The Vinyl Institute

A Division of The Society of The Plastics Industry, Inc.

Roy T. Gottesman
Executive Director

RECEIVED
AUG 10 1989
Sherry M. Carr

August 8, 1989

TO: The Pipe Resources Organization

RE: Information From Uni-Bell

I believe the attached two letters received from Bob Walker at Uni-Bell will be of interest and value to you.

Roy

RTG/pmb
enclosures

CTL027698

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UNI-BELL PVC PIPE ASSOCIATION
2655 Villa Creek Drive, Suite 155
Dallas, Texas 75234-7362
Phone (214) 243-3902 Fax (214) 243-3907

August 4, 1989

TO: Roy Gottesman

FROM: Robert Walker

REC'D AUG 7 1989

SUBJECT: **Large Diameter Pipe Competition**

Per your request we obtained an internal analysis of non-PVC, large diameter pipe prices conducted by one of our members. While I cannot attest to the accuracy of the figures, I consider the source to be a reliable one.

Corrugated Steel Pipe (Non-Pressure)

The term gauge refers to wall thickness of metal pipe used for culverts and storm drains (not applicable to iron pressure pipes). In this nomenclature, the smaller the Gauge the thicker the wall of the pipe.

Corrugated Metal Pipe Gauge	Wall Thickness in Inches
18	0.052
16	0.064
14	0.079
12	0.109
10	0.138
8	0.168

Only corrugated steel is included in this pipe analysis. Corrugated aluminum has an AASHTO Specification, but it is a minor factor in the market because it is difficult to install. Generally, a lower Gauge aluminum is often required against a higher Gauge steel because aluminum is highly flexible and will buckle thus adding to the installation disadvantage.

18 Gauge steel is rarely used in diameters larger than 10".

16 Gauge Steel is generally restricted to 24" and below for most highway projects.

14 Gauge steel is generally not used in diameters larger than 36" for most highway projects.

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12 Gauge steel may be used for all diameters, 48" and smaller.

10 Gauge steel may be used for all larger diameters 48" and smaller. It is estimated, however, that less than 20 percent of metal projects are specified 10 Gauge.

CORRUGATED STEEL PRICE TABLES

Corrugated Steel: 16 Gauge

Diameter (D)	Wt (Lbs/Ft)	Price ($/Ft)
18	15	$6.00
21	17	$7.00
24	19	$8.50

Corrugated Steel: 14 Gauge

Diameter (D)	Wt (Lbs/Ft)	Price ($/Ft)
18	18	$7.38
21	21	$8.61
24	24	$9.84
27	27	$11.07
30	30	$12.00

Corrugated Steel: 12 Gauge

Diameter (D)	Wt (Lbs/Ft)	Price ($/Ft)
18	25	$10.25
21	29	$11.89
24	33	$13.53
27	37	$15.17
30	41	$16.81
36	49	$20.09
42	57	$22.00
48	65	$25.00
54	73	$29.93

Corrugated Steel: 10 Gauge

Diameter (D)	Wt (Lbs/Ft)	Price ($/Ft)
18	-	-
21	-	-
24	41	$16.81
27	47	$19.27
30	52	$21.32
36	62	$25.42
42	72	$29.52
48	82	$33.62
54	92	$37.72

Concrete Pipe (Non-Pressure)

Type III concrete accounts for approximately 60-70 percent of all concrete used for highway projects.

Concrete prices will vary in an attempt to keep PVC pipes out of the highway market. Once PVC pipe has been accepted by all DOTs, throughout the U.S., then concrete prices will probably stabilize. Concrete traditionally prices high when competitors are not specified, then drops to exceptionally low levels when competitors are specified.

Concrete pipe is difficult to install because of its enormous weight ratio over PVC pipe. Laying advantages for PVC pipe can amount to $1.00 - $2.00/ft by contractors who have become used to the product.

