



STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
ROGER L. LANDE, DIRECTOR

September 12, 2011

Southern Iowa Rural Water Association (SIRWA)
Attn: Dan McIntosh
1391 190 th Street
Creston, Iowa 50801

Subject: Determination Letter on Variance request from design standards Sections 13.4.2, 18C.7.4.4 & 18C.7.4.6, 18C.7.7 and 18C.10.6

Re: Wastewater Collection and Treatment System Project,
DNR Project No. S2008-0208
Ringgold County, IA

Dear Mr. McIntosh:

The Iowa Department of Natural Resources has completed the evaluation of the submitted four remaining variance petitions related with Iowa Wastewater Facilities Design Standards Sections 13.4.2, 18C.7.4.4 & 18C.7.4.6, 18C.7.7 and 18C.10.6 for the proposed controlled discharge lagoon system for the County of Ringgold.

Variances from the design standards which provide in the judgment of the department for substantially equivalent or improved effectiveness may be requested when there are unique circumstances not found in most projects in accordance with Rule 567 IAC 64.2(9) "c".

The following are the brief description of the requested variances with department evaluation and final determinations.

1. **Pump Station Screening:** The requested variance is to omit screening protection for a grinder pump station handling the raw wastewater from Ringgold. The Iowa Wastewater Facilities Design Standards Section 13.4.2 requires that all pumping stations handling raw wastewater have provisions for screening to protect the pumps from clogging or damage.

Decision: **Approved.** It is the determination of this department, since each individual house is equipped with a grinder pump which grinds the solids into smaller size that would easily pass through the lift station, the proposed system will function properly without a screening and a trash basket.

2. **Variance for pond influent piping:** The variance has been submitted to allow installation of influent piping at the top of the pond liner; constructed of ductile iron pipe suitably anchored, and also to allow discharging horizontally at the level of pond liner. The Iowa Wastewater facilities Design Standards Section 18C.7.4.4 and 18.7.4.6 require that the influent lines for controlled discharge ponds be located along the bottom of the pond so that the top of the pipe is just below the average elevation of the pond seal and the influent pipes discharge the wastewater horizontally into shallow saucer shaped depression respectively.

Decision: **Approved with conditions.**

- a. Ductile iron pipe shall be used.
 - b. The influent line shall rest on a suitable concrete apron which is large enough such that the terminal influent velocity at the end of apron does not cause soil erosion as required by Iowa Wastewater Facilities Design Standards Section 18C.7.4.6. The apron must have a lip or baffle at the opposite end of the discharge point.
 - c. Adequate measures must be taken to ensure that the line is properly secured and anchored.
3. **Variance for pond level gauge:** The requested variance is to allow utilizing riser pipe buried adjacent to the control structures to measure the pond level in lieu of pond level gauges installed in the ponds as required by the Iowa Wastewater Facilities Design Standard 18C.10.6.

Decision: **Approved with conditions.**

- The pond level measurement arrangement shall allow for independent depth measurement of each cell.
4. **Variance for prefilling:** Iowa Wastewater Facilities Design Standards Section 18C.7.7 requires all controlled discharge lagoons to be prefilled to the two foot level, where water is available, to protect lagoon liner, to prevent weed growth, to encourage rapid start up the biological process and discourage odor. The requested variance is to allow prefill to the one foot level.

Decision: The design standard states that prefill to the two foot level is required "where water is available". The variance petition describes limited availability of water supplies which can be used for prefilling the lagoon system. **The department has determined that a variance is not required in this instance and a prefill level of one foot may be utilized based on the request.**

Pursuant to Iowa Code Section 455 B.181 and 561 Iowa Administrative Code (IAC) 7.4(1), as adopted by reference by 567 IAC Chapter 7, a written notice of appeal to Environmental Protection Commission may be filed within 30 days of receipt of this letter. The notice of appeal is required to be filed with the Director of Department, must identify the specific portion or portions of the variance denial that are being appealed and include a short and plain statement of the reasons for appeal. A contested case hearing will be commenced pursuant to Iowa Code Chapter 17A, 561 IAC Chapter 7, and 567 IAC Chapter 7.

