

CITY OF LOS ANGELES CALIFORNIA

BOARD OF PUBLIC WORKS MEMBERS

-
- VALERIE LYNNE SHAW
PRESIDENT
- ELLEN STEIN
VICE-PRESIDENT
- JANICE WOOD
PRESIDENT PRO-TEMPORE
- RONALD LOW
COMMISSIONER
- YOLANDA FUENTES
COMMISSIONER
-
- JAMES A. GIBSON
SECRETARY



JAMES K. HAHN
MAYOR

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ENGINEERING

GARY LEE MOORE, P.E.
CITY ENGINEER

650 SOUTH SPRING ST., SUITE 200
LOS ANGELES, CA 90014-1911

March 9, 2005

9003-503-1455

Kelly Odell
Gelco Services/ Michels Pipe Services, Divs. of Michels Corp.
1705 Salem Industrial Dr NE
Salem, OR 97303

Dear Mr. Odell:

Re: **APPROVAL - GELCO LINER FORMULATED WITH APPLIED FELTS CIPP TUBE AND INTERPLASTICS CORVE 8190 VINYLESTER RESIN** **W.O. BD001663**

This is in response to your letter dated March 1, 2005. Gelco Liner is approved for sanitary sewer and storm drain rehabilitation as follows:

- Trade Name: **Gelco Liner CIPP**
- Archive Lab Report: #2003-514-05, dated 7/22/02
- City of Los Angeles Public Works Approval: 3/9/05
- Approved Diameter Range: 100 mm to 2200 mm (4" to 84")
- Installation: SSPWC Section 500-1 as modified by City of Los Angeles Brownbook
- Approved Resin: **Interplastics CORVE 8190 Vinylester**
- Approved CIPP Tube: Needled polyester felt, Applied Felts, 450 College Drive, Martinsville, VA 24112
- Field-cured composite pipe properties:
 - initial Flexural Modulus: 1724.1 MPa (250,000 psi) minimum
 - initial Tensile Strength: 41.4 MPa (6,000 psi) minimum
 - Flexural Modulus for 50-year Design: 431.0 MPa (62,500 psi) minimum

The long term (50-year) flexural modulus value is revisable upon submission and acceptance of 10,000-hour constant load tests. Tests must be performed at an approved laboratory, advise this office prior to starting any tests. If you have any questions, please call me at (213)847-8776.

Sincerely,

Hugh S. Lee, Group Manager
Design Standards and Investigations Group
650 S. Spring Street, Suite 400
Los Angeles, California 90014-1913

HL:hl/gelco0.wpd:applied4.wpd

- cc: Walter Mattox, Applied Felts, Inc., 450 College Drive, Martinsville, VA 24112
E. Achonu, Con Ad Mat Con - M/S 480
R. T. Haug, Exec - M/S 490
W. Lawson, WCCD - M/S 538
A. Vidaurrazaga, SED

AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER