WELLHEAD PROTECTION PLAN AMENDMENT Part II

City of Hutchinson, Minnesota

POTENTIAL CONTAMINANT SOURCE MANAGEMENT STRATEGY

FEBRUARY 2018 – FEBRUARY 2028

SEH

DEPARTMENT OF HEALTH

BAYERL WATER RESOURCES

Forward

This document presents the wellhead protection (WHP) plan amendment for the City of Hutchinson that will help provide for an adequate and safe drinking water supply for community residents. It contains the following components:

- Assessment of the data elements used to prepare the plan;
- Delineation of the wellhead protection area;
- Delineation of the drinking water supply management area;
- Assessments of well and drinking water supply management area vulnerability;
- Impact of land and water use changes on the public water supply wells used by the water supplier;
- Issues, problems, and opportunities affecting the wells, well water, and the drinking water supply management area;
- Potential Contaminant Source Inventory and risk assessment
- Wellhead protection goals for this plan;
- Objectives and plan of action for achieving the wellhead protection goals;
- Evaluation program for assessing the effectiveness of this plan; and
- Contingency strategy to address an interruption of the water supply.

Water Supply Wells Included in This Plan

Unique Number	Well Name or Number	Use/Status[1]
210426	**4**	**P**
228800	**5**	**P**
233077	**6**	**P**
511076	**7**	**P**
724408	**8**	**P**

[1]P = Primary Water Supply Well, E = Emergency Backup Well, S = Seasonal Well

WHP Plan Manager

John Paulson
Project/Environmental Regulation Manager
City of Hutchinson
111Hassan Street Southeast
Hutchinson, MN 55350
Phone: 320.234.5682
jpaulson@ci.hutchinson.mn.us

WHP Team Members

John Paulson	City of Hutchinson	JPaulson@ci.hutchinson.mn.us
Eric Levine	City of Hutchinson	ELevine@ci.hutchinson.mn.us
John Rodeberg	SEH Engineering	jrodeberg@sehinc.com
Jeff Ledin	SEH Engineering	jledin@sehinc.com
Karen Voz	MDH Planner	karen.s.voz@state.mn.us
Marilyn Bayerl	Bayerl Water Resources	marilyn@bayerlwaterresources.com

Written By

Marilyn Bayerl, Bayerl Water Resources, for SEH Engineering, Inc
Mapping completed by SEH Engineering, Inc.

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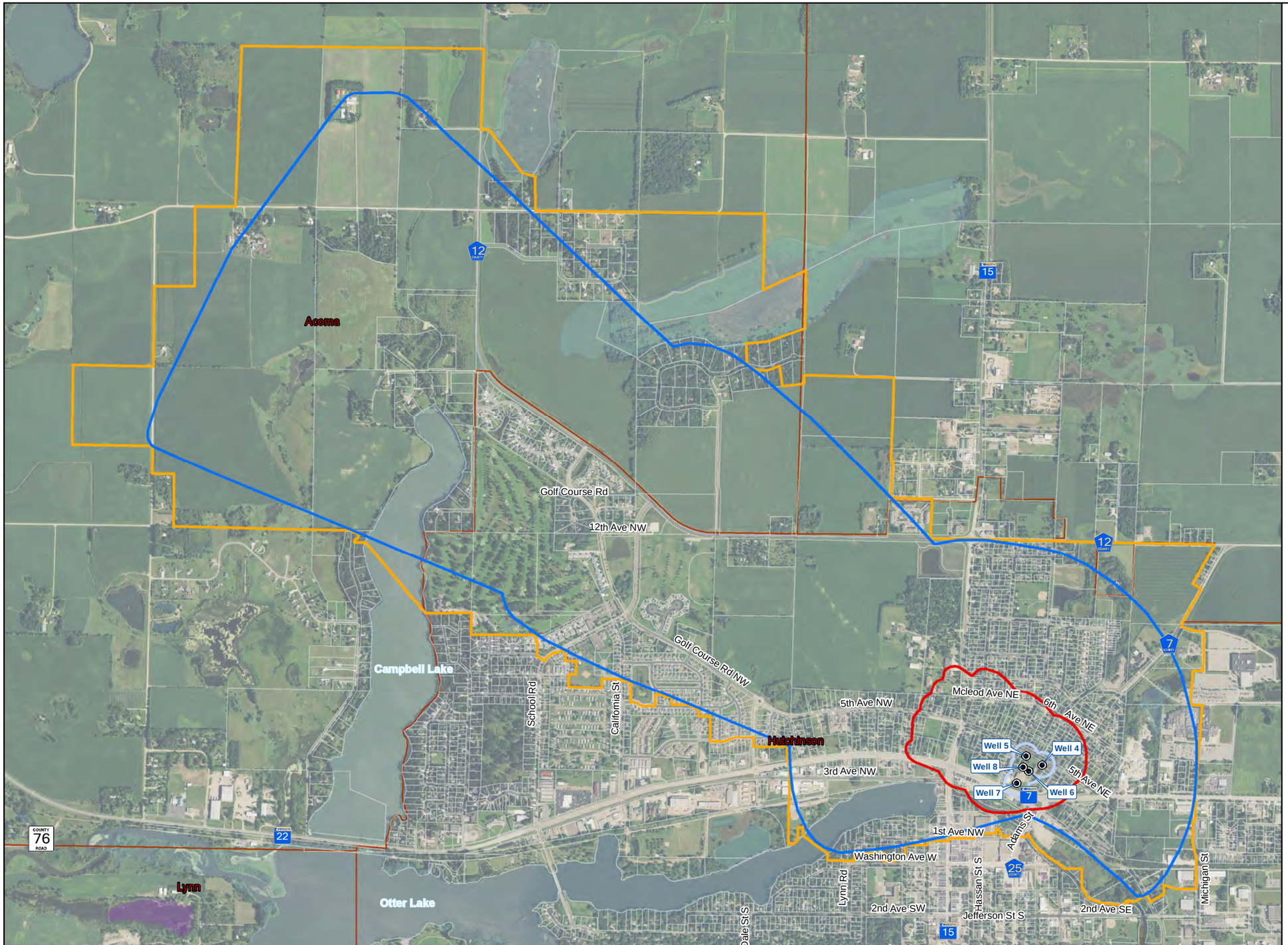


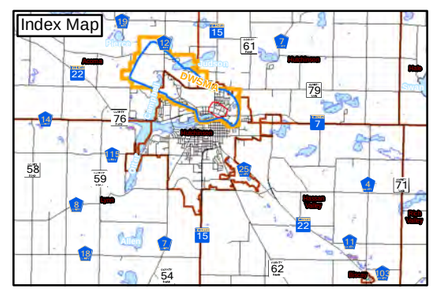
Legend

Hutchinson Wellhead Protection Plan Features

- Public Water Supply Well
- Wellhead Protection Area (WHPA)
- Low Vulnerability Drinking Water Supply Management Area (DWSMA)
- Emergency Response Area
- Inner Wellhead Management Zone

Minnesota Admin Boundaries

- County Boundaries
- Municipality Boundaries
- Mcleod County Parcels



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ST. PAUL, MN 55110
PHONE: (651) 490-2000
FAX: (651) 490-2150
WATTS: 800-325-2055
www.sehinc.com

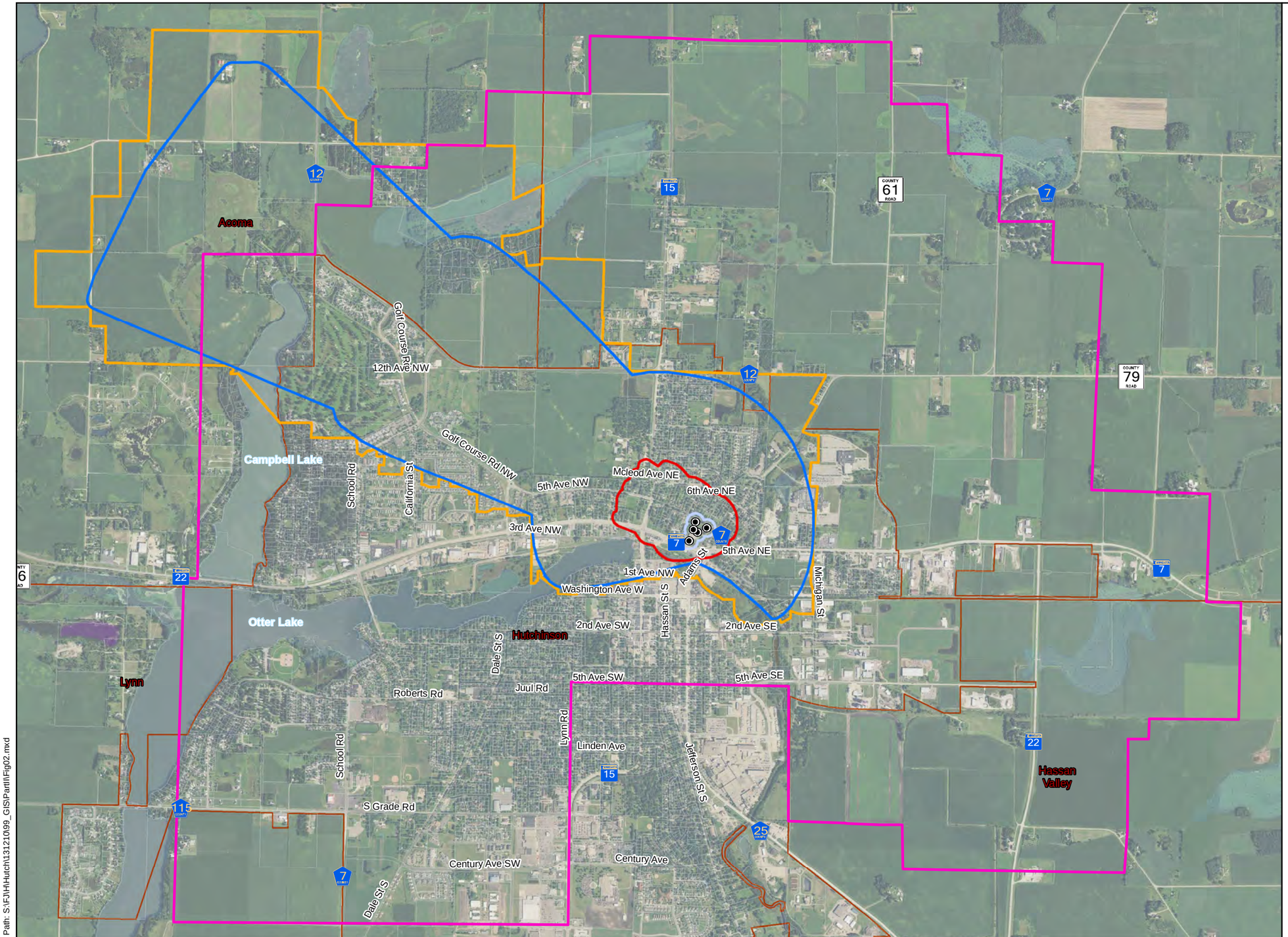
Project: Hutch 131210
Print Date: 7/18/2017

Map by: Msherrill
Projection: UTM Zone 15N
Source: ESRI, MDH, MPCA, MnDOT MnDNR, SeH, MnGeo WMS Service

WELLHEAD PROTECTION PLAN
Part II
Hutchinson, Minnesota

WHPA and DWSMA

Figure 1



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- Emergency Response
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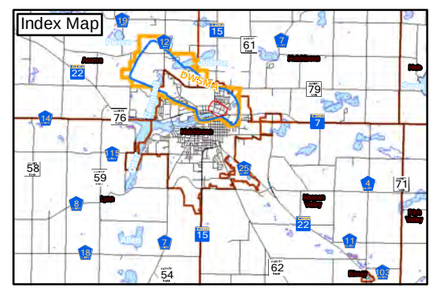
Minnesota Admin Boundaries

- County Boundaries
- Municipality Boundaries
- Mcleod County Parcels
- Public Land Survey (TRS)
- Previous Drinking Water Supply Management Area (DWSMA)



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ST. PAUL, MN 55110
PHONE: (651) 490-2000
FAX: (651) 490-2150
WATTS: 800-325-2055
www.sehinc.com

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WELLHEAD PROTECTION PLAN
Part II
Hutchinson, Minnesota

Current and Previous DWSMA Boundaries

Figure 2

Chapter 1 - Introduction

1.1 Background

The wellhead protection (WHP) plan amendment for the City of Hutchinson was prepared by SEH Engineering, Inc. in cooperation with the Minnesota Department of Health (MDH). Changes in the size of the DWSMA are significant since the original plan and are shown in Figure 2. It has decreased from 8,686 to 2,778-acres. Since the original plan in 2003, the city has drilled a new well, removed Well #3 from service (sealed), and reduced water usage by about 20-percent. Well #2 has been removed from the public water supply system and is used for bulk water. The vulnerability has remained low.

The city has mitigated all class V wells located in the previous DWSMA. They have also offered well sealing events and sealed 28 wells in the past ten years of implementation.

This amendment contains specific actions that the city will take to fulfill WHP requirements that are specified under Minnesota Rules, part 4720.5510 to 4720.5590. Also, the support that Minnesota state agencies, federal agencies, McLeod County, and others will provide is presented to identify their roles in protecting the city's drinking water supply. The plan is effective for 10 years after the approval date specified by MDH and the city is responsible for implementing its WHP plan of action, as described in Table 11 of this report. Furthermore, the city will evaluate the status of plan implementation at least every two-and-one-half years to identify whether its WHP plan is being implemented on schedule.

1.2 Plan Appendices

Much of the technical information that was used to prepare this plan is contained in the appendices, but is summarized in the main body of this plan. In particular:

- Appendix I contains the first part of the plan, consisting of the delineation of the wellhead protection area (WHPA), the drinking water supply management area (DWSMA), and the vulnerability assessments for the public water supply wells and the DWSMA. It also contains the municipal well logs and the Part One Scoping Document. This part of the plan is summarized in Chapter 3.
- Appendix II contains the inventory of potential contamination sources. This inventory is discussed in Chapter 4 in terms of assigning risk to the city's water supply and is also discussed in Chapter 6, relating to issues, problems or opportunities. It also contains a listing of parcels located within the DWSMA.
- Appendix III contains the Inner Wellhead Management Zone (IWMZ) Potential Contaminant Sources. This information is discussed in Chapter 4.
- Appendix IV contains the Alternative Water Supply / Contingency Strategy document. This information is discussed in Chapter 11.
- Appendix V contains the Old Municipal Well report.
- Appendix VI contains the Part Two WHPP Scoping Document outlining the requirements for this plan.
- Appendix VII contains the Glossary of Terms and Acronyms.
- Appendix VIII contains the Implementation Schedule.

Chapter 2 - Identification and Assessment of the Data Elements Used to Prepare the Plan

The data elements that are included in this plan were used to 1) delineate the WHPA and the DWSMA and to assess DWSMA and well vulnerability and 2) document the need for the WHP measures that will be implemented to help protect the city's water supply from potential sources of contamination. The city met with representatives from MDH on two occasions to discuss data elements that are specified in Minnesota Rules, part 4720.5400, for preparing a WHP plan.

The first scoping meeting, held on October 30, 2013, addressed the data elements that were needed to support the delineation of the WHPA, the DWSMA, and the wells and DWSMA vulnerability assessments. The second scoping meeting, held on April 11, 2017, discussed the data elements required to 1) identify potential risks to the public water supply and 2) develop effective management strategies to protect the public water supply in relation to well and DWSMA vulnerability.

The results of each meeting were communicated to the city by MDH through a formal scoping decision notice and are presented in *Appendices I and VI*. Not all of the data elements listed in the WHP rule had to be addressed in the WHP plan because of the non-vulnerable nature of the city's source of drinking water. The following data elements were reviewed by the WHP team and will be ranked for prioritization of plan implementation.

Land Use and **Zoning** are noted in Figures 3 and 4 with projected future land use noted in Figure 5. Table 1 shows the land use within the DWSMA. This is based on the 2015 National Agricultural Statistics Service from the United States Department of Agriculture. Land use is predominantly developed at fifty-four percent, with cropland and water at near twenty percent each. Forested areas encompass less than ten percent.

Table 2 summarizes Figures 4 and 5 showing current and future zoning which consists mainly of Residential and Commercial zones within city limits and predominantly agriculture use outside the city limits. Changes in the future land use noted in the city's Comprehensive Plan shows a decrease in commercial and industrial uses and identifies the park, open spaces and public land within the past residential areas.

McLeod County has designated an urban expansion, or Joint Powers Area, area described as approximately one-mile beyond Hutchinson city limits. Development within this zone is considered by the county, township and the city. Changes will likely include agricultural to residential use of the areas within the DWSMA that lie outside the city limits. The City of Hutchinson encompasses less than half of the DWSMA. The tables below depict the acres included for the current land use and current and future zoning.

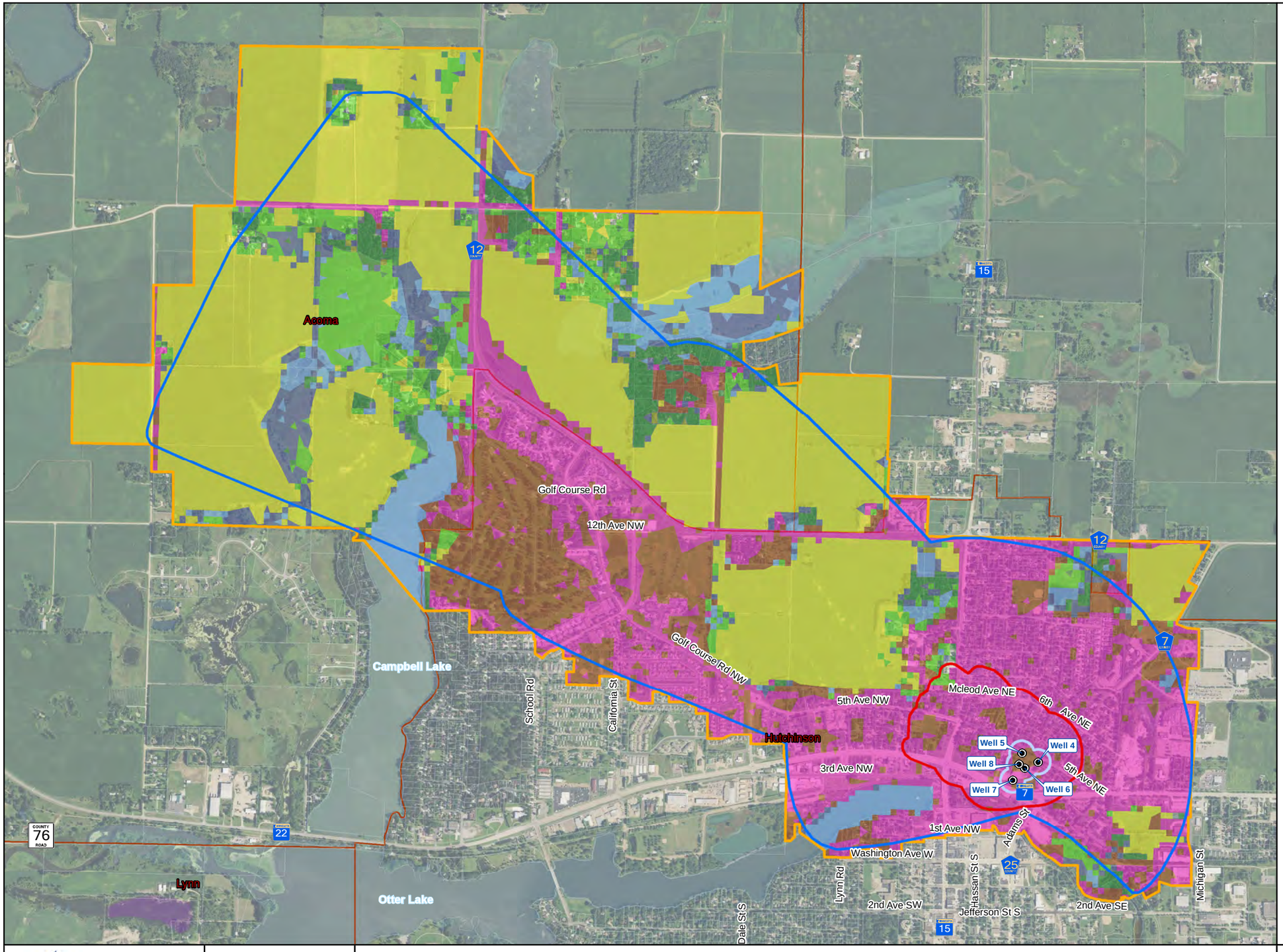
Table 1 – Land Use - Hutchinson DWSMA

Land Class Category (NASS 2016)	Total Acres
Emergency Response Area (ERA)	
Barren	10.0
Deciduous Forest	124.0
Developed	216.8
Developed/Open Space	255.0
Grass/Pasture	132.0
Cropland	222.0
Evergreen Forest	1.0
Herbaceous Wetlands	181.0
Open Water	100.0
Shrubland	41.0

Table 2 – Current and Future Zoning - Hutchinson DWSMA

Hutchinson City Zoning	Current Acres	Future Acres
Commercial	70	20
Industrial	116	73
Residential	1040	578
Park, Open and Public Land		427
Mixed Use		35
McLeod County Zoning		
Agricultural	278.7	
Conservation District	6.6	
R-1 Residential	132.0	
Joint Powers Area	1,029.8	

The entire land area of the DWSMA is located within McLeod County and the south fork of the Crow River Watershed. Less than half of the DWSMA is located within the city limits of Hutchinson with an area on the northwest lying in Hutchinson Township and a on the northeast in Acoma Township.



Legend

Hutchinson Wellhead Protection Plan Features

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Minnesota Admin Boundaries

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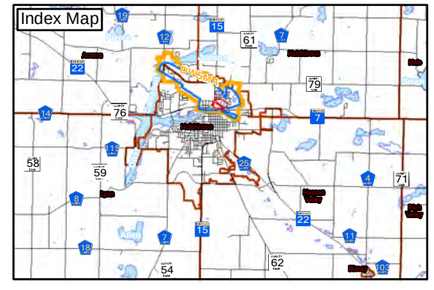
Land Cover (NASS 2016)

- Cropland
- Deciduous Forest
- Developed
- Developed/Open Space
- Grass/Pasture
- Herbaceous Wetlands
- Open Water
- Shrubland



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3535 VADNAIS CENTER DR.
ST. PAUL, MN 55110
PHONE: (651) 490-2000
FAX: (651) 490-2150
WATTS: 800-325-2055
www.sehinc.com

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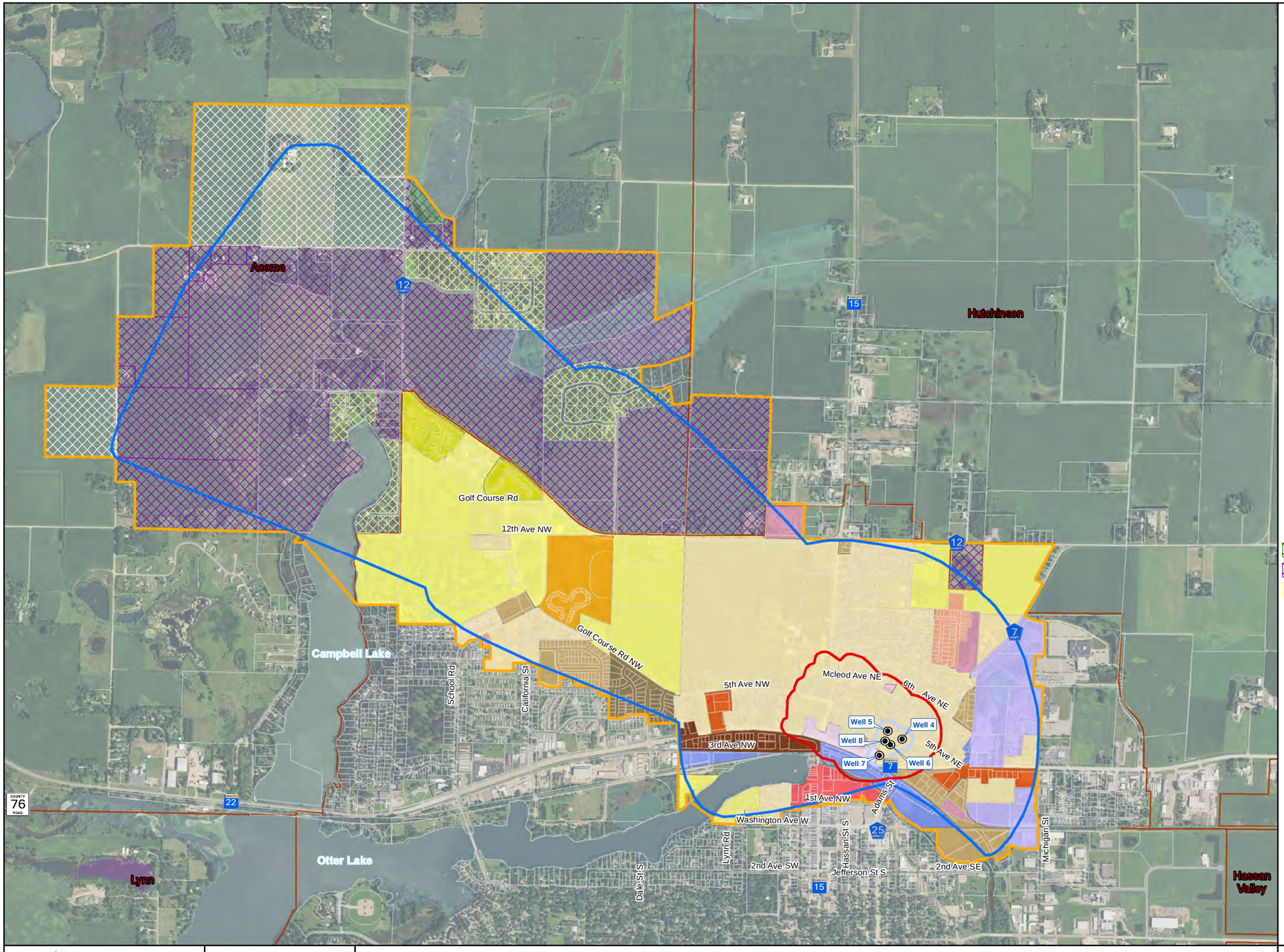
Projection: UTM Zone 15N
Source: ESRI, MDH, MPCA, MnDOT MnDNR, SeH, MnGeo WMS Service National Agriculture Statistics Service - Cropland Data Layer

WELLHEAD PROTECTION PLAN
Part II
Hutchinson, Minnesota

2016 NASS Land Cover

Figure 3



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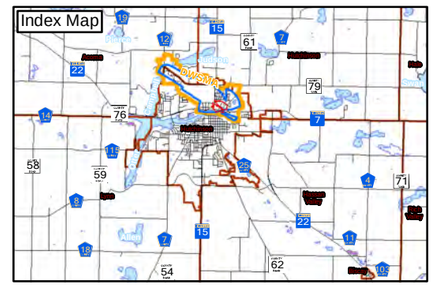
City of Hutchinson Zoning

- C-1
- C-2
- C-3
- C-4
- C-5
- I-1
- I/C
- R-1
- R-1 PD
- R-2
- R-2 PD
- R-2B
- R-3
- R-3 PD
- R-4

Mcleod County Zoning

- Agricultural
- Conservation District
- Joint Powers Area
- R-1 Residential



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3535 VADNAIS CENTER DR.
ST. PAUL, MN 55110
PHONE: (651) 490-2000
FAX: (651) 490-2150
WATTS: 800-325-2055
www.sehinc.com

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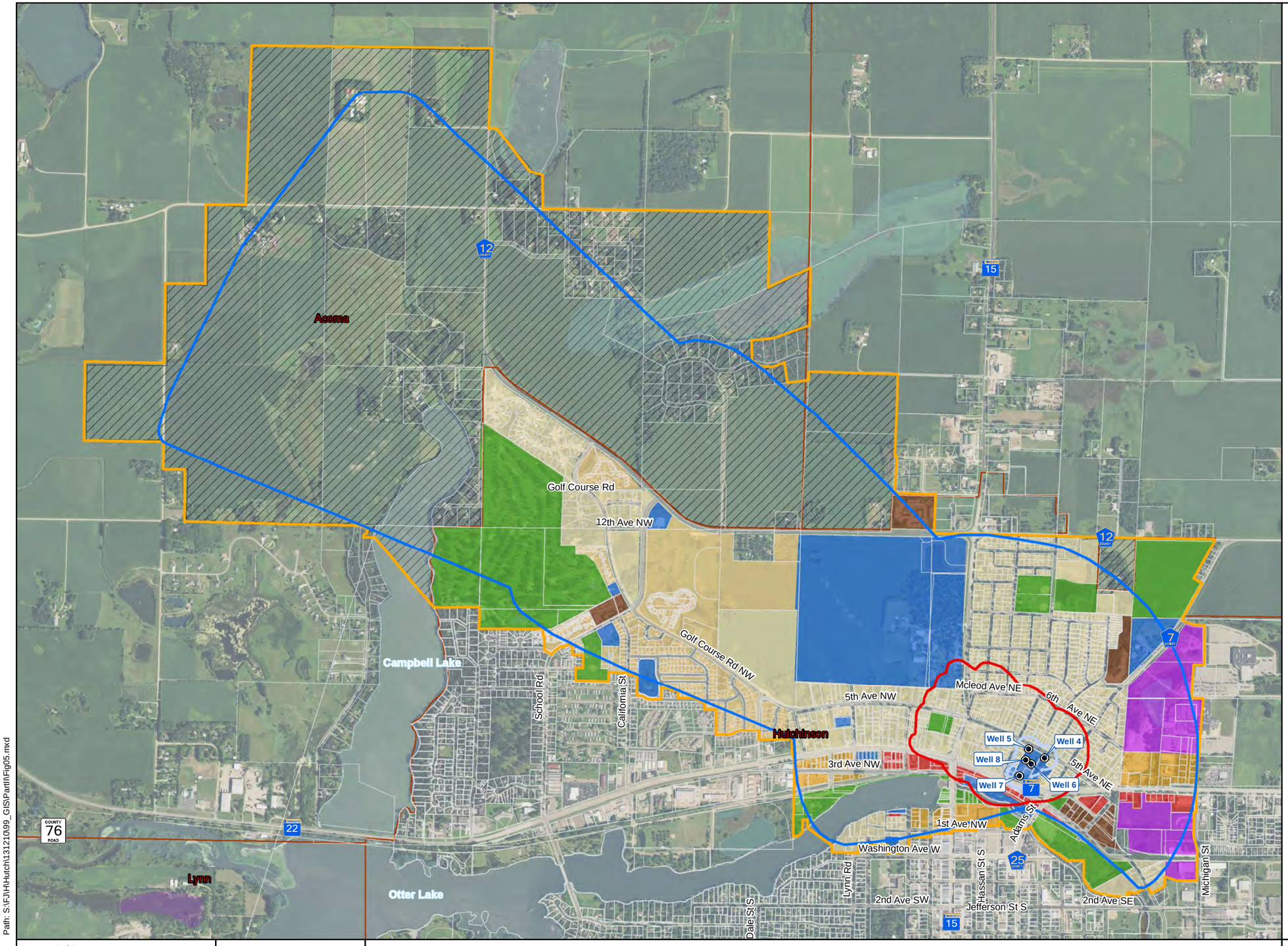
WELLHEAD PROTECTION PLAN
Part II
Hutchinson, Minnesota

City and County Zoning

Figure 4



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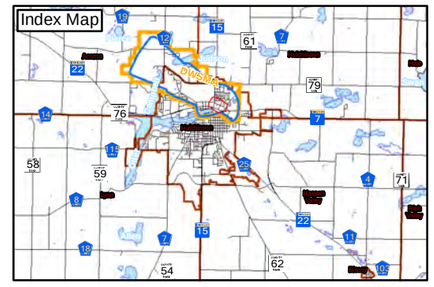
City of Hutchinson Future Landuse (Comprehensive Plan, 2013)

- Commercial
- High Density Residential Neighborhood
- Medium Density Residential Neighborhood
- Low Density Residential Neighborhood
- Industrial
- Mixed Use
- Park/Open Space
- Public/Institutional
- Outside City Limits



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WELLHEAD PROTECTION PLAN
Part II
Hutchinson, Minnesota

Future Landuse
(Comprehensive Plan, 2013)

Figure 5

Other data element assessments required for this plan are as follows:

Geology: A geologic atlas of McLeod County was completed in 2009 with the hydrogeology completed in 2013. Geologic information such as 1) bedrock geology, 2) surficial geology, 3) quaternary stratigraphy, 4) sand distribution model and Precambrian bedrock geology, and 5) bedrock topography and depth to bedrock was completed as part of that survey. This survey can be found at: http://www.dnr.state.mn.us/waters/programs/gw_section/mapping/platesum/mclecga.html.

Geologic data elements pertinent to the Wellhead Protection Area (WHPA) delineation and vulnerability status are included in Part One of this Wellhead Protection Plan (WHPP) and were utilized in the delineation. Part One can be found in *Appendix I* and is on file with the Minnesota Department of Health (MDH) and the City Hutchinson.

The current public water supply wells in use are located in the Quaternary Buried Artesian Aquifer and are between 400 and 475-feet deep. They are not vulnerable to activities on the surface due to a confining layer between the aquifer and the surface.

Groundwater Quantity: Adequacy of volume during drought periods has been addressed in Part One of the Plan. The depth of these wells makes recharge uncertain. It is unknown how long it takes water from the surface to reach this aquifer so long-term quantity is a consideration. There are no known high-capacity wells located within two miles of the DWSMA. Ten high-capacity wells were utilized in the delineation and are listed in Part One. These can be found in *Appendix I*. There is no known interference with the city wells from any of these wells. Any new proposed high-capacity wells will be evaluated by the MN Department of Natural Resources (DNR), the City and MDH to determine potential impact to the public water supply. If a new well is needed by the City, they will work with the MDH to determine placement.

While permitted withdrawal from each of the city wells is allowed at one-billion gallons per year, actual historic well use is considerably less as shown in Table 3. The city is currently working with the DNR on their Water Supply Plan to address consumption, conservation and emergency management.

ANNUAL WELL PUMPING AMOUNTS ***Table 3***
(IN MILLIONS OF GALLONS)

YEAR →	2010	2011	2012	2013	2014
Well 4	165.41	131.14	154.23	137.56	187.26
Well 5	124.85	135.88	133.93	138.22	132.55
Well 6	140.26	138.69	131.31	131.42	150.71
Well 7	160.75	152.66	146.64	119.72	0.95
Well 8	161.10	150.43	137.99	154.22	192.59
TOTAL	752.37	708.81	704.10	681.14	664.05

There are no known environmental bore holes in the DWSMA. There are monitoring wells located in the shallow aquifer.

Groundwater Quality: Tritium analysis was conducted on the PWS wells aquifer. Tritium is a radioactive isotope of hydrogen that was released into the atmosphere during testing of hydrogen bombs. When Tritium is found in groundwater in amounts greater than one tritium unit, it is an indicator that recharge due to rainfall has occurred in the United States. Levels of Tritium have not been detected above one tritium unit, meaning there is no influence from the surface since 1953. The City of Hutchinson will work to maintain their good water quality the community has come to expect and comply with requirements of the Safe Drinking Water Act.

Data elements were reviewed by the WHP team and ranked for prioritization of plan implementation.

Chapter 3 - Delineation of the Wellhead Protection Area, Drinking Water Supply Management Area and Vulnerability Assessments

A detailed description of the process used for 1) delineating the WHPA and the DWSMA, and 2) preparing the vulnerability assessments of the city water supply wells and DWSMA is presented in *Appendix I*. This work was completed by Short Elliott Hendrickson, Inc (SEH).

3.1 WHPA and DWSMA Delineation

Figure 1 shows the boundaries of the WHPA and the DWSMA. The WHPA was delineated using computer simulations of groundwater movement to generate the underground capture zones for city Wells 5 (Unique No. 462924), 6 (Unique No. 596649), 7 (Unique No. 693065), and 8 (Unique No. 753671). The DWSMA boundary was designated using the following criteria:

- Center-lines of highways, streets, roads, or railroad rights-of-ways;
- Public Land Survey coordinates;
- Parcel boundaries.

3.2 Well Vulnerability Assessment

The construction and water quality obtained from each primary well used by the City of Hutchinson is included in the assessment of well vulnerability. The vulnerability of the city wells is considered non-vulnerable because they are constructed so that each well is adequately sealed into the borehole and does not pump water that contains human-caused contaminants.

3.3 DWSMA Vulnerability Assessment

The low vulnerability assigned to the DWSMA was determined using geologic, soils, and groundwater chemistry information and indicates that the source water aquifer is covered by at least 50 continuous feet of clay-rich geological material.

Chapter 4 - Establishing Priorities and Assigning Risk to Potential Contamination Sources

The types of potential contamination sources that may exist within the DWSMA were derived from the information collected to satisfy the data element requirements (Chapter 2). The impact assigned to each data element as part of the assessment process was used to assess the types of potential contamination sources that may present a risk to the city's drinking water supply. The low vulnerability assessment for the DWSMA indicates that, generally, only unknown wells, wells 300-feet in depth to 500-feet in depth need to be considered. Other types of boreholes, excavations that may reach the aquifer, and certain types of Environmental Protection Agency Class V Wells are also likely to impact the city wells and require consideration.

4.1 Contaminants of Concern

None of the human-caused contaminants regulated under the federal Safe Drinking Water Act have been detected at levels indicating that any well itself serves to draw contaminants into the aquifer as a result of pumping.

4.2 Inventory Results and Risk Assessment

A description of the locations of potential contamination sources is presented in *Appendix II*. The MDH "County Well Index", along with the well disclosure website and city knowledge was utilized to locate wells. EPA sent a Class V Well Inventory for the DWSMA area. Base maps, Land Use, Land Cover and Zoning were derived from MDH, DNR, the MN Geologic Survey, McLeod County and the City of Hutchinson. The Old Municipal Well inventory, as shown in *Appendix V*, was provided by MDH.

The Inner Wellhead Management Zone is defined as 200-feet from the city wells. A survey of this area is shown for each well in *Appendix III*. A summary of the results for the IWMZ is listed in Table 4. Table 5 and Figure 6 present these results for the remainder of the DWSMA. The DWSMA focuses on wells 300-feet deep to 500-feet deep. The priority assigned to each type of potential contamination source addresses 1) the number inventoried, 2) its proximity to a city well, 3) the capability of local geologic conditions to absorb a contaminant, 4) the effectiveness of existing regulatory controls, 5) the time required for the City of Hutchinson to obtain cooperation from governmental agencies that regulate it, and 6) the administrative, legal, technical, and financial resources needed. A **high (H)** risk potential implies that the potential source type has the greatest likelihood to negatively impact the city's water supply and should receive highest priority for management. A **low (L)** risk potential implies that a lower priority for implementing management measures is assigned.

Table 4 - Potential Contamination Sources and Assigned Risk for the IWMZ

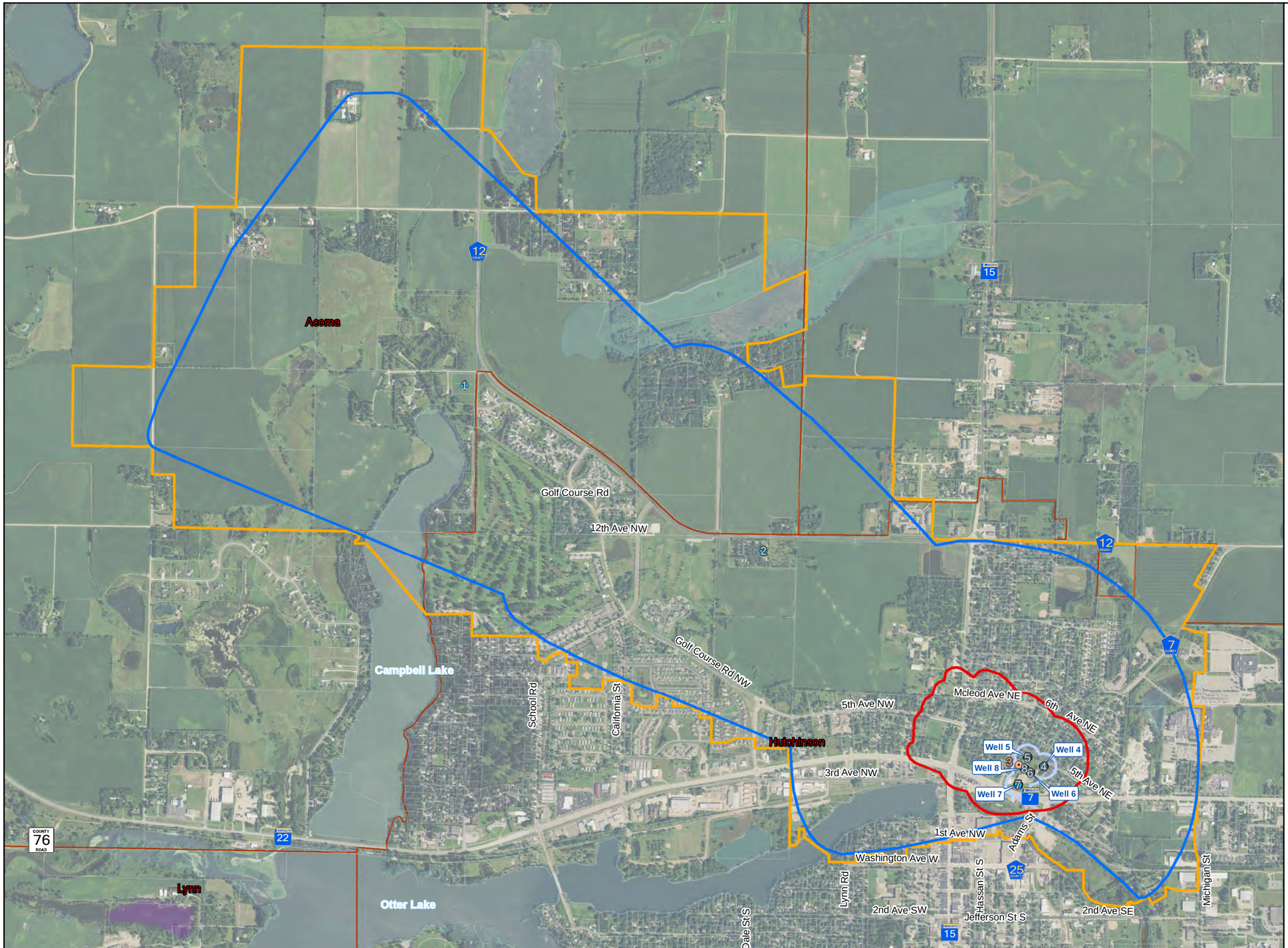
Potential Source Type	Well #4	Well #5	Well #6	Well #7	Well #8	Level of Risk
SB1 – Buried sewer serving one bldg.	2	1	3	3	2	M
SBM – Buried sewer-municipal (pressurized, open jointed or unapproved materials)	1	1				H
DWT – Discharge water treatment waste			1	1	1	L
SD1 – Stormwater Drain Pipe	1	1	2	2	2	L
WEL – Operating Well		1	1		2	L

Recommendations for the IWMZ include replacement of cracking or leaking sewer lines. Strategies to implement all measures in the IWMZ will be included in the implementation section of this plan.

Table 5 - Potential Contamination Sources and Assigned Risk for the Rest of the DWSMA

Potential Source Type	Total Number	Level of Risk
Wells 300-500 feet deep	2	L
Unknown Wells	1	H
Public Water Supply Wells	5	L
Class V Wells	0	L

All wells will be addressed in the management strategies with emphasis on sealing unused/unsealed wells. A listing of sealed wells is available at city hall.



Legend

Hutchinson Wellhead Protection Plan Features

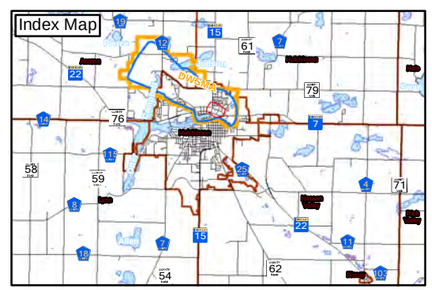
- Public Water Supply Well
- Wellhead Protection Area
- Drinking Water Supply Management Area (DWSMA)
- Emergency Response
- Inner Wellhead Management Zone

Minnesota Admin Boundaries

- County Boundaries
- Municipality Boundaries
- Mcleod County Parcels
- Public Land Survey (TRS)

Minnesota Well Index

- Well Location
- Well Location (Unverified Location)



0 625 1,250 2,500 Feet

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

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SEH
3535 VADNAIS CENTER DR.
ST. PAUL, MN 55110
PHONE: (651) 490-2000
FAX: (651) 490-2150
WATTS: 800-325-2055
www.sehinc.com

Project: Hutch 131210
Print Date: 7/18/2017

Map by: Msherrill
Projection: UTM Zone 15N
Source: ESRI, MDH, MPCA, MnDOT MnDNR, SeH, MnGeo WMS Service Mcleod County

WELLHEAD PROTECTION PLAN
Part II
Hutchinson, Minnesota

Potential Contaminant Source Inventory

Figure 6

Chapter 5 - Impact of Land and Water Use Changes on the Public Water Supply Wells

The city estimates that the following changes to the physical environment, land use, surface water, and groundwater-may occur over the 10-year period that the WHP plan amendment is in effect (Table 6). This is needed to determine whether new potential sources of contamination may be introduced in the future and to identify future actions for addressing these anticipated sources. Land and water use changes may introduce new contamination sources or result in changes to groundwater use and quality. The anticipated changes may occur within the jurisdictional authority of the city. Table 6 describes the anticipated changes to the physical environment, land use, and surface water or groundwater in relationship to the 1) influence that existing governmental land and water programs and regulations may have on the anticipated change, and 2) administrative, technical, and financial considerations of the City of Hutchinson and property owners within the DWSMA.

Table 6 - Expected Land and Water Use Changes

Expected Change (Physical Environment, Land Use, Surface Water, Groundwater)	Impact of the Expected Change On the Source Water Aquifer	Influence of Existing Government Programs and Regulations on the Expected Change	Administrative, Technical, and Financial Considerations Due to the Expected Change
Physical Environment: None anticipated	None	Does not apply	Does not apply
Land Use: Potential change from cropland to residential outside city limits.	None	Does not apply for wellhead protection purposes.	Does not apply for wellhead protection purposes.
Groundwater: Less demand with conservation measures	Less depletion of the drinking water resource aquifer.	Work with MDH and DNR to mitigate concerns.	MDH and DNR have regulatory authority.

Chapter 6 - Issues, Problems, and Opportunities

6.1 Identification of Issues, Problems and Opportunities

The City of Hutchinson has identified water and land use issues and problems and opportunities related to 1) the aquifer used by the city water supply wells, 2) the quality of the well water, or 3) land or water use within the DWSMA. The city assessed 1) input from public meetings and written comments it received, 2) the data elements identified by MDH during the scoping meetings, and 3) the status and adequacy of the city's official controls and plans on land and water uses, in addition to those of local, state, and federal government programs. The results of this effort are presented in the following table, which defines the nature and magnitude of contaminant source management issues in the city's DWSMAs. Identifying issues, problems and opportunities, including resource needs, enables the city to 1) take advantage of opportunities that may be available to make effective use of existing resources, 2) set meaningful priorities for source management and 3) solicit support for implementing specific source management strategies.

6.2 Comments Received

There have been several occasions for local governments, state agencies, and the general public to identify issues and comment on the city's WHP plan. At the beginning of the planning process, local units of government were notified that the city was going to develop its WHP plan and were given the opportunity to identify issues and comment. A public information meeting was held to review the results of the delineation of the wellhead protection area, DWSMA, and the vulnerability assessments. The meetings of the city's wellhead protection team were open to the public.