If you have any questions or concerns regarding this letter, please contact Dinbandhu Gupta, Project Manager at (515) 281-8367 or Dinbandhu.Gupta@dnr.iowa.gov.

Sincerely,



Satya Chennupati, P.E.
Wastewater Section Supervisor

cc: Garden and Associates, LTD., Oskaloosa Office, Iowa
Field Office # 4
DNR File: 6-34-09-0-01

VARIANCE REQUEST
Iowa Department of Natural Resources

1. Date: August 30, 2011 2. Reviewer/Engr.: Dinbandhu Gupta 3. Date Received: March 04, 2010 4. Facility Name: Ringgold WWTF Improvements (proposed) 5. Facility Number: 6-34-09-0-01 6. County Number: 80 (Ringgold) 7. Program Area: CP (Wastewater) 8. Facility Type: C05 (biological treatment) 9. Subject Area: 344 (pump clogging protection) 10. Rule Reference: 567-64.2(9)a 11. Design Std. Ref.: 13.4.2 12. Consulting Engr.: Garden and Associates, LTD. 13. Variance Rule: 567-64.2(9)c	14. Decision: <i>approved</i> Date: <i>9/9/11</i> 15. Appealed: Date:
16. <u>Description of Variance Request:</u> The Cities of Benton, Delphos, Maloy, and Redding, Iowa are Unsewered communities located in southwestern Ringgold County. The Southern Iowa Rural Water Association (SIRWA) is assisting the communities in a combined effort to provide sanitary wastewater collection and treatment system for above listed four communities' residents and businesses. A controlled discharge lagoon is proposed as selected alternative for their wastewater treatment system. The Consulting Engineer on behalf of SIRWA has requested a variance from the design standard which requires all pumping stations handling raw wastewater shall have provisions for screening to protect the pumps from clogging or damage. The Engineer on behalf of SIRWA is requesting an exemption from the requirement to provide screenings for the proposed grinder pump station handling raw wastewater.	
17. <u>Applicant's/Consulting Engineer's Justification:</u> Undue and unnecessary hardship: <i>E. Equivalent Effectiveness</i> Based on fact that all wastewater pumped through the proposed lift station will first be pumped by individual low pressure sewer service pumps. All pumped wastewater will be processed by the grinding mechanism within the respective individual sewer service pump. It is expected that no large solids or stringy materials would be captured by a conventional sized trash basket. The lift station pumps will be conventional non-clog style; the required pump redundancy will be furnished. If screening is required, operational staff will need to check the mechanism; it is Engineer's opinion that the initial construction cost and on-going inspection costs associated with screening will cause undue and unnecessary hardship.	
18. <u>Department's Justification:</u> Recommend <i>approved</i> Since the LPS collection system consists of an individual grinder pumps at each individual customer location. Before entering the wastewater into collection and conveyance system, there would not be significant size of clogging material in the system that will cause the clogging of pumps.	
19. <u>Precedents Used:</u>	
20. Staff Reviewer: <i>[Signature]</i>	Date: <i>08/30/2011</i>
21. Supervisor: <i>[Signature]</i>	Date: <i>9/6/2011</i>
22. Authorized by: <i>[Signature]</i>	Date: <i>9/9/11</i>

LWB 9/2/11

Influent LPS force main size = 3"
 Typical trash basket has 2" ϕ holes
 on 3" centers. Little additional protection
 1 would be afforded by
 a trash basket.



