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March 21, 2022

Cindy Riesselman
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DALLAS CENTER, IOWA
NE SEWER PLANNING AREA

This letter is a follow up to the discussion at the March 8, 2022 City Council meeting relative to planning for future sewer service in the east and northeast growth areas of the City. Enclosed is a copy of a portion of a drawing that was prepared as part of the Comprehensive Plan Update. The drawing shows the conceptual plan for providing sewer service to the area northeast and easterly of the City.

On the enclosed drawing the approximate ridge lines are shown in yellow. Although it is possible for sewer service to be extended beyond a ridge line, the ridge lines generally define the limits of sewer service. As indicated on the enclosed drawing, the ridge lines create significant limitations on the easterly and northeasterly growth of the service area for the City.

Almost all of the area east and northeast of the City is tributary to the same general drainage basin that is part of the upland area of the Walnut Creek basin. The natural drainage flows away from the City to the east and southeast. A single sewer system could be constructed that would serve almost all of an area directly east and northeast of the City.

The farther to the east and southeast a lift station is located the larger the service area that would be tributary to that lift station. While it would be ideal to locate the lift station as far easterly as the City believes would be needed in the long term, that approach significantly increases the initial cost of sewer service.

The growth in the City will likely start adjacent to the City and work outward. The ideal configuration for the long term sewer service area would start at the lift station and work back toward the City. This direction is opposite of the growth pattern that will start at the City and work outward.

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As the result of the difference between the ideal sewer service area and the growth area it is likely the expansion of sewer service into this area will require a compromise between what is affordable in the near term and what would be ideal in the longer term.

On the enclosed the enclosed drawing the writer has shown three possible locations for a future lift station. Lift station Location A is located north of Highway 44 and would serve the northeast growth area north of Highway 44. This location would generally not provide service to much of the area south of Highway 44.

Location B would locate the lift station just in the area of the south side of Highway 44. At this location the lift station could serve all of the area to the north of Highway 44 as well as the area directly east of the City. The more southerly areas along the southeast side of the City probably could not be served by a location at lift station Location B.

Lift station Location C is considered the ideal long term location. This location provides close to the maximum growth area to serve the easterly and northeasterly area of the City. This lift station location would require a far larger investment in sanitary sewer and force main than the City could realistically expect to recover in the near term. Although lift station Location C is considered the preferred long term alternative, it is not considered the preferred alternative due to its initial cost.

Based on initial review it would appear the options for expanding sewer service in the area northwest and east of the City would be lift station Location A or lift station Location B. There is a cost difference between the two locations. However, the service area for lift station Location B is significantly greater and would serve areas directly on the south side of Highway 44 that could not be easily served by Location A.

As part of the sewer planning the writer will move forward with evaluating the cost and service areas for lift stations Locations A and B. Unless the City has interest in lift station Location C, the writer would propose not to consider Location C at this time due to its high initial cost.

If you have any questions or comments concerning the project, please contact the writer at 515-225-8000, or bveenstra@v-k.net.

VEENSTRA & KIMM, INC.



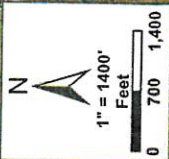
H. R. Veenstra Jr.

HRVJr:paj

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Enclosure

Cc: Ralph Brown, Brown, Fagen & Rouse



2022 DALLAS CENTER
COMPREHENSIVE PLAN
PLANNING BOUNDARY

FUTURE SEWER SERVICE AREA
CITY OF DALLAS CENTER, IOWA

LEGEND

	CORPORATE LIMITS
	EXISTING SANITARY SEWER
	FUTURE SEWER
	RIDGE LINE

**VEENSTRA
& KIMM INC.**

PROJECT NO. 313179
MAY 22, 2023

