+72, LT.
24.0 L.F. X 4.0' = 96 S.F.

8-R STA. 282+22 TO STA. 282+85, LT.
88.0 L.F. X 4.0' = 352 S.F.

9-R STA 282+50 TO STA 282+97 RT
44 L.F. X 4' = 256 S.F.

ITEM 202 - WALK REMOVED

SHEET NO. 42

1-R STA. 263+93, LT.
20.0 L.F. X 3.0' = 60 S.F.

SHEET NO. 43

1-R STA. 264+22, RT.
20.0 L.F. X 3.0' = 60 S.F.

SHEET NO. 46

1-R STA. 276+23 TO STA. 280+00, LT.
377.0 L.F. X 4.0' = 1508 S.F.

2-R STA. 279+29, LT.
5.0 L.F. X 2.0' = 10 S.F.

3-R STA. 280+00, LT.
5.0 L.F. X 3.0' = 15 S.F.

4-R STA. 276+35, RT.
3.0 L.F. X 6.0' = 18 S.F.

SHEET NO. 47

1-R STA. 280+00 TO STA. 281+25, LT.
125.0 L.F. X 4.0' = 500 S.F.

2-R STA. 281+41 TO STA. 282+85, LT.
[(145.0 L.F. X 4.0')] + [(28.0 L.F. X 3.0')] = 664 S.F.

3-R STA. 280+91, LT.
3.0 L.F. X 3.0' = 9 S.F.

4-R STA. 282+50 TO STA. 282+97, RT.
[47.0 L.F. X 4.0'] + [(15.0 L.F. X 4.0')] = 248 S.F.

ITEM 660 - SODDING

SHEET NO. 46

1-EC STA. 276+23 TO STA. 276+42, LT.
19.0 L.F. X 3.0' /9 = 7 S.Y.

2-EC STA. 276+70 TO STA. 277+76, LT.
106.0 L.F. X 3.0' /9 = 36 S.Y.

3-EC STA. 277+88 TO STA. 278+32, LT.
44.0 L.F. X 3.0' /9 = 15 S.Y.

4-EC STA. 278+44 TO STA. 278+92, LT.
48.0 L.F. X 3.0' /9 = 16 S.Y.

5-EC STA. 279+12 TO STA. 279+70, LT.
58.0 L.F. X 3.0' /9 = 20 S.Y.

6-EC STA. 279+82 TO STA. 280+00, LT.
18.0 L.F. X 3.0' /9 = 6 S.Y.

SHEET NO. 47

1-EC STA. 280+00 TO STA. 281+15, LT.
115.0 L.F. X 3.0' /9 = 39 S.Y.

2-EC STA. 281+52 TO STA. 281+73, LT.
21.0 L.F. X 3.0' /9 = 7 S.Y.

3-EC STA. 282+22 TO STA. 282+69, LT.
47.0 L.F. X 3.0' /9 = 16 S.Y.

4-EC STA. 282+50 TO STA. 282+78, RT.
28.0 L.F. X 3.0' /9 = 10 S.Y.

CALC. BY DATE <i>1-9-72</i>	UNI-739-2.01	OHIO	22 177
CHRG. BY DATE <i>12-9-72</i>		FHWA REGION 5	

[illegible]

GENERAL SUMMARY

ITEM	SHEET NUMBERS																														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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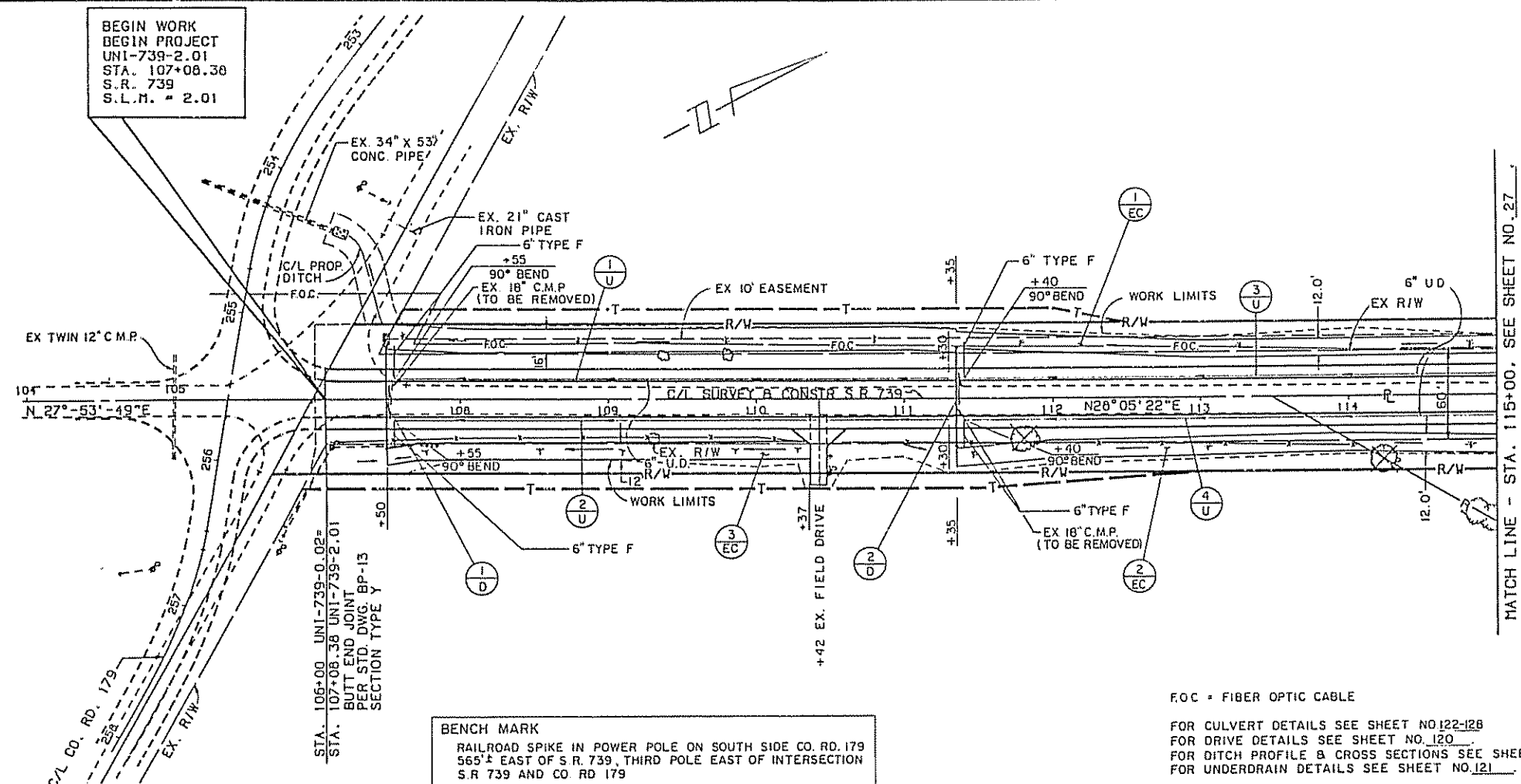
CALC. <i>AK</i> R# DATE 11-92	UNI-739-2.01	OHIO	24 177
DATED <i>CHS</i> BY DATE 11-92		FHWA REGION 5	

GENERAL SUMMARY

CALC. MC BY DATE 11-92	UNI-739-2.01	OHIO	25 177
CHECKED BY DATE 12-92		FHWA REGION 5	

GENERAL SUMMARY

BNG..... DTC 12-92.



F.O.C. = FIBER OPTIC CABLE

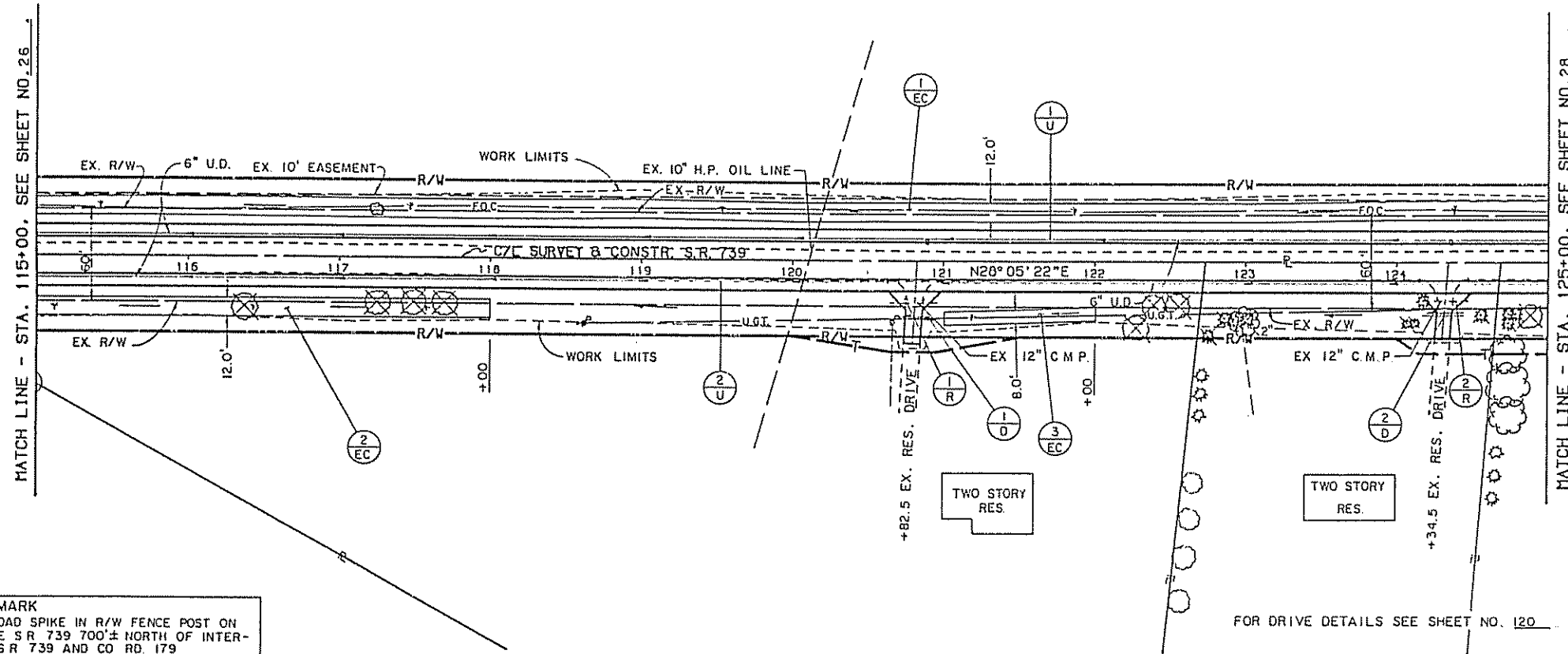
FOR CULVERT DETAILS SEE SHEET NO. 122-128
FOR DRIVE DETAILS SEE SHEET NO. 120
FOR DITCH PROFILE & CROSS SECTIONS SEE SHEET NO. 132
FOR UNDERDRAIN DETAILS SEE SHEET NO. 121

The profile view shows the vertical alignment of the road. The horizontal axis represents stationing from 104 to 115, and the vertical axis represents elevation in feet from 1070 to 1090. The existing profile is shown as a dashed line, and the proposed profile is shown as a solid line. Key features include:

- Grade Break:** A 0.24% grade break occurs at STA 108+00.
- Proposed Profile:** The proposed profile starts at STA 107+08.38 and ends at STA 115+00. It includes a 6" shallow U.D. (Under Drain) at STA 107+08.38 and a 6" uncl. U.D. (Under Drain) at STA 107+08.38.
- Existing Profile:** The existing profile starts at STA 107+08.38 and ends at STA 115+00. It includes a 6" shallow U.D. (Under Drain) at STA 107+08.38 and a 6" uncl. U.D. (Under Drain) at STA 107+08.38.
- Excavation and Embankment:** The project includes 3,029 CY of excavation and 320 CY of embankment.
- Seeding and Mulching:** The project includes 5,206 SY of seeding and mulching.
- Stationing:** The stationing is marked from 104 to 115 in increments of 1.
- Elevation:** The elevation is marked from 1070 to 1090 in increments of 5 feet.

[illegible]

PLAN & PROFILE S.R. 7 STA. 107+08.38 TO STA. 115+00



FOR DRIVE DETAILS SEE SHEET NO. 120

ESTIMATED QUANTITIES

BENCH MARK
RAILROAD SPIKE IN R/W FENCE POST ON
EAST SIDE SR 739 700'± NORTH OF INTER-
SECTION SR 739 AND CO RD. 179
ELEV. = 1081.50

PROFILE GRADE
 STA. 115+00 TO STA. 125+00
 EXCAVATION 3,091 C.Y.
 EMBANKMENT 324 C.Y.
 SEEDING & MULCHING 6,624 S.Y.

200' V.C.
 P.V.C. STA. 123+75
 ELEV. = 1089.57
 ACTUAL DESIGN SPEED MET. 70 MPH

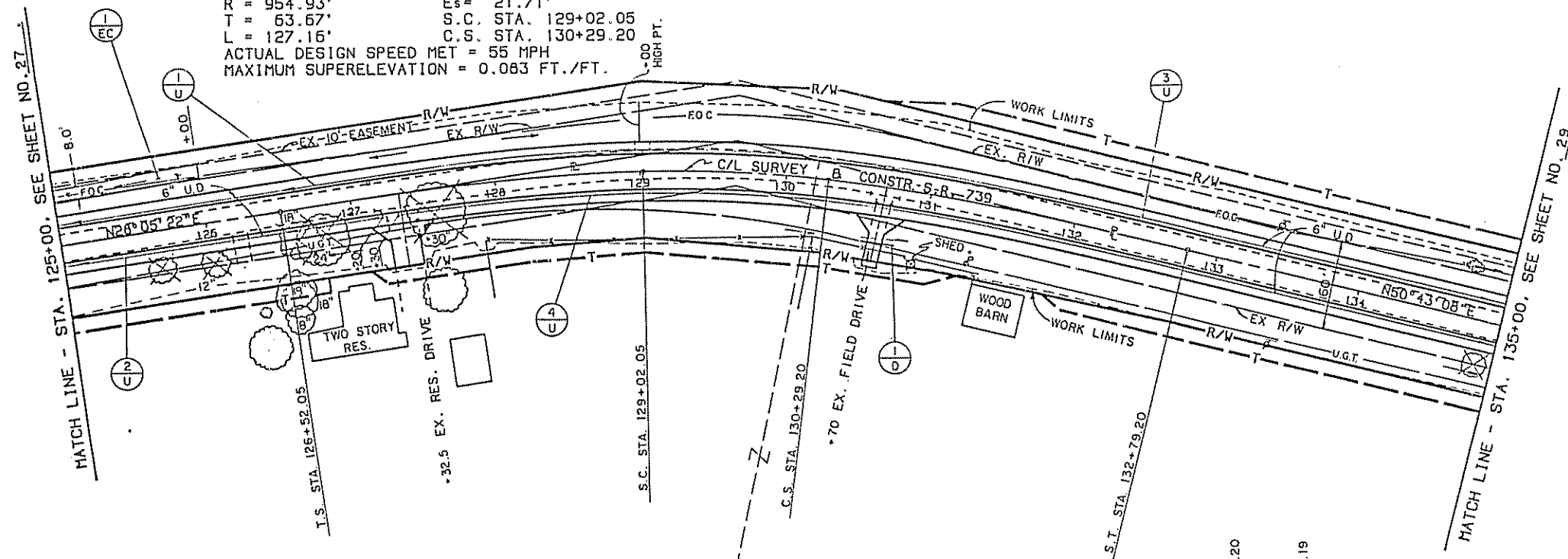
EXISTING PAVEMENT
 PROPOSED PROFILE
 EX. 10" H.P. OIL LINE
 EX. FOC EXACT LOCATION UNKNOWN
 6" SHALLOW U.D. LT. & RT.
 +0.84%
 +1.44%

ELEVATIONS (Left): 1095, 1090, 1085, 1080, 1075
 ELEVATIONS (Right): 1095, 1090, 1085, 1080, 1075
 STATIONING (Bottom): 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125

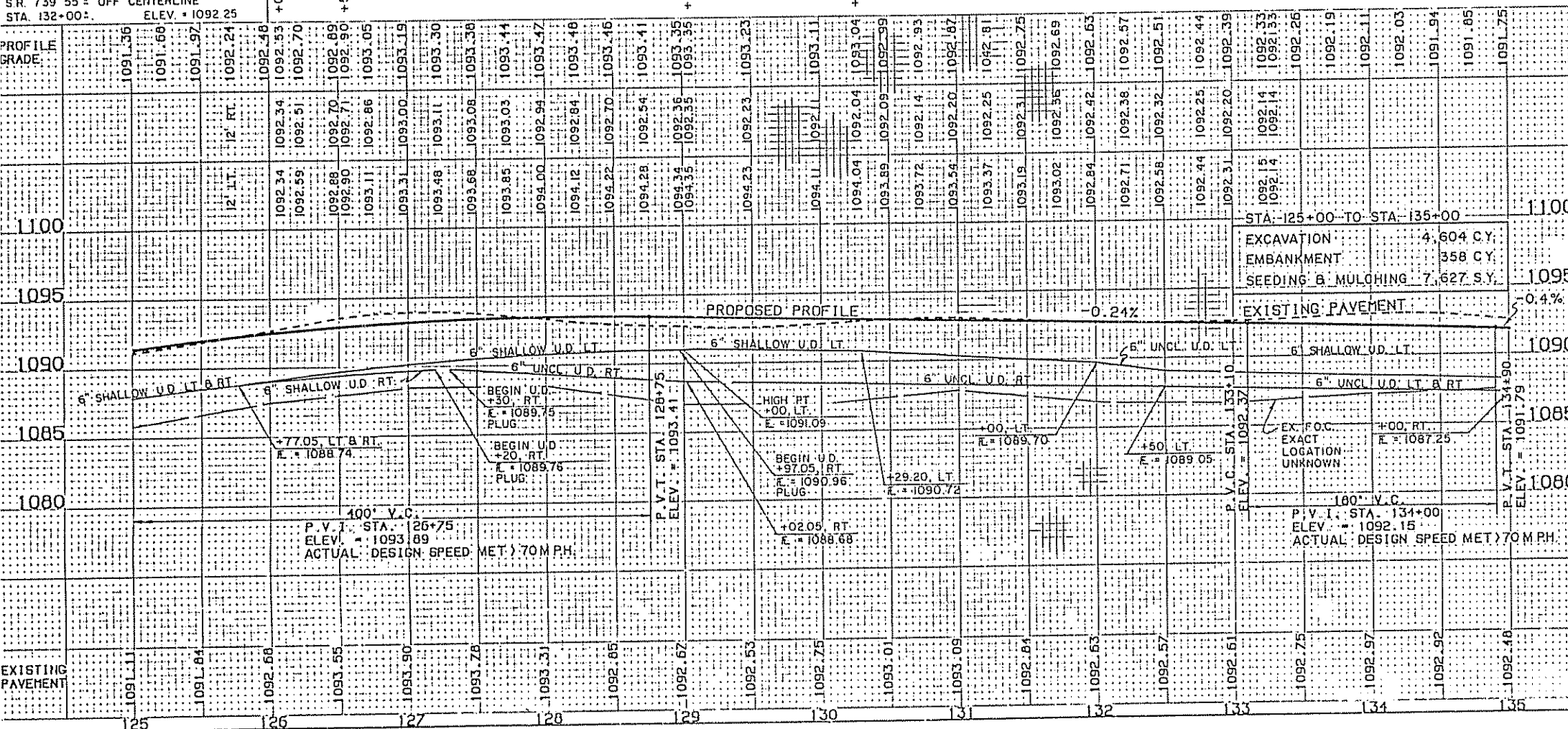
PLAN & PROFILE S.R. 739 STA. 115+00 TO STA. 125+00

PROPOSED CURVE DATA

C/L S.R. 739
P.I. STA. 129+68.59
 $\Delta T = 22^\circ - 37' - 46''$ RT.
 $\Delta C = 07^\circ - 37' - 46''$ RT.
 $D_c = 06^\circ - 00' - 00''$
 $R = 954.93'$
 $T = 63.67'$
 $L = 127.16'$
 $\theta = 07^\circ - 30' - 00''$
 $L_s = 250.00'$
 $T_s = 316.54'$
 $L.T. = 166.82'$
 $S.T. = 83.47'$
 $E_s = 21.71'$
S.C. STA. 129+02.05
C.S. STA. 130+29.20
ACTUAL DESIGN SPEED MET = 55 MPH
MAXIMUM SUPERELEVATION = 0.083 FT./FT.



BENCH MARK
TOP OF IRON PIN AT NORTHWEST
CORNER HORSE BARN ON SOUTH SIDE
S.R. 739 55' OFF CENTERLINE
STA. 132+00. ELEV. = 1092.25



DESIGNED BY ink DATE 1-92
CHECKED BY BHA DATE 12-92

UNI-739-2.01

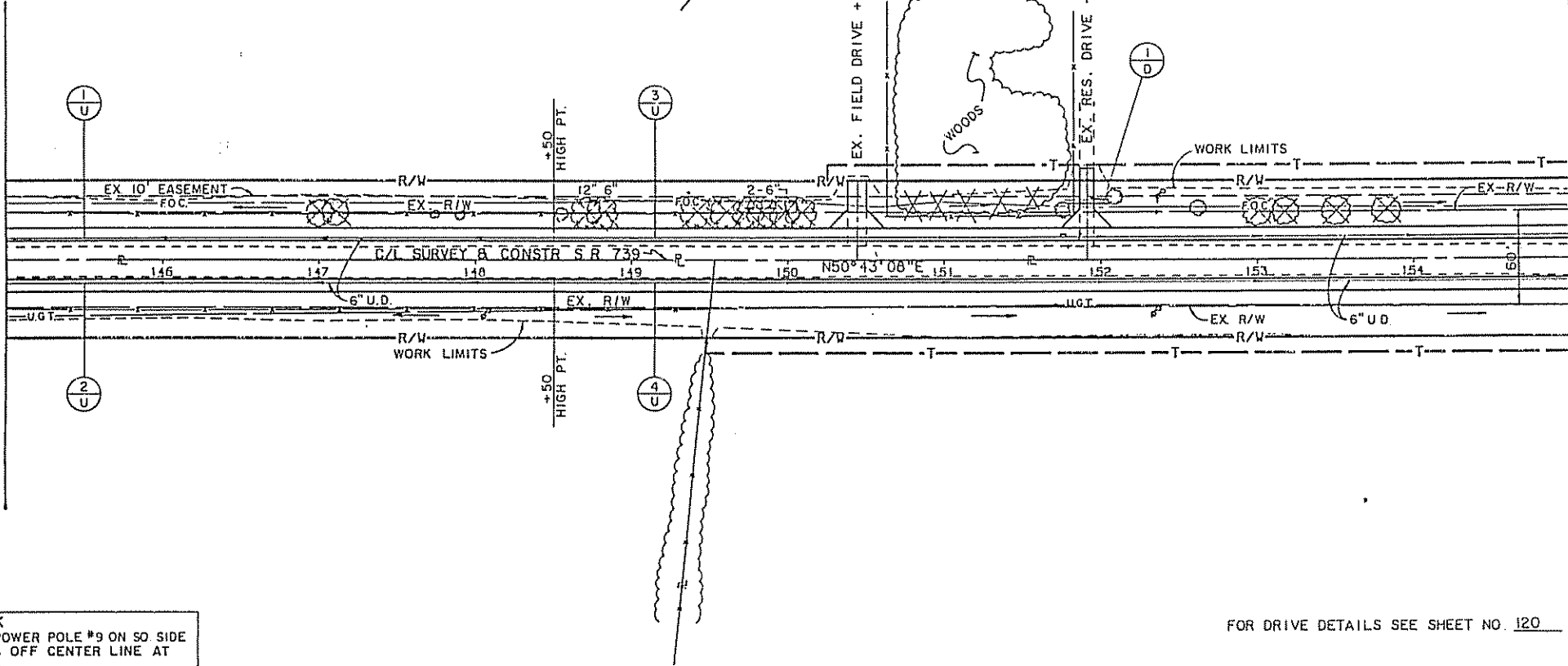
OHIO
28
177

ESTIMATED QUANTITIES

ITEM NO.	STATION TO STATION	SECTION	603 12\"/>
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PLAN & PROFILE S.R. 739 STA. 125+00 TO STA. 135+00

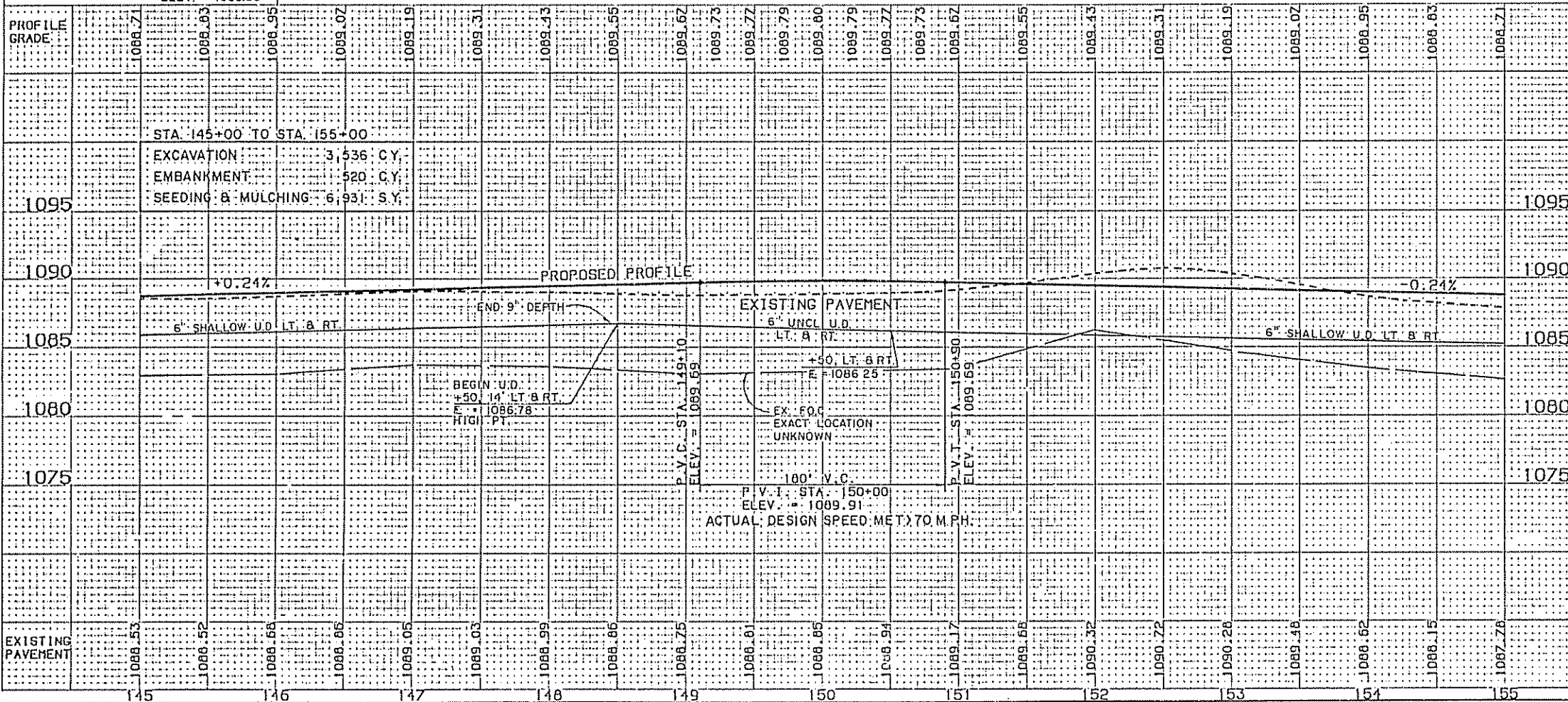
MATCH LINE - STA. 145+00. SEE SHEET NO. 29.



MATCH LINE - STA. 155+00. SEE SHEET NO. 31.

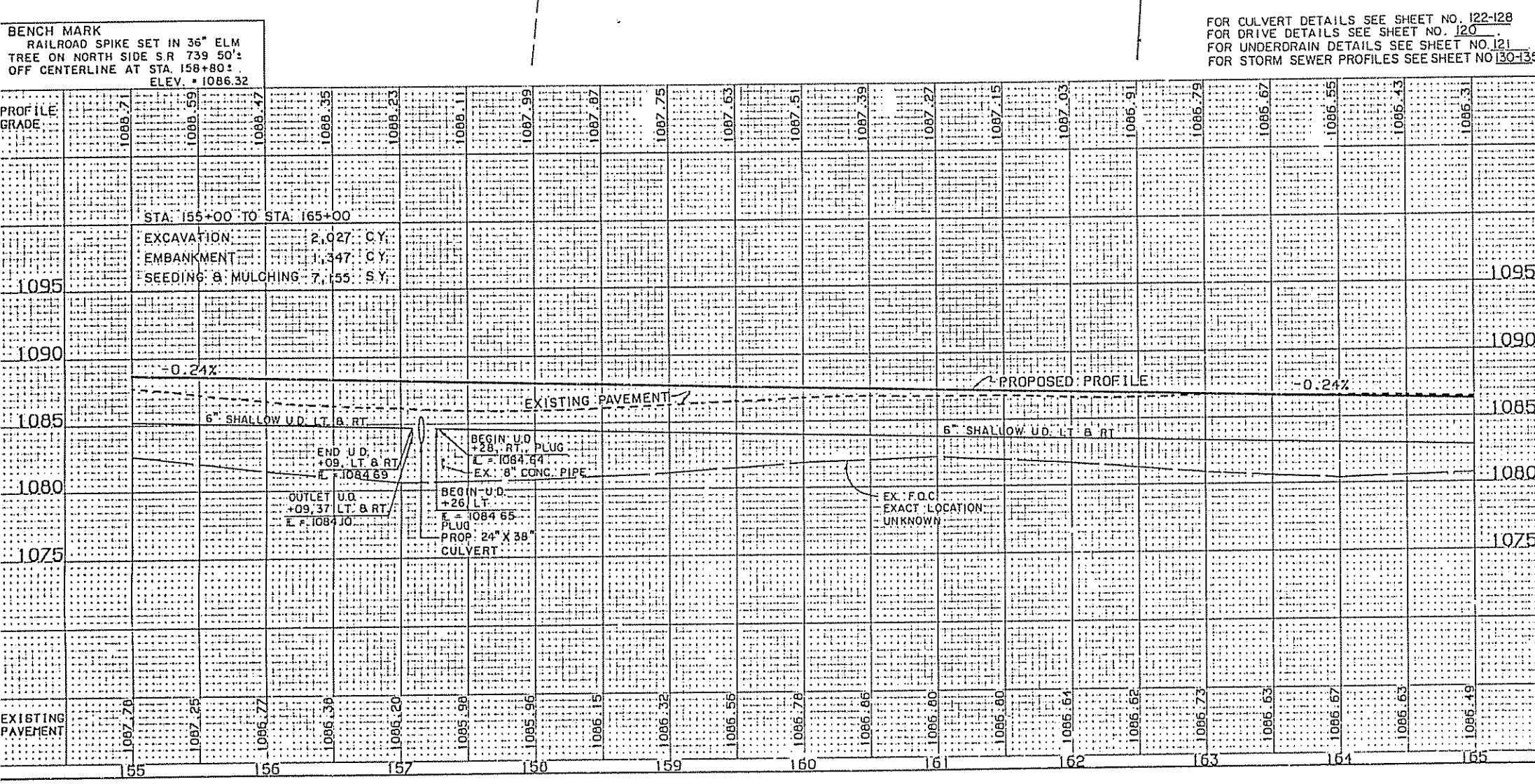
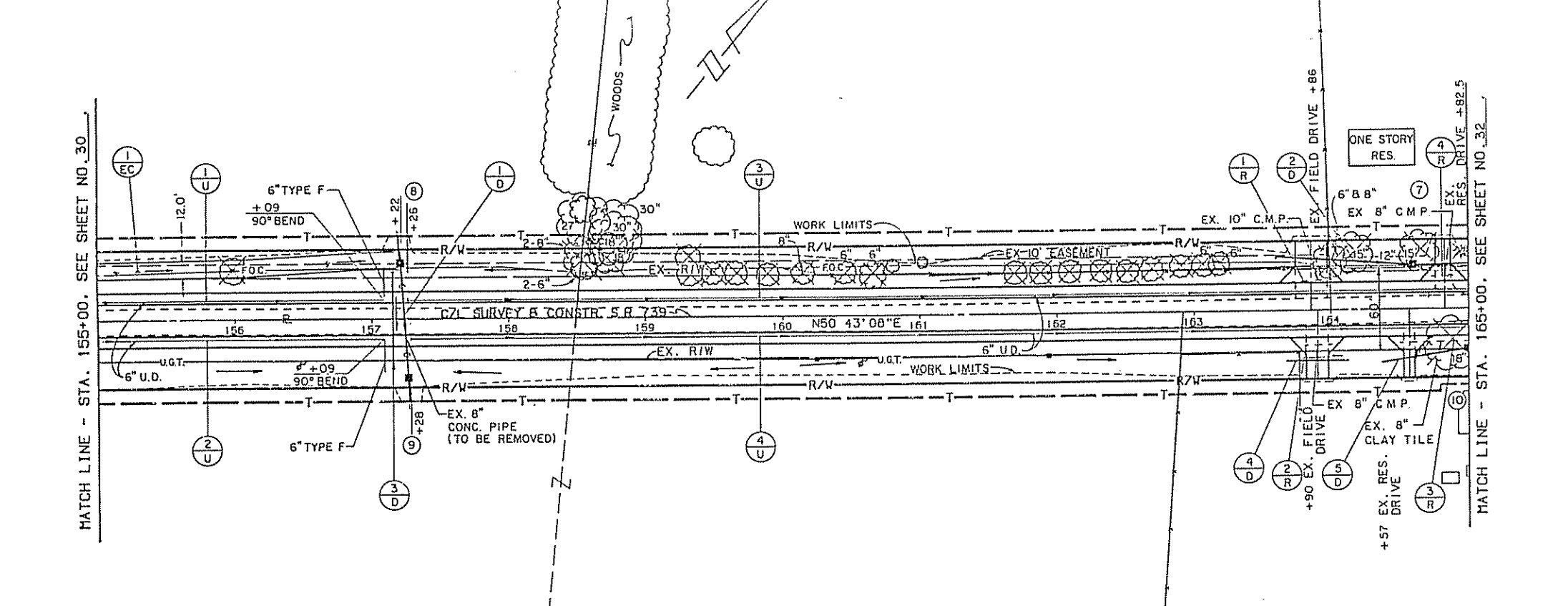
BENCH MARK
SPIKE IN POWER POLE #9 ON SO. SIDE
S.R. 739 35' OFF CENTER LINE AT
STA. 144+00.2
ELEV. = 1088.39

FOR DRIVE DETAILS SEE SHEET NO. 120



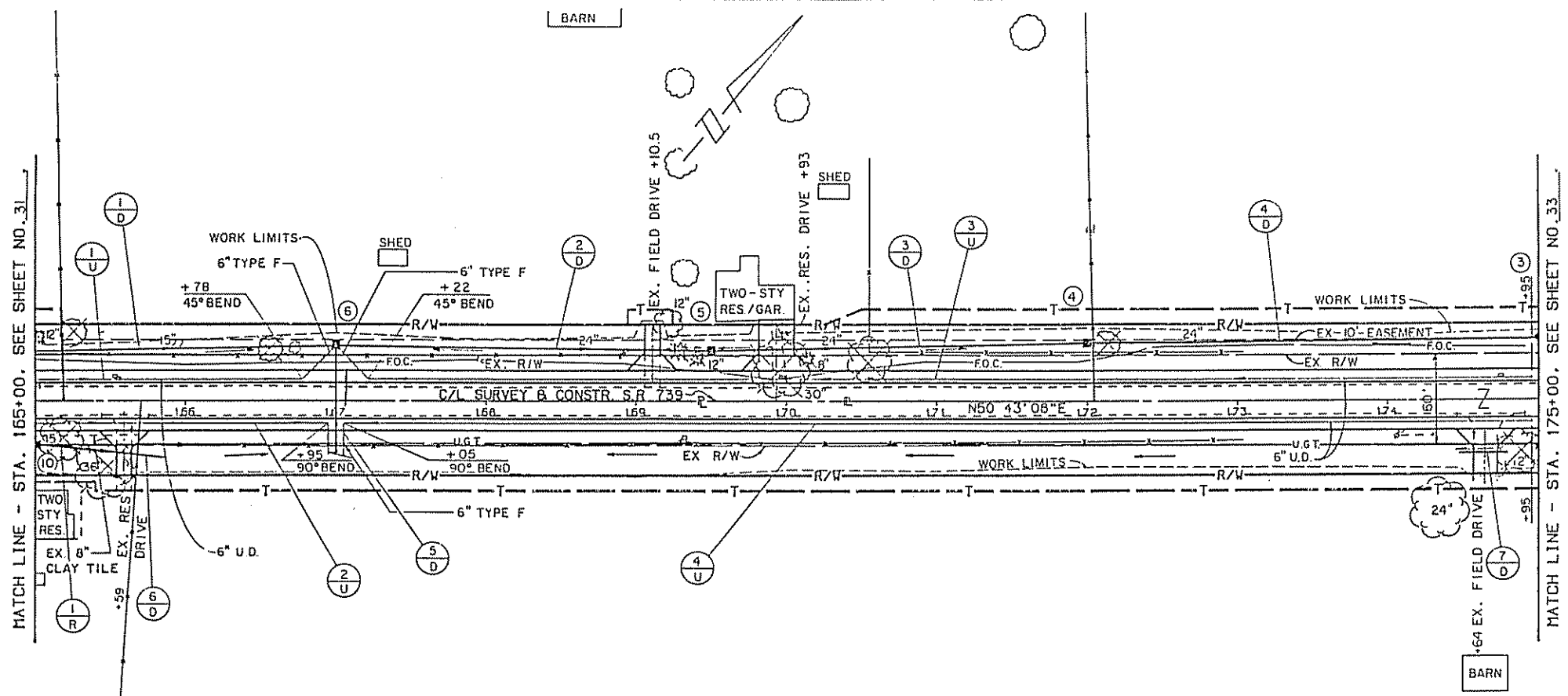
ESTIMATED QUANTITIES

REF NO	STATION TO STATION	SIDE	603 12" CONDUIT TYPE D	605 6" SHALLOW PIPE U.D.	605 6" UNCL. PIPE U.D.	SEE SHEET NO
1-U	145+00 TO 148+50	L.T.	L.F.	L.F.	L.F.	
2-U	145+00 TO 148+50	RT.		350		
3-U	148+50 TO 155+00	L.T.		350		
4-U	148+50 TO 155+00	RT.		450	200	
				450	200	



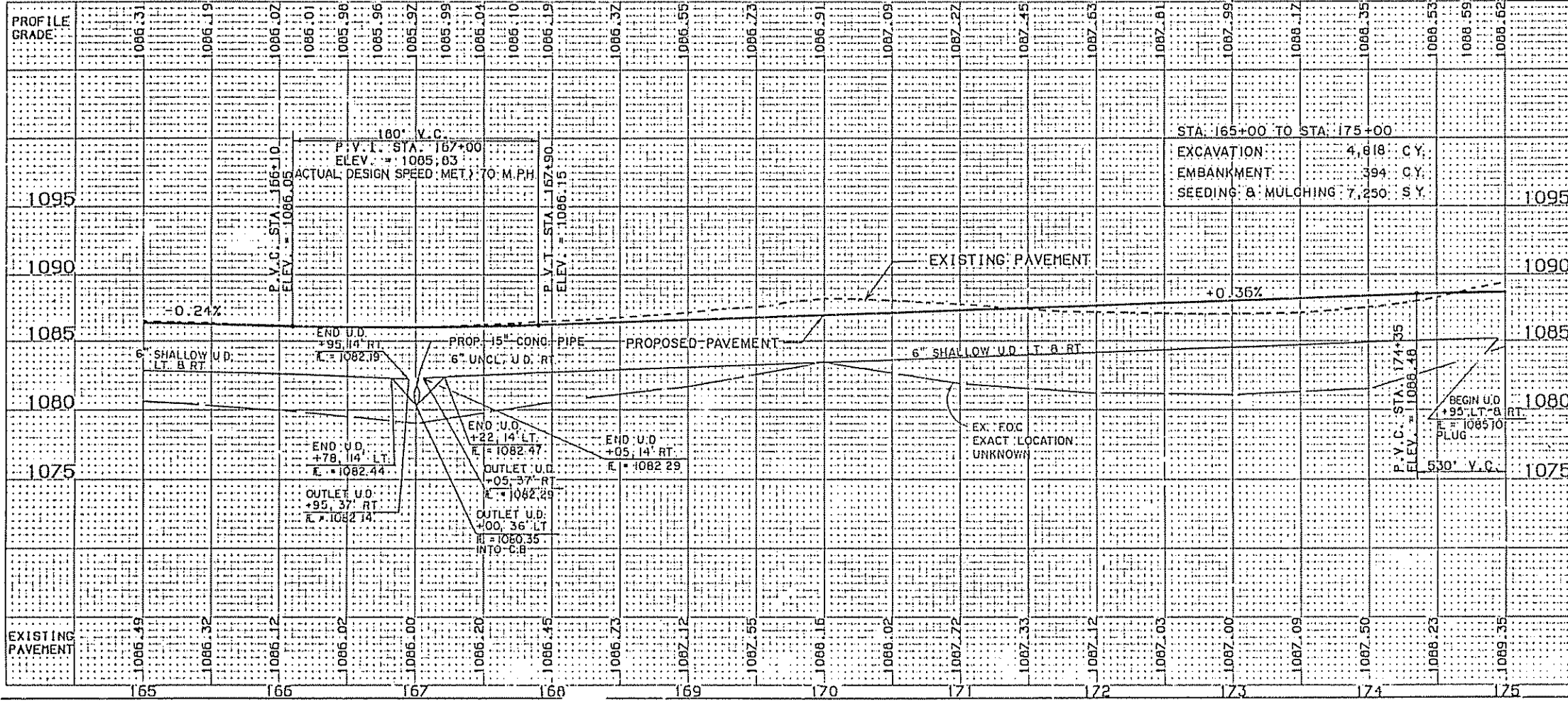
ESTIMATED QUANTITIES											
CLASS HE - II											
ITEM NO.	STATION TO STATION	UNIT	QTY.	UNIT PRICE	AMOUNT	601 CONCRETE TYPE A	602 CONCRETE TYPE B	603 CONCRETE TYPE C	604 CONCRETE TYPE D	605 SHALLOW PIPE U.D.	606 SHALLOW PIPE U.D.
1-U	155+00 TO 157+09	LT.									
2-U	157+09 TO 157+26	RT.									
3-U	157+26 TO 165+00	LT.									
4-U	157+26 TO 165+00	RT.									
1-D	157+21 TO 157+26	LAR									
2-D	157+26 TO 165+00	LT.									
3-D	157+26 TO 165+00	LBR									
4-D	157+26 TO 165+00	RT.									
5-D	157+26 TO 165+00	RT.									
1-R	163+74 TO 164+01	LT.									
2-R	163+74 TO 164+01	RT.									
3-R	164+01 TO 165+00	LT.									
4-R	164+01 TO 165+00	RT.									
1-EC	155+00 TO 157+22	LT.									

PLAN & PROFILE S.R. 739 STA. 155+00 TO STA. 165+00



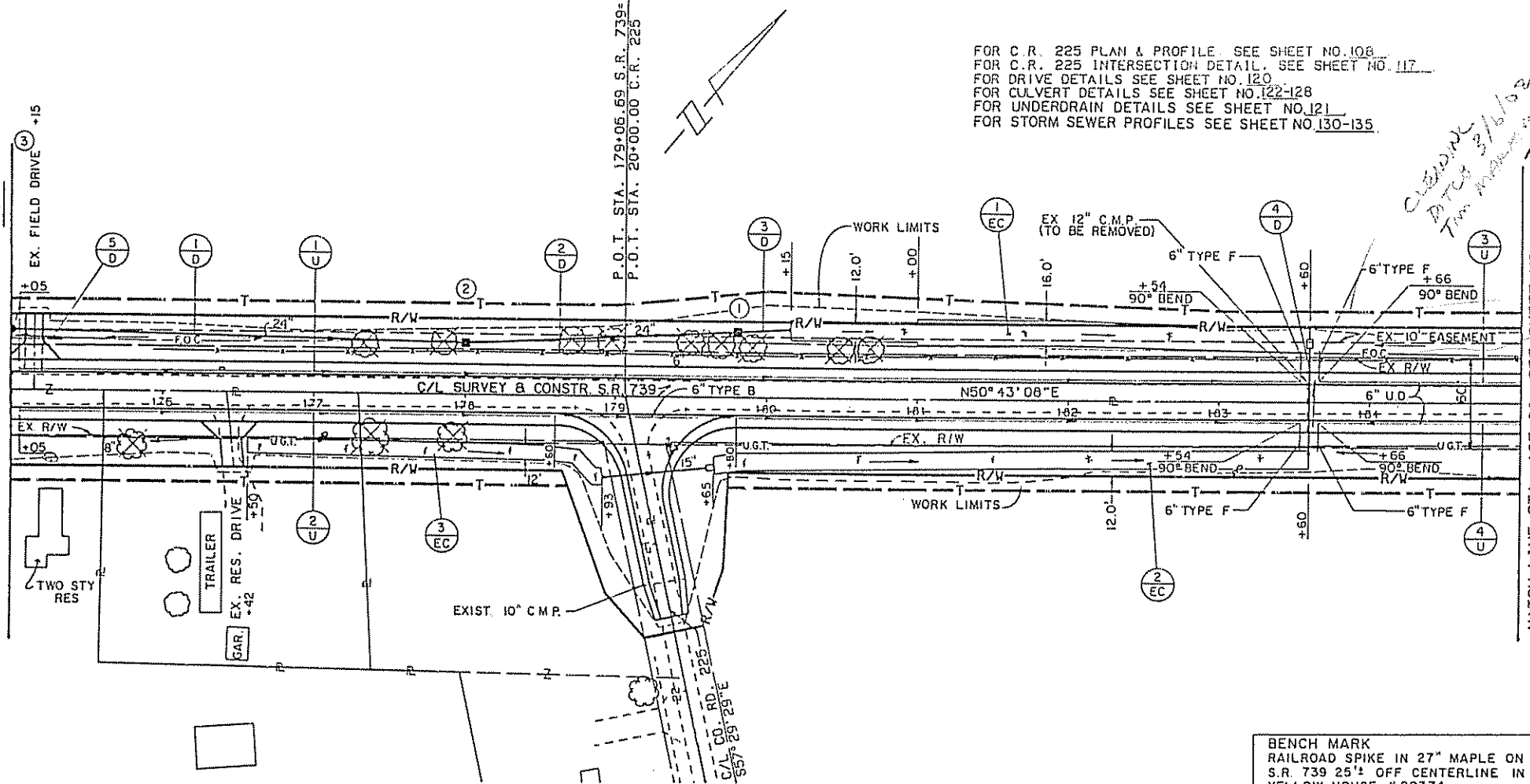
FOR DRIVE DETAILS SEE SHEET NO. 120
FOR STORM SEWER PROFILES SEE SHEET NO. 130-135
FOR UNDERDRAIN DETAILS SEE SHEET NO. 121

BENCH MARK
RAILROAD SPIKE IN ROOT OF 36' MAPLE ON
SOUTH SIDE S.R. 739 65' OFF CENTERLINE STA
174+50.1 TREE ON WEST SIDE DRIVE TO HOUSE
ELEV. 1088.23



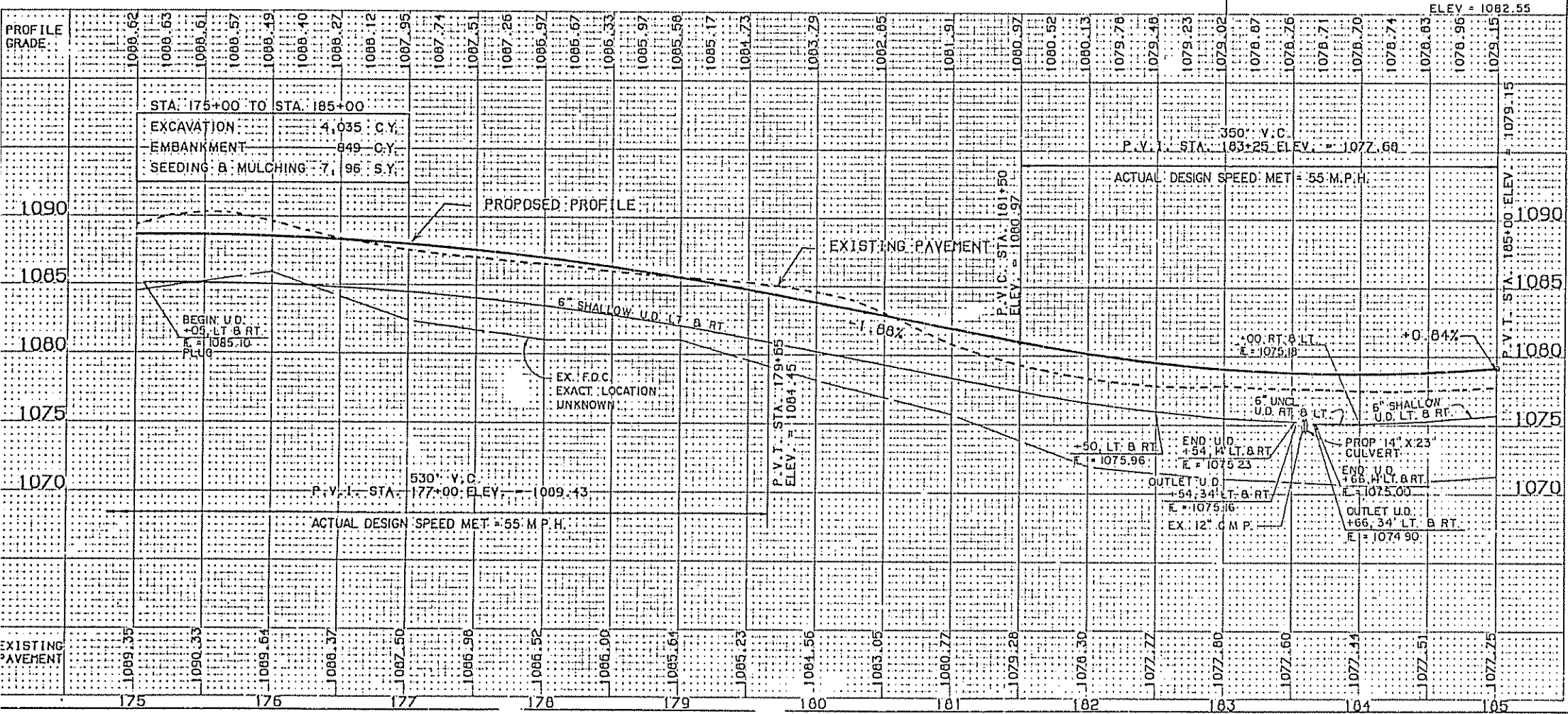
ESTIMATED QUANTITIES									
REF. NO.	STATION TO STATION	SECTION	602 CONC. TYPE C 705.02	603 CONC. TYPE B 705.02	603 CONC. TYPE F 705.02	603 CONC. TYPE D 705.02	603 CONC. TYPE C 705.02	603 CONC. TYPE B 705.02	603 CONC. TYPE D 705.02
1-U	165+00 TO 166+95	LT.							
2-U	166+00 TO 166+95	RT.							
3-U	167+00 TO 174+95	LT.							
4-U	167+05 TO 174+95	RT.							
1-D	165+00 TO 167+00	LT.							
2-D	167+00 TO 169+50	LT.							
3-D	169+50 TO 172+00	LT.							
4-D	172+00 TO 175+00	LT.							
5-D	167+00	LT.							
6-D	165+00 TO 165+88	RT.							
7-D	174+47 TO 174+80	RT.							
1-R	165+00 TO 165+62	RT.							
174									
175									

MATCH LINE STA. 175+00. SEE SHEET NO. 32.



FOR C.R. 225 PLAN & PROFILE. SEE SHEET NO. 108.
FOR C.R. 225 INTERSECTION DETAIL. SEE SHEET NO. 117.
FOR DRIVE DETAILS SEE SHEET NO. 120.
FOR CULVERT DETAILS SEE SHEET NO. 122-128.
FOR UNDERDRAIN DETAILS SEE SHEET NO. 121.
FOR STORM SEWER PROFILES SEE SHEET NO. 130-135.

BENCH MARK
RAILROAD SPIKE IN 27\"/>

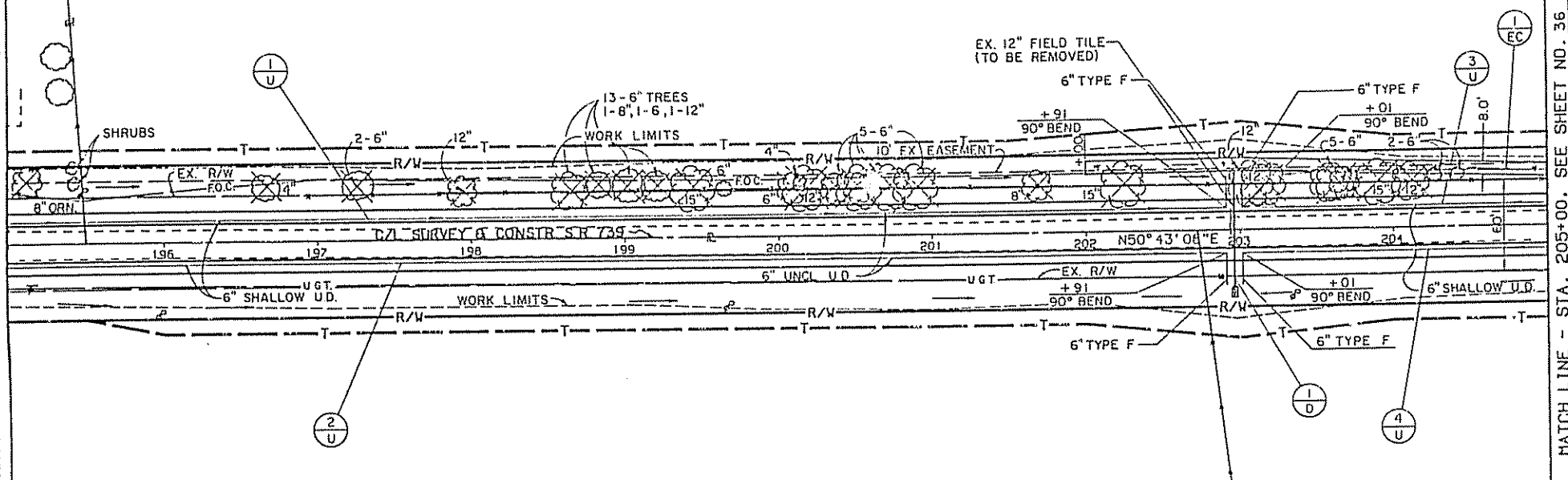


ESTIMATED QUANTITIES

ITEM NO.	STATION TO STATION	SOE	601 R.C.P. TYPE C W/ FILTER MASONRY	602 CONC. TYPE C MASONRY	603 6\"/>
1-U	175+05 TO 183+54	LT.			
2-U	175+05 TO 183+54	RT.			
3-U	183+56 TO 185+00	LT.			
4-U	183+56 TO 185+00	RT.			
1-D	175+00 TO 178+00	LT.			
2-D	178+00 TO 179+80	LT.			
3-D	179+80 TO 180+15	LT.			
4-D	183+60	L&R			
5-D	175+01 TO 175+29	LT.			
1-EC	180+15 TO 183+60	LT.			
2-EC	179+65 TO 183+60	RT.			
3-EC	176+50 TO 178+93	RT.			

PLAN & PROFILE S.R. 739 STA. 175+00 TO STA. 185+00

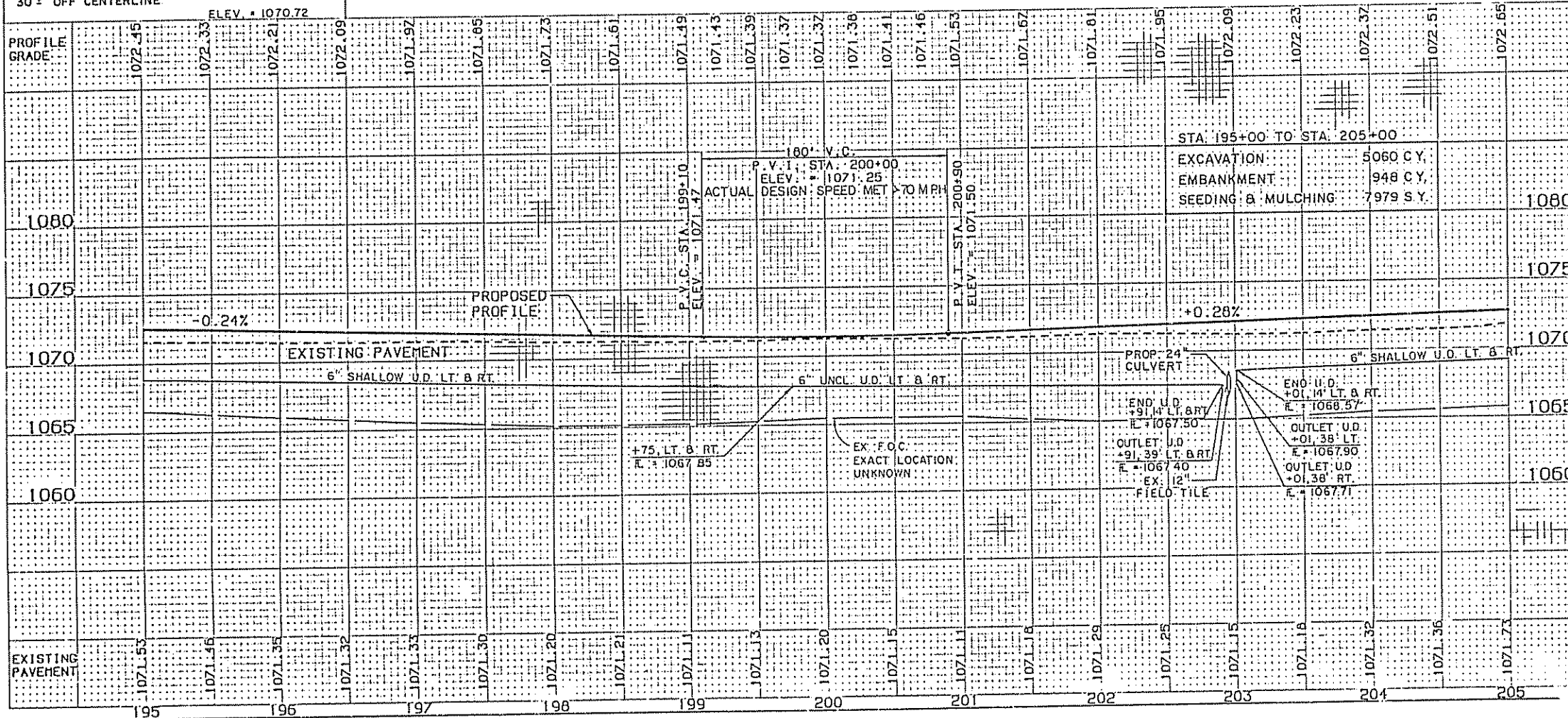
MATCH LINE - STA. 195+00. SEE SHEET NO. 34.



MATCH LINE - STA. 205+00. SEE SHEET NO. 36.

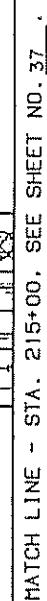
FOR CULVERT DETAILS SEE SHEET NO. 122-128
FOR UNDERDRAIN DETAILS SEE SHEET NO. 121

BENCH MARK
RAILROAD SPIKE IN 15" ELM ON NORTH SIDE
S.R. 739 300'± EAST OF HOUSE #22437
30'± OFF CENTERLINE



ESTIMATED QUANTITIES										** 707.17 NON-PERFORATED, ASTM D 3034, SDR 35 OR SS 931 OR SS 944									
REF NO	STATION TO STATION	SIC	601 R.C.P. TYPE C w/ FILTER	602 CONC. MASONRY	670 DITCH EROSION PROTECT	603 6" CONDUIT TYPE F 705-02				605 6" SHALLOW PIPE U.D.		605 6" UNCLASS PIPE U.D.		BENDS B BRANCH EACH	SPECIAL PRECAST REINF. CONCRETE OUTLET EACH	SEE SHEET NO			
						L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.						
1-U	195+00 TO 202+91	LT.																	
2-U	195+00 TO 202+91	RT.																	
3-U	203+01 TO 205+00	LT.																	
4-U	203+01 TO 205+00	RT.																	
1-D	202+95	L&R	1.6	0.92															
1-EG	202+00 TO 205+00	LT.			267														

PLAN & PROFILE S.R. 739 STA. 195+00 TO STA. 205+00

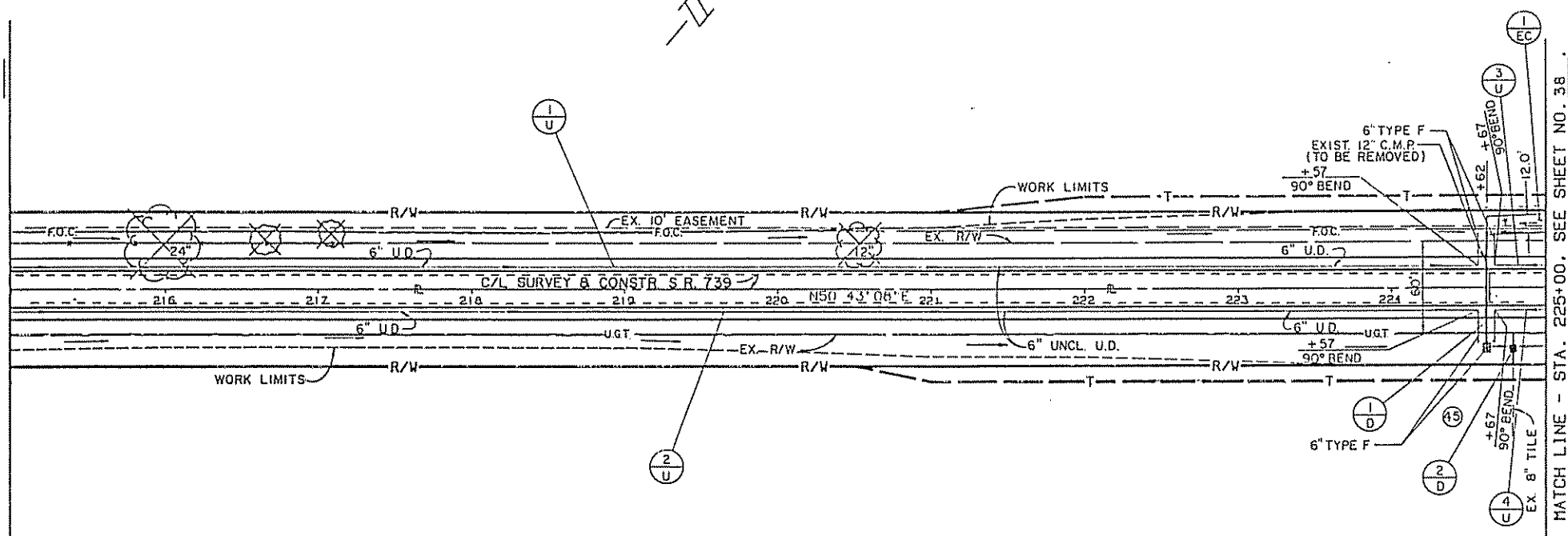


ELEV. = 1070.72

ESTIMATED QUANTITIES[illegible]

PLAN & PROFILE S.R. 739 STA. 205+00 TO STA. 215+00

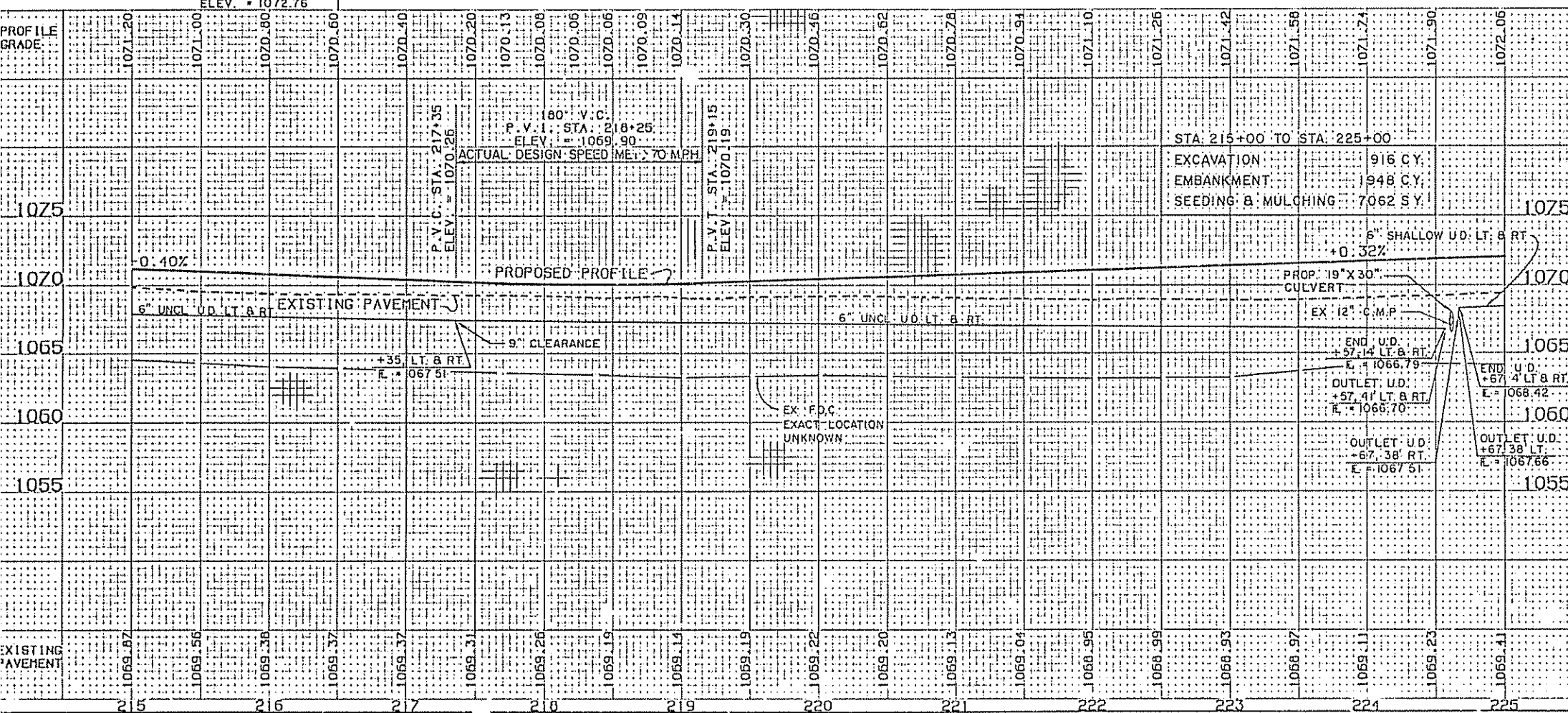
MATCH LINE - STA. 215+00. SEE SHEET NO. 36.



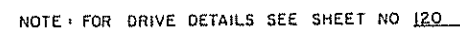
MATCH LINE - STA. 225+00, SEE SHEET NO. 38.

BENCH MARK
U.S.G.S. - 0.80[±] MI. SOUTHWEST OF RAYMOND ON
S.R. 739. 310'[±] SOUTH OF INTERSECTION C.R. 229
AND 80'[±] SOUTHEAST OF S R 739 IN CONCRETE WALK
ELEV. = 1072.76

FOR CULVERT DETAILS SEE SHEET NO 122-129
FOR UNDERDRAIN DETAILS SEE SHEET NO 121

[illegible]

PLAN & PROFILE S.R. 739 STA. 215+00 TO STA. 225+00



ESTIMATED QUANTITIES

[illegible]

PLAN & PROFILE S.R. 739 STA. 225+00 TO STA. 235+00

MATCH LINE - STA. 235+00. SEE SHEET NO. 38.

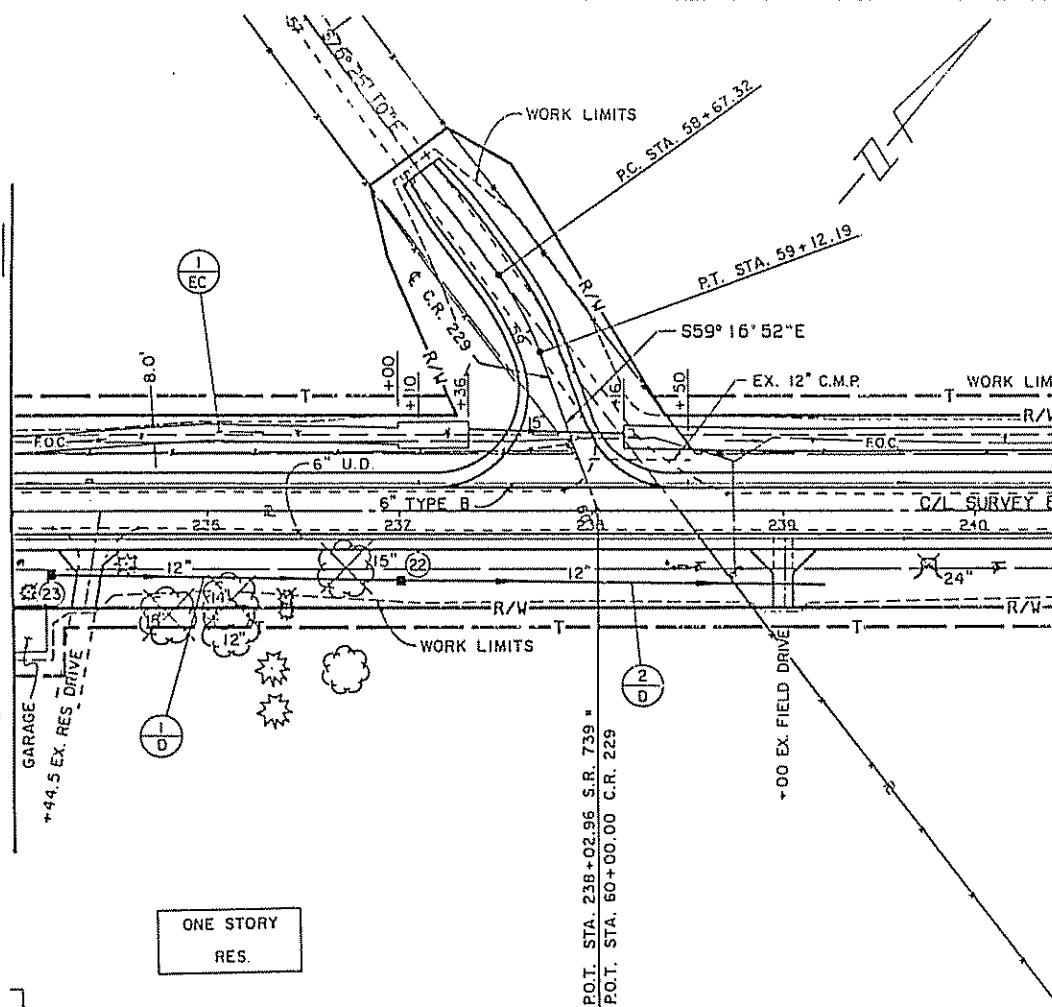
FOR C.R. 229 PLAN & PROFILE, SEE SHEET NO. 111.
FOR C.R. 229 INTERSECTION DETAIL, SEE SHEET NO. 117.
FOR DRIVE DETAILS SEE SHEET NO. 120.
FOR CULVERT DETAILS SEE SHEET NO. 122-128.
FOR STORM SEWER PROFILE SEE SHEET NO. 130-135.

MATCH LINE - STA. 245+00. SEE SHEET NO. 40.

