

# STATE OF OHIO DEPARTMENT OF HIGHWAYS

## CUY-2-18.67

# EAST 55<sup>th</sup> ST. SEA WALL

## CITY OF CLEVELAND CUYAHOGA COUNTY

U.I-329(6)  
PART 1

FED. RD. DIVISION	STATE	FEDERAL AID PROJECT	TYPE FUNDS
2	OHIO	U.I-329(6)	POST WAR

CUYAHOGA COUNTY  
CUY-2-18.67

CUY-90-19.48

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

The Standard Specifications of the State of Ohio Department of Highways including changes and supplemental Specifications listed in the proposal shall govern this improvement.

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

Approved Louis L. Drasler  
Date 4/2/57 Division Deputy Engineer

Approved \_\_\_\_\_  
Date \_\_\_\_\_ Chief Engineer, Bureau of Maintenance

Approved Norman H. Hill  
Date 4/2/57 Chief Engineer, Bureau of Planning and Programming

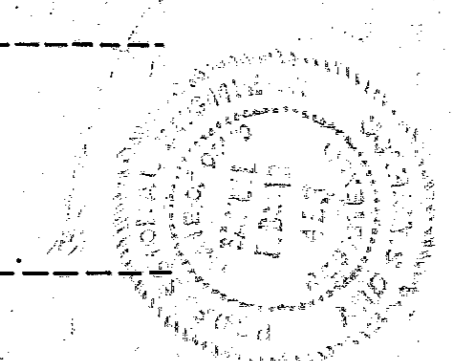
Approved Richard C. Ott  
Date 4/2/57 Chief Engineer, Bureau of Bridges & R.R. Crossings

Approved W. J. Whittington  
Date 4/2/57 Chief Engineer, Bureau of Location & Design

Approved L. F. Schaubli  
Date 4/2/57 First Asst. Director & Chief Engineer

Approved W. J. Miller  
Date 4/2/57 Director of Highways

Approved \_\_\_\_\_ For the City of Cleveland  
Date 5-29-57 Samuel Z. David  
Director of Public Service



CONSTRUCTION BUREAU  
APR 11 1957  
GROUND PHOTOLAT

### CONVENTIONAL SIGNS

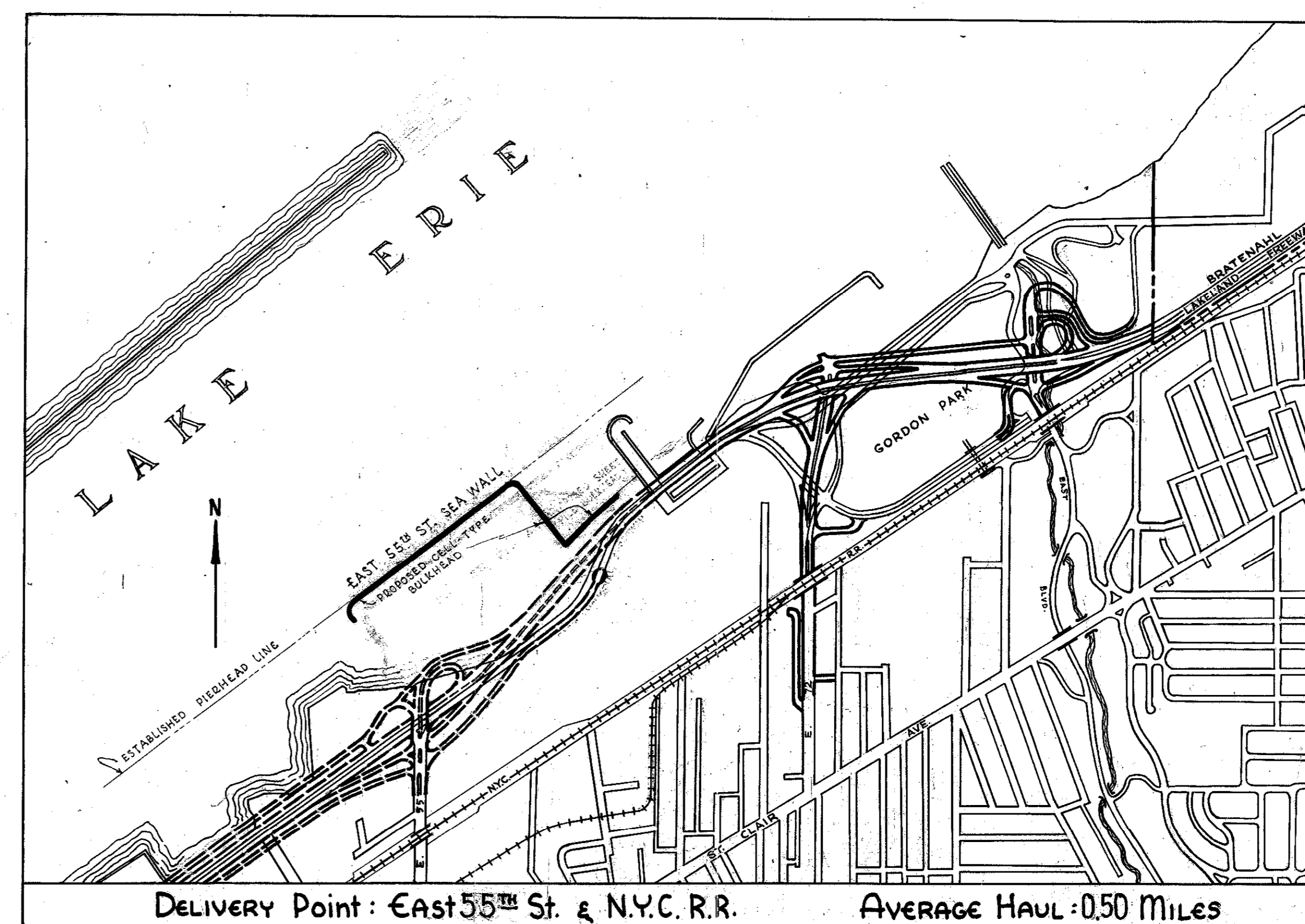
CITY OR VILLAGE LINE	_____
SECTION LINE	_____
CENTER LINE	_____
PROPERTY LINE	_____
FENCE LINE	-x-x-x-
RAIL ROAD	+++++

### INDEX OF SHEETS

TITLE PAGE	1
GENERAL SUMMARY & LOCATION PLAN	2
DETAILS OF CELLS	3-6
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REVISIONS	2A & 5A

### LINE DATA

LENGTH OF PROJECT = 0.00 LIN. FT. OR 0.00 MILES



### LOCATION PLAN

<b>SCALES</b>	Plan 1" = 100'	SCALE IN FEET 0 500 1000 2000 3000	<b>LEGEND</b>
Profile Vertical	1" = 20'		Portion to be improved
Profile Horizontal	1" = 150'		State Highways
Cross Sections			Other Roads

STANDARD	DRAWINGS

SUPPLEMENTAL	SPECIFICATIONS
T-171.19 Rev. 7-31-50	

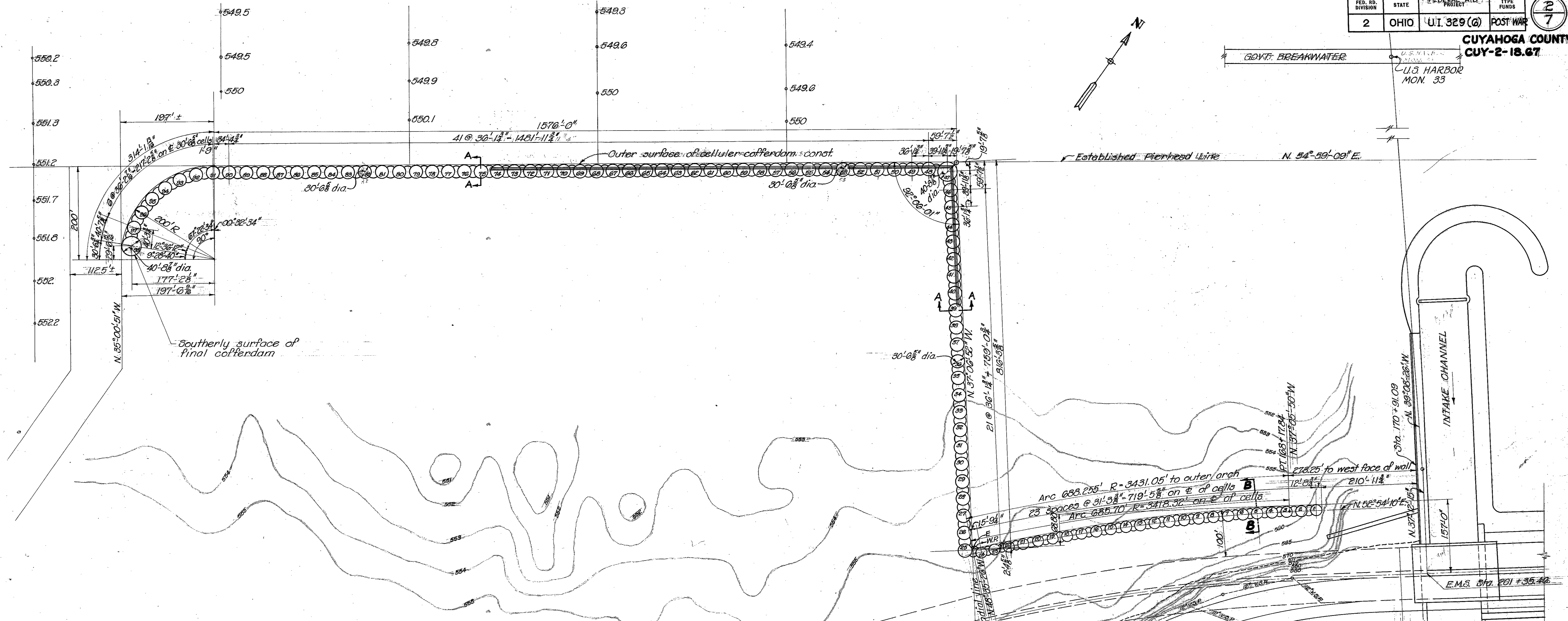
00053  
FILE NO. CUYAHOGA COUNTY CITY CLEVELAND  
DATE LETTING 195  
CONTRACT NO.

**DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS**

**RECOMMENDED FOR APPROVAL**

DISTRICT ENGINEER	DATE
APPROVED	
DIVISION ENGINEER	DATE





**ESTIMATED QUANTITIES**

WALL CELLS #1 TO #24 INCL.				WALL CELLS #25 TO #98 INCL.			
ITEM	UNIT	DESCRIPTION	QUANTITY	ITEM	UNIT	DESCRIPTION	QUANTITY
			Original				Original
Special	Cu. yds.	Fill in cells	15,200	Special	Cu. yds.	Fill in cells	74,800
Special	Cu. yds.	Fill along heel of wall		Special	Cu. yds.	Fill along heel of wall	19,300
Special	Lbs.	Steel sheet piling	2,606,700	S-1	Cu. yds.	Class "E" concrete, slab & wave roll back	6,420
				S-4	Lbs.	Reinforcing steel	700,000
				S-9	Lbs.	Expansion joint plates	22,000
				Special	Lbs.	Steel sheet piling	12,995,600
				Special	Each	6" dia. extra strong pipe sleeves - 1'9" long	594
				Special	Sq. Ft.	Asphalt cement	12,000
				Special	Tons	Stone toe protection	10,000
				Special	Lin. Ft.	Kapco No. 36 joint sealing compound or equiv.	3,900

NOTE: Elevations & soundings are in feet & tenths and are referred to Low Water Datum El. 570.6

CELL NOS	ELEVATION	ELEVATION
	TOP OF SHEET PILES	BOTTOM OF SHEET PILES
1 to 24 incl.	579.25	533.0
25 and 26	578.25	536.0
27, 28 and 29	578.25	533.0
30, 31 and 32	578.25	530.0
33, 34 and 35	578.25	526.0
36, 37 and 38	578.25	523.0
39 to 98 incl.	578.25	520.0

Top of sheet piling cross walls in cell 47 & 98 shall be at El. 576.25 with bottoms at El. 520.6.

Cells nos. 25 to 98 shall be capped with rein. concrete, varying from 1'6" to 2'0" in thickness. Wave roll back on top of cells shall extend from cell No. 25 to cell No. 98.

Circular segment walls shall have tops at elevation of adjacent cell piles with bottoms at lowest elevation of piling in adjacent cells.

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS

**LOCATION PLAN AND ESTIMATED QUANTITIES**

**EAST 55TH STREET SEA WALL**

CUYAHOGA COUNTY  
SECT. CUY-2-18.67

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CEI	CEI	NEY	CEI		1/14/2 6-10-57	6-18-52



### ESTIMATED QUANTITIES

#### CELLS # 25 TO #111

ITEM	UNIT	DESCRIPTION	QUANTITY	
			ORIGINAL	REV. 2-17-53
SPECIAL	CU. YDS.	SAND FILL IN CELLS	74,800	86,000
SPECIAL	CU. YDS.	FILL ALONG HEEL OF WALL	19,300	18,500
5-1	CU. YDS.	CLASS "E" CONCRETE, SLAB & WAVE ROLL BCK	6,420	-0-
5-4	LBS.	REINF STEEL	700,000	-0-
5-9	LBS.	EXPANSION JOINT PLATES	22,000	-0-
SPECIAL	LBS.	ST'L SHEET PILING 60' LONG & UNDER	12,995,600	10,871,100
SPECIAL	EACH	6" Φ EXTRA STRONG PIPE SLEEVES, 1'-9" LG.	594	-0-
SPECIAL	SQ. FT.	ASPHALT CEMENT	12,000	-0-
SPECIAL	TONS	STONE TOE PROTECTION	10,000	11,800
SPECIAL	LIN. FT.	"KAPCO" #36 JOINT SEAL'G COMP'ND OR EQV	15,900	-0-
SPECIAL	LBS.	ST'L SHEET PILING OVER 60 FT. LONG	-0-	4,888,900
SPECIAL	CU. YDS.	STONE FILL IN CELLS	-0-	6406
			Revisions of	
			2-17-53 made	
			on CO #1	

Revised As Shown  
1-16-56

85,374 C.O. #9  
18,396 C.O. #9

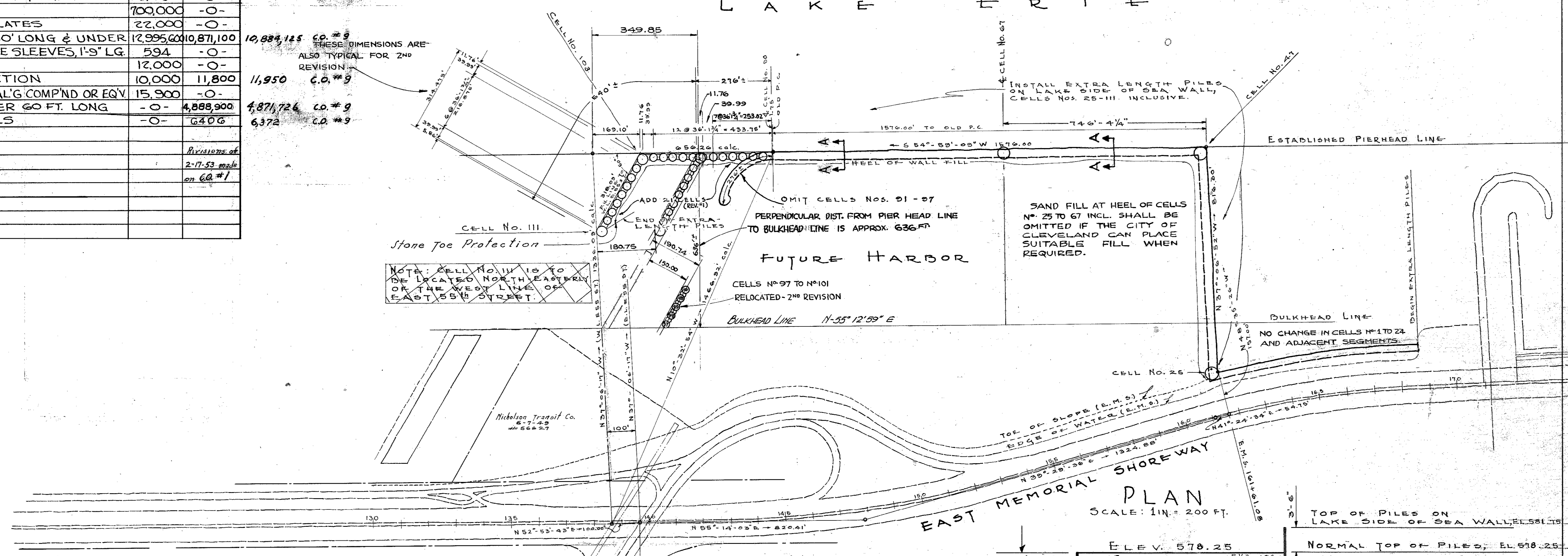
10,884,125 C.O. #9  
THESE DIMENSIONS ARE ALSO TYPICAL FOR 2ND REVISION

11,950 C.O. #9

4,871,726 C.O. #9  
6,372 C.O. #9

NOTE: CELLS NO. 97 TO NO. 101 INCLUSIVE ARE RELOCATE AS SHOWN AS PER 2ND REVISION OCT. 12, 1953

NOTE: SEE SHEET 5-A FOR DETAIL OF 2ND REVISION CHANGE



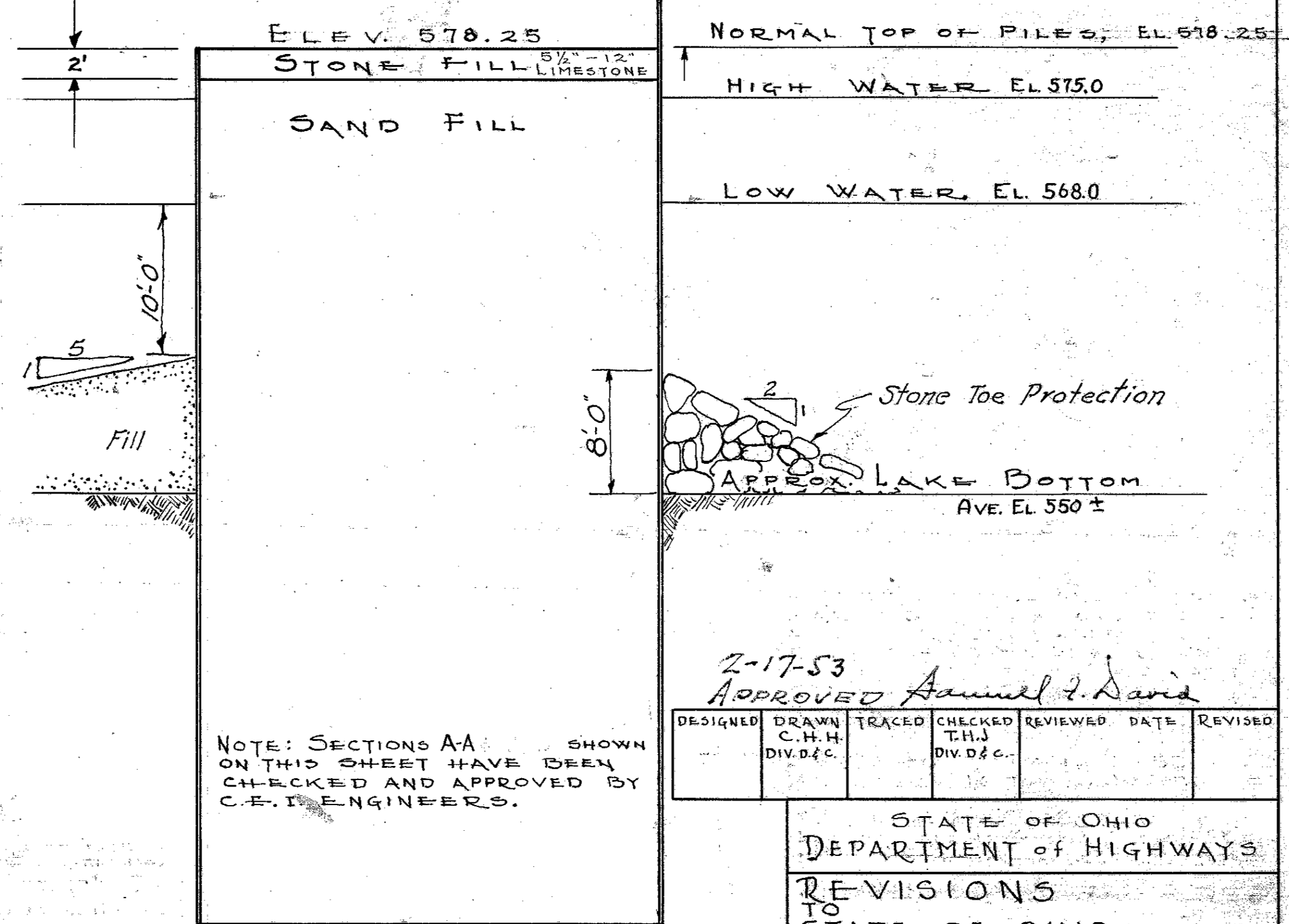
#### ELEVATION TOP & BOTTOM OF SHEET PILING CELLS #25 TO #111

CELL NOS	ELEVATION TOP-LAKE SIDE	ELEVATION TOP-SHORE SIDE	ELEVATION BOTTOM-ALL
25 & 26	581.75	578.25	536.0
27-28 & 29	581.75	578.25	533.0
30-31 & 32	581.75	578.25	530.0
33-34 & 35	581.75	578.25	526.0
36-37 & 38	581.75	578.25	522.0
39 to 111 incl.	581.75	578.25	520.6

Top of sheet piling cross walls in Cells 47-103 & 111 shall be at Elev. 576.25 with bottoms at Elev. 520.6

Cells Nos 25 to 111 incl. shall be capped with 2 ft. of limestone screened from 5 1/2" to 12"

Circular segment walls shall have tops at elevations of adjacent cell piles with bottoms at lowest elev. of piling in adjacent cell.



