CONTRACT NO. C-41
COUNTY - OTTAWA AND SANDUSKY
DATE: MAY 1953

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

DESIGN SECTION D-14

CONTRACT NO. C-41

TURNPIKE CONSTRUCTION CONTRACT

STATION 336+35 OTTAWA COUNTY TO STATION 132+00 SANDUSKY COUNTY

LOCATION PLAN
(FROM OTTAWA & SANDUSKY COUNTY MAPS)

0 ½ 1 2 3 4
SCALE IN MILES

APPROVAL RECOMMENDED
PORTER URQUHART ASSOCIATED
CONTRACTING ENGINEER
JUNE 13, 1953

APPROVED
J. E. GREINER CO.
CONSULTING ENGINEER
10-20-53.

APPROVED
OHIO TURNPIKE COMMISSION
CHIEF ENGINEER
10-22-53

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SHEET NO.	TITLE
1.	Index Sheet
2	Summary Sheet
3 to 10	Plan and Profile
11 to 12	Plan and Profile, Portage River South Rd.-Co. Rd. 117
13 to 14	Plan and Profile, S.R. 120
15	Plan and Profile, Dishinger Rd.-Co. Rd. 48
16	Plan and Profile, Swartzman Rd.-Co. Rd. 74
17	Plan and Profile, Relocated Sommers Rd.-Co. Rd. 149
18	Box Culvert - C-4
19	Behring Agricultural Drainage Ditch
20 to 53	Structures No. 15 thru No. 22
54 to 57	Boring Data for Structures

~ General Notes ~

1. Elevation Mean Sea Level U.S.C. & G.S.
2. North as indicated and referred to in this set of Plans is the Grid North of the North Zone of the Ohio State Lambert Projection Coordinate System

METHOD OF OBTAINING SUPERELEVATION

SUPERELEVATION ROTATED ABOUT CENTER LINE OF PAVEMENT

T.R. = Point of Tangent Runout
T.Tn = Point of Tangent Transition
T.C. = Point of Transition Curve
C.Tn = Point of Curve Transition
T.T. = Point of Transition Tangent
Ln = Length of Runout
Ls = Length of Spiral
T.S. = Point of Tangent Spiral
S.C. = Point of Spiral Curve
C.S. = Point of Curve Spiral
S.T. = Point of Spiral Tangent
Ltn = Length of Transition

METHOD OF MAINTAINING LOCAL TRAFFIC
Scale 1" = 1 Mile

STANDARD DRAWINGS

No.	TITLE	Dated
1	Turnpike Ditch Details	5/6/53
2	Standard Headwalls for Pipe Sizes 48" and Under	11/20/53
3	Standard Headwalls for Pipe Sizes over 48"	11/20/53
4	Typical Roadway Sections	5/6/53
5	Handrail Details	5/6/53
6	Inlets and Curbs	5/6/53
7	Manholes	5/6/53
8	Pavement Reinforcement and Details	10/20/53
9	Transverse Pavement Joints Type A	2/7/53
10	Transverse Pavement Joints Type B	5/6/53
11	Pavement Joint Spacing	12/31/52
12	Right of Way Fence and Gates	5/6/53
13	Right of Way Fence Installation Details	5/6/53
14	Permanent Barricade, Permanent Monument and Delineators	3/3/53
15	Drainage Details for Turnpike Overpasses and Underpasses	4/27/53
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17	Guardrails Type A and Type B	1/24/53
18	Guardrails Type C and Type D	5/6/53
19	Agricultural Tile Drainage Typical Details	12/15/52
20	Flood Gates for Right of Way Fence	1/6/53
21	Transverse Pavement Joints, Type C	1/23/53
22	Culvert Pipe Bedding & Backfill	2/19/53

THIS PROJECT SHALL BE CONSTRUCTED UNDER OHIO TURNPIKE PROJECT Nº1, GENERAL SPECIFICATIONS, DATED DECEMBER 9, 1952

SPECIAL PROVISIONS FOR CONTRACT C-41

SUPPLEMENTAL	SPECIFICATION	NO. B-20	DATED	DEC. 9, 1952
SUPPLEMENTAL	SPECIFICATION	NO. B-35	DATED	DEC. 9, 1952
SUPPLEMENTAL	SPECIFICATION	NO. B-70	DATED	DEC. 9, 1952
SUPPLEMENTAL	SPECIFICATION	NO. I-18	DATED	MAY 28, 1953
SUPPLEMENTAL	SPECIFICATION	NO. T-30	DATED	DEC. 9, 1952
SUPPLEMENTAL	SPECIFICATION	NO. T-31	DATED	DEC. 9, 1952
SUPPLEMENTAL	SPECIFICATION	NO. T-35	DATED	DEC. 9, 1952
SUPPLEMENTAL	SPECIFICATION	NO. I-9	DATED	DEC. 9, 1952
SUPPLEMENTAL	SPECIFICATION	NO. I-16	DATED	FEB. 3, 1953
SUPPLEMENTAL	SPECIFICATION	NO. I-17	DATED	MAY 28, 1953
SUPPLEMENTAL	SPECIFICATION	NO. I-30	DATED	JULY 9, 1953
SUPPLEMENTAL	SPECIFICATION	NO. A-5	DATED	AUG. 7, 1953
SUPPLEMENTAL	SPECIFICATION	NO. I-29	DATED	MAY 28, 1953

