SUPERELEVATION TABLES - ABOUT CENTER LINE

FED. RD. DIVISION	STATE	
2	OHIO	U-UG-1C

STA. 21-10.2

LEFT OF ℄								SURVEY ℄ STATION	RIGHT OF ℄								REMARKS
Speed Change Lane		Outside Edge Pav't.		Inside Edge Pav't.		Storage Lane			Storage Lane		Inside Edge Pav't.		Outside Edge Pav't.		Speed Change Lane		
Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.		Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	
		For Pav't. Elevations from Sta. 539+75 to Sta. 541+00						See Intersection Detail Sheet No. 82									
		935.27	34.0'	934.67	10.0'			541+00	934.38	1.5'	934.38	4.5'	935.74	30.0'			Full Superelevation 0.025 Ft. Per Ft.
		935.28		934.68	10.0'			541+25	934.39	1.5'	934.39		933.75				
		935.36		934.76	10.0'			541+50	934.47	1.5'	934.47		933.83				
		935.49		934.89	10.0'			541+75	934.60	1.5'	934.60		933.96				
		935.69		935.09	10.0'			542+00	934.80	1.5'	934.80		934.16				P.V.T.
		936.15		935.55	10.0'			542+50	935.26	1.5'	935.26		934.62				
		936.56		935.96	10.0'			543+00	935.71	0.0'	935.71		935.07				
		936.94		936.36	10.0'	936.17	2.5'	543+50			936.17		935.53				
		937.30		936.67	9.0'	936.62	7.0'	544+00			936.62		935.98				
		937.72		937.08	8.5'			544+50			937.08		936.44				
		938.17		937.53				545+00			937.53		936.89				
		938.63		937.99				545+50			937.99		937.35				
		939.08		938.44				546+00			938.44		937.80				
		939.54		938.90				546+50			938.90		938.26				
		939.99		939.35				547+00			939.35		938.71				
		940.45		939.81				547+50			939.81	4.5'	939.17				
		940.90		940.26				548+00	940.26	3.5'	940.20	6.0'	939.59				
		941.36		940.72				548+50	940.72	0.5'	940.58		939.98				
		941.81		941.17		941.17	4.5'	549+00			940.91		940.30				
		942.27		941.63		941.63	5.5'	549+50			941.34		940.74				
		942.72	34.0'	942.08	8.5'	942.08	5.5'	550+00			941.79	6.0'	941.19	30.0'			
		For Pavement Elevations from Sta. 550+50 to Sta. 554+50						See Intersection Detail Sheet No. 82									
		929.18	34.0'	929.48	10.0'			580+00	929.58	0.5'	929.58	2.5'	929.18	28.0'			
		929.05	34.0'	929.35	10.0'			580+17.05	929.45	0.5'	929.45	2.5'	929.05	28.0'			Begin Transition Lt. Lane
		928.97	33.9'	929.29	9.9'			580+35.05	929.33	0.5'	929.33	2.5'	928.93	28.0'			
		928.92	33.8'	929.21	9.8'			580+45.05	929.25	0.5'	929.25	2.5'	928.85	28.0'			T.S.
		928.83	33.7'	929.08	9.7'			580+60	929.15	0.5'	929.15	2.5'	928.75	28.0'			P.V.C.
		928.75	33.2'	928.91	9.2'			580+95.05	928.96	0.5	928.96	2.5'	928.56	28.0'			
		928.75	32.6'	928.84	8.6'			581+25	928.88	0.0'	928.88	2.5'	928.48	28.0'			
		928.78	32.4'	928.85	8.4'	928.88	0.2'	581+55			928.88	2.5'	928.48	28.0'			
		928.86	31.9'	928.90	7.9'	928.91	1.3'	581+55.05			928.91	2.5'	928.49	27.8'			
		928.96	31.6'	928.97	7.6'	928.97	4.0'	581+75			928.97	2.1'	928.49	27.6'			Sta. 581+60 Begin Transition Rt. Lane
		929.21	30.9'	929.11	6.9'	929.10	5.1'	582+00			929.10	2.0'	928.50	27.5'			P.V.I.
		929.52	30.3'	929.29	4.8'			582+25			929.29	1.8'	928.56	27.3'			Sta. 582+48 Rt. Begin Full Superelevation 0.033 Ft. Per Ft.
		929.98	29.5'	929.60	4.0'			582+55.05			929.60	1.6'	928.78	27.1'			
		930.30	29.1'	929.85	3.6'			582+75			929.85	1.5'	928.99	27.0'			
		930.33	29.1'	929.88	3.6'						929.85	1.5'	929.01	27.0'			
		930.84	28.5'	930.23	3.0'			583+00			930.23	1.3'	929.39	26.8'			
		931.22	28.2'	930.52	2.7'			583+17.30			930.52	1.2'	929.68	26.7'			
		931.63	27.9'	930.85	2.4'			583+35.05			930.85	1.1'	930.01	26.6'			
		931.74	27.8'	930.95	2.3'			583+40			930.95	1.0'	930.11	26.5'			P.V.T.
		931.86	27.7'	931.05	2.2'			583+45.05			931.05		930.21				S.C. Begin Full Superelevation 0.033 Ft. Per Ft. Lt.
		932.39	27.2'	931.55	1.7'			583+70			931.55		930.71				
		932.99	26.7'	932.15	1.2'			584+00			932.15		931.31				
		933.35	26.6'	932.51	1.1'			584+18			932.51		931.67				
		933.99	26.5'	933.15	1.0'			584+50			933.15		932.31				
		934.49		933.65				584+75			933.65		932.81				P.V.C.
		934.78		933.94				584+90			933.94		933.10				
		935.42		934.58				585+25			934.58		933.74				
		935.83		934.99				585+50			934.99		934.15				
		936.20		935.36				585+75			935.36		934.52				
		936.40		935.56				585+90			935.56		934.72				
		936.53		935.69				586+00			935.69		934.85				P.V.I.
		936.84		936.00				586+25			936.00		935.16				
		937.00		936.16				586+40			936.16		935.32				
		937.10	26.5'	936.26	1.0			586+50			936.26	1.0'	935.42	26.5'			

SUPERELEVATION TABLES - ABOUT CENTER LINE

FED. RD. DIVISION	STATE	PROJECT
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LEFT OF ℄								SURVEY ℄ STATION	RIGHT OF ℄								REMARKS
Speed Change Lane		Outside Edge Pav't.		Inside Edge Pav't.		Storage Lane			Storage Lane		Inside Edge Pav't.		Outside Edge Pav't.		Speed Change Lane		
Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.		Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	
		937.33	26.5'	936.49	1.0'			586+75			936.49	1.0'	935.65	26.5'			
		937.44		936.60				586+90			936.60		935.76				
		937.51		936.67				587+00			936.67		935.83				
		937.67		936.83				587+25			936.83		935.99				P.V.T.
		937.75		936.91				587+40			936.91		936.07				
		937.80		936.96				587+50			936.96		936.12				
		938.02		937.18				587+90			937.18		936.34				
		938.07		937.23				588+00			937.23		936.39				
		938.29		937.45				+40			937.45		936.61				
		938.34		937.50				+50			937.50		936.66	26.5'			
		938.48		937.64				+75			937.64	1.0'	936.80	26.5'			
		938.56		937.72				+90			937.72	1.2'	936.88	26.7'			Begin Median Transition Rt.
		938.61		937.77				589+00			937.77	1.4'	936.93	26.9'			
		938.83		937.99				+40			937.99	2.0'	937.15	27.5'			
		938.88		938.04				+50			938.04	2.2'	937.20	27.7'			
		939.10		938.26				+90			938.26	2.8'	937.42	28.3'			
		939.15		938.31				590+00			938.31	3.0'	937.47	28.5'			
		939.37		938.53				+40			938.53	3.6'	937.69	29.1'			
		939.42		938.58				+50			938.58	3.8'	937.74	29.3'			
		939.64		938.80				+90			938.80	4.4'	937.96	29.9'			
		939.69		938.85				591+00			938.85	4.6'	938.01	30.1'			
		939.91		939.07				+40			939.07	5.2'	938.23	30.7'			
		939.96		939.12				+50			939.12	5.4'	938.28	30.9'			
		940.18		939.34				+90			939.34	6.0'	938.50	31.5'			
		940.23		939.39				592+00			939.39	6.2'	938.55	31.7'			
		940.45		939.61				+40			939.61	6.8'	938.77	32.3'			
		940.50		939.66				+50			939.66	7.0'	938.82	32.5'			
		940.72		939.88				+90			939.88	7.6'	939.04	33.1'			
		940.77		939.93				593+00			939.93	7.8'	939.09	33.3'			
		941.04		940.20				+50			940.20	8.6'	939.36	34.1'			
		941.31		940.47				594+00			940.47	9.4'	939.63	34.9'			
		941.58		940.74				+50			940.74	10.2'	939.90	35.7'			
		941.85		941.01				595+00			941.01	11.0'	940.17	36.5'			
		942.12		941.28				+50			941.28	11.0'	940.44				End Median Transition Rt.
		942.39		941.55				596+00	941.55	11.0'	941.55	11.0'	940.71		940.71	36.5'	Sta. 596+25 Begin Transition Rt. Lane
		942.66		941.82				+50	941.82	9.5'	941.76	12.5'	940.92		940.87	38.8'	P.V.C.
		942.78		941.94				+75	941.94	8.0'	941.81		940.99		940.88	40.1'	
		942.86		942.02				597+00	942.02	6.0'	941.83		941.01		940.85	41.3'	
		942.90		942.06				+25	942.06	3.5'	941.81		941.00		940.78	42.6'	
		942.90		942.06				+50	942.06	2.2'	941.74		940.94		940.67	43.9'	
		942.87		942.03				+75	942.03	1.2'	941.66		940.87		940.56	45.2'	End Transition Rt Lane
		942.80		941.96				598+00	941.96	1.0'	941.58		940.79		940.46	46.5'	P.V.I.
		942.69		941.85				+25	941.85		941.47		940.67		940.35		
		942.54		941.70				+50	941.70		941.31		940.52		940.19		
		942.51		941.67				+54	941.67		941.28		940.49		940.16		
		942.38		941.52				+75	941.52		941.12		940.33		940.01		Begin Transition Lt Lane
		942.19	26.5'	941.31	1.0'			599+00	941.31	1.0'	940.91	12.5'	940.12	36.5'	939.79	46.5'	

For Pav't Elevations from Sta 599+25 to Sta 602+53 See Intersection Detail Sheet No. 84

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SUPERELEVATION TABLES - ABOUT CENTER LINE

LEFT OF ℄								SURVEY ℄ STATION	RIGHT OF ℄								REMARKS
Speed Change Lane		Outside Edge Pav't		Inside Edge Pav't		Storage Lane			Storage Lane		Inside Edge Pav't		Outside Edge Pav't		Speed Change Lane		
Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.		Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	Elevation	Dist.	
		940.76	Existing	939.56	Existing Profile Grade			602+53	939.02	8.5'	939.02	10.5'	937.67	37.0'			Full Superelevation 0.050 Ft. Per Ft.
								+75	939.29		939.29		937.94				
		941.35		940.08				603+00	939.60		939.60		938.25				
								+25	939.90		939.90		938.55				
		941.89		940.64				+46	940.16		940.16		938.81				
								+50	940.21		940.21		938.86				P.V.C.
								+75	940.45		940.45		939.14				
		942.44		941.20				604+00	940.73		940.73		939.38				
								+25	940.91		940.91		939.56				
								+50	941.03	8.5'	941.03		939.68				
								+75	941.13	8.2'	941.13		939.78				P.V.I.
		942.85		941.60				605+00	941.21	7.8'	941.21		939.86				
								+25	941.28	6.0'	941.28		939.93				
								+50	941.28	4.0'	941.28		939.93				
								+75	941.22	1.6'	941.22		939.87				
		942.40		941.32		941.14	0.5'	606+00			941.14		939.79				P.V.T.
						940.99	1.0'	+25			940.99		939.64				
						940.80	1.0'	+50			940.80	10.5'	939.45	37.0'			End Work
								+75									
		941.54	Existing	940.36	Existing Profile Grade			607+00									

GENERAL NOTES

FED. RD. DIVISION	STATE	PROJECT	
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STA. 21-10.23

DESIGN SPEED

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

FIELD OFFICE

The Contractor shall provide a suitable "Field Office" in accordance with Section S-0.01(b) having a minimum of 500 square feet of floor space. The Contractor shall have a telephone installed and maintained in this field office during construction of the project.

MONUMENT ASSEMBLY ITEM 1-8

See Standard Drawing R1-1 for details of Standard Monument Assembly.

MAINTENANCE OF TRAFFIC

Local traffic detours shall be as directed by the City of Massillon.
WALNUT ROAD, CHERRY ROAD, and U.S.R. 21 north of CHERRY ROAD
Two Way Vehicular and Pedestrian Traffic shall be Maintained at all times.
PEDESTRIAN TRAFFIC -
Where temporary walks are required they shall be at least 5 feet wide within the limits of the work and have an aggregate surface (4" Minimum thickness) or equal.

The Contractor shall furnish all lights, flagmen, watchmen and all other items necessary to expedite movement of traffic in accordance with Sections G-1.07 and G-4.05. Quantities of T-10, M-10, I-15 Temporary Guard Rail and "T-35 for Maintaining Traffic" to be placed if and as directed by the Engineer, have been carried in the General Summary.

Payment for construction, maintenance, and subsequent removal, wherever required, of temporary roadways and walks except for furnishing and placing items T-10, M-10, I-15 temporary Guard Rail and "T-35 for Maintaining Traffic" is included in the Lump Sum bid for "Maintaining Traffic."

REMOVAL OF TREES AND STUMPS

Sizes - 12" to 18" - 10	Sizes - 30" to 36" - 2
18" to 24" - 4	36" to 42" - 3
24" to 30" - 3	42" to 48" - 2

Payment for removal of trees and stumps shall be included in the lump sum bid for Item E-9, Removal of trees and stumps. Approximately 24 trees and stumps, as tabulated above, are to be removed. No tree shall be removed until specifically marked for removal by the Engineer. The State of Ohio reserves the right to order the removal of additional trees and stumps, even though these trees or stumps are not indicated on the plans. Payment for removal of these additional trees or stumps is included in the lump sum bid for the removal of trees and stumps.

MISCELLANEOUS PAVEMENT REMOVAL

Removal of all private drives, steps, sidewalks, and patios on this project shall be considered miscellaneous removals per Sec. E-1.03(c) unless otherwise specified on these plans.

NON-RIGID PAVEMENT REMOVAL

Removal and disposal of existing non-rigid pavement, unless otherwise indicated on these plans, shall be measured and paid for as Item E-1 Roadway Excavation.

DRIVEWAYS

Wherever new Roadway or Sidewalk disturbs existing bituminous or concrete drives and parking areas, the area between the back edge of the new sidewalk and edge of the existing surface will be replaced in kind at locations shown by the plans or as designated by the Engineer. Payment shall be at the unit prices bid for the various payment items required.

COMPACTION FOR DRIVES

The subgrade for new drives or drives being reconstructed shall be compacted for a depth of six (6) inches to the density requirements of Table III, Item E-1. Payment for subgrade compaction, as specified above, shall be included in the unit price bid for Item E-1, Roadway Excavation.

EXPANSION JOINTS

Although specific locations of certain expansion joints have been detailed on this plan, no waiver of the specifications is intended and expansion joints shall be provided at all major structures as required by Standard Construction Drawing T.J.

CONTRACTION JOINTS

In addition to the joints indicated on plan details, the maximum distance between Contraction Joints shall in all cases be in accordance with Standard Construction Drawing T.J.

HEAVY EQUIPMENT

The Contractor shall exercise care in the use of heavy equipment over finished work and will be required to remove and replace any completed work destroyed thereby. Culverts shall be backfilled to a height of four feet before loaded earth-moving equipment is permitted to cross the trench. Any additional fill and subsequent excavation required to provide this minimum cover shall be made at no additional cost to the State. Heavy equipment shall not be operated over any completed layer of embankment, compacted subgrade, or subbase, if such operation tends to destroy the soil structure or pipe underdrains; however, if such operation cannot be avoided, the Contractor will be required to reduce the size of loads to an extent that damage does not occur.

BERMS AND SLOPES

Berms, slopes and rounding shall be finished in accordance with Standard Drawing R1-1 except where otherwise shown on the cross sections. All slopes in transitions from cut to fill shall be made in a manner to blend with the surrounding terrain as directed by the Engineer.

The grading tolerances as noted in Section E-1.10 of the Specifications shall be modified as follows: The finished graded and seeded section in the areas of lawns or residences shall not deviate more than one inch vertically below the grade and lines as shown in these plans. These areas are to be in smooth contour and free from sticks, stones and other debris. Care shall be exercised, as directed by the Engineer, to assure that proper surface drainage is obtained in the areas involved as well as adjacent to or across any driveways that may be located in the areas. Payment for any additional tools, labor including handraking if necessary, incidentals and operations necessary to accomplish this shall be included in the price bid for Item E-1 Roadway Excavation.

The above note shall be considered to be particularly applicable in the following areas:

Edwin Ave.	Sta. 0+24 to Sta. 1+80 Lt. & Rt.
Mainline	Sta. 570+50 to Sta. 573+55 Rt.
	Sta. 578+60 to Sta. 584+50 Rt.
	Sta. 597+90 to Sta. 603+60 Rt.

ITEM SPECIAL- FINE AGGREGATE, AS PER PLAN

This item shall consist of furnishing & placing a fine aggregate blanket as shown on sheet no. 4 and on the cross sections. Fine Aggregate shall meet the requirements as designated in Section M-2.1 of the Construction and Material Specifications of the State of Ohio.

Quantity to be paid for shall be the number of cubic yards compacted in place in conformity with the lines and grades as shown on the cross sections. Construction shall conform essentially with Sec. 1-22.03 of the Construction and Material Specifications.

The yardage measured as provided above shall be paid for at the contract unit price bid for "Item Special, Fine Aggregate As Per Plan" which price and payment shall constitute full compensation for compacting the subgrade, furnishing, hauling, placing and compacting the aggregate and for all labor, equipment, tools and incidentals necessary to complete this item except excavation which is paid under Item E-1 Roadway Excavation.

SPECIAL ABANDONING OF EXISTING 48" SEGMENTAL BLOCK AND 54" TWO-RING BRICK SANITARY SEWER

The existing sewer and manholes within the limits of Sta. 542+06 to the manhole opposite Sta. 552+15 shall be uncovered, the portions above the sewer spring line removed and/or broken down, and the trench backfilled in accordance with Sec. E-12.04. Payment for the above, including removal of manholes, shall be included in the unit price bid for Item E-12, Abandoning 48" and 54" Sewer.

Between Stations 552+15 and 558+47.5 and between Stations 567+69.5 and 575+47, the existing 48 inch sewer shall be abandoned in place. In these areas the existing manholes shall be abandoned under Item I-16 and bulkheads shall be provided in the sewer at the locations shown on the plans. The bulkheads shall consist of brick masonry as specified in Sec. I-8.05 with a minimum thickness of 12 inches.

Each of these bulkheads in place, completed and accepted, shall be paid for at the contract unit price bid for "Item Special, 48"in Bulkheads, which price and payment shall constitute full compensation for all labor, furnishing and placing all materials, tools, equipment, excavation, backfill, disposal of materials and incidentals necessary to complete this item.

MANHOLE RECONSTRUCTED TO GRADE USING SALVAGED CASTING ITEM I-8

The Contractor shall remove existing casting and reconstruct existing manhole to grade using materials designated in Section I-8.02 of the specifications. The salvaged casting shall be cleaned of all concrete, etc. and placed on the manhole. Reconstruction shall conform, as nearly as practicable, to the existing type of construction.

Payment for this item shall be at the contract unit price "Each" for Item I-8, Manhole Reconstructed to Grade Using Salvaged Casting As Per Plan. Extent of removal and reconstruction shall be at least down to the existing spring line.

MANHOLE ADJUSTMENTS

It is the intent of this plan that any manhole adjustment not specifically detailed for which the grade is raised more than 12 inches or lowered more than 6 inches shall be considered as "Reconstructed to Grade." Any adjustment falling within the above limits shall be considered as "Adjusted to Grade."

TILE FOR SUBGRADE DRAINAGE

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

ESTIMATED QUANTITIES

The following estimated quantities of class "B" Storm Sewers and No. 7 Catch Basins have been provided in the General Summary for replacement and reconstruction, as directed by the Engineer.

6" - 100 Lin. Ft. 8" - 100 Lin. Ft 2 each I-8 C.B. No. 7

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

SANITARY SEWER RELOCATION

The Contractor will be required to keep properly functioning existing sanitary sewers affected by the construction of this project, until the proper connections and relocations are made as shown on the Plans.

M-6.6(b) or M-6.6(c) Pipe used in I-2 Storm Sewers (Sanitary) shall be factory lined with two (2) coats of Bitumastic Super Service Black, as manufactured by the Tar Products Division of the Koppers Company, Inc., Pittsburgh 12, Pa., or approved equal.

The entire interior of the Pipe, the interior and end of the bell and outside and end of the tongue shall be coated.

Joints in the concrete pipe shall be sealed with "Hexseal" rubber gaskets, or approved equal, installed in accordance with the manufacturer's recommendations and as directed by the Engineer.

Payment for all the above shall be included in the contract Unit Price per linear foot bid for "Item I-2 Sec. M-6.6(b) or M-6.6(c) Storm Sewers (Sanitary).

REMOVAL OF EXISTING HOUSE DRAINS

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

CONNECTIONS TO EXISTING SEWERS

At places where the plan provides for proposed drainage pipe to be connected to existing pipes, it shall be the responsibility of the Contractor to locate the existing pipe both as to line and grade before he starts to lay the proposed sewer. The cost of this operation and the provision of suitable connections to the existing sewers shall be included in the unit price bid for the pertinent Item I-2 Storm Sewer.

PLUGGING OF EXISTING STORM AND SANITARY SEWERS

The contractor shall plug the existing sewers at locations designated on plans. Construction methods and materials for this work shall be in accordance with Section I-16.03 of the Construction and Material Specifications. Cost of this work will be included under E-1, Roadway Excavation, and no additional compensation shall be allowed.

CASTINGS

All castings from abandoned manholes, inlets and catch basins shall be carefully removed and stockpiled along the Right of Way. The City of Massillon shall have the choice of selecting the casting they can use. The balance of the castings, if any, shall become the property of the contractor and shall be removed from the site by him.

Continued On Sheet No. 10

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. 21-10.23

GENERAL NOTES

FLOOD PROTECTION

The flood wall parallel to this project is for the protection of the City of Massillon. The Contractor shall be required to schedule his work on the Alterations to "Sippo Creek Conduit and Pumping Station" and "Federal Avenue Pump Station Relocation," so that the City of Massillon will have maximum flood protection at all times.

Payment for this Flood Protection and furnishing and maintaining stand-by pumps, temporary drainage and special schedule or sequence of Construction, wherever required, shall be included in the lump sum bid for "Alterations Sippo Creek Conduit & Pumping Station" and/or "Relocation Federal Avenue Pump Station" and no additional compensation shall be allowed.

PROTECTION OF EXISTING LEVEE AND TOE DRAIN

The Contractor is hereby instructed that all construction work adjacent to or on existing levee, that may disturb existing toe drain, must be protected by shoring or other suitable methods acceptable to the Corps of Engineers.

This protection shall be done at no additional cost to the State.

PUBLIC UTILITIES AFFECTED

East Ohio Gas Company
Ohio Water Service Company
Ohio Bell Telephone Company
Ohio Edison Power Company
City of Massillon Storm & Sanitary Sewers
Pennsylvania Railroad Company
Wheeling & Lake Erie Railroad Company (N.K.P.)
Baltimore & Ohio Railroad Company
Western Union Telegraph Company

UTILITY NOTE

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

UNDERGROUND UTILITIES

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

FILLING BASEMENTS

All basements or portions thereof within the right of way but beyond the normal slope lines shall be filled to surrounding ground elevation as directed by the Engineer. Prior to filling within this area, the basement floors and walls shall be broken up or removed as provided under Sec. E-1.03(c) and all house drains not removed shall be plugged as described in note entitled "Plugging of Existing Storm and Sanitary Sewers" on Sheet 9.

Where basements, drives, garage floors and other masonry extend beyond the right of way line, but are within slope easement or work agreement lines, they shall be removed and filled to the elevation of the surrounding ground as directed by the Engineer but the requirements of Sec. E-1.03(c) shall be waived for those portions extending beyond the right of way line.

Payment for all of the above is included in the unit price bid for Roadway Excavation, Item E-1.

SEEDING ITEM L-9

Item L-9 Seeding quantities shall include all soil areas between the Right-Of-Way lines excepting areas to be sodded.

The seeding mixture for the entire project shall be as follows:

25%	Kentucky Bluegrass
60%	Kentucky 31 Fescue
10%	Red Top
5%	Alsike Clover

SODDING ITEM L-10

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

PLACING SOD IN DITCHES

All sod placed in ditches shall be laid with the long edges of the strips perpendicular to the flow line of the ditch. Successive strips shall be neatly matched and all joints staggered or broken. The sod shall be staked securely with stakes placed on maximum two (2) foot centers in rows not more than two (2) feet apart. Stakes in adjacent rows shall be staggered. The stakes shall be wood from ½" x ¾" x 12" to 1" x 1" x 24", as required to hold the sod, and shall be driven flush with the top of the sod.

CONSTRUCTION LAYOUT STAKES

See note in proposal describing the work included in this lump sum pay item.

RIPRAP, USING 6" REINFORCED CONCRETE SLAB, AS PER PLAN

In addition to meeting the general requirements of Sections I-10.03 and I-10.05, the riprap furnished for this item shall be a 6-inch reinforced concrete slab, reinforced with bars or fabricated reinforcement equivalent to 3/8-inch round bars spaced at two-foot centers, two directions, and placed approximately midway between the top and bottom of the slab. Formed construction joints may be used subject to the approval of the Engineer. Reinforcement shall extend through all construction joints.

The requirements of Sec. I-10.05 for depressed grooves and thickened bottom edges in this item shall be waived. In lieu thereof cut-off walls and impressed contraction joints, as noted on Standard Construction Drawing I-14G, shall be provided and payment therefor shall be included in the unit price bid for this item.

APPROVALS BY THE CORPS OF ENGINEERS, U.S. ARMY

Where these plans indicate that approval of the Contractor's construction methods and procedures and/or construction sequence will be required of the U.S. Army Corps of Engineers, the necessary submissions to the Corps of Engineers shall be made through the Project Engineer who will coordinate the proposed work and advise the Contractor when the approval has been obtained.

SUBBASE, GRADING "A" or "B", AS PER PLAN

The material furnished for this item shall meet the requirements of Grading A or B of Sec. I-22.02 except that, for either grading, no more than 10 percent of the material shall pass a No. 200 sieve.

GUARD RAIL POST ANCHORS

Where existing or proposed culvert or pier construction interferes with proposed guard rail construction and sufficient post depth is not available, anchors as detailed on Standard Construction Drawing I-15 No. 6 or an equal approved by the Engineer shall be provided. Payment for these anchors shall be included in the unit price bid for Item I-15 Guard Rail.

REFERENCES TO CITY PARTICIPATION

References to percentage city participation, other than 100% City Participation items, appearing throughout these plans shall be disregarded except for purposes of identification of the proposed work area in relation to the north curb line of Cherry Road.

Quantities indicated as "1.58% City" in the sub-summaries involve work north of said curb line. Quantities indicated as "5% City" involve work south of said curb line.

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA - 21 - 10.23

TYPE CODE 7221

ITEM	U-1010(5) FULL PROJECT PARTICIPATION - SOUTH OF CHERRY ROAD																				SUB TOTAL
	9	13	14	15	17	18	19	20	21	22	24	25	26	27	28	29	30	31	32	35	36	
E-1			33884			1			14			98									8	33205
E-1			52108																			52108
E-4			92256																			92256
E-8						622			1488			520		675				844	1037	500	390	6076
E-8						106			353					267				18	68	272	78	1162
E-8						8			107										1898			2013
E-9	L.S.																					L.S.
E-11			838																			838
I-8			10																			10
I-13			10691																			10691
I-15					1550			1687.5			1012.5	550	125		662.5			25				5612.5
I-15					487.5																	487.5
L-9		61910																				61910
L-9		5.63																				5.63
L-9		28.15																				28.15
L-10		638																				638
SS-18		6090																				6090
SS-18		2																				2
T-10	250																					250
M-10	5																					5
T-35	50																					50
Special									1		3	4	4	1								13
E-4				605																		605
E-4				40																		40
E-5				3																		3
E-12					345			507	216													1068
E-12						75	1	133								1	1	1				212
E-12												96									28	124
E-12											410	260	278									948
I-2																34						34
I-2																			12			12
I-2	75																					75
I-2	75											54										129
I-2						64						40		10				6				120
I-2								92				72										164
I-2																254						254
I-2														74								74
I-2														106								106
I-2															178	70						248
I-2					126	142	60							234		214	70	56		158	352	114	1526
I-2								100						192	40								332
I-2															104	80							184
I-2														92			64						156
I-2																264							264
I-2																	28						28
I-2					390		396			452	464	135	85										1922
I-2								400															400
I-2												84											84
I-4			12438																				12438
I-4				683																			683
I-4				600																			600
I-4				250																			250
I-4				728																			728
I-4				162																			162
I-4				42																			42
I-5				39																			39
I-5				2																			2
I-5				1																			1
I-5																		2					2
I-5														1									1
I-5																		2					2
I-8																							
I-8														2		2	1		1				6
I-8					1	2			2					2		2					4	2	15
I-8						4														5			9
I-8	1																						1
I-8																			1				1
I-8																1	1	1					3
I-2																			144				144

ITEM	FULL PROJECT PARTICIPATION NORTH OF CHERRY ROAD						SUB TOTAL
	9	13	14	15	32	34	
E-1			979				979
E-1			2673				2673
E-8					1378	67	1445
E-9	L.S.						L.S.
E-11			6				6
I-15							
L-9		1723					1723
L-9		0.16					0.16
L-9		0.78					0.78
SS-18		210					210
T-10	250						250
M-10	5						5
T-35	50						50
I-4							
I-4							
I-4							
I-4							
I-4							
I-4							
I-4							
I-4							
I-4							
I-5							
I-5							
I-5							
I-5							
I-5							
I-8							
I-8							
I-8							
I-8							
I-8							
I-8							
I-8							
I-2							

ITEM	100% CITY						SUB TOTAL
	13	14	35				
E-1		195	3				198
E-1		428					428
E-8							
E-9	L.S.						L.S.
E-11		1					1
I-15							
L-9	157						157
L-9	0.02						0.02
L-9	0.07						0.07
SS-18							
T-10							
M-10							
T-35							
I-4							
I-4							
I-4							
I-4							
I-4							
I-4							
I-4							
I-4							
I-5							
I-5							
I-5							
I-5							
I-5							
I-8							
I-8							
I-8							
I-8							
I-8							
I-8							
I-8							
I-2							

ITEM	FED. PARTIC SUB TOTAL	TOTAL
E-1	34184	34382
E-1	54781	55209
E-4	92256	92256
E-8	6076	6076
E-8	1162	1162
E-8	3458	3458
E-9	L.S.	L.S.
E-11	844	845
I-8	10	10
I-13	10691	10691
I-15	5612.5	5612.5
I-15	487.5	487.5
L-9	63633	63790
L-9	5.79	5.81
L-9	28.93	29.00
L-10	638	638
SS-18	6300	6300
SS-18	2	2
T-10	500	500
M-10	10	10
T-35	100	100
I-4	605	605
I-4	40	40
I-5	3	3
E-12	1068	1068
E-12	213	213
E-12	89	89
E-12	948	948
I-2	34	34
I-2	12	12
I-2	75	75
I-2	129	129
I-2	120	120
I-2	164	164
I-2	254	254
I-2	74	74
I-2	106	106
I-2	248	248
I-2	1650	1650
I-2	332	332
I-2	184	184
I-2	156	156
I-2	264	264
I-2	28	28
I-2	1922	1922
I-2	400	400
I-2	84	84
I-4	13029	13029
I-4	683	683
I-4	600	600
I-4	250	250
I-4	740	748
I-4	162	162
I-4	42	42
I-5	40	40
I-5	2	2
I-5	1	1
I-5	2	2
I-5	1	1
I-5	2	2
I-8		
I-8	6	6
I-8	15	15
I-8	9	9
I-8	1	1
I-8	1	1
I-8	4	4
I-2	144	144

ITEM	UG-1010(5) FULL PROJECT PARTICIPATION - SOUTH OF CHERRY RD.							TOTAL
	9	13	14	15	23	24	95	
E-1			25009					25009
E-1			3356					3356
E-4								
E-8								
E-8								
E-8								
E-9	L.S.							L.S.
E-11			6					6
I-8								
I-13								
I-15						62.5		62.5
I-15								
L-9		3518						3518
L-9		0.32						0.32
L-9		1.58						1.58
L-10								
SS-18		210						210
SS-18								
T-10								
M-10								
T-35								
Special								
E-4								
E-4								
E-5								
E-12								
E-2					1	1	280	282
E-12								
E-12								
I-2								
I-2								
I-2								
I-2								
I-2								
I-2								
I-2								
I-2								
I-2					274	152		426
I-2					136			136
I-2					208	130		338
I-2								
I-2								
I-2								
I-2								
I-2								
I-2								
I-4					765			765
I-4								
I-4								
I-4								
I-4					46			46
I-4								
I-4								
I-5					3			3
I-5								
I-5								
I-5								
I-5								
I-8					1			1
I-8					2	2		4
I-8								
I-8								
I-8								
I-8								
I-8								
I-2								

GRAND TOTAL ITEM	QUANT.	UNIT	DESCRIPTION
			ROADWAY
E-1	59391	Cu.Yds.	Roadway Excavation, Method B, as per plan
E-1	58565	Sq.Yds.	Compacted Subgrade
E-4	92256	Cu.Yds.	Borrow
E-8	6076	Sq.Ft.	Removal and Disposal of Existing Sidewalk
E-8	1162	Lin.Ft.	Removal and Disp. of Exist. Curb, Curb & Gutter, or Header Curb
E-8	3458	Sq.Yds.	Removal and Disposal of Existing Pavement (Rigid)
E-9	L.S.	Lump Sum	Removal of Trees & Stumps
E-11	851	M. Gal.	Water
I-8	10	Each	Standard Monument Assemblies
I-13	10691	Sq.Ft.	4" Concrete Sidewalk
I-15	5675	Lin.Ft.	Guard Rail, Steel Beam Standard Type (Deep)
I-15	487.5	Lin.Ft.	Temporary Guard Rail
L-9	67308	Sq.Yds.	Seeding & Protecting, As per Plan
L-9	6.13	Tons	Commercial Fertilizer (12-12-12)
L-9	30.58	Tons	Agricultural Liming Materials
L-10	638	Sq.Yds.	Sodding, As per Plan
SS-18	6510	Lin.Ft.	Fence, Type "C"
SS-18	2	Each	Fence Gates, Type C
T-10	500	Cu.Yds.	Traffic Compacted Surface Course for Maintaining Traffic
M-10	10	Tons	Calcium Chloride, Furnished and Applied for Maintaining Traffic
T-35	100	Cu.Yds.	Asphaltic Concrete Surface Course or an Approved Bituminous Pre-mixed Surface Course for Maintaining Traffic
			DRAINAGE
Special	13	Each	48" diameter Bulkheads
E-4	605	Lin.Ft.	6" Underdrains, Sec. M-6.4 (4)(c)
E-4	40	Lin.Ft.	6" Pipe Outlets for Underdrains, Sec. M-6.4(4)(c) without perforations
E-5	3	Each	6" Pipe Specials for Underdrains, Sec. M-6.4(4)(c)
E-12	1068	Lin.Ft.	Abandoning Existing 48" & 54" Segmental Block or Two Ring Brick San. Sewer, as per plan
E-2	495	Cu.Yds.	Excavation for Structures
E-12	213	Lin.Ft.	Pipe Removed, 15" and Under
E-12	948	Lin.Ft.	Pipe Removed, Over 15"
I-2	34	Lin.Ft.	12" Class A Storm Sewers
I-2	12	Lin.Ft.	15" Class A Storm Sewers
I-2	100	Lin.Ft.	6" Class B Storm Sewers
I-2	154	Lin.Ft.	8" Class B Storm Sewers
I-2	120	Lin.Ft.	12" Class B Storm Sewers
I-2	164	Lin.Ft.	15" Class B Storm Sewers
I-2	254	Lin.Ft.	18" Class B Storm Sewers
I-2	74	Lin.Ft.	24" Class B Storm Sewers
I-2	106	Lin.Ft.	30" Class B Storm Sewers
I-2	248	Lin.Ft.	36" Class B Storm Sewers
I-2	2076	Lin.Ft.	12" Class B Storm Sewers Under Pavement or Approaches
I-2	468	Lin.Ft.	15" Class B Storm Sewers Under Pavement or Approaches
I-2	522	Lin.Ft.	18" Class B Storm Sewers Under Pavement or Approaches
I-2	156	Lin.Ft.	24" Class B Storm Sewers Under Pavement or Approaches
I-2	264	Lin.Ft.	36" Class B Storm Sewers Under Pavement or Approaches
I-2	28	Lin.Ft.	24" Storm Sewers Sec. M-6.6(b) or Sec. M-6.8(b)
I-2	1922	Lin.Ft.	48" Storm Sewers (Sanitary) Sec. M-6.6(b) As per Plan
I-2	400	Lin.Ft.	48" Storm Sewers (Sanitary) Sec. M-6.6(c) As per Plan
I-2	84	Lin.Ft.	8" Storm Sewers (Sanitary) Sec. M-6.8(b)
I-4	13,794	Lin.Ft.	6" Underdrains
I-4	683	Lin.Ft.	8" Underdrains, Sec. M-6.4(f)
I-4	600	Lin.Ft.	12" Underdrains, Sec. M-6.4(f)
I-4	250	Lin.Ft.	15" Underdrains, Sec. M-6.4(f)
I-4	788	Lin.Ft.	6" Pipe Outlets for Underdrains Sec. M-6.4(h) Without Perforations
I-4	162	Lin.Ft.	8" Pipe Outlets for Underdrains Sec. M-6.4(c)
I-4	42	Lin.Ft.	15" Pipe Outlets for Underdrains Sec. M-6.4(c)
I-5	45	Each	6" Pipe Specials for Underdrains
I-5	2	Each	8" Pipe Specials for Underdrains, Sec. M-6.4(f)
I-5	1	Each	15" Pipe Special for Underdrains, Sec. M-6.4(f)
I-5	2	Each	8" Pipe Specials for Class B Storm Sewers
I-5	1	Each	24" Pipe Special for Class B Storm Sewers
I-5	2	Each	36" Pipe Specials for Class B Storm Sewers under Pavement or Approaches
I-8	1	Each	Catch Basin, Standard No. 2-2B
I-8	10	Each	Catch Basins, Standard No. 2-2A
I-8	15	Each	Catch Basins, Standard No. 3
I-8	9	Each	Catch Basins, Standard No. 3A
I-8	2	Each	Catch Basins, Standard No. 7 Side Ditch
I-8	1	Each	Median Inlet, Standard No. 2-6
I-8	4	Each	Median Inlets, Standard No. 2-8
I-2	144	Lin.Ft.	18" Class B Storm Sewers Under Pavement or Approaches, Sec. M-6.6(b) Sec. M-6.8

GENERAL SUMMARY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA - 21 - 10.23

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TYPE CODE 7221

U-1010(5) — FULL PROJECT PARTICIPATION - SOUTH OF CHERRY ROAD

ITEM	13	14	17	18	19	20	21	22	24	25	26	27	28	29	30	31	32	35	36	SUB TOTAL	97	106	109	115	116
I-8			1		1								1							3					
I-8											3		1							4					
I-8											1		1							2					
I-8																	1			1					
I-8												1								1					
I-8							1										1			2					
I-8												2								2					
I-8											2		4	2		1		1		10					
I-8			1		2	2		1	1	2	1						1			11					
I-8														1			2	2		5					
I-8				1												1	1			3					
I-8				1																1					
SPECIAL																				L.S.				L.S.	
SPECIAL																				L.S.					L.S.
I-14											10									10					
I-14													485	1130		200				1815					
I-14																									
I-16				1				1	2	3	1	2	2			1		2		15					
S-1			0.46	1.64	0.23	1.08								0.23	0.23	0.23				4.1					
S-27						150														150					
S-27				116																116					
SPECIAL		3082																		3082					
I-10			18	20	9	20														67					
SPECIAL																				L.S.	L.S.				
SPECIAL																				L.S.		L.S.			
E-3																				1700	1700				
I-10																				329	329				
B-19							26			90			12						7	135					
B-219		584																		584					
T-31		1750																		1750					
T-31		56																		56					
T-70				4			7										11		19	41					
T-71	45110																			45110					
I-12	98																			98					
I-12	15824																			15824					
I-12	2078																			2078					
I-12													450							450					
I-18		1004																		1004					
I-21		1310																		1310					
I-22	9368																			9368					
E-2																				L.S.					
S-1																									
S-4																									
S-9																									
SPECIAL																				135	135				
SPECIAL																				100	100				
																				L.S.					

FULL PROJECT PARTICIPATION - N. OF CHERRY RD. / 100% CITY

ITEM	34	13	14	32	SUB TOTAL	13	15	21	27	35	SUB TOTAL	FED PARTIC SUB TOTAL	TOTAL
I-8												3	3
I-8				1	1							5	5
I-8												2	2
I-8												1	1
I-8												1	1
I-8												2	2
I-8												2	2
I-8												10	10
I-8				1	1			1	2	1	4	6	10
I-8												3	3
I-8	1				1							2	2
SPECIAL												L.S.	L.S.
SPECIAL												L.S.	L.S.
I-14												10	10
I-14												1815	1815
I-14													
I-16				2	2							17	17
S-1	0.2				0.2							4.3	43
S-27												150	150
S-27												116	116
SPECIAL												3082	3082
I-10	9				9							76	76
SPECIAL												L.S.	L.S.
SPECIAL												L.S.	L.S.
E-3												1700	1700
I-10												329	329
B-19											3	3	135	138
B-219												584	584
T-31												1750	1750
T-31												56	56
T-70												41	41
T-71	2678			2473	428							428	47783	49211	2596
I-12												98	98
I-12	1350			1358	108							108	17382	17290	916
I-12												2078	2078
I-12												450	450
I-18												1004	1004	110
I-21		101		101								1411	1411
I-22	571			571	76							76	9939	10015	552
E-2														L.S.
S-1														134
S-4														34	19347
S-9														1540
SPECIAL												135	135
SPECIAL												100	100
				L.S.								L.S.	L.S.	LS

UG-1010(5) — FULL PROJECT PARTICIPATION - SOUTH OF CHERRY RD.

ITEM	13	14	23	24	95	TOTAL
I-8						
I-8						
I-8						
I-8						
I-8						
I-8						
I-8						
I-8				1		1
I-8						
I-8						
I-8						
SPECIAL						
SPECIAL						
I-14			20			20
I-14			495	200		695
I-14				30		30
I-16						
S-1			0.2	1.4		1.6
S-27						
S-27						
SPECIAL						
I-10						
SPECIAL						
SPECIAL						
E-3						
I-10						
B-19						
B-219						64
T-31						190
T-31						7
T-70						
T-71						2596
I-12						
I-12						916
I-12						
I-12						
I-18						110
I-21						
I-22						552
E-2						
S-1						
S-4						
S-9						
SPECIAL						
SPECIAL						
						L.S.

GRAND TOTAL

ITEM	QUANT.	UNIT	DESCRIPTION
			DRAINAGE (Continued)
I-8	3	Each	Median Inlets, Standard No. 2-10
I-8	5	Each	Paved Shoulder Inlets, Standard No. 2-6, Modified As per Plan
I-8	2	Each	Paved Shoulder Inlets, Standard No. 2-8, Modified As per Plan
I-8	1	Each	Paved Shoulder Inlet, Standard No. 2-10, Modified As per Plan
I-8	1	Each	Paved Shoulder Inlet, Standard No. 2-12, Modified As per Plan
I-8	2	Each	Paved Shoulder Inlets, Standard No. 2-14, Modified As per Plan
I-8	2	Each	Paved Shoulder Inlets, Standard No. 2-18, Modified As per Plan
I-8	11	Each	Manholes, Standard No. 1
I-8	11	Each	Manholes, Standard No. 2 Without Drop Pipes
I-8	10	Each	Manholes Adjusted to Grade
I-8	3	Each	Manholes Reconstructed to Grade, using Salvaged Casting, As per Plan
I-8	2	Each	Inlets Adjusted to Grade
SPECIAL	L.S.	Lump Sum	Alterations to Tremont Avenue Siphon Outlet Structure
SPECIAL	L.S.	Lump Sum	Cherry Road Siphon Outlet Structure
I-14	30	Lin. Ft.	Paved Gutter, Standard Type 1, Modified As per Plan
I-14	2510	Lin. Ft.	Paved Gutter, Standard Type 2
I-14	30	Lin. Ft.	Paved Gutter, Standard Type 2, Modified As per Plan
I-16	17	Each	Manholes, Catch Basins, or Inlets Abandoned
S-1	5.9	Cu. Yds.	Concrete for Structures, Class E
S-27	150	Lin. Ft.	24" Pipe for Roadway Culverts, Sec. M-6.6(b) or M-6.8(b)
S-27	116	Lin. Ft.	36" Pipe for Roadway Culverts, Sec. M-6.6(b) or M-6.8(b)
SPECIAL	3082	Cu. Yds.	Fine Aggregate, As per Plan
I-10	76	Cu. Yds.	Dumped Rock Channel Protection
SPECIAL	L.S.	Lump Sum	Alterations to Sippo Creek Conduit and Pumping Station
SPECIAL	L.S.	Lump Sum	Relocation of Federal Avenue Pump Station
E-3	1700	Cu. Yds.	Channel Excavation
I-10	329	Sq. Yds.	Riprap using 6" Reinforced Concrete Slab, as per plan
			SEE CONTINUATION OF DRAINAGE ITEMS BELOW
			PAVEMENT
B-19	138	Cu. Yds.	Aggregate Base Course
B-219	648	Cu. Yds.	Waterproofed Aggregate Base Course
T-31	1940	Gal.	Bituminous Surface Treatment - Bituminous Material, As per Plan
T-31	63	Cu. Yds.	Bituminous Surface Treatment - No. 6 Aggregate
T-70	41	Sq. Yds.	7" Portland Cement Concrete Pavement, As per Plan
T-71	50007	Sq. Yds.	9" Reinforced Portland Cement Concrete Pavement
I-12	98	Lin. Ft.	Concrete Curb, Standard Type 6
I-12	18206	Lin. Ft.	Concrete Curb, Standard Type 2A
I-12	2078	Lin. Ft.	Combination Curb and Gutter, Standard Type 2
I-12	450	Lin. Ft.	Reinf. Comb. Barrier Curb and Gutter, As per Plan
I-18	1114	Cu. Yds.	Stabilized Crushed Aggregate Shoulders and Approaches
I-21	1411	Sq. Yds.	4" Portland Cement Concrete Median Pavement, Standard Type 1, As per Plan
I-22	18567	Cu. Yds.	Subbase, Grading "A" or "B", as per plan
			DRAINAGE (CONTINUED)
E-2	L.S.	Lump Sum	Cofferdams, Cribs and Sheeting
S-1	134	Cu. Yds.	Concrete for Structures, Class "C"
S-4	19361	Lbs.	Reinforcing Steel
S-9	1540	Sq. Ft.	2" Preformed Expan. Joint Filler, "Flexcium", or approved equal
SPECIAL	135	Lin. Ft.	Pressure Relief Wells
SPECIAL	100	Lin. Ft.	Piezometer Tubes
	L.S.	Lump Sum	Construction Layout Stakes

QUANTITIES FOR RETAINING WALL

Sta. 583+50 to 584+43 Rt. - See Sheet No. 109

QUANTITIES FOR STRUCTURES OVER 20 FOOT SPAN

Bridge No. Sta. 21-1069 - See Sheet No. 120

Bridge No. Sta. 21-1073 - See Sheet No. 138

Alterations - Tremont Avenue Bridge - See Sheet No. 144

BUILDING REMOVALS

For Estimated Quantities, See Sheet 146

* Denotes Quantities Continued on Designated Sheets

CALCULATIONS

T-71 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

CODE U-1010(5) 5% CITY

STATION TO STATION		LENGTH	AV. WIDTH	SQ.YDS.	REMARKS
MAIN LINE					
539+75	540+50	75.00	64.0	533.33	Lt. & Rt.
540+50	542+50	200.00	35.5	788.89	Lt.
540+50	547+64	714.00	25.5	2,023.00	Rt.
542+50	544+50	200.00	30.5	677.78	Lt.
544+50	551+62	712.00	25.5	2,017.33	Lt.
547+64	549+40	176.00	30.5	596.44	Rt.
549+40	551+62	222.00	35.5	875.67	Rt.
551+62	552+62	100.00	64.0	711.11	Lt. & Rt.
552+62	554+60	198.00	47.5	1,045.00	Lt.
552+62	563+58	1,096.00	25.5	3,105.33	Rt.
554+60	555+00	40.00	46.5	206.67	Lt.
555+00	556+00	100.00	39.5	438.89	Lt.
556+00	557+04	104.00	29.5	340.89	Lt.
557+04	563+58	654.00	25.5	1,853.00	Lt.
568+16	575+54	738.00	25.5	2,091.00	Rt.
568+16	577+85	969.00	25.5	2,745.50	Lt.
575+54	577+33	179.00	35.5	706.06	Rt.
577+33	579+34	(By Planimeter 17.24"² x 400)		766.22	Rt.
577+85	578+96	(By Planimeter 8.74"² x 400)		388.44	Lt.
578+96	581+20	224.00	34.5	858.67	Lt.
579+34	596+00	1,666.00	25.5	4,720.33	Rt.
581+20	582+00	80.00	30.0	266.67	Lt.
582+00	600+00	1,800.00	25.5	5,100.00	Lt.
596+00	597+00	100.00	31.5	350.00	Rt.
597+00	598+00	100.00	41.5	461.11	Rt.
598+00	600+00	200.00	45.5	1,011.11	Rt.
600+00	600+86	86.00	26.5	253.22	Lt.
600+00	600+35	35.00	46.5	180.83	Rt.
600+35	600+69	34.00	42.5	160.56	Rt.
600+69	601+00	31.00	39.5	136.06	Rt.
600+86	601+00	14.00	13.25	50.06	Lt.
601+00	601+22	22.00	13.25	48.28	Rt.
Main Line Total				35,507.45	
EDWIN AVE. CONNECTION					
0+23.9	0+75	(By Planimeter 6.20"² x 400)		275.56	
0+75	5+00	425.00	29.0	1,369.44	
5+00	5+73	(By Planimeter 7.80"² x 400		346.67	
Edwin Ave. Conn. Total				1,991.67	
WALNUT ROAD					
8+00	9+67	167.00	31.0	575.22	
9+67	10+19	(By Planimeter 7.62"² x 400)		338.67	
10+84	11+58.3	(By Planimeter 10.77"² x 400)		478.67	
Walnut Road Total				1,392.56	
NICKLE PLATE DRIVE (Lt. of Walnut Rd. Sta. 8+64)					
0+15.5	0+40	(By Planimeter 2.12"² x 400)		94.22	
Nickle Plate Drive Total				94.22	
CHARLES AVE.					
8+40	10+04	(By Planimeter 7.56"² x 400)		336.00	Lt.
8+40	10+04	(By Planimeter 9.06"² x 400)		402.67	Rt.
Deceleration Lane		(By Planimeter 6.52"² x 400)		289.78	Lt.
7+95	8+40	38.5 x 45		192.50	
Charles Ave. Total				1,220.95	
THIRD STREET (At Charles Ave.)					
10+21	11+00	(By Planimeter 8.72"² x 400)		387.56	
Third St. Total (At Charles Ave.)				387.56	
THIRD STREET CONNECTION					
0+19	0+79	(By Planimeter 6.56"² x 400)		291.56	
0+79	6+38	559.00	29.0	1,801.22	
6+38	6+63.5	(By Planimeter 2.43"² x 400)		108.00	
Third St Conn. Total				2,200.78	
WEIRICH BLVD.					
5+18	6+00	(By Planimeter 9.64"² x 400)		428.44	
Weirich Blvd. Total				428.44	

T-71 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

CODE U-1010(5) 5% CITY (Continued)

STATION TO STATION		LENGTH	AV. WIDTH	SQ.YDS.	REMARKS
CHERRY ROAD					
2+92.20	4+51	(By Planimeter 17.02"² x 400)		756.44	
Deceleration Lane		(By Planimeter 6.95"² x 400)		308.89	Lt.
5+25	6+08.6	(By Planimeter 14.41"² Minus for Island 0.58"²=13.83"² x 400)		614.67	
Acceleration Lane		(By Planimeter 4.64"² x 400)		206.22	
Cherry Rd. Total				1,886.22	
TOTAL CODE U-1010(5) 5% CITY				45,109.85	

USE 45,110 SQ.YDS.

CODE U-1010(5) 1.58% CITY

MAIN LINE					
600+86	601+00	34.00	13.25	50.06	Lt. & ℄
601+00	601+22	22.00	13.25	48.28	℄ & Rt.
601+00	602+53	153.00	26.5	450.50	Lt.
601+22	601+66	44.00	39.5	193.11	Rt.
601+66	602+53	87.00	9.0	87.00	Stand-by Lane
601+66	602+40	74.00	28.5	234.33	Rt.
602+40	606+50	410.00	27.0	1,230.00	Rt.
602+53	604+50	197.00	11.0	240.78	Stand-By Lane
604+50	605+00	50.00	10.5	58.33	Stand-by Lane
605+00	606+00	100.00	6.25	69.44	Stand-by Lane
606+00	606+50	50.00	2.0	11.11	Stand-by Lane
TOTAL CODE U-1010(5) 1.58% CITY				2,672.94	

USE 2,673 SQ.YDS.

CODE U-1010(5) 100% CITY

THIRD STREET (At Third St. Conn.)				
23+30	24+54	104.00	37.0	427.56
TOTAL CODE U-1010(5) 100% CITY				427.56

USE 428 SQ.YDS.

CODE UG-1010(5) 5% CITY

563+58	568+16	458.00	25.5	1,297.67	Lt.
563+58	568+16	458.00	25.5	1,297.67	Rt.
TOTAL CODE UG-1010(5) 5% CITY				2,595.34	

USE 2,596 SQ.YDS.

ITEM I-22 SUBBASE

CODE U-1010(5) 5% CITY

		CU.YDS.
MAIN LINE	(See Engr's Comp.)	
Sta. 539+75 to Sta. 563+58 } Sta. 568+16 to Sta. 601+22 }		7,535.51
EDWIN AVE.		391.93
WALNUT ROAD		260.54
NICKLE PLATE DRIVE (At Walnut Rd.)		19.48
CHARLES AVE.		206.75
THIRD ST. (At. Charles Ave.)		76.30
THIRD ST. CONNECTION		420.84
WEIRICH BLVD.		83.93
CHERRY ROAD		372.30
TOTAL CODE U-1010(5) 5% CITY		9,367.58

USE 9,368 CU.YDS.

CODE U-1010(5) 1.58% CITY

600+86	606+50	570.61
TOTAL CODE U-1010(5) 1.58% CITY		570.61

USE 571 CU.YDS.

CODE U-1010(5) 100% CITY

THIRD ST. (At Third St. Conn.)	75.50
TOTAL CODE U-1010(5) 100% CITY	75.50

USE 76 CU.YDS.

CODE UG-1010(5) 5% CITY

563+58	568+16	551.30
TOTAL CODE UG-1010(5) 5% CITY		551.30

USE 552 CU.YDS.

ITEM SS-18 FENCE, TYPE C

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	LIN. FT.	REMARKS
540+51	551+82	Rt.	1150	
552+50.5	562+36±	Rt.	990	(Approx.)
568+16	574+14	Rt.	620	
574+30	577+97	Rt.	380	
579+22	582+10	Rt.	350	
582+85	585+49.5	Rt.	70	
584+44	601+03.5	Rt.	1650	
EDWIN AVE. CONN.				
0+40	4+61.5	Lt.	430	
0+40	4+88	Rt.	450	
TOTAL CODE U-1010(5) 5% CITY			6,090 LIN. FT.	

CODE U-1010(5) 1.58% CITY

601+87	603+67.5	Rt.	210
TOTAL CODE U-1010(5) 1.58% CITY			210 LIN. FT.