2-17-53  
APPROVED Samuel J. David

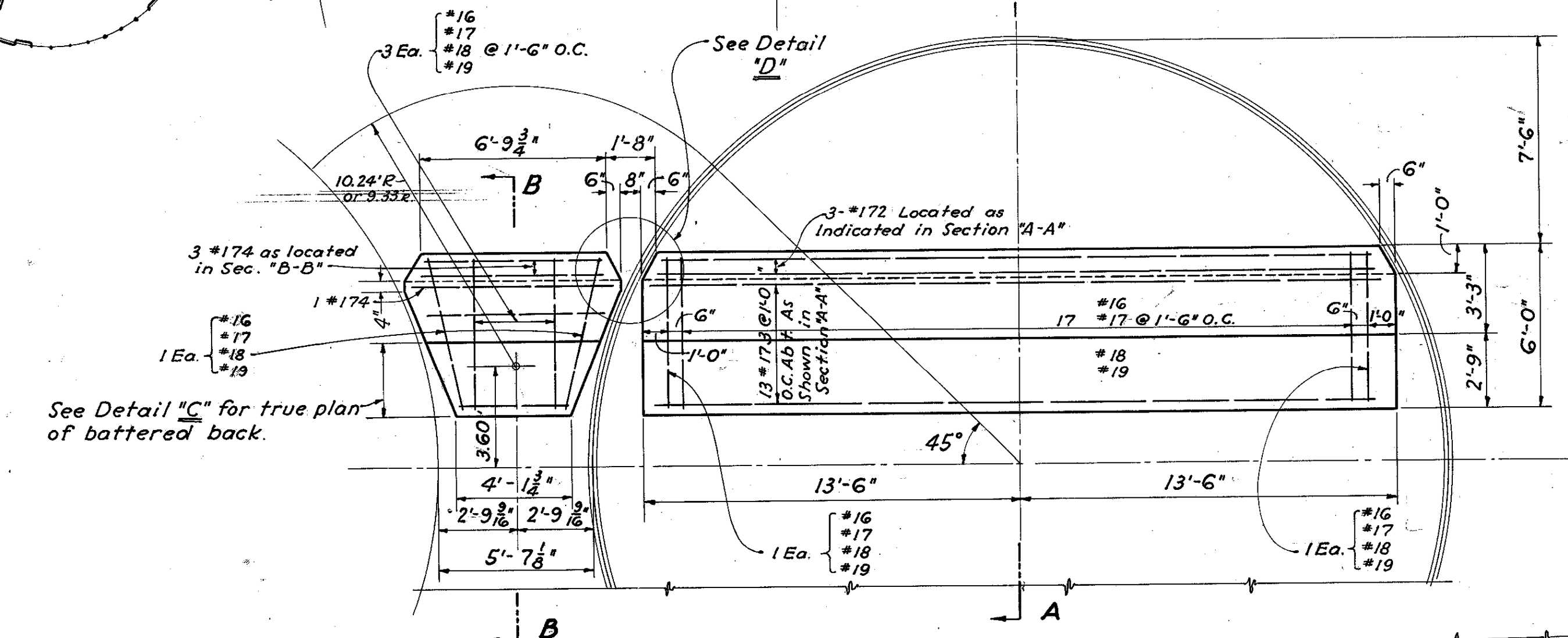
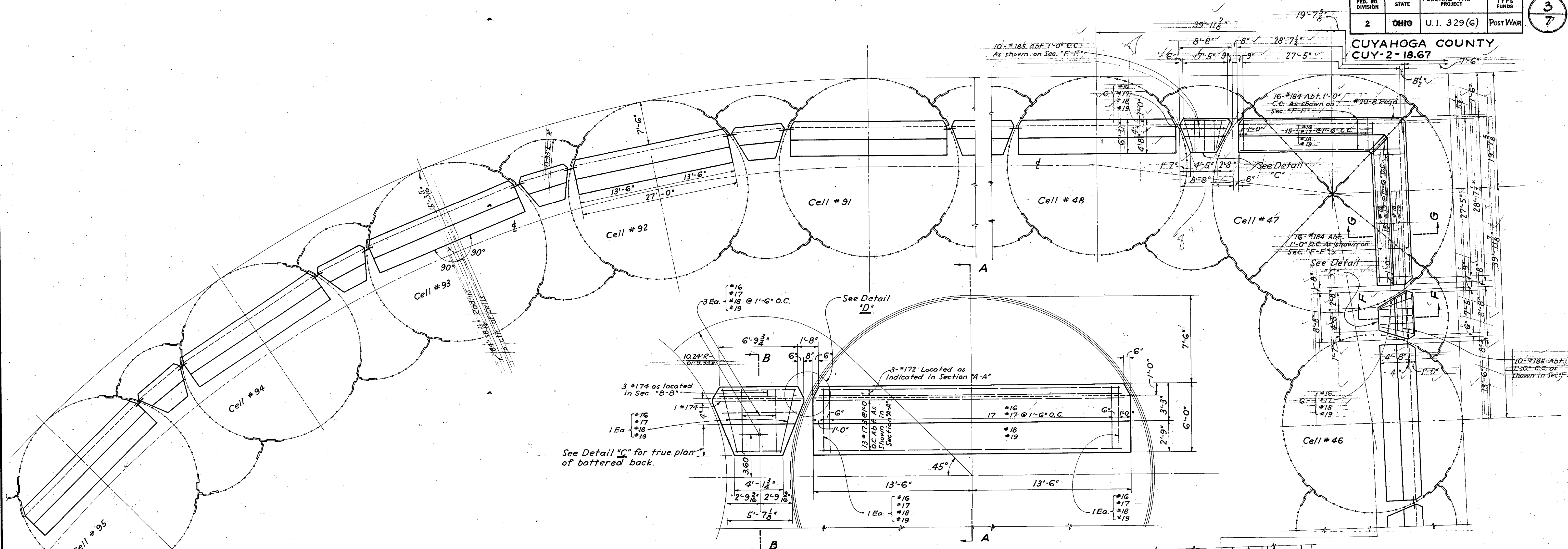
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	C.H.H. DIV. 24 C.		T.H.J. DIV. 24 C.			

STATE OF OHIO DEPARTMENT OF HIGHWAYS	
TO REVISIONS	
STATE OF OHIO DEPARTMENT OF HIGHWAYS CUY-2-18.67 EAST 55 ST. SEA WALL	
SCALE AS NOTED	DATE FEB. 1953

