

✓ 9-18-06

**VARIANCE REQUEST**  
**Iowa Department of Natural Resources**

1. Date: May 12, 2003  
2. Review Engineer: Boris Eliosov  
3. Date Received: April 22, 2003  
4. Facility Name: Luxemburg  
5. County Number: 31  
6. Program Area: CP (Wastewater Construction)  
7. Facility Type: C05 (Biological Treatment)  
8. Subject Area: 310  
9. Rule Reference: 567-64.2(9)a  
10. Design Std Ref: 12.5.1  
11. Consulting Engr: IIW  
12. Variance Rule: 567-64.2(9)d

13. Decision: *Approved*  
Date: *5/13/03*

14. Appeal:  
Date:

**15. Description of Variance Request:**

City of Luxemburg has submitted a project for sanitary sewer extension which includes installation of 524 feet of 6 - inch sewer at a slope of 1%. Iowa Design Standard 12.5.1 requires the minimum pipe diameter 6 inches for sewer communities.

**16. Consulting Engineer's Justifications**

The proposed sewer is an extension from the existing 6-inch pipe. No further extensions are anticipated from the proposed sewer.

**17. Department's Justifications**

**Recommend variance approval:**

The proposed sewer is an extension from the existing 6-inch pipe and will be installed at a slope greater than that of the downstream 6-inch segment. For this reason, the capacity of the system is defined by the capacity of the existing downstream pipe and will not increase if 8-inch pipe is used in the proposed project. The proposed sewer will have enough capacity (260,000 gpd) to accommodate the design PHWW flow of 9,600 gpd. The full flow velocity of 2.5 ft/s exceeds the design standard requirements.

For unsewered communities, the 6-inch pipe can be used for the last 800 feet of sewer. 515 feet of the downstream 6-inch pipe were installed when the City was considered unsewered. If the design variance is approved, the total length of the 6-inch segments will be 1,039 feet. Although this is more than 800 feet allowed by Iowa Design Standards, the proposed extension will not significantly affect the performance and capacity of the collection system.

Lisbon - Approved 1/11/89; St. Anthony - Approved 8/9/2002

19. Staff Reviewer:

*B. Eliosov*

Date: 5/12/2003

20. Supervisor:

*Don J. [Signature]*

Date:

*5/13/03*

21. Authorized by:

*J. Riessen*

Date:

*5/13/03*



# STATE OF IOWA

THOMAS J. VILSACK, GOVERNOR  
SALLY J. PEDERSON, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
JEFFREY R. VONK, DIRECTOR

May 12, 2003

The Honorable Ronald Ungs  
Mayor of Luxemburg  
200 S. Andres Street  
P.O. Box 19  
Luxemburg, IA 52056

RE: West Side Sanitary Sewer Extension  
IDNR # 6-31-58-0-01

Dear Mayor Ungs:

The Iowa Department of Natural Resources received your engineer's variance request from Design Standard 13.5.1. This design standard requires minimum diameter of 8-inch for gravity sewers.

Your engineer's letter indicates that the the proposed sewer is an extension from the existing 6-inch pipe. For this reason, the capacity of the system is defined by the capacity of the existing downstream pipe and will not increase if 8-inch pipe is used in the proposed project.

According to Iowa Design Standards, Chapter 12, item 12.5.3(d), the variance request is approved as being substantially equivalent to the design standard requirements.

If you have any questions, please contact Boris Eliosov at 515/281-7953. My telephone number is 515-281-5029.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Riessen", with a long horizontal line extending to the right.

Jack Riessen, Chief  
Water Quality Bureau

c.: IIW Engineers & Surveyors, P.C.  
Field Office # 1

April 22, 2003



Boris Eliosov  
Wastewater Permits Section  
Department of Natural Resources  
502 East 9th St.  
Des Moines, Iowa 50319

Re: City of Luxemburg, Iowa  
West Side Sanitary Sewer Extension  
Request for Variance  
IIW Project No: 02239-01

Dennis F. Waugh, PE/SE  
Charles A. Cate, PE  
Gary D. Sejkora, PE  
Michael A. Jansen, PE/SE  
Ronald A. Balmer, PE/SE\*  
John M. Tranmer, PLS  
Timothy J. Tranel, PE  
John F. Wandsnider, PE  
Julie P. Neebel, PE  
James P. Kaune, PE  
Thomas J. Oster, PLS  
Wray A. Childers, PLS  
Geoffrey T. Blandin, PE  
Steven J. Hunn, PE

\*Licensed Architect IL, WI, MN, SD

Dear Boris:

On behalf of the City of Luxemburg, Iowa, we hereby request DNR approval of a variance from design standards to allow a 6 inch sanitary sewer extension.

Prior to 1999 the community of Luxemburg was without sewer service. In 1999 the city constructed a wastewater collection system funded in part by USDA Rural Development. Being a community without a sewer system, six inch sewers were allowed by existing DNR standards. As such the USDA would not allow larger than minimum size sewers. Therefore a six inch sewer was installed.

When the property owners on the west side of Luxemburg decided to build a replacement house they wanted city sewer service. The nearest sewer is an existing six inch sewer. This six inch sewer has adequate capacity to handle the flow from the new house and the 3 possible future lots.

We do not foresee a problem with the construction of a six inch sewer extension in Luxemburg. We hope that the DNR can grant the variance.

Sincerely,

**IIW ENGINEERS & SURVEYORS, P.C.**

*Gary Sejkora (PC)*

Gary Sejkora, P.C.

bc

Civil Engineering  
Structural Engineering  
Environmental Engineering  
Municipal Engineering  
Transportation Engineering  
Architectural Engineering  
Land Surveying  
Quality Control Testing  
Information Technology

**IIW Engineers & Surveyors, P.C.**  
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