CALCULATED BY HC DATE 11-92
CHECKED BY GLG DATE 12-92

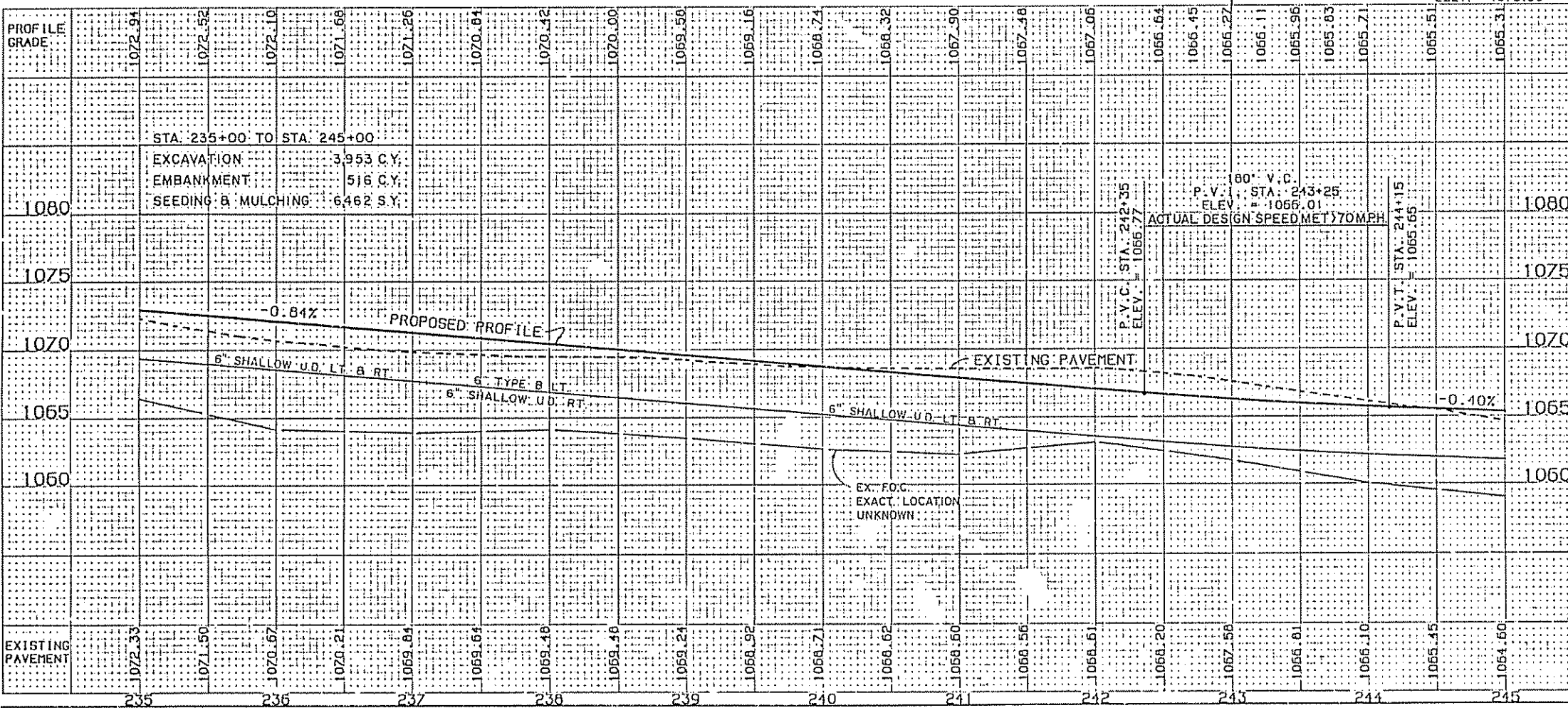
UN1-739-2.01

OHIO
AREA
NO. 3
39
177



ONE STORY
RES.

BENCH MARK
RAILROAD SPIKE IN 40" OAK TREE 300± NORTH
OF INTERSECTION C.R. 229 AND S.R. 739 25± EAST
OF S.R. 739
ELEV. = 1070.08

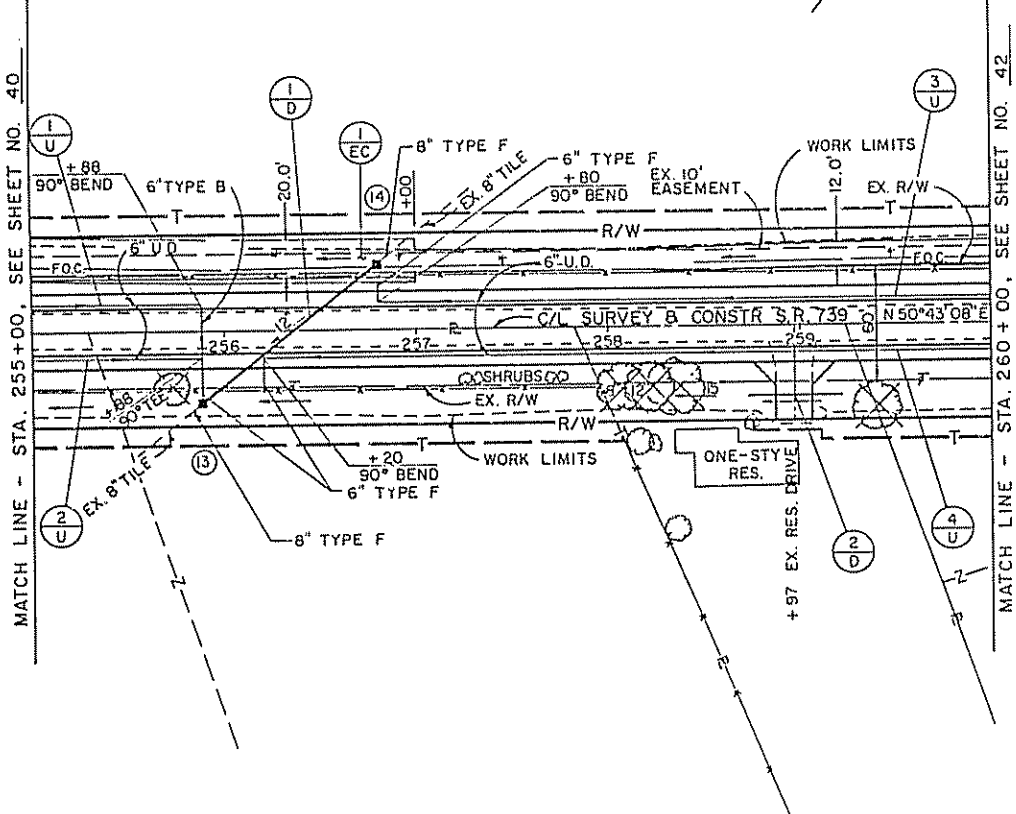


ESTIMATED QUANTITIES

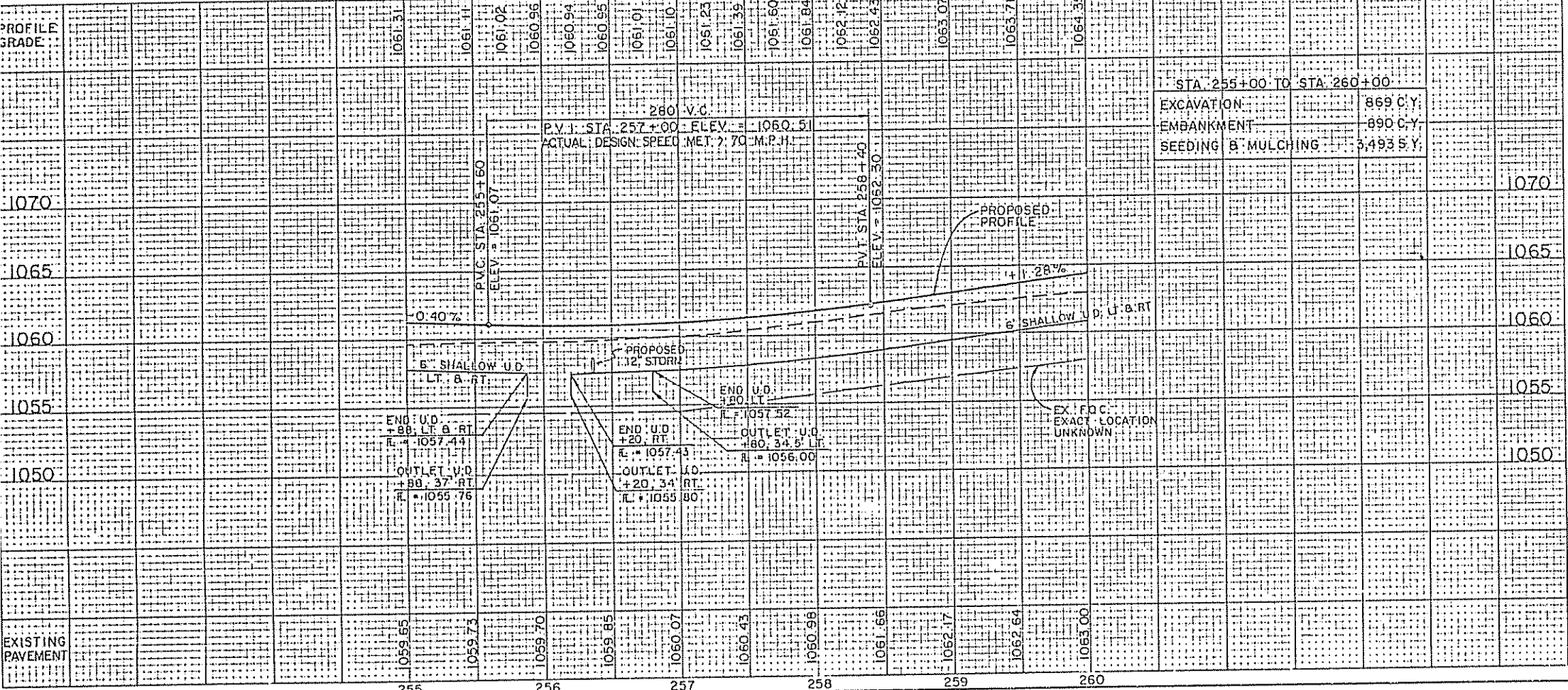
REF. NO.	STATION TO STATION	SOIL	602 CONCRETE MASONRY	603 CONCRETE TYPE C 708.02	604 2-2-B CATCH BASIN	670 DITCH EROS. PROT.
1-U	235+00 TO 245+00	LT.				
2-U	235+00 TO 245+00	RT.				
1-D	235+18 TO 237+00	RT.				
2-D	237+00 TO 239+22	RT.	0.2	182	1	
1-EC	235+00 TO 237+36	LT.				
2-EC	238+16 TO 245+00	LT.				
1014.5			0.2	404	2	1138

PLAN & PROFILE S.R. 739 STA. 235+00 TO STA. 245+00

FOR DRIVE DETAILS SEE SHEET NO. 120
FOR CULVERT DETAILS SEE SHEET NO. 122-123
FOR UNDERDRAIN DETAILS SEE SHEET NO. 121



BENCH MARK
RAILROAD SPIKE IN NORTH ROOT 36\"/>

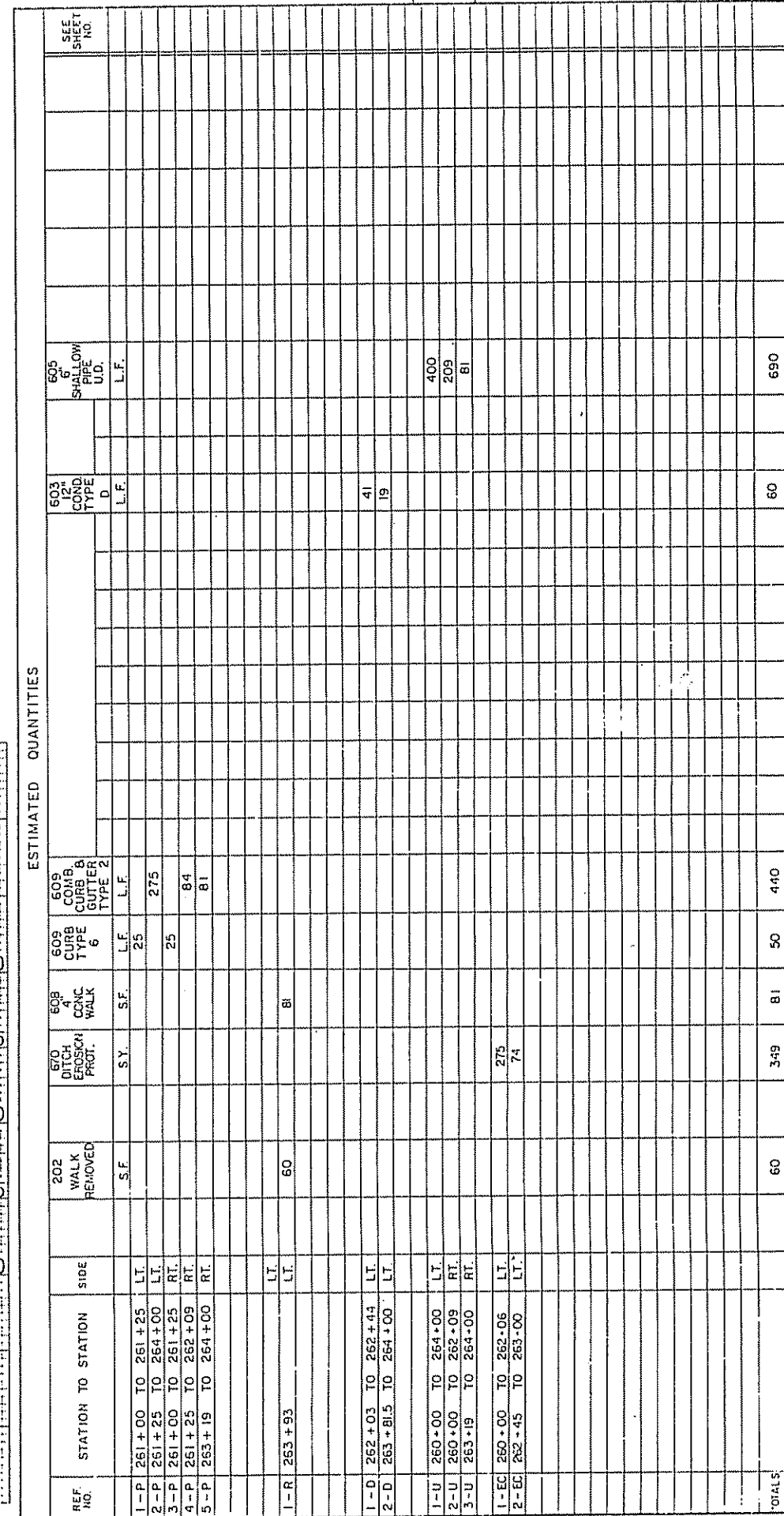


* 705.02 ESTIMATED QUANTITIES ** 707.17 NON-PERFORATED, ASTM D 3034, SDR 35 OR SS 931 OR SS944															
REF NO.	STATION TO STATION	SIDE	670 DITCH EROSION PROTECT.	603 6" 603 COND. TYPE			603 6" 603 COND. TYPE			603 COND. TYPE	604 2-2-B CATCH BASIN	605 6" SHALLOW PIPE U.D.	BENDS B 90°-45°	SPECIAL PRECAST REINF. CONC. OUTLET	SEE SHEET NO.
				L.F.	L.F.	L.F.	L.F.	L.F.	L.F.						
1-EC	255+00 TO 260+00	LT.	845												
1-D	255+88 TO 255+80	L&R.													
2-D	258+72 TO 259+22	RT.							116	36	2				
1-U	255+00 TO 255+88	LT.				28						88	1		
2-U	255+00 TO 255+88	RT.				10						101	1		
3-U	258+60 TO 260+00	LT.				10						320	1		
4-U	255+20 TO 260+00	RT.				110	10					380	1		

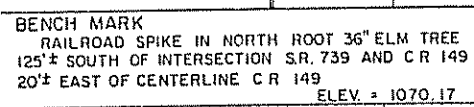
PLAN & PROFILE S.R. 739 STA. 255+00 TO STA. 260+00

P.O.T. STA. 262+76.41 S.R. 739 =
P.O.T. STA 70+00.00 C R 149

CALC BY DATE	11/90	UNI-739-201	OHIO	
CHKD BY DATE	11/92		FIWA REGION	



PLAN & PROFILE S.R. 739 STA. 260+00 TO STA. 264+00



20' EAST OF CENTERLINE C.R. 15

ELEV. = 1070.17

PROPOSED PROFILE

EXISTING PAVEMENT

0.98%

200' V.C.

HIGH POINT
+00 RT. & LT.
E. = 1065.49

P.V.I. STA. 264+00
ELEV. = 1069.47

P.V.T. STA. 265+00
ELEV. = 1069.50

STA. 264+00 TO STA. 268+00

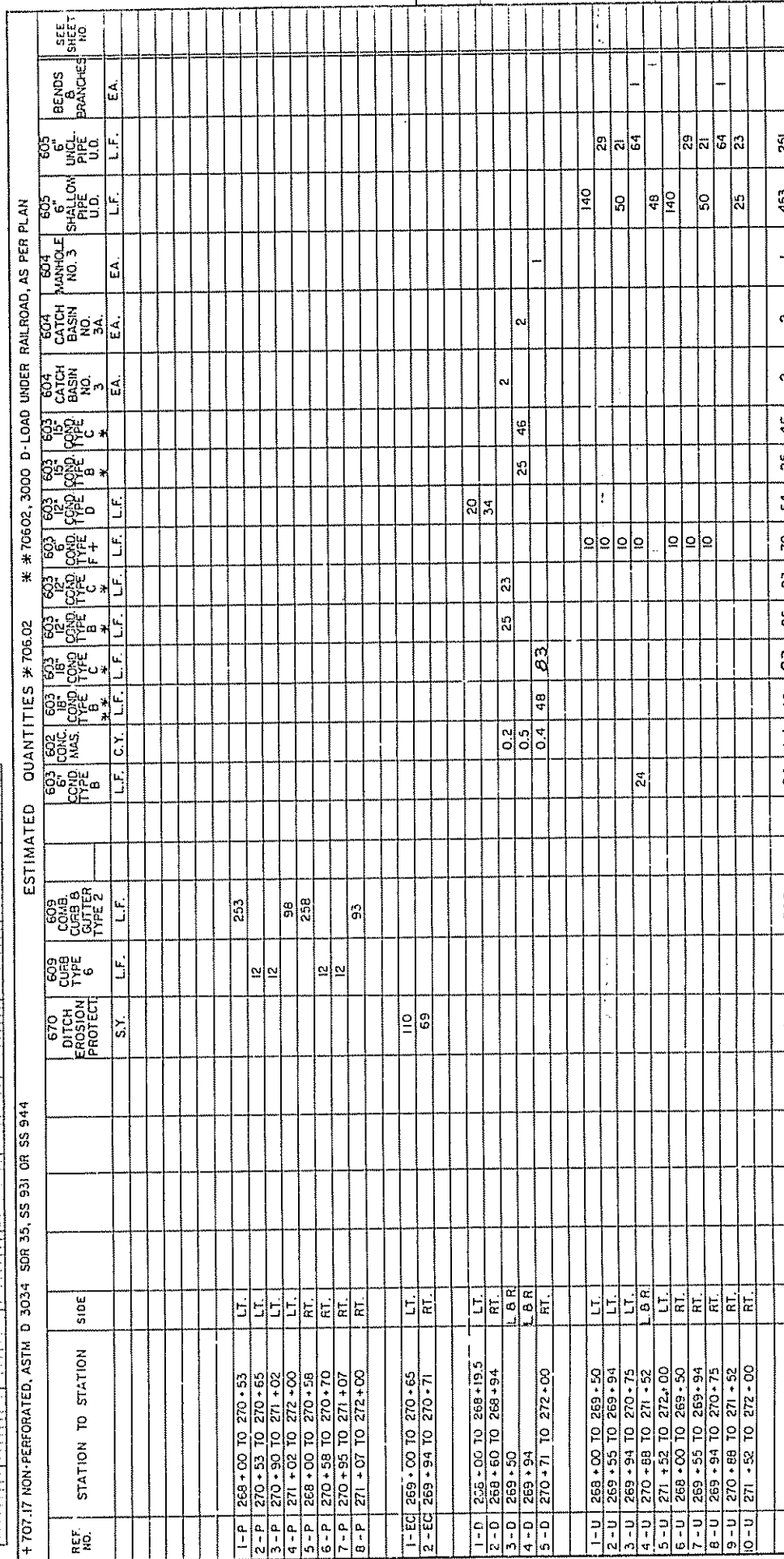
EXCAVATION	2.76 C.Y.
EMBANKMENT	0.61 C.Y.
SEEDING & MULCHING	2.86 C.Y.

EX. F.O.C. EXACT LOCATION UNKNOWN

6" SHALLOW DEPTH D.T. & RT.

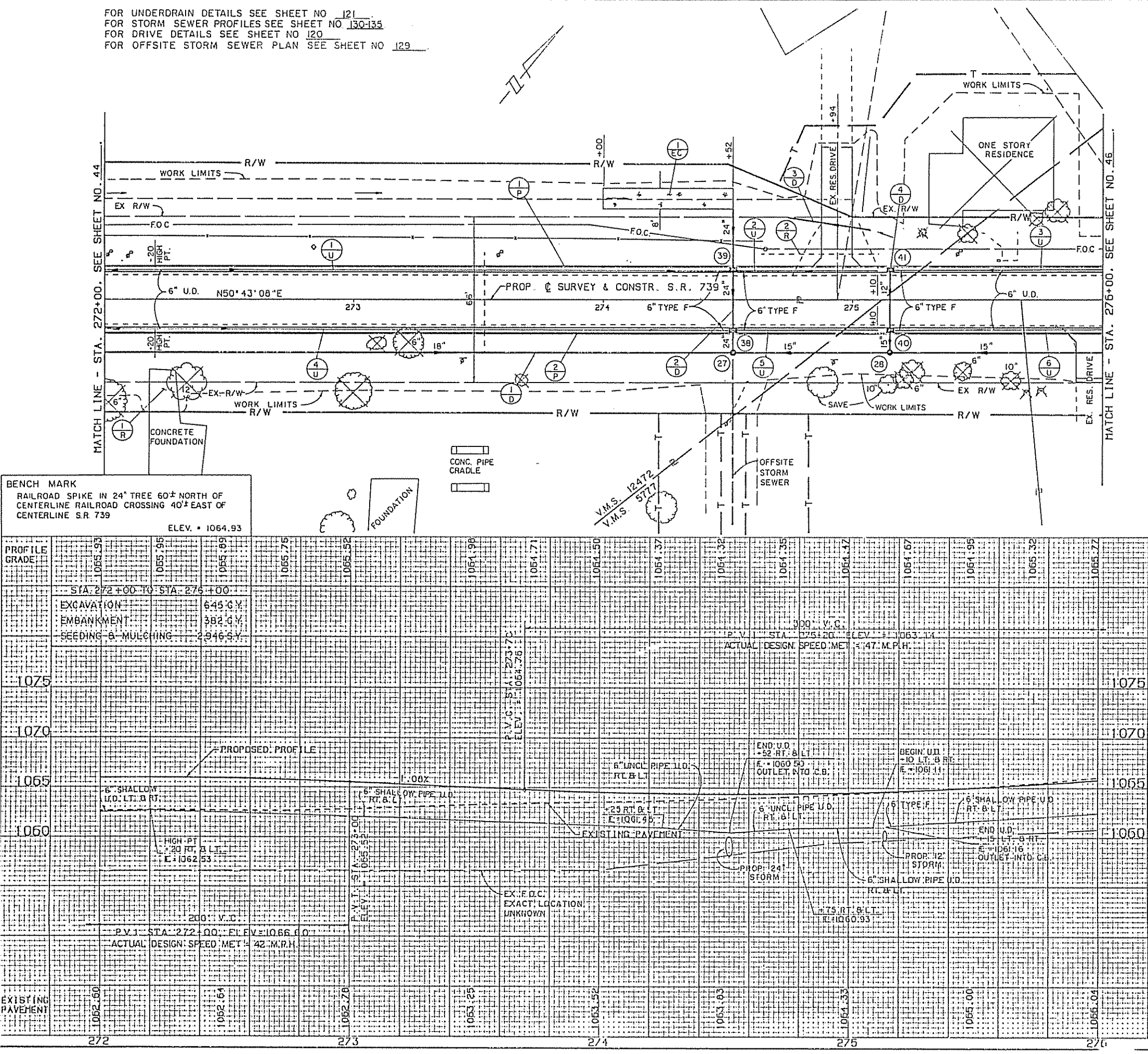
[illegible]

PLAN & PROFILE S.R. 739 STA. 264+00 TO STA. 268+00



PLAN & PROFILE S.R. 739 STA. 268+00 TO STA. 272+00

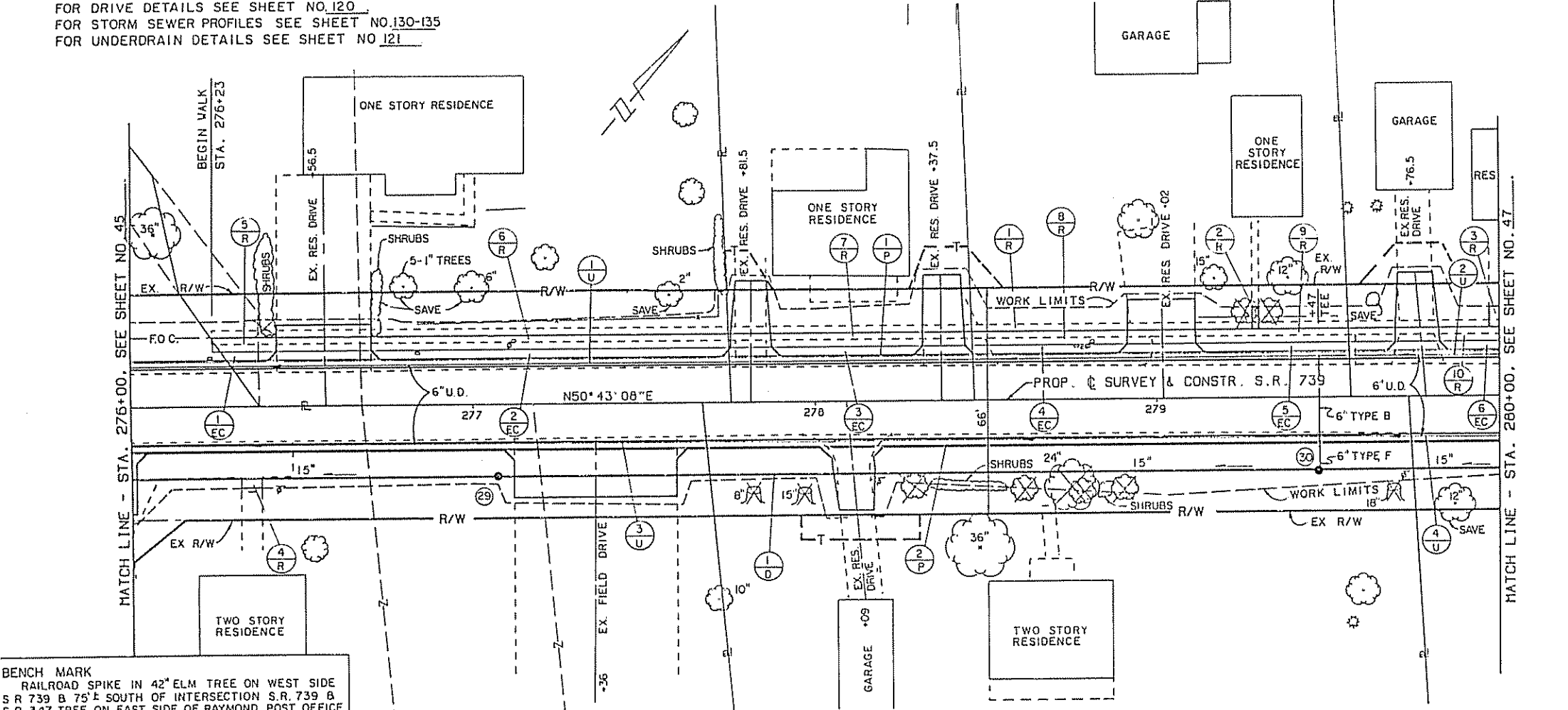
FOR UNDERDRAIN DETAILS SEE SHEET NO 121
FOR STORM SEWER PROFILES SEE SHEET NO 130-135
FOR DRIVE DETAILS SEE SHEET NO 120
FOR OFFSITE STORM SEWER PLAN SEE SHEET NO 129



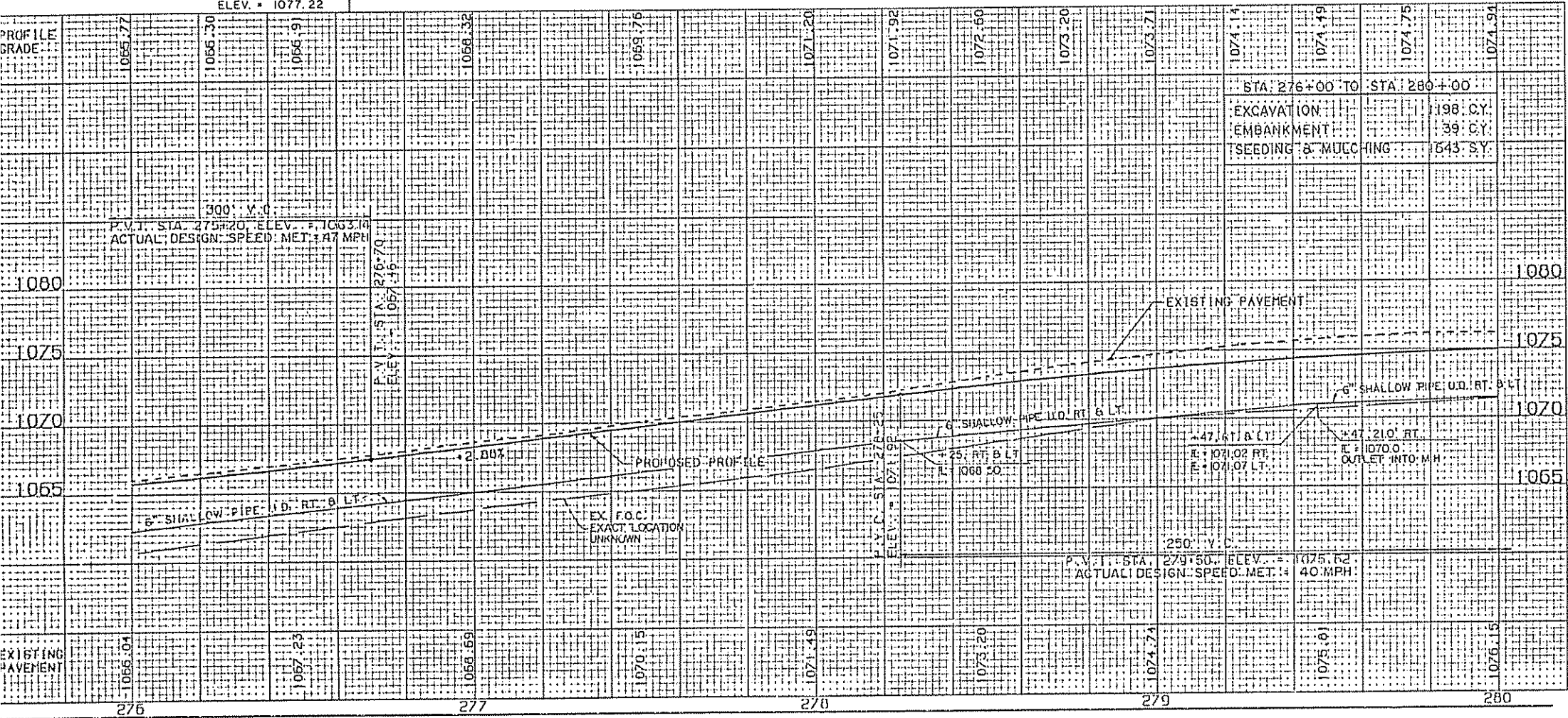
ESTIMATED QUANTITIES										* 706.02									
REF. NO.	STATION TO STATION	SIDE	202 PORTION OF STRUCT. REMOVED UNDER	202 PIPE REMOVED	670 DITCH EROSION PROTECT.	602 CONC. MASONRY	609 CONC. CURB & GUTTER	603 COND. TYPE F	603 COND. TYPE B	603 COND. TYPE C	603 COND. TYPE D	603 COND. TYPE E	603 COND. TYPE F	603 COND. TYPE G	603 COND. TYPE H	603 COND. TYPE I	603 COND. TYPE J	603 COND. TYPE K	603 COND. TYPE L
1-R	272+18 TO 272+28	RT.																	
2-R	273+54 TO 275+11	LT.																	
1-P	272+00 TO 276+00	LT.					400												
2-P	272+00 TO 276+00	RT.					400												
1-EC	274+00 TO 274+52	LT.																	
1-D	272+00 TO 274+52	LT.																	
2-D	274+52 TO 275+10	LT.																	
3-D	274+73 TO 275+08	LT.																	
4-D	275+15 TO 275+15	LT.																	
1-U	272+00 TO 274+52	LT.																	
2-U	274+52 TO 275+10	LT.																	
3-U	275+15 TO 276+00	LT.																	
4-U	272+00 TO 274+52	RT.																	
5-U	275+52 TO 275+10	RT.																	
6-U	275+15 TO 276+00	RT.																	
TOTALS																			

PLAN & PROFILE S.R. 739 STA. 272+00 TO STA. 276+00

FOR DRIVE DETAILS SEE SHEET NO.120
FOR STORM SEWER PROFILES SEE SHEET NO.130-135
FOR UNDERDRAIN DETAILS SEE SHEET NO.121



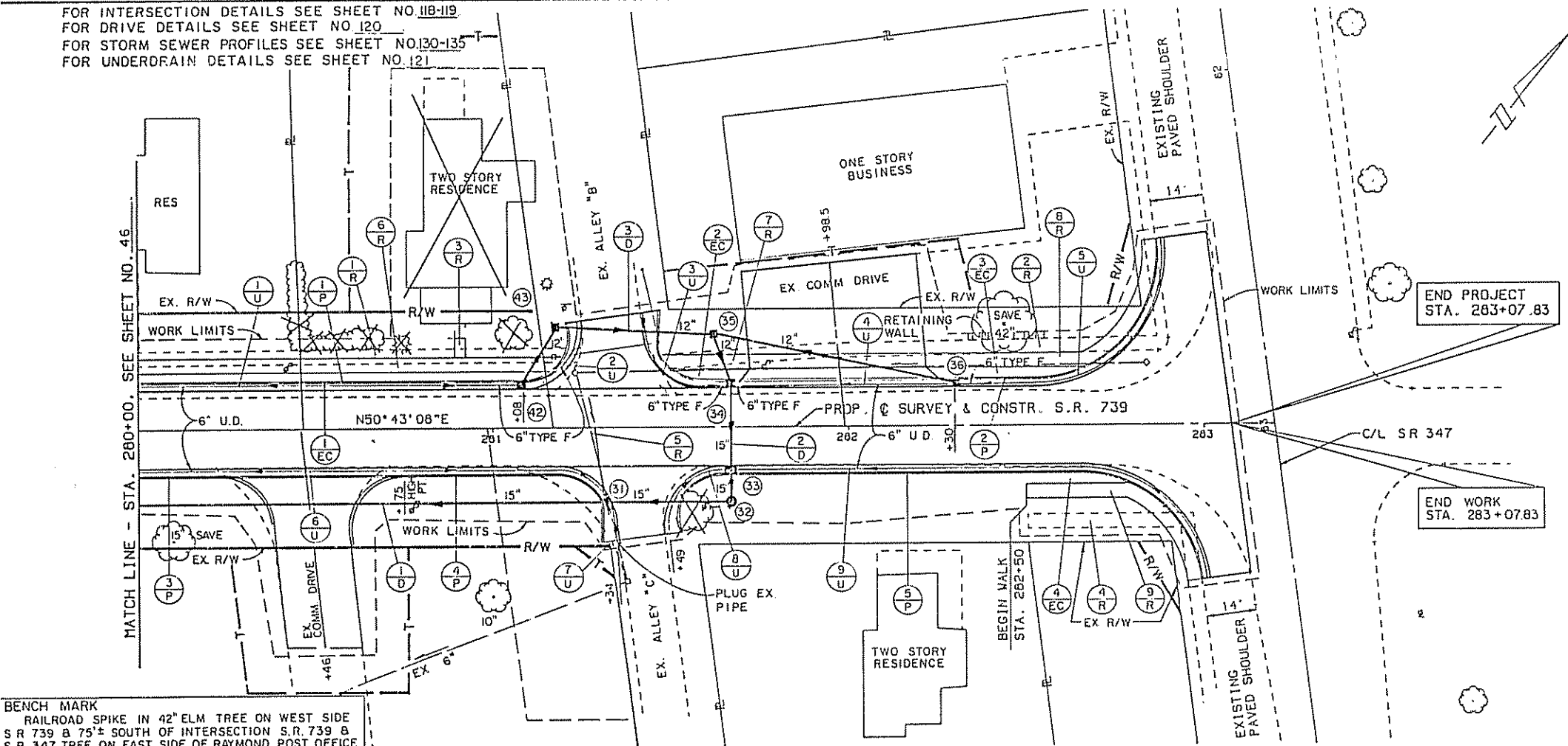
BENCH MARK
RAILROAD SPIKE IN 42\"/>



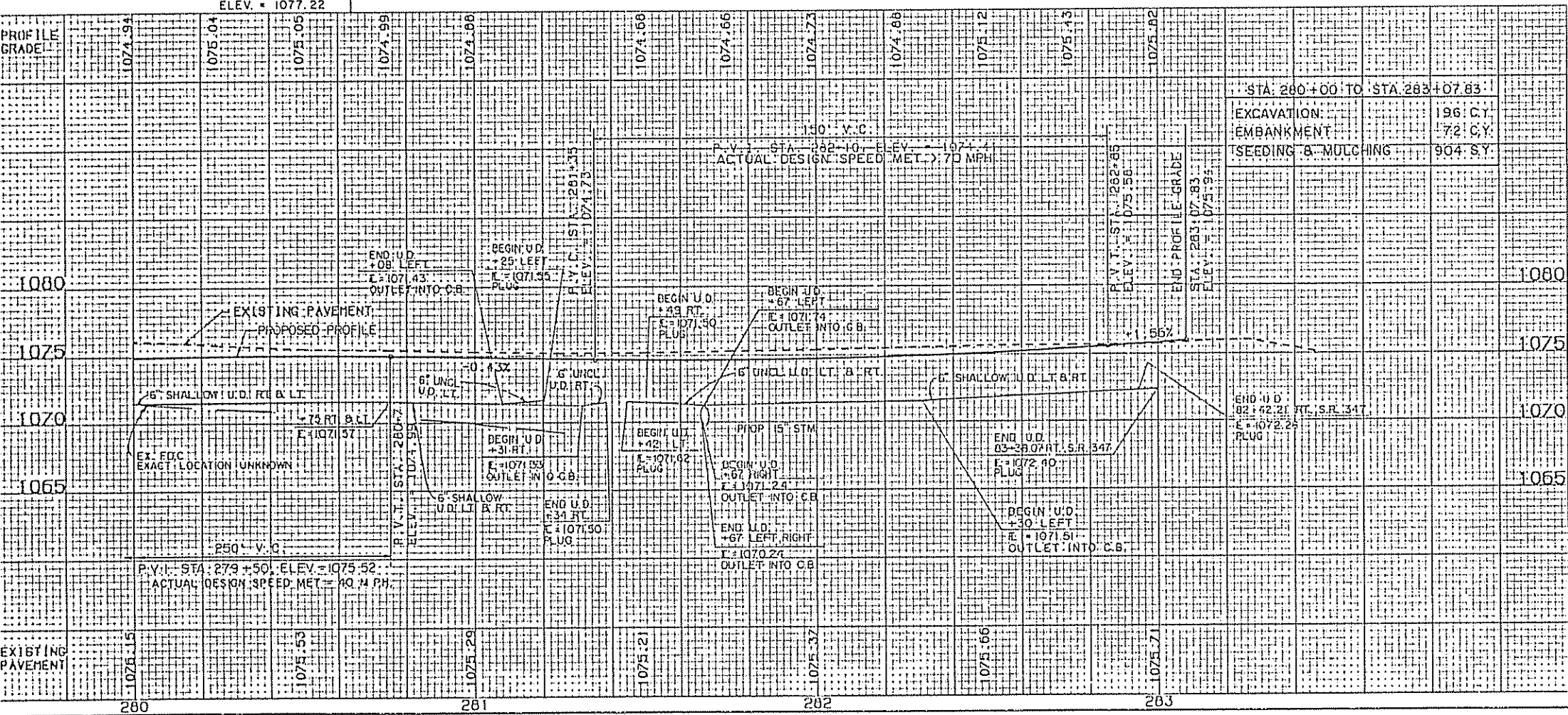
ESTIMATED QUANTITIES																				QUANTITIES																				707.17 NON-PERFORMED, ASTM D 3034 SDR 35, SS 931 OR SS 944																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
REF. NO.	STATION TO STATION	SIDE	202 WALK REMOVED	660 SCODING	609 CURB & GUTTER TYPE 2	608 4" CONC. WALK	603 6" CORR. TYPE B				603 15" CORR. TYPE C	604 MANHOLE NO. 3	605 6" SHALLOW PIPE U.D.	BENDS & BRANCHES	SEE SHEET NO.	603 6" CORR. TYPE F				603 15" CORR. TYPE C	604 MANHOLE NO. 3	605 6" SHALLOW PIPE U.D.	BENDS & BRANCHES	SEE SHEET NO.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
							L.F.	S.F.	L.F.	S.F.						L.F.	S.F.	L.F.	S.F.						L.F.	S.F.	L.F.	S.F.	L.F.	S.F.	L.F.	S.F.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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PLAN & PROFILE S.R. 739 STA. 276+00 TO STA. 280+00

FOR INTERSECTION DETAILS SEE SHEET NO. 118-119
FOR DRIVE DETAILS SEE SHEET NO. 120
FOR STORM SEWER PROFILES SEE SHEET NO. 130-135
FOR UNDERDRAIN DETAILS SEE SHEET NO. 121



BENCH MARK
RAILROAD SPIKE IN 42\"/>



ESTIMATED QUANTITIES		QUANTITIES									
REF. NO.	STATION TO STATION	WALK REMOVED	PIPE REMOVED	CATCH BASIN REMOVED	CONC. WALK	CURB TYPE	CONC. CURB	CONC. CURB	CONC. CURB	CONC. CURB	CONC. CURB
1-R	280+00 TO 281+25	LT. 500									
2-R	281+41 TO 282+85	LT. 554									
3-R	280+91	LT. 9									
4-R	282+50 TO 282+97	LT. 246									
5-R	281+24 TO 282+84	LT. 168									
6-R	280+00 TO 281+16	LT. 172									
7-R	281+48 TO 281+72	LT. 24									
8-R	282+22 TO 282+85	LT. 63									
9-R	282+50 TO 282+97	LT. 47									
1-EC	280+00 TO 281+15	LT. 172									
2-EC	281+52 TO 281+73	LT. 21									
3-EC	282+22 TO 282+69	LT. 47									
4-EC	282+50 TO 282+78	LT. 28									
1-P	280+00 TO 281+25	LT. 172									
2-P	281+43 TO 282+85	LT. 172									
3-P	280+00 TO 280+38	LT. 172									
4-P	280+60 TO 281+36	LT. 172									
5-P	281+50 TO 282+97	LT. 172									
1-D	280+00 TO 281+67	LT. 172									
2-D	281+62 TO 281+67	LT. 172									
3-D	281+08 TO 282+30	LT. 172									
1-U	280+00 TO 281+08	LT. 172									
2-U	281+08 TO 281+25	LT. 172									
3-U	281+42 TO 281+67	LT. 172									
4-U	281+67 TO 282+25	LT. 172									
5-U	282+30 TO 282+42	LT. 172									
6-U	280+00 TO 281+31	LT. 172									
7-U	281+31 TO 281+34	LT. 172									
8-U	281+49 TO 281+67	LT. 172									
9-U	281+67 TO 283+34	LT. 172									
TOTALS		1421	212	2	1194	50	597	4	72	90	

PLAN & PROFILE S.R. 739 STA. 280+00 TO STA. 283+19.93

134

134

080

PROPERTY

T. R. W.

075

LIBRARY

11070

07579

03	00	30	ALFRED	00	00	BAG
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1075 79

F.O.C. = FIBER OPTIC CABLE

1080

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1. $2x^2 + 3x - 4$ 2. $5x^3 - 2x^2 + 7x - 1$ 3. $x^4 - 3x^3 + 2x^2 - x + 5$ 4. $7x^5 - 4x^4 + 9x^3 - 6x^2 + 3x - 8$ 5. $10x^6 - 5x^5 + 12x^4 - 8x^3 + 4x^2 - 2x + 1$	6. $3x^7 - 2x^6 + 5x^5 - 4x^4 + 7x^3 - 6x^2 + 3x - 9$ 7. $8x^8 - 5x^7 + 11x^6 - 9x^5 + 6x^4 - 4x^3 + 2x^2 - x + 10$ 8. $12x^9 - 7x^8 + 15x^7 - 10x^6 + 8x^5 - 5x^4 + 3x^3 - 2x^2 + x - 11$ 9. $15x^{10} - 9x^9 + 18x^8 - 12x^7 + 10x^6 - 7x^5 + 4x^4 - 3x^3 + 2x^2 - x + 13$ 10. $18x^{11} - 11x^{10} + 20x^9 - 14x^8 + 12x^7 - 9x^6 + 6x^5 - 4x^4 + 3x^3 - 2x^2 + x - 14$
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1075

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1070

032:30

EX TWIN 12" C M P

11072 4011

STA: 105	00	40	LT
EX: TWIN	12	OUTLET	
IT: 107	82		

105-00

1075 64

STA: 105	+ 00' : 39'
EX: TWIN	12" INLET
FILE: 107	190

1080

EX: R/W

EX: R/W—

51075

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

4070

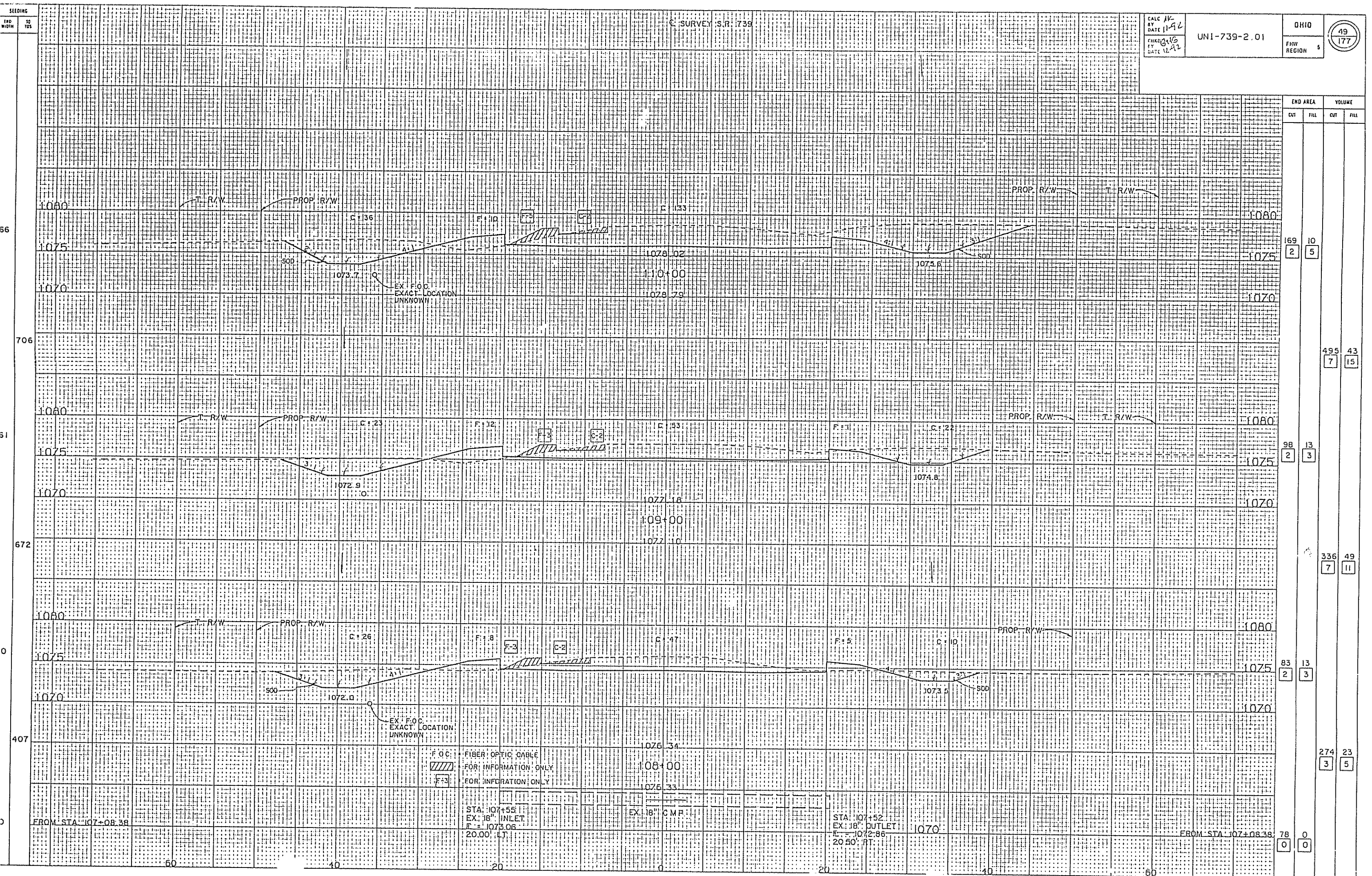
072:84

1072.95

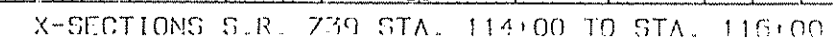
194-90

1036 00

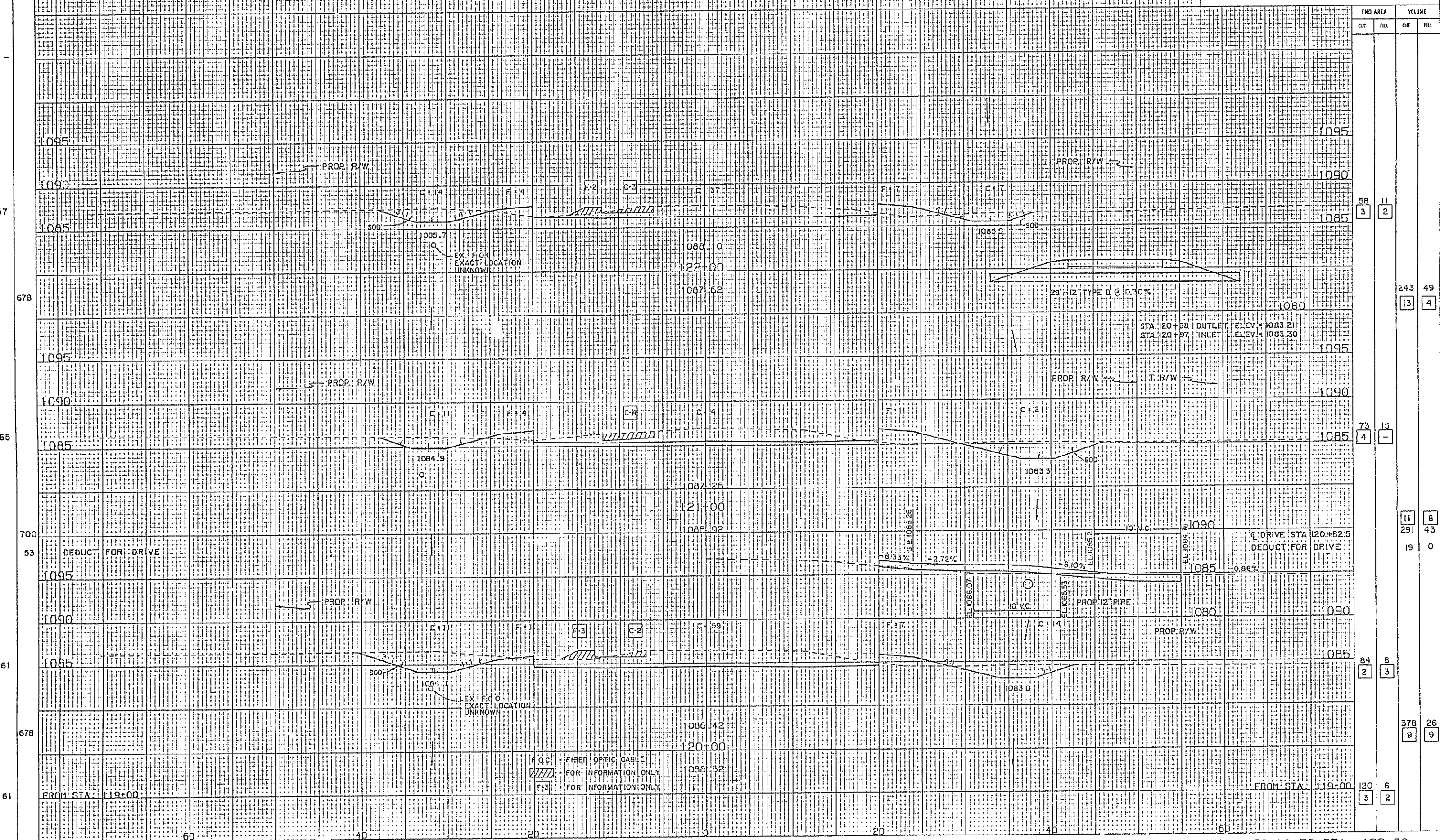
X-SECTIONS S.R. 739 STA 104+00 TO STA 107+08.38



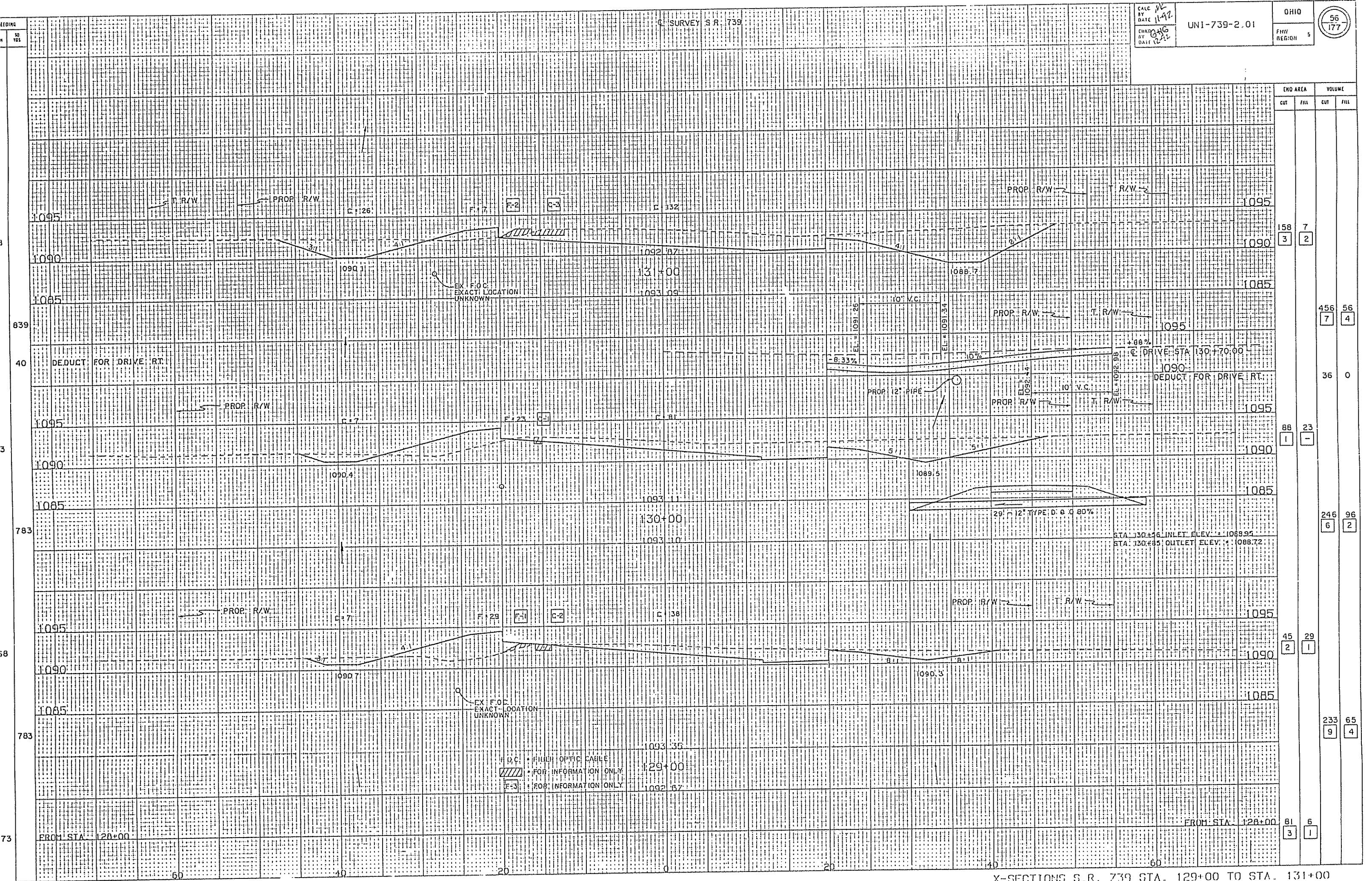
X-SECTIONS S.R. 739 STA. 108+00 TO STA. 110+00



X-SECTIONS S.R. 739 STA. 117+00 TO STA. 119+00

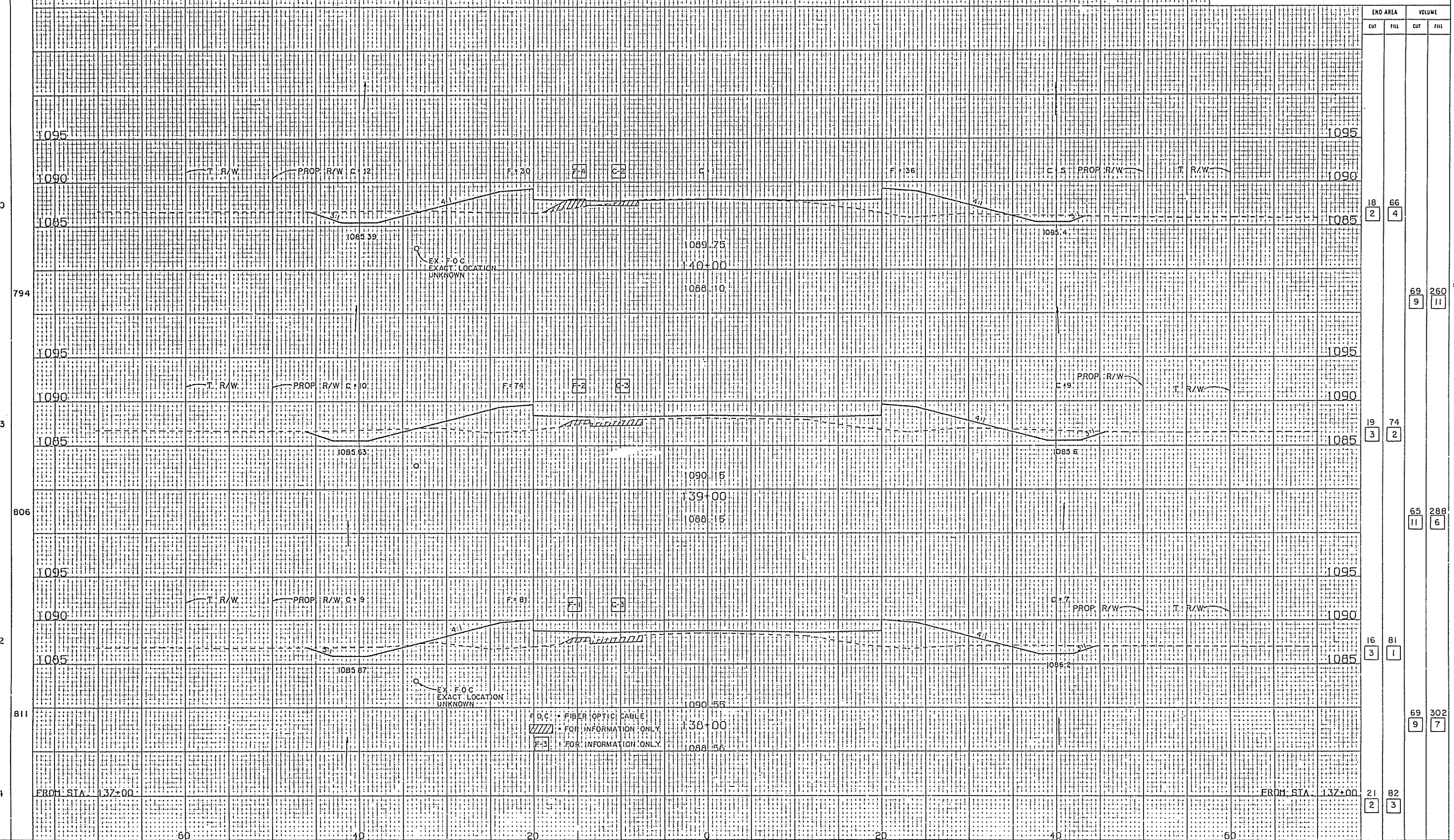


X-SECTION S.R. 739 STA. 120+00 TO STA. 122+00



END AREA		VOLUME	
CUT	FILL	CUT	FILL
158	7		
3	2		
		456	56
		7	4
		36	0
88	23		
1	-		
		246	96
		6	2
45	29		
2	1		
		233	65
		9	4
81	6		
3	1		

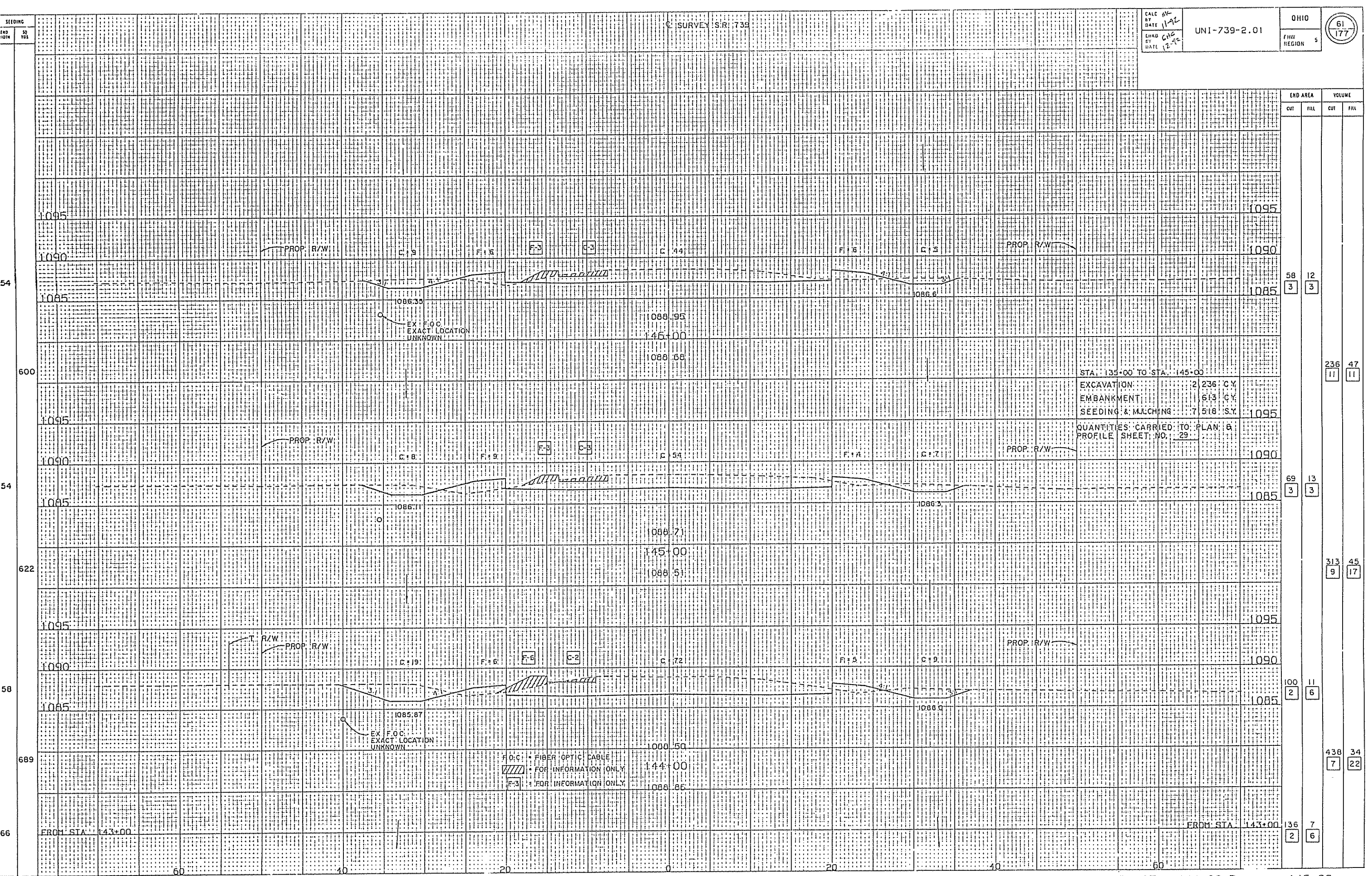
X-SECTIONS S.R. 739 STA. 129+00 TO STA. 131+00



X-SECTION'S S.R. 739 STA. 138+00 TO STA. 140+00

[illegible]

X-SECTIONS S.R. 739 STA. 141+00 TO STA. 143+00



X-SECTIONS S.R. 739 STA. 144+00 TO 145+00

		END AREA		VOLUME	
		CUT	FILL	CUT	FILL
7					
628		36	24	165	76
		4	2	11	11
6					
622		53	17	219	50
		2	4	9	19
6					
611		65	10	228	41
		3	6	11	17
4		58	12		
		3	3		

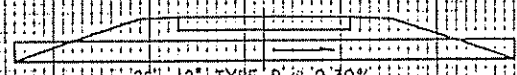
SEEDING
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
260
270
280
290
300
310
320
330
340
350
360
370
380
390
400
410
420
430
440
450
460
470
480
490
500
510
520
530
540
550
560
570
580
590
600
610
620
630
640
650
660
670
680
690
700
710
720
730
740
750
760
770
780
790
800
810
820
830
840
850
860
870
880
890
900
910
920
930
940
950
960
970
980
990
1000

C SURVEY S.R. 739

DATE 11-9-96	OHIO 63 177
CHKD GHS	UN1-739-2.01
DATE 12-9-96	FINN REGION 5

1090

1085



STA. 151+78 INLET ELEV. 1086.47
STA. 152+04 OUTLET ELEV. 1086.39

T R/W

PROP. R/W

PROP. R/W

T R/W

1095

1095

1090

1085

T R/W

PROP. R/W

EX. F.O.C.
EXACT LOCATION
UNKNOWN

1089.43

1085.4

1085

1095

C DRIVE STA. 151+9

10' V.C.
EL. 1086.69
EL. 1086.50

152+00
1090.3

DEDUCT. FOR DRIVE LT.

DEDUCT. FOR DRIVE LT.

1095

1085

T R/W

PROP. R/W

10' V.C.
EL. 1086.69
EL. 1086.50

PROP. 12" PIPE

1090

PROP. R/W

T R/W

1095

1090

1085

T R/W

PROP. R/W

10' V.C.
EL. 1086.69
EL. 1086.50

PROP. 12" PIPE

1089.67

1085.7

1085

1090

C DRIVE STA. 150+44.5

4.72%
EL. 1086.95
EL. 1086.35

151+00
1089.2

DEDUCT. FOR DRIVE LT.

DEDUCT. FOR DRIVE LT.

1095

1085

PROP. R/W

PROP. R/W

10' V.C.
EL. 1086.69
EL. 1086.50

PROP. 12" PIPE

1090

PROP. R/W

T R/W

1095

1090

1085

T R/W

PROP. R/W

10' V.C.
EL. 1086.69
EL. 1086.50

PROP. 12" PIPE

1089.91

1086.0

1085

EX. F.O.C.
EXACT LOCATION
UNKNOWN

F.O.C. - FIBER OPTIC CABLE
- FOR INFORMATION ONLY
- FOR INFORMATION ONLY

150+00
1086.9

FROM STA. 149+00

FROM STA. 149+00

END AREA		VOLUME	
CUT	FILL	CUT	FILL
251	0	15	6
6	0	602	32
		36	0
74	17	196	93
2	3	7	13
		5	0
32	33		
2	4	126	106
		11	11
36	24		
4	2		

X-SECTIONS S.R. 739 STA. 150+00 TO STA. 152+00

SEEDING
0 IN 50 YDS
1
3
800
3
806
72
811
74

C. SURVEY S.R. 739

CALC BY
DATE 11-92
CHKD BY
DATE 6-95
12-92

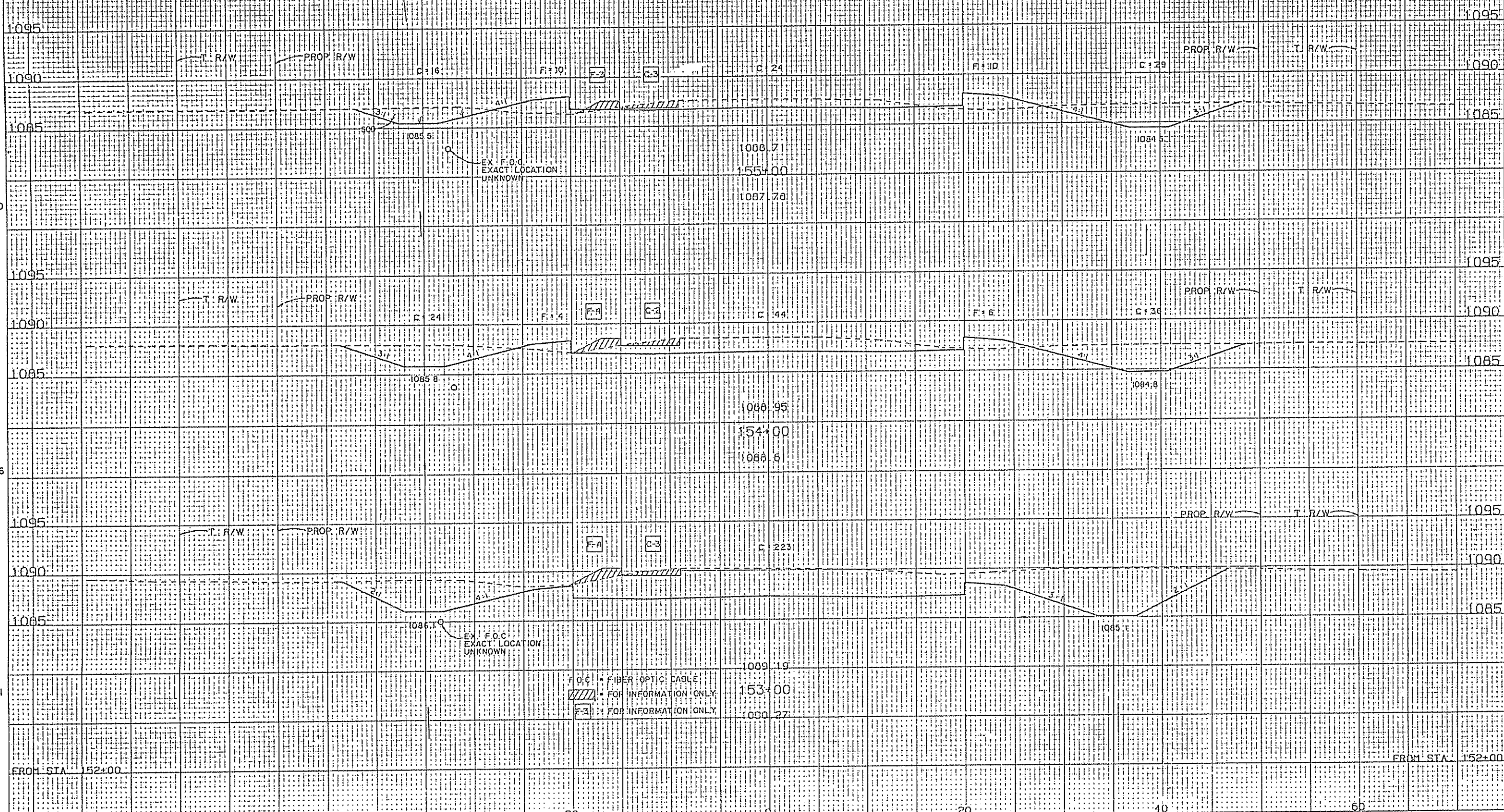
OHIO
FHWA REGION 5
64
177

UNI-739-2.01

STA. 145+00 TO STA. 155+00

EXCAVATION	3536 CY
EMBANKMENT	520 CY
SEEDING & MULCHING	6931 S.Y.