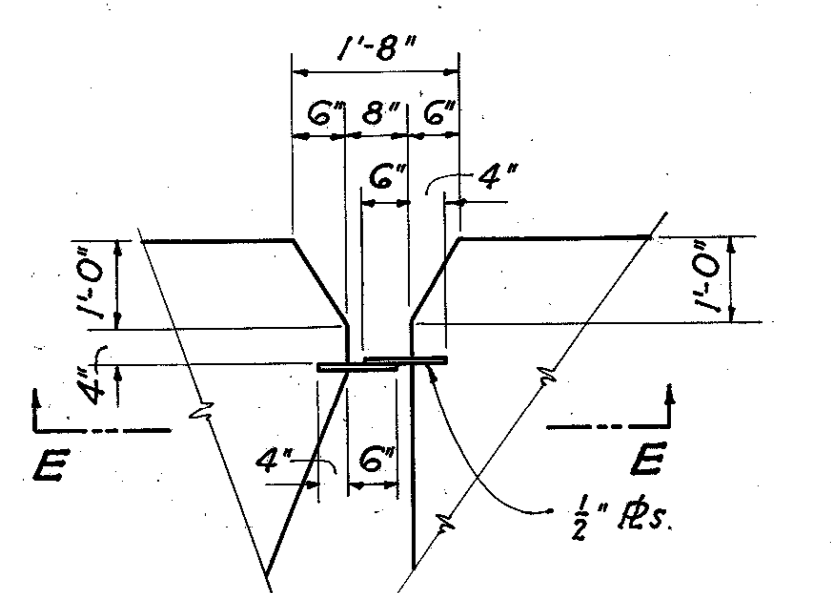
DWG. PK. 31-51



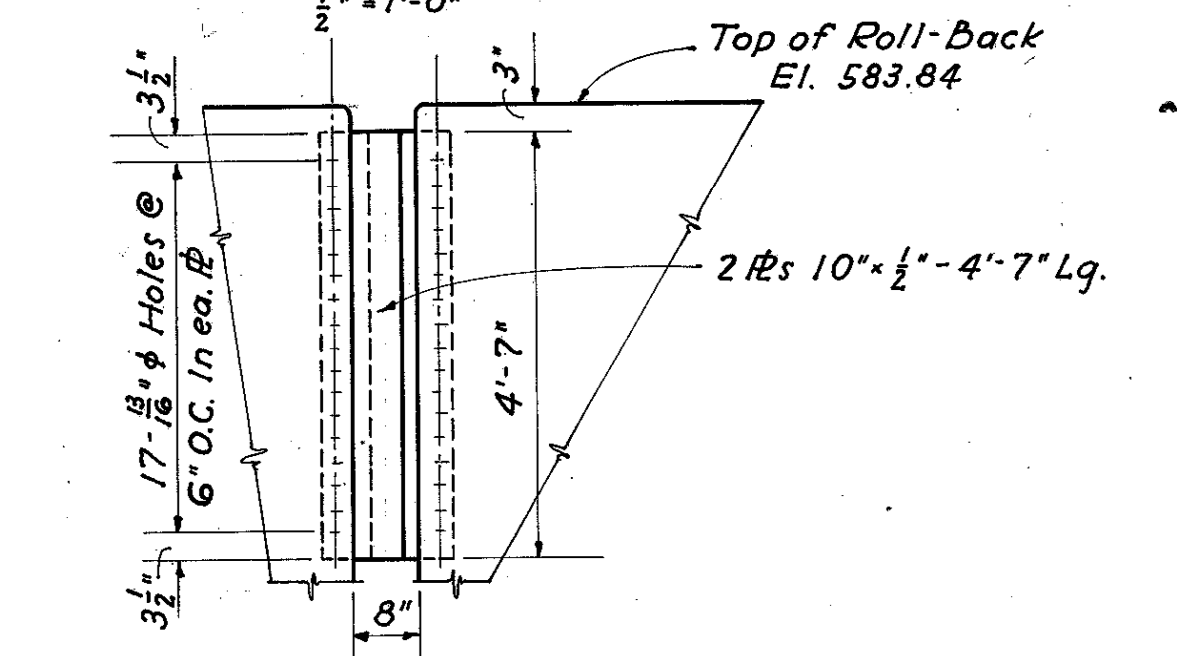
CUYAHOGA COUNTY  
SEC. CUY-2-18.67



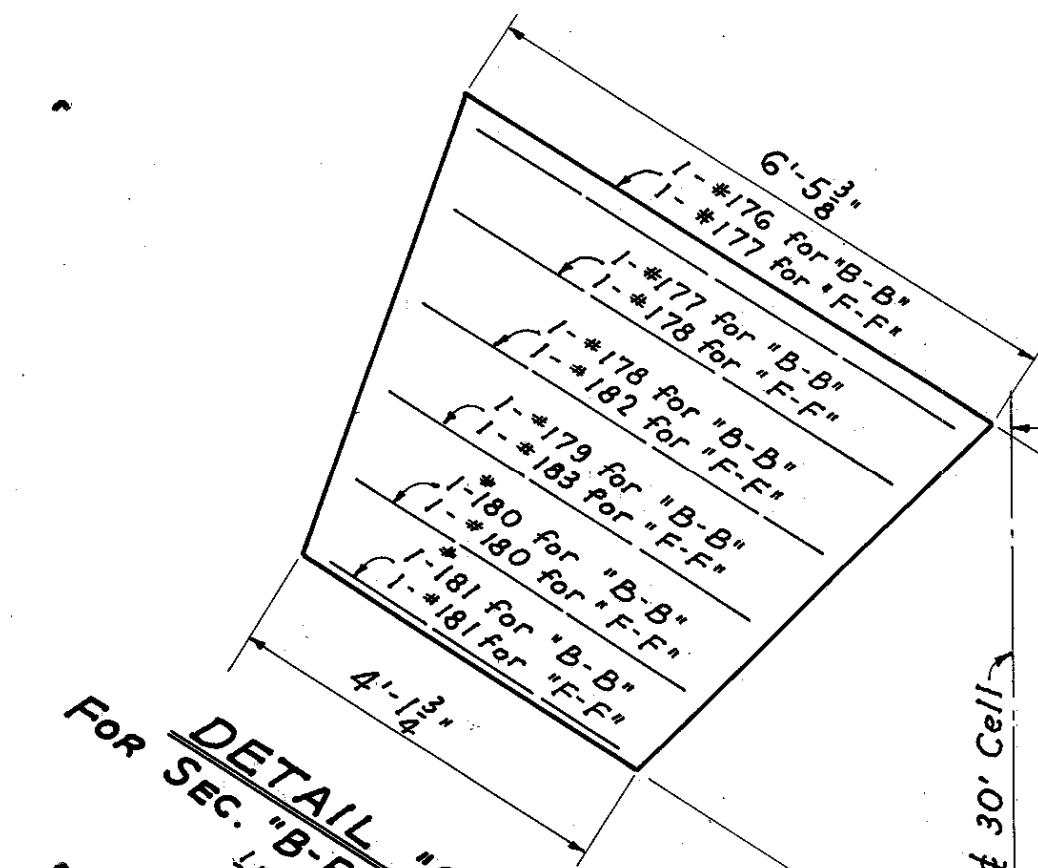
**TYPICAL PLAN OF ROLL-BACK**  
For Cells Nos. 25 To 46 INCL. } 70 REQD  
For Cells Nos. 48 To 95 INCL. }  
1/2" = 1'-0"



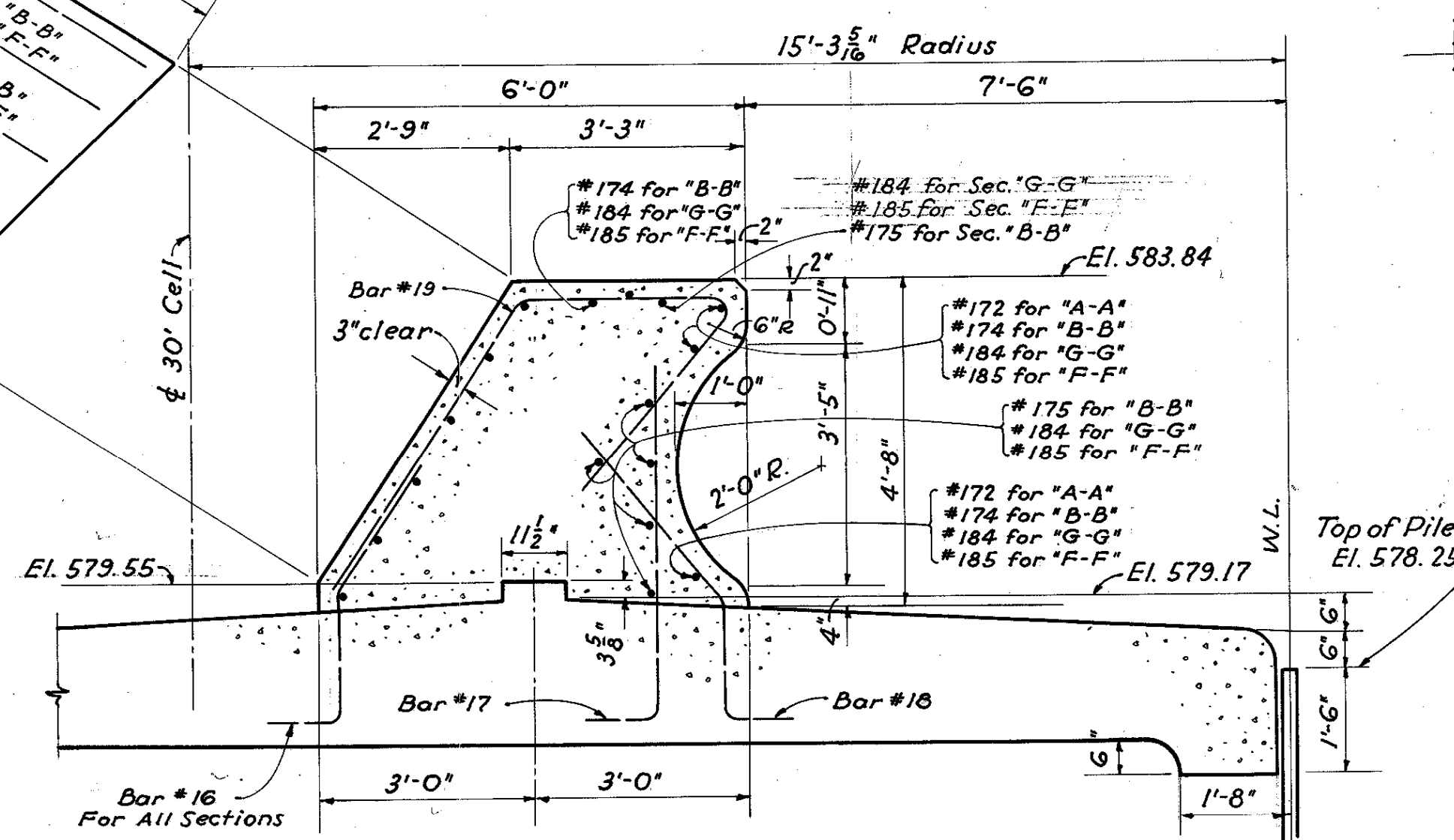
**DETAIL "D"**  
1/2" = 1'-0"



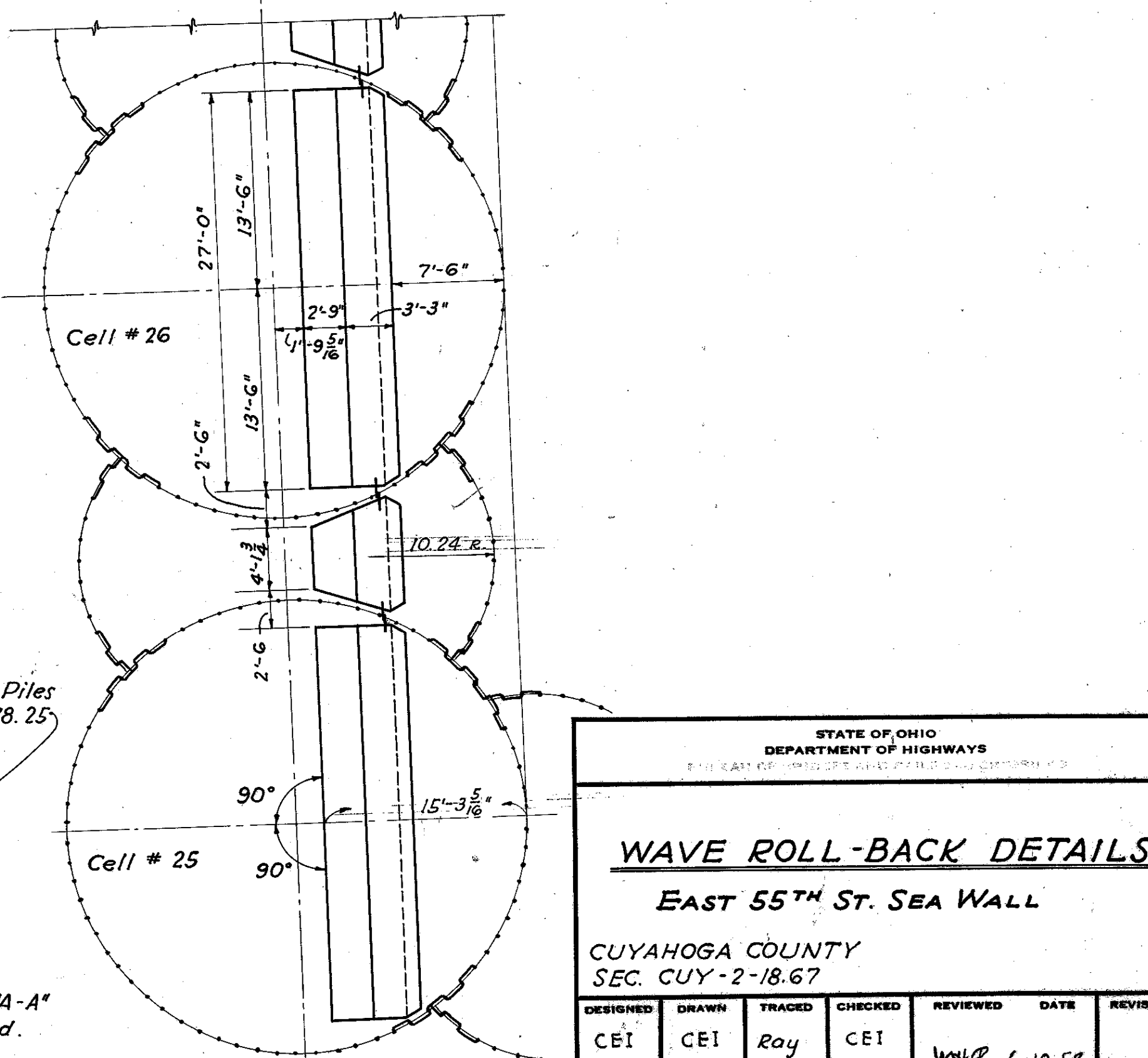
**DETAIL "E-E"**  
1/2" = 1'-0"