A public hearing was held before the completed WHP plan was sent to MDH for state agency review and approval. While there were no issues identified at the local government, state agency and/or the public informational meeting, the wellhead protection team has identified the following issues:

Table 7- Issues, Problems, and Opportunities

Issue Identified	Impacted Feature	Problem Associated with the Identified Issue	Opportunity Associated with the Identified Issue	Adequacy of Existing Controls to Address the Issue
There may be unknown wells located within the DWSMA	Aquifer Well water quality DWSMA	The city needs to assess if these wells presents a threat to the aquifer based upon depth, construction, and state of repair.	The city will pursue 100% funding to seal unused and unsealed wells located within the DWSMA if they meet the priority criteria outlined in the PCSI.	The city does not have authority to require that unused wells be properly sealed. The MDH has authority to require well sealing.
Wells located within the DWSMA need to be assessed for sealing potential.	Aquifer Well water quality DWSMA	The city needs to locate unused, unsealed wells and assess which wells present a threat to the aquifer based upon their construction, depth, and state of repair.	The city can partner with McLeod County and utilize MDH implementation grant dollars to help property owners pay for the costs of properly sealing unused wells.	The city does not have authority to require that unused wells be properly sealed. The MDH has authority to require well sealing.
The city will locate wells in the Old Municipal Well Inventory if possible and assess for sealing potential.	Aquifer	The city needs to locate and verify sealing if unverified and seal if unsealed, unused.	The city can apply for MDH grant funding to seal wells	The city does not have authority to require that unused wells be sealed. The MDH has authority to require well sealing.
Recharge potential to the Quaternary Buried Artesian Aquifer (QBAA) at the depths of the public water supply wells is unknown.	Aquifer DWSMA	Long range planning for water supply is uncertain. Additional aquifer draw by other sources may affect the resource.	The city will complete the DNR Conservation Plan, present educational information to consumers and encourage voluntary conservation. Complete leak detection/water audit.	The city has the authority to restrict water use is needed. The DNR has authority f high-capacity wells.
Additional high-capacity wells within the QBAA may affect the public water supply wells.	Aquifer DWSMA	Five agricultural processing/industrial processing wells currently exist in the deep QBAA.	The city can work with the DNR and MDH to evaluate any new proposed high-capacity wells within the DWSMA.	The city has the authority to restrict wells within the city limits of the DWSMA. The DNR has authority to restrict high-capacity wells.
Over 50% of the DWSMA is located outside the municipal boundary of Hutchinson.	Aquifer DWSMA	The city does not have regulatory authority over land use and/or wells in this area.	McLeod County, Acoma and Hutchinson Townships and the city of Hutchinson has a joint powers agreement for orderly development in this area.	The city does not have the authority to regulate wells and permitting outside city limits. McLeod County has regulatory authority.
There may be unknown Class V Wells located in the DWSMA.	Aquifer Well water quality DWSMA	The city needs to inform property owners of what a Class V Well is and how to report.	The city can apply for MDH grant funding to inform the property owners within the DWSMAs.	The EPA has authority over Class V Wells in Minnesota.

It is difficult to foresee or plan for the future. The City of Hutchinson will use its planning and management capabilities within this plan to respond to any new/unknown source water protection issues that may impact the quality or quantity of its drinking water in the future.

Chapter 7 - Existing Authority and Support Provided by Local, State, and Federal Governments

In addition to its own controls, the City of Hutchinson will rely upon partnerships formed with local units of government, state agencies, and federal agencies with regulatory controls or resource management programs in place to help implement its WHP plan. The level of support that a local, state, and federal agency can provide depends on its legal authority, as well as the resources available to local governments.

7.1 Existing Controls and Programs of the City of Hutchinson

The DWSMA is located almost entirely within the city limits of Hutchinson. Table 8 shows the legal controls and/or programs that the city has identified to support the management of potential contamination sources within the DWSMA.

Table 8 - Controls and Programs of the City of Hutchinson

Type of Control	Program Description
City Well Ordinance	New wells within the city limits of Hutchinson are not allowed. Well sealing assistance up to $500 or 75% of cost.
Cross-connection Ordinance	Existing wells must be separated from the municipal water system.
Stormwater Ordinance	Infiltration restrictions.
Land Use and Zoning Controls	
Comprehensive Plan	Long-range growth planning with McLeod County.

7.2 Local Government Controls and Programs

The McLeod County SWCD provides cost-share for well-sealing projects.

Table 9 - Local Agency Controls and Programs

Government Unit	Name of Control/Program	Program Description
McLeod County Planning and Zoning	County Comprehensive Plan Local Water Management Plan	Education and grant funding for water quality priorities
McLeod County SWCD	Cost-share Programs	Well Sealing Cost-Share
Joint Powers	McLeod County, Acoma and Hutchinson Townships, and the City of Hutchinson.	Manage development within approximately a one-mile delineated boundary of the city limits of Hutchinson.

7.3 State Agency and Federal Agency Support

MDH will serve as the contact for enlisting the support of other state agencies on a case-by-case basis regarding technical or regulatory support that may be applied to the management of potential contamination sources. Participation by other state agencies and the federal government is based on legal authority granted to them and resource availability.

Furthermore, MDH 1) administers state regulations that affect specific potential sources of contamination and 2) can provide technical assistance to property owners to comply with these regulations.

The following table identifies the specific regulatory programs or technical assistance that state and federal agencies may provide to the City to support implementation of the WHP plan. It is likely that other opportunities for assistance may be available over the 10-year period that the plan is in effect due to changes in legal authority or increases in funding granted to state and federal agencies. Therefore, the table references opportunities available when the city's WHP plan was first approved by MDH.

Table 10 - State and Federal Agency Controls and Programs

Government Unit	Type of Program	Program Description
MDH	State Well Code for Municipal Wells (Minnesota Rules, Chapter 4725)	MDH has authority over the construction of new municipal wells and the sealing of wells. MDH staff in the Well Management Program offer technical assistance for enforcing well construction codes, maintaining setback distances for certain contamination sources, and well sealing.
MDH	WHP	MDH has staff that will help the city identify technical or financial support that other governmental agencies can provide to assist with managing potential contamination sources.
DNR	Water appropriation permitting (Minnesota Rules, Chapter 6115)	DNR can require that anyone requesting an increase in existing permitted appropriations, or to pump groundwater, must address concerns regarding the impacts to drinking water if these concerns are included in a WHP plan.
EPA	Class V Wells	The EPA has authority over Class V wells. Owners are required to notify the EPA.

7.4 Support Provided by Nonprofit Organizations

The Minnesota Rural Water Association (MRWA) will assist the City of Hutchinson with implementing its WHP plan by providing 1) referenced education and outreach materials for land owners, 2) technical assistance for implementing the individual WHP action items listed in the plan, and 3) support to the city for assessing the results of plan implementation.

Chapter 8 - Goals

Goals define the overall purpose for the WHP plan, as well as the end points for implementing objectives and their corresponding actions. The WHP team identified the following goals after considering the impacts that 1) changing land and water uses have presented to drinking water quality over time and 2) future changes that need to be addressed to protect the community's drinking water:

- Maintain a safe and adequate drinking water supply for community residents;
- Create public awareness and general knowledge about the importance of WHP for maintaining a safe and adequate drinking water supply.
- Promote water conservation practices to ensure an adequate water supply in the future.

Chapter 9 - Objectives and Plan of Action

Objectives provide the focus for ensuring that the goals of the WHP plan are met and that priority is given to specific actions that support multiple outcomes of plan implementation.

Both the objectives and the wellhead protection measures (actions) that support them are based on assessing 1) the data elements (Chapter 2), 2) the potential contaminant source inventory (Chapter 4), 3) the impacts that changes in land and water use present (Chapter 5) and 4) issues, problems, and opportunities referenced to administrative, financial, and technical considerations (Chapter 6).

9.1 Objectives

The following objectives have been identified to support the goals of the WHP plan for the City of Hutchinson:

1. Create public awareness and general knowledge about the importance of WHP for maintaining an adequate and safe drinking water supply;
2. Increase the knowledge base regarding quantity of water available – maintain adequate drinking water supply and promote conservation.
3. Gather new information on potential contaminants.
4. Manage potential contaminants.
5. Ensure emergency preparedness of local agencies.
6. Create awareness among LGUs about the importance of protection of the drinking water supply aquifer.
7. Maintain communications with the MDH, MRWA and other agencies able to assist with implementation of this plan.
8. Collect additional data to substantiate information contained within this Plan, and to provide more detail for future Plan amendments.
9. Conduct regular evaluations of Plan implementation and effectiveness.

9.2 WHP Measures and Action Plan

Based upon the factors, the WHP team has identified WHP measures that will be implemented by the city over the 10-year period that its WHP plan is in effect. The objective that each measure supports is noted as well as 1) the lead party and any cooperators, 2) the anticipated cost for implementing the measure and 3) the year or years in which it will be implemented.

The following categories are used to further clarify the focus that each WHP measure provides, in addition to helping organize the measures listed in the action plan:

- Data Collection
- IWMZ Management
- Land Use Management
- Potential Contamination Source Management
- Public Education and Outreach
- Reporting and Evaluation
- Water Use and Contingency Strategy

9.3 Establishing Priorities

WHP measures reflect the administrative, financial, and technical requirements needed to address the risk to water quality or quantity presented by each type of potential contamination source. Not all of these measures can be implemented at the same time, so the WHP team assigned a priority to each. A number of factors must be considered when WHP action items are selected and prioritized (part 4720.5250, subpart 3):

- Contamination of the public water supply wells by substances that exceed federal drinking water standards.
- Quantifiable levels of contamination resulting from human activity.
- The location of potential contaminant sources relative to the wells.
- The number of each potential contaminant source identified and the nature of the potential contaminant associated with each source.
- The capability of the geologic material to absorb a contaminant.
- The effectiveness of existing controls.
- The time needed to acquire cooperation from other agencies and cooperators.
- The resources needed, i.e., staff, money, time, legal, and technical resources.

The City of Hutchinson defines a priority for implementing a WHP measure as maintaining the quantity and high quality drinking water they have come to expect. Table 11 lists each measure that will be implemented over the 10-year period that the city's WHP plan is in effect, including the priority assigned to each measure.

Table 11 - WHP Plan of Action

MONITORING, DATA COLLECTION, AND ASSESSMENT:

Description	Objective	Priority	Responsible Party & Cooperators	Cost	Implementation Time Frame									
					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1. Groundwater Quality & Quantity Monitoring **WHP Measure #1:** The City will contact the MDH Hydrologist or consultant when planning routine pump or well maintenance on city well #8 (724408) to televise and verify existing well record if grant funding is available.	**2/7/8**	**L**	Hutchinson MDH Consultant	Up to $10,000					X					
WHP Measure #2: The City will contact the MDH during year 7 to conduct Tritium testing on city well #8.	**7/8**	**H**	MDH Hutchinson	Staff Time							X			
WHP Measure #3: The City will contact the MDH by year 7 to set up testing on city wells for "vulnerability suite" – the city will collect samples.	**7/8**	**H**	MDH Hutchinson	Staff Time							X			
2. Well Inventory and Prioritization **WHP Measure #4:** Update the well inventory as data is collected. Review the status of existing wells and add new wells identified in the DWSMA.	**3/8**	**H**	Hutchinson MDH	Staff Time	←----------On-Going----------→									

WELL AND CONTAMINANT SOURCE MANAGEMENT:

1. Municipal Well Management Practices **WHP Measure #5:** Provide a map of the DWSMA to MNDOT and the local Fire, Street and County Highway Departments pointing out the specific location of city wells near roads. Request their awareness and prompt response to accidents, spills & clean-up efforts near the PWS wells.	**5/6**	**H**	Hutchinson McLeod County MNDOT	Staff Time	X									

WELL AND CONTAMINANT SOURCE MANAGEMENT (cont):

Description	Objective	Priority	Responsible Party & Cooperators	Cost	Implementation Time Frame									
					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2. Inner Wellhead Management Zone **WHP Measure #6:** Any sewer lines observed to be leaking, cracked or deteriorated should be replaced.	**4**	**L**	Hutchinson	TBD	←----------As Needed----------→									
WHP Measure #7: Implement all measures identified within the IWMZ.	**4**	**M**	Hutchinson	TBD	←----------On-Going----------→									
WHP Measure #8: The city will manage the stormwater pipe within the IWMZ for optimal performance.	**4**	**L**	Hutchinson	Staff Time	←----------On-Going----------→									
WHP Measure #9: Review and update the IWMZ survey form for all wells in the system in year 6 working in coordination with MDH.	**3/8**	**H**	Hutchinson MDH MRWA	Staff Time						X				
WHP Measure #10: Monitor setbacks for all new potential sources of contamination within the IWMZ.	**4**	**H**	Hutchinson MDH	Staff Time	←----------As Needed----------→									
3. Class V Wells **WHP Measure #11:** If a Class V Well is identified, contact MDH Planner.	**3/7**	**L**	Hutchinson EPA MDH	Staff Time	←----------As Needed----------→									
4. High Capacity Well Management **WHP Measure #12:** If the city becomes aware of a new high capacity well identified or proposed within one-mile of the DWSMA, they will contact MDH Hydrologist to evaluate the effect that proposed pumping may have on the boundaries of the delineated WHPA or DWSMA.	**3/7**	**M**	Hutchinson DNR MDH	Staff Time	←----------As Needed----------→									

WELL AND CONTAMINANT SOURCE MANAGEMENT (cont.):

Description	Objective	Priority	Responsible Party & Cooperators	Cost	Implementation Time Frame									
					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
5. Old Municipal Wells **WHP Measure #13:** Locate wells in the Old Municipal Well inventory and assess for sealing potential.	**4/7**	**H**	Hutchinson MDH	TBD			X	X						
WHP Measure #14: Obtain a cost estimate and apply for MDH SWP Grant or MDH Well Management funds to seal Old Municipal Wells if feasible and restore site as necessary. Submit information to MDH.	**4**	**H**	Hutchinson MDH	TBD				X	X					
6. Private Well Management **WHP Measure #15:** Continue current well-sealing program. Apply for a MDH SWP Grant to seal the high priority unused unsealed wells identified in the DWSMA.	**4**	**H**	Hutchinson MDH	TBD	←----------On-Going----------→									

EDUCATION AND OUTREACH:

Description	Objective	Priority	Responsible Party & Cooperators	Cost	Implementation Time Frame									
					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1. WHP and Drinking Water Protection Education **WHP Measure #16:** Review annually and update web page on the city website as needed, including well management /unused wells, water conservation practices and sealing information. Obtain information from MRWA and/or MDH websites.	**1/4**	**M**	Hutchinson MDH MRWA	Staff Time $1,000	X	X	X	X	X	X	X	X	X	X
WHP Measure #17: Request brochures from MDH. Place at city hall and the local library to inform citizens of proper well usage.	**1/4**	**M**	Hutchinson MDH	Staff Time	X					X				

EDUCATION AND OUTREACH (cont):

Description	Objective	Priority	Responsible Party & Cooperators	Cost	Implementation Time Frame									
					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
WHP Measure #18: Distribute leak detection tablets as available to high water users and make available at city hall to encourage leak detection in toilets and conservation of water.	**1/4**	**L**	Hutchinson DNR	Staff Time	←----------On-Going----------→									
WHP Measure #19: Include information on water conservation tips and practices in billing inserts.	**1/4**	**L**	Hutchinson MDH	Staff Time	X				X				X	
WHP Measure #20: Include information on water conservation practices in the Consumer Confidence Report.	**1/4**	**L**	Hutchinson MDH	Staff Time	X	X	X	X	X	X	X	X	X	X
WHP Measure #21: Provide information encouraging use of rain barrels by homeowners on the city website and participate in the CROW rain-barrel program.	**1/4**	**L**	Hutchinson CROW	Staff Time	←----------On-Going----------→									

LAND USE AND PLANNING:

Description	Objective	Priority	Responsible Party & Cooperators	Cost	Implementation Time Frame									
					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1. Water Use Management **WHP Measure #22:** Review and update the DNR Water Supply Plan as required.	**5**	**H**	Hutchinson	Staff Time	X									
WHP Measure #23: Incorporate water conservation practices within city owned facilities to demonstrate water conservation practices if funding is available.	**1/4**	**L**	Hutchinson MDH	TBD	←----------On-Going----------→									
WHP Measure #24: Promote assistance from Minnesota Technical Assistance Program (MNTAP) to businesses on water conservation practices.	**1/4**	**L**	Hutchinson MRWA	Staff Time	X		X		X		X		X	
WHP Measure #25: Provide a home water audit for water use customers when water billings indicate an unusually higher than normal customer usage.	**1/4**	**L**	Hutchinson		←----------On-Going----------→									

WHP COORDINATION, REPORTING, AND EVALUATION:

Description	Objective	Priority	Responsible Party & Cooperators	Cost	Implementation Time Frame									
					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1. WHP Coordination **WHP Measure # 26:** Hold a meeting every other year with the WHP Team and local resource partners involved in plan implementation to discuss new WHP issues, past year's accomplishments and activities planned for the upcoming year.	**8**	**M**	Hutchinson	Staff Time	X		X		X		X		X	
2. Implementation Tracking and Reporting Activities **WHP Measure # 27:** Maintain a "WHP folder" that contains documentation of WHP activities you have completed and a date that it was done.	**8**	**H**	Hutchinson MDH	Staff Time	X	X	X	X	X	X	X	X	X	X
3. WHP Program Evaluation Plan Reporting **WHP Measure #28:** Complete and submit an evaluation report on completed WHP activities to your city council every 2.5 years.	**8**	**H**	MDH Hutchinson MDH	Staff Time			X		X		X		X	
WHP Measure # 29: Summarize all WHP Plan implementation efforts in a report to MDH in the 8th year.	**8**	**M**	Hutchinson MDH	Staff Time								X		
WHP Measure #30: It is difficult to foresee or plan for the future. The city will use its planning and management capabilities within this plan to respond to any new/unknown source water protection issues that may impact the quality or quantity of its drinking water in the future.	**4/8**	**M**	Hutchinson MDH	TBD	←----------On-Going----------→									

9.4 Commitments from Cooperators

The agencies listed in Table 12 have available programs to support the City of Hutchinson with implementing the WHP measures in which they are identified.

Table 12 - Cooperating Agencies List

Agency	Measure
MDH	1-4, 9-17, 19, 20, 23, 27-30
MCLEOD COUNTY	5
CROW	21
MNDOT	5
MRWA	9, 16, 24
EPA	11
DNR	12, 18

Chapter 10 - Evaluation Program

Evaluation is used to support plan implementation and is required under Minnesota Rules, part 4720.5270, prior to amending the city's WHP plan. Plan evaluation is specified under Objective 9 and provides the mechanism for determining whether WHP action items are achieving the intended result or whether they need to be modified to address changing administrative, technical, or financial resource conditions within the DWSMA. The city has identified the following procedures that it will use to evaluate the success with implementing its WHP plan:

1. The WHP team will meet annually, or at a minimum, every two-and-one-half years to assess the status of plan implementation and to identify issues that impact the implementation of action steps throughout the DWSMA;
2. The city will assess the results of each action item that has been taken annually to determine whether the action item has accomplished its purpose or whether modification is needed. Assessment results will be presented every 2.5 years to the city council.
3. The city will prepare a written report that documents how it has assessed plan implementation and the action items that were carried out. The report will be presented to MDH at the first scoping meeting held with the city to begin amending the WHP plan.

Chapter 11 - Contingency Strategy

The Alternative Water Supply and Contingency Strategy can be found in *Appendix IV* of this Plan. The purpose of this Contingency Strategy is to establish, provide and keep updated, certain emergency response procedures and information for the City of Hutchinson which may become vital in the event of a partial or total loss of public water supply services as a result of natural disaster, chemical contamination, or civil disorder of human-caused disruptions.

Appendix

I – WHPA and DWSMA Delineations and Vulnerability Assessments (Part 1), Part One WHPP Scoping Document and Municipal Well Logs

II – Inventory of Potential Contamination Sources and DWSMA parcels

III – Inner Wellhead Management Zone Potential Contaminant Sources

IV – Alternative Water Supply / Contingency Strategy

V– Old Municipal Well Report

VI – Part Two WHPP Scoping Document

VII – Glossary of Terms and Acronyms

VIII – Implementation Schedule

Amendment to the Wellhead Protection Plan Part 1

Delineation of WHPA, DWSMA and Vulnerability Assessments

Hutchinson, Minnesota

SEH No. HUTCH 131210 4.00

January 16, 2017

Delineation of WHPA, DWSMA and Vulnerability Assessments
Amendment to the Wellhead Protection Plan Part 1
Hutchinson, Minnesota

SEH No. HUTCH 131210

January 16, 2017

I hereby certify that this report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Geologist under the laws of the State of Minnesota.

Melanie Niday, PG

Date: October 26, 2016 Lic. No.: 30346

Prepared By: Jacob Macholl, MS Date: October 26, 2016

Short Elliott Hendrickson Inc.
3535 Vadnais Center Drive
St. Paul, MN 55110-5196
651.490.2000

Glossary of Terms

Data Element. A specific type of information required by the Minnesota Department of Health to prepare a wellhead protection plan.

Drinking Water Supply Management Area (DWSMA). The area delineated using identifiable land marks that reflects the scientifically calculated wellhead protection area boundaries as closely as possible (Minnesota Rules, part 4720.5100, subpart 13).

Drinking Water Supply Management Area Vulnerability. An assessment of the likelihood that the aquifer within the DWSMA is subject to impact from land and water uses within the wellhead protection area. It is based upon criteria that are specified under Minnesota Rules, part 4720.5210, subpart 3.

Emergency Response Area (ERA). The part of the wellhead protection area that is defined by a one-year time of travel within the aquifer that is used by the public water supply well (Minnesota Rules, part 4720.5250, subpart 3). It is used to set priorities for managing potential contamination sources within the DWSMA.

Inner Wellhead Management Zone (IWMZ). The land that is within 200 feet of a public water supply well (Minnesota Rules, part 4720.5100, subpart 19). The public water supplier must manage the IWMZ to help protect it from sources of pathogen or chemical contamination that may cause an acute health effect.

Surface Water Contribution Area (SWCA). In a conjunctive delineation, the geographic area that may provide recharge to the aquifer within the well capture zone, attributed to: 1) the presence of a surface hydraulic feature; and 2) the runoff of precipitation or meltwater.

Wellhead Protection (WHP). A method of preventing well contamination by effectively managing potential contamination sources in all or a portion of the well's recharge area.

Wellhead Protection Area (WHPA). The surface and subsurface area surrounding a well or well field that supplies a public water system, through which contaminants are likely to move toward and reach the well or well field (Minnesota Statutes, section 103I.005, subdivision 24).

Well Vulnerability. An assessment of the likelihood that a well is at risk to human-caused contamination, either due to its construction or indicated by criteria that are specified under Minnesota Rules, part 4720.5550, subpart 2.

Acronyms

DNR	Minnesota Department of Natural Resources
EPA	United States Environmental Protection Agency
IWMZ	Inner Wellhead Protection Management Zone
MDA	Minnesota Department of Agriculture
MDH	Minnesota Department of Health
MGS	Minnesota Geological Survey
MnDOT	Minnesota Department of Transportation
MnGEO	Minnesota Geospatial Information Office
MPARS	MNDNR Permitting and Reporting System (formerly known as SWUDS)
MPCA	Minnesota Pollution Control Agency
MWI	Minnesota Well Index (formerly known as CWI)
PLS	Public Land Survey
SWCD	Soil and Water Conservation District
UMN	University of Minnesota
USGS	United States Geological Survey

Executive Summary

This report documents the delineation of the protection areas for the public water supply wells used by City of Hutchinson and includes an assessment of their vulnerability to contamination. The recharge area for the wells is known as the wellhead protection area, or WHPA, and represents the area that contributes a 10-year pumping volume to the city's wells. The area represented by a one-year volume is known as the emergency response area, or ERA. Practical reasons require the designation of a management area that fully envelops the WHPA, called the drinking water supply management area, or DWSMA. Each of these areas is shown in **Figure 1**.

The wells used by the City of Hutchinson are sufficiently deep and well-constructed to be considered to have a low vulnerability to contamination. One of the principal considerations for this determination is that there is significant natural geologic protection between the ground surface and the depth from which the water is pumped. Available data suggest that the low vulnerability observed at the city wells is consistent throughout the DWSMA. At present, none of the contaminants of concern for which the Safe Drinking Water Act has established standards are present in the city's water supply.

The low vulnerability of the DWSMA means that the chief contamination threats to the City of Hutchinson's aquifer are other wells that reach or penetrate it. Old and unused wells may provide a conduit for contaminants to short circuit the natural geologic protection and are considered a principal threat to the city's drinking water source.

The following report outlines the steps taken to delineate the City of Hutchinson's WHPA, DWSMA and ERA.

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January 2017

Amendment to the Wellhead Protection Plan Part 1

Delineation of WHPA, DWSMA and Vulnerability Assessments

Prepared for the City of Hutchinson

1.0 Introduction

Short Elliott Hendrickson, Inc. (SEH) developed Part I of the wellhead protection plan (WHP Plan) at the request of the City of Hutchinson (PWSID 1430004). The work was performed in accordance with the Minnesota Wellhead Protection Rule, parts 4720.5100 to 4720.5590.

This document contains the amendment of the WHP Plan that was first developed for the city of Hutchinson in 2003. The Minnesota Department of Health (MDH) requires that wellhead protection plans be reviewed and amended to reflect current conditions every ten years.

This report presents delineations of the wellhead protection area (WHPA) and drinking water supply management area (DWSMA), and the vulnerability assessments for the public water supply wells and DWSMA. **Figure 1** shows the boundaries for the WHPA and the DWSMA. The WHPA is defined by a 10-year time of travel. **Figure 1** also shows the emergency response area (ERA), which is defined by a one-year time of travel. An inner wellhead management zone (IWMZ), which is the area within a 200-foot radius around the well, serves as the WHPA for emergency wells and is not displayed in this report. Definitions of rule-specific terms used are provided in the “Glossary of Terms.”

In addition, this report documents the technical information required to prepare this portion of the WHP Plan in accordance with the Minnesota Wellhead Protection Rule.

Table 1 lists all the wells in the public water supply system. Only wells listed as primary are required to be included in the WHP Plan.

Table 1
Water Supply Well Information

Local Well ID	Unique Number	Use/ Status[1]	Casing Diameter (inches)	Casing Depth (feet)	Well Depth (feet)	Date Constructed	Aquifer[2]	Well Vulnerability
4	210426	P	16	342	412	1966	QBAA	Not Vulnerable
5	228800	P	16	340	410	1971	QBAA	Not Vulnerable
6	233077	P	20	355	475	1972	QBAA	Not Vulnerable
7	511076	P	18	320	400	1988	QBAA	Not Vulnerable
8	724408	P	18	325	415	2005	QBAA	Not Vulnerable

Note: 1. Primary (P), Emergency Backup (E), Seasonal Use (S)
2. Quaternary Buried Artesian Aquifer (QBAA)

1.1 Summary of Changed Conditions from Previous Plan

Few changes have occurred in the city's public water supply infrastructure in the time since the original WHP plan was prepared in 2003. The total volume of water pumped by the municipal wells has decreased from the 2003 delineation by about 20% and the allocation of pumping between wells has become more balanced. In 2005, Municipal Well No. 8 (724408) was constructed and Municipal Well Nos. 2 and 3 are no longer used by the City for drinking water (Note: Well 2 is currently used for a bulk filling station, but is not part of the potable water supply). Because of differences in pumping volume, additional water quality information, additional geologic information with the publication of the McLeod County geologic atlas in 2009, and changes in delineation methods, it is prudent to re-delineate the WHPAs.

2.0 Assessment of the Data Elements

MDH staff met with representatives of the City of Hutchinson on October 30, 2013 for a scoping meeting that identified the data elements required to prepare Part I of the WHP Plan. **Table 2** presents the assessment of these data elements relative to the present and future implications of planning items specified in Minnesota Rules, part 4720.5210. The Scoping Decision Notice can be found in **Appendix A** of this report. Please note that the acronyms used in this report are listed after the "Glossary of Terms" at the beginning of this report.

Table 2
Assessment of Data Elements

Data Element	Present and Future Implications				Data Source
	Use of the Well (s)	Delineation Criteria	Quality and Quantity of Well Water	Land and Groundwater Use in DWSMA	
Precipitation					
Geology					
Maps and geologic descriptions	M	H	H	H	MGS, DNR, USGS
Subsurface data	M	H	H	H	MGS, MDH, MWI, DNR
Borehole geophysics	M	H	H	H	MGS
Surface geophysics	L	L	L	L	Not Available
Maps and soil descriptions					
Eroding lands					
Water Resources					
Watershed units					
List of public waters					
Shoreland classifications					
Wetlands map					
Floodplain map					
Land Use					
Parcel boundaries map	L	H	L	L	McLeod County, City
Political boundaries map	L	L	L	L	MnGEO, City
Public Land Survey map	L	H	L	L	MnGEO
Land use map and inventory					
Comprehensive land use map					
Zoning map					
Public Utility Services					
Transportation routes and corridors	L	H	L	L	MnDOT, MnGEO
Storm/sanitary sewers and PWS system map					
Oil and gas pipelines map					
Public drainage systems map or list					
Records of well construction, maintenance, and use	H	H	H	H	City, MWI, MDH

Data Element	Present and Future Implications				Data Source
	Use of the Well (s)	Delineation Criteria	Quality and Quantity of Well Water	Land and Groundwater Use in DWSMA	
Surface Water Quantity					
Stream flow data					
Ordinary high water mark data					
Permitted withdrawals					
Protected levels/flows					
Water use conflicts					
Groundwater Quantity					
Permitted withdrawals	H	H	H	H	City, DNR
Groundwater use conflicts	L	L	L	L	DNR
Water levels	H	H	H	H	MWI, DNR, MDH, City
Surface Water Quality					
Stream and lake water quality management classification					
Monitoring data summary					
Groundwater Quality					
Monitoring data	H	H	H	H	MDH, DNR
Isotopic data	H	H	H	H	MDH, DNR
Tracer studies	L	L	L	L	Not Available
Contamination site data	M	M	M	M	Not Available
Property audit data from contamination sites					
MPCA and MDA spills/release reports	M	L	M	M	MPCA, MDA

Definitions Used for Assessing Data Elements:

High (H) - the data element has a direct impact

Moderate (M) - the data element has an indirect or marginal impact

Low (L) - the data element has little if any impact

Shaded - the data element was not required by MDH for preparing the WHP Plan

3.0 General Descriptions

3.1 Description of the Water Supply System

The City of Hutchinson obtains its drinking water supply from five (5) primary municipal wells as summarized in **Table 1**.

3.2 Description of the Hydrogeologic Setting

The hydrologic setting for the QBAA was originally described in the 2003 WHP Plan Part 1 (Earth Tech, 2003). The description of the hydrogeologic setting is presented in **Table 3**.

The hydrogeologic setting developed during the previous wellhead protection plan correlates well to McLeod County geologic atlas (Lusardi 2009; Peterson 2013). The distribution of the aquifer and its stratigraphic relationships with adjacent geologic materials are shown in **Appendix B**. They were prepared by Earth Tech in 2003 using well record data contained in the Minnesota Well Index database, now referred to as the Minnesota Well Index (MWI). The geological maps and studies used to further define local hydrogeologic conditions are provided in the "Selected References" section of this report. **Figure 3** shows the surficial geology in the Hutchinson area.

Table 3
Description of the Hydrogeologic Setting

Aquifer	Attribute	Descriptor	Data Source
Quaternary Buried Artesian Aquifer (QBAA)	Aquifer Material	Sand and Gravel	Well Logs, MGS
	Porosity	0.3	2003 model.
	Aquifer Thickness	150 ft	City well logs.
	Stratigraphic Top Elevation	750 ft AMSL	City well logs.
	Stratigraphic Bottom Elevation	600 ft AMSL	City well logs.
	Hydraulic Confinement	Confined	City well logs and interpreted from well records in the MWI database
	Transmissivity	Range of Values: 19,500 to 285,000 $ft^{2/}$day	The transmissivity values were obtained from specific capacity data test conducted at QBAA wells in the area. A range of transmissivity values was used to reflect changes in aquifer composition and thickness, as well as uncertainties related to the quality of existing aquifer test data.
	Hydraulic Conductivity	Range: 130 to 1900 ft/day	The values were obtained by dividing the estimated transmissivity by the aquifer thickness at the wells.
	Groundwater Flow Field	Northwest to Southeast; 0.0006 ft/ft	Defined by interpolating static water level elevations from well records in the MWI database.

4.0 Delineation of the Wellhead Protection Area

4.1 Delineation Criteria

The boundaries of the WHPA for the City of Hutchinson are shown in **Figure 1**. **Table 4** describes how the delineation criteria specified under Minnesota Rules, part 4720.5510, were addressed.

Pumping data was obtained from the DNR Permit and Reporting System (MPARS) for the public water supply's Appropriation Permit No. 1968-0209. These values, confirmed by the public water supplier, were used to identify the maximum volume of water pumped annually by each well over the previous five-year period, as shown in **Table 5**. Also, an estimate of the pumping for the next five years is shown. No increase in water use is expected in the next five years. The maximum daily volume of discharge used as an input parameter in the model was calculated by dividing the greatest annual pumping volume by 365 days.

Table 4
Description of WHPA Delineation Criteria

Criterion	Descriptor	How the Criterion was Addressed
Flow Boundary	None	There are no flow boundaries close enough to public water supply wells that may impact capture areas. Campbell Lake to the west and Otter Lake and the Crow River to the south likely act as a flow boundary for groundwater flow at the water table but likely has little influence on the deeper confined aquifer. Constant head boundaries derived from the interpolated potentiometric surface were used in the model.
Flow Boundary	Other High-Capacity Wells (**Table 6**)	The pumping amounts were determined based on the 2011 pumped volumes. The pumping amounts of these high-capacity wells were included in the methods used for the delineation.
Daily Volume of Water Pumped	See **Table 5**	Pumping information was obtained from the DNR, Appropriations Permit No. 1968-0209, and was converted to a daily volume pumped by a well.
Groundwater Flow Field	Groundwater flow is northwest to southeast with an approximate gradient of 0.0006 (**Figure 2**).	The groundwater flow field used for delineation of the WHPA was determined by developing a potentiometric surface map which was used to create the groundwater flow model.
Aquifer Transmissivity (T)	Reference Value: 147,300 ft^2/day	The aquifer test plan (ATP) was approved by the MDH on April 23, 2015. The representative T was determined from the results from the pumping test (see **Appendix C**) and the screened interval of wells completed in the aquifer. Results were incorporated into the groundwater flow model as discussed below in **Section 4.2.1**. Uncertainty regarding aquifer transmissivity was addressed as described in **Section 4.4**.
Time of Travel	10 years	The public water supplier selected a 10-year time of travel.

Table 5
Annual Volume of Water Discharged from Water Supply Wells

Well No.	Unique Well No.	2010	2011	2012	2013	2014	2018 Projected *	Daily Volume** (m^3/day)
4	210426	165.407	131.143	154.228	137.563	**187.259**	155.12	1,942
5	228800	124.849	135.878	133.930	**138.216**	132.553	133.09	1,433
6	233077	140.256	138.696	131.314	131.422	**150.711**	138.48	1,563
7	511076	**160.748**	152.664	146.644	119.718	0.945	116.14	1,667
8	724408	161.099	150.430	137.986	154.220	**192.586**	159.26	1,997
	Total Volume Pumped	*752.359*	*708.811*	*704.102*	*681.139*	*664.054*	702.09	*8,603*

Annual volumes expressed as million gallons per year (MGY). **Bold** indicated greatest annual pumping volume

Notes: * Projections assume water production will maintain average pumping from 2010-2014
** Pumping rate used in groundwater flow modeling

In addition to the wells used by the City of Hutchinson, **Table 6** shows other high capacity wells included in the delineation to account for their pumping impacts on the capture areas for the public supply wells. Thirteen (13) other active high capacity wells were identified within two miles of the City of Hutchinson municipal wells; however, two wells are sealed, one abandoned and four are completed within shallower, isolated quaternary buried artesian aquifers and not the deeper, larger QBAA utilized by the City. The five wells used in the delineation are shown below.

Table 6
Other Permitted High-Capacity Wells within Two Miles

Unique Number	Well Name	DNR Permit Number	Aquifer	Use	Annual Volume Pumped (MGY)	Daily Volume (m^3/day)
177050	AB MAURI FOOD INC DBA OHLY AMERICA'S	1966-1155	QBAA	Agricultural Processing	170.8	1771.4
210423	AB MAURI FOOD INC DBA OHLY AMERICA'S	1966-1155	QBAA	Agricultural Processing	131	1358.6
210429	AB MAURI FOOD INC DBA OHLY AMERICA'S	1966-1155	QBAA	Agricultural Processing	44	456.3
210433	AB MAURI FOOD INC DBA OHLY AMERICA'S	1966-1155	QBAA	Agricultural Processing	14.7	152.5
703542	HUTCHINSON TECHNOLOGY INC	1980-4287	QBAA	Other Industrial Processing	3.2	33.2

Source: DNR Division of Waters - State Water Use Data System (SWUDS)

4.2 Porous Media Delineation

The porous-media flow capture zone for each of the Hutchinson municipal wells was determined using a MODFLOW model that was specifically developed for this project. MODFLOW is the USGS Modular Three-Dimensional Ground-Water Flow Model. (McDonald and Harbaugh, 1988; Harbaugh et al., 2000). Because of its ability to simulate a wide variety of systems, its extensive publicly available documentation, and its rigorous USGS peer review, MODFLOW has become the worldwide standard ground-water flow model. MODFLOW is used to simulate systems for water supply, containment remediation, and mine dewatering. MODFLOW is most appropriate in those situations where a relatively precise understanding of the flow system is needed to make decisions.

The Groundwater Vistas Version 6.85 Build 35 MODFLOW graphical user interface was used to run the groundwater model and for pre- and post-processing of data.

The existing local MODFLOW model developed by Earth Tech in 2003 for Hutchinson's original Part 1 was provided by the MDH and used as a reference for developing the model for this amendment. The groundwater flow system had been conceptualized in the 2003 WHPP as a confined single layer system. The original conceptual model is still valid and model inputs and design for this amendment are discussed below.

4.2.1 Groundwater Flow Model

A new groundwater flow model was developed for this study incorporating some of the information from the previous model used in 2003. For this amendment, wells were modeled as analytic elements and pumping rates for the Hutchinson municipal wells were adjusted to reflect the greatest annual pumping volume of the past 5 years.. Pumping rates for high capacity wells within two miles of Hutchinson were adjusted and set at the 2011 pumping rate based on the Minnesota Department of Natural Resources' Permit Information Report. A potentiometric surface map for the aquifer utilized by the City was created using groundwater level data from the Minnesota Well Index for wells within approximately 10 miles of the City.

With assistance from MDH, a single layer model was developed to represent the confined quaternary aquifer. The model was developed following MDH guidance which uses a spreadsheet to help recreate a uniflow-type model in MODLFOW. The model relies on gradient, direction of flow, pumping from the PWS wells of interest, and other high capacity wells that are within the same aquifer within two miles of the PWS wells. The gradient and direction of flow were determined from the potentiometric surface map. A spreadsheet of model inputs are included in **Appendix D**.

Horizontal conductivity was adjusted to better reflect the transmissivities found in the QBAA. The MDH provided a range of values determined from specific capacity data from around the Hutchinson area. Using approximately 100 different sample locations, the mean hydraulic conductivity was found to be 207 ft/day with a 95% confidence level range of 138 to 279 ft/day. For the purposes of the uncertainty analyses, a range of 130 to 1,900 ft/day was used to capture the low end values and keep a high end conservative value. (Please note that the 2003 model used an extremely conservative hydraulic conductivity of 147,310 ft/day during delineation of the WHPA and there appears to be a discrepancy between the model and the reported value.)

The WHPA delineation was performed by backtracking particles from the municipal wells to a 1- and 10-year time of travel using the particle tracking MODPATH code. A series of 50 particles were launched at each well. A porosity of 0.30 was used for the QBAA. When

evaluated in plan view, the areas encompassed by the particle traces were then outlined as the one- and ten-year porous-media capture zones (**Figure 1**)

4.3 Results of Model Calibration and Sensitivity Analysis

Model calibration is a procedure that compares the results of a model based on estimated input values to measured or known values. This procedure can be used to define model validity over a range of input values, or it helps determine the level of confidence with which model results may be used. As a matter of practice, groundwater flow models are usually calibrated using water elevation or flux. This model does not have calibration targets as the gradient and flow direction were used to construct the model potentiometric surface.

Model sensitivity is the amount of change in model results caused by the variation of a particular input parameter. The direction and extent of the modeled capture zone may be sensitive to any of the input parameters:

- The pumping rate directly affects the volume of the aquifer that contributes water to each municipal well. An increase in pumping rate leads to an equivalent increase in the volume of aquifer within the capture zone, proportional to the porosity of the aquifer materials.
  Results – The pumping rate defined by WHP rule requirements is the highest rate that can be expected under normal water demand (**Table 5)** and therefore, with respect to the delineation of the WHPA, the sensitivity of the capture zone to variations in the pumping rate is minimized.

- The direction of groundwater flow determines the orientation of the capture area. Variations in the direction of groundwater flow will not affect the size of the capture zone but are important for defining the areas that are the source of water to the municipal well.
  Results - The ambient groundwater flow field defined in **Figure 2** provides the basis for determining the extent to which each model run reflects the conceptual understanding of the orientation of the capture area for a well. The direction of groundwater flow was adjusted ±10° to account for uncertainty in the flow field.

- A hydraulic gradient (along with aquifer transmissivity) determines the rate at which water moves through the aquifer materials. A hydraulic gradient of zero produces a circular capture zone, centered on the well. As the hydraulic gradient increases, the capture zone changes into an elliptical shape, with the well centered on the down-gradient focal point.
  Results - The model was created using the gradient determined from the potentiometric surface map based groundwater levels. A hydraulic gradient of 0.0006 was maintained throughout the sensitivity analysis. The sensitivity of the WHPA to the hydraulic gradient should not be significant given the current knowledge of hydraulic head distribution in the aquifer.

- The aquifer thickness, hydraulic conductivity, and porosity influence the size and shape of the capture zone. A decrease in porosity causes a linear, proportional increase in the areal extent of the capture zone; whereas thickness and hydraulic conductivity each factor into the transmissivity, which defines the relative proportions of the capture zone width to length. A decrease in hydraulic conductivity decreases the length of the capture zone and increases the distance to the stagnation point, making the capture zone more circular in shape, centered at the well.
  Results – An increase in hydraulic conductivity extends the length of the capture

zone and a decrease in hydraulic conductivity reduces the length as shown in **Figure 4**. A conservative porosity value of 0.30 was maintained throughout the sensitivity analysis.

4.4 Addressing Model Uncertainty

Using computer models to simulate groundwater flow involves representing a complicated natural system in a simplified manner. Local geologic conditions may vary within the capture area of the Hutchinson municipal wells, but existing information is not sufficiently detailed to define this degree of variability. In addition, the available groundwater flow modeling techniques may not represent the natural flow system exactly; however, the results are valid within a range defined by the reasonable variation of input parameters.

Together, sensitivity and uncertainty analyses are commonly used to evaluate the effects that natural variability and uncertainties in the hydrogeologic data have on the size and shape of the capture zones. In regards to the WHPA delineation, these analyses are used to document that the delineation is optimal, conservative, and protective of public health based on existing information.

Traditional numerical groundwater models were used to delineate the capture zone for the porous media aquifer that contributes water to the public water supply well. The steps employed for this delineation to address model uncertainty were:

- Pumping Rate - For the municipal wells, a maximum historical (five-year) pumping rate or an engineering estimate of future pumping, whichever is greater (Minnesota Rules, part 4720.5510, subpart 4).
- Hydraulic Conductivity – a range of hydraulic conductivity values was used to address variability in aquifer composition.
- Ambient Flow Field – A composite of capture zones created from angles of flow that are 10 degrees greater and 10 degrees lesser than the representative angle of ambient flow (Minnesota Rules, part 4720.5510, subpart 5, B(2).

The WHPA for the Hutchinson municipal wells consists of a composite of the porous media aquifer delineations for a range of hydraulic conductivities and groundwater flow directions. **Table 7** documents the variables used to address uncertainty. Pumping rates used can be found in **Table 5**.

Table 7
Model Parameters Used in Uncertainty Runs

Model	K Value (m/day)	Flow Angle	Results
Hutch_Base	299.314	123	Base model.
Hutch_base_neg10	299.314	113	The capture zone for the wells shifted to the north.
Hutch_base_plus10	299.314	133	The capture zone for the wells shifted to the south.
Hutch_Khi	579.12	123	High K scenario. The capture zone for all wells narrowed and nearly doubled in length to the northwest. DWSMA was delineated to include sensitivity analysis results/capture zone. See **Figure 4**.
Hutch_Khi_neg10	579.12	113	The capture zone for the wells shifted to the north.
Hutch_Khi_plus10	579.12	133	The capture zone for the wells shifted to the south.
Hutch_Klow	39.624	123	Low K scenario. The capture zone for all wells fanned out (wider) and shortened in length. DWSMA was delineated to include sensitivity analysis results/capture zone. See **Figure 4**.
Hutch_Klow_neg10	39.624	113	The capture zone for the wells shifted to the north.
Hutch_Klow_plus10	39.624	133	The capture zone for the wells shifted to the south.

4.5 Conjunctive Delineation

The DWSMA does not include areas of high vulnerability (**Figure 5**); therefore, no conjunctive delineation is necessary.

5.0 Delineation of the Drinking Water Supply Management Area

The boundaries of the DWSMA, shown in **Figure 1**, were defined using the following features:

- Public land surveys (including township, range, and section boundaries),
- Roadway centerlines, and
- Property lines (City of Hutchinson and McLeod County parcel data).

A GIS shapefile of the DWSMA is provided in **Appendix D**.

6.0 Vulnerability Assessments

The Part I WHP Plan includes the vulnerability assessments for the public water supply wells and the DWSMA. These vulnerability assessments are used to help define potential contamination sources within the DWSMA and to select appropriate measures for reducing the risk that they present to the public water supply.

6.1 Assessment of Well Vulnerability

The MDH has developed a database of community and non-community, non-transient public water supply wells in Minnesota that stores information pertinent to well vulnerability and rates the vulnerability of individual wells. A score is calculated for each well based on factors such as well construction, geology at the well site, and chemical data. A higher score correlates to a greater perceived vulnerability. A numeric cutoff is used to identify vulnerable from non-vulnerable wells (MDH, 1997). Vulnerable wells are also identified based on the presence of contamination, such as nitrate-nitrogen in excess of 10 mg/l, or young (post-1953) water, as indicated by the presence of 1 tritium unit or greater in the well water.

Well vulnerability scoring sheets from the MDH are presented in **Appendix E** and listed in **Table 1.** The well vulnerability scoring sheets include well-specific information such as aquifer setting, well construction, and water quality (including results from tritium and nitrate analysis). As indicated in **Appendix E**, all five of the municipal wells have been analyzed for tritium and nitrate analysis. Based on the information presented, all five of the municipal wells are classified as being not vulnerable to surface contaminants.

6.2 Assessment of the Drinking Water Supply Management Area Vulnerability

The vulnerability of the DWSMA is low (**Figure 5**) and is based upon the following information:

- Isotopic data and water chemistry from all five of the Hutchinson municipal wells indicate the aquifer contains water that has no detectable levels of tritium or human-caused contamination. However, Well 4 had a nitrate detection of 2.1 mg/L in 1974, which could be considered background concentration. Also of note, a tritium result of 0.8 TU at Well 8 was obtained in 2011, though this value is the laboratory detection limit and does not change the overall approach of this Plan.