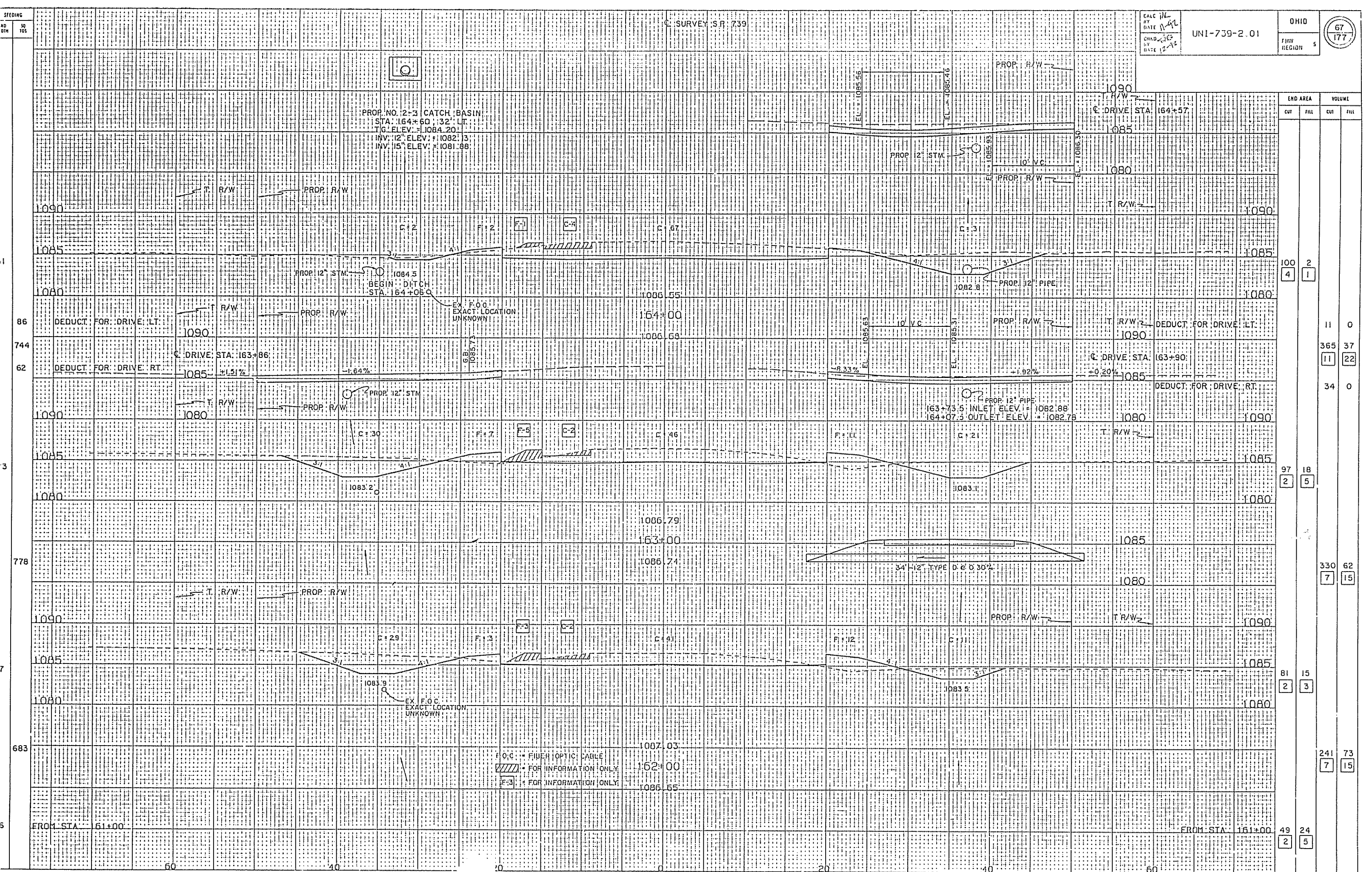
QUANTITIES CARRIED TO PLAN & PROFILE SHEET NO. 130



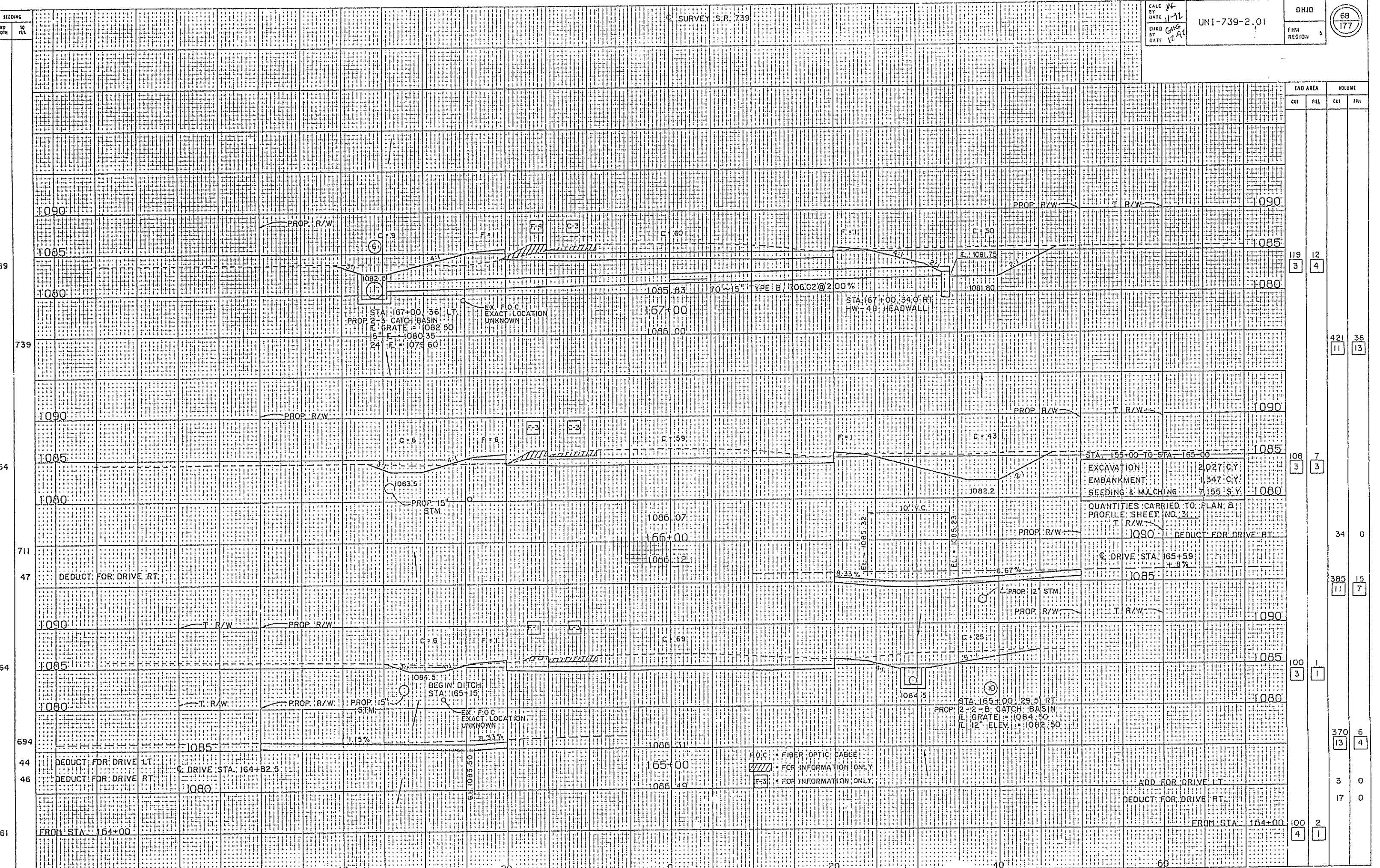
END AREA		VOLUME	
CUT	FILL	CUT	FILL
69	20	321	56
3	3	9	13
104	10	606	19
2	4	9	15
223	0	878	0
3	4	17	7
251	0	6	0

X-SECTIONS S.R. 739 STA. 153+00 TO STA. 155+00

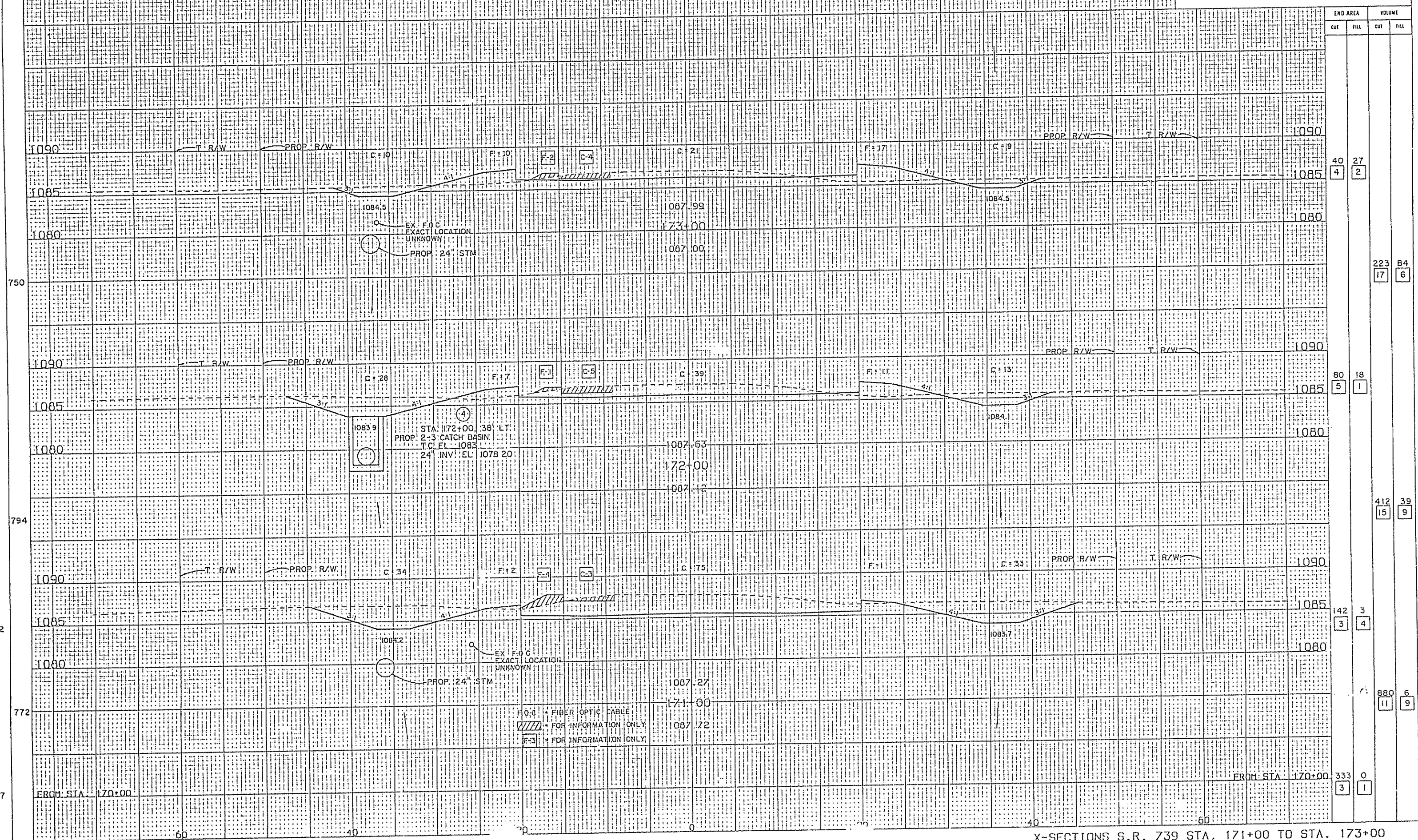
[illegible]



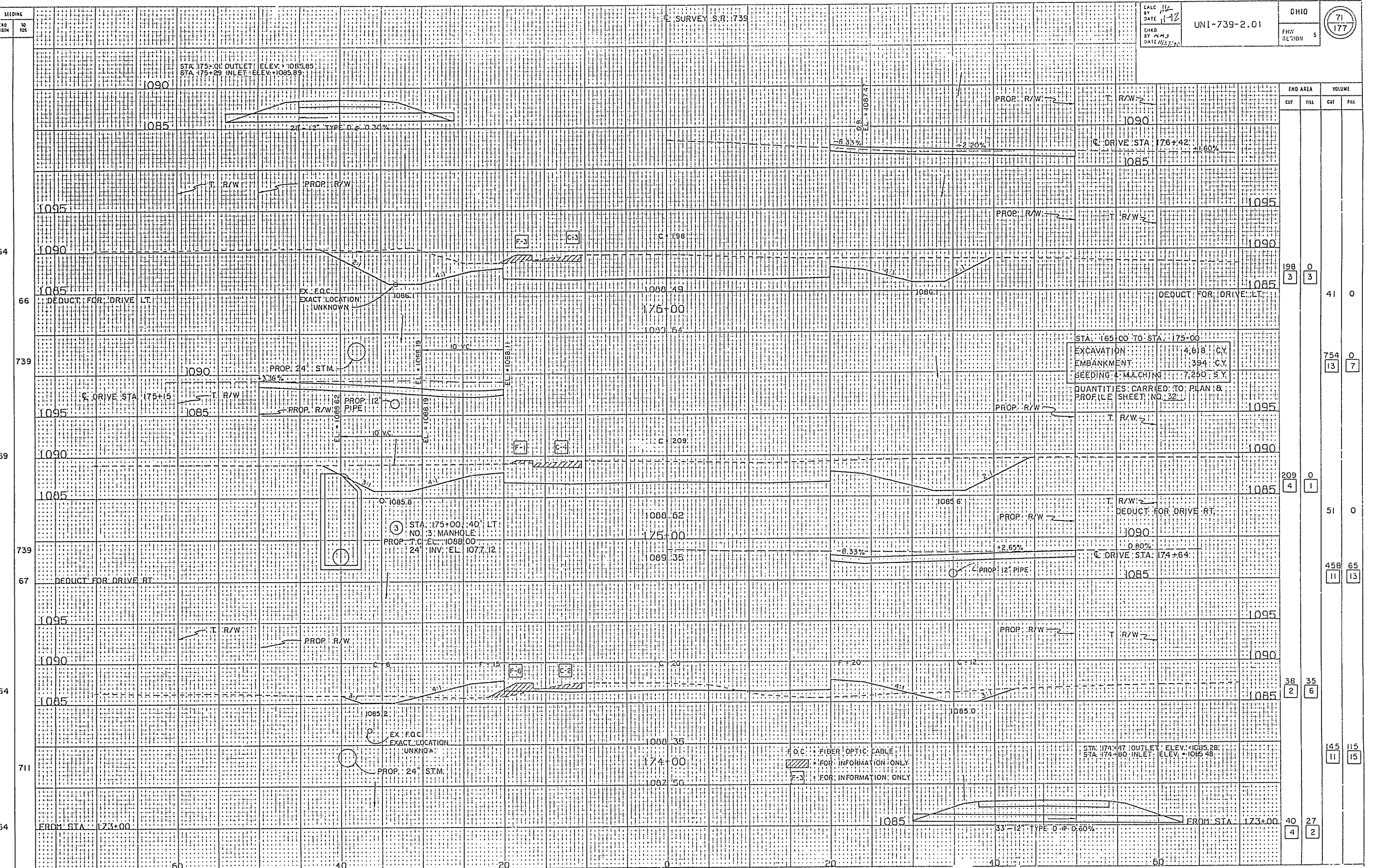
X-SECTIONS S.R. 739 STA. 162+00 TO STA. 164+00



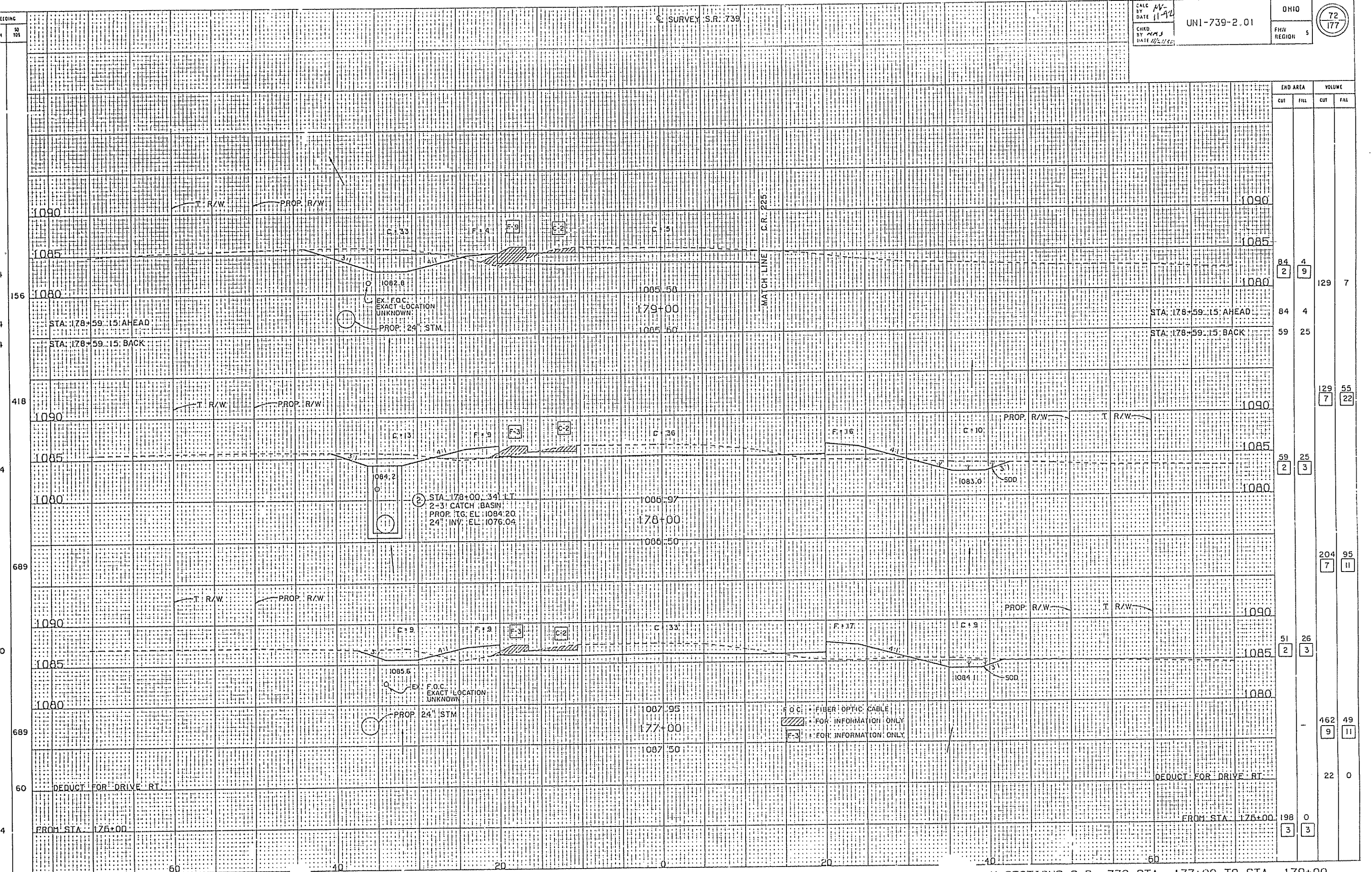
X-SECTIONS S.R. 739 STA. 165+00 TO STA. 167+00



X-SECTIONS S.R. 739 STA. 171+00 TO STA. 173+00

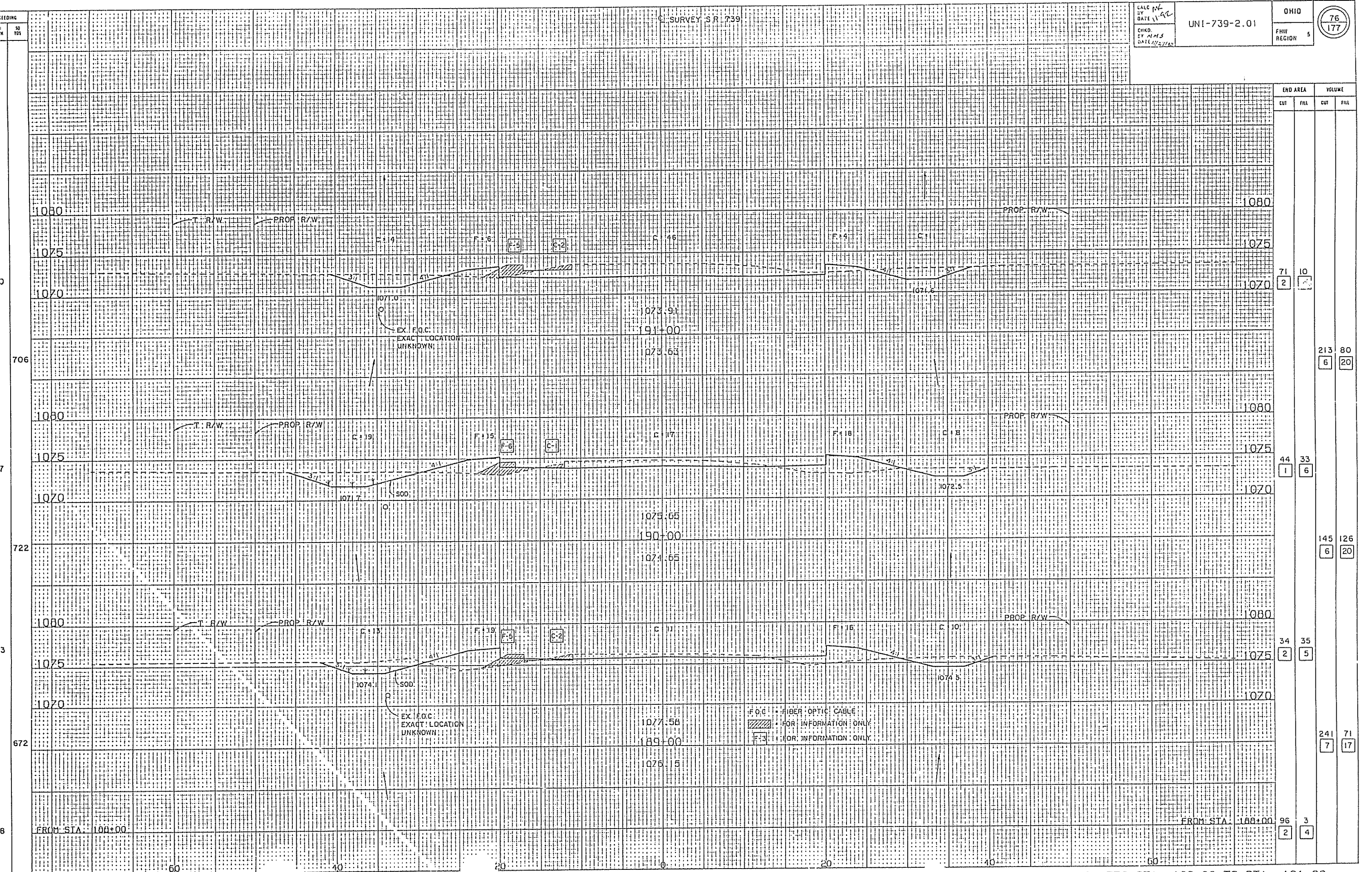


X-SECTIONS S.R. 739 STA. 174+00 TO STA. 176+00



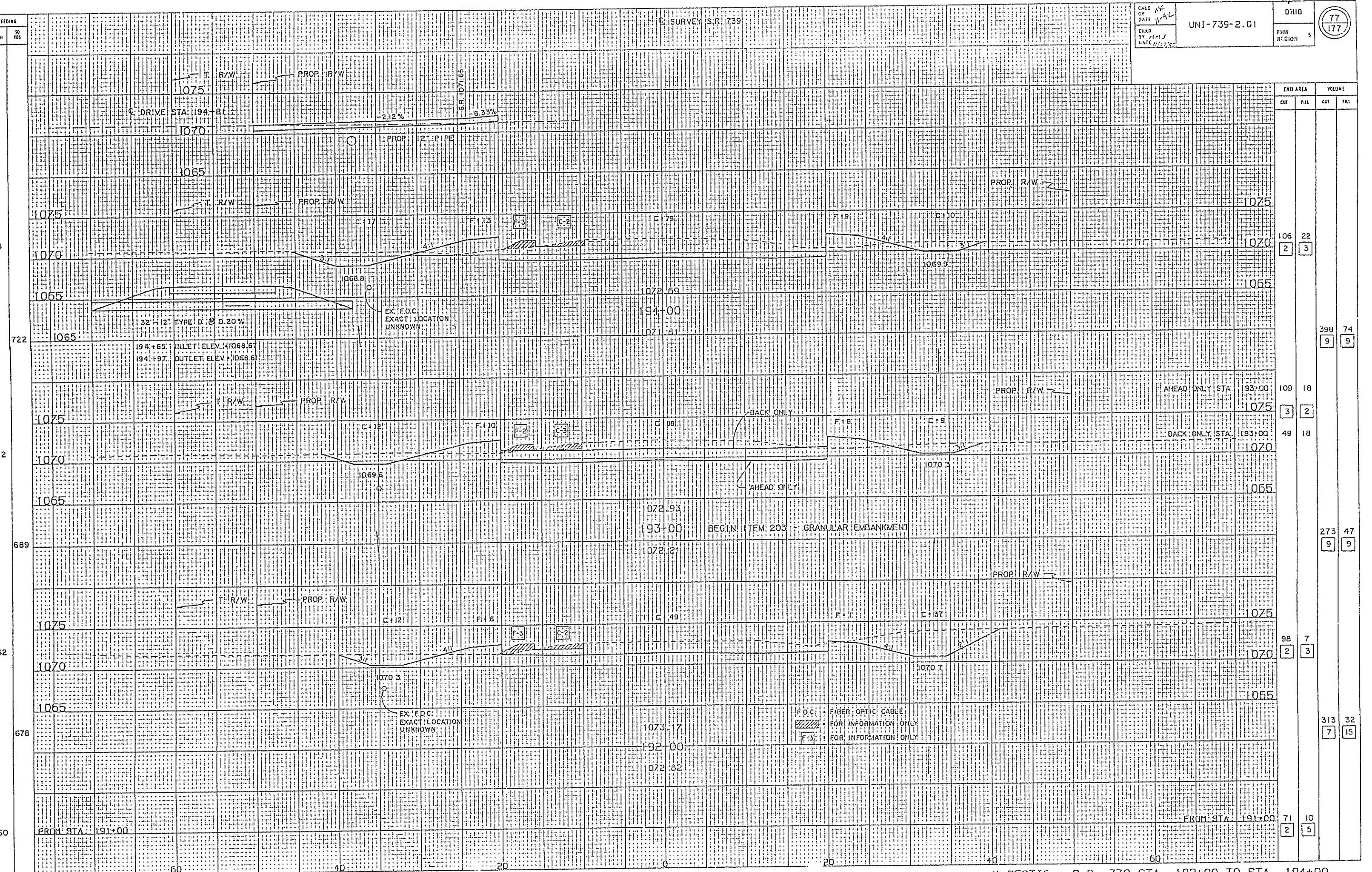
X-SECTIONS S.R. 739 STA. 177+00 TO STA. 179+00

X-SECTIONS S.R. 739 STA. 183+00 TO STA. 185+00

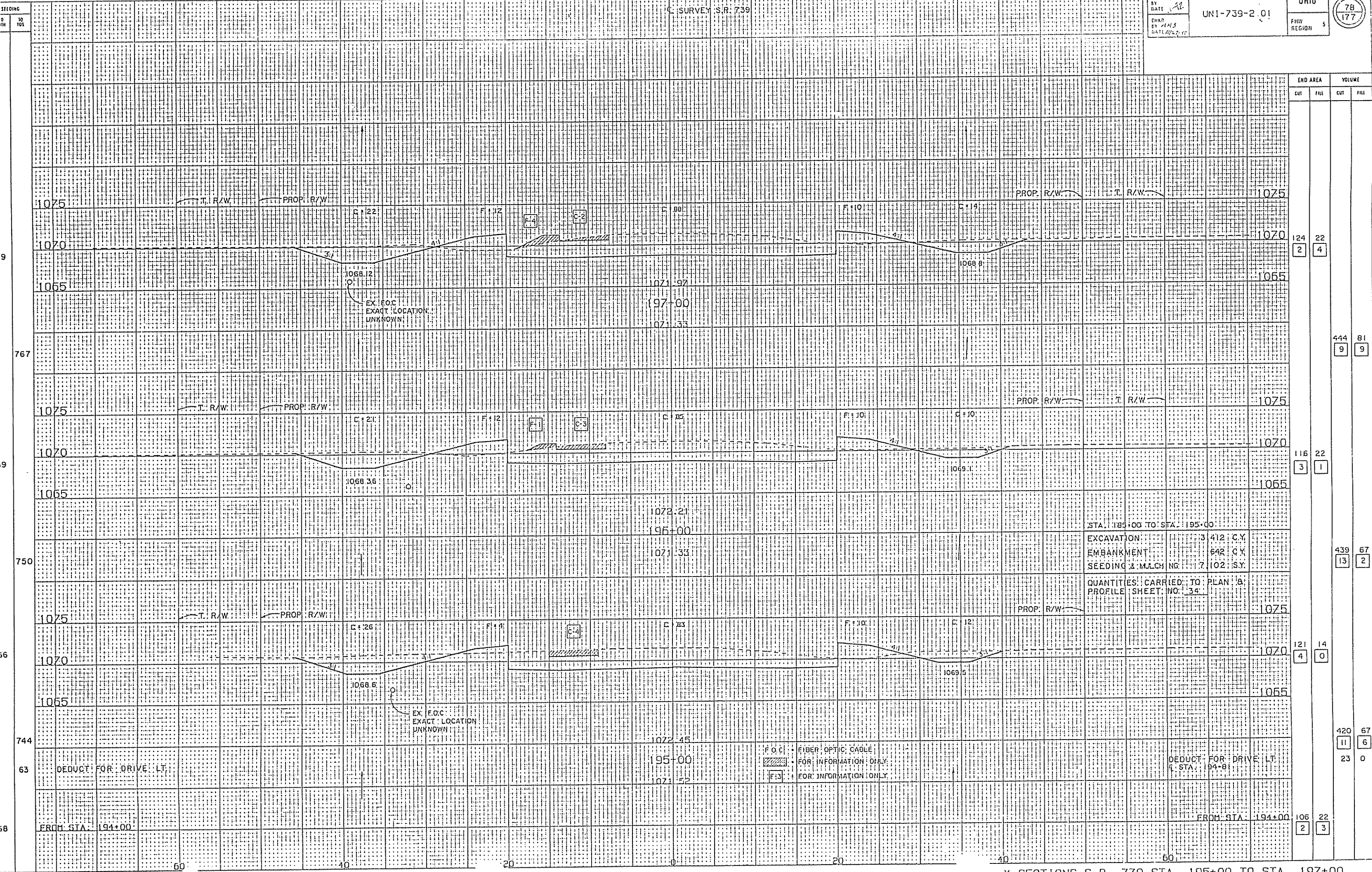


END AREA		VOLUME	
CUT	FILL	CUT	FILL
71	10	213	80
2	1	6	20
44	33	145	126
1	6	6	20
34	35	241	71
2	5	7	17
96	3		
2	4		

X-SECTION S.R. 739 STA. 189+00 TO STA. 191+00



X-SECTION S.R. 739 STA. 192+00 TO STA. 194+00



END AREA		VOLUME	
CUT	FILL	CUT	FILL
124	22	444	81
2	4	9	9
116	22	439	67
3	1	13	2
121	14	420	67
4	0	11	6
106	22	23	0
2	3		

X-SECTIONS S.R. 739 STA. 195+00 TO STA. 197+00

X-SECTIONS S.R. 739 STA. 198+00 TO STA. 200+00



EDGING
30
100
5
717
4
717
5
822
33

SURVEY S.R. 739

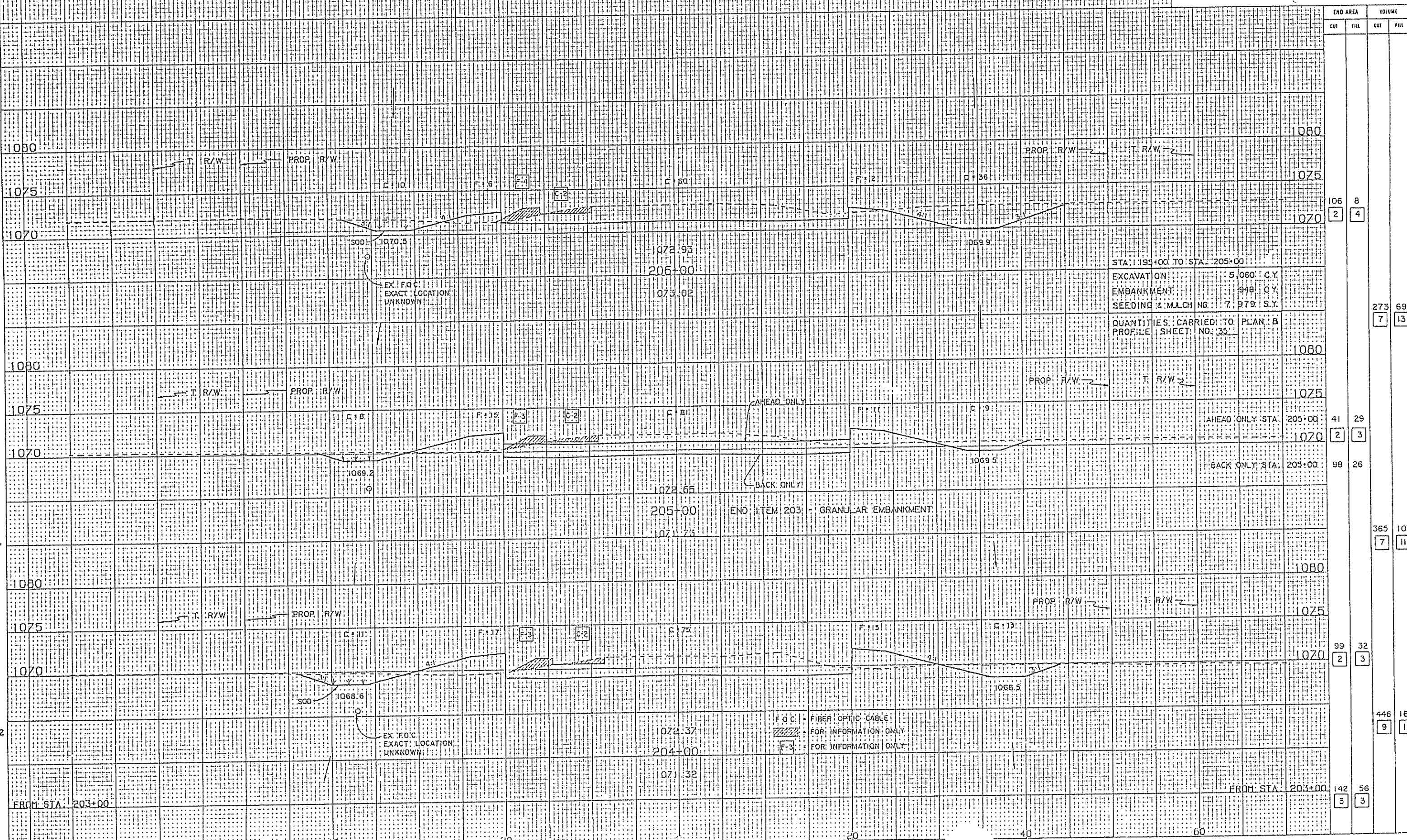
CALC. SK.
BY
DATE 11-9-2

CHKD.
BY M.H.S.
DATE 11/17/13

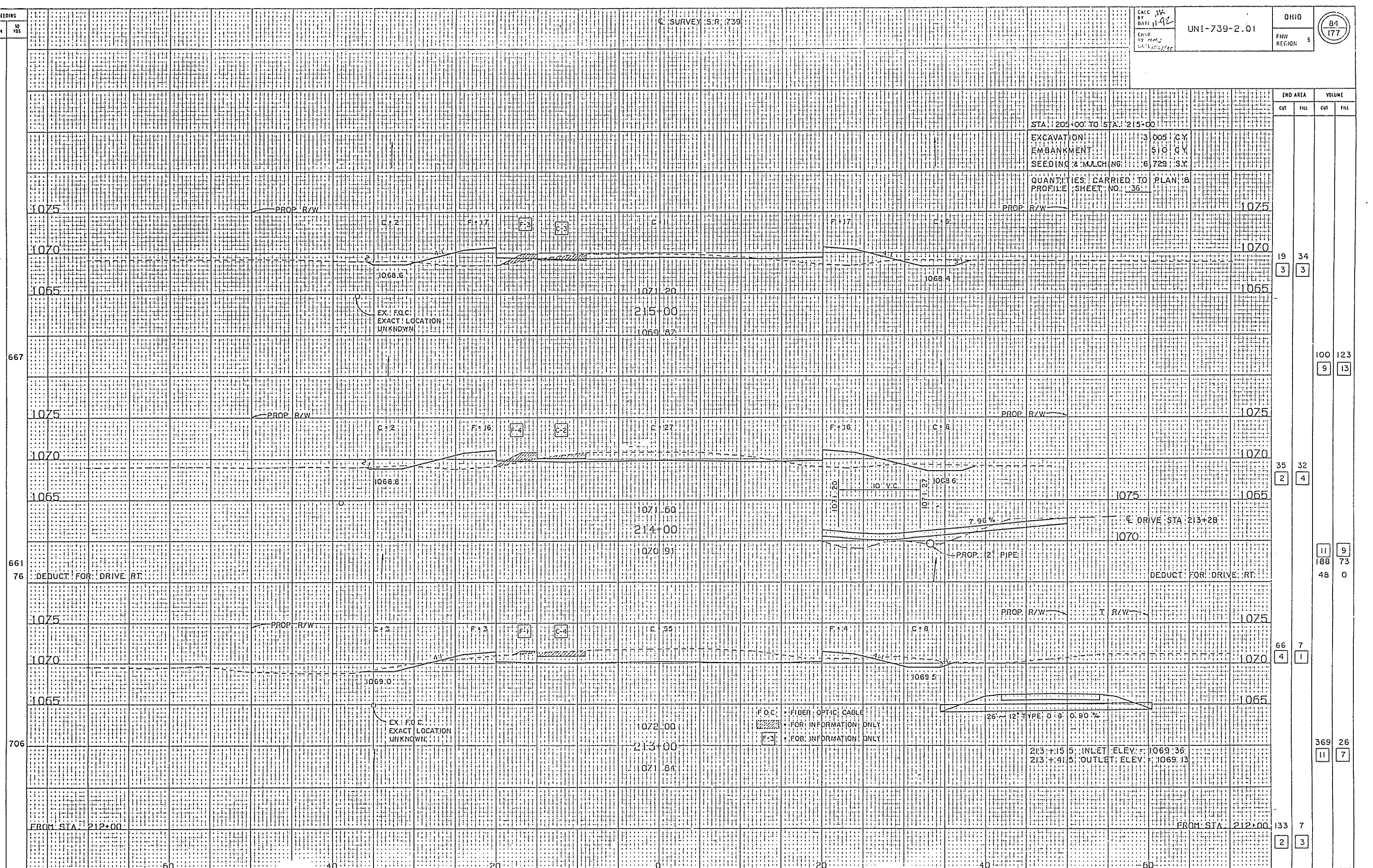
UNI-739-2.01

OHIO
FHW
REGION 5

01
177



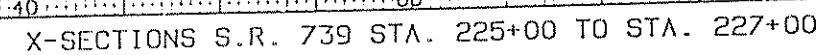
X-SECTIONS S.R. 739 STA. 204+00 TO STA. 206+00

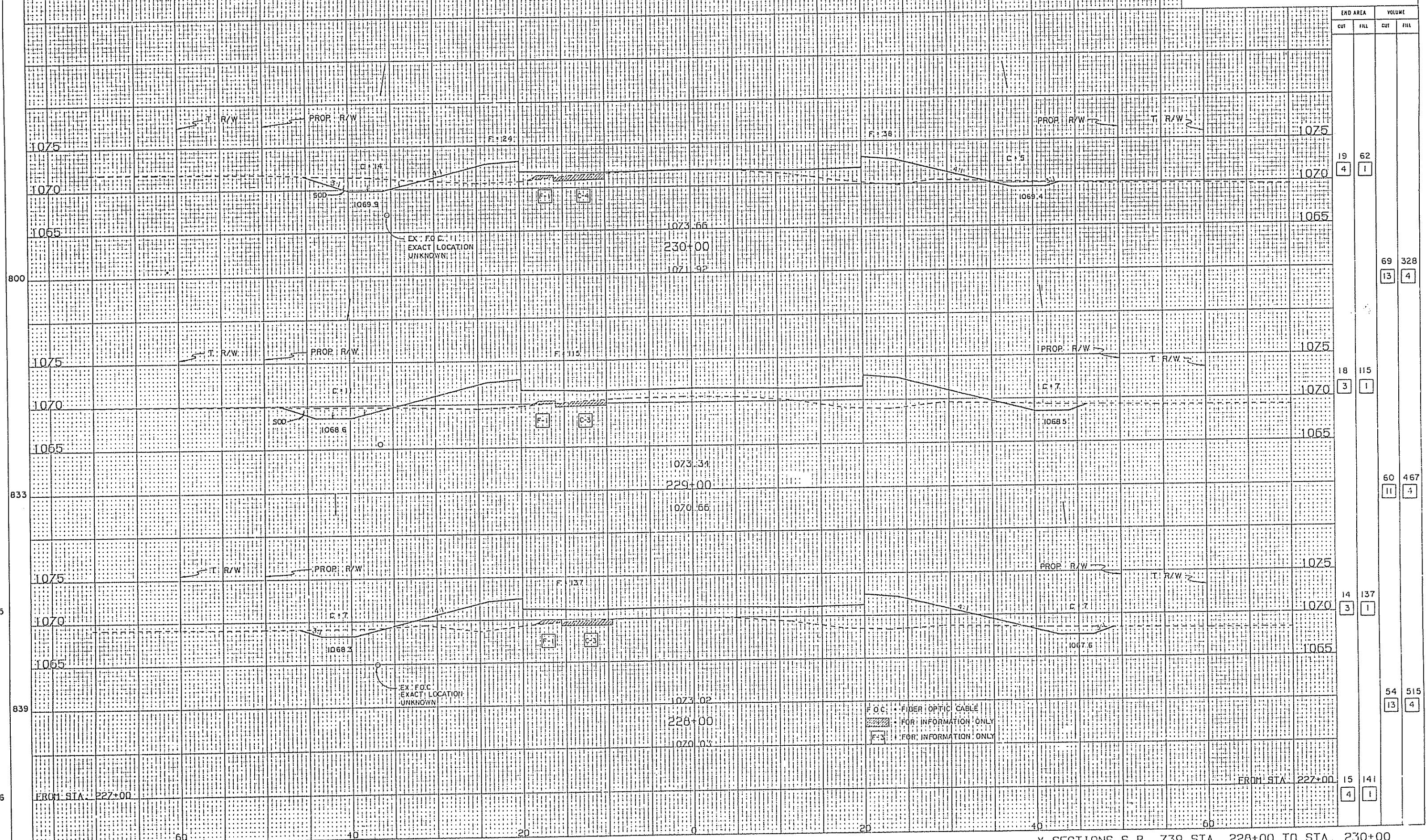


X-SECTIONS 1. 739 STA. 213+00 TO STA. 215+00

[illegible]

X-SECTIONS S.R. 739 STA. 219+00 TO STA. 221+00



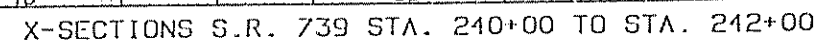


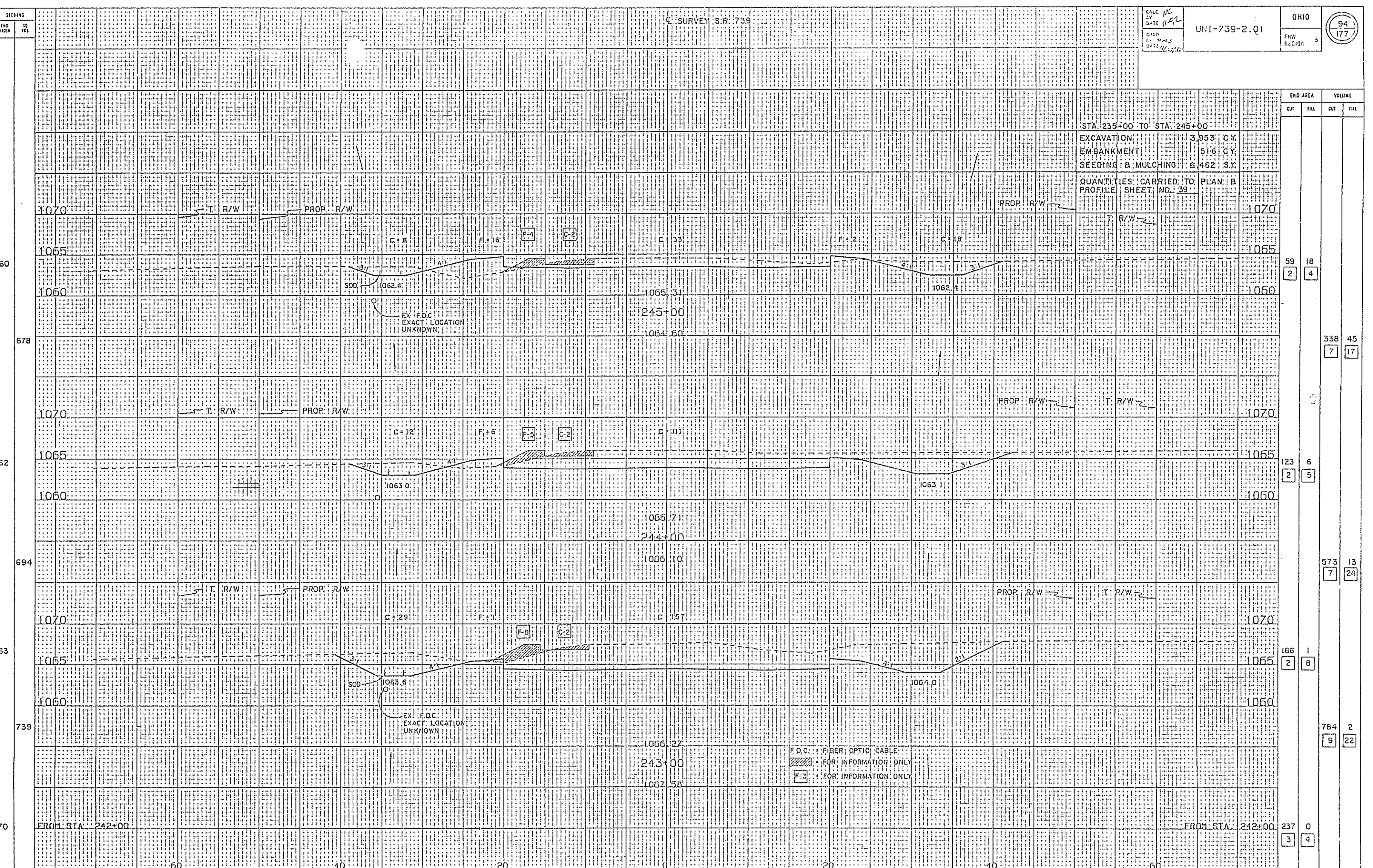
X-SECTIONS S.R. 739 STA. 228+00 TO STA. 230+00

X-SECTIONS S.R. 739 STA. 234+00 TO STA. 236+00

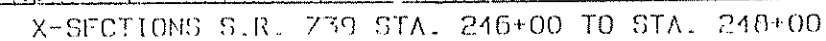
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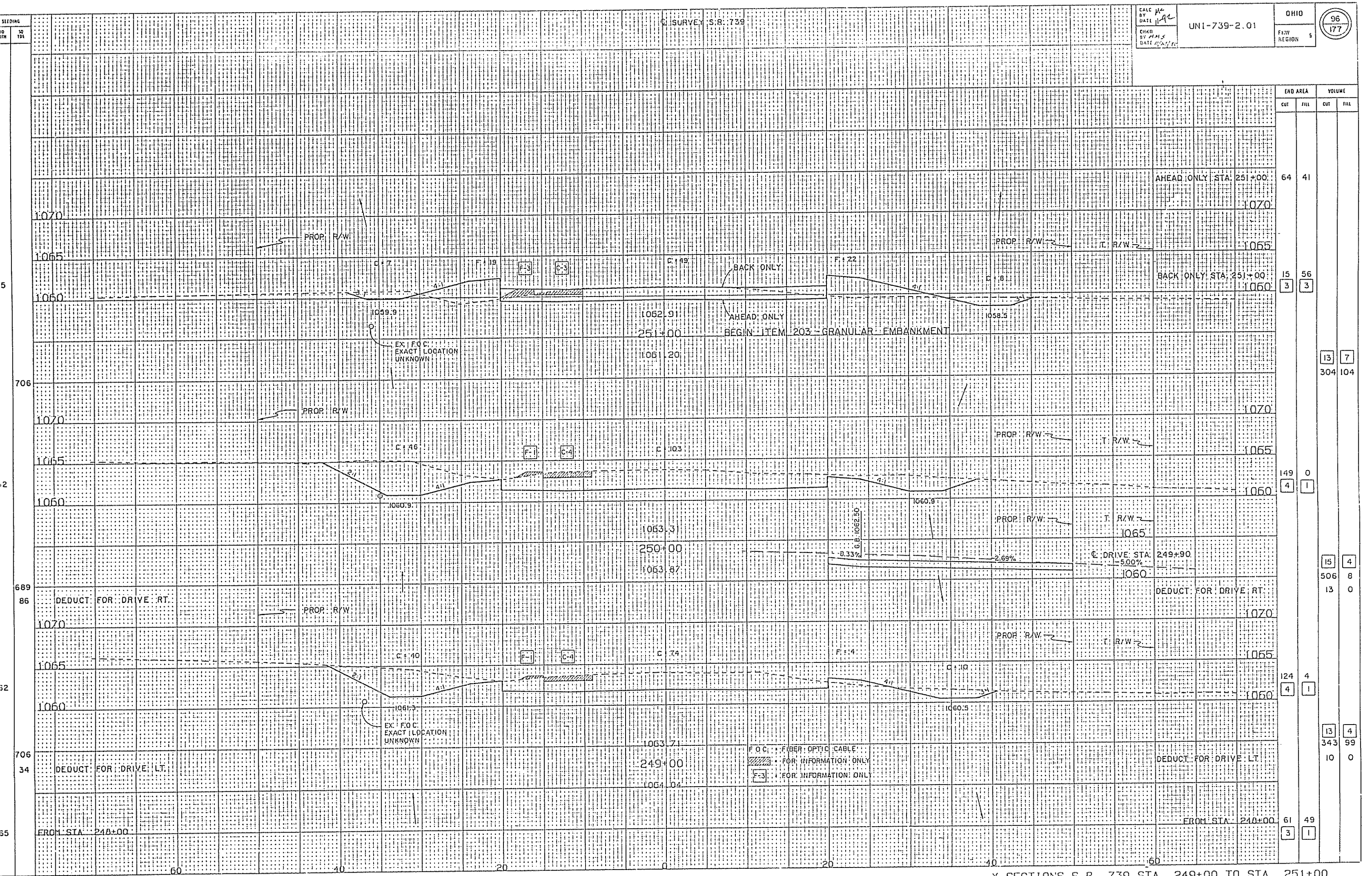
X-SECTIONS S.R. 739 STA. 237+00 TO STA. 239+00



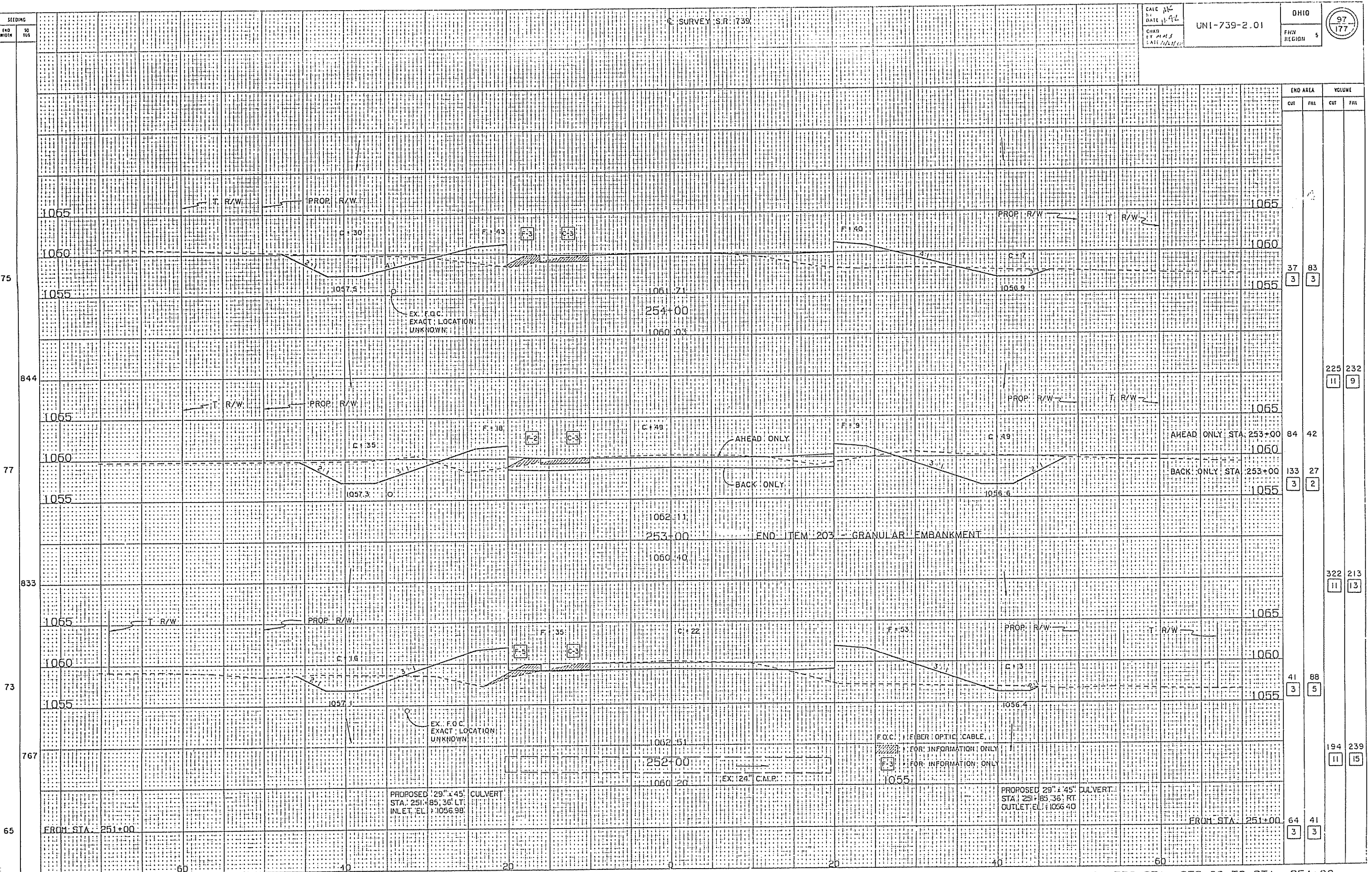


X-SECTIONS S.R. 739 STA. 243+00 TO STA. 245+00





X-SECTIONS S.R. 739 STA. 249+00 TO STA. 251+00



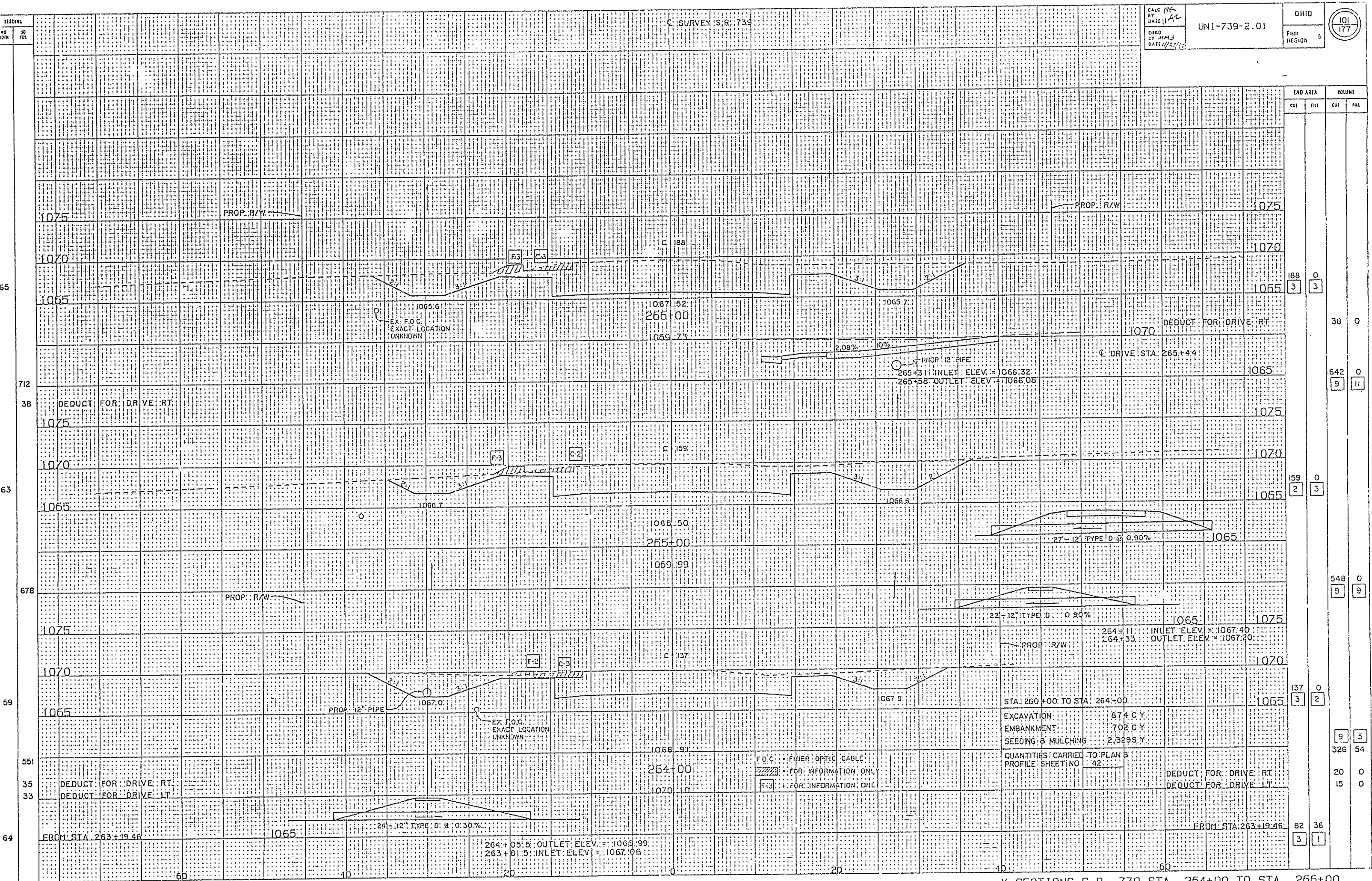
END AREA		VOLUME	
CUT	FILL	CUT	FILL
37	83	225	232
3	3	11	9
84	42	84	42
133	27	133	27
3	2	3	2
41	88	322	213
3	5	11	13
64	41	194	239
3	3	11	15

X-SECTIONS S.R. 739 STA. 252+00 TO STA. 254+00

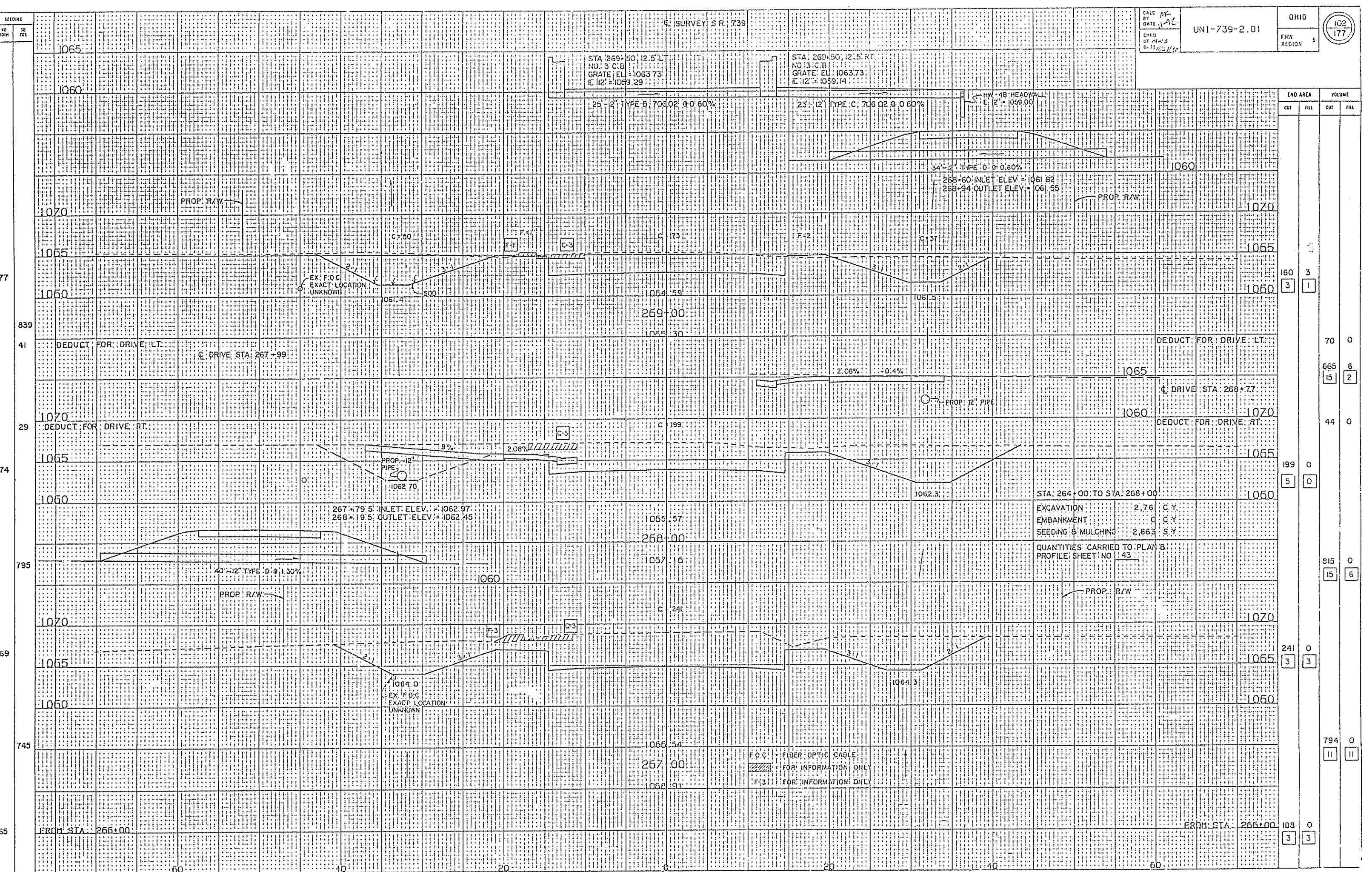
SEEDING		END WIDTH		SQ		FOI		C SURVEY S.R. 1739		CALC. DATE 11-12		UN1-739-2.01		OHIO		99	
														FHW REGION 5		177	
														END AREA		VOLUME	
														CUT		FILL	
														40		76	
														3		2	
														193		180	
														11		6	
														64		21	
														3		1	
														224		106	
														11		7	
														35		0	
														57		36	
														3		3	
														202		157	
														11		11	
														52		49	
														3		3	

X-SECTIONS S.R. 739 STA. 258+00 TO STA. 260+00

X-SECTIONS S.R. 739 STA. 261+00 TO STA. 263+00



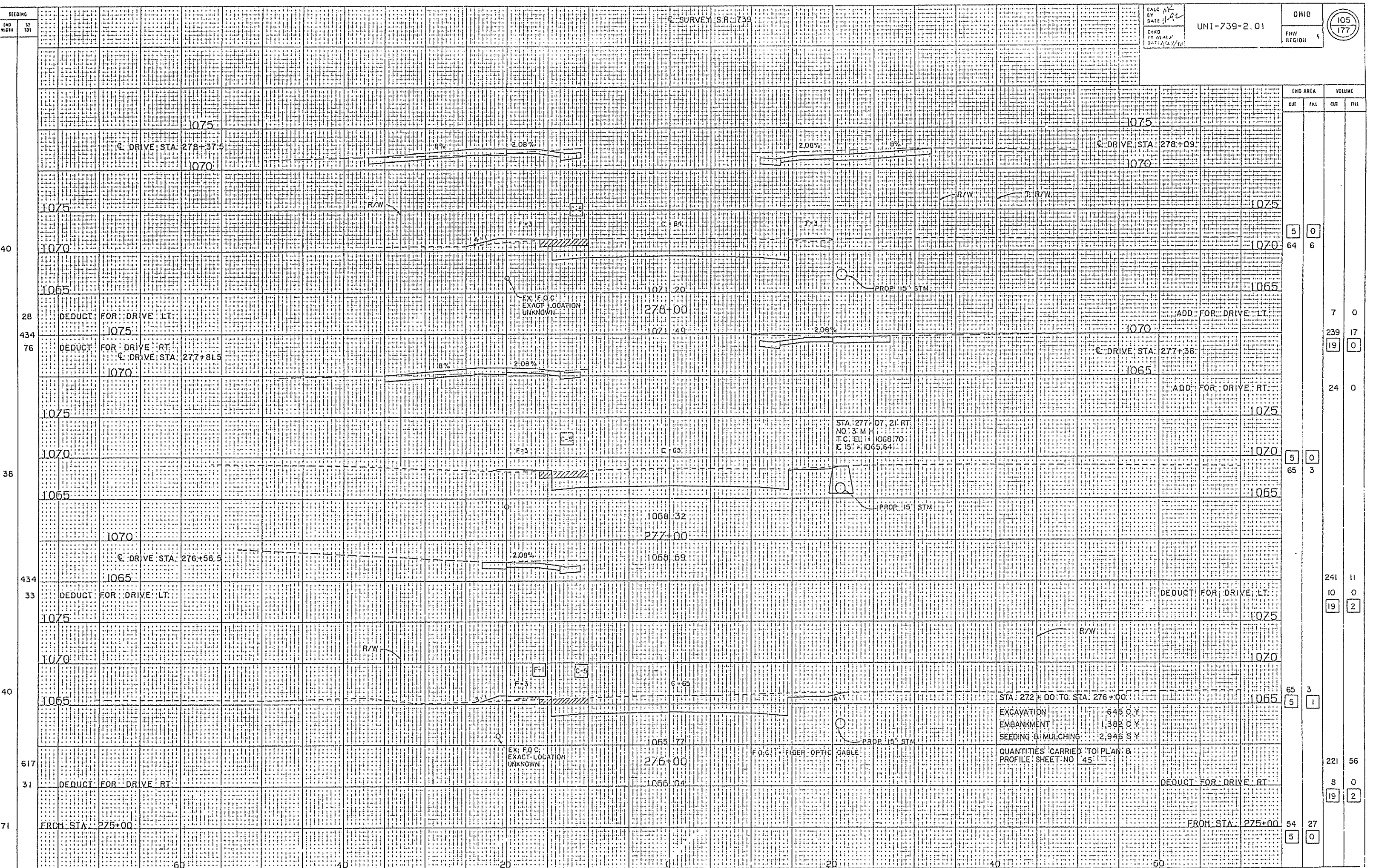
X-SECTIONS S.R. 739 STA. 264+00 TO STA. 266+00



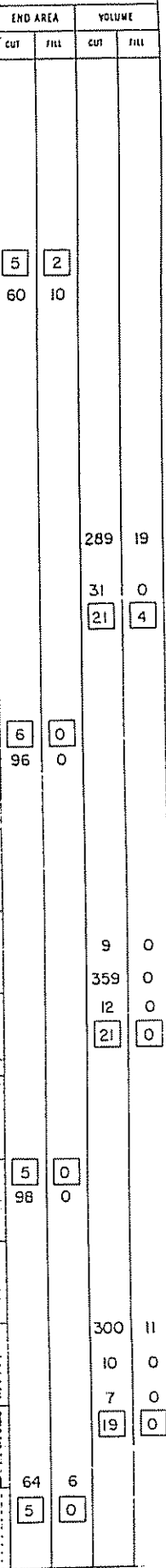
X-SECTIONS S.R. 739 STA. 267+00 TO STA. 269+00

X-SECTIONS S.R. 739 STA. 270+00 TO STA. 272+00

X-SECTIONS S.R. 739 STA. 273+00 TO STA. 275+00

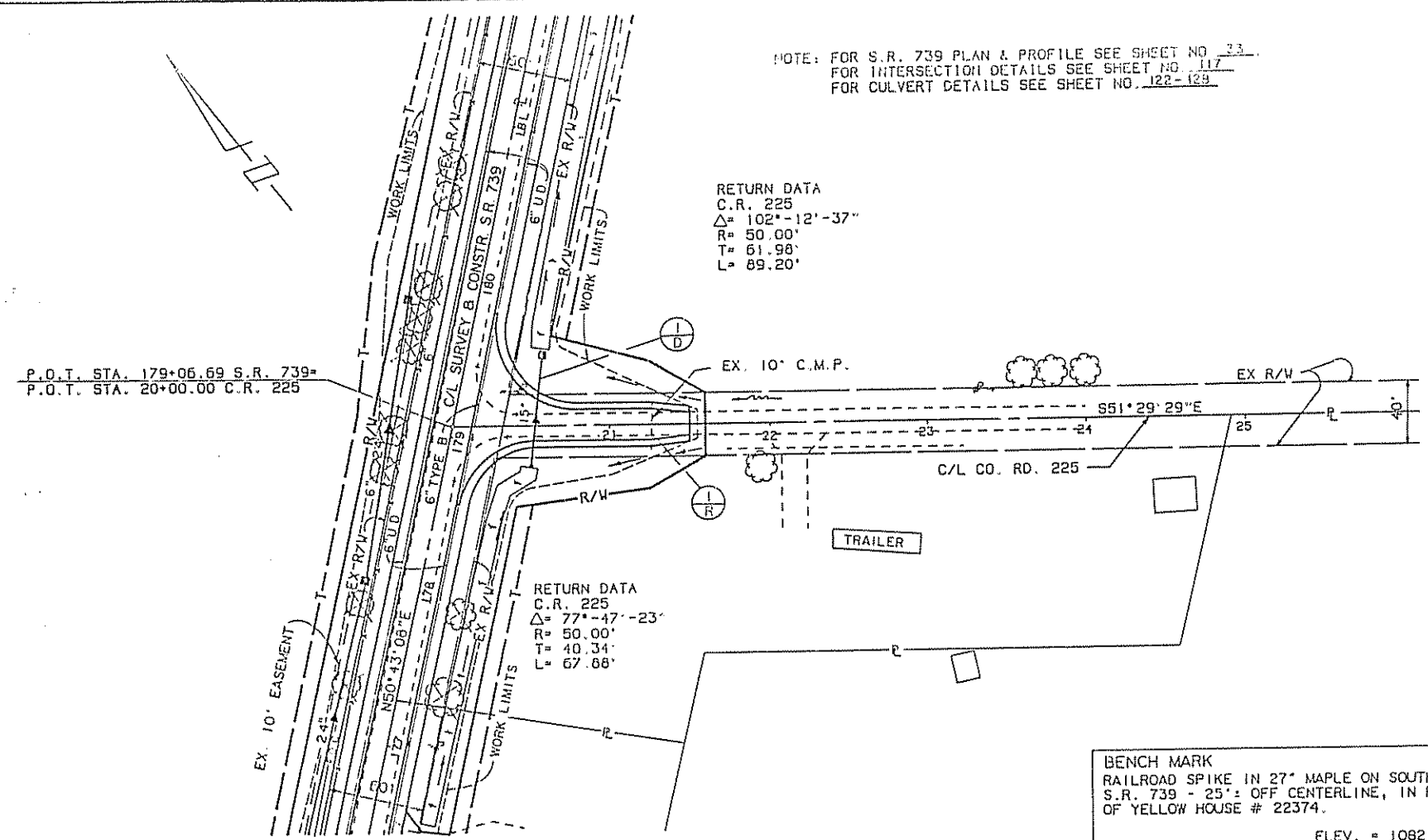


X-SECTIONS S.R. 739 STA. 276+00 TO STA. 278+00

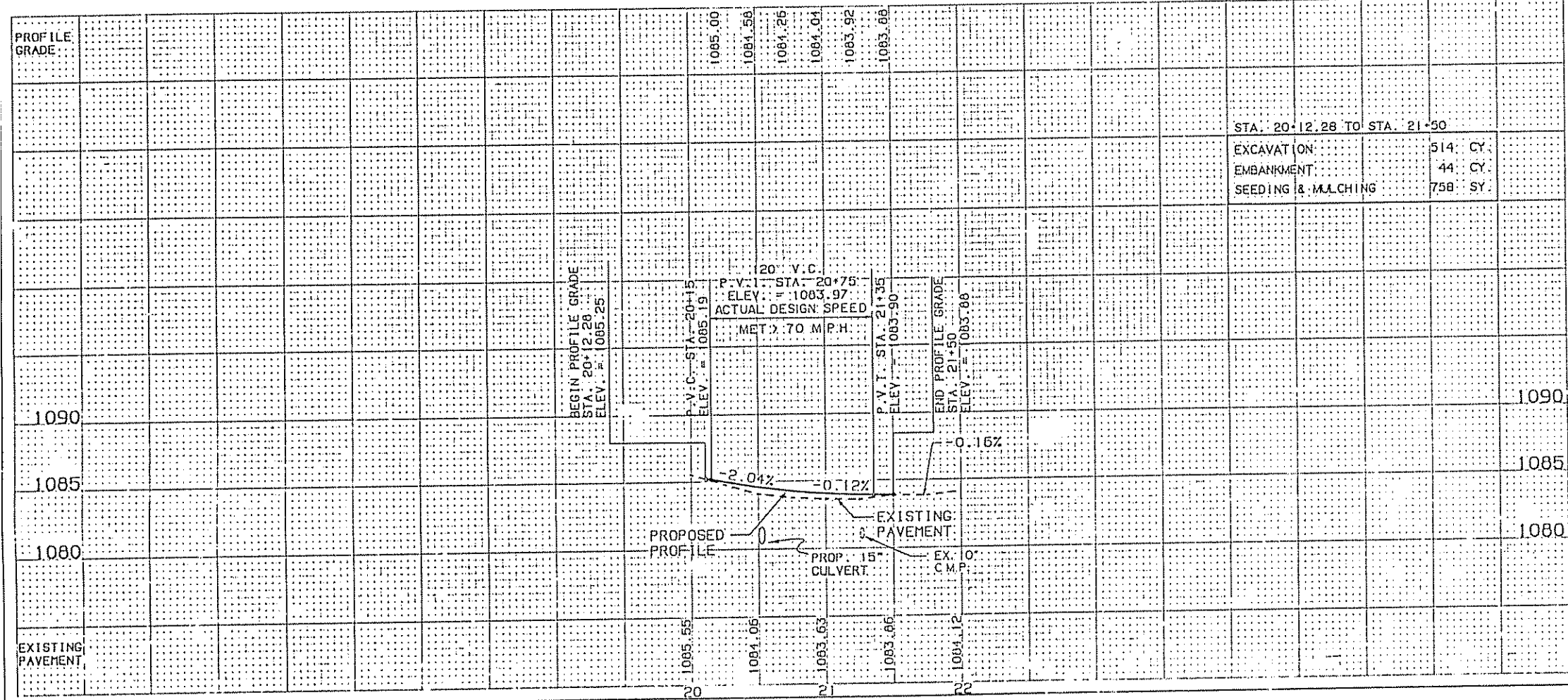


X-SECTIONS S.R. 739 STA. 282+00 TO STA. 283+07 83

NOTE: FOR S.R. 739 PLAN & PROFILE SEE SHEET NO. 117
FOR INTERSECTION DETAILS SEE SHEET NO. 117
FOR CULVERT DETAILS SEE SHEET NO. 122-129