**DETAIL "C"**  
For Sec. "B-B", "F-F" & "G-G"  
1/2" = 1'-0"



**SECTION "A-A"**  
ROLL-BACK SECTION TYPICAL FOR SECTIONS "B-B", "F-F" & "G-G"  
1/2" = 1'-0"



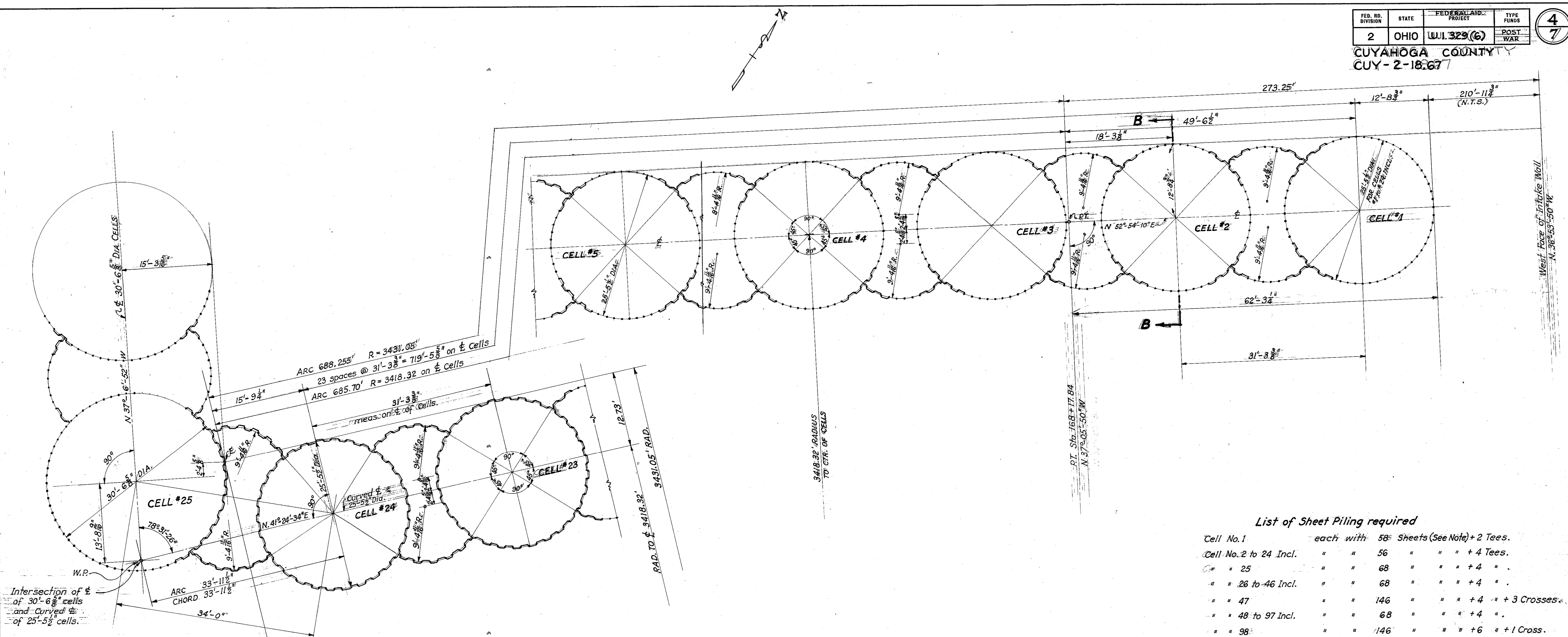
STATE OF OHIO  
DEPARTMENT OF HIGHWAYS

**WAVE ROLL-BACK DETAILS**  
EAST 55<sup>TH</sup> ST. SEA WALL

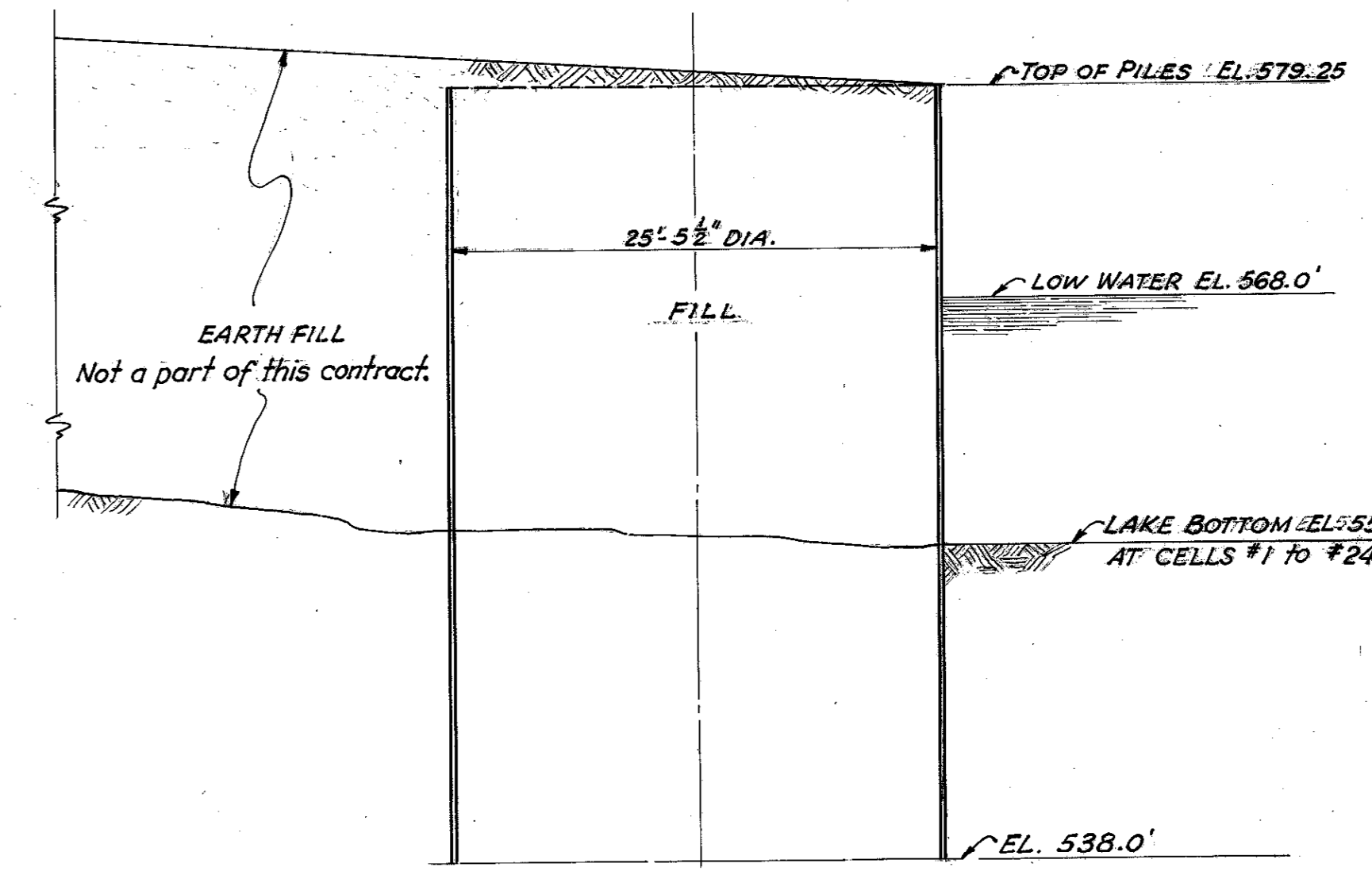
CUYAHOGA COUNTY  
SEC. CUY-2-18.67

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CEI	CEI	Ray	CEI	WHR	6-10-52	





- List of Sheet Piling required**
- |                        |           |     |                             |
|------------------------|-----------|-----|-----------------------------|
| Cell No. 1             | each with | 58  | Sheets (See Note) + 2 Tees. |
| Cell No. 2 to 24 Incl. | " "       | 56  | " " " + 4 Tees.             |
| " " 25                 | " "       | 68  | " " " + 4 "                 |
| " " 26 to 46 Incl.     | " "       | 68  | " " " + 4 "                 |
| " " 47                 | " "       | 146 | " " " + 4 " + 3 Crosses.    |
| " " 48 to 97 Incl.     | " "       | 68  | " " " + 4 "                 |
| " " 98                 | " "       | 146 | " " " + 6 " + 1 Cross.      |
- Circular Segments between Cells No. 1 to No. 24 each with 20 sheets (See Note)**
- |                      |     |    |         |
|----------------------|-----|----|---------|
| " " No. 24 to No. 25 | " " | 20 | " " " " |
| " " " 25 to " 46     | " " | 22 | " " " " |
| " " " 46 to " 48     | " " | 24 | " " " " |
| " " " 48 to " 91     | " " | 22 | " " " " |
| " " " 91 to " 97     | " " | 23 | " " " " |
| " " " 97 to " 98     | " " | 22 | " " " " |
- Note: Sheet piling shall be MP-112, SP-4 or equivalent.



**SECTION B-B**  
TYPICAL FOR CELLS #1 TO #24 INCL.

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS

**DETAIL OF CELLS**  
EAST 55TH ST SEAWALL  
CUYAHOGA COUNTY  
SEC. CUY-2-18.67

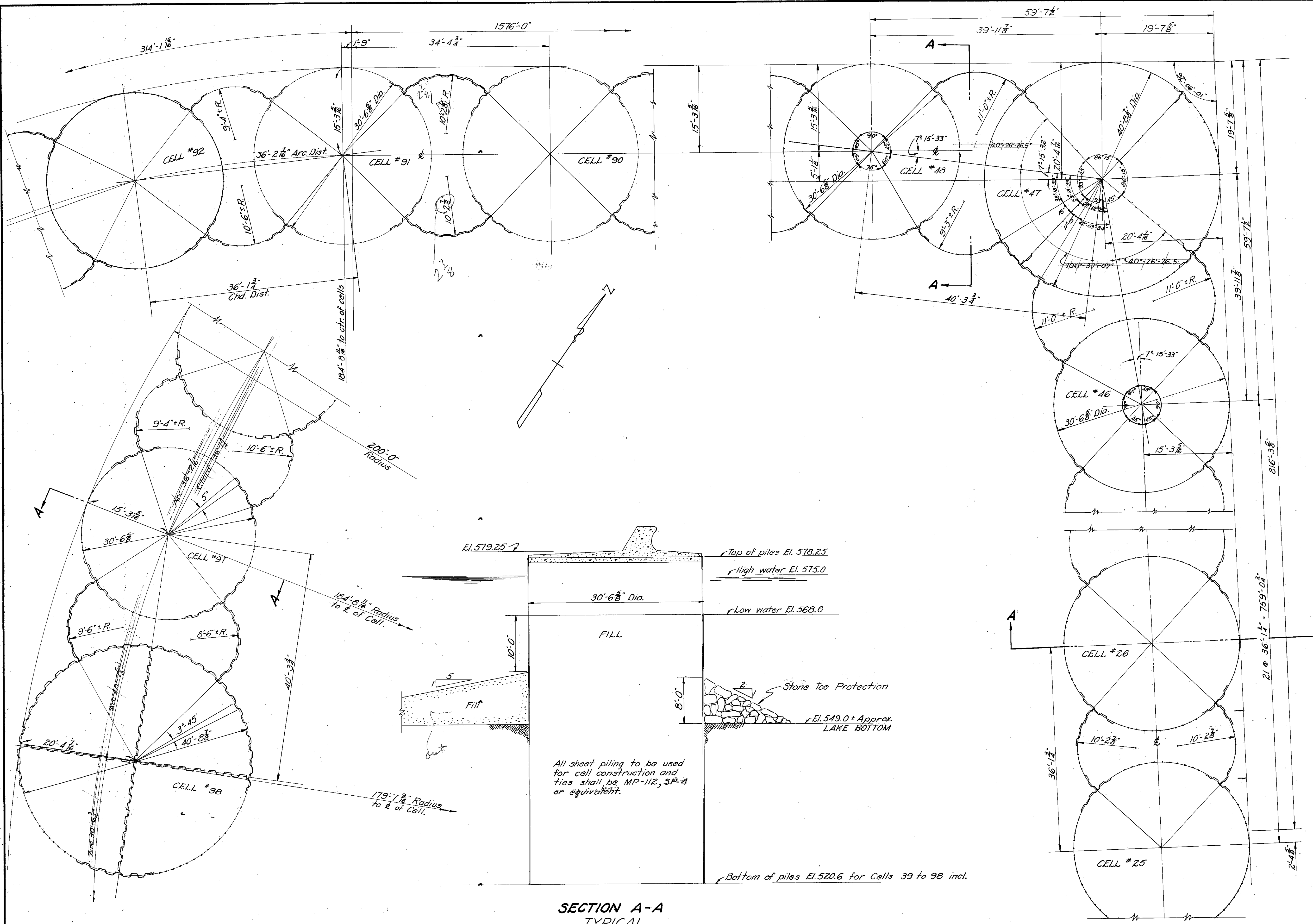
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CEI	CEI	J.V.G.	CEI	W.H.C.	6-10-52	