February 21, 2011

Satya Chennupati, P.E., Wastewater Engineering Section Supervisor
IDNR Wastewater Engineering Section
Wallace State Office Building
502 E. 9th Street
Des Moines, IA 50319

Dinbandhu Gupta, P.E., Project Manager
IDNR Wastewater Engineering Section
Wallace State Office Building
502 E. 9th Street
Des Moines, IA 50319

Re: Wastewater Treatment System – Variance Request
SW Ringgold County Iowa
Southern Iowa Rural Water Association
G&A 3007055

Dear Satya and Din:

Southern Iowa Rural Water Association (SIRWA) is proceeding with the development of a wastewater system to jointly serve the unsewered communities of Benton, Delphos, Maloy, and Redding, in Southwest Ringgold County, Iowa. SIRWA has been awarded project funding from the Iowa Department of Economic Development and USDA-Rural Development (USDA-RD). SIRWA is petitioning for variances from Design Standards in order to significantly reduce the cost of constructing a controlled discharge lagoon and a lift station to convey wastewater collected by Low Pressure Sewer (LPS), while maintaining equivalent effectiveness and protection of the public health, safety, and welfare. Please find the following variance requests pursuant to 561 Iowa Administrative Code (IAC) Chapter 10.

Please note that Garden & Associates, Ltd is not aware of any person or entity that would be adversely affected by the granting of the requested variances. Similarly, Garden & Associates, Ltd is not aware of any persons to whom notice is required to be sent by certified mail, by any provision of law. If you are aware of persons who are to be notified by certified mail, please inform us at your earliest convenience.

As required, the technical and engineering justification provided herein to support the variance request, are certified, sealed, and signed by a professional engineer licensed in Iowa.

33637 AM 8:39 03/04/11

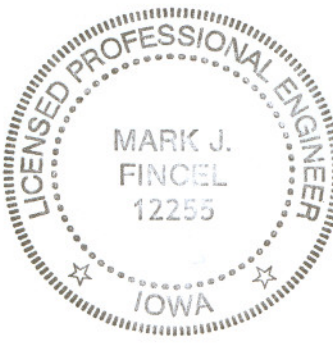
If you are in need of additional information or documentation, in order to process this request, please contact me at 641-672-2526.

Sincerely,
GARDEN & ASSOCIATES, LTD.

Mark J. Fincel

Mark J. Fincel, P.E.

cc: Dan McIntosh, General Manager
Dee Fischer, USDA-RD, Atlantic
Jim Carroll, P.E., USDA-RD, State Office

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa. <i>Mark J. Fincel</i> <u>2-21-11</u> Mark J. Fincel, P.E. Date License Number: 12255 My license renewal date is December 31, 2011 Pages or sheets covered by this seal: <u>Transmittal letter, Completed DNR Form 542-0004 pages 1-6,</u> <u>and attachment showing proposed lagoon layout.</u>
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**DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL SERVICES DIVISION
502 EAST 9TH STRET- DES MOINES, IOWA 50319-0034
Telephone: 515-242-5851; 515-281-8986
Fax: 515-281-8895**

**UNIFORM FORM FOR
PETITIONS FOR WAIVERS FROM ADMINISTRATIVE RULES**

This form may be used to seek a waiver or variance from an administrative rule adopted by the Department listed above. A waiver, if granted, may excuse the petitioner from the requirements of a rule in its entirety or in part, or may modify the requirements of a rule, for a period of time or permanently. The process for seeking a waiver from an administrative rule and the standards under which the petition will be evaluated are described in 561 IAC Chapter 10. Please keep in mind that the Department is not allowed to waive or alter a statutory duty or requirement.

Criteria for a waiver includes clear and convincing evidence that:

1. The application of the rule would impose undue hardship on the person for whom the waiver is requested;
2. The waiver from the requirements of the rule in the specific case would not prejudice the substantial legal rights of any person;
3. The provisions of the rule subject to the petition for a waiver are not specifically mandated by statute or another provision of law; and
4. Substantially equal protection of public health; safety, and welfare will be afforded by a means other than that prescribed in the particular rule for which the waiver was requested.