NO.	REVISION	BY	DATE
1	As Built Plans	DLM	1-13-56

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

INDEX SHEET

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: D.L.M.	CHECKED: M.A.L.Jr.	DATE: 28 April 1953
DRAWN: D.L.M.	IN CHARGE: F.L.D.	SCALE: As Noted

CONTRACT NO. C-41 SHEET 1 OF 57

Reference Number	Specification Item Number	Description	Unit	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	As Built Totals	Proposal Quantities
		ROADWAY																				
1	E-1	Roadway Excavation	Cu.Yd.	45,414	51,989	45,754	14,922	13,750	6,429	16,856	11,968	3,889	1,599	2,681	1,322	1,893	2,752	569			221,143	200,000
2	E-4	Borrow	Cu.Yd.	44,491	52,259	22,048	42,230	41,518	37,459	104,335	11,206	6,440	9,414	38,112	31,089	11,032	35,824	432			693,580	720,000
3	E-8	Removal and disposal of Existing Pavement	Sq.Yd.									217.3		667	667		565				4,071.3	3,400
4	E-12	Removal of Existing Pipe (Under 16")	Lin.Ft.										40	21	21						82.0	300
5	I-15	Guard Rail Type A	Lin.Ft.	568.1	1,354.2	484.2	1,591.2	149.1	1,887.4		148										6,184.0	3,600
6	I-15	Guard Rail Type B	Lin.Ft.						2,632.6	1,388											4,020.6	3,900
7	I-15	Guard Rail Type C-1 or C-2	Lin.Ft.											967.2	968.3						1,935.5	2,000
8	I-15	Guard Rail Type D-2	Lin.Ft.														1,564.2				1,564.2	1,600
9	I-15	Guard Rail Type D-3	Lin.Ft.									677.3	681.0			828.4					2,186.7	2,200
10	SP-5	Guard Rail Removed and Rebuilt	Lin.Ft.											1,055.1							1,055.1	1,500
11	I-25	Right of Way Fence Type 2	Lin.Ft.	3,973.5	5,558.1	5,670.5	5,289.4	5,413.5	5,181.0	5,327.2	4,944.2										41,938.4	44,000
12	I-24	Delineators	Each		48																48.0	50
13	I-25	Permanent Barricades	Lin.Ft.										20					50			70.0	100
14	I-26	Permanent Monuments and Station Markers	Each	2	3		1	1		1	1										9.0	9
15	L-3	Placing Stockpiled Topsoil	Sq.Yd.	11,681	14,392	16,736	14,737	16,035	11,143	15,153	14,564			32,51	2,827						120,519.0	115,000
16	L-3	Seeding and Protecting-Type A (Revised)	Sq.Yd.	11,681	14,392	16,736	14,737	16,035	11,143	15,153	14,564			32,51	2,827						120,519.0	147,000
17	L-3	Commercial Fertilizer (10-20-10) Revised	Ton																		15.0	14
18	L-3	Bonemeal or Raw Bone	Ton																		0	14
19	L-3	Agricultural Hydrated Lime	Ton																		2.0	67
20	L-10	Sodding	Sq.Yd.																		0	410
21	L-19	Special Seeding (Revised)	Sq.Yd.	22,892	36,623	26,223	28,452	33,887	46,912	26,903	22,267	8,407	7,956	16,521	11,937	6,065	14,159			23,936	330,310.0	275,000
22	E-11	Water	M.Gal.																		2,271.0	8,000
23	T-28	Temporary Cattle Fence	Lin.Ft.																		3,720.0	10,000
24	L-6	Roadside Cleanup	L.S.																		Lump	Lump
		DRAINAGE Including Small Structures (Box Culverts)																				
25	E-2	Excavation for Structures Unclassified	Cu.Yd.	37.8	18.5	46.2	23.7	37.6	148.7	19.7	22.2							72.1			1,616.4	1,100
26	E-3	Channel Excavation	Cu.Yd.		1,015.6		67.8													97.28	20,562.0	21,000
27	T-1	Pipe for Driveways 12"C.M.P.-M.6.4(b) 16 Ga.	Lin.Ft.						44			80	40		48	20	76				308	190
28	I-2	Storm Sewers 15" R.C.C.P.-M.6.6(b)	Lin.Ft.		250.1	75.5	256.3	25.5	219	147.5	213.1										1,416.5	1,450
30	I-2	" " 18" R.C.C.P.-M.6.6(b)	Lin.Ft.	64.3		68.5				68.6											201.4	210
31	I-2	" " 18" R.C.S.P.-M.6.6(a)	Lin.Ft.	116.7		96.8	121.1														334.6	330
32	I-2	" " 30" R.C.C.P.-M.6.6(b)	Lin.Ft.						33												33.0	30