FED. NO. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	U.L. 329 (6)	POST-WAR

5  
7

CUYAHOGA COUNTY  
CUY-2-18.67

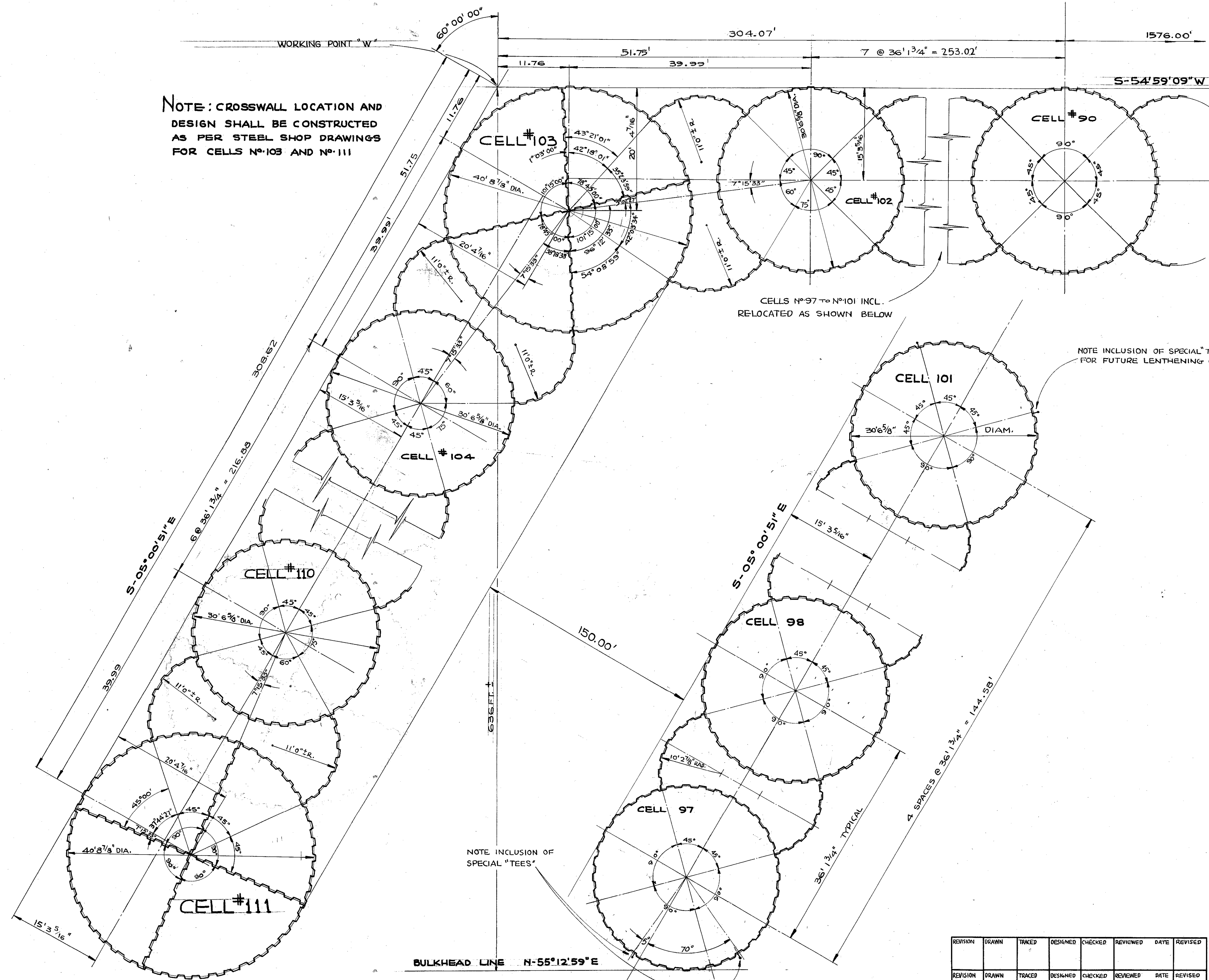


SECTION A-A  
TYPICAL

STATE OF OHIO DEPARTMENT OF HIGHWAYS						
DETAIL OF CELLS #25 TO #98 EAST 55TH. ST. SEAWALL						
CUYAHOGA COUNTY SEC. CUY-2-18.67						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CEI	CEI	CW	CEI	WTC	6-10-52	



NOTE: CROSSWALL LOCATION AND DESIGN SHALL BE CONSTRUCTED AS PER STEEL SHOP DRAWINGS FOR CELLS NO. 103 AND NO. 111



CELLS NO. 97 TO NO. 101 INCL. RELOCATED AS SHOWN BELOW

NOTE INCLUSION OF SPECIAL "TEES" FOR FUTURE LENGTHENING OF WALL

NOTE INCLUSION OF SPECIAL "TEES"

REVISION	DRAWN	TRACED	DESIGNED	CHECKED	REVIEWED	DATE	REVISED
1	JABLONSKI	JABLONSKI	JABLONSKI	SEIFRIDGE			
2							

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS

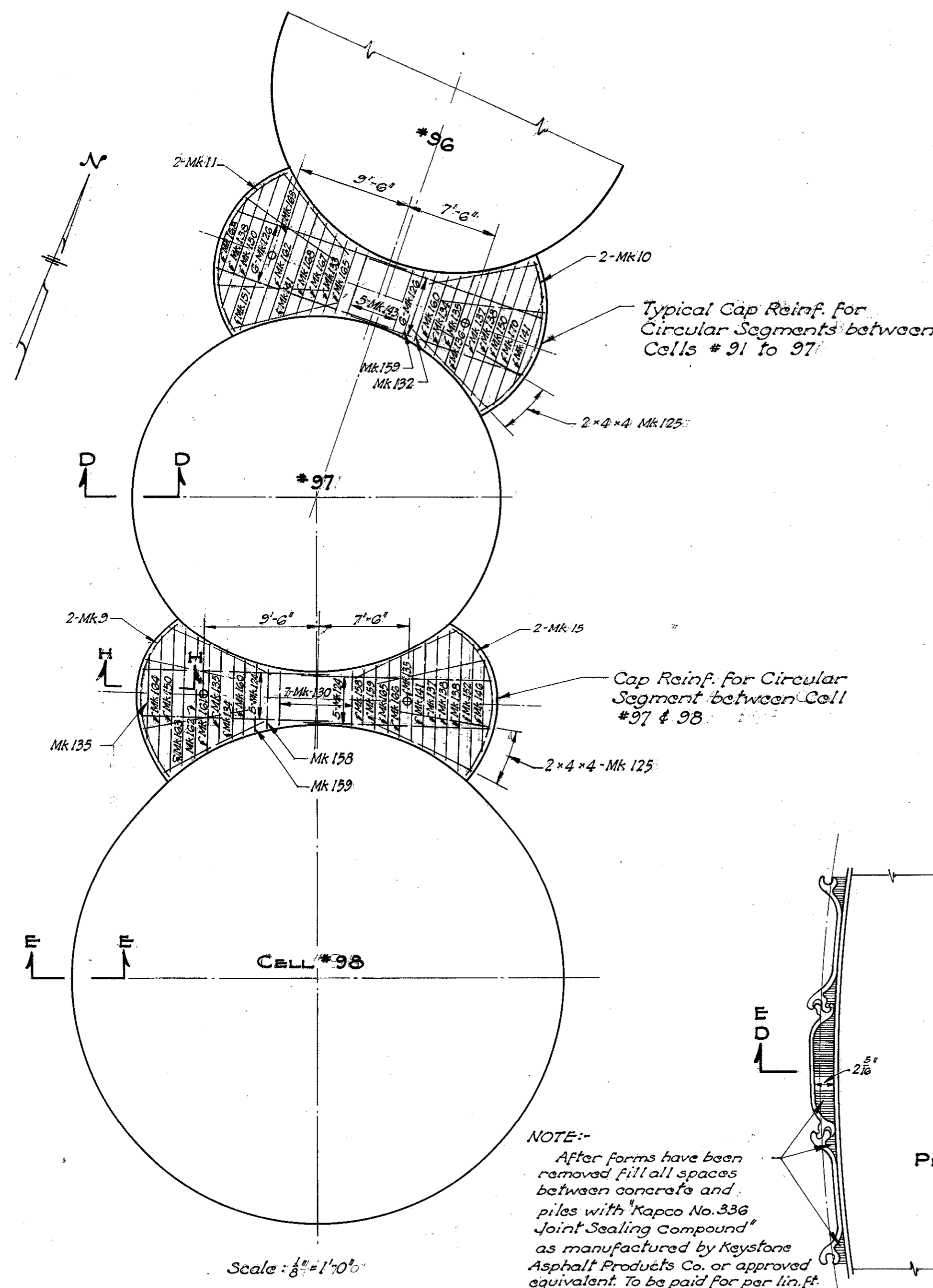
DETAILS OF  
CELLS #90 TO #111  
EAST 55 ST. SEA WALL