BENCH MARK
RAILROAD SPIKE IN 27\"/>



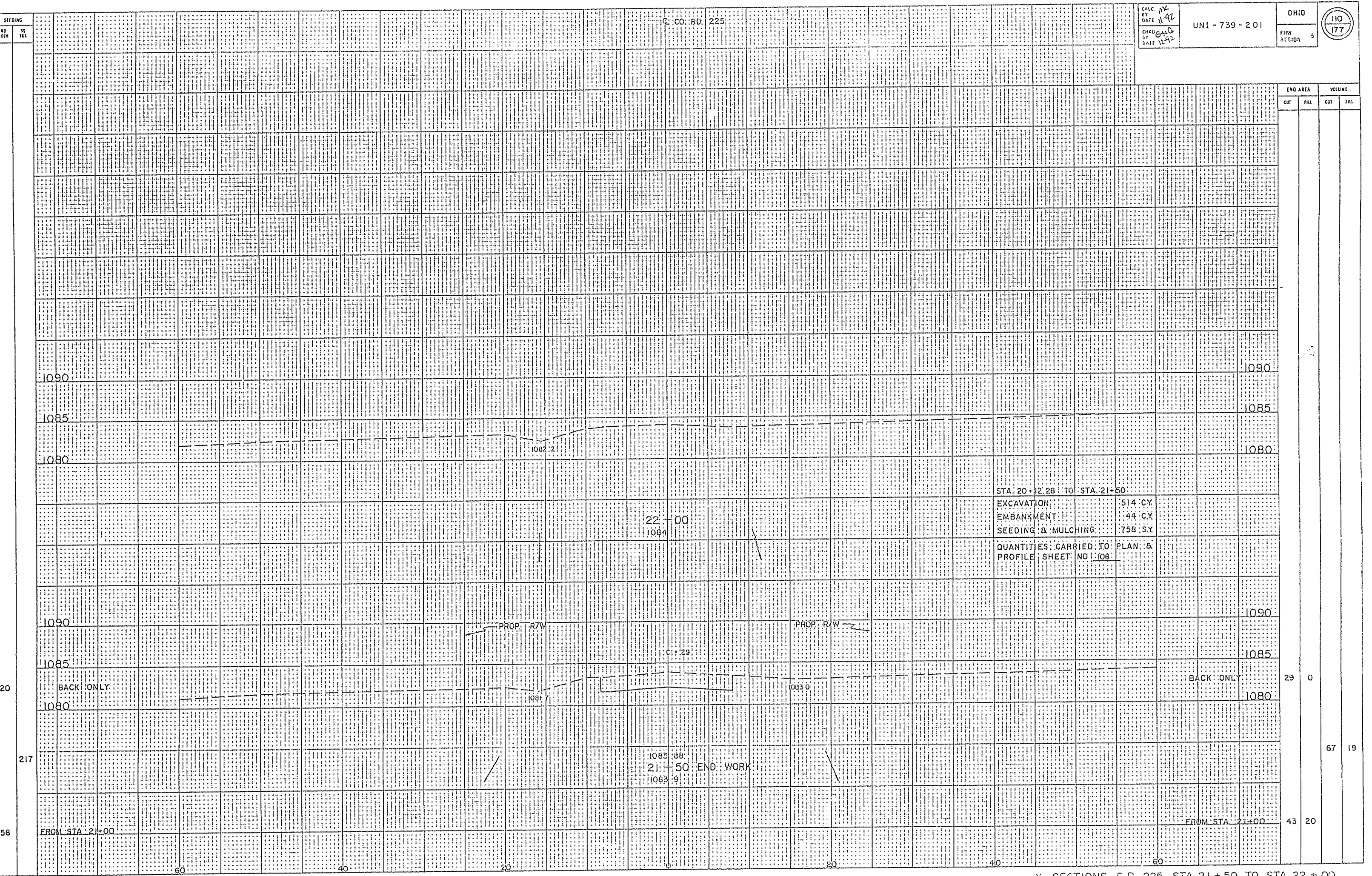
ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
603	15\"/>	68			
602	CONC. MASONRY	0.50			
601	R.C.P. WITH UNDER FILTER	1.2			
202	PIPE REMOVED 24\"/>	30			
1-D	20+52.50				
1-R	21+25				
TOTAL					

PLAN & PROFILE C.R. 225 STA. 20+12.28 TO STA. 21+50

[illegible]

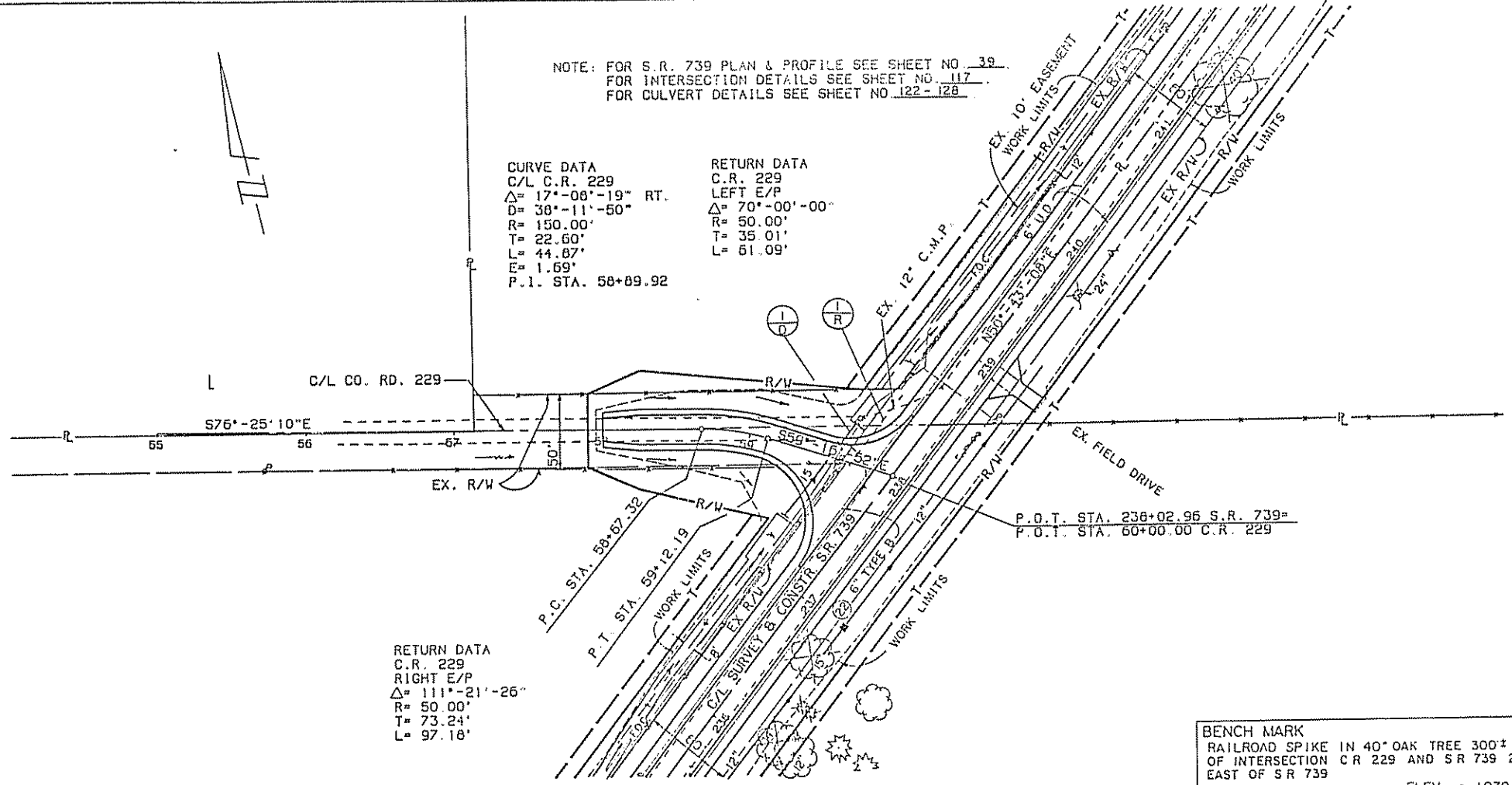
X- SECTIONS C R 225 STA 20+12.28 TO STA 21+00



NOTE: FOR S.R. 739 PLAN & PROFILE SEE SHEET NO. 39
FOR INTERSECTION DETAILS SEE SHEET NO. 117
FOR CULVERT DETAILS SEE SHEET NO. 122-128

CURVE DATA
C/L C.R. 229
 $\Delta = 17^{\circ}-08'-19"$ RT.
D = 38'-11'-50"
R = 150.00'
T = 22.60'
L = 44.87'
E = 1.69'
P.I. STA. 58+89.92

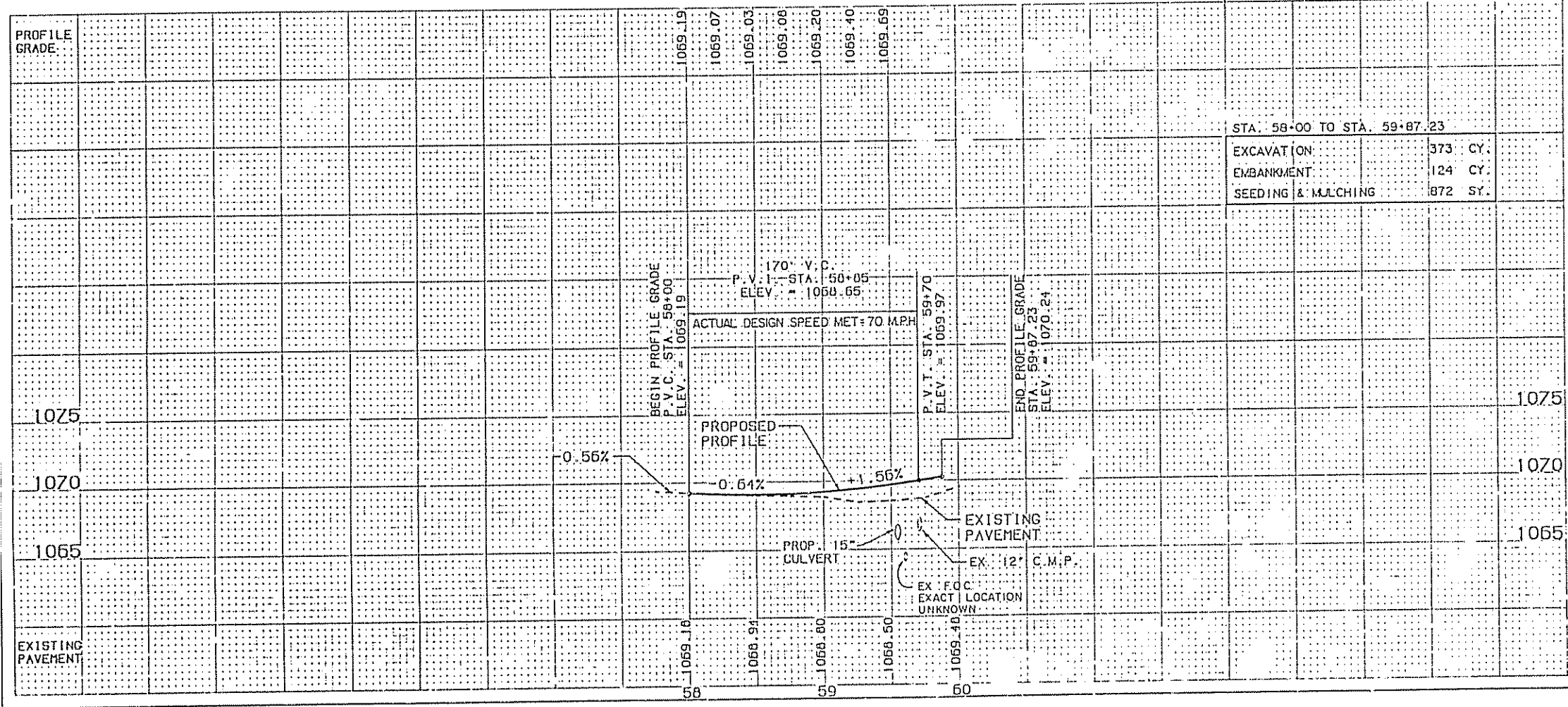
RETURN DATA
C.R. 229
LEFT E/P
 $\Delta = 70^{\circ}-00'-00"$
R = 50.00'
T = 35.01'
L = 61.09'



RETURN DATA
C.R. 229
RIGHT E/P
 $\Delta = 111^{\circ}-21'-26"$
R = 50.00'
T = 73.24'
L = 97.18'

BENCH MARK
RAILROAD SPIKE IN 40' OAK TREE 300'± NORTH
OF INTERSECTION CR 229 AND SR 739 25'±
EAST OF SR 739
ELEV. = 1070.08

STA. 58+00 TO STA. 59+87.23	
EXCAVATION	373 CY.
EMBANKMENT	124 CY.
SEEDING & MULCHING	872 SY.



ESTIMATED QUANTITIES

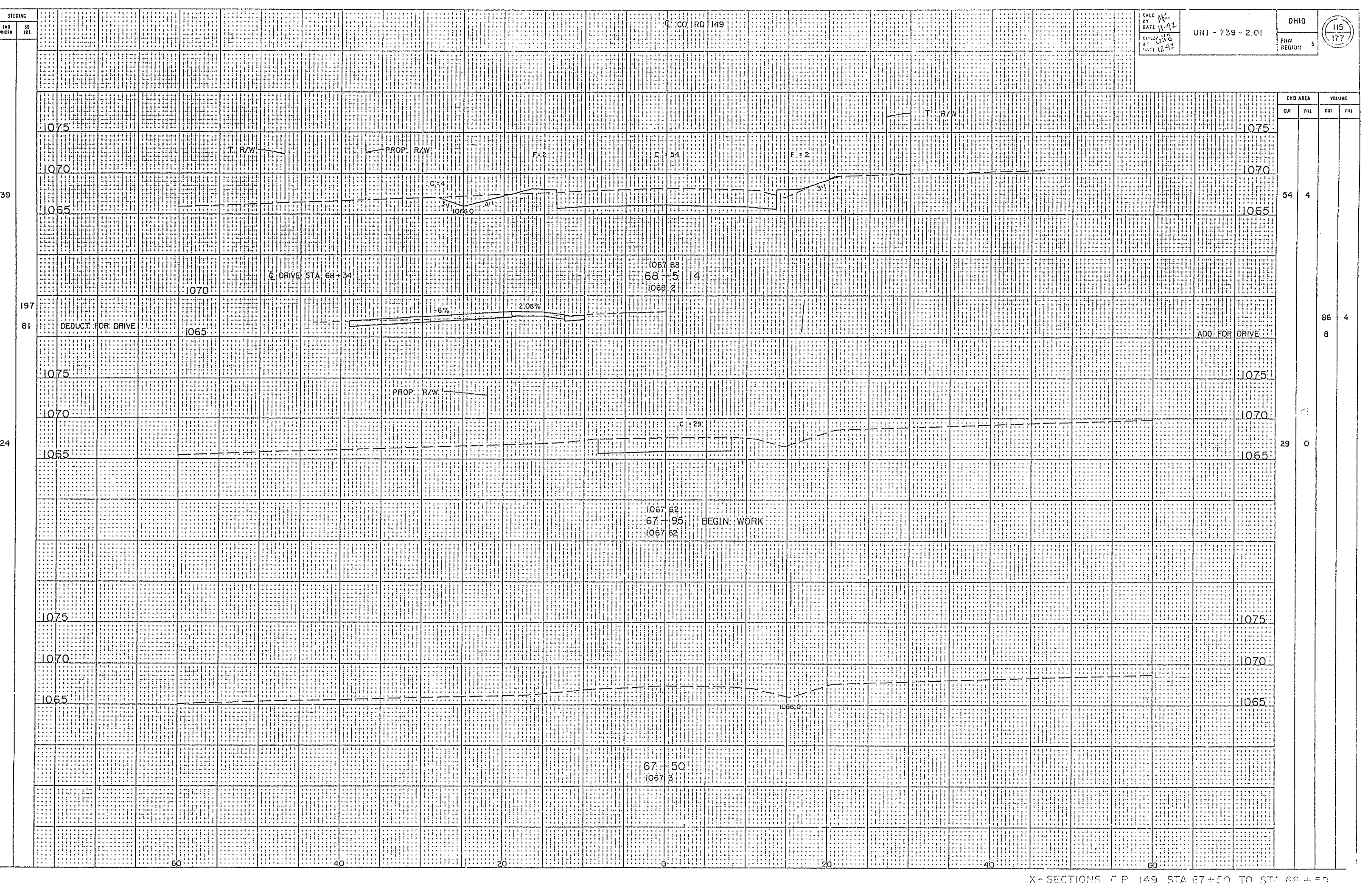
REF. NO.	STATION TO STATION	SIZE	202 PIPE REMOVED WITH 24" & UNDER FILTER LIN. FT.	601 R.C.P. WITH MASURRY TYPE C LIN. FT.	602 CONC. MASURRY TYPE A LIN. FT.	603 15" TYPE A 705.02 LIN. FT.
I-D	59+55.50	12RT		1.2	0.50	80
I-R	237+91 TO 238+52	LT	61			

PLAN & PROFILE C.R. 229 STA. 58+00 TO STA. 59+87.23

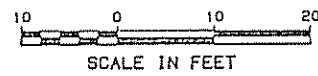
X-SECTIONS C R 229 STA 57+50 TO STA 58+50

[illegible]

X- SECTIONS C R 229 STA 59+00 TO STA 59+87.23



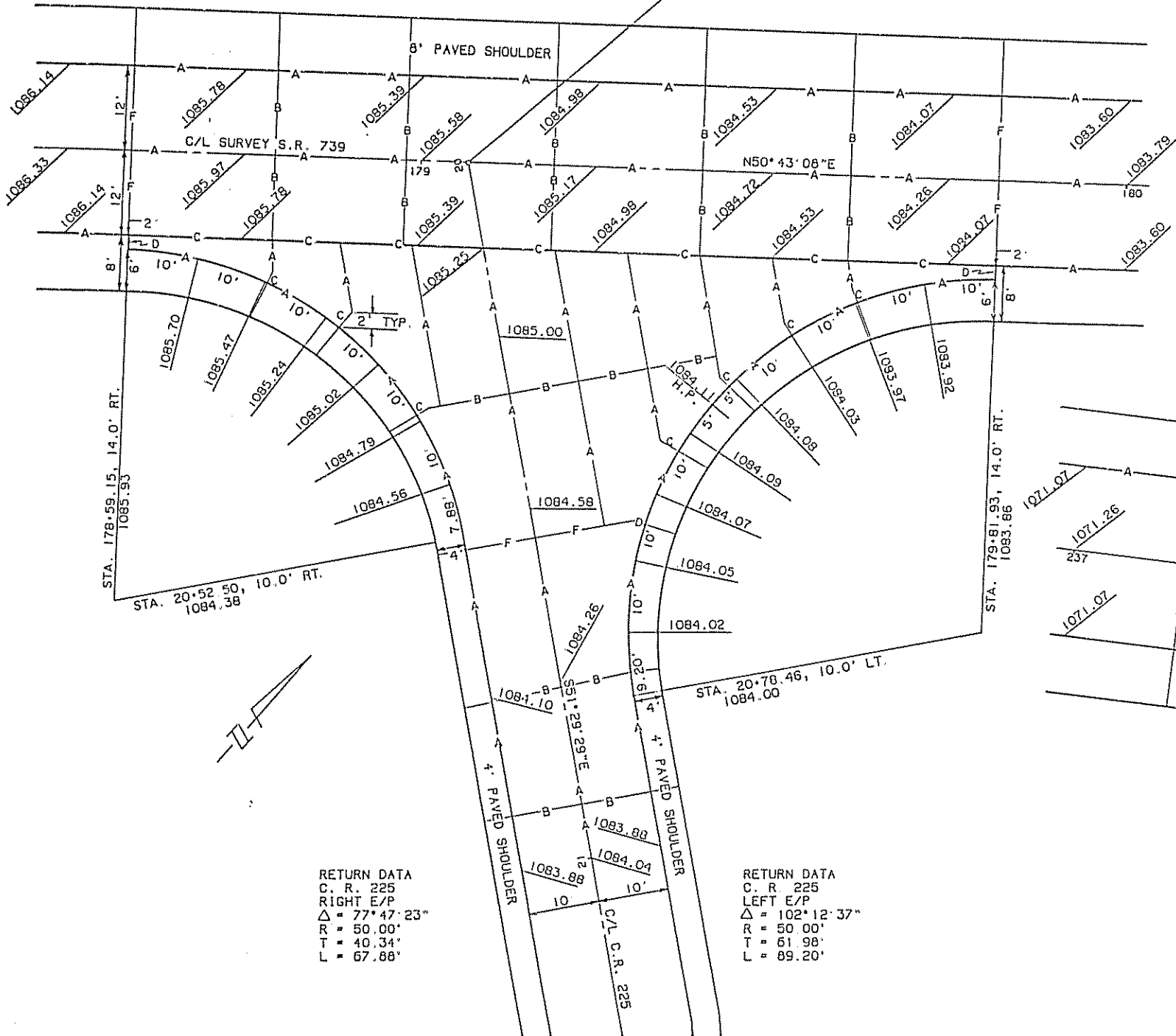
INTERSECTION DETAILS



RETURN DATA
C. R. 229
RIGHT E/P
 $\Delta = 111^\circ 21' 25''$
R = 50.00'
T = 73.24'
L = 97.18'

RETURN DATA
C. R. 229
LEFT E/P
 $\Delta = 70^\circ 00' 00''$
R = 50.00'
T = 35.01'
L = 61.09'

P.O.T. STA. 179+06.69 S.R. 739
P.O.T. STA. 20+00.00 C.R. 225



RETURN DATA
C. R. 225
RIGHT E/P
 $\Delta = 77^\circ 47' 23''$
R = 50.00'
T = 40.34'
L = 67.68'

RETURN DATA
C. R. 225
LEFT E/P
 $\Delta = 102^\circ 12' 37''$
R = 50.00'
T = 61.98'
L = 89.20'

P.O.T. STA. 238+02.96 S.R. 739
P.O.T. STA. 60+00.00 C.R. 229

CURVE DATA
C/L C. R. 229
P.I. STA. 58+09.92
 $\Delta = 17^\circ 08' 18''$ RT.
D = 38' 11' 50"
R = 150.00'
T = 22.60'
L = 44.87'
E = 1.69'

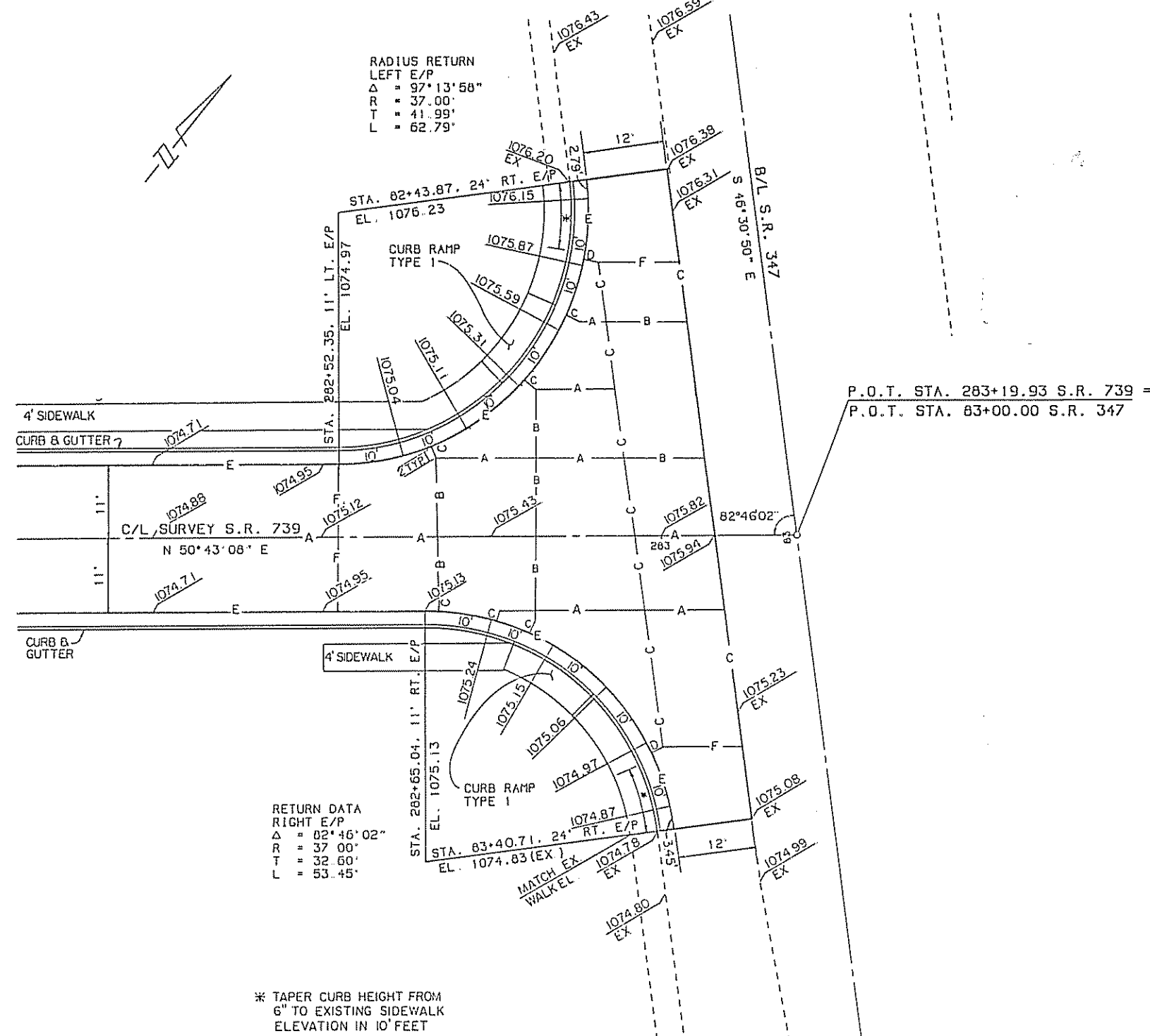
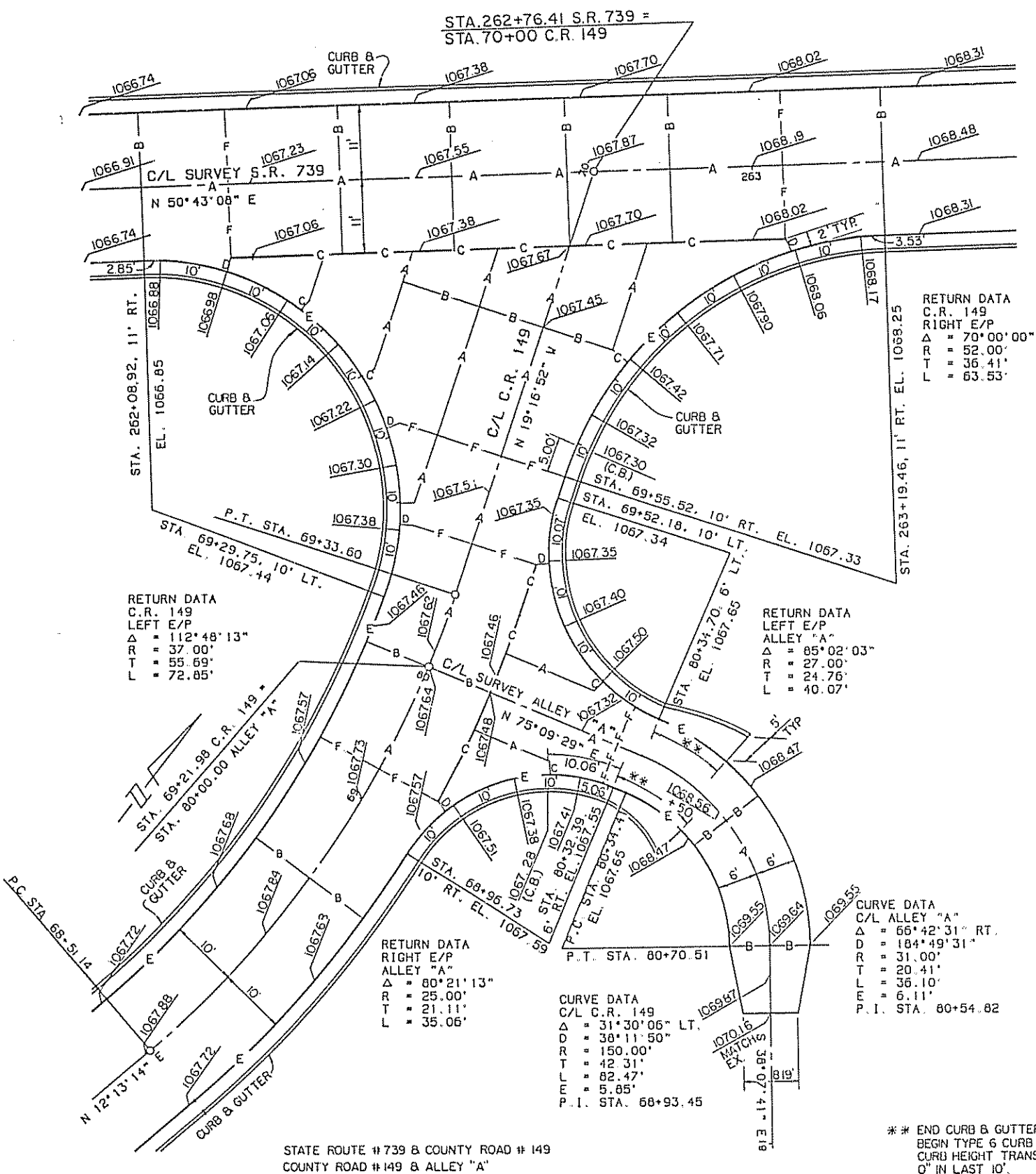
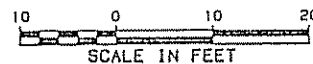
STATE ROUTE #739 & COUNTY ROAD #229

STATE ROUTE #739 & COUNTY ROAD #225

- A - LONGITUDINAL JOINT W/TIE BARS (SEE STD DWG. BP-2.1 2-21-92)
- B - TRANSVERSE JOINT (SEE STD DWG. BP-2.2 2-21-92)
- C - LONGITUDINAL JOINT AS PER STD. DWG. BP-2.1 2-21-92 W/O THE BARS
- D - EXPANSION JOINT W/O DOWELS (SEE STD. DWG. BP-2.2 2-21-92)
- E - LONGITUDINAL JOINT W/TIE BARS (SEE STD DWG. BP-5.1 2-21-92)
- F - EXPANSION JOINT, PER. BP-2.2

A - LONGITUDINAL JOINT W/ TIE BARS (SEE STD. DWG. BP-2.1 2-21-92)
 B - TRANSVERSE JOINT (SEE STD. DWG. BP-2.2 2-21-92)
 C - LONGITUDINAL JOINT AS PER STD. DWG. BP-2.1 2-21-92 W/O DOWELS
 D - EXPANSION JOINT W/O DOWELS (SEE STD. DWG. BP-2.2 2-21-92)
 E - LONGITUDINAL JOINT W/ TIE BARS (SEE STD. DWG. BP-5.1 2-21-92)
 F - EXPANSION JOINT, PER BP-2.2

INTERSECTION DETAILS



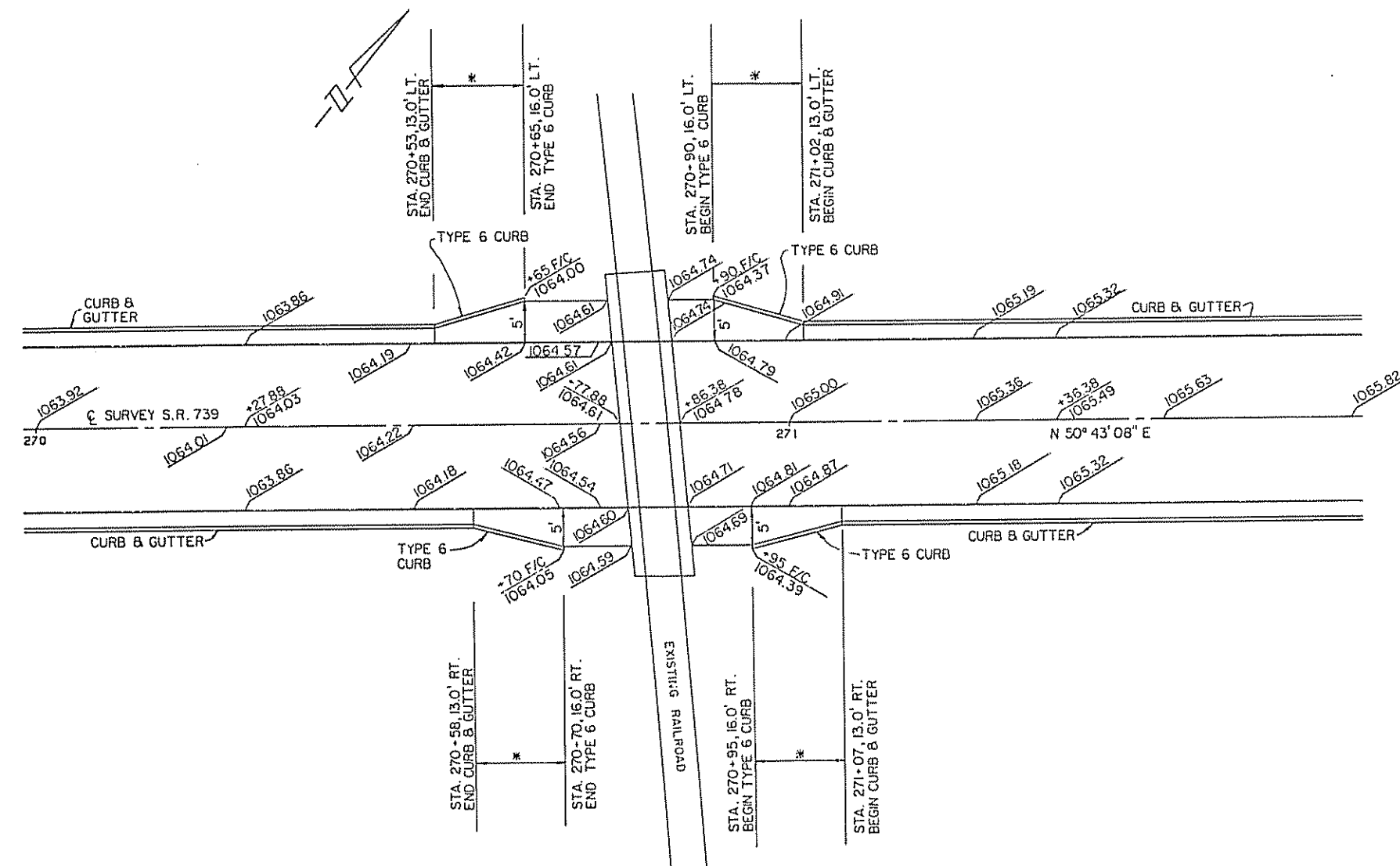
** END CURB & GUTTER
 BEGIN TYPE 6 CURB & PAVED SHOULDER
 CURB HEIGHT TRANSITIONS FROM 6" TO 0" IN LAST 10'

- A - LONGITUDINAL JOINT W/ TIE BARS (SEE STD. DWG BP-2.2 2-21-92)
 B - TRANSVERSE JOINT (SEE STD. DWG. BP-2.2 2-21-92)
 C - LONGITUDINAL JOINT AS PER STD. DWG BP-2.2 2-21-92 W/O DOWELS
 D - EXPANSION JOINT W/O DOWELS (SEE STD. DWG BP-2.2 2-21-92)
 E - LONGITUDINAL JOINT W/ TIE BARS (SEE STD. DWG BP-5.1 2-21-92)
 F - EXPANSION JOINT, PER BP-2.2

INTERSECTION DETAILS

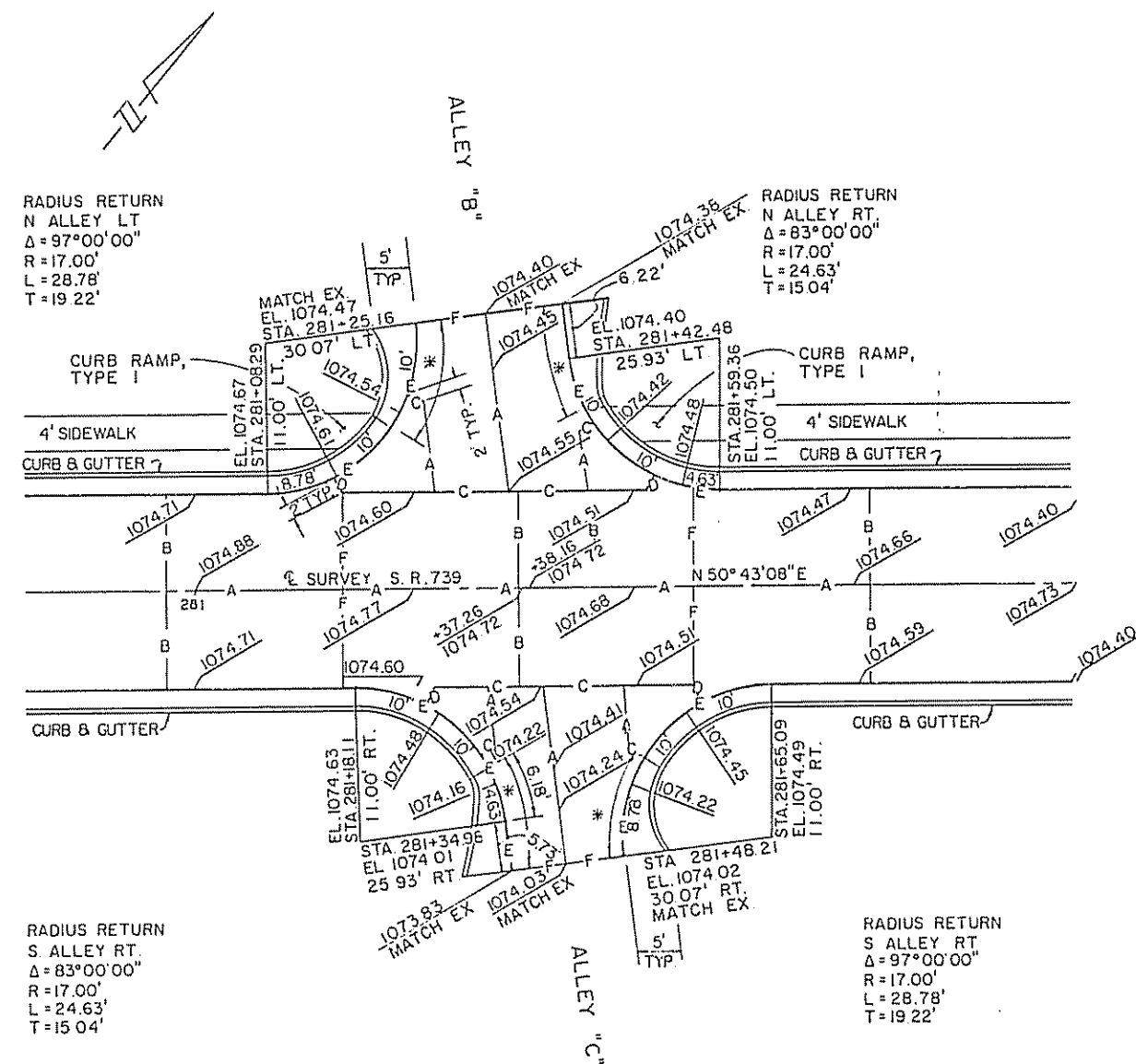


CALC. BY: M.F.	DATE: 11-92	OHIO	119
CHECKED BY: G.H.G.	DATE: 12-92	UN1-739-2.01	177
		FWHA REGION 5	



RAILROAD CROSSING

NOTE: ELEVATIONS ARE PAVEMENT
ELEV. UNLESS OTHERWISE
SHOWN



ALLEYS "B" & "C"

* END CURB & GUTTER
BEGIN TYPE 6 CURB & PAVED SHOULDER
CURB HEIGHT TRANSITIONS FROM 6" TO
0" IN LAST 10'

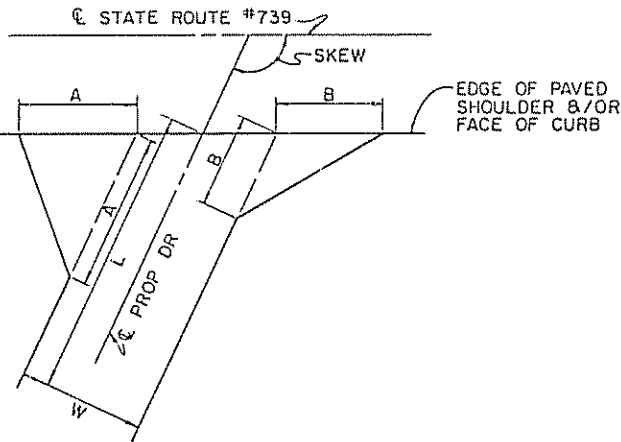
DRIVEWAY QUANTITIES AND DETAILS

STATION	SIDE	TYPE	SKEW	LENGTH	WIDTH	A	B	S.F.	304 C.Y.	402 C.Y.	404 C.Y.	408 GAL.	5" 452 S.Y.
110 + 42.0	RT.	FIELD	90	37'	11'	12'	12'	551	16				
120 + 82.5	RT.	RES.	93	35'	11'	12'	12'	529	10		5	24	
124 + 34.5	RT.	RES.	94	30'	10'	12'	12'	444	9		5	20	
127 + 32.5	RT.	RES.	90 TAN.	30'	20'	12'	12'	744	14		7	33	
130 + 70.0	RT.	FIELD	90 TAN.	35'	10'	12'	12'	494	14				
141 + 61.5	LT.	FIELD	90	40'	30'	12'	12'	1344	38				
142 + 25.0	RT.	FIELD	85	30'	8'	12'	12'	384	11				
150 + 44.5	LT.	FIELD	90	30'	12'	12'	12'	504	14				
151 + 91.0	LT.	RES.	90	40'	9'	12'	12'	504	10		5	23	
163 + 86.0	LT.	FIELD	90	30'	23'	12'	12'	634	24				
163 + 90.0	RT.	FIELD	90	30'	16'	12'	12'	624	18				
164 + 57.0	RT.	RES.	90	30'	8'	12'	12'	384	8		4	17	
164 + 82.5	LT.	RES.	90	30'	11'	12'	12'	474	9		5	21	
165 + 59.0	RT.	RES.	90	30'	10'	12'	12'	444	9		5	21	
169 + 10.5	LT.	FIELD	90	30'	10'	12'	12'	444	13				
169 + 93.0	LT.	RES.	90	30'	24'	12'	12'	864	16		8	39	
174 + 64.0	RT.	FIELD	90	30'	16'	12'	12'	624	18				
175 + 15.0	LT.	FIELD	90	30'	10'	12'	12'	444	13				
176 + 42.0	RT.	RES.	85	30'	14'	12'	12'	564	11		6	25	
186 + 33.5	RT.	RES.	90	30'	12'	12'	12'	504	10		5	23	
194 + 81.0	LT.	RES.	87	30'	13'	12'	12'	534	10		5	24	
207 + 85.0	RT.	RES.	90	30'	13'	12'	12'	534	10		5	24	
208 + 64.0	RT.	FIELD	91	30'	18'	12'	12'	684	19				
212 + 00.0	LT.	FIELD	90	30'	10'	12'	12'	444	13				
213 + 28.0	RT.	FIELD	90	30'	12'	12'	12'	504	14				
233 + 86.5	RT.	FIELD	90	30'	10'	12'	12'	444	13				
235 + 44.5	RT.	RES.	100	30'	12'	17'	8'	536	10		5	24	
239 + 00.0	RT.	FIELD	90	30'	10'	12'	12'	444	13				
246 + 13.0	RT.	FIELD	90	30'	16'	12'	12'	504	14				
248 + 31.0	LT.	RES.	104	30'	7'	17'	8'	386	8		4	17	
249 + 90.0	RT.	RES.	90	30'	22'	12'	12'	804	15		8	36	
258 + 97.0	RT.	RES.	90	30'	20'	12'	12'	744	14		7	33	
262 + 24.0	LT.	FIELD	90	29'	22'	3'	3'	647	14				19
263 + 52.0	LT.	RES.	90	25'	10'	3'	3'	291	4		2	9	11
263 + 80.0	RT.	RES.	90	17'	18'	3'	3'	315	3		3	8	15
265 + 44.0	RT.	RES.	86	30'	9 5'	3'	3'	340	5		3	11	11
267 + 99.0	LT.	RES.	91	24'	15'	3'	3'	369	5		3	12	13
268 + 77.0	RT.	FIELD	90	21'	12'	3'	3'	261	5				11
271 + 34.0	RT.	RES.	87	47'	21'	3'	3'	996	16		8	37	18
274 + 94.0	LT.	RES.	90	47'	12'	3'	3'	573	9		5	22	11
275 + 95.0	RT.	RES.	89	18'	12'	3'	3'	225	3		2	6	11
276 + 56.5	LT.	RES.	90	10'	28'	3'	3'	289	2		1	4	23
277 + 36.0	RT.	FIELD	90	14'	48'	3'	3'	681	10				39
277 + 81.5	LT.	RES.	90	22'	9'	3'	3'	251	3		2	7	11
278 + 09.0	RT.	RES.	85	19'	10'	3'	3'	225	3		2	6	11
278 + 37.5	LT.	RES.	90	24'	11'	3'	3'	272	4		2	8	11
279 + 02.0	LT.	RES.	90	16'	20'	3'	3'	329	4		2	8	17
279 + 76.5	LT.	RES.	92	23'	10'	3'	3'	269					30
280 + 46.0	RT.	COMM.	83	49 5'	21'	-	-	1138	17	4	3	30	52
281 + 98.5	LT.	COMM.	94	33'	50'	3'	3'	1659	32	7	5	58	40
C R 149													
68 + 34.0	LT	RES.	90	27'	26 5'	3'	3'	725	15				22
TOTAL =									592	11	132	630	376

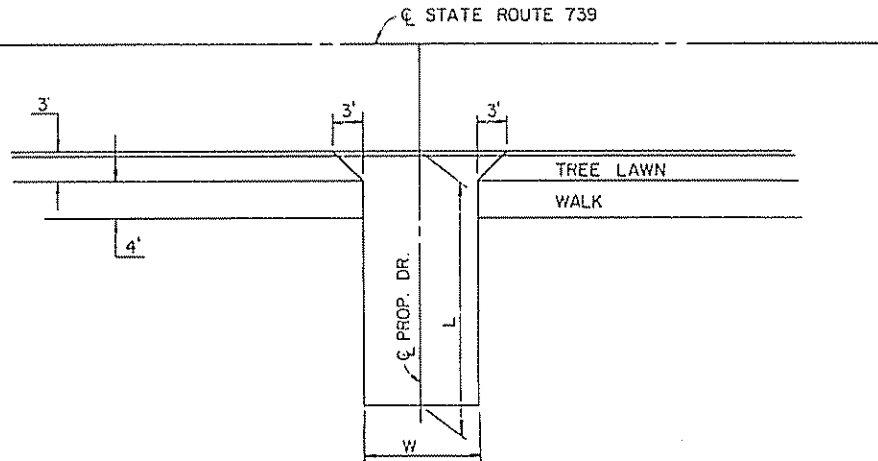
TOTALS CARRIED TO GENERAL SUMMARY

TYPICAL PAVEMENT COMPOSITION

GRAVEL - FIELD DR.	COMMERCIAL DR
9" ITEM 304	8" ITEM 304
ASPHALT - RESIDENTIAL DR	ITEM 408
3" ITEM 404	1 3/4" ITEM 402
ITEM 408	1 1/4" ITEM 404
6" ITEM 304	
CONCRETE - RESIDENTIAL DR	
6" ITEM 452	



TYPICAL DRIVEWAY DETAIL
NON - CURBED SECTION



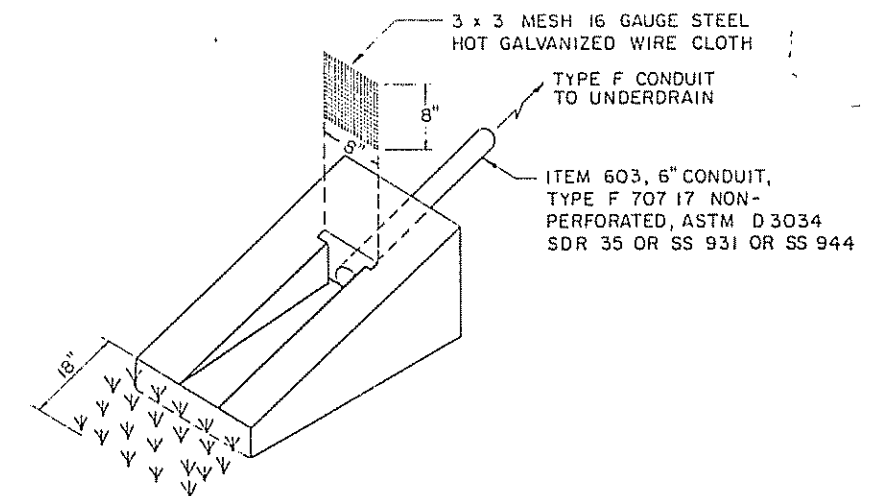
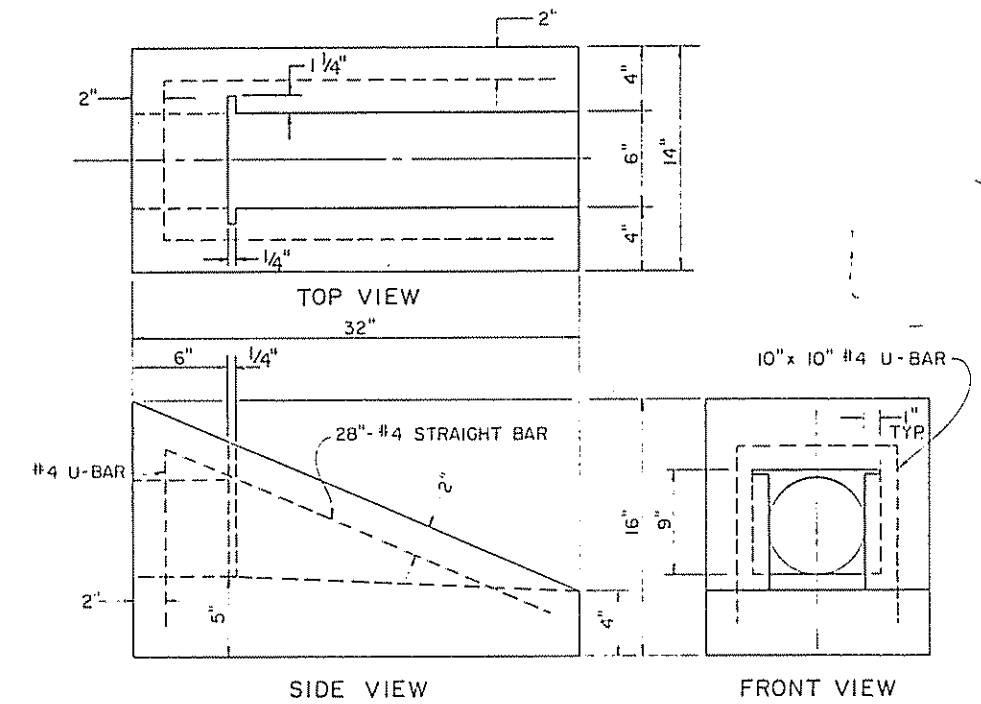
TYPICAL DRIVEWAY DETAIL
CURBED SECTION

MISCELLANEOUS DETAILS

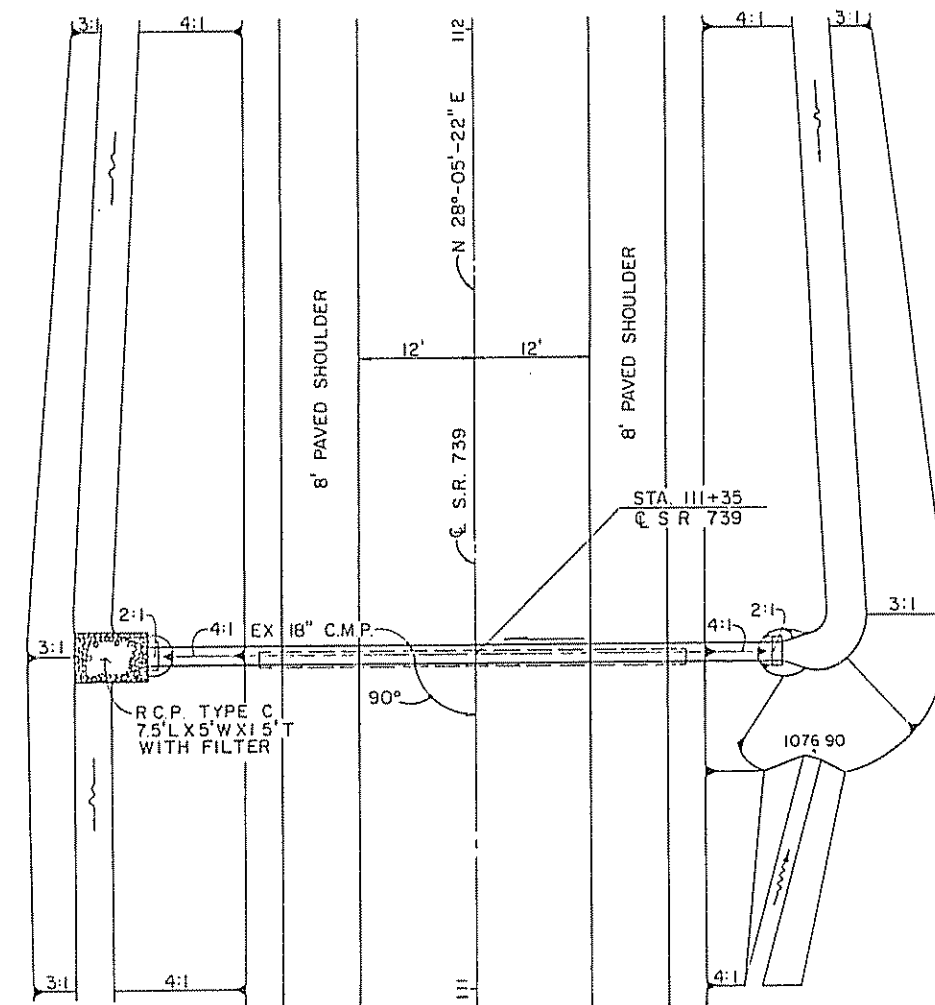
DRAWN BY DATE 11-1-91	UNI - 739 - 2.01	OHIO	121
CHECKED BY DATE 12-1-91		FHWA REGION 5	177

ITEM SPECIAL - PRECAST REINFORCED CONCRETE OUTLET

THE CONCRETE OUTLET SHALL MEET THE REQUIREMENTS OF
ITEM 604 IN THE CONSTRUCTION & MATERIALS SPECIFICATIONS
PAYMENT SHALL BE MADE ON AN EACH BASIS. PAYMENT SHALL
INCLUDE THE COST OF THE SOD & WIRE CLOTH.

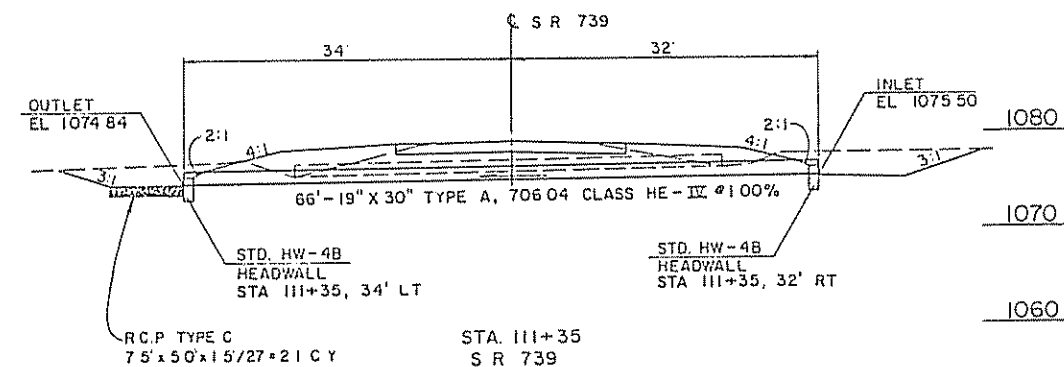
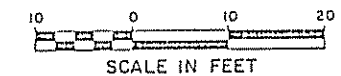


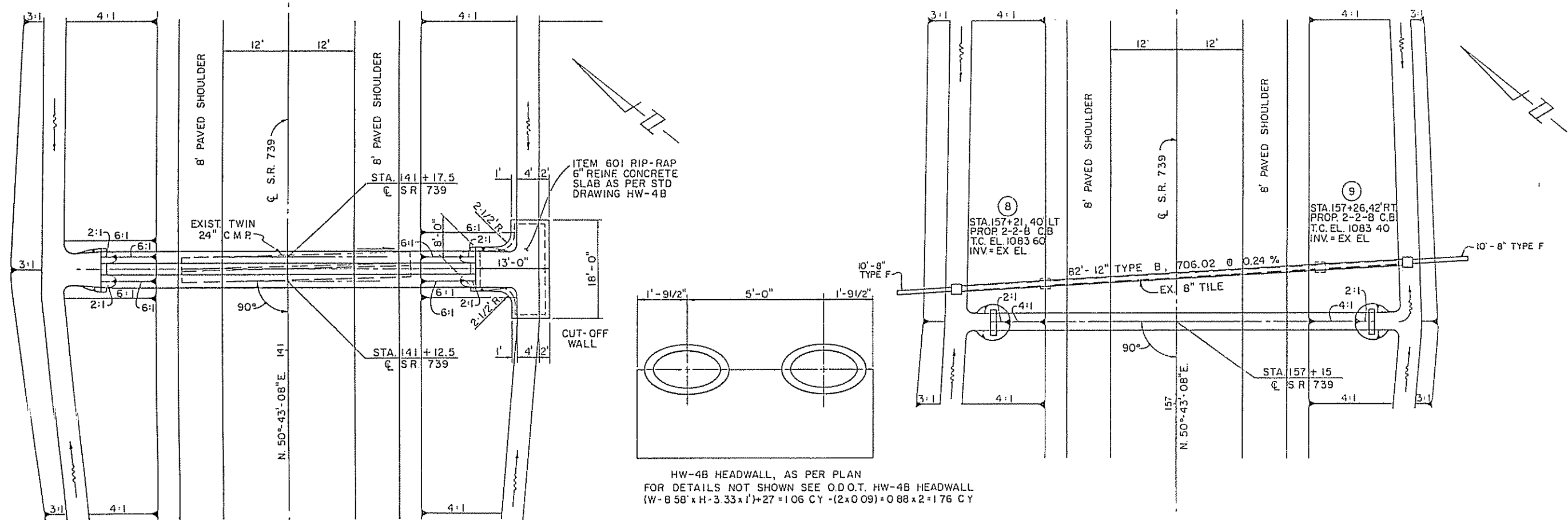
NOTE: THE SOD SHALL BE IN ACCORDANCE WITH
ITEM 660 AND STAKED AT EACH CORNER
APPROXIMATELY 3 INCHES IN FROM THE EDGE



ITEM 603 CONDUIT, TYPE A, 19"X30", 706 04 CLASS HE-II	68 LIN. FT
ITEM 601 ROCK CHAN. PROTECT., TYPE C WITH FILTER	2.3 CU YD
ITEM 602 CONCRETE MASONRY	0.70 CU YD
QUANTITIES CARRIED TO SHEET NO <u>26</u> .	

ITEM 603 CONDUIT, TYPE A, 19" X 30", 70604 CLASS HE-IV	66 LIN FT
ITEM 601 ROCK CHAN PROTECT, TYPE C WITH FILTER	21 CU YD
ITEM 602 CONCRETE MASONRY	0.70 CU YD
QUANTITIES CARRIED TO SHEET NO <u>26</u>	



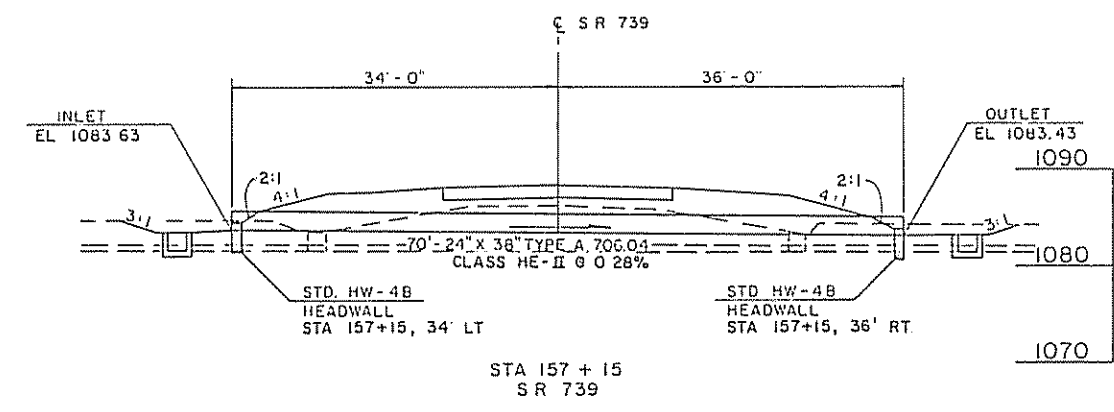
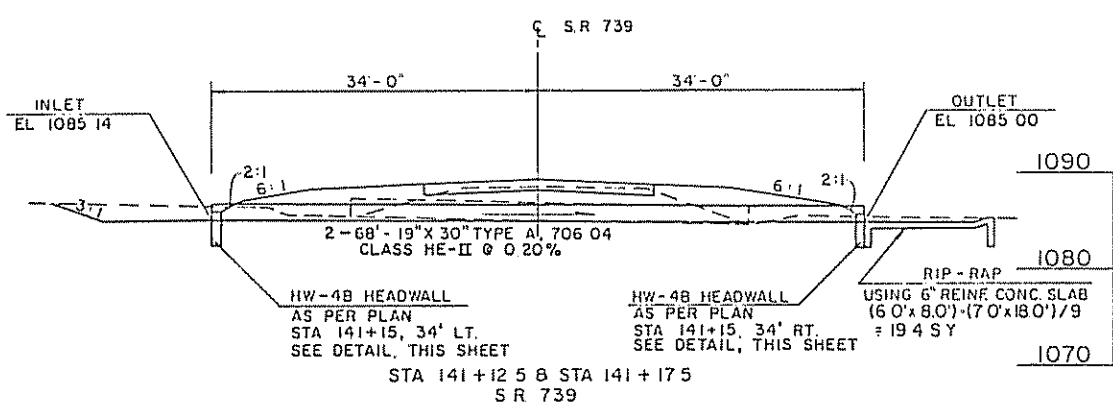
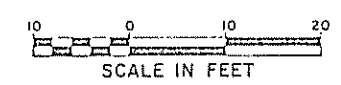
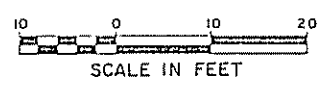


DRAINAGE AREA	= 34.4 Ac.
Q25	= 41.0 CFS
Q100	= 49.2 CFS
HW100	= 1088.34

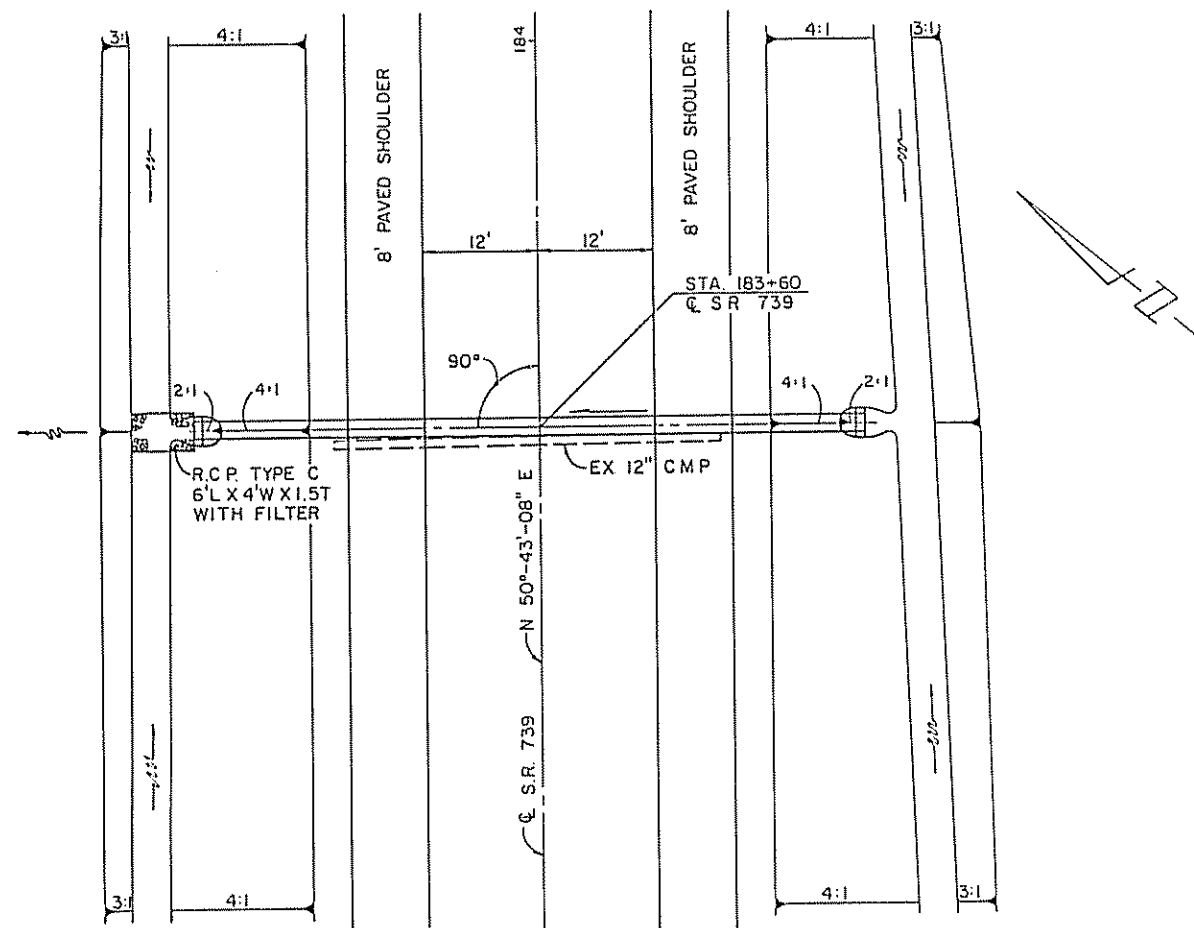
ITEM 603 CONDUIT, TYPE A, 19" X 30", 706.04 CLASS HE-II 136 LIN. FT.
ITEM 601 RIP-RAP, USING 6" REINF. CONC. SLAB 19.4 SY
ITEM 602 CONCRETE MASONRY 1.76 CY
QUANTITIES CARRIED TO SHEET NO. 29

DRAINAGE AREA	= 17.9 Ac.
Q25	= 20.4 CFS
Q100	= 24.8 CFS
HW100	= 1085.93

ITEM 603 CONDUIT, TYPE F, 8" * 20 LIN. FT.
ITEM 603 CONDUIT, TYPE B, 12", 706.02 82 LIN. FT.
ITEM 603 CONDUIT, TYPE A, 24" X 38", 706.04 CLASS HE-II 70 LIN. FT.
ITEM 602 CONCRETE MASONRY 0.70 CU. YD.
ITEM 604 2-2-B CATCH BASIN 2 EACH
QUANTITIES CARRIED TO SHEET NO. 31

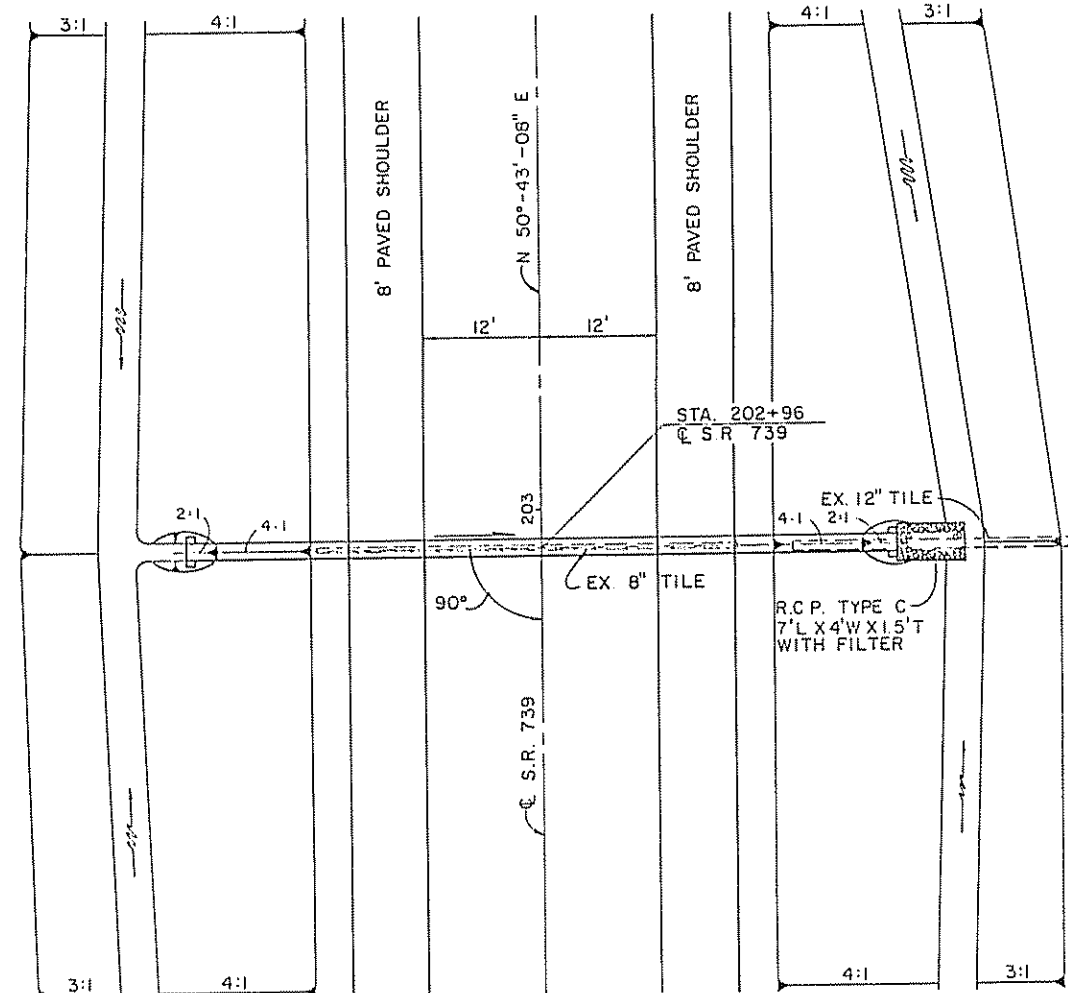
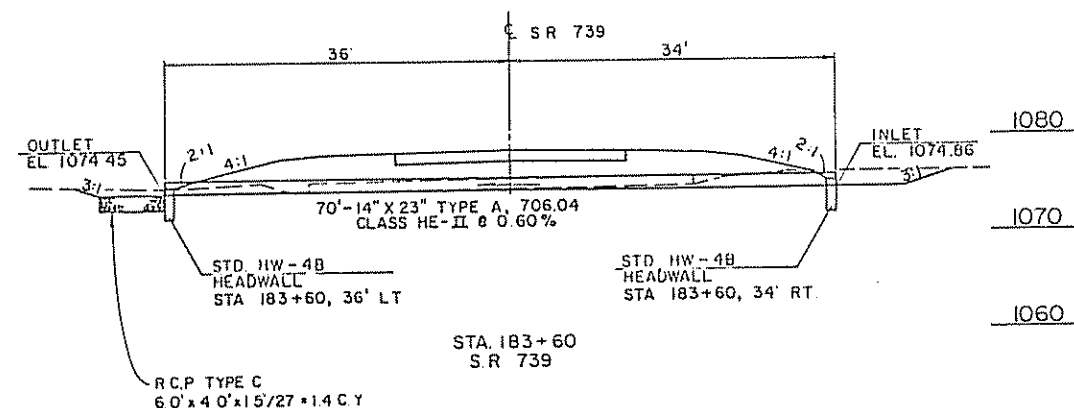
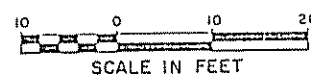


* 707.17 NON-PERFORATED,
ASTM D3034, SDR 35 OR
SS 931 OR SS 944



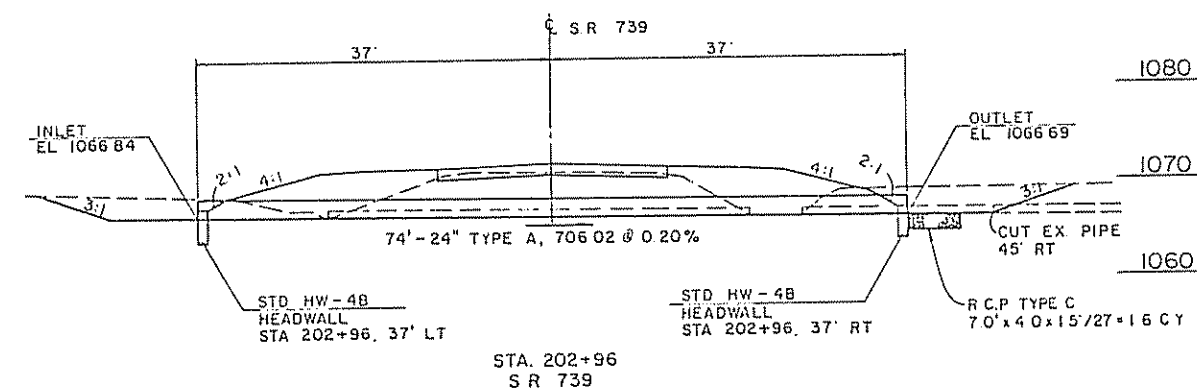
DRAINAGE AREA	= 5.7 Ac
Q25	= 14.2 CFS
Q100	= 17.5 CFS
HW100	= 1078.96