- Review of the geologic logs contained in the MWI database, geological maps, and reports indicate the aquifer exhibits a low to moderate geologic sensitivity throughout the DWSMA (**Figure 5**). The geologic sensitivity of wells completed in the same aquifer as utilized by the public supply wells range from low to moderate with the majority of wells having a low rating and two wells (194031 at Hutchinson Technology and 258169, a well with unknown construction information) have a geologic sensitivity of very high. The L-scores from wells within or close to the DWSMA vary from 0 to 29, excluding 258169 which is -99, reflective of missing information.

Geologic logs were reviewed further to determine if low L-scores were due to poorly described geology or if the thickness of the till was in fact lower in those areas. Thick till sequences are still present, but the geologic descriptions list sandy clay rather than just clay in the wells with lower L-scores, which are distributed throughout the DWSMA and not concentrated in particular areas. The aquifer within the DWSMA is therefore determined to have a low vulnerability to potential sources of contamination that are located directly over the aquifer in this area.

7.0 Recommendations

The following plan implementation action item recommendations have been made for the Public Water Supplier to consider. Each recommendation is referenced to the plan implementation category under which it can be incorporated. Each recommendation will be further evaluated during the preparation of the Part II WHP Plan Update.

Plan Implementation Category – Data Collection

- The DWSMA extends beyond the Hutchinson municipal boundaries into the Townships of Acoma to the northwest and Hutchinson to the northeast. While developing and implementing Part II of the City's WHPP, it is recommended that the City collaborate and cooperate with municipalities into which the City's DWSMA extends. As the City cannot dictate land use activities outside of its jurisdiction, it can work closely with surrounding municipalities as land uses change and decisions are made that may impact the City's water supply.

- Coordinate with the Minnesota Department of Health regional Source Water Protection Hydrologist to collect water samples to reassess the vulnerability of the system in year 7 of implementation.

- Determine if future maintenance and/or storage conditions would make it possible to conduct additional aquifer pumping tests to spatially refine transmissivity values across the model domain. Collect or incorporate groundwater level measurements from many wells across the domain from a similar time. Groundwater levels used in the model were from the MWI and range over many years.

Plan Implementation Category – Contingency Planning

Item 1- Addressing the potential movement of contamination toward the municipal wells.

- The MDH recommends that if contaminants are ever detected in a municipal water supply well, the Public Water Supplier work with the MDH to perform an evaluation of whether to continue pumping the impacted well(s). Turning off a well may alter the movement of contamination to other pumping wells and compound the problem. Therefore, it is very important to include this recommendation in the contingency plan.

8.0 Standard of Care

The interpretations presented in this report are based on local data collected during this study and previous studies, such as current and historical pumping tests and regional data collected from governmental agencies. Data collected and analyzed by others and used in this report may not be precise or accurate. This Plan does not account for any variations that may occur between points of exploration; geologic and hydrogeologic conditions likely differ across the study area. Also, it must be noted that seasonal and cyclical fluctuations in the hydrogeologic characteristics and properties of the aquifers will occur.

The scope of this report and the corresponding groundwater flow model and calculations is limited to the delineation of capture zones for the Hutchinson municipal wells. Use of the groundwater flow model by other parties or for other purposes is not advised. Use or modification of the model for purposes other than the delineation of capture zones must be done with caution and a full understanding of the inherent assumptions and limitations of the data.

This Plan represents our understanding of the significant aspects of the local geologic and hydrogeologic conditions; the conclusions are based on our hydrogeologic and engineering judgment, understanding and perspective, and represent our professional opinions. These opinions were arrived at in accordance with the currently accepted standard of care for geologic and engineering practices at this time and location. No warranty is implied or intended.

9.0 Selected References

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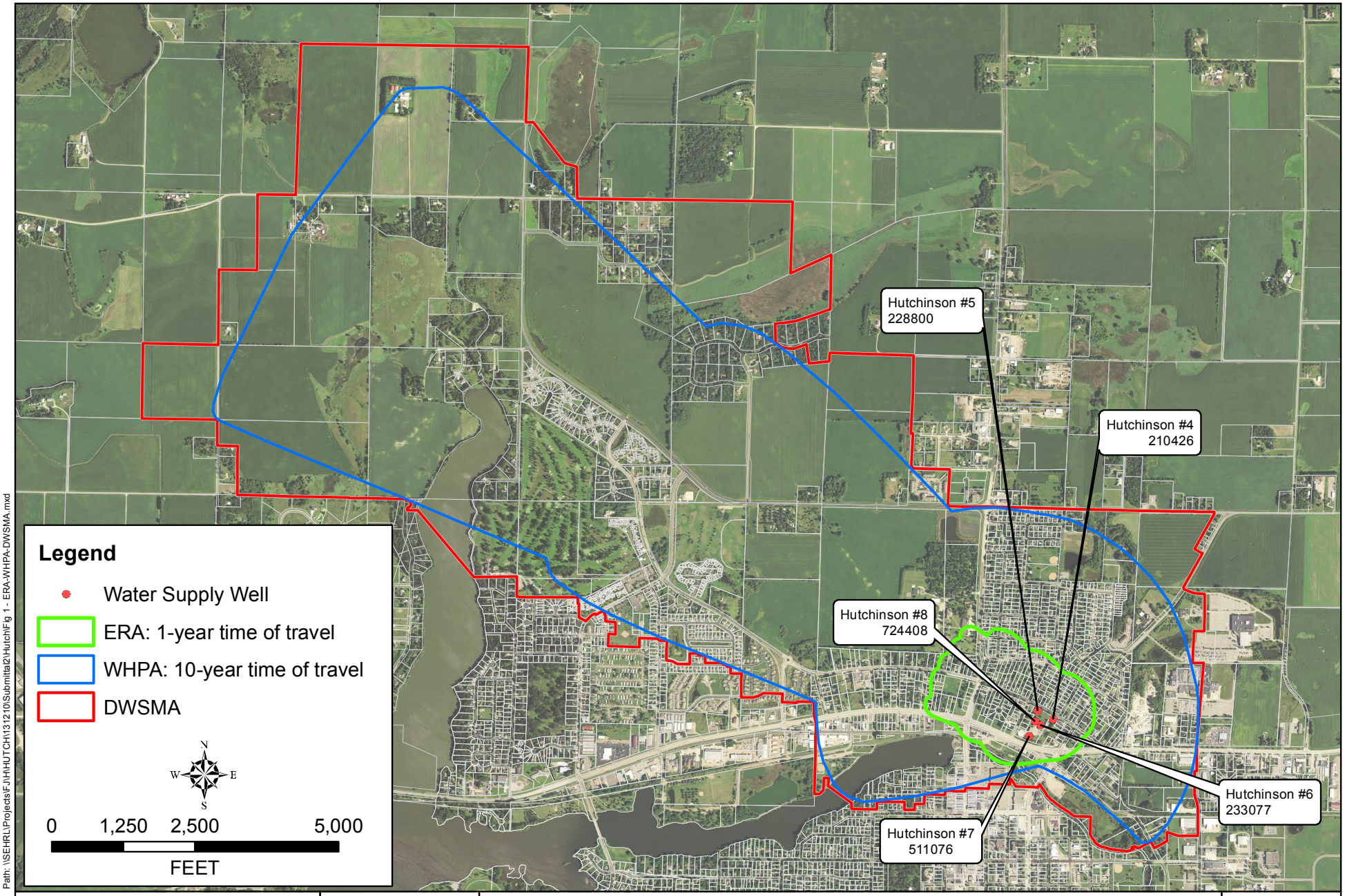
List of Figures



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SEH
3535 VADNAIS CENTER DR.
ST. PAUL, MN 55110
PHONE: (651) 490-2000
FAX: (651) 490-2150
WATTS: 800-325-2055
www.sehinc.com

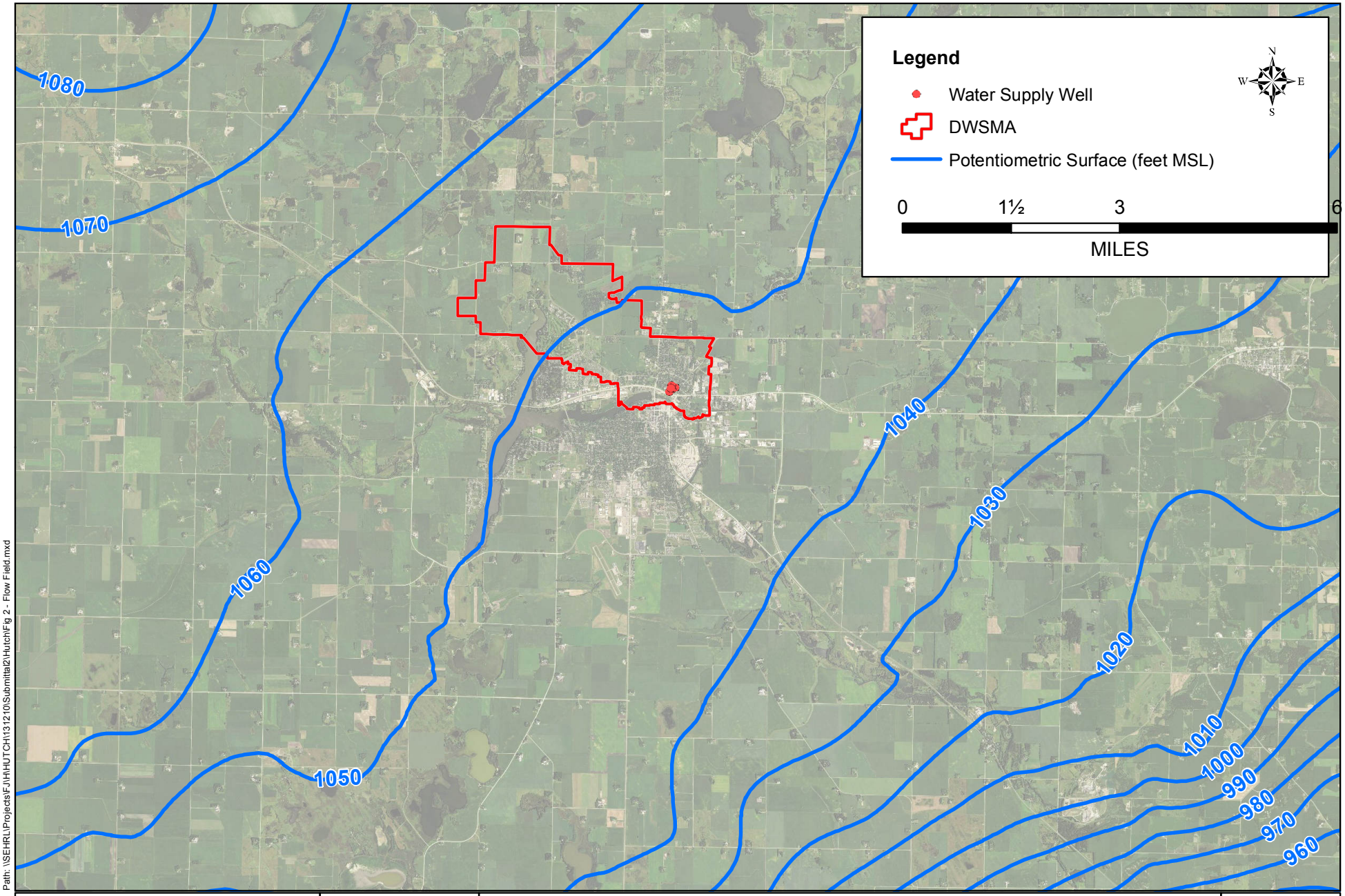
Project: HUTCH 131210
Print Date: 1/16/2017

Map by: jmacholl
Projection: NAD 83 UTM Zone 15N
Source: McLeod County, NAIP

WELLHEAD PROTECTION AREAS

Hutchinson Wellhead Protection Plan Amendment Part 1
Hutchinson, Minnesota

Figure 1



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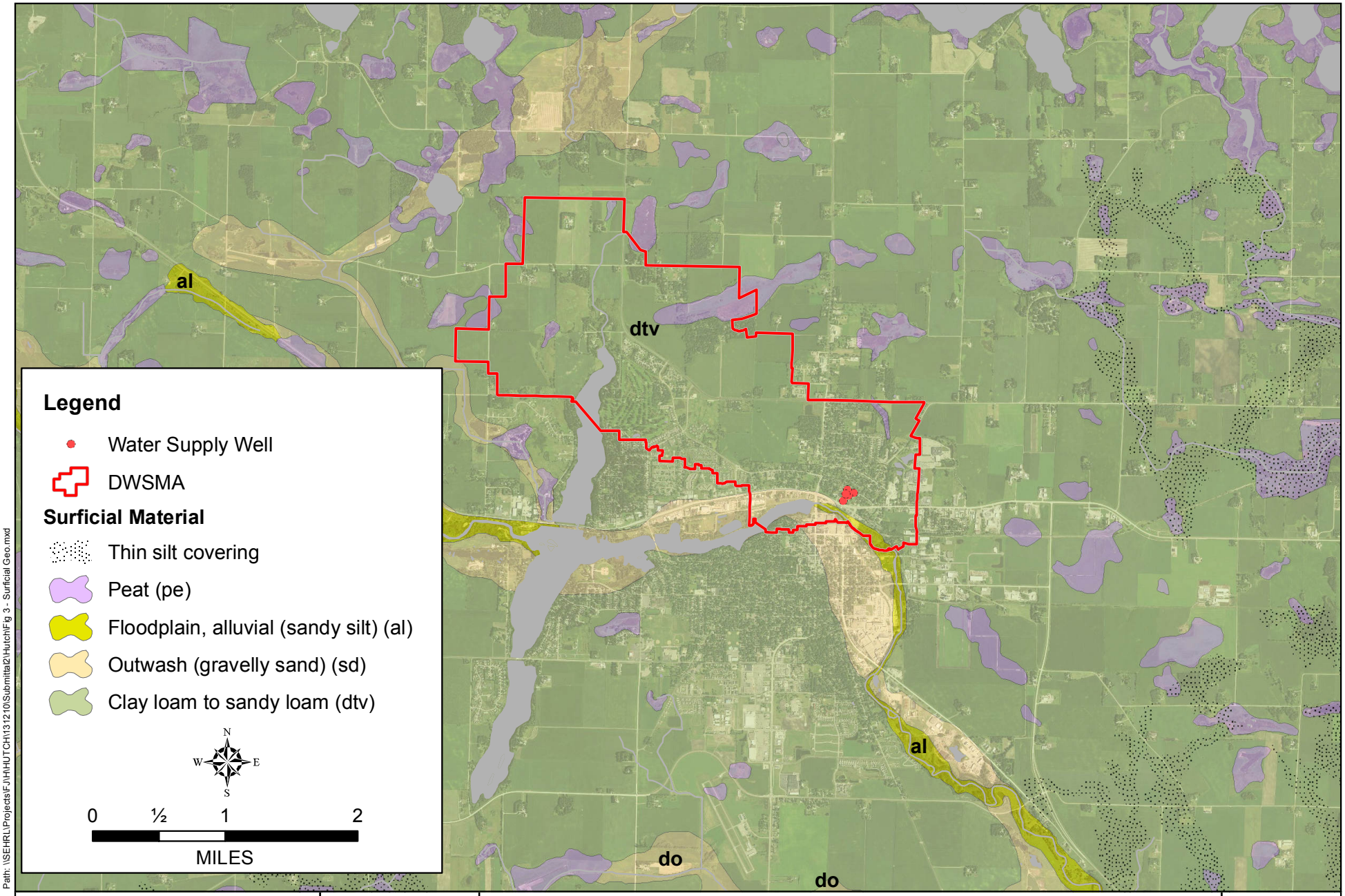
Map by: jmacholl
Projection: NAD 83 UTM Zone 15N
Source: MWI; NAIP (2015)

AMBIENT GROUNDWATER FLOW FIELD

Hutchinson Wellhead Protection Plan Amendment Part 1
Hutchinson, Minnesota

Figure 2



Legend

- Water Supply Well
- DWSMA

Surficial Material

- Thin silt covering
- Peat (pe)
- Floodplain, alluvial (sandy silt) (al)
- Outwash (gravelly sand) (sd)
- Clay loam to sandy loam (dtv)

N
W E
S

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MILES

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SEH
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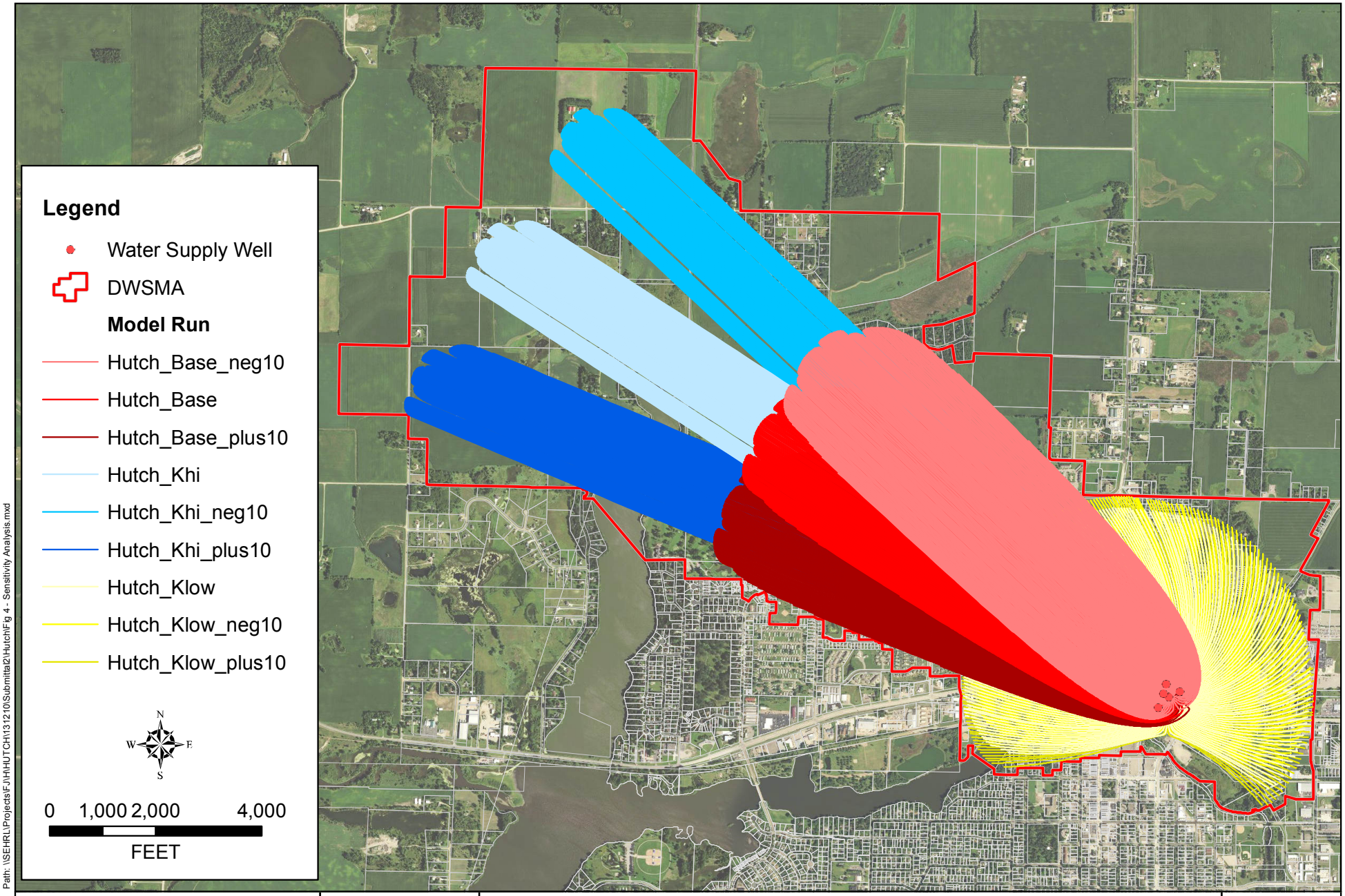
Map by: jmacholl
Projection: NAD 83 UTM Zone 15N
Source: MGS, NAIP

SURFICIAL GEOLOGY

Hutchinson Wellhead Protection Plan Amendment Part 1
Hutchinson, Minnesota

Figure 3



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SEH
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ST. PAUL, MN 55110
PHONE: (651) 490-2000
FAX: (651) 490-2150
WATTS: 800-325-2055
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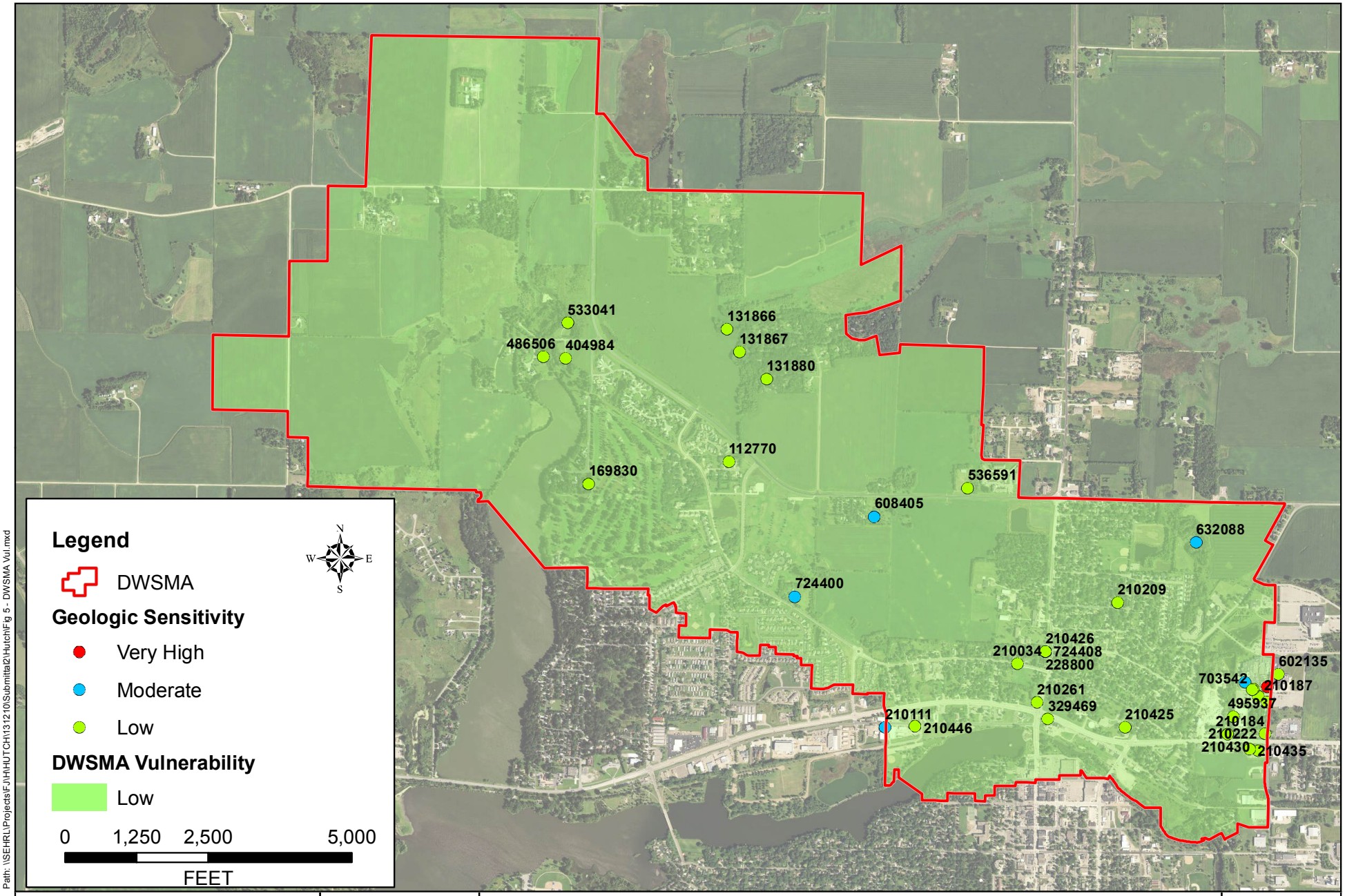
Print Date: 1/16/2017

Map by: jmacholl
Projection: NAD 83 UTM Zone 15N
Source: McLeod County, NAIP

SENSITIVITY ANALYSIS RESULTS

Hutchinson Wellhead Protection Plan Amendment Part 1
Hutchinson, Minnesota

Figure 4



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SEH
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ST. PAUL, MN 55110
PHONE: (651) 490-2000
FAX: (651) 490-2150
WATTS: 800-325-2055
www.sehinc.com

Project: HUTCH 131210
Print Date: 1/16/2017

Map by: jmacholl
Projection: NAD 83 UTM Zone 15N
Source: CWI, NAIP, SWUDS

DWSMA VULNERABILITY

Hutchinson Wellhead Protection Plan Amendment Part 1
Hutchinson, Minnesota

Figure 5

Appendix A

Scoping Decision Notice

Addendum I
Scoping 1 Letter and Decision Notice

MINNESOTA MDH DEPARTMENT OF HEALTH

Protecting, maintaining and improving the health of all Minnesotans

November 6, 2013

Mr. John Paulson
Environmental Specialist- City of Hutchinson
111 Hassan Street SE
Hutchinson, Minnesota 55350

Dear Mr. Paulson:

Subject: Scoping Decision Notice No. 1 for the City of Hutchinson, PWSID 1430004, for Amending the Wellhead Protection Plan

This letter provides notice of the results of the Scoping 1 meeting held with you, Dick Nagy (city of Hutchinson), Karen Voz, and me (Minnesota Department of Health) on October 30, 2013, regarding the amendment of your wellhead protection plan. During the meeting, we discussed the preparation of Part I of a Wellhead Protection Plan that will document 1) the delineation of the wellhead protection area, 2) the delineation of the drinking water supply management area, and 3) the assessments of well and aquifer vulnerability related to these areas for the primary water supply wells used by the city of Hutchinson. As you may remember, the wellhead protection area is the surface and subsurface area surrounding your public water supply wells through which contaminants are likely to move and affect your drinking water supply. The drinking water supply management area is the area delineated using identifiable landmarks that reflect the wellhead protection area boundaries as closely as possible.

The city of Hutchinson will have until August 4, 2015, to submit the amendment of its entire Wellhead Protection Plan, Part I and Part II to the Minnesota Department of Health (MDH). MDH highly recommends that half of the time allotted be dedicated to completing Part II of the plan.

It is our understanding that you will be contracting with a consulting engineer to prepare the delineations and vulnerability assessments for the city for amending its Wellhead Protection Plan. At our meeting, we discussed rule requirements and the types of information needed to amend the Part I report. The Wellhead Protection Plan must be prepared in accordance with Minnesota Rules, parts 4720.5100 to 4720.5590. General wellhead protection requirements and criteria for delineating the wellhead protection area and data reporting are presented in Minnesota Rules, parts 4720.5500 to 4720.5510.

The enclosed Scoping Decision Notice No. 1 formally identifies the information that the city must provide to MDH to meet rule requirements for amending and preparing Part I of the Wellhead Protection Plan. The wellhead rule refers to the existing information required for wellhead planning as data elements. Much of this information is available in the public domain, as described in the Scoping Decision Notice No. 1 form. You only need to provide the information that is not in the public domain and, therefore, not available to MDH. The Scoping Decision Notice No. 1 form also 1) lists the Minnesota unique well number and well construction for each well that will be included in the Wellhead Protection

Plan [Table 1]; 2) lists the pumping volumes for each well [Table 2]; 3) lists other permitted high-capacity wells [Table 3]; and 4) includes a map of the well locations. A summary of the information that the PWS needs to provide is included at the end of the Scoping Decision Notice No. 1 form.

After your consultant has had an opportunity to develop a conceptual model of the local hydrogeologic setting and has submitted the aquifer test plan to the Department, we would like to meet with your consultant to discuss the proposed delineation approach. This pre-delineation meeting may be accomplished by a conference call if 1) MDH approves and 2) the consultant provides figures for the discussion beforehand.

Prior to finalizing the wellhead protection area boundaries, we highly recommend that we informally review preliminary model results and assess whether any changes are needed to meet rule requirements. Model input and solution files should be submitted in electronic form. The same applies to geographical data, such as the wellhead protection area and drinking water supply management area. When submitting geographic data electronically, ArcInfo export or ArcView shapefile formats are preferred. It will greatly accelerate our review if these geographic data use the 1983 North American Datum (NAD83), Universal Transverse Mercator, Zone 15 North (UTM, Z15N) projection, with meter distance units. Other datum and projection systems are acceptable as long as they are documented. Specific questions regarding electronic geographic data can be directed to Michael Baker, Source Water Protection Unit, at 651/201-4651.

Finally, it is our understanding that you will serve officially as the wellhead protection manager on behalf of the city. You are responsible for providing written notice to local units of government of the city's intent to amend the Wellhead Protection Plan, as required by the wellhead protection rule (part 4720.5300, subpart 3). A copy of this notice should be forwarded to MDH and must include a list of the city wells, their unique well numbers, and contact information for you as Wellhead Protection manager. Karen Voz, your Source Water Protection Planner, provided you with an example notice during our scoping meeting. If you would like further assistance, please feel free to contact Karen at 320/223-7322.

In closing, we look forward to working with you on amending your Wellhead Protection Plan. If you have any questions regarding our comments, please contact me at 651/201-4691 or at gail.haglund@state.mn.us.

Sincerely,

Gail Haglund, Hydrologist
Source Water Protection Unit
Environmental Health Division
P.O. Box 64975
St. Paul, Minnesota 55164-0975

GLH:ds-b
Enclosures: Scoping Decision Notice No. 1, Summary of Data Requested, Table 1 - Public Water Supply Well Information, Table 2 - Annual Volume of Water Pumped From PWS Wells, Table 3 – Permitted High-Capacity Wells, Map of Well Locations
cc: Karen Voz, Planner, Source Water Protection Unit, St. Cloud District Office

SCOPING DECISION NOTICE No. 1

The purpose for the first Scoping Meeting, as required by Minnesota Rules, part 4720.5310, is to discuss the information necessary for amending the Part I Report of a Wellhead Protection Plan. The Part I Report identifies the area that provides the source of drinking water for the public water supply (PWS) so that the PWS can develop land use or management practices to protect their groundwater resource from contamination. Specifically, the Part I Report documents the delineation of the wellhead protection area (WHPA), the delineation of the drinking water supply management area (DWSMA), and assesses the vulnerability of the PWS wells and DWSMA.

The wellhead rule (Minnesota Rules, part 4720.5310) refers to the information required for wellhead planning as data elements. This form lists the data elements stated in Minnesota Rules, part 4750.5400. The Minnesota Department of Health (MDH) uses this form to designate which data elements are needed to prepare the Part I Report, based on the hydrogeological setting, vulnerability of the wells, and aquifer information known at the time of the Scoping 1 Meeting.

Name of Public Water Supply			Date
Hutchinson (PWSID = 1430004)			November 6, 2013
Name of the Wellhead Protection Manager			
John Paulson, Environmental Specialist			
Address	**City**	**Zip**	
111 Hassan Street SE	Hutchinson	55350	
Unique Well Numbers			**Phone**
210426 (Well 4), 228800 (Well 5), 233077 (Well 6), 511076 (Well 7), and 724408 (Well 8)			(320) 587-5151

Instructions for Completing the Scoping No. 1 Form

N	D	V	S	
X				N = If this box is checked with an "X," this data element is **NOT** necessary for the **Part I Report** of your Wellhead Protection Plan. This data element may be identified later at the Scoping 2 Meeting and used for the Part 2 Report. Please go to the next data element.

N	D	V	S	
	X			D = If this box is checked with an "X," the preparer of the Part I Report is **required** to use this information for the **DELINEATION** of the WHPA or the DWSMA. If there is no check in the "S" box, this information is available in the public domain or is on file at MDH.

N	D	V	S	
		X		V = If this box is checked with an "X," the preparer of the Part I Report is **required** to use this information for the **VULNERABILITY** assessment of the PWS wells or the DWSMA. If there is no check in the "S" box, this information is available in the public domain or is on file at MDH.

N	D	V	S	
			X	S = If this box is checked with an "X," the PWS **must SUBMIT** the information to the MDH.

DATA ELEMENTS ABOUT THE PHYSICAL ENVIRONMENT

A. PRECIPITATION

N	D	V	S	
X				A.1: An existing map or list of local precipitation gauging stations.

Technical Assistance Comments:

N	D	V	S	
X				A.2: An existing table showing the average monthly and annual precipitation, in inches, for the preceding five years.

Technical Assistance Comments: Although not required to submit, knowledge of annual precipitation is warranted for bracketing potential vertical leakage to the buried drift aquifer serving the city wells.

B. GEOLOGY

N	D	V	S	
	X	X	X	B.1: An existing geologic map and a description of the geology, including aquifers, confining layers, recharge areas, discharge areas, sensitive areas as defined in Minnesota Statutes, section 103H.005, subdivision 13, and groundwater flow characteristics.

Technical Assistance Comments: Information of this type is required to characterize the geologic and hydrogeologic setting of the PWS well field. This information is used to define aquifer geometry, location and magnitude of the recharge and discharge areas, and groundwater flow information. Aquifer tests or alternatives listed in MN Rules, part 4720.5510, subpart 6, can be used to help characterize flow in the aquifer. Reference all information used to develop the conceptual model of the geologic setting and submit to MDH only the information that is not available in the public domain.

N	D	V	S	
	X	X	X	B.2: Existing records of the geologic materials penetrated by wells, borings, exploration test holes, or excavations, including those submitted to the department.

Technical Assistance Comments: Information of this type may be useful to refine the understanding of the geologic and hydrogeologic setting on a local basis. Submit only if the PWS or city has information of test drilling or site investigations conducted by the city that is not available in the public domain.

N	D	V	S	
	X	X	X	B.3: Existing borehole geophysical records from wells, borings, and exploration test holes.

Technical Assistance Comments: Information from geophysical records may provide additional information about aquifer thickness, well construction, and water level information at a local scale. Submit only if the information is not available in the public domain.

N	D	V	S	
	X	X	X	B.4: Existing surface geophysical studies.

Technical Assistance Comments: Information from geophysical studies may be useful to refine the understanding of the geology on a local basis. Submit only if the information is not available in the public domain.

C. SOILS

N	D	V	S	
X				C.1: Existing maps of the soils and a description of soil infiltration characteristics.

Technical Assistance Comments:

N	D	V	S	
X				C.2: A description or an existing map of known eroding lands that are causing sedimentation problems.

Technical Assistance Comments:

D. WATER RESOURCES				
N	D	V	S	D.1: An existing map of the boundaries and flow directions of major watershed units and minor watershed units.
X				
Technical Assistance Comments:				
N	D	V	S	D.2: An existing map and a list of public waters as defined in Minnesota Statutes, section 103G.005, subdivision 15, and public drainage ditches.
X				
Technical Assistance Comments:				
N	D	V	S	D.3: The shoreland classifications of the public waters listed under sub-item (2), pursuant to part 6120.3000 and Minnesota Statutes, sections 103F.201 to 103F.221.
X				
Technical Assistance Comments:				
N	D	V	S	D.4: An existing map of wetlands regulated under Chapter 8420 and Minnesota Statutes, section 103G.221 to 103G.2373.
X				
Technical Assistance Comments:				
N	D	V	S	D.5: An existing map showing those areas delineated as floodplain by existing local ordinances.
X				
Technical Assistance Comments:				

DATA ELEMENTS ABOUT THE LAND USE

E. LAND USE				
N	D	V	S	E.1: An existing map of parcel boundaries.
	X		X	
Technical Assistance Comments: This information may be helpful in delineating the DWSMA, if available. If this information is provided, identification numbers must be provided for each parcel. An electronic format for the map is preferable.				
N	D	V	S	E.2: An existing map of political boundaries.
	X		X	
Technical Assistance Comments: Please provide this information if the boundaries have been updated/changed. This information may help delineate the DWSMA. An electronic format for the map is preferable.				
N	D	V	S	E.3: An existing map of public land surveys, including township, range, and section.
	X			
Technical Assistance Comments: This information is available in the public domain and may be used to delineate the DWSMA.				
N	D	V	S	E.4: A map and an inventory of the current and historical agricultural, residential, commercial, industrial, recreational, and institutional land uses and potential contaminant sources.
X				
Technical Assistance Comments:				
N	D	V	S	E.5: An existing, comprehensive land-use map.
X				
Technical Assistance Comments:				
N	D	V	S	E.6: Existing zoning map.
X				
Technical Assistance Comments:				

F. PUBLIC UTILITY SERVICES

N	D	V	S	
	X			F.1: An existing map of transportation routes or corridors.

Technical Assistance Comments: This information is available in the public domain and may be used to delineate the DWSMA.

N	D	V	S	
X				F.2: An existing map of storm sewers, sanitary sewers, and the public water supply systems.

Technical Assistance Comments:

N	D	V	S	
X				F.3: An existing map of gas and oil pipelines used by gas and oil suppliers.

Technical Assistance Comments:

N	D	V	S	
X				F.4: An existing map or list of public drainage systems.

Technical Assistance Comments:

N	D	V	S	
	X	X	X	F.5: An existing record of construction, maintenance, and use of the public water supply wells and other wells within the drinking water supply management area.

Technical Assistance Comments: If the information is different from that on file with MDH, please provide 1) the pumping rates for the current and previous years and the projected annual pumping rates for the next five years for each well in the PWS; and 2) well records for the PWS wells. Information about the PWS wells may affect the vulnerability assessment due to rehabilitation/reconstruction of a well or changes in pumping rates.

DATA ELEMENTS ABOUT WATER QUANTITY

G. SURFACE WATER QUANTITY

N	D	V	S	
X				G.1: An existing description of high, mean, and low flows on streams.

Technical Assistance Comments:

N	D	V	S	
X				G.2: An existing list of lakes where the state has established ordinary high water marks.

Technical Assistance Comments:

N	D	V	S	
X				G.3: An existing list of permitted withdrawals from lakes and streams, including source, use, and amounts withdrawn.

Technical Assistance Comments:

N	D	V	S	
X				G.4: An existing list of lakes and streams for which state protected levels or flows have been established.

Technical Assistance Comments:

N	D	V	S	
	X	X	X	G.5: An existing description of known water-use conflicts, including those caused by groundwater pumping.

Technical Assistance Comments: Please notify MDH of surface water/well interference problems of which the PWS is aware, because this information would be used to delineate the WHPA, determine, or confirm the vulnerability rating.

H. GROUNDWATER QUANTITY

N	D	V	S	
	X	X	X	H.1: An existing list of wells covered by state appropriation permits, including amounts of water appropriated, type of use, and aquifer source.

Technical Assistance Comments: Please submit this information for wells that are not permitted by the DNR because this information may be useful in identifying the hydrologic boundary conditions that could affect the size and shape of the WHPA boundaries.

N	D	V	S	
	X	X	X	H.2: An existing description of known well interference problems and water-use conflicts.

Technical Assistance Comments: Please notify MDH of well interference problems of which the PWS is aware. Interference problems with other wells, if present, likely indicate a hydrologic boundary that would need to be considered in making the WHPA delineation.

N	D	V	S	
	X	X	X	H.3: An existing list of state environmental boreholes, including unique well number, aquifer measured, years of record, and average monthly levels.

Technical Assistance Comments: Only submit monthly water level measurements (with unique well numbers and dates) if this information is not available in the public domain.

DATA ELEMENTS ABOUT WATER QUALITY

I. SURFACE WATER QUALITY

N	D	V	S	
X				I.1: An existing map or list of the state water quality management classification for each stream and lake.

Technical Assistance Comments:

N	D	V	S	
X				I.2: An existing summary of lake and stream water quality monitoring data, including: 1. bacteriological contamination indicators; 2. inorganic chemicals; 3. organic chemicals; 4. sedimentation; 5. dissolved oxygen; and 6. excessive growth or deficiency of aquatic plants.

Technical Assistance Comments:

J. GROUNDWATER QUALITY

N	D	V	S	
	X	X	X	J.1: An existing summary of water quality data, including: 1) bacteriological contamination indicators; 2) inorganic chemicals; and 3) organic chemicals.

Technical Assistance Comments: Submit if the PWS has information that is not available in the public domain, because the information may help explain groundwater flow paths.

N	D	V	S	
	X	X	X	J.2: An existing list of water chemistry and isotopic data from wells, springs, or other groundwater sampling points.

Technical Assistance Comments: Submit if the PWS has information that is not available in the public domain, because the information may help explain groundwater flow paths.

N	D	V	S	
	X	X	X	J.3: An existing report of groundwater tracer studies.

Technical Assistance Comments: Submit if the PWS has information that is not available in the public domain, because the information may help explain groundwater flow paths.

N	D	V	S	
		X	X	J.4: An existing site study and well water analysis of known areas of groundwater contamination.

Technical Assistance Comments: Submit if the PWS has information on contaminant sources not available in the public domain, because these reports may contain additional geologic or hydrogeologic information.

N	D	V	S	
X				J.5: An existing property audit identifying contamination.

Technical Assistance Comments:

N	D	V	S	
	X	X		J.6: An existing report to the Minnesota Department of Agriculture and the Minnesota Pollution Control Agency of contaminant spills and releases.

Technical Assistance Comments: Notify MDH of reports on spills or contaminant releases that are on file with the PWS or city but are not in the public domain. These reports do not need to be submitted but MDH staff would like to review the reports.

City of Hutchinson
Summary of Data Request
Specific Data to be Provided to MDH by PWS

As discussed during the first Scoping Meeting on October 30, 2013, the public water supply (PWS) will supply the following information for amending Part I of their Wellhead Protection Plan to the Minnesota Department of Health. The number of the data element that refers to the information needed to prepare the Part I Report is listed in the parenthesis at the end of each request.

1) Municipal well information: Use Tables 1 and 2, the well records for the PWS wells, and the map showing the locations of all the PWS wells, to review the accuracy of 1) all PWS well construction, 2) well locations, and 3) pumping information. (F.5)

   Table 1 lists well use and construction for each of the PWS wells. Have you reconstructed any wells? Are there well records for reconstructed wells?

   The enclosed map shows the locations of the primary public water supply wells. Please let us know if you feel the wells are not correctly labeled or located. These locations must be used to delineate your wellhead protection areas.

   Table 2 shows the available pumping information and indicates what information the PWS needs to provide for the delineation of the capture zone. Please provide 1) the pumping data for 2012 that was sent to the Minnesota Department of Natural Resources, 2) whether this rate was measured or estimated, and 3) the projected annual pumping amounts for the next five years. If work on amending the Part I Plan does not begin until 2014, you may want to revise Table 2 to show the historical pumping for 2009 through 2013.

2) Please provide a copy of any aquifer test, production test, or specific capacity information for the PWS wells obtained during well construction, maintenance, or repair. During our scoping meeting, we specifically discussed obtaining the production test information for Well 8 (724408). This information should be compiled, analyzed, and used to update the aquifer test plan. (B.1)

3) During our meeting, you mentioned that it is likely that the city and county parcel information is available in GIS format. This information will be very useful for defining the Drinking Water Supply Management Area (DWSMA) and the PCSI. At your convenience, please provide the parcel GIS files to MDH. If possible, please include the parcel identification numbers as part of the GIS information.

   Have the city boundaries changed? If the city boundaries have changed, please provide the new boundaries. The boundaries of the DWSMA may be larger if political boundaries are used instead of the parcel boundaries. (E.1 and E.2)

4) Are there other private well records, soil boring reports, geophysical studies, or water level measurements in your files that MDH staff did not identify at the scoping meeting and that would be available for MDH staff to review and copy? (B.2, B.3, B.4, and H.3)

5) Please identify reports that you have on file relating to leaks/contamination sites that may be a concern to your drinking water supply that MDH may review and copy. (J.4)

6) Do your files contain water chemistry data, such as bacteria, virus, inorganic, organic, or isotopic results from wells or other groundwater sampling points, that is not currently available to MDH that MDH may review and copy? (J.1 and J.2)

7) Please identify reports that you have in your files relating to groundwater tracer studies that have been conducted. (J.3)

8) Please provide information about other high-capacity wells in your area that may not be permitted and are not listed on the attached Table 3. (H.1)

9) Please describe any conflicts over water use that the PWS has been involved with, such as if private wells went dry due to pumping by other wells (well interference). Was the Department of Natural Resources involved in resolving the conflict? (G.5 and H.2)

Table 1 - Public Water Supply Well Information
Hutchinson, Minnesota

Local Well Name	Unique Number	Use/ Status[1]	Casing Diameter (inches)	Casing Depth (feet)	Well Depth (feet)	Date Constructed/ Reconstructed	Well Vulnerability	Aquifer[2]
Well 4	210426	P	16	342	412	1966	Not vulnerable	QBAA
Well 5	228800	P	16	340	410	1971	Not vulnerable	QBAA
Well 6	233077	P	20	355	475	1972	Not vulnerable	QBAA
Well 7	511076	P	18	320	400	1988	Not vulnerable	QBAA
Well 8	724408	P	18	325	415	2005	Not vulnerable	QBAA

Note: 1. Primary (P)
2. Quarternary Buried Artesian Aquifer (QBAA)

Table 2 - Annual Volume of Water Pumped from Hutchinson Wells
(million gallons)

Well Name/ Number	2008	2009	2010	2011	*2012	*5-Year Projection	*2003 Delineation
Well 4 (210426)	198.120	190.489	165.407	131.143			60.563
Well 5 (228800)	150.561	128.789	124.849	135.878			309.733
Well 6 (233077)	17.707	150.589	140.256	138.696			319.119
Well 7 (511076)	179.146	164.362	160.748	152.664			348.863
Well 8 (724408)	195.182	172.693	161.099	150.430			not constructed
TOTAL	740.716	806.922	752.359	708.811			1041.900[+]

Source: DNR State Water Use Database System PA 68-0209.

* Data to be provided by the city of Hutchinson. If the plan amendment work extends into 2014, the city may want to summarize pumping volumes for 2009 through 2013 (rather than 2008 through 2012).