CUYAHOGA COUNTY  
SEC. CUY-2-18.67

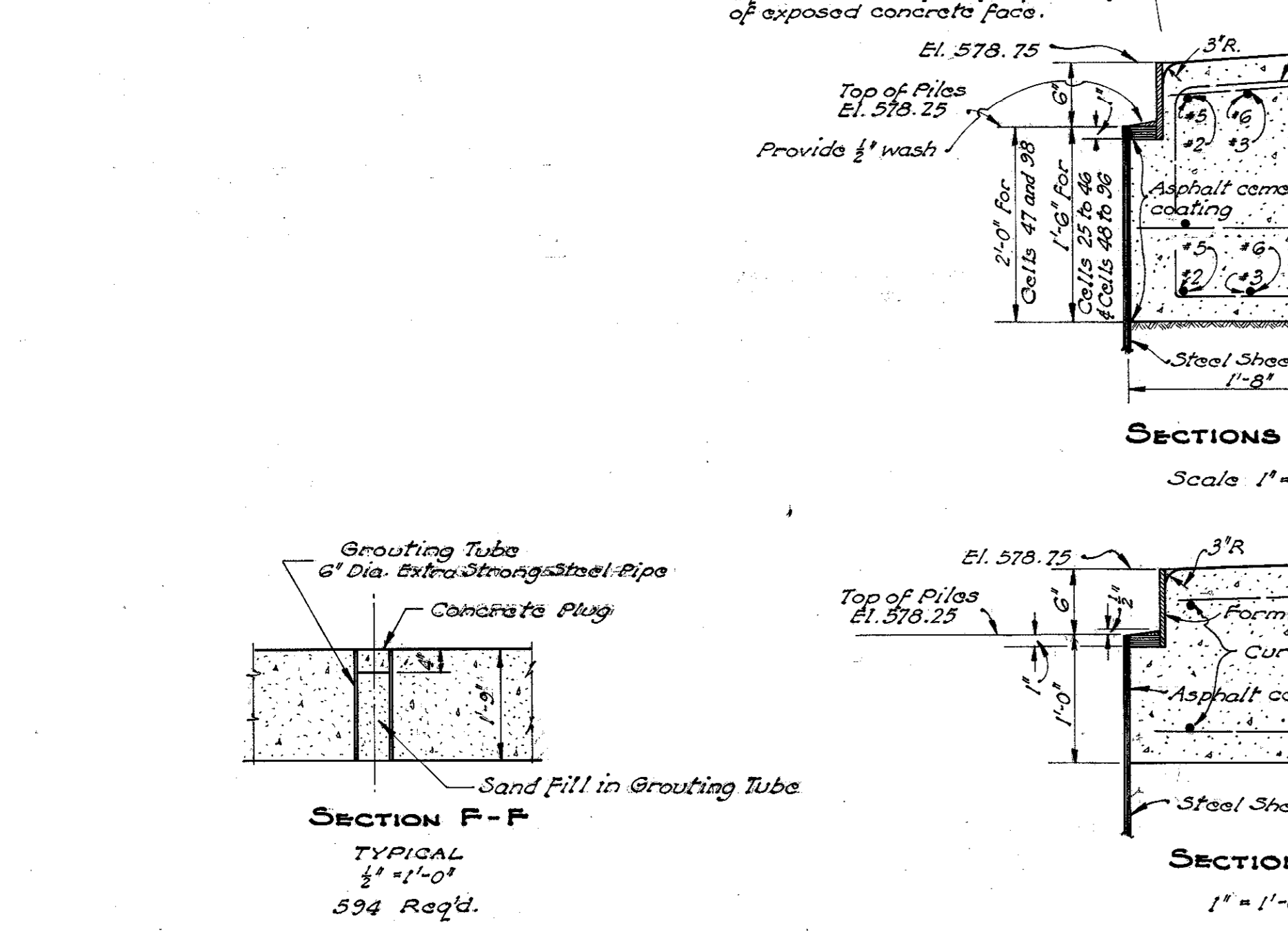
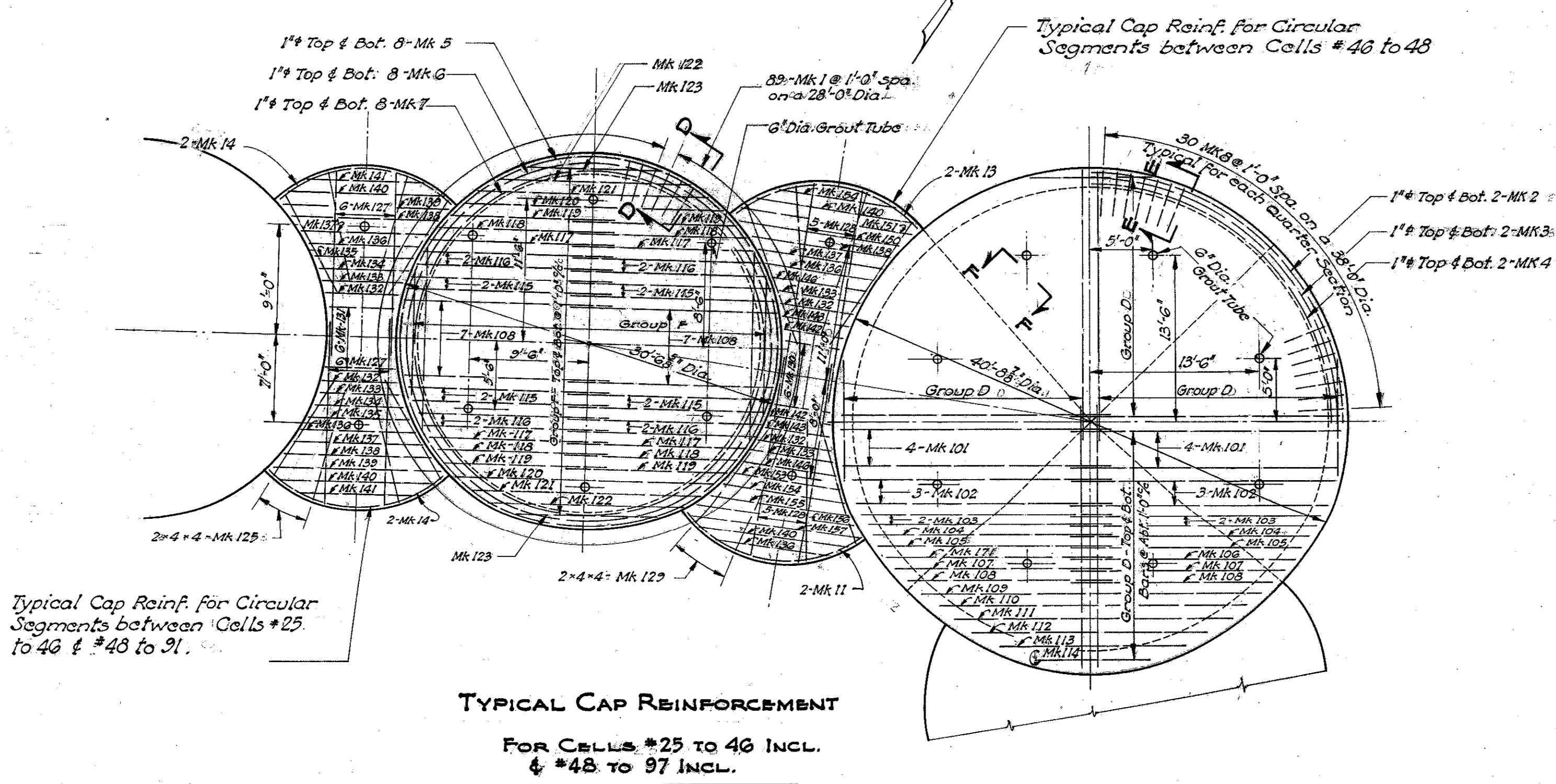
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JABLONSKI	JABLONSKI	JABLONSKI	SEIFRIDGE			

10-12-53



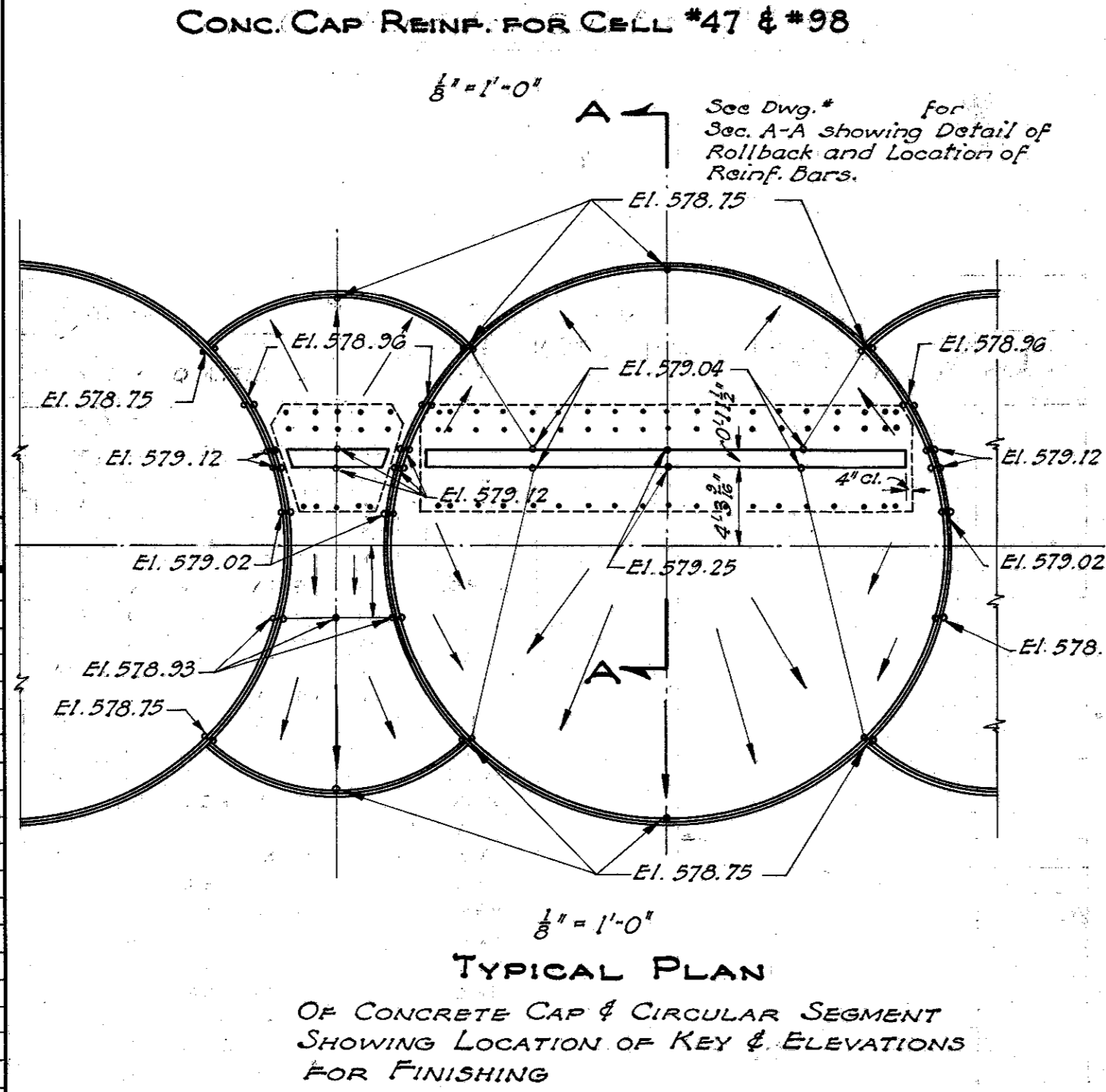


PREFIX		STRAIGHT BAR SCHEDULE									
MARK	SIZE	TOTAL QUANT.	LENGTH	2 CELLS #47 & 98	72 CELLS #25 TO 46 #48 TO 97	1 CIR. SEG. BETWEEN #91 TO 97	6 CIR. SEG. BETWEEN #91 TO 97	2 CIR. SEG. BETWEEN #48 TO 46	64 CIR. SEG. BETWEEN #25 TO 46 #48 TO 97	WEIGHT	
101	6	128	21'-6"	128							
102	6	96	20'-9"	96							
103	6	64	20'-0"	64							
104	6	32	19'-3"	32							
105	6	32	18'-9"	32							
107	6	32	17'-3"	32							
108	6	4064	18'-3"	32	4032						
109	6	16	28'-3"	16							
110	6	16	28'-0"	16							
111	6	16	23'-6"	16							
112	6	16	20'-3"	16							
113	6	16	18'-6"	16							
114	6	16	10'-9"	16							
115	6	2304	15'-9"	2304							
116	6	2304	15'-0"	2304							
117	6	1152	14'-0"	1152							
118	6	1152	13'-0"	1152							
119	6	1152	12'-6"	1152							
120	6	576	20'-9"	576							
121	6	576	18'-6"	576							
122	6	576	15'-6"	576							
123	6	576	11'-6"	576							
124	5	20	15'-0"								
125	5	2272	9'-0"			20	192		2048		
126	5	144	15'-0"								
127	5	1536	14'-3"					40	1536		
128	5	40	16'-9"					64			
129	5	64	12'-0"								
130	4	38	4'-3"			14		24			
131	4	768	5'-0"						768		
132	4	276	5'-9"				12	8	256		
133	4	276	6'-6"				12	8	256		
134	4	270	7'-0"				12	8	256		
135	4	274	7'-9"				12	8	256		
136	4	276	8'-9"				12	8	256		
137	4	274	10'-0"				12	4	256		
138	4	288	11'-6"			4	24	4	256		
139	4	256	13'-6"					8	256		
140	4	264	12'-3"					8	256		
141	4	282	9'-0"			2	24		256		
142	4	8	4'-9"					8			
143	4	68	5'-3"				60	8			



