

NOTICE TO CONTRACTORS

INVITATION TO BID CULVERT PIPE

The Pelham Board of Selectmen is accepting sealed bids for the supply of culvert pipe and couplings for the period January 1, 2013 through December 31, 2013. Bid documents may be picked up at the Pelham Selectmen's office at 6 Village Green, Pelham, New Hampshire or mailed upon request.

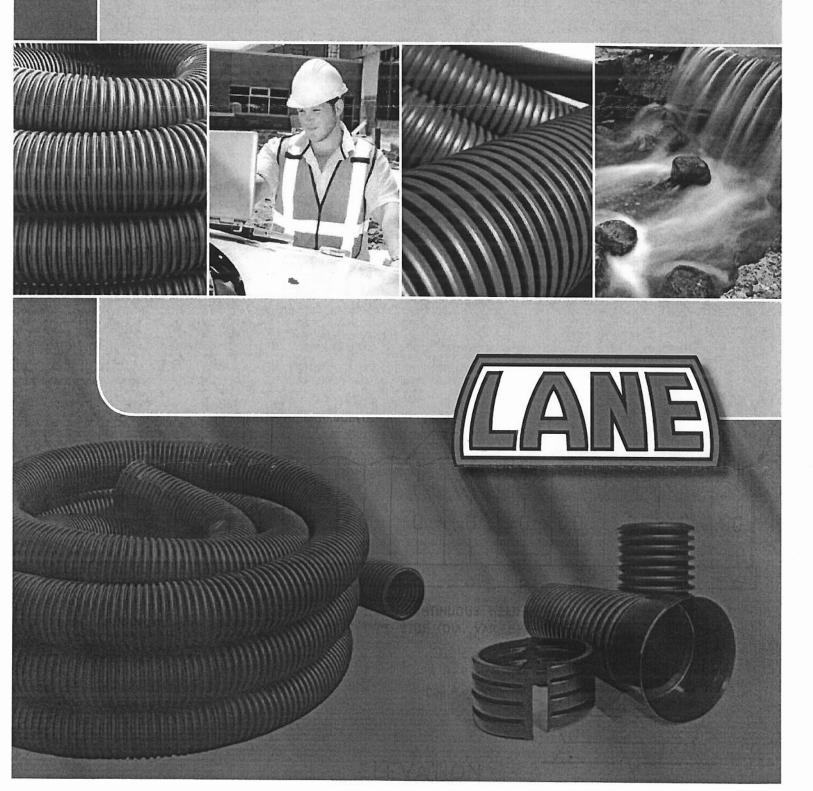
All bids must be received in the Selectmen's Office at 6 Village Green by 4:00 p.m. on December 13, 2012. Sealed envelopes will be addressed to the Board of Selectmen with the name and address of the bidder and marked "BID, PIPE". All bids will be opened at the Town Conference Room, 6 Village Green, Pelham, N.H. on Friday, December 14, 2012 at 10:00 A.M. A complete bid packet is posted on the Town Website www.pelhamweb.com/rfp. Bid results will be posted on the website as well.

All decisions in reference to the bidding and the selection of the contractor will be made by the Board or an authorized agent. The Town reserves the right to reject any and all bids or waive any bid informality deemed in the best interest of the Town and to select the bid most advantageous to the Town.

HIGH DENSITY POLYETH	YLENE PIPE WITH SMO	O SPECIFICATIONS OTH INTERIOR AND CORRUGA OS PIPE OR EQUIVALENT	TED OUTER SHELL N-
DIAMETER		PIPE PRICE PER LINEAR FOOT DELIVERED	PRICE PER COLLAR DELIVERED
	Solid Pipe	Perforated Pipe	
8"	3.20'	3,20	4,200
10"	4.70	4,70'	6.35 en
12"	5,55'	5.55'	7,35 04
15"	7.20'	2.20'	11.55 04
18"	10,70'	10,70'	19.65 ea
24"	16.55	16.55	27,70 24
30"	25,15	25.15	55,20 29
36"	32,50'	3250'	71.35-20
42"	46.35'	46.35'	107.80 4
Delivery to be made to Highway Department yard, 31 Newcomb Filed Parkway, Pelham, NH on an as-needed basis:			
AUTHORIZED SIGNATURE BOWY & STEWN DATE:			
NAME PRINTED: BARRY STEVENS			
COMPANY: VELLAND BROS. INC			
ADDRESS: 309 RT#27, RAYMOND, NH. 03037			
TELEPHONE #: 603 - 895 - 9730			

VELLANO BROS. INC. 309 STATE ROUTE 27 RYAMOND, NH 03077 603-895-9730 VELLANO BROS. INC. 309 STATE ROUTE 27 RYAMOND, NH 03077 603-895-9730

High Quality HDPE Products You Can Depend On



High Quality HDPE Products You Can Depend On

A PARTNERSHIP YOU CAN DEPEND ON

Lane's commitment to quality extends to the services and personalities that support our product . . . technical and responsive services to aid the designer, support the contractor and assure the end user . . . from specification assistance to product submissions, from complete CAD services to application engineering, from total order management to installation consultation . . . a partnership you can depend on. Please contact your local Lane representative to help ensure a successful project.