PETITION INFORMATION

Your Name:	<u>Garden & Associates, LTD, on behalf of Southern Iowa Rural Water Association (SIRWA)</u>	Business Telephone:	<u>641-672-2526</u>
Address:	<u>PO Box 451</u>	Residence Telephone:	<u>N/A</u>
City, State, Zip:	<u>Oskaloosa, IA 52577</u>	Contact:	<u>Mark J. Fincel, P.E.</u>

List the number and a description of the rule from which you are requesting a waiver: (i.e. 567 IAC Chapter 100-123)

Iowa Department of Natural Resources Wastewater Facilities Design Standards:

- A. Chapter 13.4.2 – “All pumping stations handling raw wastewater shall have provisions for screening”...
- B. Chapter 18C.5.1.2 – “A minimum of three cells are required for all facilities greater than one acre total surface area.”
- C. Chapter 18C.7.4.4 – “Influent lines for controlled discharge ponds shall be located along the bottom of the pond so that the top of the pipe is just below the average elevation of the pond seal.”
- D. Chapter 18C.7.4.6 – “The influent line(s) shall discharge horizontally into a shallow saucer-shaped depression”...
- E. Chapter 18C.7.7 – “Where water is available, the pond shall be prefilled to the two foot level”...
- F. Chapter 18C.10.6 – “Pond level gauges shall be provided for all cells of controlled discharge ponds.”... “a calibrated mast, pipe, or inclined concrete”...

WAIVER REQUESTED

Briefly describe the nature of the waiver that you are requesting and the period of time you want the waiver to last.

Waivers Scope:

- A. Chapter 13.4.2 – Allow the SW Ringgold (Redding) wastewater pump station handling, collected Low Pressure Sewer system wastewater, to be exempt from requirement to provide screening.
- B. Chapter 18C.5.1.2 – Allow the SW Ringgold controlled discharge pond system to consist of two cells.
- C. Chapter 18C.7.4.4 – Allow the influent line for controlled discharge ponds for SW Ringgold to be located on top of the pond liner; constructed of ductile iron pipe; suitably anchored.
- D. Chapter 18C.7.4.6 – Allow the influent lines to discharge horizontally at the level of the pond liner for SW Ringgold.
- E. Chapter 18C.7.7 – Allow SIRWA to prefill the SW Ringgold ponds to the one foot level due to very limited availability of water.
- F. Chapter 18C.10.6 – Allow SIRWA to utilize riser piping buried adjacent to control structures to measure pond level in lieu of calibrated mast or other level measuring device installed in the pond.

Operative period:

- A. Chapter 13.4.2 – during the life of the SW Ringgold sanitary sewer system.
- B. Chapter 18C.5.1.2 – during the life of the SW Ringgold wastewater treatment system; until a facility upgrade is required.
- C. Chapter 18C.7.4.4 – during the life of the SW Ringgold wastewater treatment facility.
- D. Chapter 18C.7.4.6 – during the life of the SW Ringgold wastewater treatment facility.
- E. Chapter 18C.7.7 – immediately following the initial construction of the SW Ringgold wastewater treatment system.
- F. Chapter 18C.10.6 – during the life of the SW Ringgold wastewater treatment facility.

SPECIFIC INFORMATION ABOUT THE WAIVER YOU ARE REQUESTING

What are the facts and reasons that, in your opinion, provide "clear and convincing evidence" supporting a waiver of the rule? Be sure to explain in your answer why you feel the rule poses an undue hardship on you.

Variance Item A is requested based upon the fact that all wastewater pumped through the proposed lift station will first be pumped by individual Low Pressure Sewer service pumps. All wastewater pumped will be processed by the grinding mechanism within the respective individual sewer service pump. It is expected that no large solids or stringy materials would be captured by a conventional sized trash basket. The lift station pumps will be of conventional non-clog style; the required pump redundancy will be furnished. If screening is required, operational staff will need to check the mechanism; it is our opinion that the initial construction cost and ongoing inspection costs associated with screening will cause undue and unnecessary hardship.