CODE UG-1010(5) 5% CITY

566+06	568+16	Rt.	210
TOTAL CODE UG-1010(5) 5% CITY			210 LIN. FT.

ITEM SS-18 FENCE GATES, TYPE C

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	GATES
574+57	574+71	Rt.	1
585+28		Rt.	1
TOTAL CODE U-1010(5) 5% CITY			2

ITEM L-10 SODDING

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	LIN. FT.	WIDTH	SQ. FT.
547+75	551+06	Rt.	331	9.5	3145
577+40	9+37 Lt. Charles St.	Rt.	50	4.5	225
595+55	595+75	Rt.	20	8.5	170
EDWIN AVE.					
9+00	5+00	Rt.	200	11.0	2200
TOTAL CODE U-1010(5) 5% CITY					5,740 S.F.

5,740 S.F. ÷ 9 = 638 SQ.YDS.

ITEM L-9 SEEDING & PROTECTING, AS PER PLAN

	CODE U-1010(5)			CODE UG-1010(5)
	5% CITY	1.58% CITY	100% CITY	5% CITY
	S.Y.	S.Y.	S.Y.	S.Y.
Tabulation from Item E-1 (Roadway Exc.)	62,548	1,723	157	3,518
Subtract L-10 Sodding	638	—	—	—
TOTALS	61,910	1,723	157	3,518

ITEM L-9 COMMERCIAL FERTILIZER 12-12-12

(S.Y. x 9 x 88/1000 ÷ 2000 = Tons)

	CODE U-1010(5)						CODE UG-1010(5)	
	5% CITY		1.58% CITY		100% CITY		5% CITY	
	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS
Tabulation from Item L-9 Seeding	61,910	—	1723	—	157	—	3,518	—
Item L-10 Sodding	638	—	—	—	—	—	—	—
TOTAL TONS	62,548	5.63	—	0.16	—	0.02	—	0.32

ITEM L-9 AGRICULTURAL LIMING MATERIALS

(S.Y. x 9 x 100/1000 ÷ 2000 = Tons)

	CODE U-1010(5)						CODE UG-1010(5)	
	5% CITY		1.58% CITY		100% CITY		5% CITY	
	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS
Tabulation from Item L-9 Seeding } Item L-10 Sodding }	62,548	—	1723	—	157	—	3,518	—
	—	28.15	—	0.78	—	0.07	—	1.58
TOTAL TONS								

ITEM I-12 COMBINATION CURB & GUTTER, TYPE 2

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	LIN. FT.	REMARKS
573+75	580+50	Lt.	654	
575+54	577+33	Rt.	170	
579+22	588+75	Rt.	928	
585+00	588+25	Lt.	326	
TOTAL CODE U-1010(5) 5% CITY			2,078 LIN. FT.	

ITEM I-12 CONCRETE CURB, TYPE 6

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	LIN. FT.	REMARKS
540+62	540+72	Rt.	12	
551+40	551+50	Lt.	12	
552+78	552+88	Rt.	12	
588+25	588+75	Lt.	50	
599+50	599+60	Lt.	12	
TOTAL CODE U-1010(5) 5% CITY			98 LIN. FT.	

ITEM I-12 CONCRETE CURB, TYPE 2-A

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	LIN. FT.	REMARKS
540+50	551+64	Median	2,198	
552+60	563+58	Median	2,200	
568+16	578+36	Median	2,044	
578+94	600+00	Median	4,224	
EDWIN AVE. CONN.				
0+23.9	5+88	Rt.	584	
0+23.9	5+34	Lt.	520	
WALNUT ROAD				
8+00	10+18	Rt.	248	
8+00	10+12	Lt.	220	
10+84	11+58.3	Lt.	104	
11+06	11+58.3	Rt.	82	
CHARLES AVE.				
7+95	@ 577+33	Lt.	212	
8+40	8+66	Rt.	14	
8+79	9+94	Median	234	
8+95	9+19	Rt.	86	Island
9+38	9+99	Lt.	170	Island
9+58	10+22	Rt.	86	
THIRD ST. (At Charles Ave.)				
10+21	11+00	Lt. & Rt.	156	
THIRD ST. CONN.				
0+04	1+70	Rt.	182	
0+26	6+63.5	Lt.	642	
2+82	6+63.5	Rt.	398	
WEIRICH BLVD.				
4+74	6+00	Rt.	132	
5+74	6+00	Lt.	26	
CHERRY ROAD				
2+92.2	599+54 @	Lt.	244	
2+92.2	602+53 @	Rt.	174	
3+74	4+39	Rt.	192	Island
4+16	4+65	Lt.	152	Island
4+89	5+96	Rt	124	
5+45	5+66	Lt.	76	Island
599+60 @	6+08.60	Lt.	100	
TOTAL CODE U-1010(5) 5% CITY			15,824 LIN. FT.	

CODE U-1010(5) 1.58% CITY

601+66	606+50	Median	968	
602+53	606+50	Rt.	390	
TOTAL CODE U-1010(5) 1.58% CITY			1,358 LIN. FT.	

CODE U-1010(5) 100% CITY

THIRD ST. (At Third St. Conn.)				
23+30	24+54	Lt.	108	
TOTAL CODE U-1010(5) 100% CITY			108 LIN. FT.	

CODE UG-1010(5) 5% CITY

563+58	568+16	Median	916	
TOTAL CODE UG-1010(5) 5% CITY			916 LIN. FT.	

CALCULATIONS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

14

STA. 21-10.23

ITEM I-13 4" CONCRETE SIDEWALK

STATION	TO STATION	AV. LENGTH	AV. WIDTH	SIDE	SQ. FT.
		CODE U-1010 (5)	5% CITY		
EDWIN AVE. CONN.					
0+31	—	25	5.0	Lt.	125.00
0+31	—	17	5.0	Rt.	85.00
WALNUT ROAD					
8+00	8+43	40	5.0	Lt.	200.00
8+00	10+14	220	5.0	Rt.	1,100.00
8+84	10+10	131	5.0	Lt.	655.00
10+87	11+48	71	5.0	Lt.	355.00
11+08	11+56.3	57	5.0	Rt.	285.00
11+48	11+56.3	10.3	5.0	Lt.	51.50
CHARLES AVE.					
8+40	8+80	42	4.0	Lt.	168.00
8+40	8+75	34	4.0	Rt.	136.00
THIRD ST. (At Charles Ave.)					
10+75	10+80	7	5.0	Lt.	35.00
THIRD ST. CONN.					
0+31	6+63.5	656	5.0	Lt.	3,280.00
0+07	2+07	225	5.0	Rt.	1,125.00
6+60	—	11	5.0	Rt.	55.00
WEIRICH BLVD.					
4+97	5+25	25	4.0	Rt.	100.00
MAIN LINE					
597+86 Rt.	3+22 Lt. Cherry Rd.	368	5.0	Rt & Lt.	1,840.00
CHERRY ROAD					
2+92.2	3+45	47	5.0	Rt.	235.00
3+74	4+35	58	5.0	Rt.	290.00
4+93	5+95	114	5.0	Rt.	570.00
TOTAL CODE U-1010 (5) 5% CITY					10,690.50

USE 10,691 SQ. FT.

ITEM I-21 PORTLAND CEMENT CONCRETE MEDIAN PAV'T., TYPE 1

STATION	TO STATION	SIDE	SQ. FT.
		CODE U-1010 (5) 5% CITY	
540+50	543+32	Median	969.00
548+82	551+64	Median	948.00
552+60	555+42	Median	969.00
578+25	578+36	Median	45.00
578+94	591+35	Median	5,362.50
597+10	600+00	Median	760.00
CHARLES AVE.			
8+79.5	9+93.5	Median	228.00
8+95	9+19	Island Rt.	336.00
9+38	9+99	Island Lt.	1,120.00
CHERRY ROAD			
4+16	4+65	Island Lt.	820.00
5+45	5+66	Island Lt.	232.00
TOTAL CODE U-1010 (5) 5% CITY		11,789.50 S.F. ÷ 9 = 1309.94 S.Y.	

USE 1310 SQ. YDS.

CODE U-1010(5) 1.58% CITY

601+66	605+48	Median	904.00
TOTAL CODE U-1010(5) 1.58% CITY			

USE 101 SQ. YDS.

GRADING ANALYSIS - TOTAL PROJECT

	EMBANKMENT	EMBANKMENT + 22%
CODE U-1010 (5) 5% CITY (Roadway)	122,997 C.Y.	150,057 C.Y.
CODE U-1010 (5) 5% CITY (Basements)	700 C.Y.	854 C.Y.
CODE U-1010 (5) 1.58% CITY (Roadway)	226 C.Y.	278 C.Y.
CODE U-1010 (5) 100% CITY (Roadway)	10 C.Y.	12 C.Y.
CODE UG-1010(5) 5% CITY (Roadway)	18 C.Y.	22 C.Y.
TOTAL CODE U-UG 1010(5)	123,953 C.Y.	151,223 C.Y.

EXCAVATION EMBANKMENT AND SEEDING

STATION	TO STATION	ITEM E-1 ROADWAY EXCAVATION METHOD B CU. YDS.	ITEM E-1 ROADWAY EMBANKMENT CU. YDS.	ITEM L-9 SEEDING & PROTECTING AS PER PLAN SQ. YDS.
		CODE U-1010 (5) 5% CITY		
533+10	538+78	2,212	0	1,370
538+78	545+00	1,005	19,810	7,857
545+00	550+00	1,070	21,852	5,867
550+00	555+00	749	21,198	4,304
555+00	563+58	4,850	23,115	8,242
568+16	575+00	5,954	11,741	9,096
575+00	580+00	5,389	241	3,945
580+00	584+90	2,924	970	1,516
584+90	589+90	411	3,570	1,991
589+90	595+00	374	4,291	2,705
595+00	601+00	1,439	8,474	3,755
Add Seeding for Work Agreement Areas				1,612
540+00 ±	550+00 ±	2,000	2,000	(Rubbish piles, etc. Estimated Quantity)
EDWIN AVE.				
0+23.9	5+50	1,762	3,705	6,142
WALNUT ROAD				
8+00	11+58.3	191	1,645	1,238
CHARLES AVE.				
7+95	9+75	528	16	489
THIRD ST. CONN.				
0+25	6+63.5	1,508	113	1,315
WEIRICH BLVD.				
4+85	6+00	261	0	171
THIRD ST. (At Charles Ave.)				
10+25	11+00	209	9	201
CHERRY ROAD				
2+92.2	6+08.6	248	247	732
TOTAL CODE U-1010 (5) 5% CITY		33,084 C.Y.	122,997 C.Y.	62,548 S.Y.

CODE U-1010 (5) 1.58% CITY

601+00	607+14	979	228	1,723
TOTAL CODE U-1010(5) 1.58% CITY		979 C.Y.	228 C.Y.	1,723 S.Y.

CODE U-1010 (5) 100% CITY

THIRD ST. (At Third St. Conn.)				
23+30	24+54	195	10	157
TOTAL CODE U-1010 (5) 100% CITY		195 C.Y.	10 C.Y.	157 S.Y.

CODE UG-1010(5) 5% CITY

563+58	568+16	25,009	18	3,184
Add Seeding for Work Agreement Areas				334
TOTAL CODE UG-1010(5) 5% CITY		25,009 C.Y.	18 C.Y.	3,518 S.Y.

ITEM E-4 BORROW CALCULATIONS

	EMBANKMENT + 22%	EXCAVATION
	CODE U-1010 (5) 5% CITY	
ROADWAY	150,911 C.Y.	(Suitable Mat'l.) 31,084 C.Y.
SIPPO CREEK CHANNEL (See Sheet No. 37)		1,700 C.Y.

CODE U-1010 (5) 1.58% CITY

278 C.Y. — 979 C.Y.

CODE U-1010 (5) 100% CITY

12 C.Y. — 195 C.Y.

CODE UG-1010(5) 5% CITY

22 C.Y. — 25,009 C.Y.

TOTAL PROJECT 151,223 C.Y. — 58,967 C.Y.

TOTAL EMBANKMENT + 22% 151,223 C.Y.
TOTAL EXCAVATION 58,967 C.Y.

TOTAL BORROW 92,256 C.Y.

B-219 WATERPROOFED AGGREGATE BASE COURSE AND I-18 STABILIZED CRUSHED AGGREGATE SHOULDERS

STATION	TO STATION	LENGTH	B-219 WIDTH	I-18 WIDTH	I-18 DEPTH	SIDE	B-219 SQ. FT.	I-18 CU. FT.
			CODE U-1010 (5)	5% CITY				
539+75	551+45	1170.00	8.0	8.25	0.417	Lt.	9,360.00	4,025.09
540+67	551+53	1086.00	8.0	8.25	0.417	Rt.	8,688.00	3,736.11
552+73	563+58	1085.00	8.0	8.25	0.417	Lt.	8,680.00	3,732.67
552+83	563+58	1075.00	8.0	8.25	0.417	Rt.	8,600.00	3,698.27
568+16	573+75	559.00	8.0	8.25	0.417	Lt.	4,472.00	1,923.10
568+16	575+54	738.00	8.0	8.25	0.417	Rt.	5,904.00	2,538.90
588+75	599+55	1080.00	8.0	8.25	0.417	Lt.	8,640.00	3,715.47
588+75	599+54	1079.00	8.0	8.25	0.417	Rt.	8,632.00	3,712.03

TOTAL CODE U-1010(5) 5% CITY ITEM B-219 62,976 S.F. x 0.25 ÷ 27 = 583.11 C.Y. USE 584 CU. YDS.
TOTAL CODE U-1010(5) 5% CITY ITEM I-18 27,081.64 C.F. ÷ 27 = 1,003.02 C.Y. USE 1004 CU. YDS.

CODE UG-1010 (5) 5% CITY

563+58	568+16	458.00	8.0	8.25	0.417	Lt.	3,664.00	1,575.63
563+58	568+16	458.00	8.0	8.25	0.417	Rt.	3,664.00	1,575.63

TOTAL CODE UG-1010 (5) 5% CITY ITEM B-219
7328 S.F (−) 495 S.F.(7' Shoulders) = 6833 S.F. x 0.25 ÷ 27 = 63.27 C.Y. USE 64 CU. YDS.
TOTAL CODE UG-1010 (5) 5% CITY ITEM I-18
3151.26 C.F. (−) 206.42 C.F.(7' Shoulders) = 2944.84 C.F. ÷ 27 = 109.07 C.Y. USE 110 CU. YDS.

T-31 BITUMINOUS SURFACE TREATMENT - BITUMINOUS MATERIAL

(Rate of Application - 0.25 Gal. per Square Yard)

CODE U-1010 (5) 5% CITY

62,976 S.F. ÷ 9 = 6,997.33 S.Y. x 0.25 = 1,749.33 Gals.
TOTAL CODE U-1010 (5) 5% CITY BITUMINOUS MATERIAL USE 1750 GALS.

CODE UG-1010 (5) 5% CITY

6,833 S.F. ÷ 9 = 759.22 S.Y. x 0.25 = 189.81 Gals.
TOTAL CODE UG-1010 (5) 5% CITY BITUMINOUS MATERIAL USE 190 GALS.

T-31 BITUMINOUS SURFACE TREATMENT NO. 6 AGGREGATE

(Rate of Application - 0.008 Cu.Yds. per Square Yard)

CODE U-1010 (5) 5% CITY

6,997.33 S.Y. x 0.008 = 55.98 Cu.Yds.
TOTAL CODE U-1010 (5) 5% CITY No. 6 AGGREGATE USE 56 CU. YDS.

CODE UG-1010 (5) 5% CITY

759.22 S.Y. x 0.008 = 6.07 Cu.Yds.
TOTAL CODE UG-1010 (5) 5% CITY No. 6 AGGREGATE USE 7 CU. YDS.

ITEM E-1 COMPACTED SUBGRADE

CODE U-1010 (5) 5% CITY

Under Item T-71	45,110 Sq.Yds.
Under Item B-219	6,998 Sq.Yds.
TOTAL CODE U-1010 (5) 5% CITY	52,108 Sq.Yds.

CODE U-1010 (5) 1.58% CITY

Under Item T-71	2,673 Sq.Yds.
TOTAL CODE U-1010 (5) 1.58% CITY	2,673 Sq.Yds.

CODE U-1010 (5) 100% CITY

Under Item T-71	428 Sq.Yds.
TOTAL CODE U-1010 (5) 100% CITY	428 Sq.Yds.

CODE UG-1010 (5) 5% CITY

Under Item T-71	2,596 Sq.Yds.
Under Item B-219	760 Sq.Yds.
TOTAL CODE UG-1010 (5) 5% CITY	3,356 Sq.Yds.

ITEM I-8 STANDARD MONUMENT ASSEMBLY

STATION	LOCATION	NO.
	CODE U-1010(5) 5% CITY	
E.S. 543+90.15	℄	1
P.T. 550+89.02	℄	1
P.O.T. 552+13.71	℄	1
P.C. 554+39.28	℄	1
E.S. 562+12.50	℄	1
P.T. 569+85.71	℄	1
P.O.T. 578+62.48	℄	1
T.S. 580+45.05	℄	1
S.C. 583+45.05	℄	1
E.S. 596+22.60	℄	1
TOTAL CODE U-1010(5) 5% CITY		10

ITEM SPECIAL - FINE AGGREGATE (As Per Plan)

CODE U-1010 (5) 5% CITY

MAIN LINE			(See Engr's. Comp.) CU. YDS.
Sta. 547+50	to	Sta. 551+50	954.74
Sta. 581+50	to	Sta. 594+75	1,759.26
Sta. 596+43	to	Sta. 599+40	367.33
TOTAL CODE U-1010(5) 5% CITY			3,081.33

USE 3,082 CU. YDS.

ITEM E-11 WATER

CODE U-1010 (5) 5% CITY

ROADWAY EMBANKMENT + 22%	150,911 C.Y.	
150,911 C.Y. x 5.00 ÷ 1000 =		754.56 M. GALS.
SUBBASE	9,368 C.Y.	
STAB. CR. AGGR. SHOULDERS	1,004 C.Y.	
	10,372 C.Y.	
10,372 C.Y x 8.00 ÷ 1000 =		82.98
TOTAL CODE U-1010 (5) 5% CITY		837.54 M. GALS.

USE 838 M. GALS.

CODE U-1010 (5) 1.58% CITY

EMBANKMENT + 22%	278 C.Y.	
278 C.Y. x 5.00 ÷ 1000 =		1.39 M. GALS.
SUBBASE	571 C.Y.	
571 C.Y. x 8.00 ÷ 1000 =		4.57
TOTAL CODE U-1010 (5) 1.58% CITY		5.96 M. GALS.

USE 6 M. GALS.

CODE U-1010 (5) 100% CITY

EMBANKMENT + 22%	12 C.Y.	
12 C.Y. x 5.00 ÷ 1000 =		0.06 M. GALS.
SUBBASE	76 C.Y.	
76 C.Y. x 8.00 ÷ 1000 =		0.61
TOTAL CODE U-1010 (5) 100% CITY		0.66 M. GALS.

USE 1 M. GALS.

CODE UG-1010 (5) 5% CITY

EMBANKMENT + 22%	22 C.Y.	
22 C.Y. x 5.00 ÷ 1000 =		0.11 M. GALS.
SUBBASE	552 C.Y.	
STAB. CR. AGGR. SHOULDERS	110 C.Y.	
	662 C.Y.	
662 C.Y. x 8.00 ÷ 1000 =		5.30
TOTAL CODE UG-1010 (5) 5% CITY		5.41 M. GALS.

USE 6 M. GALS.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA. - 21 - 10.23

TABULATION - PIPE UNDERDRAIN

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	F.L. ELEV.	F.L. ELEV.	I-4 LIN. FEET 6" UDRAIN SHALLOW	I-4 LIN. FEET 6" UDRAIN OUTLET	I-5 EACH 6"-30° BEND	6"-60° Y	6"-45° BEND	6" TEE	6"-90° BEND	OUTLET STATION & REMARKS
539 + 90 M.L.	541 + 07 M.L.	Rt.	930.90	930.24	117'	16'				1		541 + 07 Rt. M.L.
2+18 Edwin Ave. Conn.	2+45 Edwin Ave. Conn.	Rt.	926.00	925.80	27'	20'				1		2+45 Rt. Edwin Ave Conn.
2+50 Edwin Ave. Conn.	4+98 Edwin Ave Conn.	Lt.	925.82	929.25	248'	18'					1	2+50 Lt. Edwin Ave Conn.
2+45 Edwin Ave. Conn.	5+00 Edwin Ave Conn.	Rt.	925.80	929.28	256'							2+45 Rt. Edwin Ave Conn.
5+00 Edwin Ave. Conn.	540 + 60 M.L.	Rt.	929.28	930.00	96'	20'					1	5+00 Rt. Edwin Ave. Conn.
541 + 07 M.L.	544 + 00 M.L.	Rt.	930.24	932.48	293'							541 + 07 Rt. M.L.
544 + 00 M.L.	547 + 00 M.L.	Rt.	932.48	935.21	300'	18'					1	544 + 00 Rt. M.L.
542 + 50 M.L.	546 + 75 M.L.	Lt.	931.76	935.62	427'							542 + 50 Lt. M.L. Median
546 + 75 M.L.	549 + 00 M.L.	Lt	935.62	937.67	226'							546 + 75 Lt M.L. Median
547 + 00 M.L.	550 + 00 M.L.	Rt.	935.21	937.69	300'	18'					1	547 + 00 Rt. M.L.
550 + 00 M.L.	553 + 00 M.L.	Rt.	937.69	940.91	300'	8'					1	550 + 00 Rt. M.L.
551 + 00 M.L.	551 + 17 M.L.	Lt.	934.00	939.97		23'			1			551 + 00 Lt. M.L. Toe Ditch
551 + 17 M.L.	551 + 70 M.L.	Lt.	939.97	940.25	54'			1				
551 + 70 M.L.	11+18 Walnut Road	Lt.	940.25	940.29	34'							
551 + 70 M.L.	555 + 95 M.L.	Lt.	940.25	942.86	425'							
551 + 00 M.L.	11+58.30 Walnut Road	Lt.	934.00	940.20	102'							
11+58.30 Walnut Road	11+58.30 Walnut Road	Lt. & Rt.	940.20	940.25	40'		1				1	
11+58.30 Walnut Road	11+07 Walnut Road	Rt.	940.25	940.62	76'							
11+18 Walnut Road	11+58.30 Walnut Road	Lt.	940.29	940.21	40'					1		
551 + 53 M.L.	9+02 Walnut Road	Rt. & Lt	939.48	933.90	136'							9+02 Lt. Walnut Road
552 + 73 M.L.	8+24 Walnut Road	Rt	940.50	930.60	214'							8+24 Rt. Walnut Road
8+00 Walnut Road	8+24 Walnut Road	Rt.	930.93	930.60	24'							8+24 Rt. Walnut Road
9+02 Walnut Road	8+24 Walnut Road	Lt.	933.90	930.60	78'							8+24 Lt. Walnut Road
8+00 Walnut Road	8+24 Walnut Road	Lt.	930.99	930.60	24'							8+24 Lt. Walnut Road
553 + 00 M.L.	555 + 95 M.L.	Rt.	940.91	943.00	295'	18'					1	553 + 00 Rt. M.L.
555 + 95 M.L.	559 + 00 M.L.	Lt.	942.86	940.00	305'	68'					1	559 + 00 Rt. M.L.
555 + 95 M.L.	559 + 00 M.L.	Rt.	943.00	939.32	305'	18'				1		559 + 00 Rt. M.L.
559 + 00 M.L.	561 + 00 M.L.	Rt.	940.00	934.71	200'	68'	1					561 + 65 Rt. M.L.
559 + 00 M.L.	561 + 00 M.L.	Lt.	940.00	934.71	200'	58'	1					561 + 55 Lt. M.L.
561 + 80 M.L.	562 + 25 M.L.	Rt.	932.06	925.75	45'					1		562 + 25 Rt. M.L.
562 + 25 M.L.	562 + 50 M.L.	Rt.	929.75	929.87	25'	14'						562 + 25 Rt. M.L.
561 + 75 M.L.	564 + 00 M.L.	Lt.	932.23	926.00	225'	14'				1		564 + 00 Lt. M.L.
569 + 00 M.L.	572 + 26 M.L.	Rt.	930.85	934.74	326'	18'					1	569 + 00 Rt. M.L.
569 + 00 M.L.	572 + 26 M.L.	Lt.	930.85	934.74	326'	20					1	569 + 00 Lt. M.L.
572 + 26 M.L.	574 + 10 M.L.	Rt.	934.74	933.46	184'	18'					1	574 + 10 Rt. M.L.
572 + 26 M.L.	574 + 05 M.L.	Lt.	934.74	933.53	179'	30'					1	574 + 05 Lt. M.L.
574 + 46 M.L.	576 + 50 M.L.	Lt.	932.91	928.52	204'							576 + 50 Lt. M.L.
574 + 50 M.L.	575 + 54 M.L.	Rt	932.84	930.69	104'	12'					1	
575 + 54 M.L.	577 + 30 M.L.	Rt.	930.54	927.25	176'						1	577 + 30 Rt. M.L.
576 + 75 M.L.	578 + 25 M.L.	Lt.	928.30	926.75	150'							578 + 25 Lt. M.L.
578 + 25 M.L.	579 + 95 M.L.	Lt.	926.75	925.54	170'							579 + 95 Lt. M.L.
577 + 30 M.L.	9+18 Charles Avenue	Rt. & Lt.	927.25	925.00	110'							9+18 Lt. Charles Avenue
9+18 Charles Avenue	8+18 Charles Avenue	Lt.	925.00	926.19	100'							9+18 Lt. Charles Avenue
8+18 Charles Avenue	7+95 Charles Avenue	Lt.	926.19	926.57	23'							8+18 Lt. Charles Avenue
7+95 Charles Avenue	8+65 Charles Avenue	Rt.	926.68	925.69	70'							8+65 Rt. Charles Avenue
8+65 Charles Avenue	10+50 Third Street	Rt.	925.69	926.03	34'							8+65 Rt. Charles Avenue
10+50 Third Street	11+00 Third Street	Rt.	926.03	921.45	50'							10+50 Rt. Third Street
11+00 Third Street	10+40 Third Street	Lt.	927.29	925.20	63'	24'					1	10+25 Lt. Third Street
9+44 Charles Avenue	578 + 98 M.L.	Rt.	925.10	926.21	74'							9+44 Rt. Charles Avenue
577 + 30 M.L.	580 + 20 M.L.	Rt	927.25	925.37	290'							580 + 20 Rt. M.L.
579 + 95 M.L.	580 + 15 M.L.	Lt	924.40	925.40	20'							579 + 95 Lt. M.L.
580 + 20 M.L.	580 + 35 M.L.	Rt.	925.54	924.20	15'	4'						580 + 35 Rt. M.L.
580 + 35 M.L.	581 + 25 M.L.	Rt.	924.20	924.81	90'					1		580 + 35 Rt. M.L.
581 + 55 M.L.	582 + 90 M.L.	Rt.	924.82	925.57	135'	16'	1					581 + 40 Rt. M.L.
582 + 90 M.L.	584 + 75 M.L.	Rt.	925.57	929.14	186'							582 + 90 Rt. M.L.
584 + 75 M.L.	586 + 00 M.L.	Rt.	929.14	931.18	125'							584 + 75 Rt. M.L.
586 + 00 M.L.	588 + 60 M.L.	Rt.	931.18	933.04	260'							586 + 00 Rt. M.L.
588 + 60 M.L.	593 + 00 M.L.	Rt.	933.04	935.59	440'							588 + 60 Rt. M.L.
594 + 87 M.L.	597 + 40 M.L.	Rt.	937.44	938.57	257'							593 + 00 Rt. M.L.
593 + 05 M.L.	597 + 40 M.L.	Rt.	935.62	937.20	435'	20'					1	593 + 05 Rt. M.L.
597 + 40 M.L.	599 + 50 M.L.	Rt.	937.20	935.72	210'	8'					1	
599 + 50 M.L.	600 + 50 M.L.	Rt.	935.42	933.24	100'						1	600 + 50 Rt. M.L.

CODE U-1010(5) 5% CITY - *Continued*

STATION TO STATION		SIDE	F.L. ELEV.	F.L. ELEV.	I-4 LIN. FEET 6" UDRAIN SHALLOW	I-4 LIN. FEET 6" UDRAIN OUTLET	I-5 EACH 6"-30° BEND	6"-60° Y	6"-45° BEND	6" TEE	6"-90° BEND	OUTLET STATIONS & REMARKS
4+41 Cherry Road	2+95 Cherry Road	Lt.	933.24	928.57	154'							2+95 Lt. Cherry Road
2+95 Cherry Road	602 + 60 M.L.	Rt.	928.57	934.25	178'							2+95 Rt. Cherry Road
5+94 Cherry Road	601 + 62 M.L.	Rt. & Lt.	940.68	936.26	144'							602 + 62 Lt. M.L.
6+15 Cherry Road	599 + 64 M.L.	Lt.	941.60	938.02	88'	46'					1	599 + 82 ℄ M.L.
23+32 Third Street	23+48 Third Street	Lt.	931.28	930.76	15'	32'		1				23+32 Rt. Third Street
24+52 Third Street	23+48 Third Street	Lt.	931.81	930.76	105'							23+32 Rt. Third Street
23+32 Third Street	5+68 Weirich Boulevard	Rt.	931.28	925.79	290'	24'				1		5+68 Rt. Weirich Boulevard
5+68 Weirich Boulevard	6+00 Weirich Boulevard	Rt.	925.79	926.06	32'							
24+52 Third Street	2+82 Third St. Conn.	Rt. & Lt.	931.78	925.64	272'	34'		1				2+97 Rt Third St. Conn.
2+82 Third St. Conn.	4+17 Third St. Conn.	Lt.	925.64	926.69	135'							
3+00 Third St. Conn.	4+17 Third St. Conn.	Lt. & Rt	925.70	926.69	117'	3'		1				2+97 Rt. Third St. Conn.
5+71 Weirich Boulevard	6+00 Weirich Boulevard	Lt.	925.81	926.07	29							5+71 Lt. Weirich Boulevard
4+17 Third St. Conn.	6+30 Third St. Conn.	Rt.	926.69	924.30	213'	3'				1		6+30 Rt. Third St. Conn.
4+17 Third St. Conn.	6+30 Third Street	Lt	926.69	924.30	213'	3'				1		6+30 Lt. Third St. Conn.
6+30 Third St. Conn.	4+62 First Street	Rt	924.30	925.68	44'							6+30 Rt. Third St. Conn.
6+30 Third St. Conn.	5+40 First Street	Lt.	924.30	924.72	44'							6+30 Lt. Third St. Conn.
5+68 Weirich Boulevard	2+95 Third St. Conn.	Lt	925.44	925.66	22'	4'		1				5+71 Lt. Weirich Boulevard
581 + 40 M.L.	581 + 50 M.L.	℄	925.00	925.70		▲40'					#1	581+40 Rt. M.L. - Fine Aggregate Blanket Area
581 + 50 M.L.	582 + 40 M.L.	Lt.	925.70	926.70	*90'					#1		581+40 ℄ M.L. - Fine Aggregate Blanket Area
581 + 50 M.L.	581 + 50 M.L.	Lt.	926.50	925.70	*40'					#1		581+50 ℄ M.L. - Fine Aggregate Blanket Area
582 + 00 M.L.	582 + 00 M.L.	Lt.	926.90	926.10	*40'							582+00 ℄ M.L. - Fine Aggregate Blanket Area
582 + 40 M.L.	582 + 40 M.L.	Lt.	927.40	926.70	*35'							582+40 ℄ M.L. - Fine Aggregate Blanket Area
547 + 50 M.L.	551 + 50 M.L.	℄	925.10	926.70	*400'							546+50 Rt. M.L. - Fine Aggregate Blanket Area
CODE U-1010(5) 5% CITY - TOTALS →					13,043	768	4	5	1	12	20	

* Using Sec. M-6.4(f) material
▲ Using Sec. M-6.4(f)(c) material, without perforations

CODE U-1010(5) 1.58% CITY

602 + 60 M.L.	605 + 00 M.L.	Rt.	934.25	936.36	240'							602 + 60 Rt. M.L.
605 + 00 M.L.	606 + 50 M.L.	Rt.	936.36	935.95	150'	12'					1	606 + 50 Rt. M.L.
605 + 25 M.L.	606 + 35 M.L.	Rt.	938.11	937.43	110'							606 + 35 M.L.
601 + 62 M.L.	602 + 53 M.L.	Lt.	936.26	937.26	91'							602 + 62 Lt. M.L.
CODE U-1010(5) 1.58% CITY - TOTALS →					591'	12'					1	

CODE UG-1010(5) 5% CITY

564 + 00 M.L.	564 + 35 M.L.	Lt.	926.00	926.30	35'							564 + 00 Lt. M.L.
564 + 45 M.L.	565 + 40 M.L.	Lt.	926.19	925.72	95'	12'			1			565 + 50 Lt. M.L.
565 + 55 M.L.	569 + 00 M.L.	Lt.	925.72	930.85	345'	10'		1				565 + 50 Lt. M.L.
566 + 10 M.L.	567 + 00 M.L.	Rt.	925.93	925.66	90'	24'				1		567 + 00 Rt. M.L.
567 + 00 M.L.	569 + 00 M.L.	Rt.	925.66	930.85	200'							567 + 00 Rt. M.L.
CODE UG-1010(5) 5% CITY - TOTALS →					765'	46'		1	1	1		

TABULATION - PIPE UNDERDRAIN FOR SPECIAL FINE AGGREGATE BLANKET

CODE U-1010(5) 5% CITY

STATION TO STATION		SIDE	F.L. ELEV.	F.L. ELEV.	I-4 LIN. FEET 8" UDRAIN	I-4 LIN. FEET 8" UDRAIN Outlet	I-5 EACH 8"-45° BEND	8" TEE	8"-90° BEND	OUTLET STATIONS & REMARKS
582 + 40 M.L.	586 + 25 M.L.	℄	926.10	931.49	385'					582 + 40 ℄ M.L.
546 + 50 M.L.	547 + 50 M.L.	Rt.	924.93	924.66		124'	1			546 + 50 Rt M.L.
596 + 43 M.L.	599 + 40 M.L.	℄	931.00	937.95	298'	38'			1	596 + 43 Lt. M.L. F.L. 930.18
	TOTALS →				*683	‡ 162	1		1	
					12" UDRAIN	12" UDRAIN Outlet	12"-45° BEND	12" TEE	12"-90° BEND	
588 + 75 M.L.	594 + 75 M.L.	℄	931.58	934.10	600					
	TOTALS				*600					586 + 00 Rt. M.L.
					15" UDRAIN	15" UDRAIN Outlet	15"-45° BEND	15" TEE	15"-90° BEND	
586 + 00 M.L.	586 + 25 M.L.	Rt.	930.45	930.58		42	1			
586 + 25 M.L.	588 + 75 M.L.	℄	930.58	931.33	250					586 + 00 Rt M.L.
CODE U-1010(5) 5% CITY - TOTALS →					*250	‡ 42	1			586 + 00 Rt M.L.

* Using Sec. M-6.4(f) material
‡ Using Sec. M-6.4(c) material

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-U6-1010(5)	

STA. - 21 - 10.23

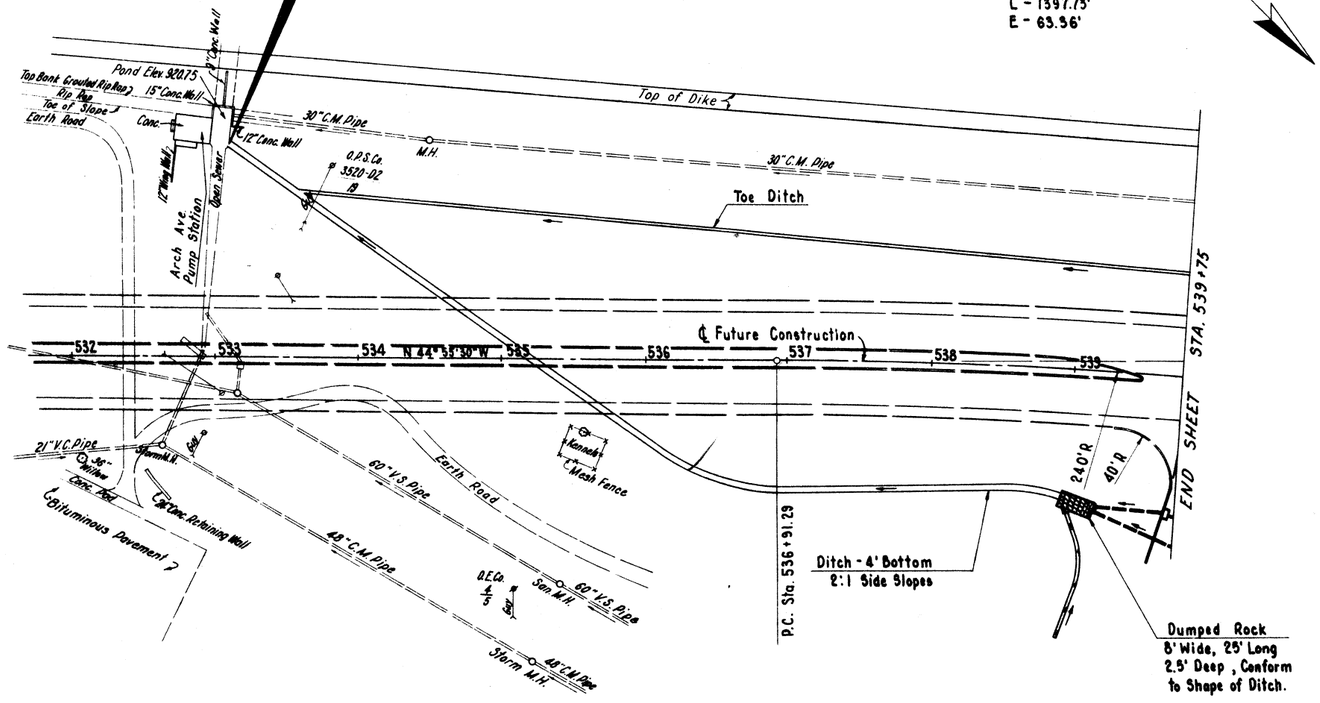
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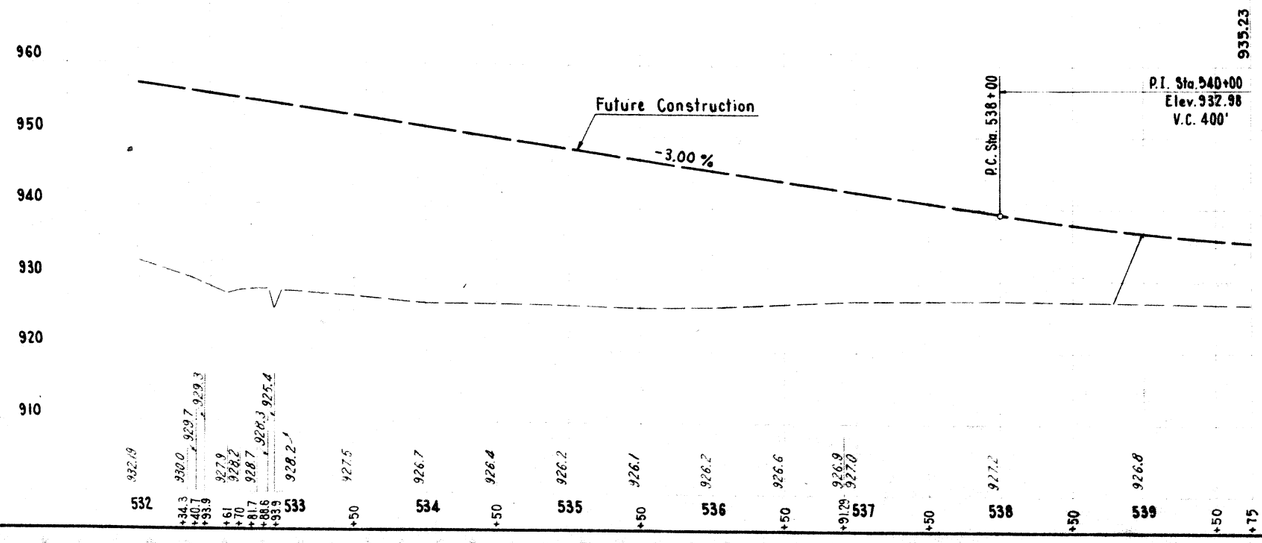
B.M. No. 21-10 Elev. 935.82
Top of S.W. Bolt in Conc. Footer of Lawson Milk Co. Sign @ S.E. Corner of Erie St. and Edwin Ave.

BEGIN WORK STA. 533+10

Curve Data
P.I. Sta. 543+97.71
Δ - 20°30'00" Rt.
D - 1°28'00"
R - 3906.53'
T - 706.42'
L - 1397.75'
E - 63.56'

For Proposed Typical Section of Adjoining Pavement to the South See Typical Section Sheet No. 5





Scale: Hor. 1"=50'
Vert. 1"=10'

LINE & PROFILE SHEET STA. 532+00 TO ST

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA - 21 - 10.23

B.M. No. 21-10 Elev. 935.82
Top of S.W. Bolt in Conc. Footer of Lawson Milk Co. Sign @ S.E. Corner of Erie St. and Edwin Ave.

U-UG-1010 (5)

Dumped Rock 6.5' Wide - 15' Long 2'6" Deep, Conform to Shape of Ditch

Dumped Rock 6.5' Wide - 15' Long 2'6" Deep, Conform to Shape of Ditch

M.H. Meter Station Conc. Bldg

Top of Dike

Toe Drain

Toe Ditch

R/W Line

BEGIN SHEET STA. 539+75

BEGIN PROJECT STA. 539+75

P.O.C. STA. 540+18.94 = EDWIN AVE. STA. 6+04.98

Future Construction

Hub Set P.T. Sta. 543+97.71
372.97'
N 01° 05' 36" E
E. Edwin Ave. Sta. 6+04.98
E. Edwin Ave. Z
Δ = 20° 30' 00"
D = 9° 32' 05"
R = 600.00'
T = 108.97'
L = 214.73'
159° 30' 00"
P.T. Sta. 550+18.00
Erie St.
Sta. 8+00 Edwin Ave.

REFERENCE POINT
P.O.C. STA. 540 + 18.94

Existing 48" San. Sewer To Be Abandoned, as per plan See Sheet No. 9

N 24° 25' 30" W

N 44° 55' 30" W

48" Seg. Blk. San. Sewer

End Temporary Guard Rail

54"

Existing 54" San. Sewer To Be Abandoned To This M.H.

16" Birch

Future Construction

Temporary Guard Rail

S 69° 28' 08" W

EDWIN AVE CONNECTION

40' R

10' R

55' R

NOTE: Federal Marker U-UG 1010 (5) Will Be Furnished And Erected On The Right By The State of Ohio Prior To Acceptance Of This Project.

54" Two ring brick San. sewer 311.9'

Δ = 142° - 07'
T = 9.60'

48" REPLACED

Bob Wire Fence

Ditch 4' Bottom 2:1 Side Slopes

CURVE DATA
P.I. Sta. 543+97.71
Δ = 20° 30' 00" Rt.
D = 1° 28' 00"
R = 3906.53'
T = 706.42
L = 1397.73'
Ex = 63.36'

STA. 545+00 SHEET END

940	935.23	935.94	934.71	934.54	934.42	934.36	934.39	934.47	934.60	934.80	935.28	935.71	936.17	936.62	937.08	937.55
935	BEGIN PROJECT STA. 539+75				V.C.=400' P.I. Sta. 540+00 Elev. 932.98					P.T. Sta. 542+00						
930	-3.000 %												+0.910 %			
	Begin 6"I-4 Pipe Rt. F.L. 930.90				End 6"I-4 Pipe Rt. F.L. 930.24	Begin 6"I-4 Pipe Rt. F.L. 930.24	6"I-4 Pipe Rt.		Begin 6"I-4 Pipe Lt. F.L. 931.76		6"I-4 Pipe Lt.		End 6"I-4 Pipe Rt. F.L. 932.48		F.L. 934.03	F.L. 935.39
					Outlet 6"I-4 Pipe Rt. F.L. 930.00									Begin 6"I-4 Pipe Rt. F.L. 932.48		
925														Outlet 6"I-4 Pipe Rt.		
920																
915	926.4				926.4					926.3			926.3		926.7	926.8
	+75	540			541					542			543		544	545

Existing 54" Sanitary Sewer

CODE U-1010(5) 5% CITY
ITEM 1-15 GUARD RAIL

REF. NO.	Station to Station	Side	Std. Design	Temporary Guard Rail
1-GR	5+02 Edwin - 545+82	Lt.		487.5
2-GR	540+19 (RR-39-90) Normal	Lt.	775.0	
3-GR	543+82 - 551+34	Lt.	775.0	
			1550	487.5

CODE U-1010(5) 5% CITY
STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	Side	12"Class B Storm Sewer Under Pavement or Approaches I-2 (LIN. FEET)	Special M-4.6(b)/40" Pipe for Sanitary Sewer I-2 (LIN. FEET)	Standard No.2 Manhole I-8 EACH	Standard No.2-10 Medium Inlet I-8 EACH	Standard No.3 Catch Basin I-8 EACH	Dumped Rock Cu. Yd. I-10	Concrete for Abandoning Existing Seg. Block Class E-S-27D.C.4 Sanitary Sewer S-1	48" Wall E-12	54"	
411	5	541+07	542+00	Rt.	62'				1	9		0.23		
5	410	542+00	542+50	Rt.	64'					9		0.23		
410	5	542+50	543+25	Rt.										158
5	409	543+25	543+00	Rt.										187
409	5	543+00	545+00	Rt.		390'	1	1	1	18		0.48		345
701	5	540+00	542+00	Rt.		390'	1	1	1					
5	701	542+00	543+00	Rt.		126'								
			TOTAL		126'	906'	2	2	3	27		0.71		345

For Intersection Detail of Edwin Ave. Connection See Sheet No. 82.

For Profiles of Storm Sewers See Sheet No. 85

For Profile of Sanitary Sewer See Sheet No. 93

Scale: Hor. 1"=50' Vert. 1"=5'

LINE & PROFILE SHEET STA. 539+75 TO

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

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STA. - 21 - 10.23

B.M. No. 21-10 Elev. 935.82
Top of S.W. Bolt in Conc. Footer of Lawson Milk Co. Sign, S.E. Corner of Erie St. & Edwin Ave.

Abandon Catch Basin Sta 0+23 - 11' Lt.

Sta. 0+00 Edwin Ave. Conn. = Sta. 28+43.85 Erie St. South

BEGIN WORK Sta. 0 + 15

CODE U-1010(5) 5% CITY

STORM SEWERS

I/Io Inlet Abandoned	I-8 Adjust Inlet to Grade	REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	I-2 LIN. FT. 12"Class B Storm Sewer Under Pavement or Approaches	I-2 LIN. FT. 12"Class B Storm Sewer	I-8 EACH Standard No. 3 Catch Basin	I-8 EACH Standard No. 3-A Catch Basin	I-8 EACH Manhole Reconstructed to Grade Using Salvaged Casting As Per Plan	S-27 LIN.FT. 36" Roadway Culvert M 6.6 (b) or M 6.8 (b)	S-1 CU.YD. Concrete for Structures Class E 9-27 P.C.4 End Wall	E-2 Excavation for Structures Cu. Yd.	I-10 Dumped Rock Cu. Yd.
1	1	423 S	422 S	0 + 15	0 + 80	Rt.	64			1					
		422 S	421 S	0 + 80	0 + 80	Rt. & Lt.	26			1					
		418 S	419 S	2 + 45	2 + 45	Rt. & Lt.	26		1						
		419 S	420 S	2 + 45	2 + 45	Lt.		18	1				0.23	1	
		424 S	—	3 + 68	—	Rt.				1					
		416 S	417 S	4 + 80	4 + 80	Lt. & Rt.						116	1.18	75	20
		413 S	414 S	5 + 00	5 + 00	Lt. & Rt.	26			1					
		414 S	415 S	5 + 00	4 + 84	Lt.		46		1			0.23	1	
1	1				TOTALS		142	64	2	4	1	116	1.64	75	20

DRIVE - CODE U-1010(5) 5% CITY

Station	Side	ITEM E-1 Roadway Exc. C.Y.	ITEM E-1 Roadway Emb. C.Y.	ITEM T-70-7" S.Y.
0+30	Lt.	1	0	4

Ditch 4' Bottom 2:1 Side Slopes Sodded

Dumped Rock 8.5' Wide 25' Long 2.5' Deep Conform to Shape of Ditch

Toe Ditch

Nail Set & Edwin Ave. Conn. 89°52'05" & Erie St. 1196.18' 95°06'50" & Walnut Rd. 280.51' D.K. Nail & First St. 86°46'00" Nail Set

REFERENCE POINT
Sta. 0+00 Edwin Ave. Conn.

CODE U-1010(5) 5% CITY

ITEM E-8		
Removal & Disposal of Existing Sidewalk	622	Sq.Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	106	Lin.Ft.
Removal & Disposal of Existing Pavement	8	Sq.Yds.

For Intersection Detail of Edwin Ave. See Sheet No. 82
For Profiles of Storm Sewer & Culverts See Sheet Nos. 85 & 92

P.O.C. Sta. 540 + 18.94 = Sta. 6 + 04.98 Edwin Ave. Conn.

BEGIN WORK Sta. 0 + 23.9

END WORK Sta. 5 + 75.20

Future Construction

END WORK Sta. 5 + 75.20

Scale: Hor. 1" = 20' Vert. 1" = 5'

-1.825 %

+1.670 %

V.C. = 200'
P.I. Sta. 2 + 40
Elev. = 928.66

BEGIN 6"I-4 Pipe Lt. F.L. 926.00

End 6"I-4 Pipe Rt. F.L. 929.79

Begin 6"I-4 Pipe Lt. F.L. 925.82

Outlet 6"I-4 Pipe Rt. F.L. 925.50

Outlet 6"I-4 Pipe Lt. F.L. 925.70

Begin 6"I-4 Pipe Rt. F.L. 925.79

6"I-4 Pipe Lt. & Rt.

End 6"I-4 Pipe Lt. F.L. 929.25

Begin 6"I-4 Pipe Rt. F.L. 929.28

End 6"I-4 Pipe Rt. F.L. 929.28

Outlet 6"I-4 Pipe Rt. F.L. 929.50

6"I-4 Pipe Rt.

End 6"I-4 Pipe Rt. F.L. 930.00

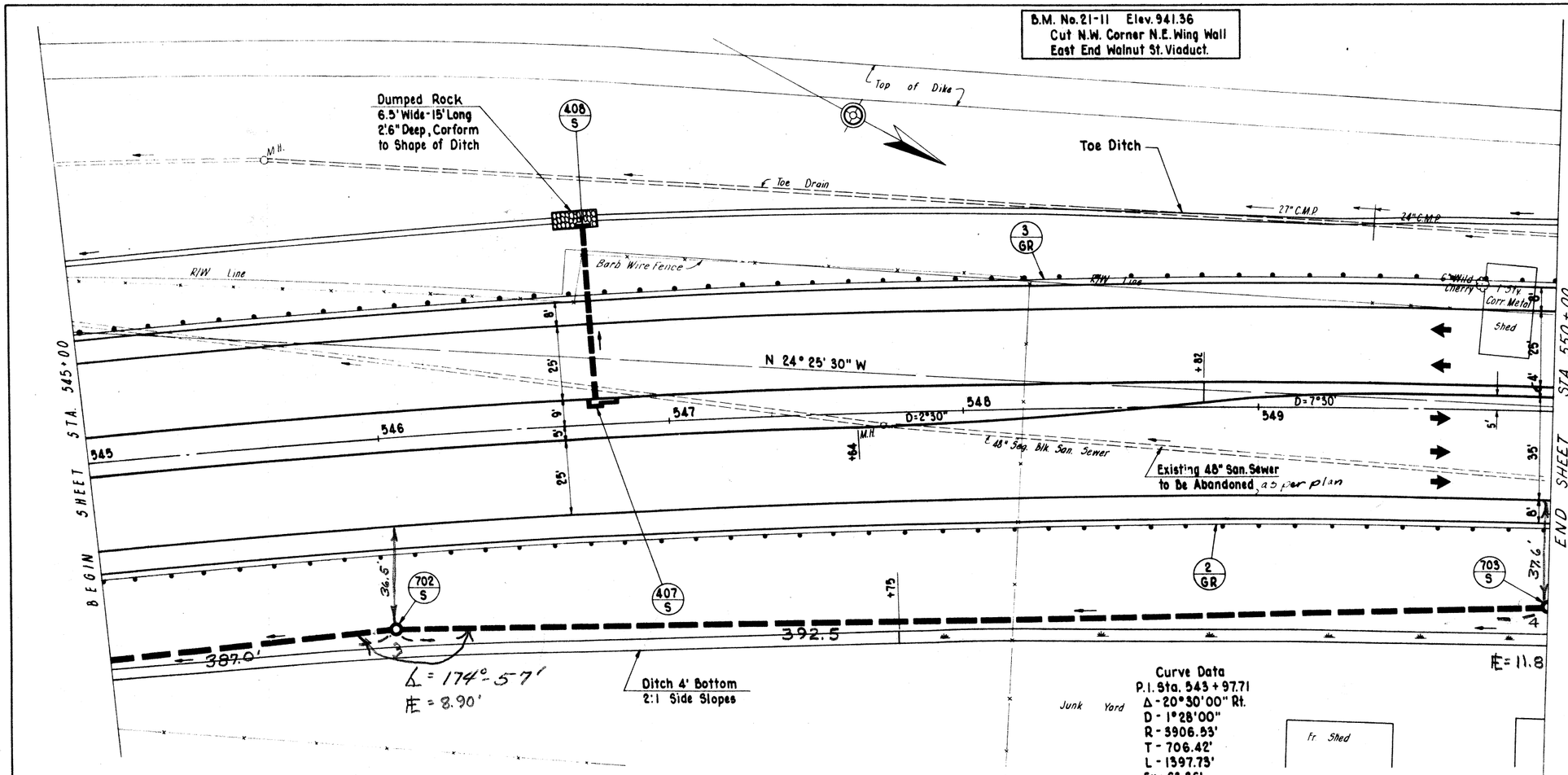
LINE & PROFILE SHEET - EDWIN AVE. CONNECT

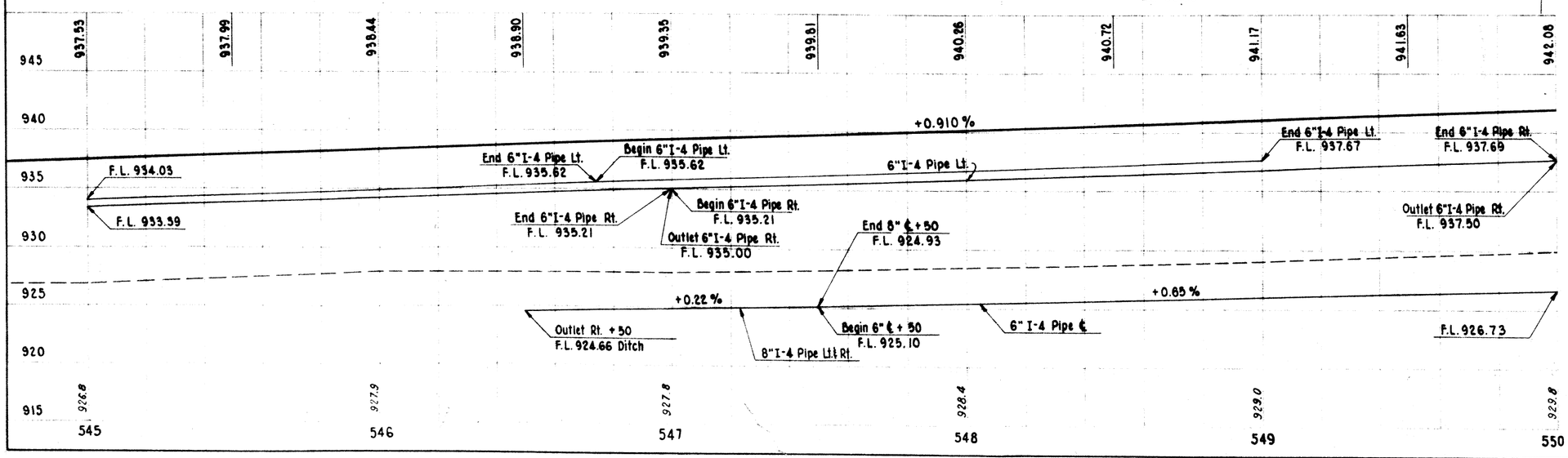
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA - 21 - 10.23

19

B.M. No. 21-11 Elev. 941.36
Cut N.W. Corner N.E. Wing Wall
East End Walnut St. Viaduct.