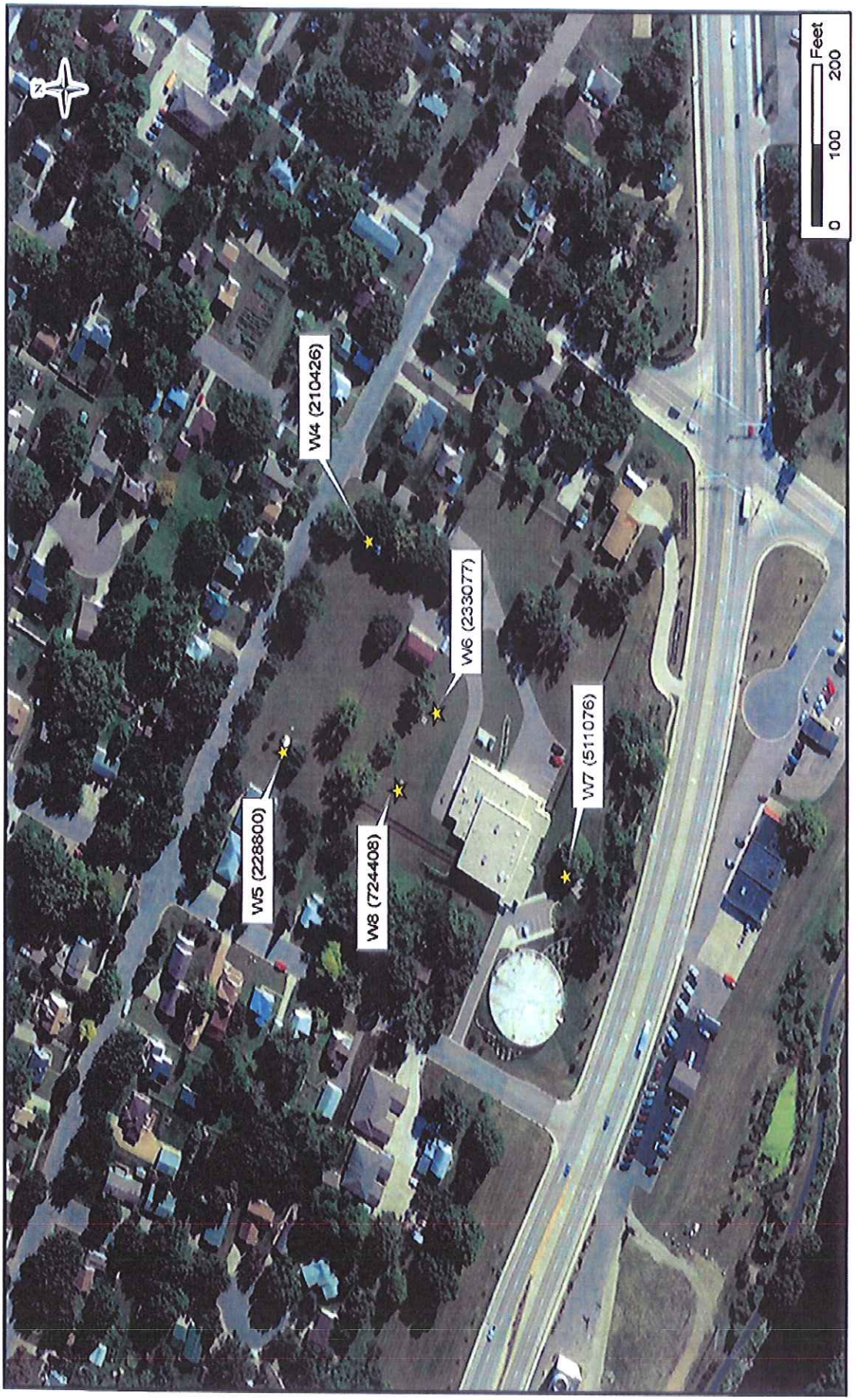
[+] 2003 Delineation - Combined use of former Wells 2 & 3 = 3.622 mgy

Table 3 - Permitted High-Capacity Wells Within a 2-Mile Radius
DNR State Water Use Database System

Unique Number	Well Name	DNR Permit Number	*Aquifer	Use	2011 Annual Volume of Water Pumped (Millions Gallons)
177050	AB MAURI FOOD INC DBA OHLY AMERICA'S	1966-1155	QBAA	Agricultural Processing	170.8
177050	MID AMERICA DAIRYMEN INC	1982-4164	QBAA	Agricultural Processing	0
210383 W2	HUTCHINSON, CITY OF	1968-0209	QBAA	Municipal Waterworks	0.9
210423	AB MAURI FOOD INC DBA OHLY AMERICA'S	1966-1155	QBAA	Agricultural Processing	131
210425 W3	HUTCHINSON, CITY OF	1968-0209	QBAA	Municipal Waterworks	sealed
210429	AB MAURI FOOD INC DBA OHLY AMERICA'S	1966-1155	QBAA	Agricultural Processing	44
210433	AB MAURI FOOD INC DBA OHLY AMERICA'S	1966-1155	QBAA	Agricultural Processing	14.7
419488	HUTCHINSON TECHNOLOGY INC	1980-4287	QBAA	Other Industrial Processing	0
703542	HUTCHINSON TECHNOLOGY INC	1980-4287	QBAA	Other Industrial Processing	3.2
689294	CROW RIVER COUNTRY CLUB	2005-4080	QBAA	Golf Course Irrigation	0
689269	CROW RIVER COUNTRY CLUB	2005-4080	QBAA	Golf Course Irrigation	15.1
495937	HUTCHINSON TECHNOLOGY INC	1980-4287	QBAA	Once-through heating or A/C	0
632079	BAUERLY BROTHERS INC	2001-4035	QBAA	Non-Metallic Processing	0.8
608405	MEADOW LINKS	1999-4170	QBAA	Golf Course Irrigation	0

Note: * It is likely that some of the wells serving these permits are completed in a different buried drift aquifer relative to the Hutchinson city wells. Further investigation is warranted to determine whether respective wells are screened in the same aquifer as the city wells.

Map of Well Locations



5

Addendum II
List of Required GIS Files

The following steps help document the electronic data that must be submitted prior to review of the first part of a wellhead protection plan (part 1 plan). This protocol is to be followed whether the part 1 is prepared by the MDH hydrologist or submitted by a consultant.

Create a folder with the name of the public water supply system. Example - D:**Hutchinson.**

1. Create a subfolder called **Shapes** and place the shape files and other GIS layers that you created for the Part 1 plan using the following file naming scheme –

   a. Example - D:**Hutchinson\Shapes** into which must go the final draft of the following files (Note – Do not include earlier versions of these layers, only the final version that will be archived and become the official version):

   Awells.shp contains the wells that were used to support the delineation (a record of each well must be entered into the County Well Index database and reflect any updated location, construction, or interpretations that are generated by development of the part 1 plan).

   Era.shp is the proposed boundary of the emergency response area for each primary well that is addressed in the plan.

   Dwsma.shp is the proposed boundary of the drinking water supply management area.

   Dwsmavul.shp is the proposed vulnerability assessment of the drinking water supply management area.

   Gw_cont.shp is the interpolated grid that contains contours depicting the ambient direction of groundwater flow. At least three contours must be included where the gradient within the source water aquifer is greater than .0001. Otherwise, consult with the hydrologist supervisor to identify the number of contours or contour intervals that should be used.

   Iwmz.shp has the inner wellhead management zones for all of the public water supply wells that are addressed by the plan.

   Pwss.shp contains the locations and unique numbers of the public water supply wells that are addressed by the plan.

   Whpa.shp – is the proposed boundary of the wellhead protection area when a surface water contribution area is not included. Otherwise use the following file names –

      Capzone.shp is the proposed capture area within the aquifer when a surface water contribution area is included.

      Swca.shp is the proposed boundary of the surface water contribution area.

   XsectionA.shp contains the trend and wells used to construct cross section 'A to A'

XsectionB.shp contains the trend and wells used to construct cross section 'B to B'

b. Copy other shape files that you want included in the plan documentation. Use the following file names for maps or layers that you may generate. For any others that are not listed below, insert a short description of what the shape file represents in the data - view item description option for the data layer. This is needed so that there is a metadata description of the layer that you produced. (Remember that all maps that are generated for a plan must be at a map scale of 1/24,000 or greater detail).

Bedrock.shp contains the bedrock geologic map.

Bedrocktopo.shp contains the bedrock topography map.

D2bedrock.shp contains the depth to bedrock map.

Karst.shp contains the locations of karst features.

Lineament.shp contains the cover of lineament segments.

CFR.shp contains the cover based on fracture flow delineation in the case of a circular calculated fixed radius (CFR) without an upgradient extension.

UGE.shp contains the cover based on fracture flow delineation in the case of a calculated fixed radius (CFR) with an upgradient extension.

Lineament_Extension.shp contains the cover based on fracture flow delineation in the case of a a lineament analysis.

Lscore.shp contains the L-score for a reference point that is generated using DNR criteria for assessing geologic sensitivity.

Parcel.shp contains the property parcel map.

Pcsi_1.shp contains the locations of potential contamination sources that were used to support development of the part 1 plan.

Samplesite.shp contains the locations of surface waters, springs, wells, or other features where either 1) water, geological, soils, or other physical samples were collected or 2) physical measurements regarding these features were collected.

Soils.shp contains the soils map.

Spring.shp contains the locations of springs.

Surfgeo.shp contains the surficial geologic map.

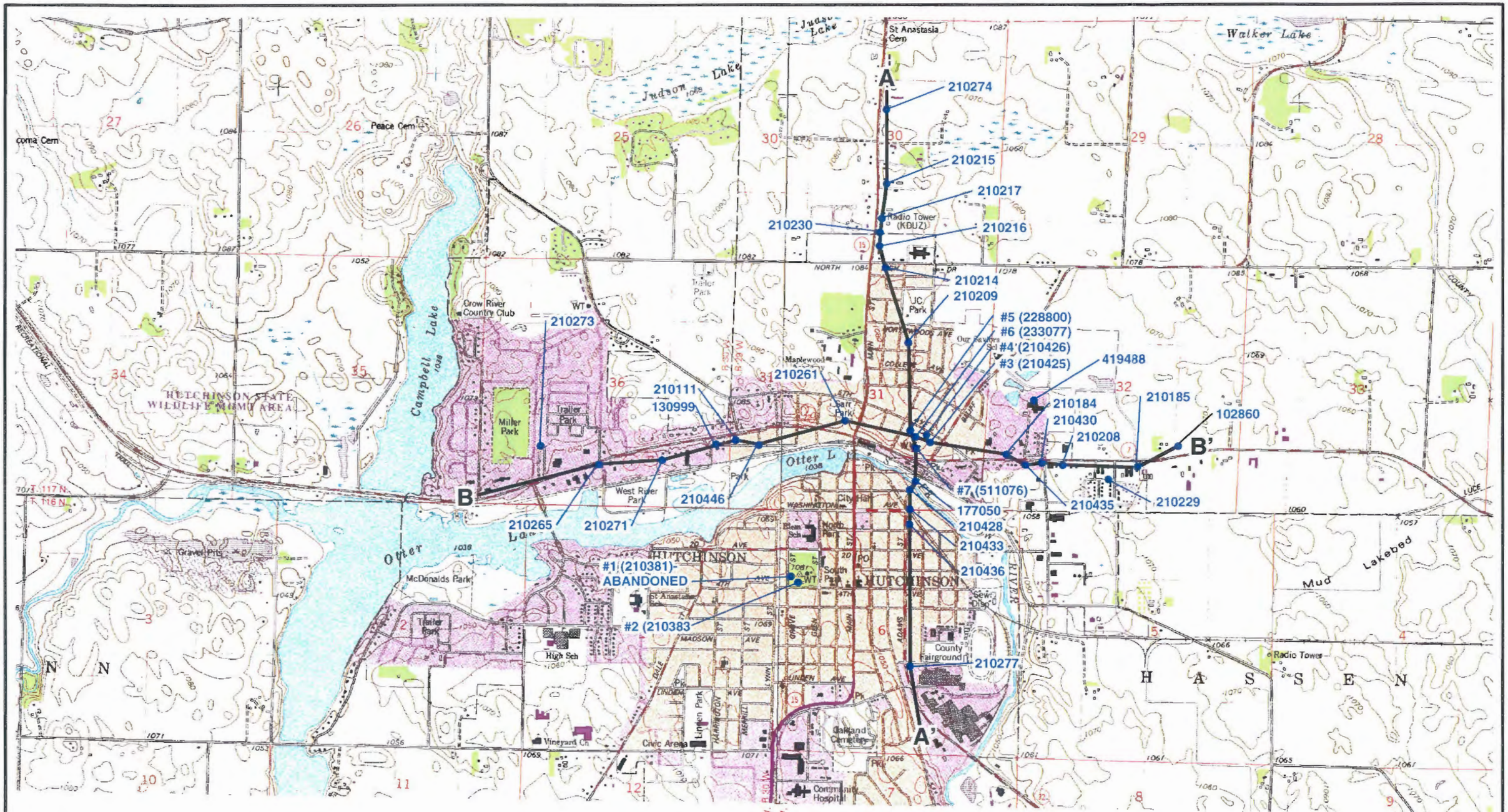
Model Shapefiles - Place model shape files and other GIS layers that you created for the Part 1 plan.

2. Create a subfolder called **Data** and c other shape files that you want included in the plan documentation. Copy data tables or spreadsheets that you want included in the plan documentation. Prepare a readme.txt file that describes the content of each data table or spreadsheet.

3. Create a folder called **Model** and place a copy of the model input files, the solution file that most closely reflects the calibration results that are presented in the part 1 plan, the calibration file, and a file called **model.txt** that describes the model(s) that were used. Include also anu runs that were used in the sensitivity analysis. If a regional model was adapted to delineate the SWPA, consult with the hydrologist supervisor regarding how to reference an enhanced regional model. (Note: fracture flow and surface water contribution area delineations are referenced in the report and/or are described using one or more GIS layers so there is no need to duplicate this documentation.)

Appendix B

Geologic Cross-Sections



N

0 1,000 2,000 Feet

LEGEND

A —— A' GEOLOGIC CROSS-SECTION LOCATION

210184 ● UNIQUE NO. OF WELL DATA POINT

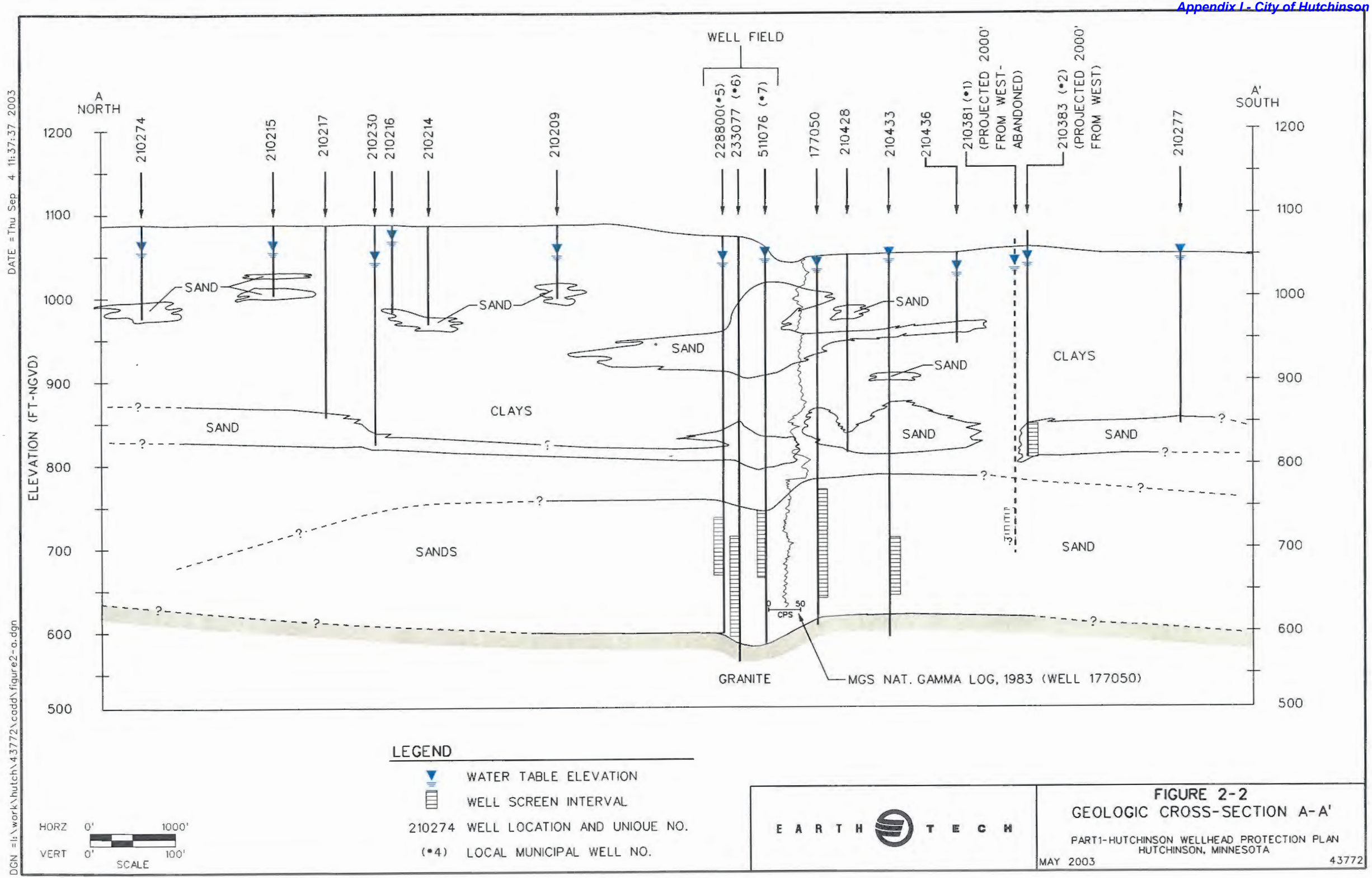
#7 (511076) ● MUNICIPAL WELL NO. AND UNIQUE NO.

EARTH TECH

FIGURE 2-1
DATA POINT AND GEOLOGIC CROSS-SECTION LOCATION MAP

PART1-HUTCHINSON WELLHEAD PROTECTION PLAN
HUTCHINSON, MINNESOTA

MAY 2003 43772



LEGEND

- WATER TABLE ELEVATION
- WELL SCREEN INTERVAL
- 210274 WELL LOCATION AND UNIQUE NO.
- (*4) LOCAL MUNICIPAL WELL NO.

HORZ 0' 1000'
VERT 0' 100'
SCALE

EARTH TECH

FIGURE 2-2
GEOLOGIC CROSS-SECTION A-A'

PART1-HUTCHINSON WELLHEAD PROTECTION PLAN
HUTCHINSON, MINNESOTA
MAY 2003 43772

DATE = Thu Sep 4 11:37:37 2003
DGN = I:\work\hutch\43772\cadd\figure2-a.dgn

B
WEST

B'
EAST

WELL FIELD

210273 (PROJECTED 600' FROM NORTH)
210265
210271
130999
210111
210446
210261
511076 (•7)
210426 (•4)
210425 (•3)
210184
419488 (PROJECTED ~1200' FROM NORTH)
210435
210430
210208
210229 (PROJECTED 250' FROM SOUTH)
210185
102860

ELEVATION (FT-NGVD)

1200
1100
1000
900
800
700
600
500

SAND
CLAYS
SANDS
GRANITE
?

LEGEND

- WATER TABLE ELEVATION
- WELL SCREEN INTERVAL
- 210274 WELL LOCATION AND UNIQUE NO.
- (•4) LOCAL MUNICIPAL WELL NO.

HORZ 0' 1000'
VERT 0' 100'
SCALE

EARTH TECH

FIGURE 2-3
GEOLOGIC CROSS-SECTION B-B'

PART1-HUTCHINSON WELLHEAD PROTECTION PLAN
HUTCHINSON, MINNESOTA

MAY 2003 43772

Appendix C

Aquifer Test Plan

MINNESOTA MDH DEPARTMENT OF HEALTH
Environmental Health Division
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Determination of Aquifer Properties and Aquifer Test Plan (DAP-ATP) Form

Public Water Supply ID:	1430004	PWS Name:	Hutchinson

Contact Information for Person Completing this Form

Name:	Melanie Niday, PG
Address:	SEH
	1200 25th Avenue South
City, State, Zip:	St. Cloud, MN 56301
Phone, Fax, e-mail:	320.229.4346, 888.908.8166, mniday@sehinc.com

Aquifer Properties Determination Methods

☐ 1) An existing pumping test that meets the requirements of wellhead protection rule part 4720.5520 and that was previously conducted on a well connected to the public water supply system.

☐ 2) An existing pumping test that meets the requirements of wellhead protection rule part 4720.5520 and that was previously conducted on another well in a hydrogeologic setting determined by the department to be equivalent.

☐ 3) A proposed new test to be conducted on a new or existing well connected to the public water supply system and that meets the requirements for larger-sized water systems (wellhead protection rule part 4720.5520). A test plan must be approved before conducting the test.

☐ 4) A proposed new test to be conducted on a new or existing public well connected to the public water supply system and that meets the requirements for smaller-sized water systems (wellhead protection rule part 4720.5530). A test plan must be approved before conducting the test.

☑ 5) An existing pumping test that does not meet the requirements of wellhead protection rule part 4720.5520 and that was previously conducted on: 1) a public water supply well or 2) another well in a hydrogeologic setting determined by the department to be equivalent.

☐ 6) Existing specific capacity test(s) conducted on the public water supply well(s) or specific capacity tests conducted on other wells in a hydrogeologic setting determined by the department to be equivalent.

☐ 7) An existing published transmissivity value.

- Include all test data and analysis documentation with the estimated transmissivity, ft^2/day, when the aquifer properties determination method is; 1, 2, 5, 6, or 7, listed above.
- Attach detailed aquifer test plan for methods 3 or 4.

Submitted by: Melanie Niday	Prof. License: PG#30346	Date: 3/24/2015

To request this document in another format, please call our Section Receptionist (651/201-4700) or Division TTY (651/201-5797).

Rationale for: 1) Aquifer Properties Determination or 2) Proposed New Test

Briefly describe the rationale for: 1) selected method to determine aquifer properties from existing data, **or** 2) a new aquifer test to be conducted on the pumped well referenced below. Include unique well numbers of all wells that were (or will be) monitored during data collection. How does the existing or proposed test deviate from the ideal. (e.g. rate, duration, no. of obwells, interfering wells, etc.) Attach documentation as necessary.

Aquifer Name:	Buried Sand and Gravel	☑ Confined	☐ Unconfined	☐ Fractured Rock

Aquifer properties of the deep sand aquifer were calculated by Earth Tech, Inc. in 2002 using data from a 1988 24-hour pump test performed on Well Number 7 (#511076). The Theis solution for confined aquifers was applied in the pump test analysis. Results of the pumping test were originally presented in the WHPP Part 1 (Earth Tech, 2003). Copies of the pump test results and a copy of the well log are attached.

Transmissivity was determined to be 165,024 ft^2/day (15,331 m^2/day) and hydraulic conductivity 982 ft/day (299 m/day). The high transmissivity and hydraulic conductivity values appear representative of the high yielding aquifer. The low calculated storage coefficient is indicative of a confined aquifer. Model sensitivity analysis completed for the 2003 WHPP Part 1 Report prepared by Earth Tech, Inc. concluded that no changes to the hydrogeologic system or capture zone delineation occurred following adjustments to the aquifer thickness or hydraulic conductivity parameters.

Proposed New Test Information Summary

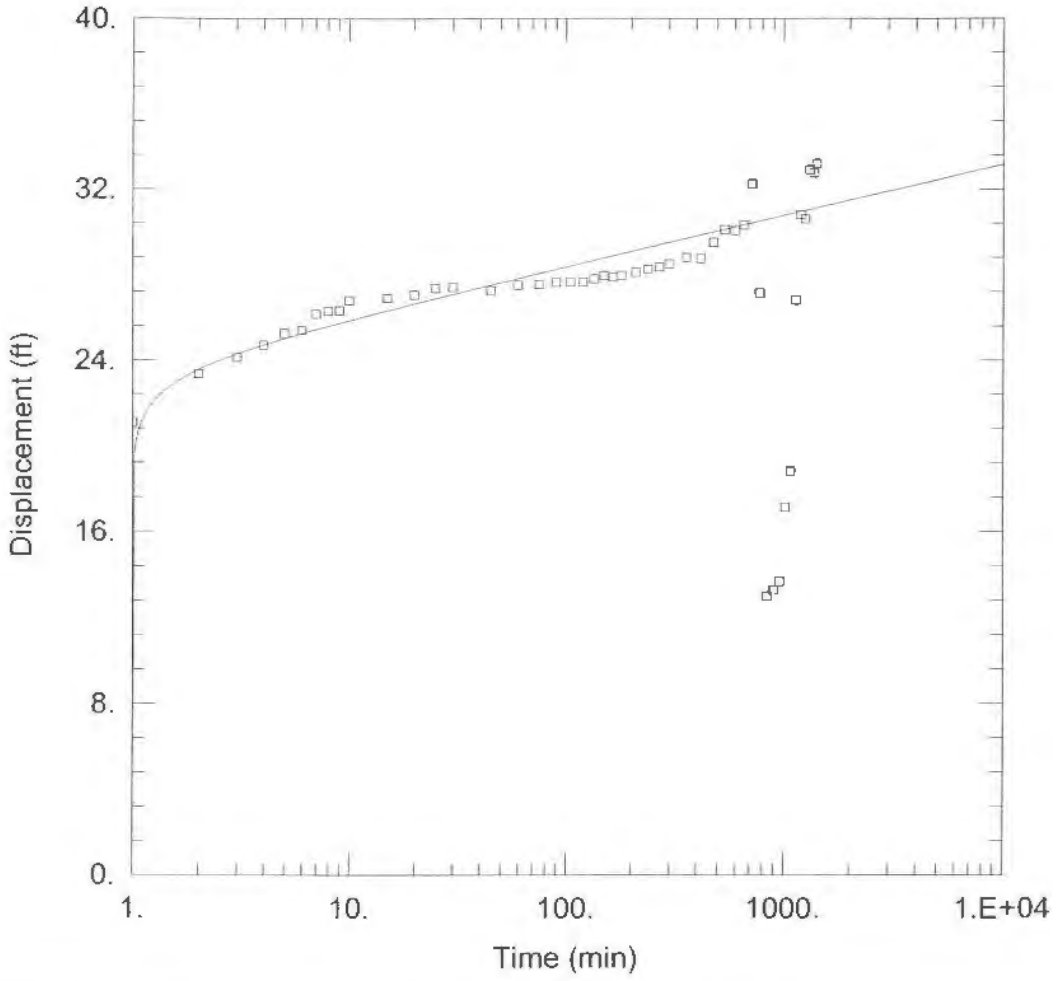
Pumped Well Name (Unique Number):	NA	**Test Duration (Hours):**	NA
Location: X, Y (meters) UTM-Z15N or Lat-Lon (decimal degrees) datum: NAD83	NA	**Pump Type:**	NA
		Discharge Rate:	NA
Number of Observation Wells:	NA	**Flow Rate Measuring Device Type:**	NA

- A map showing the location of the pumping well and observation well(s) must be included.

List the unique number of each public water supply well to which this DAP-ATP Form applies

210426					
228800					
233077					
511076					
724408					

Reviewed by:	**Approved:** ◉ Yes ○ No	**Approval Date:**



WELL TEST ANALYSIS

Data Set: C:\Documents and Settings\etomlinson\My Documents\Hutch\pumptest.aqt
Date: 11/27/02 Time: 09:02:02

PROJECT INFORMATION

Company: Earth Tech
Client: City of Hutchinson, MN
Project: 43772.02
Test Location: Hutchinson, MN
Test Well: Municipal Well No. 7
Test Date: 4-7-1988

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PW 1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
MW-1	0	0

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 114.6 ft^2/min
Kz/Kr = 1.
S = 1.726E-08
b = 168. ft

Data Set: C:\Documents and Settings\etomlinson\My Documents\Hutch\pumptest.aqt
Date: 11/27/02
Time: 09:00:23

PROJECT INFORMATION

Company: Earth Tech
Client: City of Hutchinson, MN
Project: 43772.02
Location: Hutchinson, MN
Test Date: 4-7-1988
Test Well: Municipal Well No. 7

AQUIFER DATA

Saturated Thickness: 168. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: PW 1

X Location: 0. ft
Y Location: 0. ft

Fully Penetrating Well

No. of pumping periods: 47

Pumping Period Data

Time (min)	Rate (cu. ft/min)	Time (min)	Rate (cu. ft/min)	Time (min)	Rate (cu. ft/min)
1.	1500.	75.	1500.	600.	1500.
2.	1500.	90.	1500.	660.	1500.
3.	1500.	105.	1500.	720.	1500.
4.	1500.	120.	1500.	780.	1500.
5.	1500.	135.	1500.	840.	1500.
6.	1500.	150.	1500.	900.	1500.
7.	1500.	165.	1500.	960.	1500.
8.	1500.	180.	1500.	1020.	1500.
9.	1500.	210.	1500.	1080.	1500.
10.	1500.	240.	1500.	1140.	1500.
15.	1500.	270.	1500.	1200.	1500.
20.	1500.	300.	1500.	1260.	1500.
25.	1500.	360.	1500.	1320.	1500.
30.	1500.	420.	1500.	1380.	1500.
45.	1500.	480.	1500.	1420.	1500.
60.	1500.	540.	1500.		

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-1

X Location: 0. ft
Y Location: 0. ft

Fully Penetrating Well

No. of observations: 47

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1.	21.1	75.	27.54	600.	30.05
2.	23.35	90.	27.64	660.	30.3
3.	24.13	105.	27.65	720.	32.25
4.	24.7	120.	27.65	780.	27.14
5.	25.25	135.	27.8	840.	12.98
6.	25.4	150.	27.95	900.	13.26
7.	26.15	165.	27.87	960.	13.67
8.	26.3	180.	27.95	1020.	17.12
9.	26.32	210.	28.1	1080.	18.79
10.	26.8	240.	28.25	1140.	26.8
15.	26.9	270.	28.35	1200.	30.8
20.	27.05	300.	28.5	1260.	30.6
25.	27.35	360.	28.8	1320.	32.9
30.	27.4	420.	28.75	1380.	32.75
45.	27.25	480.	29.5	1420.	33.2
60.	27.5	540.	30.1		

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	114.6	ft^2/min
S	1.726E-08	
Kz/Kr	1.	
b	168.	ft

Unique No. 00511076
County Name Mcleod

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD
Minnesota Statutes Chapter 1031

Update Date 2008/05/23
Entry Date 1992/08/06

Township Name	Township	Range	Dir	Section	Subsection
	117	29	W	31	DBDDCC

Well Depth 477 ft. **Depth Completed** 400 ft. **Date Well Completed** 1988/03/04

Well Name HUTCHINSON 7

Drilling Method Non-specified Rotary

Contact's Name CITY OF HUTCHINSON
111 HASSEN SE ST
HUTCHINSON MN 55350

Drilling Fluid Bentonite

Well Hydrofractured? ☐ Yes ☐ No
From ft. to ft.

Well Owner's Name HUTCHINSON 7

HUTCHINSON MN 55350

Use Community Supply

Casing **Drive Shoe?** ☐ Yes ☐ N

Hole Diameter
in. t 30 ft
in. t 400 ft

Casing Diameter **Weight(lbs/ft)**
26 in. t 30 ft 0
18 in. t 320 ft 0

GEOLOGICAL MATERIAL	COLOR	HARDNESS	FROM	TO
TOP SOIL	BLACK		0	3
SANDY CLAY	YELLO		3	19
SANDY CLAY	BLUE		19	58
CLAY	BLACK	HARD	58	59
SANDY CLAY	BLUE		59	61
DIRTY SAND	BROW		61	99
SAND	BROW		99	138
SAND	GRAY		138	161
SAND	BROW		161	172
SANDY CLAY	BLUE		172	179
CLAY	VARIE		179	183
CLAY	BLUE		183	192
CLAY	BLUE		192	203
SANDY CLAY	BLUE		203	223
SAND & SANDY CLAY	BLUE		223	239
SAND & GRAVEL	VARIE		239	276
CLAY	BLUE		276	284
DIRTY SAND	BLUE		284	288
SANDY CLAY	BLUE		288	297
HARDPAN			297	304
CLAY	BLUE		304	308
DIRTY SAND	BROW		308	333
CLEANER SAND	BROW		333	339
SAND	VARIE		339	379
DIRTY SAND, FINE SAND &	BROW		379	435
SAND LITTLE CLEANER	BROW		435	450
SAND	BLUE		450	472
DECOMPOSED & SAND	WHITE		472	477

Screen Y

Open Hole From ft. to ft.

Make JOHNSON Type L

Diameter	Slot	Length	Set	Fitting
10	30	320	ft. to ft	
10	25		ft. to 400 ft	

Static Water Level 36 ft. from Land surface Date 1988/03/04

PUMPING LEVEL (below land surface)
114.4 ft. after 24 hrs. pumping 1550 g.p.m.

Well Head Completion
Pitless adapter mfr Model
Casing Protection ☑ 12 in. above grade
☐ At-grade(Environmental Wells and Borings ONLY)

Grouting Information Well grouted? ☑ Yes ☐ No

Material	From	To (ft.)	Amount(yds/bags)	
G	0	30	1.75	Y
G	0	320	17.5	Y

Nearest Known Source of Contamination
ft. direction type
Well disinfected upon completion? ☑ Yes ☐ No

Pump ☐ Not Installed Date Installed
Mfr nam GOULDS
Model 14R-J60 HP 75 Volts 460

Drop Pipe Length 150 ft. Capacity E+03 g.p.m
Type T

Any not in use and not sealed well(s) on property? ☐ Yes ☐ No

USGS Quad Hutchinson East Elevation 1081
Aquifer: QBAA Alt Id: 1430004S05

Was a variance granted from the MDH for this Well? ☐ Yes ☐ No

Well CONTRACTOR CERTIFICATION Lic. Or Reg. No. 91353
License Business Name
Name of Driller HEJTMANEK, D.

Report Copy

HE-01205-06 (Rev. 9/96)

Unique No. 00511076	**MINNESOTA DEPARTMENT OF HEALTH**	**Update Date** 2008/05/23
County Name Mcleod	**WELL AND BORING RECORD**	**Entry Date** 1992/08/06
	Minnesota Statutes Chapter 1031	

Township Name	Township	Range	Dir	Section	Subsection	Well Depth		Depth Completed		Date Well Completed
	117	29	W	31	DBDDCC	477	ft.	400	ft.	1988/03/04

Well Name HUTCHINSON 7 **Lic. Or Reg. No.** 91353 **Name of Driller** HEJTMANEK, D.

USGS Quad Hutchinson **Elevation** 1081 **Aquifer** QBAA **Alternative Id** 1430004S05

GEOLOGICAL MATERIAL	COLOR	HARDNESS	FROM	TO	STRAT	LITH PRIM	LITH SEC	LITH MINOR
TOP SOIL	BLACK		0	3	RUUK	SOIL	ORGD	
RUUK = Recent deposit-black	SOIL = Soil				ORGD = Organic Deposits			
SANDY CLAY	YELLOW		3	19	QLUY	CLAY	SAND	
QLUY = clay+sand-yellow	CLAY = Clay				SAND = Sand			
SANDY CLAY	BLUE		19	58	QLUG	CLAY	SAND	
QLUG = clay+sand-gray	CLAY = Clay				SAND = Sand			
CLAY	BLACK	HARD	58	59	QCUK	CLAY		
QCUK = clay-black	CLAY = Clay							
SANDY CLAY	BLUE		59	61	QLUG	CLAY	SAND	
QLUG = clay+sand-gray	CLAY = Clay				SAND = Sand			
DIRTY SAND	BROWN		61	99	QNUB	SAND	SILT	
QNUB = sand+silt-brown	SAND = Sand				SILT = Silt			
SAND	BROWN		99	138	QFUB	SAND		
QFUB = sand-brown	SAND = Sand							
SAND	GRAY		138	161	QFUG	SAND		
QFUG = sand-gray	SAND = Sand							
SAND	BROWN		161	172	QFUB	SAND		
QFUB = sand-brown	SAND = Sand							
SANDY CLAY	BLUE		172	179	QLUG	CLAY	SAND	
QLUG = clay+sand-gray	CLAY = Clay				SAND = Sand			
CLAY	VARIED		179	183	QCUU	CLAY		
QCUU = clay	CLAY = Clay							
CLAY	BLUE		183	192	QCUG	CLAY		
QCUG = clay-gray	CLAY = Clay							
CLAY	BLUE		192	203	QCUG	CLAY		
QCUG = clay-gray	CLAY = Clay							
SANDY CLAY	BLUE		203	223	QLUG	CLAY	SAND	
QLUG = clay+sand-gray	CLAY = Clay				SAND = Sand			

Unique No. 00511076
County Name Mcleod

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD
Minnesota Statutes Chapter 1031

Update Date 2008/05/23
Entry Date 1992/08/06

Township Name	Township	Range	Dir	Section	Subsection	Well Depth		Depth Completed		Date Well Completed
	117	29	W	31	DBDDCC	477	ft.	400	ft.	1988/03/04

Well Name HUTCHINSON 7 **Lic. Or Reg. No.** 91353 **Name of Driller** HEJTMANEK, D.
USGS Quad Hutchinson **Elevation** 1081 **Aquifer** QBAA **Alternative Id** 1430004S05

GEOLOGICAL MATERIAL	COLOR	HARDNESS	FROM	TO	STRAT	LITH PRIM	LITH SEC	LITH MINOR
SAND & SANDY CLAY	BLUE		223	239	QLUG	SAND	CLAY	
QLUG = clay+sand-gray	SAND = Sand			CLAY = Clay				
SAND & GRAVEL	VARIED		239	276	QHUU	SAND	GRVL	
QHUU = sand +larger	SAND = Sand			GRVL = Gravel				
CLAY	BLUE		276	284	QCUG	CLAY		
QCUG = clay-gray	CLAY = Clay							
DIRTY SAND	BLUE		284	288	QNUG	SAND	SILT	
QNUG = sand+silt-gray	SAND = Sand			SILT = Silt				
SANDY CLAY	BLUE		288	297	QLUG	CLAY	SAND	
QLUG = clay+sand-gray	CLAY = Clay			SAND = Sand				
HARDPAN			297	304	QPUU	HDPN	CLAY	SAND
QPUU = pebbly sand/silt/clay	HDPN = Hardpan			CLAY = Clay			SAND = Sand	
CLAY	BLUE		304	308	QCUG	CLAY		
QCUG = clay-gray	CLAY = Clay							
DIRTY SAND	BROWN		308	333	QNUB	SAND	SILT	
QNUB = sand+silt-brown	SAND = Sand			SILT = Silt				
CLEANER SAND	BROWN		333	339	QFUB	SAND		
QFUB = sand-brown	SAND = Sand							
SAND	VARIED		339	379	QFUB	SAND		
QFUB = sand-brown	SAND = Sand							
DIRTY SAND, FINE SAND & SANDY CLAY	BROWN		379	435	QWUB	SAND	SILT	CLAY
QWUB = cly/snd/slt-no peb.-brn	SAND = Sand			SILT = Silt			CLAY = Clay	
SAND LITTLE CLEANER	BROWN		435	450	QFUB	SAND		
QFUB = sand-brown	SAND = Sand							
SAND	BLUE		450	472	QFUB	SAND		
QFUB = sand-brown	SAND = Sand							
DECOMPOSED & SAND	WHITE		472	477	UREG	REGO		
UREG = weathering residuum unc.age	REGO = Regolith							

Appendix D

Model Files and GIS Shapefiles (CD)

Appendix E

Vulnerability Assessments

625 Robert St. N. St. Paul MN 55155
P.O. Box 64975 St. Paul MN 55164 - 0975

MINNESOTA DEPARTMENT OF HEALTH
SECTION OF DRINKING WATER PROTECTION
SWP Vulnerability Rating

PWSID: 1430004 TIER: 5
SYSTEM NAME: Hutchinson WHP RANK:
WELL NAME: Well #4 UNIQUE WELL #: 00210426

COUNTY: McLeod TOWNSHIP NUMBER: 117 RANGE: 29 W SECTION: 31 QUARTERS: DBDD

CRITERIA		DESCRIPTION	POINTS
Aquifer Name(s)	:	Quaternary Buried Artesian Aquifer	
DNR Geologic Sensitivity Rating	:	Very low	0
L Score	:	20	
Geologic Data From	:	Well Record	
Year Constructed	:	1966	
Construction Method	:		5
Casing Depth	:	342	5
Well Depth	:	412	
Casing grouted into borehole?		Yes	0
Cement grout between casings?		Not applicable	0
All casings extend to land surface?		Yes	0
Gravel - packed casings?		No	0
Wood or masonry casing?		No	0
Holes or cracks in casing?		No	0
Isolation distance violations?			0
Pumping Rate	:	1000	10
Pathogen Detected?			NOT VULNERABLE
Surface Water Characteristics?			NOT VULNERABLE
Maximum nitrate detected	:	2.1 01/01/1974	NOT VULNERABLE
Maximum tritium detected	:	<.8 09/02/2005	NOT VULNERABLE
Non-THMS VOCs detected?			0
Pesticides detected?			0
Carbon 14 age	:	Unknown	0
Wellhead Protection Score	:		30
Wellhead Protection Vulnerability Rating	:		NOT VULNERABLE
Vulnerability Overridden	:		

COMMENTS

MINNESOTA DEPARTMENT OF HEALTH
625 Robert St. N. St. Paul MN 55155
P.O. Box 64975 St. Paul MN 55164 - 0975

MINNESOTA DEPARTMENT OF HEALTH
SECTION OF DRINKING WATER PROTECTION
SWP Vulnerability Rating

PWSID: 1430004 TIER: 5
SYSTEM NAME: Hutchinson WHP RANK:
WELL NAME: Well #5 UNIQUE WELL #: 00228800

COUNTY: McLeod TOWNSHIP NUMBER: 116 RANGE: 29 W SECTION: 6 QUARTERS:

CRITERIA		DESCRIPTION	POINTS
Aquifer Name(s)	:	Quaternary Buried Artesian Aquifer	
DNR Geologic Sensitivity Rating	:	Very low	0
L Score	:	18	
Geologic Data From	:	Well Record	
Year Constructed	:	1971	
Construction Method	:		5
Casing Depth	:	340	5
Well Depth	:	410	
Casing grouted into borehole?		Unknown	5
Cement grout between casings?		Not applicable	0
All casings extend to land surface?		Yes	0
Gravel - packed casings?		No	0
Wood or masonry casing?		No	0
Holes or cracks in casing?		No	0
Isolation distance violations?			0
Pumping Rate	:	1000	10
Pathogen Detected?			NOT VULNERABLE
Surface Water Characteristics?			NOT VULNERABLE
Maximum nitrate detected	:	<.4	NOT VULNERABLE
Maximum tritium detected	:	<.8 04/25/2002	NOT VULNERABLE
Non-THMS VOCs detected?			0
Pesticides detected?			0
Carbon 14 age	:	Unknown	0
Wellhead Protection Score	:		25
Wellhead Protection Vulnerability Rating	:		NOT VULNERABLE
Vulnerability Overridden	:		

COMMENTS

625 Robert St. N. St. Paul MN 55155
P.O. Box 64975 St. Paul MN 55164 - 0975

MINNESOTA DEPARTMENT OF HEALTH
SECTION OF DRINKING WATER PROTECTION
SWP Vulnerability Rating

PWSID: 1430004 TIER: 5
SYSTEM NAME: Hutchinson WHP RANK:
WELL NAME: Well #6 UNIQUE WELL #: 00233077

COUNTY: McLeod TOWNSHIP NUMBER: 117 RANGE: 29 W SECTION: 31 QUARTERS: DBDD

CRITERIA		DESCRIPTION	POINTS
Aquifer Name(s)	:	Quaternary Buried Artesian Aquifer	
DNR Geologic Sensitivity Rating	:	Low	15
L Score	:	4	
Geologic Data From	:	Well Record	
Year Constructed	:	1972	
Construction Method	:	Cable Tool/Bored	0
Casing Depth	:	355	5
Well Depth	:	475	
Casing grouted into borehole?		Unknown	0
Cement grout between casings?		Not applicable	0
All casings extend to land surface?		Yes	0
Gravel - packed casings?		No	0
Wood or masonry casing?		No	0
Holes or cracks in casing?		Unknown	0
Isolation distance violations?			0
Pumping Rate	:	1000	10
Pathogen Detected?			NOT VULNERABLE
Surface Water Characteristics?			NOT VULNERABLE
Maximum nitrate detected	:	<.1	NOT VULNERABLE
Maximum tritium detected	:	<.8 04/25/2002	NOT VULNERABLE
Non-THMS VOCs detected?			0
Pesticides detected?			0
Carbon 14 age	:	Unknown	0
Wellhead Protection Score	:		30
Wellhead Protection Vulnerability Rating	:		NOT VULNERABLE
Vulnerability Overridden	:		

COMMENTS

MINNESOTA DEPARTMENT OF HEALTH
625 Robert St. N. St. Paul MN 55155
P.O. Box 64975 St. Paul MN 55164 - 0975

MINNESOTA DEPARTMENT OF HEALTH
SECTION OF DRINKING WATER PROTECTION
SWP Vulnerability Rating

PWSID: 1430004 TIER: 5
SYSTEM NAME: Hutchinson WHP RANK:
WELL NAME: Well #7 UNIQUE WELL #: 00511076

COUNTY: McLeod TOWNSHIP NUMBER: 117 RANGE: 29 W SECTION: 31 QUARTERS: DBDD

CRITERIA		DESCRIPTION	POINTS
Aquifer Name(s)	:	Quaternary Buried Artesian Aquifer	
DNR Geologic Sensitivity Rating	:	Very low	10
L Score	:	11	
Geologic Data From	:	Well Record	
Year Constructed	:	1988	
Construction Method	:	Rotary/Drilled	0
Casing Depth	:	320	5
Well Depth	:	400	
Casing grouted into borehole?		Yes	0
Cement grout between casings?		Yes	0
All casings extend to land surface?		Yes	0
Gravel - packed casings?		No	0
Wood or masonry casing?		No	0
Holes or cracks in casing?		No	0
Isolation distance violations?			0
Pumping Rate	:	1000	10
Pathogen Detected?			NOT VULNERABLE
Surface Water Characteristics?			NOT VULNERABLE
Maximum nitrate detected	:	<.4	NOT VULNERABLE
Maximum tritium detected	:	<.8 11/21/1991	NOT VULNERABLE
Non-THMS VOCs detected?			0
Pesticides detected?			0
Carbon 14 age	:	Unknown	0
Wellhead Protection Score	:		25
Wellhead Protection Vulnerability Rating	:		NOT VULNERABLE
Vulnerability Overridden	:		

COMMENTS

MINNESOTA DEPARTMENT OF HEALTH
625 Robert St. N. St. Paul MN 55155
P.O. Box 64975 St. Paul MN 55164 - 0975

MINNESOTA DEPARTMENT OF HEALTH
SECTION OF DRINKING WATER PROTECTION
SWP Vulnerability Rating

PWSID: 1430004 TIER: 5
SYSTEM NAME: Hutchinson WHP RANK:
WELL NAME: Well #8 UNIQUE WELL #: 00724408

COUNTY: McLeod TOWNSHIP NUMBER: RANGE: SECTION: QUARTERS:

CRITERIA		DESCRIPTION	POINTS
Aquifer Name(s)	:	Quaternary Buried Artesian Aquifer	
DNR Geologic Sensitivity Rating	:	Low	20
L Score	:	2	
Geologic Data From	:	Well Record	
Year Constructed	:	2005	
Construction Method	:	Rotary/Drilled	0
Casing Depth	:	325	5
Well Depth	:	415	
Casing grouted into borehole?		Yes	0
Cement grout between casings?		Yes	0
All casings extend to land surface?		Yes	0
Gravel - packed casings?		No	0
Wood or masonry casing?		No	0
Holes or cracks in casing?		Unknown	0
Isolation distance violations?			0
Pumping Rate	:	1000	10
Pathogen Detected?			NOT VULNERABLE
Surface Water Characteristics?			NOT VULNERABLE
Maximum nitrate detected	:	<.05 05/19/2014	NOT VULNERABLE
Maximum tritium detected	:	.8 03/23/2011	NOT VULNERABLE
Non-THMS VOCs detected?			0
Pesticides detected?			0
Carbon 14 age	:	Unknown	0
Wellhead Protection Score	:		35
Wellhead Protection Vulnerability Rating	:		NOT VULNERABLE

Vulnerability Overridden :

COMMENTS

CITY OF HUTCHINSON DWSMA POTENTIAL CONTAMINANT SOURCE INVENTORY

PCSI_ID	DWS_ID	DWS_VUL	DV_TYPE_C	PIN	FAC_NAME	ADDRESS	CITY	ZIP	PCS_C	STATUS_C	PROGRAM_ID	TOTAL	COMMENT
1	966	L	GW	011020020	KEVIN COMPTON	20449 KOGLIN RD	HUTCHINSON	55350	WEL	A	816957	1	
7	966	L	GW	230561690	HUTCHINSON 7	439 PROSPECT ST NE	HUTCHINSON	55350	WEL	A	511076	1	
6	966	L	GW	230561690	HUTCHINSON 6	439 PROSPECT ST NE	HUTCHINSON	55350	WEL	A	233077	1	
8	966	L	GW	230561690	HUTCHINSON 8	439 PROSPECT ST NE	HUTCHINSON	55350	WEL	A	724408	1	
5	966	L	GW	230561690	HUTCHINSON 5	439 PROSPECT ST NE	HUTCHINSON	55350	WEL	A	228800	1	
3	966	L	GW	230561720	HUTCHINSON CITY WELL	469 PROSPECT ST NE	HUTCHINSON	55350	WEL	U	210424	1	Unknown
4	966	L	GW	230561680	HUTCHINSON 4	140 5TH AVE NE	HUTCHINSON	55350	WEL	A	210426	1	
2	966	L	GW	230366500	NORTHVIEW COURT 1	25 NORTHVIEW CT	HUTCHINSON	55350	WEL	A	258169	1	