33	I-2	" " 36" R.C.S.P.-M.6.6(b)	Lin.Ft.	112.8		105.2															218.0	220
35	I-2	" " 66" R.C.C.P.-M.6.6(b)	Lin.Ft.						225												225.0	190
36	I-5	Pipe Specials-30° Bends-15" R.C.C.P.-M.6.6(b)	Each						4	2											6	6
37	I-8	Inlets Type A	Each		1																1	1
38	I-8	Inlets Type A-1	Each				1	2	2	1											6	7
39	I-9	Stone Underdrains No. 1	Lin.Ft.									282	262.5	70	68	416.0	370	499			1,967.5	350
40	I-10	Riprap Type A	Sq.Yd.		779.9		540.8														1,320.7	1,300
41	I-30	12" P.C.C.P.-M.6.5(b)	Lin.Ft.				108.7														108.7	110
43	I-14	Paved Ditches 4" Concrete	Sq.Yd.		457.4				205	9.5			219.6								707.2	950
44	I-16	Catch Basins Abandoned	Each											4	4						8	9
45	I-16	Inlets Abandoned	Each											1							1	1
46	I-30	Farm Tile Drains 6" E.Q.D.T.	Lin.Ft.	300	256.9	183.7	166	266	700	600			265			268					7,166	5,150
47	I-30	" " " 8" E.Q.D.T.	Lin.Ft.	700		857	1,262	500	1,000	1,000							1,140				6,459	6,050
48	I-30	" " " 10" E.Q.D.T.	Lin.Ft.	545		73	660	620	400	350	350										3,000	3,000
49	I-30	" " " 12" E.Q.D.T.	Lin.Ft.				68	70			700										838	860
50	I-30	" " " 15" E.Q.D.T.	Lin.Ft.								718										718	720
51	I-30	" " " 12" U.C.P.M.6.8(b)	Lin.Ft.										90								90	60
52	I-30	6" Pipe Outlet for Tile Drains	Lin.Ft.		40	60										20					120	20
53	I-30	8" " " " " "	Lin.Ft.				40	20									40				100	60
54	I-30	10" " " " " "	Lin.Ft.	20		20															40	40
55	I-30	12" " " " " "	Lin.Ft.				20	20													40	40
56	I-30	15" " " " " "	Lin.Ft.								20										20	20
57	S-1	Concrete for Structures Class "C"	Cu.Yd.	13.3	5.6	15.6	8.2	50.7	27.5	6.1	68								263.4		397.2	370
58	S-4	Reinforcing Steel	Lb.	640	377	791	548	2,051	1,437	397	452								35,145		42,038.0	45,000
59	S-27	66" R.C.C.P. M.6.6(b)	Lin.Ft.					170.9													170.9	170
60	S-29	Drainage for Structures 6" Perforated Pipe	Lin.Ft.																	60	600	60
		PAVEMENT																				
62	I-7	9" Reinforced Concrete Approach Slab	Sq.Yd.											44	44						88.0	90
63	I-17	Side Approaches	Cu.Yd.									12	18	33.9	81		88				232.9	300
64	I-18	Stabilized Shoulders & Temporary Run-Arounds	Cu.Yd.											162.9	134.7						297.6	300
65	I-22	Selected Sub-Base	Cu.Yd.	5,983	7,462.9	7,713.7	7,530.0	7,730	6,531.0	7,382.2	7,342.1			1,334.0	1,123.0						52,372.6	54,000
66	B-20	5" Waterbound Macadam Base Course (1 Course)	Sq.Yd.										190			1,500		2,349			4,039	3,800
67	B-20	9" Waterbound Macadam Base Course (2 Courses)	Sq.Yd.									1,580	1,320				1,814				4,714	4,950
68	B-35	Asphaltic Concrete Leveling Course	Cu.Yd.											105	86						191	200
69	B-70	9" Portland Cement Concrete Base Course	Cu.Yd.											2,942	2,435						5,377	5,500
70	T-30	Bituminous Prime Coat MS.3, MC.0 or MC.1	Gal.									830	820			700	926	1,175			4,451	4,400
71	T-51	Bituminous Surface Treatment-Bit. Material	Cu.Yd.															822			822	850
72	T-51	Bituminous Surface Treatment-No. 6 Aggregate	Cu.Yd.															24			24	30
73	T-55	Bituminous Macadam Surface Course	Sq.Yd.	7,855.6	9,910.2	11,261.2	9,618.8	10,809.8	7,683.5	10,600.0	9,800.0										77,444.1	79,000
74	T-55	Asphaltic Concrete Surface Course-Type A	Cu.Yd.									72.0	73.8	105	86	61.1	77.4				475.3	460
75	T-71	10" Reinforced Portland Cement Concrete Pavement	Sq.Yd.	10,480	13,414	15,015	13,113	14,418	10,196	14,185	13,067										104,534	105,000
76	T-30	Bituminous Tack Coat, MS.1, 70-80	Gal.											315	260						575	550