CODE U-1010(5) 5% CITY

STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	E-2 Excavation for Structure CU. YD.	I-2 (LIN. FEET) 12" Class B Storm Sewer under Pav't or Approaches	I-2 (LIN. FEET) Special M-6.6 (b) 48" Pipe for Sanitary Sewer	I-8 EACH Standard Manhole NO. 2	I-8 EACH Standard Median Inlet NO. 2-10	I-10 Dumped Rock Cu. Yds.	S-1 CU. YD. Concrete for Structures Class E S-27 P.C.4 End Wall	E-12 Abandoning Existing 48" Sag. Block Sanitary Sewer Lin. Ft.
702 S	703 S	546+00	550+00	Rt.			396'	2				
407 S	408 S	546+75	545+00	Lt.	1	60'			1	9	0.23	507
			550+00	RT&LT	1	60'	396'	2	1	9	0.23	507
				TOTALS								

For Profile of Storm Sewer See Sheet No. 85

For Profile of Sanitary Sewer See Sheet No. 93

Scale: Hor. 1"=20'
Vert. 1"=5'

LINE & PROFILE SHEET STA. 545+00 TO S

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

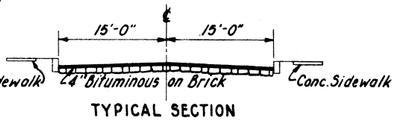
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STA - 21 - 10.23

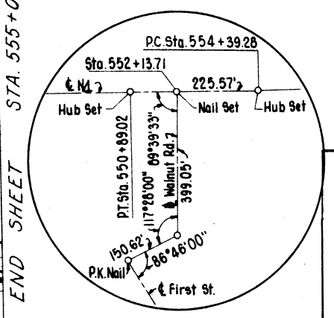
Curve Data
P.I. Sta. 543 + 97.71
Δ - 20° 30' 00" Rt.
D - 1° 28' 00"
R - 3906.53'
T - 706.42'
L - 1397.73'
Ex. - 63.36'

B.M. 21-11 Elev. 941.36
Cut N.W. Corner N.E. Wing Wall
East End Walnut Rd. Viaduct.

Curve Data
P.I. Sta. 562 + 13.52
Δ - 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
L - 1546.43'
Ex. - 24.39'



TYPICAL SECTION
EXISTING WALNUT ROAD

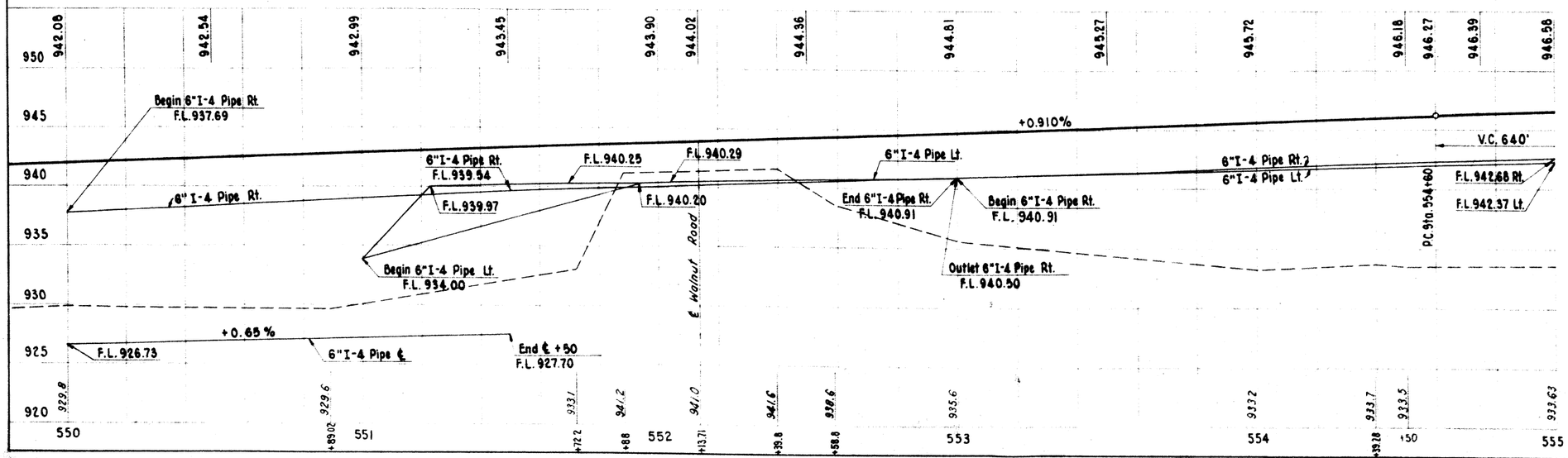


REFERENCE POINT
P.O.T. Sta. 552 + 13.17

BEGIN SHEET STA. 550+00

END SHEET STA. 555+00

Top of Dike
End Work Sta. 11 + 58.3
Toe Ditch
24" C.M. Pipe
18" C.M. Pipe
24" R.C. Pipe
M.H.
10' R.
45' R.
30' R.
Conc. Sidewalk
6" Conc. Curb
Conc. Sidewalk
P.C. Sta. 554 + 39.28
B. L.O.R.R. Siding
Track No. 27 C
Track To Be Abandoned By Others
Timber Retaining Curb
8" V.C. Pipe
6" H.P. Gas Line
6" Water Line
S 65° 54' 57" W
N 24° 25' 30" W
D - 6° 15' 00"
P.C.
550
551
552
553
554
+62
+60
N.P.R.R.
S 89° 59' 33" E
O.P.S.Co. #252AA3 21
Bulkhead
2" H.P. Gas Line
48" Seg. Blk. Pipe San. Sewer
12" Alley
to be Abandoned, as per plan
See note, Sheet 9
Cone
Tile Block Garage
Existing 48" San. Sewer
To Be Abandoned in place
Sta. 552 + 13.71 Main Line =
Sta. 10 + 49.67 Walnut Road
187.8'
447.5
210.5
85.0'
Bituminous
Wood fence
Gate
Truck Scales
Parking Lot (Earth)
1-Sty. Conc. Block Office & Warehouse
Ditch 4' Bottom 2:1 Side Slopes Sodded
Dumped Rock 8.5' Wide, 2.5' Long Conform to Shape of Ditch.
1'-2" Sumacs
Conc. Pad
Conc. Ramp
Transformers
Metal Scrap Dock
Fuel Oil Tank & Hand Pump
4" V.C. Pipe ?
4" Metal Pipe ?
O.P.S.Co. #252AA2 41
Brick Shed
1-Sty. Brick Brick Shop
WALNUT ROAD
R/W
℄ Walnut Road
8" C.I. Pipe San. Sewer ?
N.P.R.R.
MH #5:
℄ = 23.7'
I.N.E. = 17.4'
I.N.N. = 13.3'
℄ = 14.85
I.N.N. = 9.10
703 S
703a S
704 S
406 S
401 S
402 S
2 GR
3 GR
4 GR
5 GR



CODE U-1010(5) 5% CITY ITEM 1-15 GUARD RAIL					
Ref. No.	Station to Station	Side	Standard Design	Temporary Guard Rail	
4 - GR	9+50 Walnut 560+60	Rt.		862.5	
5 - GR	552+14 to 561+00	Lt.		825.0	
	TOTAL			1,687.5	

CODE U-1010(5) 5% CITY
STORM SEWERS

REF. NO.	STATION From	STATION To	Pipe Size		E-2 Excavation for Structures Cu. Yd.	I-2 (Lin. Feet) 15" Class B Storm Sewer	Special 48" M-6.6 (c) Pipe for San. Sewers	I-8 EACH Standard Manhole No. 2	I-10 Dumped Rock Cu. Yd.	S-1 Cu. Yd. Concrete for Structures Class E S.S.S.A.-1 Brickwall	S-27 Lin. Ft. Roadway Culvert 24" M-6.6 (b)	E-12 Abandoning Existing 48" Seg. Block San. Sewer	SPECIAL Bulkhead Each
703 S	703a S	550+00	552+14	Rt.			212	1					
703a S	704 S	552+14	564+06	Rt.			180	1					
405 S	406 S	Walnut Rd. 9+49 Lt.			1	92			20	0.26	150	1	
402 S	401 S	551+38	552+80	Rt.	1.92					0.82			1
		550+00	595+00	Rt.									
		TOTALS			1.33	92	400	2	20	1.08	150	1	1

For Intersection Detail of Walnut Rd. Connection. See Sheet No. 82

For Profiles of Storm Sewers See Sheet No. 85

For Profile of Sanitary Sewer See Sheet No. 93

Scale: Hor. 1" = 20'
Vert. 1" = 5'

LINE & PROFILE SHEET STA. 550+00 TO STA. 555+00

B.M. No. 21-11 Elev. 941.36
Cut N.W. Corner N.E. Wing Wall
East End Walnut St. Viaduct

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

21

STA. -21- 10.23

BEGIN WORK
Sta. 8 + 00

END WORK
Sta. 11 + 58.3

Meet Existing Grade

END WORK
Sta.0 + 70

Sta. 8 + 64 Walnut Road =
Sta. 0 + 00 Nickel Plate Drive

Sta. 552 + 13.71 Main Line =
Sta. 10 + 49.67 Walnut Rd.

552 + 13.71
- 25.00
551 + 88.71

WALNUT ROAD
Bituminous Pav't.

1-Sty. Brick Freight Sta. NICKEL PLATE R. R.

2-Sty. - Frame Warehouse
MASSILLON CLEVELAND AKRON SIGN CO.

3-Sty. - Brick
MASSILLON RIVET & MFG. CO.

Tile Block Garage

Existg. 48" San. Sewer to be Abandoned

Concr. Pad

Timber Wall

Toe Ditch

Top of Dike

Drive (Gravel)

Drive (Pushed Slag)

1" to 2" Sumacs

W. Meter & Valve Box

1" Water Line

End Concrete Sewer

8'x12' Sign Board

R.R. Crossing Sign

P.R. Warning Sign, Conc. Sidewalk & Guard Fence

8" V.C. Pipe San. Sewer

6" V.C. Pipe

8" V.C. Pipe

12" V.C. Pipe

12" V.C. Pipe

2" C.M. Pipe

M.H.

Plug

Bulkhead

6" Water Line

6" H.P. Gas Line

2" H.P. Gas Line

Street Light

O.P.S.Co. 2520A-3 18

O.P.S.Co. 2520A-3 19

O.P.S.Co. 2520A-3 20

O.P.S.Co. 2520A-3 21

O.P.S.Co.

Q.B.T.Co.

N.P.R.R. #9572

N.P.R.R.

I.P.

J.E. or O.

Track No. 27

Track No. 27E

Track No. 27F

Conc.

6" V.C. Pipe

8" V.C. Pipe

12" C.I. Pipe

Timber Rail Curb

Top of Bank

Top of Dike

Existg. Bridge

S 65°54'57" W

N 74°25'30" W

89°39'35"

552

553

15'

16'

33'

20'

25' R

45' R

50' R

10' R

+40

+40

Sta. 0 + 00 Nickel Plate Drive

Sta. 10 + 49.67 Walnut Rd.

Sta. 11 + 58.3

Sta. 0 + 70

Sta. 8 + 64 Walnut Road

Sta. 8 + 90

Sta. 9 + 02

Sta. 9 + 24

Sta. 8 + 24

Sta. 10 + 15

Sta. 9 + 75

Sta. 8 + 10

Sta. 8 + 00

Sta. 11 + 58.3

Sta. 552 + 13.71 Main Line =
Sta. 10 + 49.67 Walnut Rd.

403 S

403a S

404 S

405 S

406 S

401 S

402 S

2 GR

3 GR

4 GR

5 GR

CODE U-1010(5) 5% CITY

ITEM E-8

Removal & Disposal of Existing Sidewalk	1488	Sq.Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	353	Lin.Ft.
Removal & Disposal of Existing Pavement	107	Sq.Yds.

CODE U-1010(5) 5% CITY

STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	I-2 LIN.FT. 15" Class B Storm Sewer Under Pav't. or Approaches	I-8 LIN.FT. Standard No. 3 Catch Basin	I-8 LIN.FT. Standard Inlet No. 2-A-14	
403 S	404 S	8 + 24	8 + 24	Lt & Rt.	26	2		
404 S	405 S	8 + 24	9 + 02	Lt.	74		1	
			TOTALS		100	2	1	

CODE U-1010(5) 5% CITY

DRIVE

STATION	SIDE	ITEM E-1 Roadway Exc. C.Y.	ITEM E-1 Roadway Emb. C.Y.		ITEM B-19 6" C.Y.	ITEM T-707 7" S.Y.
8 + 64	Lt.	14	0		14	0
8 + 90	Rt.	0	20		12	7
TOTALS		14	20		26	7

CODE U-1010(5)

100% CITY

I-8

Manhole Adjusted To Grade

403a	8 + 49 Walnut Rd.	1

15'-0" | 15'-0"
Conc. Sidewalk | 4" Bituminous | Conc. Sidewalk

TYPICAL SECTION
EXISTING WALNUT ROAD

END WORK-Sta. 0 + 70
Meet Existing Grade

935.27 | 935.03 | 934.96 | 934.65 | 934.49 | 934.18

935
930
925

-1.56 %

Sta. 0 + 00 = Sta. 8 + 64 Walnut Rd.

933.87 | 934.44 | 934.37 | 934.18 | 933.95

0 | +15 | +25 | +50 | +10 | 100

PROFILE - NICKEL PLATE DRIVE

934.54 | 934.41 | 934.34 | 934.51 | 934.75 | 935.10 | 935.82 | 936.78 | 937.50 | 939.31 | 940.03 | 941.03 | 942.35 | 943.23 | 943.55 | 943.62 | 944.02 | 944.02 | 943.99 | 943.89

945
940
935
930
925

V.C. - 80'
P.I. Sta. 8 + 50
El. 933.90

V.C. - 80'
P.I. Sta. 9 + 75
El. 942.91

P.C. Sta. 8 + 10
P.T. Sta. 8 + 90
P.C. Sta. 9 + 35
P.T. Sta. 10 + 15

BEGIN WORK
Sta. 8 + 00
Track No. 27E

+1.600 %
+7.208 %
-1.270 %
-0.174 %

Begin 6" I-4 Pipe Lt. F.L. 930.99
Begin 6" I-4 Pipe Rt. F.L. 930.93
End 6" I-4 Pipe Lt. & Rt. F.L. 930.60
Begin 6" I-4 Pipe Rt. & Lt. F.L. 930.60
Begin 6" I-4 Pipe Lt. F.L. 933.90
End 6" I-4 Pipe Lt. F.L. 933.90
6" I-4 Pipe Rt.
6" I-4 Pipe Lt.
End 6" I-4 Pipe Lt. F.L. 939.48
End 6" I-4 Pipe Rt. F.L. 940.50
Begin 6" I-4 Pipe Lt. F.L. 940.25
End 6" I-4 Pipe Lt. F.L. 940.29
Begin 6" I-4 Pipe Rt. F.L. 940.62
6" I-4 Pipe Rt.
6" I-4 Pipe Lt.
End 6" I-4 Pipe Lt. F.L. 940.21
Begin 6" I-4 Pipe Lt. F.L. 940.29
End 6" I-4 Pipe Rt. F.L. 940.25

Existg. Bridge

Sta. 552 + 13.71 Main Line =
Sta. 10 + 49.67 Walnut Road

934.70 | 934.54 | 934.18 | 934.67 | 936.05 | 937.12 | 938.42 | 939.19 | 940.91 | 942.05 | 942.78 | 942.90 | 943.45 | 943.83 | 943.88 | 943.81

+75 | 8 | +50 | 9 | +50 | +75 | 10 | +14.67 | +19.67 | +50 | +74.67 | +83.7 | +96.67 | 11 | +25 | +50 | +59.3 | 12

For Intersection Detail of Walnut Road Connection See Sheet No. 82

For Profiles of Storm Sewer & Culvert See Sheets No. 85 & 92

For Profile of Sanitary Sewer See Sheet No. 93

Scale: Hor. 1" = 20'
Vert. 1" = 5'

LINE & PROFILE SHEET- V

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

22

STA - 20 - 10.23

B.M. No. 21-11 Elev. 941.36
Cut N.W. Corner N.E. Wing Wall
East End Walnut St. Viaduct

CURVE DATA
P.I. Sta. 562 + 13.52
Δ - 7° 13' 00" Lt.
D - 0° 28' 00"
R - 12,277.70'
T - 774.24'
Ex - 24.39'
L - 1546.43'

BEGIN SHEET STA. 555+00

END SHEET STA. 560+00

Top of Dike

Track To Be Abandoned By Others

18" CM Pipe

Track No. 27 C

B&O RR Siding

N.P.R.R. Siding 2

D = 6°15'

D = 5°00'

N 24°25'30" W

555 556 557 558 559 560

48" Seg Block Pipe San Sewer

Bulkhead

12' Alley

M.H.

Existing 48" San. Sewer
To Be Abandoned in place

48" R.C.C. Pipe Sanitary Sewer

O.P.CO.

34.65'

Toe Ditch

Track No. 27 D

℄ = 16.1'

Tracks To Be Abandoned By Others

Track No. 42

Track No. 34

Track No. 29 E

(Abandoned) Conc. Blk. House

Wood Scale Platform

O.P.C. #2520A2 43

W & L.E. R.R.

Track To Be Abandoned By Others

Derailer

1-Sty. Brick Brick Shop

	946.58	946.72	946.82	946.87	946.89	946.87	946.81	946.70	946.55	946.37	946.14	945.86 / 945.81	945.56	945.20	944.81	944.37	943.90	943.38	942.82	942.23	941.58
950																					
945																					
940																					
935																					
930																					
925																					
920	933.63		933.3		933.52		933.9		934.12		934.2		934.99		935.7		936.24		937.3	937.4	937.0

+0.910 %

-3.304 %

F.L. 942.68 Rt.
6" I-4 Pipe Rt.
F.L. 942.37 Lt.
6" I-4 Pipe Lt.

End 6" I-4 Pipe Rt. F.L. 943.00
Begin 6" I-4 Pipe Rt. F.L. 943.00
End 6" I-4 Pipe Lt. F.L. 942.86
Begin 6" I-4 Pipe Lt. F.L. 942.86

6" I-4 Pipe Rt. F.L. 942.65
6" I-4 Pipe Lt.
6" I-4 Pipe Lt. F.L. 942.64

6" I-4 Pipe Lt.
6" I-4 Pipe Rt.
V.C. 640'
P.I. Sta. 557+80
Elev. 949.18

End 6" I-4 Pipe Lt. F.L. 940.00
Begin 6" I-4 Pipe Rt. & Lt. F.L. 940.00
Outlet 6" I-4 Pipe Lt. & Rt. F.L. 939.00
End 6" I-4 Pipe Rt. F.L. 939.32
6" I-4 Pipe Lt. & Rt.
6" I-4 Pipe Lt. & Rt. F.L. 937.68

555 +50 556 +50 557 +50 558 559 +42 +44 +51.3 +69 +80.5 +86 +99.3 560

For Profile of Sanitary Sewer
See Sheet No. 93

Scale: Hor. 1"=20'
Vert. 1"=5'

LINE & PROFILE SHEET STA. 555+00 TO STA. 560+00

CODE U-1010(5) 5% CITY
STORM SEWER

REF. NO. From	REF. NO. To	STATION From	STATION To	Size	I-16	SPECIAL		
						Manhole Abandoned		
						48" Bulkhead Each		
							1	1
							3	3
							1	1
					1-8 EACH	Standard Manhole No. 2		
					1-2 LIN. FT.	Special 48" M-6.6(b) Pipe For Sanitary Sewer		
704 S	705 S	554 + 00	558 + 47.5	452' Rt.				
		555 + 00	558 + 47.5	452' Lt.				
			TOTAL	904'			3	3

B.M. No. 21-12 Elev. 949.60
Cut Conc. Wing Wall East End P.R.R. Bridge Over Tuscarawas River 6' South of South Bridge Rail. West Corner of Angle Point in Wing Wall of North Bridge of Two Bridges.

BEGIN SHEET STA. 560+00

END SHEET STA. 565+00

Top of Dike

SUSPEND U-1010(5) Sta. 563+58

BEGIN UG-1010(5) Sta. 563+58

Sta. 564+09.11 U.S. Rt. 21 = Sta. 12+78.12 Track No. 29 Reloc.

Tracks To Be Abandoned By Others

Toe Ditch

Track No. 27 C

Track No. 27 B

Track No. 29

B&O R.R.

5 GR

4 GR

101 S

100 S

105 S

102 S

10'

8'

12'

7' Shoulder

25'

9'

5'

560

561

562

563

564

565

N 24° 25' 30" W

N 31° 38' 30" W

31° 45' 17" Tan. To Curve

W. & L.E. R.R.

48" R.C.C.P. Sanitary Sewer

Toe Ditch

Wetmore Creek

(Pressure Conduit)

P.C. Sta. 13+83.58

P.T. Sta. 14+69.80

+50

14

W. & L.E. R.R. & B&O R.R.

Tracks To Be Abandoned By Others

Track No. 29 E

Track No. 30 D

Track No. 29 15

Track Relocation (By Others)

M.H.

48" C.I.P. (Extra Heavy) Sanitary Sewer

Earth Road

PRR Telegraph

PRR Telegraph

For Alterations Wetmore Creek Pressure Conduit See Sheet No. 95

Track No. 29
Curve Data
P.I. Sta. 14+27
Δ = 13°47'00" Rt.
D = 16°00'00"
T = 43.42'
L = 86.22'
R = 359.26'

Curve Data
P.I. Sta. 562+13.52
Δ = 7°13'00" Lt.
D = 0°28'00"
T = 774.24'
L = 1546.43'
R = 12,277.70'
Ex = 24.39'

PROPOSED MINOR STRUCTURE
Type: Reinf. Conc. Saddle For Protection of Pressure Conduit
Alignment: Parallel to Existing Conduit (on 8° Curve)

EXISTING WETMORE CREEK STRUCTURE
Reinforced Concrete Pressure Conduit
Span 14'±
Height 7'-9"
(To Remain in Place)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

23

STA - 21 - 10.23

PROPOSED STRUCTURE BRIDGE NO. STA-21-10 69
U.S.R. 21 UNDER W. & L.E. R.R.
Type: Thru-girder with wrought iron plate deck and reinforced concrete substructure.
Spans: 82'-9" & 82'-0" c/c Brgs.
39.88' & 39.49' Clear. f/f substructure
Width: 1 Track 19'-9½" c/c girders plus 3'-0" Sidewalk (So. Side)
Clearance: 15.10' Min. Vertical
Loading: Coopers E-72
Skew: 58° 14' 43" Rt. Forward
Alignment: R.R. Tangent and 16°00' Curve Rt. U.S.R. 21 on 0°28' Curve Lt.
Superelevation: None
Design Criteria: A.R.E.A. Specifications

CODE UG-1010(5) 5% CITY

STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	SIDE	E-2 Excavation For Structures Cu. Yd.	I-2 (LIN. FT.) Class B Storm Sewer Under Pav't. or Approaches 12"-15"	I-2 (LIN. FT.) Class B Storm Sewer Under Pav't. Approaches 18"	I-6 EACH Standard Catch Basin 2-A1-2-25	I-14 (LIN. FT.) Standard Type I Paved Gutter Modified As Per Plan	I-14 (LIN. FT.) Standard Type 2 Paved Gutter	S-1 CU. YD. Concrete for Structures Class E S-27 P.C.4 End Wall
100 S	105 S	562+25	564+45	Rt.		222		1	10		0.23
102 S	105 S	564+08	564+45	Rt.	1	52					
105 S	106 S	564+45	566+50	Rt.			208	1	10	370	
101 S	103 S	564+00	565+30	Lt.			136			125	
—	—	562+50	566+20	Rt.							
—	104 S	564+25	565+50	Lt.							
			TOTAL		1	274	136	2	20	495	0.23

941.58 940.90 940.18 939.41 938.61 936.96 935.30 934.51 933.77 933.10 932.46 931.92 931.43 930.99 930.62 930.30 930.04 929.85 929.81 929.70

950
945
940
935
930
925
920

V.C. 640'
P.T. Sta. 561+00
P.C. Sta. 562+00
V.C. 560'
P.I. Sta. 564+80
Elev. 926.05
15.10' Min. Vert. Clearance

6"I-4 Pipe Lt. & Rt.
F.L. 937.68
-3.304%
End 6"I-4 Pipe Rt. & Lt.
F.L. 934.71
6"I-4 Pipe Lt. & Rt.
Outlet 6"I-4 Pipe Lt.
F.L. 934.30
6"I-4 Pipe Lt.
6"I-4 Pipe Rt.
Outlet 6"I-4 Pipe Rt.
F.L. 934.14
Wetmore Creek Pressure Conduit
Begin 6"I-4 Pipe Rt.
F.L. 932.06
6"I-4 Pipe Lt. 2
Begin 6"I-4 Pipe Lt.
F.L. 932.23
End 6"I-4 Pipe Rt.
F.L. 929.75
Begin 6"I-4 Pipe Rt.
F.L. 929.75
Outlet 6"I-4 Pipe Rt.
F.L. 929.65
End 6"I-4 Pipe Rt.
F.L. 929.87
6"I-4 Pipe Lt. 2
6"I-4 Pipe Lt.
F.L. 928.58
End 6"I-4 Pipe Lt.
F.L. 926.00
Outlet 6"I-4 Pipe Lt.
F.L. 925.70
End 6"I-4 Pipe Lt.
F.L. 926.50
Begin 6"I-4 Pipe Lt.
F.L. 926.00
6"I-4 Pipe Lt.
F.L. 925.80
+2.071%
Begin 6"I-4 Pipe Lt.
F.L. 926.19

560 +14 +28.2 +46.5 +53 561 +39.2 +41.5 +52.5 +65.5 +71 +76.1 562 +87.5 +91 +93 +12.1 +47.6 563 +87 +50 564 +22 +50 +89 565

936.7 937.0 935.7 934.8 937.6 936.8 937.4 939.4 939.8 940.1 940.6 940.2 939.8 939.9 940.0 938.6 931.8 931.4 930.6 930.1 932.0 933.9 935.0 938.4

Bridge No. STA. 21-1069
U.S.R. 21 under W. & L.E. R.R
Sta. 564+09.11 See Sheet Nos. 119-129

For Profile of Storm Sewers See Sheet No. 86

Scale: Hor. 1"=20' Vert. 1"=5'

LINE & PROFILE SHEET STA. 560+00 TO STA.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

24

STA - 21 - 10.23

B.M. No. 21-12 Elev. 949.60
Cut Conc. Wing Wall East End P.R.R. Bridge Over Tusarawas River 6' South of South Bridge Rail. West Corner of Angle Point in Wing Wall of North Bridge of Two Bridges.

For Profile of Storm Sewers See Sheet No. 86

For Profile of Sanitary Sewer See Sheet No. 94

P.I. Sta. 562 + 13.52
Δ - 7°13'00" Lt.
D - 0°28'00"
R - 12,277.70'
T - 774.24'
Ex - 24.39'
L - 1546.43'

Track To Be Abandoned By Others

Track No. 29 Relocation — Track Relocated by Others

B & O R.R.

PENNSYLVANIA R.R. (2 Tracks)

℄ P.R.R. Telegraph

Top of Dike

END UG-1010(5) Sta. 568+16

RESUME U-1010(5) Sta. 568+16

P.T. Sta. 569 + 85.71

12" C.M. Pipe

P.R.R. Industrial Track

Lot No. 1064

Toe Ditch

Bulkhead

48" Seg. Brick Sanitary Sewer

M.H.

48" Brick Sanitary Sewer

12" C.M.P.

STA. 565 + 00

STA. 570 + 00

BEGIN SHEET

END SHEET

Earth Road

T' Shoulder

Paved Gutter Std. Type 2

Sta. 565 + 91.16 - U.S. Rt. 21
Sta. 10 + 09.61 - R.R. Survey

N 31°38'30" W

40°24'04"

Existing San. Sewer To Be Abandoned in place

Gravel

Cinder Drive

Paved Gutter Std. Type 2 (Modified)
See Detail Sheet No. 5

Track to be Abandoned by Others

106 S Special Endwall
See Detail Sheet No. 5

SOUTH AVENUE

1 Sty - Brick

Gravel & Cinder

Aluminous Pav't.

4-20,000 Gal. Storage Tanks

Chain Link Fence

Drive (Earth)

30" Spruce

Ditch 4' Bottom
2:1 Side Slopes

Conc. Block Pump House

Gravel

V.C. 560'
P.I. Sta. 564 + 80
Elev. 926.05

Vert. Clear. Min. 15.01'

P.T. Sta 567 + 60

+2.071 %

V.C. 600'

P.C. Sta. 569 + 50

Outlet 6" I-4 Pipe Lt.
F.L. 925.68

6" I-4 Pipe Lt.
F.L. 925.80

End 6" I-4 Pipe Lt.
F.L. 925.72

Begin 6" I-4 Pipe Lt.
F.L. 925.72

6" I-4 Pipe Lt.

Begin 6" I-4 Pipe Rt.
F.L. 925.93

6" I-4 Pipe Lt.

6" I-4 Pipe Rt.

End 6" I-4 Pipe Rt.
F.L. 925.66

Begin 6" I-4 Pipe Rt.
F.L. 925.66

6" I-4 Pipe Rt.

Outlet 6" I-4 Pipe Rt.
F.L. 925.50

6" I-4 Pipe Rt.
F.L. 927.95

End 6" I-4 Pipe Lt. & Rt.
F.L. 930.85

Begin 6" I-4 Pipe Lt. & Rt.
F.L. 930.85

6" I-4 Pipe Lt. & Rt.

6" I-4 Pipe Lt. & Rt.
F.L. 932.83

Outlet 6" I-4 Pipe Rt.
F.L. 930.50

Outlet 6" I-4 Pipe Lt.
F.L. 930.77

ITEM 1-15 GUARD RAIL					
REF. NO.	STATION TO STATION	SIDE	STANDARD DESIGN		
			1012.5	CODE U-1010(5)	
			1012.5	5% CITY	
				CODE UG-1010(5)	
6 GR	566+12 576+14	Rt.		5% CITY	
CODE U-1010(5) 5% CITY TOTAL			62.5		
7 GR	561+49 563+07	Rt.	62.5		
CODE UG-1010(5) 5% CITY TOTAL			62.5		

| STORM SEWERS | | | | |

B.M. 21-13 Elev. 938.23
Cut Top S.W. Corner Pier Footer of Third Pier West of East Abutment of Tremont Ave. Viaduct Tuscarawas River

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG 1010(5)	

25

STA - 21 - 10.23

BEGIN SHEET STA. 570+00

END SHEET STA. 575+00

Top of Dike
12" C.M. Pipe
Track To Be Abandoned By Others
P.R.R. Industrial Track
Toe Ditch
Road (Earth)
Existing San. Sewer to be Abandoned in place
48" Seg. Blk. Pipe Sanitary Sewer
15" R.C.P.
Ditch
Bulkhead
M.H.
O.P.S. Co. # 252 I.C.A.
Conc. & Brick Pump House
Sippo Creek
Paved Gutter Std. Type I (Modified)
Ditch 4' Bottom 2:1 Side Slope
E-1 Removal
Bulkhead 48" Seg. Block Pipe Sanitary Sewer
Existg. San. Sewer to be Aband. in place
Drive (Proposed)
Sidewalk
Conc. Curb & Gutter
28'R
52'R
12" Stone Wall (Ruins)
Cont'd. on Sheet No. 97
OAK AVENUE
8" Water Line
2" Gas Line
Conc. Slope Wall
MASSILLON COAL & BUILDERS SUPPLY CO.
1-Sty. Tile Bldg.
Chicken Coop
Wood Pool
2-Sty. Fr. Dwg.
1-Sty. Fr. Dwg.
Shed
Sumacs
Poplar
Willow
Plum
Apple
Guy
W.V.
Sippo Creek Pressure Conduit

PT. Sta. 569+85.71
Sta. 575+80.95
Nail Set
261.46'
Sta. 572+47.17
333.78'
℄ Hub Set
℄ Third St.
℄ Alley
℄ Oak Ave.
℄ Second St.
Hub Set
Nail Set
23.75'
202.81'
100°52'15"
90°10'05"
191.52'
89°58'50"

REFERENCE POINT
P.O.T. Sta. 572+47.17

* Included in Lump Sum bid for "Alterations to Sippo Creek Conduit and Pumping Station"

STA. 575+00
CODE U-1010(5) 5% CITY
DRIVE

STATION TO STATION	SIDE	ITEM E-1 ROADWAY EXC. EMB.	ITEM B-19 6" C.Y.
574+70 - 575+38	Rt.	98	90
		98	90

DRIVE Rt. Sta. 574+70 to Sta. 575+38

6" Aggregate Base Course
Var. 6" — ½ Ft.
2'-0"
2:1

CODE U-1010(5) 5% CITY
ITEM I-15 GUARD RAIL

Ref. No.	Station to Station	Side	Std. Design	Temporary Guard Rail
8-GR	570+32 to 570+48	Rt.	12.5	
9-GR	572+05 to 572+52	Rt.	50.0	
10-GR	574+63 to 577+00	Median	487.5	
TOTAL			550.0	

CODE U-1010(5) 5% CITY
ITEM E-8

Removal & Disposal of Existing Sidewalk	520 S.F.

CODE U-1010 (5) 5% CITY
STORM SEWERS

REF NO. From	REF NO. To	STATION From	STATION To	SIDE	I-2 LIN. FT. 12" Class B Storm Sewer Sec. M-6.4(c)	Special M-6.6(b) Pipe For San. Sewer 48"	I-8 EACH SPECIAL I-16 8" Pipe For San. Sewer M-6.8(b)	Standard Manhole No. 2	48" Bulkhead	Abandoned Manholes
802 S	803 S	572+30	573+64	Rt.		135	84		4	3
804 S	803 S	574+26	574+26	Rt.				1		1
109 S	110 S	573+92	574+06	Lt & Rt.	*			1		1
		570+00	575+47	Lt & Rt.						
803a		572+41		Rt.						
803b		574+21		Rt.	*	135	84	2	4	3
TOTAL										

Scale: Hor. 1"= 20'
Vert. 1"= 5'

For Details of Alteration Sippo Creek Conduit & Pump House See Sheets No. 97 to 105

For Profile of Sanitary Sewer See Sheet No. 94

| | 570 | +50 | 571 | +50 | 572 | | | | | | | | | |

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

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STA - 21 - 10.23

B.M. No. 21-14 Elev. 936.51
Top S.W. Bolt in Steel Light Standard 46' South On Line Of West Edge Of Service Sta. Bldg. (Red Head Oil Co.) 85' Rt. Sta. 580+85

EXISTING STRUCTURE BRIDGE NO 21-1092
USR 21 UNDER EXISTING TREMONT AVE.
STA. 515 + 80.95

Type: Continuous Steel beams with concrete Filled I-Beam-Lok deck and Reinforced concrete substructure
Spans: 50'-55'-55'-50', 83'-95'-83', G2'-45'-10 13/16", G1'-1 3/16"-58' c/c Brgs.
Roadway: 40'-0" f/f curbs + two 6'-6" Sidewalks
Loading: H-20-33
Skew: 6°24'08" Rt. Fwd. Piers 2 to 7
9°08'46" Rt. Fwd. Piers 8 to 10
Alignment: Tangent

BEGIN SHEET STA. 575+00

END SHEET STA. 580+00

Sta. 515+80.95 M = Sta. 8+87.21

Sta. 578+62.48 Main Line = Sta. 10+40.31 Charles Ave

12" C.M. Pipe

15" C.M. Pipe

12" V.C. Pipe Sanitary Sewer

10" V.C. Pipe Sanitary Sewer

P.R.R. Industrial Track

Track To Be Abandoned By Others

Toe Ditch

577 N 31° 38' 30" W

130' R

100° 37' 05"

15" V.C. Pipe

Existg. San. Sewer To Be Abandoned in place 48" Sew. Brk. Pipe

Bulkhead

Drive (Proposed)

O.P.S.Co.

12" Water Line (Supported On Bridge)

6" Locust

8" V.C. Pipe

TREMONT AVENUE

Tremont Ave Viaduct

For Alterations Tremont Avenue Siphon See Sheets No. 114 & 115

48" V.C. Pipe Sanitary Sewer

THIRD STREET (Abandoned)

Parking Lot (Gravel)

Single Strand Wire Fence on Channel Iron Posts

Wire Fence

18" V.C. Pipe

6" V.C. Pipe

S 69° 17' 45" W

525' R

75' R

CHARLES AVE. S.W.

Catch Basin

O.P.S.Co. #2521 C4-2 32

O.P.S.Co. #2521 C4-2

15° 08' 45"

40" Poplar

36" Ash

15" Sumac

18" Walnut

12" Apple

Fr. Garage

2 Sty. Shingle Dwg.

6" Willow - Libc.

Wire Mesh Fence, 7'

Conc. Work

Privet Hedge

2-Sty. Shingle Dwg. #57

2-Sty. Shingle Dwg. #67-71

2-Sty. Shingle Dwg. #51

2½-Sty. Shingle Dwg.

Conc. Sidewalk

Earth

Brick

Conc.

W.V.

W.U.

W.U. M.H.

M.H.

W.V. Catch Basin

22" Gas Line

30" V.C. Pipe

36" V.C. Pipe

24" V.C.P.

18" Maple

For Intersection Detail of Charles Ave Connection See Sheet No. 84

For Profiles of Storm Sewers See Sheet No. 87

Scale: Hor. 1" = 20' Vert. 1" = 5'

-2.439 %

-0.713 %

V.C. 600'

V.C. 200'
P.I. Sta. 516+60
Elev. 932.00

P.T. Sta. 515+50
P.C. Sta. 515+60
Vert. Clear 15.08' Min.

P.T. Sta. 517+60

935.81 935.27 934.68 934.44 934.08 933.53 933.03 932.59 932.43 932.20 931.87 931.59 931.36 931.29 931.00 930.65 930.29 929.93 929.58

935.1 935.3 935.1 935.1 935.0 934.4 934.7 935.6 936.5 936.3 935.9 933.3 932.6 932.1 931.7 932.6 934.4 932.7 931.2 931.0 932.2 933.0 929.3

515 +30.5 +39 +51 +81.3 576 +9.5 +14 +50 577 +23.6 +32.8 +39.3 +72.3 578 +11.8 +24.8 +41.2 +56 +71.5 579 +50 580

G"I-4 Pipe Lt. & Rt. F.L. 931.91

G"I-4 Pipe Lt. & Rt.

End G"I-4 Pipe Rt. F.L. 930.69

Begin G"I-4 Pipe Rt. F.L. 930.54

G"I-4 Pipe Rt.

G"I-4 Pipe Lt.

End G"I-4 Pipe Lt. F.L. 928.52

Begin G"I-4 Pipe Lt. F.L. 928.30

G"I-4 Pipe Rt.

End G"I-4 Pipe Rt. F.L. 921.25

Begin G"I-4 Pipe Rt. F.L. 927.25

G"I-4 Pipe Lt.

End G"I-4 Pipe Lt. F.L. 926.15

G"I-4 Pipe

G"I-4 Pipe Rt. F.L. 925.51

End G"I-4 Pipe Lt. F.L. 925.54

Begin G"I-4 Pipe Lt. F.L. 924.40

G"I-4 Pipe Lt. F.L. 929.65

Existg. 15" V.C. Pipe

CODE U-1010(5) 5% CITY
ITEM I-15 GUARD RAIL - Temporary Guard Rail

Ref. No.	Station To Station	Side	Std. Design	
11-GR	515+82-516+71	Lt.		125.0

STORM SEWERS CODE U-1010(5) 5% CITY

I-8 EACH: Standard Catch Basin No. 3 (2-A-8 & 2-A-8); Standard Manhole No. 1, No. 2, No. 2A, No. 3 (2-A-8 & 2-A-8); Special Pipe for Class B Storm Sewer 24" Dia. No. 1; Pipe Removed Over 15"; Manhole Abandoned

I-14 Standard Paved Gutter Type 1 Modified As Per Plan

I-5 Pipe for Sanitary Sewer

I-12 Special (4-Gal.b) Class B Storm Sewer 48"

T-16 E-12

I-2 (LIN. FEET): Class B Storm Sewer 12" 15" 24" 30"; Class B Storm Sewer or Approaches 12" 15" 24"; Class B Storm Sewer Under Pavement or Approaches 12" 15" 24"

| REF. NO From | REF. NO To | STATION From | STATION To | Side | I-8 EACH | I-14 | I-5 | I-12 | T-16 E-12 | I-2 (LIN. FEET) | | |

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

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B.M. No. 21-14 Elev. 936.51
Top S.W. Bolt In Steel Light Standard 46' South On Line Of West Edge Of Service Sta. Bldg. (Red Head Oil Co.) 85' Rt. Sta. 580+85

STA. - 21-10.23

TYPICAL SECTION
EXISTING CHARLES AVENUE
℄
EXISTING THIRD STREET

19'-0" 19'-0"
Conc. Sidewalk
Stone Curb
Bituminous Surface
Conc. Sidewalk
Stone Curb

2nd STREET (Bituminous)
N 20° 45' 20" W
90° 03' 05"
Sta. 5+00 Charles Ave. =
Sta. 20+48.52 Secand St.
CHARLES AVE. S.W. (Bituminous)
S 69° 17' 45" W
BEGIN WORK
Sta. 7+95
Sta. 8+99.39 Charles Ave. =
Sta. 10+00 Third St.
3rd STREET (Abandoned)
N 20° 39' 07" W
89° 56' 52"
79° 03' 45"
N 31° 38' 30" W
END WORK
Sta. 11+00
Sta. 10+40.37 Charles Ave. =
Sta. 578+62.48 ℳ

3-Sty Brick
Parking Lot
Wire Fence
Gravel Alley
Gravel Drive
Drive
Toe Ditch
Single Strand Wire Fence Channel Iron Posts
Wood Curb
Earth over Brick
2"x6" Wood Pole
3'x5' Metal Sign
Parking Sign (Blocked Off)
Stop Sign
Parking Sign
Street Marker
Street Light Pole
Street Light
Catch Basin
Hedge
Privet Hedge
Wire Mesh Fence
Stone Walk
Earth
Conc. Walk
Brick
Stone Sidewalk
Conc. Sidewalk
6" Stone Curb
Snow Fence
6" Water Line
6" Gas Line
3" Gas Line
2" Gas Line
18" V.C.P.
24" V.C.P.
36" V.C.P.
W.U.Ø
M.H.
W.V.
G.V.
F.H.
Bit.
Conc.
Stone
Brick
Earth
Rose
Lilac
Willow
Locust
Cherry
Apple
Sumac
Maple
Poplar
Aspen

OPS Co. #2521C4-1 43
OPS Co. #2521C4-1 52
OPS Co. #2521C4-1 42
OPS Co. #2521C4-2 26
OPS Co. #2521C4-2 25
OPS Co. #2521C4-2 28
OPS Co. #2521C4-2 27
OPS Co. #2521C4-2 29
OBT Co. #2762
OBT Co. M.H.

#301 #300 #295 #1051 #1053 #1054 #189 #186 #172 #171 #174 #175 #173

207 S (No Number) 206 S 206a S 206b S 209 S 202 S 202a S 207a S 207b S 208 S 208a S 208b S 211 S 205 S

CODE U-1010(5) 5% CITY									
STORM SEWERS									
REF. NO.		STATION			SIDE	I-2 (LIN. FT.)	I-8 EACH	I-16	E-12
From	To	From	To			Class B Storm Sewer Under Pavement or Approaches	Standard Inlets (Modified)	Catch Basins Abandoned	Pipe Removal Over 15"
						15" 18"	2-A-12 2-A-18		
209S	210S	8+18 Charles Ave.	8+65 Charles Ave.	Lt. & Rt.		60			
210S	206S	8+65 Charles Ave.	10+25 Third St.	Rt. & Lt.		44	1 1		
211S	208S	10+50 Third St.	10+25 Third St.	Rt. & Lt.	40		1		
207a		9+24 Charles Ave.		Lt.				1	140
207b		9+20 Charles Ave.		Rt.				1	120
TOTALS					40	104	1 2	2	260

CODE U-1010(5) 5% CITY		
ITEM E-8		
Removal & Disposal of Existing Sidewalk	675	Sq. Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	267	Lin. Ft.
Removal & Disposal of Existing Pavement	—	Sq. Yds.

REFERENCE POINT
P.O.T. Sta. 578+62.48

Second St. ℄ 2 S.W.
Charles Ave. ℄
Axle Set
Existg. I.P. 90°03'05"
399.39'
180°00'00"
Sta. 575+80.86
79°03'45"
Sta. 578+62.48
140.98'
182.57'
Hub Set
Third St. ℄ 2
T.S. Sta. 580+45.05

PROFILE - THIRD STREET RT.

CODE U-1010(5) 100% CITY		
I-8		
Manhole Adjusted To Grade		
206 a	9+00 Charles Ave.	1
206 b	9+10 Charles Ave.	1
TOTAL		2

END WORK
Sta. 11+00
P.I. Sta. 10+20
No Curve
End 6"I-4 Pipe Rt. F.L. 926.03
-1.300 %
+2.910 %
Begin 6"I-4 Pipe Rt. F.L. 925.69
Begin 6"I-4 Pipe Rt. F.L. 926.03
6"I-4 Pipe Rt.
End 6"I-4 Pipe Rt. F.L. 927.45
End 6"I-4 Pipe Lt. F.L. 927.29
6"I-4 Pipe Lt.
Begin 6"I-4 Pipe Lt. F.L. 925.20
Outlet 6"I-4 Pipe Lt. F.L. 925.00
Sta. 10+00 Third St. = Sta. 8+99.39 Charles Ave.
930.12 929.03 929.99 930.77 931.39
935 930 925 920 915 910
10 +25 +50 +75 11

PROFILE - CHARLES AVENUE

Existg. ℄ Grade
BEGIN WORK
Meet Existg. Grade
Sta. 7+95
-1.420 %
Begin 6"I-4 Pipe Lt. F.L. 926.19
Begin 6"I-4 Pipe Rt. F.L. 926.68
End 6"I-4 Pipe Lt. F.L. 926.19
End 6"I-4 Pipe Rt. F.L. 925.69
6"I-4 Pipe Rt.
6"I-4 Pipe Lt.
Begin 6"I-4 Pipe Lt. F.L. 926.57
Begin 6"I-4 Pipe Rt. F.L. 925.69
End 6"I-4 Pipe Rt. F.L. 926.03
6"I-4 Pipe Rt.
End 6"I-4 Pipe Lt. F.L. 925.00
6"I-4 Pipe Lt.
Begin 6"I-4 Pipe Lt. F.L. 925.00
6"I-4 Pipe Lt.
Begin 6"I-4 Pipe Rt. F.L. 925.10
P.C. Sta. 8+66.64
V.C. 100'
P.I. Sta. 9+16.64
Elev. 928.93
P.T. Sta. 9+66.64
+1.332 %
End 6"I-4 Pipe Lt. F.L. 927.25
6"I-4 Pipe Rt.
6"I-4 Pipe Rt. F.L. 926.18
Sta. 8+99.39 Charles Ave. = Sta. 10+00 Third St.
Sta. 10+40.37 Charles Ave. = Sta. 578+62.48 ℳ
930.59 929.88 929.64 929.54 929.32 929.27 929.28 929.41 926.80 923.71 930.04 930.20
932.00 931.28 930.65 930.58 929.87 929.66 929.17 928.14 928.62 929.07 929.72 930.12
935 930 925 920 915 910
7 +50 +66 +66.64 +75 +99.39 +16.64 +28 +86.64 +75 10

For Intersection Detail of Charles Ave. Connection See Sheet No. 84
For Profiles of Storm Sewer See Sheet No. 87
℄ 98

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

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STA - 21 - 10.23

B.M. No. 21-14 Elev. 936.51
Top S.W. Bolt In Steel Light Standard 46' South on Line of West Edge of Service Station Bldg. (Red Head Oil Co.) 85' Rt. Sta. 580 + 85

Curve Lt Edge
Δ - 5°36'09" Rt.
D - 1°15'00"
T - 224.28'
L - 448.20'
R - 4583.66'

For Details of Combination Barrier Curb & Gutter See Sheets No. 110 to 113

CODE U-1010(5) 5% CITY DRIVES		
Station to Station	Side	B-19 6" C.Y.
583+50 - 585+25	Rt.	72

Drive Rt. Sta. 585+00 — 10'-0" — 10'-0"
Drive Rt. 584+00 — 2'-0" — 6'-0" — 6'-0" — 2'-0"
6" Aggregate Base Course
DRIVES RT.
Sta. 583+50 to Sta. 585+25

Spiral Curve Data
P.I. Sta. 597+73.67
Δ - 60°40'16" Rt.
D - 2°07'30"
L.S. - 300.00'
R - 2696.27
θs - 3°11'15"
P - 1.39'
Xc - 299.91'
Yc - 5.57'
K - 149.99'
L.T. - 200.03'
S.T. - 100.03'
Lc - 2555.11'
Ts - 1728.62
Es - 429.34
Lc - 2555.11

CODE U-1010(5) 5% CITY ITEM I-12 COMBINATION BARRIER CURB & GUTTER	
Sta. 580+50 - 585+00 Lt.	450 L.F.

CODE U-1010 (5) 5% CITY ITEM I-15 GUARD RAIL						
Ref. No.	Station to Station			Std. Design	Temporary Guard Rail	
12-GR	581+20	583+50	Rt.	231.5		
13-GR	584+44	588+69	Rt.	425.0		
	Total			662.5		

P.C. Lt. Edge = 34.00 Lt. of Sta. 580+133
Sta. 580+50 Lt. Begin Combination Barrier Curb & Gutter
P.T. Lt. Edge = 26.50 Lt. P.O.C. Sta. 584+58.70
Sta. 585+00 Lt. End Combination Barrier Curb & Gutter
BEGIN SHEET STA. 580+00
END SHEET STA. 585+00
Top of Dike
15" C.M. Pipe
18" C.M. Pipe
M.H.
Std. Paved Gutter Type 2
Track to be Abandoned By Others
300' R
P.C.
18" V.C. Pipe Storm Sewer
P.R.R. Track
W 31° 38' 30" W
100' 46' 25"
Retaining Wall
Drive
Conc.
5 Doorway Catch Basin
S.C. Sta. 583+45.05
LINCOLN WAY
U.S. Route 30
T.S. Sta. 580+45.05
Earth
Bituminous
Privet Hedge
Gravel
6" Conc. Ret. Wall
Conc. Gas Island & Air Hose
Conc. Gas Island
Gasoline Tank Valves
Wood Fence
Fr. Garage
Gravel
Tile Block Service Station
2½-Sty. Shingle Dwg.
O.P.S.Co. #2521C & 2 18
1 Sty. Brick Garage
For Retaining Wall See Sheet No. 109
For Profiles of Storm Sewers See Sheet No. 88
For Structure No. 21-1105 See Sheet No. 154

EXISTING STRUCTURE BRIDGE NO. STA. 21-1105
U.S.R. 21 UNDER EXISTING LINCOLN WAY STA. 582+55.10
TYPE: Continuous Steel Beam And Girder Bridge With Concrete Deck And Substructure
SPANS: Girder Unit - 80'-100'-100'-80' ℄ Brgs
Beam Unit - 68'-10"-58'-5½"-68'-6"-68'-8"-55'-0" ℄ Brgs.
ROADWAY: 52'-0" Plus Two 6'-0" Sidewalk
LOADING: 5-20-40
SKEW: 6° 45" Rt. Fwd. Piers 1-5
5° 22" Rt. Fwd. Piers 6-8
SURFACE COURSE: 2½" Bituminous
For Structure No. Sta. 21-1105, See Sheet No. 145

V.C. 280'
P.I. Sta. 582+00
Elev. 928.15
Vert. Clear. Min. 15.01'
P.C. Sta. 580+60
P.T. Sta. 583+40
P.C. Sta. 584+75
V.C. 250'
-0.713 %
-0.80 %
+2.000 %
+1.40 %
End G"I-4 Pipe Lt. F.L. 925.40
G"I-4 Pipe Rt. F.L. 925.51
G"I-4 Pipe Rt.
G"I-4 Pipe Lt. F.L. 924.65
End G"I-4 Pipe Rt. F.L. 925.37
Begin G"I-4 Pipe Rt. F.L. 925.31
End G"I-4 Pipe F.L. 924.36
Begin G"I-4 Pipe F.L. 924.36
Outlet G"I-4 Pipe Rt. F.L. 924.20
End G"I-4 Pipe Rt. F.L. 924.81
G"I-4 Pipe
Outlet Rt. +40 F.L. 925.0 Manhole
Outlet G"I-4 Pipe Rt. F.L. 924.10
G"I-4 Pipe 20%
G"I-4 Pipe Rt. Begin Lateral +50 Lt. F.L. 926.5
Outlet Lateral +50 ℄ F.L. 925.1
40'-G"I-4 Pipe 2.0% Slope
Begin Lateral +00 Lt. F.L. 926.9
Outlet Lateral +00 ℄ F.L. 926.1
40'-G"I-4 Pipe 2.0% Slope
Begin Lateral +40 Lt. F.L. 927.4
Outlet Lateral +40 ℄ F.L. 926.7
35'-G"I-4 Pipe 2.0% Slope
Begin G"I-4 Pipe Rt. F.L. 924.82
G"I-4 Pipe ℄
End ℄
End G"I-4 Pipe Rt. F.L. 925.57
Outlet ℄ +40 F.L. 926.10 Manhole
Begin G"I-4 Pipe Rt. F.L. 925.57
8"I-4 Pipe ℄
End G"I-4 Pipe Rt. F.L. 929.14
Begin G"I-4 Pipe Rt. F.L. 929.14
G"I-4 Pipe Rt. F.L. 929.62
F.L. 929.14

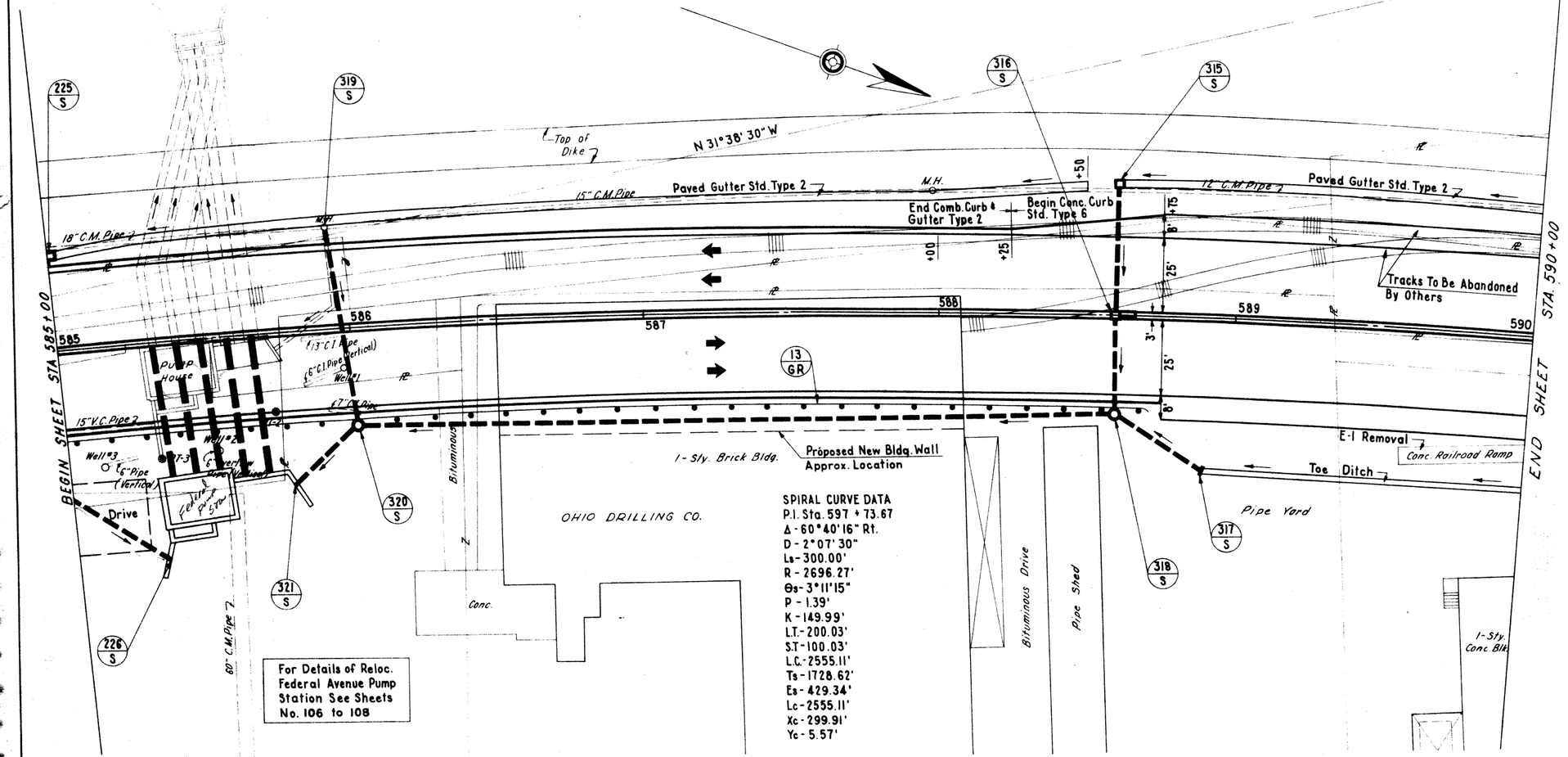
| CODE U-1010(5) 5% CITY STORM SEWERS | | | | | |

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

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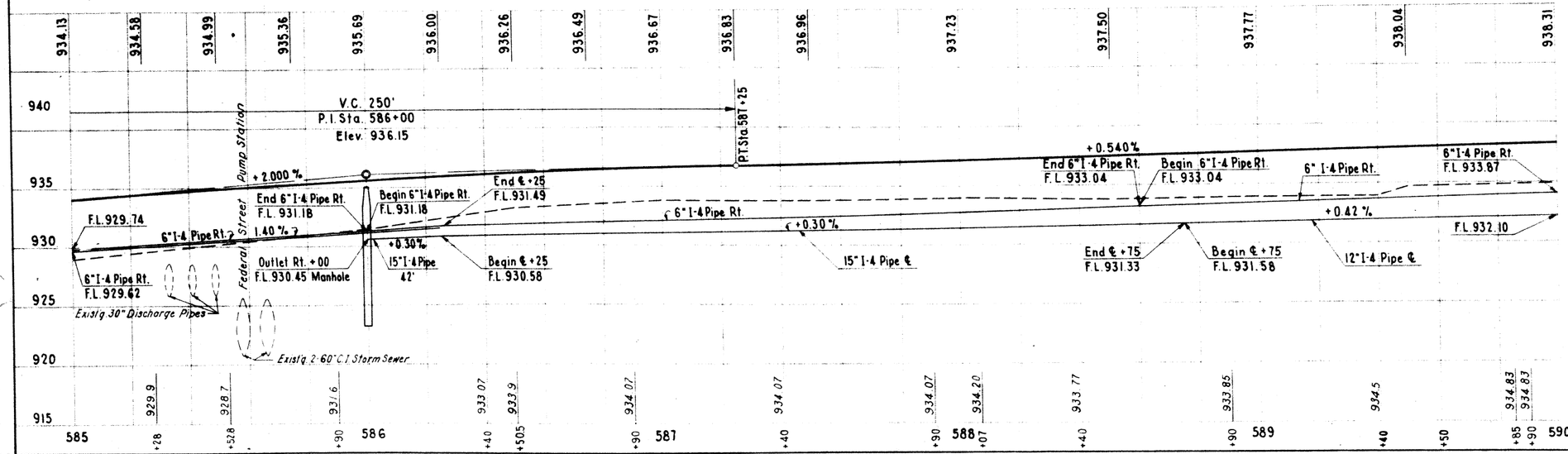
STA - 21 - 10.23

B.M. 21-15 Elev. 935.64
Top Flange Bolt on Street Side of Fire Hydrant 8' East of S.E. Corner Ohio Drilling Co. Bldg. (Front) on 3rd. St. N.W. East Bolt of Two Bolts.



SPIRAL CURVE DATA
P.I. Sta. 597 + 73.67
Δ - 60°40'16" Rt.
D - 2°07'30"
Ls - 300.00'
R - 2696.27'
Θs - 3°11'15"
P - 1.39'
K - 149.99'
L.T. - 200.03'
S.T - 100.03'
L.C. - 2555.11'
Ts - 1728.62'
Es - 429.34'
Lc - 2555.11'
Xc - 299.91'
Yc - 5.57'

For Details of Reloc. Federal Avenue Pump Station See Sheets No. 106 to 108



For Profiles of Storm Sewers See Sheet No. 89

Scale: Hor. 1"=20' Vert. 1"=5'

CODE U-1010(5) 5% CITY

STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	Side	Class B Storm Sewer Under Pav't or Approaches 12"	Class B Storm Sewer Under Pav't or Approaches 24"	I-2 (LIN.FT.) Class A Storm Sewer 12"	Class B Storm Sewer 18"	Class B Storm Sewer 24"	Class B Storm Sewer 36"	Storm Sewer M-63(D) M-68(D) 24"	I-8 (EACH) Standard Manhole No. 1	I-8 (EACH) Adjust Manhole To Grade	I-8 (EACH) Standard Catch Basin 2-2A	I-8 (EACH) Standard Median Inlet 2-8	S-1 (CU.YD) Concrete for Structures Class E S-27 P.C.4 End Wall	E-2 (CU.YD) Excavation For Structures	I-14 (LIN.FT.) Standard Paved Gutter Type 2
224 S	226 S	584+75	585+31	Rt.						70								
319 S	320 S	585+94	586+00	Lt. & Rt.		64							1					
321 S	320 S	585+76	586+00	Rt.														
320 S	318 S	586+00	588+60	Rt.				254				1						
315 S	316 S	588+60	588+60	Lt.	40							1						
316 S	318 S	588+60	588+60	Rt.	30													
318 S	317 S	588+60	588+90	Rt.			34											
225 S	—	585+01	588+50	Lt.														
315 S	—	588+60	596+40	Lt.														
TOTALS					70	64	34	254	—	70	28	2	1	1	1	0.23	1	1130

LINE & PROFILE SHEET STA. 585+00 TO STA 590+00

FED.RD. DIVISION	STATE	PROJECT	
2	OHIO	U-U6-1010(5)	

STA. 21-10.23

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B.M. No. 21-15 Elev. 935.64
Top Flange Bolt on Street Side of Fire Hydrant 8' East of S.E. Corner Ohio Drilling Co. Bldg. (Front) on Third St. N.W. East Bolt of Two Bolts.

BEGIN SHEET STA 590+00

END SHEET STA 595+00

Top of Dike

Std. Paved Gutter Type 2 — Toe Drain

12" C.M. Pipe

Tracks To Be Abandoned By Others

P.R.R. Tracks

E-1 Removal

Conc. Coal Pit

Metal Door

Cherry Rd. Siphon

30" San. Sewer

E-1 Removal

Conc. Railroad Ramp

1-Sty. Tile Block

5-Sty. Brick Warehouse

Toe Ditch

14" Apple

Lilac

Lawn

2-Sty. Insulbric Dwg.

Truck Scales

Gas Pump

Conc.

12" Sumac

6" Sumac

Private Hedge

Parking Lot & Pipe Yard

1-Sty. Conc. Blk.

Gravel

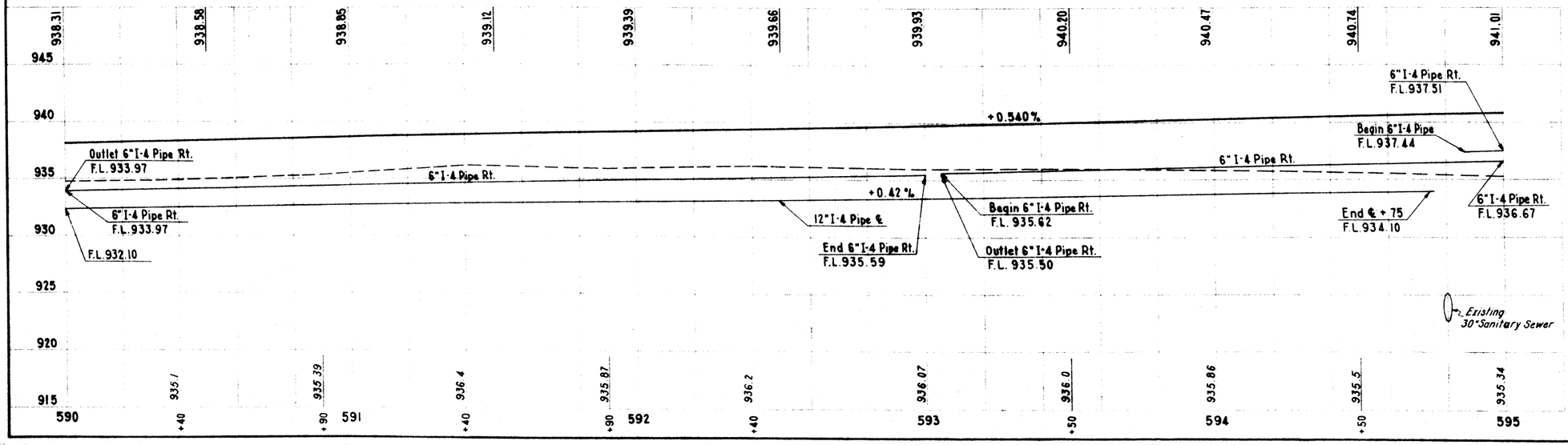
M.H.

8" Gas Line

For Details of Reloc. Cherry Rd. Siphon See Sheets No. 116 to 118

SPIRAL CURVE DATA

P.I. Sta. 597+73.67	Yc - 5.57'
Δ - 60°40'16" Rt.	K - 149.99'
D - 2°07'30"	L.T - 200.03'
Ls - 300.00'	S.T. - 100.03'
R - 2696.27'	L.C. - 2555.11'
θs - 3°11'15"	Ts - 1728.62'
P - 1.39'	Es - 429.34'
Xc - 299.91'	Lc - 2555.11'



For Storm Sewer Profile See Sheet No. 89

Scale: Hor. 1" = 20'
Vert. 1" = 5'

CODE U-1010(5) 5% CITY

STORM SEWERS										
REF. NO. From	REF. NO. To	STATION From	STATION To	Side	E-2 (CU. YD.) Excavation For Structures	E-2 (LIN. FT.) 12" Class B Storm Sewer Under Pavement or Approaches	1-8 EACH Standard Median Inlet 2-8	S-1 (CU. YD.) Concrete For Structures Class E S-27 P.C.4 End Wall		
313 S	314 S	593+00	593+00	Rt.	1	56	1	0.23		
				TOTAL	1	56	1	0.23		

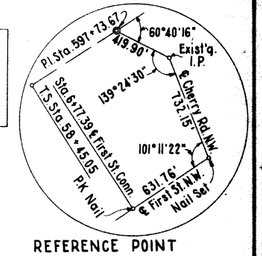
LINE & PROFILE SHEET STA. 590+00 TO STA. 595+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

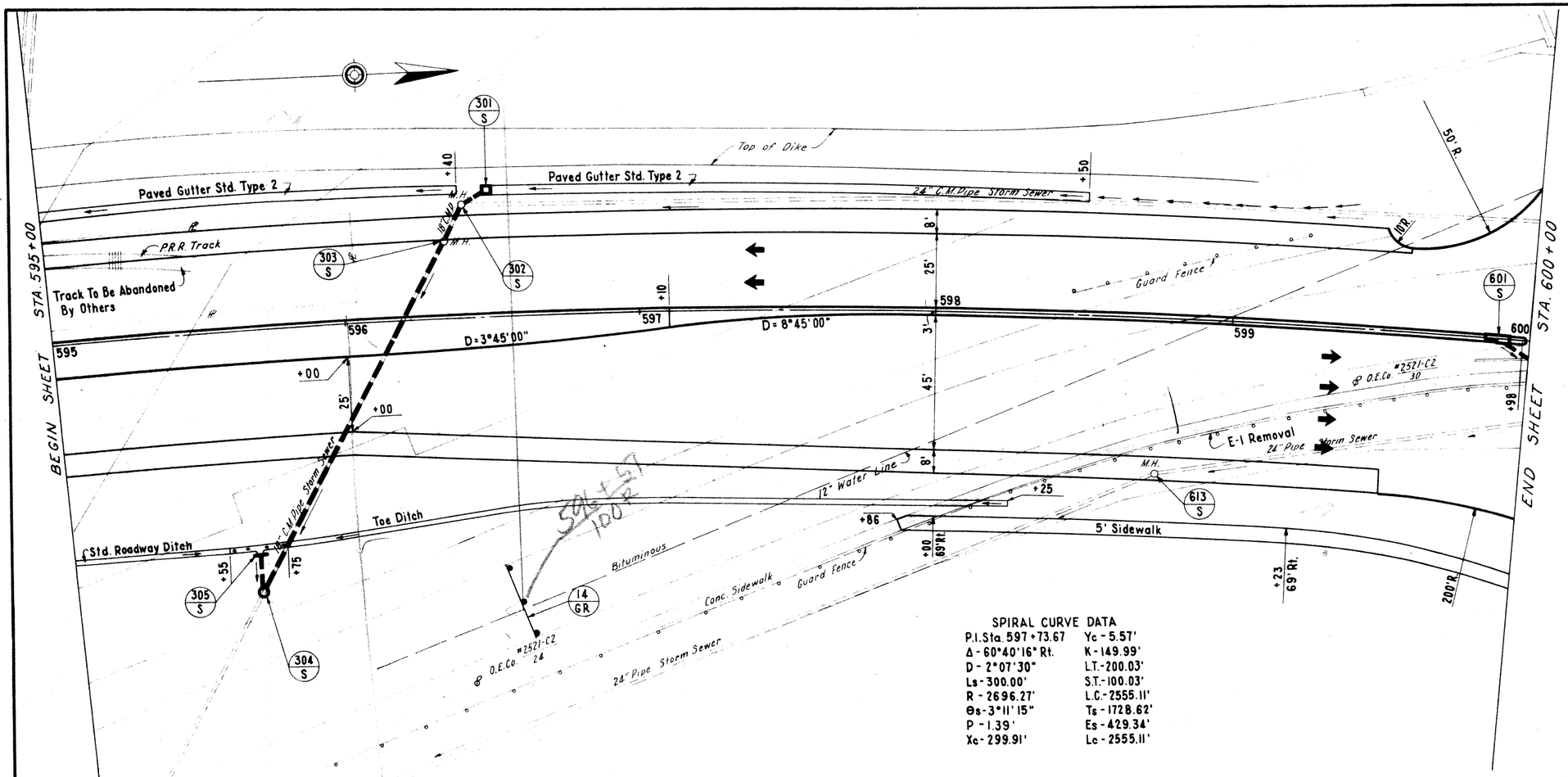
31

STA - 21 - 10.23

B.M. 21-3 Elev. 946.59
Cut S.E. Corner S.E. Wingwall East and Viaduct Cherry Rd. N.W., 100' Lt. Sta. 599 + 50-10'S. of S. Bridge Rail East End at Tuscarawas River.

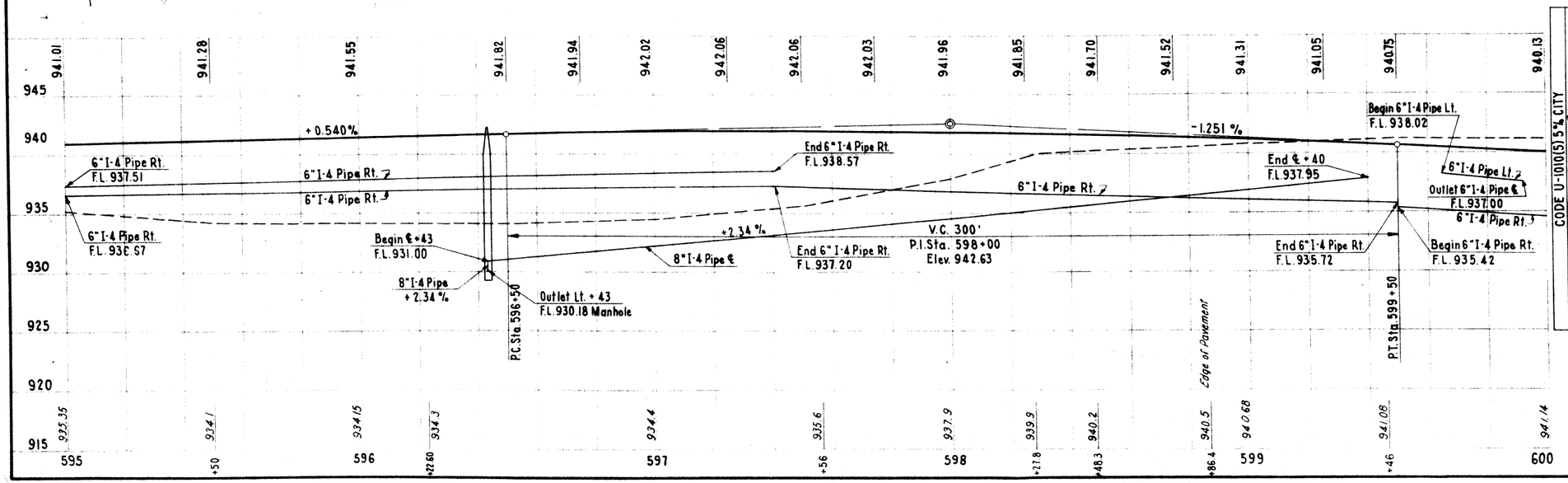


REFERENCE POINT
P.I. Sta. 597+73.67



SPIRAL CURVE DATA

P.I. Sta. 597+73.67	Yc - 5.57'
Δ - 60°40'16" Rt.	K - 149.99'
D - 2°07'30"	L.T. - 200.03'
Ls - 300.00'	S.T. - 100.03'
R - 2696.27'	L.C. - 2555.11'
Θs - 3°11'15"	Ts - 1728.62'
P - 1.39'	Es - 429.34'
Xc - 299.91'	Lc - 2555.11'



CODE U-1010(5) 5% CITY
ITEM E-8

Ref. No.	Station To Station	Side	Standard Design	Temporary Guard Rail
14 GR	597 + 00	Rt.	25	
			TOTAL	25

		Item	Sq. Ft.
Removal & Disposal of Existing Sidewalk			844
Removal & Disposal of Curb, Curb & Gutter or Header Curb			18
Removal & Disposal of Existing Pavement			—

CODE U-1010(5) 5% CITY
STORM SEWERS

REF. NO. From	REF. NO. To	STATION From	STATION To	Side	E-2 (CU YD) Excavation For Structures	I-2 (LIN. FT.) 18" Class B Storm Sewer Under Pavement or Approaches (Class A-6 Encl.)	I-2 (LIN. FT.) Class B Storm Sewer 12"	I-2 (LIN. FT.) Class A Storm Sewer 15"	I-8 (EACH) Standard Manhole No. 1	I-8 (EACH) Standard Catch Basin 2-2A	I-8 (EACH) Manhole Reconstructed To Grade Using Salvage Casting As Per Plan	I-14 (LIN. FT.) Standard Paved Gutter Type 2	S-1 (CU YD) Concrete Structures Class E S-27 P.C. 4 End Wall	I-16 (EACH) Manhole Abandoned
301 S	302 S	596 + 50	596 + 43	Lt.			6			1				1
302 S	304 S	596 + 43	595 + 65	Lt & Rt.		144			1					
304 S	305 S	595 + 65	595 + 65	Rt.	1			12						
303 S	—	596 + 36	—	Lt.								200	0.23	1
301 S	—	596 + 50	596 + 50								1			
613 S	—	598 + 15	—				"							
		TOTALS			1	144	6	12	1	1	1	200	0.23	1

For Profile of Storm Sewer See Sheet No. 89

Scale: Hor. 1" = 20' Vert. 1" = 5'

LINE & PROFILE SHEET STA. 595+00 TO STA.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG1010(5)	

32

STA - 21 - 10.23

B.M. No. 21-3 Elev. 946.59
Cut S.E. Corner S.E. Wingwall East and viaduct
Cherry Rd. N.W, 100' Lt, Sta. 599+50-10' S of
S. Bridge Rail East end @ Tuscarawas River

END WORK
Sta. 6+08.60

100' R

19'-0" 19'-0"
Conc. Sidewalk | Stone Curb | Bituminous on Brick | Stone Curb | Conc. Sidewalk
TYPICAL SECTION
EXISTING CHERRY ROAD

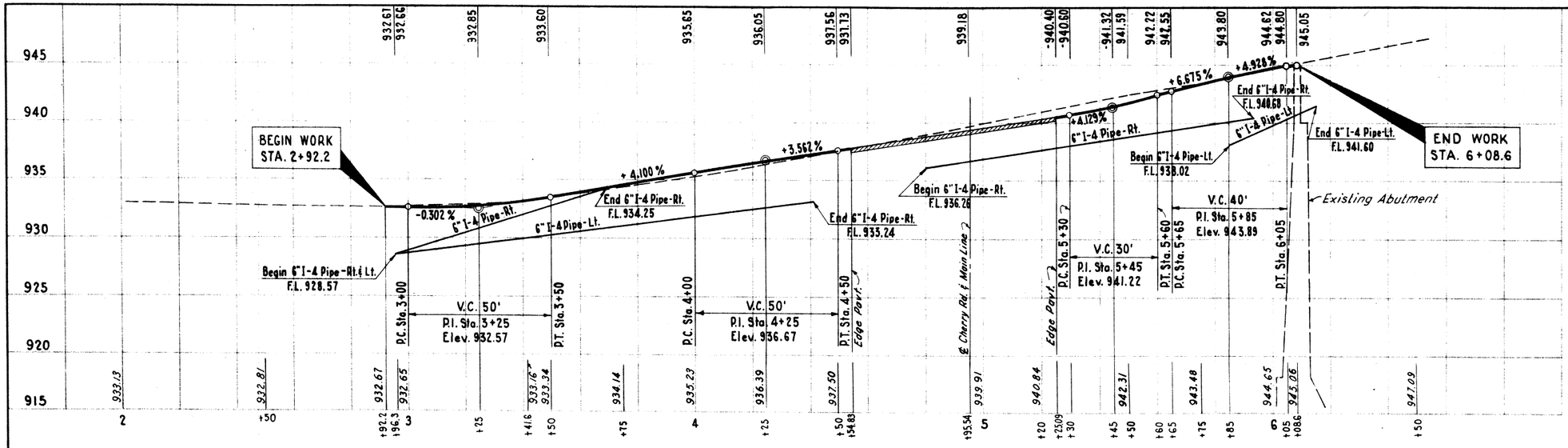
N 29°01'46"E

Sta. 600+15.39 M
Sta. 4+95.54 Cherry Rd.

5' Sidewalk
12" Water Line
50' R
Street Width 20'
24" Pipe Toe Drain
M.H.
12" R.C.Pipe
Conc. Gutter
24" V.C. Pipe
+53
24" V.C. Pipe Storm Sewer 2
U.S. Route 21
23'-6"
10'-6"
1'-6" R
+68
39'
26'
3'
24" Storm Sewer
8" Water Line
4" Gas Line
8" V.C. Pipe
8" Beveled Curb
16'
Stone Fence
Traffic Light (10' Steel Pole)
20'
22'
S 69°37'16" W
F.H.
Std. Type 2-A Depressed Curb
6" Conc. Curb
T-40
T-10
T-73
T-80
Steel Light Pole
Str. Conc. Drive
Street Light
110'
20'
Tel. P.
12" V.C.P.
R.W.
Bit. Court
HORACE MANN School
75' R
30" Maple
8' Conc. Walk
BEGIN WORK
Sta. 2+92.20
School Zone Sign
Traffic Signal
Guard Fence
4" Pipe
Storm Sewer
Steel Light Pole
16'
20'
200' R
5' Sidewalk
6" Conc. Curb
12" Elm
0.D.S. Co. #2221 #3
#90
27' Lt. Gravel
24" Willow
Earth Drive
Eva Barth
2½ - Sty. Shingle Dwg
Brick
Conc.
Conc. 2
Light Pole
Conc. Walk
14" Twin Mulberry
12" Mulberry
Retaining Wedge
Tile Blk Gar
2½ - Sty. Shingle Dwg
Earth
Drive
Fr. Gar
8' Conc. Walk
Bituminous Pavt.
CHERRY RD. N.W. 2
Conc. S.W.
Steel Pole
Conc.
Br.
Gravel
Earth
Brick Drive
W.V.
4" Catalpa
Conc. S.W.
Earth
Gravel
Br.
Dr.
Tel. P.
Gravel
Conc.
Gravel
Conc.
Gravel
Conc

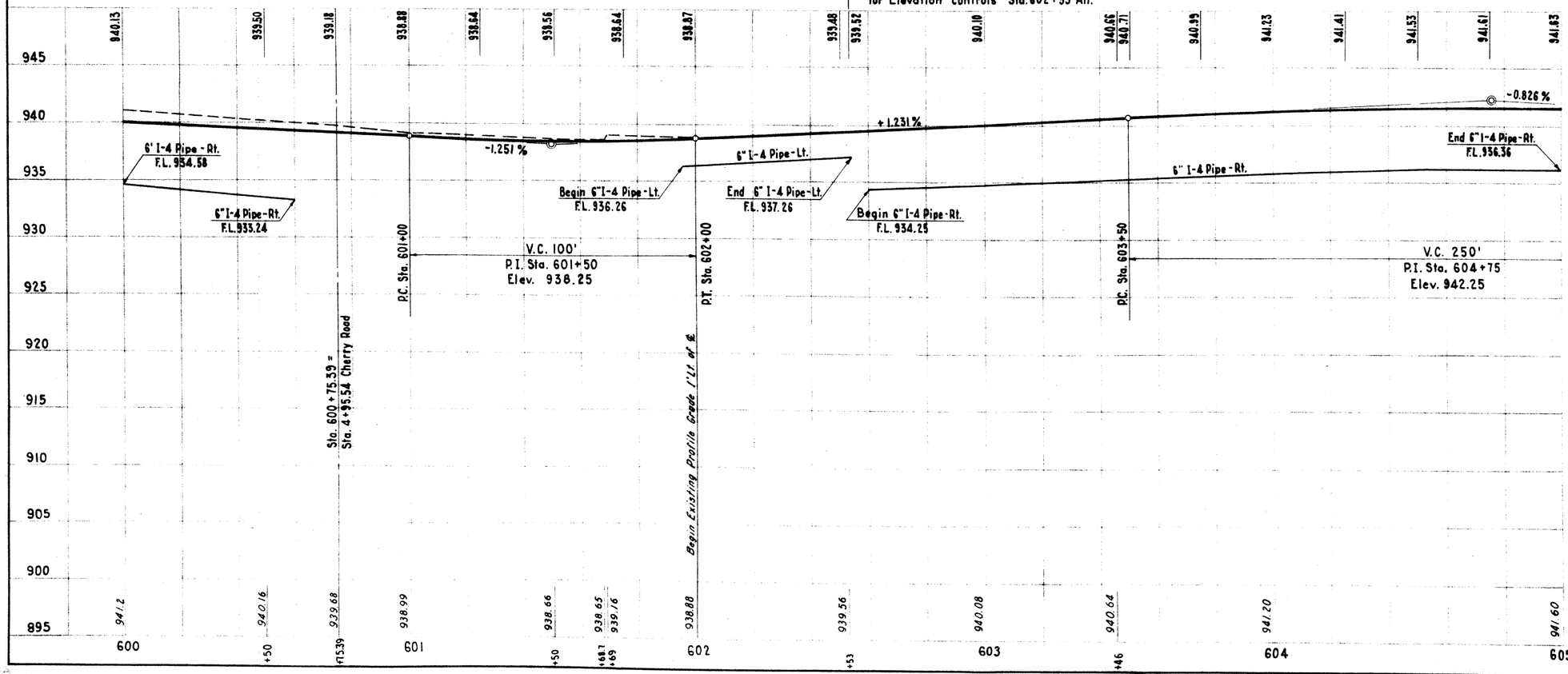
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG 1010 (5)	

STA - 21 - 10.23



PROFILE CHERRY ROAD

See Superelevation Tables for Elevation Controls Sta. 602+53 Ah.



For Plan Views of Main Line ℄ Cherry Rd. See Sheet No. 32

Scale: Hor. 1" = 20'
Vert. 1" = 5'

PROFILE SHEET - CHERRY ROAD AND ℄ - STA. 600+00 TO STA. 605+00

NOTE: Federal Marker U-UG1010(5) Will be Furnished and Erected On the Left by The State of Ohio Prior to Acceptance of This Project.

STORM SEWERS					CODE U-1010(5)		1.58 % CITY		
Ref. No.		STATION			E-2 (Cu.Yd.)	I-2 (Lin.Ft.)	I-8 (Each)	S-1 (Cu.Yd.)	I-10 (Cu.Yd.)
From	To	From	To	Side	Excavation For Structures	12"Class B Storm Sewers Under Pavement or Approaches	Inlet Adjusted To Grade	Concrete for Structures Class E. S-27 P.C. 4 End Wall	Dumped Rock
609 S	610 S	606+33	606+35	Rt.	1	6	1	0.23	9
TOTAL					1	6	1	0.23	9

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG1010(5)	

34

STA. - 21 - 10.23

ITEM E-8	CODE U-1010(5)	1.58 % CITY	
Removal & Disposal of Existing Pavement		67	Sq.Yds.

B.M. 21-3 Elev. 946.59
Cut S.E. Corner S.E. Wingwall East and Viaduct Cherry Rd. N.W., 100' Lt. Sta. 599+50 - 10' S of S.Bridge Rail East End @ Tuscarawas River

U-UG-1010 (5)

END PROJECT STA. 606+50

END WORK STA. 607+14

BEGIN SHEET - STA. 605+00

EXISTING U.S. ROUTE 21

Conc. Gutter

24" V.C.P. Storm Sewer

N 29°01'46" E

U.S.R. 21

M.H.

15" R.C. Pipe

12" R.C. Pipe

D=5°00'

D=8°45'

23'-6"

13'-6"

26'

24'

+48

606

607

608

609

610

611

Future Curb

FUTURE CONSTRUCTION

Ditch

Toe Ditch

Dumped Rock
6.5' Wide 15' Long
2'6" Deep, Conform to Shape of Ditch

OPS Co

WARWICK AVE. N.W.

FIRST ST. N.W.

GROSE AVE.

Conc. Blk Garage

2-Sty Brick Shingle House

2-Sty Frame House

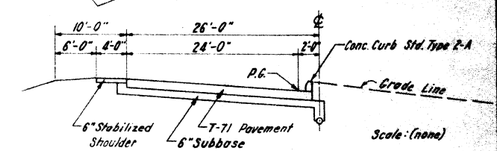
W.M.C. to CY

Conc. Walk

C.S. Sta. 609+00.16

Spiral Curve Data

Δ - 60°40'16" Rt.	Xc - 299.91'
Dc - 2°07'30"	Ts - 1728.62'
R - 2696.27	Es - 429.34'
Ls - 500.00'	Lc - 2555.11'
θ - 3°11'15"	T.S. - 580+45.05
P - 1.39'	S.C. - 583+45.05
K - 149.99'	Δc - 54°17'46"
ST - 100.03'	Yc - 5.57'
LT - 200.03'	



TYPICAL SECTION OF EXISTING PAVEMENT
STA. 609+00

END PROJECT Sta. 606+50

END WORK Sta. 607+14

Begin 6" I-4 Pipe-Rt. F.L. 938.11

6" I-4 Pipe-Rt.

End 6" I-4 Pipe-Rt. F.L. 937.43

6" I-4 Pipe-Rt.

Begin 6" I-4 Pipe-Rt. F.L. 936.36

End 6" I-4 Pipe-Rt. F.L. 935.95

Outlet 6" I-4 Pipe-Rt. F.L. 935.50

V.C. 250'

P.T. Sta. 606+00

941.63 941.61 941.53 941.39 941.22 940.80

940.60 941.32 940.89 940.30 940.14 939.86 939.70 939.47 939.36 939.13 938.99 938.00 939.2 939.0 938.7 938.3 938.1 938.0 937.7 937.5

940 935 930 925 920 915

605 606 45.3 607 +25 +50 +75 608 +25 +50 +72+75 609 +30 +60 +90 610 +20 +50 +80 611 +10

For Profile of Storm Sewers See Sheet No. 91

Scale: Hor. 1"=20' Vert. 1"= 5'

LINE & PROFILE SHEET - STA. 605+00 TO STA. 611+00

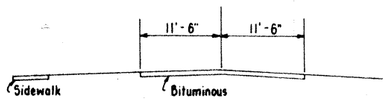
FED. RD DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

35

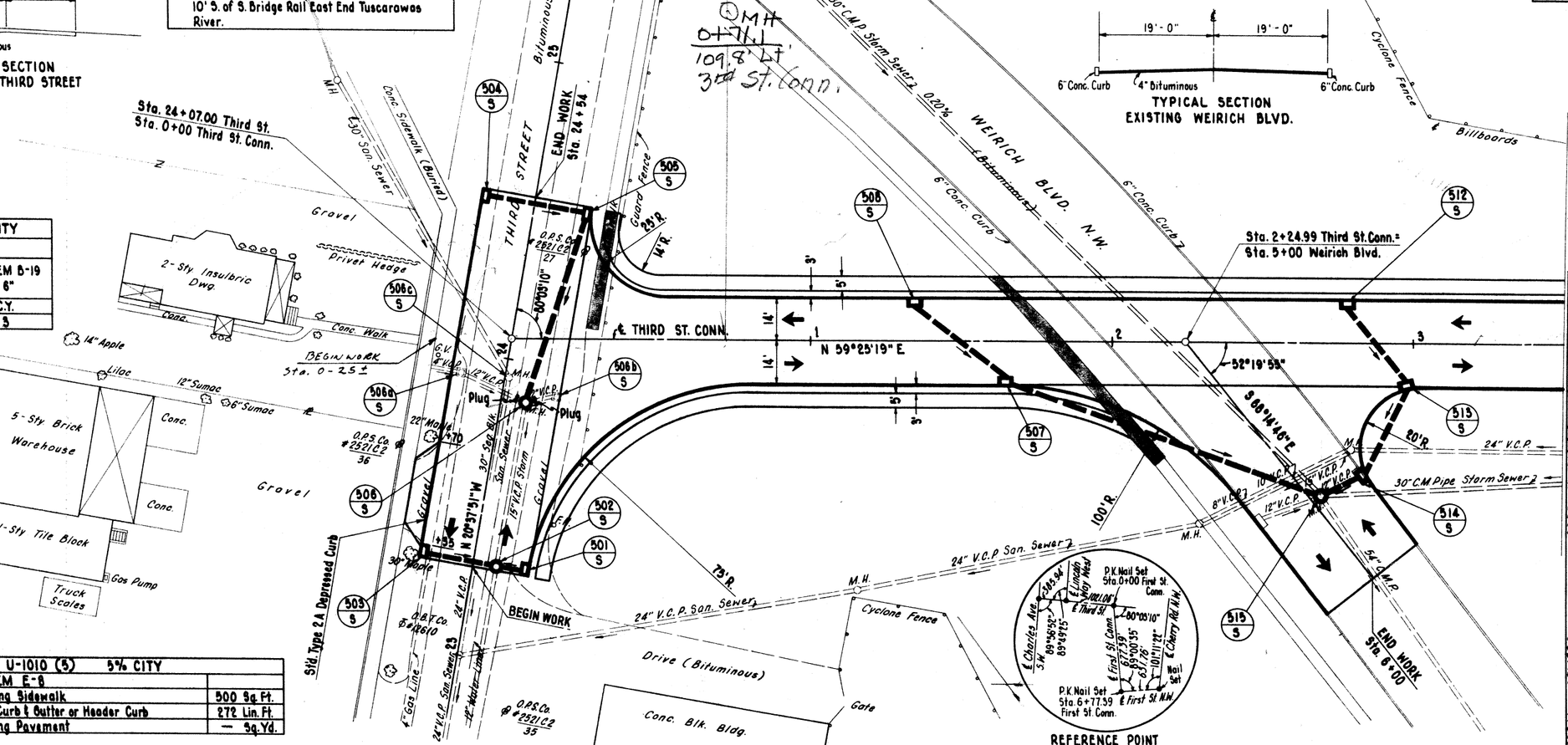
STA. -21-10.23

B.M. No. 21-S Elev. 946.59
Cut S.E. Corner S.E. Wingwall East and Viaduct Cherry Rd. N.W., 100' Lt. Sta. 599+50 10' S. of S. Bridge Rail East End Tuscarawas River.

TYPICAL SECTION
EXISTING THIRD STREET



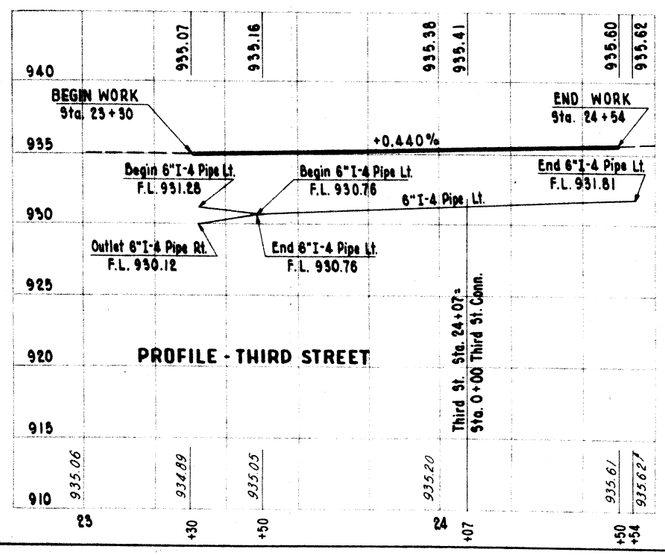
TYPICAL SECTION
EXISTING WEIRICH BLVD.

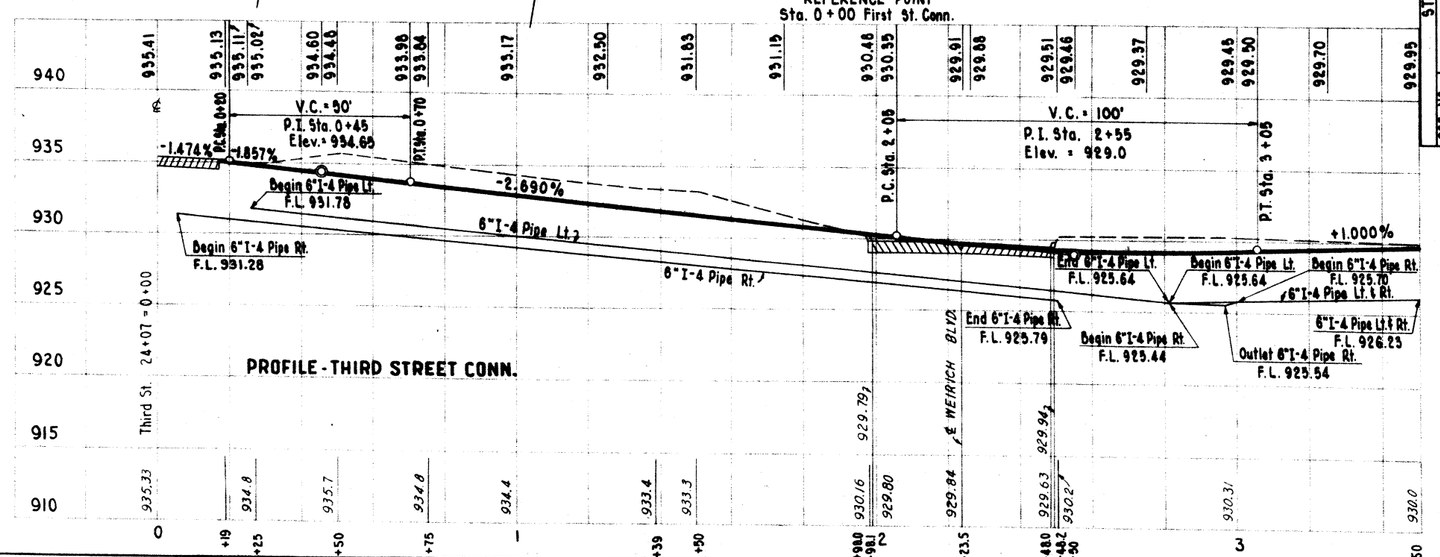


CODE U-1010(5) 100% CITY				
DRIVE				
STATION	SIDE	ITEM E-1 Roadway Exc.	ITEM E-1 Roadway Emb.	ITEM B-19 6" C.Y.
23+50	Lt.	5	0	5

CODE U-1010(5) 100% CITY
ITEM I-8
Manhole Adjusted To Grade
506c | 23+94 Third St. | 1

CODE U-1010 (5) 5% CITY	
ITEM E-8	
Removal & Disposal of Existing Sidewalk	500 Sq. Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	272 Lin. Ft.
Removal & Disposal of Existing Pavement	— Sq. Yd.





REFERENCE POINT
Sta. 0+00 First St. Conn.

| STORM SEWERS STATION | | | | CODE U-1010 (5) 5% CITY E-8 (LIN. FT.) | | | |

FED. RD DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

36

STA -21-10.23

B.M. No. 21-3 Elev. 946.59
Cut S.E. Corner S.E. Wing Wall
East end Viaduct Cherry Rd. N.W.
100' Lt. Sta. 599+50 10' S. of S. Bridge
Rail East End at Tuscarawas River.

SHEET 12

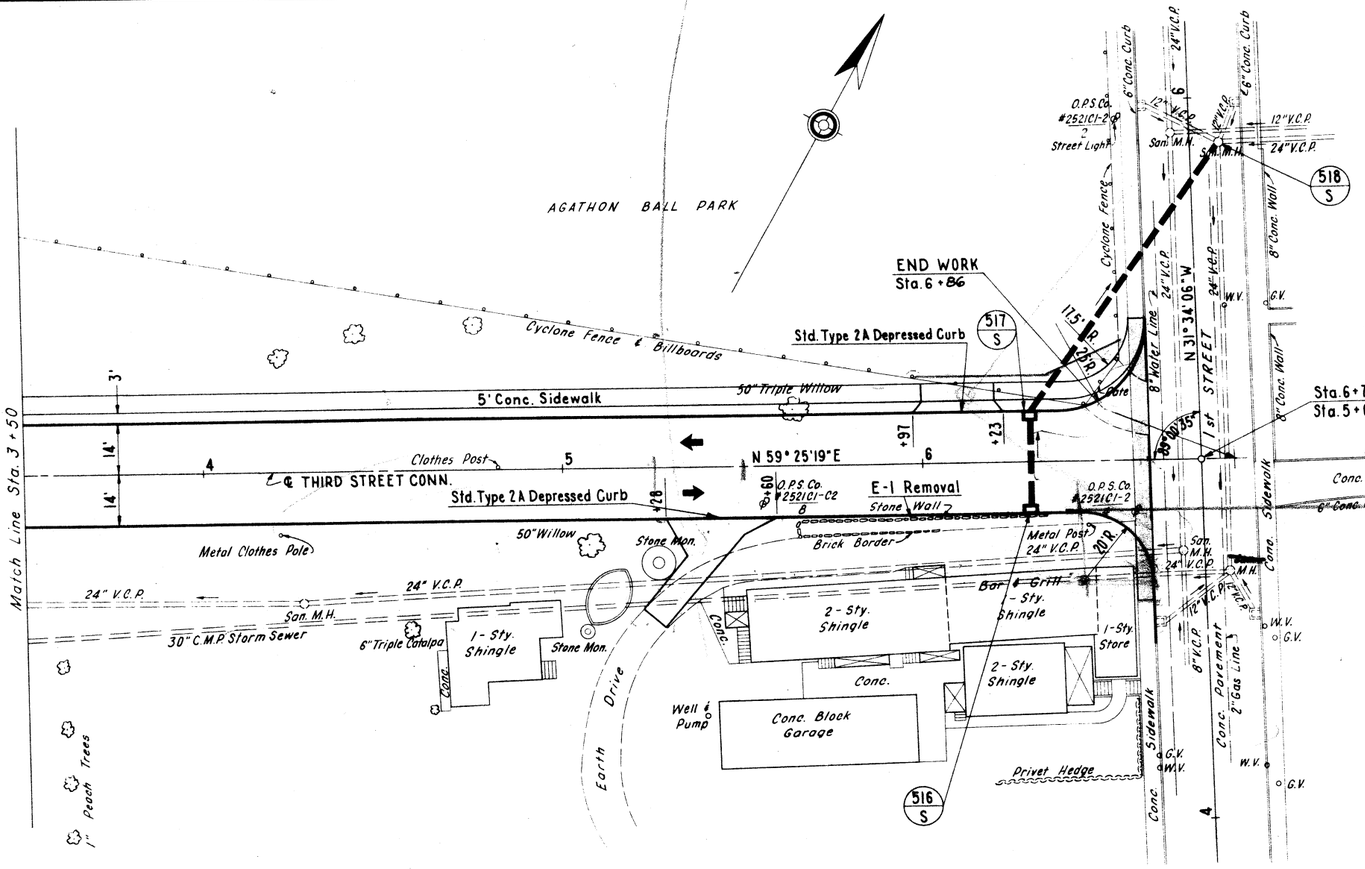
2" CONC.

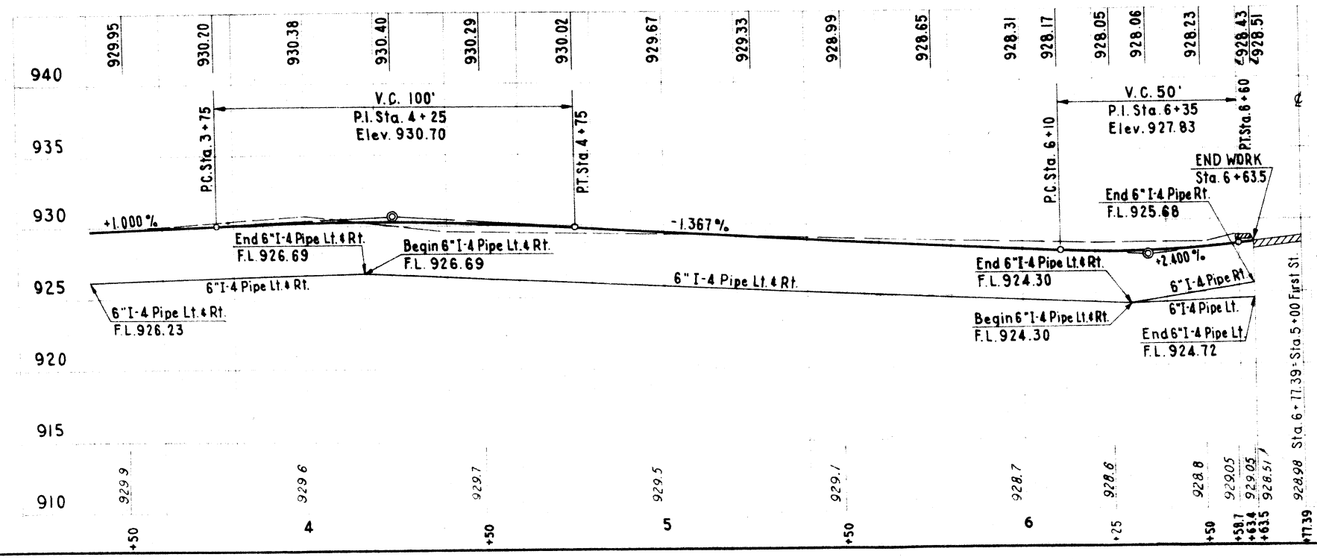
CODE U-1010(5) 5 % CITY DRIVE						
STATION	SIDE	ITEM E-1 Roadway		ITEM B-19 6"	ITEM T-70	
		Exc.	Emb.	C.Y.	S.Y.	
5+40	Rt.	7	0	7		
6+10	Lt.	1	0	0	19	
TOTALS		8	0	7	19	

28
12

CODE U-1010(5) 5 % CITY ITEM E-8		
Removal & Disposal of Existing Sidewalk	390	Sq. Ft.
Removal & Disposal of Curb, Curb & Gutter or Header Curb	78	Lin. Ft.
Removal & Disposal of Existing Pavement	—	Sq. Yds.

CODE U-1010(5) 5 % CITY STORM SEWERS						
REF. NO.		STATION			I-2 (LIN. FT.)	I-8 (EACH)
From	To	From	To	Side	12" Class B Storm Sewer Under Pavement or Approaches	Standard Catch Basin No. 3
516 S	517 S	6+30 Third St. Conn.	6+30	Lt. & Rt.	26	1
517 S	518 S	6+30	5+87.5 First St.	Lt. & Rt.	88	1
TOTALS					114	2





For Intersection Detail of Third St. Conn.
See Sheet No. 83

For Profiles of Storm Sewer
See Sheet No. 90

Scale: Hor. 1" = 20'
Vert. 1" = 5'

LINE & PROFILE SHEET THIRD ST. CONN. STA. 3+50 TO STA. 6+77.

SECTIONS

CUT	FILL
192	
291	
46	
399	
46	
511	
46	
45	
46	
415	
46	

℄ Survey Line

539+00 925 — 70' Rt. — F.L. 921.61

538+00 925 — 70' Rt. — F.L. 921.48

537+00 925 — 70' Rt. — F.L. 921.35

536+91.29 925 — 70' Rt. — F.L. 921.34

R/W 105'

RW 110'

RW 119'

RW 119'

F.L. 923.8

F.L. 923.3

F.L. 922.8

F.L. 922.76

80' Lt.

80' Lt.

80' Lt.

938.47
539+00
926.8

938.98
538+00
927.2

941.98
537+00
927.0

942.24
536+91.29
926.9

Future

Future

Future

R/W

R/W

R/W

Sta. 538+78
Begin Embankment
Area 0

Sta. 533+65

Begin Seeding
Sta. 533+10

Begin Ditch Lt.
Sta. 533+10

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
86	1065		
		75	434
98	0		
		289	0
102	0		
		393	0
110	0		
		56	0
114	0		
		1378	0
114	0		
		116	0
0			

Scale 1" = 5'

10 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - STA. 536+91.29 TO STA. 539+00

SEEDING: AND WIDTH | SQ. YDS.

END AREA: CUT | FILL
VOLUME: CUT | FILL

543+00 925 — 70'Rt. — F.L. 923.40 — R/W

96 — R/W — F.L. 925.8 — 48 894

R/W — 80' Lt. — 542+00 925 — Existg. San. Sewer

935.71 543+00 926.3

542+00 925 — 70'Rt. — R/W — F.L. 923.04

1089 — 156 5119

100 — F.L. 925.3 — 36 790

R/W — 80'Lt. — 541+00 925

934.80 542+00 926.3

541+00 925 — 70'Rt. — F.L. 922.68 — R/W

1350 — 148 2852

143 — F.L. 924.8 — 44 750

R/W — 80'Lt. — 540+00 925

934.38 541+00 926.4

1144 — 111 2810

63 — 16 800

175 — F.L. 924.3 — Match Line Edwin Ave Sta. 5+50 — 189 3454

63 150 192 — 1458

Sta. 539+75 Ahead Back Sta. 539+00

934.94 540+00 926.4

80 70 60 50 40 30 20 10 — 10 20 30 40

Scale 1" = 5'

Sta. 539+00 — 86 1065

CROSS SECTIONS - STA. 540+00 TO STA. 543+00

SHEET NO.	STATE	PROJECT
2	OHIO	U-UG-1010(5)

STA.- 21 - 10.23

SETTING

LANE WIDTH	SLOPE
110	
9.22	
12.17	
109	
12.11	
109	
11.39	
96	

547+00
925
F.L. 924.84
70'Rt.
RW

939.35
547+00
927.8
Existg. San. Sewer
F.L. 928.25
RW

546+00
925
F.L. 924.48
70'Rt.
RW

938.44
546+00
927.9
Existg. San Sewer
F.L. 927.3
RW

545+00
925
F.L. 924.12
70'Rt.
RW

937.53
545+00
926.8
Existg. San. Sewer
F.L. 926.8
RW

544+00
925
F.L. 923.76
70'Rt.
RW

936.62
544+00
926.7
Existg. 48" Seg. Blk. San. Sewer
F.L. 926.3
RW

Sta. 543+00

Sta. 545+00

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
24	1196		
		104	4211
32	1078		
		111	3941
28	1050		
		144	3685
50	940		
		182	3396
48	894		

Scale = 1" = 5'

CROSS SECTIONS - STA. 544+00 TO STA. 547+00

SEEDING	
ENG. WIDTH	SQ. YDS.
99	969
97	1078
97	1139
108	1211
110	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
64	1518		
		227	4141
74	1194		
		274	4495
74	1232		
		337	4687
108	1272		
		244	4578
24	1196		

550+89.02
925
70'Rt.
F.L. 927.25

RW
F.L. 933.93
942.89
550+89.02
929.6
Shed
Existg. San. Sewer
550+00
925
70'Rt.
F.L. 926.61

RW
F.L. 933.4
942.08
550+00
929.8
Existg. San. Sewer
549+00
925
70'Rt.
F.L. 925.91

RW
F.L. 932.8
941.17
549+00
929.0
Existg. San. Sewer
548+00
925
70'Rt.
F.L. 925.20

RW
F.L. 930.53
940.26
548+00
928.4
Existg. 48" Seg. Blk. San. Sewer
Sta. 547+00

Sta. 547+15 Rt.
Begin L-10 Sodding
Width 9.5
Sta. 547+00

Scale 1"=5'

10 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - STA. 548+00 TO STA. 550+89.0

SEQ. NO.	STATE	PROJECT NO.	
2	OHIO	U-UG-1010(5)	

41

STA.- 21 - 10.23

SEEDING	
END WIDTH	SQ. YDS.
54	190
72	190
99	

Sta. 552+60 ± Existing Toe Drain Begins

RW 92.5'

Back Area

Match Line Walnut Rd.

944.44
552+58.8
930.6

Begin Seeding
Sta. 552+58.8

Existg. San Sewer

944.26
552+39.8
941.6

943.79
551+88
941.2

RW 96

Area Ahead
Match Line Walnut Rd.
Sta. 11+00

End Seeding
Sta. 551+72.2

Sta. 551+70 ± Existing Toe Drain Ends

Existg. 18" Pipe

943.65
551+72.2
933.1

Sta. 550+89.0℄

Area Ahead
Match Line
Walnut Rd.
Sta. 10+00

Existg. San. Sewer

Existg. 48" Seg Blk. San. Sewer

Sta. 551+06 Rt.
End L-10 Sodding
Width 9.5

Scale 1" = 5'

RW 90'

END AREA		VOLUME	
CUT	FILL	CUT	FILL
Ahead 0	1106		
Back 0	672		
		1	305
		2	190
		4	311
		2	154
		1	327
Ahead 0	982		
Back 0	1370		
		99	414
		64	1318

10 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - STA. 551+72.2 TO STA. 552+58.8

U-UG-1010(5)

STA.- 21 - 10.23

SEEDING

END WIDTH	SQ. YDS.
93	648
99	434
100	1111
100	352

RW 87'

Top of Dike

RW 89'

Top of Dike

RW 90'

Top of Dike

RW 92'

Top of Dike

946.58
555+00
933.63

946.08
554+39.28
933.7

945.72
554+00
933.2

944.81
553+00
935.6

555+00
930
10'Rt.
F.L. 929.7

554+3928
930
10'Rt.
F.L. 929.4

554+00
930
10'Rt.
F.L. 929.2

553+00
930
10'Rt.
F.L. 928.7

Existg. San. Sewer

Existg. Sewer

Existg. 48" Seg. Blk. San Sewer

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
30	1524		
		90	3557
50	1444		
		77	2966
56	1396		
		207	4811
56	1202		
		43	1761
0	1106		

Sta. 552+58.8

60 50 40 30 20 10 10 20 30 40

Scale 1"= 5'

Sta. 552+58.8 Ahead

CROSS SECTIONS- STA. 553+00 TO STA. 555+00

	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	43

STA.- 21 - 10.23

SEEDING		END AREA		VOLUME	
END WIDTH	SQ YDS	CUT	FILL	CUT	FILL
97	1122				
		25	1190		
				56	4886
105	1172				
		5	1454		
				45	5478
106	1106				
		18	1504		
				89	5608
95		30	1524		

W 70'Rt. 558+00 930 F.L. 931.2 RW

945.56 558+00 934.99

W 10'Rt. 557+00 930 F.L. 930.7 RW

Existg. San Sewer

946.55 557+00 934.12

End Toe Drain Sta. 556+50 Lt.