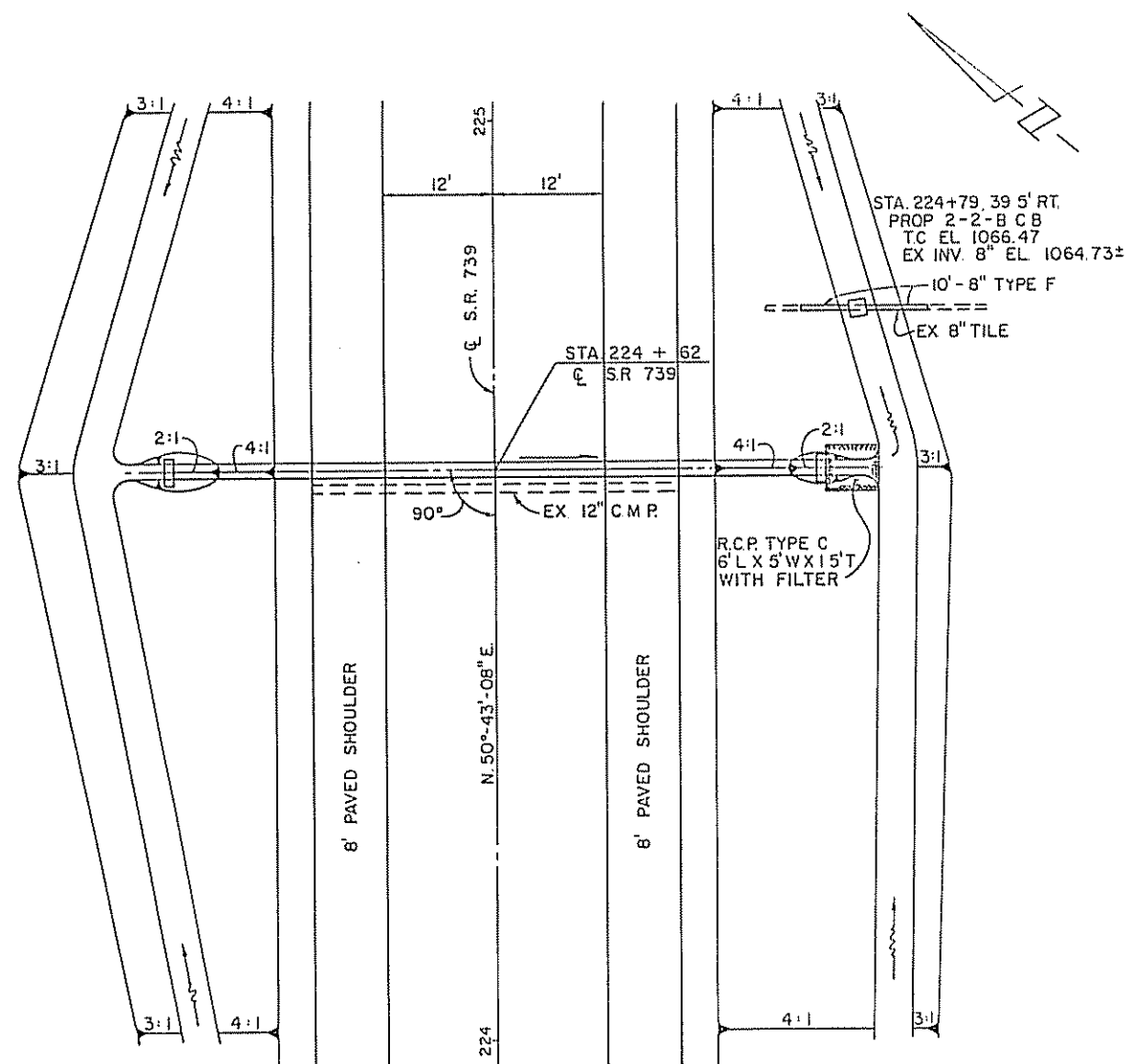
ITEM 603 CONDUIT, TYPE A, 14" X 23", 706 04 CLASS HE-II 70 LIN FT
 ITEM 601 ROCK CHAN PROTECT., TYPE C WITH FILTER 1.4 CU YD
 ITEM 602 CONCRETE MASONRY 0.58 CU YD
 QUANTITIES CARRIED TO SHEET NO 33



DRAINAGE AREA	= 12.9 Ac
Q25	= 20.6 CFS
Q100	= 25.5 CFS
HW100	= 1070.73

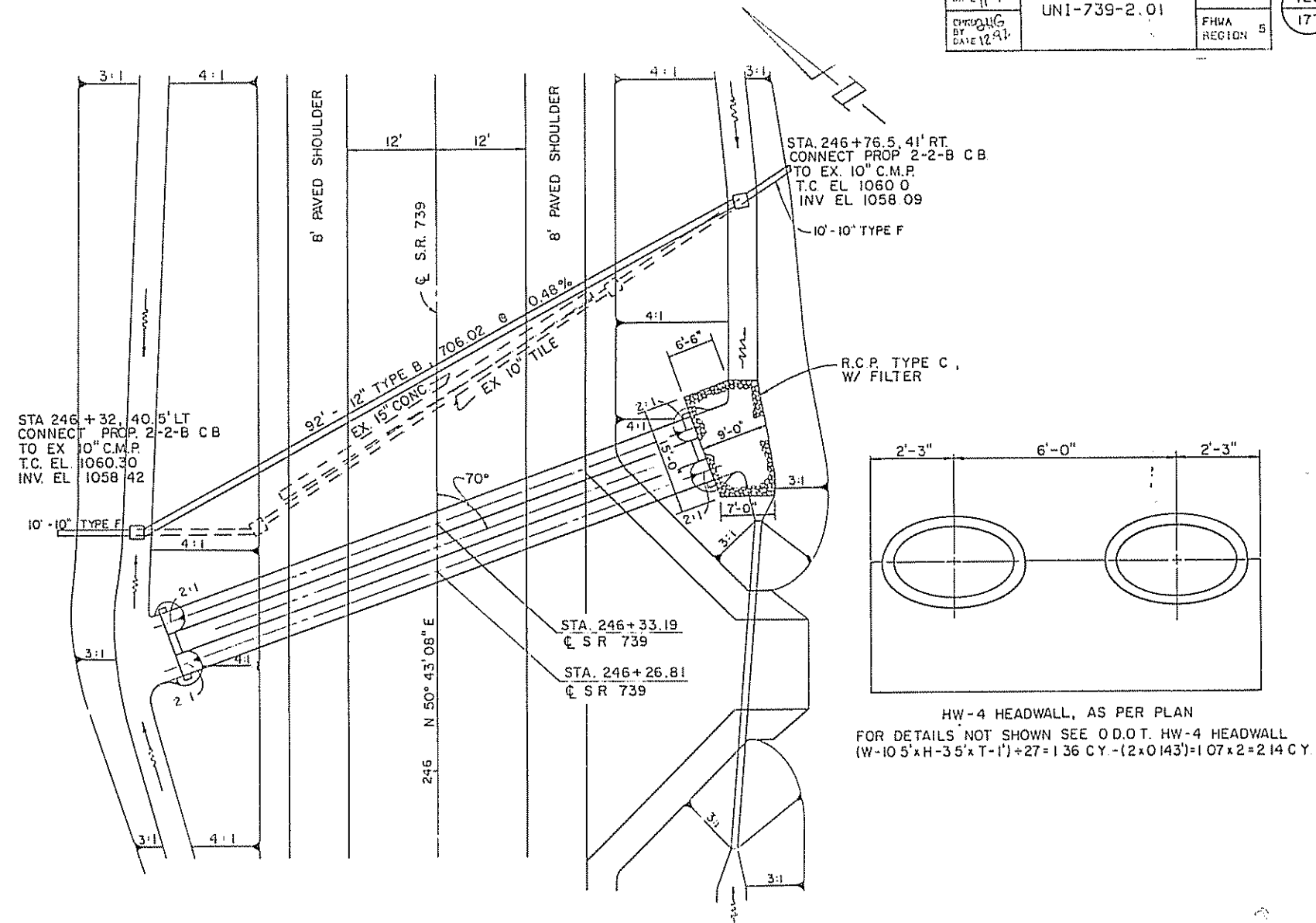
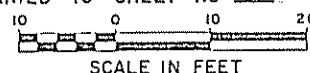
ITEM 603 CONDUIT, TYPE A, 24", 706 02 74 LIN FT
 ITEM 601 ROCK CHAN PROTECT., TYPE C WITH FILTER 1.6 CU YD
 ITEM 602 CONCRETE MASONRY 0.92 CU YD
 QUANTITIES CARRIED TO SHEET NO 35





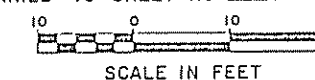
DRAINAGE AREA	= 11.3 Ac
Q25	= 18.0 CFS
Q100	= 22.3 CFS
HW100	= 1069.54

ITEM 603 CONDUIT, TYPE F, 8" *	20 LIN. FT.
ITEM 603 CONDUIT, TYPE A, 19"X30", 706 04 CLASS HE-II	72 LIN FT
ITEM 601 ROCK CHAN PROTECT, TYPE C WITH FILTER	17 CU YD
ITEM 602 CONCRETE MASONRY	0 70 CU YD
ITEM 604 2-2-B CATCH BASIN	1 EACH
QUANTITIES CARRIED TO SHEET NO <u>37</u>	

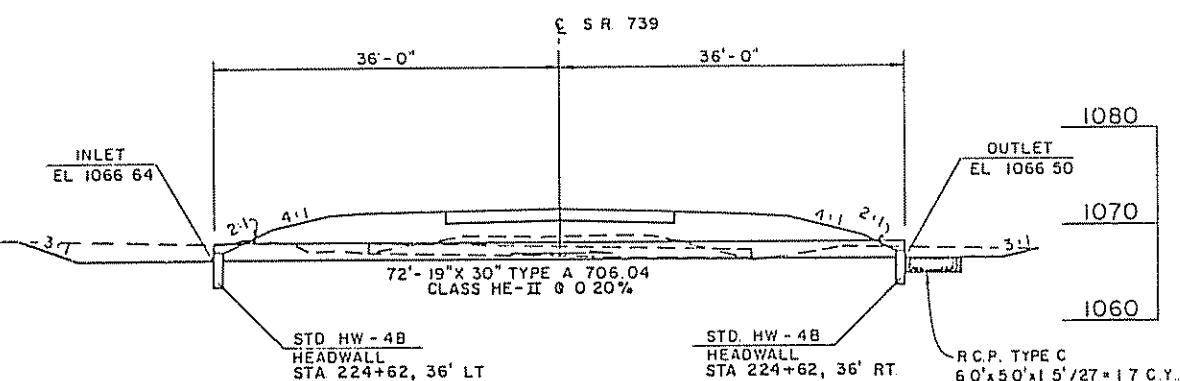


DRAINAGE AREA	= 32.0 Ac.
Q25	= 368 CF
Q100	= 44.0 C.F.
HW100	= 1062.50

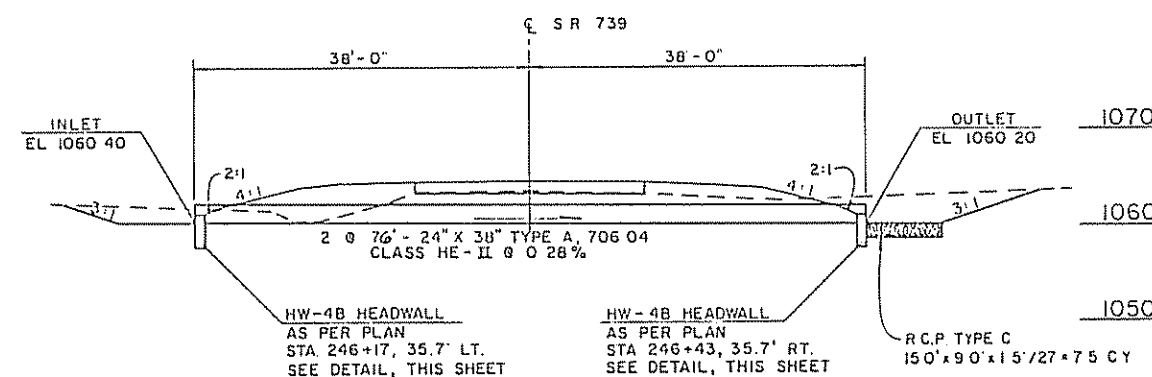
ITEM 603	CONDUIT, TYPE F, 10" *	20 LIN. FT.
ITEM 603	CONDUIT, TYPE B, 12", 706.02	92 LIN. FT
ITEM 603	CONDUIT, TYPE A, 24"x38", 706.04 CLASS HE-II	152 LIN FT
ITEM 601	ROCK CHAN PROTECT, TYPE C WITH FILTER	75 CU YD
ITEM 602	CONCRETE MASONRY	214 CU YD
ITEM 604	2-2-B CATCH BASIN	2 EACH
QUANTITIES CARRIED TO SHEET NO <u>40</u> .		



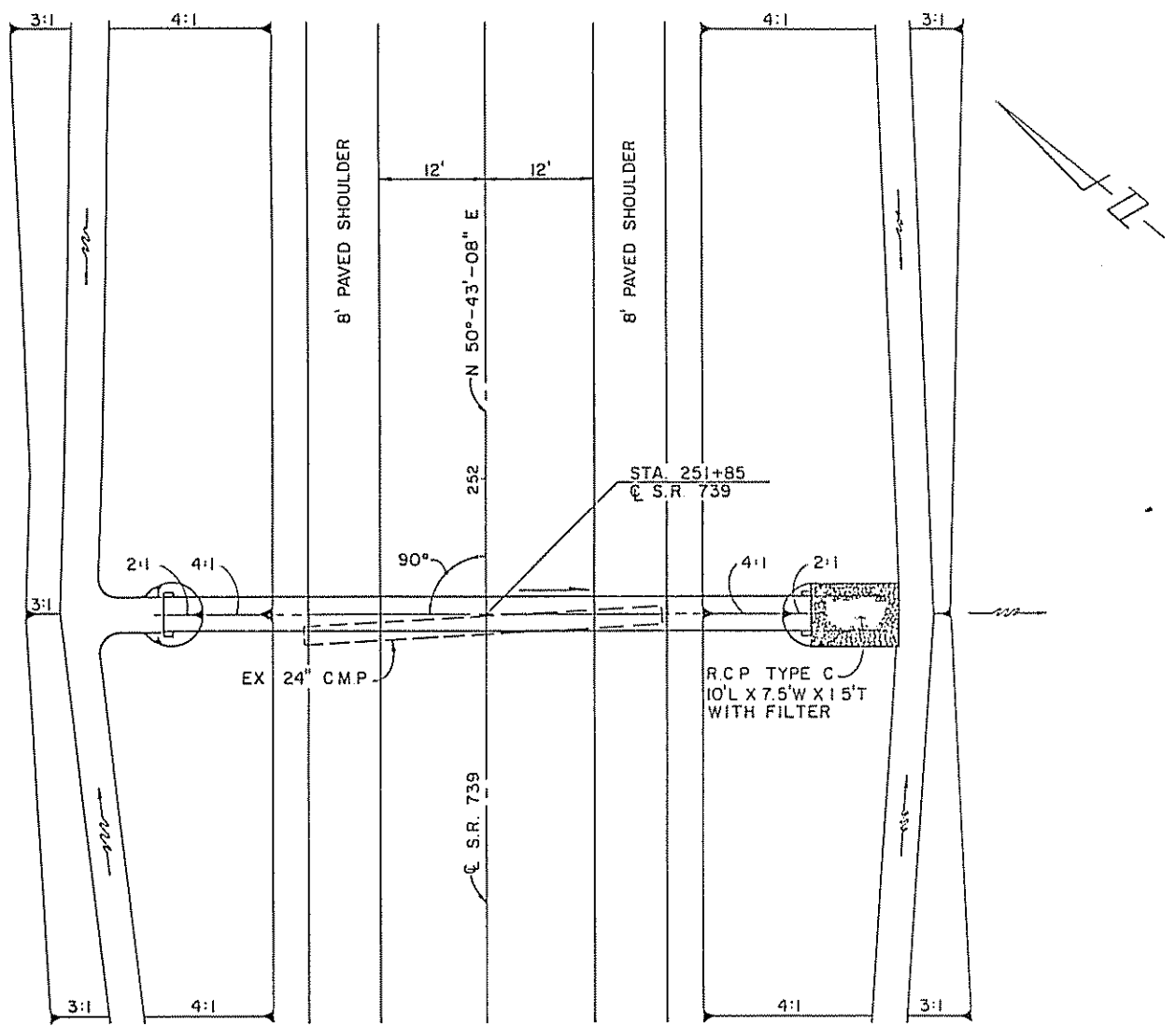
* 707.17 NON-PERFORATED.
ASTM D 3034, SDR 35 OR
SS 931 OR SS 944



STA. 224 + 62
S R 739

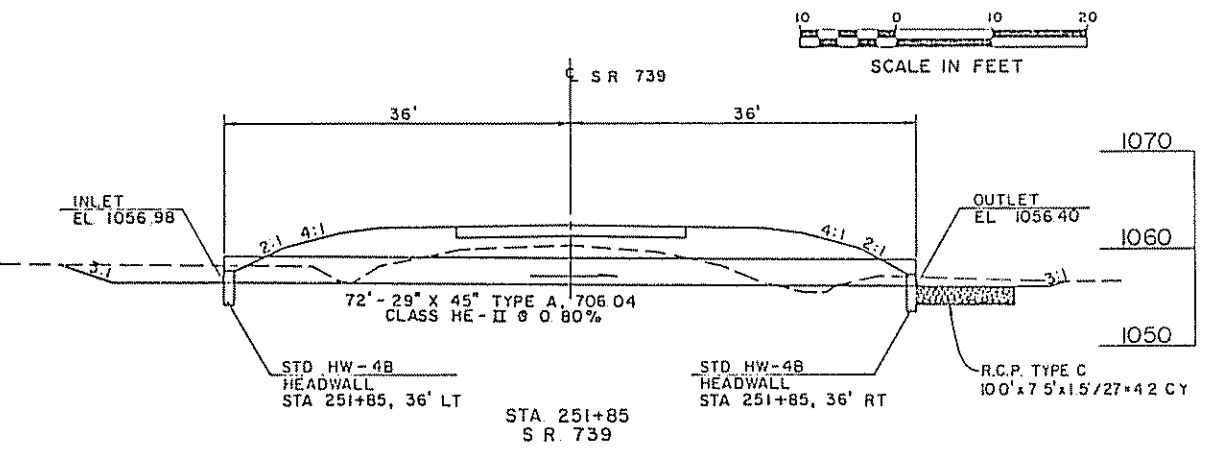


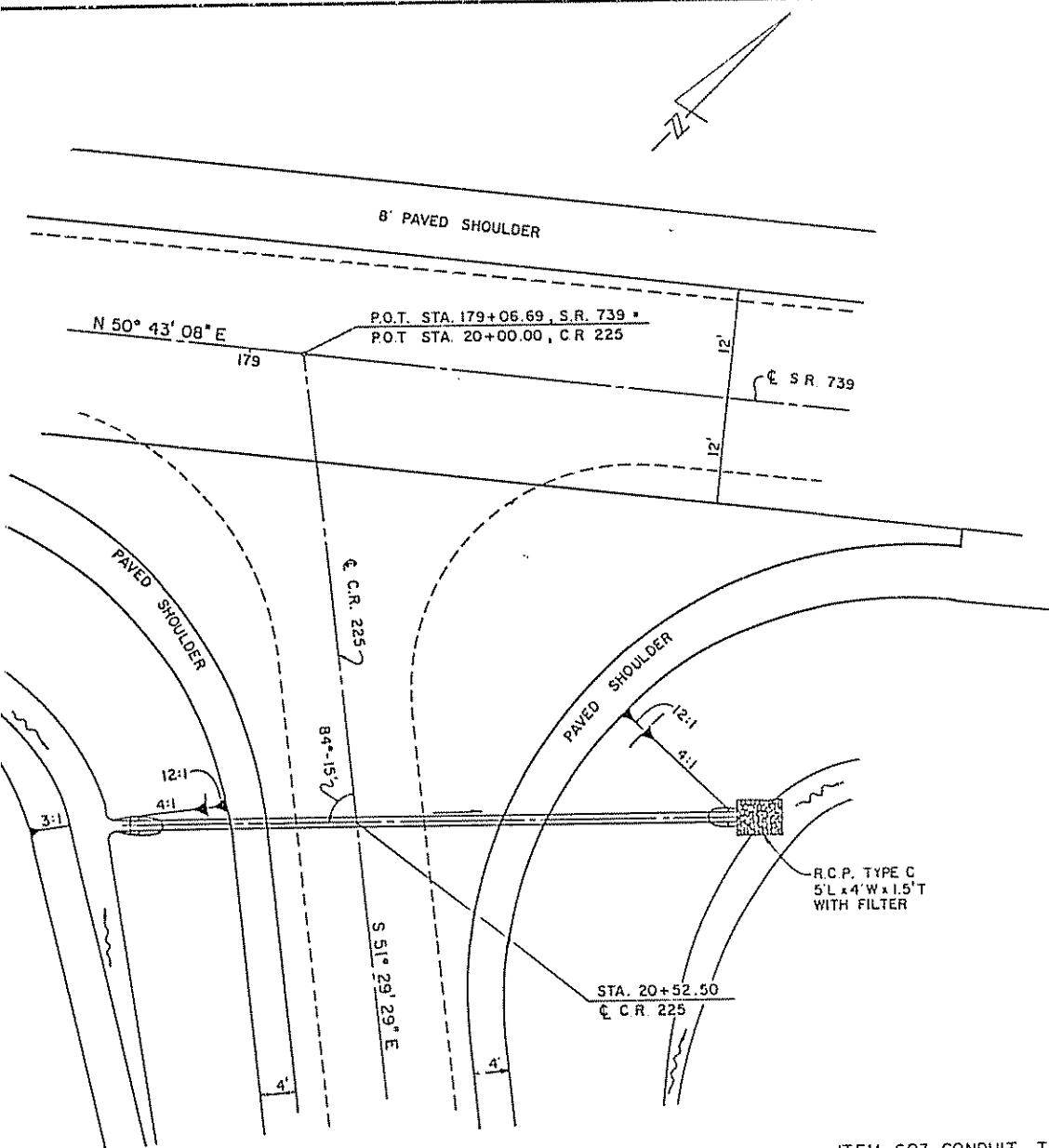
STA. 246+26 81 @ STA. 246+33 19
SR 739



DRAINAGE AREA	36.6 Ac.
Q25	47.6 CFS
Q100	58.5 CFS
HW100	1060.36

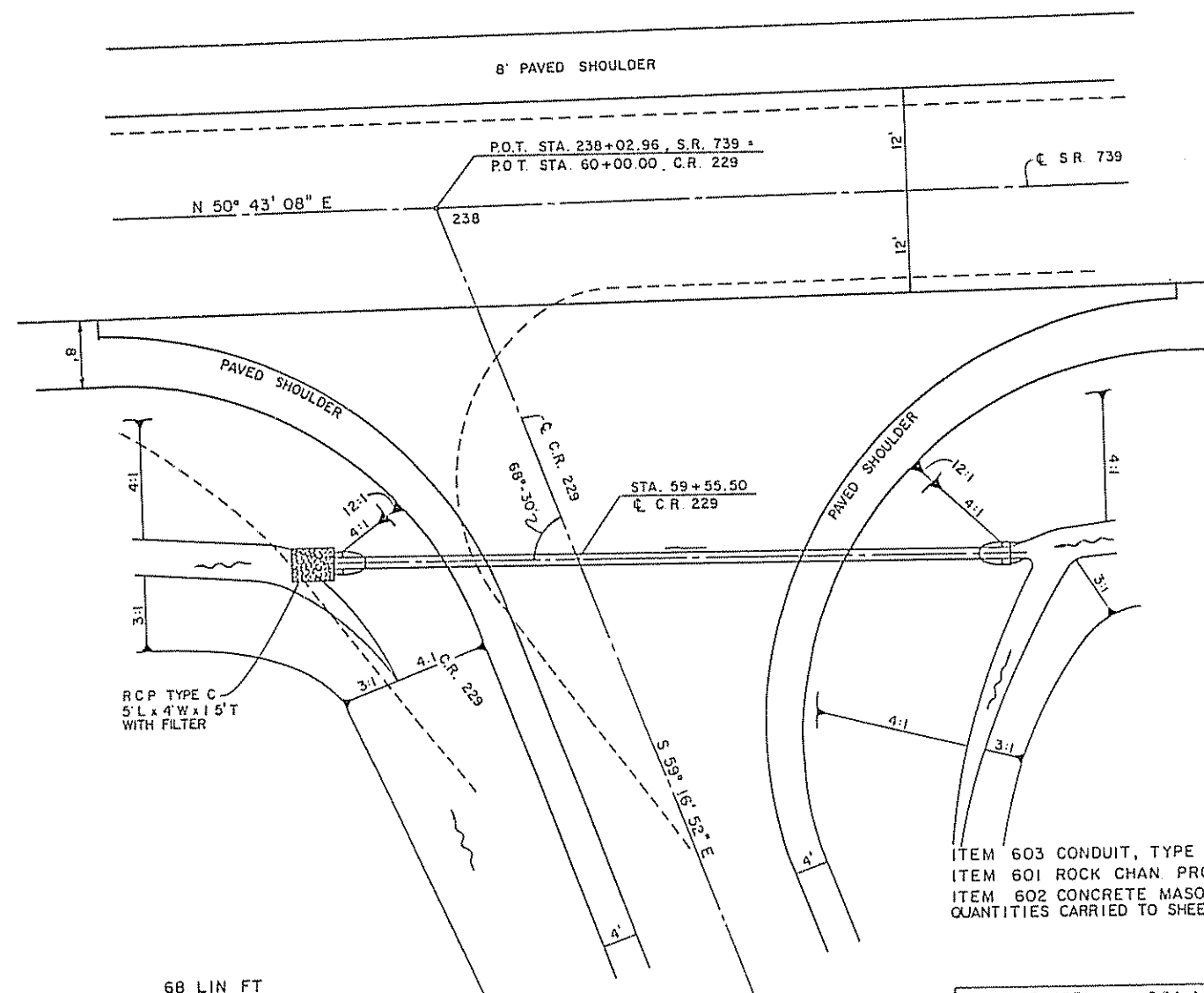
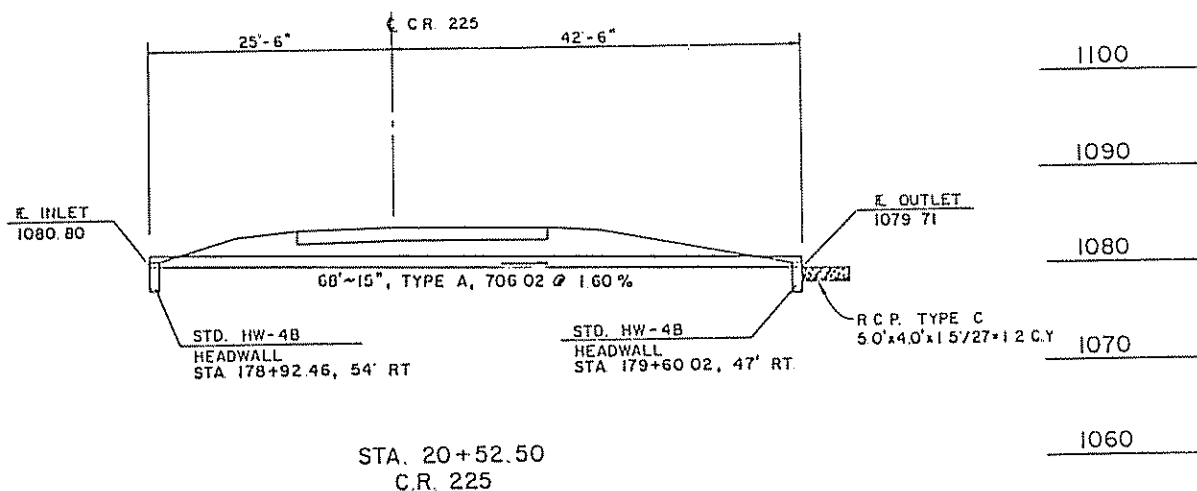
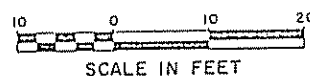
ITEM 603 CONDUIT TYPE A, 29"X45", 706.04 CLASS HE II 72 LIN FT
 ITEM 601 ROCK CHAN PROTECT, TYPE C WITH FILTER 4.2 CU YD
 ITEM 602 CONCRETE MASONRY 0.98 CU YD
 QUANTITIES CARRIED TO SHEET NO. 40





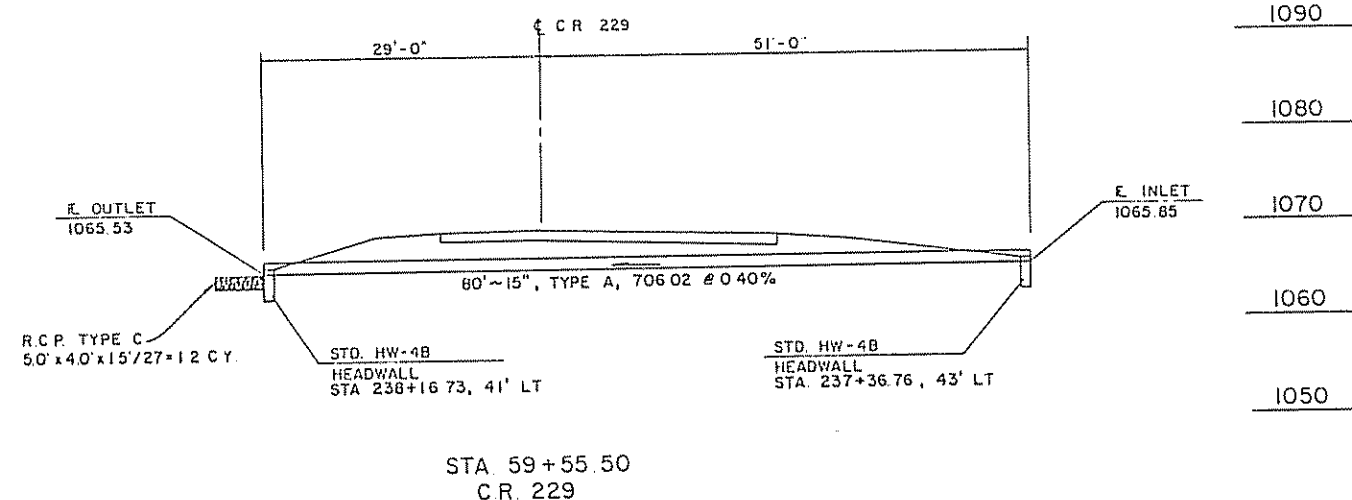
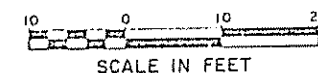
DRAINAGE AREA	= 2.30 Ac.
Q25	= 4.8 C.F.S.
Q100	= 6.0 C.F.S.
HW100	= 1083.50

ITEM 603 CONDUIT, TYPE A, 15", 706.02
 ITEM 601 ROCK CHAN. PROTECT., TYPE C WITH FILTER
 ITEM 602 CONCRETE MASONRY
 QUANTITIES CARRIED TO SHEET NO. 108.

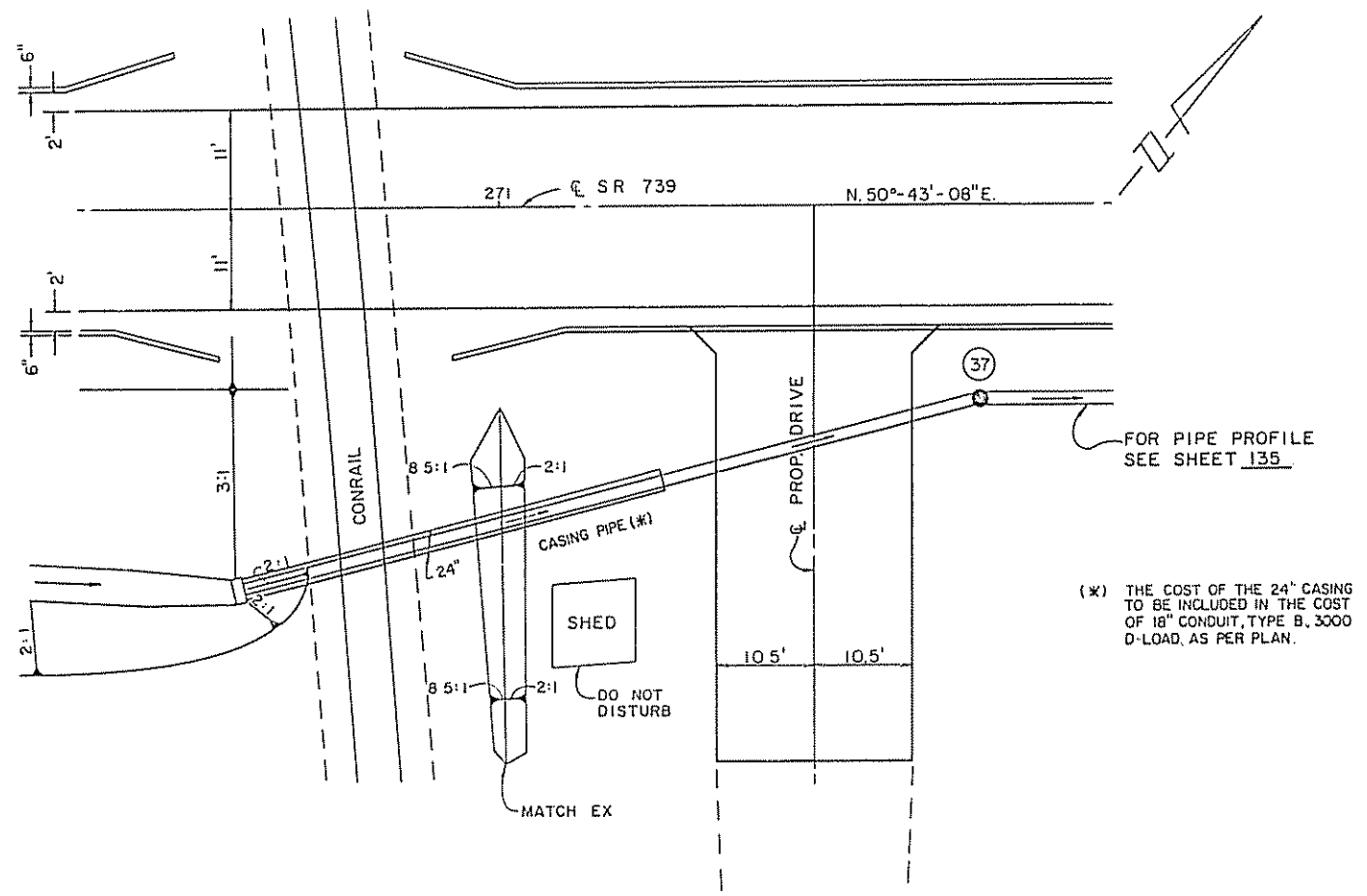


DRAINAGE AREA	= 2.34 Ac.
Q25	= 6.20 C.F.S.
Q100	= 7.60 C.F.S.
HW100	= 1068.35

ITEM 603 CONDUIT, TYPE A, 15", 706.02
 ITEM 601 ROCK CHAN. PROTECT., TYPE C WITH FILTER
 ITEM 602 CONCRETE MASONRY
 QUANTITIES CARRIED TO SHEET NO. 111.

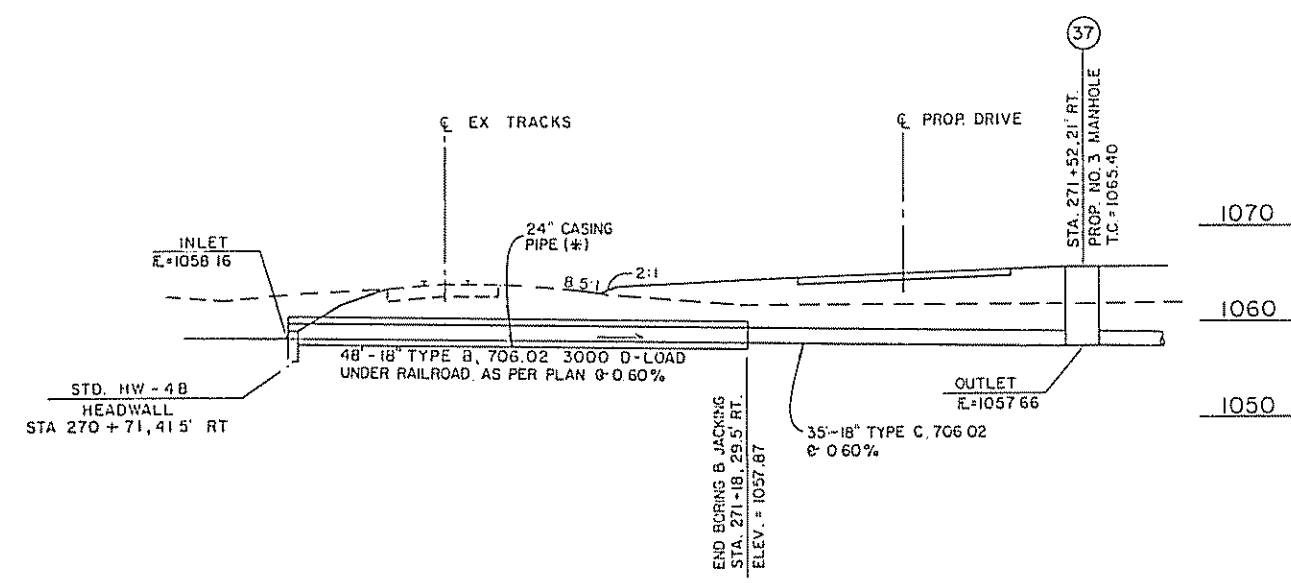
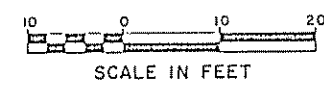


1090
1080
1070
1060
1050

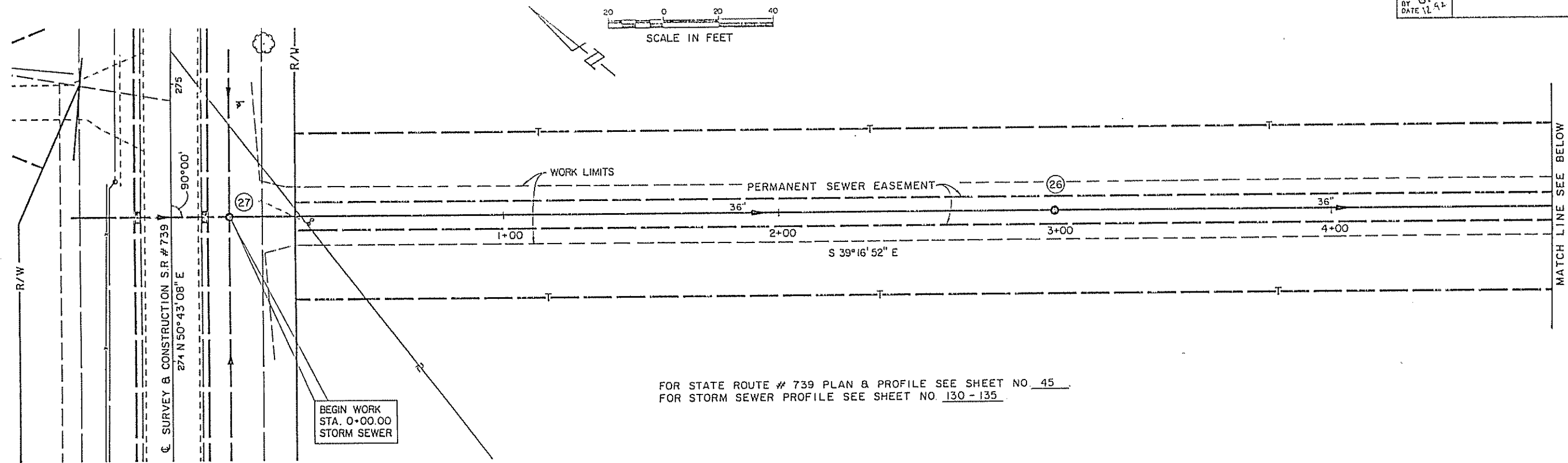


DRAINAGE AREA	= 2.9 Ac.
Q 25	= 6.0 CFS
Q 100	= 7.4 CFS
HW 100	= 1059.75

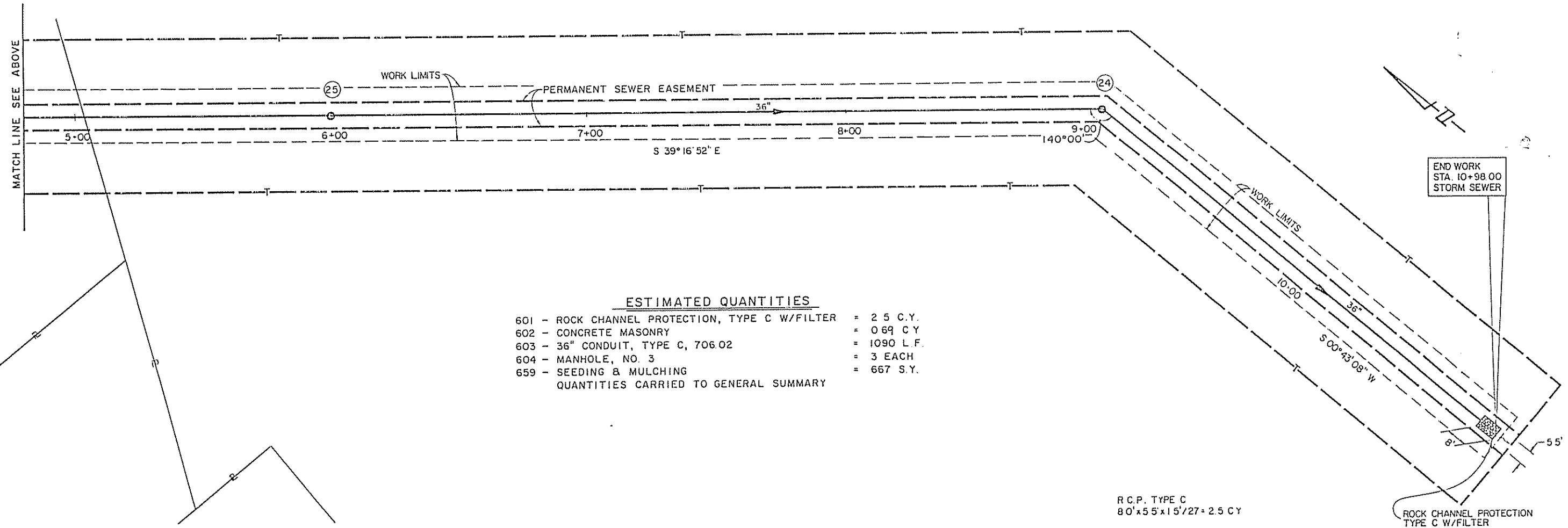
- ITEM 602 CONCRETE MASONRY 0.43 CU. YD
- ITEM 603 CONDUIT, TYPE B, 18", 706.02, 48 LIN. FT
- 3000 D-LOAD UNDER RAILROAD, AS PER PLAN 35 LIN. FT
- ITEM 603 CONDUIT, TYPE C, 18", 706.02
- QUANTITIES CARRIED TO SHEET NO. 44



CULVERT DETAILS



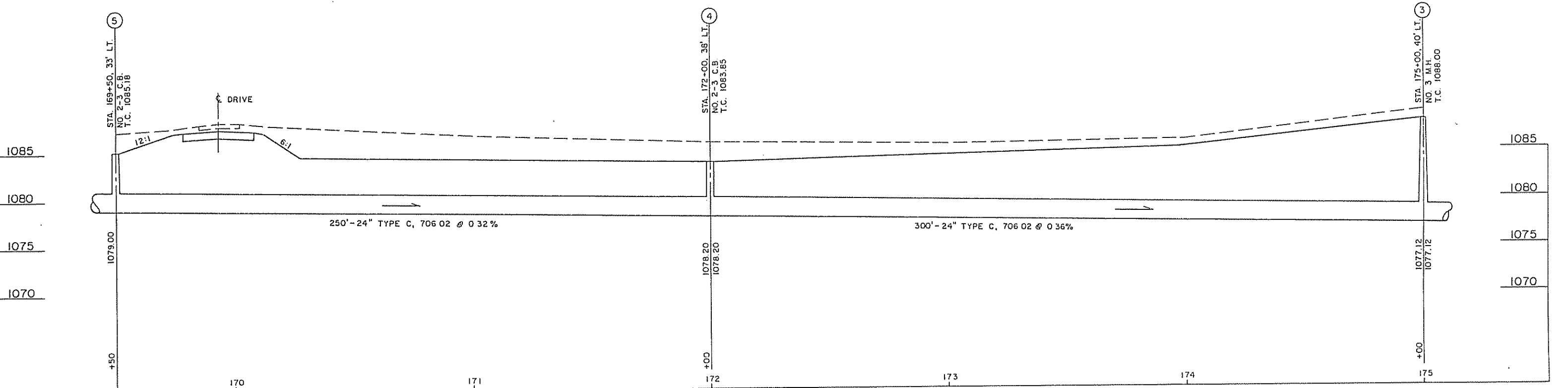
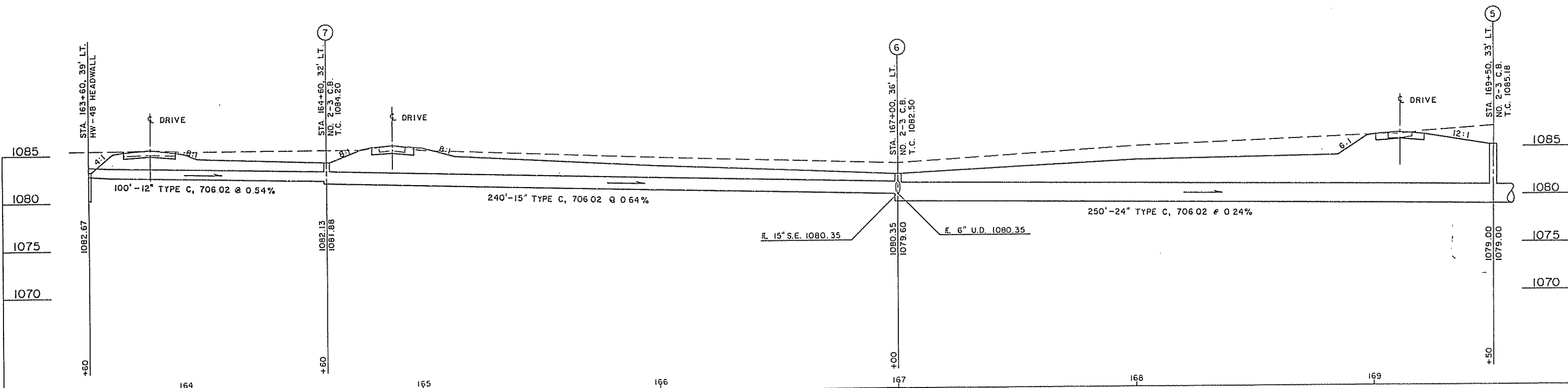
FOR STATE ROUTE # 739 PLAN & PROFILE SEE SHEET NO. 45
 FOR STORM SEWER PROFILE SEE SHEET NO. 130 - 135

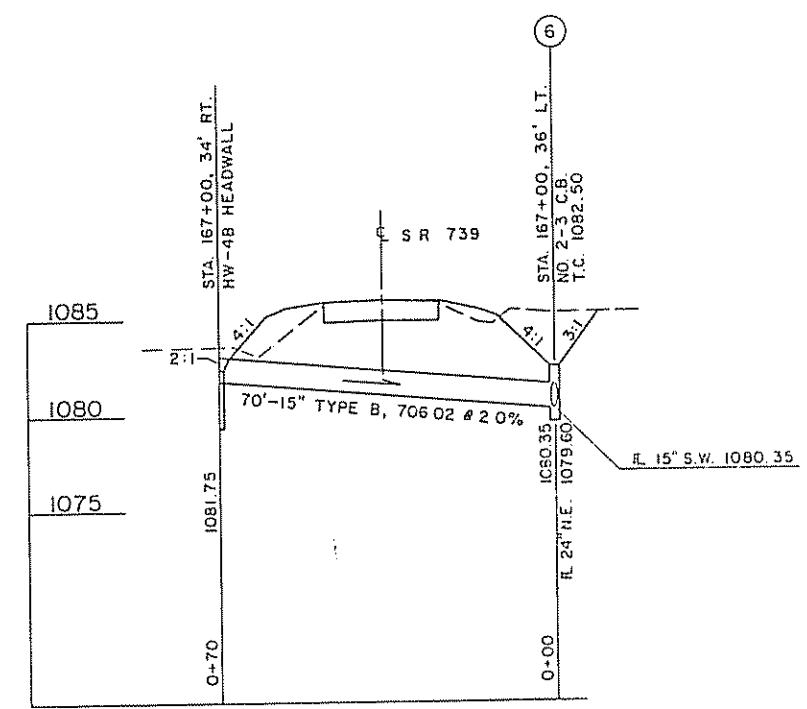
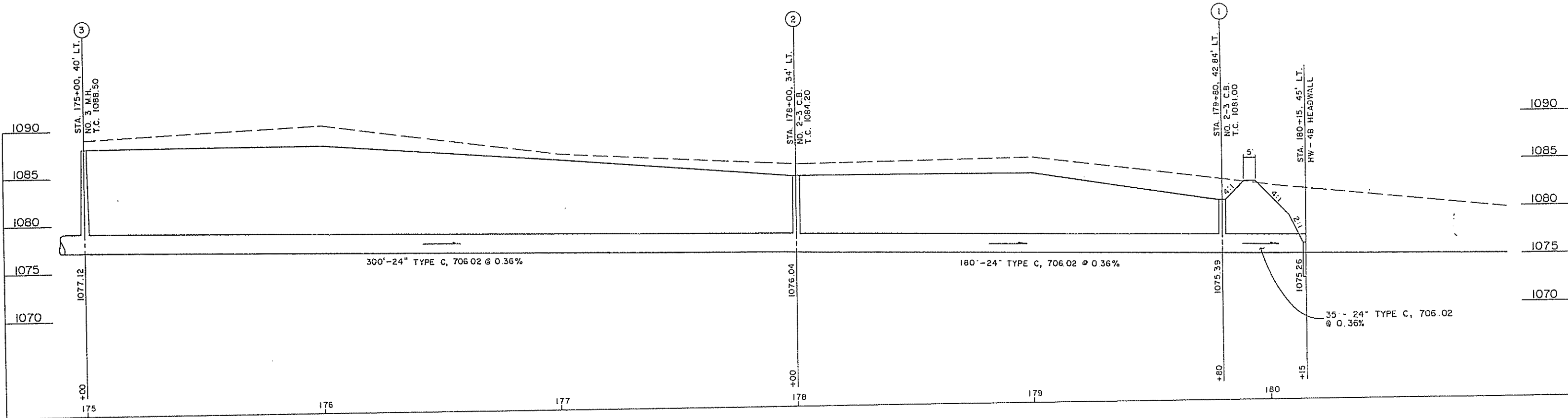


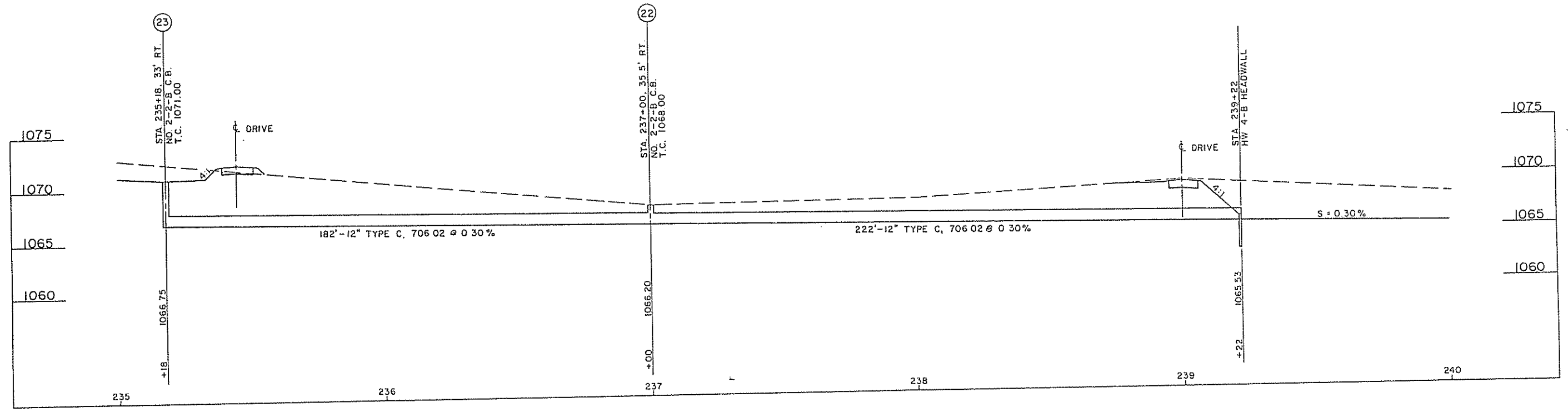
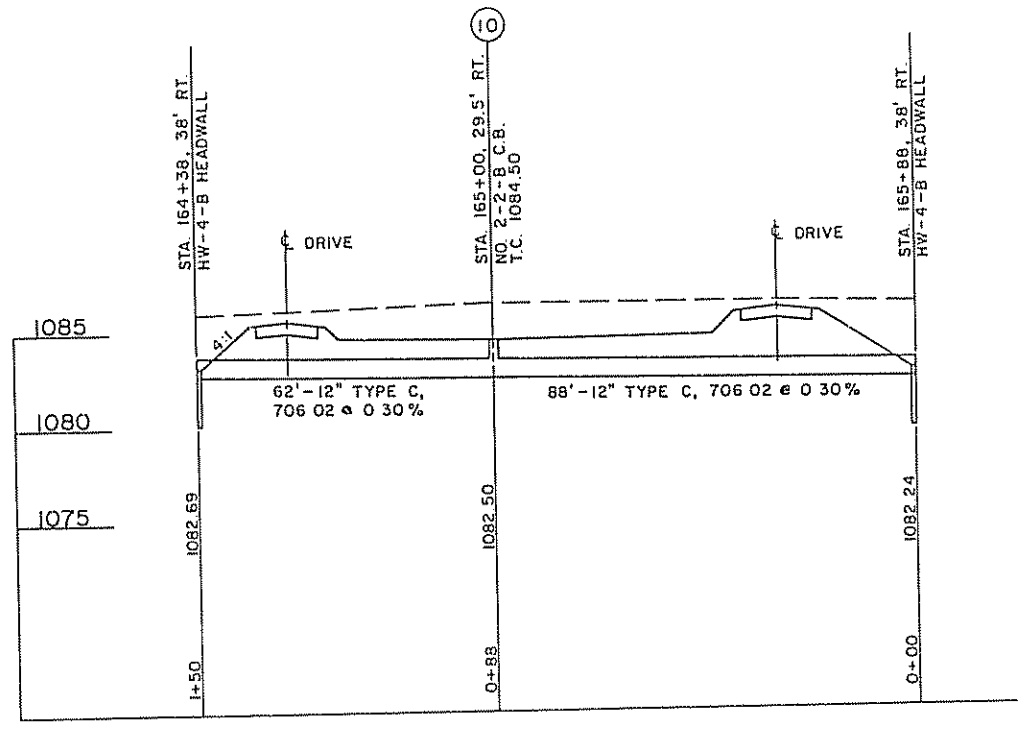
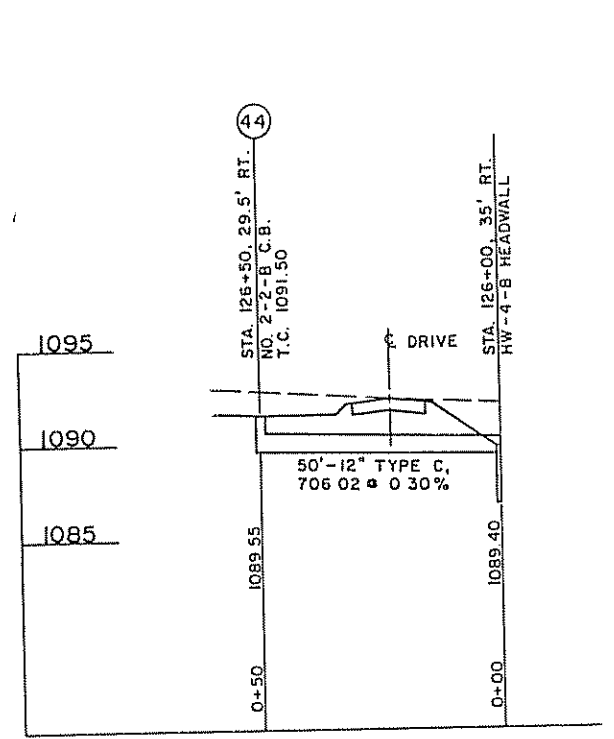
ESTIMATED QUANTITIES

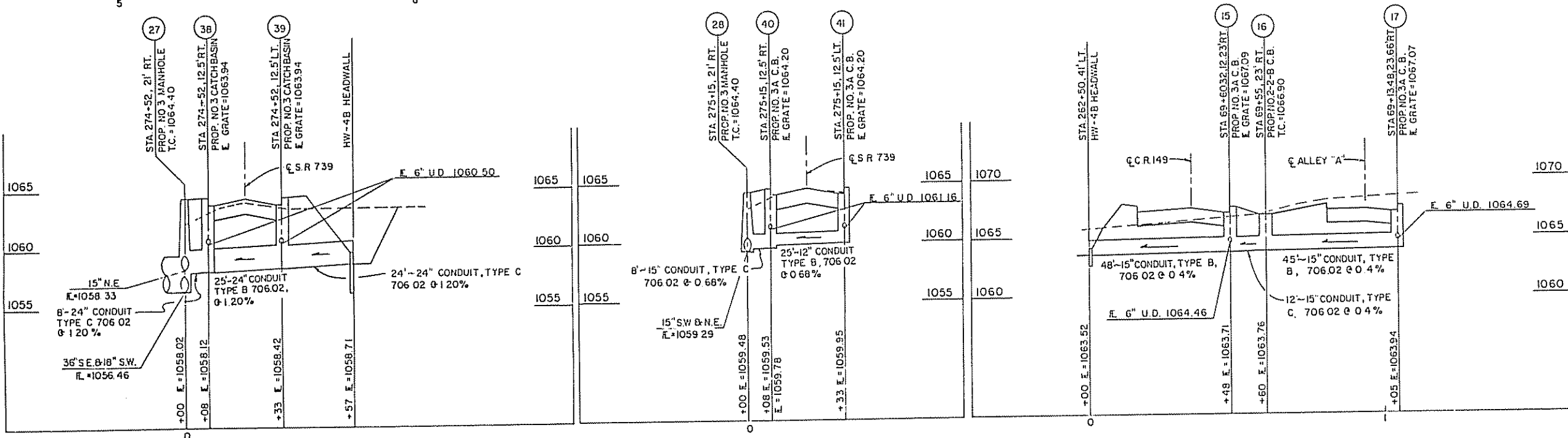
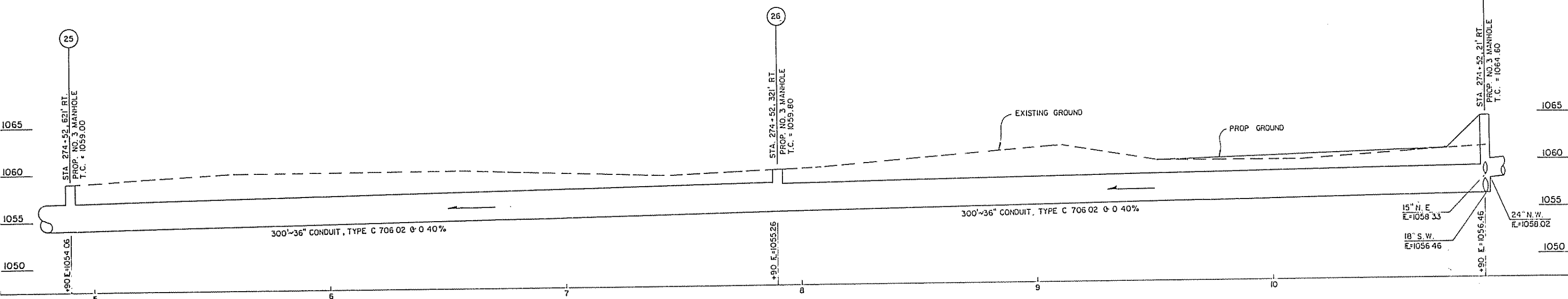
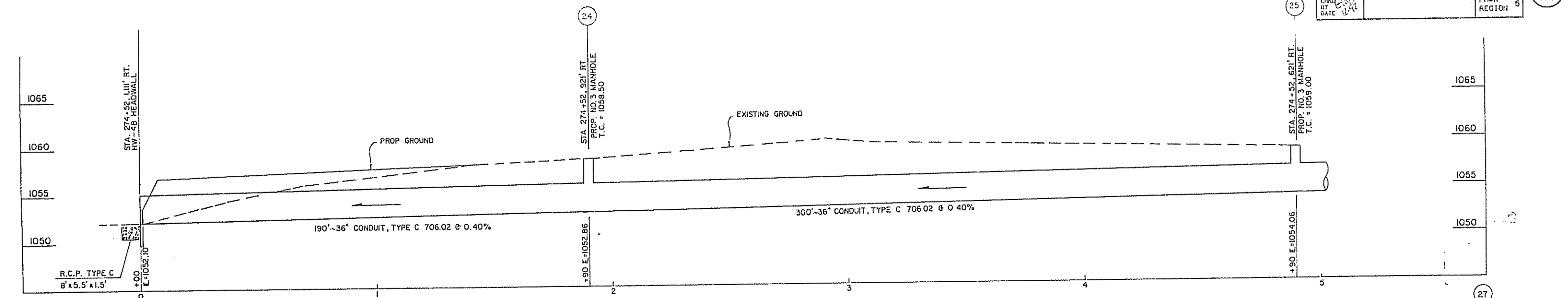
601 - ROCK CHANNEL PROTECTION, TYPE C W/FILTER	= 2.5 C.Y.
602 - CONCRETE MASONRY	= 0.69 C.Y.
603 - 36" CONDUIT, TYPE C, 706.02	= 1090 L.F.
604 - MANHOLE, NO. 3	= 3 EACH
659 - SEEDING & MULCHING	= 667 S.Y.
QUANTITIES CARRIED TO GENERAL SUMMARY	

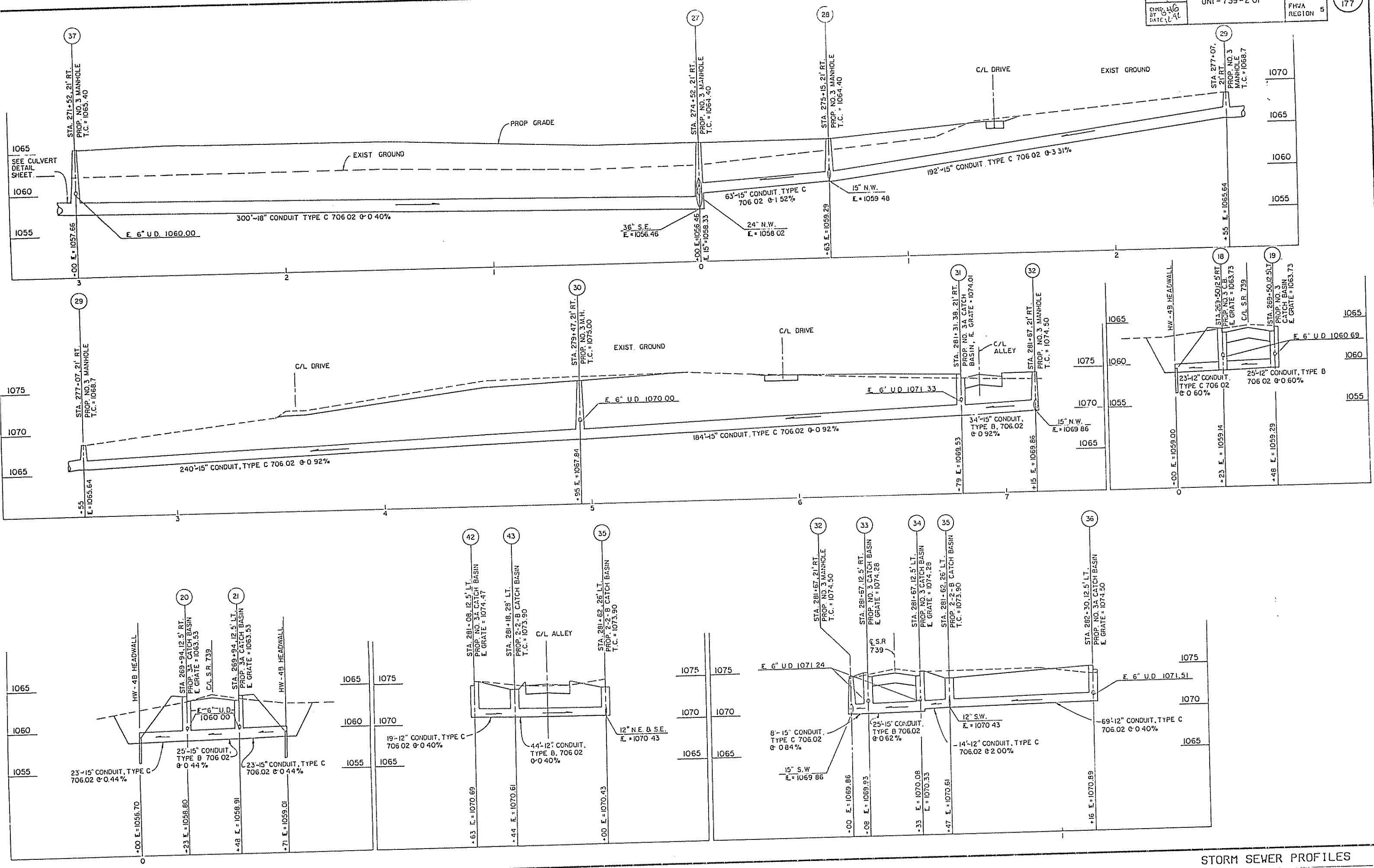
R.C.P. TYPE C
 80"x55"x15'/27 = 2.5 CY











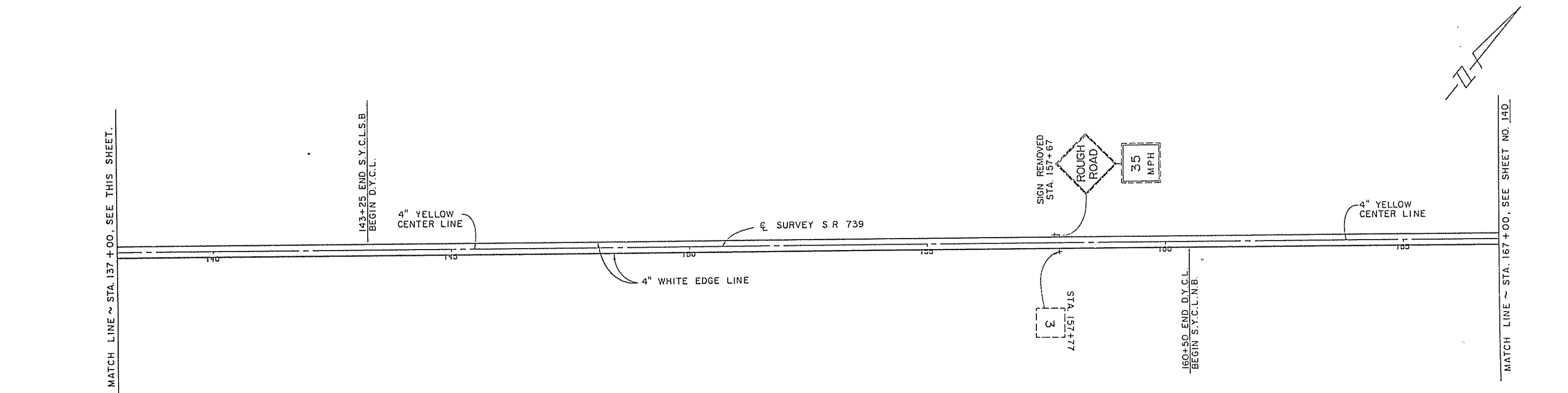
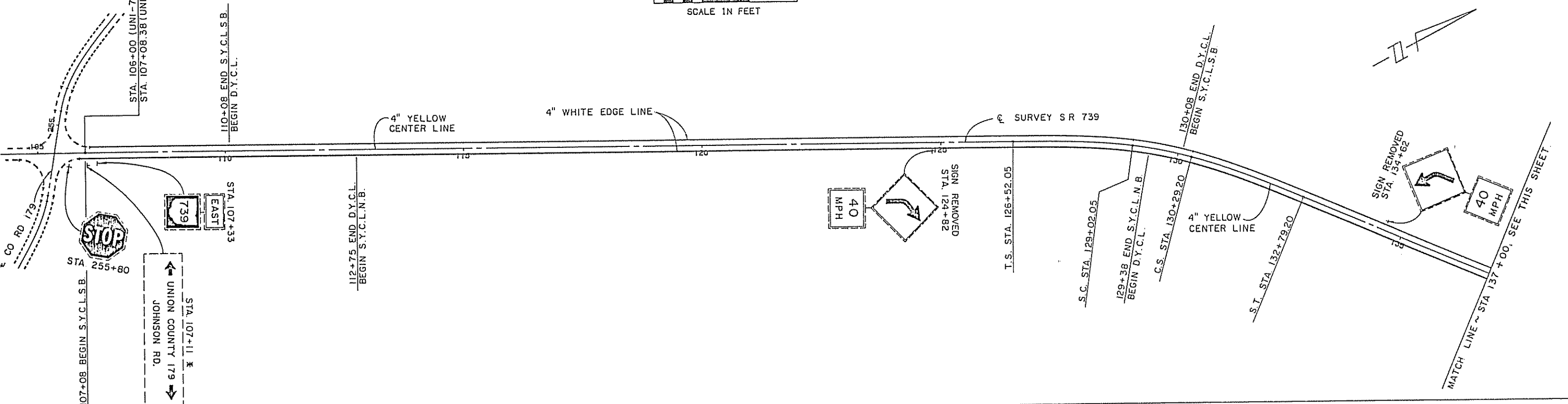
STORM SEWER PROFILES

SIGNING SUB-SUMMARY

• - TWO - NO. 3 POSTS

[illegible]

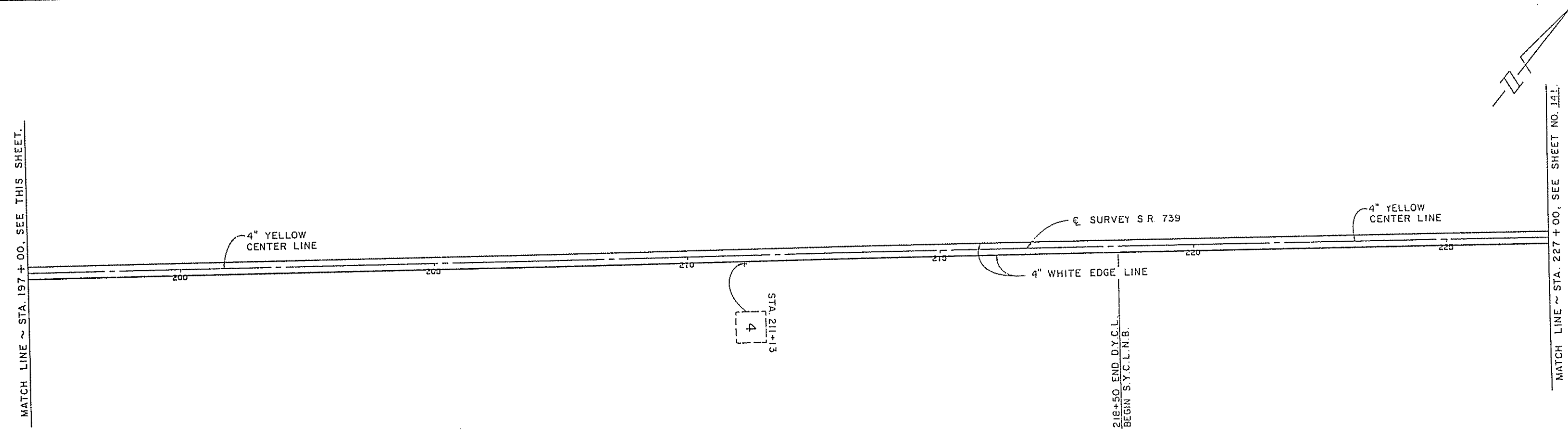
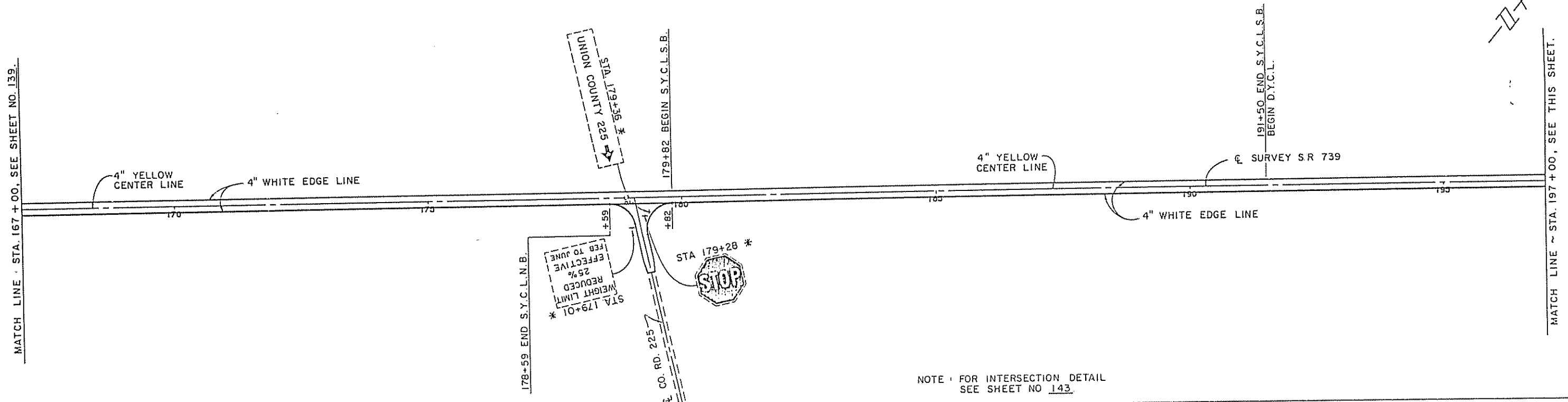
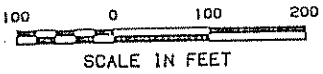
SIGNING & PAVEMENT MARKING PLAN



SDYCL - SOLID DOUBLE YELLOW CENTER LINE
DYCL - DASHED YELLOW CENTER LINE
SYCLSB - SOLID YELLOW CENTER LINE "NO PASSING" SOUTHBOUND
SYCLNB - SOLID YELLOW CENTER LINE "NO PASSING" NORTHBOUND
* REMOVE & REERECT EXISTING SIGN ON NEW POST
ALL DASHED OUTLINE SIGNS ARE EXISTING

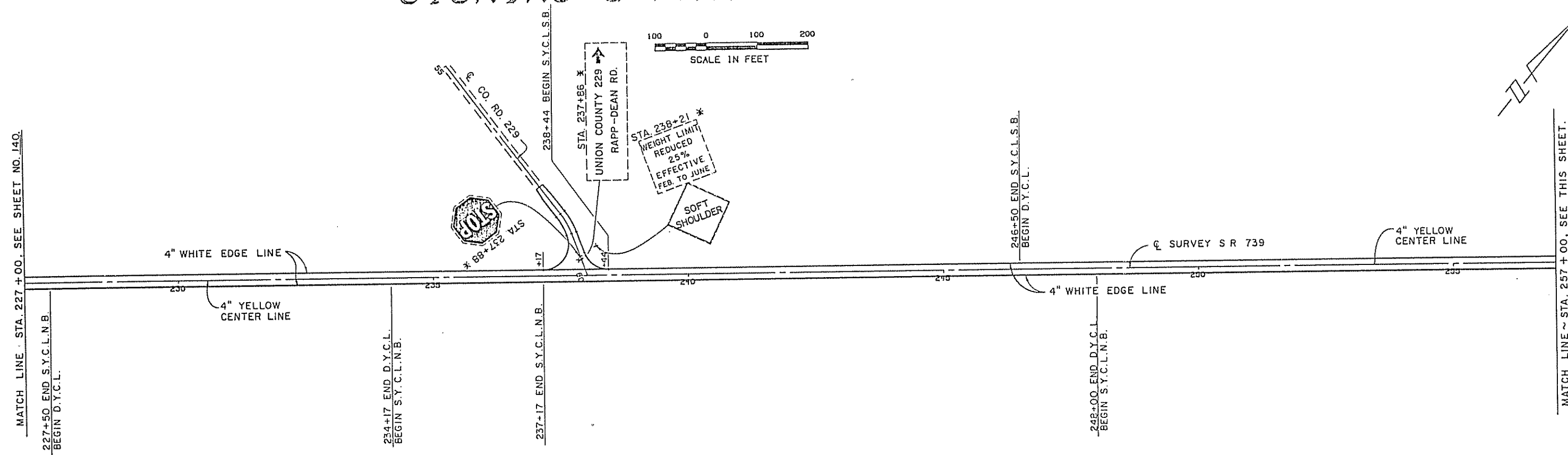
SIGNING & PAVEMENT MARKING PLAN

CALC BY DATE	MC 11/1/14	UN1-739-2.01	OH10	140
CHNG BY DATE	MC 11/1/14		FHWA REGION 5	177

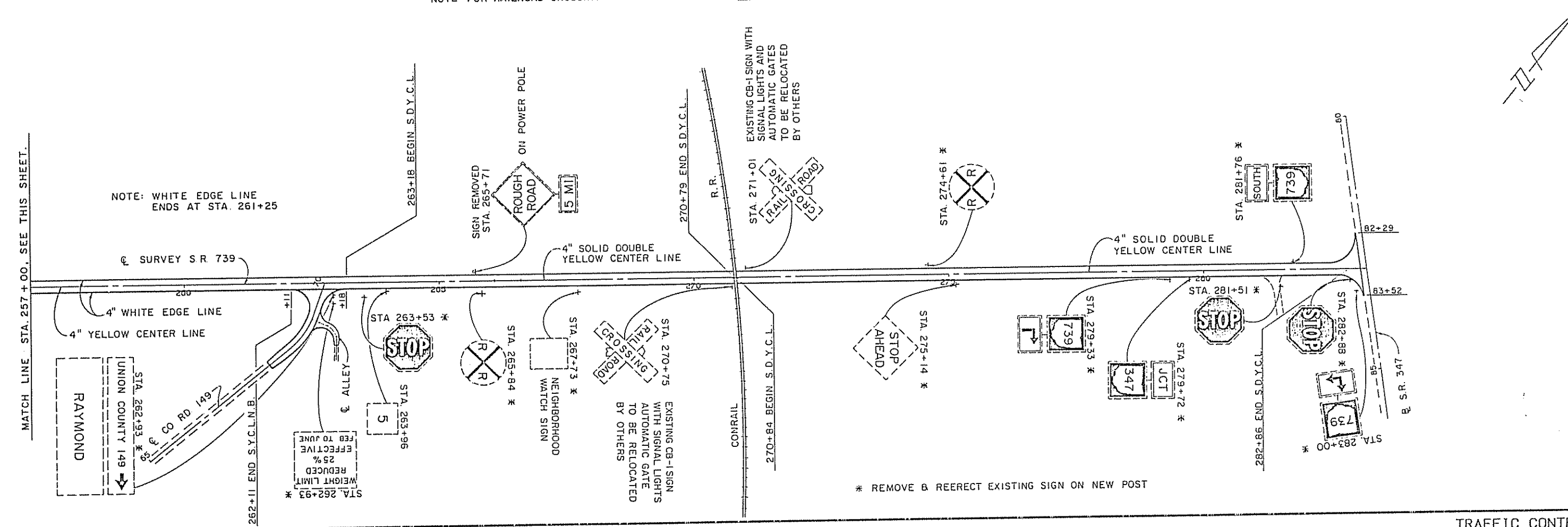


* REMOVE & REERECT EXISTING SIGN ON NEW POST

SIGNING & PAVEMENT MARKING PLAN

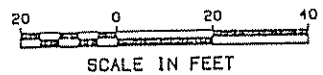


NOTE: FOR INTERSECTION DETAILS SEE SHEET NO. 143.
NOTE: FOR RAILROAD CROSSING DETAILS SEE SHEET NO. 142.