Reference Number	Specification Item Number	Description	Unit	20	24	33	37	39	43	46	50	As Built Totals	Proposal Quantities
		STRUCTURE NO.		15	16	17	18	19	20	21	22		
78	E-2	Excavation for Structures "Dry"	Cu.Yd.	525.6	2,767.0	567.5	305.4	483.1	546.5	389.3	387.4	5,977.8	6,500
79	E-2	Excavation for Structures "Wet"	Cu.Yd.				138.0		324.0			462	400
80	S-1	Concrete for Structures Class "C"	Cu.Yd.	800.2	3,371.1	480.4	470.8	467.4	783.3	459.7	393.1	7,826	7,980
81	S-1	Concrete for Structures Class "E"	Cu.Yd.	125.6	1,423.9	119.1		119.1	71.6	94.5	110.3	2,064.1	2150
82	S-3	Premolded Sealing Strip	Lin.Ft.		175.9							175.9	400
83	S-4	Reinforcing Steel	Lbs.	192,193	703,028	118,763	84,237	103,449	159,681	112,598	88,276	1,610,231	1,800,000
84	S-7	Structural Steel	Lbs.	217,271	1,388,213	163,836	75,623	143,817	143,160	225,932	149,188	2,533,330	2,570,000
85	S-9	Structural Expansion and/or Contrach. Joints	Lbs.	14,304	40,771	8,569	8,636	8,709	13,761	8,170	6,647	109,673	119,000
86	S-14	Railing Type A	Lin.Ft.	660.3	1,962.1		277.7		592.1			3,492.8	3,600
87	S-14	Railing Type B	Lin.Ft.			512		456.5		459.7	446.9	1,914.9	1,920
88	S-16	First Test Pile	Each	1	1	1		1		1	1	6	6
89	S-17	Pile Test Load	Each	1	1	1		1		1	1	6	8
90	S-18	Steel Bearing Piles 10BP42, Furnishing	Lin.Ft.	334.2	7408	650		500		1700	630	14,230	13,200
91	S-18	" " " Driving	Lin.Ft.	3114.9	14,333.3	471.4		472.1		1584.6	460.3	20,436.6	20,350
92	S-18	" " " Splices Making	Each		50	0		0		0	0	50	410
93	S-29	Scuppers Type A	Each	4	13				4			21	20
94	S-29	Scuppers Type B	Each			4		4		4	4	16	16
95	S-29	Drainage of Structures 6" Pipe	Lin.Ft.	264	216	243	160	205	106	257	221	1,678	1,900
96	S-29	" " 8" Pipe	Lin.Ft.	322	274	181		46		151	6	980	700
97	S-29	" " 10" Pipe	Lin.Ft.		303							303	360
98	S-29	" " 12" Pipe	Lin.Ft.		246							246	260
99	S-29	" " 15" Pipe	Lin.Ft.		168							168	175
100	S-29	Porous Backfill	Cu.Yd.		1,208							1,208	1,200
101	S-29	Drainage of Structures 6" W.I.	Lin.Ft.	136.4	1,687.7	135.2	36	142.4	69.0	148.6	148.1	2,523.4	1,420
102	S-29	" " 18" R.C.C.P.	Lin.Ft.		36							36	80
103	S-29	" " 12" Perforated Pipe	Lin.Ft.		1,919.6							1,919.6	1,950
104	I-15	Guard Rail Type A	Lin.Ft.	662.4	1,964.8		280.7		543.8			3,451.7	3,600
105	T-55	Asphaltic Concrete Wearing Surface, 1½" Type C	Cu.Yd.							25		25	25
106	S-3	Waterproofing Type "C"	Cu.Yd.							709.5		709.5	710
107	S-18	Steel Bearing Piles, 12BP53, Furnishing	Lin.Ft.		8,925							8,825	9,100
108	S-3	Waterproofing, Type "A"	Sq.Yd.		1,139.2							1,139.2	1,000
		DRAINAGE CONTINUED		11	12	13	14	15	16	17	18	4			
61	S-29	Porous Backfill No. 34 Aggregate	Cu.Yd.								141			141	120
E.W.O. 1211.3	I-30	6" V.S.P. M.6.8 (a)	Lin.Ft.									150		150	
		MISCELLANEOUS													
77	I-29	Construction Contract Information Sign	Each	1	1	1	1			2				6	10