CONCRETE PIPE
PRICE TABLES

Reinforced Concrete: Type III "n" = 0.015			Reinforced Concrete: Type IV "n" = 0.015		
Diameter (D)	Wt (Lbs/Ft)	Price ($/Ft)	Diameter (D)	Wt (Lbs/Ft)	Price ($/Ft)
18	168	$7.20	18	181	$7.78
21	214	$8.40	21	231	$9.07
24	264	$9.60	24	285	$10.37
27	322	$10.80	27	348	$11.66
30	384	$16.90	30	414	$18.25
36	451	$23.20	36	487	$25.06
42	753	$28.40	42	813	$30.67
48	960	$35.60	48	1036	$38.45
54	1162	$42.00	54	1255	$45.36

Ductile Iron (Pressure Pipe)

General observation has revealed that ductile iron rarely is sold for much less than 22 cents per pound. The attached weight tables are provided to facilitate price per foot calculations.

RPW/vac

Enclosure

cc: Arthur Kahn

TABLE 51.4

Standard Dimensions and Weights of Push-on-Joint Ductile-Iron Pipe

Size in.	Thickness Class	Thickness in.	OD* in.	Wt. of Barrel Per Ft lb	Wt. of Bell§ lb	18-ft Laying Length		20-ft Laying Length	
						Wt. Per Lgth.† lb	Avg. Wt. Per Ft‡ lb	Wt. Per Lgth.† lb	Avg. Wt. Per Ft‡ lb
3	51	0.25	3.96	8.9	7.0	165	9.3	185	9.2
	52	0.28	3.96	9.9	7.0	185	10.3	205	10.2
	53	0.31	3.96	10.9	7.0	205	11.3	225	11.2
	54	0.34	3.96	11.8	7.0	220	12.2	245	12.2
	55	0.37	3.96	12.8	7.0	235	13.2	265	13.2
	56	0.40	3.96	13.7	7.0	255	14.1	280	14.0
4	51	0.26	4.80	11.3	9.0	210	11.8	235	11.8
	52	0.29	4.80	12.6	9.0	235	13.1	260	13.0
	53	0.32	4.80	13.8	9.0	255	14.3	285	14.2
	54	0.35	4.80	15.0	9.0	280	15.5	310	15.4
	55	0.38	4.80	16.1	9.0	300	16.6	330	16.6
	56	0.41	4.80	17.3	9.0	320	17.8	355	17.8
6	50	0.25	6.90	16.0	11.0	300	16.6	330	16.6
	51	0.28	6.90	17.8	11.0	330	18.4	365	18.3
	52	0.31	6.90	19.6	11.0	365	20.2	405	20.2
	53	0.34	6.90	21.4	11.0	395	22.0	440	22.0
	54	0.37	6.90	23.2	11.0	430	23.8	475	23.8
	55	0.40	6.90	25.0	11.0	460	25.6	510	25.6
	56	0.43	6.90	26.7	11.0	490	27.3	545	27.2
8	50	0.27	9.05	22.8	17.0	425	23.7	475	23.7
	51	0.30	9.05	25.2	17.0	470	26.1	520	26.0
	52	0.33	9.05	27.7	17.0	515	28.6	570	28.6
	53	0.36	9.05	30.1	17.0	560	31.0	620	31.0
	54	0.39	9.05	32.5	17.0	600	33.4	665	33.3
	55	0.42	9.05	34.8	17.0	645	35.7	715	35.7
	56	0.45	9.05	37.2	17.0	695	38.1	760	38.0
10	50	0.29	11.10	30.1	24.0	565	31.4	625	31.3
	51	0.32	11.10	33.2	24.0	620	34.5	690	34.4
	52	0.35	11.10	36.2	24.0	675	37.5	750	37.4
	53	0.38	11.10	39.2	24.0	730	40.5	810	40.4
	54	0.41	11.10	42.1	24.0	780	43.4	865	43.3
	55	0.44	11.10	45.1	24.0	835	46.4	925	46.3
	56	0.47	11.10	48.0	24.0	890	49.3	985	49.2

*Tolerance of OD of spigot end: 3–12 in., ±0.06 in.; 14–24 in., −0.05 in., −0.08 in.; 30–54 in., +0.08 in., −0.06 in.

§The bell weights shown above are adequate for 350 psi operating pressure. Bell weights vary due to differences in push-on joint design. The manufacturer shall calculate pipe weights using standard barrel weights and weights of bells being produced.

†Including bell; calculated weight of pipe rounded off to nearest 5 lb.

‡Including bell; average weight per foot based on calculated weight of pipe before rounding.