Variance Item B is requested based upon the fact that two or three cell Controlled Discharge ponds operated in accordance with the guidelines presented in the "Iowa Facultative Pond Operations Manual", dated 2009 (page 18), would include treatment of wastewater by the primary cell and one secondary cell, prior to discharge. As described in the referenced operations manual, when all ponds meet applicable effluent limitations and the receiving water is free of ice cover, multiple ponds may be discharged simultaneously. This operational scheme does not provide plug flow reactor benefits for fecal coliform reduction in a 3 cell system; a two cell controlled discharge lagoon will provide equivalent treatment in our opinion. If plug flow reactor operation is later determined to be necessary in a two cell controlled discharge lagoon, it is believed that the additional reactor vessel(s) could be easily created with the installation of floating baffle(s).

Also, it is a fact that 2 cell controlled discharge lagoon system has a lower allowable BOD loading in the primary cell by design standards, as compared to the loading allowed in the Primary Cell of a 3 cell system, while hydraulic loading for both systems is equivalent. If primary lagoon cells are minimized and sized only for BOD loading, it is believed that better BOD treatment would be achieved in a 2 cell system. In the event that the primary cell is taken out of service for repairs or maintenance, it is believed that the 60 day storage in the secondary cell will provide adequate capacity to store and treat wastewater while the work is performed.

Cost savings related to reduced control structures and piping, reduced quantities of excavation, reduction in land use, and reduction in quantities of revetment, all required with the 2 cell lagoon, are in our opinion significant. Estimated cost savings are as follows: Excavation = \$21,500; Revetment = \$9,400; Control Structures and Piping = \$16,500; Miscellaneous = \$5,000; total of approximately \$52,400, or approximately \$5,000 per customer to be served by the improvements. It is our opinion that the initial construction cost will cause undue and unnecessary hardship to the low income population served by the improvements.

Variance Items C and D are requested based on the facts that piping installed on top of the lagoon liner and without inlet depressions can be constructed at lower costs and in areas where groundwater and soil conditions could prove to be challenging. Elimination of the inlet depressions and buried piping will allow the lagoon liner to be constructed at a higher elevation. We believe that the liner has better integrity without piping installed below the floor. We do not know of any problems that have developed as a result of installing ductile iron pipe, properly anchored, without an inlet depression; and the lagoons can be maintained during the long term. It is our opinion that the initial construction cost and potential construction challenges maintaining separation with groundwater and challenges associated with potential additional overexcavation, will cause undue and unnecessary hardship.

Variance Item E is provided for in the Design Standards, but there is no definition of 'where water is available'. Water needed to prefill the ponds is in short supply; rural water system capacity is reported to be limited; no ponds or perennial streams are located adjacent to the site; we are aware of no other viable water supplies in the vicinity of the lagoons. We believe the lagoon liner can be protected and pond start up can be accomplished with one foot of water in a controlled discharge lagoon. It is our opinion that the initial construction cost associated with hauling in water or the stress that would be placed on the rural water system will cause undue and unnecessary hardship.

Variance Item F is an alternative method of accomplishing pond level measurements which will not be susceptible to ice damage or lagoon level gauge movement. Buried riser piping located adjacent to control structures is the lagoon level measuring technique utilized in many lagoons throughout the state; we are aware of no problems related to this practice and believe that pond level measurement is more accurately and reliably accomplished with use of buried piping and staff gauge. It is our opinion that the initial construction cost and ongoing maintenance costs associated with lagoon level measuring devices located within the pond will cause undue and unnecessary hardship; measuring the lagoon level in piping provides equivalent effectiveness.

Summary

The application of the specific listed existing design standards above would pose an unnecessary and undue financial hardship on the SW Ringgold customers, in our opinion. Each of the requested variances have in our opinion, been proven to provide equivalent effectiveness and protection of the public health, if operated as outlined above.