GRADING ANALYSIS

Sheet No.	Station From	Station To	Excavation Topsoil	Excavation Uncl.	Excavation Total	Embankment Embank.	Embankment Emb. +15.56%	Borrow
3	336+35	356+00	127	45,287	45,414	470	543	- 44,491
4	356+00	382+50	2,421	49,568	51,989	78,324	90,527	52,259
5	382+50	410+65.33	1,088	44,666	45,754	19,223	22,216	- 22,048
6	1+70.91	27+00	4,149	10,173	14,322	45,342	52,408	42,230
7	27+00	54+00	5,121	8,629	13,750	43,385	50,142	41,513
8	54+00	81+00	5,867	562	6,429	326,246	377,075	376,513
9	81+00	107+50	4,736	12,120	16,856	92,539	107,024	104,555
10	107+50	132+00	3,883	8,085	11,968	16,691	19,291	11,206
11 & 12	Co. Rd. 117-Portage River Rd.		894	4,594	5,488	17,693	20,448	15,854
13 & 14	S.R. 120		1,871	2,082	3,953	61,674	71,283	69,201
15	Co. Rd. 43-Dishinger Rd.		530	1,369	1,899	10,731	12,401	11,082
16	Co. Rd. 74-Swartsman Rd.		1,126	1,626	2,752	31,369	36,250	35,524
17	Co. Rd. 149-Elec. Summer Rd.		300	269	569	608	701	432
TOTALS			32,113	189,030	221,143	744,955	861,004	693,580
Unsuitable Material				- 21,606				
Mat'l Avail. for Emb.				167,424				

No.	Revision	By	Date
1	As Built Plans	D.L.M.	1-13-56

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO.

SUMMARY SHEET

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: J.H.H. CHECKED: R.F.P. DATE:
DRAWN: J.C.B. IN CHARGE: F.L.D. SCALE:

CONTRACT NO. C-41 SHEET 2

QUANTITIES

NO.	ITEM	LOCATION & REMARKS	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
E-1	Roadway Excav.		C.Y.	6,407	6,429
I-15	Guard Rail	Type A	L.F.	1,900	1887.4
I-15	Guard Rail	Type B	L.F.	2,570	2632.6
I-23	R/W Fence	Type 2	L.F.	6,068	5181.0
L-3	Place Stkd Topsoil		S.Y.	11,054	11,143.0
L-9	Seed & Protect	Type A	S.Y.	11,054	11,143.0
L-19	Special Seed		S.Y.	46,944	46,912.0
E-2	Excav. for Struct.	(Uncl)	C.Y.	119	148.7
I-2	12" R.C.C.P.	M-6.6(b)	L.F.	214	219.0
I-2	30" R.C.C.P.	M-6.6(b)	L.F.	30	33.0
I-8	Inlets	Type A-1	Ea.	2	2
I-5	Pipe Specials	30° bends M-6.6(b) 15" R.C.C.P.	Ea.	4	4
I-30	10" E.Q.D.T.		L.F.	400	400
I-30	8" E.Q.D.T.		L.F.	1000	1000
I-30	6" E.Q.D.T.		L.F.	700	700
I-14	Paved Ditches	4" Concrete	S.Y.	13	20.5
I-2	66" R.C.C.P.	M-6.6(b)	L.F.	190	225
S-1	Conc. for Struct.	Class "C"	C.Y.	267	27.5
S-4	Reinf. Steel		Lbs.	1,768	1,637
T-22	Selected Sub.		C.Y.	3,140	8,203
T-33	B.T. Mac. Surf. Cse.		S.Y.	8,360	7,638.5
T-71	Reinf. Conc. Pave. 10"		S.Y.	11,107	10,961
E-4	Borrow		C.Y.	397,293	376,513
I-1	12" C.M.P. M-6.4(a) 16 Ga.		L.F.	0	44

NO.	REVISION	BY	DATE
1	As Built Plans	D.L.M.	1-13-56

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

PLAN AND PROFILE
SANDUSKY CO.
54+00 TO 81+00

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: J.H.H. CHECKED: R.F.P.
DRAWN: J.C.B. IN CHARGE: F.L.D.

CONTRACT NO. C- 41 SHEET

FUTURE DOUBLE TRACK

TABLE OF ELEVATIONS

WEST BOUND BRIDGE

Stringer	S1				S5			
Location	West Stringer		East Stringer		West Stringer		East Stringer	
End of Stringer	West End	East End	West End	East End	West End	East End	West End	East End
Elev. Top of Pavement at ℄ Bearing	646.49	647.05	647.88	647.87	647.05	647.47	647.74	647.88
Elev Top of Bearing Pad	642.34	641.08	641.92	643.71	641.08	641.52	641.79	641.92
Stringer	S2				S6			
Location	West Stringer		East Stringer		West Stringer		East Stringer	
End of Stringer	West End	East End	West End	East End	West End	East End	West End	East End
Elev. Top of Pavement at ℄ Bearing	646.85	647.34	648.00	648.08	647.34	647.73	647.82	648.00
Elev. Top of Bearing Pad	642.70	641.39	642.05	643.88	641.39	641.78	641.87	642.05
Stringer	S3				S7			
Location	West Stringer		East Stringer		West Stringer		East Stringer	
End of Stringer	West End	East End	West End	East End	West End	East End	West End	East End
Elev. Top of Pavement at ℄ Bearing	647.03	647.49	647.96	648.03	647.49	647.82	647.73	647.96
Elev Top of Bearing Pad	642.88	641.53	642.01	643.88	641.53	641.87	641.78	642.01
Stringer	S4				S8			
Location	West Stringer		East Stringer		West Stringer		East Stringer	
End of Stringer	West End	East End	West End	East End	West End	East End	West End	East End
Elev. Top of Pavement at ℄ Bearing	647.05	647.45	647.75	647.87	647.45	647.74	647.47	647.75
Elev. Top of Bearing Pad.	642.89	641.50	641.80	643.72	641.50	641.79	641.52	641.80