LANE'S HDPE DRAINAGE PIPE

Lane's High Density Polyethylene (HDPE) pipe is a heavy-duty corrugated pipe for storm sewers, culverts, storm water storage, and water quality applications. Lane's HDPE pipe is available in diameters ranging from 4" to 48", in both single and double-wall profiles (i.e. corrugated or smooth interior). With options for perforated or non-perforated patterns along with standard or custom fabricated fittings, Lane's HDPE pipe offerings can meet all the subsurface drainage demands of your site, building, roads and pavements.

HIGH QUALITY HDPE RESINS

State DOT specifications require virgin resins in accordance with AASHTO M252 and M294, while local agencies may permit the use of recycled materials when managing "Green Building" incentives. Whether made from prime virgin resins or material with a recycled content, Lane's HDPE pipe has the strength and service life needed for your project.

AASHTO GRADE RESINS... Incoming prime virgin resin contains a certificate of analysis that indicates the material was made exclusively for the AASHTO M252/M294 market. All AASHTO polyethylene pipe products are manufactured, tested and supplied in accordance with the National Transportation Product Evaluation Program (NTPEP), a division of AASHTO. Under this program NTPEP certifies that Lane pipe products meet or exceed the requirements of AASHTO M252/M294.

RECYCLED GRADE RESINS... Lane's recycled grade polyethylene pipe is an engineered compound of high density polyethylene resins meeting the cell classifications and performance requirements associated with state highway specifications, and more specifically, ASTM F2648 (see table next page). With a minimum recycled content of 40%, this product is designed to qualify for LEED credits while maintaining a high level of performance.

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PIPE SIZES AND HANDLING WEIGHTS			
Nominal Inside Diameter (in)	Actual Outside Diameter (in)	¹ Single-Wall Handling Weight (lb/ft)	² Double-Wall Handling Weight (lbs/20ft)
4	4.75	0.31	³n/a
6	7.05	0.78	20
8	9.40	1.10	30
10	12.00	1.80	40
12	14.50	3.01	60
15	17.50	4.31	100
18	21.50	6.01	120
24	28.00	9.49	200
30	34.50	n/a	300
36	41.00	n/a	400
42	47.50	n/a	550
48	54.50	n/a	640

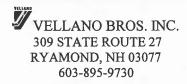
¹AASHTO Type C (Type CP, Class 1 and 2 perforations) ²AASHTO Type S (Type SP, Class 1 and 2 perforations) ³Available as a re-sale item through Lane

HEIGHTS OF COVER FOR LANE HDPE PIPE

AASHTO Minimum Cover for Vehicular Loading	12 inches
Minimum Cover for E-80 (Rail Road) Loads	24 inches
Temporary Cover for Construction Loads ¹	3 to 5 feet
AASHTO Maximum Burial Depths ²	+20 feet

- ¹Cover for construction loads depends on the pipe diameter and the construction equipment loading. Consult Lane's *HDPE Pipe Installation Practice* for details.
- ² Maximum burial depths greater than 20 feet are attainable with quality embedment materials and good compaction levels. It is recommended to obtain a cover height calculation from Lane using the AASHTO LRFD methodology for the site-specific installation conditions.





SERVICE LIFE

Lane's HDPE pipe is a tough, durable, chemically inert product that is highly resistant to abrasion and corrosion. AASHTO currently recognizes a 75 year service life for corrugated HDPE pipe, while some DOT's have even adopted a 100 year service life protocol for this class of pipe. Coupled with the strength inherent in the corrugated profile design, Lane's HDPE pipe is designed to meet the most challenging service life criteria defined for construction projects today.



HYDRAULICALLY EFFICIENT

The smooth interior of Lane's double-wall HDPE pipe creates a hydraulically efficient flow that meets the strictest values specified for gravity drainage. Hydraulic tests performed over the years consistently show a Manning's n in the range of 0.009 to 0.011. The major investigation cited in this regard is the 2005 Utah State University study which recognized an effective Manning's n as low as 0.010. A Manning's n for design is conservatively factored to 0.012 to account for the varying affects of field installations as compared to the laboratory environment.

FITTINGS AND CUSTOM FABRICATION

Lane's fitting fabrication shop produces a full assortment of standard fittings and special fabrications in all diameters. These fittings are used in storm water storage, flow control and water quality applications. Standard and special drawings are available from Lane to aid the designer in the use of corrugated HDPE for related applications.