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
010790010	DAN H & BARBARA J HUEBERT	20126 205TH DR	HUTCHINSON	MN	55350
010700060	ALLAN A & DEBRA J KOGLIN	20075 205TH DR	HUTCHINSON	MN	55350
010900010	JOHN W & ROBERTA P YATES	20404 205TH CT	HUTCHINSON	MN	55350
010700050	PAUL R & KARLA M KLAWITTER	20512 205TH CT	HUTCHINSON	MN	55350
010700040	DARRIN L NEUBARTH	20424 205TH CT	HUTCHINSON	MN	55350
010900020	RYAN A & STACY J JURGENSON	20418 205TH CT	HUTCHINSON	MN	55350
010590030	JOHN H & PATRICIA A PAULSEN	20317 KOGLIN RD	HUTCHINSON	MN	55350
010590040	JAMES L & KAREN L MONA	20181 KOGLIN RD	HUTCHINSON	MN	55350
010590020	RONALD C & JANICE D JOHNSON	20369 KOGLIN RD	HUTCHINSON	MN	55350
010720140	BENJAMIN C EVENSON	19597 SKYVIEW CIR	HUTCHINSON	MN	55350
010720090	FRANK R ZEULI	19747 SKYVIEW CIR	HUTCHINSON	MN	55350
010720100	PATRICK J & JOYCE M SCHOMMER	19719 SKYVIEW CIR	HUTCHINSON	MN	55350
010720130	DAVID & CARA MACH	19625 SKYVIEW CIR	HUTCHINSON	MN	55350
010720120	TIMOTHY C PIEHL	19653 SKYVIEW CIR	HUTCHINSON	MN	55350
010260400	ALLAN A & DEBRA J KOGLIN	20075 205TH DR	HUTCHINSON	MN	55350
010260200	GLENN GOETZ	20269 205TH DR	HUTCHINSON	MN	55350
011020010	MS DEVELOPMENT OF HUTCHINSON	1376 HERITAGE AVE NW	HUTCHINSON	MN	55350
010260975	WHITE PROPERTIES LLC	317 HWY 7 EAST	HUTCHINSON	MN	55350
010260900	VINCENT R & KASI C THOMAS	20178 205TH DR	HUTCHINSON	MN	55350
010260910	DAN H HUEBERT	20126 205TH DR	HUTCHINSON	MN	55350
010260980	VINCENT R & KASI C THOMAS	20178 205TH DR	HUTCHINSON	MN	55350
010250100	REBECCA TUCHTENHAGEN ETAL	515 EDGEWOOD DR	GLENCOE	MN	55336
010250600	DAVID F & JENNIFER BERNHAGEN	685 NORTH HIGH DR	HUTCHINSON	MN	55350
010250450	MCCORMICK FAMILY LTD PTNRSHP	PO BOX 577	HUTCHINSON	MN	55350
010530010	JOHN W KORNGIEBEL TRUST	415 SCHOOL RD NW #103	HUTCHINSON	MN	55350
010530020	KENNETH J BACON REV TRUST	6013 CHARLOTTE ST	SHAWNEE	KS	66216
010530030	JUSTIN L & TANYA J BLACK	19334 JUDSON CIR	HUTCHINSON	MN	55350
010530040	BRYAN J & AMY S SCHEELE	19369 JUDSON CIR	HUTCHINSON	MN	55350
010530050	ALLAN R & ARLIS J FESER	19413 JUDSON CIR	HUTCHINSON	MN	55350
010530060	KURT J & BETH R PULKRABEK	19445 JUDSON CIR	HUTCHINSON	MN	55350
230561250	DAVID W & CHARLENE M VOSPER	94 5TH AVE NW	HUTCHINSON	MN	55350
230560557	TERESA MARY HOESCHEN	83 5TH AVE NE	HUTCHINSON	MN	55350
230560420	TERRENCE R & MARY S THEIS	567 PROSPECT ST NE	HUTCHINSON	MN	55350
230970020	CHARLES T HAUSLADEN	23529 TAGUS AVE	HUTCHINSON	MN	55350
230561240	CHE D & MICHELLE L MCILRATH	52 5TH AVE NW	HUTCHINSON	MN	55350
230630010	VY THY HANH PHAM	5 5TH AVE NE	HUTCHINSON	MN	55350
230561230	LISA IVERSEN-WILLIAMS	42 5TH AVE NW	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230860180	JOEL R PLATH	574 CARLISLE ST NE	HUTCHINSON	MN	55350
230561220	IVAN L & SHARON JOHNSON	32 5TH AVE NW	HUTCHINSON	MN	55350
230630020	PATRICK M BETKER	11 5TH AVE NE	HUTCHINSON	MN	55350
230560580	ALEXANDER D TRAUT	544 PROSPECT ST NE	HUTCHINSON	MN	55350
230561180	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230860140	CHARLES J & HARRIET BURICH	583 CARLISLE ST NE	HUTCHINSON	MN	55350
230860060	JOHN KAUKOLA	596 CLARK ST NE	HUTCHINSON	MN	55350
230960080	MICHAEL R & MARY A NIECE	637 BLUFF ST NE	HUTCHINSON	MN	55350
230960030	J D & MARDELL M HILL	627 BLUFF ST NE	HUTCHINSON	MN	55350
230560020	KYLE J & LEAH MC SEIFERT	606 BLUFF ST NE	HUTCHINSON	MN	55350
230560430	NEIL C & ANITA A BRANSTAD	553 PROSPECT ST NE	HUTCHINSON	MN	55350
230560780	KRISTIN L LINDEMEIER	18557 WALDEN AVE	HUTCHINSON	MN	55350
230860190	ROBERT D & CAROLYN A LAMBERT	564 CARLISLE ST NE	HUTCHINSON	MN	55350
230561890	HUTCHINSON 18 2007 LLC	6377 SMITHTOWN RD	EXCELSIOR	MN	55331
230561930	GERALD L ELLIOTT &	475 HIGH ST NE	HUTCHINSON	MN	55350
230561875	LUCAS & SARANYA MOELLERS	207 4TH AVE NE	HUTCHINSON	MN	55350
232460130	JOE FABER FAMILY LTD PTRSHP	4610 RUSAN ST/PO BOX 806	ST CLOUD	MN	56303
230561940	SWAN SHORES COMPANY	17084 236TH CT	HUTCHINSON	MN	55350
231000030	THOMAS J & CHERYL K GLAESER	820 ASH ST NE	HUTCHINSON	MN	55350
234340090	PAUL T & KRISTINA M NEMITZ	785 WALNUT ST NE	HUTCHINSON	MN	55350
232320120	TERRA L AUGESON	820 OAK ST NE	HUTCHINSON	MN	55350
230990010	JACOB D SMITH	825 OAK ST NE	HUTCHINSON	MN	55350
230990060	BRUCE A BUTLER	820 ELM ST NE	HUTCHINSON	MN	55350
230900360	RALPH & PHYLLIS BLUM	825 MAPLE ST NE	HUTCHINSON	MN	55350
230900200	DENNIS J DRAZKOWSKI	24732 UPSALA LN	HUTCHINSON	MN	55350
230900430	JORUNN E KASTENS	825 SPRUCE ST NE	HUTCHINSON	MN	55350
231020050	ALLAN & LINDA NYMAN	816 MAPLE ST NE	HUTCHINSON	MN	55350
232320110	LORI M KLEIN	810 OAK ST NE	HUTCHINSON	MN	55350
232320020	NICOLE A POKORNOWSKI	815 MAIN ST N	HUTCHINSON	MN	55350
230990020	CHRIS A & DEBRA RUEB	815 OAK ST NE	HUTCHINSON	MN	55350
231000050	GEOFFREY A & GERI L DOLNEY	815 ELM ST NE	HUTCHINSON	MN	55350
231000090	ROGER E DEMEYER	307 GRIFFIN AVE NE	HUTCHINSON	MN	55350
234340030	JOHN S LOGEAIS	770 WALNUT ST NE	HUTCHINSON	MN	55350
230990050	ELAINE M THUL	810 ELM ST NE	HUTCHINSON	MN	55350
231000060	MARCUS & SHIRLEY A JAKES	800 ASH ST NE	HUTCHINSON	MN	55350
234340100	PHILIP R & JESSICA D REMINGTON	775 WALNUT AVE NE	HUTCHINSON	MN	55350
230900350	EDWARD L KARL REV TRUST	815 MAPLE ST NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230900210	DONALD IRVIN STEENHOEK	810 SPRUCE ST NE	HUTCHINSON	MN	55350
230900440	SARAH J NELSON	815 SPRUCE ST NE	HUTCHINSON	MN	55350
010530070	JOHN W KORNGIEBEL TRUST	415 SCHOOL RD NW #103	HUTCHINSON	MN	55350
010530080	BRADY W BURCHILL	19517 JUDSON CIR	HUTCHINSON	MN	55350
010530090	DAVID & BETTY HENKE	19523 JUDSON CIR	HUTCHINSON	MN	55350
010530100	DENIS G & MELODIE A ROONEY	19454 JUDSON CIR	HUTCHINSON	MN	55350
010250500	MCCORMICK FAMILY LTD PTNRSHP	PO BOX 577	HUTCHINSON	MN	55350
010530110	DENIS G & MELODIE A ROONEY	19454 JUDSON CIR	HUTCHINSON	MN	55350
010260300	ALLAN A & DEBRA J KOGLIN	20075 205TH DR	HUTCHINSON	MN	55350
080650010	MITCHELL P & LINDA K KRENTZ	18758 202ND CIR	HUTCHINSON	MN	55350
080650030	RYAN G & LISA NEPPL	18759 202ND CIR	HUTCHINSON	MN	55350
080650040	SCOTT & JOLYNN OGREN	18717 202ND CIR	HUTCHINSON	MN	55350
080650050	ROGER JANOUSEK	31 MAIN ST N	HUTCHINSON	MN	55350
080650060	JONATHAN D & LISA A ROLLINS	18756 202ND CIR	HUTCHINSON	MN	55350
080291500	DARYL L & KAREN K RIGENHAGEN	515 NORTH HIGH DR	HUTCHINSON	MN	55350
080291400	KEVIN L & VALERIE K SEVERSON	545 NORTH HIGH DR	HUTCHINSON	MN	55350
080291000	JIA R WRIGHT	525 NORTH HIGH DR	HUTCHINSON	MN	55350
080291300	VERNON D JR ANDERSON	535 NORTH HIGH DR	HUTCHINSON	MN	55350
080291200	NORTHERN NATURAL GAS CO	PO BOX 3330	OMAHA	NE	68103
080291100	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
080291600	GARY A & NANCY E MAGNUSON	555 NORTH HIGH DR NE	HUTCHINSON	MN	55350
080290500	JULIE J WENDLAND	15652 200TH ST	HUTCHINSON	MN	55350
080510100	SANDI SPORTELLI	20072 RAVEN AVE	HUTCHINSON	MN	55350
080520010	JON L & RUTH ANN CHRISTENSEN	1245 HWY 7 E	HUTCHINSON	MN	55350
080510030	SCOTT D ANDERSON	3195 LABEAUX AVE NE	ST MICHAEL	MN	55376
080510145	JEFFREY J & MARY E HORROCKS	687 BLUFF ST NE	HUTCHINSON	MN	55350
080510420	MINN CONF ASSOC OF 7TH DAY ADV	7384 KIRKWOOD CT	MAPLE GROVE	MN	55369
080510370	BRUCE G NEUBARTH	20732 BELLE LAKE RD	HUTCHINSON	MN	55350
080510020	RYAN D BERGER	20278 RAVEN AVE	HUTCHINSON	MN	55350
080520030	JASON J & DEANNA L BROTEN	1090 BLUFF ST NE	HUTCHINSON	MN	55350
080520040	JASON F PROCHASKA	1080 BLUFF ST NE	HUTCHINSON	MN	55350
080520060	SHANE M RETZLAFF	1070 BLUFF ST NE	HUTCHINSON	MN	55350
080520050	MARK E STARKE &	1060 BLUFF ST NE	HUTCHINSON	MN	55350
080520070	MIDWEST INDUSTRIAL TOOL GRIND	45 W HIGHLAND PARK DR/POBOX 549	HUTCHINSON	MN	55350
080520080	VERNON D NOON FAMILY TRUST	1600 ALA MOANA BLVD APT 1910	HONOLULU	HI	96815
080510430	MINN CONF ASSOC OF 7TH DAY ADV	7384 KIRKWOOD CT	MAPLE GROVE	MN	55369
080510010	CRAIG R POWELL	20284 RAVEN AVE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
011020020	RICHARD G NELLIS	20449 KOGLIN RD	HUTCHINSON	MN	55350
011020030	DAVID & CARA MACH	19625 SKYVIEW CIR	HUTCHINSON	MN	55350
011020040	DAVID & CARA MACH	19625 SKYVIEW CIR	HUTCHINSON	MN	55350
011020050	MS DEVELOPMENT OF HUTCHINSON	1376 HERITAGE AVE NW	HUTCHINSON	MN	55350
080510140	KON R & DIANE M SORENSEN	979 HILLCREST RD NW	HUTCHINSON	MN	55350
230900450	TAMMY R BEILKE	805 SPRUCE ST NE	HUTCHINSON	MN	55350
230900550	LORALL T & ANITA K DALLMAN	855 SPRUCE ST NE	HUTCHINSON	MN	55350
234340050	MELVIN & SHIRLEY BURMEISTER	750 WALNUT ST NE	HUTCHINSON	MN	55350
234340120	KAYLA J FRIED	755 WALNUT ST NE	HUTCHINSON	MN	55350
232440130	MICHAEL & PAMELA COMMERFORD	800 HILLCREST RD NE	HUTCHINSON	MN	55350
230900330	DARYL N ROIGER &	765 MAPLE ST NE	HUTCHINSON	MN	55350
230900230	ROGER & MARLENE HETTVER	760 SPRUCE ST NE	HUTCHINSON	MN	55350
230880270	LAWRENCE R WALZ	106 GRIFFIN AVE NE	HUTCHINSON	MN	55350
230880360	ROLAND W & CHERYL A SANDBERG	744 ELM ST NE	HUTCHINSON	MN	55350
230900460	DIRK A NELSON	765 SPRUCE ST NE	HUTCHINSON	MN	55350
230880370	RALPH C WICHMAN	200 GRIFFIN AVE NE	HUTCHINSON	MN	55350
230880460	SCOTT D & CYNTHIA A MCKEE	246 GRIFFIN AVE NE	HUTCHINSON	MN	55350
230880640	GERALD R PAUL	755 ASH ST NE	HUTCHINSON	MN	55350
230880730	ANDREA M MARCEAU	756 MAPLE ST NE	HUTCHINSON	MN	55350
234340060	KURT D NELSON &	740 WALNUT ST NE	HUTCHINSON	MN	55350
234340130	BRADLEY J & JUDY M PLATZ	745 WALNUT ST NE	HUTCHINSON	MN	55350
232440140	SHELDON J & DIANE K ROBINSON	760 HILLCREST RD NE	HUTCHINSON	MN	55350
230900320	DAVID R & KIMBERLY STREICH	755 MAPLE ST NE	HUTCHINSON	MN	55350
230880280	JON A SCHMIDT	735 OAK ST NE	HUTCHINSON	MN	55350
230880350	DEAN J & JACQUELYN GORES	734 ELM ST NE	HUTCHINSON	MN	55350
230900240	CONNIE P HARBARTH	750 SPRUCE ST NE	HUTCHINSON	MN	55350
230880380	CATHY BATES	735 ELM ST NE	HUTCHINSON	MN	55350
230880450	DAVID A BROUCHOUS	740 ASH ST NE	HUTCHINSON	MN	55350
230900470	HEIDI A RADUNZ	755 SPRUCE ST NE	HUTCHINSON	MN	55350
230880650	CRAIG A FITZLOFF	743 ASH ST NE	HUTCHINSON	MN	55350
230880720	RICHARD A & SUSAN JORGENSEN	PO BOX 452	HUTCHINSON	MN	55350
234340070	BRIAN L & JAMI E BEFFERT	730 WALNUT ST NE	HUTCHINSON	MN	55350
230880290	ROGER J LARSEN	11042 TOWN RD 300	MIZPAH	MN	56660
234340140	DUSTIN BOECKERS	735 WALNUT ST NE	HUTCHINSON	MN	55350
230880340	DEAN J JR GORES	724 ELM ST NE	HUTCHINSON	MN	55350
232440150	ASHLEY DAUWALTER	750 HILLCREST RD NE	HUTCHINSON	MN	55350
230900310	JOHN L & SHEILA M ORTLIP	745 MAPLE ST NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230880390	OPTIMA REALTY LLC	16690 705TH AVE	DASSEL	MN	55333
230880440	ANNE ZIPF	730 ASH ST NE	HUTCHINSON	MN	55350
230900250	CORRINE J ORLICKI	740 SPRUCE ST NE	HUTCHINSON	MN	55350
230880660	ELIZABETH A LITFIN	727 ASH ST NE	HUTCHINSON	MN	55350
230900480	JVONNE J LARSON	745 SPRUCE ST NE	HUTCHINSON	MN	55350
230880710	MARSHALL W & LOIS L BOWERS	24576 230TH ST	HUTCHINSON	MN	55350
230880070	TERESA J AMBERG	47 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880300	WILLIAM J KRASKEY	715 OAK ST NE	HUTCHINSON	MN	55350
230880320	MARY ELLEN SVOBODA	131 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880330	SPYRA WOJCIECH	141 COLLEGE AVE NE	HUTCHINSON	MN	55350
232440280	JAY R & TERESA A MARTIN	720 WALNUT ST NE	HUTCHINSON	MN	55350
230880400	GORDON H MOGARD	209 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880410	SCOTT STUTELBERG	72984 178TH ST	DASSEL	MN	55325
230900300	WAYNE & BARBARA MICKA	725 MAPLE ST NE	HUTCHINSON	MN	55350
230880420	RICHARD A COWMAN ETAL	237 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880430	LEONE RUSCH	245 COLLEGE AVE NE	HUTCHINSON	MN	55350
232440190	ROBERT H & LYNN C WINSLOW	725 WALNUT ST NE	HUTCHINSON	MN	55350
230900260	GRACE L SAUTER	730 SPRUCE ST NE	HUTCHINSON	MN	55350
230880670	SCOTT SCHINDLER	715 ASH ST NE	HUTCHINSON	MN	55350
232440160	ROBERT M & JUDY A ROSSELL	740 HILLCREST RD NE	HUTCHINSON	MN	55350
230880700	MARSHALL W & LOIS L BOWERS	24576 230TH ST	HUTCHINSON	MN	55350
230900490	SETH A HOPKINS	735 SPRUCE ST NE	HUTCHINSON	MN	55350
230880310	KYLE LARSON	705 OAK ST NE	HUTCHINSON	MN	55350
230880690	JEFFREY K & LORY L OLSON	345 COLLEGE AVE NE	HUTCHINSON	MN	55350
230900290	MARIE S MCKEE	405 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880680	PAULINE A BIPES	705 ASH ST NE	HUTCHINSON	MN	55350
232440290	ROGER & LAURIE WERSAL	710 WALNUT ST NE	HUTCHINSON	MN	55350
230900270	DORIS MARIAN BUCK	720 SPRUCE ST NE	HUTCHINSON	MN	55350
232440180	TIMOTHY II THODE	715 WALNUT ST NE	HUTCHINSON	MN	55350
230900500	TODD M & DEBORA L VEDDER	725 SPRUCE ST NE	HUTCHINSON	MN	55350
232440170	JOSEPH L KRIPPNER	730 HILLCREST RD NE	HUTCHINSON	MN	55350
230900280	ROBERT L & MARSHA J DIETZ	425 COLLEGE AVE NE	HUTCHINSON	MN	55350
230940060	MICHAEL P BROESDER	702 HILLCREST RD NE	HUTCHINSON	MN	55350
230900510	TIMOTHY A UTSCH	715 SPRUCE ST NE	HUTCHINSON	MN	55350
230940020	JASON M BRICKEY	706 WALNUT ST NE	HUTCHINSON	MN	55350
230940050	LINCOLN L & TRACY R SCHULTZ	703 WALNUT ST NE	HUTCHINSON	MN	55350
230880160	VINCENT FORCIER	646 OAK ST NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230880170	GEORGE & RITA NELSON FAM TRUST	18383 640TH AVE	DARWIN	MN	55324
230880250	DAVID S & DEBRA K FENSKE	132 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880260	BRIAN M & AMBER M PLATH	634 ELM ST NE	HUTCHINSON	MN	55350
230880470	ORVILLE R & JANET BEILKE	212 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880550	AEHB LLC	60686 CASH 28	LITCHFIELD	MN	55355
230880560	BARRY A & JANET S OLSON	304 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880630	SCHRUPP PROPERTIES LLC	1416 FIR AVE N	GLENCOE	MN	55336
230900070	CLIFFORD D KIEPER	400 COLLEGE AVE NE	HUTCHINSON	MN	55350
230900520	JACK L & CONNIE M HOGAN	445 COLLEGE AVE NE	HUTCHINSON	MN	55350
230940030	AMY L & MIKE A KIRCHHOFF	704 WALNUT ST NE	HUTCHINSON	MN	55350
230880150	CODY L NELSON	636 OAK ST NE	HUTCHINSON	MN	55350
230900060	DOROTHY VEACH	410 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880180	PEGGY A JORGENSEN	637 OAK ST NE	HUTCHINSON	MN	55350
230880480	JAMIE R MILLER	635 ELM ST NE	HUTCHINSON	MN	55350
230880540	GREGORY A DERSHEM	636 ASH ST NE	HUTCHINSON	MN	55350
230900050	SHANNON A BEST	420 COLLEGE AVE NE	HUTCHINSON	MN	55350
230940070	GEORGIA L BECK	705 HILLCREST RD NE	HUTCHINSON	MN	55350
230940040	WAYNE L ANDERSON	700 WALNUT ST NE	HUTCHINSON	MN	55350
230900530	DWAYNE C DAVIS	455 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880140	MATTHEW J HAUSLADEN	626 OAK ST NE	HUTCHINSON	MN	55350
230880190	SHANTELLE N HULS	625 OAK ST NE	HUTCHINSON	MN	55350
230900040	DEBORA K CALAVERA	430 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880240	BENJAMIN D SCHUERMAN	624 ELM ST NE	HUTCHINSON	MN	55350
230880490	STEVEN L PANKAKE	625 ELM ST NE	HUTCHINSON	MN	55350
230880570	TYLER R PALMA	635 ASH ST NE	HUTCHINSON	MN	55350
230880530	KIMBERLY A KARG &	628 ASH ST NE	HUTCHINSON	MN	55350
230880620	MICHAEL P HANSEN	1125 SHERWOOD ST SE	HUTCHINSON	MN	55350
230900090	DARRELL & MARION GANDER	111 SPRUCE CT NE	HUTCHINSON	MN	55350
230940010	SHANE DOBBS	206 5TH AVE NE	HUTCHINSON	MN	55350
230900030	DANIEL L BRIGDEN	440 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880120	DENNIS E & MARY J FORSBERG	29 MCLEOD AVE NE	HUTCHINSON	MN	55350
230880130	DANIEL R KRUEGER	16976 705TH AVE	DASSEL	MN	55325
230880200	MARC J & KERI L WILLIAMS	21835 VISTA RD	HUTCHINSON	MN	55350
230880230	KAROL R BROWN	614 ELM ST NE	HUTCHINSON	MN	55350
230880500	JOYCE C JANSEN	615 ELM ST NE	HUTCHINSON	MN	55350
230960140	JEFFREY J & MARY E HORROCKS	687 BLUFF ST NE	HUTCHINSON	MN	55350
230900100	TYLER J BONDERSON &	113 SPRUCE CT NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230880580	DAVID A LARSON	83 MCLEOD AVE NE	HUTCHINSON	MN	55350
230900540	LOWELL C & KIM J PEARSON	465 COLLEGE AVE NE	HUTCHINSON	MN	55350
230900160	EARL C & BERNICE HALL	665 HILLCREST RD NE	HUTCHINSON	MN	55350
232380060	EARL C & BERNICE HALL	665 HILLCREST RD NE	HUTCHINSON	MN	55350
232380050	JAMES L GRAF	658 BLUFF ST	HUTCHINSON	MN	55350
230880590	TIMOTHY C & TARA L HAGEN	89 MCLEOD AVE NE	HUTCHINSON	MN	55350
230880600	JANET CONNOR	95 MCLEOD AVE NE	HUTCHINSON	MN	55350
230560680	DOUGLAS E & JANET YERKS	251 5TH AVE NW	HUTCHINSON	MN	55350
230560685	BENJAMIN M & MAGGIE R SCHIEFER	249 5TH AVE NW	HUTCHINSON	MN	55350
230560672	CRAIG ALBION DECKER	231 5TH AVE NW	HUTCHINSON	MN	55350
230560675	RONALD E & JENNIE M BEST	221 5TH AVE NW	HUTCHINSON	MN	55350
230900020	DANIEL E BOSKE	450 COLLEGE AVE NE	HUTCHINSON	MN	55350
230560670	JASON M WRIGHT	17223 145TH ST	HUTCHINSON	MN	55350
230560665	PAUL A & ROSEMARIE G BOLDUC	14360 FAIRWAY DR	EDEN PRAIRIE	MN	55344
230880210	ELVA D SCHUFT	605 OAK ST NE	HUTCHINSON	MN	55350
230560650	SCOTT A & DEBRA J HOWELL	145 5TH AVE NW	HUTCHINSON	MN	55350
230900150	DENNIS H RIEDEL	655 HILLCREST RD NE	HUTCHINSON	MN	55350
230880220	GLEN E & DEBORAH L JORGENSEN	39 MCLEOD AVE NE	HUTCHINSON	MN	55350
230560645	CHASIDY STAMMER	135 5TH AVE NW	HUTCHINSON	MN	55350
230560640	RICHARD E WILLOBY	125 5TH AVE NW	HUTCHINSON	MN	55350
230880510	DAVID L RADUNZ	65 MCLEOD AVE NE	HUTCHINSON	MN	55350
230560620	JAMES & CLAIRE MURRAY REV TRST	1119 ABBOTT AVE	GLENCOE	MN	55336
230560610	ALAN V & JOAN L TEUBERT	105 5TH AVE NW	HUTCHINSON	MN	55350
230880520	BRYAN J MARCONCINI	77 MCLEOD AVE NE	HUTCHINSON	MN	55350
230960150	CHRISTOPHER SCHROEDER	677 BLUFF ST NE	HUTCHINSON	MN	55350
230650140	BEATRICE E KRUSSOW	106 5TH AVE NW	HUTCHINSON	MN	55350
230580080	CANDACE R BAUER	5604 HURON ST SE	PRIOR LAKE	MN	55372
230650110	CHRISTOPHER & JILL M RENSTROM	37 5TH AVE NW	HUTCHINSON	MN	55350
230650070	CHRISTOPHER J PLAMANN &	27 5TH AVE NW	HUTCHINSON	MN	55350
230650080	DANIEL HOUK	815 2ND AVE	HUTCHINSON	MN	55350
230650010	BRUCE & RAMONA R NELSON	546 MAIN ST N	HUTCHINSON	MN	55350
230900010	DEBORAH HEILMAN	624 HILLCREST RD NE	HUTCHINSON	MN	55350
230960160	KEVIN R & DONNA R HARTMANN	667 BLUFF ST NE	HUTCHINSON	MN	55350
230650020	JONATHAN D & MONICA L WEHLER	540 MAIN ST N	HUTCHINSON	MN	55350
230560060	PATRICIA A VLCEK	648 BLUFF ST NE	HUTCHINSON	MN	55350
230560050	JAMES L GRAF	658 BLUFF ST	HUTCHINSON	MN	55350
230900130	MERLIN C NASS	635 HILLCREST RD NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230630060	DOUGLAS A PETERS &	545 MAIN ST N	HUTCHINSON	MN	55350
230900110	MICHAEL J MILLER	115 6TH AVE NE	HUTCHINSON	MN	55350
230630070	JAMES H GIERKE	22 MCLEOD AVE NE	HUTCHINSON	MN	55350
230630100	GARY L SODERBERG	32 MCLEOD AVE NE	HUTCHINSON	MN	55350
230630110	ALEXANDER J EIDEN	38 MCLEOD AVE NE	HUTCHINSON	MN	55350
230560630	ALAN V & JOAN L TEUBERT	105 5TH AVE NW	HUTCHINSON	MN	55350
230580060	KELLY STEFFEN	1341 CAMPBELL LN NW	HUTCHINSON	MN	55350
230630140	KATHLEEN G CHRISTENSEN	19452 OMEGA AVE	HUTCHINSON	MN	55350
230560080	KEVIN KELLER	645 HILLCREST RD NE	HUTCHINSON	MN	55350
230630150	NATHAN W HELLAND	56 MCLEOD AVE NW	HUTCHINSON	MN	55350
230630160	KEVIN R & JODI L OLSON	66 MCLEOD AVE NE	HUTCHINSON	MN	55350
230580050	JEWELIE L FREDERICKS	121 6TH AVE NE	HUTCHINSON	MN	55350
230560555	THOMAS W BRADFORD	76 MCLEOD AVE NE	HUTCHINSON	MN	55350
230560556	JUSTIN E & MEYTAL STANCEK	86 MCLEOD AVE NE	HUTCHINSON	MN	55350
230560552	TAMMY R HELMKE	578 PROSPECT ST NE	HUTCHINSON	MN	55350
230650030	RANDY LEONARD ULRICH	536 MAIN ST N	HUTCHINSON	MN	55350
230560100	MERLIN C NASS	635 HILLCREST RD NE	HUTCHINSON	MN	55350
230580040	DUANE D UNTERBURGER	127 6TH AVE NE	HUTCHINSON	MN	55350
230960170	HAROLD & BEVERLY HANSON LIV TR	655 WALLER DR NE	HUTCHINSON	MN	55350
230900120	ROBERT A & REGINA E KUENZI	625 HILLCREST RD NE	HUTCHINSON	MN	55350
230560690	LARRY B GAUGER	247 5TH AVE NW	HUTCHINSON	MN	55350
230630050	STACIE L SERVATY	531 MAIN ST N	HUTCHINSON	MN	55350
230650100	RANDY P HEUER	35 5TH AVE NW	HUTCHINSON	MN	55350
230650130	LARRY F JR JOHNSON	51 5TH AVE NW	HUTCHINSON	MN	55350
231020040	DANIELLE M TRIMBO	317 GRIFFIN AVE NE	HUTCHINSON	MN	55350
231020045	JILL K WARNER	315 GRIFFIN AVE NE	HUTCHINSON	MN	55350
232330030	BRINKMAN FAMILY TRUST	1203 FAIRWAY AVE NW	HUTCHINSON	MN	55350
232330060	JUDITH M KREBSBACH	810 HILLCREST RD NE	HUTCHINSON	MN	55350
232330020	RICHARD H & BERNICE BAUMETZ	840 HILLCREST RD NE	HUTCHINSON	MN	55350
232330040	DONALD H & VONNIE BROTEN	830 HILLCREST RD NE	HUTCHINSON	MN	55350
232330050	BYRON KOHLS	820 HILLCREST RD NE	HUTCHINSON	MN	55350
232440250	KENDRA BROWN	825 HILLCREST RD NE	HUTCHINSON	MN	55350
232440255	DENNIS & BRENDA DUMMER	827 HILLCREST RD NE	HUTCHINSON	MN	55350
232440245	CAROL E AXT	835 HILLCREST RD NE	HUTCHINSON	MN	55350
230560660	HARRY & IRENE BLAKE REV TRUST	185 5TH AVE NW	HUTCHINSON	MN	55350
230580070	CHRISTOPHER HLAVKA	107 6TH ST NE	HUTCHINSON	MN	55350
230880615	CHRISTOPHER HLAVKA	107 6TH ST NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
232440260	KEVIN K HODSON	815 HILLCREST RD NE	HUTCHINSON	MN	55350
232440265	ORLIN A & ARLISS M ORTLOFF	817 HILLCREST RD NE	HUTCHINSON	MN	55350
230560010	KENT M & RENEE L GLESSING	638 BLUFF ST NE	HUTCHINSON	MN	55350
230560390	GREGORY J MORAN	595 PROSPECT ST NE	HUTCHINSON	MN	55350
230650090	DELORIS M OLSON	33 5TH AVE NW	HUTCHINSON	MN	55350
230960060	DONALD G & LEONA JANKE	657 BLUFF ST NE	HUTCHINSON	MN	55350
230560553	DAVID K DEMENGE	570 PROSPECT ST NE	HUTCHINSON	MN	55350
230650060	CHRISTOPHER J WILLEMSSEN	17 5TH AVE NW	HUTCHINSON	MN	55350
230580020	LAURA A CUMMINGS	139 6TH AVE NE	HUTCHINSON	MN	55350
230650050	JAMES F & ANN MARIE MARTINSON	15 5TH AVE NW	HUTCHINSON	MN	55350
230560040	TRAVIS B SHUFELT	632 BLUFF ST NE	HUTCHINSON	MN	55350
230630040	JUSTIN L HEMINGSEN	527 MAIN ST N	HUTCHINSON	MN	55350
230560400	FLOYD L GROEHLER	583 PROSPECT ST NE	HUTCHINSON	MN	55350
230580010	MARK D NISSE	145 6TH AVE NE	HUTCHINSON	MN	55350
230860160	JEREMIAH G CLARK	594 CARLISLE ST NE	HUTCHINSON	MN	55350
230960165	SIDNEY A GRAMS	645 WALLER DR NE APT 1	HUTCHINSON	MN	55350
230560554	JUDY R ANDERSON	564 PROSPECT ST NE	HUTCHINSON	MN	55350
230970010	SIDNEY A GRAMS	645 WALLER DR NE APT 1	HUTCHINSON	MN	55350
230560075	ROBERT J & SANDRA J DIETZ	155 6TH AVE NE	HUTCHINSON	MN	55350
230630180	BRADLEY D ZIEMAN	55 5TH AVE NE	HUTCHINSON	MN	55350
230960050	TIMOTHY H MOLITOR	647 BLUFF ST NE	HUTCHINSON	MN	55350
230650040	BRITT M GUSTAFSON	506 MAIN ST N	HUTCHINSON	MN	55350
230560410	JOEL & JEAN HARTELT	577 PROSPECT ST NE	HUTCHINSON	MN	55350
230630030	RODNEY L & JAN R DAUER	505 MAIN ST N	HUTCHINSON	MN	55350
230630170	DAVID J & JODI D ALLEX	75 5TH AVE NE	HUTCHINSON	MN	55350
230630080	TODD A PETERSEN	15 5TH AVE NE	HUTCHINSON	MN	55350
230860170	DEBRA A KRUEGER	1128 10TH ST E	GLENCOE	MN	55336
230630090	LUCAS J PETERSON	25 5TH AVE NE	HUTCHINSON	MN	55350
230560910	ANTHONY W & LINDA K ANDERBERG	120 5TH AVE NW / PO BOX 7434	HUTCHINSON	MN	55350
230560920	THOMAS L & CHERYL A GUSTAFSON	118 5TH AVE NW	HUTCHINSON	MN	55350
230560551	WILLARD W EXSTED	2124 10TH ST E	GLENCOE	MN	55336
230560870	ROGER L & CHRISTINE A KAUFMANN	116 5TH AVE NW	HUTCHINSON	MN	55350
230630130	WILLIAM J & DINA J HAWORTH	47 5TH AVE NE	HUTCHINSON	MN	55350
230560558	MICHAEL J TRETTIN	79 5TH AVE NE	HUTCHINSON	MN	55350
230630120	LINUS J & LISA HODGE SVODOBA	39 5TH AVE NE	HUTCHINSON	MN	55350
230560860	BEATRICE E KRUSSOW	106 5TH AVE NW	HUTCHINSON	MN	55350
230860150	JAIME R & ANGELA C BERGSTROM	593 CARLISLE ST NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230960040	MICHAEL R & MARY A NIECE	637 BLUFF ST NE	HUTCHINSON	MN	55350
230560090	ROBERT J DIETZ &	155 6TH AVE NE	HUTCHINSON	MN	55350
230960090	MARK C & MARY GUGGEMOS	626 WALLER DR NE	HUTCHINSON	MN	55350
230561170	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230560770	GLENN E LARSON	256 5TH AVE NW	HUTCHINSON	MN	55350
230560590	JOSHUA D GASPAR	534 PROSPECT ST NE	HUTCHINSON	MN	55350
230860130	MACKENZIE L KERN	575 CARISLE ST NE	HUTCHINSON	MN	55350
230860070	ROXANNE M HUBERT	584 CLARK ST NE	HUTCHINSON	MN	55350
230970030	JOEL R SCHWARZE	19266 SIOUX HILLS RD	HUTCHINSON	MN	55350
230960100	MARK C GUGGEMOS &	626 WALLER DR NE	HUTCHINSON	MN	55350
230960020	FINISHING TOUCH HOME SOLUTIONS	PO BOX 668	HUTCHINSON	MN	55350
230710070	RAYMOND P & ARLENE D SPURZEM	477 GLEN ST NW	HUTCHINSON	MN	55350
230860050	GRANT W BENJAMIN	595 CLARK ST NE	HUTCHINSON	MN	55350
230560440	DEON J & DEBBIE J RODER	531 PROSPECT ST NE	HUTCHINSON	MN	55350
230560880	STEPHEN C & MINDY SCHIMMEL	450 GLEN ST NW	HUTCHINSON	MN	55350
230860200	PAMELA D WHITE	554 CARLISLE ST NE	HUTCHINSON	MN	55350
230561200	RAYMOND P & ARLENE D SPURZEM	477 GLEN ST NW	HUTCHINSON	MN	55350
230860120	JERRY J ANDERSON	565 CARLISLE ST NE	HUTCHINSON	MN	55350
230860080	AMBURR L WHITE	574 CLARK ST NE	HUTCHINSON	MN	55350
230560600	JEFFREY G MAISCH	524 PROSPECT ST NE	HUTCHINSON	MN	55350
230960010	RONNIE H & GAIL TELECKY	607 BLUFF ST NE	HUTCHINSON	MN	55350
230860040	DANA J KAPING	585 CLARK ST NE	HUTCHINSON	MN	55350
230560350	LONNIE D & BARBARA J WILEY	596 BLUFF ST NE	HUTCHINSON	MN	55350
230960110	DONI ROBBEN	64188 330TH ST	WATKINS	MN	55389
230710060	W JOHN & JULIANNE TUPA	467 GLEN ST NW	HUTCHINSON	MN	55350
230960120	NAGEL PROPERTIES LLC	17965 718TH AVE	DASSEL	MN	55325
230560490	BOBBY C & NESHA M WITHERS	544 CARLISLE ST NE	HUTCHINSON	MN	55350
230970040	EGGE LIVING TRUST	7920 E MARIGOLD LN	PRESCOTT VAL	AZ	86314
230561210	W JOHN & JULIANNE TUPA	467 GLEN ST NW	HUTCHINSON	MN	55350
230860090	EUGENE H & LINDA WIEDENROTH	564 CLARK ST NE	HUTCHINSON	MN	55350
230860110	RICKY KRUEGER	555 CARLISLE ST NE	HUTCHINSON	MN	55350
230560570	PAUL GAINES	87 5TH AVE NE	HUTCHINSON	MN	55350
230560470	CHRIS D & SANDRA R JOHNSON	527 PROSPECT ST NE	HUTCHINSON	MN	55350
230860030	TERESA D HAMILTON	575 CLARK ST NE	HUTCHINSON	MN	55350
230560360	SHEILA M KRIENKE	584 BLUFF ST NE	HUTCHINSON	MN	55350
230561470	STEPHEN NOGA	26 5TH AVE NE	HUTCHINSON	MN	55350
230710050	SYLVIA R WOLTER	455 GLEN ST NW	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230560560	KIMBERLY A KOTZER	132 MAIN ST S	HUTCHINSON	MN	55350
230560550	GARY L & LOIS C HOFFMAN	545 CARLISLE ST NE	HUTCHINSON	MN	55350
230560495	JUSTIN L PETTERSON	540 CARLISLE ST NE	HUTCHINSON	MN	55350
230561190	SYLVIA R WOLTER	455 GLEN ST NW	HUTCHINSON	MN	55350
230860100	KASSI D LARSON	19960 JOAN AVE	HASTINGS	MN	55033
230561440	DASSEL MANAGEMENT LLC	720 CENTURY AVE SW STE 100	HUTCHINSON	MN	55350
230970050	SHELDON M MACKINNON	605 WALLER DR NE	HUTCHINSON	MN	55350
230560450	STEPHEN J HANSEN	103 5TH AVE NE	HUTCHINSON	MN	55350
230860020	DAVID L & LINDA M HARRIS	565 CLARK ST NE	HUTCHINSON	MN	55350
230560370	RANDY G & MARY E ANDERSON	20288 HWY 15 N STE 100	HUTCHINSON	MN	55350
230561450	JENNIFER A KERBER	13175 62ND ST	MAYER	MN	55360
230560190	JOHN & HEIDI MAKI	595 BLUFF ST NE	HUTCHINSON	MN	55350
230561120	STIX & BRIX INC	307 N HOLCOMBE AVE	LITCHFIELD	MN	55355
230561460	JAMES B RILEY	465 N MAIN ST N	HUTCHINSON	MN	55350
230710040	MARC J PLOCHER	17980 CSAH 15	DASSEL	MN	55325
230560460	DAVID & ROBIN B MCMURRAY	107 5TH AVE NE	HUTCHINSON	MN	55350
230560540	AUDREY P LANKEY	541 CARLISLE ST NE	HUTCHINSON	MN	55350
230610010	KATELYN M MOLDAN	544 CLARK ST NE	HUTCHINSON	MN	55350
230560500	SYBIL JENNINGS	1570 ADAMS ST SE	HUTCHINSON	MN	55350
230730120	BRENDA J QUAST	405 ROSE LN NE	HUTCHINSON	MN	55350
230560380	RANDY G & MARY E ANDERSON	20288 HWY 15 N STE 100	HUTCHINSON	MN	55350
230860010	JACQUELINE M RUZICKA	555 CLARK ST NE	HUTCHINSON	MN	55350
230560200	CHARLES L SHOWALTER	585 BLUFF ST NE	HUTCHINSON	MN	55350
230560480	LUIS C GARCIA	121 5TH AVE NE	HUTCHINSON	MN	55350
230561430	KAREN M SCHRADER	72 5TH AVE NE	HUTCHINSON	MN	55350
230970055	STEVEN L & HOLLY M WILLIAMS	361 SOUTH SHORE CIR / PO BOX 924	WINSTED	MN	55395
230710030	REBECCA J BLANK	17980 CSAH 15	DASSEL	MN	55325
230960130	STEVEN L & HOLLY M WILLIAMS	361 SOUTH SHORE CIR / PO BOX 924	WINSTED	MN	55395
230610020	BECKY J BRAATEN	534 CLARK ST NE	HUTCHINSON	MN	55350
230560510	STIX & BRIX INC	307 N HOLCOMBE AVE	LITCHFIELD	MN	55355
230590010	REX A & KIMBERLY A ERICKSON	590 PETERSON CIR NE	HUTCHINSON	MN	55350
230730010	HOLLY M SETTER	420 ROSE LN NE	HUTCHINSON	MN	55350
230561420	MICHAEL C & SARA JO POLLOCK	80 5TH AVE NE	HUTCHINSON	MN	55350
230840080	LINDA K BUROS	545 CLARK ST NE	HUTCHINSON	MN	55350
230560520	BLUE KIN HOMES LLC	1785 E SAHARA AVE #490-1208	LAS VEGAS	NV	89104
230560210	KIELER CONST & HOLDINGS LLC	3600 HOLLY LN STE 10	PLYMOUTH	MN	55447
230730110	JOHN S & KELLI J SAWYER	415 ROSE LN NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230561380	TERRY L MCDONALD	448 PROSPECT ST NE	HUTCHINSON	MN	55350
230560530	DOUGLAS L & NANCY K DWINNELL	18166 668TH AVE	DARWIN	MN	55324
230610030	BRADLEY J KASID	524 CLARK ST NE	HUTCHINSON	MN	55350
230710025	TIMOTHY D & JACINDA A WALTER	425 GLEN ST NW	HUTCHINSON	MN	55350
230730020	JOEL D & AMY C NIEMEYER	430 ROSE LN NE	HUTCHINSON	MN	55350
230840070	TERRY L & FAITH CHRISTENSEN	535 CLARK ST NE	HUTCHINSON	MN	55350
230590020	PRESTON A FOX	1055 JORGENSON ST SE	HUTCHINSON	MN	55350
230840010	MARY E ANDERSON	1230 7TH AVE NW	HUTCHINSON	MN	55350
230560220	DUSTIN J HATTON	565 BLUFF ST NE	HUTCHINSON	MN	55350
230561390	RICHARD K & KIMBERLEY SCHUMANN	486 PROSPECT ST NE	HUTCHINSON	MN	55350
230620010	RODNEY & REBECCA SAAR	595 PETERSON CIR NE	HUTCHINSON	MN	55350
230610040	MELISSA STEINBEISSER	514 CLARK ST NE	HUTCHINSON	MN	55350
230730100	RAYMOND F FIALA	425 ROSE LN NE	HUTCHINSON	MN	55350
230730030	RICHARD M HANLEY	440 ROSE LN NE	HUTCHINSON	MN	55350
230561710	JUSTIN J KOHLS	104 5TH AVE NE	HUTCHINSON	MN	55350
230840060	MN CONF ASSOC OF SEVENTH-DAY	7384 KIRKWOOD CT	MAPLE GROVE	MN	55369
230560230	JAMES & LAURIE HULKONEN REV TR	555 BLUFF ST NE	HUTCHINSON	MN	55350
230840020	RANDY G & MARY E ANDERSON	20288 HWY 15 N STE 100	HUTCHINSON	MN	55350
230610050	DANIEL J & DEAUN BRINKMAN	149 5TH AVE NE	HUTCHINSON	MN	55350
230590030	CHRYSTAL L MORTENSEN	570 PETERSON CIR NE	HUTCHINSON	MN	55350
230561400	JOSHUA L HENNESSEY	476 PROSPECT ST NE	HUTCHINSON	MN	55350
230730090	WAYNE D & JENNIFER J JOHNSON	12371 RUSSELL LAKE RD	BRAINERD	MN	56401
230561690	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230620020	DWAYNE L & DIANE BRIESE	585 PETERSON CIR NE	HUTCHINSON	MN	55350
230560260	JODI M GALLES	535 BLUFF ST NE	HUTCHINSON	MN	55350
230840030	HW HOLDINGS LLC	PO BOX 2349	WATFORD CITY	ND	58854
230730045	BRIAN ERNHART	540 PARK ST E	NEW GERMANY	MN	55367
230561410	MICHAEL J LOOMIS	19528 SKYVIEW CIR	HUTCHINSON	MN	55350
230560170	CRAIG V VONBERGE	262 6TH AVE NE	HUTCHINSON	MN	55350
230730080	CONNIE STOCK	445 ROSE LN NE	HUTCHINSON	MN	55350
232400070	JOHN G BOLLIG	544 HIGHLAND PARK DR NE	HUTCHINSON	MN	55350
230561720	BRUCE B & CONNIE A DAHLBERG	65885 216TH ST	DARWIN	MN	55324
232460050	MARSHALL CONCRETE PRODUCTS INC	2610 MARSHALL ST NE	MINNEAPOLIS	MN	55418
230730050	BRIAN ERNHART	540 PARK ST E	NEW GERMANY	MN	55367
232400060	GERALD W & JUNE L PAEHLKE	545 E HIGHLAND PK DR NE	HUTCHINSON	MN	55350
230590040	BRUCE F & PATRICIA BLOCK	560 PETERSON CIR NE	HUTCHINSON	MN	55350
230840050	THOMAS PARKER	520 HWY 22	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230730070	MELINDA J ARENS	455 ROSE LN NE	HUTCHINSON	MN	55350
230590060	RODNEY W & BARBARA MARKGRAF	575 PETERSON CIR	HUTCHINSON	MN	55350
230730060	FRANCIS E JR BURMIS	465 ROSE LN NE	HUTCHINSON	MN	55350
230561370	HERBERT & ELIZABETH KRIENKE	456 PROSPECT ST NE	HUTCHINSON	MN	55350
232460025	VALLEY DEVELOPMENT LLC	7500 145TH ST W	APPLE VALLEY	MN	55124
230560250	RALPH W HAKEL REVOCABLE TRUST	525 BLUFF ST NE	HUTCHINSON	MN	55350
230560275	BRUCE F & PATRICIA BLOCK	560 PETERSON CIR NE	HUTCHINSON	MN	55350
230560160	MARSHALL CONCRETE PRODUCTS INC	2610 MARSHALL ST NE	MINNEAPOLIS	MN	55418
230590050	DALE M & SHARI L ZIEMAN	565 PETERSON CIR NE	HUTCHINSON	MN	55350
230840040	VICTORIA A ANDERSON	514 BLUFF ST NE	HUTCHINSON	MN	55350
230561680	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561595	BRIAN C PONATH	448 PROSPECT ST NE	HUTCHINSON	MN	55350
230560300	BRUCE F & PATRICIA BLOCK	560 PETERSON CIR NE	HUTCHINSON	MN	55350
230560165	MARSHALL CONCRETE PRODUCTS INC	2610 MARSHALL ST NE	MINNEAPOLIS	MN	55418
230620030	CHAD W & MARCIA A STASSEN	252 6TH AVE NE	HUTCHINSON	MN	55350
232400080	MARK SKELTON	534 HIGHLAND PARK DR NE	HUTCHINSON	MN	55350
230560270	TIMOTHY J & SUSAN L STEUCK	19113 703RD AVE	DASSEL	MN	55325
230561730	LESTER ZIEGLER TRUST	1401 MAIN ST W APT 222	SILVER LAKE	MN	55381
232400050	BRUCE B & CONNIE A DAHLBERG	65885 216TH ST	DARWIN	MN	55324
230560310	DALE M & SHARI L ZIEMAN	565 PETERSON CIR NE	HUTCHINSON	MN	55350
230560280	JON H QUADE	215 5TH AVE NE	HUTCHINSON	MN	55350
230561660	JUANITA J REA	154 5TH AVE NE	HUTCHINSON	MN	55350
230560240	TRAVIS JOSEPH KNUDSON	205 5TH AVE NE	HUTCHINSON	MN	55350
230560330	ALLEN O DAVIDSON	229 5TH AVE NE	HUTCHINSON	MN	55350
230750010	BEVERLY R STEVENS	449 PROSPECT ST NE	HUTCHINSON	MN	55350
230562190	L H MELTZER LLC	513 SUMMIT AVE	ST PAUL	MN	55102
230561670	DEBRA A SALIM	481 CLARK ST NE	HUTCHINSON	MN	55350
232400090	LYLE & CAROL EMME	524 HIGHLAND PK DR NE	HUTCHINSON	MN	55350
232400040	STEVEN & LINDA HORKY	525 HIGHLAND PARK DR NE	HUTCHINSON	MN	55350
230561650	RICHARD M PAUL	194 5TH AVE NE	HUTCHINSON	MN	55350
230561590	ERIC WANGEN	436 PROSPECT ST NE	HUTCHINSON	MN	55350
230560340	PETER M & LINDA MERKINS	237 5TH AVE NE	HUTCHINSON	MN	55350
230560290	JON H QUADE	215 5TH AVE NE	HUTCHINSON	MN	55350
230562440	FORD ARTHUR ROLFE	20433 624TH AVE	LITCHFIELD	MN	55355
230562300	DEANE DIETEL	845 2ND AVE SE	HUTCHINSON	MN	55350
230562310	NORMAN DARYL WRIGHT	187 3RD AVE NW	HUTCHINSON	MN	55350
230562320	DISABLED AMERICAN VETS CH #37	177 3RD AVE NW	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230562330	DISABLED AMERICAN VETS CH #37	177 3RD AVE NW	HUTCHINSON	MN	55350
230562340	RONDA L ROBBEN	157 3RD AVE NW	HUTCHINSON	MN	55350
230562430	FORD ARTHUR ROLFE	20433 624TH AVE	LITCHFIELD	MN	55355
230640010	GUY M & BETH A CASPERS	1145 WEST SHORE DR SW	HUTCHINSON	MN	55350
230640020	GUY M & BETH A CASPERS	1145 WEST SHORE DR SW	HUTCHINSON	MN	55350
230562420	FORD A ROLFE	20433 624TH AVE	LITCHFIELD	MN	55355
230562410	DALE H RITZ	901 HAYDEN AVE SW	HUTCHINSON	MN	55350
230562400	DALE H RITZ	901 HAYDEN AVE SW	HUTCHINSON	MN	55350
230730040	KYLE T FELBER	450 ROSE LN NE	HUTCHINSON	MN	55350
230561480	LINDA R BUTZIN	16 5TH AVE NE	HUTCHINSON	MN	55350
230561640	TINEA D & JAMES E GRAHAM	480 BLUFF ST NE	HUTCHINSON	MN	55350
232400100	DAVID T & STEPHANIE L FRENTZEL	215 100TH ST SE	BENSON	MN	56215
230560150	JOHN C TUCKER	245 HWY 7 E	HUTCHINSON	MN	55350
230560320	VICTOR & S L PROESCHEL REV TRS	1628 FORD AVE N	GLENCOE	MN	55336
232400030	CHRISTOPHER R EMME	515 HIGHLAND PARK DR NE	HUTCHINSON	MN	55350
230561630	JULIE SCHAFFER ETAL	14601 UNDULATE CT	HUTCHINSON	MN	55350
232460065	MARSHALL CONCRETE PRODUCTS INC	2610 MARSHALL ST NE	MINNEAPOLIS	MN	55418
230560125	ROBERT E SANDSTEDE	70978 CSAH 18	DASSEL	MN	55325
230561620	NIKKI G KRUEGER	466 BLUFF ST NE	HUTCHINSON	MN	55350
232460100	STIX & BRIX INC	307 N HOLCOMBE AVE	LITCHFIELD	MN	55355
230560140	ROBERT E SANDSTEDE	70978 CSAH 18	DASSEL	MN	55325
232460090	CHARLES A & COLLEEN MALLINSON	475 HWY 7 E	HUTCHINSON	MN	55350
230561610	CORY R & KRISTINE N OTTE	456 BLUFF ST NE	HUTCHINSON	MN	55350
232460110	RUSSELL & I CHRISTENSEN	326 HWY 7 E	HUTCHINSON	MN	55350
232460200	ROBERT W PETERSON ETAL	570 LYNN RD SW	HUTCHINSON	MN	55350
232460150	ROBERT W PETERSON ETAL	570 LYNN RD SW	HUTCHINSON	MN	55350
232460120	ROBERT W PETERSON ETAL	570 LYNN RD SW	HUTCHINSON	MN	55350
232460140	JD PROPERTIES LLC	306 HIGHWAY 7 EAST	HUTCHINSON	MN	55350
232460190	WARREN DEMUTH &	3005 W 96TH ST CIR	BLOOMINGTON	MN	55431
232460180	ROLAND S & MARY L EBENT	472 HWY 7 E / PO BOX 97	HUTCHINSON	MN	55350
232460170	JOHN H & PATRICIA A PAULSEN	20317 KOGLIN RD	HUTCHINSON	MN	55350
232460160	BERNARD M MCRAITH	600 TYLER ST SW	HUTCHINSON	MN	55350
230561900	RICHARD & GLORIA PAUL	70 ORCHARD AVE SE	HUTCHINSON	MN	55350
230561950	BERMER CORPORATION	PO BOX 174	CORTEZ	CO	81321
230561910	HUTCHINSON 18 2007 LLC	6377 SMITHTOWN RD	EXCELSIOR	MN	55331
230561960	V V PROPERTY LLC	275 E 4TH ST SUITE 720	ST PAUL	MN	55101
232480140	B & T PROPERTIES	PO BOX 575	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
232460210	B & T PROPERTIES	PO BOX 575	HUTCHINSON	MN	55350
230320100	V V PROPERTY LLC	275 E 4TH ST SUITE 720	ST PAUL	MN	55101
232540024	HILLYARD INC	302 4TH ST N	ST JOSEPH	MO	64501
230500020	JASON D RANNOW	75 ARCH ST	HUTCHINSON	MN	55350
230500025	STATE OF MINNESOTA	900 NCL TOWER / 445 MINNESOTA ST	ST PAUL	MN	55101
230500010	TRUST AGREEMENT OF KENNETH &	43 ARCH ST SE	HUTCHINSON	MN	55350
233090020	SCOTT BRADFORD	9168 WASSERMANN CT	VICTORIA	MN	55386
230360200	CROW RIVER COUNTRY CLUB	915 COLORADO ST NW	HUTCHINSON	MN	55350
230250200	CROW RIVER COUNTRY CLUB	915 COLORADO ST NW	HUTCHINSON	MN	55350
232910030	EDWIN R PLOWMAN	1125 13TH AVE NW	HUTCHINSON	MN	55350
232910020	TROY A & TAMARA M SCHWARZE	1135 13TH AVE NW	HUTCHINSON	MN	55350
232910010	SHANE M & GRETCHEN TANKERSLEY	1145 13TH AVE NW	HUTCHINSON	MN	55350
230365900	MARK E FRATZKE	710 NORTH HIGH DR #25	HUTCHINSON	MN	55350
230366000	COLLEGE HILL DEVELOPERS	22 N MAIN ST	HUTCHINSON	MN	55350
230365600	CROWN PROPERTIES OF MN LLC	20288 HWY 15 N STE 100	HUTCHINSON	MN	55350
230880010	JASON & ANJULI MAYER	745 MAIN ST N	HUTCHINSON	MN	55350
230880100	RUSSELL R & DORIS NELSON	746 OAK ST NE	HUTCHINSON	MN	55350
230880020	DAVID C & JOYCE K SCHRUPP	825 2ND AVE SW	HUTCHINSON	MN	55350
230880090	DANE D CRUCKSON	734 OAK ST NE	HUTCHINSON	MN	55350
230880030	DANIEL CURTISS	725 MAIN ST N	HUTCHINSON	MN	55350
230880080	GERALD B & JERILYN A LAMP	724 OAK ST NE	HUTCHINSON	MN	55350
230880040	SIRAK TEKLE	18036 DUNCAN CIR	FARMINGTON	MN	55024
230880060	DIANE C HELSINGER	31 COLLEGE AVE NE	HUTCHINSON	MN	55350
230880050	SHANNON D & CARLA J JURGENS	705 MAIN ST N	HUTCHINSON	MN	55350
230560700	GARTH R & KARYN K HEYDT	253 5TH AVE NW	HUTCHINSON	MN	55350
230561810	SCOOTER T BOESE	218 5TH AVE N	HUTCHINSON	MN	55350
230560030	BRENDA L LEE	626 BLUFF ST NE	HUTCHINSON	MN	55350
230560070	RYAN S & SARA R MESSNER	620 BLUFF ST NE	HUTCHINSON	MN	55350
230562140	NORTHLAND INVESTMENTS LLC &	3112 GOLF RD	EAU CLAIRE	WI	54701
230562560	STEARNSWOOD INC	320 3RD AVE NW / PO BOX 50	HUTCHINSON	MN	55350
230562550	STEARNSWOOD INC	320 3RD AVE NW / PO BOX 50	HUTCHINSON	MN	55350
230561962	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230321200	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
232380120	DEER PARK APARTMENTS LLP	1707 GOLD DR S #200	FARGO	ND	58103
230366500	MARK E FRATZKE	710 NORTH HIGH DR #25	HUTCHINSON	MN	55350
232450010	J & D BONNIWELL TRUST	505 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
232450015	ELAINE E BLADE LIVING TRUST	515 NORTHWOODS AVE NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
232460040	MARSHALL CONCRETE PRODUCTS INC	2610 MARSHALL ST NE	MINNEAPOLIS	MN	55418
230561700	JEREMY L DAMMANN	108 5TH AVE NE	HUTCHINSON	MN	55350
232420030	DALADO LLC	1125 WEST SHORE DR SW	HUTCHINSON	MN	55350
232420035	LAVONNE N HANSEN &	1125 WESTSHORE DR SW	HUTCHINSON	MN	55350
232400120	MARTY C & DAWN P OGREN	485 HWY 7 E	HUTCHINSON	MN	55350
232400110	RICHARD L JR DECKER	504 HIGHLAND PARK DR NE	HUTCHINSON	MN	55350
232400020	LUANN MARIE SPEARS	505 HWY 7 E	HUTCHINSON	MN	55350
230363350	STEARNSWOOD INC	320 3RD AVE NW / PO BOX 50	HUTCHINSON	MN	55350
232400010	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
232460135	HOWARD PROPERTIES	16 GROVE ST SW	HUTCHINSON	MN	55350
230561870	TIMOTHY R & ELISABETH THEISEN	250 GAUGER ST NE	HUTCHINSON	MN	55350
230561920	RONALD G BURR	5999 17TH ST W	IDAHO FALLS	ID	83402
230561860	GEORGE M LEHN &	237 4TH AVE NE	HUTCHINSON	MN	55350
230561880	THOMAS V & DEBRA WIPRUD	257 GAUGER ST NE	HUTCHINSON	MN	55350
232540020	DUANE M HAEFNER	150 MICHIGAN ST SE	HUTCHINSON	MN	55350
230561000	PAUL G KOENIG	62547 150TH ST	LITCHFIELD	MN	55355
230560990	BEVERLY E SCHEURER	4436 WASHINGTON BLVD	MADISON LAKE	MN	56063
230560960	JESSICA L ARTIBEE	462 JAMES ST NW	HUTCHINSON	MN	55350
230560950	SARAH S SMOCK	452 JAMES ST NW	HUTCHINSON	MN	55350
230561030	PHYLLIS BERDE	44 QUALITY AVE S	LAKELAND	MN	55043
230561020	TYLER BRATSCH	183 4TH AVE NW	HUTCHINSON	MN	55350
230561040	CHRISTOPHER R YOCH	1031 PRAIRIE VIEW DR SW	HUTCHINSON	MN	55350
230561050	LARRY M & PATRICIA J DEWITT	177 4TH AVE NW	HUTCHINSON	MN	55350
230560840	SAM ULLAND	PO BOX 907	WINSTED	MN	55395
230560850	CLAUDE D & BARBARA SCHULTZE	201 4TH AVE NW	HUTCHINSON	MN	55350
230560830	HOME STATE BANK	745 HIGHWAY 7 WEST	HUTCHINSON	MN	55350
230560760	LANCE T & PATTY L KETCHUM	224 5TH AVE NW	HUTCHINSON	MN	55350
234280120	BRIAN J & LORI J KAPING	15407 W CAMINO ESTRELLA DR	SURPRISE	AZ	85374
234280110	MARIAN & DAVID SKAAR REV TRUST	1404 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280130	JASON M FRATZKE	1412 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280100	DOUGLAS A & CATHERINE M RETTKE	1372 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280140	DAVID A & SUSAN M FAUTH TRUST	1416 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280280	BRIAN M & STEPHANIE FITZGERALD	1397 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280210	JOSEPH R JR PERRAULT	1444 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280090	DAVID J & RENEE WETTERLING	1396 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280270	JOHN O & KAREN G GREIN	1391 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280150	JEFFREY R & JENNIFER L RENSCH	1420 HERITAGE AVE NW	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
234280590	HUTCHINSON FAIRWAY DEVELOPMENT	114 SANDY HOOK RD	CHANHASSEN	MN	55317
234280260	CHAD KABES	1385 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280580	HUTCHINSON FAIRWAY DEVELOPMENT	114 SANDY HOOK RD	CHANHASSEN	MN	55317
234280080	JOSEPH ALAN ULLIAN &	1392 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280160	JOSEPH PATRICK TRACY &	1432 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280170	JOSEPH P & ELLEN R TRACY	1432 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280070	KEVIN R COMPTON	66872 CSAH 33	DARWIN	MN	55324
233270050	CLAYTON P & LYNN D ARTIBEE	1332 BIRDIE CT NW	HUTCHINSON	MN	55350
234280180	JOSEPH P & ELLEN R TRACY	1432 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280060	GREGREY J & LINDA L MURCH	1384 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280250	THE TRUSTEES OF THE DIOCESE	1730 CLIFTON PL #201	MINNEAPOLIS	MN	55403
233270060	MICHAEL L KUTTER	1335 BIRDIE CT NW	HUTCHINSON	MN	55350
234280240	DALE D & LISA J BAKER	1373 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280230	JOSEPH C SCHULTZ ETAL	1390 BROOKVIEW DR	WINONA	MN	55987
234280050	SARA L GIRARD	1376 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270040	JOHN C & JANE A MALLAK	1326 BIRDIE CT NW	HUTCHINSON	MN	55350
233270070	PETER JOSEPH QUINN	1329 BIRDIE CT NW	HUTCHINSON	MN	55350
234280220	PETER J & SHANNON M MARKOVIC	1361 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280040	SARA L GIRARD	1376 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270090	MICHAEL D KIEFER	1265 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270100	WALTER & DIANE FERGUSON	1245 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270010	THOMAS M HARMS	1355 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280030	DOUGLAS A & CATHERINE M RETTKE	1372 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270080	DOUGLAS ANKRUM	1285 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270110	ROGER W & RITA M TIEDE	1225 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270020	RYAN M ELBERT	1335 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280020	BRIAN M & CAROL J STARK	1368 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270030	BRIAN & MONICA MOHR	1325 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270120	ROGER W & RITA M TIEDE	1225 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280010	STEPHEN C & SHARON PETERSON	1364 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270130	PATRICK & NANCY PESTA WALSH	1360 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270140	JOAN D DIXON	1352 HERITAGE AVE NW	HUTCHINSON	MN	55350
230364700	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
234950010	MATTHEW J LYNAUGH &	455 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
232890010	DAVID P PULKRABEK ETAL	1165 13TH AVE NW	HUTCHINSON	MN	55350
232890015	GARY R & SHARON M DANIELS	20092 LAKE HOOK RD	HUTCHINSON	MN	55350
233270230	CORY & LEANN GALLAGHER	1270 HERITAGE AVE NW	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