TABLE OF ELEVATIONS

EAST BOUND BRIDGE

Stringer	S1				S5			
Location	West Stringer		East Stringer		West Stringer		East Stringer	
End of Stringer	West End	East End	West End	East End	West End	East End	West End	East End
Elev. Top of Pavement at ℄ Bearing	647.75	647.87	647.37	646.93	646.87	647.86	647.69	647.37
Elev. Top of Bearing Pad	643.60	641.92	641.42	642.78	641.92	641.90	641.74	641.42
Stringer	S2				S6			
Location	West Stringer		East Stringer		West Stringer		East Stringer	
End of Stringer	West End	East End	West End	East End	West End	East End	West End	East End
Elev. Top of Pavement at ℄ Bearing	647.97	648.04	647.64	647.25	648.04	647.97	647.91	647.64
Elev. Top of Bearing Pad	643.81	642.08	641.69	643.10	642.08	642.02	641.96	641.69
Stringer	S3				S7			
Location	West Stringer		East Stringer		West Stringer		East Stringer	
End of Stringer	West End	East End	West End	East End	West End	East End	West End	East End
Elev. Top of Pavement at ℄ Bearing	648.00	648.03	647.74	647.40	648.03	647.91	647.97	647.74
Elev. Top of Bearing Pad	643.85	642.08	641.79	643.24	642.08	641.96	642.02	641.79
Stringer	S4				S8			
Location	West Stringer		East Stringer		West Stringer		East Stringer	
End of Stringer	West End	East End	West End	East End	West End	East End	West End	East End
Elev. Top of Pavement at ℄ Bearing	647.88	647.86	647.68	647.38	647.86	647.69	647.86	647.68
Elev. Top of Bearing Pad	643.72	641.91	641.73	643.23	641.90	641.74	641.90	641.73

QUANTITIES

NOTE: Quantities include both bridges

Item No.	Item	Remarks	Unit	Est. Quant.	Final Quant.
E-2	Excavation for Structures	Dry	Cu.Yd.	4,170	2,767
I-15	Board Rail, Type A		Lin.Ft.	2,100	1,969.8
S-1	Concrete for Structures	Class C	Cu.Yd.	4,100	3,971.1
S-1	Concrete for Structures	Class E	Cu.Yd.	1,435	1,423.3
S-3	Premolded Sealing Strip		Lin.Ft.	400	175.3
S-4	Reinforcing Steel		Lb.	942,000	703,028
S-7	Structural Steel		Lb.	1,425,000	1,388,215
S-9	Structural Expansion and or Contraction Joints		Lb.	40,450	40,777
S-14	Railing	Type A	Lin.Ft.	2,113	1,962.1
S-16	First Test Pile		Ea.	1	1
S-17	Pile Test Load		Ea.	2	1
S-18	Furnishing Bearing Piles, Steel	10 BP42	Lin.Ft.	6888	7,408
		12 BP53	Lin.Ft.	9064	8,825
S-19	Driving Bearing Piles, Steel	10 BP42	Lin.Ft.	6452	14,333.3
		12 BP53	Lin.Ft.	8240	
S-19	Splices for Bearing Piles		Ea.	293	50
S-29	Drainage of Structures	6" W.I. Pipe	Lin.Ft.	640	1,687.7
S-29	Drainage of Structures	6" Pipe	Lin.Ft.	460	216
S-29	Drainage of Structures	12" perf. pipe	Lin.Ft.	1920	1919.6
S-29	Drainage of Structures	8" Pipe	Lin.Ft.	230	274
S-29	Drainage of Structures	10" Pipe	Lin.Ft.	360	303
S-29	Drainage of Structures	12" Pipe	Lin.Ft.	260	296
S-29	Drainage of Structures	15" Pipe	Lin.Ft.	170	168
S-29	Scuppers	Type A	Ea.	12	13
S-29	Porous Backfill	" "	Cu.Yd.	1200	1208
S-3	Waterproofing	Type A	Sq.Yd.	1000	1139.2
S-29	Drainage of Structures 18" Corr. Lin.			80	56

GENERAL NOTES

Specifications
Design specifications for Highway Structures, State of Ohio, Oct. 1, 1951
Revised July 15, 1952
General Specifications
C.F. 2,000

Concrete
Pier Footings - Class "E"; all other conc. - class "C". All exposed edges to be chamfered 1", unless otherwise shown.

Reinforcement
Intermediate, Hard, or Rail Steel, deformed bars.