W 70'Rt. 556+00 930 F.L. 930.2 RW

Existg. San Sewer

946.89 556+00 933.52

Scale: 1" = 5'

Existg. 48" R.C.C. San. Sewer Sta. 555+00

Sta. 555+00

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS STA. 556+00 TO STA. 558+00

NO.	DATE	REVISION
2		U-UG-1010(5)

STA. - 21 - 10.23

SEEDING

END WIDTH	SQ. YDS.
69	761
68	922
98	1072
95	1067

NET AREA CUT	NET AREA FILL	VOLUME CUT	VOLUME FILL
484	0		
		1052	111
84	60		
		156	1184
0	556		
		80	2322
43	718		
		126	3553
25	1190		

R/W

F.L. 932.86

935.50
562+00
939.92

F.L. 932.98

F.L. 936.06

938.61
561+00
939.58

F.L. 936.29

10'Rt.
560+00
930

F.L. 939.26

941.58
560+00
937.4

10'Rt.
559+00
930

Existing 48" R.C.C. San. Sewer

943.90
559+00
936.24

F.L. 931.7

Sta. 558+00

Scale: 1"=5'

70 60 50 40 30 20 10 ℄ 10 20 30 40

CROSS SECTIONS STA. 559+00 TO STA. 562+00

SEEDING	
ENG. WIDTH	SQ. YDS.
20	
	391
59	
	261
53	
	542
53	
	618
69	

DIST.	STATE	PROJECT
2	OHIO	U-UG-1010(5)

45

STA.- 21 - 10.23

END AREA		VOLUME	
CUT	FILL	CUT	FILL
1106	0		
		7897	7
652	4		
		989	11
620	10		
		3285	30
576	18		
		1963	33
484	0		

Sta. 563+58

Sta. 562+00

Abut.

F.L. 928.49

RW 89.5

F.L. 928.30

Sta. 564+25 Lt.
Begin Paved Gutter
Std. Type-2

929.76
564+89
935.0

930.62
564+00
930.1

932.48
563+00
931.4

R W

Abut.

F.L. 928.53

R W

F.L. 929.23

R W

F.L. 929.66

F.L. 931.11

Abut.

Sta. 562+50 Rt.
Begin Paved Gutter
Std Type-2

Scale: 1"=5'

70 60 50 40 30 20 10 ℄ 10 20 30 40

CROSS SECTIONS STA. 563+00 TO STA. 564+89

SECTIONS		END AREA		VOLUME	
END WIDTH	VOL.	CUT	FILL	CUT	FILL
69					
	194				
			1760	0	
				8011	0
74					
	432				
			2566	0	
				6131	0
18					
	56				
			1352	0	
				1206	0
20					
			1106	0	

Sta. 567+50 Lt.
End Paved Gutter
Std. Type-2

Abut.

FL. 929.46

930.78
567+00
946.34

10' Rt.

567+00
925

FL. 924.65

Sta. 566+50 Rt.
End Paved Gutter
Std. Type 2

Abut.

FL. 928.43

929.77
566+00
950.4

10' Rt.

566+00
940

FL. 927.97

Abut.

FL. 928.35

929.66
565+15.5
945.3

Abut.

FL. 928.40

Sta. 564+89

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40 CROSS SECTIONS STA. 565+15.5 TO STA. 567+00

OHIO U-UG-1010(5)

STA.- 21 - 10.23

AREA		VOLUME	
CUT	FILL	CUT	FILL
522	32		
		2173	53
875	2		
		181	0
898	0		
		1148	0
1204	0		
		4446	0
1760	0		

117
1085
115
70
115
370
111
810
69

RW 87'

F.L. 930.77

934.75
569+00
933.13

Existg. San. Sewer

W
70' Rt.
569+00
930

R/W

F.L. 924.38

Sta. 568+16

RW 86'

W
70' Rt.
568+10.5
930

R/W

F.L. 930.10

932.89
568+10.5
933.5

F.L. 924.50

Existg. San. Sewer

RW 85'

W
70' Rt.
567+81
930

R/W

F.L. 929.88

932.28
567+81
942.4

F.L. 924.54

Existg. 48" Brick San Sewer

Scale: 1" = 5'

Sta. 567+00

Sta. 568+16

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS STA. 567+81 TO STA. 569+00

2	OHIO	U-UG-1010(5)		48

STA.- 21 - 10.23

END AREA		VOLUME	
		CUT	FILL
136	658		
		548	2308
160	588		
		793	1889
268	432		
		140	215
260	382		
		1241	657
		522	32

RW 86'

121

F.L. 933.00

1335

RW 86.5'

119

F.L. 932.25

1322

RW 81.5'

119

F.L. 931.51

186

RW 81.5'

115

F.L. 931.40

1105

117

Sta. 569+00

938.61
572+00
931.0

Existg San. Sewer

938.04
571+00
930.99

Existg. San. Sewer

936.73
570+00
931.0

Existg. San. Sewer

936.47
569+85.71
931.1

Existg. 48" Seg. Block San. Sewer

572+00
930
70' Rt.

571+00
925
70' Rt.

570+00
930
70' Rt.

569+85.71
930
70' Rt.

R/W

F.L. 923.97

F.L. 924.11

F.L. 924.24

F.L. 924.26

Scale: 1" = 5'

Sta. 569+00

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - STA. 569+85.71 TO STA. 572+00

OHIO U-UG-1010(5)

STA.- 21 - 10.23

45

SEEDING

12.5	
1333	
117	
1356	
127	
1378	
121	

RW 85'

F.L. 931.50

RW 85.5'

Pump House Floor

F.L. 992.45

Existing Pressure Conduit

RW 86'

F.L. 953.40

Sta. 572+00

935.81
515+00
935.06

937.49
514+00
925.2

938.43
513+00
932.06

515+00
935
10' Rt.

Drive

RW

Drive

Existg. San. Sewer

RW 89'

Existg. San. Sewer

RW

10' Rt.
513+00
925

Existg. Seq. Blk. San. Sewer

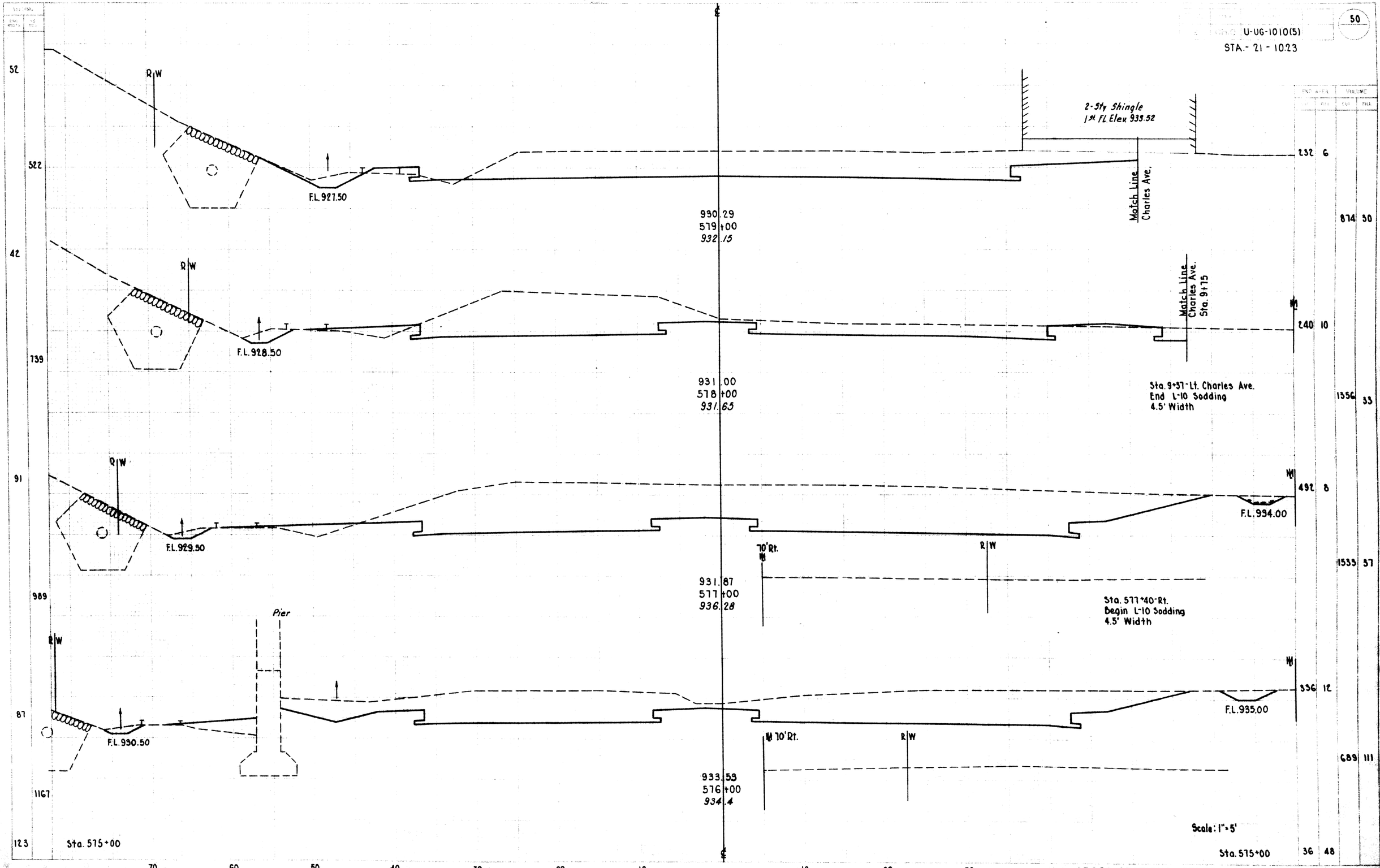
F.L. 923.84

Scale: 1"=5'

VOLUME CUT	VOLUME FILL
56	48
70	1752
2	898
370	2696
198	556
619	122
Sta. 572+00	136 658

70 60 50 40 30 20 10 ℄ 10 20 30 40

CROSS SECTIONS - STA. 573+00 TO STA. 575+00



END AREA		VOLUME	
CUT	FILL	CUT	FILL
232	6		
		874	30
240	10		
		1356	33
491	8		
		1535	37
336	12		
		689	111
		36	48

CROSS SECTIONS - STA. 576+00 TO STA. 579+00

U-UG-1010(5)

STA.- 21 - 10.23

51

SECTIONAL AREA CUT	SECTIONAL AREA FILL	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
41					
280		400	40		
				851	51
45					
317		336	6		
				671	18
52					
185		238	10		
				532	15
43					
528		274	10		
				937	30
52		232	6		

R/W

F.L. 931.22

928.91
581+55.05
929.6

R/W

R/W

F.L. 929.84

928.96
580+95.05
933.0

R/W

Sta. 580+50 Lt.
Begin Comb. Barrier Curb & Gutter

R/W

F.L. 928.46

Sta. 580+15 Lt.
Begin Paved Gutter
Std. Type 2

929.33
580+35.05
932.8

R/W

R/W

Garage
Fl. Elev. 933.8

929.58
580+00
932.87

Sta. 579+00

70 60 50 40 30 20 10 10 20 30 40

Scale: 1" = 5'

Sta. 579+00

CROSS SECTIONS - STA. 580+00 TO STA. 581+55.05

SLOPING

END WIDTH	1/2 LOC
9	48
9	45
13	23
10	66
9	278
41	

End Retaining Wall - Sta. 584 + 43

R/W — F.L. 935.90 — 932.51 — 584+18 — 928.4

R/W — Drive

R/W — F.L. 935.62 — 931.55 — 583+10 — 927.5

R/W — 1st Fl. Elev. 936.65

R/W — Drive

Basement Elev. 923.84

Begin Retaining Wall - Sta. 583 + 50

R/W — F.L. 935.20 — 930.85 — 583+35.05 — 926.94

R/W — 1st Fl. Elev. 936.65

PROGRESSIVE CHEVROLET GARAGE

Basement Elev. 923.84

R/W — F.L. 934.90 — 930.52 — 583+11.30 — 927.0

R/W

R/W — F.L. 933.52 — 929.60 — 582+56.05 — 925.9

R/W

Sta. 581+55.05

Scale: 1" = 5'

AREA CUT	AREA FILL	VOLUME CUT	VOLUME FILL
60	100		
		15	174
24	96		
28	94		
20	50		
18	29		
54	38		
72	83		
28	54		
192	137		
Sta. 581+55.05		400	40

50 40 30 20 10 ℄ 10 20 30 40 50 60

CROSS SECTIONS - STA. 582+55.05 TO STA. 584+18

SEEDING
LEFT WIDTH | LEFT AREA

RIGHT WIDTH | RIGHT AREA

22 | 122
22 | 200
50 | 611
60 | 276
9

R/W
F.L. 936.12
Ohio Drilling Co.
R/W
Proposed Bldg. Wall
Approx. Location
936.60
586+90
934.1

22 | 132
39 | 252

R/W
F.L. 936.21
R/W
936.16
586+40
933.07

20 | 140
20 | 457

R/W
F.L. 935.71
Existing Pumping Station
L/A
R/W
3 Existing 30" Steel Pipes
Sta. 585+00 Lt.
End Comb. Barrier Curb & Gutter
935.56
585+90
931.6
2-60" Cast Iron Pipes
R/W
F.L. 936.12
L/A
R/W
Seeding Limit

2 | 354
11 | 985

4 | 178
85 | 371

933.94
584+90
929.0

Scale: 1" = 5'

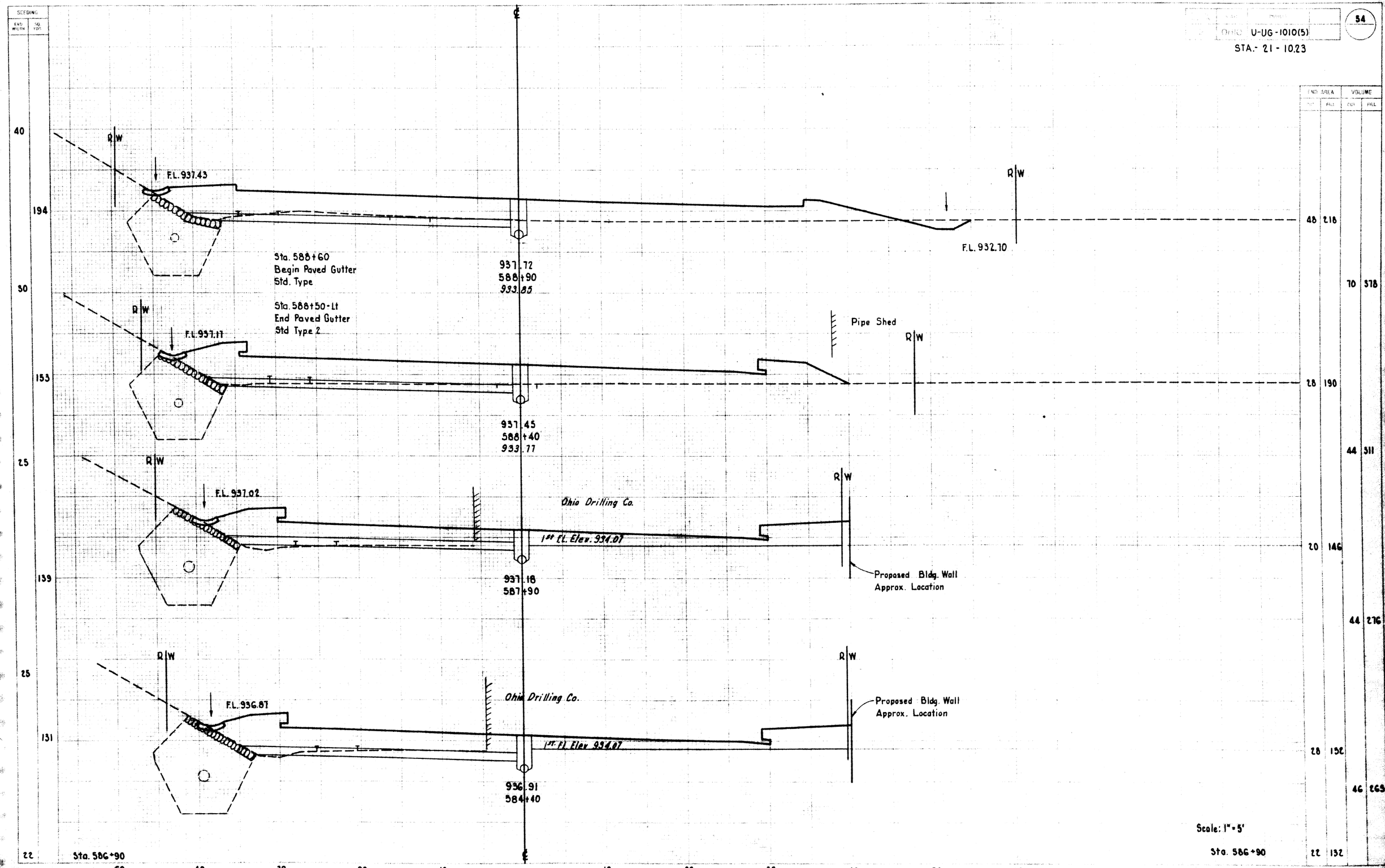
Sta. 584+18
60 | 100

50 40 30 20 10 ℄ 10 20 30 40 50 60

CROSS SECTIONS - STA. 584+90 TO STA. 586+90

Proj. U-UG-1010(5)

STA.- 21 - 10.23



END AREA		VOLUME	
CUT	FILL	CUT	FILL
48	218		
		70	378
28	190		
		44	311
20	146		
		44	276
28	152		
		46	263
22	132		

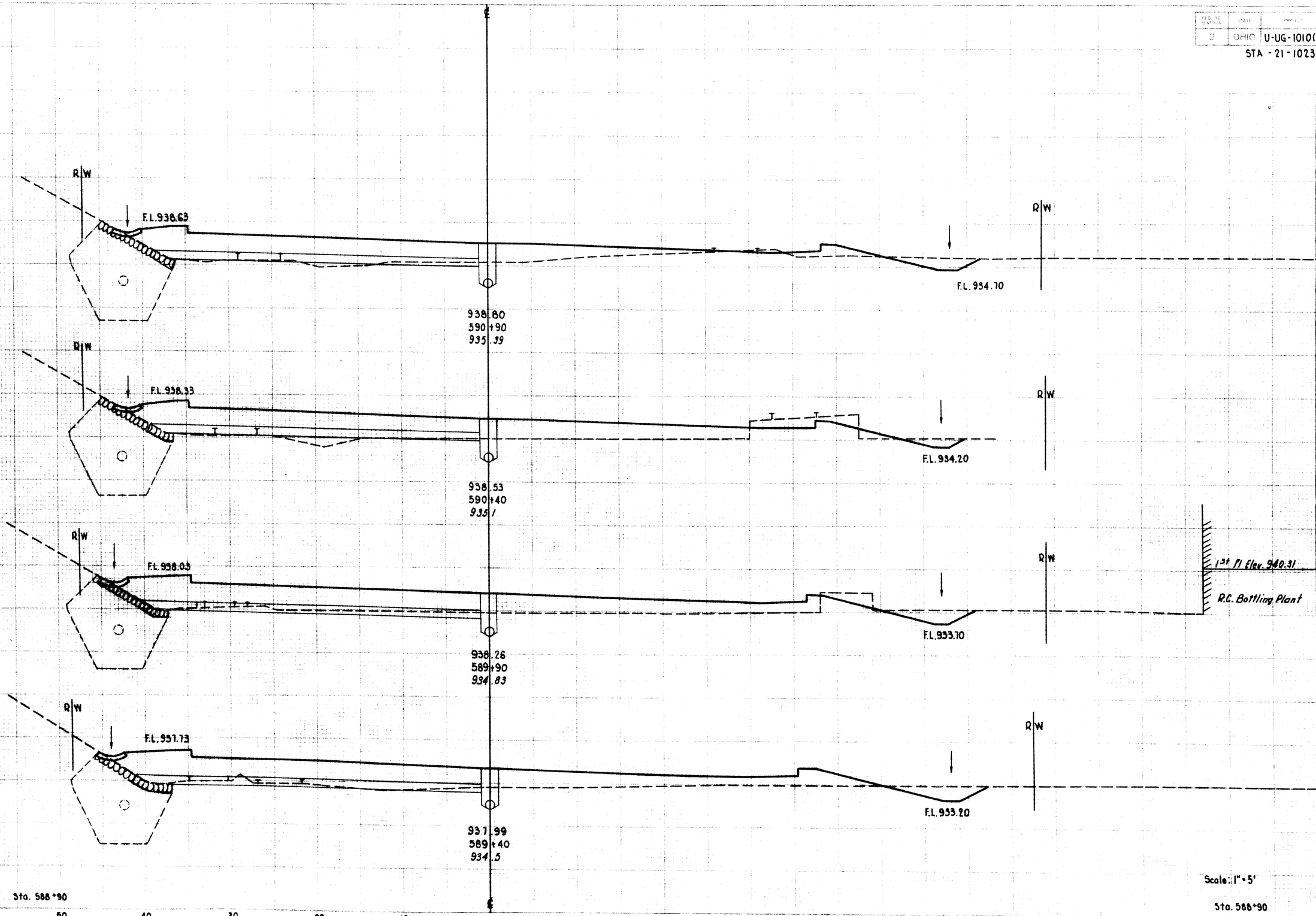
Scale: 1"=5'

CROSS SECTIONS - STA. 587+40 TO STA. 588+90

FED. ROAD DIVISION	STATE	PROJECT	SHEET NO.
2	OHIO	U-UG-1010(5)	55

STA - 21 - 1023

SEEDING		
LAND WIDTH	SLOPE RATIO	
36	2	
37	3	
39	2	
40	3	
40	2	



END AREA		VOLUME	
CUT	FILL	CUT	FILL
18	126		
20	144	35	250
59	280		
44	158	67	296
28	162	70	352
48	218		

CROSS SECTIONS - STA. 589+40 TO STA. 590+90

SHEET	PROJECT	
2	OHIO U-UG-1010(5)	

56

STA - 21 - 1023

SEEDING

END WIDTH	SQ. YDS.
53	333
47	250
43	228
39	208
36	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
26	244		
			47 480
16	188		
		22	317
8	154		
		19	256
12	122		
		28	230
18	126		

R/W
F.L. 939.78
Garage
939.93
593+00
936.07
1st Fl. Elev. 938.68
F.L. 934.90
Basement Elev. 930.93
R/W

R/W
F.L. 939.53
Warehouse
939.61
592+40
936.2
F.L. 935.32
R/W

R/W
F.L. 939.23
1st Fl. Elev. 940.38
939.54
591+90
935.87
F.L. 935.67
R/W

R/W
F.L. 938.93
939.07
591+40
936.4
F.L. 935.20
R/W

Scale: 1"=5'

Sta. 590+90

60 50 40 30 20 10 10 20 30 40 50 60

Sta. 590+90

CROSS SECTIONS - STA. 591+40 TO STA. 593+00

STATE	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

57

STA - 21 - 1023

SLOPING

END AREA		VOLUME	
CUT	FILL	CUT	FILL
28	376		
		48	644
24	320		
		41	563
20	288		
		43	495
26	244		

59

R|W

F.L. 940.33

940.14
594+50
935.5

R|W

F.L. 933.85

58

R|W

F.L. 940.14

314

940.47
594+00
935.86

R|W

F.L. 934.20

55

R|W

F.L. 939.96

300

940.20
593+50
936.0

R|W

F.L. 934.55

Scale: 1" = 5'

53

Sta. 593+00

50 40 30 20 10 0 10 20 30 40 50 60

Sta. 593+00

CROSS SECTIONS - STA. 593+50 TO STA. 594+50

Sta. 596 + 40 Lt
End Paved Gutter
Std Type 2

R/W

F.L. 940.88

941.55
596+00
934.15

R/W

F.L. 934.20

Sta. 595+75-Rt.
End L-10 Sodding
Width 8.5'

R/W

F.L. 940.10

Sta. 595+55-Rt.
Begin L-10 Sodding
Width 8.5'

R/W

F.L. 933.15

941.28
595+50
934.1

R/W

EXISTING PUMP STATION

F.L. 940.52

R/W

F.L. 933.50

941.01
595+00
935.34

Existing 3-Pipe Siphon - 10", 15", 18" VP

Existing 30" Pipe

Sta. 594+50

Sta. 594+50

Scale: 1" = 5'

CROSS SECTIONS - STA. 595+00 TO STA. 596+00

STATION		END AREA		VOLUME	
		CUT	FILL	CUT	FILL
596+00					
	40 Lt	12	574		
595+75	Rt				
		24	1041		
595+55	Rt				
		14	550		
595+50					
		19	959		
595+00					
		6	464		
594+50				32	778
		28	576		

SETTING

NO. RT.	NO. LT.
77	
	417
62	
	539
35	
	472
50	
	622
62	

VOLUME

CUT	FILL
88	350
	208 692
120	282
	311 937
48	224
	122 1278
18	466
	56 1986
12	574

R|W 15'Rt.
599+54
930

R|W

940.70
599+54
941.23

R|W 15'Rt.
599+00
930

R|W

R|W

941.31
599+00
940.68

Sta. 598+50 Lt.
End Paved Gutter
Std Type 2

R|W
F.L. 941.05

R|W 15'Rt.

R|W

941.96
598+00
937.9

598+00
930

R|W
80'

F.L. 938.20

R|W

R|W
F.L. 941.05

F.L. 937.50

Sta. 596+50 Lt.
Begin Paved Gutter
Std. Type 2
F.L. 940.80

942.02
597+00
934.4

Scale : 1"=5'

Sta. 596+00

30 60 50 40 30 20 10 10 20 30 40

Sta. 596+00

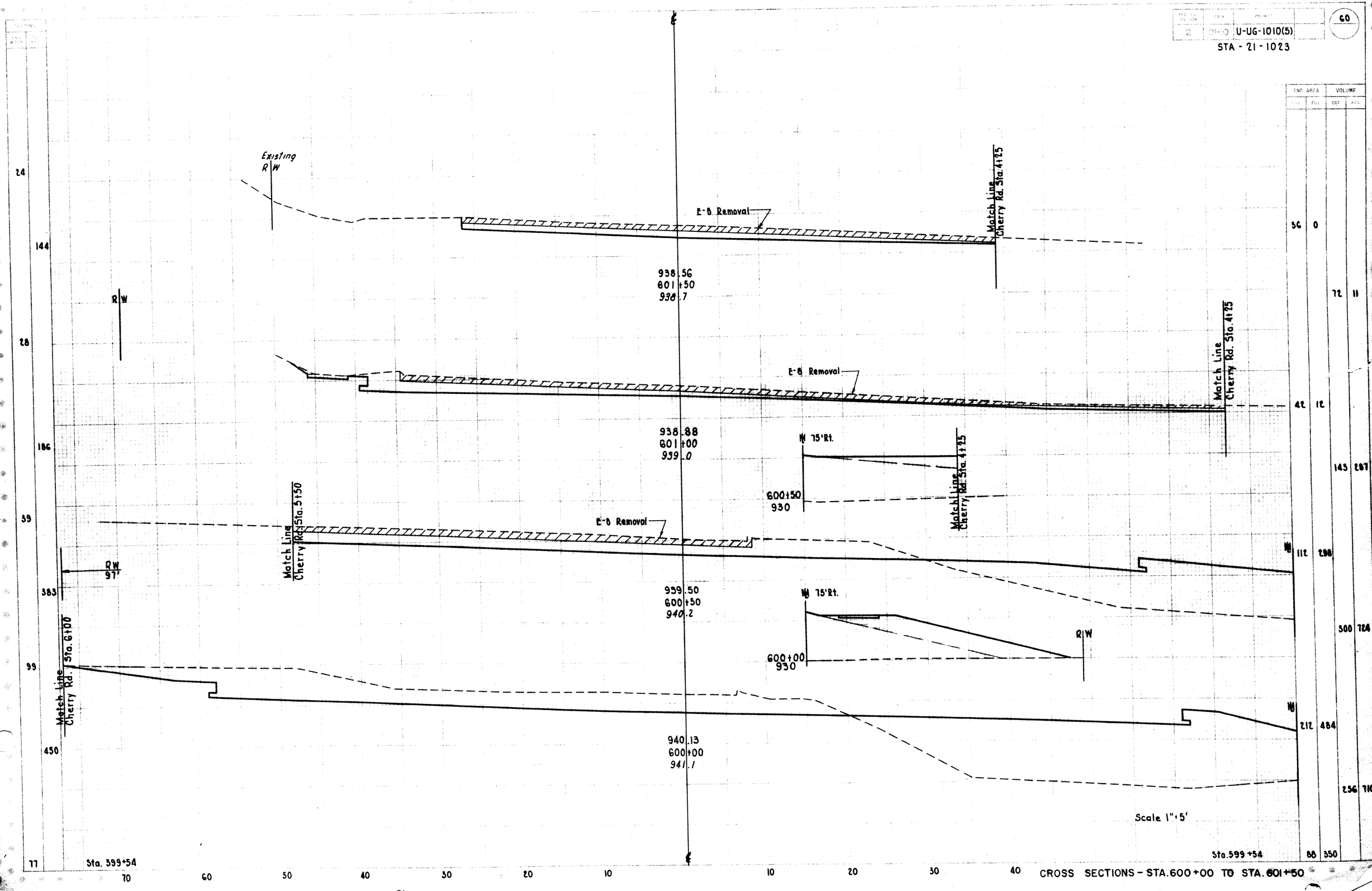
CROSS SECTIONS - STA. 597+00 TO STA. 599+54

PROJECT			
2	OHIO	U-UG-1010(5)	

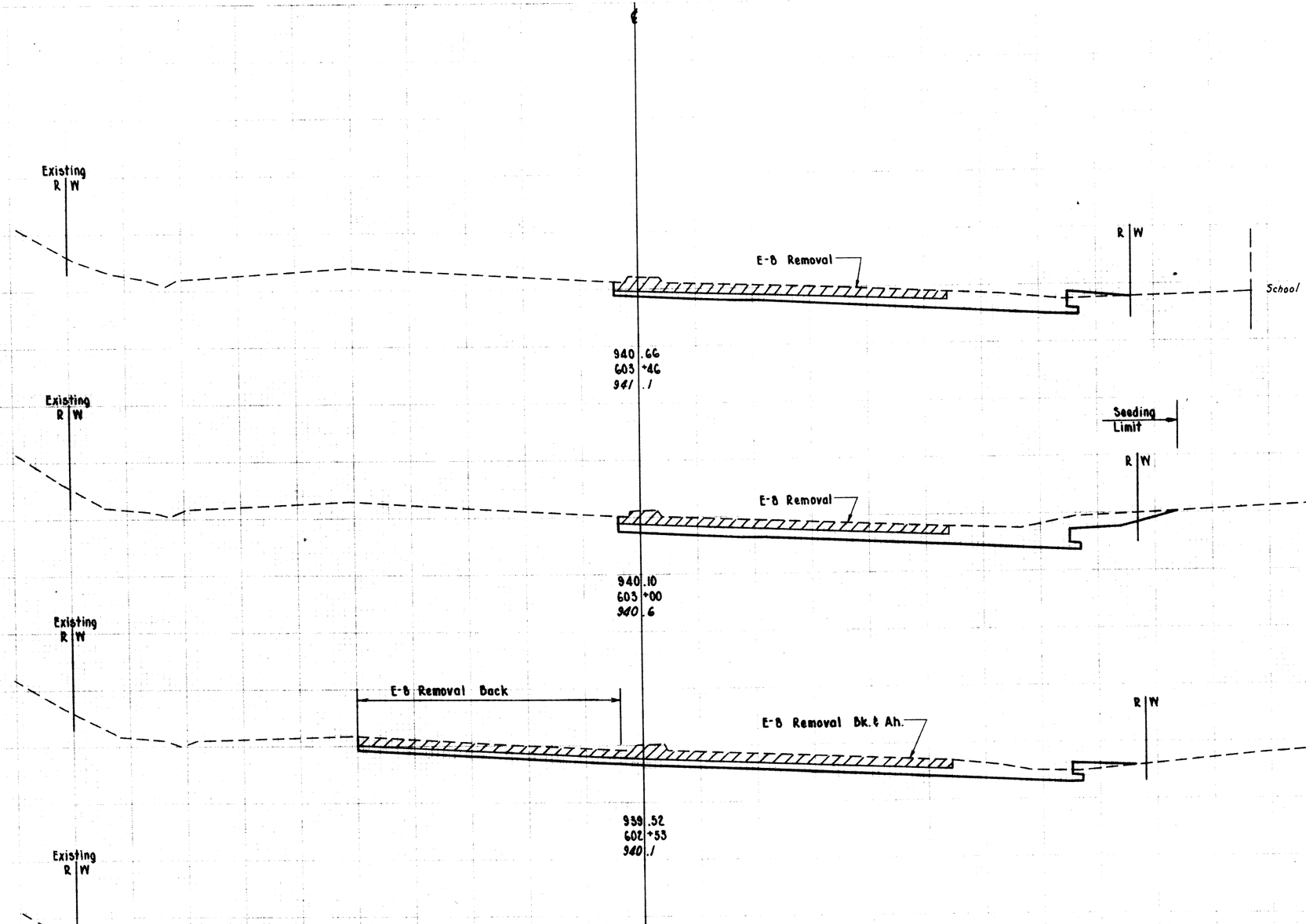
60

STA - 21 - 1023

END AREA		VOLUME	
CUT	FILL	CUT	FILL
36	0		
		72	11
42	12		
		143	287
112	298		
		300	724
212	484		
		256	710
88	350		



U-UG-1010(5)
STA. 21-10.23



| | | |

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

62

STA. 21-10.23

SEEDING END WIDTH	SEEDING SQ. YDS.
19	30
19	356
45	433
35	300
21	81
6	

End Seeding
Sta. 607+14

607+00
940.3

End Earthwork
Sta. 607+14

Seeding Limit

F.L. 932.90

R W

E-8 Removal

941.22
606+00
941.9

Sta. 606+30

Seeding Limit

F.L. 933.40

R W

E-8 Removal

941.63
605+00
942.2

F.L. 935.90

R W

E-8 Removal Back

941.23
604+00
941.7

Seeding Limit

R W

Scale: 1"=5'

Sta. 603+46

Sta. 603+46

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
2	0		
		1	0
2	0		
		4	0
Ahead 2	0		
Back 44	16		
		81	30
44	16		
		193	56
60	14		
		189	89
Ahead 42	54		
Back 30	34		
		68	36
58	2		

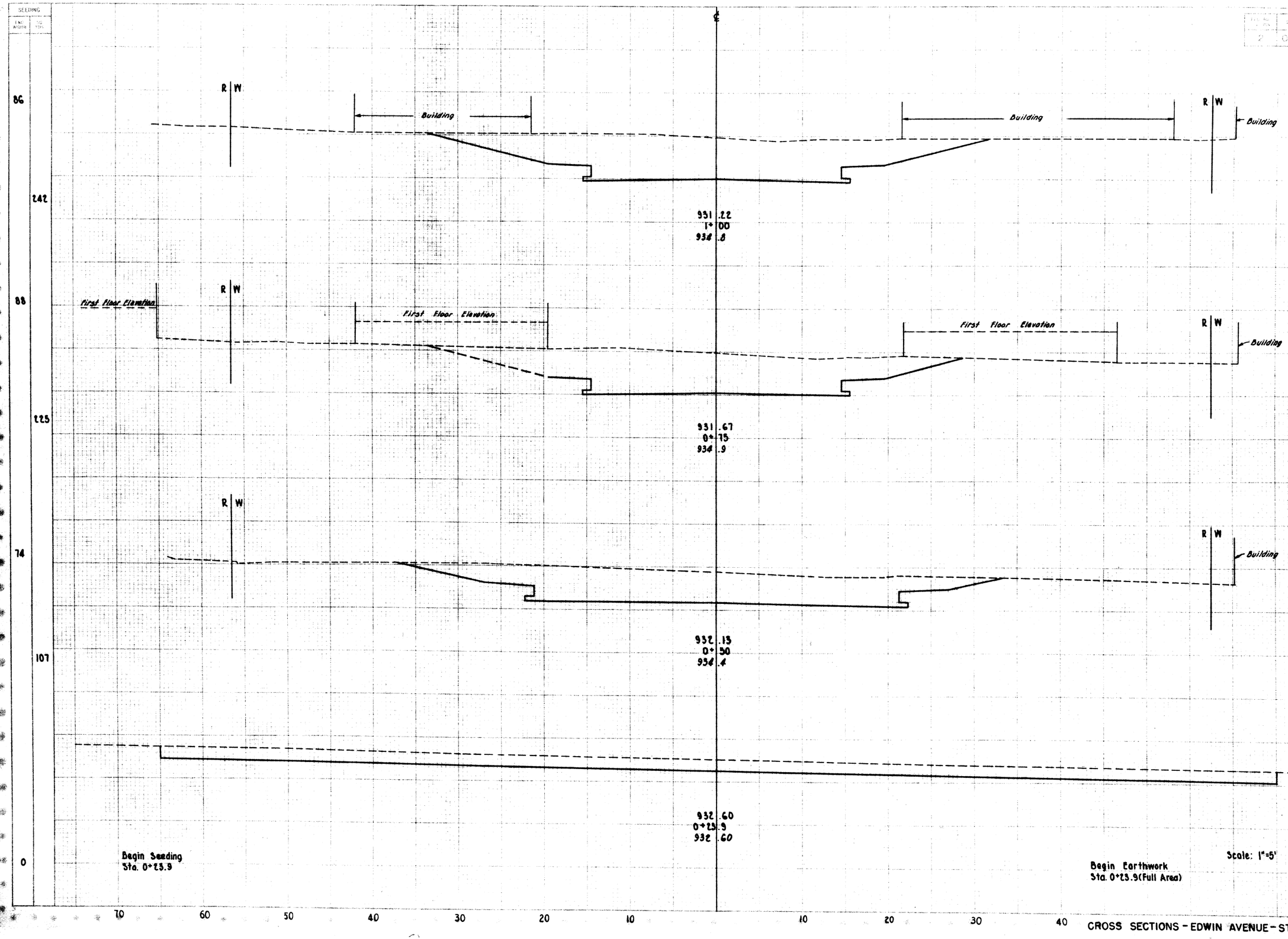
CROSS SECTIONS - STA. 604+00 TO STA. 607+00

PID	DIST	REF	
2	OHIO	U-06-1010(5)	

STA: 21-10.23

SEEDING

END AREA		VOLUME	
CUT	FILL	CUT	FILL
226	0		
		101	0
208	0		
		186	0
194	0		
		177	0
172	0		



CROSS SECTIONS - EDWIN AVENUE - STA. 0+23.9 TO STA. 1+00

SHEETS	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 21-10.23

64

SPACING	
END AREA	50 FEET

END AREA		VOLUME	
CUT	FILL	CUT	FILL
	18		2.12
		193	393
	86		0
		152	0
	230		0
		212	0
	246		0
		457	0
	226		0

105

R W

F.L. 924.82

Existing 54" Brick San Sewer

929.80
3+00
925.3

F.L. 923.65

R W

Sta. 3+00-Rt.
Begin L-10 Sodding
Width 11.0'

1089

91

R W

R W

929.10
2+00
930.7

259

88

R W

R W

929.22
1+74
934.0

235

88

R W

R W

Shed

930.31
1+50
934.3

483

86

Sta. 1+00

Sta. 1+00

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - EDWIN AVENUE - STA. 1+50 TO STA. 3+00

SEEDING	
END WIDTH	VOL TO
134	381
140	399
147	1478
119	1244
105	

ROUTE SECTION	STATE	PROJECT
2	OHIO	U-U6-1010(5

STA: 2I-10.23

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	546	0	467
0	462	0	423
0	452	85	1433
46	522	119	989
18	212		

℄

934.25
5+15
926.2

End Seeding
Sta. 5+50

Seeding Limit

End Earthwork
Sta. 5+50 (Full Area)

Seeding Limit
106'

933.84
5+50
926.0

Seeding Limit

Seeding Limit
112'

933.42
5+25
926.0

Seeding Limit

Seeding Limit
122'

933.00
5+00
925.6

Sta. 5+00-Rt.
End L-10 Sodding
Width 11.0'

R/W

F.L. 923.09

931.35
4+00
925.6

F.L. 922.95

R/W

Existing 54" Brick San. Sewer

Sta. 3+00

Sta. 3+00

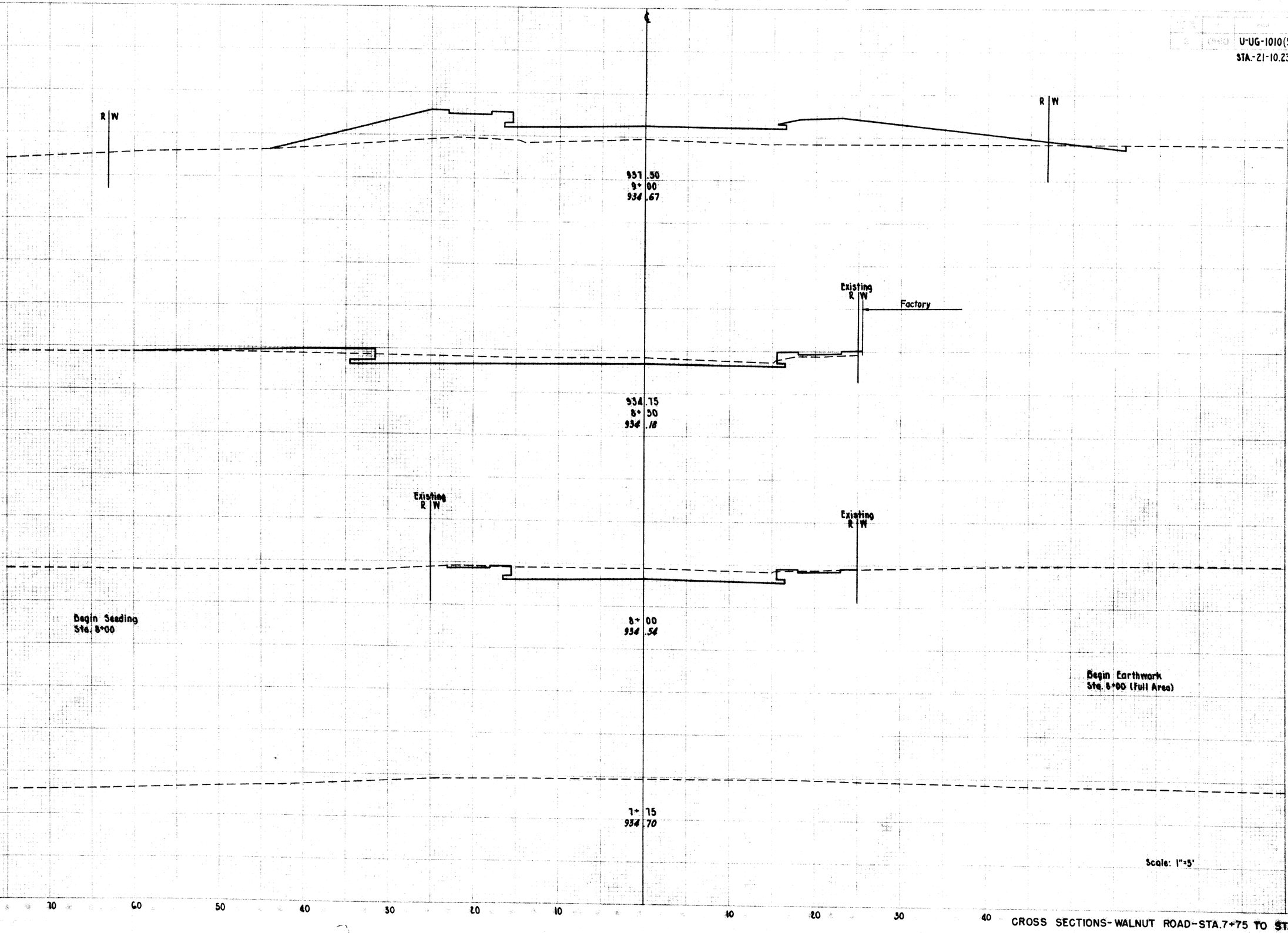
Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - EDWIN AVENUE - STA. 4+00 TO STA. 5+75

SEEDING

END WIDTH	SQ YDS
12	
	214
5	
	42
10	



END AREA		VOLUME	
CUT	FILL	CUT	FILL
2	178		
		37	174
58	10		
		72	10
40	1		

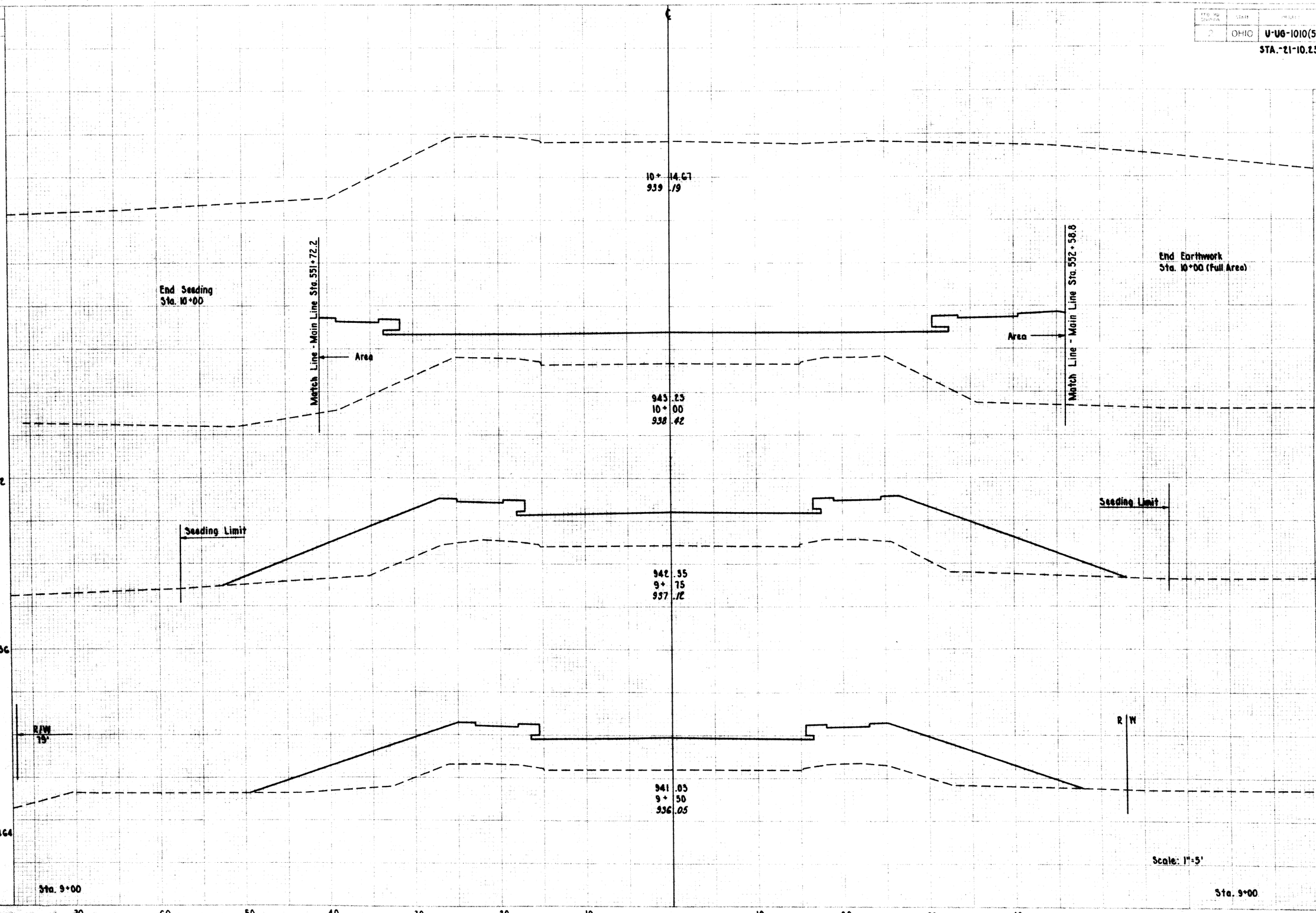
CROSS SECTIONS- WALNUT ROAD- STA.7+75 TO STA.9+00

STATE	PROJECT
OHIO	U-UG-1010(5)

STA.-21-10.23

67

SEEDING	
2 NO. WIDTH	3 SQ. YDS.
13	
122	
75	
236	
95	
464	
72	



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	456		
0	408		
0	428		
0	363		
0	356		
0	494		
℄	178		

CROSS SECTIONS-WALNUT ROAD-STA.9+50 TO STA.10+14.67

SEEDING	
END WIDTH	SQ. YDS.
10	18
28	88
35	54
4	

SHEET NO.	STATE	PROJECT NO.	TOTAL SHEETS
2	OHIO	U-UG-1010(5)	68

STA: 21-10.23

End Seeding
Sta. 11+58.3

Existing
R | W

Existing
R | W

End Earthwork
Sta. 11+58.3 (Full Area)

R | W

R | W

11+58.3
943.88

943.91
11+50
943.83

Match Line - Main Line

945.94
11+25
945.65

Match Line - Main Line

Match Line - Main Line Sta. 551+72.2

943.99
11+00
944.90

Match Line - Main Line Sta. 552+58.8

Begin Seeding
Sta. 11+00

Begin Earthwork
Sta. 11+00 (Full Area)

Scale: 1"=5'

END AREA		VOLUME	
CUT	FILL	CUT	FILL
38	0		
		12	0
38	0		
		36	60
40	130		
		32	185
30	162		

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-WALNUT ROAD-STA.11+00 TO STA.11+58.3

SEEDING	
END WIDTH	SQ YDS
25	89
7	4
7	

DIST	STATE	PROJECT		69
2	OHIO	U-U6-1010(5)		

STA: 21-10.23

END AREA		VOLUME	
CUT	FILL	CUT	FILL
72	0		
		111	0
48	0		
		9	0
48			

R | W

929.66
8+50
929.67

Existing R | W

R | W

Seeding Limit

Existing R | W

930.59
8+00
930.58

Existing R | W

Begin Seeding Sta. 7+95

Seeding Limit

Existing R | W

7+95
930.65

Begin Earthwork Sta. 7+95

Existing R | W

Existing R | W

7+50
931.28

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - CHARLES STREET - STA 7+50 TO STA 8+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA.-21-10.23

10

SEEDING	
END WIDTH	SQ YDS
61	110
18	135
30	155
25	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
170	14	131	6
112	4	157	6
58	2	120	2
12	0		

75' Lt.

9+15
950

End Seeding
Sta. 9+75

930.04
10+00
930.12

First Floor Elevation

RW
81'

End Earthwork
Sta. 9+75 (Fill Area)

RW
82'

929.71
9+75
929.72

Seeding Limit

Match Line 3rd St.

First Floor Elevation

929.41
9+50
929.07

Match Line-3rd St. Sta. 10+25

℄ W

929.32
9+00
929.14

50 60 70

Scale: 1"=5'

Sta. 8+50

10 60 50 40 30 20 10 10 20 50 40

Sta. 8+50

CROSS SECTIONS-CHARLES STREET-STA.9+00 TO STA.10+00

SEEDING	
END WIDTH	SQ YDS
17	
	49
18	
	97
52	
	96
17	

STATE	PROJECT	SHEET NO.
OHIO	U-UG-1010(5)	11

STA: 21-10.23

END AREA		VOLUME	
CUT	FILL	CUT	FILL
86	0		
		80	0
86	0		
		88	0
104	0		
		93	0
96	0		

℄

R | W

Seeding Limit

933.17
1+00
933.4

R | W

Seeding Limit

933.84
0+75
934.8

Seeding Limit

R | W

934.68
0+50
935.7

R | W

R | W

935.02
0+25
936.8

Begin Seeding
Sta. 0+25

Begin Earthwork
Sta. 0+25

Scale: 1"=5'

10 60 50 40 30 20 10 10 20 30 40 50 60 70

CROSS SECTIONS-THIRD STREET CONN.-STA.0+25 TO STA.1+00

SEEDING	
LINEAR WIDTH	SQ YDS
18	78
10	58
11	78
17	94

PID NO. DIVISION	DIST.	FED. PROJ.	STATE PROJ.
2	OHIO	U-UG-1010(5)	

STA.: 21-10.23

72

Seeding Limit

R/W

℄

R/W

929.45
3+00
930.9

Seeding Limit

R/W

Match Line Weirich Blvd.

929.51
2+50
930.2

Seeding Limit

R/W

Match Line Weirich Blvd.

930.48
2+00
929.80

Seeding Limit

R/W

R/W

951.85
1+50
953.5

Sta. 1+00

Scale: 1"=5'

Sta. 1+00

END AREA		VOLUME	
CUT	FILL	CUT	FILL
82	0		
		157	0
88	0		
		119	7
40	8		
		128	7
98	0		
		170	0
86	0		

60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-THIRD STREET CONN.-STA.1+50 TO STA.3+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 2+10.23

13

SEEDING END WIDTH	SEEDING SQ. YDS.
22	
	111
18	
	114
23	
	114
18	
	100
18	

Seeding Limit

R/W

R/W

929.67
5+00
929.5

Seeding Limit

R/W

R/W

930.29
4+50
929.7

Seeding Limit

R/W

R/W

930.38
4+00
929.6

Seeding Limit

R/W

R/W

929.95
3+50
929.9

Sta. 3+00

Scale: 1"=5'

Sta. 5+00

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
38	10		
		61	15
28	6		
		43	26
18	22		
		52	26
38	6		
		111	6
62	0		

CROSS SECTIONS-THIRD STREET CONN.-STA.3+50 TO STA. 5+00

SEEDING	
ENG. WIDTH	HOR. DIST.
0	
	11
15	
	31
22	
	58
20	
	114
21	
	119
22	

DIST.	STATE	PROJECT	SHEET NO.
2	OHIO	U-UG-1010(5)	14

STA: 2.1-10.23

Sta. 5+00

End Seeding
Sta. 6+63.5

Seeding Limit

928.51
6+63.5
928.54

End Earthwork
Sta. 6+63.5

First Floor Elev. 2

928.23
6+50
928.8

Seeding Limit

R/W

R/W

Bldg.

928.05
6+25
928.6

Seeding Limit

R/W

R/W

First Floor Elev. 2

928.31
5+00
928.7

Seeding Limit

R/W

R/W

First Floor Elev. 2

928.99
5+50
929.1

Scale: 1"=5'

Sta. 5+00

END AREA		VOLUME	
CUT	FILL	CUT	FILL
126	0		
		57	0
100	0		
		84	0
82	0		
		72	2
74	4		
		113	9
48	6		
		80	15
38	10		

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-THIRD STREET CONN.- STA.5+50 TO STA. 6+63.5

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

STA: 21-10.23

15

SEEDING	
END WIDTH	SQ YDS
14	60
6	97
19	

End Seeding
Sta. 24+54

Existing R/W

Existing R/W

End Earthwork
Sta. 24+54

935.62
24+54
935.62

Existing R/W

Match Line Third St. Conn.

935.38
24+00
935.22

Existing R/W

Existing R/W

Begin Seeding
Sta. 23+30

935.07
23+30
934.89

Begin Earthwork
Sta. 23+30

Scale: 1"=5'

END AREA		VOLUME	
CUT	FILL	CUT	FILL
90	3		
		86	6
36	3		
		109	4
48	0		

30 60 50 40 30 20 10 0 10 20 30 40

CROSS SECTIONS-THIRD STREET-STA.23+30 TO STA.24+54

SHEET	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

76

STA: 21-10.23

SEEDING

LINE WIDTH	SQ YDS
24	
	47
10	
	22
6	
	24
11	
	9
0	

Existing R/W

929.66
5+75
929.94

Match Line Third St. Conn.

Existing R/W

929.23
5+50
929.91

Match Line Third St. Conn.

Existing R/W

929.51
5+25
929.86

Match Line Third St. Conn.