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TABLE 51.4—*(cont.)*

Size *in.*	Thickness Class	Thickness *in.*	OD* *in.*	Wt. of Barrel Per Ft *lb*	Wt. of Bell§ *lb*	18-ft Laying Length		20-ft Laying Length	
						Wt. Per Lgth.† *lb*	Avg. Wt. Per Ft‡ *lb*	Wt. Per Lgth.† *lb*	Avg. Wt Per Ft‡ *lb*
12	50	0.31	13.20	38.4	29.0	720	40.0	795	39.8
	51	0.34	13.20	42.0	29.0	785	43.6	870	43.4
	52	0.37	13.20	45.6	29.0	850	47.2	940	47.0
	53	0.40	13.20	49.2	29.0	915	50.8	1015	50.7
	54	0.43	13.20	52.8	29.0	980	54.4	1085	54.2
	55	0.46	13.20	56.3	29.0	1040	57.9	1155	57.8
	56	0.49	13.20	59.9	29.0	1105	61.5	1225	61.4
14	50	0.33	15.30	47.5	45.0	900	50.0	995	49.8
	51	0.36	15.30	51.7	45.0	975	54.2	1080	54.0
	52	0.39	15.30	55.9	45.0	1050	58.4	1165	58.2
	53	0.42	15.30	60.1	45.0	1125	62.6	1245	62.4
	54	0.45	15.30	64.2	45.0	1200	66.7	1330	66.4
	55	0.48	15.30	68.4	45.0	1275	70.9	1415	70.7
	56	0.51	15.30	72.5	45.0	1350	75.0	1495	74.8
16	50	0.34	17.40	55.8	54.0	1060	58.8	1170	58.5
	51	0.37	17.40	60.6	54.0	1145	63.6	1265	63.3
	52	0.40	17.40	65.4	54.0	1230	68.4	1360	68.1
	53	0.43	17.40	70.1	54.0	1315	73.1	1455	72.8
	54	0.46	17.40	74.9	54.0	1400	77.9	1550	77.6
	55	0.49	17.40	79.7	54.0	1490	82.7	1650	82.4
	56	0.52	17.40	84.4	54.0	1575	87.4	1740	87.1
18	50	0.35	19.50	64.4	59.0	1220	67.7	1345	67.4
	51	0.38	19.50	69.8	59.0	1315	73.1	1455	72.8
	52	0.41	19.50	75.2	59.0	1415	78.5	1565	78.2
	53	0.44	19.50	80.6	59.0	1510	83.9	1670	83.6
	54	0.47	19.50	86.0	59.0	1605	89.3	1780	89.0
	55	0.50	19.50	91.3	59.0	1700	94.5	1885	94.2
	56	0.53	19.50	96.7	59.0	1800	100.0	1995	99.7
20	50	0.36	21.60	73.5	74.0	1395	77.6	1545	77.2
	51	0.39	21.60	79.5	74.0	1505	83.6	1665	83.2
	52	0.42	21.60	85.5	74.0	1615	89.6	1785	89.2
	53	0.45	21.60	91.5	74.0	1720	95.6	1905	95.2
	54	0.48	21.60	97.5	74.0	1830	101.6	2025	101.2
	55	0.51	21.60	103.4	74.0	1935	107.5	2140	107.1
	56	0.54	21.60	109.3	74.0	2040	113.4	2260	113.0

*Tolerance f OD of spigot end: 3–12 in., ±0.06 in.; 14–24 in., +0.05 in., −0.08 in.; 30–54 in., +0.08 in., −0.06 in.

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†Including bell; calculated weight of pipe rounded off to nearest 5 lb.

‡Including bell; average weight per foot based on calculated weight of pipe before rounding.