WATER-TIGHT JOINT CONFIGURATIONS

Bell and spigot couplers are provided on nominal 20 ft pipe lengths for diameters ranging from 6" to 48". With the inclusion of a factory installed gasket meeting the requirements of ASTM F477, properly installed bell and spigot couplers can provide a watertight connection (i.e. laboratory pressure tested to 10.8 psi per ASTM D3212). Third party test results are available to certify the pipe joints meet the laboratory water-tight requirements of ASTM D3212.

INSTALLATION

Corrugation profiles are designed to produce extremely high strength-to-weight ratios, which makes installation one of the main advantages over other pipe types. Load carrying capacities increase with the quality of embedment material and compaction levels. Installations in accordance with AASHTO, ASTM D2321 or Lane's published guidelines will ensure proper performance at the minimum and maximum cover heights possible with Lane's corrugated HDPE pipe.



SPECIFICATIONS ASSOCIATED WITH LANE'S CORRUGATED HDPE PIPE			
Specification	Description	Application	
AASHTO M2521	Corrugated HDPE Pipe (3" to 10")	Storm Sewers, Culverts and Subsurface Drainage Systems	
AASHTO M2941	Corrugated HDPE Pipe (12" to 60")	Storm Sewers, Culverts and Subsurface Drainage Systems	
AASHTO LRFD	Bridge Design Specifications (Section 12)	Cover Height (Structural) Calculation Procedure	
AASHTO LRFD	Bridge Construction Specifications (Section 30)	Standard Practice and Guidelines for Installation	
ASTM D3212	Joints Using Flexible Elastomeric Seals	Watertight Joint Certification (10.8 psi rating)	
ASTM F477	Elastomeric Seals (Gaskets) for Joining Pipe	Gasket Material Required for ASTM D3212 Certification	
ASTM D3350	Polyethylene Plastics Pipe and Fittings Materials	Identification of Polyethylene Material Properties	
ASTM F23061	Corrugated HDPE Gravity-Flow Storm Sewer (12" to 60")	Storm Sewers and Subsurface Drainage Systems	
ASTM F405 ^{1,2}	Corrugated HDPE Pipe and Fittings (3" to 6")	Soil Drainage and Septic Field Leach Beds	
ASTM F667 ^{1,2,3}	Corrugated HDPE Pipe and Fittings (8" to 24")	Culverts and Subsurface Drainage Systems	
ASTM F2648 ^{1,3}	Corrugated HDPE Pipe and Fittings (2" to 60")	Culverts and Subsurface Drainage Systems	

¹Specification identifies the material, manufacture and workmanship requirements for the intended application

²Specification intended for single-wall (internally and externally corrugated) pipe

Intended for the agricultural, landfill and forestry markets

	12 SMOOTHWA	LL ADS PIPE OR EQUIVALENT	
DIAMETER		PIPE PRICE PER LINEAR FOOT DELIVERED	PRICE PER COLLAR DELIVERED
	Solid Pipe	Perforated Pipe	
8"	3.12	3.12	3.90
10"	4.43	4.43	5.36
12"	5.01	5.01	6.05
15"	6.44	644	10.07
18"	10.01	10.01	17.16
24"	15.03	15.03	24.20
30"	23.51	23.57	56.27
36"	27.20	27.20	78.29
42"	35.00	35.00	114.60
Delivery to be made to H basis:	ighway Department yar	rd, 31 Newcomb Filed Parkway, Pelhan	n, NH on an as-needed
	<i>M</i>		
AUTHORIZED SIGNATU	IRE Mers	1 Thuc	DATE: DEC. 10,20
NAME PRINTED:	flier S.	Fowler	
COMPANY: TA	FIND ONT	RIEV, INC	
ADDRESS: 191	BURTLAND (ME	ET LONDONDENAY,	WH 03053
TELEPHONE #:	03, 4/32,8/	86 TEL 603.365.6	5782 CELL

BID SHEET AND SPECIFICATIONS HIGH DENSITY POLYETHYLENE PIPE WITH SMOOTH INTERIOR AND CORRUGATED OUTER SHELL N- 12 SMOOTHWALL ADS PIPE OR EQUIVALENT			
DIAMETER		PIPE PRICE PER LINEAR FOOT DELIVERED	PRICE PER COLLAR DELIVERED
	Solid Pipe	Perforated Pipe	
8"	3.28	3.28	4.41
10"	4.4Le	4.46	6.04
12"	5.01	5.01	6.85
15"	Co.44	6.44	11.40
18"	10.01	10.01	19.41
24"	15.03	15.03	27.39
30"	23.51	23.51	L=3. L8
36"	27.20	27.20	88.60
42"	35.00	35,00	129.68
Delivery to be made to Highway Department yard, 31 Newcomb Filed Parkway, Pelham, NH on an as-needed basis:			
AUTHORIZED SIGNATURE Quil A. On DATE: 12-5-12			
NAME PRINTED: David A. Ovy			
COMPANY: Ferguson Waterworks			
ADDRESS: I Chester Rd Raymond N.H. 03077			
TELEPHONE #: 603 - 895 - 2282			