PREFIX		STRAIGHT BAR SCHEDULE									
MARK	SIZE	TOTAL QUANT.	LENGTH	2 CELLS #47 & 98	72 CELLS #25 TO 46 #48 TO 97	1 CIR. SEG. BETWEEN #91 TO 97	6 CIR. SEG. BETWEEN #91 TO 97	2 CIR. SEG. BETWEEN #48 TO 46	64 CIR. SEG. BETWEEN #25 TO 46 #48 TO 97	WEIGHT	
145											
146	4	10	7'-6"					8			
147											
148											
149											
150	4	30	13'-0"			2	24	4			
151	4	16	13'-9"				12	4			
152	4	2	10'-6"			2					
153	4	4	8'-6"					4			
154	4	8	9'-6"					8			
155	4	4	11'-0"					4			
156	4	4	12'-6"					4			
157	4	4	14'-0"					4			
158	4	4	5'-0"			4					
159	4	16	5'-6"			4		12			
160	4	14	6'-3"			2		12			
161	4	2	9'-3"			2					
162	4	14	10'-3"			2		12			
163	4	14	11'-9"			2		12			
164	4	2	10'-6"			2					
165	4	26	6'-0"			2		24			
166	4	2	6'-9"			2					
167	4	12	7'-3"					12			
168	4	24	8'-0"					24			
169											
170	4	12	12'-0"					12			
171	6	32	18'-3"	32							
172	6	210	25'-6"								
173	6	910	26'-0"								
174	6	256	6'-3"								
175	6	384	7'-3"								
176	6	64	5'-0"								
177	6	66	5'-8"								
178	6	66	5'-0"								
179	6	64	4'-6"								
180	6	66	4'-0"								
181	6	66	3'-7"								
182	6	2	4'-10"								
183	6	2	4'-4"								
184	6	32	27'-0"								
185	6	20	7'-0"								

PREFIX		BENT BAR SCHEDULE									
MARK	SIZE	TOTAL QUANT.	LENGTH	TYPE	A	B	C	D	E	PIN	WEIGHT
1	4	6319	7'-8"	I	3'-6"	1'-6"	1'-2"	1'-0"	5'	4814	805
2	3	16	18'-0"	II	2'-2"	19'-9"	18'-9"				405
3	3	16	18'-7"	II	2'-3"	19'-6"	18'-0"				780
4	3	16	18'-3"	II	2'-11"	19'-0"	17'-9"				
5	3	576	26'-9"	II	5'-7"	14'-11"	23'-4"				
6	3	576	26'-0"	II	5'-5"	14'-9"	22'-7"				
7	3	576	25'-3"	II	5'-4"	14'-11"	22'-0"	2'-11"			
8	4	240	8'-8"	I	3'-6"	2'-0"	1'-2"	1'-6"	5'	4814	182
9	4	2	14'-9"	II	2'-4"	3'-2"	12'-1"				
10	4	12	14'-9"	II	2'-7"	10'-2"	13'-6"				
11	4	16	16'-0"	II	3'-4"	9'-0"	14'-0"				
12											
13	4	4	16'-3"	II	3'-0"	10'-8"	14'-9"				
14	4	256	15'-6"	II	2'-7"	10'-0"	14'-0"				
15	4	2	14'-6"	II	3'-0"	8'-2"	12'-8"				
16	G	1742	4'-10"	III	1'-0"	1'-10"	1'-2"			4'	
17	G	1742	5'-8"	III	1'-0"	4'-10"				4'	
18	G	1742	5'-7"	III	1'-0"	4'-10"	2'-3"	1'-9"		4'	
19	G	1742	11'-1"	III	2'-9"	4'-11"	3'-0"			4'	
20	G	8	4'-10"	IV	2'-6"	2'-6"				4'	





FED. RD. DIVISION	STATE	FEDERAL AID PROJECT	TYPE FUNDS
2	OHIO	UI-323(6)	POST WAR

7  
7

CUYAHOGA COUNTY  
SEC. CUY-2-18.67

## GENERAL NOTES

PROPOSED WORK consists of the construction of a marine structure known as the East 55th St. Sea Wall for the purpose of protecting the East Memorial Shoreway against lake action. This sea wall consists of approximately 720' of filled sheet pile cells parallel to and 157' from  $\pm$  of proposed shoreway; and approximately 2680' of filled sheet pile cells with a concrete cap, extending into the lake. Incidental features are a concrete wave roll-back on top of the concrete slab, stone toe protection in front of and sloped fill behind the 2680'  $\pm$  portion.

STEEL SHEET PILES. The sheet piling shall be U.S. Steel section MP-112 or Bethlehem section SP-4 or approved equivalent fabricated connections such as tees and crosses shall be of size and strength to correspond with the rolled members. The fabricated members may be built up by either welding or riveting. Steel for sheet piling shall be in accordance with Sec. M-7.4(c).

A suitable template or other means shall be used to establish the position and insure proper fit of the sheet piles in a cell.

The driving of a pile, if directed by the Engineer, shall be stopped before the top of the pile reaches the required elevation, to permit cutting off of metal that is deformed due to driving. Such cutting shall be neatly done to a straight line. Defective piles shall be removed and replaced. A pile will be considered defective if injured to an extent that would reduce the strength of its section more than 20 percent.

The penetration of the sheet piles shall be such as to reach the elevations shown on sheet 2 unless obstructions are encountered.

The sheet piles shall be ordered 6" longer than required according to these elevations, to allow for cut-off of deformed metal at top of pile due to driving.

In case obstructions such as boulders or large stones either above or below lake bottom prevent the penetration of a sheet pile to a depth of at least 10 feet below lake bottom such obstructions shall be removed.

The sheet piling shall be paid for at the contract unit price per pound bid for this item. The number of pounds paid for shall be the actual weight of piling in place and accepted plus an allowance for cut-off as hereinafter set forth. In determining the weight to be paid for the length of each sheet pile (and special section) shall be considered the length below the specified top of sheeting plus the length of cut-off but not to exceed 6" of cut-off, and the weight per linear foot of each sheet pile shall be determined from the approved shop drawings using the shapes, weights and dimensions called for on these project plans. The weight of steel shall be considered as 490 pounds per cubic foot. Payment for the quantity determined as described above, at the unit price bid per pound, shall constitute full compensation for furnishing, fabricating, driving and cutting-off all steel sheet piling and special sections required, and for removal of obstructions, and for all labor, tools and equipment necessary to complete this item.

FILLING OF CELLS: The fill material shall be composed of sound, durable particles of sand, gravel, crusher-run limestone or sandstone, bank-run blast furnace slag or boiler slag. It shall be substantially free from organic matter, lumps of clay, and thin, flat shaly or elongated pieces. Lake sand is acceptable but permission for its use must be obtained by the contractor from the Director of Natural Resources of the State of Ohio.

The grading requirements are: 100% shall pass a 6" square sieve and not more than 10% by weight shall pass a No. 100 sieve.

The fill need not be compacted but care shall be taken in its placement to avoid unfilled pockets and large pores. The top of the fill, on which the slab will be placed, shall be dense in texture to permit placing of the slab concrete.

Payment will be made for the number of cubic yards of fill in place, based on the horizontal inside area according to the dimensions shown on the plans and on the depth from the bottom of the slab to the average elevation of lake bottom within each cell as it exists and is determined by the Engineer before the filling is begun. This quantity will be paid for at the contract unit price per cubic yard bid, which payment shall constitute full compensation for all material, labor, tools and equipment necessary to complete this item.

FILL ALONG HEEL OF WALL shall be composed of any of the kinds of material as specified for the filling of the cells. This fill shall be placed simultaneously with or soon after the fill in the adjacent cells. Payment will be made at the contract unit price per cubic yard bid, for the number of cubic yards of fill in place and accepted, measured by the Engineer before being deposited under water. This payment shall constitute full compensation for all material, labor, tools and equipment necessary to complete this item.

STONE TOE PROTECTION. The stone placed as protection along the toe of the sea wall shall conform approximately to the overall cross-sectional dimensions shown on the plans. The stones shall be of 22 ton minimum size.

Stone shall be placed simultaneously

with or soon after the fill in the adjacent cells.

Payment will be made for the number of tons of stone toe protection placed and accepted, based on scale weights. This quantity will be paid for at the contract unit price per ton bid, which payment shall constitute full compensation for all material, labor, tools and equipment necessary to complete this item.

CONCRETE SLAB. Concrete for the slab and wave roll-back shall be Class "E". The upper surfaces of the slab shall be given a float finish, the other exposed surfaces shall be given a grout cleaning finish.

PIPE SLEEVES shall meet the requirements for extra strong pipe as specified in Section M-6.9. The pipe sleeves shall be paid for per piece, in place and accepted, including concrete plugs.

ASPHALT CEMENT: Inside face of piles from top of piles to the bottom of concrete slab shall be coated with two applications of Section M-5.1, 85-100 penetration asphalt cement at the rate of 0.25 gallons per square yard for each application. Asphalt cement shall be placed immediately in advance of placing concrete.

Payment will be made for the number of square feet of sheet piling coated, measured on the arcs as determined by the radii shown on the plans.

### PROGRESS SCHEDULE:

Construction work on cells No. 1 to 25 inclusive shall be started at the earliest possible date and shall be prosecuted to completion as rapidly as possible in order to permit the construction of adjacent embankment on East Memorial Shoreway, Federal Project UI-323(6) Part 2. Work on the remainder of the sea wall shall be scheduled in a manner that will not retard or interfere with the above mentioned work on cells No. 1 to 25.

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES AND RAILROAD CROSSINGS						
<b>GENERAL NOTES</b>						
EAST 55 <sup>TH</sup> STREET SEA WALL						
CUYAHOGA COUNTY SECT. CUY-2-18.67						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
		NEY		WNC	6-10-52	