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TABLE 51.4—*(cont.)*

Size *in.*	Thickness Class	Thickness *in.*	OD* *in.*	Wt. of Barrel Per Ft *lb*	Wt. of Bell§ *lb*	18-ft Laying Length		20-ft Laying Length	
						Wt. Per Lgth.† *lb*	Avg. Wt. Per Ft‡ *lb*	Wt. Per Lgth.† *lb*	Avg. Wt. Per Ft‡ *lb*
24	50	0.38	25.80	92.9	95.0	1765	98.1	1955	97.7
	51	0.41	25.80	100.1	95.0	1895	105.4	2095	104.8
	52	0.44	25.80	107.3	95.0	2025	112.6	2240	112.0
	53	0.47	25.80	114.4	95.0	2155	119.7	2385	119.2
	54	0.50	25.80	121.6	95.0	2285	126.9	2525	126.3
	55	0.53	25.80	128.8	95.0	2415	134.1	2670	133.6
	56	0.56	25.80	135.9	95.0	2540	141.2	2815	140.7
30	50	0.39	32.00	118.5	139.0	2270	126.2	2510	125.4
	51	0.43	32.00	130.5	139.0	2490	138.2	2750	137.4
	52	0.47	32.00	142.5	139.0	2705	150.2	2990	149.4
	53	0.51	32.00	154.4	139.0	2920	162.1	3225	161.3
	54	0.55	32.00	166.3	139.0	3130	174.0	3465	173.2
	55	0.59	32.00	178.2	139.0	3345	185.9	3705	185.2
	56	0.63	32.00	190.0	139.0	3560	197.7	3940	197.0
36	50	0.43	38.30	156.5	184.0	3000	166.7	3315	165.7
	51	0.48	38.30	174.5	184.0	3325	184.7	3675	183.7
	52	0.53	38.30	192.4	184.0	3645	202.6	4030	201.6
	53	0.58	38.30	210.3	184.0	3970	220.5	4390	219.5
	54	0.63	38.30	228.1	184.0	4290	238.3	4745	237.3
	55	0.68	38.30	245.9	184.0	4610	256.1	5100	255.1
	56	0.73	38.30	263.7	184.0	4930	273.9	5460	272.9
42	50	0.47	44.50	198.9	224.0			4200	210.1
	51	0.53	44.50	224.0	224.0			4705	235.2
	52	0.59	44.50	249.1	224.0			5205	260.3
	53	0.65	44.50	274.0	224.0			5705	285.2
	54	0.71	44.50	298.9	224.0			6200	310.1
	55	0.77	44.50	323.7	224.0			6700	334.9
	56	0.83	44.50	348.4	224.0			7190	359.6
48	50	0.51	50.80	246.6	274.0			5205	260.3
	51	0.58	50.80	280.0	274.0			5875	293.7
	52	0.65	50.80	313.4	274.0			6540	327.1
	53	0.72	50.80	346.6	274.0			7205	360.3
	54	0.79	50.80	379.8	274.0			7870	393.5
	55	0.86	50.80	412.9	274.0			8530	426.6
	56	0.93	50.80	445.9	274.0			9190	459.6
54	50	0.57	57.10	309.8	335.0			6530	326.6
	51	0.65	57.10	352.7	335.0			7390	369.4
	52	0.73	57.10	395.6	335.0			8245	412.3
	53	0.81	57.10	438.3	335.0			9100	455.0
	54	0.89	57.10	480.9	335.0			9955	497.7
	55	0.97	57.10	523.4	335.0			10805	540.2
	56	1.05	57.10	565.8	335.0			11650	582.6

*Tolerance of OD of spigot end: 3–12 in., ±0.06 in.; 14–24 in., +0.05 in., −0.08 in.; 30–54 in., +0.08 in., −0.06 in.

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‡Including bell; average weight per foot based on calculated weight of pipe before rounding.

CTL027704

UNI-BELL PVC PIPE ASSOCIATION
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August 2, 1989

TO: Uni-Bell Board of Directors
Uni-Bell Market Development Committee

FROM: Robert Walker

SUBJECT: **Alleged Bid Rigging**

Your friendly competition may have been a little too friendly amongst themselves. The July 20 issue of *Engineering News Record (ENR)* reports that Atlanta has filed suit against U.S. Pipe Co. and American Cast Iron Pipe Co. for alleged bid rigging (see attached article).

The ductile iron pipe companies involved could lose between $25 million and $50 million if guilty. Even more significant is the fact that publicity from the suit may encourage other cities to bring similar actions against your ductile iron competitors or to join in Atlanta's suit.

We will continue to provide you with additional information regarding this matter as it becomes available.

RPW/vac

Enclosure

cc: Uni-Bell Associate Members
Roy Gottesman
Arthur Kahn

CTL027705

BID RIGGING

Ruling may open the door for large antitrust suits

The City of Atlanta may recover all the money it has paid to a cast iron pipe company over the past 17 years—between $25 million and $50 million—if the city proves its allegations of bid-rigging, a federal judge ruled last month.