Seeding Limit

929.88
5+00
929.92

Begin Seeding
Sta. 4+85

Begin Earthwork Rt.
Sta. 4+85

Scale: 1"=5'

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
58	0		
		80	0
114	0		
		81	0
62	0		
		42	0
28	0		
		8	0
0	0		

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - WEIRICH BLVD. - STA. 5+00 TO STA. 5+75

SETTING	
H.O. WIDTH	V.E. 10/1

SHEET NO.	DATE	PROJECT	
2	OHIO	U-UG-1010(5)	

77

STA: 21+10.23

END AREA		VOLUME	
CUT	FILL	CUT	FILL

6+00
930.75

7+50
930.58

7+00
930.39

6+50
930.10

End Earthwork
Sta. 6+00

End Seeding
Sta. 6+00

Existing
R/W

Existing
R/W

929.93
6+00
629.93

Scale: 1"=5'

Sta. 5+75

Sta. 5+75

26
69
24

70 60 50 40 30 20 10 10 20 30 40

50 0
50 0
58 0

CROSS SECTIONS- WEIRICH BLVD.- STA.6+00 TO STA.8+00

NO.	STATE	PROJECT	78
2	OHIO	U-UG-1010(5)	

STA: 21-10.23

SEEDING		
	END WIDTH	SO YDS.
	18	
		74
	35	
		74
	18	
		53
	20	

END AREA		VOLUME	
CUT	FILL	CUT	FILL
54	0		
		50	0
54	0		
		60	0
76	0		
		99	9
138	20		

End Seeding
Sta. 11+00

First Floor Elev.

Existing R | W

931.39
11+00
931.52

End Earthwork
Sta. 11+00

Seeding Limit

930.66
10+75
930.77

Begin Seeding
Sta. 10+25

Match Line Charles Ave. Sta. 9+75

929.93
10+50
929.99

Proposed Sidewalk

Begin Earthwork
Sta. 10+25

10+25
929.03

Scale: 1"=5'

70 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS - THIRD STREET - STA. 10+25 TO STA. 11+00

SEEDING
LB/1000 SY | SY/1000

R/W

Match Line Main Line

E-B Removal

934.62
3+75
936.16

Existing R/W

E-B Removal

933.60
3+50
933.56

Existing R/W

R/W

E-B Removal

932.66
3+00
932.65

Existing R/W

First Floor Elev.

Existing R/W

E-B Removal

932.70
2+92.2
932.67

Begin Seeding
Sta. 2+92.2

Begin Earthwork
Sta. 2+92.2

Scale: 1"=5'

SEEDING LB/1000 SY	SEEDING SY/1000
29	89
35	172
27	21
22	

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
54	20		
		46	9
46	0		
		70	0
30	0		
		7	0
20	0		

70 60 50 40 30 20 10 | 10 20 30 40

CROSS SECTIONS-CHERRY STREET-STA.2+92.2 TO STA.3+75

	OHIO	U-UG-1010(5)	

STA: 21-10.23

SEEDING

END WIDTH	SQ YDS
94	235
75	144
29	

939 .36
5+00
939 .91

937.56
4+50
937.50

936 .65
4+25
936.39

935 .65
4+00
935.23

75'Lt.

RW 112'

4+25
925

End Seeding
Sta. 4+25

End Earthwork
Sta. 4+25

E-B Removal

Match Line - Main Line Sta. 601+50

Match Line Main Line

RW 88'

Sta. 3+75

Sta. 5+75

Scale: 1"=5'

END AREA		VOLUME	
	FILL	CUT	FILL
12	292		
		16	182
22	102		
		35	56
54	20		

30 60 50 40 30 20 10 10 20 30 40

CROSS SECTIONS-CHERRY STREET-STA. 4+00 TO STA. 5+00

SEEDING

ACC.	VOL.
0	
	3
7	
	24
10	
	44
22	

End Seeding
Sta. 6+08.60

Begin Seeding
Sta. 5+50

Match Line W. Sta. 600+00

Match Line

Match Line Sta. 600+50

Main Line

E-8 Removal

E-8 Removal

E-8 Removal

944 .62
6+ 00
944 .65

943 .20
5+ 75
943 .48

941 .59
5+ 50
942 .31

940 .40
5+ 25
941 .10

R W

R W

End Earthwork
Sta. 6+08.60 (Use Area 6+00)

Begin Earthwork
Sta. 5+50

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
32	0		
		10	0
32	0		
		30	0
32	0		
		34	0
42	0		

Scale: 1"=5'

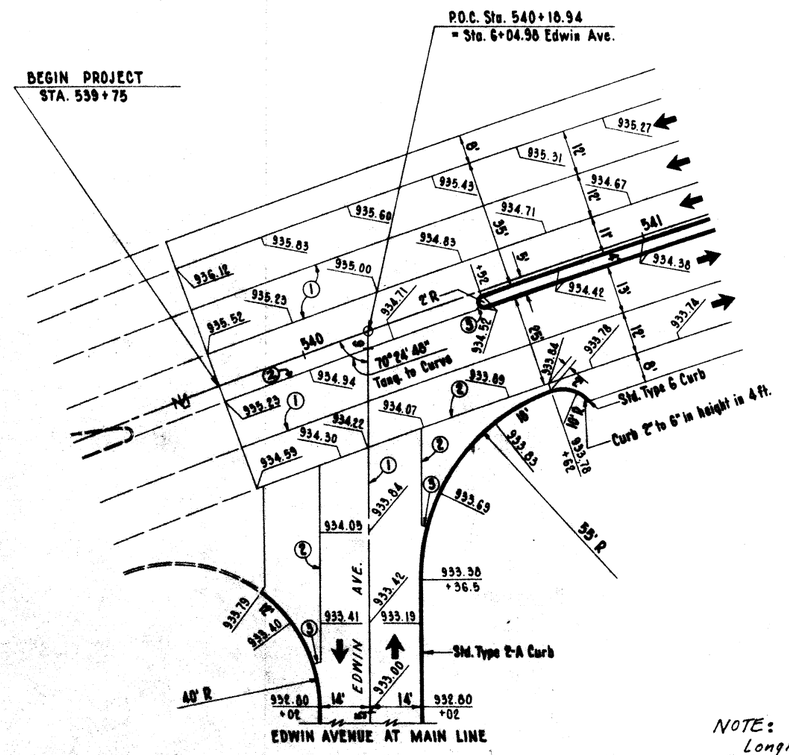
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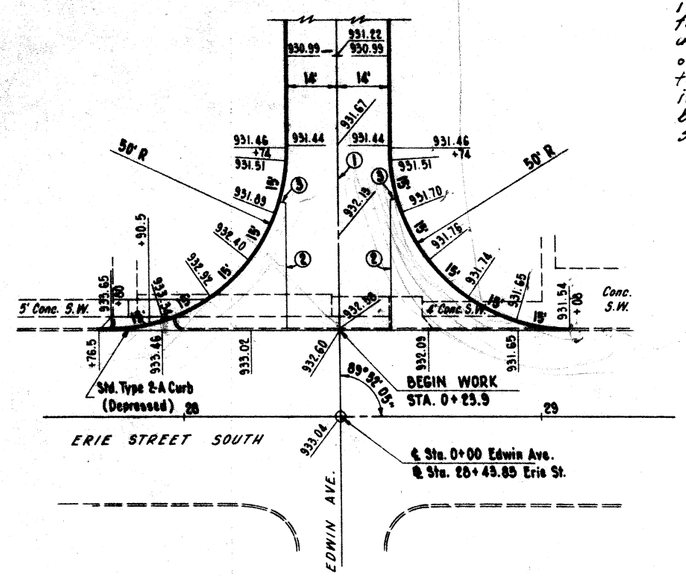
CROSS SECTIONS-CHERRY STREET-STA. 5+25 TO STA. 6+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

82

STA. - 21 - 10.23



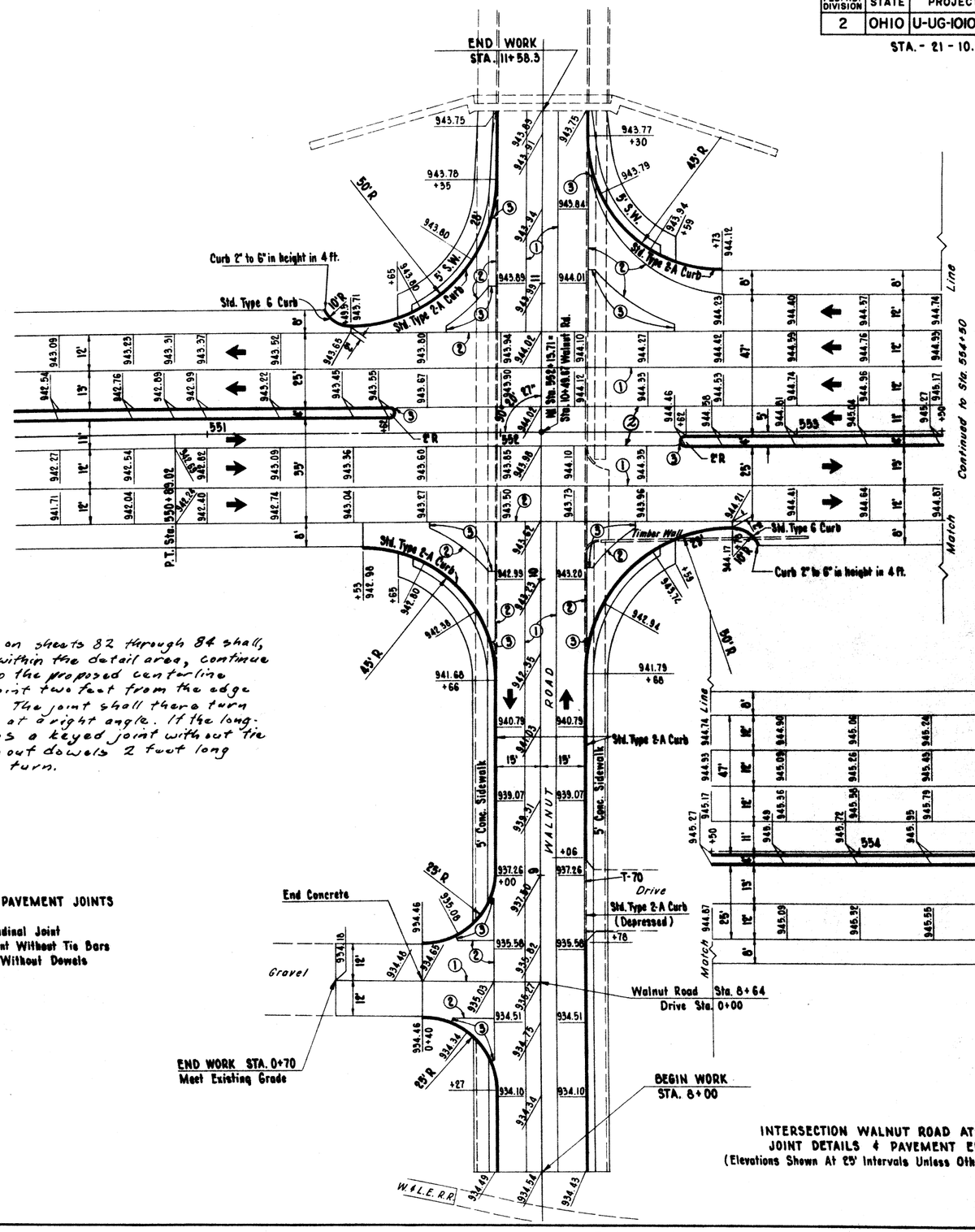


INTERSECTION EDWIN AVENUE AT ERIE STREET
JOINT DETAILS & PAVEMENT ELEVATIONS
(Elevations Shown At 25' Intervals Unless Otherwise Indicated)

NOTE:
Longitudinal joints shown on sheets 82 through 84 shall, if termination is not shown within the detail area, continue forward and back parallel to the proposed centerline until the joint reaches a point two feet from the edge of the proposed pavement. The joint shall there turn to meet the pavement edge at a right angle. If the longitudinal joint is indicated as a keyed joint without tie bars, an expansion joint without dowels 2 feet long shall be provided at the turn.

LEGEND - FOR PAVEMENT JOINTS

① Standard Longitudinal Joint
② Standard Key Joint Without Tie Bars
③ Expansion Joint Without Dowels

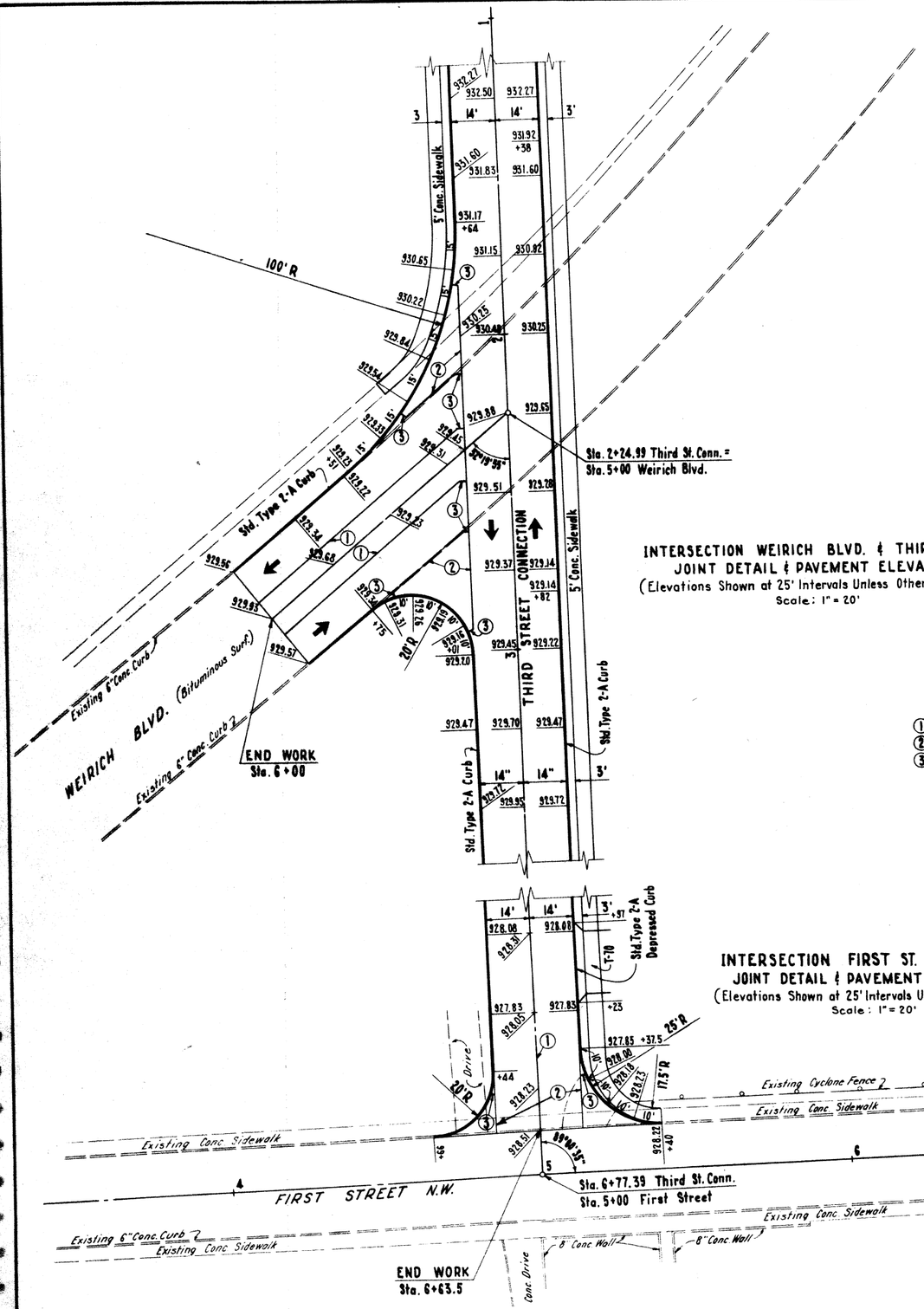


INTERSECTION WALNUT ROAD AT MAIN LINE
JOINT DETAILS & PAVEMENT ELEVATIONS
(Elevations Shown At 25' Intervals Unless Otherwise Indicated.)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010 (5)	

85

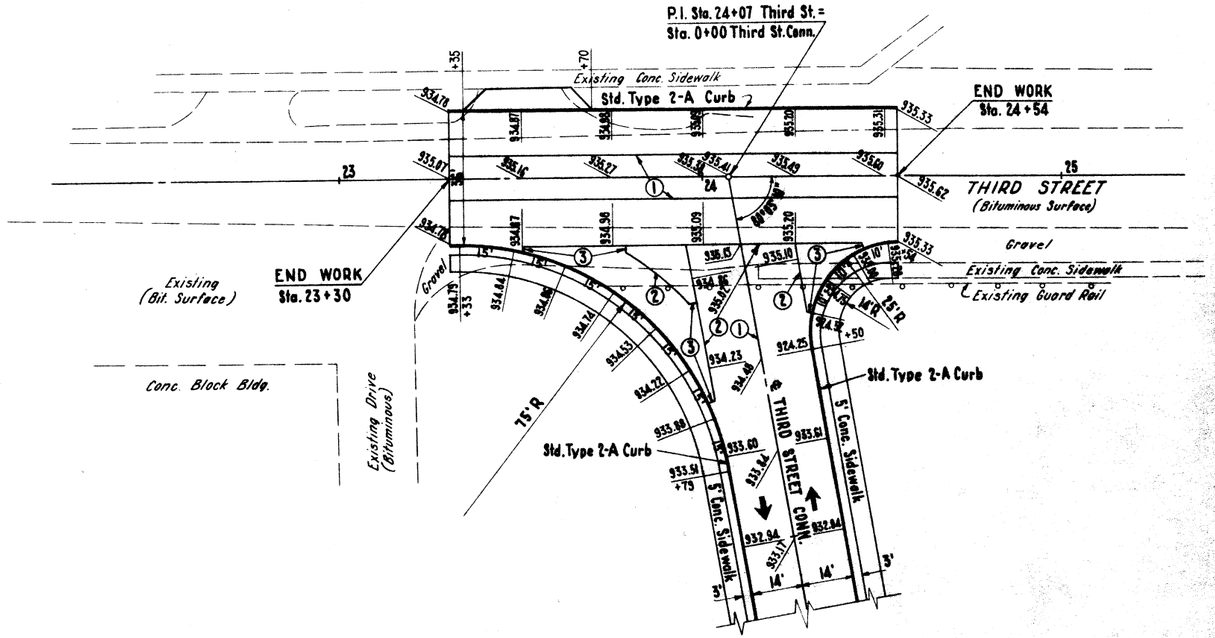
STA. 21-10.23



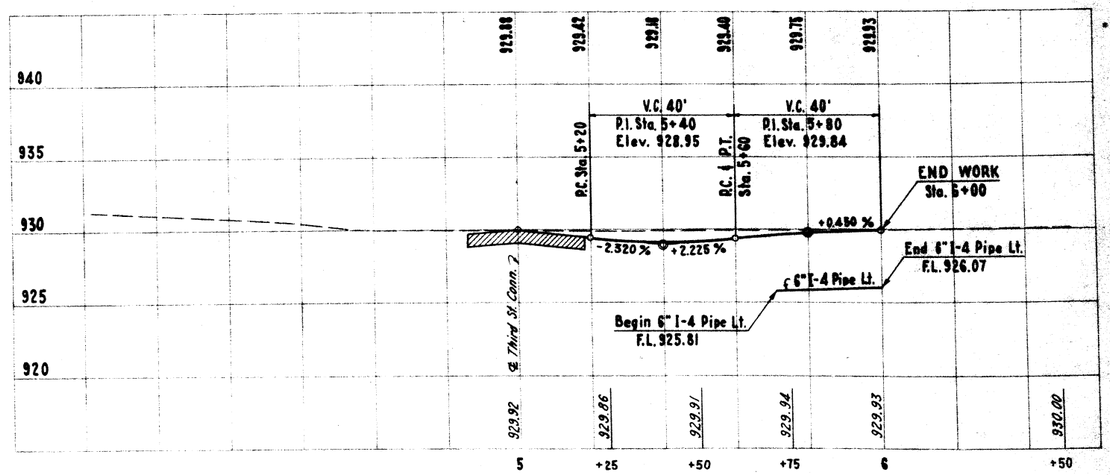
INTERSECTION WEIRICH BLVD. & THIRD ST. CONN.
JOINT DETAIL & PAVEMENT ELEVATIONS
(Elevations Shown at 25' Intervals Unless Otherwise Indicated)
Scale: 1" = 20'

INTERSECTION FIRST ST. & THIRD ST. CONN.
JOINT DETAIL & PAVEMENT ELEVATIONS
(Elevations Shown at 25' Intervals Unless Otherwise Indicated)
Scale: 1" = 20'

LEGEND (For Pavement Joints)
① STANDARD LONGITUDINAL JOINT
② STANDARD KEY JOINT WITHOUT TIE BARS
③ EXPANSION JOINT WITHOUT DOWELS



INTERSECTION THIRD ST. & THIRD ST. CONN.
JOINT DETAILS & PAVEMENT ELEVATIONS
Elevations Shown at 25' Intervals Unless Otherwise Indicated
Scale: 1" = 20'

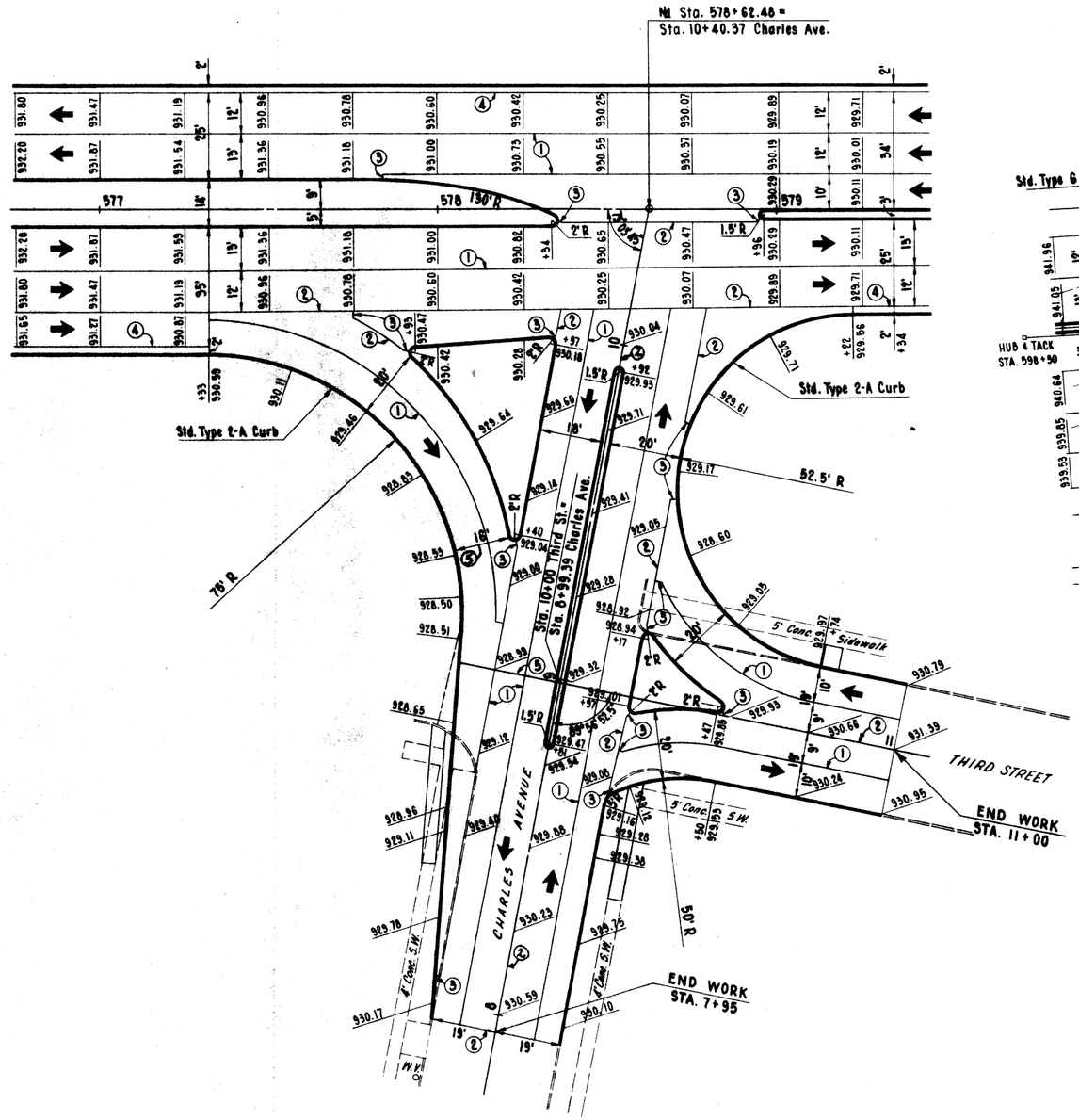


PROFILE WEIRICH BLVD. AT THIRD ST. CONN.
Scale: Hor. 1" = 20'
Vert. 1" = 5'

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

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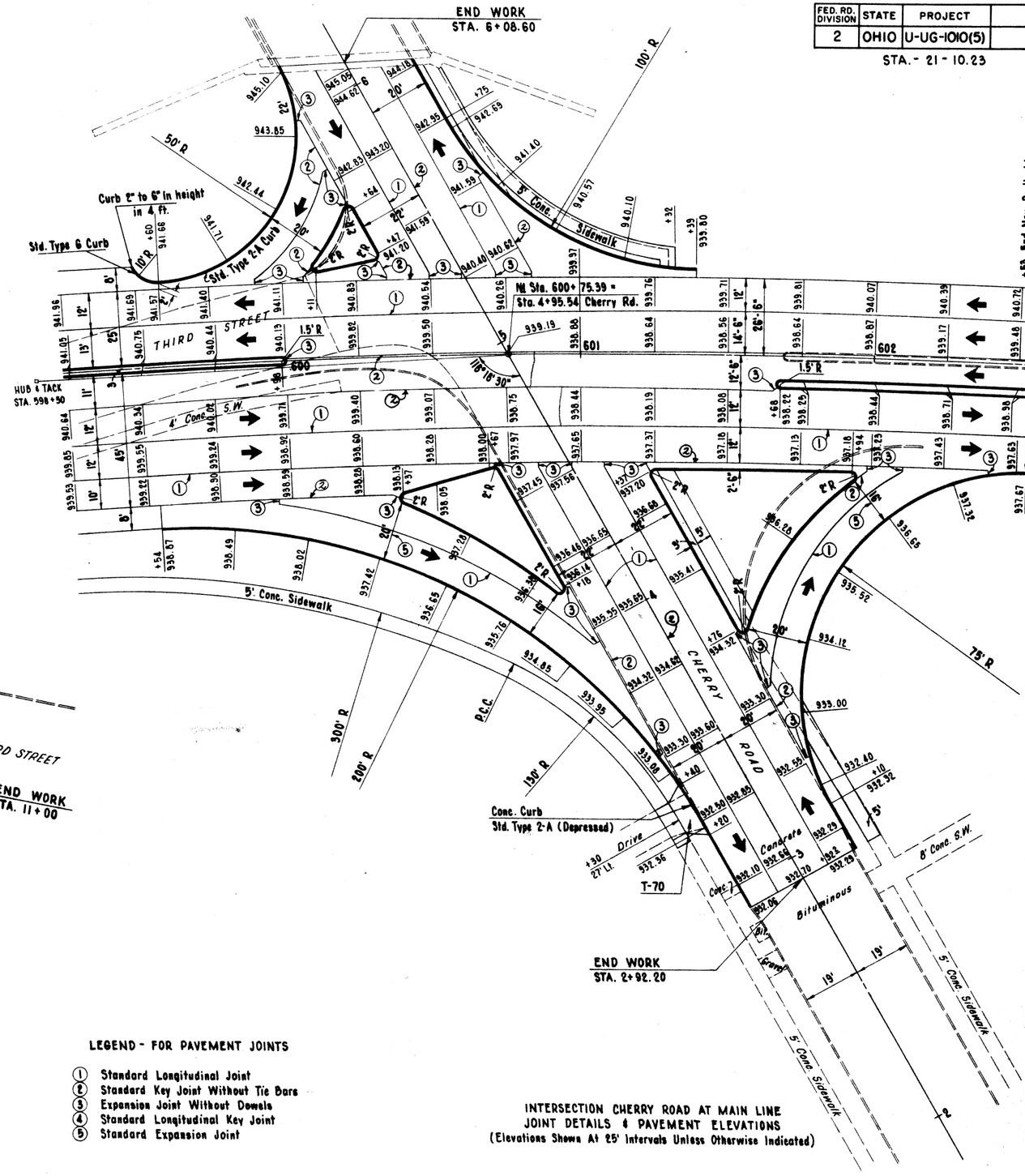
84



INTERSECTION CHARLES AVE. AT MAIN LINE & THIRD STREET
JOINT DETAILS & PAVEMENT ELEVATIONS
(Elevations Shown At 25' Intervals Unless Otherwise Indicated)

LEGEND - FOR PAVEMENT JOINTS

1. Standard Longitudinal Joint
2. Standard Key Joint Without Tie Bars
3. Expansion Joint Without Dowels
4. Standard Longitudinal Key Joint
5. Standard Expansion Joint

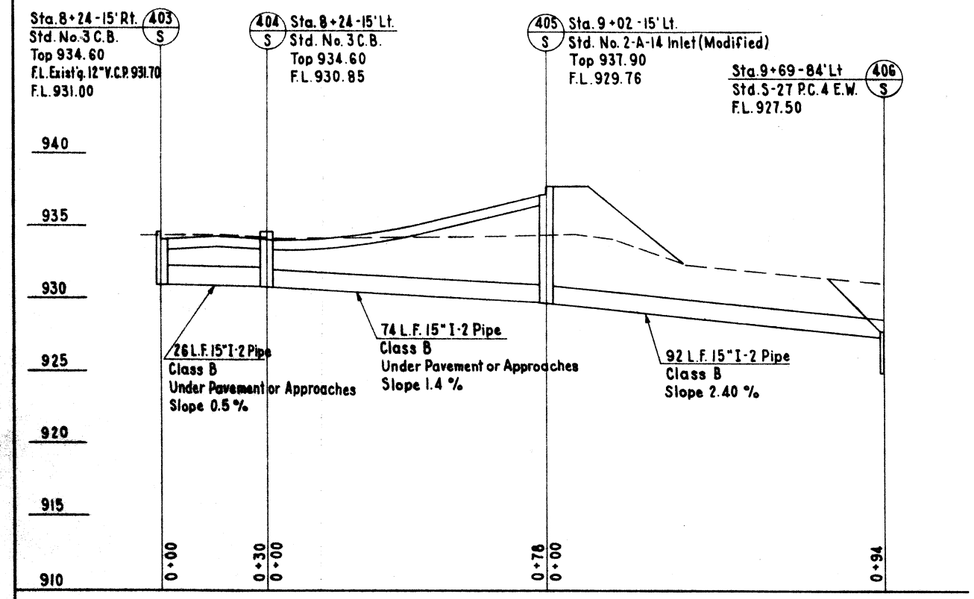


INTERSECTION CHERRY ROAD AT MAIN LINE
JOINT DETAILS & PAVEMENT ELEVATIONS
(Elevations Shown At 25' Intervals Unless Otherwise Indicated)

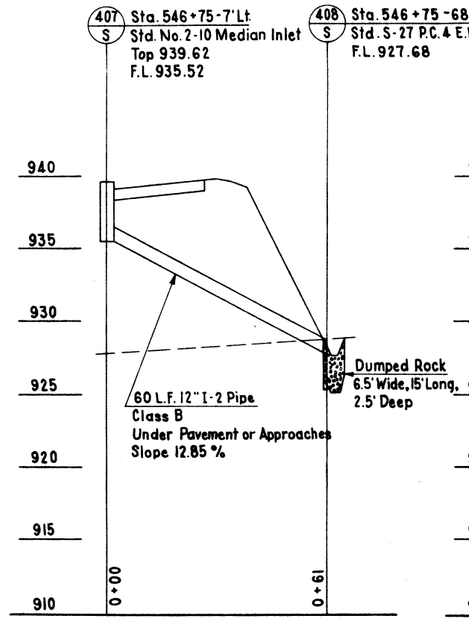
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-U6-1010(5)	

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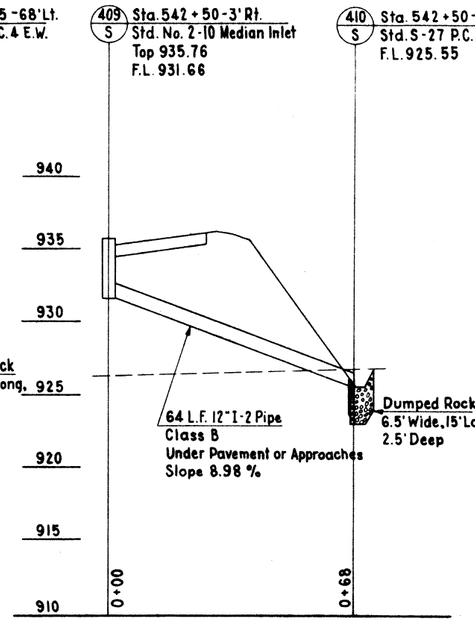
STA. - 21 - 10.23



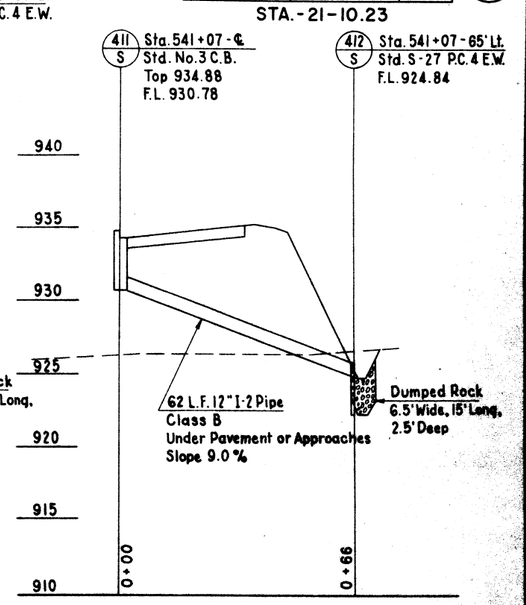
Scale: Hor. 1" = 20'
Vert. 1" = 5'



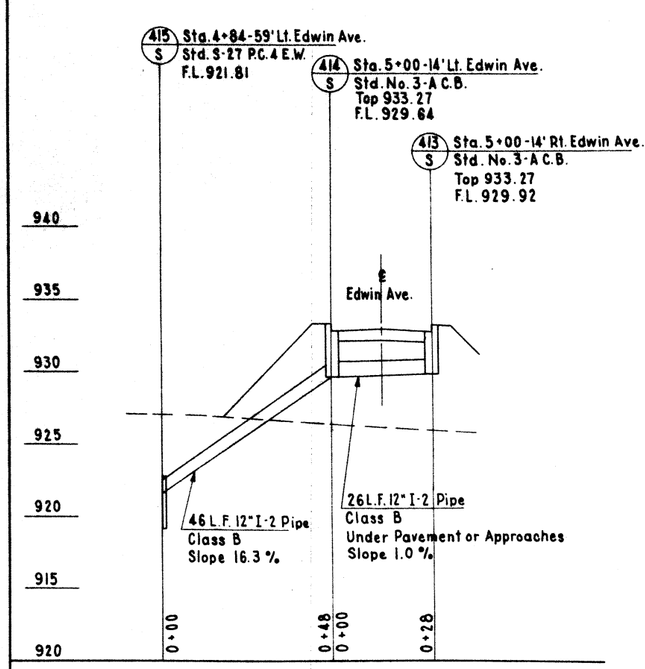
Scale: Hor. 1" = 20'
Vert. 1" = 5'



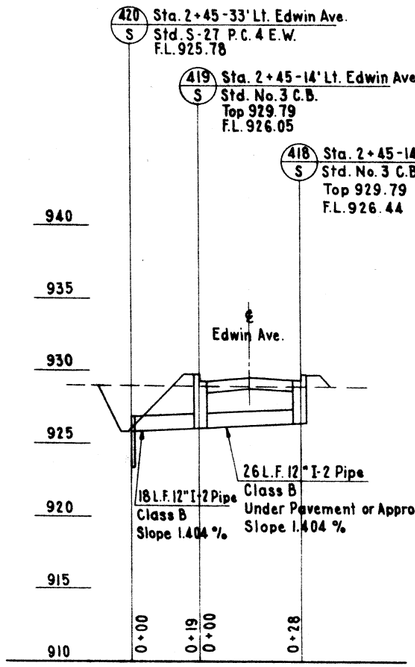
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Vert. 1" = 5'



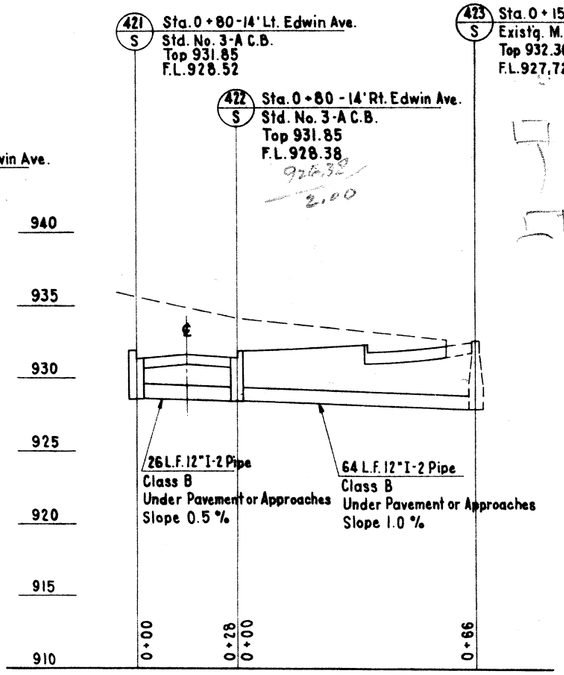
Scale: Hor. 1" = 20'
Vert. 1" = 5'



Scale: Hor. 1" = 20'
Vert. 1" = 5'

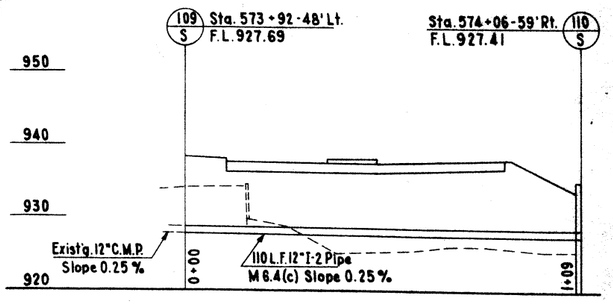


Scale: Hor. 1" = 20'
Vert. 1" = 5'



Scale: Hor. 1" = 20'
Vert. 1" = 5'

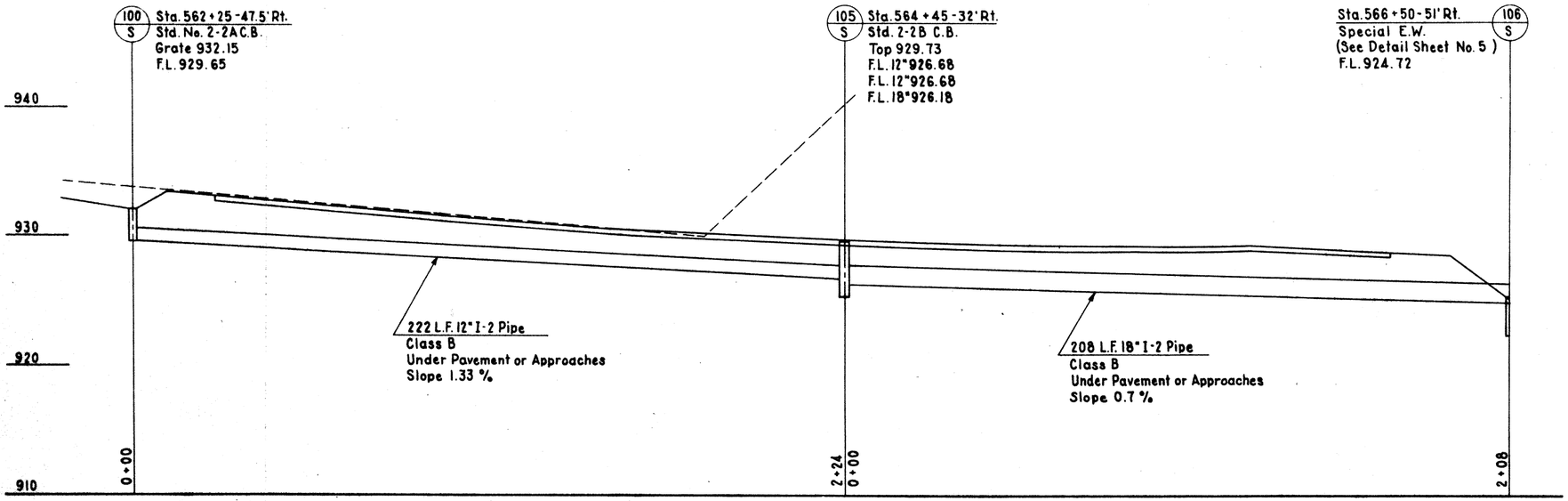
927.0 ℄
926.38

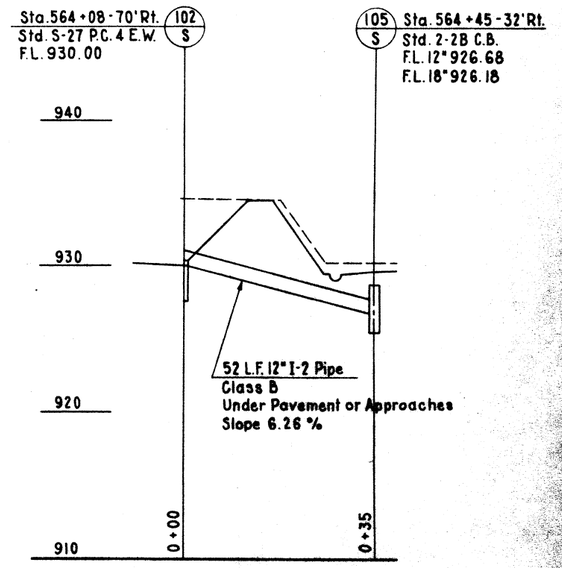


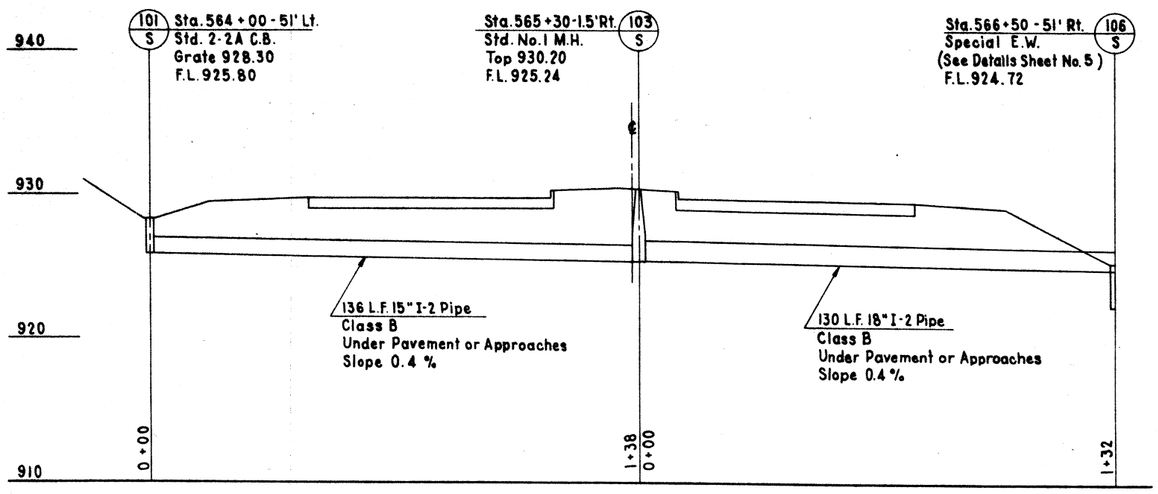
Scale: Hor. 1" = 20'
Vert. 1" = 10'

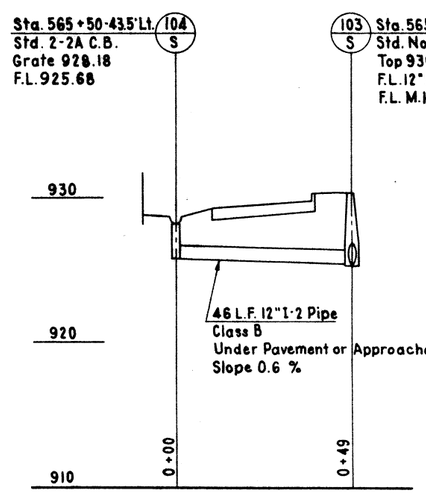
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

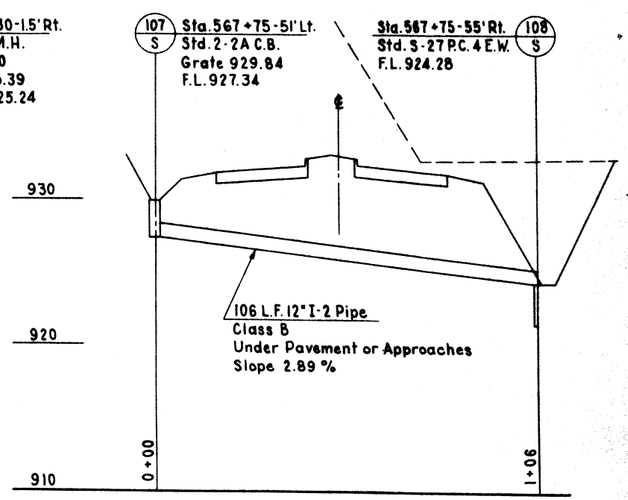
STA.-21-10.23











Scale: Hor. 1" = 20'
Vert. 1" = 5'

STORM SEWER PROFILES

FED. RD. DIVISION	STATE	PROJECT	
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202 S Sta. 578 + 25 - 37' Lt.
Std. 2-A-6 Inlet (Mod.)
Top 930.75
F.L. 926.65

Sta. 579 + 25-36' Rt. 205 S
Std. No. 1 M.H.
Top 930.30
F.L. 12" 926.03
F.L. 15" 925.52
F.L. 924.12

122 L.F. 12" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 0.5 %

221 S Sta. 582 + 25 - 3' Lt.
Std. No. 2-B Median Inlet
Top 929.79
F.L. 925.69

220 S Sta. 582 + 40 ℄
Std. No. 1 M.H.
Top 930.00
F.L. 12" 925.53
F.L. 923.01

Sta. 583 + 16 - 13' Rt. 220b S
12" x 36" x 36" Wye
F.L. 12" 924.50
F.L. 36" 922.78

Sta. 583 + 92 - 23.5' Rt. 222 S
12" x 36" x 36" Wye
F.L. 12" 924.00
F.L. 922.55

Sta. 584 + 75 - 32' Rt. 224 S
Std. No. 1 M.H.
Top 933.30
F.L. 12" 928.70
F.L. 922.30

Sta. 585 + 31 - 74' Rt. 226 S
F.L. 36" 922.00

12 L.F. 12" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 1.0 %

76 L.F. 36" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 0.3 %

78 L.F. 36" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 0.3 %

82 L.F. 36" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 0.3 %

70 L.F. 36" I-2 Pipe
Class B
Slope 0.42 %

223 S Sta. 583 + 75 - ℄
Std. No. 2-10 Median Inlet
Top 932.15
F.L. 928.02

222 S Sta. 583 + 92 - 23.5' Rt.
12" x 36" x 36" Wye
F.L. 12" 924.00
F.L. 36" 922.55

28 L.F. 12" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 13.5 %

225 S Sta. 585 + 01 - 32' Lt.
Std. 2-2A C.B.
Grate 934.80
F.L. 931.50

Sta. 584 + 75 - 32' Rt. 224 S
Std. No. 1 M.H.
Top 933.30
F.L. 12" 928.70
F.L. 922.30

66 L.F. 12" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 4.0 %

201 S Sta. 576 + 50 - 36' Lt.
Std. 2-A-6 Inlet (Modified)
Top 932.52
F.L. 928.42

Sta. 577 + 30 - 42' Rt. 204 S
Std. 2-A-8 Inlet (Modified)
Top 931.25
F.L. 12" 927.27
F.L. 926.90

Sta. 579 + 25 - 36' Rt. 205 S
Std. No. 1 M.H.
Top 930.30
F.L. 12" 926.03
F.L. 15" 925.52
F.L. 924.12
F.L. 12" 926.03

112 L.F. 12" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 1.0 %

192 L.F. 15" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 0.72 %

212 S Sta. 579 + 50 - 45' Lt.
Std. 2-2A C.B.
Grate 927.00
F.L. 924.50

213 S Sta. 579 + 95 - 36' Lt
Std. 2-A-6 Inlet (Modified)
Top 929.54
F.L. 12" 925.40
F.L. 924.23

216 S Sta. 580 + 35 - 36' Rt.
Std. No. 1 M.H.
Top 929.50
F.L. 12" 924.97
F.L. 18" 923.90
F.L. 30" 923.79
F.L. 923.54

42 L.F. 15" I-2 Pipe
Class B
Slope 0.6 %

80 L.F. 18" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 0.4 %

220c S Sta. 582 + 32 - 34' Rt.
8" - 90° Bend
F.L. 925.78

220d S Sta. 582 + 90 - 38' Rt.
Std. 2-A-6 Inlet
Top 929.57
F.L. 926.47
F.L. 925.47

Sta. 582 + 72 - 36' Rt. 220e S
8" x 8" x 8" Tee
F.L. 925.78

Sta. 583 + 10 - 87' Rt. 220f S
12" x 36" x 36" Wye
F.L. 12" 924.50
F.L. 36" 922.78

214 S Sta. 580 + 15 - 42.5' Lt.
Sta. 2-2A C.B.
Top 926.00
F.L. 925.50

213 S Sta. 579 + 95 - 36' Lt.
Std. 2-A-6 Inlet
Top 929.54
F.L. 12" 925.40
F.L. 924.23

16 L.F. 12" I-2 Pipe
Class B
Slope 0.5%

36 L.F. 8" I-2 Pipe
Class B
Slope 0.5 %

18 L.F. 8" I-2 Pipe
Class B
Slope 0.5%

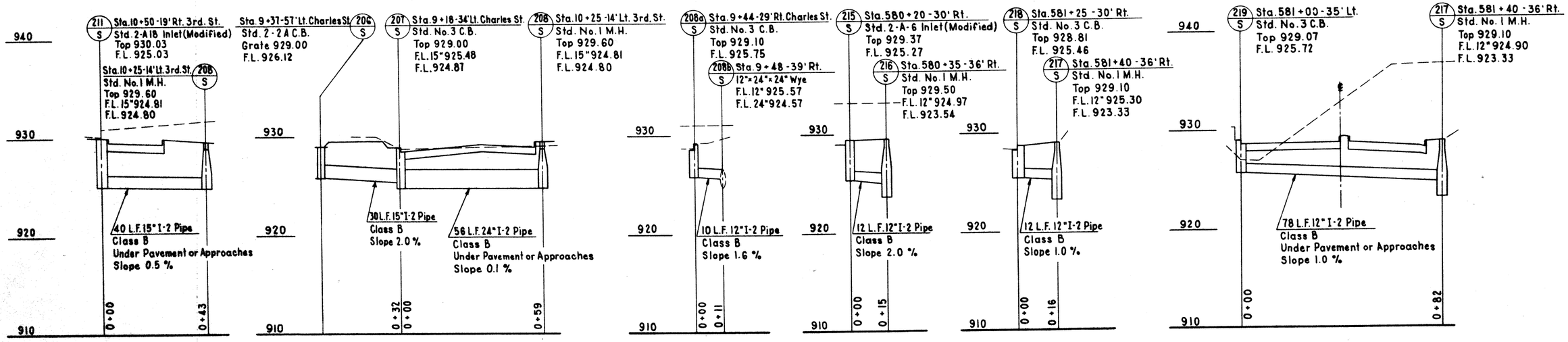
30 L.F. 12" I-2 Pipe
Class B
Under Pavement or Approaches
Slope 3.2 %

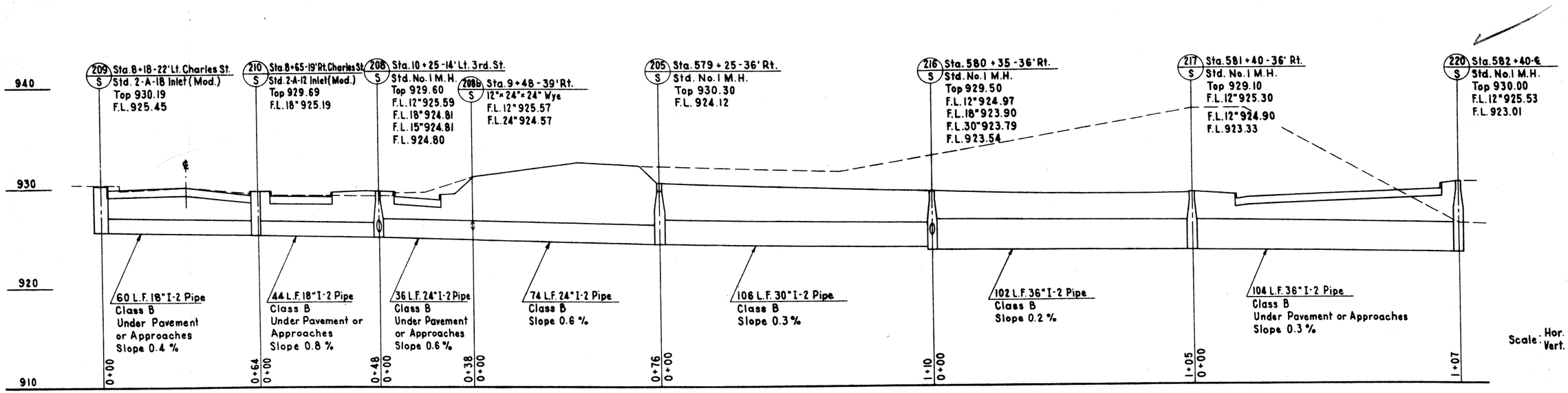
Scale: Hor. 1" - 20'
Vert. 1" - 5'

STORM SEWER PROFILES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

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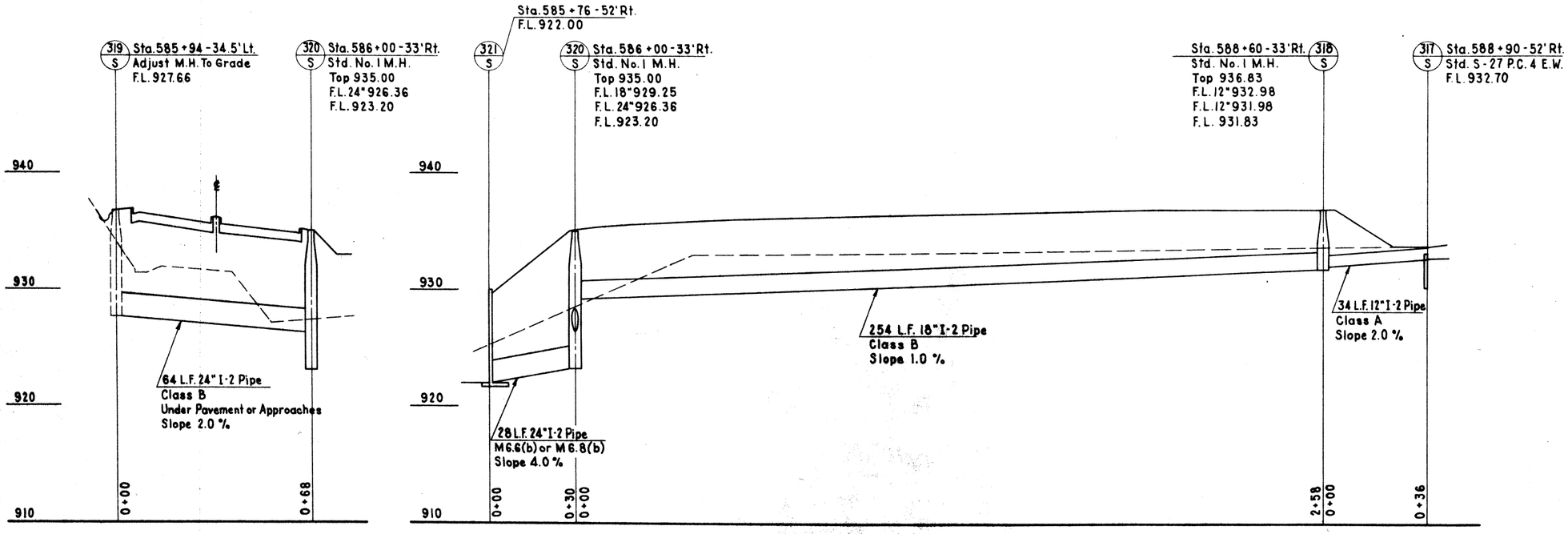