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233270240	GARY F & CONNIE J SCHMIDT	1240 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270150	SHARON SCHOLL	1344 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270250	RANDY R BREUER	1200 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270180	VIRGIL & JUDITH BUBOLTZ REV TR	1320 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270160	DAVID W & ROSANN C MAHER	1336 HERITAGE AVE NW	HUTCHINSON	MN	55350
233270170	DEAN A & LISA A KIRCHOFF	1328 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280370	NORMA & RICHARD COWMAN TRSTEES	1189 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280380	LEE R & JUDY A THUNSTROM	1187 OAKWOOD CT NW	HUTCHINSON	MN	55350
233270220	LARRY & SHARON ROMO	1267 BIRDIE CIR NW	HUTCHINSON	MN	55350
234280390	NINA V MATTKINS	1185 OAKWOOD CT NW	HUTCHINSON	MN	55350
232380045	KON R & DIANE M SORENSEN	979 HILLCREST RD NW	HUTCHINSON	MN	55350
232380040	KON R & DIANE M SORENSEN	979 HILLCREST RD NW	HUTCHINSON	MN	55350
232380016	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
232460035	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230750020	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
233270190	BUD L & LOIS M MORROW TRUSTEES	1278 BIRDIE CIR NW	HUTCHINSON	MN	55350
234280400	GEORGE S SR STANLEY	1183 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280360	EVERETT G & KATHERINE A HANTGE	1191 OAKWOOD CT NW	HUTCHINSON	MN	55350
233270210	RYAN A & STACY J JURGENSON	20418 205TH CT	HUTCHINSON	MN	55350
233270200	RENAE & MICHAEL MCKIMM TRSTEES	1268 BIRDIE CIR NW	HUTCHINSON	MN	55350
234280410	DONALD E & MARION PADRNOS	1181 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280350	TYRONE V & VEREEN L WACKER	1193 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280420	JARVIS J HAUGEBERG	1179 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280340	GUY FRANK ETTEL	1195 OAKWOOD CT	HUTCHINSON	MN	55350
234280430	LANCE L SCHUETTE	1177 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280440	RICHARD N LENNES TRUST &	1175 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280330	ROLLIN E & CAROL M KUBASCH	1197 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280450	BART P BRADFORD	20752 196TH RD	HUTCHINSON	MN	55350
234280320	ADA E SCHAUER	1199 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280310	REBECCA J CHRISTIANS	1201 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280460	RICHARD & JEANNE STEWART TRUST	1171 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280300	RICHARD J & DEE ANN CROSBY	1203 OAKWOOD CT NW	HUTCHINSON	MN	55350
233260100	DUANE M & TAMARA R JELKIN	1220 OAKWOOD LN NW	HUTCHINSON	MN	55350
234280520	LEROY H & NANCY K MACKEDANZ	PO BOX 67	HUTCHINSON	MN	55350
234280470	DIANE L HESS	1169 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280290	KATHLEEN M MCGRAW	1205 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280510	PATRICIA A MARCONCINI &	1168 OAKWOOD CT NW	HUTCHINSON	MN	55350

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234280530	NORMA M SCHWICHTENBERG REV TRT	1180 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280500	AMANDA M DONNAY	1162 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280480	JOHN J & LORETTA M BERNHAGEN	1167 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280490	LAVONNE J FLEMMING	1156 OAKWOOD CT NW	HUTCHINSON	MN	55350
234280540	BEVERLY J LUKE TRUST	1186 OAKWOOD CT NW	HUTCHINSON	MN	55350
233980030	CHET & ASSOCIATES	16377 SO BOND LAKE ESTATES	MINONG	WI	54859
233980040	CHET & ASSOCIATES	16377 SO BOND LAKE ESTATES	MINONG	WI	54859
232910040	DAVID M HUNSTAD	1115 13TH AVE NW	HUTCHINSON	MN	55350
233260090	DANIEL L & PAMELA A HOLY	13255 W MULBERRY DR	LITCHFIELD PAF	AZ	85340
233260010	SHERMAN L MCCORMICK	1207 OAKWOOD LN NW	HUTCHINSON	MN	55350
233260080	MICHAEL P & AMBER K CANNON	1212 OAKWOOD LN NW	HUTCHINSON	MN	55350
233980050	CHET & ASSOCIATES	16377 SO BOND LAKE ESTATES	MINONG	WI	54859
233260020	KATHRYN M BEELER	1205 OAKWOOD LN NW	HUTCHINSON	MN	55350
232890040	ROBERT J BASEMAN	1140 13TH AVE NW	HUTCHINSON	MN	55350
232890030	J SCOTT PLOWMAN FAMILY TRUST	1204 OAKWOOD LN NW	HUTCHINSON	MN	55350
233260070	ROBB & MARY TOTUSHEK	1208 OAKWOOD LN NW	HUTCHINSON	MN	55350
233980060	CHET & ASSOCIATES	16377 SO BOND LAKE ESTATES	MINONG	WI	54859
233260030	SCOTT R & ABRAH S RENNING	1203 OAKWOOD LN NW	HUTCHINSON	MN	55350
233260060	J SCOTT PLOWMAN FAMILY TRUST	1204 OAKWOOD LN NW	HUTCHINSON	MN	55350
233260040	RANDALL M JR STUCKEY	1201 OAKWOOD LN NW	HUTCHINSON	MN	55350
233260050	RYAN A & MICHELLE A HEINING	1200 OAKWOOD LN NW	HUTCHINSON	MN	55350
230365700	CHARLES H BULLERT	951 GOLF COURSE RD NW	HUTCHINSON	MN	55350
231040080	PHILLIP & DOREEN BURKS	4 11TH AVE NE	HUTCHINSON	MN	55350
231040070	RONALD R & LINDA L NYSTROM	14 10TH AVE NE	HUTCHINSON	MN	55350
233090030	SCOTT BRADFORD	9168 WASSERMANN CT	VICTORIA	MN	55386
231060340	CARLA M REINOWSKI	166 11TH AVE NE	HUTCHINSON	MN	55350
231040060	DAVID L & MONYNE E COTTON	24 10TH AVE NE	HUTCHINSON	MN	55350
231060350	TYLER A POSUSTA	165 10TH AVE NE	HUTCHINSON	MN	55350
231040090	RANDALL S BORG	1001 MAIN ST N	HUTCHINSON	MN	55350
231040050	DEREK PLOMBON	34 10TH AVE NE	HUTCHINSON	MN	55350
232380070	DAVID P DUMMER	999 MAIN ST N	HUTCHINSON	MN	55350
231040040	APHRA B FOWLER	44 10TH AVE NE	HUTCHINSON	MN	55350
231040030	KARLA L MORAWITZ	54 10TH AVE NE	HUTCHINSON	MN	55350
231040020	DENNIS & LINDA RUZICKA	64 10TH AVE NE	HUTCHINSON	MN	55350
231040010	BRIAN J & RACHEL M GARTNER	74 10TH AVE NE	HUTCHINSON	MN	55350
231060420	JACQUELINE K RUSSELL	106 10TH AVE NE	HUTCHINSON	MN	55350
231060430	STEVEN H & ROCHELLE ABRAHAMSON	116 10TH AVE NE	HUTCHINSON	MN	55350

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231060440	JOEL M & TRICIA S SHEGGEBY	126 10TH AVE NE	HUTCHINSON	MN	55350
231060450	BEVERLY J ZUMACH TRUST	146 10TH AVE NE	HUTCHINSON	MN	55350
231060460	TIMOTHY A GROTH &	156 10TH AVE NE	HUTCHINSON	MN	55350
231060470	RAYMOND E & LUCILLE KRUEGER	166 10TH AVE NE	HUTCHINSON	MN	55350
232360080	DARRELL A ONDRACHEK	5 9TH AVE NE	HUTCHINSON	MN	55350
232360070	ANDREW M BONDERMAN	209 SUMMIT AVE NW / PO BOX 543	SILVER LAKE	MN	55381
232350010	BRENT A & JENNIFER L SCHMIDT	45 9TH AVE NE	HUTCHINSON	MN	55350
232340150	ANDREW P CARLSON	55 9TH AVE NE / PO BOX 7404	HUTCHINSON	MN	55350
232340140	BRANDON R HOFFMAN &	65 9TH AVE NE	HUTCHINSON	MN	55350
232340130	THERESA M FIELD	75 9TH AVE NE	HUTCHINSON	MN	55350
232320200	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
232360060	CHARLES UPEGUI	4 9TH AVE NE	HUTCHINSON	MN	55350
232360050	DONALD RUZSA	6 9TH AVE NE	HUTCHINSON	MN	55350
232350020	SHIRLEY E MORAN	890 OAK ST NE	HUTCHINSON	MN	55350
232340070	ROOSEVELT VIEW LLC	PO BOX 2887	WALLA WALLA	WA	99362
232340060	MARK F & BARBARA L RIEGER	888 ELM ST NE	HUTCHINSON	MN	55350
232340080	CURTIS A FORSETH	887 OAK ST NE	HUTCHINSON	MN	55350
232350030	ROSIE A NELSON	886 OAK ST NE	HUTCHINSON	MN	55350
232340050	ARCHIE D & SANDRA K KUCERA	886 ELM ST NE	HUTCHINSON	MN	55350
232360040	BRUCE & ANITA CROSBY	879 MAIN ST N	HUTCHINSON	MN	55350
232350040	DAVID L WILL	882 OAK ST NE	HUTCHINSON	MN	55350
232340090	ROBERT B RUZICKA	883 OAK ST NE	HUTCHINSON	MN	55350
232320180	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
232340040	ROGER LEE BERGGREN	882 ELM ST NE	HUTCHINSON	MN	55350
233090010	HUTCHINSON MEADOWS ASSOCIATION	8525 EDINBROOK CROSSING	BROOKLYN PAR	MN	55443
233090240	ARLEN M & CAROLE SOLIE	861 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090250	DONALD W & PHYLLIS M HECHT	857 GREENSVIEW CT NW	HUTCHINSON	MN	55350
232360030	PAUL J & COLLEEN TREBIL	19565 CO RD 9	LESTER PRAIRI	MN	55354
232350050	MATTHEW T & DEANA D SHAW	878 OAK ST NE	HUTCHINSON	MN	55350
232340100	MICHAEL P CAMPA &	879 OAK ST NE	HUTCHINSON	MN	55350
232340030	KIRK JR HENDRICKSON	878 ELM ST NE	HUTCHINSON	MN	55350
233090230	ELSIE C BECKER	865 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090260	SHIRLEY A OTTO	853 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090150	TRUST AGREEMENT OF DAVID AND	844 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090270	LEE A & BONITA K WENDT	849 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090160	GLORIA A HIMLE	848 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090220	JERRY A & MALENE A CARLSON	869 GREENSVIEW CT NW	HUTCHINSON	MN	55350

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233090140	JOEL R SCHWARZE ETAL	840 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090170	KENNETH J & KAREN E PRIHODA	852 GREENSVIEW CT NW	HUTCHINSON	MN	55350
232350060	JARROD B PEDERSON	874 OAK ST NE	HUTCHINSON	MN	55350
232340110	ROBERT & ARLENE BENSHOOF	875 OAK ST NE	HUTCHINSON	MN	55350
232340020	MAVIS V SCHWANKE	874 ELM ST NE	HUTCHINSON	MN	55350
232360020	MN CONF ASSOC OF SEVENTH-DAY	7384 KIRKWOOD CT	MAPLE GROVE	MN	55369
232360010	AVEYRON HOMES INC	222 5TH AVE NW	HUTCHINSON	MN	55350
233090130	MELINDA K SAMUELSON	836 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090210	TYLER A KRISCHEL	873 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090280	DIETER & SHARON BARGEL	845 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090200	DARRYL C JOHNSON REV TRUST	425 WASHINGTON AVE W	HUTCHINSON	MN	55350
233090180	HEATHER N HOECKE	1217 PEREGRINE CIR	LINO LAKES	MN	55038
232350070	QUINTESS ASSET MANAGEMENT LLC	21020 654TH AVE	LITCHFIELD	MN	55355
233090120	DARLEEN M KNIGGE	832 GREENSVIEW CT NW	HUTCHINSON	MN	55350
232340120	MICHEAL A CHRISTENSON &	65 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
232340010	WILLIS G & SHARON M GREELEY	75 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
233090190	KENNETH E SCHULTZ LIV TRST AGM	860 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090290	PATRICIA L PETERSON	841 GREENVIEW CT NW	HUTCHINSON	MN	55350
230900560	TINA M SHAFER	405 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
233090300	ROLLAND H JENSEN	837 GREENSVIEW CT NW	HUTCHINSON	MN	55350
230900570	ADAM N BREITBARTH	415 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
230900580	RUTH HACKBARTH	425 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
230900590	DONALD R & JUDITH GREENMAN	435 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
230900600	RONALD B KERN	445 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
233090110	MARLYCE HEPNER	828 GREENSVIEW CT NW	HUTCHINSON	MN	55350
232450020	BRADLEY W ZIEGENHAGEN	525 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
232450030	KAY A SORENSEN	3610 ATHENS DR S	MANDAN	ND	58554
233090320	RICHARD H TRACY	829 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090310	SHANE L & SHARON M STENBERG	833 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090330	LOUISE E JOHNSON	825 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090100	RICHARD H & LINDA M RANNOW	824 GREENSVIEW CT NW	HUTCHINSON	MN	55350
232320065	RYAN SHORKEY	6 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
232320070	JORGE J MEDRANO &	860 OAK ST NE	HUTCHINSON	MN	55350
231010010	SHERRARD C & LORI M KLIMA	106 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
231010060	THOMAS R & ANN J KOPF	860 ELM ST NE	HUTCHINSON	MN	55350
231010070	JEREMY J FREYHOLTZ	204 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
231010140	JASON M & HOLLY M GREGOR	860 ASH ST NE	HUTCHINSON	MN	55350

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231020010	LAWRENCE D & BENJAMA N HAAS	300 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
233090090	DAVID H & JANICE M MOONEY	820 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090340	SHIRLEY R EMIGH	821 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090070	JOYCE KAY JACKSON	812 GREENSVIEW CT NW	HUTCHINSON	MN	55350
233090080	PEGGY J THOMAS	816 GREENSVIEW CT NW	HUTCHINSON	MN	55350
232440215	LESLIE A & MARY L BULAU	901 HILLCREST RD NE	HUTCHINSON	MN	55350
233090060	JOYCE M BODE	808 GREENSVIEW CT NW	HUTCHINSON	MN	55350
232320060	CHRISTIAN T & LEAH L HOVERSTEN	520 HIDDEN CIR SW	HUTCHINSON	MN	55350
233090350	THE KAREN S GRAY REV TRUST	4460 COMSTOCK LN N	PLYMOUTH	MN	55446
231010080	BRIAN H SOLDNER	855 ELM ST NE	HUTCHINSON	MN	55350
231010020	THOMAS W CHAPMAN	855 OAK ST NE	HUTCHINSON	MN	55350
232320080	JASON C & CANDACE M BLOM	850 OAK ST NE	HUTCHINSON	MN	55350
231010050	JUSTIN E JOHNSON	850 ELM ST NE	HUTCHINSON	MN	55350
231010130	ROBERT D & JULIE M MOSES	850 ASH ST NE	HUTCHINSON	MN	55350
231020020	TIMOTHY E WASS	855 ASH ST NE	HUTCHINSON	MN	55350
230900390	MEXKER L & JOANN IRVIN	400 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
230900170	LARRY J & STACIE A HOFFMAN	420 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
233090360	STEVEN W JOHNSON	70395 CSAH 24	DASSEL	MN	55325
232440220	NOLEN FAMILY TRUST 1	857 HILLCREST RD NE	HUTCHINSON	MN	55350
230900400	LORALL T & ANITA K DALLMAN	855 SPRUCE ST NE	HUTCHINSON	MN	55350
232320050	MINN CONF ASSOC OF 7TH DAY ADV	7384 KIRKWOOD CT	MAPLE GROVE	MN	55369
230900550	LORALL T & ANITA K DALLMAN	855 SPRUCE ST NE	HUTCHINSON	MN	55350
232440060	KIM A GONZALEZ ETAL	850 WALNUT ST NE	HUTCHINSON	MN	55350
232440070	DANIEL O & JOYCE L WRASPIR	805 WALNUT ST NE	HUTCHINSON	MN	55350
233090050	MARLYS M LINDGREN	804 GREENSVIEW CT NW	HUTCHINSON	MN	55350
231020080	MICHELLE N POTTER	846 MAPLE ST NE	HUTCHINSON	MN	55350
232440225	EVELYN E ODEGAARD	855 HILLCREST RD NE	HUTCHINSON	MN	55350
233090370	LOIS GETZKE	809 GREENSVIEW CT NW	HUTCHINSON	MN	55350
231010030	AARON K JOHNSON	845 OAK ST NE	HUTCHINSON	MN	55350
231010090	MARY E ALSLEBEN	845 ELM ST NE	HUTCHINSON	MN	55350
231010040	ISAIAH BROWN	840 ELM ST NE	HUTCHINSON	MN	55350
231010120	ROBIN & BARBARA FARNES	840 ASH ST NE	HUTCHINSON	MN	55350
232320090	RICKY A KRUEGER	555 CARLISLE ST NE	HUTCHINSON	MN	55350
233090040	FLORENCE H NILSON	800 GREENSVIEW CT NW	HUTCHINSON	MN	55350
232320040	STACI A SCHMIDT	831 MAIN ST N	HUTCHINSON	MN	55350
230900380	GEORGE & SALLY MOEHRING	845 MAPLE ST NE	HUTCHINSON	MN	55350
230900180	TIMOTHY & DARLA COCHRAN	840 SPRUCE ST NE	HUTCHINSON	MN	55350

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233090380	LINDA E BERGS	805 GERENSVIEW CT NW	HUTCHINSON	MN	55350
230900410	ROSE F WAGNER	845 SPRUCE ST NE	HUTCHINSON	MN	55350
231020070	SAWBILL COMPANIES INC	217 SECOND ST N MAIN FL	STILLWATER	MN	55082
234340010	GARY J & PENNY L BRATCHER	790 WALNUT ST NE	HUTCHINSON	MN	55350
234340080	NORBERT & NOEL MOHS FAMILY TR	795 WALNUT ST NE	HUTCHINSON	MN	55350
232320160	ALEXANDER R & CONNIE SALOUM	825 MAIN ST N	HUTCHINSON	MN	55350
231010100	JOHN KROGER	835 ELM ST NE	HUTCHINSON	MN	55350
231020030	BRITTANY K LINDELL	835 ASH ST NE	HUTCHINSON	MN	55350
231000020	KEVIN LEE ORTLOFF	835 OAK ST NE	HUTCHINSON	MN	55350
231010110	JEFFREY M & TERESA K SCHMIDT	830 ASH ST NE	HUTCHINSON	MN	55350
231000010	MELVIN M KLOCKMANN	830 ELM ST NE	HUTCHINSON	MN	55350
233090390	JAMES J FIELD	801 GREENSVIEW CT NW	HUTCHINSON	MN	55350
232320130	CRYSTAL M MOORE	870 SCHOOL RD NW	HUTCHINSON	MN	55350
230900370	CHIYOKO J HAYASHI	835 MAPLE ST NE	HUTCHINSON	MN	55350
230900190	JOSEPH E JR WARREN	830 SPRUCE ST NE	HUTCHINSON	MN	55350
230900420	KELLI D & TODD L STARRETT	835 SPRUCE ST NE	HUTCHINSON	MN	55350
234280550	HUTCHINSON FAIRWAY DEVELOPMENT	114 SANDY HOOK RD	CHANHASSEN	MN	55317
232330010	BEVERLY J EMME	846 HILLCREST RD NE	HUTCHINSON	MN	55350
232440080	ERIC P FREDERICKSON	860 HILLCREST RD NE	HUTCHINSON	MN	55350
232440085	LUELLA OKLOBZIJA ETAL	850 HILLCREST RD NE	HUTCHINSON	MN	55350
232440235	LAVONNE M KAUFMANN	847 HILLCREST RD NE	HUTCHINSON	MN	55350
232440230	REBECCA E RISTOW	845 HILLCREST RD NE	HUTCHINSON	MN	55350
232440240	ELDOR H & NANCY C HECKSEL	837 HILLCREST RD NE	HUTCHINSON	MN	55350
232890035	VERLE G & DOROTHY J HALVORSON	21046 746TH AVE	DASSEL	MN	55325
232440210	PATRICIA KOELLN ETAL	903 HILLCREST RD NE	HUTCHINSON	MN	55350
232440200	BILLY L & JANICE A STIBAL	909 HILLCREST RD NE	HUTCHINSON	MN	55350
232440205	SHERYL & JON LUCKEMEYER TRSTEE	760 COLORADO CT NW	HUTCHINSON	MN	55350
231020090	JUSTIN J HAVEMEIER	1308 BAYARD AVE	ST PAUL	MN	55116
231020095	JOSEPH T & AMIE L DALBEC	856 MAPLE ST NE	HUTCHINSON	MN	55350
233070030	HUTCHINSON CONGREGATION OF	493 CALIFORNIA ST NW	HUTCHINSON	MN	55350
233070010	DAVID M HUNSTAD	1115 13TH AVE NW	HUTCHINSON	MN	55350
234580030	RICHARD & JANET HAUSLADEN	1125 12TH AVE NW	HUTCHINSON	MN	55350
234580010	MICHAEL J GRAHAM &	1120 13TH AVE NW	HUTCHINSON	MN	55350
234580020	MARK E & BEVERLY I FRITSCH	879 HUNTERS ST SW	HUTCHINSON	MN	55350
231020060	PATRICIA MARCONCINI ETAL	1168 OAKWODD CT NW	HUTCHINSON	MN	55350
234340020	WILLIAM L & MICHELLE M KOPESKY	780 WALNUT ST NE	HUTCHINSON	MN	55350
231000040	GRANT S PETERSEN	825 ELM ST NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
232320030	JASON R DONNAY	821 MAIN ST N	HUTCHINSON	MN	55350
231000080	JANICE K HALL	825 ASH ST NE	HUTCHINSON	MN	55350
232320100	JAMES D & TERESA T AHLERS	25 GRIFFIN AVE NE	HUTCHINSON	MN	55350
232320010	JUDITH O VAVRECK	805 MAIN ST N	HUTCHINSON	MN	55350
230990030	RICHARD P & JANE E FERNHOLZ	105 GRIFFIN AVE NE	HUTCHINSON	MN	55350
230990040	DANIEL A TIMM	131 GRIFFIN AVE NE	HUTCHINSON	MN	55350
232320140	TROY F BOETTCHER &	205 GRIFFIN AVE NE	HUTCHINSON	MN	55350
231000100	ROGER E & PEGGY DEMEYER	307 GRIFFIN AVE NE	HUTCHINSON	MN	55350
231000070	SHAWN L GORACKE	245 GRIFFIN AVE NE	HUTCHINSON	MN	55350
234340040	MARK G & HEATHER LANDREVILLE	760 WALNUT ST NE	HUTCHINSON	MN	55350
234340110	GERALD R & DONNA DELEEUW	765 WALNUT ST NE	HUTCHINSON	MN	55350
230900340	DEBORAH K BREWER	506 LYNN RD SW	HUTCHINSON	MN	55350
230900220	NAGEL FAMILY LLC	20849 196TH RD	HUTCHINSON	MN	55350
234280570	HUTCHINSON FAIRWAY DEVELOPMENT	114 SANDY HOOK RD	CHANHASSEN	MN	55317
234800010	KEITH G & KIMBERLY K BOLLMAN	1443 HERITAGE CT NW	HUTCHINSON	MN	55350
234800020	JON M & LYNN M WILKE	1439 HERITAGE CT NW	HUTCHINSON	MN	55350
234800030	STEPHEN P SELBY	1435 HERITAGE CT NW	HUTCHINSON	MN	55350
234800040	KENNETH W & JOELLEN KIMBALL	1431 HERITAGE AVE NW	HUTCHINSON	MN	55350
234800050	BONNEVILLE LAND & CATTLE LLC	20455 248TH CIR	HUTCHINSON	MN	55350
234800060	BONNEVILLE LAND & CATTLE LLC	20455 248TH CIR	HUTCHINSON	MN	55350
234800070	ORLAN R & KATHLENE J FLAATA	1419 HERITAGE CT NW	HUTCHINSON	MN	55350
234800080	BONNEVILLE LAND & CATTLE LLC	20455 248TH CIR	HUTCHINSON	MN	55350
232440270	RIDGEDALE SQUARE LLC	6179 45TH AVE SE	ST. CLOUD	MN	56304
230562680	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562670	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562660	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230563200	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230500060	GEORGE D LEE	72 ARCH ST SE	HUTCHINSON	MN	55350
230500070	GEORGE D LEE	72 ARCH ST SE	HUTCHINSON	MN	55350
230570010	SHOPKO SPE REAL ESTATE LLC	700 PILGRIM WAY	GREEN BAY	WI	54304
230570015	WELLS FARGO BANK NA	PO BOX 2609	CARLSBAD	CA	92018
230562690	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562650	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562700	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562070	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562045	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562060	LIGHT & POWER COMMISSION	111 HASSAN ST SE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230562080	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562040	KEVIN S & TERRIE M ERICKSON	PO BOX 155	HUTCHINSON	MN	55350
230562030	STANDARD PRINTING CO	124 4TH AVE NE	HUTCHINSON	MN	55350
230562010	GORDON O JR FRANK	154 4TH AVE NE	HUTCHINSON	MN	55350
230562050	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562020	STANDARD PRINTING CO	124 4TH AVE NE	HUTCHINSON	MN	55350
230562000	ROBERT & DELORES POWELL REVOC	405 OTTAWA AVE SE	HUTCHINSON	MN	55350
230561990	LARRY L SORENSEN	PO BOX 489	HUTCHINSON	MN	55350
230561980	LARRY L SORENSEN	PO BOX 489	HUTCHINSON	MN	55350
230561975	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561970	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561965	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562645	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562710	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562720	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562730	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562740	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562750	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230351100	CROW RIVER COUNTRY CLUB	915 COLORADO ST NW	HUTCHINSON	MN	55350
233070035	BART P BRADFORD	20752 196TH RD	HUTCHINSON	MN	55350
232460010	OUR SAVIORS EVANGELICAL CHURCH	800 BLUFF ST NE	HUTCHINSON	MN	55350
234280200	MICHAEL R & KARLA K MCGRAW	1440 HERITAGE AVE NW	HUTCHINSON	MN	55350
234280190	CHRIS R SOLIEN	1436 HERITAGE AVE NW	HUTCHINSON	MN	55350
232450035	DANIEL D & RHONDA M CROTTEAU	545 NORTHWOODS AVE NE	HUTCHINSON	MN	55350
232380190	MINN CONF ASSOC OF 7TH DAY ADV	7384 KIRKWOOD CT	MAPLE GROVE	MN	55369
232380130	MINN CONF ASSOC OF 7TH DAY ADV	7384 KIRKWOOD CT	MAPLE GROVE	MN	55369
232380140	MINN CONF ASSOC OF 7TH DAY ADV	7384 KIRKWOOD CT	MAPLE GROVE	MN	55369
232380135	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230880110	STATE OF MINNESOTA DOT ROW DIV	2505 TRANSPORTION	WILLMAR	MN	56201
230560110	DENNIS H RIEDEL	655 HILLCREST RD NE	HUTCHINSON	MN	55350
230561780	MACH 1 PROPERTIES LLC	22845 705TH AVE	DASSEL	MN	55325
230561790	PARULBEN D PATEL	200 HWY 7 E	HUTCHINSON	MN	55350
230561855	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561850	WILLIAM J BREITKREUTZ	246 GAUGER ST NE	HUTCHINSON	MN	55350
230561795	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561800	OPTIMA REALTY LLC	16690 705TH AVE	DASSEL	MN	55333
230561820	SHANE & MARY DOBBS	206 5TH AVE NE	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230561840	ORION LOKENSGARD	465 BLUFF ST NE	HUTCHINSON	MN	55350
230561830	ALEX R SMITH	455 BLUFF ST NE	HUTCHINSON	MN	55350
230561770	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561760	RONALD L DOSTAL	193 HWY 7 E	HUTCHINSON	MN	55350
230561490	TYLER JAMES SMITH	6 5TH AVE NE	HUTCHINSON	MN	55350
230561500	BRIAN R DAMLOW	475 MAIN ST N	HUTCHINSON	MN	55350
234710010	SOUTHWEST MINN FOUNDATION	15 3RD AVE NW	HUTCHINSON	MN	55350
230561320	HORNICK PROPERTIES LTD PTRSHP	151 KAI LA PL	KIHEI	HI	96753
230561350	HORNICK PROPERTIES LTD PTRSHP	151 KAI LA PL	KIHEI	HI	96753
230710020	LAMKIN PROPERTIES	10920 NORTH SHORE ROAD	WACONIA	MN	55387
230710010	ANNIE JESKE	97 4TH AVE NW	HUTCHINSON	MN	55350
230561340	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561300	HORNICK PROPERTIES LTD PTRSHP	151 KAI LA PL	KIHEI	HI	96753
230561290	HORNICK PROPERTIES LTD PTRSHP	151 KAI LA PL	KIHEI	HI	96753
230561150	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561280	HORNICK PROPERTIES LTD PTRSHP	151 KAI LA PL	KIHEI	HI	96753
230561270	JOHN M MUSKE &	71 4TH AVE NW	HUTCHINSON	MN	55350
230561260	LLOYD E & ELVERN RADUNZ	81 4TH AVE NW	HUTCHINSON	MN	55350
230561160	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561140	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561130	JESSE J TROSKA &	490 MAIN ST N	HUTCHINSON	MN	55350
230562150	JOHANNECK LEASING LLC	PO BOX 171	REDWOOD FALI	MN	56283
230562170	L H MELTZER LLC	513 SUMMIT AVE	ST PAUL	MN	55102
230562180	L H MELTZER LLC	513 SUMMIT AVE	ST PAUL	MN	55102
230562250	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562260	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562270	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562280	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562290	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562350	STEVEN G & NANCY FANGMEIER	16670 705TH AVE	DASSEL	MN	55325
230562370	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562380	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562390	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230561110	KEVIN J NORDBERG	105 4TH AVE NW	HUTCHINSON	MN	55350
230561115	BARBARA ANN SHELLEY	1421 48TH ST NE	BUFFALO	MN	55313
230560790	WILDFLOWER PROPERTIES LLC	222 2ND AVE SE	HUTCHINSON	MN	55350
230561100	NICHOLAS B ORTLOFF	123 4TH AVE NW	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230560890	KODY J & LINSAY R KRANTZ	115 4TH AVE NW	HUTCHINSON	MN	55350
230562565	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230560970	JULIA L LLAMAS	124 5TH AVE NW	HUTCHINSON	MN	55350
230560940	MICHAEL D & KELLEY J MARVAN	134 5TH AVE NW	HUTCHINSON	MN	55350
230561010	KENNETH L HENNING	144 5TH AVE NW	HUTCHINSON	MN	55350
230700080	RODNEY G THEISEN	482 JAMES ST NW	HUTCHINSON	MN	55350
230700090	JOSHUA A BERGE	472 JAMES ST NW	HUTCHINSON	MN	55350
230700100	JESSICA L ARTIBEE	462 JAMES ST NW	HUTCHINSON	MN	55350
230700110	SARAH S SMOCK	452 JAMES ST NW	HUTCHINSON	MN	55350
230561060	ERIK D HENKE	442 JAMES ST NW	HUTCHINSON	MN	55350
230561070	JEANNE A LANGAN	424 JAMES ST NW	HUTCHINSON	MN	55350
230561080	GERALD G RANNOW &	151 4TH AVE NW	HUTCHINSON	MN	55350
230700070	JIMMIE L THOMAS	122 5TH AVE NW	HUTCHINSON	MN	55350
230700060	TIMOTHY & LOUISA DION	483 JAMES ST NW	HUTCHINSON	MN	55350
230700050	DANELLE A SANDRY	473 JAMES ST NW	HUTCHINSON	MN	55350
230700040	KELSEY R LAMBERTSON	463 JAMES ST NW	HUTCHINSON	MN	55350
230700030	ROSS M RUNKE &	453 JAMES ST NW	HUTCHINSON	MN	55350
230700020	BEATRICE E KRUSSOW	106 5TH AVE NW	HUTCHINSON	MN	55350
230700010	DEAN A BUSCHE	433 JAMES ST NW	HUTCHINSON	MN	55350
230561090	BART P BRADFORD	20752 196TH RD	HUTCHINSON	MN	55350
230560730	KRO PARTNERS LLC	220 5TH AVE NW	HUTCHINSON	MN	55350
230560750	AVEYRON HOMES INC	222 5TH AVE NW	HUTCHINSON	MN	55350
230560740	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230560810	PETER W JENSEN	258 5TH AVE NW	HUTCHINSON	MN	55350
230560815	MICHAEL L BLAKE	265 4TH AVE NW	HUTCHINSON	MN	55350
230560820	MATTHEW R DETTMAN	135 AIRPORT RD	HUTCHINSON	MN	55350
230650120	SARA-BETH SWANSON-LANE	28423 BLUEBILL BAY RD	BOVEY	MN	55709
230650125	LARRY F JR JOHNSON	51 5TH AVE NW	HUTCHINSON	MN	55350
232460018	HUTCHINSON TECHNOLOGY INC	40 WEST HIGHLAND PK DR	HUTCHINSON	MN	55350
232430010	HUTCHINSON TECHNOLOGY INC	40 WEST HIGHLAND PK DR	HUTCHINSON	MN	55350
232420010	HUTCHINSON TECHNOLOGY INC	40 WEST HIGHLAND PK DR	HUTCHINSON	MN	55350
232460014	HUTCHINSON TECHNOLOGY INC	40 WEST HIGHLAND PK DR	HUTCHINSON	MN	55350
232460013	HUTCHINSON TECHNOLOGY INC	40 WEST HIGHLAND PK DR	HUTCHINSON	MN	55350
230562520	VET VISIONS LLC	271 3RD AVE NW	HUTCHINSON	MN	55350
230562460	FIRST MINNESOTA BANK	308 MAIN ST S	HUTCHINSON	MN	55350
230562510	VET VISIONS LLC	271 3RD AVE NW	HUTCHINSON	MN	55350
230562500	VET VISIONS LLC	271 3RD AVE NW	HUTCHINSON	MN	55350