Equivalent effectiveness for each of the above requested Design Standards variances B, C, D, and F has been investigated as part of the small unsewered community pilot program, beginning with the Southern Iowa Rural Water Association system constructed in 1995 at Cromwell, Iowa. In our opinion, the findings of the pilot program have indicated that equivalent treatment effectiveness for secondary wastewater treatment standards can be attained with the above requested variances, and that significant savings in construction cost are attained for the unsewered communities. Additionally, it is our opinion that a two cell controlled discharge lagoon allowed under variance B would provide affordable increased flexibility for wastewater treatment system expansion in response to increases in population; the addition of a secondary cell will allow for at least a 25% increase in capacity. This additional cell would be connected to existing stubbed piping from the inter-cell structure and constructed on adjacent property owned by SIRWA. Future expansions of three cell controlled discharge lagoons are likely to be more costly due to the expected need to increase both primary and secondary cell treatment capacity.

Although a fecal coliform limit would not currently apply to a controlled discharge lagoon serving the SW Ringgold wastewater system customers, it is noted that the IDNR is evaluating the performance of existing lagoons in Iowa. It is reported that the operating data collected to date may indicate a correlation between fecal coliform reduction and the number of lagoon cells, but we have not been able to establish any correlation based on a review of the information provided to us to date. We note that half of the eight (8) 2 cell controlled discharge lagoons sampled appeared to have high fecal coliform levels in October 2010; other data reviewed for mostly older controlled discharge lagoons did not appear to indicate any trend in treatment effectiveness that could be correlated to the number of cells in a treatment system.

Garden & Associates has first-hand experience and knowledge of design of similar systems utilizing variance request items B through F above; as constructed in other small unsewered communities during the past ten (10) years. We have observed the construction of similar systems and have continued discussion with the owners and operators of these systems, and have not learned of any deficiencies. Similarly we have observed a reduction in construction costs for these systems.

The requested design standard variance items B through F listed above were investigated, allowed by the IDNR, and utilized in the previously unsewered Iowa communities of Kinross, Harper, Hamilton, Keswick, Morrison, Plano, Promise City, Pleasant Plain, and Conroy, all designed by Garden & Associates. We are aware of no problems related to any of the above variances being implemented in any of the above wastewater systems; we observed equivalent effectiveness; we observed significant cost savings.

List the name, address and telephone number of any person or entity that would be adversely affected by the granting of this waiver.

Garden & Associates, Ltd is not aware of any person or entity that would be adversely affected by the granting of the petition. Similarly, Garden & Associates, Ltd is not aware of any persons to whom notice is required to be sent by certified mail, by any provision of law.

List the name, address and telephone number of any other state or federal boards or agencies, or local governmental bodies, such as a city or county, which also regulates the area in question, or which might be affected by the granting of this waiver.

Garden & associates, Ltd is not aware of any public agency or political subdivision of the state or federal government which also regulates the activity in question, or might be affected by the granting of the petition.

How will the public health, safety and welfare be protected if your request for a waiver is granted?

In the opinion of Garden & associates, Ltd, the application of the variances from specific listed existing design standards above would provide substantially equal protection of public health, safety, and welfare as is provided by the design standards listed.

Provide a history of any prior contacts between you and the Department relating to the regulated activity or permit affected by the proposed waiver, including a description of each affected permit held by you, any notices of violation, contested case hearings, or investigative reports relating to the regulated activity or permit within the past five years.

Garden & Associates, Ltd is not aware of any affected permit held by the petitioner or any other case proceedings or lawsuits involving the petitioner and the department for the above referenced project.

Do you know how the Department has treated similar situations? ☒ Yes ☐ No

If yes, describe how similar situations were handled.