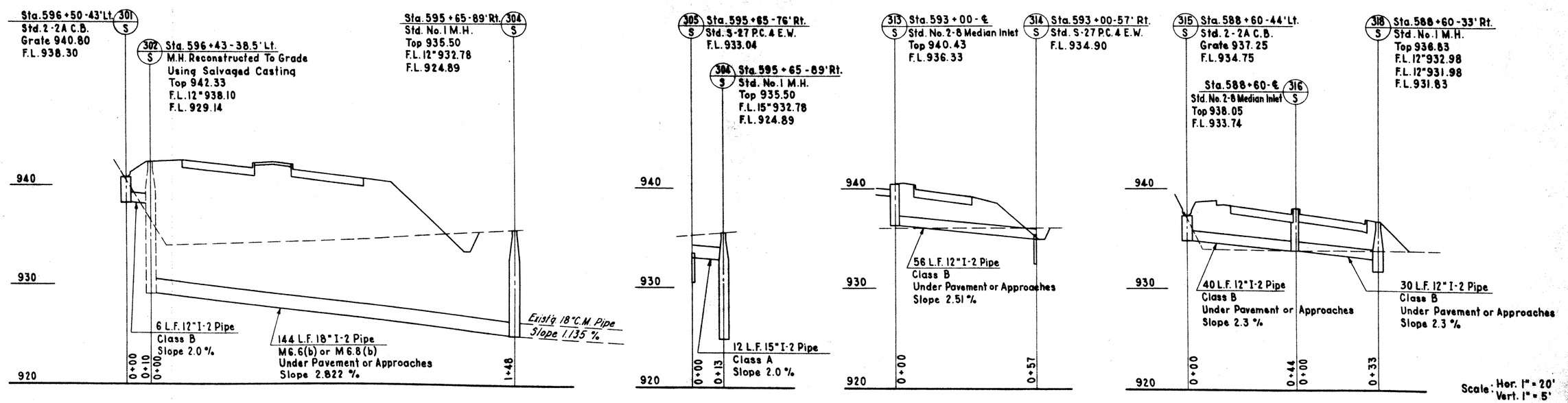
STORM SEWER PROFILES

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-U6-1010(5)	

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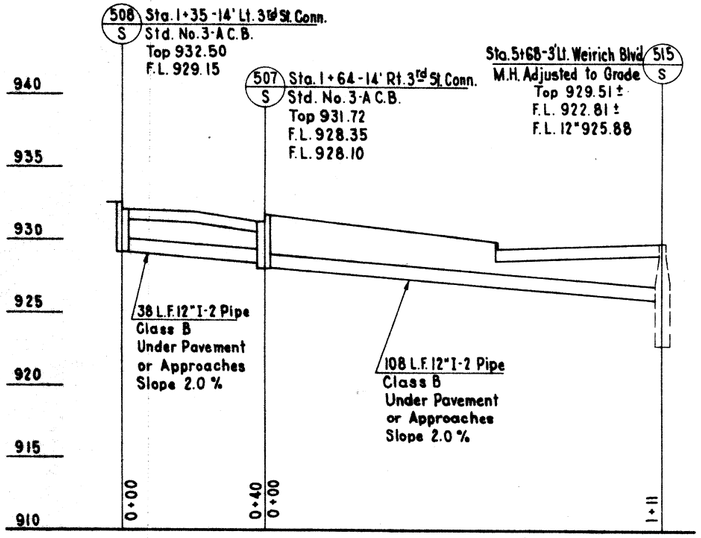


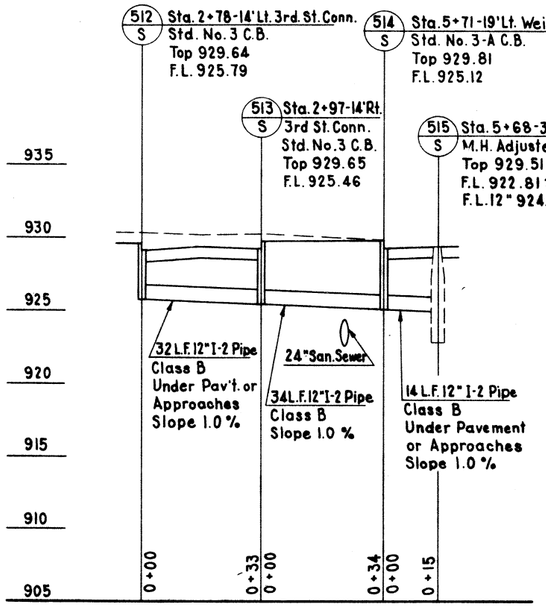
STORM SEWER PROFILES

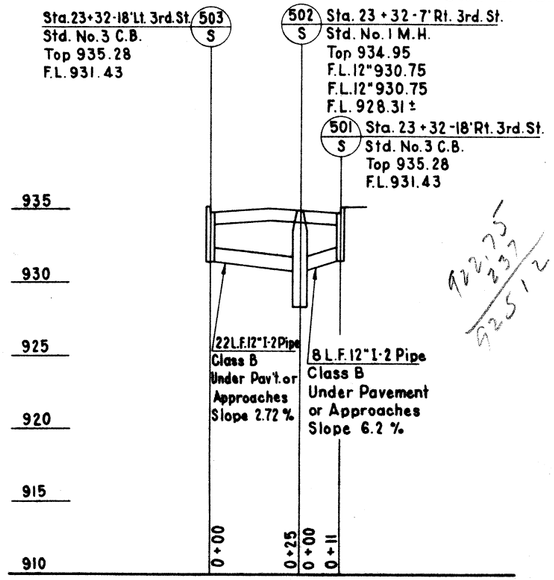
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

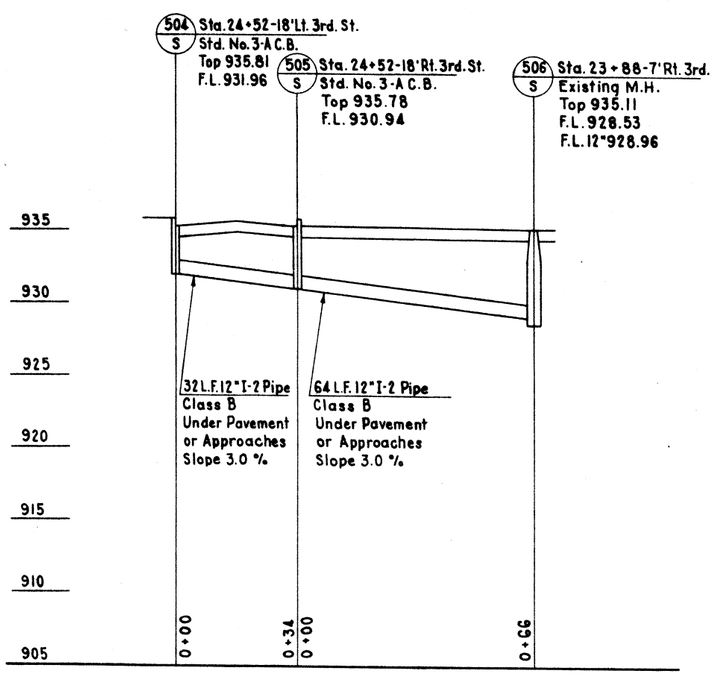
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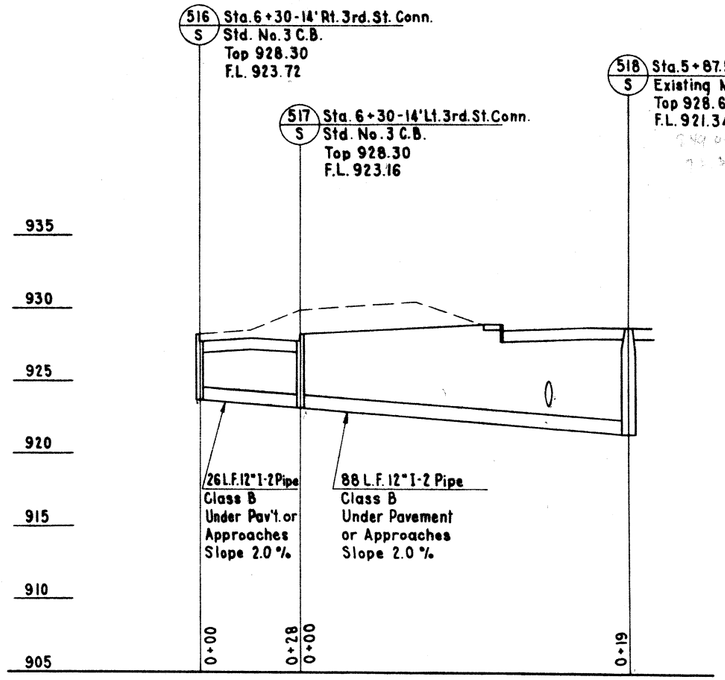
STA. -21-10.23











Scale : Hor. 1" = 20'
Vert. 1" = 5'

STORM SEWER PROFILES

FED. RD. DIVISION	STATE	PROJECT	
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601 S Sta. 600+92 - ℄
Std. No. 2-G Median Inlet
Top 940.63
F.L. 936.53

602 S Sta. 600+30-20' Rt.
M.H. Reconstructed To Grade
Top 939.21
F.L. 12" 935.18
Exist'g. Top 936.90
Exist'g. F.L. 921.81

40 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 3.2 %

940 935 930 925 920 915 910
0+00 0+42

603 S Sta. 600+50-76' Rt.
Std. No. 2-A-10 Inlet (Modified)
Top 937.24
F.L. 933.14

604 S Sta. 600+50-49' Rt.
Std. No. 2 M.H.
Top 938.78
F.L. 12" 932.85
F.L. 12" 930.87
F.L. 923.00 ±

Sta. 4+00-22' Rt. 605 S
Std. No. 2-A-14 Inlet (Modified)
Top 935.91
F.L. 931.81

26 L.F. 12" I-2 Pipe
Class B
Under Pav't.
or Approaches
Slope 1.0 %

Exist'g. 18" R.C.P.
3.6 % ±

92 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 1.0 %

940 935 930 925 920 915 910
0+00 0+29 0+00 0+94

606 S Sta. 601+62-31' Lt.
M.H. Adjusted To Grade
F.L. 12" 932.94

607 S Sta. 601+90-9' Rt.
Std. No. 2-B Median Inlet
Top 938.24
F.L. 933.44

46 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 1.0 %

72 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 1.0 %

940 935 930 925 920 915 910
0+00 0+50 0+00 0+76

606 S Sta. 602+60-37' Rt.
Std. No. 2-A-6 Inlet (Modified)
Top 938.30
F.L. 934.20

609 S Sta. 606+35 - ℄
Adjust Exist'g. Inlet
Top 941.43
F.L. 12" 935.33

610 S Sta. 606+35-54' Rt.
Std. S-27 P.C. 4 E.W.
F.L. 934.16

Existing 12" R.C.P.
2.173 %

Dumped Rock
6.5' Wide, 15' Long,
2.6' Deep

6 L.F. 12" I-2 Pipe
Class B
Under Pavement
or Approaches
Slope 2.173 %

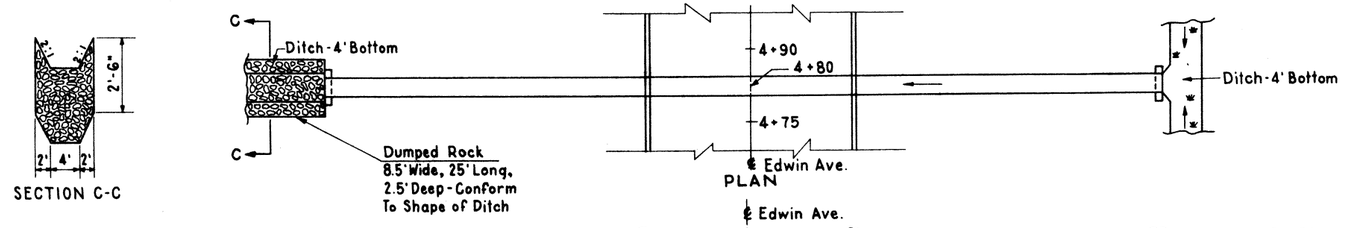
945 940 935 930 925 920 915
0+00 0+54

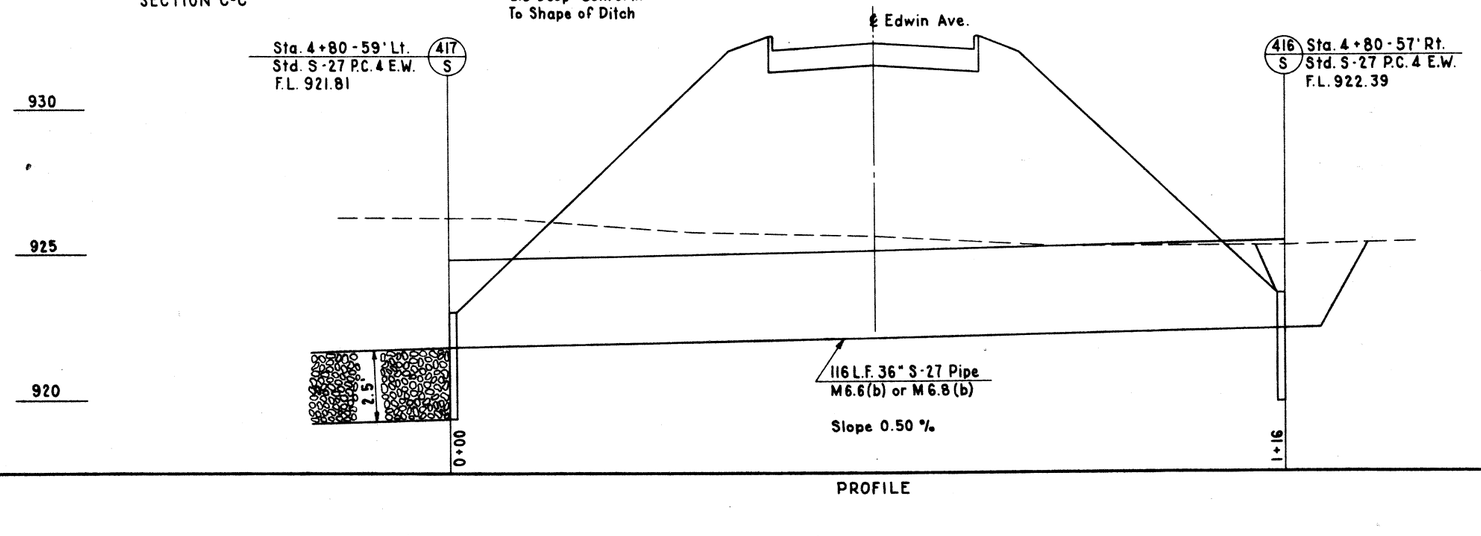
Scale: Hor. 1" = 20'
Vert. 1" = 5'

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-U6-1010(5)	

STA.-21-10.23

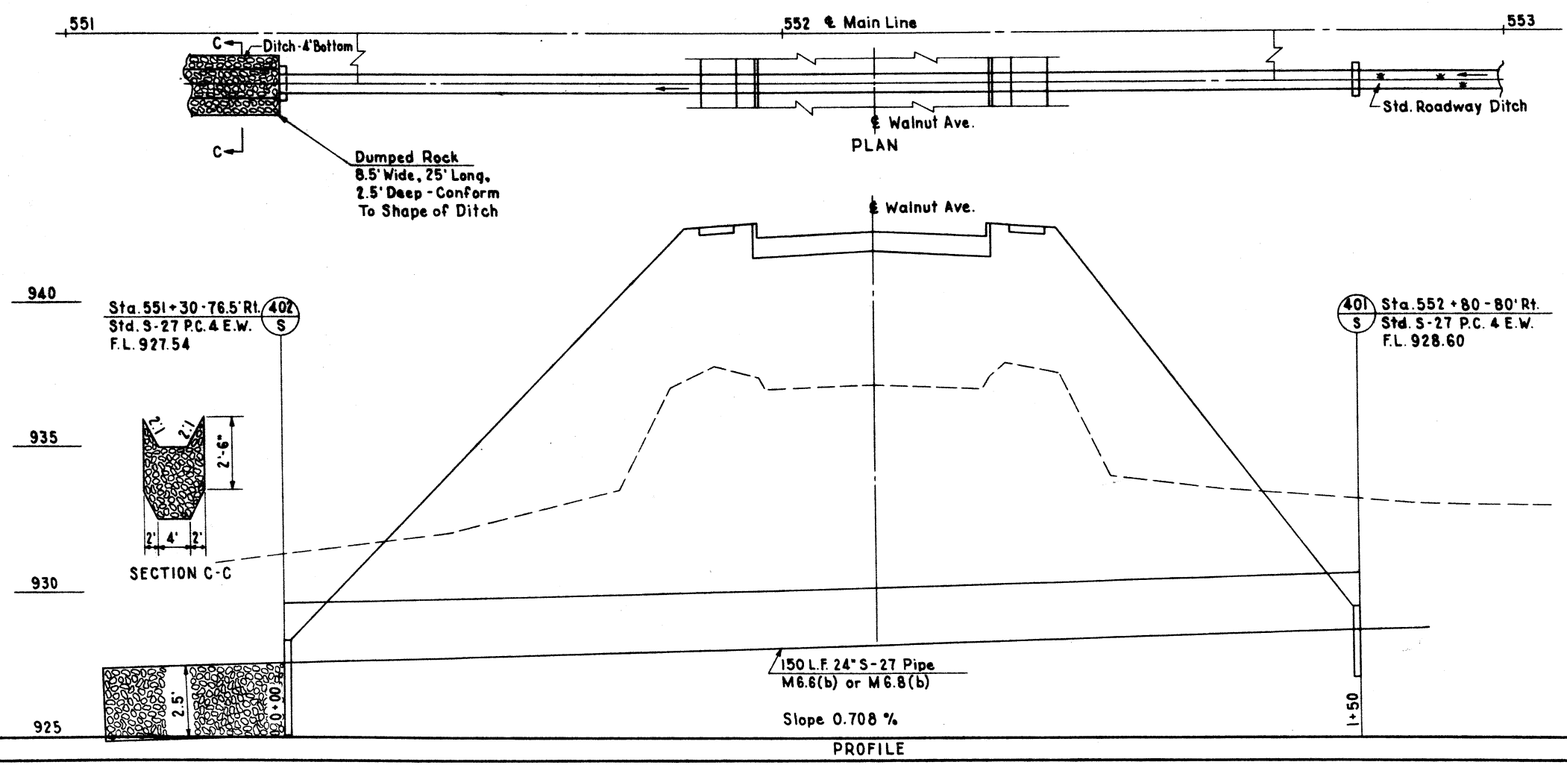
92





Area = 22.84 Ac.
Q_{25} = 40.0 C.f.s.

Scale: Hor. 1" = 10'
Vert. 1" = 2.5'



Area = 4.81 Ac.
Q_{25} = 10.0 C.f.s.

Scale: Hor. 1" = 10'
Vert. 1" = 2.5'

CULVERT DETAILS EDWIN AVE. STA. 4+80 ℄ STA. 551+30 TO STA. 552+80

FED. RD. DIVISION	STATE	PROJECT	
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701 S Sta. 542+06-60' Rt.
Std. No. 2 M.H.
Top 928.0
F.L. 918.60 (To Meet Exist'g. F.L.)

702 S Sta. 546+00-65.5' Rt.
Std. No. 2 M.H.
Top 928.0
F.L. 918.68

930
925
915

Proposed Grade Over Pipe

Exist'g. 54" San. Sewer

0+00

390 L.F. 48" I-2 Pipe Special
M 6.6 (b)
Slope 0.021 %

3+90
0+00

396 L.F. 48" I-2 Pipe Special
M 6.6 (b)
Slope 0.021 %

Match Line Sta. 2+00

703a S Sta. 552+14-66' Rt.
Std. No. 2 M.H.
Top 942.35
F.L. 918.81

703 S Sta. 550+00-66.5' Rt.
Std. No. 2 M.H.
Top 929.6
F.L. 918.77

704 S Sta. 554+00-66' Rt.
Std. No. 2 M.H.
Top 934.2
F.L. 918.85

Proposed Grade Over Pipe

WALNUT ROAD

925
920
915

Match Line Sta. 2+00

3+96
0+00

212 L.F. 48" I-2 Pipe Special
M 6.6 (c)
Slope 0.021 %

168 L.F. 48" I-2 Pipe Special
M 6.6 (c)
Slope 0.021 %

4+00
0+00

Match Line Sta. 0+50

Sta. 558+47.5-61.5' Rt. 705 S
Std. No. 2 M.H.
Top 935.5
F.L. 918.95 ± (Meet Exist'g. F.L.)

Proposed Grade Over Pipe

930
925
920
915

Match Line Sta. 0+50

Exist'g. 48" R.C. Pipe San. Sewer

452 L.F. 48" I-2 Pipe Special
M 6.6 (b)
Slope 0.021 %

4+52

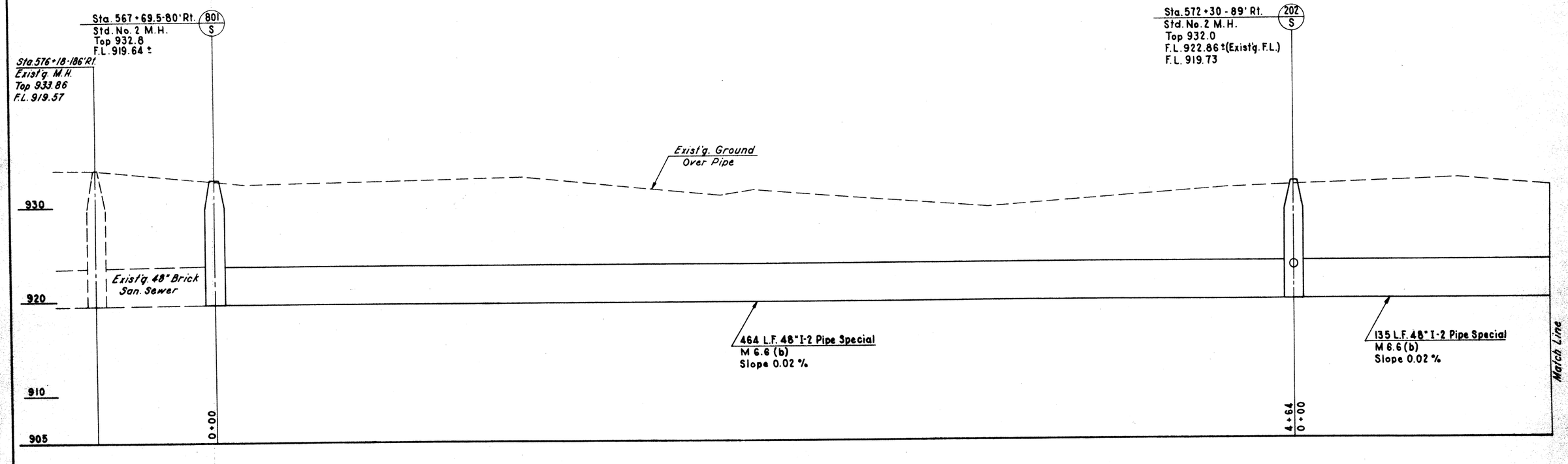
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Vert. 1" = 5'

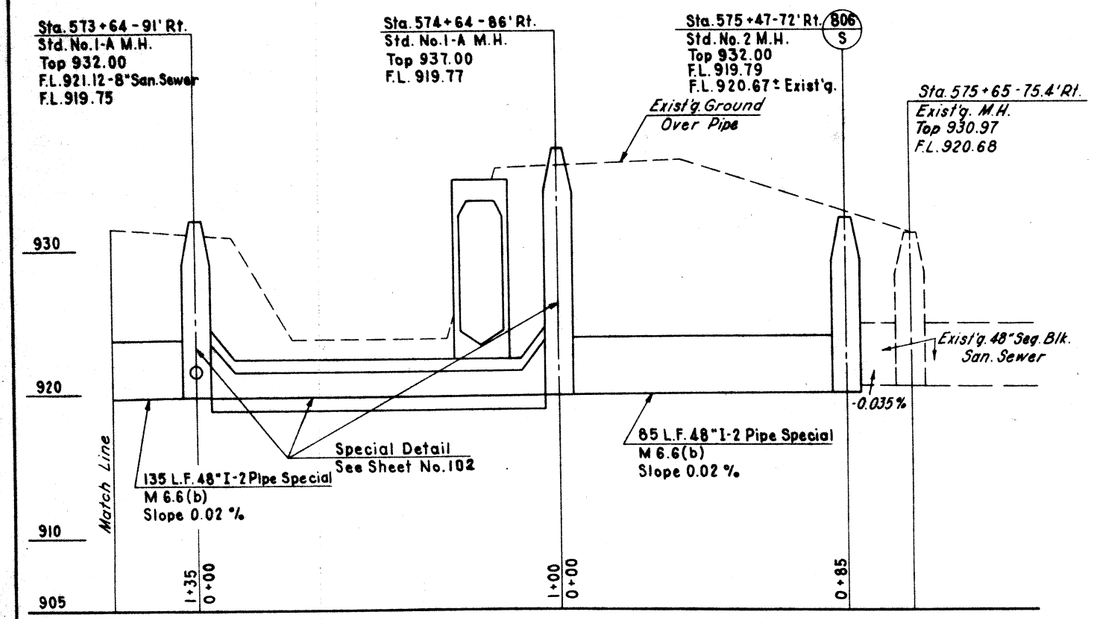
SANITARY SEWER PROFILE

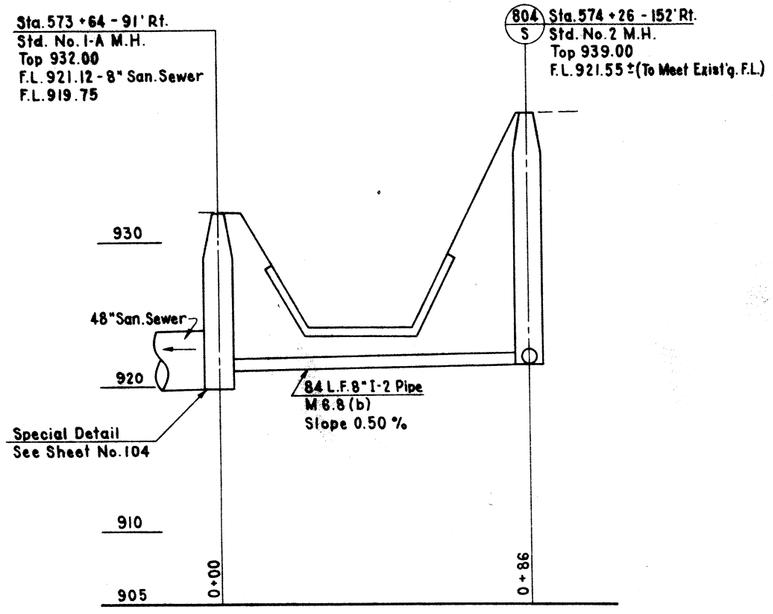
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

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STA.-21-10.23







Scale: Hor. 1" = 20'
Vert. 1" = 5'

SANITARY SEWER PROFILE

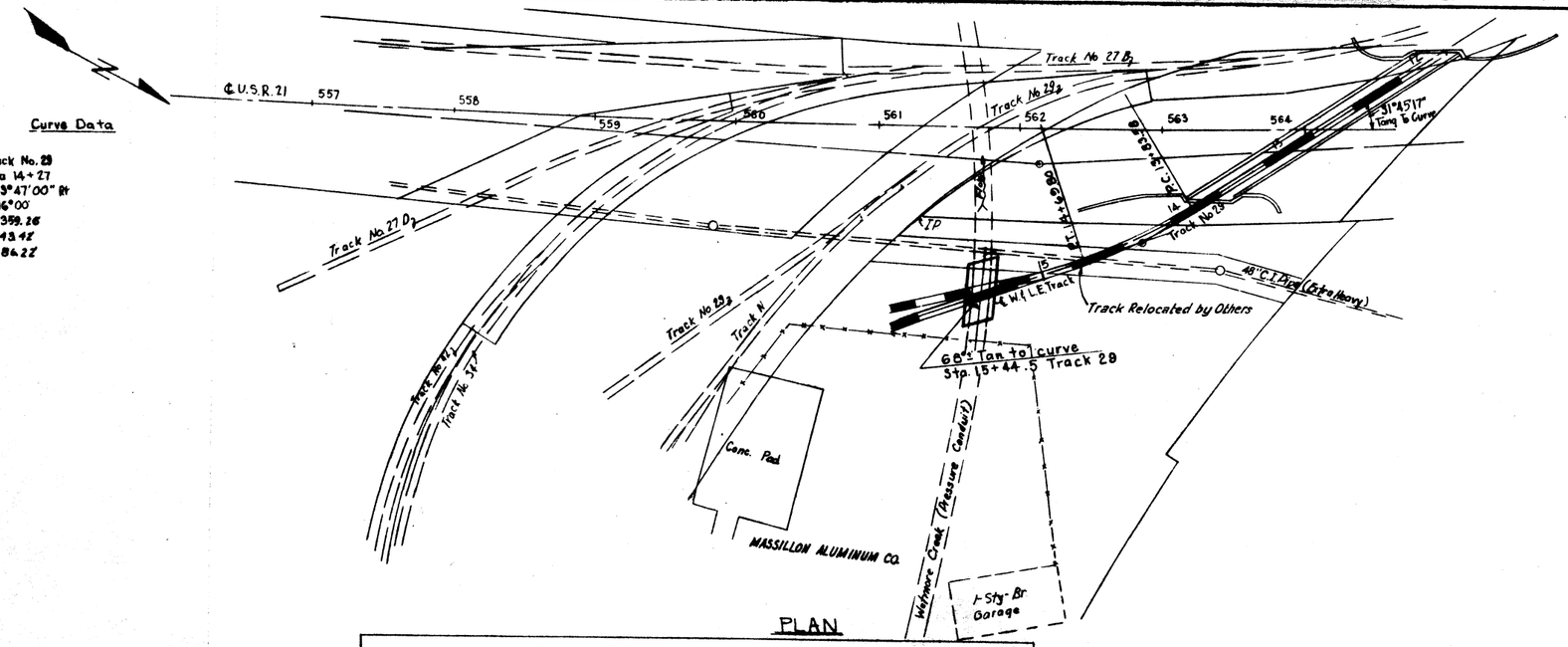
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

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STA-21-10.23

Curve Data

Track No. 29
P.I. Sta 14+27
Δ = 13°47'00" Rt
D = 16°00'
R = 359.26
T = 43.42
L = 86.22



PLAN

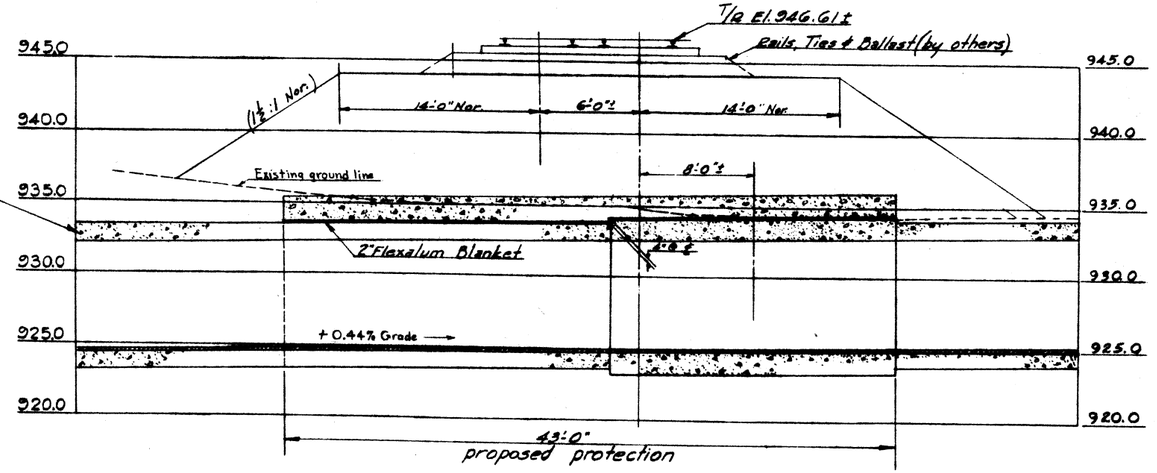
ESTIMATED QUANTITIES

Item	Totals	Unit	Description
E-2		L.S.	Cofferdams, Cribs & Sheeting
E-2	280.	C.Y.	Unclassified excavation
S-1	134.	C.Y.	Class "C" concrete
S-4	18347.	lbs.	Reinforcing steel
S-9	1540.	Sq.ft.	2" Preformed expansion filler (Flexalum)

EXISTING STRUCTURE

14'± Span x 7'-9" Height Reinforced Concrete Pressure Conduit

(To remain in place)



Proposed protection to be located to fit final railroad alignment.

LONGITUDINAL SECTION THRU CONDUIT
LOOKING NORTH

NOTES:-

- Design Specification: This structure conforms to the requirements of Design Specifications for Highway Structures of the State of Ohio, Dept. of Highways dated 9-1-57, revised 2-21-58.
- Modifications to the above specification:-
  (a) Material specification shall govern except specification for Flexalum or approved equal as follows:-

  (b) Design procedures, allowable stresses and distribution of live load pertaining to railroads are to follow A.R.E.A. Specifications (1959)

- Foundation bearing pressure: Footings are designed for a maximun bearing pressure of 2.75 tons per sq. ft.
- All concrete to be Class "C."

PROPOSED MINOR STRUCTURE

Type: Reinforced Concrete Saddle protection for Pressure Conduit.
Span: 14'-10" normal x 43.0' Long
Skew: 22°± Rt. Fwd.
Loading: Coopers E-72
Alignment: Parallel to existing Conduit (on 8° curve)

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ROCHESTER, PENNSYLVANIA

SITE PLAN

W&LE RR OVER WETMORE CREEK PRESSURE CONDUIT - MASSILLON, OHIO.

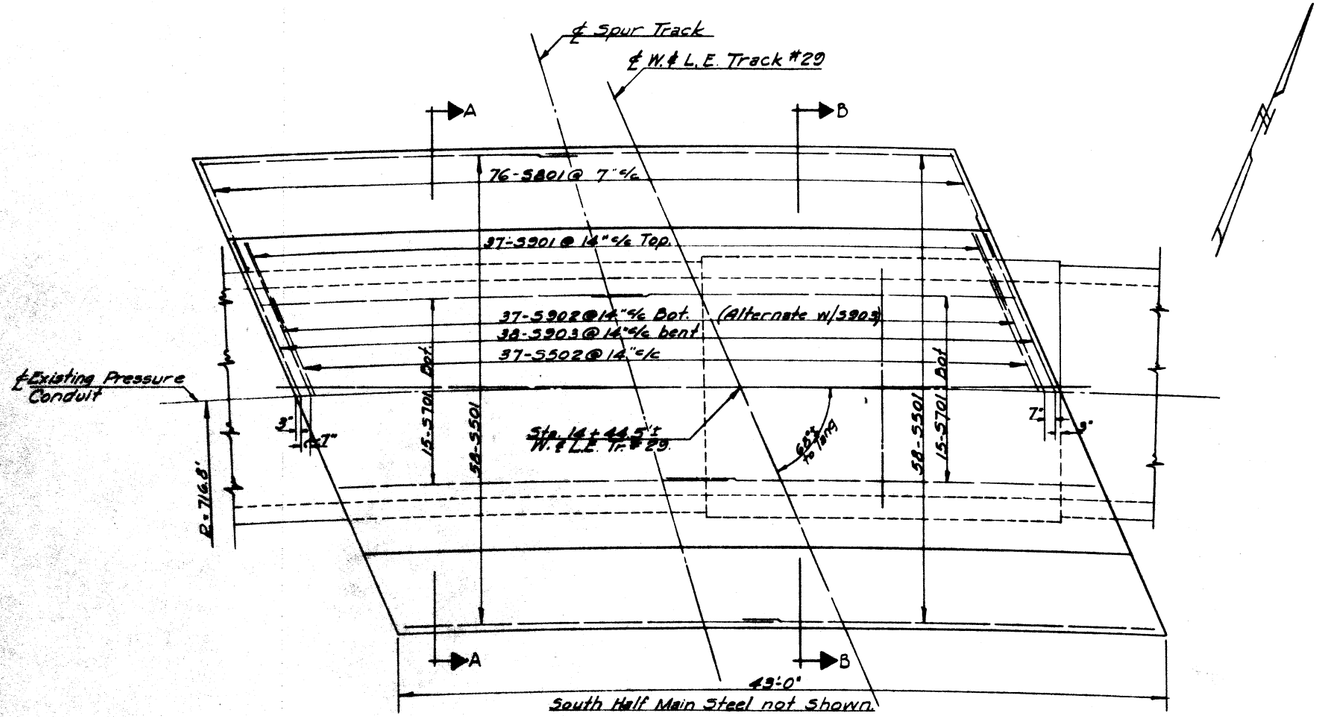
STARK COUNTY — U.S.R. 21 Rt. of Sta 561+70

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
HGW	HGW		S.J.F. J.D.K.		

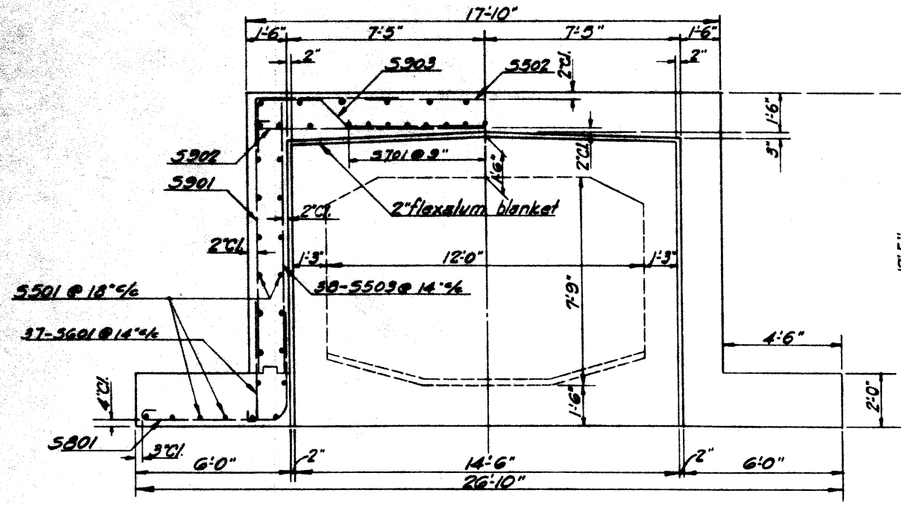
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2	OHIO	U-UG-1010(5)	

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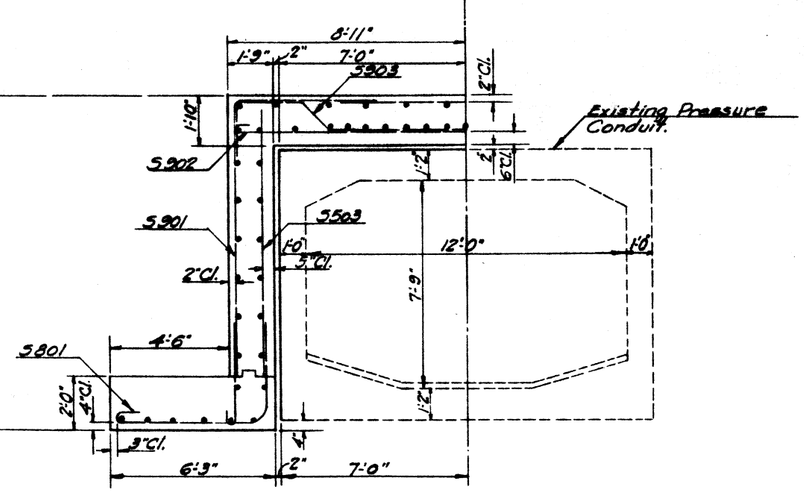
STA-21-10.23



PLAN



SECTION-B B

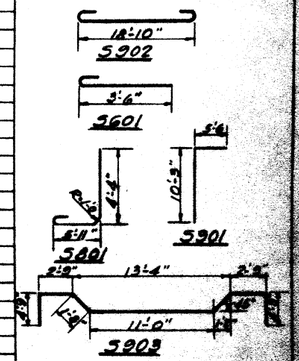


SECTION A A

REINFORCING·STEEL·LIST.

Mark	No.	Length	Weight	Shape
5501	116	22'-4"	2702.	5
5502	37	9'-9"	905.	5
5503	76	10'-0"	793.	5
5601	74	4'-2"	463.	B
5701	30	22'-6	1380.	5
5801	76	11'-8"	2367.	B
5901	74	15'-9"	8963.	B
5902	37	21'-4"	2684.	B
5903	38	29'-4"	3690.	B
Replacement Bars				
RE500	1	5'-7		5
RE600	2	4'-2"		B
RE700	1	6'-2"		5
RE800	2	4'-4		5
RE900	1	6'-10"		5

Bending Diagrams



Replacement bars are not required if reinforcing steel is fabricated from stock previously tested and approved by the Ohio Highway Testing Laboratory

Bar size is indicated in the bar mark. The first digit where three digits are used, indicates the bar size number.

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ROCHESTER, PENNSYLVANIA

CONCRETE SADDLE PROTECTION

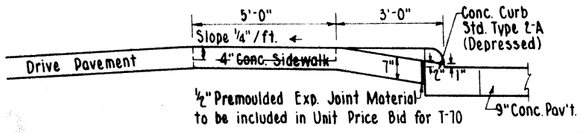
W.℄L.E.RR over WETMORE CREEK, PRESSURE CONDUIT ~ MASSILLON, OHIO.

STARK COUNTY U.S.R. 21
Rt. of Sta. 561+74 ±

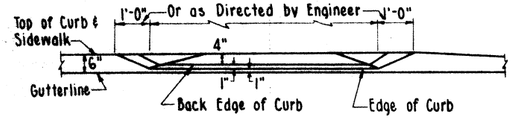
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	APPROVED
DWP	TGP		SJF		

BEAVER VALLEY BLUEPRINTING SUPPLIES COMPANY BEAVER, PA. 15009

FED. RD. DIVISION	STA.
2	OHIO

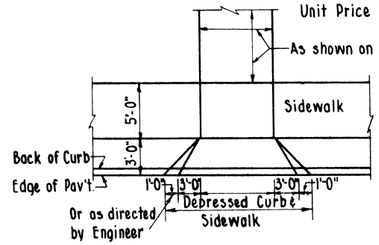


DETAIL OF CURB & SIDEWALK AT DRIVES
No Scale

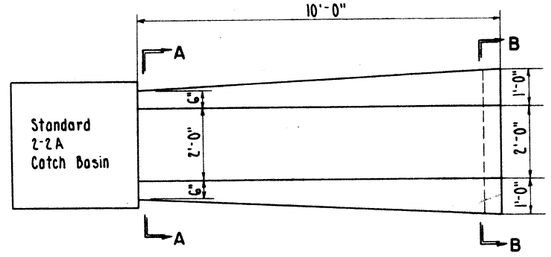


ELEVATION OF CURB AT DRIVEWAYS
No Scale

NOTE: Payment for Curb Section on T-10 Pavement between edge of through Pavement & Sidewalk is Included in the Unit Price Bid for Item T-10

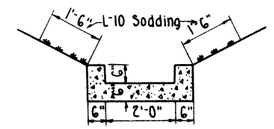


DETAIL OF PRIVATE DRIVES
No Scale

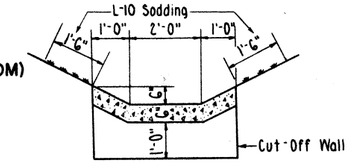


STANDARD PAVED GUTTER
TYPE I MODIFIED AS PER PLAN (2' WIDTH BOTTOM)
Scale: ½" = 1'-0"

NOTE: For Details and Notes not shown Refer to Std. Const. Dwg. 1-14 G

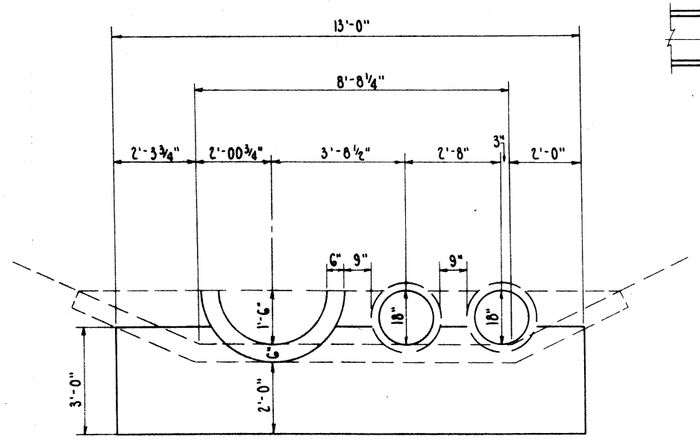


SECTION A-A

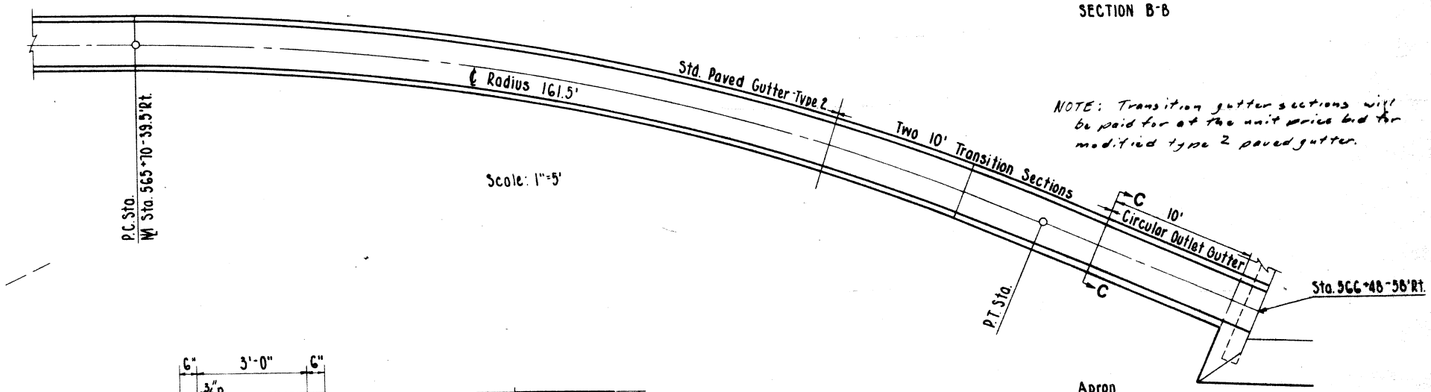


SECTION B-B

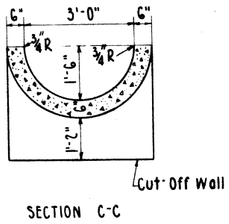
SIDE VIEW



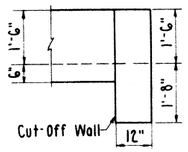
SECTION B-B
END VIEW
DETAIL SPECIAL ENDWALL



NOTE: Transition gutter sections will be paid for at the unit price bid for modified type 2 paved gutter.

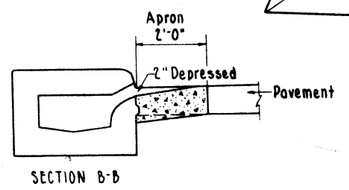


SECTION C-C

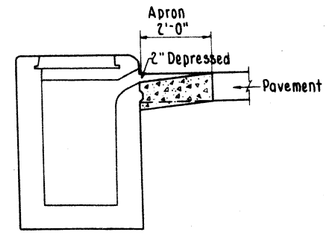


SIDE VIEW

PAVED GUTTER STD. TYPE 2 (MODIFIED) AS PER PLAN
CIRCULAR OUTLET GUTTER
Scale: 1"=2'



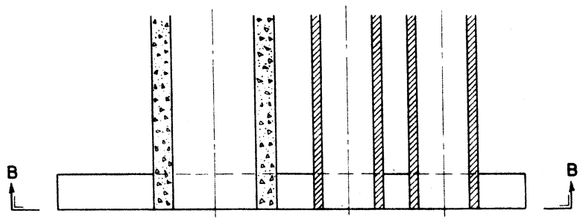
SECTION B-B



SECTION A-A

PAVED SHOULDER INLET
STANDARD NO. 2 (MODIFIED)
To be Used with 1-12 Combination Curb & Gutter Std. Type 2
(See Standard Construction Drawing 1-8 Inlet No. 2A)

Scale: ½" = 1'-0"



PLAN VIEW
DETAIL SPECIAL ENDWALL
See Plan Sheet No. 24

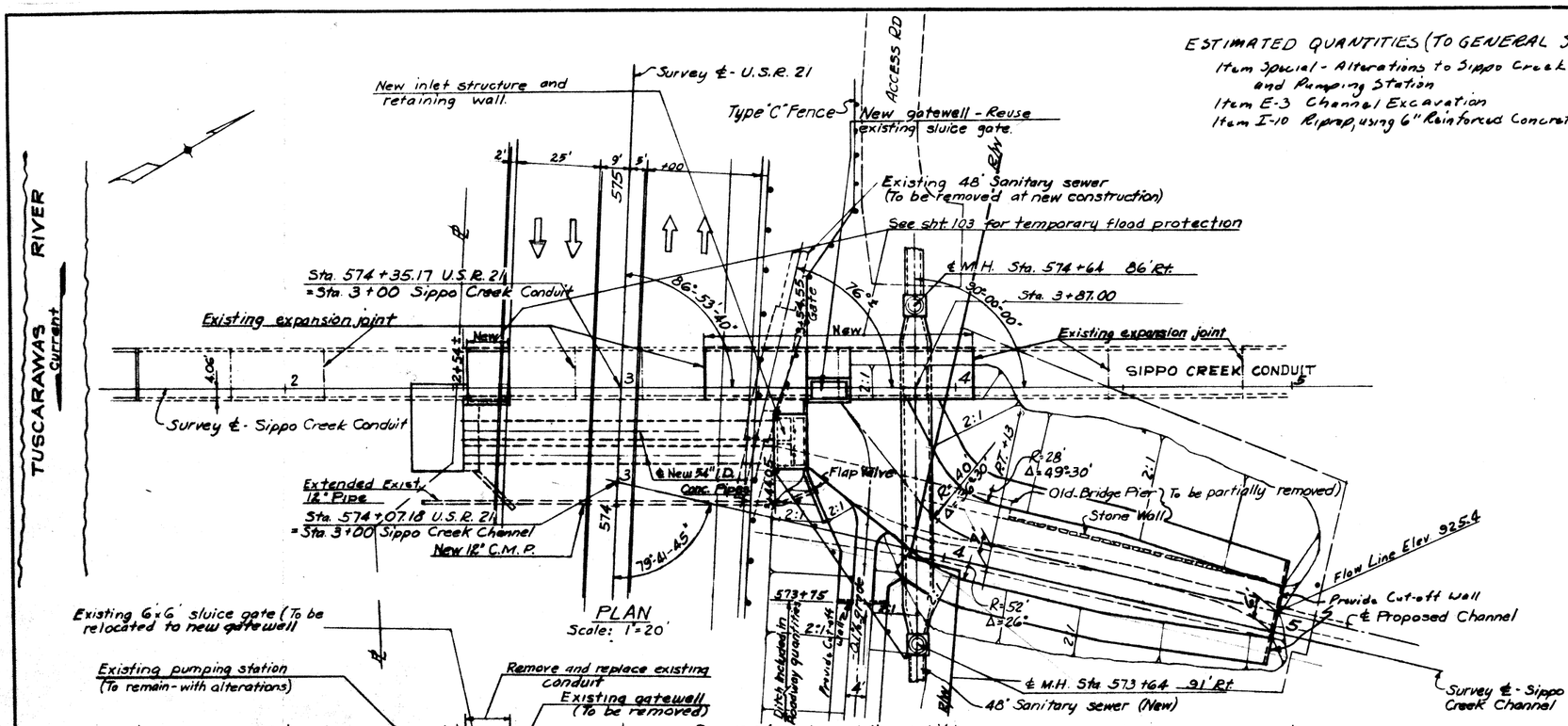
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010 (5)	

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STA-21-10.23

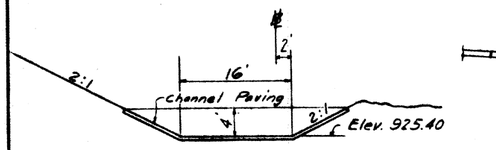
ESTIMATED QUANTITIES (TO GENERAL SUMMARY)

Item Special - Alterations to Sippo Creek Conduit and Pumping Station	Lump Sum
Item E-3 Channel Excavation	1700 Cu. Yds.
Item I-10 Riprap, using 6" Reinforced Concrete Slab	829 Sq. Yds.

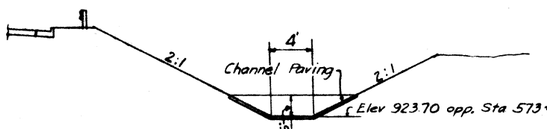


PROFILE ALONG CONDUIT BASELINE

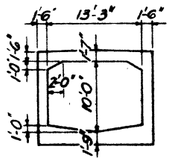
Elevations shown are invert for existing and proposed flow line.



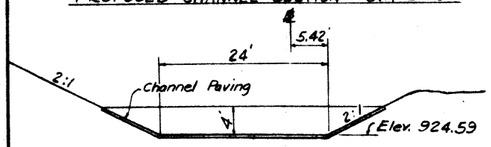
PROPOSED CHANNEL SECTION @ STA 5+00



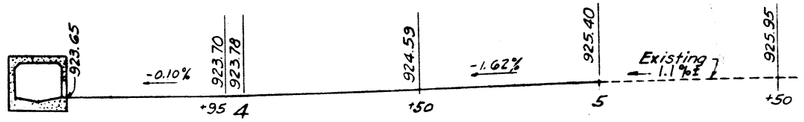
TYPICAL ROADWAY DITCH SECTION



PROPOSED SECTION



PROPOSED CHANNEL SECTION @ STA. 4+50



PROFILE OF PROPOSED CHANNEL

PROPOSED WORK.

1. The contractor shall secure written approval of his proposed construction procedure and sequence from the Corp of Engineers, U.S. Army, Huntington, W. Va. prior to beginning work on this item.
2. Remove section of existing pressure conduit and build new 48" sanitary sewer transition section between manholes. Divert sewer flow from existing to new section.
3. Remove section of existing pressure conduit and build new gatewell section and new conduit section, installing existing 6'x6' sluice gate.
4. Remove existing gatewell conduit section and build new pressure conduit. Remove trash screen and inlet facilities at pump house.
5. Lay new 54" pipes, repairing pump house wall as required. Build new inlet structure and retaining wall. Extend existing 12" pipe and reinstall flap valve.
6. Install existing 5'x5' sluice gates with manual controls, and trash screen at new inlet structure.
7. Install new ladder in existing discharge well.
8. Make backfill around pump house, 54" pipes and inlet structure.
9. Excavate channel; place roadway embankment; pave new creek channel and roadway drainage ditch.
10. Seed area bared by channel excavation in conjunction with seeding of roadway embankment slopes.
11. Make alterations to electric service as per Plans.
12. Maintain conduit flow and provide flood protection during construction.

GENERAL NOTES

1. Copper water stop to be installed in all conduit monolith joints.
2. Partial removal of old bridge pier and stone wall included with E-3 for payment.
3. See Sheets No. 104 & 105 for Pumping Station Electric Service Alterations.
4. See Sheet No 103 for suggested details of Flood Protection during construction, also see General Note Sheet No. 10 and Special Drainage Structure notes on Sheet 118-A.

Construction and materials shall be governed by the provisions of Construction and Material Specifications, State of Ohio, Dept. of Highways, dated January 1, 1959 or as approved by the Corps of Engineers, U.S. Army.

Foundation Bearing Pressure: Footings are designed for a maximum bearing pressure of 3# per sq. ft.