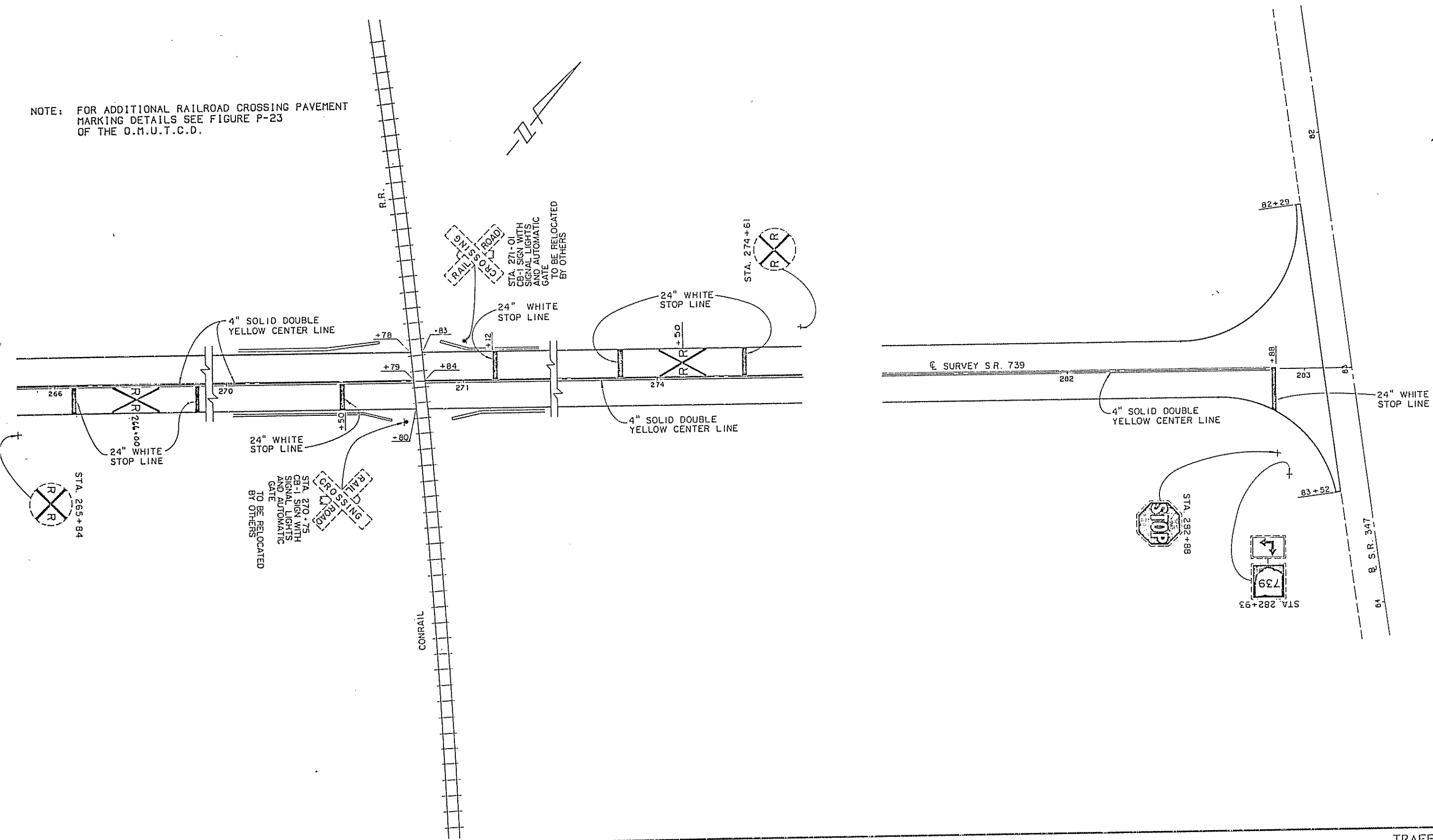


* REMOVE & REERECT EXISTING SIGN ON NEW POST

SIGNING & PAVEMENT MARKING PLAN

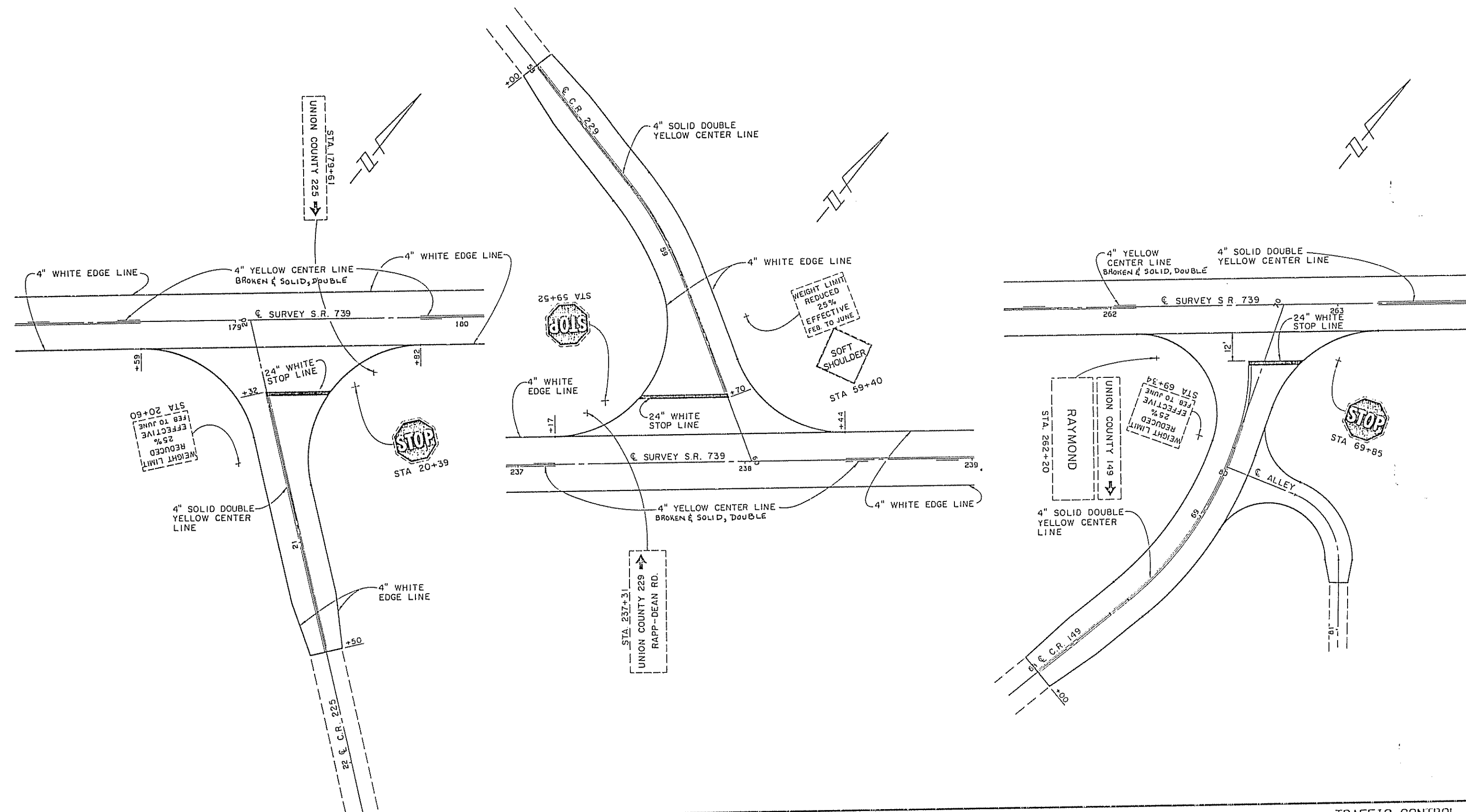


NOTE: FOR ADDITIONAL RAILROAD CROSSING PAVEMENT MARKING DETAILS SEE FIGURE P-23 OF THE O.H.U.T.C.D.



SIGNING & PAVEMENT MARKING PLAN

20 0 20 40
SCALE IN FEET



CALC. BY DATE	UN1 - 739 - 2.01	OHIO	144
CKCD BY DATE		FHWA REGION 5	177

SHEET NO. 1 OF 3

1
34

RECEIVED _____ OF _____
RECORDED _____
PLAT BOOK _____ PAGE _____
SIGNED _____
FEE _____ COUNTY RECORDER

I HEREBY CERTIFY THAT THIS PLAT
IS A TRUE DELINEATION OF A SURVEY
MADE FOR THE STATE OF OHIO IN 1989.
BY

R.D ZANDE & ASSOCIATES, LTD.,
CONSULTING ENGINEERS
COLUMBUS, OHIO

Thomas L. Webb DATE 8-6-92
 REGISTERED SURVEYOR NO. 4650

Y.M.S. 12400 - 12413

```

PROPOSED CURVE DATA
C/L SURVEY S.R. #739
P.1. STA. 129+68.59
Δ= 22°37'46" RT.
D= 07°37'46" RT.
D= 06°00'00"
R= 954.93'
T= 63.67'
L= 127.16'
Δ= 07°30'00"
L= 250.00'
T= 316.54'
L.T.= 166.82'
S.T.= 83.47'
E= 21.71'

```

200 0 200 400

SCALE IN FEET

BEGIN PROJECT
STA. 107+00.30
C/L SURVEY S.R. #739

LONG TANGENT

C/L SURVEY & CONSTRUCTION S.R. #739
120 125

T.S. 514. 126.52.03

S.C. STA. 129+02.05

C.S. STA. 130+29.20

S.T. STA. 132+79.20

135

140

115 N 5

10° 43' 00"

08° E

50

155

150

LINE STA. 165 + 00
SHEET NO. 2

STA. 106+00.00, S.R. # 739, BACK =
STA 107+08 38, S.R # 739, AHEAD

PROPOSED REFERENCE MONUMENTS		
STATION	LT.	RT.
105 + 88.99	—	49.99'
107 + 56.18	50.0'	—
110 + 00	50.0'	50.0'
120 + 00	50.0'	50.0'
126 + 52.05	50.0'	50.0'
129 + 02.05	61.42'	45.0'
130 + 29.20	61.42'	50.0'
132 + 79.20	50.0'	50.0'
140 + 00	50.0'	50.0'
150 + 00	50.0'	50.0'
160 + 00	50.0'	50.0'

EXISTING MONUMENT		
STATION	LOCATION	DESCRIPTION
106+43.16	0.19' RT.	RAILROAD SPIKE
107+00.00	0.0'	REROD
107+10.44	27.45' RT.	IRON PIN
113+47.93	0.02' LT.	RAILROAD SPIKE
122+23.17	468.05' RT.	IRON PIN
122+70.46	29.98' RT.	IRON PIN
122+73.55	0.01' LT.	PONY SPIKE
123+97.90	583.71' RT.	REROD
124+28.00	516.44' RT.	IRON PIN
124+66.24	33.40' RT.	REROD
124+60.87	0.0'	RAILROAD SPIKE
120+16.69	660.76' RT.	IRON PIN
129+63.15	21.97' LT.	IRON PIN
142+19.12	0.0'	RAILROAD SPIKE
158+48.83	1.05' RT.	RAILROAD SPIKE
162+89.87	31.84' RT.	IRON PIN
163+92.24	319.56' LT.	IRON PIN
163+99.39	29.17' LT.	IRON PIN

NOTE: ALL CALL POINT STATIONS AND OFFSETS
LOCATED OFF THE SPIRALLED CURVES ARE
CALCULATED FROM THE LONG TANGENT WITH
THE STATIONING BEING EITHER ADDED TO THE
T.S STATION OR SUBTRACTED FROM THE ST
STATION.

TYPE FUNDS

[illegible]

SURVEYOR'S SEAL

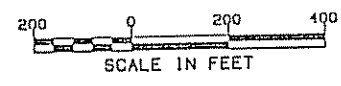
CENTERLINE SURVEY PLAT

CENTERLINE SURVEY PLAT
UNI-739-2.01

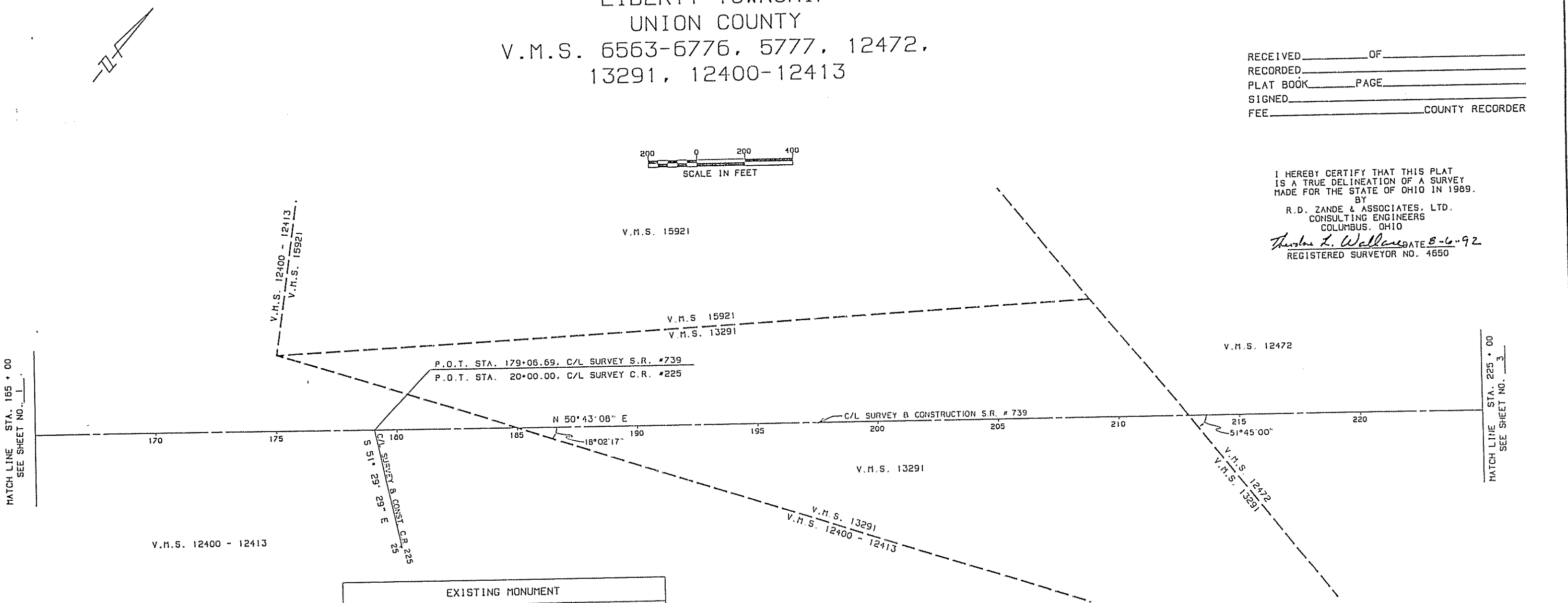
LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 6563-6776, 5777, 12472,
13291, 12400-12413

DATE 12/1/91	OHIO 145 177
DATE 12/1/91	UNI - 739 - 2.01
DATE 12/1/91	FHWA REGION 5
SHEET NO. 2 OF 3	
2 34	

RECEIVED _____ OF _____
RECORDED _____
PLAT BOOK _____ PAGE _____
SIGNED _____
FEE _____ COUNTY RECORDER



I HEREBY CERTIFY THAT THIS PLAT
IS A TRUE DELINEATION OF A SURVEY
MADE FOR THE STATE OF OHIO IN 1989.
BY
R.D. ZANDE & ASSOCIATES, LTD.
CONSULTING ENGINEERS
COLUMBUS, OHIO
Thurston L. Wallace DATE 8-6-92
REGISTERED SURVEYOR NO. 4650



EXISTING MONUMENT		
STATION	LOCATION	DESCRIPTION
165+18.74	0.91' RT.	REROD
165+68.17	31.77' RT.	IRON PIN
165+70.35	0.22' RT.	IRON BAR
175+58.51	181.06' RT.	REROD
175+60.32	32.54' RT.	REROD
175+60.54	1.79' RT.	RAILROAD SPIKE
178+51.53	477.99' RT.	REROD
179+06.15	0.25' LT.	IRON BAR
179+27.09	186.85' RT.	REROD
179+47.58	187.19' RT.	RAILROAD SPIKE
179+90.00	400.19' RT.	REROD
180+10.53	400.37' RT.	RAILROAD SPIKE
180+10.54	400.44' RT.	RAILROAD SPIKE
193+57.84	248.60' LT.	REROD
193+72.77	30.11' LT.	REROD
193+74.82	0.12' LT.	RAILROAD SPIKE
195+32.90	249.60' LT.	REROD
195+47.51	31.10' LT.	REROD
195+47.88	30.34' LT.	REROD
195+49.79	0.40' LT.	RAILROAD SPIKE

PROPOSED REFERENCE MONUMENTS		
STATION	LT.	RT.
170+00	50.0'	50.0'
178+65	-	50.0'
179+75	-	50.0'
180+00	50.0'	-
190+00	50.0'	50.0'
200+00	50.0'	50.0'
210+00	50.0'	50.0'
220+00	50.0'	50.0'

TYPE FUNDS		SURVEYOR'S SEAL
COMPLETION DATE		
REV.	DATE	DESCRIPTION

CENTERLINE SURVEY PLAT
UNI-739-2.01

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 6563-6776, 5777, 12472,
13291, 12400-12413

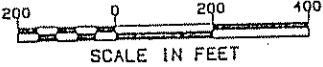
CALC. BY DATE	UNI - 739 - 2.01	OHIO FHWA REGION 5	146 177
CHECKED BY DATE			3 34

SHEET NO. 3 OF 3

RECEIVED _____ OF _____
RECORDED _____
PLAT BOOK _____ PAGE _____
SIGNED _____
FEE _____ COUNTY RECORDER

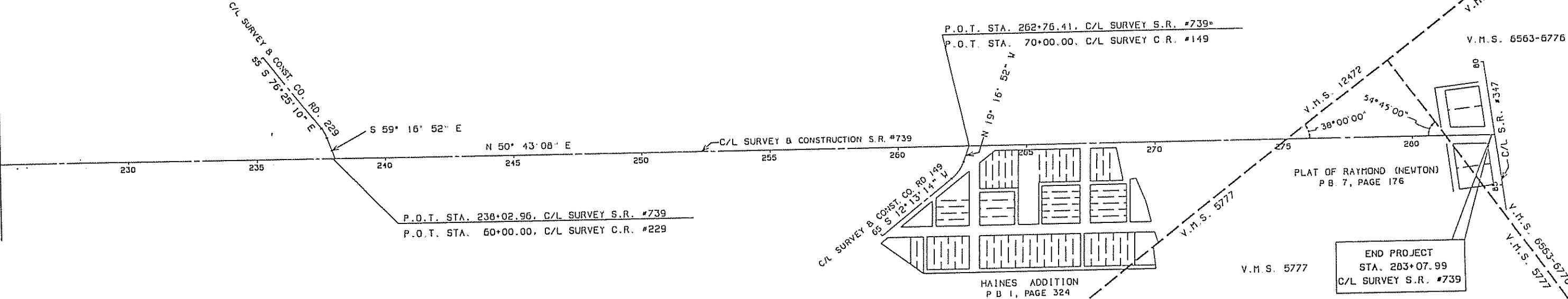
I HEREBY CERTIFY THAT THIS PLAT
IS A TRUE DELINEATION OF A SURVEY
MADE FOR THE STATE OF OHIO IN 1989.
BY
R. D. ZANDE & ASSOCIATES, LTD.
CONSULTING ENGINEERS
COLUMBUS, OHIO
Thorsten L. Walther DATE 8-2-92
REGISTERED SURVEYOR NO. 4650

CURVE DATA
E SURVEY CO. RD. #229
P.I. STA. 58+89.92
Δ = 17° 08' 19" RT.
D = 38° 11' 50"
R = 150.00'
T = 22.60'
L = 44.87'
E = 1.69'
P.C. STA. 58+57.32
P.T. STA. 59+12.19



V.M.S. 12472

MATCH LINE STA. 225+00
SEE SHEET NO. 2



EXISTING MONUMENT		
STATION	LOCATION	DESCRIPTION
238+45.24	0.69' RT.	REROD
246+53.79	63.55' LT.	REROD
246+58.37	29.47' LT.	REROD
246+62.59	0.30' RT.	RAILROAD SPIKE
250+47.07	262.95' LT.	REROD
252+41.92	0.02' RT.	RAILROAD SPIKE
259+21.42	322.97' RT.	IRON PIN
260+14.06	250.41' RT.	IRON PIN
261+26.30	513.03' RT.	IRON PIN
263+70.45	0.50' LT.	RAILROAD SPIKE
270+98.66	151.97' LT.	REROD
271+15.22	0.31' LT.	RAILROAD SPIKE
274+27.38	301.58' LT.	REROD
275+56.75	398.27' LT.	REROD
276+06.75	67.50' LT.	REROD
276+15.49	28.84' LT.	REROD
276+37.51	0.17' LT.	RAILROAD SPIKE

EXISTING MONUMENT		
STATION	LOCATION	DESCRIPTION
276+62.39	245.93' LT.	IRON PIN
276+65.10	128.79' LT.	IRON PIN
276+67.41	0.90' LT.	RAILROAD SPIKE
277+66.67	3.36' LT.	RAILROAD SPIKE
277+66.88	0.14' LT.	REROD
277+69.51	20.14' RT.	IRON PIN
277+70.27	140.46' LT.	IRON PIN
277+70.95	128.74' LT.	REROD
277+74.25	33.12' LT.	REROD
279+55.69	26.62' LT.	IRON PIN
279+73.54	0.11' LT.	RAILROAD SPIKE
279+75.75	33.63' RT.	IRON PIN
279+83.57	170.60' RT.	IRON PIN
280+12.97	371.11' RT.	IRON PIN
281+71.71	329.94' RT.	IRON PIN
282+71.94	116.50' LT.	IRON PIN
283+19.93	0.0'	RAILROAD SPIKE

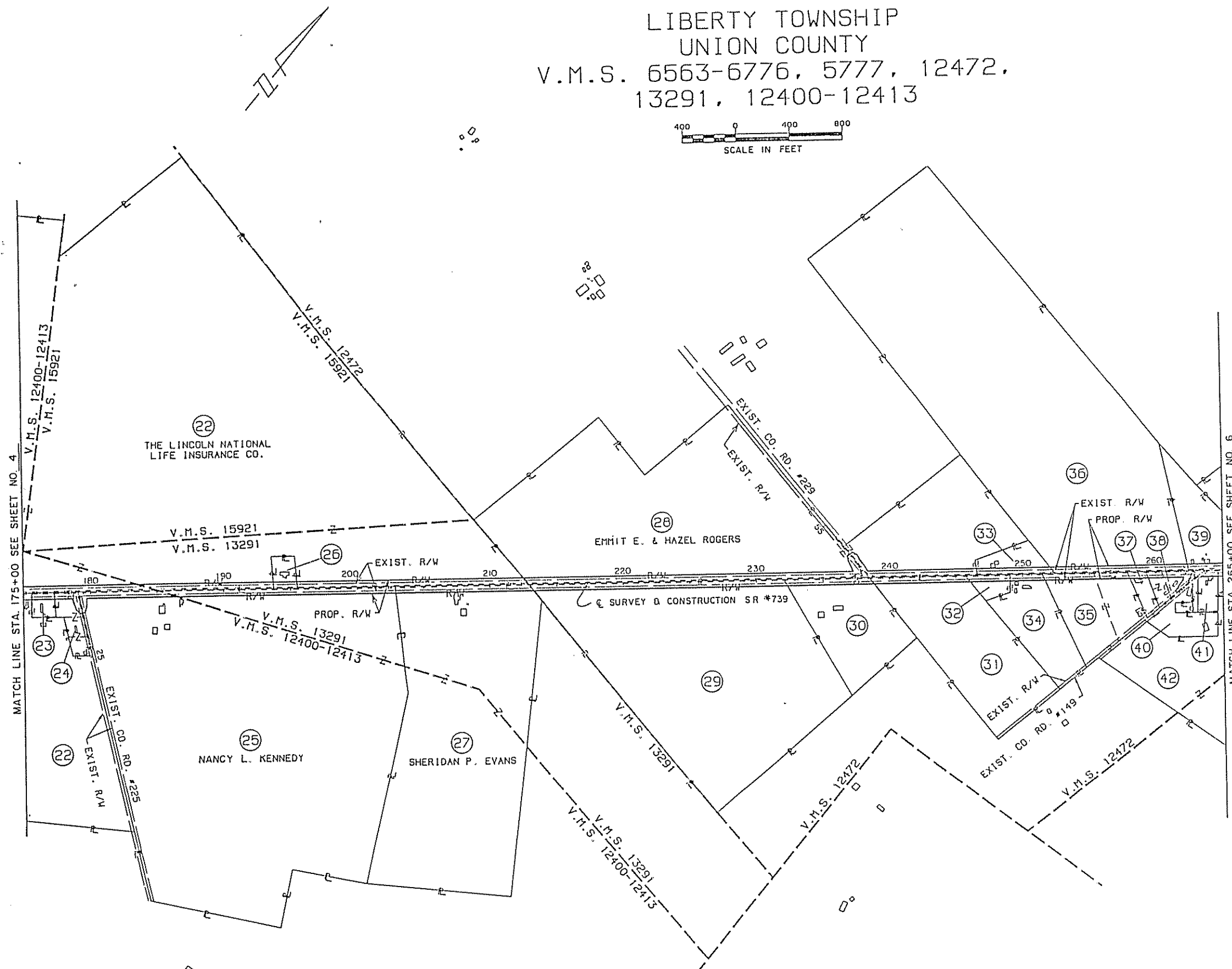
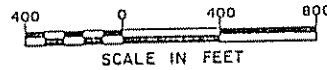
CURVE DATA
E SURVEY CO. RD. #149
P.I. STA. 68+93.45
Δ = 31° 30' 06" LT.
D = 38° 11' 50"
R = 150.00'
T = 42.31'
L = 82.47'
E = 5.85'
P.C. STA. 68+51.14
P.T. STA. 69+33.60

PROPOSED REFERENCE MONUMENTS		
STATION	LT.	RT.
230+00	50 0'	50 0'
237+30	50 0'	-
238+38.47	50 0'	-
240+00	-	50 0'
250+00	50 0'	50 0'
260+00	50 0'	50 0'
262+10	-	50 0'
263+38.70	-	50 0'
270+44.13	50 0'	-
270+53.17	-	50 0'
279+54.22	40 0'	-
279+75.90	-	40 0'
282+70	45 0'	-
282+75	-	45 0'

TYPE FUNDS		COMPLETION DATE		DESCRIPTION
REV.	DATE			

PROPERTY MAP UNI-739-2.01

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 6563-6776, 5777, 12472.
13291, 12400-12413



PARCEL #	OWNER
22	THE LINCOLN NATIONAL LIFE INSURANCE CO.
23	JOHN W & MELODY D. ENGLE
24	DAVID L. GWILLIAMS
25	NANCY L. KENNEDY
26	RONALD E. & KATHRYN I. MCKENZIE
27	SHERIDAN P. EVANS
28	EMMIT E. & HAZEL ROGERS
29	JOHN W. & SHIRLEY ANN MILEY
30	ELDRIDGE DAVID THOMAS
31	ELDRIDGE D. & DONNA LOUISE THOMAS
32	KENNETH & EDNA TAYLOR
33	GERALD D., JR. & WILMA J. TREES
34	GEORGE W., JR. & CHRISTINA EDITH BRIGHT
35	GEORGE L. & MIRIAM J. HISEY
36	DONALD W. & LILLIAN C. SCHROLUCKE & ROBERT F. & SHIRLEY L. SCHROLUCKE
37	RUSSELL K. & LINDA C. GILBERT
38	KENNETH B. & CHARLENE SEGNER
39	ALBERTA JOHNSON
40	THE CHURCH OF CHRIST IN CHRISTIAN UNION
41	MICHAEL W. & MELLISA J. SEELY
42	RICHARD D. JUSTICE

TYPE FUNDS		
COMPLETION DATE		
REV.	DATE	DESCRIPTION

TOTAL NUMBER OF ... 50
OWNERSHIPS 0
TOTAL TAKES 13
OWNERSHIPS W/STRUCTURES INVOLVED 0
OWNERSHIPS W/"P" ITEMS 0

SUMMARY OF ADDITIONAL RIGHT OF WAY

RCEL	OWNER	SHEET NO.	OWNER RECORD		RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUNDS	AUDITOR'S PARCEL NO.	REMARKS & PERSONALTY	AS ACQUIRED	
			BOOK	PAGE							LEFT	RIGHT				BOOK	PAGE
OVD	THE LINCOLN NATIONAL LIFE INSURANCE CO.	12,13,14,15	311/296	754/453	149.560	4.467	4.024	2.441	1.583	NO	143.51	-	STATE	22-0015005.000	TO CONSTRUCT SLOPES		
OT	" " " " "	12					0.107	-	0.107	↑			↑		" " "		
OT-1	" " " " "	14,15					0.263	-	0.263								
1WD	TURKEY RUN, INC.	12	282	543	198.750	3.725	0.811	0.482	0.329		-	194.696		22-0015036.000	ALL TAKE FROM #22-0015036.000	326	211
1T	" " "	12					0.122	-	0.122					22-0015037.000	TO CONSTRUCT SLOPES		
2WD	BRENT L. & AUDREY E. HEFLIN	12,13	295	414	5.186	0.618	1.008	0.618	0.390		-	4.178		22-0015055.000	TO RECONSTRUCT DRIVE	325	739
2T	" " "	13					0.021	-	0.021								
										↓							
3WD	COURTNEY L. & MARY LOU POLING	13	296	304	2.494	0.135	0.225	0.135	0.090		-	2.269		22-0015035.000	TO RECONSTRUCT DRIVE		
3T	" " "	13					0.013	-	0.013	NO							
															1.400 ACRES FROM #22-0015056.000		
4WD	JOHN H. & REBECCA A. PETEE	13,14,15	296/296	336/338	30.400	1.206	2.073	1.206	0.867	YES	-	28.327		22-0015034.000	0.673 ACRES FROM #22-0015034.000		
4T	" " "	13,14					0.049	-	0.049	NO				22-0015056.000	TO CONSTRUCT SLOPES		
4T-1	" " "	14					0.088	-	0.088	YES					TO CONSTRUCT SLOPES & REMOVE SHED		
4T-2	" " "	14,15					0.232	-	0.232	NO					" " "		
5WD	DENNIS A. & DEBORAH A. PAVER	15,16	320/324	406/174	34.380	0.505	0.841	0.505	0.336	↑	-	33.539		22-0015033.000	TO CONSTRUCT SLOPES & RECONSTRUCT DRIVE		
5T	" " "	15					0.021	-	0.021					22-0015052.000	0.007 ACRES FROM #22-0015033.000		
														22-0015033.100	0.811 ACRES FROM #22-0015052.000		
														22-0015033.200	0.023 ACRES FROM #22-0015033.200		
16WD	H. KEVIN KLINE	15,16,17	298	442	33.500	1.122	1.870	1.122	0.748		31.630	-		22-0015009.000			
16T	" " "	15					0.032	-	0.032						TO CONSTRUCT SLOPES		
16T-1	" " "	16,17					0.190	-	0.190								
17WD	THE LINCOLN NATIONAL LIFE INSURANCE CO.	16,17	311/296	754/453	50.080	0.923	1.538	0.923	0.615		-	48.542		22-0015032.000	TO CONSTRUCT SLOPES		
17T	" " " " "	16,17					0.308	-	0.308								
18WD	THEODORE FEUCHT	17	280	858	108.100	0.378	0.629	0.378	0.251		107.471	-		22-0015010.000	TO CONSTRUCT SLOPES		
18T	" " "	17					0.125	-	0.125								
										↓			↓				
19WD	JEFFREY C. & JUTTA C. PEAKE	17,18	297	119	10.000	0.192	0.319	0.192	0.127		-	9.681		22-0015031.000	TO CONSTRUCT SLOPES		
19T	" " "	17,18					0.057	-	0.057	NO			STATE				

NOTE : PARCEL NO'S. 1 THRU 9 NOT USED

TEMPORARY DURATION 18 MONTHS
IN 6 MONTH INCREMENTS

TYPE FUNDS		
COMPLETION DATE		
REV.	DATE	DESCRIPTION

TOTAL NUMBER OF ... 50
OWNERSHIPS 0
TOTAL TAKES 13
OWNERSHIPS W/STRUCTURES INVOLVED 13
OWNERSHIPS W/"P" ITEMS 0

SUMMARY OF ADDITIONAL RIGHT OF WAY

RCEL	OWNER	SHEET NO.	(C) CALCULATED		RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUNDS	AUDITOR'S PARCEL NO.	REMARKS & PERSONALTY	AS ACQUIRED	
			BOOK	PAGE							LEFT	RIGHT				BOOK	PAGE
20WD	JAMES E. & ROSEMARY RUSSELL	17,18	203	355	0.881	0.082	0.136	0.082	0.054	NO	0.745	-	STATE	22-0015011.000	TO CONSTRUCT SLOPES		
20T	" " "	17,18					0.027	-	0.027	↑			↑				
											53.332	-		22-0015012.000	TO RECONSTRUCT DRIVE		
21WD	ROBERT E. & ALICE M. RUSSELL, JAMES E. RUSSELL	18	307/281	758/72	54.119	0.472	0.787	0.472	0.315						TO RECONSTRUCT DRIVE		
21T	& GRAYCE ANN & RALPH KLEIBER	18	227/321	229/142			0.007	-	0.007						TO CONSTRUCT SLOPES		
21T-1		18					0.038	-	0.038								
															2.490 ACRES FROM #22-0015013.000		
															1.138 ACRES FROM #22-0015026.000		
22WD	THE LINCOLN NATIONAL LIFE INSURANCE CO.	18,19,20	311/296	754/453	262.160	4.170	3.628	2.177	1.451		197.557	58.197		22-0015026.000	ALL FROM # 22-0015013.000		
22WD-1	" " " "	21,22					1.974	1.189	0.785					22-0015013.000	TO CONSTRUCT SLOPES		
22T	" " " "	18,19					0.228	-	0.228						" " "		
22T-1	" " " "	18,19,20					0.544	-	0.544						" " "		
22T-2	" " " "	21,22					0.419	-	0.419								
23WD	JOHN W. & MELODY D. ENGLE	19	320	133	0.730	0.117	0.195	0.117	0.078		-	0.535		22-0015030.000	TO CONSTRUCT SLOPES		
23T	" " " "	19					0.040	-	0.040								
24WD	DAVID L. GWILLIAMS	19	278/308	132/590	1.810	0.396	0.314	0.184	0.130		-	1.284		22-0015029.000	ALL TAKE FROM # 22-0015029.000		
24T	" " " "	19	277/	29/			0.031	-	0.031					22-0015027.000	TO CONSTRUCT SLOPES		
														22-0015028.000			
25WD	NANCY L. KENNEDY	19,20,21	321	552	106.700	3.054	2.833	1.699	1.134		-	102.512		22-0015015.000	TO CONSTRUCT SLOPES		
25T	" " " "	19,20					0.172	-	0.172						" " "		
25T-1	" " " "	21					0.176	-	0.176								
26WD	RONALD E. & KATHRYN I. MCKENZIE	20,21	269	458	1.000	0.121	0.201	0.121	0.080	↓	0.799	-		22-0015014.000	TO CONSTRUCT SLOPES		
26T	" " " "	20,21					0.040	-	0.040	NO							
27WD	SHERIDAN P. EVANS	21,22	211	13	61.720	0.694	1.166	0.694	0.472	P	-	60.554		22-0015016.001	PRIVATE WOOD SIGN		
27T	" " " "	21,22					0.109	-	0.109	NO					TO CONSTRUCT SLOPES		
27T-1	" " " "	22					0.128	-	0.128	↑					" " "		
															1.090 ACRES FROM #22-0010030.000		
28WD	EMMIT E. & HAZEL ROGERS	22,23,24,25,26	181/192	607/79	65.940	3.461	4.186	2.553	1.633		60.846	-		22-0010021.000	3.096 ACRES FROM #22-0010021.000		
28T	" " " "	23,24,25					0.362	-	0.362					22-0010030.000	TO CONSTRUCT SLOPES		
28T-1	" " " "	25,26					0.188	-	0.188						" " "		
29WD	JOHN W. & SHIRLEY ANN MILEY	22,23,24	327	753	64.200	1.316	2.192	1.316	0.876	↓	-	62.008	↓	22-0010018.000	TO CONSTRUCT SLOPES		
29T	" " " "	23,24					0.266	-	0.266	NO			STATE				

TEMPORARY DURATION 18 MONTHS
IN 6 MONTH INCREMENTS

TYPE FUNDS		
COMPLETION DATE		
REV.	DATE	DESCRIPTION

TOTAL NUMBER OF ...
OWNERSHIPS
TOTAL TAKES
OWNERSHIPS W/STRUCTURES INVOLVED
OWNERSHIPS W/"P" ITEMS

50
0
13
0

SUMMARY OF ADDITIONAL RIGHT OF WAY

DEL	OWNER	SHEET NO.	OWNER RECORD		RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUNDS	AUDITOR'S PARCEL NO.	REMARKS & PERSONALTY	AS ACQUIRED	
			BOOK	PAGE							LEFT	RIGHT				BOOK	PAGE
1WD 1T	ELDRIDGE DAVID THOMAS	24,25	283	713	10.840	0.445	0.743	0.445	0.298	YES	-	10.097	STATE	22-0010019.000	CONSTR. SLOPES. REMOVE GARAGE		
	" " "	24,25					0.176	-	0.176	YES							
1WD 1T	ELDRIDGE D. & DONNA LOUISE THOMAS	25,26	218/316	493/97	18.500	0.841	0.629	0.497	0.332	NO	-	17.327		22-0010015.000	TO CONSTRUCT SLOPES		
	" " "	25,26					0.166	-	0.166								
2WD 2T	KENNETH & EDNA TAYLOR	26	307	339	1.810	0.226	0.367	0.226	0.141	YES	-	1.443		22-0010013.000	TO CONSTRUCT SLOPES & REMOVE SHED		
	" " "	26					0.082	-	0.082	YES							
3WD 3T 3T-1	GERALD D. JR. & WILMA J. TREES	26	293	425	2.060	0.393	0.648	0.393	0.255	YES	1.412	-		22-0010014.000	TO CONSTRUCT SLOPES, REMOVE RES. & GAR.	325	736
	" " "	26					0.145	-	0.145	YES					TO RECONSTRUCT DRIVE		
	" " "	26					0.024	-	0.024	NO							
4WD 4T	GEORGE W. JR. & CHRISTINE EDITH BRIGHT	26	267	510	6.260	0.326	0.286	0.168	0.118	YES	-	5.816		22-0010012.000	CONSTR. SLOPES. REMOVE SHED		
	" " "	26					0.114	-	0.114	YES							
5WD 5T	GEORGE L. & MIRIAM J. HISEY	26,27	192	399	7.250	0.783	0.732	0.439	0.293	NO	-	6.174		22-0010011.000	TO CONSTRUCT SLOPES		
	" " "	26,27					0.155	-	0.155								
36WD 36T	DONALD W. & LILLIAN C. SCHROLUCKE, ROBERT F. & SHIRLEY L. SCHROLUCKE	26,27	272	889	86.970	0.698	1.169	0.698	0.471		85.801	-		22-0010007.000	TO CONSTRUCT SLOPES		
		26,27					0.243	-	0.243								
37WD 37T	RUSSELL K. & LINDA C. GILBERT	27	268	27	1.102	0.168	0.160	0.096	0.064		-	0.870		22-0010010.000	TO CONSTRUCT SLOPES		
	" " "	27					0.012	-	0.012								
38WD 38T	KENNETH B. & CHARLENE SEGNER	27	192/196	150/457	1.648	0.505	0.611	0.386	0.225	NO	-	0.918		22-0010008.001	TO CONSTRUCT SLOPES		
	" " "	27	196	459			0.061	-	0.061								
39WD 39T 39T-1	ALBERTA JOHNSON	27,28	228/185	51/621	7.030	0.381	0.630	0.381	0.249	YES	6.400	-		22-0020034.000	RECONSTR. DRIVE. REMOVE RES.		
	" " "	27					0.051	-	0.051	YES			STATE		TO CONSTRUCT SLOPES		
	" " "	28					0.032	-	0.032	NO							

TEMPORARY DURATION 18 MONTHS
IN 6 MONTH INCREMENTS

TYPE FUNDS		COMPLETION DATE		DESCRIPTION
REV.	DATE	REV.	DATE	

TOTAL NUMBER OF ...
OWNERSHIPS
TOTAL TAKES
OWNERSHIPS W/STRUCTURES INVOLVED
OWNERSHIPS W/"P" ITEMS

50
0
2
5

SUMMARY OF ADDITIONAL RIGHT OF WAY

PARCEL	OWNER	SHEET NO.	(C) CALCULATED		RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUNDS	AUDITOR'S PARCEL NO.	REMARKS AND PERSONALTY	AS ACQUIRED	
			BOOK	PAGE							LEFT	RIGHT				BOOK	PAGE
8WD	KENNETH B. & CHARLENE SEGNER	28	192/196	150/457	1.648	0.505	0.611	0.386	0.225	(P)	-	0.916	STATE	22-0010008.000	(P) GRAPE ARBOR & VINES TO CONSTRUCT SLOPES		
8T	" " " "	28	196	459			0.611	-	0.061	(P)					TO CONSTRUCT DRIVE, (P) R.R. TIES		
8T-1	" " " "	28					0.016	-	0.016								
9WD	ALBERTA JOHNSON	28.29	228/185	51/621	7.030	0.381	0.575	0.381	0.194	NO	6.455	-		22-0020034.000			
										↑							
										↓							
OT	THE TRUSTEES OF THE CHURCH OF CHRIST IN CHRISTIAN UNION	28	173/234	362/374	2.404 (C)	0.000	0.009	0.000	0.009	NO	-	2.404		22-0020052.001 22-0020054.000	LOTS #17, 18, & 19, HAINES ADD. * TO CONSTRUCT SLOPES ALL TAKE FROM #22-0020052.001		
11WD	MICHAEL W. & MELLISA J. SEELY	28.29	311	497	0.980 (C)	0.022	0.048	0.022	0.026	(P)	-	0.932		22-0020039.001 22-0020045.001	LOTS #11 THRU 16, #23 THRU 26 HAINES ADDITION ALL TAKE FROM #22-0020039.001		
															(P) LIGHT, FLOWER GARDEN IN TIRE, ROCK GARDEN (P) R.R. TIES AT 2 TREES		
12WD	RICHARD D. JUSTICE	28.30	298	579	27.000	0.088	0.243	0.088	0.155	(P)	-	26.757		22-0020037.001			
43WD	LAWRENCE D. & VICKIL SMITH	29.30	323	523	8.930	0.214	0.386	0.214	0.172	NO	8.486	0.058		22-0020033.001			
										↑							
44WD	MILLCREEK COONHUNTERS ASSOCIATION, INC.	30	317	409	0.250	0.098	0.164	0.098	0.066		-	0.086		22-0020036.000			
45WD	CONRAIL	30.31					0.378	0.283	0.095						TO CONSTRUCT SLOPES & DRIVE		
45T	"	30					0.204	0.091	0.113						TO CONSTRUCT STORM SEWER		
45T-1	"	31					0.009	-	0.009						SEWER EASEMENT		
45S	"	31					21 S.F.	0	21 S.F.								
46WD	JERRY TIM LANE	30.31, 32	306/240	311/438	2.320	0.388	0.572	0.308	0.184	NO	1.748	-		22-0020030.001	TO CONSTRUCT DRIVE & REMOVE HOUSE		
46T	"	31	305	766			0.139	-	0.139	YES							
47WD	JAMES L. WOODSON, EDGAR P. WOODSON,	31	243/311	409/61	4.890	0.059	0.089	0.059	0.030	NO	-	4.801		22-0020059.001	STORM SEWER		
47S	HAZEL L. BURTON, WILLIAM C. WOODSON	31.34					0.110	-	0.110	↑					TO CONSTRUCT STORM SEWER		
47T	THOMAS E. WOODSON, JR.	31.34					0.654	47S=0.110	0.544	↓							
48WD	TOMMY LEE & LINDA C. CUNNINGHAM	31.32	308/273	563/615	0.730	0.151	0.161	0.151	0.010	NO	-	0.569		22-0020061.000 22-0020062.000 22-0020063.000	0.086 ACRES FROM #22-0020061.000 0.0375 ACRES FROM #22-0020062.000 0.0375 ACRES FROM #22-0020063.000		
49WD	DONALD M. & PAMELA ANN JONES	32	306 275	313 888	1.770	0.113	0.113	0.113	0.000	(P)	1.657	-	STATE	22-0020028.001	(P) WOOD ARCH		

* TEMPORARY DURATION 18 MONTHS
IN 6 MONTH INCREMENTS

TYPE FUNDS: STATE

REV.	DATE	DESCRIPTION
1/1	5/7/93	REVISED PCL 43WD

TOTAL NUMBER OF ... OWNERSHIPS
TOTAL TAKES OWNERSHIPS W/STRUCTURES INVOLVED
OWNERSHIPS W/"P" ITEMS

50
0
2
5

SUMMARY OF ADDITIONAL RIGHT OF WAY

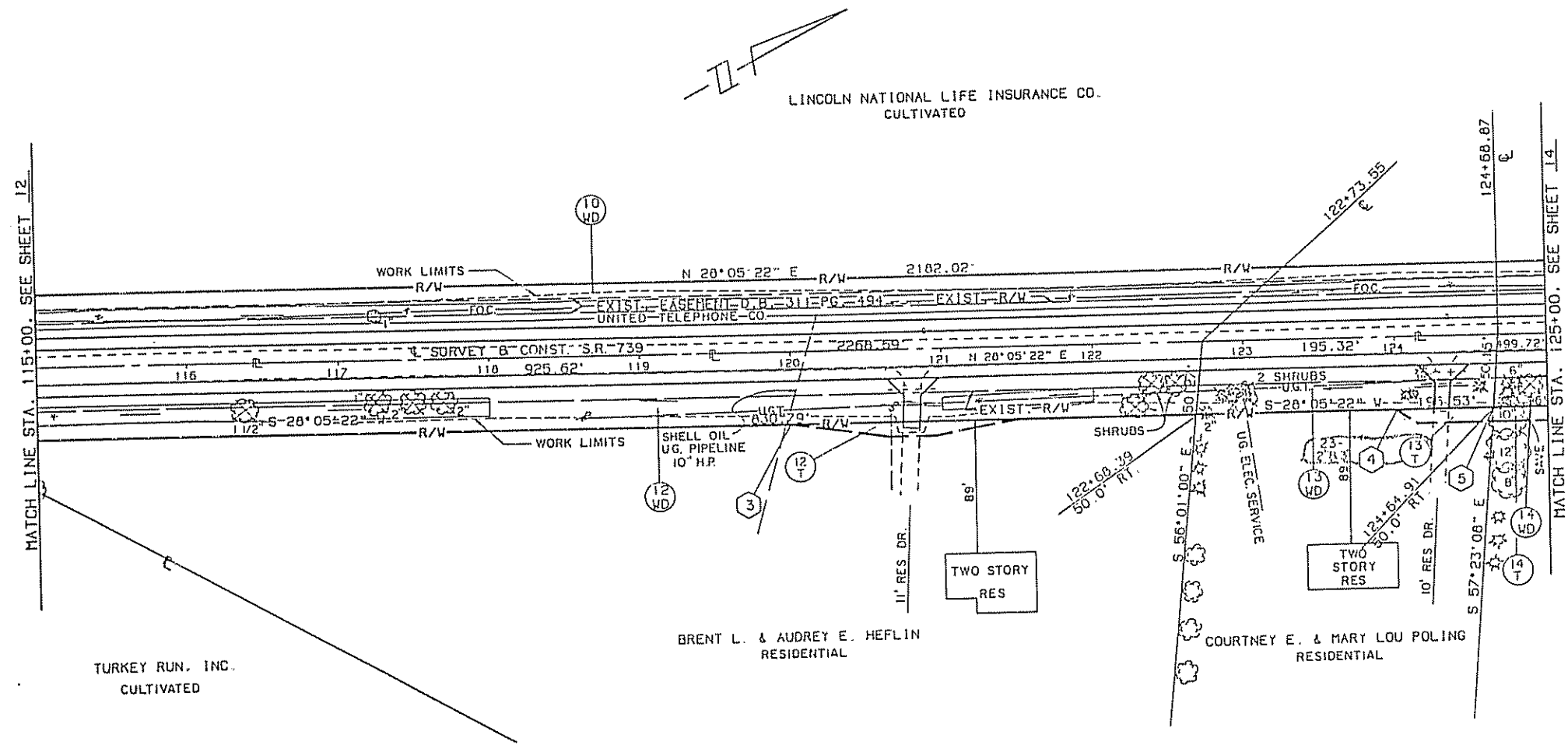
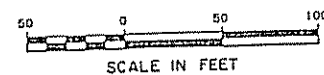
ARCEL	OWNER	SHEET NO.	OWNER RECORD		RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUNDS	AUDITOR'S PARCEL NO.	REMARKS AND PERSONALTY	AS ACQUIRED	
			BOOK	PAGE							LEFT	RIGHT				BOOK	PAGE
50WD	GREG A. & KIMBERLY ERWIN	32	321	453	0.803	0.156	0.156	0.156	0.000	NO	-	0.647	STATE	22-0020064.000	TO RECONSTRUCT DRIVE		
50T	" " "	32					0.006	-	0.006	↗							
51WD	WILLIAM, JR. & BRENDA KAY HUDSON	32	251	482	0.243 (C)	0.054	0.054	0.054	0.000		0.189	-		22-0020027.000	TO RECONSTRUCT DRIVE		
51T	" " "	32					0.003	-	0.003						TO RECONSTRUCT DRIVE		
51T-1	" " "	32					0.004	-	0.004								
52WD	KENNETH F. TILLMAN	32	290	563	0.350	0.083	0.083	0.083	0.000		0.267	-		22-0020026.000	TO RECONSTRUCT DRIVE		
52T	" " "	32					0.001	-	0.001								
53WD	EDNA ELLIOTT	32,33	287	610	0.230	0.068	0.068	0.068	0.000		0.162	-		22-0020025.000	TO CONSTRUCT DRIVE		
53T	" " "	32					0.006	-	0.006								
54WD	SAMUEL D. & TERESA L. JACKSON	32,33	305	147	1.360	0.118	0.118	0.118	0.000	NO	-	1.242		22-0020065.000	TO RECONSTRUCT DRIVE		
54T	" " "	33	307	535			0.046	-	0.046	(P)					TO RECONSTRUCT ALLEY		
54T-1	" " "	33					0.001	-	0.001	NO					(P) 2 FLOWER BEDS WITH SIGNS		
55WD	RICHARD E. & JANICE E. TILLMAN	33	286	45	0.219 (C)	0.052	0.052	0.052	0.000	YES	0.167	-		22-0020024.000	TO REMOVE HOUSE		
55T	" " "	33					0.084	-	0.084								
56WD	BOARD OF LIBERTY TOWNSHIP TRUSTEES	33	269	52	0.231 (C)	0.000	0.003	0.000	0.003	NO	0.228	-		22-0020023.000	LOT # 17, TOWN OF RAYMOND TO RECONSTRUCT DRIVE		
56T	" " "	33					0.031	-	0.031	↗							
57	JON K. & ELLEN L. KLEIBER	33	300/318	690/178	0.197 (C)						-	-		22-0020068.000	PT. OF LOT #18, TOWN OF RAYMOND NO R/W REQUIRED		
58WD	TRUSTEES OF LIBERTY TOWNSHIP	33	76	452	0.078 (C)	0.000	0.002	0.000	0.002		-	0.076		22-0020069.000	PT. OF LOT #18, TOWN OF RAYMOND		
59S	LIBERTY LOCAL BOARD OF EDUCATION	34	183	485	24.36		0.138	0.000	0.138	↘	-	24.36			STORM SEWER EASEMENT		
59T	" " "	34					0.026	59S=0.138	0.688	NO			STATE		TO BUILD STORM SEWER		

* TEMPORARY DURATION 18 MONTHS
IN 6 MONTH INCREMENTS

TYPE FUNDS: STATE		
COMPLETION DATE		
REV.	DATE	DESCRIPTION
1/11	5-13-98	REVISED PCL 50W 0

[illegible]

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12400-12413



- 10 WD LINCOLN NATIONAL LIFE INSURANCE CO.
GROSS TAKE = 4.024 ACRES
P.R.O. IN TAKE = 2.441 ACRES
NET TAKE = 1.583 ACRES
- 10 T SEE SHEET NO. 12.
- 10 T-1 SEE SHEET NO. 14 & 15
- 12 WD BRENT L. & AUDREY E. HEFLIN
GROSS TAKE = 1.008 ACRES
P.R.O. IN TAKE = 0.618 ACRES
NET TAKE = 0.390 ACRES
- 12 T GROSS TAKE = 0.021 ACRES
- 13 WD COURTNEY E. & MARY LOU POLING
GROSS TAKE = 0.225 ACRES
P.R.O. IN TAKE = 0.135 ACRES
NET TAKE = 0.090 ACRES
- 13 T GROSS TAKE = 0.013 ACRES
- 14 WD JOHN H. & REBECCA A. PETEE
GROSS TAKE = 2.073 ACRES
P.R.O. IN TAKE = 1.206 ACRES
NET TAKE = 0.867 ACRES
- 14 T GROSS TAKE = 0.049 ACRES
- 14 T-1 SEE SHEET NO. 14.
- 14 T-2 SEE SHEET NO. 14 & 15

PARCEL # 12 - T

3	120 + 00.00	50.0' RT.	
	N 28° 05' 22" E		150.00'
	121 + 50.00	50.0' RT.	
	S 17° 47' 05" W		55.90'
	120 + 95.00	60.0' RT.	
	S 28° 05' 22" W		30.00'
	120 + 65.00	60.0' RT.	
	S 36° 50' 08" W		65.76'
	120 + 00.00	50.0' RT.	

PARCEL # 13 - T

4	124 + 00.00	50.0' RT.	
	N 28° 05' 22" E		64.91'
	124 + 64.91	50.0' RT.	
	S 57° 23' 08" E		10.03'
	124 + 64.12	60.0' RT.	
	S 28° 05' 22" W		49.12'
	124 + 15.00	60.0' RT.	
	S 61° 46' 46" W		18.03'
	124 + 00.00	50.0' RT.	

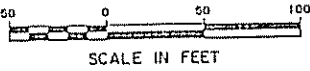
PARCEL # 14 - T

5	124 + 64.91	50.0' RT.	
	N 28° 05' 22" E		212.14'
	126 + 77.05 (TAN.)	50.0' RT.	
	S 61° 54' 38" E		10.00'
	126 + 77.05 (TAN.)	60.0' RT.	
	S 28° 05' 22" W		212.93'
	124 + 64.12	60.0' RT.	
	N 57° 23' 08" W		10.03'
	124 + 64.91	50.0' RT.	

TYPE FUNDS

COMPLETION DATE			DESCRIPTION
REV.	DATE		

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12400-12413



LINCOLN NATIONAL LIFE INSURANCE CO.
CULTIVATED

JOHN H. & REBECCA A. PETEE
RESIDENTIAL

PROPOSED CURVE DATA
C/L SURVEY S.R. #739
P.I. STA. 129+66.59
 $\Delta = 22^\circ 37' 46''$ RT
 $\Delta c = 07^\circ 37' 46''$ RT
 $D = 06^\circ 00' 00''$
 $R = 954.93'$
 $T = 63.67'$
 $L = 127.16'$
 $O s = 07^\circ 30' 00''$
 $L s = 250.00'$
 $T s = 316.54'$
 $L T = 166.62'$
 $S T = 83.47'$
 $E s = 21.71'$

PARCEL # 10 - T-1

⑦	130 + 54.20 (TAN.)	50.0' LT.	
	N 39° 24' 32" E		50.99'
	131 + 04.20 (TAN.)	60.0' LT.	
	N 50° 43' 08" E		1,122.55'
	142 + 26.75	60.0' LT.	
	S 32° 01' 52" E		10.08'
	142 + 25.48	50.0' LT.	
	S 50° 43' 08" W		1,171.28'
	130 + 54.20 (TAN.)	50.0' LT.	

LINCOLN NATIONAL LIFE INSURANCE CO.
GROSS TAKE = 4.024 ACRES
P.R.O. IN TAKE = 2.441 ACRES
NET TAKE = 1.583 ACRES

SEE SHEET NO. 12

GROSS TAKE = 0.263 ACRES

JOHN H. & REBECCA A. PETEE
GROSS TAKE = 2.073 ACRES
P.R.O. IN TAKE = 1.206 ACRES
NET TAKE = 0.867 ACRES

GROSS TAKE = 0.049 ACRES

GROSS TAKE = 0.088 ACRES

GROSS TAKE = 0.232 ACRES

PARCEL # 14 - T-1

⑥	127 + 07.05 (TAN.)	50.0' RT.	
	N 28° 05' 22" E		111.82'
	128 + 16.59 (TAN.)	50.0' RT.	
	N 32° 11' 20" E		77.08'
	129 + 02.05	45.0' RT.	
	N 41° 46' 13" E		120.84'
	130 + 29.20	50.0' RT.	
	N 46° 36' 59" E		76.42'
	131 + 12.38 (TAN.)	55.0' RT.	
	N 49° 00' 07" E		16.83'
	131 + 29.20 (TAN.)	54.5' RT.	
	S 23° 00' 36" W		22.59'
	131 + 09.20 (TAN.)	65.0' RT.	
	S 46° 25' 43" W		71.94'
	130 + 29.20	60.0' RT.	
	S 41° 47' 47" W		119.51'
	129 + 02.05	55.0' RT.	
	S 32° 05' 55" W		77.58'
	128 + 17.05 (TAN.)	60.0' RT.	
	S 28° 05' 22" W		100.00'
	127 + 17.05 (TAN.)	60.0' RT.	
	S 73° 05' 22" W		14.14'
	127 + 07.05 (TAN.)	50.0' RT.	

PARCEL # 14 - T-2

⑧	131 + 89.20 (TAN.)	52.7' RT.	
	N 49° 00' 07" E		90.04'
	132 + 79.20	50.0' RT.	
	N 50° 43' 08" E		937.10'
	142 + 16.30	50.0' RT.	
	S 36° 03' 36" E		10.02'
	142 + 15.74	60.0' RT.	
	S 50° 43' 08" W		1,011.54'
	132 + 04.20 (TAN.)	60.0' RT.	
	S 76° 40' 37" W		16.68'
	131 + 89.20 (TAN.)	52.7' RT.	

PARCEL # 14 - T

⑤	124 + 64.91	50.0' RT.	
	N 28° 05' 22" E		212.14'
	126 + 77.05 (TAN.)	50.0' RT.	
	S 61° 54' 38" E		10.00'
	126 + 77.05 (TAN.)	60.0' RT.	
	S 28° 05' 22" W		212.93'
	124 + 64.12	60.0' RT.	
	N 57° 23' 08" W		10.03'
	124 + 64.91	50.0' RT.	

TYPE FUNDS

COMPLETION DATE		DESCRIPTION
REV.	DATE	

R/W PLAN S.R. 739 STA. 125+00 TO STA. 135+00

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12400-12413

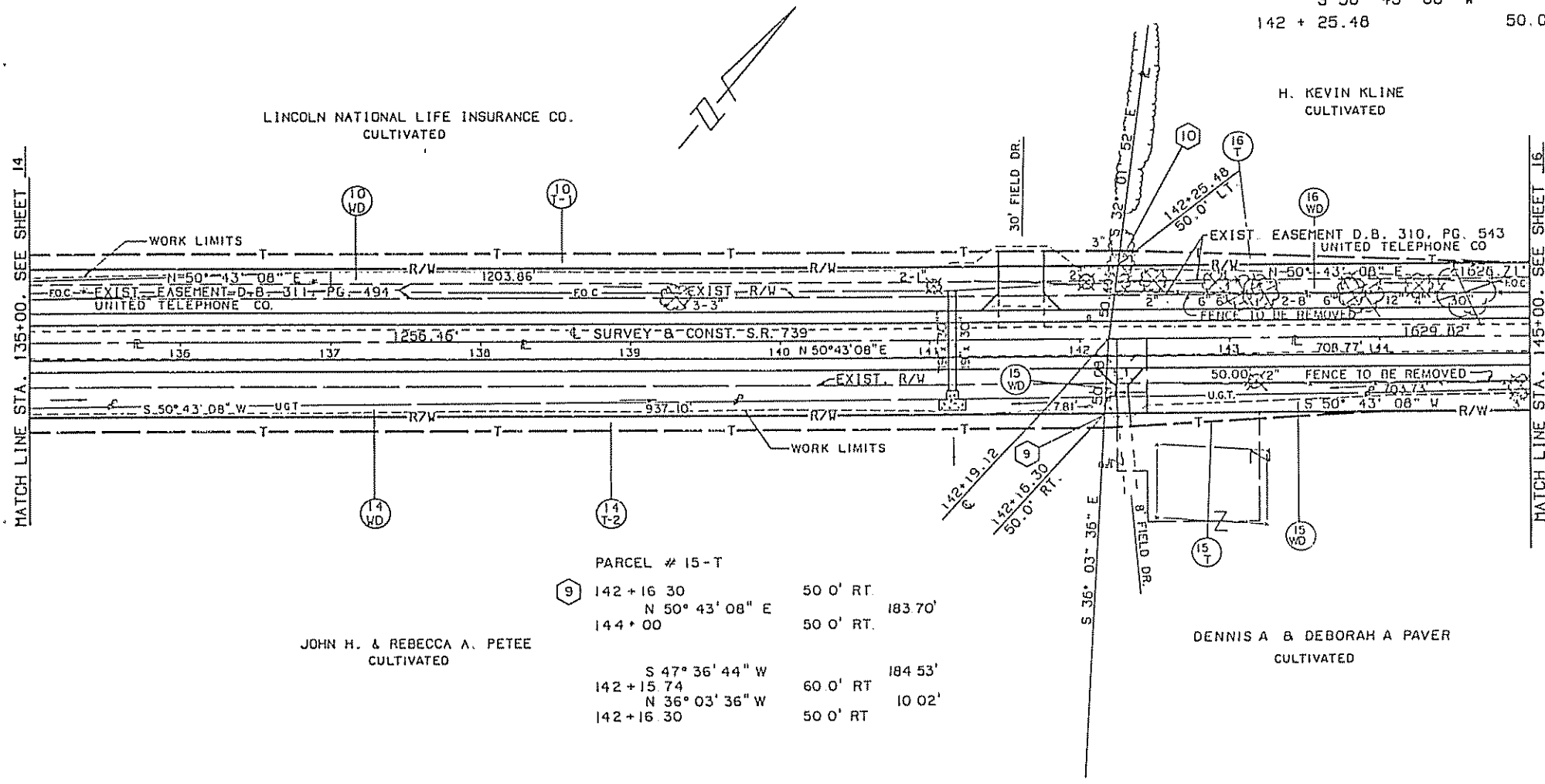
PARCEL # 10 - T-1

- 6 130 + 54.20 (TAN.) 50.0' LT. 50.99'
N 39° 24' 32" E
131 + 04.20 (TAN.) 60.0' LT. 1.122.55'
N 50° 43' 08" E
142 + 26.75 60.0' LT. 10.08'
S 32° 01' 52" E
142 + 25.48 50.0' LT. 1.171.28'
S 50° 43' 08" W
130 + 54.20 (TAN.) 50.0' LT.



PARCEL # 16 - T

- 10 142 + 25.48 50.0' LT. 10.08'
N 32° 01' 52" W
142 + 26.75 60.0' LT. 273.43'
N 52° 48' 53" E
145 + 00.00 50.0' LT. 274.52'
S 50° 43' 08" W
142 + 25.48 50.0' LT.



PARCEL # 15 - T

- 9 142 + 16.30 50.0' RT. 183.70'
N 50° 43' 08" E
144 + 00 50.0' RT.
S 47° 36' 44" W 184.53'
142 + 15.74 60.0' RT. 10.02'
N 36° 03' 36" W
142 + 16.30 50.0' RT.

JOHN H. & REBECCA A. PETEE
CULTIVATED

DENNIS A & DEBORAH A PAVER
CULTIVATED

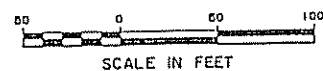
PARCEL # 14 - T-2

- 8 131 + 89.20 (TAN.) 52.7' RT. 90.04'
N 49° 00' 07" E
132 + 79.20 50.0' RT. 937.10'
N 50° 43' 08" E
142 + 16.30 50.0' RT. 10.02'
S 36° 03' 36" E
142 + 15.74 60.0' RT. 1.011.54'
S 50° 43' 08" W
132 + 04.20 (TAN.) 60.0' RT. 16.68'
S 76° 40' 37" W
131 + 89.20 (TAN.) 52.7' RT.

- 10 WD LINCOLN NATIONAL LIFE INSURANCE CO.
GROSS TAKE = 4.024 ACRES
P.R.O. IN TAKE = 2.441 ACRES
NET TAKE = 1.583 ACRES
10 T SEE SHEET NO. 12
10 T-1 GROSS TAKE = 0.263 ACRES
14 WD JOHN H. & REBECCA A. PETEE
GROSS TAKE = 2.073 ACRES
P.R.O. IN TAKE = 1.206 ACRES
NET TAKE = 0.867 ACRES
14 T SEE SHEET NO. 13 & 14
14 T-1 SEE SHEET NO. 14
14 T-2 GROSS TAKE = 0.232 ACRES
15 WD DENNIS A. & DEBORAH A. PAVER
GROSS TAKE = 0.841 ACRES
P.R.O. IN TAKE = 0.505 ACRES
NET TAKE = 0.336 ACRES
15 T GROSS TAKE = 0.021 ACRES
16 WD H. KEVIN KLINE
GROSS TAKE = 1.870 ACRES
P.R.O. IN TAKE = 1.122 ACRES
NET TAKE = 0.748 ACRES
16 T GROSS TAKE = 0.032 ACRES
16 T-1 SEE SHEET NO. 16 & 17

TYPE FUNDS		
COMPLETION DATE		
REV.	DATE	DESCRIPTION

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12400-12413



CALC. BY DATE	UNI-739-2.01	OHIO
CHECKED BY DATE		FHWA REGION 5

159
177
16
34

(15) DENNIS A. & DEBORAH A. PAVER
WD SEE SHEET NO 15

PARCEL # 16 - T-1

(12)	150 + 25.00	50.0' LT.	
	N 39° 16' 52" W		10.00'
	150 + 25.00	60.0' LT.	830.24'
	N 50° 43' 08" E		
	158 + 55.24	60.0' LT.	10.06'
	S 33° 16' 52" E		
	158 + 54.19	50.0' LT.	629.19'
	S 50° 43' 08" W		
	150 + 25.00	50.0' LT.	