Structural Steel
All Structural Steel to be Carbon Steel. Rivets 7/8" ϕ; Holes 15/16" ϕ.

Foundations
Any changes in required foundation elevations shall be determined by the Engineer.

Forming - For exposed portions of abutments & piers shall be T&G placed vertically with staggered end joints. Forms for parapets shall be lined for a smooth finish. No construction joints other than shown on the plans.

Finishing
Machine finish for deck slab and abutment slab.

Welding - Class A

For Log of Borings see Sheet #54

NO.	REVISION	BY	DATE
2	Deck Replaced & Widened See CIP: 43-85-05		1986
1	As Built Plans	D.L.M.	1-13-56

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 16
TURNPIKE OVER N.Y. CENTRAL R.R.
GENERAL PLAN

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: Vaska | CHECKED: Vaska | DATE: 4-15-53
DRAWN: Lewis | IN CHARGE: Morel | SCALE: 1"=30'-0"

CONTRACT NO. C-41 SHEET 24 OF 57

PLAN

Scale: 1" = 30'-0"

PIPE SUPPORT DETAIL

Scale: 1½" = 1'-0"

DIAGRAMMATIC SECTION OF PIPING OF ABUTMENT

Scale: ¼" = 1'-0"

3" w.i. Pipe Outlet Deck Slab

3" w.i. Pipe Outlet Abutment Slab

NO.	REVISION	BY	DATE
2	DECK REPLACED & WIDENED SEE CIP: 43-85-05		1986
1	As Built Plans	D.L.M.	1-13-56

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 16
TURNPIKE OVER N.Y. CENTRAL R.R.
RAILING & DRAINAGE PLAN

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: C. M. | CHECKED: A. Morel | DATE: June 8, 1953
DRAWN: J. Vasko | IN CHARGE: A. Morel | SCALE: As shown

CONTRACT NO. C-41 SHEET 25 OF 57

Material: All stringers (S1 thru S8) - 36"WF300 + Cover PL's as shown.
End Diaphragms: 27"WF102
Intermediate Diaphragms: 18"[42.7

Note: For location of splices see Camber Diagram.
Weld Cover PLs to 36"WF300 with 5/16" continuous fillet welds all around PL
For bearing details see

ELEVATION OF HALF STRINGER
Scale: 3/16" = 1'-0"

CAMBER DIAGRAM
Cambered for Dead Load & Vert. Curve only.
not to scale.

FRAMING PLAN
Scale: 1" = 30'-0"

SECTION A-A
Scale: 3/4" = 1'-0"

TYPICAL CROSS-SECTION
Scale: 1/2" = 1'-0"

TYPICAL DETAIL FOR ALL CONSTRUCTION JOINTS IN DECK SLAB

NO.	REVISION	BY	DATE
2	DECK REPLACED & WIDENED SEE CIP: 43-85-05		1986
1	As Built Plans	D.L.M.	1-13-86

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 16
TURNPIKE OVER N.Y. CENTRAL R.R.
FRAMING PLAN

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: PINAR CHECKED: MOREL DATE: May 15, 1956
DRAWN: VASKO IN CHARGE: MOREL SCALE: As Shown

CONTRACT NO. C-41 SHEET 26 OF 57

SECTION G-G
SCALE 1/8"=1'-0"

Note: For Parapet Dimensions, Anchor Bolt, Railing & Guard Rail. Details - See Framing Plan.

SECTION C-C
SCALE 1/2"=1'-0"

SECTION F-F
SCALE 1/4"=1'-0"

DETAIL C
SCALE 1 1/2"=1'-0"

SECTION B-B
SCALE 1/4"=1'-0"

Note: For corner and parapet details see detail B

PLAN
SCALE 1/8"=1'-0"

Note: For details of Parapet and corner see detail A.
For Drainage Details See Std Dwg No. 15.
For Pad & Gutter Details See West Abut., West Bound Bridge.

SIDE ELEVATION F-F
SCALE 1/4"=1'-0"

FRONT ELEVATION
SCALE 1/8"=1'-0"

All Piles - 10" BP 42
Max. Pile Load 40 T; Est. Length of Piles 34'

SECTION A-A
SCALE 1/4"=1'-0"

SECTION D-D
SCALE 1/4"=1'-0"

JOINT DETAIL D
SCALE 1/4"=1'-0"

DETAIL A

DETAIL B

SECTION H-H
SCALE 1/4"=1'-0"

SECTION E-E
SCALE 1/4"=1'-0"

SECTION E-E
SCALE 1/4"=1'-0"

NO.	REVISION	BY	DATE
2	DECK REPLACED & WIDENED SEE CIP: 43-85-05		1980
1	As Built Plans	D.L.M.	1-13-56

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 16
TURNPIKE OVER N.Y. CENTRAL R.R.
EAST ABUTMENT EAST BOUND BRIDGE

PORTER - URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: Valls | CHECKED: | DATE: 4-15-1953
DRAWN: Valls | IN CHARGE: Morel | SCALE: As noted