PARCELS LOCATED WITHIN THE CITY OF HUTCHINSON DWSMA

PARCEL ID	PROPERTY OWNER	ADDRESS	CITY	STATE	ZIP
230562470	VET VISIONS LLC	271 3RD AVE NW	HUTCHINSON	MN	55350
230562450	VET VISIONS LLC	271 3RD AVE NW	HUTCHINSON	MN	55350
230560900	DANELLE A SANDRY	473 JAMES ST	HUTCHINSON	MN	55350
230560930	KELSEY R LAMBERTSON	463 JAMES ST NW	HUTCHINSON	MN	55350
230560980	JOSHUA A BERGE	472 JAMES ST NW	HUTCHINSON	MN	55350
232380025	CHARLES FRANK DAVIS	240 NORTH HIGH DR NE	HUTCHINSON	MN	55350
232380014	STEPHEN E LEE	4402 N 56TH ST	PHOENIX	AZ	85018
232460020	VALLEY DEVELOPMENT LLC	7500 145TH ST W	APPLE VALLEY	MN	55124
232460030	JULIE MAE JENSEN	715 HWY 7 E	HUTCHINSON	MN	55350
232460070	FLORIAN THODE	327 HWY 7 E	HUTCHINSON	MN	55350
232460060	CRAIG R & PAMELA A WHITE	317 HWY 7 E - STE C	HUTCHINSON	MN	55350
232460040	MARSHALL CONCRETE PRODUCTS INC	2610 MARSHALL ST NE	MINNEAPOLIS	MN	55418
232460080	BERNADINE A TELECKY	321 HWY 7 EAST	HUTCHINSON	MN	55350
230562610	STATE OF MINNESOTA DOT ROW DIV	2505 TRANSPORTION	WILLMAR	MN	56201
235000010	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562640	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562630	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562625	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562620	STATE OF MINNESOTA DOT ROW DIV	2505 TRANSPORTION	WILLMAR	MN	56201
230562770					
230562555	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230562760	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350
230366600	GOPHER CAMPFIRE SANCTUARY	24718 CO RD 7 / PO BOX 336	HUTCHINSON	MN	55350
230900140	KEVIN KELLER	645 HILLCREST RD NE	HUTCHINSON	MN	55350
230900080	JASON E WILLETT	109 SPRUCE CT NE	HUTCHINSON	MN	55350
230880610	WILLIAM F JARMAN	23435 735TH ST	DASSEL	MN	55325
230365450	HUTCHINSON BAPTIST CHURCH ETAL	705 5TH AVE SW	HUTCHINSON	MN	55350
230365400	LANCE T & PATTY L KETCHUM	224 5TH AVE NW	HUTCHINSON	MN	55350
232460015	HUTCHINSON TECHNOLOGY INC	40 WEST HIGHLAND PK DR	HUTCHINSON	MN	55350
235030010	HUTCHINSON CITY	111 HASSAN ST SE	HUTCHINSON	MN	55350

MINNESOTA MDH DEPARTMENT OF HEALTH
Environmental Health Division
Drinking Water Protection Section
P.O. Box 64975
St. Paul, Minnesota 55164-0975

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) - POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1430004
NAME	Hutchinson
ADDRESS	Water Superintendent, Hutchinson City Hall, 111 Hassan Street South, Hutchinson, MN 553502522

COMMUNITY

FACILITY (WELL) INFORMATION

NAME	Well #4
FACILITY ID	S02
UNIQUE WELL NO.	210426
COUNTY	McLeod

IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE?

☐ **YES** (Please attach a copy)
☐ **NO** ☐ **UNDETERMINED**

PWS ID / FACILITY ID	1430004 S02	**UNIQUE WELL NO.**	210426

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
Agricultural Related							
*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well[2] (Class V well - illegal[3])	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		
SSTS Related							
AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)[2]	50/300/150[4]	50/300/150[4]	100/600/300[4]	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal)[2]	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal)[2]	illegal	illegal		N		

PWS ID / FACILITY ID	1430004 S02	UNIQUE WELL NO.	210426

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	89	N
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	160	N**
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	82	N
SWI	Storm water drainage well[2] (Class V well - illegal[3])	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)[2]	illegal[3]	illegal[3]		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		

PWS ID / FACILITY ID	1430004 S02	UNIQUE WELL NO.	210426

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50[5]	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		
Additional Sources (If there is more than one source listed above, please indicate here).							
Potential Contamination Sources and Codes Based on Previous Versions of this Form							
SBM	Sewer, buried collector, municipal, pressurized, open jointed, or unapproved materials	50	50		Y	25	N

* New potential contaminant source.

** This number is the estimated distance that this potential source is from this well even though it was identified during an inventory for an adjacent well.

[1] A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

[2] These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

[3] These sources are classified as illegal by Minnesota Rules, Chapter 4725.

[4] Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

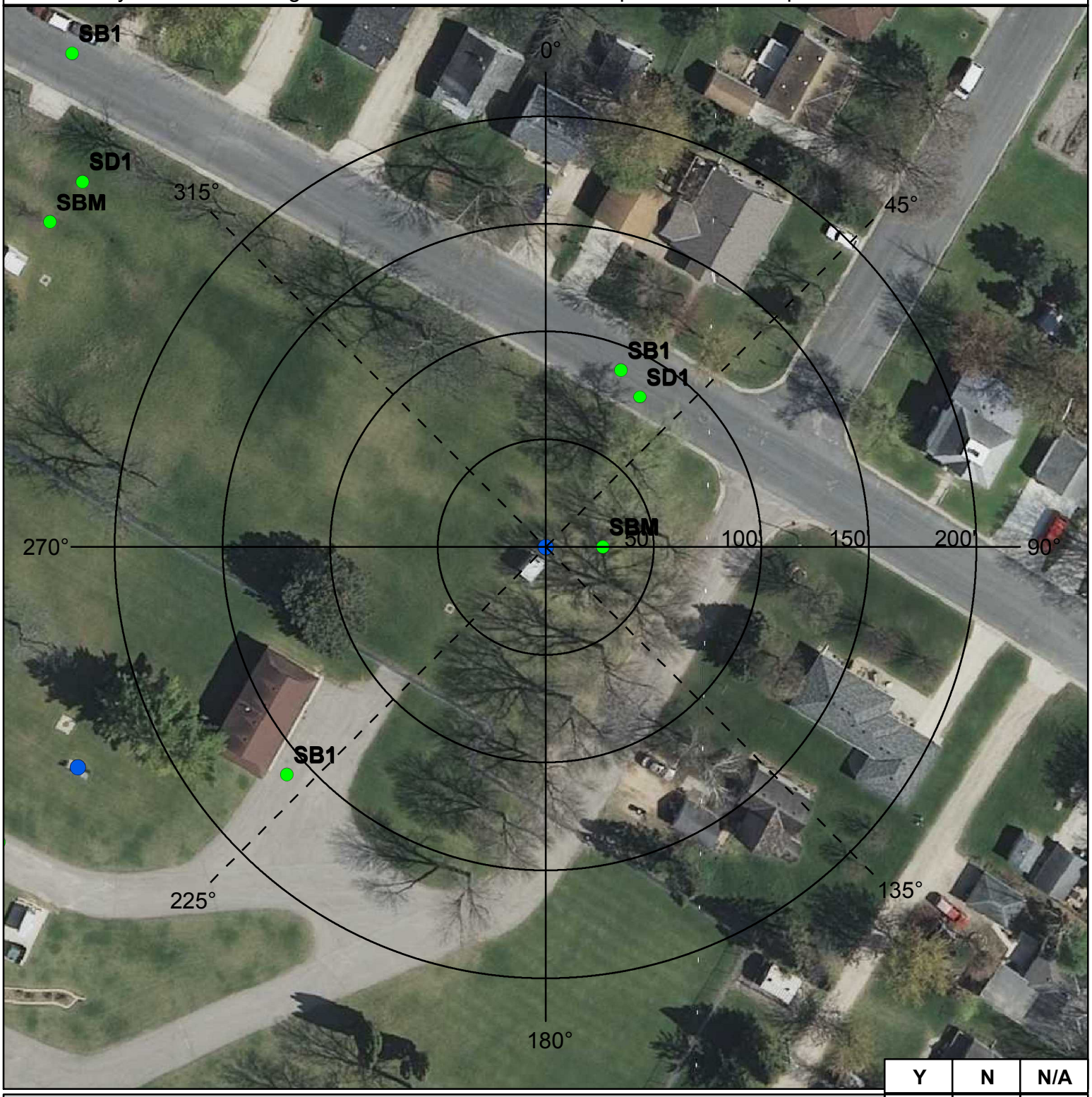
[5] A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID	1430004 S02	UNIQUE WELL NO.	210426

SETBACK DISTANCES	All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR	Voz, Karen (SWP)	DATE	7 - 20 - 2017

PWS ID / FACILITY ID	1430004 S02	UNIQUE WELL NO.	210426

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED
Any sewer lines that are observed to be leaking, cracked, or deteriorated, should be replaced.		

COMMENTS

9/7/2003 - Location for PCSI Type DWT (bearing = 0, distance = 28 , inventory date: 3/23/1999) could not be determined.
9/7/2003 - Location for PCSI Type SBP (bearing = 0, distance = 0 , inventory date: 3/23/1999) could not be determined.

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

MINNESOTA MDH DEPARTMENT OF HEALTH
Environmental Health Division
Drinking Water Protection Section
P.O. Box 64975
St. Paul, Minnesota 55164-0975

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) - POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1430004
NAME	Hutchinson
ADDRESS	Water Superintendent, Hutchinson City Hall, 111 Hassan Street South, Hutchinson, MN 553502522

COMMUNITY

FACILITY (WELL) INFORMATION

NAME	Well #5
FACILITY ID	S03
UNIQUE WELL NO.	228800
COUNTY	McLeod

IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE?

☐ **YES** (Please attach a copy)
☐ **NO** ☐ **UNDETERMINED**

PWS ID / FACILITY ID	1430004 S03	**UNIQUE WELL NO.**	228800

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
Agricultural Related							
*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well[2] (Class V well - illegal[3])	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		
SSTS Related							
AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)[2]	50/300/150[4]	50/300/150[4]	100/600/300[4]	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal)[2]	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal)[2]	illegal	illegal		N		

PWS ID / FACILITY ID	1430004 S03	UNIQUE WELL NO.	228800

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	96	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	56	N
SWI	Storm water drainage well[2] (Class V well - illegal[3])	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		Y	187	
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)[2]	illegal[3]	illegal[3]		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PWS ID / FACILITY ID	1430004 S03	UNIQUE WELL NO.	228800

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50[5]	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		
Additional Sources (If there is more than one source listed above, please indicate here).							
Potential Contamination Sources and Codes Based on Previous Versions of this Form							
SBM	Sewer, buried collector, municipal, pressurized, open jointed, or unapproved materials	50	50		Y	37	N

* New potential contaminant source.

[1] A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

[2] These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

[3] These sources are classified as illegal by Minnesota Rules, Chapter 4725.

[4] Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

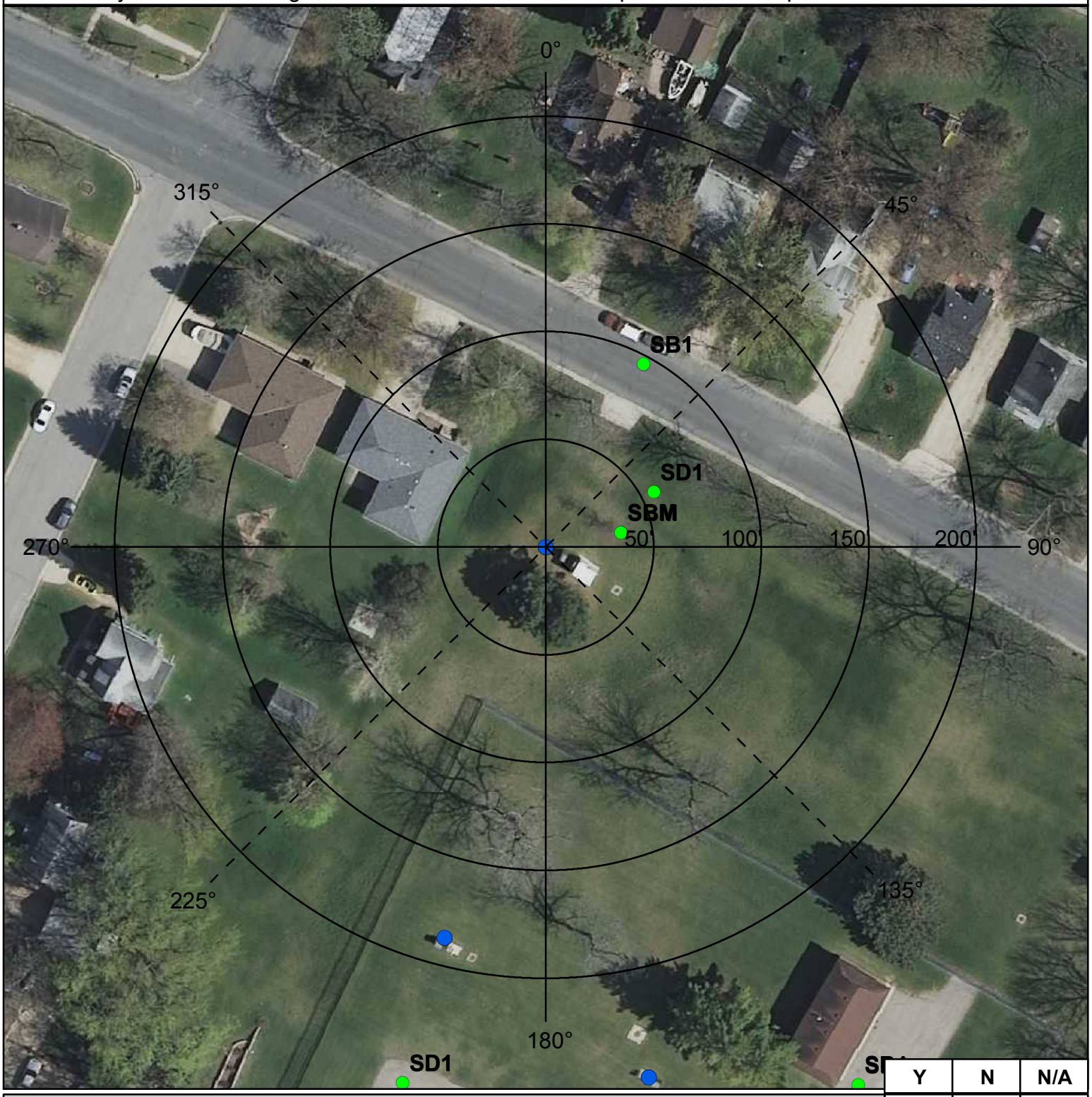
[5] A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID	1430004 S03	UNIQUE WELL NO.	228800

SETBACK DISTANCES	All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR	Voz, Karen (SWP)	DATE	7 - 20 - 2017

PWS ID / FACILITY ID	1430004 S03	UNIQUE WELL NO.	228800

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED
Any sewer lines that are observed to be leaking, cracked, or deteriorated, should be replaced.		

COMMENTS

9/7/2003 - Location for PCSI Type DWT (bearing = 0, distance = 40 , inventory date: 3/23/1999) could not be determined.
9/7/2003 - Location for PCSI Type SBP (bearing = 0, distance = 0 , inventory date: 3/23/1999) could not be determined.

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

MINNESOTA MDH DEPARTMENT OF HEALTH
Environmental Health Division
Drinking Water Protection Section
P.O. Box 64975
St. Paul, Minnesota 55164-0975

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) - POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1430004 **COMMUNITY**
NAME	Hutchinson
ADDRESS	Water Superintendent, Hutchinson City Hall, 111 Hassan Street South, Hutchinson, MN 553502522

FACILITY (WELL) INFORMATION

NAME	Well #6
FACILITY ID	S04
UNIQUE WELL NO.	233077
COUNTY	McLeod

IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE?

☐ **YES** (Please attach a copy)
☐ **NO** ☐ **UNDETERMINED**

PWS ID / FACILITY ID	1430004 S04	**UNIQUE WELL NO.**	233077

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
Agricultural Related							
*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well[2] (Class V well - illegal[3])	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		
SSTS Related							
AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)[2]	50/300/150[4]	50/300/150[4]	100/600/300[4]	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal)[2]	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal)[2]	illegal	illegal		N		

PWS ID / FACILITY ID	1430004 S04	UNIQUE WELL NO.	233077

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	147	N
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	137	N
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	97	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	115	N
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	114	N**
SWI	Storm water drainage well[2] (Class V well - illegal[3])	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		Y	115	
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)[2]	illegal[3]	illegal[3]		N		

PWS ID / FACILITY ID	1430004 S04	UNIQUE WELL NO.	233077

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50[5]	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		
Additional Sources (If there is more than one source listed above, please indicate here).							
Potential Contamination Sources and Codes Based on Previous Versions of this Form							
DWT	Discharge of water treatment chemical waste	50	50		Y	50	N

* New potential contaminant source.

** This number is the estimated distance that this potential source is from this well even though it was identified during an inventory for an adjacent well.

[1] A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

[2] These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

[3] These sources are classified as illegal by Minnesota Rules, Chapter 4725.

[4] Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

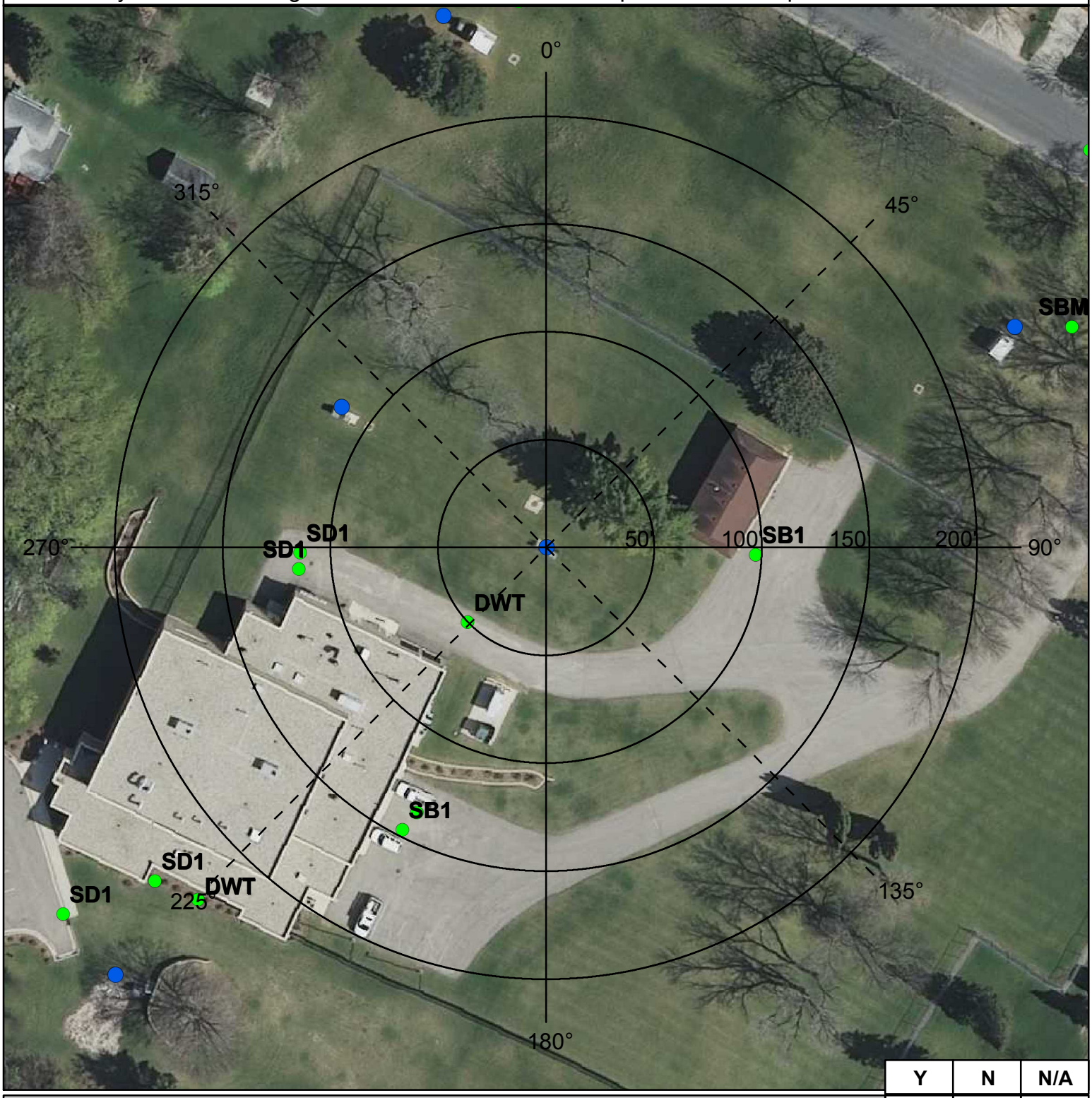
[5] A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID	1430004 S04	UNIQUE WELL NO.	233077

SETBACK DISTANCES	All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR	Voz, Karen (SWP)	DATE	7 - 20 - 2017

PWS ID / FACILITY ID	1430004 S04	UNIQUE WELL NO.	233077

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type SBM (bearing = 0, distance = 0 , inventory date: 3/23/1999) could not be determined.

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

MINNESOTA MDH DEPARTMENT OF HEALTH
Environmental Health Division
Drinking Water Protection Section
P.O. Box 64975
St. Paul, Minnesota 55164-0975

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) - POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1430004
NAME	Hutchinson
ADDRESS	Water Superintendent, Hutchinson City Hall, 111 Hassan Street South, Hutchinson, MN 553502522

COMMUNITY

FACILITY (WELL) INFORMATION

NAME	Well #7
FACILITY ID	S05
UNIQUE WELL NO.	511076
COUNTY	McLeod

IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE?

☐ **YES** (Please attach a copy)
☐ **NO** ☐ **UNDETERMINED**

PWS ID / FACILITY ID	1430004 S05	**UNIQUE WELL NO.**	511076

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
Agricultural Related							
*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well[2] (Class V well - illegal[3])	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		
SSTS Related							
AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)[2]	50/300/150[4]	50/300/150[4]	100/600/300[4]	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal)[2]	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal)[2]	illegal	illegal		N		

PWS ID / FACILITY ID	1430004 S05	UNIQUE WELL NO.	511076

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	149	N**
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	158	N**
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	183	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	37	N
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	47	N
SWI	Storm water drainage well[2] (Class V well - illegal[3])	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)[2]	illegal[3]	illegal[3]		N		

PWS ID / FACILITY ID	1430004 S05	UNIQUE WELL NO.	511076

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50[5]	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		
Additional Sources (If there is more than one source listed above, please indicate here).							
Potential Contamination Sources and Codes Based on Previous Versions of this Form							
DWT	Discharge of water treatment chemical waste	50	50		Y	50	N

* New potential contaminant source.

** This number is the estimated distance that this potential source is from this well even though it was identified during an inventory for an adjacent well.

[1] A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

[2] These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

[3] These sources are classified as illegal by Minnesota Rules, Chapter 4725.

[4] Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

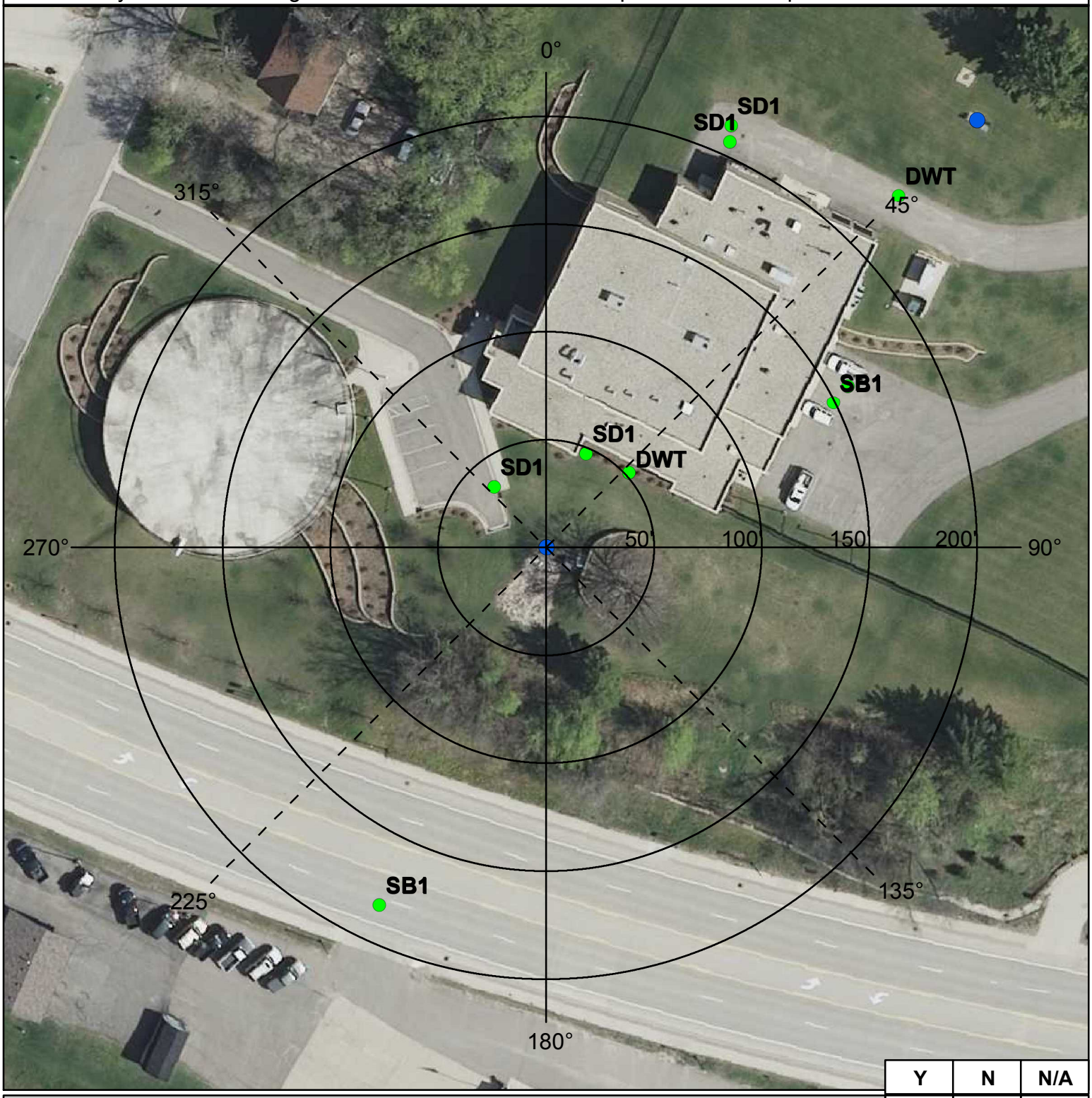
[5] A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID	1430004 S05	UNIQUE WELL NO.	511076

SETBACK DISTANCES	All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR	Neiman, Dave	DATE	3 - 13 - 2015

PWS ID / FACILITY ID	1430004 S05	UNIQUE WELL NO.	511076

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

9/7/2003 - Location for PCSI Type SBM (bearing = 0, distance = 0 , inventory date: 3/23/1999) could not be determined.

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

MINNESOTA MDH DEPARTMENT OF HEALTH
Environmental Health Division
Drinking Water Protection Section
P.O. Box 64975
St. Paul, Minnesota 55164-0975

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) - POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1430004
NAME	Hutchinson
ADDRESS	Water Superintendent, Hutchinson City Hall, 111 Hassan Street South, Hutchinson, MN 553502522

COMMUNITY

FACILITY (WELL) INFORMATION

NAME	Well #8
FACILITY ID	S06
UNIQUE WELL NO.	724408
COUNTY	McLeod

IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE?

☐ **YES** (Please attach a copy)
☐ **NO** ☐ **UNDETERMINED**

PWS ID / FACILITY ID	1430004 S06	**UNIQUE WELL NO.**	724408

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
Agricultural Related							
*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well[2] (Class V well - illegal[3])	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		
SSTS Related							
AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)[2]	50/300/150[4]	50/300/150[4]	100/600/300[4]	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal)[2]	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal)[2]	illegal	illegal		N		

PWS ID / FACILITY ID	1430004 S06	UNIQUE WELL NO.	724408

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	191	N**
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		Y	198	N**
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	70	N
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	77	N**
SWI	Storm water drainage well[2] (Class V well - illegal[3])	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		Y	187	
WEL	Operating well	record dist.	record dist.		Y	115	
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)[2]	illegal[3]	illegal[3]		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		

PWS ID / FACILITY ID	1430004 S06	UNIQUE WELL NO.	724408

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well[1]	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50[5]	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		
Additional Sources (If there is more than one source listed above, please indicate here).							
Potential Contamination Sources and Codes Based on Previous Versions of this Form							
DWT	Discharge of water treatment chemical waste	50	50		Y	116	N**

* New potential contaminant source.

** This number is the estimated distance that this potential source is from this well even though it was identified during an inventory for an adjacent well.

[1] A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

[2] These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

[3] These sources are classified as illegal by Minnesota Rules, Chapter 4725.

[4] Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

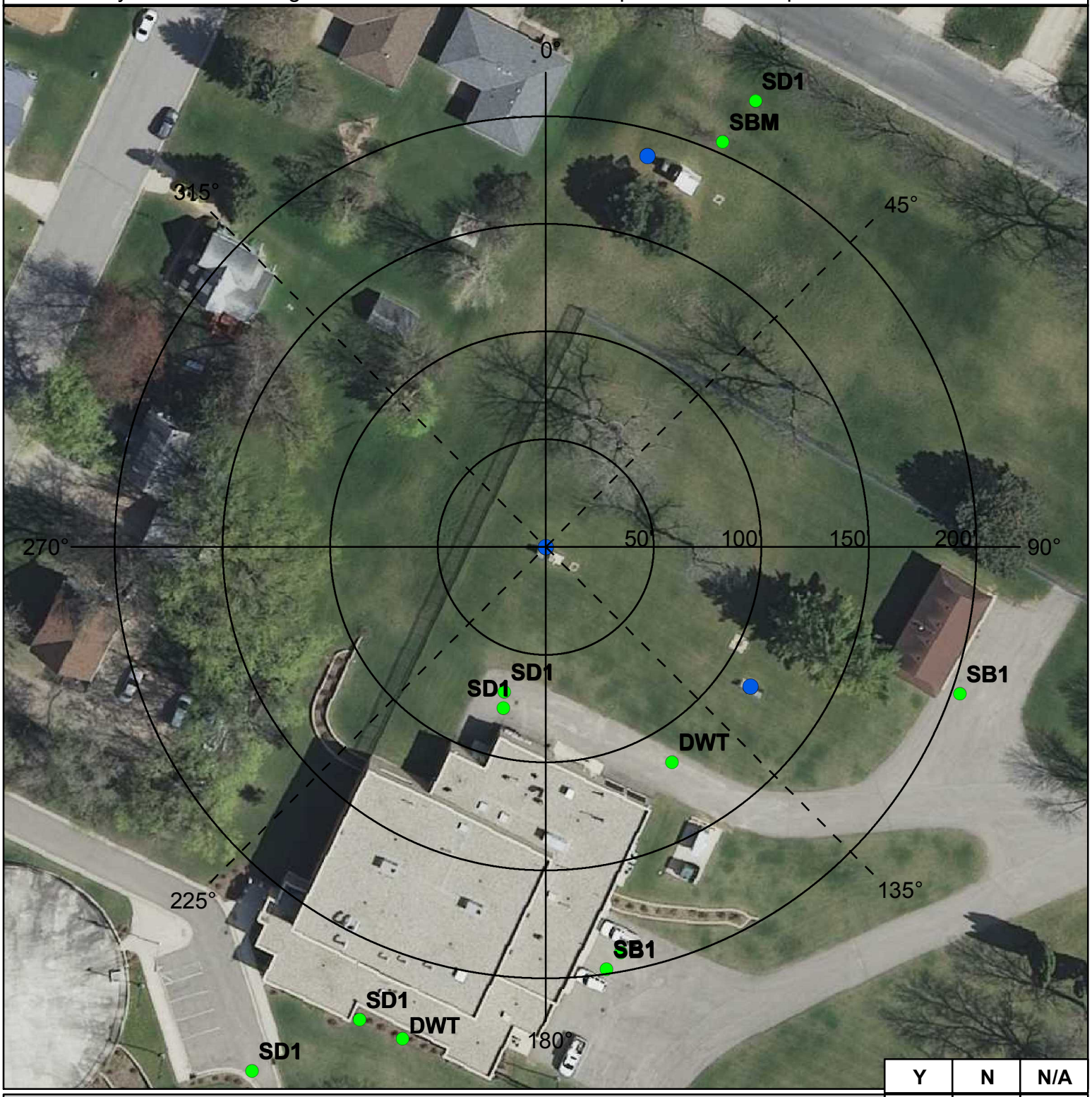
[5] A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID	1430004 S06	UNIQUE WELL NO.	724408

SETBACK DISTANCES	All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



	Y	N	N/A
Were the isolation distances maintained for the new sources of contamination?			
Is the system monitoring existing nonconforming sources of contamination?			

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR	Voz, Karen (SWP)	DATE	7 - 20 - 2017

PWS ID / FACILITY ID	1430004 S06	UNIQUE WELL NO.	724408

RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

ALTERNATIVE WATER SUPPLY; CONTINGENCY STRATEGY

Minnesota Rules 4720.5280

I. PURPOSE

The purpose of this Contingency Plan is to establish, provide and keep updated, certain emergency response procedures and information for the City of Hutchinson which may become vital in the event of a partial or total loss of public water supply services as a result of natural disaster, chemical contamination, or civil disorder of human-caused disruptions.

II. PUBLIC WATER SUPPLY CHARACTERISTICS

A. CURRENT SUPPLY SOURCE

	Well Number 4	**Well Number 5**	**Well Number 6**	**Well Number 7**	**Well Number 8**
Supply Source	210426	228800	233077	511076	724408
Well Depth (ft.)	412	410	475	400	400
Well Diameter (in.)	16	16	20	18	18
Well Capacity (gpm)	1100	1100	1100	1100	1100
Well Production (gpm)	800	800	800	800	800

B. TREATMENT

The City of Hutchinson uses two parallel treatment processes: biological filtration and reverse osmosis. Seven 12-foot diameter biological pressure tanks produce a total biological filtration flow from 300 gallons per minute (gpm) up to 1800 gpm. Three RO machines each have a design flow of 900 gpm of treated water, producing a total RO flow from 900 gpm up to 2700 gpm. The two treatment processes are combined at a 25% biological filtration and 75% RO ratio. To complete the treatment process, the blended water's pH is increased to 8.1 to control corrosion, free chlorine is adjusted to 1.2 parts per million (ppm) for disinfection, and the water is fluoridated to 0.7 ppm.

C. STORAGE AND DISTRIBUTION

The City of Hutchinson operates three water towers: Century Tower, South Park Tower, and Golf Course Tower. The towers are all approximately the same elevation and they have a capacity of 500,000 gallons each. The City's ground storage includes a 1.5-million-gallon reservoir and a mixing basin and clearwells totaling 154,300 gallons. The ground storage is used for suction for three high service pumps each with a 2400 gallon per minute capacity. Two of the high service pumps can be powered by a standby generator.

D. MAPS/PLANS

Complete treatment plant plans are located at the water treatment plant and at the Hutchinson City Center. Paper copies of distribution maps are located at City Center and in each water department vehicle. Electronic distribution maps are available from two sources and can be accessed in the office or on field-use laptops.

III. PRIORITY OF WATER USERS DURING WATER SUPPLY EMERGENCY

Water Use Category	Annual Use (MG)
Residential	321.6
Commercial	110.2
Industrial	115.4
Water Supply Services	10.2

IV. ALTERNATIVE WATER SUPPLY OPTIONS

A. SURFACE WATER SOURCES AND TREATMENT NEEDS

The Crow River is approximately 600 feet to the south of the water treatment plant. This source would require pilot testing and at a minimum clarification as an RO pre-treatment.

B. BOTTLED WATER SUPPLIES, DELIVERY AND DISTRIBUTION

There are several large grocery stores in Hutchinson that can provide bottled water in emergency circumstances.

C. SYSTEM INTERCONNECTS WITH OTHER WATER SUPPLIES

The closest municipal potable water system is Silver Lake 9 miles to the east which would not have the capacity needed to supply Hutchinson. The City of Glencoe has a larger capacity, but is 16 miles to the southeast.

D. NEW WELL

The City of Hutchinson has a local well driller that could potentially drill an emergency well if necessary. The piping for a future Well 9 was installed from the general well location to inside the water plant during plant construction in 2007.

E. EMERGENCY OR BACKUP WELLS

Any two of the five wells are required for normal operation of the water treatment plant. When water demand is high, three or four wells are required. So, there are always one to three backup wells in the rotation. During an extended power outage, the wells, high service pumps, and biofilter treatment can be powered with the standby generator.

F. EMERGENCY TREATMENT OF WATER SYSTEM

The city could bypass the reverse osmosis treatment or the biofilter treatment in the event of a failure or shortage. It's also possible to bypass the 1.5 MG storage reservoir or an individual clearwell.

G. SOURCE MANAGEMENT (BLENDING)

Any two of the wells can be blended at equal parts. The reverse osmosis treatment and biofilter treatment can be blended at any ratio from 0 – 100 percent or the RO percent recovery can be increased to 80 during a water shortage.

V. INVENTORY OF AVAILABLE EMERGENCY EQUIPMENT AND MATERIALS

Description	Owner	Telephone	Location
Well Repair	Al Pulkrabek LTP Enterprises, Inc.	320-587-4400	16491 Hwy 7 E, Hutchinson, MN
Pump Repair	Al Pulkrabek LTP Enterprises, Inc.	320-587-4400	16491 Hwy 7 E, Hutchinson, MN
Electrician	Kyle Rewerts E2 Electric	320-234-8330	15895 Hwy 7 E, Hutchinson, MN
Electrician	John Schrupp Hotwire Electric	763-234-1271	815 Neal Ave, Hutchinson, MN
Plumber	TEK Mechanical Emergency Repair	320-587-2779	220 5th Ave NW, Hutchinson, MN
Backhoe	Boog Wendlandt Juul Contracting	320-583-8741 320-587-2989	1060 Adams St, Hutchinson, MN
Backhoe	Kurt Hjerpe Hjerpe Contracting	320-234-8305	16246 Hwy 15 S, Hutchinson, MN
Chemical Feed	Jeremy Bakke Vessco, Inc	612-805-8917 952-314-0636	8217 Upland Cir. Chanhassen, MN
Meter Repair	Dan Winjum Automatic Systems	651-631-9005	2400 W Co.Rd D St. Paul, MN
Generator	Lucas Braun Power Systems Service	952-465-9959 888-968-8872	13635 58th Ave N Plymouth, MN
Valves	Joel Morgan Vessco, Inc	763-276-4262 952-941-0576	8217 Upland Cir. Chanhassen, MN
Water Tower	Mike Farnsworth Maguire Iron	605-310-1282 605-334-9749	1610 N MN Ave Sioux Falls, SD

VI. NOTIFICATION PROCEDURES

A. LEAD COORDINATING AGENCY

Water System Personnel	Name	Telephone	Alternate Telephone
Mayor/Board Chair	Gary Forcier	320-583-8717	320-587-2868
Council Members	Steve Cook	320-587-7108	320-234-4000
Council Members	John Lofdahl	320-582-1084	320-587-2293
Council Members	Mary Christensen	320-296-3389	320-587-6115
Council Members	Chad Czmowski	952-237-3587	320-587-2453
State Incident Duty Officer	NA	800-422-0798	NA
County Emergency Director	Kevin Mathews	320-864-1339	320-864-3134
Fire Chief	Mike Schumann	320-552-0578	320-234-4211
Sheriff	Scott Rehmann	888-440-3134	NA
System Operator	Eric Levine	320-583-5457	320-234-4222
School Superintendent	Daron Vanderheiden	320-587-2860	NA
Ambulance	Allina Health EMS	651-222-0555	911
Hospital	Hutchinson Health	320-234-5000	NA
Power Company	Hutchinson Utilities	320-587-4745	877-593-3973
Highway Department	McLeod County Hwy	320-484-4321	NA
Telephone Company	New Ulm Telecom	320-234-5261	320-587-2323
Neighboring Water System	City of Glencoe	320-510-0367	NA
MPCA Groundwater Division	Sharon Kroening	651-296-6300	800-422-0798
MRWA Technical Services	David Neiman	218-820-0595	800-367-6792
MDH Public Water Supply	Amy Lynch	507-344-2713	NA
MDH SWP Planner	Karen Voz	320-223-7322	NA

B. INCIDENT ASSESSMENT TEAM

Responsible Party	Name	Telephone	Alternate Telephone
Mayor/Board Chair	Gary Forcier	320-583-8717	320-587-2868
Council Members	Steve Cook	320-587-7108	320-234-4000
Council Members	John Lofdahl	320-582-1084	320-587-2293
Council Members	Mary Christensen	320-296-3389	320-587-6115
Council Members	Chad Czmowski	952-237-3587	320-587-2453
Fire Chief	Mike Schumann	320-552-0578	320-234-4211
Sheriff	Scott Rehmann	888-440-3134	NA
County Emergency Director	Kevin Mathews	320-864-1339	320-864-3134
Hazardous Materials Response	HFD	320-587-2506	911
System Operator	Eric Levine	320-583-5457	320-234-4222

C. Public Information Plan

1. Primary spokesperson for the media and/or public comment in the event of an emergency or contamination incident.

Name: **Matt Jaunich**
Title: **City Administrator**
Address: **111 Hassan St. SE**

Home Phone: **320-234-5650**
Work Phone:

Public Information Center Location during Emergency: City Hall

Times Available: As needed

2. Information checklist to be conveyed to the public media:

Name of water system: _____

Contaminant of concern and date: _____

Source of contamination: _____

Public health hazard: _____

Steps the public can take: _____

Steps the water system is taking: _____

Other information: _____

3. Media Contacts

Media	Name	Telephone	Address
Newspaper	Hutchinson Leader	320-753-3635	170 Shady Ridge Rd NW, Suite 100 Hutchinson, MN 55350
Radio	KDUZ/KARP/KGLB	320-587-5158	20132 Hwy 15 N Hutchinson, MN 55350
TV	HCVN	320-587-3113	100 Jefferson St. SE Hutchinson, MN 55350

VII. MITIGATION AND CONSERVATION

A. MITIGATION

1. Infrastructure maintenance/upgrades/maps:

System infrastructure replaced as needed and to coincide with street projects. System maps are updated regularly.

2. Regular inspection of tower, well, pump house:

Inspections completed as part of daily rounds.

3. Staff emergency training:

Staff safety training is performed by Safe Assure on a monthly basis. AWWA safety talks are done weekly.