The city filed suit in U.S. District Court in January against United States Pipe and Foundry Co. and American Cast Iron Pipe Co., both based in Birmingham, Ala. The city claimed that the two conspired to rig bids and allocate territories for the sale of ductile iron pipe. Specifically, the city charges that by fixing prices, U.S. Pipe was guaranteed to supply Atlanta, while American Cast Iron supplied Macon and Columbus, Ga.

The ruling touched off a fight between opposing attorneys in the case, when a large Atlanta law firm hired by the city issued a press release claiming that the decision by U.S. District Judge G. Ernest Tidwell was a landmark that could change the nature of municipal antitrust lawsuits across the country by allowing the use of a legal theory of recovery never before used in antitrust cases.

"The court decision potentially adds tens of millions of dollars to the amount of damage that could be awarded in such suits," the press release said.

Attorneys for the defendants were outraged by the press release, calling it an attempt to pressure other city governments to join the suit or bring similar actions against the pipe companies. The companies also are the primary suppliers to the cities of New York, Miami, San Francisco, Detroit, Cincinnati, New Orleans, Charleston, S.C., and Birmingham, Ala.

The defendants filed a motion accusing the attorneys of unethical conduct and asking the judge for a confidentiality order limiting the information released about the case to ensure a fair trial.

U.S. Pipe and American Cast Iron are the largest pipe suppliers in the country. Atlanta buys ductile pipe directly from the manufacturer, and each year since 1972 the city has published invitations to bid asking for a unit price for each category of pipe. The contract is awarded to the company whose total price for all categories is the lowest.

According to the lawsuit, U.S. Pipe and American Cast Iron exchanged bid price information so that American Cast Iron's prices on some items were lower than the U.S. Pipe prices, "with the understanding . . . of the defendants, however, that U.S. Pipe's total aggregate price for all . . . items listed by the city on its invitation of bid would be lower, and, therefore, U.S Pipe would be awarded the city's contract for ductile pipe."

The suit alleges common law fraud restraint of trade and violations o both federal and Georgia racketeering laws. It also claims that because o those illegal acts, the supply contract the city had with U.S. Pipe are void Under a theory of common law calle disgorgement, the city claims, it is enti tled to recover all sums it paid unde those contracts while keeping all of th pipe. Usually in such cases, the plain tiff is awarded the difference betwee the market price and the rigged price plus triple damages.

The defendants asked the judge t dismiss that claim, and it was in hi order denying dismissal that Judg Tidwell ruled that the city may be ent tled to recover the amounts it pai under the pipe contracts even thoug it cannot return all the pipe it ha received from the vendors during th 17-year duration of the allege conspiracy."

By Mary Powers in Birmingham

COMPANIES

Ashland to sell off A-E arm

CTL027706

Rethinking its role as one of the largest A-E conglomerates in the U.S., Ashland Oil Inc., Columbus, Ohio, has agreed to sell its architectural and engineering subsidiary to the unit's management and employees for $97 million in cash and securities. The subsidiary, Ashland Technology Corp. (ATC), includes some of the biggest design firms in the country, such as Holmes & Narver Inc., Orange, Calif.; Daniel, Mann, Johnson, & Mendenhall, Los Angeles; Frederic R. Harris Inc., New York City; and Williams Brothers Engineering Co., Tulsa.

The sale represents a marked departure from the strategy mapped out by the parent firm in 1987, when it acquired PRC Engineering Inc. and broke it into three subsidiaries, including Frederic R. Harris (ENR 2/5/87 p. 42).

stated that it intended to make ATC major player in the architectural an engineering markets.

That thinking has changed. ATC " not closely aligned with our core p troleum refining and related growt businesses," says John R. Hall, chai man of Ashland Oil. Its sale, he add will allow Ashland to focus more on i growth strategy "while offering AT management and employees the o portunity to own and grow with the operations."

An Ashland spokesman says that th company has no plan to sell its co struction contracting and materia subsidiary. "It's a natural fit," he sa adding that The Tanner Cos., a Pho nix-based contractor and materia company owned by the subsidiary h remained profitable despite the slo