- For Location see Roadway Plan Sheet No. 25

ESTIMATED-MAJOR-QUANTITIES

Item	Total	Unit	Description
E-2	L.S.	lump sum	Cofferdams, cribs and sheeting
E-2	900	cu. yds.	Unclassified excavation
S-1	325	cu. yds.	Class 'C' concrete, pressure conduit & gatewell
S-1	39	cu. yds.	Class 'C' concrete, sewer transition section
S-1	78	cu. yds.	Class 'C' concrete, inlet structure & retaining wall
S-1	1	cu. yds.	Class 'C' concrete, pump house alterations
S-4	62,578	lbs.	Reinforcing steel
S-7	L.S.	lump sum	Structural Steel (gratings)
S-9	389	sq. ft.	½" Preformed Expansion joint filler Sec. M-10.02
S-9	135	lin. ft.	Folded copper strip (18" wide x 16 oz)
S-14	50	lin. ft.	Railing - steel pipe
S-22	223	cu. yds.	Removal of portions of existing conduit and pumping station
S-25	L.S.	lump sum	Pumping station electric service alterations.
S-29	5	cu. yds.	Porous backfill
I-2	182	lin. ft.	54" Reinforced concrete pipe (M-6.6 c)
I-2	110	lin. ft.	12" Bit. Coated Corrugated metal pipe (M-6.4 c) including special
Special	L.S.	lump sum	Reset existing sluice gates and trash screen.
Special	L.S.	lump sum	Alterations to manual controls for sluice gates
I-8	2	each	Manhole standard No. 1A without drop pipes
Special	L.S.	lump sum	*Construct, maintain and remove temporary flood protection

*For Details see sheet no. 103.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

RELOCATION OF U.S. ROUTE 21

STARK COUNTY STA. 574+35.17

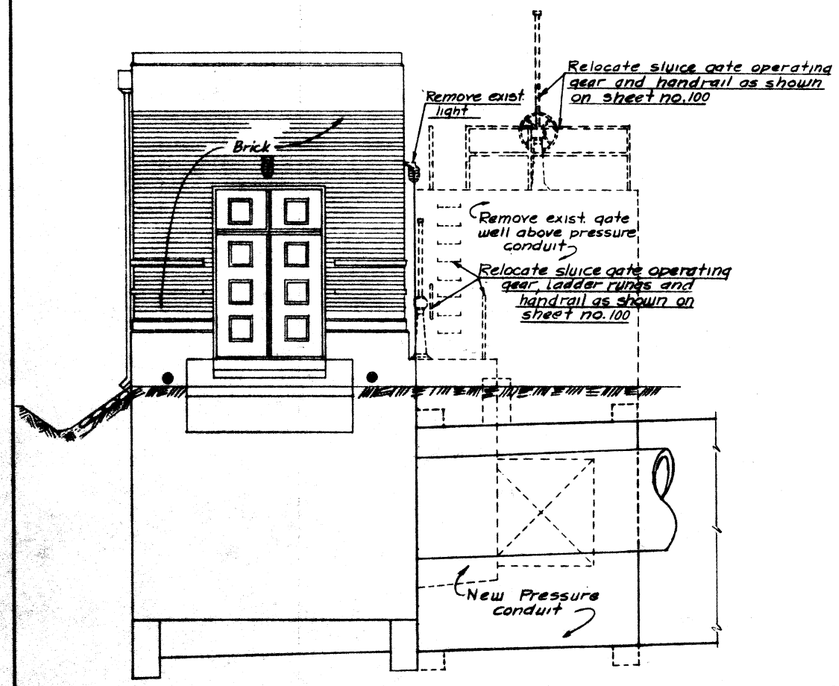
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
D.W.P. J.D.Y.	ASWG		CFF		

BEAVER VALLEY BLUEPRINTING SUPPLIES COMPANY BEAVER 1-2700

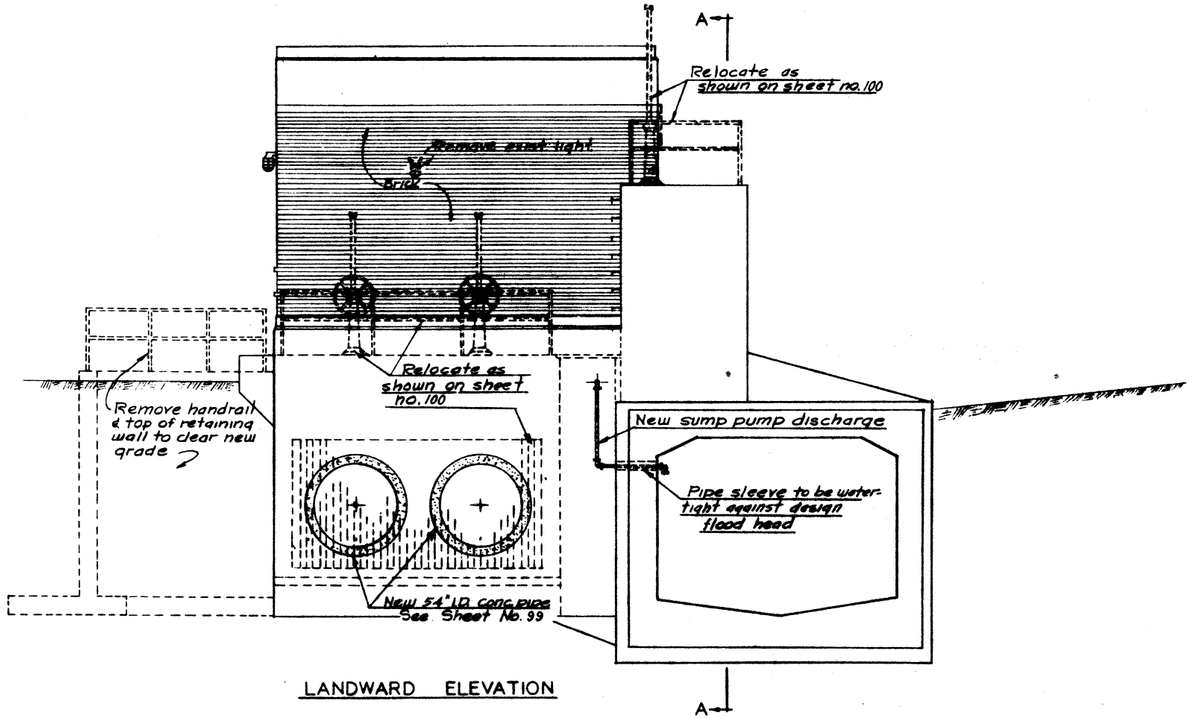
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

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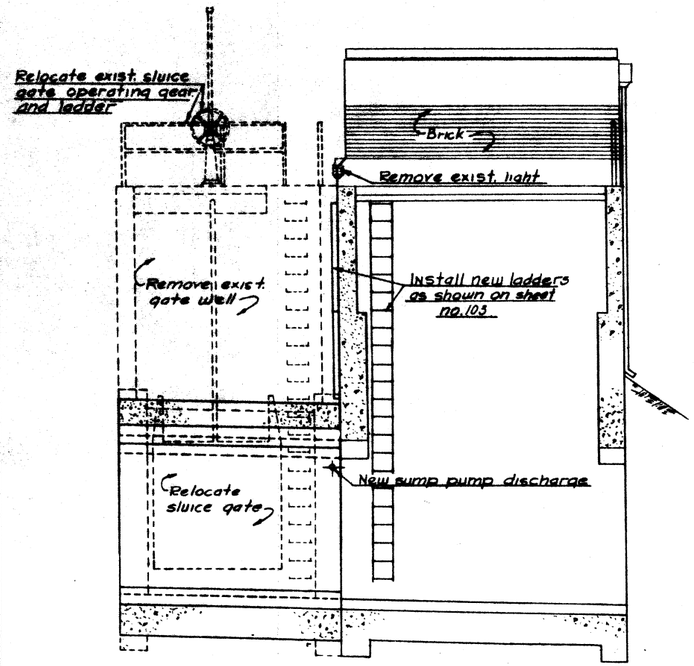
STA. -21-10.23



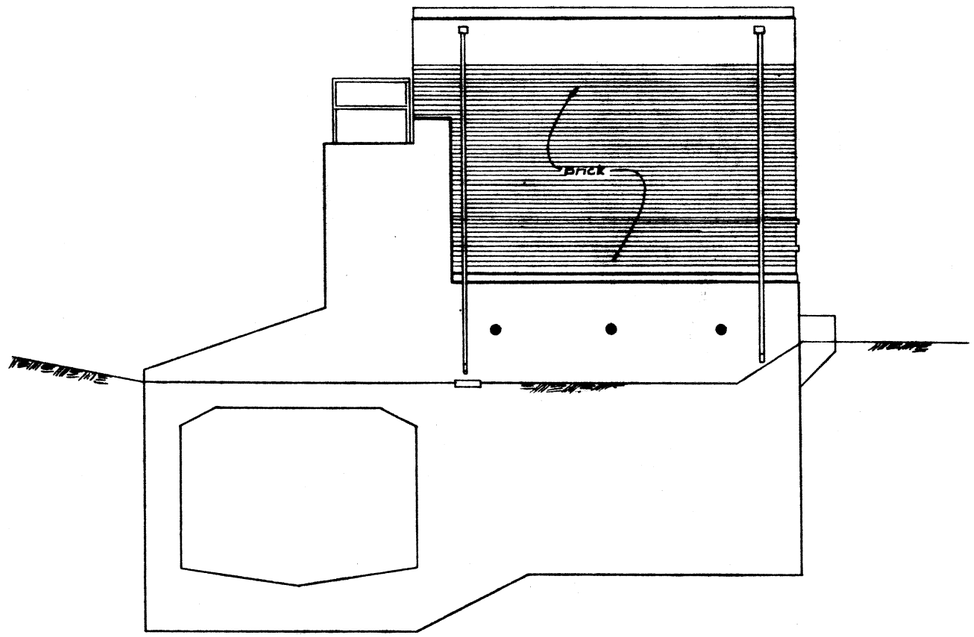
DOWNSTREAM ELEVATION



LANDWARD ELEVATION



SECTION A-A



RIVERWARD ELEVATION

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

ELEVATIONS

STARK COUNTY STA 574+35.17

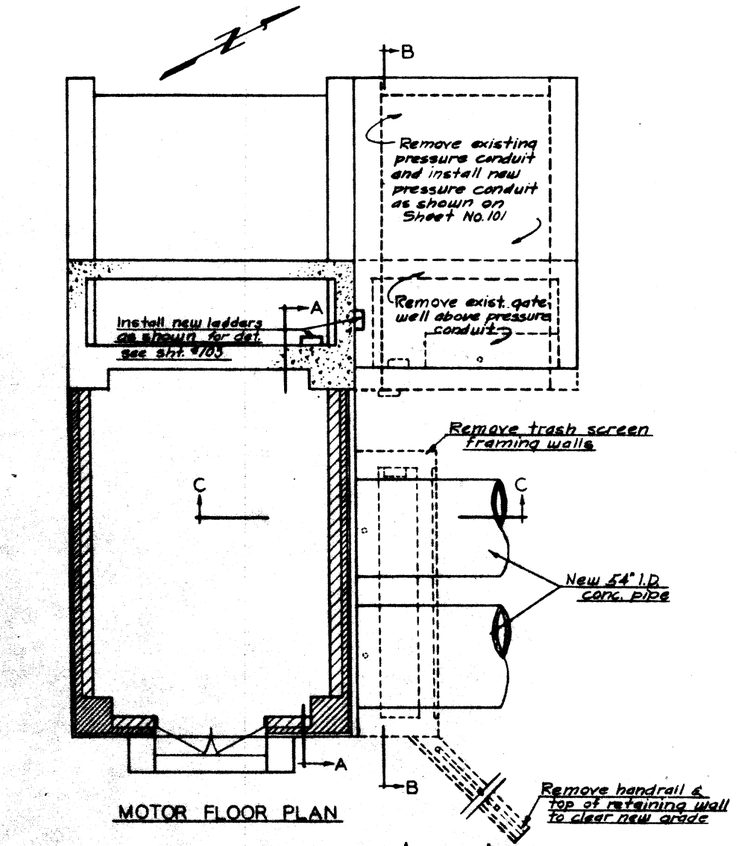
DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	SHEET NO.
J.D.Y.	J.D.Y.		C.F.F.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27001

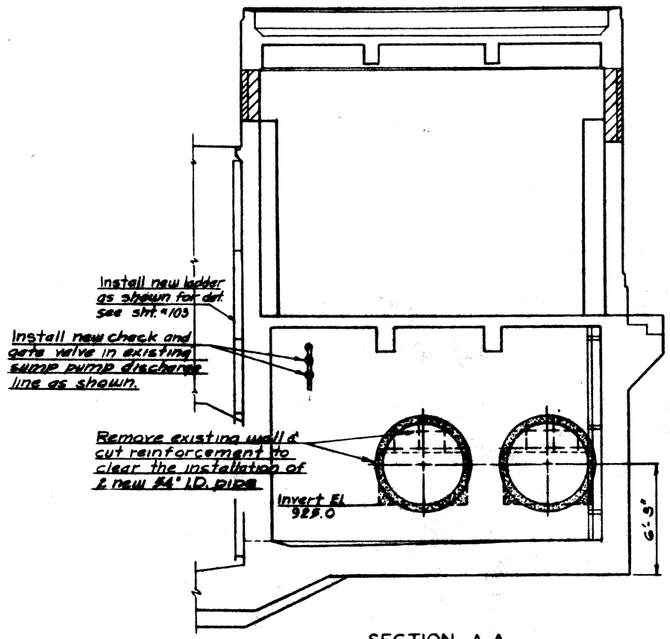
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

99

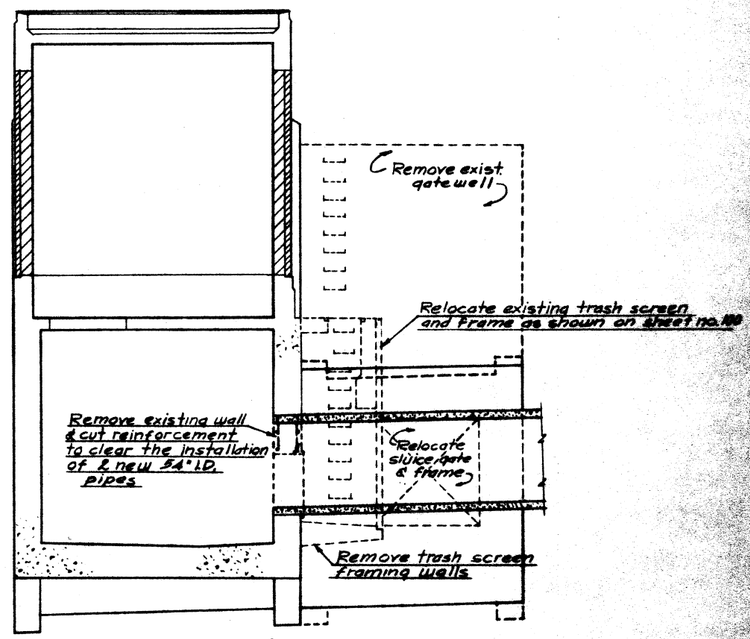
STA.-21-10.23



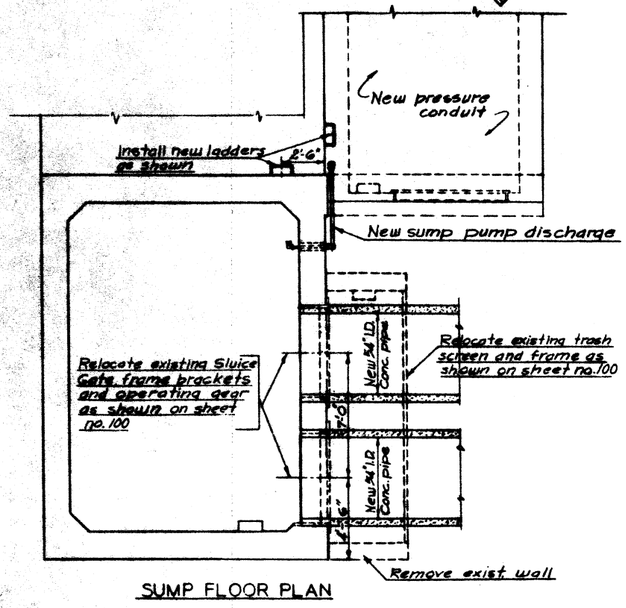
MOTOR FLOOR PLAN



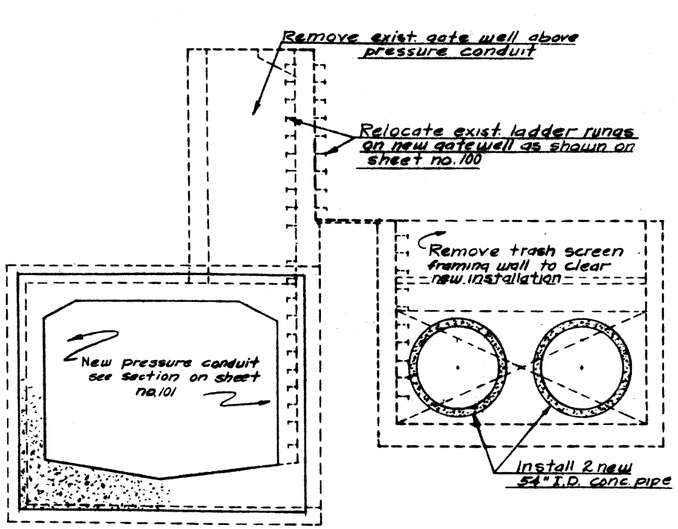
SECTION A-A



SECTION C-C

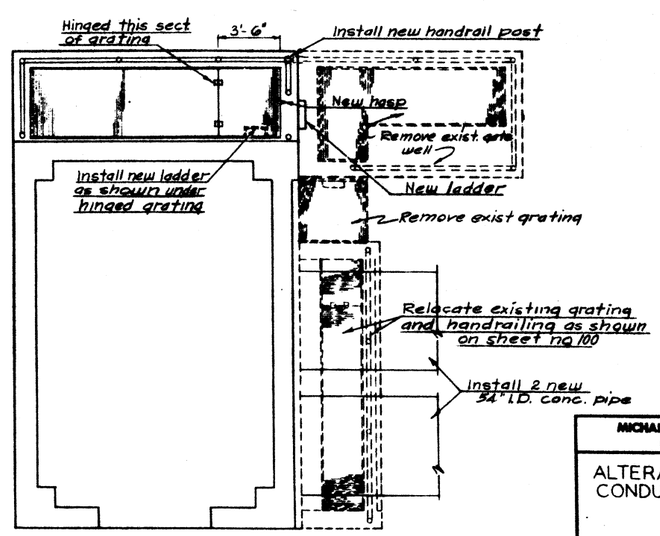


SUMP FLOOR PLAN



SECTION B-B

LEGEND.
O.F. = Outside Face
I.F. = Inside Face



MOTOR FLOOR PLAN

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

PLAN & SECTIONS

STARK COUNTY STA 574+35.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVIEWED
J.D.Y.	J.D.Y.		CFF		

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

100

STA-21-10.23

Existing Culvert — Sta 3+24.55± — New Culvert

Sta 3+24.55± — Sta 3+67.05 — New Sanitary sewer see sht. #102 — New Culvert — Sta 4+04.69± — Existing Culvert

½" Expansion Jt See Detail Sht #103

New pressure conduit For section see sht. #101

New Gatewell

Relocated ladder rungs

Notch edges to install relocated grating & frame

Relocated handrailing and alter as required

Relocated Floorstand, stem, stem guide & sluice gate & frame and replace all damaged parts

Relocated Trash Screen, frame & fittings

Relocated handrailing, Alter as required

Relocated Floorstand, Sluice gate & frame, Alter as required.

Relocated grating & frame, Notch edge as required

Relocated flap valve

New 54" I.D. Pipe

Install new grating & notch edges

PLAN

New 12" concrete pipe toe drain extension

Lengthen or replace existing stem as required

Finished grade El. 936.23

El. 937.27

opening

60"x36" Opening

SECTION B-B

El. 945.00

El. 929.65

New pressure conduit similar to Section shown on sheet no 101

El. 923.65

El. 920.65

New pressure conduit. For Sections See Sht. #101

Warp bottom of transformation chamber to fit contour of new 54" I.D. Pipe

SECTION A-A

El. 937.27

Lengthen or replace existing stem as required

Trash Screen Headwall

El. 930.85

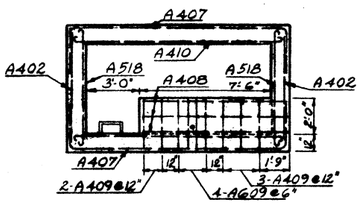
72"x72" opening

El. 925.10

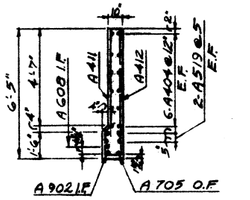
SECTION C-C

NOTE: Reinforcement to be 2" clear.

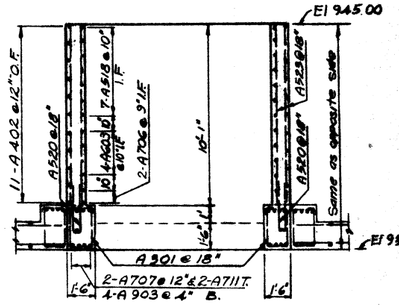
LEGEND
O.F. = Outside Face
I.F. = Inside Face



PLAN OF GATEWELL—TOP



TRASH SCREEN HEADWALL



SECTION D-D

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

DETAILS

STARK COUNTY STA. 574+35.17

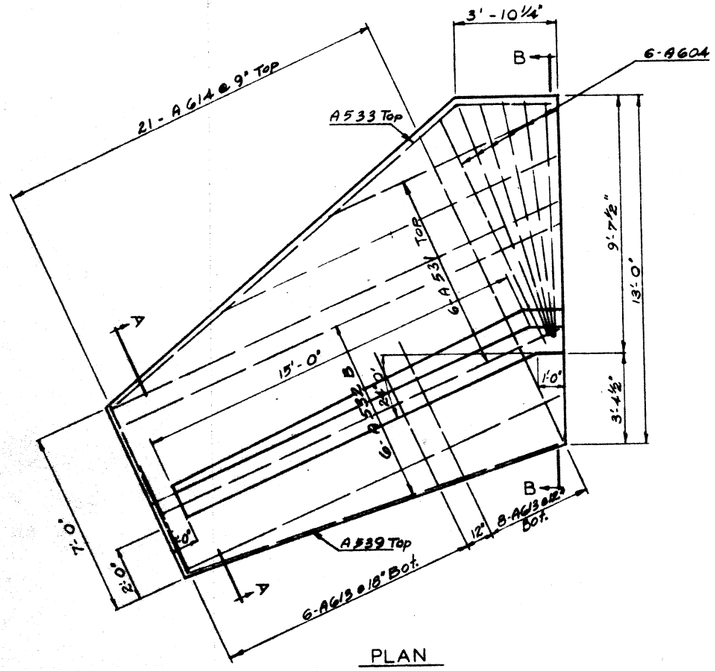
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.D.Y.	J.D.Y.		C.F.F.		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-ST901

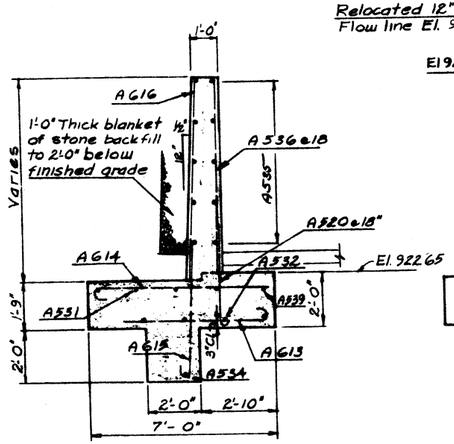
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

101

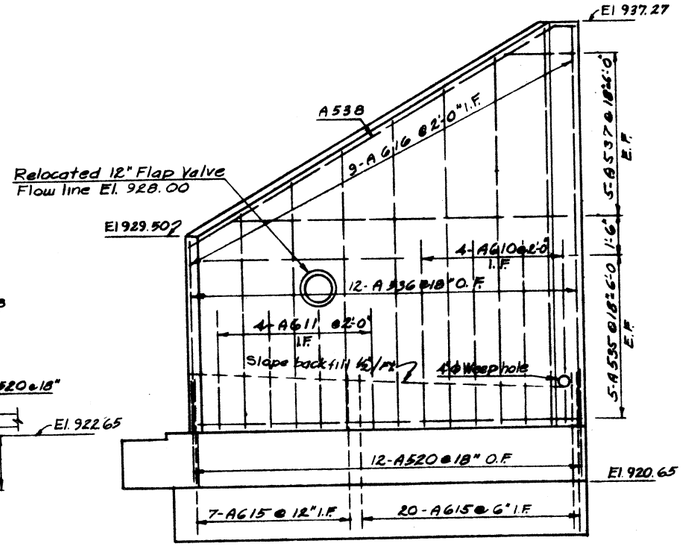
STA.-21-10.23



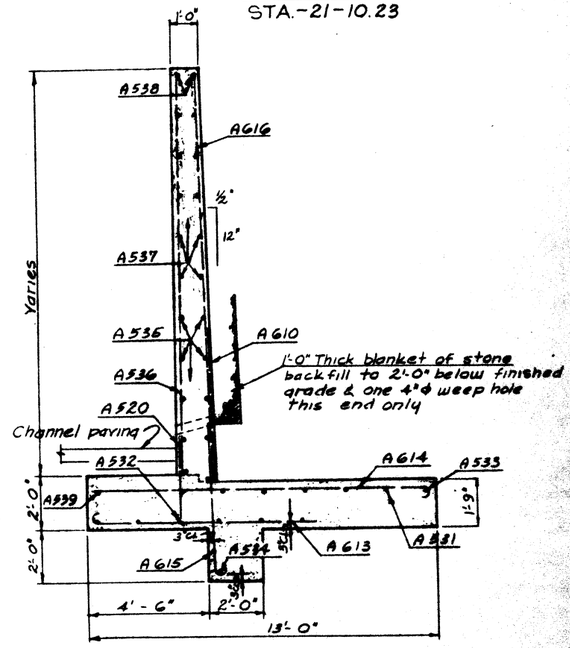
PLAN



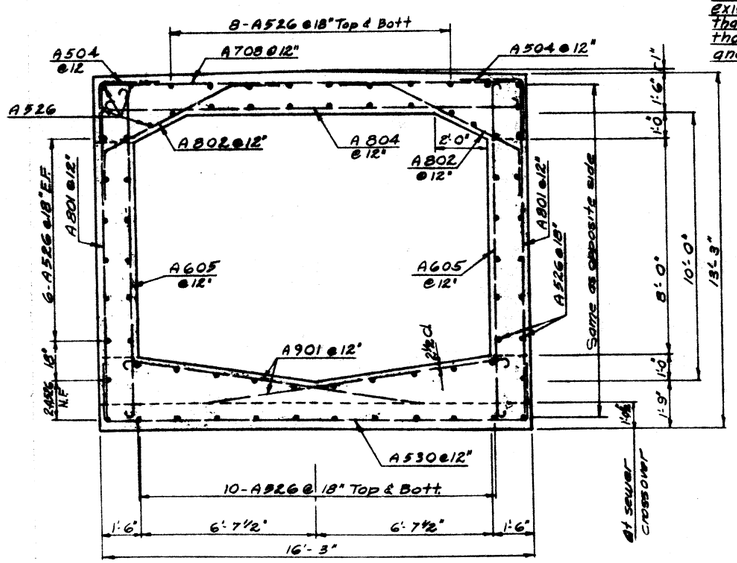
SECTION A-A



ELEVATION

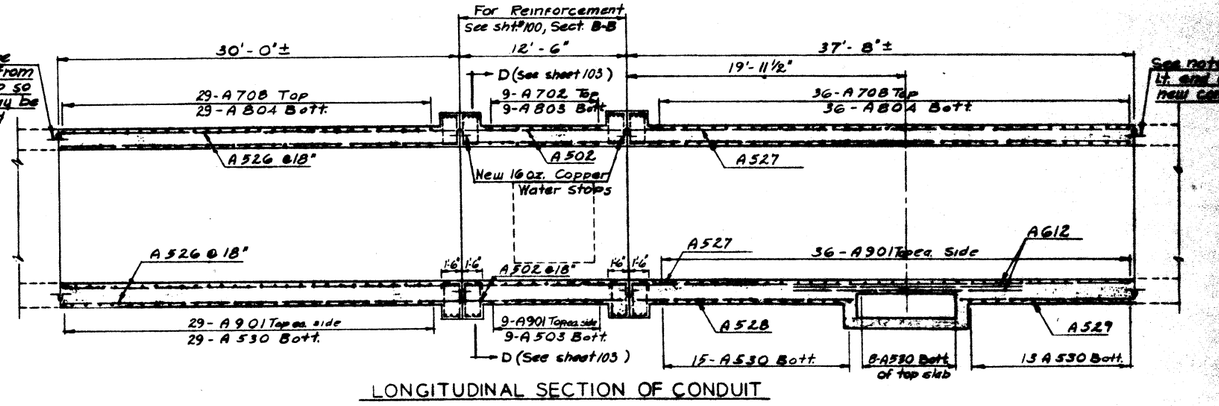


SECTION B-B



TYPICAL CONDUIT SECTION

Concrete should be carefully removed from existing waterstop so that water stop may be thoroughly cleaned and reused.



LONGITUDINAL SECTION OF CONDUIT

NOTE:
Reinforcement to be 2" Cl. except as noted.

LEGEND
O.F. = Outside Face
I.F. = Inside Face
E.F. = Each Face

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

DETAILS

STARK COUNTY STA 574+35.17

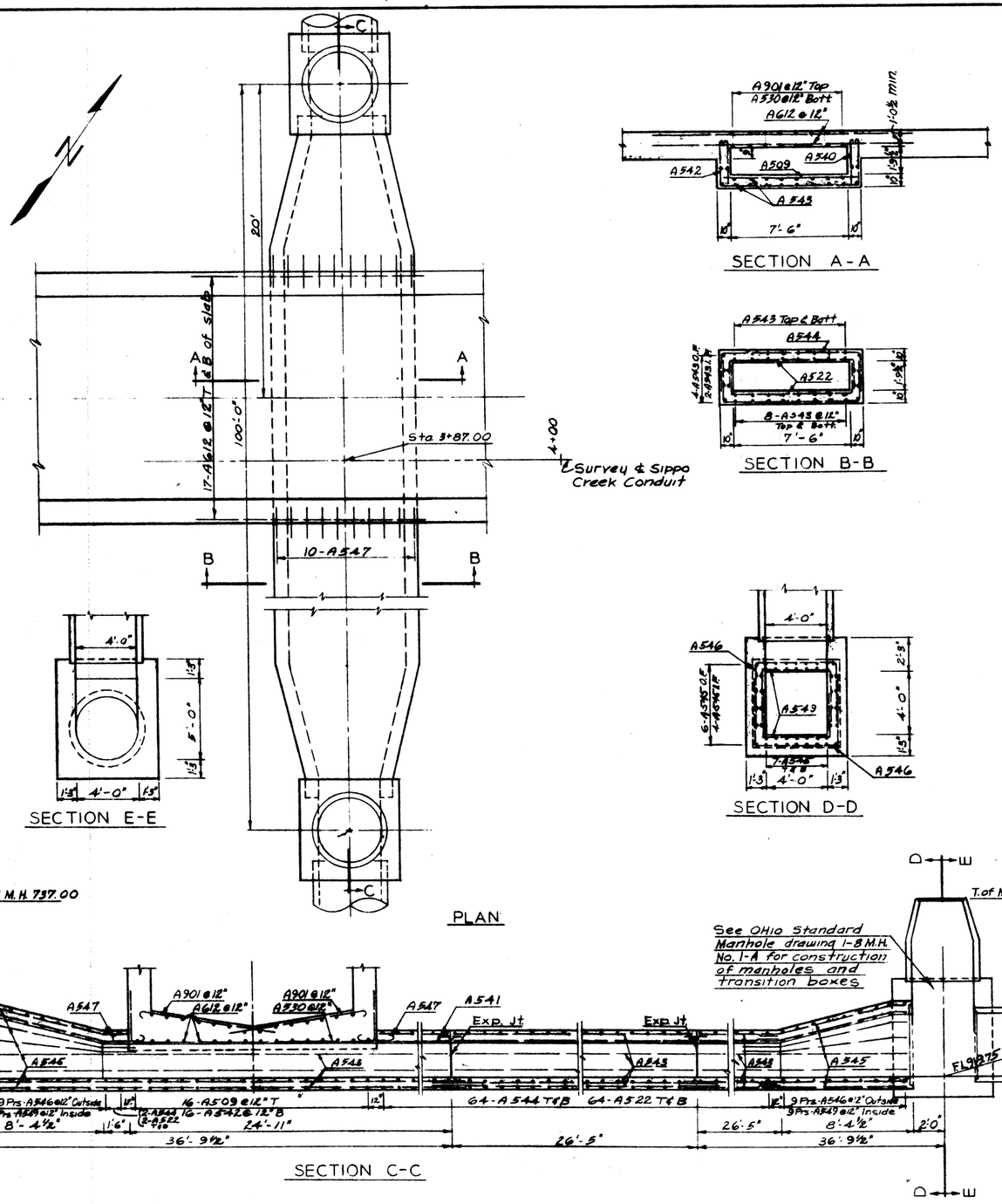
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J.D.Y.	J.D.Y.		CFF		

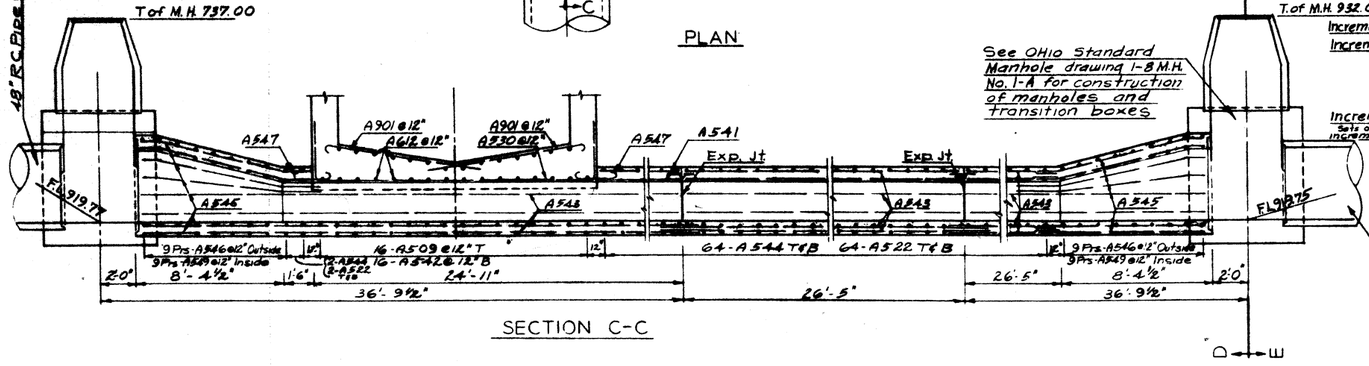
BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-27001

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010 (5)	

102

STA-21-10.23





See notes for bar size code.

REINFORCING STEEL LIST

Mark	No	Length	Weight	Shp	Bending Diagram
A301	36	7'-0	95	B	
A302	72	5'-4"	142	B	
A402	22	6'-7"	97	S	
A403	8	18'-5"	98	B	
A404	12	19'-7"	157	S	
A405	13	15'-7"	135	S	
A406	28	5'-7"	104	S	
A407	10	14'-5"	96	B	
A408	5	8'-1"	27	S	
A409	5	8'-10"	30	B	
A410	11	13'-1"	96	B	
A411	14	6'-0"	56	S	
A412	14	8'-7"	80	B	
A550	10	6'-6"	68	B	
A501	28	10'-10"	316	S	
A502	124	12'-3"	1584	S	
A503	9	21'-0"	197	B	
A504	165	5'-11"	1018	B	
A505	8	15'-4"	128	B	
A506	17	15'-7"	276	S	
A507	4	7'-0"	29	S	
A508	35	13'-3"	484	B	
A509	16	8'-9"	146	S	
A510	6	9'-0"	56	S	
A511	6	9'-7"	60	B	
A512	8	8'-0"	67	S	
A513	12	10'-9"	134	S	
A514	7	16'-9"	122	B	
A515	58	10'-1"	610	S	
A516	64	13'-0"	868	S	
A517	7	16'-3"	119	S	
A518	14	7'-9"	113	B	
A519	4	20'-7"	86	S	
A520	69	3'-5"	246	B	
A521	16	6'-2"	103	B	
A522	132	11'-0"	1514	B	
A523	16	9'-11"	165	S	
A524	8	7'-9"	65	S	
A525	16	8'-10"	147	B	
A526	72	29'-8"	2228	S	
A527	60	37'-4"	2336	S	
A528	12	15'-9"	197	S	
A529	12	13'-6"	169	S	
A530	78	19'-10"	1613	B	
A531	6	9'-3" to 18'-6"	87	S	Increment 1½"
A532	6	18'-0" to 150'	103	S	Increment 7"
A533	1	20'-5"	21	B	
A534	1	16'-9"	17	B	
A535	10	15'-9"	164	B	
A536	12	6'-9" to 14'-5"	132	S	
A537	10	15'-0" to 26'-6"	81	B	Increments Sets of 5 Increment 2½"
A538	2	17'-6"	96	B	
A539	1	15'-0"	16	S	
A540	32	3'-9"	125	B	
A541	22	8'-6"	195	S	
A542	16	16'-0"	267	B	
A543	110	26'-1"	2992	S	
A544	132	13'-10"	1904	B	
A545	96	9'-8"	968	B	
*A546	4 Ser 9	15'-7" to 12'-5"	485	B	
A547	20	4'-2"	87	B	
A548	80	7'-4"	612	B	
*A549	4 Ser 9	10'-11" to 9'-9"	388	B	
AG01	7	13'-5"	142	B	
AG02	5	15'-5"	116	B	
AG03	8	7'-11"	95	B	
AG04	6	9'-5"	85	B	
AG05	165	14'-2"	3511	B	
AG06	2	15'-7"	47	S	
AG07	12	11'-5"	206	B	
AG08	1	15'-7"	23	S	
AG09	4	8'-11"	54	B	
AG10	4	7'-0"	42	S	
AG11	4	4'-6"	27	S	
AG12	34	17'-0"	868	S	
AG13	14	5'-6" to 9'-0"	149	B	
AG14	21	6'-8" to 8'-6"	302	B	
AG15	27	6'-4"	257	B	
AG16	9	6'-9" to 14'-5"	143	S	
A701	3	16'-1"	99	B	
A702	9	11'-2"	205	B	
A703	7	13'-9"	197	B	
A704	12	6'-4"	155	B	
A705	1	20'-7"	42	S	
A706	4	8'-3"	67	B	
A707	8	24'-3"	397	B	
A708	79	15'-10"	2524	S	
A709	2	12'-1"	49	S	
A710	12	30'-1"	738	B	
A711	8	9'-3"	151	S	
A712	24	16'-4"	801	B	
AB01	165	12'-10"	5654	S	
AB02	165	8'-3"	3635	B	
AB03	9	15'-0"	360	B	
AB04	78	18'-0"	3749	B	
A901	174	13'-3"	7839	B	
A902	1	15'-7"	53	S	
A903	16	20'-5"	1111	B	
A904	24	12'-6"	1020	B	
A905	24	9'-9"	796	B	
A1001	32	12'-11"	1779	B	

REPLACEMENT BARS

RE300	1	4'-11"	S
RE400	1	5'-3"	S
RE500	2	5'-7"	S
RE600	1	5'-10"	S
RE700	1	6'-2"	S
RE800	1	6'-6"	S
RE900	1	6'-10"	S
RE1000	1	7'-2"	S

* 4 S of 9 indicates 4 Series of 9 bars = a total of 36 bars

NOTE:
Reinforcement to be 2" clear

Bar size is indicated in the bar mark. The first digit where three digits are used, indicates the bar size number. Example = A901 is a no. 9 bar; A1001 is a no. 10 bar

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

LEGEND
O.F. = Outside Face
I.F. = Inside Face
E.F. = Each Face

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

SEWER SECTION & STEEL LIST

STARK COUNTY STA 574+35

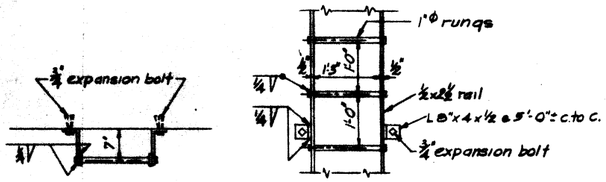
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.D.Y.	J.D.Y.		CFF		

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY BEAVER, PA. 27001

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U-UG-1010(5)	

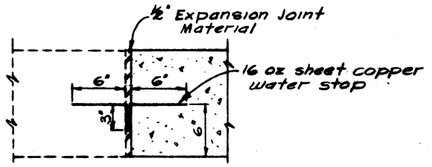
105

STA.-21-10.23

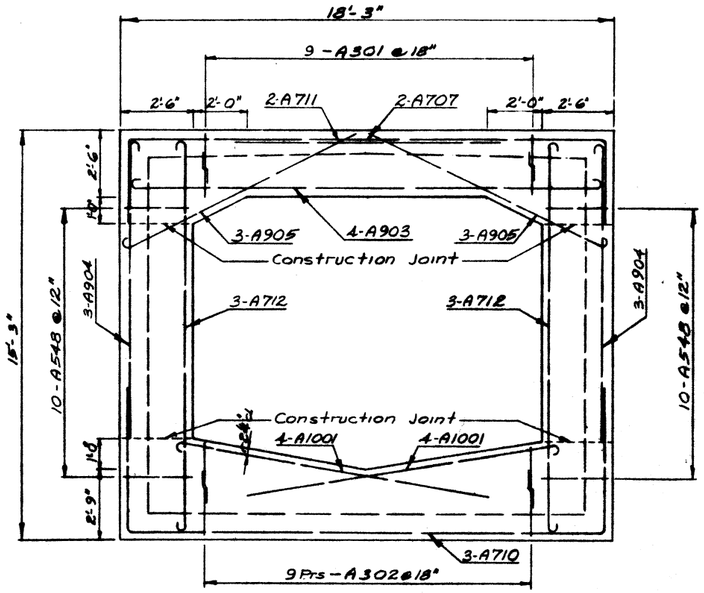


PLAN ELEVATION

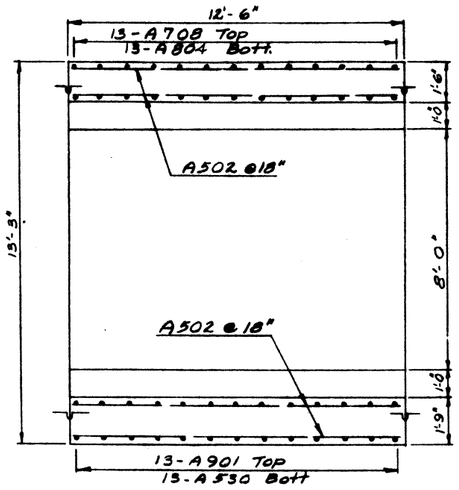
LADDER DETAILS
FOR OLD WORK



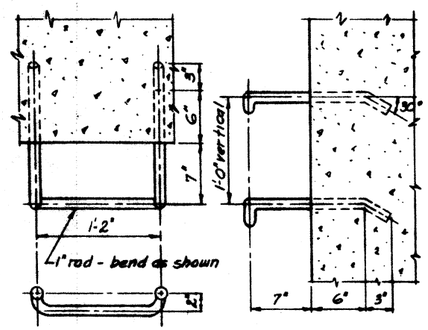
TYPICAL EXPANSION JOINT



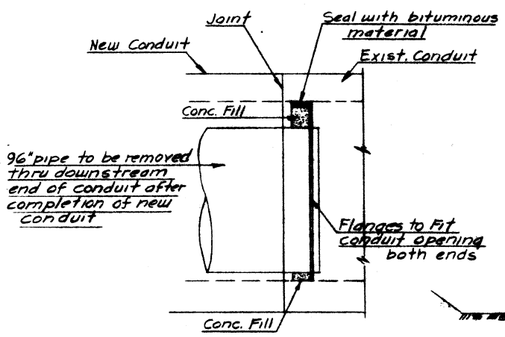
SECTION D-D OF FRAME

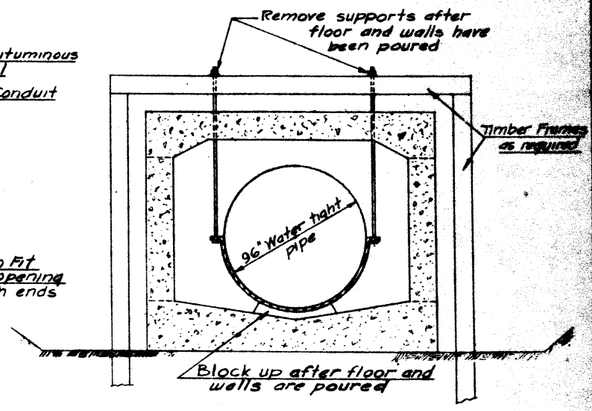


SECTION OF NEW PRESSURE CONDUIT
NEXT TO PUMP HOUSE



LADDER RUNG
FOR NEW WORK





SUGGESTED TEMPORARY FLOOD PROTECTION

Note:
Temporary flood protection may be accomplished by an alternate method subject to approval of the Director of Highways, the Bureau of Public Roads and the U.S. Army Corps of Engineers.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

MISCELLANEOUS DETAILS

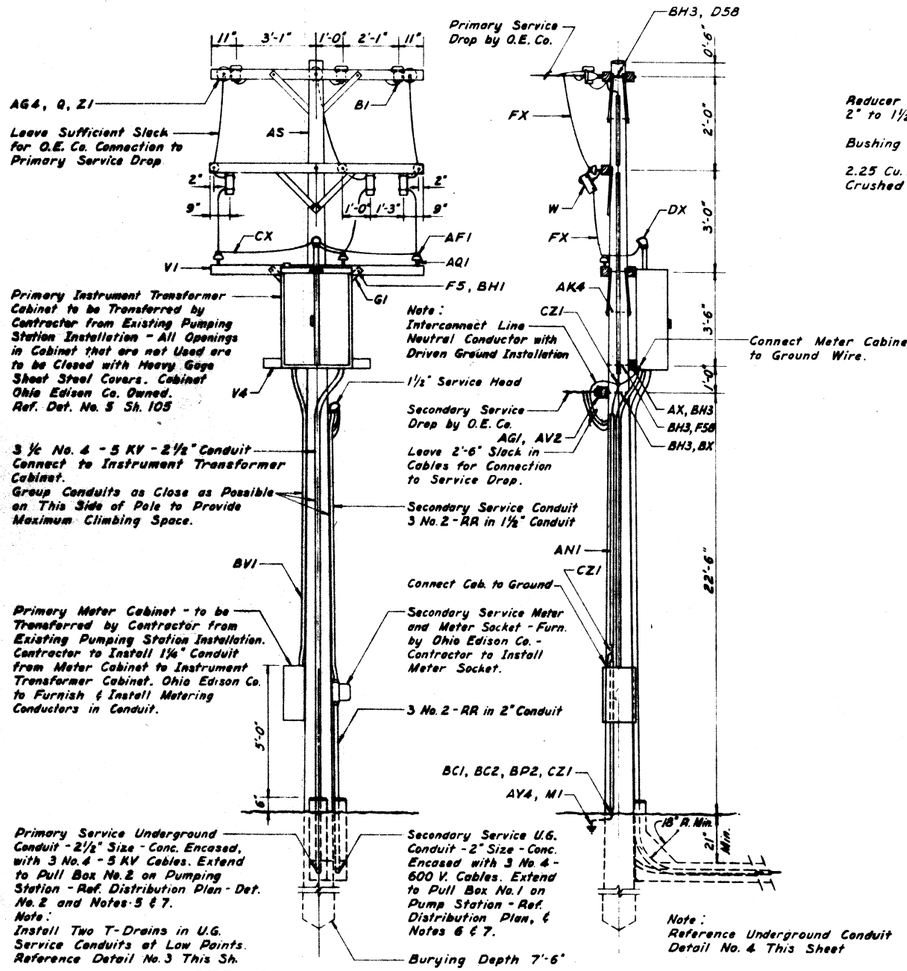
STARK COUNTY STA 574+35.17

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.D.Y.	J.D.Y.		CFF		

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-UG-1010(5)	

104

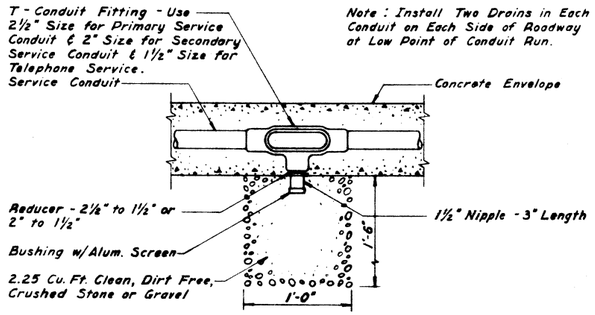
STA. - 21 - 10.23



SERVICE METERING & TERMINAL POLE DETAIL NO. 1

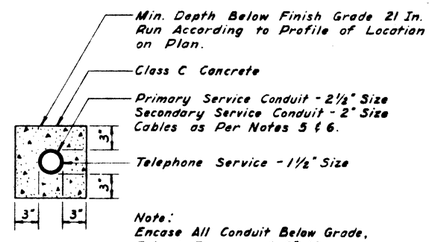
No Scale

Symbol	Quantity	Item & Description
AF1	6	Pin Type Insulator - O.B. 12847 or Equivalent
AG1	1	Secondary Rack Spool Insulator - 3" Dia. Size
AG4	3	6" Strain Dist. Insulator - O.B. 32433 or Equiv. (Furn. & Inst. by O.E. Co.)
AK4	10	½" x 4" Fetter Drive Lag Screw
AN1	3	Wood Moulding - 1" x 8' with ½" Groove (Treated)
AQ1	6	⅝" Steel Dist. Pin
AS	1	40' Pole CL 3 (Fully Treated) per ASA Specs. Pine or Cedar
AV2	1	1 Spool Secondary Rack
AY4	2	⅝" x 8'-0" Copperweld Sectional Ground Rod
B1	3	3 KV Arrester - Valve Type per O.E. Specs.
BC1	15	1⅛" x 3" Copperweld Staple
BC2	4	⅝" x 1½" Copperweld Staple
BH1	10	1" Round Washer
BH3	27	2⅛" Square Washer
BP2	40 L.F.	Wire - #2, #3 or #4 Bare or Weatherproof Copper
BX	1	⅝" x 9" Machine Bolt
DX	1	Service Hd. & Conduit Extension (Exist. Equip. from Pumping Station)
FX	As Req'd.	Wire #4, Weatherproof Copper (Medium Hard Drawn)



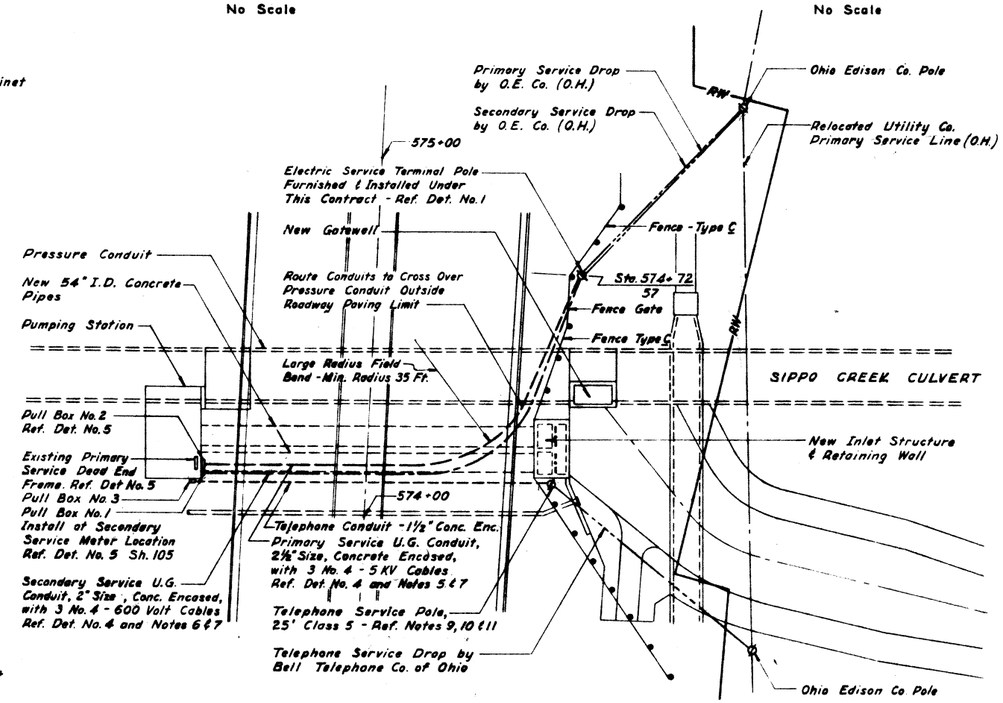
TYPICAL CONDUIT DRAIN DETAIL NO. 3

No Scale



SERVICE CONDUIT ENCASEMENT DETAIL NO. 4

No Scale



ELECTRIC SERVICE DISTRIBUTION PLAN - DETAIL NO. 2

Scale : 1" = 20'

Symbol	Quantity	Item & Description
BV1	As Req'd.	Conduit - 1¼" Galv. Rigid - From Instrument Transformer Cabinet to Meter Cabinet (Furn. & Installed by Contractor, O.E. to Furn. & Inst. Wiring)
CZ1	3	Line Connector - #6 Solid to #2 Stranded Copper
DS8	8	⅝" x 18" Double Arming Bolt
F5	10	⅜" x 5½" Machine Bolt
F58	1	⅝" x 12" Machine Bolt
G1	10	30" Wood Crossarm Brace with Clips (Treated)
M1	1	⅜" Bronze Ground Rod Clamp
Q	3	Strain Clamp (Furn. by O.E. Co. & Installed by O.E. Co.)
V1	10	3½" x 4¼" x 8' - 6 Pin Dist. Wood Crossarm (Treated)
V4	1	3½" x 4¼" x 4' - Outrigger Crossarm (Treated)
W	3	Cutout 5 KV - 100 Amp. - Porcelain Enclosed Type.
Z1	3	⅝" Nut, 1½" Eye (Furn. & Installed by O.E. Co.)
	2	Hangers - For Primary Instrument Transformer Cabinet (Furn. by O.E. Co.)
AX	4	½" x 5" Machine Bolt (For Fastening Cabinet to Crossarm)
CX	As Req'd.	Cable - 1/c No. 8 - 5000 Volt, Okonite Co. Cat. No. 10502

Note: Work This Sheet in Conjunction with the Notes & Details on Sheet No. 105

NOTES

1. Contractor to Review Metering Installation Details with O.E. Co. Meter Section Before Construction and shall Comply with Rules and Regulations of O.E. Co. for This Installation.
2. All Materials to be Furnished and Installed by Contractor Unless Otherwise Noted.
3. All Hardware shall be Hot Dipped Galvanized.
4. Primary Instrument Transformer Cabinet to be Transferred from Pumping Station to Terminal Pole.
5. Primary Service Cables shall be Single Conductor, A.W.G. No. 4, Unshielded, Concentric Stranded, Rated 5000 Volts with 10/64 th Inch Rubber Insulation and 3/64 th Inch Polychloroprene Sheath Equivalent to Okonite Company Okolite - Okoprene Cat. No. OK 10507.
6. Secondary Service Cables shall be Single Conductor, A.W.G. No. 4, Concentric Stranded, Rated 600 Volts with 4/64 th Inch Rubber Insulation and 3/64 th Inch Polychloroprene Sheath Equivalent to Okonite Co. Okolite - Okoprene Cat. No. OK 10030.
7. Terminate Cables in Accordance to Manufacturer's Recommendations. Substitution of Cable Type Listed in Notes 5 & 6 shall not be Permitted Unless Approved in Writing by the Engineer.
8. Installation shall Conform to Rules and Regulations of the National Electrical Code and the National Electrical Safety Code.
9. Telephone Service shall be Installed in Accordance to Rules & Regulations of Bell Telephone Co. of Ohio.
10. Install No. 12 Gage Galv. Drag Wire in Tele. Conduit.
11. Telephone Service Pole shall be Buried 6 Ft. Extend Conduit on Pole 18' Above Finish Grade and Terminate with Service Head.
12. All Material shall be New, First Grade and Approved by Underwriters Laboratories.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ALTERATIONS TO SIPPO CREEK CONDUIT AND PUMPING STATION

SERVICE PLAN & DETAILS

STARK COUNTY STA. 574+35.17

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISED
		RLB	EEE	RLB	

BEAVER VALLEY ENGINEERING SUPPLIES CO.