CONTRACT NO. C-41 | SHEET 27 OF 57

NO.	REVISION	BY	DATE
2	DECK REPLACED & WIDENED		1986
	SEE CIP: 43-85-05		
1	AS BUILT PLANS	DLM	1-13-86

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 16
TURNPIKE OVER N.Y. CENTRAL R.R.
WEST ABUTMENT WEST BOUND BRIDGE

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: C.M. | CHECKED: Wellinger | DATE: 4-15-1983
DRAWN: Rummo | IN CHARGE: Flore | SCALE: As noted

CONTRACT NO. C-41 | SHEET 28 OF 57

NO.	REVISION	BY	DATE
2	DECK REPLACED & WIDENED SEE CIP: 43-85-05		1980
1	AS BUILT PLANS	DLM	1-13-56

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 16
TURNPIKE OVER N.Y. CENTRAL R.R.
W. ABUT. E. BOUND BRIDGE E. ABUT. W. BOUND BRIDGE

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: S. CROSS
DRAWN: E. J. PEPI
CHECKED: J. VASKO
IN CHARGE: A. MOREL
DATE: APR 14, 1953
SCALE: As noted

CONTRACT NO. C-41

SHEET 29 OF 57

ELEVATION OF WALL AT WEST PIERS

PLAN

ELEVATION OF WALL AT EAST PIERS

PLAN

ELEVATION OF WALL AT CENTER PIERS

PLAN

Note: for sections see "Pier ℄ sections"

NO.	REVISION	DATE
2	DECK REPLACED & WIDENED SEE CIP: 43-85-05	1986
1	As Built Plans	1-12-56

OHIO TURNPIKE PROJEC

STRUCTURE NO. 16
TURNPIKE OVER N.Y. CENTRAL
PIER AND WALL DETAI

PORTER-URQUHART ASSOCIAT
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: AM & R.D. CHECKED: J.V. DATE
DRAWN: A.R. IN CHARGE: A.M. SCALE

CONTRACT NO. C-41 SHEET

D. 1

2-53
1'-0"
57

SECTION A-A
SCALE: ¼"=1'-0"

SECTION B-B
SCALE: ¼"=1'-0"

SECTION C-C
SCALE ¼"=1'-0"

Note: For location of sections see "Piers & Wall Details"

SECTION D-D
SCALE ¼"=1'-0"

SECTION E-E
SCALE: ¼"=1'-0"

SECTION F-F
SCALE: ½"=1'-0"

DETAIL K: TYPICAL DRAINAGE BEHIND WALLS WITH EARTH FILL.
Scale: ¼"=1'-0"

SECTION G-G
(East & West Wall Footing)
Scale: ¼"=1'-0"

SECTION H-H
(Center Wall Footing)
Scale: ¼"=1'-0"

EXPANSION JOINT DETAILS.

SECTION J-J
(Wall)
Scale: ½"=1'-0"

NO.	REVISION	BY	DATE
2	Deck Replaced & Widened. See CIP: 43-85-05		1986
1	As Built Plans	D.L.K.	1-8-86

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 16
TURNPIKE OVER N.Y. CENTRAL R.R.
PIER AND WALL SECTIONS

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: A.M. & R.D.	CHECKED: J.V.	DATE: 5-25-53
DRAWN: C.H. & R.R.	IN CHARGE: A.M.	SCALE: As noted

CONTRACT NO. C-41 SHEET 31 OF 51

SIDE ELEVATION

SECTION 3-3

SECTION 4-4

SECTION K-K

SECTION F-F

SECTION 5-5

FIXED BEARING AT PIER NO. 2

Scale: ¾"=1'-0"

PLAN

EXPANSION BEARING AT ABUTMENTS

Scale: ¾"=1'-0"

SECTION A-A
SECTION B-B

Scale: 1"=1'-0"

SIDE ELEVATION

SECTION 1-1

SECTION 2-2

SECTION 6-6

Scale: Half Size

SECTION 7-7

EXPANSION BEARING AT PIER NO. 1 & 3

Scale: ¾"=1'-0"

DETAILS OF EXPANSION JOINT AT ENDS OF SKEWED ENDS OF DIAPHRAGMS

Scale: 1"=1'-0"

END DIAPHRAGM AND EXPANSION DAM DETAILS

Scale: 1"=1'-0"

SECTION C-C

STRINGER SPLICE

Scale: ¾"=1'-0"

NOTE:
Rivets ⅞"φ; Open holes 15/16"φ except noted

NO.	REVISION	BY	DATE
2	DECK REPLACED & WIDENED SEE CHP. 43-85-05		1986
1	AS BUILT PLANS	D.L.M.	1-13-86

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 16
TURNPIKE OVER N.Y. CENTRAL R.R.
MISCELLANEOUS DETAILS

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: C. EMBERSON | CHECKED: J. WASKO | DATE: 6-5-53
DRAWN: G. KOPPELMAN | IN CHARGE: R. MOREL | SCALE: AS SHOWN

CONTRACT NO. C-41 SHEET 32 OF 57