(15) SEE SHEET NO 15
T

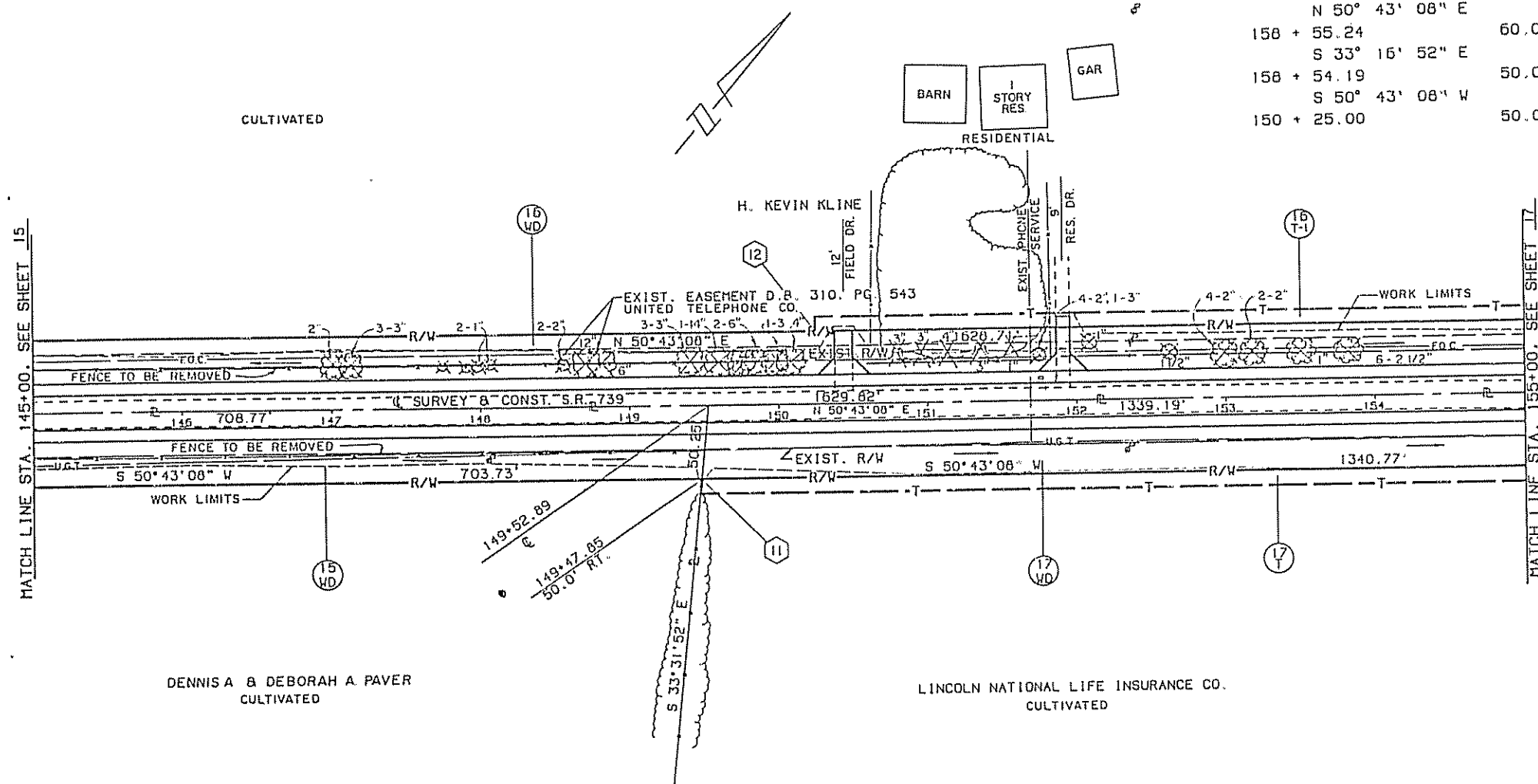
(16) H. KEVIN KLINE
WD GROSS TAKE = 1.870 ACRES
P.R.O. IN TAKE = 1.122 ACRES
NET TAKE = 0.748 ACRES

(16) SEE SHEET NO. 15.
T

(16) GROSS TAKE = 0.190 ACRES
T-1

(17) LINCOLN NATIONAL LIFE INSURANCE CO.
WD GROSS TAKE = 1.538 ACRES
P.R.O. IN TAKE = 0.923 ACRES
NET TAKE = 0.615 ACRES

(17) GROSS TAKE = 0.308 ACRES
T



PARCEL # 17 - T

(11)	149 + 47.85	50.0' RT.	
	N 50° 43' 08" E		1.340.77'
	162 + 88.62	50.0' RT.	
	S 35° 19' 50" E		10.02'
	162 + 87.93	60.0' RT.	
	S 50° 43' 08" W		1.341.08'
	149 + 46.85	60.0' RT.	
	N 33° 31' 52" W		10.05'
	149 + 47.85	50.0' RT.	

TYPE FUNDS

COMPLETION DATE		DESCRIPTION
REV.	DATE	

R/W PLAN S.R. 739 STA. 145+00 TO STA. 155+00

LIBERTY TOWNSHIP UNION COUNTY V.M.S. 12400-12413

PARCEL # 20 - T

CALC. BY DATE CHK. BY DATE	01110 UN1-739-2.01 FINRA REGION 5	160 177 17 34
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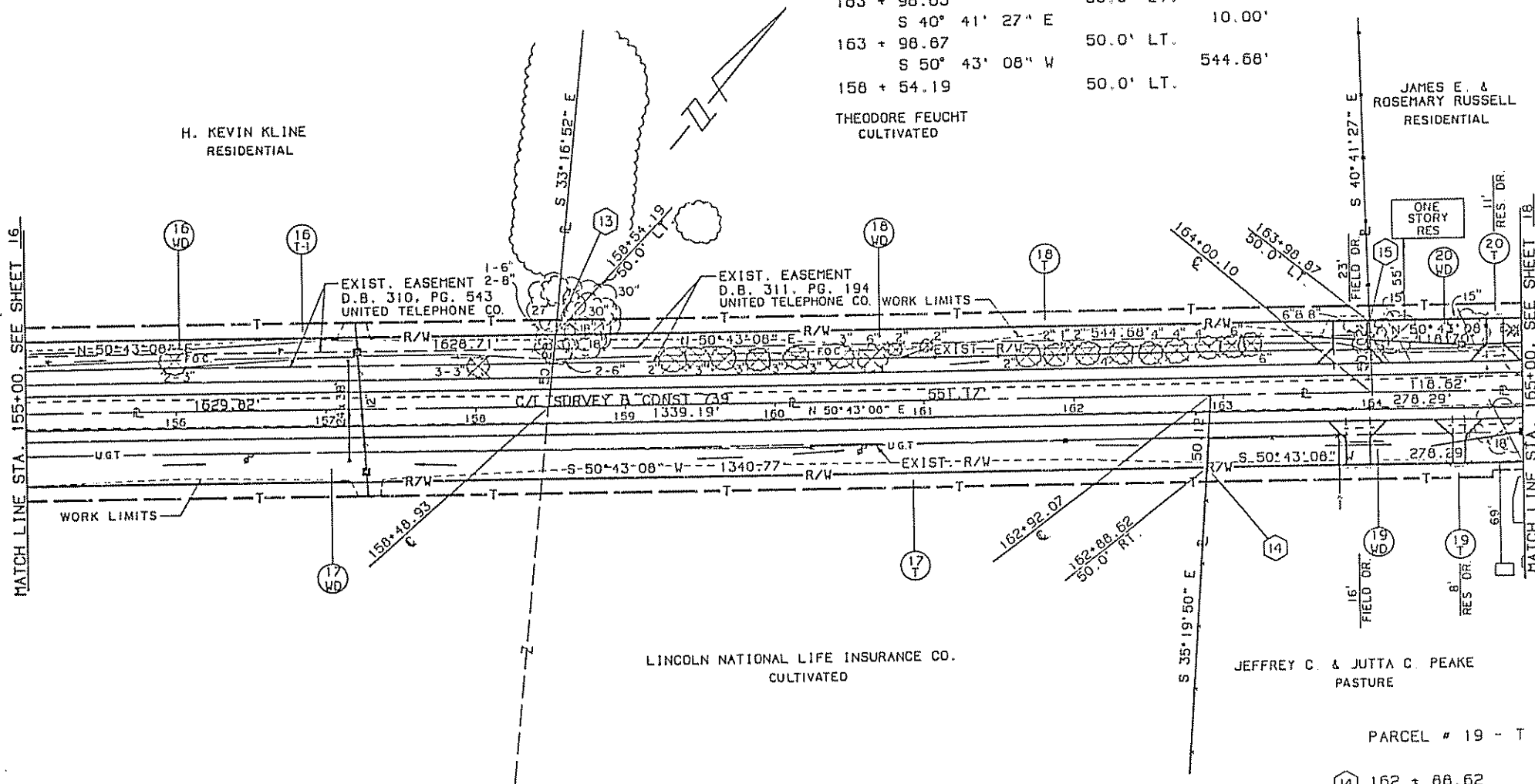
PARCEL # 16 - T-1

12	150 + 25.00	50.0' LT.	10.00'
	N 39° 16' 52" W		
	150 + 25.00	60.0' LT.	830.24'
	N 50° 43' 08" E		
	158 + 55.24	60.0' LT.	10.06'
	S 33° 16' 52" E		
	158 + 54.19	50.0' LT.	829.19'
	S 50° 43' 08" W		
	150 + 25.00	50.0' LT.	

PARCEL # 18 - T

13	158 + 54.19	50.0' LT.	10.06'
	N 33° 16' 52" W		
	158 + 55.24	60.0' LT.	543.39'
	N 50° 43' 08" E		
	163 + 98.63	60.0' LT.	10.00'
	S 40° 41' 27" E		
	163 + 98.87	50.0' LT.	544.68'
	S 50° 43' 08" W		
	158 + 54.19	50.0' LT.	

15	163 + 98.87	50.0' LT.	10.00'
	N 40° 41' 27" W		
	163 + 98.63	60.0' LT.	118.72'
	N 50° 43' 08" E		
	165 + 17.35	60.0' LT.	10.00'
	S 40° 35' 27" E		
	165 + 17.58	50.0' LT.	118.70'
	S 50° 43' 08" W		
	163 + 98.87	50.0' LT.	



H. KEVIN KLINE
GROSS TAKE = 1.870 ACRES
P.R.O. IN TAKE = 1.122 ACRES
NET TAKE = 0.748 ACRES

SEE SHEET NO. 15

GROSS TAKE = 0.190 ACRES

LINCOLN NATIONAL LIFE INSURANCE CO.
GROSS TAKE = 1.538 ACRES
P.R.O. IN TAKE = 0.923 ACRES
NET TAKE = 0.615 ACRES

GROSS TAKE = 0.308 ACRES

THEODORE FEUCHT
GROSS TAKE = 0.629 ACRES
P.R.O. IN TAKE = 0.378 ACRES
NET TAKE = 0.251 ACRES

GROSS TAKE = 0.125 ACRES

JEFFREY C. & JUTTA C. PEAKE
GROSS TAKE = 0.319 ACRES
P.R.O. IN TAKE = 0.192 ACRES
NET TAKE = 0.127 ACRES

GROSS TAKE = 0.057 ACRES

JAMES E. & ROSEMARY RUSSELL
GROSS TAKE = 0.136 ACRES
P.R.O. IN TAKE = 0.082 ACRES
NET TAKE = 0.054 ACRES

GROSS TAKE = 0.027 ACRES

PARCEL # 17 - T

11	149 + 47.85	50.0' RT.	1,340.77'
	N 50° 43' 08" E		
	162 + 88.62	50.0' RT.	10.02'
	S 35° 19' 50" E		
	162 + 87.93	60.0' RT.	1,341.08'
	S 50° 43' 08" W		
	149 + 46.85	60.0' RT.	10.05'
	N 33° 31' 52" W		
	149 + 47.85	50.0' RT.	

PARCEL # 19 - T

14	162 + 88.62	50.0' RT.	278.29'
	N 50° 43' 08" E		
	165 + 66.91	50.0' RT.	10.02'
	S 35° 19' 50" E		
	165 + 66.22	60.0' RT.	26.22'
	S 50° 43' 08" W		
	165 + 40.00	60.0' RT.	5.00'
	N 39° 16' 52" W		
	165 + 40.00	55.0' RT.	60.00'
	S 50° 43' 08" W		
	164 + 80.00	55.0' RT.	5.00'
	S 39° 16' 52" E		
	164 + 80.00	60.0' RT.	192.07'
	S 50° 43' 08" W		
	162 + 87.93	60.0' RT.	10.02'
	N 35° 19' 50" W		
	162 + 88.62	50.0' RT.	

TYPE FUNDS

COMPLETION DATE		DESCRIPTION
REV.	DATE	

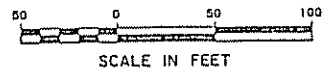
R/W PLAN S.R. 739 STA. 155+00 TO 157+00

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12400-12413

PARCEL # 20 - T

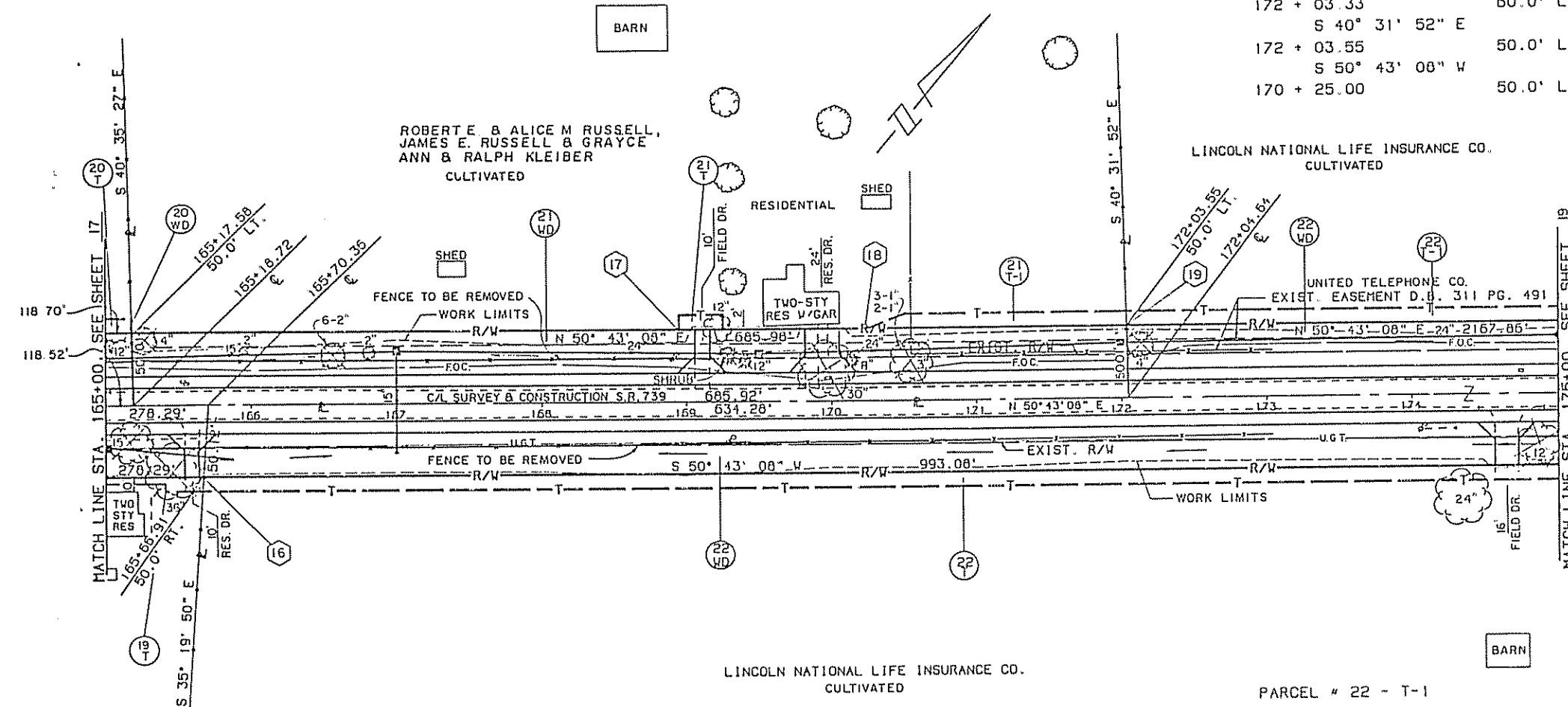
PARCEL # 21 - T

3 + 98.87	50.0' LT.	17	168 + 95.00	50.0' LT.	
N 40° 41' 27" W	10.00'		N 39° 16' 52" W	10.00'	
3 + 98.63	60.0' LT.		168 + 95.00	60.0' LT.	
N 50° 43' 08" E	118.72'		N 50° 43' 08" E	30.00'	
5 + 17.35	60.0' LT.		169 + 25.00	60.0' LT.	
S 40° 35' 27" E	10.00'		S 39° 16' 52" E	10.00'	
5 + 17.58	50.0' LT.		169 + 25.00	50.0' LT.	
S 50° 43' 08" W	118.70'		S 50° 43' 08" W	30.00'	
3 + 98.87	50.0' LT.		168 + 95.00	50.0' LT.	



PARCEL # 21 - T-1

18	170 + 25.00	50.0' LT.	
	N 28° 55' 02" E	26.93'	
	170 + 50.00	60.0' LT.	
	N 50° 43' 08" E	153.33'	
	172 + 03.33	60.0' LT.	
	S 40° 31' 52" E	10.00'	
	172 + 03.55	50.0' LT.	
	S 50° 43' 08" W	178.55'	
	170 + 25.00	50.0' LT.	



19	WD	JEFFREY C. & JUTTA C. PEAKE
		GROSS TAKE = 0.319 ACRES
		P.R.O. IN TAKE = 0.192 ACRES
		NET TAKE = 0.127 ACRES

19	T	GROSS TAKE = 0.057 ACRES
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20	WD	JAMES E. & ROSEMARY RUSSELL
		GROSS TAKE = 0.136 ACRES
		P.R.O. IN TAKE = 0.082 ACRES
		NET TAKE = 0.054 ACRES

20	T	GROSS TAKE = 0.027 ACRES
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21	WD	ROBERT E. & ALICE M. RUSSELL, JAMES E. & RUSSELL & GRAYCE ANN & RALPH KLEIBER
		GROSS TAKE = 0.787 ACRES
		P.R.O. IN TAKE = 0.472 ACRES
		NET TAKE = 0.315 ACRES

21	T	GROSS TAKE = 0.007 ACRES
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21	T-1	GROSS TAKE = 0.038 ACRES
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22	WD	LINCOLN NATIONAL INSURANCE CO.
		GROSS TAKE = 3.628 ACRES
		P.R.O. IN TAKE = 2.177 ACRES
		NET TAKE = 1.451 ACRES

22	WD-1	SEE SHEET NO. 21 & 22
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22	T	GROSS TAKE = 0.228 ACRES
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22	T-1	GROSS TAKE = 0.544 ACRES
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22	T-2	SEE SHEET NO. 21 & 22
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PARCEL # 19 - T

14	162 + 88.62	50.0' RT.	
	N 50° 43' 08" E	278.29'	
	165 + 66.91	50.0' RT.	
	S 35° 19' 50" E	10.02'	
	165 + 66.22	60.0' RT.	
	S 50° 43' 08" W	26.22'	
	165 + 40.00	60.0' RT.	
	N 39° 16' 52" W	5.00'	
	165 + 40.00	55.0' RT.	
	S 50° 43' 08" W	60.00'	
	164 + 80.00	55.0' RT.	
	S 39° 16' 52" E	5.00'	
	164 + 80.00	60.0' RT.	
	S 50° 43' 08" W	192.07'	
	162 + 87.93	60.0' RT.	
	N 35° 19' 50" W	10.02'	
	162 + 88.62	50.0' RT.	

PARCEL # 22 - T

16	165 + 66.91	50.0' RT.	
	N 50° 43' 08" E	993.08'	
	175 + 59.99	50.0' RT.	
	S 38° 30' 03" E	10.00'	
	175 + 59.88	60.0' RT.	
	S 50° 43' 08" W	993.66'	
	165 + 66.22	60.0' RT.	
	N 35° 19' 50" W	10.02'	
	165 + 66.91	50.0' RT.	

PARCEL # 22 - T-1

19	172 + 03.55	50.0' LT.	
	N 40° 31' 52" W	10.00'	
	172 + 03.33	60.0' LT.	
	N 50° 43' 08" E	696.67'	
	179 + 00.00	60.0' LT.	
	N 45° 00' 29" E	100.50'	
	180 + 00.00	70.0' LT.	
	N 52° 37' 40" E	300.17'	
	183 + 00.00	60.0' LT.	
	N 50° 43' 08" E	1,070.73'	
	193 + 70.73	60.0' LT.	
	S 43° 11' 25" E	10.02'	
	193 + 71.41	50.0' LT.	
	S 50° 43' 08" W	2,167.86'	
	172 + 03.55	50.0' LT.	

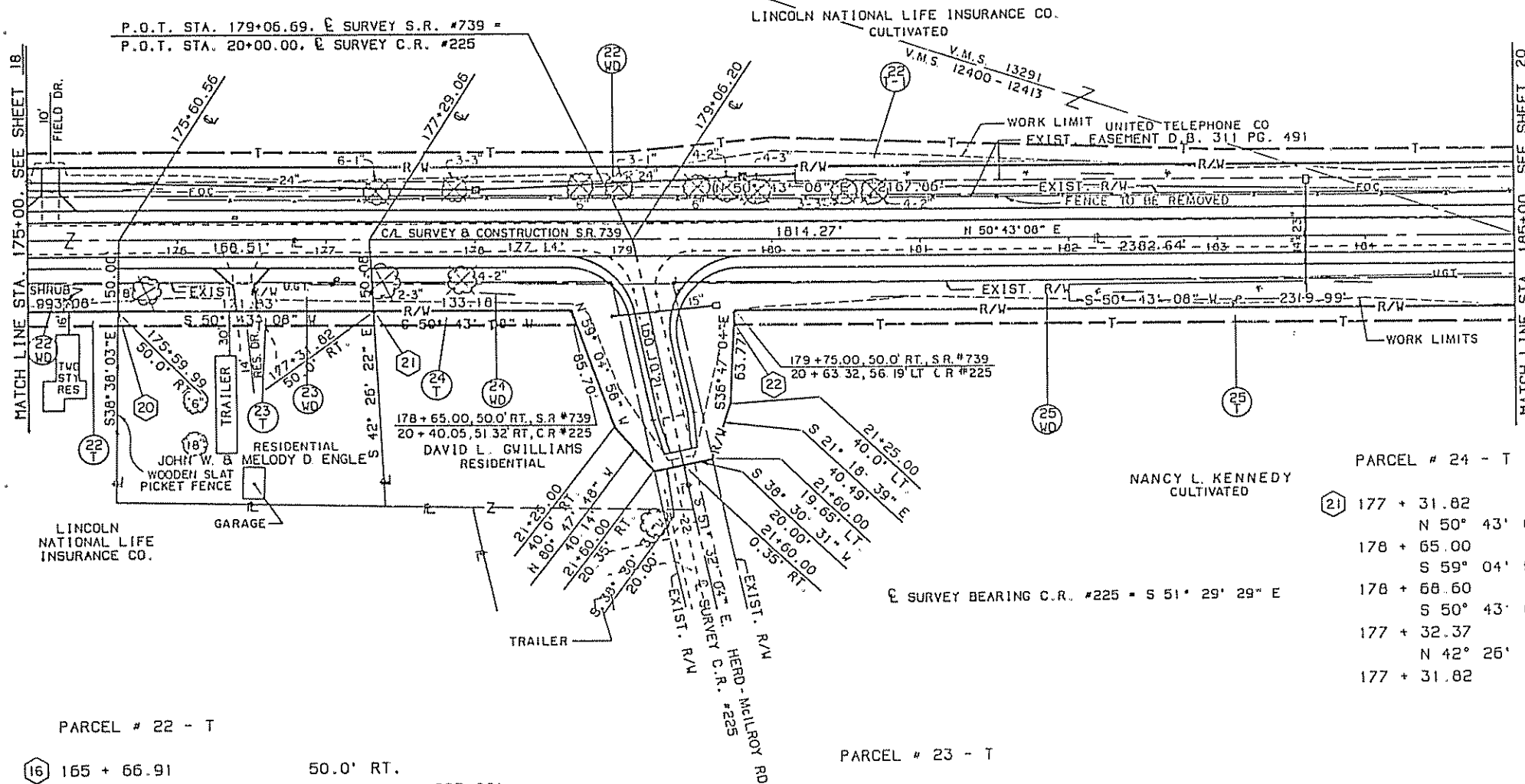
TYPE FUNDS

COMPLETION DATE		DESCRIPTION
REV.	DATE	

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12400-12413, 13291

PARCEL # 22 - T-1

19	172 + 03.55	50.0' LT.	
	N 40° 31' 52" W	10.00'	
	172 + 03.33	60.0' LT.	
	N 50° 43' 08" E	696.67'	
	179 + 00.00	60.0' LT.	
	N 45° 00' 29" E	100.50'	
	180 + 00.00	70.0' LT.	
	N 52° 37' 40" E	300.17'	
	183 + 00.00	60.0' LT.	
	N 50° 43' 08" E	1,070.73'	
	193 + 70.73	60.0' LT.	
	S 43° 11' 25" E	10.02'	
	193 + 71.41	50.0' LT.	
	S 50° 43' 08" W	2,167.86'	
	172 + 03.55	50.0' LT.	



PARCEL # 22 - T

16	165 + 66.91	50.0' RT.	
	N 50° 43' 08" E	993.08'	
	175 + 59.99	50.0' RT.	
	S 38° 38' 03" E	10.00'	
	175 + 59.88	60.0' RT.	
	S 50° 43' 08" W	993.66'	
	165 + 66.22	60.0' RT.	
	N 35° 19' 50" W	10.02'	
	165 + 66.91	50.0' RT.	

PARCEL # 23 - T

20	175 + 59.99	50.0' RT.	
	N 50° 43' 08" E	171.83'	
	177 + 31.82	50.0' RT.	
	S 42° 26' 22" E	10.02'	
	177 + 32.37	60.0' RT.	
	S 50° 43' 08" W	172.50'	
	175 + 59.88	60.0' RT.	
	N 38° 38' 03" W	10.00'	
	175 + 59.99	50.0' RT.	

PARCEL # 24 - T

21	177 + 31.82	50.0' RT.	
	N 50° 43' 08" E	133.18'	
	178 + 65.00	50.0' RT.	
	S 59° 04' 58" E	10.63'	
	178 + 68.60	60.0' RT.	
	S 50° 43' 08" W	136.23'	
	177 + 32.37	60.0' RT.	
	N 42° 26' 22" W	10.02'	
	177 + 31.82	50.0' RT.	

PARCEL # 25 - T

22	179 + 74.56	60.0' RT.	
	N 36° 47' 04" W	10.01'	
	179 + 75.00	50.0' RT.	
	N 50° 43' 08" E	775.00'	
	187 + 50.00	50.0' RT.	
	S 39° 24' 32" W	50.99'	
	187 + 00.00	60.0' RT.	
	S 50° 43' 08" W	725.44'	
	179 + 74.56	60.0' RT.	

22	LINCOLN NATIONAL LIFE INSURANCE CO.
WD	GROSS TAKE = 3.628 ACRES
	P.R.O. IN TAKE = 2.177 ACRES
	NET TAKE = 1.451 ACRES

22 WD-1 SEE SHEET NO. 21 & 22.

22 T GROSS TAKE = 0.228 ACRES

22 T-1 GROSS TAKE = 0.544 ACRES

22 T-2 SEE SHEET NO. 21 & 22.

23	JOHN W. & MELODY D ENGLE
WD	GROSS TAKE = 0.195 ACRES
	P.R.O. IN TAKE = 0.117 ACRES
	NET TAKE = 0.078 ACRES

23 T GROSS TAKE = 0.040 ACRES

24	DAVID L. GWILLIAMS
WD	GROSS TAKE = 0.314 ACRES
	P.R.O. IN TAKE = 0.184 ACRES
	NET TAKE = 0.130 ACRES

24 T GROSS TAKE = 0.031 ACRES

25	NANCY L. KENNEDY
WD	GROSS TAKE = 2.833 ACRES
	P.R.O. IN TAKE = 1.699 ACRES
	NET TAKE = 1.134 ACRES

25 T GROSS TAKE = 0.172 ACRES

25 T-1 SEE SHEET NO. 21

TYPE FUNDS

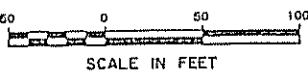
COMPLETION DATE	
REV.	DATE

R/W PLAN S.R. 739 STA. 175+00 TO STA. 185+00

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12400-12413, 13291

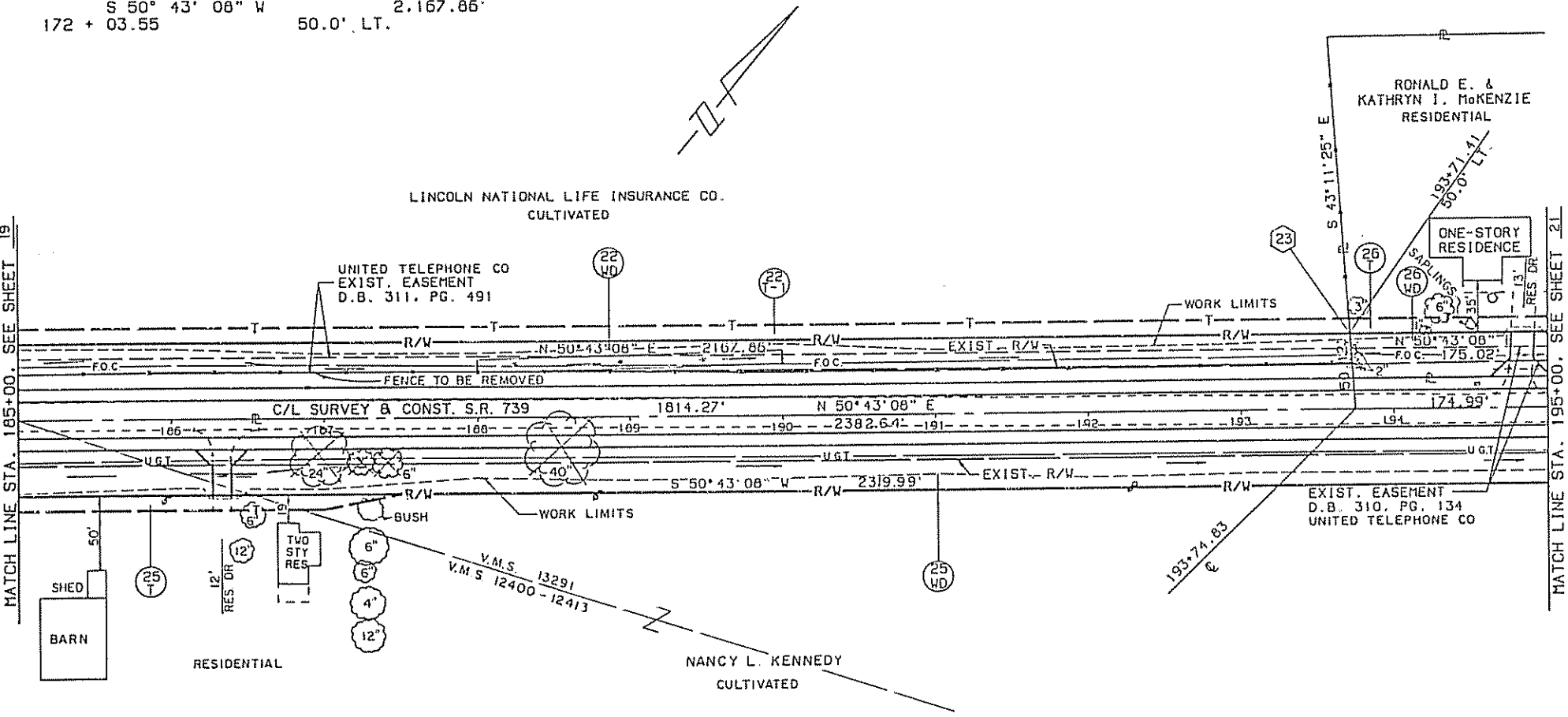
PARCEL # 22 - T-1

172 + 03.55	50.0' LT.	
N 40° 31' 52" W	10.00'	
172 + 03.33	60.0' LT.	696.67'
N 50° 43' 08" E	60.0' LT.	
179 + 00.00	70.0' LT.	100.50'
N 45° 00' 29" E	300.17'	
180 + 00.00	60.0' LT.	1,070.73'
N 52° 37' 40" E	60.0' LT.	
183 + 00.00	60.0' LT.	10.02'
N 50° 43' 08" E	50.0' LT.	2,167.86'
193 + 70.73	50.0' LT.	
S 43° 11' 25" E	50.0' LT.	
193 + 71.41	50.0' LT.	
S 50° 43' 08" W	50.0' LT.	
172 + 03.55	50.0' LT.	



PARCEL # 26 - T

193 + 71.41	50.0' LT.	10.02'
N 43° 11' 25" W	60.0' LT.	175.02'
193 + 70.73	60.0' LT.	10.02'
N 50° 43' 08" E	50.0' LT.	175.02'
195 + 45.75	50.0' LT.	
S 43° 09' 31" E	50.0' LT.	
195 + 46.43	50.0' LT.	
S 50° 43' 08" W	50.0' LT.	
193 + 71.41	50.0' LT.	



22	WD	LINCOLN NATIONAL LIFE INSURANCE CO. GROSS TAKE = 3.628 ACRES P.R.O. IN TAKE = 2.177 ACRES NET TAKE = 1.451 ACRES
22	WD-1	SEE SHEET NO. 21 & 22
22	T	SEE SHEET NO. 18 & 19
22	T-1	GROSS TAKE = 0.544 ACRES
22	T-2	SEE SHEET NO. 21 & 22
25	WD	NANCY L. KENNEDY GROSS TAKE = 2.833 ACRES P.R.O. IN TAKE = 1.699 ACRES NET TAKE = 1.134 ACRES
25	T	GROSS TAKE = 0.172 ACRES
25	T-1	SEE SHEET NO. 21
26	WD	RONALD E. & KATHRYN I. McKENZIE GROSS TAKE = 0.201 ACRES P.R.O. IN TAKE = 0.121 ACRES NET TAKE = 0.080 ACRES
26	T	GROSS TAKE = 0.040 ACRES

PARCEL # 25 - T

22	179 + 74.56	60.0' RT.	10.01'
	N 36° 47' 04" W	50.0' RT.	775.00'
	179 + 75.00	50.0' RT.	50.99'
	N 50° 43' 08" E	60.0' RT.	725.44'
	187 + 50.00	60.0' RT.	
	S 39° 24' 32" W	60.0' RT.	
	187 + 00.00	60.0' RT.	
	S 50° 43' 08" W	60.0' RT.	
	179 + 74.56	60.0' RT.	

TYPE FUNDS		
COMPLETION DATE		
REV.	DATE	DESCRIPTION

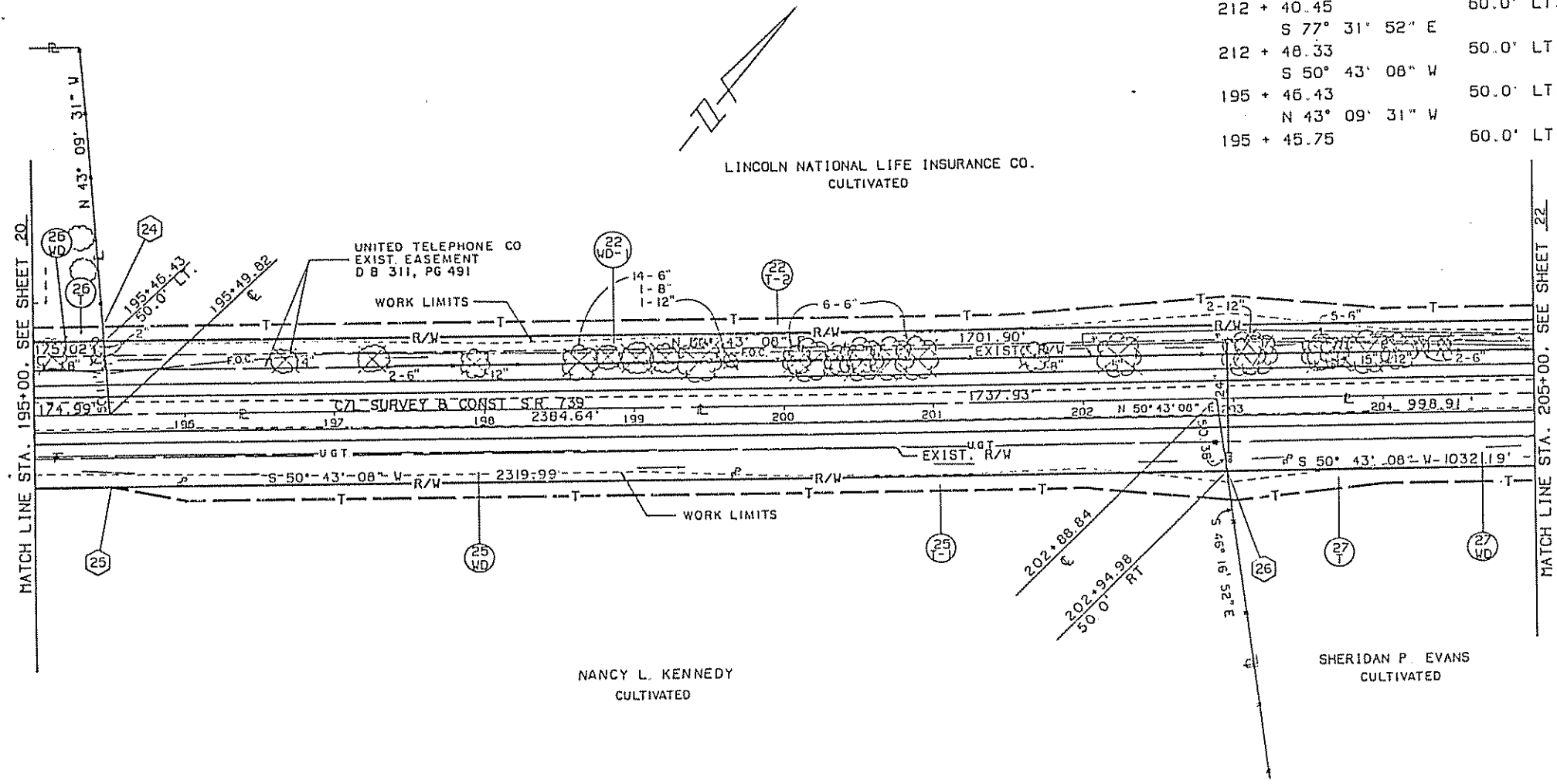
LIBERTY TOWNSHIP UNION COUNTY V.M.S. 13291

PARCEL # 26 - T

- 23 193 + 71.41 50.0' LT. 10.02'
- N 43° 11' 25" W
- 193 + 70.73 60.0' LT. 175.02'
- N 50° 43' 08" E
- 195 + 45.75 60.0' LT. 10.02'
- S 43° 09' 31" E
- 195 + 46.43 50.0' LT. 175.02'
- S 50° 43' 08" W
- 193 + 71.41 50.0' LT.

PARCEL # 22 - T-2

- 24 195 + 45.75 60.0' LT. 604.25'
- N 50° 43' 08" E
- 201 + 50.00 60.0' LT. 150.33'
- N 46° 54' 17" E
- 203 + 00.00 70.0' LT. 100.50'
- N 56° 25' 46" E
- 204 + 00.00 60.0' LT. 840.45'
- N 50° 43' 08" E
- 212 + 40.45 60.0' LT. 12.73'
- S 77° 31' 52" E
- 212 + 48.33 50.0' LT. 1,701.90'
- S 50° 43' 08" W
- 195 + 46.43 50.0' LT. 10.02'
- N 43° 09' 31" W
- 195 + 45.75 60.0' LT.



LINCOLN NATIONAL LIFE INSURANCE CO.

- 22 WD SEE SHEET NO. 18 & 19.
- 22 WD GROSS TAKE = 1.974 ACRES
P.R.O. IN TAKE = 1.189 ACRES
NET TAKE = 0.785 ACRES
- 22 T SEE SHEET NO. 18 & 19.
- 22 T-1 SEE SHEET NO. 18, 19 & 20.
- 22 T-2 GROSS TAKE = 0.419 ACRES
- 25 WD NANCY L. KENNEDY
GROSS TAKE = 2.833 ACRES
P.R.O. IN TAKE = 1.699 ACRES
NET TAKE = 1.134 ACRES
- 25 T SEE SHEET NO. 19 & 20.
- 25 T-1 GROSS TAKE = 0.176 ACRES
- 26 WD RONALD E. & KATHRYN I. McKENZIE
GROSS TAKE = 0.201 ACRES
P.R.O. IN TAKE = 0.121 ACRES
NET TAKE = 0.080 ACRES
- 26 T GROSS TAKE = 0.040 ACRES
- 27 WD SHERIDAN P. EVANS
GROSS TAKE = 1.166 ACRES
P.R.O. IN TAKE = 0.694 ACRES
NET TAKE = 0.472 ACRES
- 27 T GROSS TAKE = 0.109 ACRES
- 27 T-1 SEE SHEET NO. 22.

PARCEL # 25 - T-1

- 25 195 + 50.00 50.0' RT. 744.98'
- N 50° 43' 08" E
- 202 + 94.98 50.0' RT. 20.15'
- S 46° 16' 52" E
- 202 + 97.43 70.00' RT. 97.95'
- S 56° 34' 43" W
- 202 + 00.00 60.0' RT. 600.00'
- S 50° 43' 08" W
- 195 + 00.00 60.0' RT. 50.99'
- S 62° 01' 43" W
- 195 + 50.00 50.0' RT.

PARCEL # 27 - T

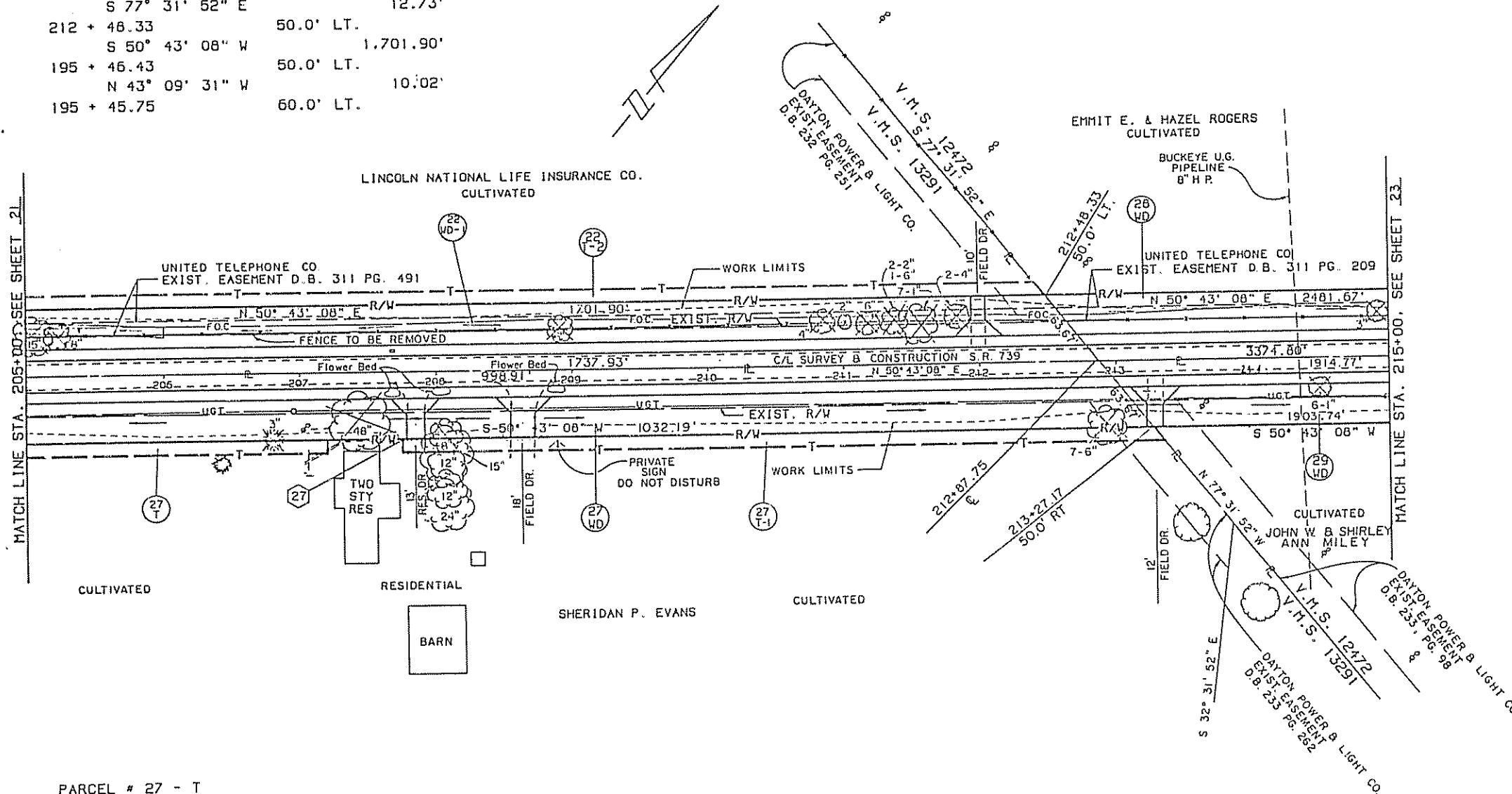
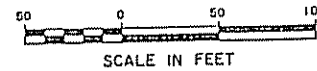
- 26 202 + 94.98 50.0' RT. 425.02'
- N 50° 43' 08" E
- 207 + 20.00 50.0' RT. 10.00'
- S 39° 16' 52" E
- 207 + 20.00 60.0' RT. 320.00'
- S 50° 43' 08" W
- 204 + 00.00 60.0' RT. 103.05'
- S 45° 09' 01" W
- 202 + 97.43 70.0' RT.
- N 46° 16' 52" W 20.15'
- 202 + 94.98 50.0' RT.

TYPE FUNDS		
COMPLETION DATE		
REV.	DATE	DESCRIPTION

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 13291, 12472

PARCEL # 22 - T-2

195 + 45.75	60.0' LT.	
N 50° 43' 08" E		604.25'
201 + 50.00	60.0' LT.	
N 46° 54' 17" E		150.33'
203 + 00.00	70.0' LT.	
N 56° 25' 46" E		100.50'
204 + 00.00	60.0' LT.	
N 50° 43' 08" E		840.45'
212 + 40.45	60.0' LT.	
S 77° 31' 52" E		12.73'
212 + 48.33	50.0' LT.	
S 50° 43' 08" W		1,701.90'
195 + 46.43	50.0' LT.	
N 43° 09' 31" W		10.02'
195 + 45.75	60.0' LT.	



PARCEL # 27 - T

202 + 78.40	50.0' RT.	
N 50° 43' 08" E		441.60'
207 + 20.00	50.0' RT.	
S 39° 16' 52" E		10.00'
207 + 20.00	60.0' RT.	
S 50° 43' 08" W		320.00'
204 + 00.00	60.0' RT.	
S 45° 00' 29" W		100.50'
203 + 00.00	70.0' RT.	
S 56° 25' 46" W		19.48'
202 + 80.62	68.06' RT.	
N 46° 16' 52" W		18.20'
202 + 78.40	50.0' RT.	

PARCEL # 27 - T-1

207 + 75.00	50.0' RT.	
N 50° 43' 08" E		552.17'
213 + 27.17	50.0' RT.	
S 77° 31' 52" E		12.73'
213 + 35.05	60.0' RT.	
S 50° 43' 08" W		560.05'
207 + 75.00	60.0' RT.	
N 39° 16' 52" W		10.00'
207 + 75.00	50.0' RT.	

LINCOLN NATIONAL LIFE INSURANCE CO.

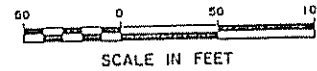
(22) WD	SEE SHEET NO. 18 & 19
(22) WD	GROSS TAKE = 1.974 ACRES P.R.O. IN TAKE = 1.189 ACRES NET TAKE = 0.785 ACRES
(22) T	SEE SHEET NO. 18 & 19
(22) T-1	SEE SHEET NO. 18, 19 & 20
(22) T-2	GROSS TAKE = 0.419 ACRES
(27) WD	SHERIDAN P. EVANS GROSS TAKE = 1.166 ACRES P.R.O. IN TAKE = 0.694 ACRES NET TAKE = 0.472 ACRES
(27) T	GROSS TAKE = 0.109 ACRES
(27) T-1	GROSS TAKE = 0.128 ACRES
(28) WD	EMMIT E. & HAZEL ROGERS GROSS TAKE = 4.186 ACRES P.R.O. IN TAKE = 2.553 ACRES NET TAKE = 1.633 ACRES
(28) T	SEE SHEET NO. 23, 24 & 25
(28) T-1	SEE SHEET NO. 25 & 26
(29) WD	JOHN W & SHIRLEY ANN MILEY GROSS TAKE = 2.192 ACRES P.R.O. IN TAKE = 1.316 ACRES NET TAKE = 0.876 ACRES
(29) T	SEE SHEET NO. 23 & 24

TYPE FUNDS

COMPLETION DATE			DESCRIPTION
REV.	DATE		
1/1	3-21-93		CORRECTED P/L ON PCL 2.9

R/W PLAN S.R. 739 STA. 205+00 TO STA. 215+00

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12472



PARCEL # 28 - T

221 + 00.00	50.0' LT.	
N 45° 00' 29" E		100.50'
222 + 00.00	60.0' LT.	
N 50° 43' 08" E		1,525.59'
237 + 25.59	60.0' LT.	
S 63° 04' 58" E		10.93'
237 + 30.00	50.0' LT.	
S 50° 43' 08" W		1,630.00'
221 + 00.00	50.0' LT.	

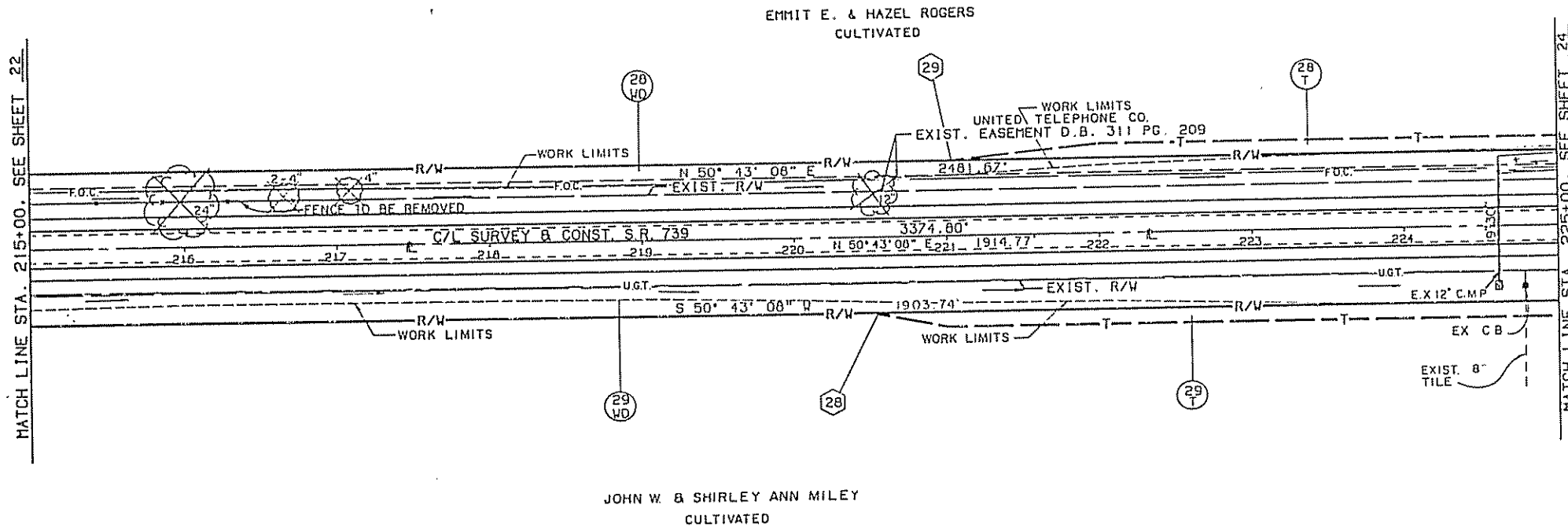
EMMIT E. & HAZEL ROGERS
GROSS TAKE = 4.186 ACRES
P.R.O. IN TAKE = 2.553 ACRES
NET TAKE = 1.633 ACRES

GROSS TAKE = 0.362 ACRES

SEE SHEET NO. 25 & 26

JOHN W. & SHIRLEY ANN MILEY
GROSS TAKE = 2.192 ACRES
P.R.O. IN TAKE = 1.316 ACRES
NET TAKE = 0.876 ACRES

GROSS TAKE = 0.266 ACRES



PARCEL # 29 - T

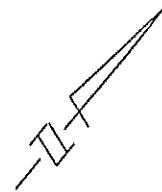
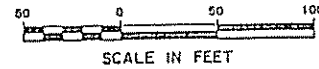
220 + 50.00	50.0' RT.	
N 50° 43' 08" E		1,180.90'
232 + 30.90	50.0' RT.	
S 68° 51' 52" E		11.50'
232 + 36.58	60.0' RT.	
S 50° 43' 08" W		1,136.58'
221 + 00.00	60.0' RT.	
S 62° 01' 43" W		50.99'
220 + 50.00	50.0' RT.	

TYPE FUNDS		
COMPLETION DATE		
REV.	DATE	DESCRIPTION
Jan	7-9-93	ADDED THE EX. 12" C.M.P. AT STA. 224+62
Jan	7-9-93	AND REV'D. THE 12" TITLE TO A 8" TILE PLY.

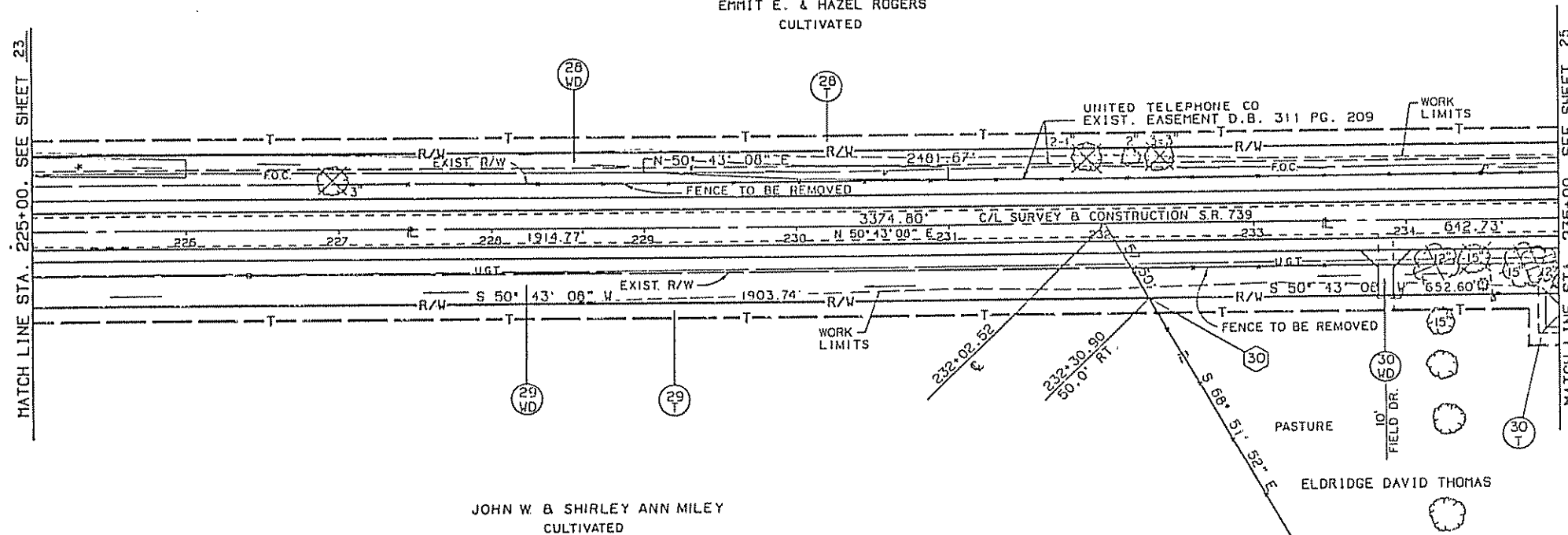
LIBERTY TOWNSHIP UNION COUNTY V.M.S. 12472

PARCEL # 28 - T

29	221 + 00.00	50.0' LT.	
	N 45° 00' 29" E	100.50'	
	222 + 00.00	50.0' LT.	
	N 50° 43' 08" E	1,525.59'	
	237 + 25.59	50.0' LT.	
	S 63° 04' 58" E	10.93'	
	237 + 30.00	50.0' LT.	
	S 50° 43' 08" W	1,630.00'	
	221 + 00.00	50.0' LT.	



EMMIT E. & HAZEL ROGERS
CULTIVATED



JOHN W. & SHIRLEY ANN MILEY
CULTIVATED

PARCEL # 30 - T

30	232 + 30.90	50.0' RT.	
	N 50° 43' 08" E	652.60'	
	238 + 83.50	50.0' RT.	
	S 76° 41' 52" E	12.59'	
	238 + 91.15	60.0' RT.	
	S 50° 43' 08" W	366.15'	
	235 + 25.00	60.0' RT.	
	S 39° 16' 52" E	25.00'	
	235 + 25.00	85.0' RT.	
	S 50° 43' 08" W	45.00'	
	234 + 80.00	85.0' RT.	
	N 39° 16' 52" W	25.00'	
	234 + 80.00	60.0' RT.	
	S 50° 43' 08" W	243.42'	
	232 + 36.58	60.0' RT.	
	N 68° 51' 52" W	11.50'	
	232 + 30.90	50.0' RT.	

PARCEL # 29 - T

28	220 + 50.00	50.0' RT.	
	N 50° 43' 08" E	1,180.90'	
	232 + 30.90	50.0' RT.	
	S 68° 51' 52" E	11.50'	
	232 + 36.58	60.0' RT.	
	S 50° 43' 08" W	1,136.58'	
	221 + 00.00	60.0' RT.	
	S 62° 01' 43" W	50.99'	
	220 + 50.00	50.0' RT.	

28
WD
EMMIT E. & HAZEL ROGERS
GROSS TAKE = 4.186 ACRES
P.R.O. IN TAKE = 2.553 ACRES
NET TAKE = 1.633 ACRES

28
T
GROSS TAKE = 0.362 ACRES

28
T-I
SEE SHEET NO. 25 & 26

29
WD
JOHN W. & SHIRLEY ANN MILEY
GROSS TAKE = 2.192 ACRES
P.R.O. IN TAKE = 1.316 ACRES
NET TAKE = 0.876 ACRES

29
T
GROSS TAKE = 0.266 ACRES

30
WD
ELDRIDGE DAVID THOMAS
GROSS TAKE = 0.743 ACRES
P.R.O. IN TAKE = 0.445 ACRES
NET TAKE = 0.298 ACRES

30
T
GROSS TAKE = 0.176 ACRES

TYPE FUNDS

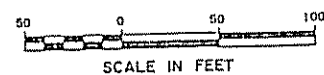
COMPLETION DATE		
REV.	DATE	DESCRIPTION

P.W. PLAN S.R. 739 STA. 225+00 TO STA. 235+00

LIBERTY TOWNSHIP UNION COUNTY V.M.S. 12472

P.C. STA. 58+67.32
P.T. STA. 59+12.19
S 76° 25' 10" E
S 59° 16' 52" E

CURVE DATA
C/L SURVEY C.R. #229
P.I. STA. 58+89.92
Δ = 17° 08' 19" RT.
D = 38° 11' 50"
R = 150.00'
T = 22.60'
L = 44.87'
E = 1.69'



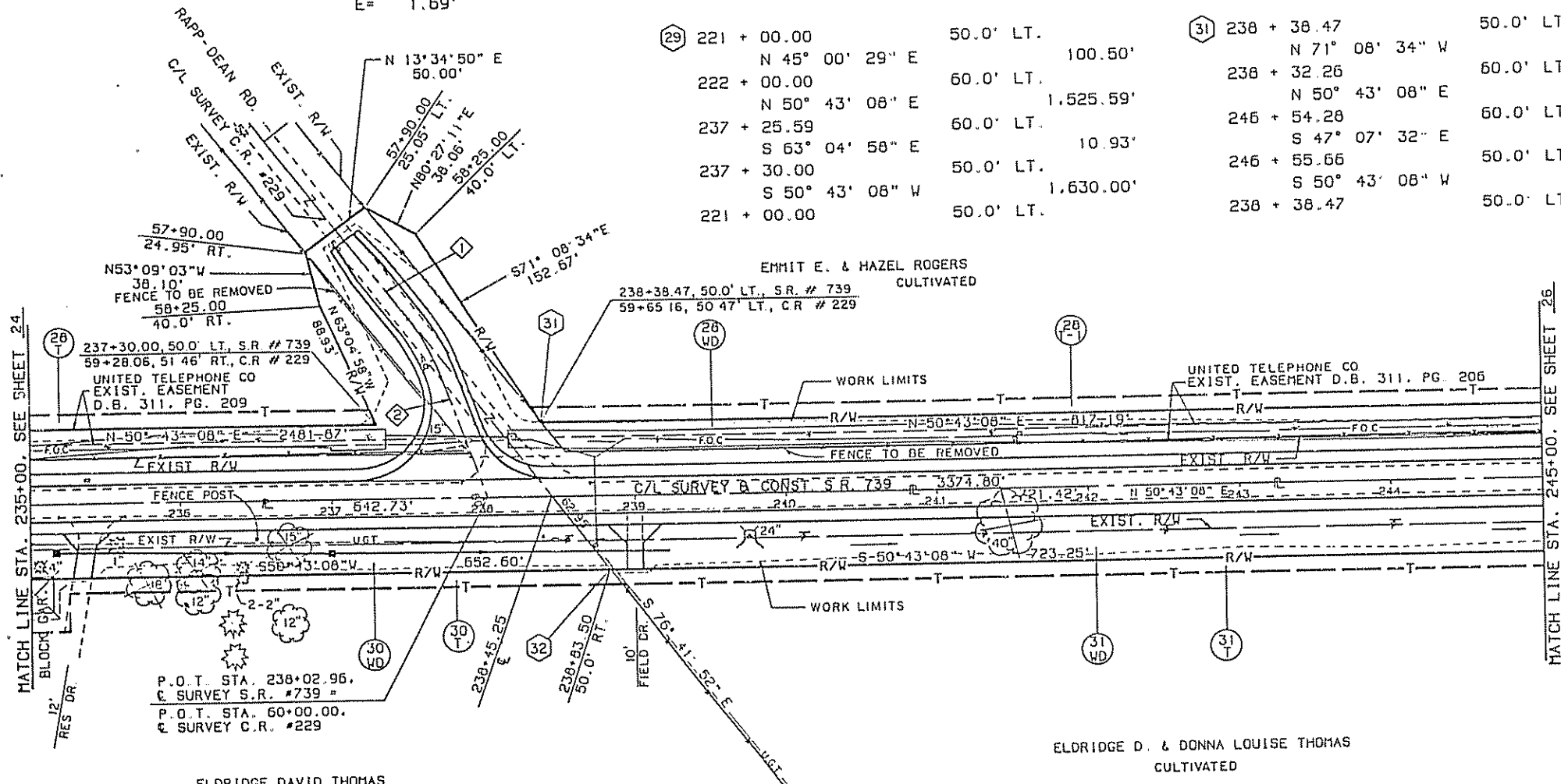
PARCEL # 28 - T

221 + 00.00	50.0' LT.
N 45° 00' 29" E	100.50'
222 + 00.00	60.0' LT.
N 50° 43' 08" E	1,525.59'
237 + 25.59	60.0' LT.
S 63° 04' 58" E	10.93'
237 + 30.00	50.0' LT.
S 50° 43' 08" W	1,630.00'
221 + 00.00	50.0' LT.

PARCEL # 28 - T-1

238 + 38.47	50.0' LT.	11.77'
N 71° 08' 34" W		
238 + 32.26	60.0' LT.	822.02'
N 50° 43' 08" E		
246 + 54.28	60.0' LT.	10.09'
S 47° 07' 32" E		
246 + 55.66	50.0' LT.	617.19'
S 50° 43' 08" W		
238 + 38.47	50.0' LT.	

28 WD	EMMIT E. & HAZEL ROGERS
	GROSS TAKE = 4.186 ACRES
	P.R.O. IN TAKE = 2.553 ACRES
	NET TAKE = 1.633 ACRES
28 T	GROSS TAKE = 0.362 ACRES
28 T-1	GROSS TAKE = 0.188 ACRES
30 WD	ELDRIDGE D. & DONNA LOUISE THOMAS
	GROSS TAKE = 0.743 ACRES
	P.R.O. TAKE = 0.445 ACRES
	NET TAKE = 0.298 ACRES
30 T	GROSS TAKE = 0.176 ACRES
31 WD	ELDRIDGE D. & DONNA LOUISE THOMAS
	GROSS TAKE = 0.829 ACRES
	P.R.O. IN TAKE = 0.497 ACRES
	NET TAKE = 0.332 ACRES
31 T	GROSS TAKE = 0.166 ACRES



PARCEL # 30 - T

232 + 30.90	50.0' RT.	652.60'
N 50° 43' 08" E		
238 + 83.50	50.0' RT.	12.59'
S 76° 41' 52" E		
238 + 91.15	60.0' RT.	366.15'
S 50° 43' 08" W		
235 + 25.00	60.0' RT.	25.00'
S 39° 16' 52" E		
235 + 25.00	85.0' RT.	45.00'
S 50° 43' 08" W		
234 + 80.00	85.0' RT.	25.00'
N 39° 16' 52" W		
234 + 80.00	60.0' RT.	243.42'
S 50° 43' 08" W		
232 + 36.58	60.0' RT.	11.50'
N 68° 51' 52" W		
232 + 30.90	50.0' RT.	

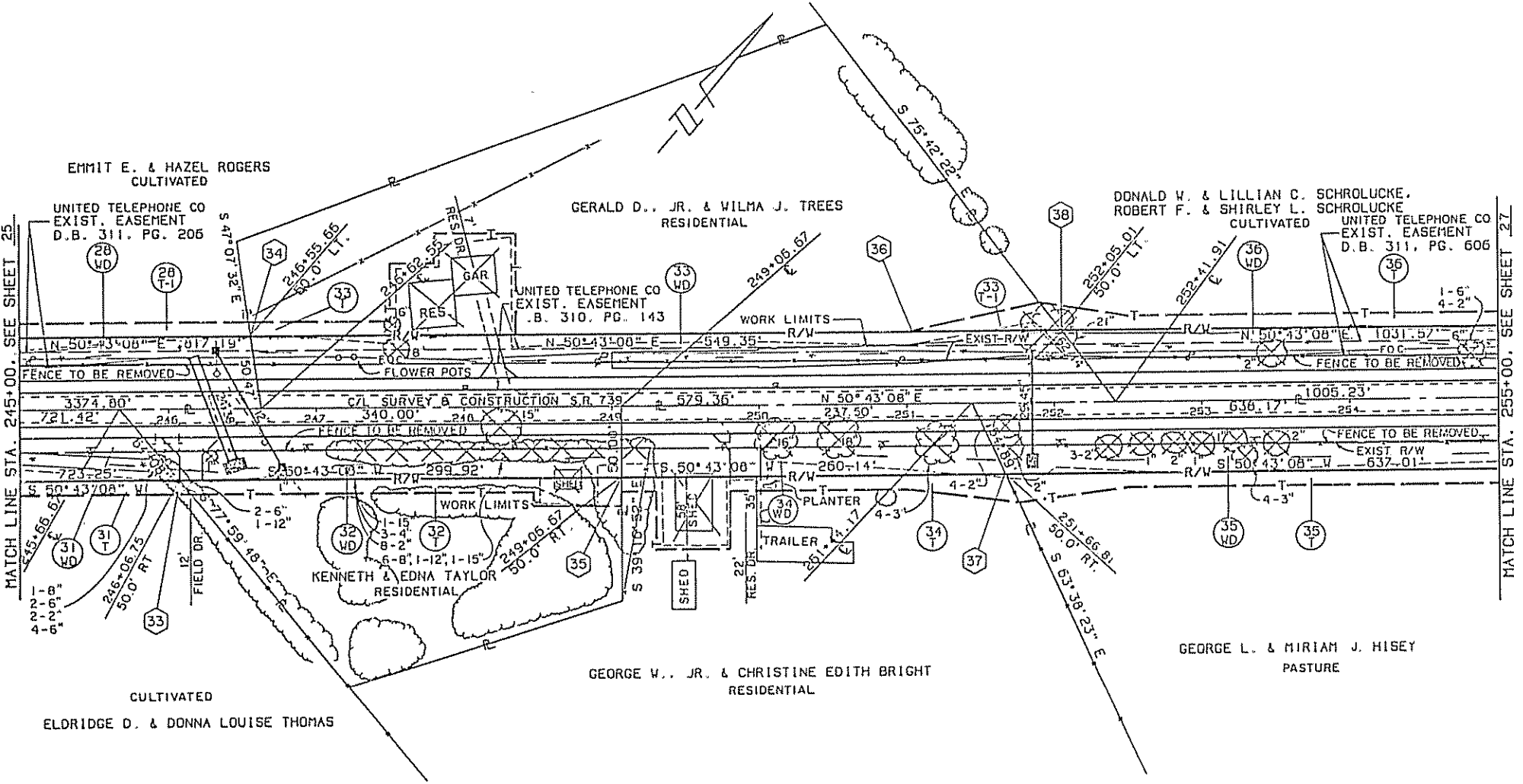
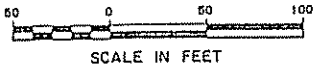
PARCEL # 31 - T

238 + 83.50	50.0' RT.	723.25'
N 50° 43' 08" E		
246 + 06.75	50.0' RT.	12.82'
S 77° 59' 48" E		
246 + 14.77	60.0' RT.	723.62'
S 50° 43' 08" W		
238 + 91.15	60.0' RT.	12.59'
N 76° 41' 52" W		
238 + 83.50	50.0' RT.	

TYPE FUNDS		
COMPLETION DATE		
REV.	DATE	DESCRIPTION

R/W PLAN S.R. 739 STA. 235+00 TO STA. 245+00

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12472



28	WD	EMMIT E. & HAZEL ROGERS GROSS TAKE = 4.186 ACRES P.R.O. IN TAKE = 2.553 ACRES NET TAKE = 1.633 ACRES
28	T	SEE SHEET NO. 23, 24 & 25
28	T-I	GROSS TAKE = 0.188 ACRES
31	WD	ELDRIDGE D. & DONNA LOUISE THOMAS GROSS TAKE = 0.829 ACRES P.R.O. IN TAKE = 0.497 ACRES NET TAKE = 0.332 ACRES
31	T	GROSS TAKE = 0.166 ACRES
32	WD	KENNETH & EDNA TAYLOR GROSS TAKE = 0.367 ACRES P.R.O. IN TAKE = 0.226 ACRES NET TAKE = 0.141 ACRES
32	T	GROSS TAKE = 0.082 ACRES
33	WD	GERALD D. JR. & WILMA J. TREES GROSS TAKE = 0.648 ACRES P.R.O. IN TAKE = 0.393 ACRES NET TAKE = 0.255 ACRES
33	T	GROSS TAKE = 0.145 ACRES
33	T-I	GROSS TAKE = 0.024 ACRES
34	WD	GEORGE W. JR. & CHRISTINE EDITH BRIGHT GROSS TAKE = 0.286 ACRES P.R.O. IN TAKE = 0.168 ACRES NET TAKE = 0.118 ACRES
34	T	GROSS TAKE = 0.114 ACRES
35	WD	GEORGE L. & MIRIAM J. HISEY GROSS TAKE = 0.732 ACRES P.R.O. IN TAKE = 0.439 ACRES NET TAKE = 0.293 ACRES
35	T	GROSS TAKE = 0.155 ACRES
36	WD	DONALD W. & LILLIAN C. SCHROLUCKE & ROBERT F. & SHIRLEY L. SCHROLUCKE GROSS TAKE = 1.169 ACRES P.R.O. IN TAKE = 0.698 ACRES NET TAKE = 0.471 ACRES
36	T	GROSS TAKE = 0.243 ACRES

TYPE FUNDS		
COMPLETION DATE		
REV.	DATE	DESCRIPTION

FOR PLAN VIEW SEE SHEET # 26

31	238 + 38.47	50.0' LT.	
	N 71° 08' 34" W		11.77'
	238 + 32.26	60.0' LT.	
	N 50° 43' 08" E		822.02'
	246 + 54.28	60.0' LT.	
	S 47° 07' 32" E		10.09'
	246 + 55.66	50.0' LT.	
	S 50° 43' 08" W		817.19'
	238 + 38.47	50.0' LT.	

32	238 + 83.50	50.0' RT.	
	N 50° 43' 08" E		723.25
	246 + 06.75	50.0' RT.	
	S 77° 59' 48" E		12.82
	246 + 14.77	60.0' RT.	
	S 50° 43' 08" W		723.62
	238 + 91.15	60.0' RT.	
	N 76° 41' 52" W		12.59
	238 + 83.50	50.0' RT.	