Kinross, Iowa (IDNR Response to Variance Requests dated July 19, 2001):

- **B (18C.5.1.2) – approved**
- **C (18C.7.4.4) – approved**
- **D (18C.7.4.6) – approved**
- **F (18C.10.6.) – approved**
- **The following items were allowed by IDNR in separate correspondences**
 - o **A (13.4.2) – no trash basket provided in grinder pump station**
 - o **E (18C7.7) – lagoon was prefilled to one (1) foot level due to limited availability of water**

Harper, Iowa (IDNR Response to Variance Requests dated May 6, 2005):

- B (18C.5.1.2) – approved
- C (18C.7.4.4) – approved
- D (18C.7.4.6) – approved
- F (18C.10.6) – approved
- The following items were allowed by IDNR in separate correspondences
 - o A (13.4.2) – no trash basket provided in grinder pump station
 - o E (18C7.7) – lagoon was prefilled to one (1) foot level due to limited availability of water

Hamilton, Iowa

- The following items was allowed by IDNR in separate correspondence:
 - o A (13.4.2) – no trash basket provided in grinder pump station

Keswick, Iowa (IDNR Response to Variance Requests dated November 23, 2004):

- A (13.4.2) – denied for lift station conveying wastewater from gravity sewer
- B (18C.5.1.2) – approved
- C (18C.7.4.4) – approved
- D (18C.7.4.6) – approved
- F (18C.10.6) – approved
- The following items was allowed by IDNR in separate correspondence:
 - o E (18C7.7) – lagoon was prefilled to one (1) foot level due to limited availability of water

Morrison, Iowa (IDNR Construction Permit dated February 16, 2006):

- A (13.4.2) – approved – no trash basket provided in grinder pump station

Plano, Iowa (IDNR Response to Variance Requests dated February 26, 2007):

- B (18C.5.1.2) – approved
- C (18C.7.4.4) – approved
- D (18C.7.4.6) – approved
- F (18C.10.6) – approved
- The following items was allowed by IDNR in separate correspondence:
 - o E (18C7.7) – lagoon was prefilled to one (1) foot level due to limited availability of water

Conroy, Iowa (IDNR Response to Variance Requests dated July 25, 2007):

- B (18C.5.1.2) – approved
- C (18C.7.4.4) – approved
- D (18C.7.4.6) – approved
- E (18C7.7) – approved
- F (18C.10.6) – approved

Promise City, Iowa (IDNR Response to Variance Requests dated October 30, 2008):

- B (18C.5.1.2) – approved
- C (18C.7.4.4) – approved
- D (18C.7.4.6) – approved
- E (18C7.7) – variance not required
- F (18C.10.6) – approved

Pleasant Plain and East Pleasant Plain, Iowa (IDNR Facility Plan approval dated February 8, 2010):

- A (13.4.2) – denied for lift station conveying wastewater from gravity sewer
- B (18C.5.1.2) – approved
- C (18C.7.4.4) – approved
- D (18C.7.4.6) – approved
- E (18C7.7) – variance not required
- F (18C.10.6) – variance not required

List the name, address and telephone number of any persons with knowledge of the relevant facts relating to the proposed waiver.

Garden & Associates, Ltd.

Mark J. Fincel, P.E.

P.O. Box 451

Oskaloosa, Iowa 52577

641-672-2526

USDA-Rural Development

Jim Carroll, P.E.

873 Federal Building

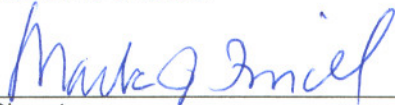
210 Walnut Street

Des Moines, Iowa 50309

515-284-4136

SIGNATURE

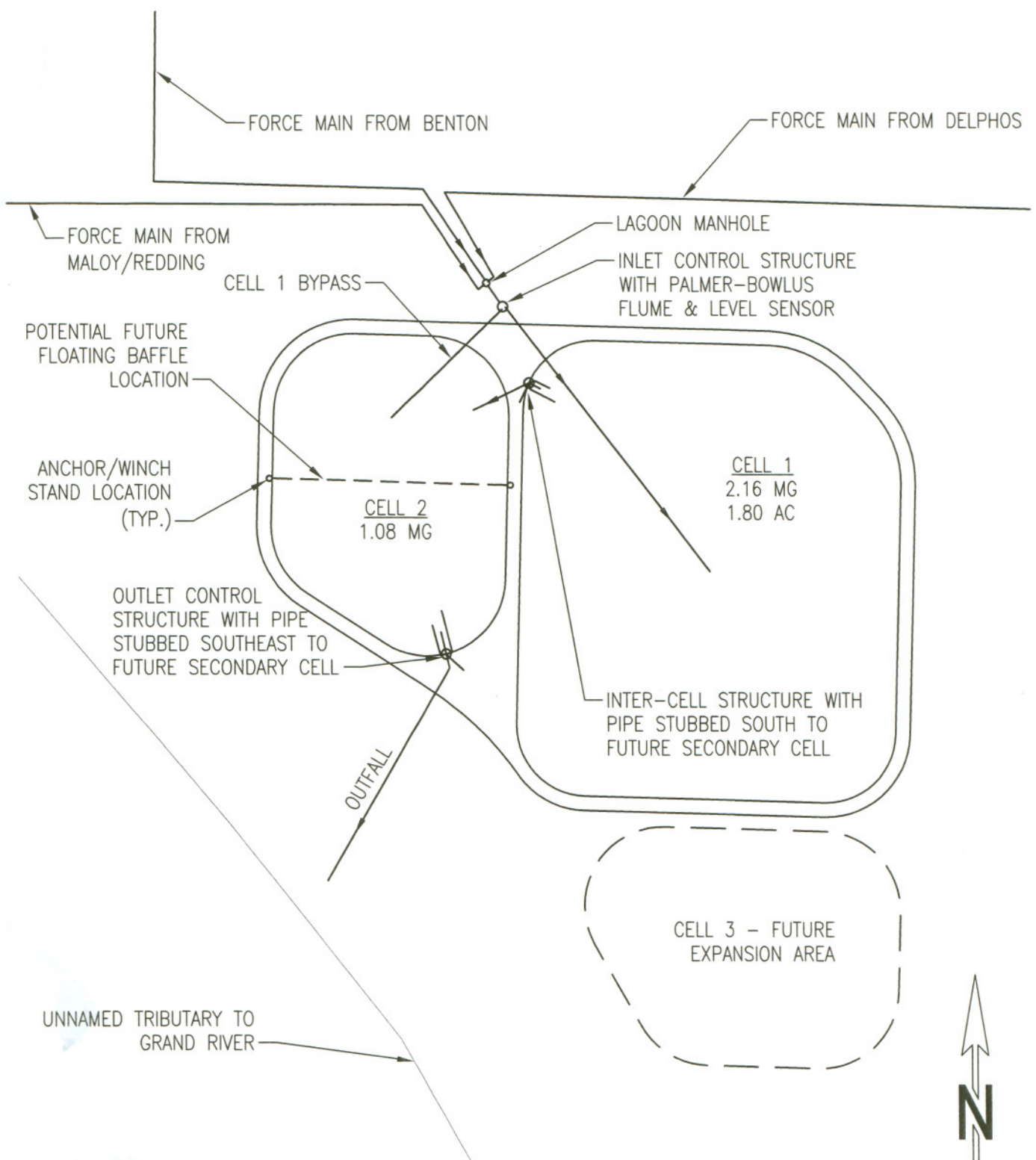
I attest to the accuracy and truthfulness of the information contained in this petition. I authorize any persons with knowledge of the relevant facts relating to the requested waiver to release any information to the Department to which this petition is directed.



Signature



Date



NO SCALE

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**WASTEWATER SYSTEM
FLOW DIAGRAM**

PROJ. NO.: 3007055

WASTEWATER COLLECTION & TREATMENT SYSTEM
SOUTHWEST RINGGOLD COUNTY
SOUTHERN IOWA RURAL WATER ASSOCIATION
BENTON, DELPHOS, MALOY AND REDDING, IOWA
2011