33	246 + 06.75	50.0' RT.	
	N 50° 43' 08" E		299.92'
	249 + 06.67	50.0' RT.	
	S 39° 16' 53" E		20.00'
	249 + 06.67	70.0' RT.	
	S 50° 43' 08" W		61.67'
	248 + 45.00	70.0' RT.	
	N 39° 16' 52" W		10.00'
	248 + 45.00	60.0' RT.	
	S 50° 43' 08" W		230.23'
	246 + 14.77	60.0' RT.	
	N 77° 59' 48" W		12.82'
	246 + 06.75	50.0' RT.	

34	246 + 55.66	50.0' LT.	
	N 47° 07' 32" W		10.09'
	246 + 54.28	60.0' LT.	
	N 50° 43' 08" E		95.72'
	247 + 50.00	60.0' LT.	
	N 39° 16' 52" W		40.00'
	247 + 50.00	100.0' LT.	
	N 50° 43' 08" E		30.00'
	247 + 80.00	100.0' LT.	
	N 39° 16' 52" W		20.00'
	247 + 80.00	120.0' LT.	
	N 50° 43' 08" E		55.00'
	248 + 35.00	120.0' LT.	
	S 39° 16' 52" E		70.00'
	248 + 35.00	50.0' LT.	
	S 50° 43' 08" W		179.34'
	246 + 55.66	50.0' LT.	

36	251 + 00.00	50.0' LT.	
	N 38° 13' 26" E		92.44'
	251 + 90.25	70.0' LT.	
	S 75° 42' 22" E		24.86'
	252 + 05.01	50.0' LT.	
	S 50° 43' 08" W		105.01'
	251 + 00.00	50.0' LT.	

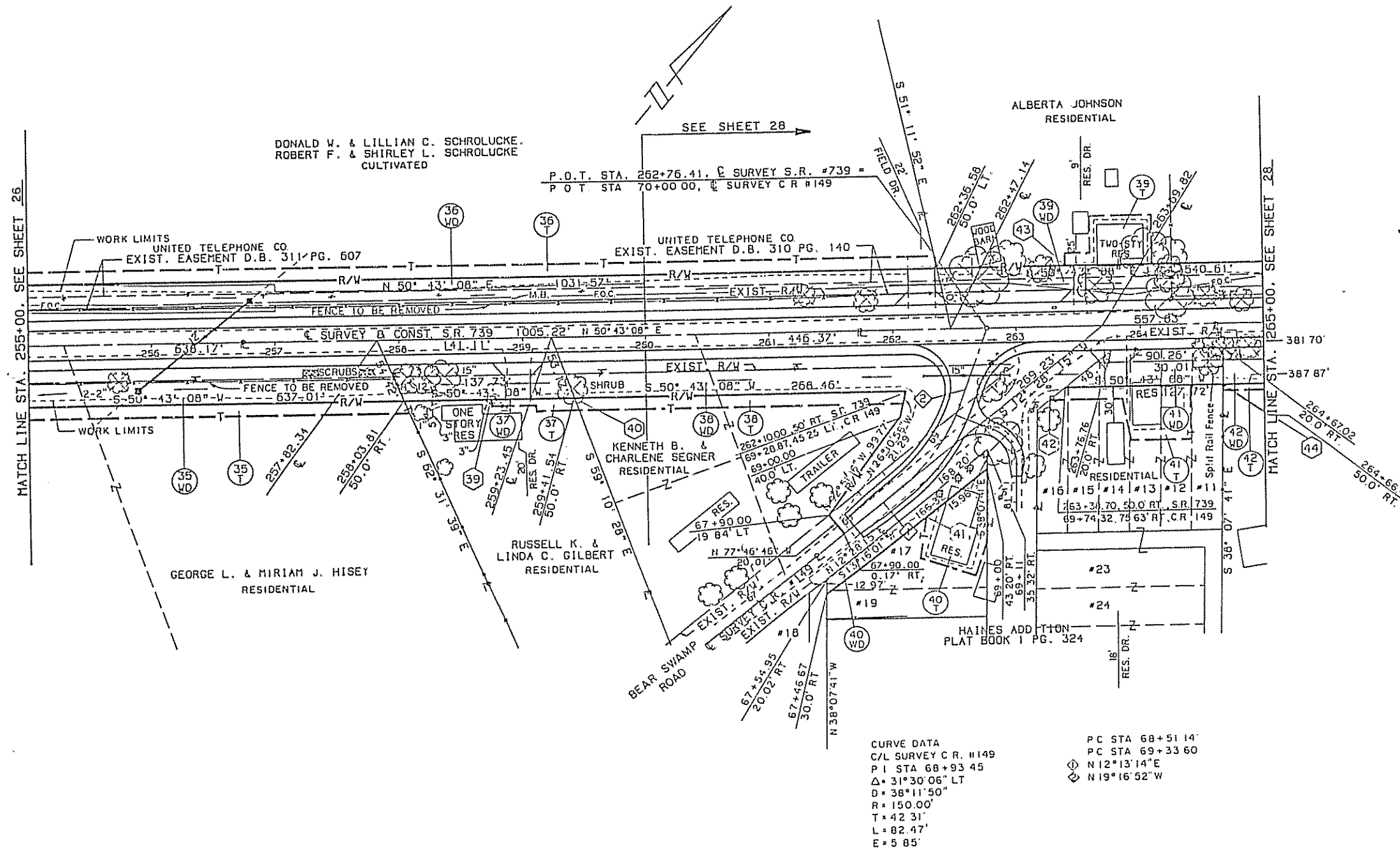
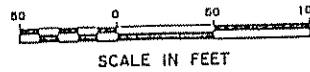
35	249 + 06.67	50.0' RT.	
	N 50° 43' 08" E		260.14'
	251 + 66.81	50.0' RT.	
	S 63° 38' 23" E		21.95'
	251 + 75.86	70.0' RT.	
	S 58° 13' 41" W		76.52'
	251 + 00.00	60.0' RT.	
	S 50° 43' 08" W		120.00'
	249 + 80.00	60.0' RT.	
	S 39° 16' 52" E		40.00'
	249 + 80.00	100.0' RT.	
	S 50° 43' 08" W		50.00'
	249 + 30.00	100.0' RT.	
	N 39° 16' 52" W		40.00'
	249 + 30.00	60.0' RT.	
	S 50° 43' 08" W		23.33'
	249 + 06.67	60.0' RT.	
	N 39° 16' 52" W		10.00'
	249 + 06.67	50.0' RT.	

37	251 + 66.81	50.0' RT.	
	N 50° 43' 08" E		637.01'
	258 + 03.81	50.0' RT.	
	S 62° 31' 39" E		10.88'
	258 + 08.11	60.0' RT.	
	S 50° 43' 08" W		558.11'
	252 + 50.00	60.0' RT.	
	S 43° 02' 13" W		74.81'
	251 + 75.86	70.0' RT.	
	N 63° 38' 23" W		21.95'
	251 + 66.81	50.0' RT.	

38	252 + 05.01	50.0' LT.	
	N 75° 42' 22" W		24.85'
	251 + 90.25	70.0' LT.	
	N 60° 13' 13" E		60.58'
	252 + 50.00	60.0' LT.	
	N 50° 43' 08" E		984.47'
	262 + 34.47	60.0' LT.	
	S 51° 11' 52" E		10.22'
	262 + 36.56	50.0' LT.	
	S 50° 43' 08" W		1,031.57'
	252 + 05.01	50.0' LT.	

[illegible]

LIBERTY TOWNSHIP UNION COUNTY V.M.S. 12472

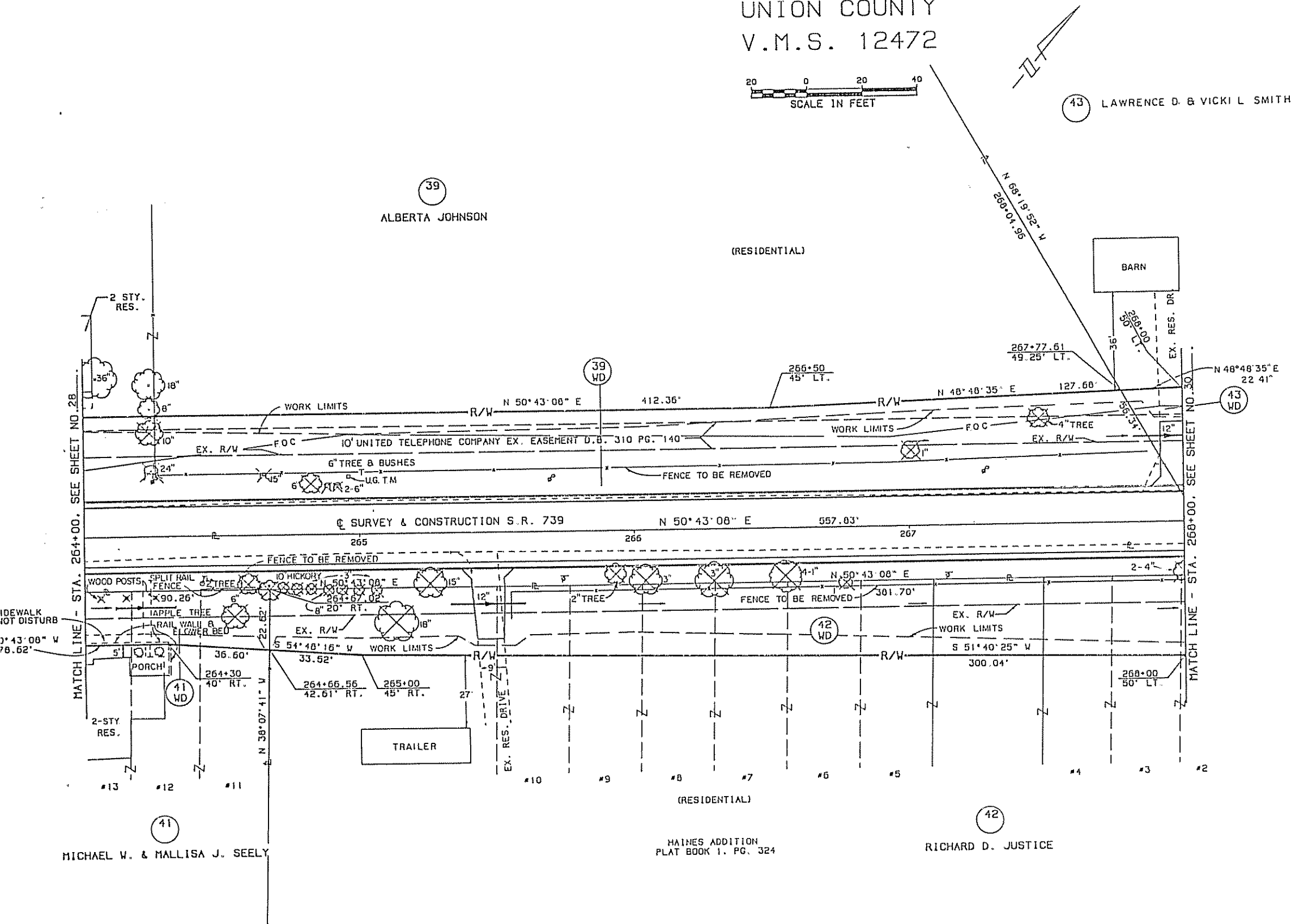


35 WD	GEORGE L. & MIRIAM J. HISEY GROSS TAKE = 0.732 ACRES P.R.O. IN TAKE = 0.439 ACRES NET TAKE = 0.293 ACRES
35 T	GROSS TAKE = 0.155 ACRES
36 WD	DONALD W. & LILLIAN C. SCHROLUCKE & ROBERT F. & SHIRLEY L. SCHROLUCKE GROSS TAKE = 1.169 ACRES P.R.O. IN TAKE = 0.698 ACRES NET TAKE = 0.471 ACRES
36 T	GROSS TAKE = 0.243 ACRES
37 WD	RUSSELL K. & LINDA C. GILBERT GROSS TAKE = 0.160 ACRES P.R.O. IN TAKE = 0.096 ACRES NET TAKE = 0.064 ACRES
37 T	GROSS TAKE = 0.012 ACRES
38 WD	KENNETH B. & CHARLENE SEGNER GROSS TAKE = 0.611 ACRES P.R.O. IN TAKE = 0.386 ACRES NET TAKE = 0.225 ACRES
38 T	GROSS TAKE = 0.061 ACRES
39 WD	ALBERTA JOHNSON GROSS TAKE = 0.630 ACRES P.R.O. IN TAKE = 0.381 ACRES NET TAKE = 0.249 ACRES
39 T	GROSS TAKE = 0.051 ACRES
39 T-1	SEE SHEET NO. 28
40 WD	TRUSTEES OF THE CHURCH OF CHRIST IN CHRISTIAN UNITY GROSS TAKE = 0.043 ACRES P.R.O. IN TAKE = 0.000 ACRES NET TAKE = 0.043 ACRES
40 T	GROSS TAKE = 0.070 ACRES
41 WD	MICHAEL W. & MELLISA J. SEELY GROSS TAKE = 0.075 ACRES P.R.O. IN TAKE = 0.022 ACRES NET TAKE = 0.053 ACRES
41 T	GROSS TAKE = 0.067 ACRES
42 WD	RICHARD D. JUSTICE GROSS TAKE = 0.265 ACRES P.R.O. IN TAKE = 0.088 ACRES NET TAKE = 0.177 ACRES
42 T	GROSS TAKE = 0.045 ACRES

TYPE FUNDS

COMPLETION DATE			DESCRIPTION
REV.	DATE		

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12472



ALBERTA JOHNSON
GROSS TAKE = 0.575 ACRES
P.R.O. IN TAKE = 0.381 ACRES
NET TAKE = 0.194 ACRES

MICHAEL W. & MALLISA J. SEELY
GROSS TAKE = 0.048 ACRES
P.R.O. IN TAKE = 0.022 ACRES
NET TAKE = 0.026 ACRES

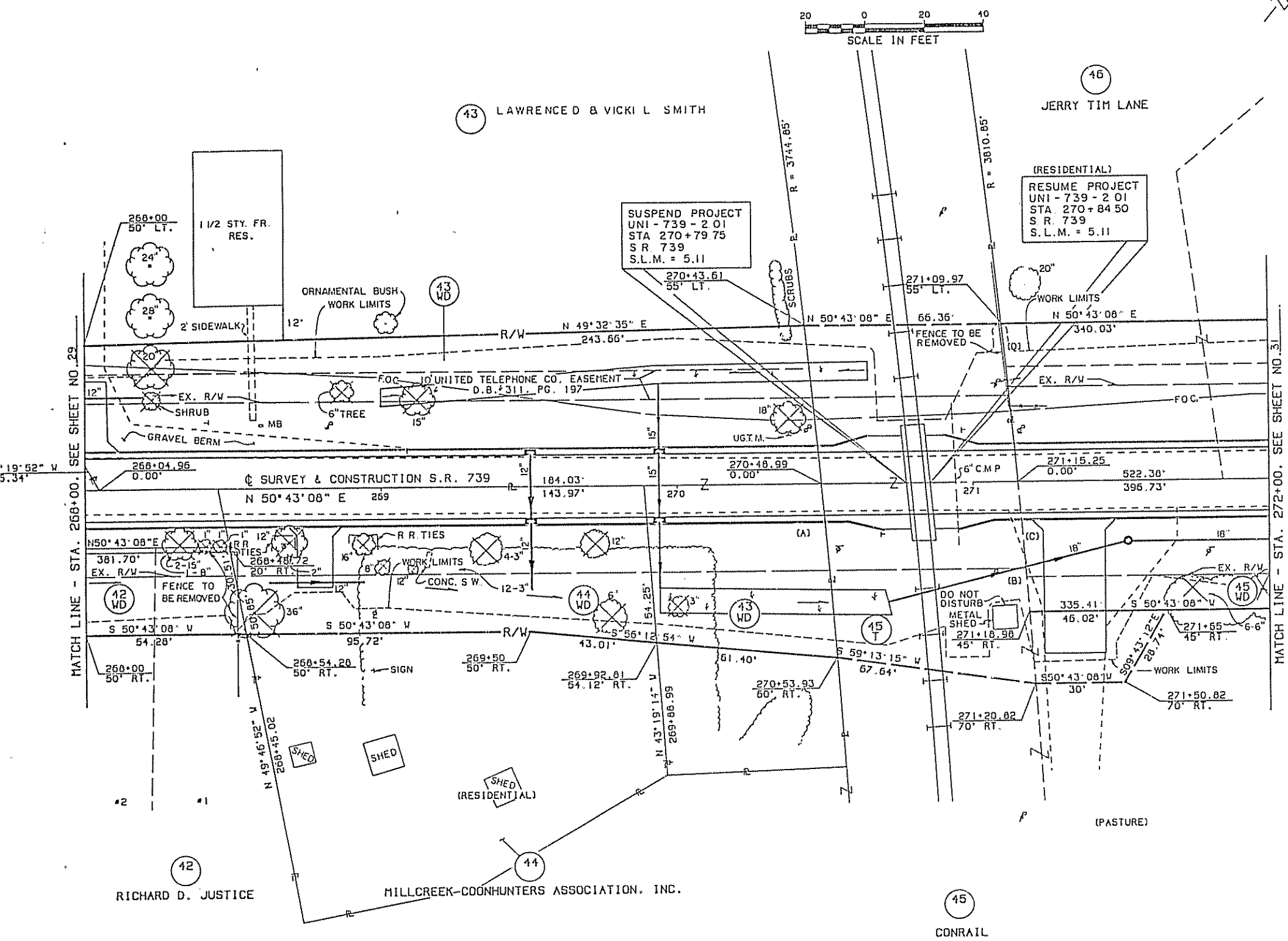
RICHARD D. JUSTICE
GROSS TAKE = 0.243 ACRES
P.R.O. IN TAKE = 0.088 ACRES
NET TAKE = 0.155 ACRES

LAWRENCE D. & VICKI L. SMITH
GROSS TAKE = 0.386 ACRES
P.R.O. IN TAKE = 0.214 ACRES
NET TAKE = 0.172 ACRES

TYPE FUNDS: STATE		
COMPLETION DATE		
REV.	DATE	DESCRIPTION
JN	5-24-91	REVISED 43WD

R/W PLAN S.R. 739 STA. 264+00 TO STA. 268+00

LIBERTY TOWNSHIP UNION COUNTY V.M.S. 12472



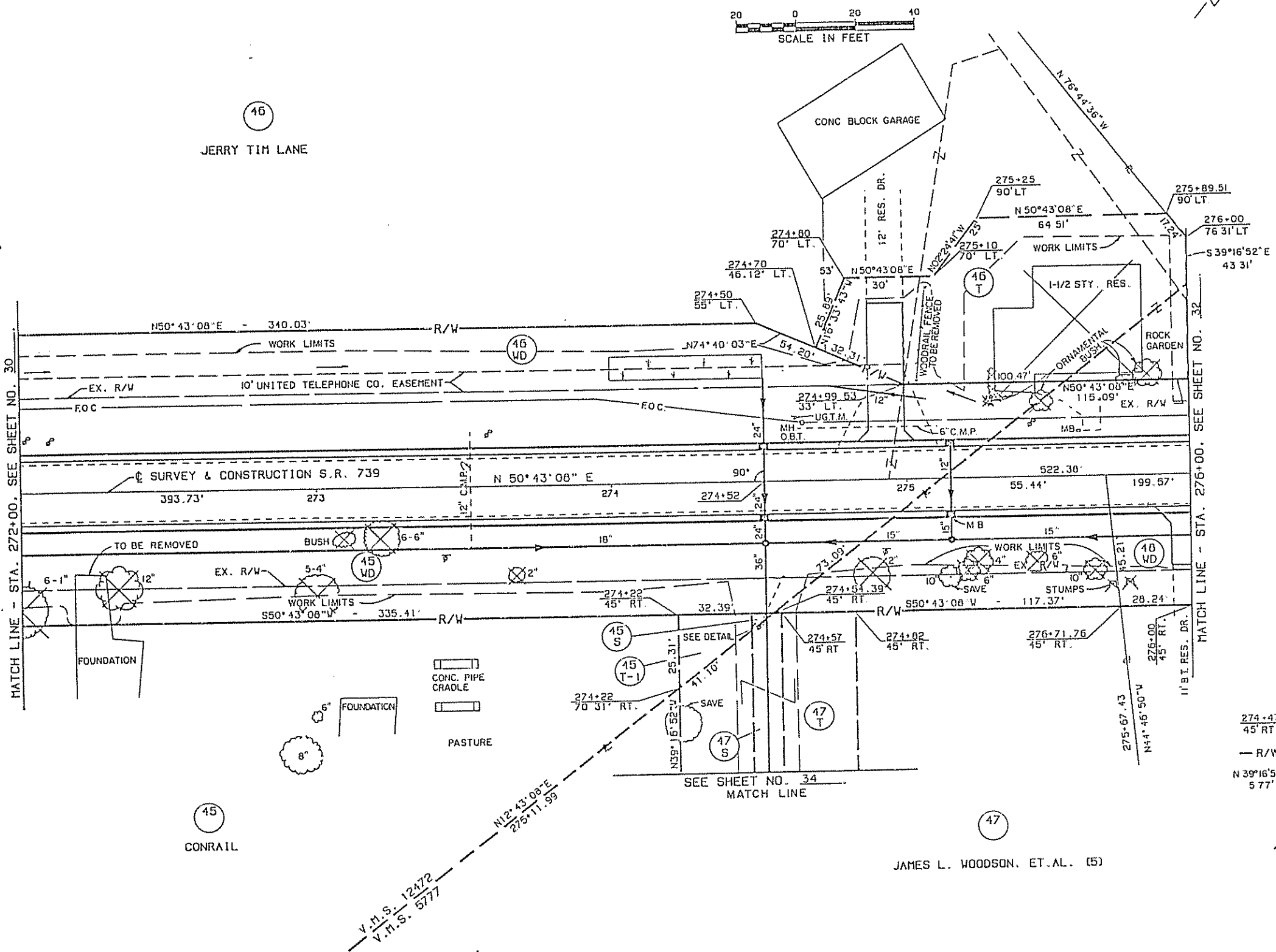
42	RICHARD D. JUSTICE		
WD	GROSS TAKE	=	0.243 ACRES
	P.R.O. IN TAKE	=	0.088 ACRES
	NET TAKE	=	0.155 ACRES
43	LAWRENCE D & VICKI L. SMITH		
WD	GROSS TAKE	=	0.386 ACRES
	P.R.O. IN TAKE	=	0.214 ACRES
	NET TAKE	=	0.172 ACRES
44	MILLCREEK COONHUNTERS ASSOCIATION, INC.		
WD	GROSS TAKE	=	0.164 ACRES
	P.R.O. IN TAKE	=	0.098 ACRES
	NET TAKE	=	0.066 ACRES
45	CONRAIL		
WD	GROSS TAKE	=	0.378 ACRES
	P.R.O. IN TAKE	=	0.283 ACRES
	NET TAKE	=	0.095 ACRES
45	GROSS TAKE	=	0.204 ACRES
T	P.R.O. IN TAKE	=	0.091 ACRES
	NET TAKE	=	0.113 ACRES
46	JERRY TIM LANE		
WD	GROSS TAKE	=	0.572 ACRES
	P.R.O. IN TAKE	=	0.388 ACRES
	NET TAKE	=	0.184 ACRES

HAINES ADDITION
PLAT BOOK 1, PG. 324

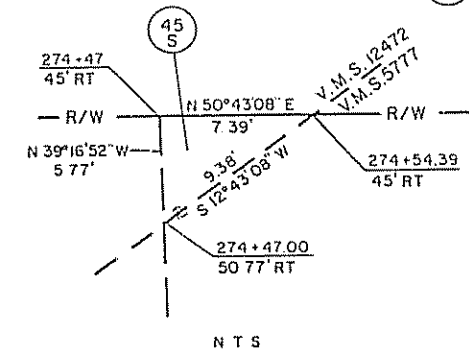
(A) Δ = 1°46'00"	(B) Δ = 1°30'35"	(C) Δ = 0°40'44"	(D) Δ = 0°49'51"
R = 3444.85'	R = 3810.85'	R = 3810.85'	R = 3810.85'
ARC = 115.47'	ARC = 100.41'	ARC = 45.15'	ARC = 55.25'
CH = S 44°24'29" E	CH = S 44°25'56" E	CH = N 44°01'01" W	CH = N 44°46'18" W
115.46'	100.41'	45.15'	55.25'

TYPE FUNDS: STATE		
COMPLETION DATE		
REV.	DATE	DESCRIPTION
1	5-26-03	REVISED PCL 43

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 12472. 5777

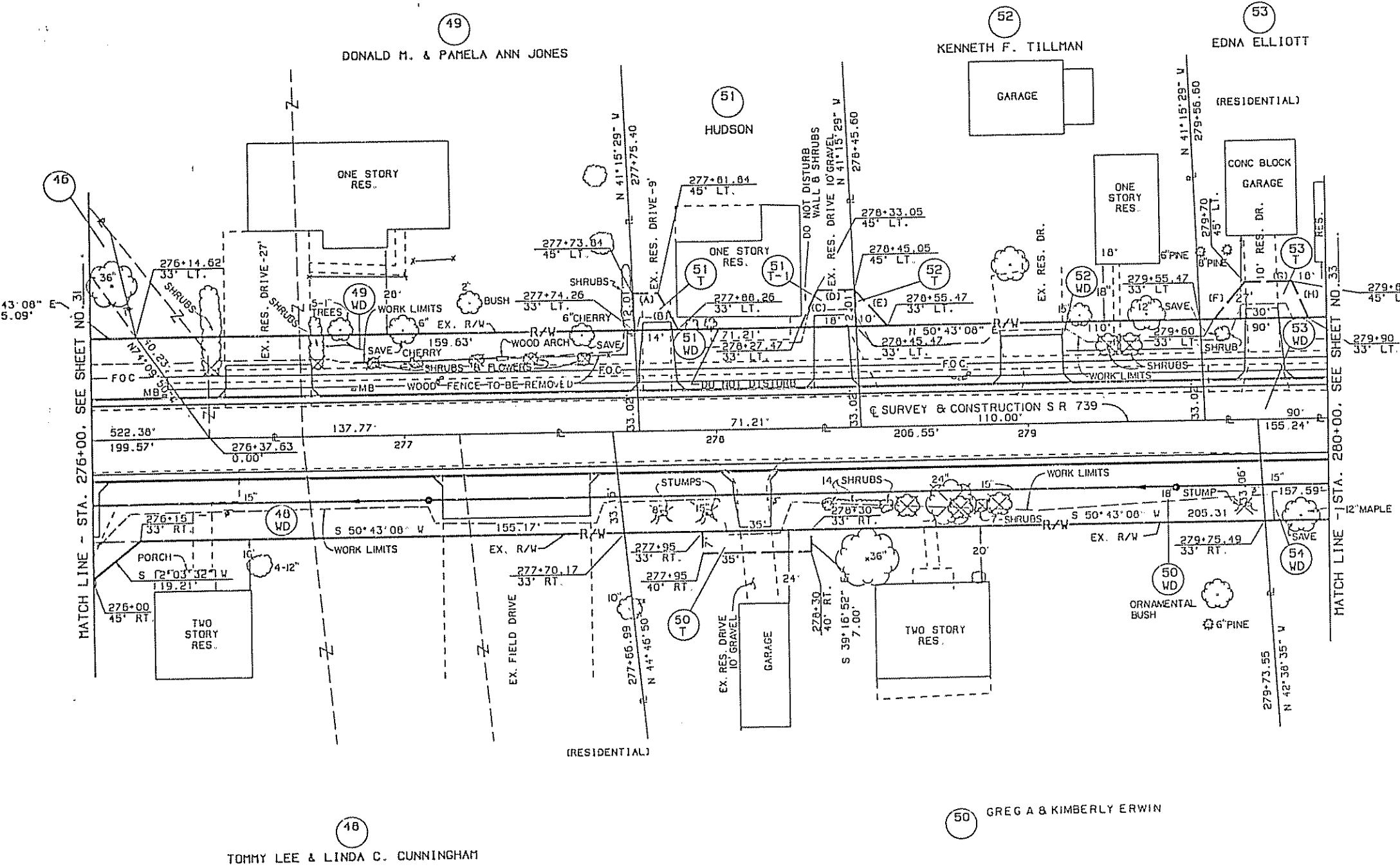


CONRAIL	
(45) WD	GROSS TAKE = 0.378 ACRES
(45) WD	P.R.O. IN TAKE = 0.283 ACRES
(45) WD	NET TAKE = 0.095 ACRES
(45) S	TAKE = 21 S.F.
(45) T	TAKE = 0.009 ACRES
JERRY TIM LANE	
(46) WD	GROSS TAKE = 0.572 ACRES
(46) WD	P.R.O. IN TAKE = 0.388 ACRES
(46) WD	NET TAKE = 0.184 ACRES
(46) T	TAKE = 0.139 ACRES
JAMES L. WOODSON, ET. AL. (5)	
(47) WD	GROSS TAKE = 0.089 ACRES
(47) WD	P.R.O. IN TAKE = 0.059 ACRES
(47) WD	NET TAKE = 0.030 ACRES
(47) S	TAKE = 0.110 ACRES
(47) T	GROSS TAKE = 0.654 ACRES
(47) T	47 S IN TAKE = 0.110 ACRES
(47) T	NET TAKE = 0.544 ACRES
TOMMY LEE & LINDA C. CUNNINGHAM	
(48) WD	GROSS TAKE = 0.161 ACRES
(48) WD	P.R.O. IN TAKE = 0.151 ACRES
(48) WD	NET TAKE = 0.010 ACRES



TYPE FUNDS: STATE		
COMPLETION DATE		
REV.	DATE	DESCRIPTION

LIBERTY TOWNSHIP
UNION COUNTY
V.M.S. 5777



46 WD	JERRY TIM LANE	GROSS TAKE = 0.572 ACRES
		P.R.O. IN TAKE = 0.388 ACRES
		NET TAKE = 0.184 ACRES
48 WD	TOMMY LEE & LINDA C. CUNNINGHAM	GROSS TAKE = 0.161 ACRES
		P.R.O. IN TAKE = 0.151 ACRES
		NET TAKE = 0.010 ACRES
49 WD	DONALD M. & PAMELA ANN JONES	GROSS TAKE = 0.113 ACRES
		P.R.O. IN TAKE = 0.113 ACRES
		NET TAKE = 0.000 ACRES
50 WD	GREG A & KIMBERLY ERWIN	GROSS TAKE = 0.156 ACRES
		P.R.O. IN TAKE = 0.156 ACRES
		NET TAKE = 0.000 ACRES
50 T		GROSS TAKE = 0.006 ACRES
51 WD	WILLIAM JR. & BRENDA KAY HUDSON	GROSS TAKE = 0.054 ACRES
		P.R.O. IN TAKE = 0.054 ACRES
		NET TAKE = 0.000 ACRES
51 T		GROSS TAKE = 0.003 ACRES
51 T-1		GROSS TAKE = 0.004 ACRES
52 WD	KENNETH F. TILLMAN	GROSS TAKE = 0.083 ACRES
		P.R.O. IN TAKE = 0.083 ACRES
		NET TAKE = 0.000 ACRES
52 T		GROSS TAKE = 0.001 ACRES
53 WD	EDNA ELLIOTT	GROSS TAKE = 0.068 ACRES
		P.R.O. IN TAKE = 0.068 ACRES
		NET TAKE = 0.000 ACRES
53 T		GROSS TAKE = 0.006 ACRES
54 WD	SAMUEL D. & TERESA L. JACKSON	GROSS TAKE = 0.118 ACRES
		P.R.O. IN TAKE = 0.118 ACRES
		NET TAKE = 0.000 ACRES

TYPE FUNDS: STATE

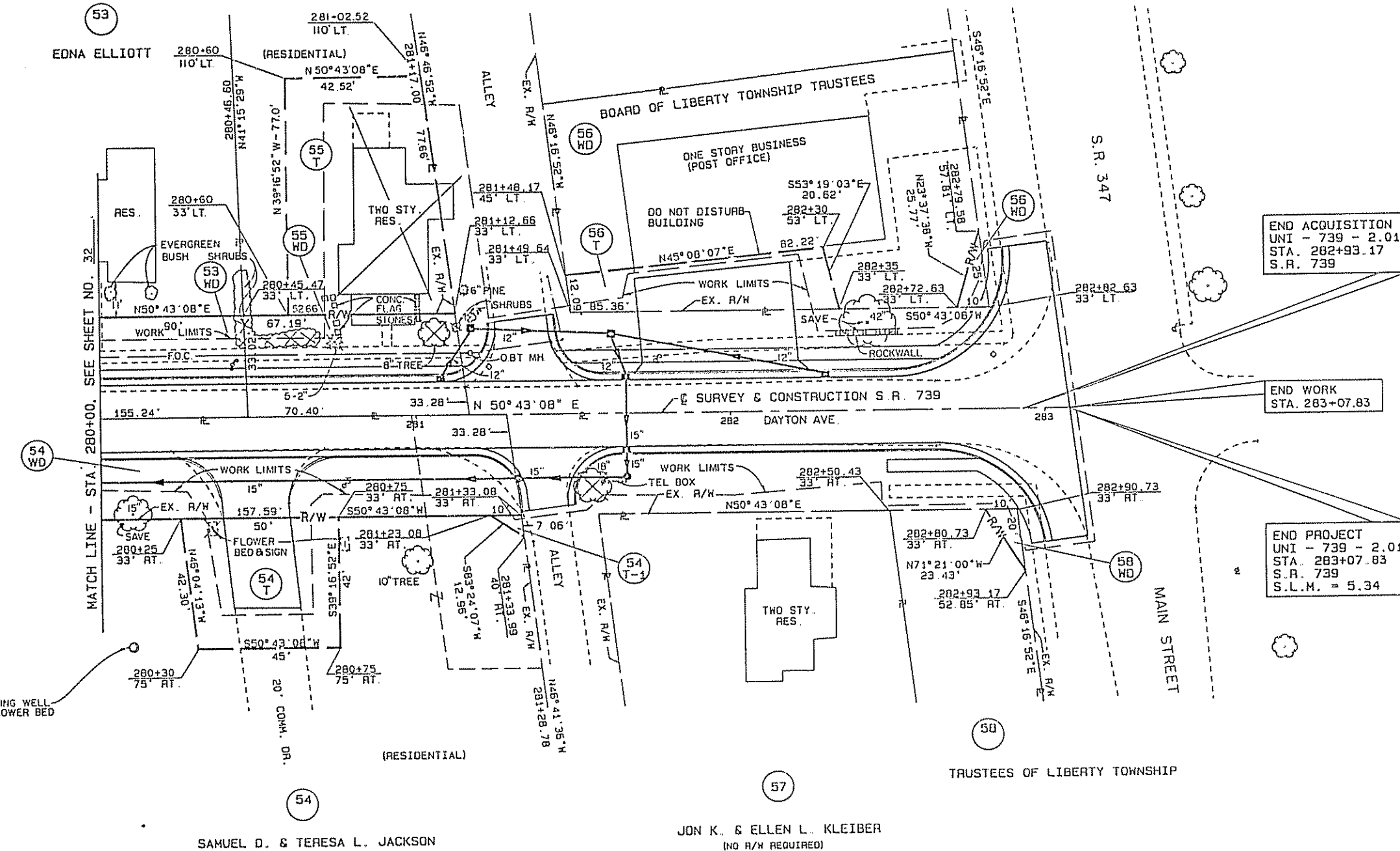
REV.	DATE	DESCRIPTION
1	5-26-93	Revised 50 WD

(A) N 50° 43' 08" E - 8.00'
(B) S 67° 24' 23" E - 13.61'
(C) N 14° 19' 12" V - 13.24'
(D) N 50° 43' 08" E - 12.00'
(E) S 80° 14' 03" E - 15.09'
(F) N 00° 31' 20" E - 15.62'
(G) N 50° 43' 08" E - 15.00'
(H) S 61° 54' 04" E - 13.00'

LIBERTY TOWNSHIP UNION COUNTY V.M.S. 5777



RICHARD E. & JANICE TILLMAN



EDNA ELLIOTT
GROSS TAKE = 0.068 ACRES
P.R.O. IN TAKE = 0.068 ACRES
NET TAKE = 0.000 ACRES

SAMUEL D. & TERESA L. JACKSON
GROSS TAKE = 0.118 ACRES
P.R.O. IN TAKE = 0.118 ACRES
NET TAKE = 0.000 ACRES

GROSS TAKE = 0.046 ACRES

GROSS TAKE = 0.001 ACRES

RICHARD E. & JANICE E. TILLMAN
GROSS TAKE = 0.052 ACRES
P.R.O. IN TAKE = 0.052 ACRES
NET TAKE = 0.000 ACRES

GROSS TAKE = 0.084 ACRES

BOARD OF LIBERTY TOWNSHIP TRUSTEES
GROSS TAKE = 0.003 ACRES

GROSS TAKE = 0.031 ACRES

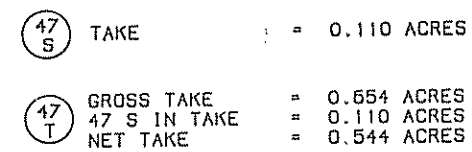
TRUSTEES OF LIBERTY TOWNSHIP
GROSS TAKE = 0.002 ACRES

TYPE FUNDS: STATE

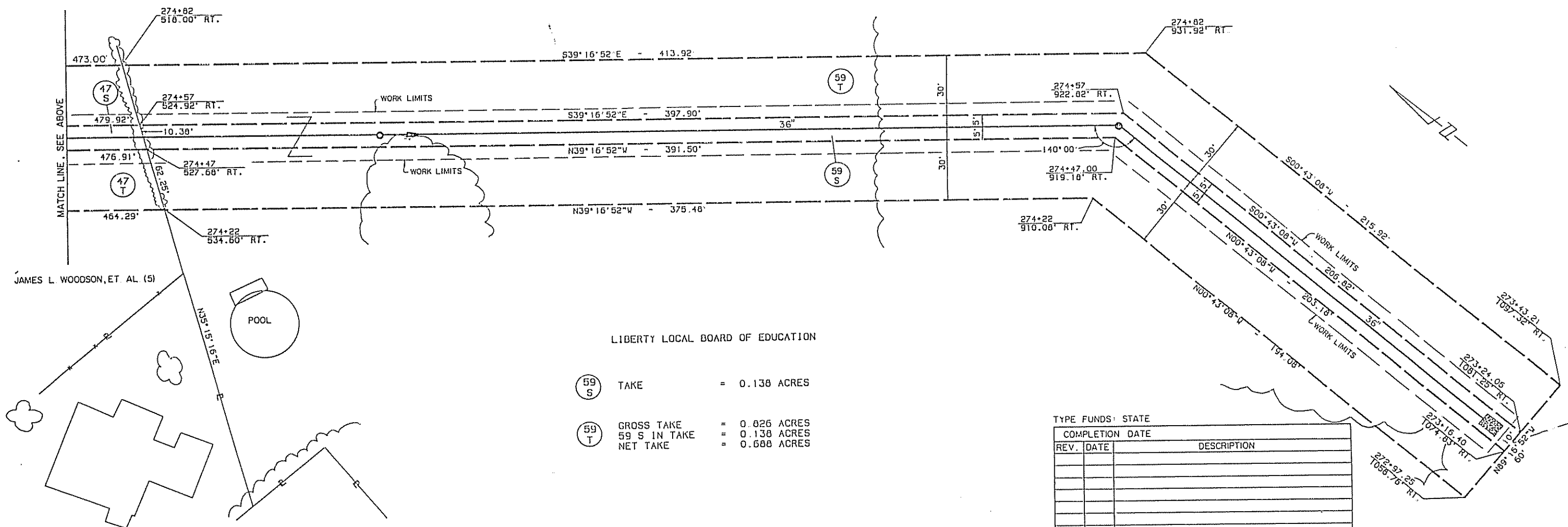
COMPLETION DATE		DESCRIPTION
REV.	DATE	

R/W PLAT S.R. REC STA. 280+00 TO ST. 283+07.83

CALC. BY DATE	11-42 11-42	UNI-739-2.01	OHIO	177
CUB. BY DATE	12-42 12-42		FHWA REGION 5	177



(17) GROSS TAKE = 0.654 ACRES
 T 47 S IN TAKE = 0.110 ACRES
 NET TAKE = 0.544 ACRES

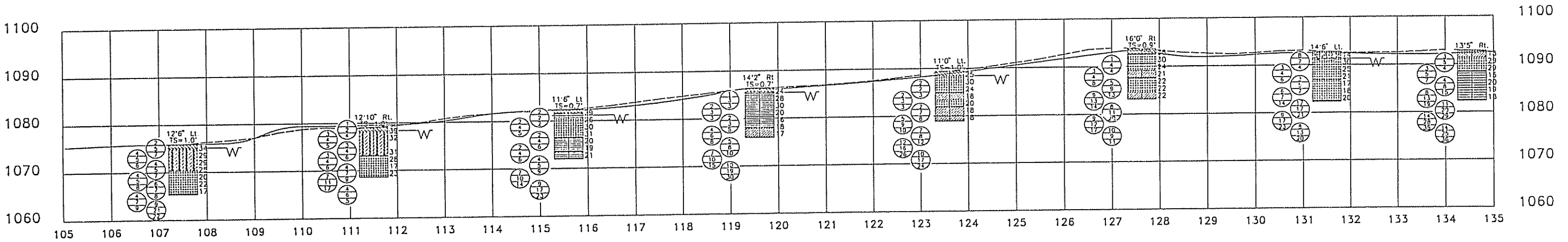
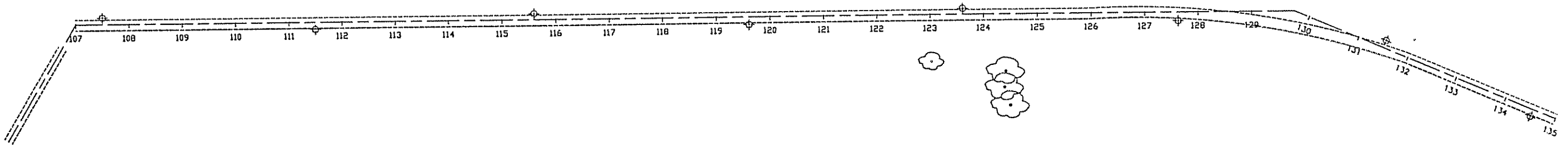


PLAN S.R. 739 STA. 27+43.0, 1

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
	OHIO	UNION/LOGAN STATE ROUTE 739	

2
13

UNI-739-2.01

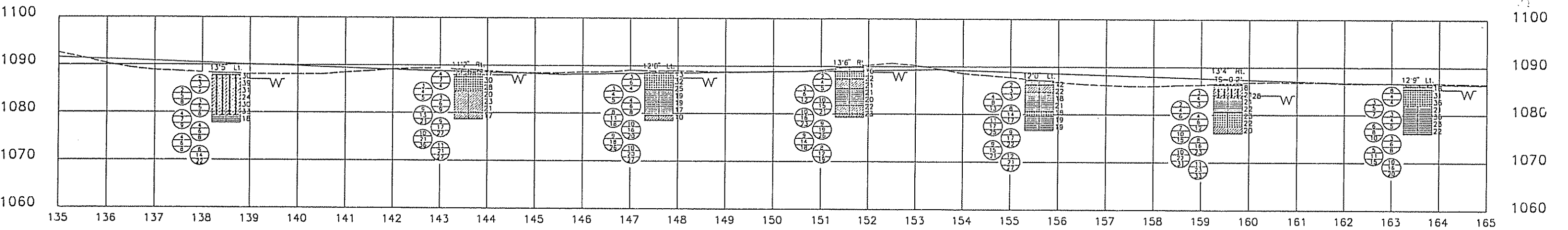
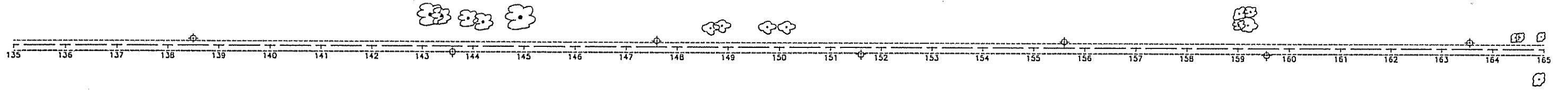


PSI Professional Service Industries, Inc. A & H Testing Division 4960 Vulcan Avenue Columbus, OH			
SOIL PROFILE OHIO STATE ROUTE 739 UNION COUNTY FOR R. D. ZANDE & ASSOCIATES			
DRWN BY	CHKD BY	DATE	PSI #
GK	MH	7-2-90	102-95139

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
	OHIO	UNION/LOGAN STATE ROUTE 739	

3
13

UNI-739-2.01

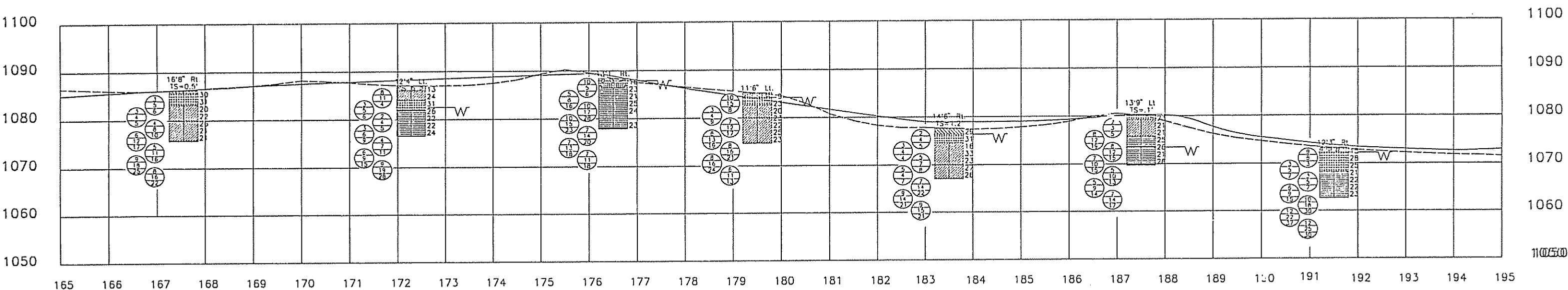
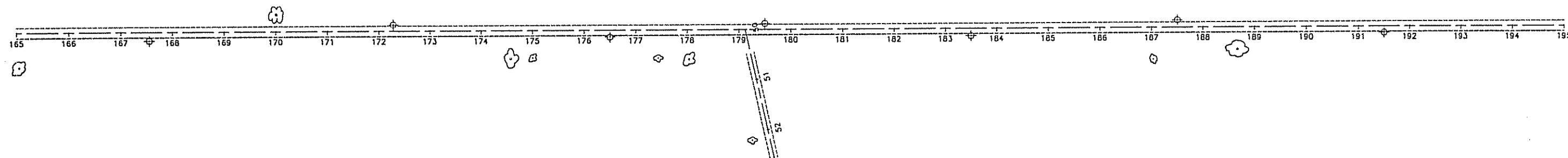


PSI Professional Service Industries, Inc. A & H Testing Division 4960 Vulcan Avenue Columbus, OH			
SOIL PROFILE OHIO STATE ROUTE 739 UNION COUNTY FOR R. D. ZANDE & ASSOCIATES			
DRWN BY	CHKD BY	DATE	PSI #
GK	MH	7-2-90	102-95139

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
	OHIO	UNION/LOGAN STATE ROUTE 739	

4
13

UNI-739-2.01

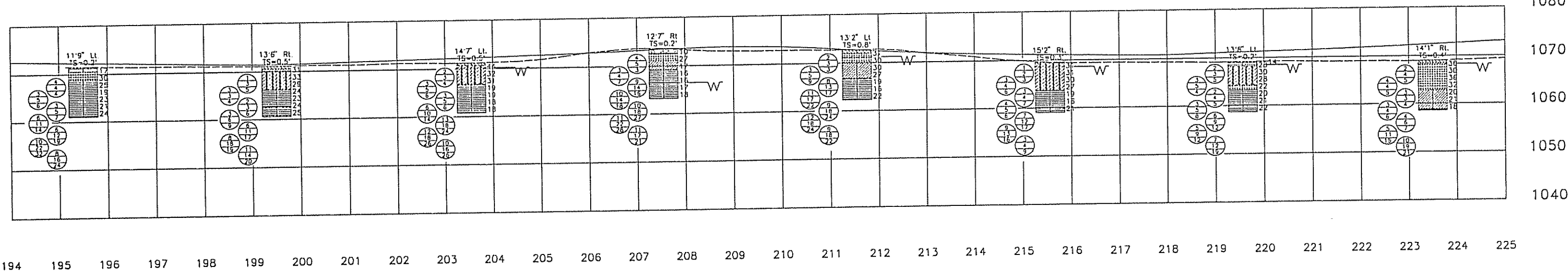
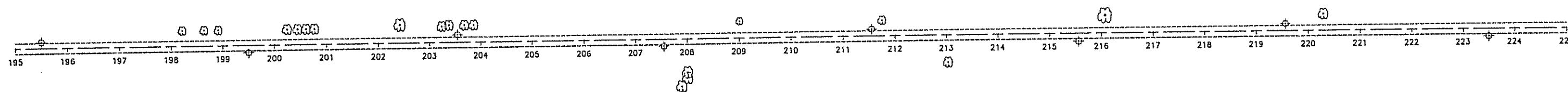


PSI Professional Service Industries, Inc. A. L. H. Testing Division 4960 Vulcan Avenue Columbus, OH			
SOIL PROFILE OHIO STATE ROUTE 739 UNION COUNTY FOR R. D. ZANDE & ASSOCIATES			
DRWN BY	CHKD BY	DATE	PSI #
GK	MH	7-2-90	102-95139

FED. RD. DISTRICT	STATE	PROJECT	TYPE FUNDS
	OHIO	UNION/LOGAN STATE ROUTE 739	

5
13

UNI-739-2.01

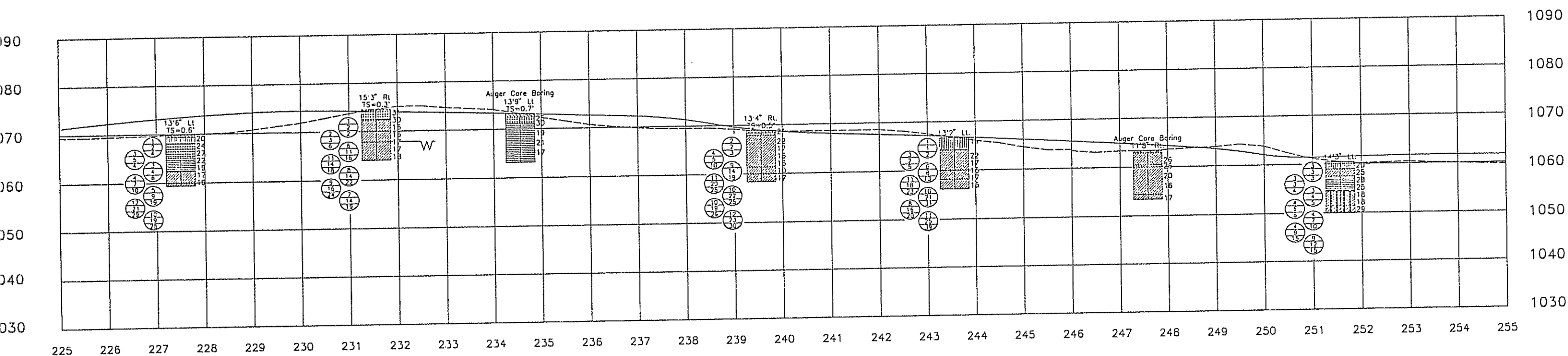
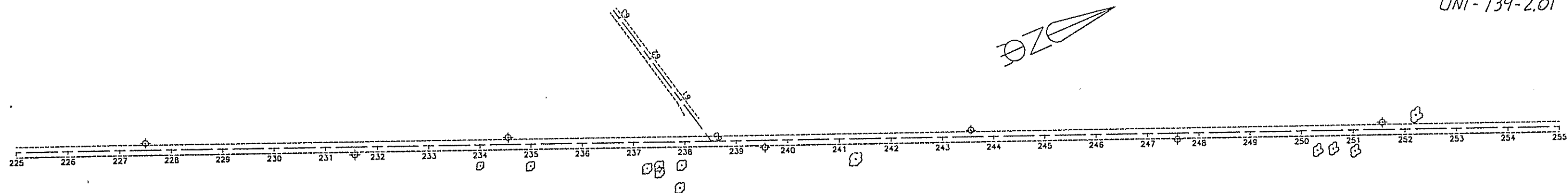


PSI Professional Service Industries, Inc. A. L. H. Testing Division 4960 Vulcan Avenue Columbus, OH			
SOIL PROFILE OHIO STATE ROUTE 739 UNION COUNTY FOR R. D. ZANDE & ASSOCIATES			
DRWN BY	CHKD BY	DATE	PSI #
GK	MH	7-2-90	102-95139

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDING
	OHIO	UNION/LOGAN STATE ROUTE 739	

6
13

UNI-739-2.01

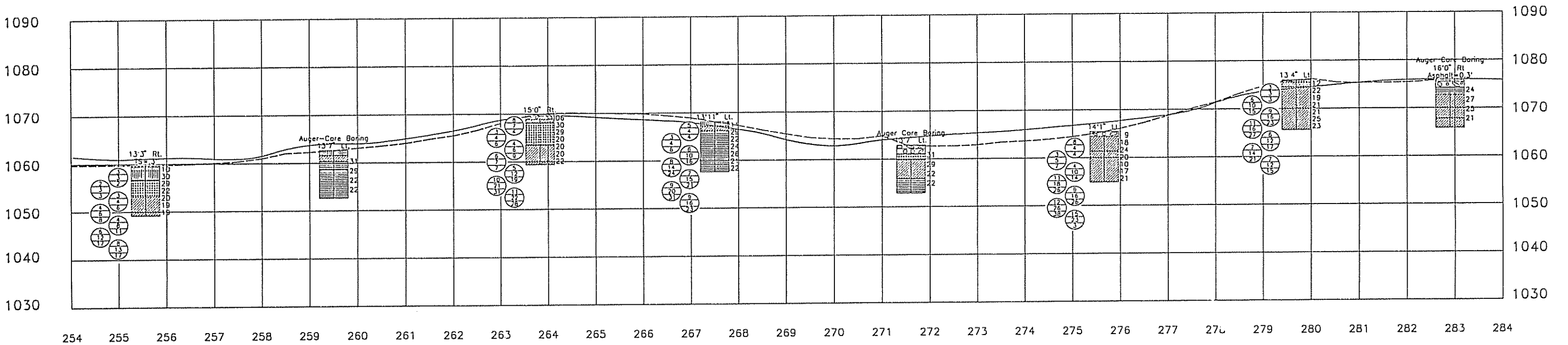
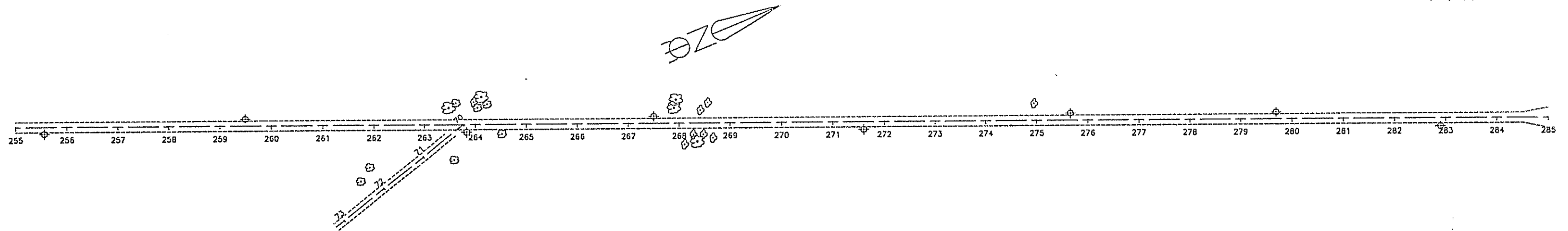


PSI Professional Service Industries, Inc. A & H Testing Division 4950 Vulcan Avenue Columbus, OH			
SOIL PROFILE OHIO STATE ROUTE 739 UNION COUNTY FOR R. D. ZANDE & ASSOCIATES			
DRWN BY	CHKD BY	DATE	PSI #
GK	MH	7-2-90	102-95139

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
	OHIO	UNION/LOGAN STATE ROUTE 739	

7
13

UNI-739-2.01



PSI Professional Service Industries, Inc. A & H Testing Division 4960 Vulcan Avenue Columbus, OH			
SOIL PROFILE OHIO STATE ROUTE 739 UNION COUNTY FOR R. D. ZANDE & ASSOCIATES			
DRWN BY	CHKD BY	DATE	PSI #
GK	MH	7-2-90	102-95139

LOG OF BORING

Station & Offset 138+50 LT. 13'5"

Hole Advancement & Sampling
3 1/2" ID HOLLOW STEM AUGER
2" OD SPLITSPOON

Water Elevation

Surface Elevation

Drilled By: PSI

Date Started 1-12-90

Date Completed 1-12-90

Boring Number B-9

Elev.	Depth	Std. Pen. (lb)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.I.	W.C.	Out	SHTL Class
1	5-3-2		BROWN CLAYEY SILT & SAND (FILL) 24HRS	SS-1								30		VISUAL
2														
3	2-5-8			SS-2								39		A-7-5**
4	3-5-6			SS-3								31		A-7-5**
5	4-7-9		GRAY AND BROWN MOTTLED ELASTIC CLAY	SS-4								24		A-7-5**
6														
7	4-6-8			SS-5								30		A-7-5**
8														
9	4-6-8			SS-6								33		A-7-5**
10	6-14-22		BROWN SILTY CLAY	SS-7								18		A-6B**
11														
12			BORING DISCONTINUED AT 10'6"											
13														

LOG OF BORING

Station & Offset 143+60 RT. 11'2"

Hole Advancement & Sampling
3 1/2" ID HOLLOW STEM AUGER
2" OD SPLITSPOON

Water Elevation

Surface Elevation

Drilled By: PSI

Date Started 1-12-90

Date Completed 1-12-90

Boring Number B-10

Elev.	Depth	Std. Pen. (lb)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.I.	W.C.	Out	SHTL Class
1	4-7-4		BROWN SILTY SAND & GRAVEL (FILL) 24HRS	SS-1								17		VISUAL
2														
3	3-4-5		BROWN & GRAY CLAY	SS-2	0	1	2	29	68	53	27	30		A-7-6
4	3-6-9			SS-3								28		A-7-6**
5														
6	9-13-21		BROWN WITH VERTICAL STREAKING SILT & CLAY	SS-4								20		A-6B**
7	9-17-27			SS-5								23		A-6B**
8														
9	10-21-36			SS-6								21		A-6B**
10	11-21-27			SS-7								17		A-6B**
11														
12			BORING DISCONTINUED AT 10'6"											
13														

LOG OF BORING

Station & Offset 147+60 LT. 12'0"

Hole Advancement & Sampling
3 1/2" ID HOLLOW STEM AUGER
2" OD SPLITSPOON

Water Elevation

Surface Elevation

Drilled By: PSI

Date Started 1-12-90

Date Completed 1-12-90

Boring Number B-11

Elev.	Depth	Std. Pen. (lb)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.I.	W.C.	Out	SHTL Class
1	3-6-4		BROWN CLAYEY SILT WITH GRAVEL (FILL) 24HRS	SS-1								13		VISUAL
2														
3	3-4-5		BROWN & GRAY CLAY WITH COARSE SAND SEAMS	SS-2								32		A-7-6**
4	4-6-8			SS-3								25		A-6B**
5														
6	8-11-18		BROWN WITH VERTICAL GRAY SEAMS SILTY CLAY	SS-4								19		A-6B**
7	10-16-20			SS-5								19		A-6B**
8														
9	9-18-26		BROWN SILTY CLAY	SS-6								17		A-6B**
10	11-20-27			SS-7								10		A-6A**
11														
12			BORING DISCONTINUED AT 10'0"											
13														
14														
15														

LOG OF BORING

Station & Offset 151+60 RT. 13'6"

Hole Advancement & Sampling
3 1/2" ID HOLLOW STEM AUGER
2" OD SPLITSPOON

Water Elevation

Surface Elevation

Drilled By: PSI

Date Started 1-12-90

Date Completed 1-12-90

Boring Number B-12

Elev.	Depth	Std. Pen. (lb)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.I.	W.C.	Out	SHTL Class
1	2-4-5		BROWN CLAYEY SILT FILL 24HRS	SS-1								16		A-7-6**
2														
3	3-6-12		BROWN CLAY	SS-2								22		A-7-6**
4	10-15-21			SS-3								21		A-6A**
5														
6	10-16-23		BROWN WITH GRAY STREAKING SILT & CLAY	SS-4								21		A-6B**
7	9-19-26		BROWN MOTTLED GRAY SILTY CLAY	SS-5								20		A-6B**
8	9-14-18			SS-6								22		A-6A**
9														
10	8-12-19		BROWN WITH GRAY VERTICAL STREAKING SILT & CLAY WITH COARSE SAND SEAMS	SS-7								23		A-6A**
11														
12			BORING DISCONTINUED AT 10'6"											

LOG OF BORING

Station & Offset 155+60 LT. 12'0"

Hole Advancement & Sampling
3 1/2" ID HOLLOW STEM AUGER
2" OD SPLITSPOON

Water Elevation

Surface Elevation

Drilled By: PSI

Date Started 1-12-90

Date Completed 1-12-90

Boring Number B-13

Elev.	Depth	Std. Pen. (lb)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.I.	W.C.	Out	SHTL Class
1	2-3-3		BROWN SILTY CLAY (FILL) 24HRS	SS-1								12		VISUAL
2														
3	4-8-13		BROWN SILTY CLAY	SS-2	3	4	8	31	54	37	15	22		A-6A
4	8-14-17			SS-3								18		A-6B**
5														
6	11-17-23		BROWN & GRAY MOTTLED SILTY CLAY	SS-4								21		A-6B**
7	9-17-22			SS-5								18		A-7-6**
8			BROWN CLAY											
9	9-15-21		BROWN SILTY CLAY WITH SEAMS OF CALCITE CRYSTALS	SS-6								19		A-6B**
10	12-21-27			SS-7								19		A-6B**
11														
12			BORING DISCONTINUED AT 10'6"											
13														

LOG OF BORING

Station & Offset 159+56 RT. 13'4"

Hole Advancement & Sampling
3 1/2" ID HOLLOW STEM AUGER
2" OD SPLITSPOON

Water Elevation

Surface Elevation

Drilled By: PSI

Date Started 1-13-90

Date Completed 1-13-90

Boring Number B-14

Elev.	Depth	Std. Pen. (lb)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.I.	W.C.	Out	SHTL Class
1			2" TOPSOIL											
2	3-4-3		BROWN SILTY CLAY	SS-1								8		VISUAL
3	2-4-6		BROWN & GRAY MOTTLED ELASTIC CLAY 24HRS	SS-2								21		A-6B**
4	4-8-12			SS-3								21		A-6B**
5														
6	7-10-15		BROWN WITH GRAY STREAKING SILTY CLAY	SS-4								22		A-6B**
7	8-16-23		BROWN WITH GRAY STREAKING CLAY	SS-5								23		A-7-6**
8														
9	10-22-31			SS-6								22		A-7-6**
10	11-23-33		BROWN SILT & CLAY	SS-7								20		A-6A**
11														
12			BORING DISCONTINUED AT 10'6"											
13														
14														
15														

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
	OHIO	UNION/LOGAN STATE ROUTE 739	



UNI-739-2.01

LOG OF BORING

Station & Offset 163+55 LT. 12'9"

Hole Advancement & Sampling
3 1/2" ID HOLLOW STEM AUGER
2" OD SPLITSPOON

Water Elevation

Surface Elevation

Drilled By: PSI

Date Started 1-13-90

Date Completed 1-13-90

Boring Number B-15

Elev.	Depth	Std. Pen. (lb)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.I.	W.C.	Out	SHTL Class
1	8-4-4		BROWN SAND & GRAVEL 24HRS	SS-1								18		VISUAL
2														
3	3-5-7		BROWN & GRAY MOTTLED CLAY TRACE ORGANICS	SS-2								31		A-7-6**
4	3-4-5			SS-3								36		A-7-6**
5														
6	6-8-10		BROWN WITH GRAY STREAKING SILTY CLAY	SS-4								21		A-6B**
7	3-6-8			SS-5								36		A-6B**
8														
9	5-11-15			SS-6								23		A-6B**
10	10-16-20			SS-7								22		A-6B**
11														
12			BORING DISCONTINUED AT 10'6"											
13														

LOG OF BORING

Station & Offset 167+55 RT. 16'8"

Hole Advancement & Sampling
3 1/2" ID HOLLOW STEM AUGER
2" OD SPLITSPOON

Water Elevation

Surface Elevation

Drilled By: PSI

Date Started 1-13-90

Date Completed 1-13-90

Boring Number B-16

Elev.	Depth	Std. Pen. (H)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.I.	W.C.	Out	SHTL Class
	1	3-5-6	6" TOPSOIL BROWN AND GRAY MOTTLED CLAY	SS-1	--	--	--	--	--	--	--	30	--	VISUAL
	2	3-4-5		SS-2	0	0	2	24	74	53	25	31	--	A-7-6
	3													
	4	4-8-10	BROWN WITH GRAY STREAKING SILT & CLAY	SS-3	--	--	--	--	--	--	--	20	--	A-6A**
	5	6-12-17		SS-4	--	--	--	--	--	--	--	22	--	A-6A**
	6													
	7	5-11-16		SS-5	--	--	--	--	--	--	--	26	--	A-6A**
	8	9-18-25		SS-6	--	--	--	--	--	--	--	21	--	A-6A**
	9													
	10	8-16-22		SS-7	--	--	--	--	--	--	--	21	--	A-6A**
	11													
	12		BORING DISCONTINUED AT 10'6"											
	13													
	14													
	15													

[illegible][illegible][illegible][illegible][illegible]

Date Started 1-23-90 Station & Offset 255+56 Rt. 13'3" Hole Advancement & Sampling
 Date Completed 1-23-90 Water Elevation _____ 3 1/2" ID HOLLOW STEM AUGER
 Boring Number 8-38 Surface Elevation _____ 2" OD SPLITSPOON
 Drilled By: PSJ

Elev.	Depth	Std. Pen. (ft)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Sil.	% Clay	L.L.	P.I.	W.C.	Duf.	SPT Blows
1	3-3-2		3" TOPSOIL	SS-1	---	---	---	---	---	---	---	10	---	VISUAL A-4A**
2	2-3-3		BROWN SANDY SILT	SS-2	---	---	---	---	---	---	---	30	---	A-6A**
3	3-4-6		BROWN SANDY SILT	SS-3	---	---	---	---	---	---	---	29	---	A-7-6**
4	4-6-8		BROWN AND GRAY MOTTLED CLAY	SS-4	---	---	---	---	---	---	---	22	---	A-7-6**
5	4-8-11			SS-5	---	---	---	---	---	---	---	20	---	A-6A**
6	6-12-17		BROWN WITH GRAY STREAKING SILT AND CLAY	SS-6	---	---	---	---	---	---	---	19	---	A-6A**
7	8-13-17			SS-7	---	---	---	---	---	---	---	19	---	A-6A**
8														
9														
10														
11														
12														
13														
14														
15														

BORING
 DISCONTINUED
 AT 10'6"

FED. RD. DIVISION:	STATE	PROJECT	TYPE FUNDS
	OHIO	UNION/LOGAN STATE ROUTE 739	

UNI-739-2.01

[illegible][illegible]

*No Atterberg Limits. Description is visual with the aid of grain-size analysis.
#TSF
**Description is visual with the aid of previous boring information.

PROJECT #: 102-95139
PROJECT: UNION/LOGAN STATE ROUTE 739
CLIENT: R. D. ZANDE & ASSOCIATES

PSI Professional Service Industries, Inc.
A & H Testing Division
4960 Vulcan Avenue
Columbus, OH

BORING LOG
OHIO STATE ROUTE 739
UNION COUNTY
FOR

R. D. ZANDE & ASSOCIATES

DRWN BY	CHKD BY	DATE	PSI #
CK	MH	7-2-90	102-95139

FED. RD. DIVISION:	STATE	PROJECT	TYPE FINDER
	OHIO	UNION/LOGAN STATE ROUTE 739	



UNI-739-2.01

LOG OF BORING

Date Started 1-23-90 Station & Offset 267-50 LT. 13'11" Hole Advancement & Sampling
Date Completed 1-23-90 Water Elevation 3 1/2" ID HOLLOW STEM AUGERS
Boring Number B-41 Surface Elevation 2" OD SPLITSPOON Drilled By: PSI

Elev.	Depth	Std. Pen. (H)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.L.	W.C.	Out	SHTL Class
1	5-4-4		BROWN SAND AND GRAVEL	SS-1								11		VISUAL
2	3-4-6		DARK BROWN SANDY SILT	SS-2								29		A-6A**
3	6-10-16		BROWN SILT AND CLAY	SS-3								22		A-6B**
4	8-14-24		BROWN WITH GRAY STREAKING SILTY CLAY	SS-4								24		A-6B**
5	7-15-21			SS-5								26		A-6B**
6	9-20-31			SS-6								21		A-6B**
7	9-16-23			SS-7								22		A-6B**
8			BORING DISCONTINUED AT 10'6"											
9														
10														
11														
12														
13														
14														

LOG OF BORING

Date Started 1-23-90 Station & Offset 271-60 RT. 15'2" Hole Advancement & Sampling
Date Completed 1-23-90 Water Elevation 4" OD FLIGHT AUGERS
Boring Number B-42 Surface Elevation Drilled By: PSI

Elev.	Depth	Std. Pen. (H)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.L.	W.C.	Out	SHTL Class
1			DARK BROWN SAND AND GRAVEL (FILL)	AU-1								45		VISUAL
2			BROWN SAND AND GRAVEL	AU-2								31	1.0	A-6A**
3			BROWN SILTY CLAY	AU-3								31	2.5	A-6A**
4			BROWN WITH GRAY STREAKING SILTY CLAY	AU-4								23	4.0	A-6A**
5												4.5		
6			BROWN SILTY CLAY	AU-5								20	4.5	A-6B**
7												4.5		
8												22	4.5	A-6B**
9														
10														
11			BORING DISCONTINUED AT 10'0"											
12														
13														
14														
15														

LOG OF BORING

Date Started 1-24-90 Station & Offset 275+66 LT. 14'1" Hole Advancement & Sampling
Date Completed 1-24-90 Water Elevation 3 1/2" ID HOLLOW STEM AUGERS
Boring Number B-43 Surface Elevation 2" OD SPLITSPOON Drilled By: PSI

Elev.	Depth	Std. Pen. (H)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.L.	W.C.	Out	SHTL Class
1	8-4-4		BROWN SAND AND GRAVEL (FILL)	SS-1								9		VISUAL
2	3-5-7		BROWN SILT AND CLAY	SS-2	1	6	6	30	57	39	13	18		A-6A
3	4-10-14			SS-3								24		A-6A**
4	11-18-24		BROWN WITH GRAY STREAKING SILTY CLAY	SS-4								20		A-6A**
5	9-16-26			SS-5								10		A-6A**
6	12-26-38			SS-6								17		A-6A**
7	15-23-3			SS-7								21		A-6A**
8			BORING DISCONTINUED AT 10'6"											
9														
10														
11														
12														
13														
14														

LOG OF BORING

Date Started 1-24-90 Station & Offset 279+69 LT. 13'4" Hole Advancement & Sampling
Date Completed 1-24-90 Water Elevation 3 1/2" ID HOLLOW STEM AUGERS
Boring Number B-44 Surface Elevation 2" OD SPLITSPOON Drilled By: PSI

Elev.	Depth	Std. Pen. (H)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.L.	W.C.	Out	SHTL Class
1	3-3-3		BROWN SILTY SAND AND GRAVEL	SS-1								12		VISUAL
2	6-10-15		BROWN SILT AND CLAY	SS-2								22		A-6A**
3	9-16-23		BROWN WITH GRAY STREAKING SILTY CLAY	SS-3								19		A-6A**
4	11-16-27			SS-4								21		A-6A**
5	6-12-17			SS-5								21		A-6A**
6	7-14-21			SS-6								25		A-6A**
7	7-12-15			SS-7								23		A-6A**
8			BORING DISCONTINUED AT 10'0"											
9														
10														
11														
12														
13														
14														
15														

LOG OF BORING

Date Started 1-24-90 Station & Offset 282+90 RT. 16'0" Hole Advancement & Sampling
Date Completed 1-24-90 Water Elevation 4" OD FLIGHT AUGER
Boring Number B-45 Surface Elevation Drilled By: PSI

Elev.	Depth	Std. Pen. (H)	Description	Sample Number	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	P.L.	W.C.	Out	SHTL Class
1			3" ASPHALT											VISUAL
2			GRAVEL BASE									24	2.75	A-6B**
3			BROWN SILTY CLAY	AU-1								4.25		A-6A**
4			BROWN WITH GRAY STREAKING SILTY CLAY	AU-2								4.5		A-6A**
5												25	4.5	A-6A**
6												4.5		
7												21	4.25	A-6A**
8			BROWN SILTY CLAY	AU-3								4.5		
9														
10														
11			BORING DISCONTINUED AT 10'0"											
12														
13														
14														
15														

*No Atterberg Limits. Description is visual with the aid of grain-size analysis.
#TSF
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PROJECT #: 102-95139
PROJECT: UNION/LOGAN STATE ROUTE 739
CLIENT: R. D. ZANDE & ASSOCIATES

PSI

Professional Service Industries, Inc.
A. L. H. Testing Division
4960 Vulcan Avenue
Columbus, OH

BORING LOG

OHIO STATE ROUTE 739
UNION COUNTY

FOR
R. D. ZANDE & ASSOCIATES

DRWN BY	CHKD BY	DATE	PSI #
GK	MH	7-2-90	102-95139