4. Site new backup well:

There is no need to site a new well at this time. Well 9 will be constructed when the demand increases and the maximum day pumpage needs exceed the firm pumping capacity of Wells 4, 5, 6, 7, and 8 (4400 gpm).

5. System valving to isolate problems:

System valving is regularly evaluated and updated as needed and to coincide with street projects.

6. Sanitation procedures for construction/repairs:

New construction sanitation is performed per project specifications. System repair sanitation and total coliform analysis is done on an as needed basis.

B. CONSERVATION

1. Water Meters

All customers are metered. Meters are tested and replaced as needed. The AMI system provides leak detection and high usage alarms.

2. Public Education

Public education is available in the billing inserts and on the city website. Staff works with high usage customers each month to help find leaks and provide water conservation information.

3. Rate Structure

The City of Hutchinson is currently working to develop and implement a conservation rate structure.

Minnesota Department of Health
Environmental Health in Minnesota

MDH Public Water Supply Sources Report

PWSID: **1430004**
PWS Name: **Hutchinson**
PWS Type: **Community**
PWS Status: **Active**

Public Water Supply Sources: Information from MNDWIS and CWI (sorted by Sample Point ID)

Source Type Codes: **GW** = Ground water; **SW** = Surface water; **GUI** = Ground water under influence
Location Source: **MGS** = digitized by the MN Geological Survey; ***** indicates imcomplete records
O* = duplicate in Unverified Well Data; **R*** = duplicate in MNDWIS PWS Sources Removed from Flow; **S*** = duplicate in MNDWIS PWS Sources in Flow;

MNDWIS PWS SOURCES IN FLOW

Source Info							MNDWIS Data				CWI Data			
Sample Point ID	Name	Type	Availability	Status	Well No. (link to Well Log(s))	Location Info (link to Map)	Drill Year	Depth (in feet)	Case Depth (in feet)	Case Diam. (in inches)	Drill Date	Depth Completed (in feet)	Case Depth (in feet)	Case Diam. (in inches)
S02	**Well #4**	GW	Primary	Active	210426	05/23/2008 (M. Wettlaufer)	1966	412	342	16	12-15-1966	412.00	342.00	16.00
S03	**Well #5**	GW	Primary	Active	228800	11/01/2013 (G. Haglund)	1971	410	**340**	16	08-11-1971	410.00	**342.00**	16.00
S04	**Well #6**	GW	Primary	Active	233077	11/01/2013 (G. Haglund)	1972	475	355	20	10-00-1972	475.00	355.00	20.00
S05	**Well #7**	GW	Primary	Active	511076	11/04/2013 (G. Haglund)	1988	400	320	18	03-04-1988	400.00	320.00	18.00
S06	**Well #8**	GW	Primary	Active	724408	11/01/2013 (G. Haglund)	2005	415	325	18	12-06-2005	415.00	325.00	18.00

MNDWIS PWS SOURCES REMOVED FROM FLOW

Source Info							MNDWIS Data				CWI Data			
Sample Point ID	Name	Type	Availability	Status	Well No. (link to Well Log(s))	Location Info (link to Map)	Drill Year	Depth (in feet)	Case Depth (in feet)	Case Diam. (in inches)	Drill Date	Depth Completed (in feet)	Case Depth (in feet)	Case Diam. (in inches)
S01	**Well #3**	GW	Sealed	Inactive	210425 **O***	10/01/1999 (T. Bovee)	**1964**	**395**	**325**	**16**	**11-00-1958**	**400.00**	**330.00**	**10.00**

MNDWIS and CWI data value discrepancies in preceding tables are shown in **RED** (0 or null values excepted).

Unverified Wells

The following tables show information on wells whose existence (or previous existence) has not yet been confirmed.

UNVERIFIED Well Data

Well Search Reference	Name(s)	Unique Well Number	Drilled Depth (ft.)	Completed Depth (ft.)	Depth Cased (ft.)	Casing Diameter (in.)	Year Constructed	Construction Type	Year Out of Service	Sealing Record?	Year Sealed	Location Info	Comments
A	Feed Mill Well; H250554		210.0	210.0		10.0	Before 1917	Cable Tool/Bored		Y	2006	Corner of 3rd Ave. NW & Main St. N. at Ames Bros.	Ref.: 1917 MDH San. Rpt. In pit 3' x 4' & 5' deep. Initially, well was

Appendix V - City of Hutchinson

UNVERIFIED Well Data													
Well Search Reference	Name(s)	Unique Well Number	Drilled Depth (ft.)	Completed Depth (ft.)	Depth Cased (ft.)	Casing Diameter (in.)	Year Constructed	Construction Type	Year Out of Service	Sealing Record?	Year Sealed	Location Info	Comments
												Mill.	193' deep. Deepened in 1933 to 210 ft. Inter-connected w/city supply. H250554 for 182' deep, 10" well. Can city confirm?
B	Power House Well		210.0	210.0		16.0	Before 1933	Cable Tool/Bored				At Power House, across Main St. fm. Ames feed mill.	Ref.: 1933 MDH San. Rpt.
C	Well No. 1; Park Well	201382	370.0	370.0	320.0	12.0	1950	Cable Tool/Bored				In municipal park.	Ref.: 1950 MDH San. Rpt.
D	Kraft Food Wells (multiple wells)	210428	235.0	235.0	208.0	16.0	1945	Cable Tool/Bored				Kraft Food Co.	Ref.: 1952 MDH San. Rpt. Inter-connected w/city supply. Is it possible for the Kraft Food property to be the same as the well at Ames Mill? Multiple Kraft wells mentioned.
E	Well No. 2	210383	392.0	265.0	237.0	12.0	1954	Cable Tool/Bored				In city park.	Ref.: 1955 MDH San. Rpt. states 257' depth, 20' of 12" screen. Well Record states orig. depth was 392', completed to 265'.
F	Well No. 3; H250568	210425 **R***	395.0	395.0	325.0	10.0	1955			Y	2007	Lot 2, Blk 14	Ref.: 1955 MDH San. Rpt. Sealing Rec. H250568

Appendix V - City of Hutchinson

UNVERIFIED Well Data

Well Search Reference	Name(s)	Unique Well Number	Drilled Depth (ft.)	Completed Depth (ft.)	Depth Cased (ft.)	Casing Diameter (in.)	Year Constructed	Construction Type	Year Out of Service	Sealing Record?	Year Sealed	Location Info	Comments
													states 395' deep, 12" csg. to 325, & 10" csg. to 325. Orig. well record show either 395' deep, cased to 325 or 481' deep, cased to 400'. Diff. well?
G	Hutchinson Well	201381	374.0	374.0	321.0	12.0	1950	Cable Tool/Bored				116-29-6 BCABCA	Ref.: CWI. Very close to Well No. 1. Are 201382 & 201381 the same well?
H	Hutchinson Utilities Well	239469	447.0	440.0	315.0	16.0	1971						Ref.: CWI.

Databases Searched	Remarks
County Well Index (1-mile radius); MDH DWP Microfiche; MDH 1988-2002 Muni Well Inventory (1Suite); Lakesnwoods.com; Biennial Report of the MN State Dairy and Food Commissioner-1907; Minnesota Geological Survey City Well File Folders; MGS Bulletin (22, 27, 31, or 32); MNBrew.com or oldbreweries.com; MDH DWP MNDWIS; Past and Present MN Railroad Stations; Sanborn Fire Insurance Maps; MDH WELLS	This Unverified Municipal Well Inventory is as complete and thorough as possible, given available documentation. However, MDH Planners and Hydros, as well as City representatives should feel free to add or subtract from this report as necessary. HUTCHINSON, in Hutchinson and Hassan Valley Townships, McLeod Co., was incorporated as a village in 1881, and as a city in 1904. The city has the second oldest park system in the United States. Sanborn historical maps were reviewed for: 1893, 1899, 1909, 1917, 1928, & 1943. Several wells were identified. The DNR's SWUDS files were not reviewed for wells. One brewery operated in the city under different names: Plotzer & Wetzig (1875), Englehorn & Co. (1885), Kleinman & Bro. (1905), & Joseph Hajicek. Five creameries are reported to have operated in the city in 1907: Hutchinson Co-op Creamery Assn., West Lynn Creamery Assn., Model Creamery, Acoma Co-op Creamery Assn., and Lynn Creamery. Four railroad depots are mentioned in references: St. Paul, Minneapolis & Manitoba railway depot (SE corn. Adams St. & Wash. Ave. E.), Minnesota Western Luce Line railway depot (unkn. location), Chicago, Milwaukee & St. Paul railway depot (built: 1886, razed: 1957), & Chicago, Milwaukee & St. Paul railway depot (built: 1916, located at 3rd Ave. near Main St. dam). Historical photos (attached) show a windmill (well) & water tank adjacent to the St. Paul, Minneapolis & Manitoba railway depot. The Farmers Produce Co. & the Coca Cola Co. each had wells, according to the 1944 MGS Bulletin 31. Two unverified PWS wells have sealing records. The PWS apparently has an active well sealing program.

Unverified Well Data Compiled By: **Geoffery Nash** Compiled Date: **10/7/2013**

Source: MN Dep't. of Health - 1/8/2015

Use of MDH Public Water Supply Sources Report

The report you have received shows three classes of Public Water Supply wells:

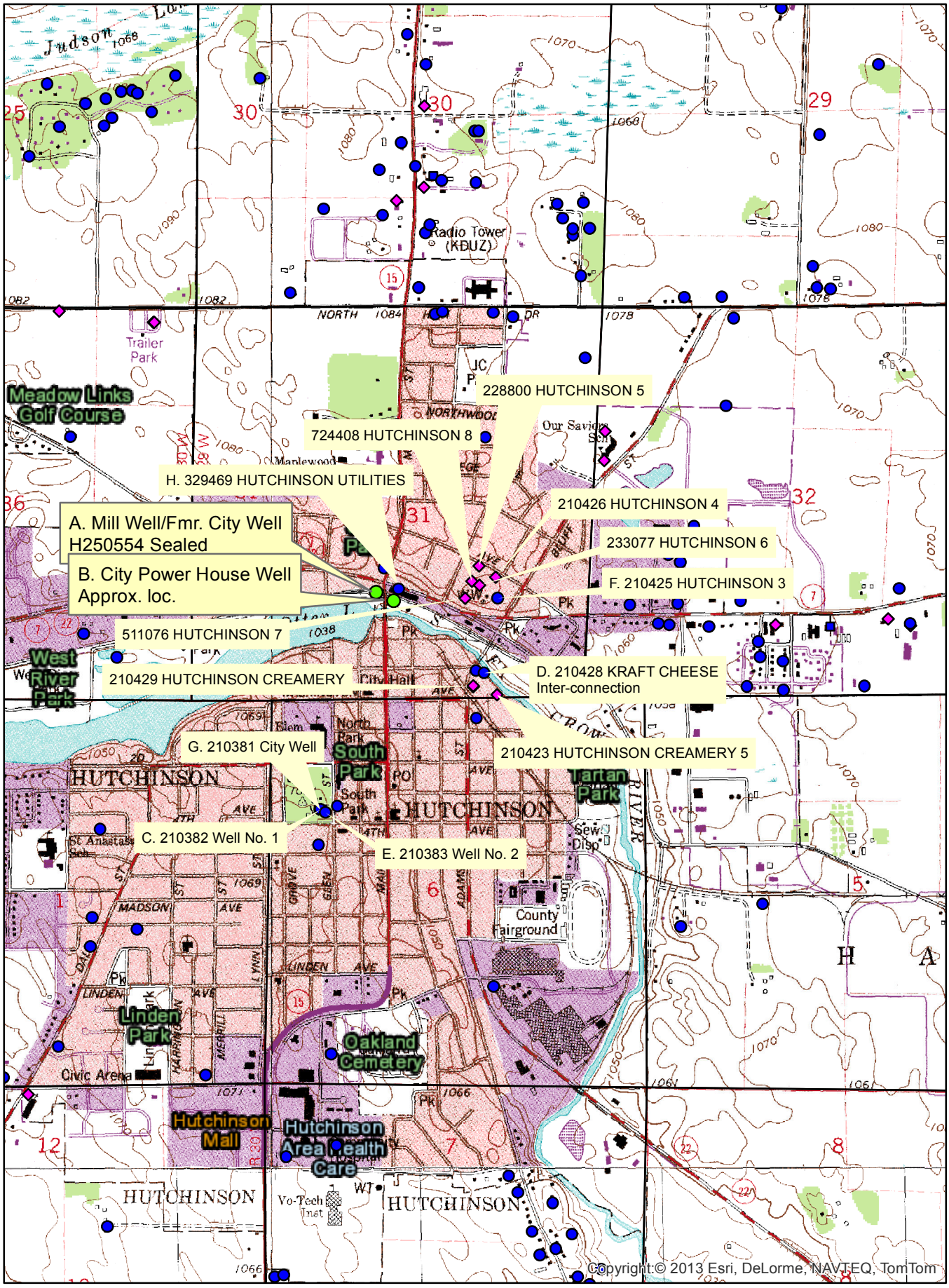
- In Use (actively used)
- Removed From Flow (for back-up or emergency use; may be disconnected from PWS)
- **Unverified Wells (unused wells with no documented location, unique ID number, and/or well sealing record)**

Unverified wells are unsealed, abandoned wells. These wells pose a risk of contamination to existing wells and aquifers. According to State Well Code and under the terms of your Wellhead Protection Plan, your PWS may need to identify, locate, and properly seal Unverified Wells within your Drinking Water Supply Management Area, to current MDH standards. While historical records may indicate that some of these wells were "capped", "abandoned", or "sealed" in the past, unless it can be shown that the sealing was performed to current standards, they may need to be located, cleaned out, and sealed properly with a well sealing record issued.

The report lists database references that were searched to compile the report. Under "Remarks" are notes and questions to help you with this process. State grant funding is available to help fund sealing of these old public water supply wells.

If you have questions, please talk to your MDH Planner or Hydrologist to address your PWS's specific issues. This report is not intended to be the "last word" on the status of unverified wells and your input will be critical in successfully finding and sealing these potential sources of contamination.

Restart


228800 HUTCHINSON 5
724408 HUTCHINSON 8
H. 329469 HUTCHINSON UTILITIES
210426 HUTCHINSON 4
A. Mill Well/Fmr. City Well
H250554 Sealed
233077 HUTCHINSON 6
B. City Power House Well
Approx. loc.
F. 210425 HUTCHINSON 3
511076 HUTCHINSON 7
210429 HUTCHINSON CREAMERY
D. 210428 KRAFT CHEESE
Inter-connection
G. 210381 City Well
210423 HUTCHINSON CREAMERY 5
C. 210382 Well No. 1
E. 210383 Well No. 2
Meadow Links Golf Course
West River Park
South Park
Tartan Park
Linden Park
Oakland Cemetery
Hutchinson Mall
Hutchinson Area Health Care
Radio Tower (KDUZ)
Trailer Park
County Fairground
Civic Arena
HUTCHINSON
Copyright© 2013 Esri, DeLorme, NAVTEQ, TomTom

Former Wells of City of Hutchinson--Systems for Bruce Olsen and Terry Bovee

SUPERSEDED...REFERENCE ONLY

Well Sequence # (in record)	Well Name	Unique #	Casing Diameter	Well Depth	Depth Cased	Year Constructed	Well Type	Year Out of Service	Sealing Record	Location
1	Old Feed Mill Well		10"	193' - 210'		pre-1917	drilled	disconnected from city system between 1949-1951		Owned initially by Ames Brothers. Located near the mill at corner of 3rd Ave. NW and Main St. N. Pumped by Northwest Light & Power Co. into city distribution system. At pumping station adjacent to So. Branch of Crow River. About 40' from river bank.
2	Old Power House Well		16"	210'		between 1919-1933	drilled	disconnected from city system between 1955-1958		Located at the power house across the street from the feed mill. At pumping station adjacent to So. Branch of Crow River. About 40' from river bank.
3	Old Well #1	210381	12"	370' - 374'	320'-321'	1950	drilled	between 1963-1974		Located in the town park. 300 S. Glen St.

SUPERSEDED...REFERENCE ONLY

Former Wells of City of Hutchinson--Systems for Bruce Olsen and Terry Bovee

Well Sequence # (in record)	Well Name	Unique #	Casing Diameter	Well Depth	Depth Cased	Year Constructed	Well Type	Year Out of Service	Sealing Record	Location
4	Kraft Food Co. plant well					pre-1952		disconnected from city system between 1955-1958		
5	Old Well #2	210383	12"	257'-265'	237'	1954	drilled	between 1963-1974		Located in the town park. 300 S. Glen St.
6	Old Well #3					1958-1959; put on city system 3/1/1960	drilled			Located on N. side of river on Lot 2, Block 14.
7		210382	12"	370'	254'		drilled			

This list does not include wells currently Permanent, Active

O://DwpSwp/Hydros/Old-Muni-Wells/Bruce/Wells-Hutchinson-BOlsen.xls

Hutchinson (p. 1)

Seq. #	Well Name	Unique #	Casing Diam.	Depth	Depth Cased	Well Type	Year Const.	Year Out of Svc.	Sealing Record	SWL	Location
①	old feed mill well		10"	193' (1917, '18) 210' (1933, '42)		drilled	pre-1917	Either well ①, ② or both were cut off from city supply between 1949-'51)		flowing (hydrostatic press. 23 ft.-1917) (1917, 142, '47,	Owned by Ames Brothers. Located near the mill at corner of 3rd Ave. NW + Main St. N. Pumped by Northwest Light + Power Co. into city distribution system. (Mill is feed mill.) At pumping station adjacent to So. Branch of Crow River, about 40' from river bank.
②	old power house well		16"	210'		drilled	between 1919-1933	Either well ②, ① or both were cut off from city supply between 1949-'51). Probably cut off from city supply between 1955-'58.		flowing (1942, 147	Located at the power house across the street from the feed mill. (So at 3rd St. NW + Main St. N.) At pumping station adjacent to So. Branch of Crow River. about 40' from river bank.

Hutchinson (p.2)

Seq. #0	Well Name	Unique #	Casing Diam.	Depth	Depth Cased	Well Type	Year Const.	Year Out of Svc.	Sealing Record	SWL	Location
(3)	Old Well #1	210381	12"	370' (MDH-1955), DNR Report) 374' (DNR log)	320' (MDH-1955) 321' (DNR log)	drilled	1950	between 1963 - '74		37' (MDH-1951), DNR log + Report)	Located in the town park. 300 So. Glen St. (DNR Approp. Report)
(4)	Kraft Food Co. plant well						pre-1952	disconnected from city between 1955 - '58			
(5)	Old Well #2	210383	12"	257' (MDH-1955) 261' (DNR) 265' (DNR log)	237'	drilled	1954	between 1963 - '74		33' (DNR Report + log)	Located in the park. 300 So. Glen St. (DNR Approp. Report + log)

Seq. #	Well Name	Unique #	Casing Diam.	Depth	Depth Cased	Well Type	Year Const.	Year Out of Svc.	Sealing Record	SWL	Location
(6)	Old Well #3					drilled	1958-'59; put on city system 3/1/1960.				Located on N side of river on Lot 2, Block 14.
(7)		210382	12"	370'	320'	drilled					Originally drilled to 390', then backfilled to 370' and gravel-packed to top of screen with 7 yds. of filler gravel.

1944 MGS Bulletin 31

		DEPTH (feet)	THICKNESS (feet)
	Gravelly clay	148–187	39
	Uniform sand with streaks of clay	187–225	38
	Gravel and sand	225–280	55
	Blue shale	280–290	10
	Gray sandy shale	290–310	20
	Gray uniform sand	310–353	43
	A drift conglomerate	353–354	1
Dresbach	Gray shale, grading into red	354–410	56
	White sand	410–544	134
	Pink sand, grading nearly to white and showing evidence of consolidation	544–578	34
	White sand, grading into pink	578–592	14
	Light-gray sand	592–602	10
Hinckley (from 760 feet)	Pink sand, toward the bottom becoming highly colored	602–820	218
	White sandstone varying to pink	820–874	54
	Pink sandstone	874–936	62
Fond du Lac	Red shale and sandstone of uniformly persistent color	936–1075	139
	Red to pink shale and sandstone, with little variation (no samples)	1075–1640	565

Hutchinson

The public supply and nearly all the domestic and industrial supplies of water at Hutchinson are obtained from a strong artesian layer in the drift that occurs at a depth of about 200 feet. The city has two wells, each 14 inches in diameter and 200 feet deep. They are located below the dam on the bank of the South Fork of the Crow River, at an elevation of 1025 feet. The water level in the river below the dam is at about 1018 feet, and that above the dam is about 1032 feet above sea level. The wells flowed with a high head when first completed, but the static level is now 15 feet below the surface. When pumped at the rate of 300 gallons per minute there is no appreciable drawdown.

A & B

Many private artesian wells in the city tap the same aquifer, but only a few flow to the surface at the present time. The Farmers' Produce Company and the Coca Cola Company each have wells that yield copiously.

Farmers' Produce Co. & Coca Cola Co. each have wells.

Brownton

The village of Brownton is located on a thick mantle of glacial drift, at an elevation of 1015 feet. The old village well was 6 inches in diameter and 304 feet deep. It did not penetrate the base of the drift. The well had a static level 24 feet below the surface and showed little drawdown when pumped at the rate of 95 gallons per minute. Another well 10 inches in diameter and only 145 feet deep was drilled in 1933. This well has a static level 40 feet below the surface and a drawdown of 20 feet when pumped at the rate of 150 gallons per minute. The creamery well is 130 feet deep, with a static level 22 feet below the surface.

Stewart

The village well at Stewart penetrates 320 feet of boulder clay, with

which has a head 15 feet above the surface, or 1035 feet above sea level. The well at the grain elevator and several at private dwellings also flow.

Koniska

This village also has a number of flowing wells. The one at the creamery is 164 feet deep. It penetrated a hardpan layer about 1 foot thick immediately above the sand layer that serves as the aquifer. The well flows 90 gallons per minute, with a head 32 feet above the surface, or 1037 feet above sea level.

FARM WATER SUPPLIES

There are many shallow dug or bored farm wells in this county, but drilled wells in the drift are the most common type. The latter vary from 75 to 300 feet in depth. A few penetrate the drift completely and draw from the underlying sandstones. The following well sections are typical of this group.

Farm Well Half a Mile North of Glencoe. William Warnke, Owner
Elevation 1030 ft.

		DEPTH (feet)	THICKNESS (feet)
Drift	Unclassified	0–250	250
Cretaceous	White sandy clay	250–260	10
Cambrian	Blue-green and red shales	260–438	178
	White sandstone	438–460	22

Farm Well, Sec. 29, T. 115 N., R. 27 W., F. Groupman, Owner

		DEPTH (feet)	THICKNESS (feet)
Drift	Unclassified	0–280	280
Dresbach	Blue, green, and red shales	280–410	130
Eau Claire	Red shale	410–430	20
	Red and green shale	430–437	7
	Red shale	437–445	8
Mt. Simon	White sandstone	445–480	35

Farm Well, Sec. 8, T. 115 N., R. 27 W., North of Plato. Elevation 975 ft.

		DEPTH (feet)	THICKNESS (feet)
Drift	Unclassified	0–320	320
Dresbach			
Eau Claire	Blue, green, and red shales	320–380	60
Mt. Simon	White and gray sandstone	380–400	20

TABLE 78. — ANALYSES OF WATERS OF McLEOD COUNTY *

	1	2	3	4	5	6
Depth (feet)	600	1640	193	197	318	140
Hardness	380	328	393	385	350	435
Alkalinity	380	384	448	450	380	488
Iron	0.35	0.4	0	...	3.6	0.5
Manganese	0	...	...	0.1	...	...
Chlorine	7.6	29	1	...	6.5	1
Fluorine	0.1	...	...	0.1	...	...

(table continues)

TABLE 78.—*Continued*

SO_3 radical	130	...	...	...	...	...
Turbidity	6	5	30	10	10	15
Color	27	28	80	20	80	20
Odor	...	e-1	e-1	...	e-1	0
pH value	8	...	...	...	...	...

* Data from State Board of Health Laboratory. Hardness, alkalinity, iron, and chlorine in terms of parts per million (1 grain per gallon = 17.1 p.p.m.). For key to turbidity and items following, see standards in section III.

1. City well at Glencoe. July 16, 1937.
2. City well at Glencoe. May 21, 1917.
3. Flowing well at Hutchinson. June 26, 1918.
4. Village well at Lester Prairie. December 31, 1930.
5. Village well at Stewart. December 6, 1915.
6. Village well at Winsted. September 12, 1923.

TABLE 79.—MINERAL ANALYSES OF WATERS OF McLEOD COUNTY
(Analyses in parts per million)

	Surface Deposits (Glacial Drift, etc.)										
	1	2	3	4	5	6	7	8	9	10	11
Depth (feet)	21	22	22	28	39	40	112	115	120	172	180
Diameter of well (inches)	120	...	240	144	144	84	2	...	...	3	10
Silica (SiO_2)	...	28	31	...	...	...	...	...	...	...	22
Iron (Fe)	...	tr.	0.2	...	...	...	...	...	...	...	5
Aluminum (Al)	...	...	...	...	...	...	...	...	...	...	...
Iron and aluminum oxides ($Fe_2O_3 + Al_2O_3$)	3.3	8	0.8	4.7	6.2	7	8.4	7.4	6.4	12	5
Calcium (Ca)	78	149	136	113	112	76	96	88	96	117	103
Magnesium (Mg)	24	50	44	46	49	24	43	38	42	42	39
Sodium and potassium (Na + K)	5	37	61	10	20	5	54	45	56	39	29
Carbonate radical (CO_3)	...	0	0.0	...	...	...	...	...	...	...	0
Bicarbonate radical (HCO_3)	330	547	415	484	516	307	540	572	560	628	512
Sulphate radical (SO_4)	27	117	110	65	61	41	79	10	71	28	67
Chlorine (Cl)	3.2	54	130	19	27	3.6	4	1.5	3	2	2
Nitrate radical (NO_3)	...	12	4.2	...	...	...	...	...	...	...	0
Total solids	303	740	731	496	529	308	550	467	550	549	531

	Surface Deposits (Glacial Drifts, etc.)							Paleozoic Sandstones		
	12	13	14	15	16	17	18	19	20	21
Depth (feet)	226	230	230	260	304	304	320	1640	1640	1640
Diameter of well (inches)	...	3	2	...	6	6	8	Sand 6	Sand 6	Sand 6
Silica (SiO_2)	24	...	...	...	29	...	26	...	8.8	...
Iron (Fe)	2.8	...	...	...	...	...	...	...	0.5	...
Aluminum (Al)	4.9	...	...	...	...	...	...	...	4.7	...
Iron and aluminum oxides ($Fe_2O_3 + Al_2O_3$)	...	8	3	1.2	0.8	3.1	3.2	1.7	...	1.2
Calcium (Ca)	99	117	120	40	71	75	42	78	77	75
Magnesium (Mg)	53	48	51	23	33	34	10	40	43	33
Sodium and potassium (Na + K)	28	51	51	106	74	75	113	80	85	209
Carbonate radical (CO_3)	0	...	...	...	0	...	0	...	0	...
Bicarbonate radical (HCO_3)	508	647	686	503	512	588	440	456	429	464
Sulphate radical (SO_4)	98	65	54	...	20	...	24	107	116	158
Chlorine (Cl)	6	1	1	8	6	5	9	35	37	165
Nitrate radical (NO_3)	0	...	...	...	0	...	1.3	...	0	...
Total solids	568	609	622	425	491	481	449	565	600	870

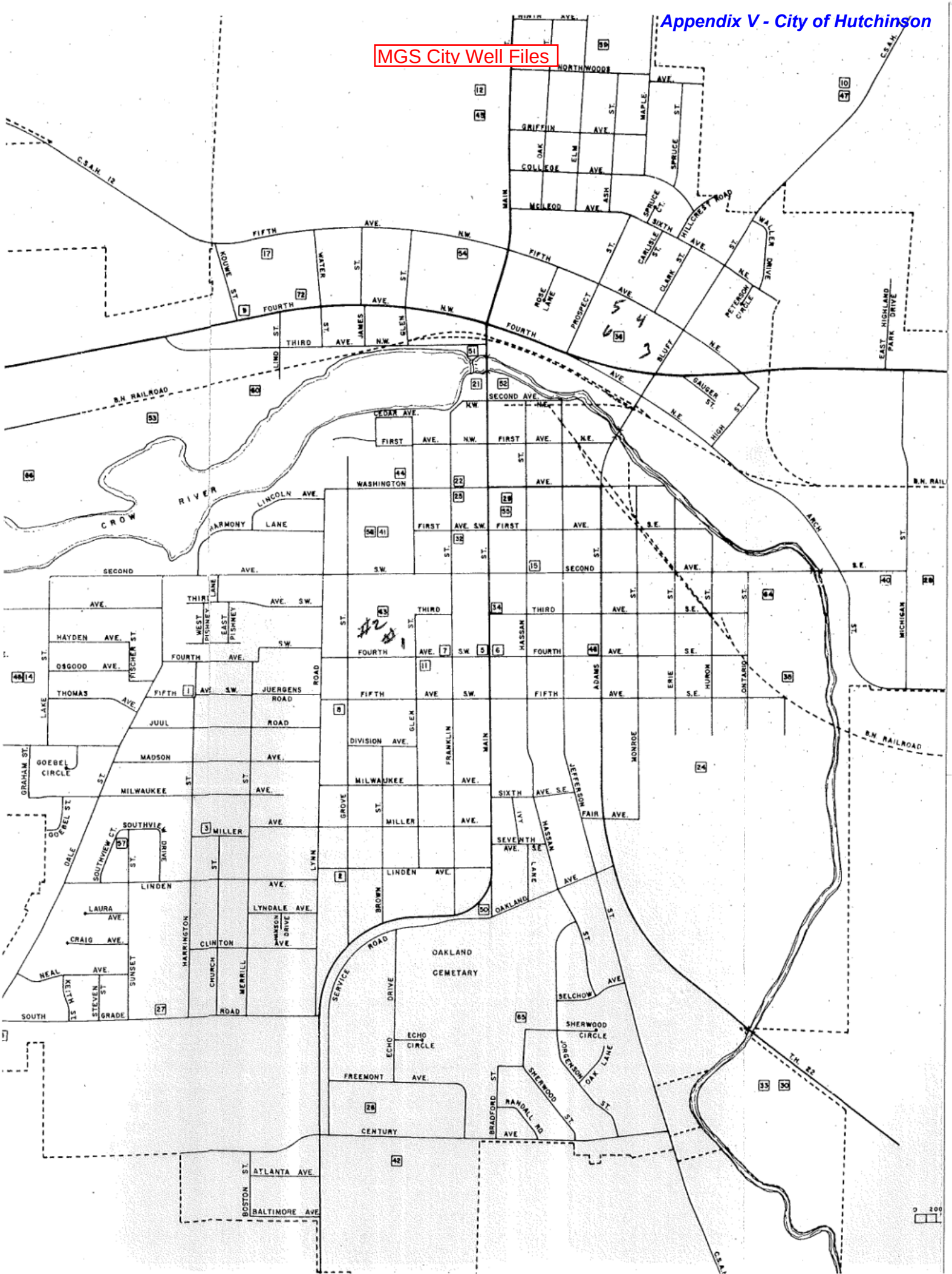
PRELIMINARY REPORT

MUNICIPAL WATER SUPPLY FACILITIES

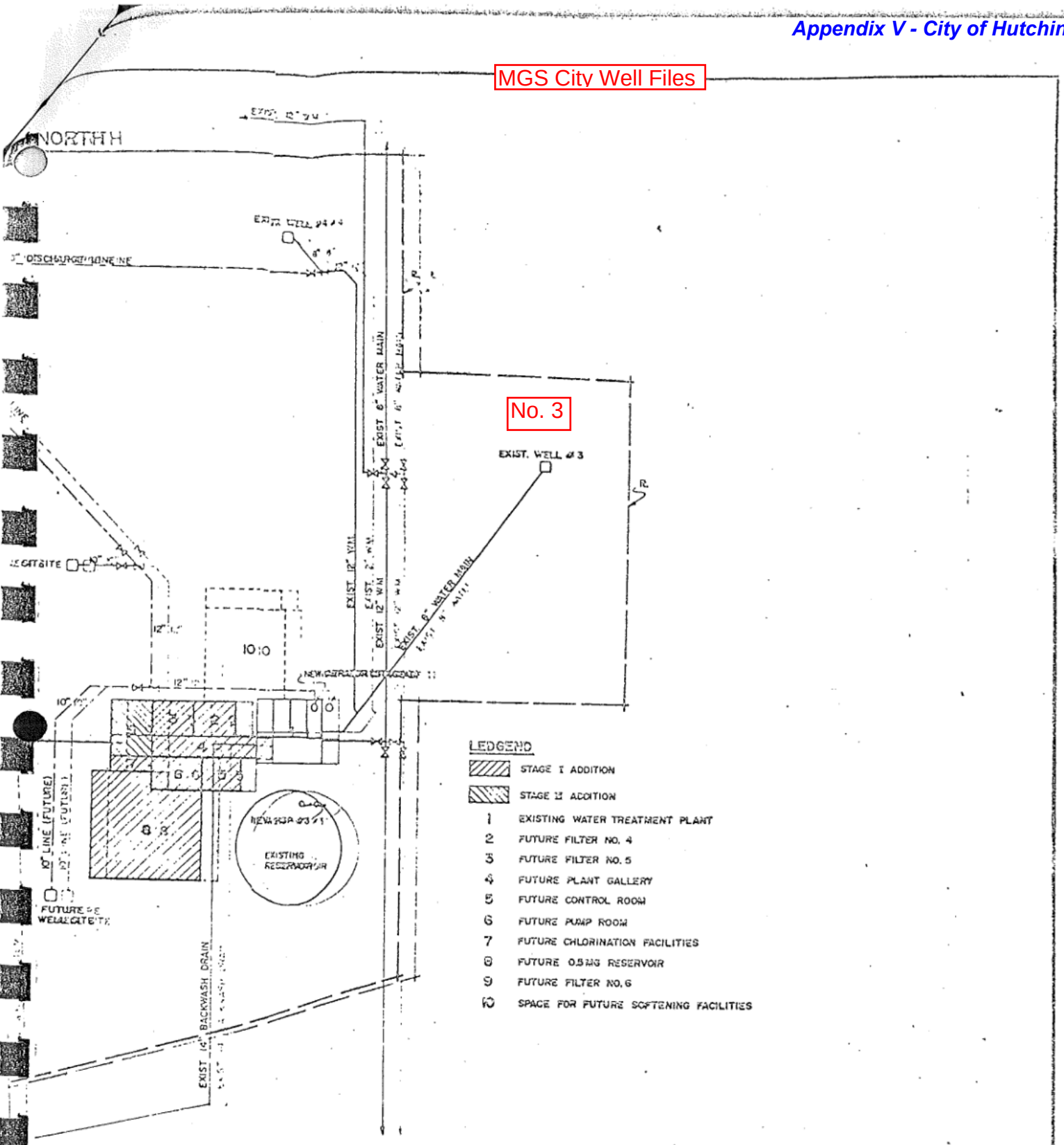
HUTCHINSON, MINNESOTA

1957

MGS City Well Files

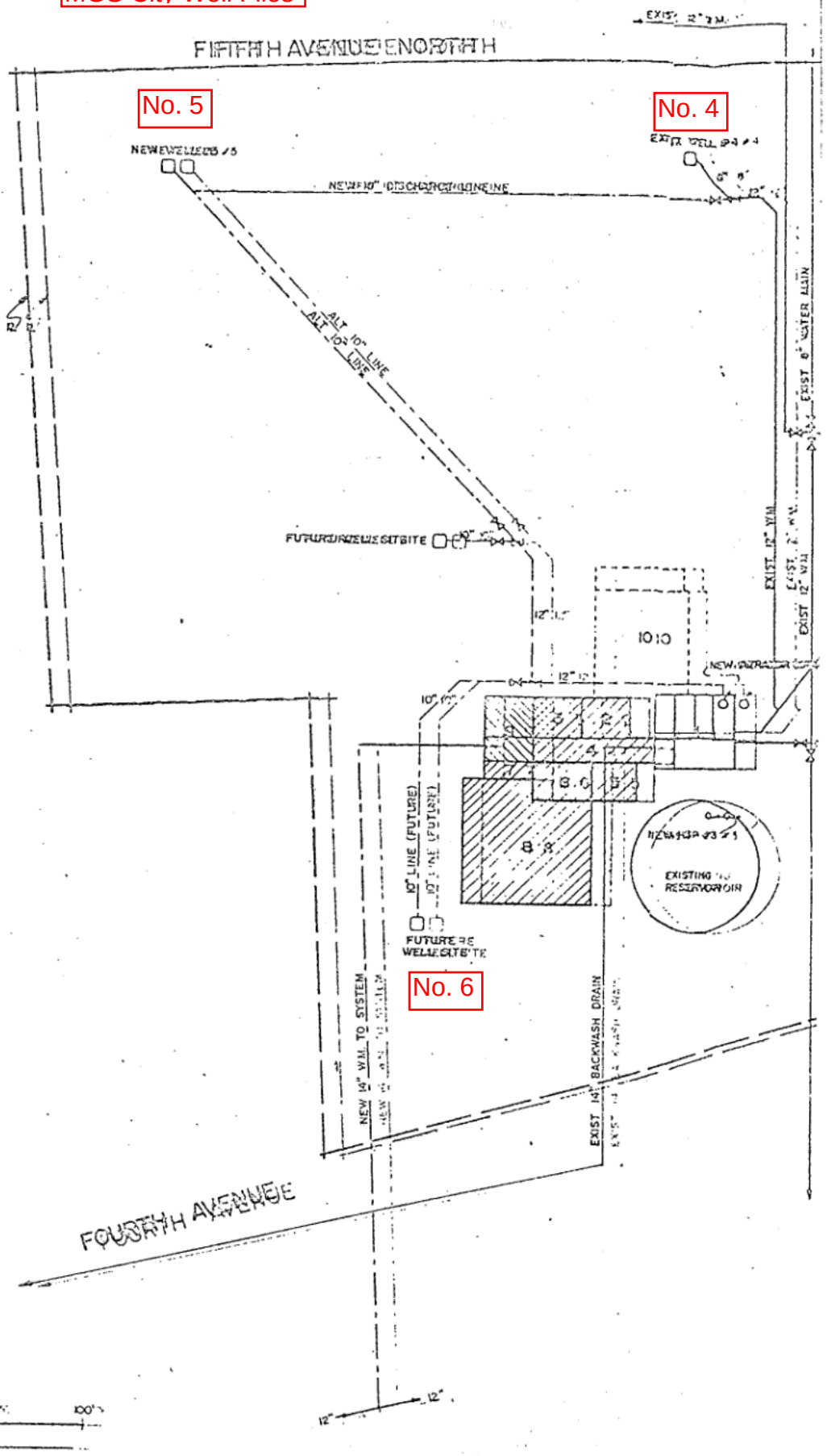


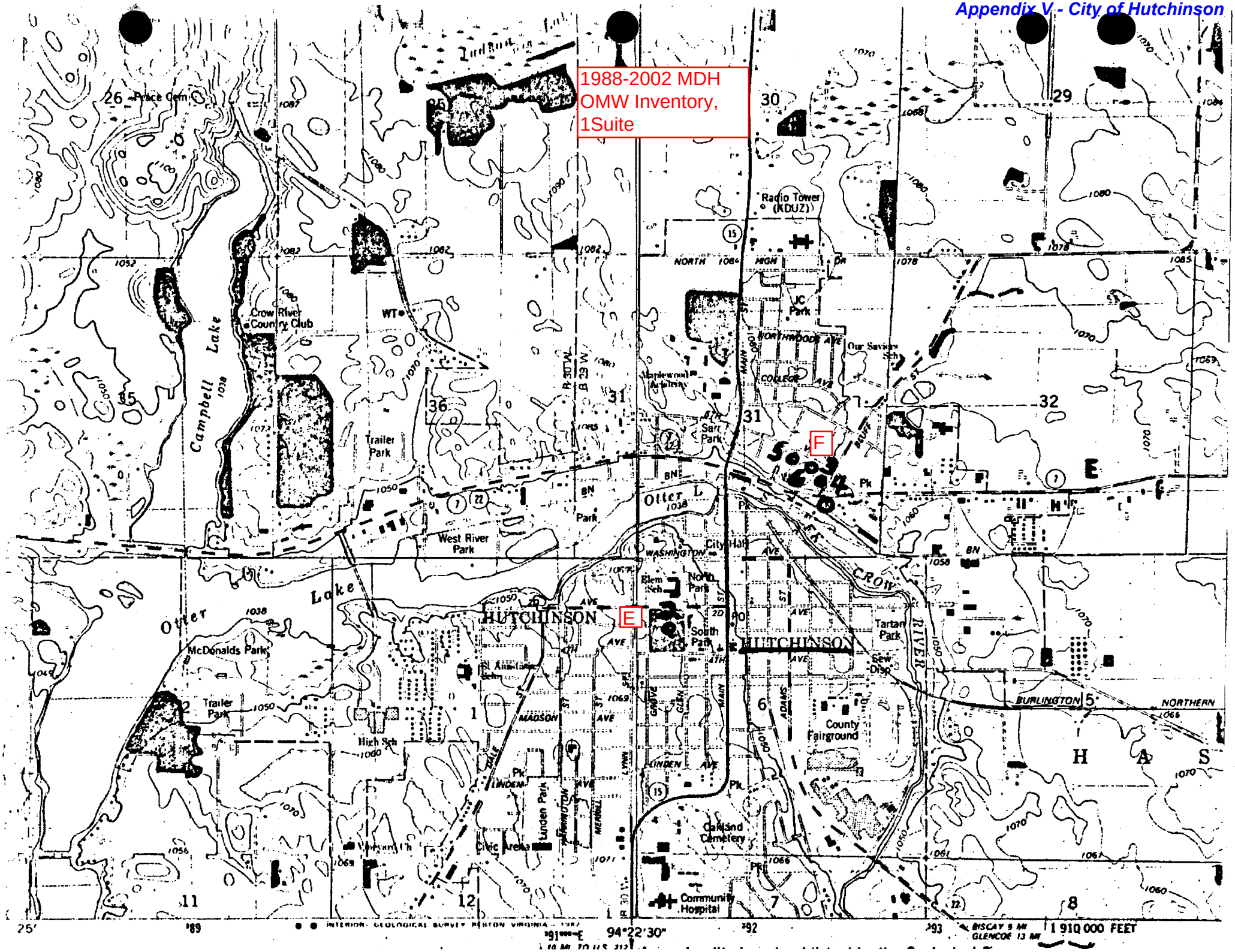
MGS City Well Files



PROPOSED EXPANSION
NORTH TREATMENT PLANT
FIGURE NO. 6

MGS City Well Files




1988-2002 MDH OMW Inventory, 1Suite
E
F
HUTCHINSON
Campbell Lake
Otter Lake
Crow River Country Club
Trailer Park
West River Park
McDonalds Park
High Sch
Linden Park
Civic Arena
Radio Tower (KDUZ)
JC Park
Our Savior's Sch
City Hall
North Park
South Park
Tartan Park
Sew Disp
County Fairground
Oakland Cemetery
Community Hospital
CROW RIVER
BURLINGTON NORTHERN
94°22'30"
1 910 000 FEET

Appendix V - City of Hutchinson

Unique Well Number: 210383

County: McLeod
Quad: Hutchinson East
Quad Id: 108A

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD
MINNESOTA STATUTES CHAPTER 1031

C

Entry Date: 1988/04/11
Update Date: 2004/12/06
Received Date:

Wellname HUTCHINSON NO. 2

Township	Range	Dir	Section	Subsection	Field Located	MGS Elevation	ft.
116	29	W	6	BCABDC		1075.00	

Well Owner CITY OF HUTCHINSON
300 GLEN ST S
HUTCHINSON MN Changed

1988-2002 MDH OMW Inventory, 1Suite

Description	Color	Hardness	From	To (ft.)
TOPSOIL	BLACK		0	2
CLAY	YELLOW		2	25
CLAY & PEBBLES	BLUE		25	195
CLAY & COARSE GRAVEL	BLUE		195	203
CLAY & PEBBLES	GRAY		203	227
SAND & GRAVEL	GREEN		227	257
LENS OF SAND & GRAVEL	GREEN/GR		257	265

Remarks
NOTE ON LOCATION FROM DNR WELL LOG: SOUTH PARK, S-1/2 OF CITY. CONSTRUCTION METHOD: DRILLED (DETAILS UNSPECIFIED). ORIGINAL LOG FROM FREDERICKSON'S WELL CO. SHOWS WELL WAS ORIGINALLY DRILLED TO 392'; APPARENTLY BACKFILLED TO

First Bedrock
Last Strat Sand
Aquifer Quat. Buried Artes. Aquifer
Depth to Bedrock ft.

Well Depth 265.00 ft
Depth Completed 265.00 ft
Date Well Completed 1954/08/00

Drilling Method Other

Drilling Fluid

Well Hydrofractured? ☐ YES ☐ NO From ft. to

Use Abandoned

Casing Type Diameter 12 Drive Shoe? ☐ YES ☐ NO Depth
12.00 in. from 0.00 to ft. lbs/ft

Hole Diameter (in.)

Screen Make Type
Diamter Slot Length Set

Open Hole(ft.) From to

Static Water Level
33.00 ft. Land surface Date measured 1954/08/00

Pumping Level (below land surface)
81.00 ft. after hrs. pumping 1050.00 g.p.m.

Well Head Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grate (Environmental Wells and Borings ONLY) ☐ Basement offset

Grouting Information Well grouted? ☐ YES ☐ NO

Nearest Known Source of Contamination
feet Direction Type
Well disinfected upon completion? ☐ YES ☐ NO

Pump
☐ Not Installed Date Installed
Manufacture's name
Model number HP Volts
Length of drop pipe Material Capacity g.p.m
Type

Abandoned Wells
Does property have any not in use and not sealed well(s)? ☐ YES ☐ NO

Variance
Was a variance granted from the MDH for this well? ☐ YES ☐ NO

Well Contractor Cerfication
Fredrickson's 08317
License Business Name Lic. or Reg No.
FREDRICKSON

Name of Driller Date

CITY OF HUTCHINSON, MINN.

C

1988-2002 MDH OMW Inventory, 1Suite

MATERIALS

WELL LOG

46-29-6
BCABDD
ELEV 1075±5

Unique Well Number: 210382

County: McLeod
Quad: Hutchinson East
Quad Id: 108A

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD
MINNESOTA STATUTES CHAPTER 1031

C

Entry Date: 1988/04/11
Update Date: 2004/12/06
Received Date:

Wellname CITY OF HUTCHINSON

Township	Range	Dir	Section	Subsection	Field Located	MGS
[redacted]16	29	W	6	BCABDB	Elevation	1075.00 ft.

1988-2002 MDH OMW Inventory, 1Suite

Description	Color	Hardness	From	To (ft.)
SANDY CLAY			0	8
CLAY		HARD	8	65
CLAY + GRAVEL			65	78
HARDPAN			78	100
CLAY			100	116
HARDPAN			116	175
SANDY CLAY			175	200
HARDPAN			200	227
CLAY + BOULDERS			227	238
HARDPAN			238	254
MUDDY SAND			254	284
[redacted] SAND			284	320
[redacted]D			320	335
SAND + GRAVEL			335	345
SAND			345	370

Remarks

SCREEN TYPE: "SHUTTER SCREEN." USED 8" (PLAIN) EVERDUR PIPE BELOW SCREEN. ORIGINALLY DRILLED TO 390', THEN BACKFILLED TO 370' AND GRAVEL-PACKED TO TOP OF SCREEN [redacted]H 7 YDS. OF FILLER GRAVEL. CASING COMPLETED ABOVE [redacted]DE.

First Bedrock
Last Strat Sand
Aquifer Quaternary Undiff.
Depth to Bedrock -999.00 ft.

Well Depth 370.00 ft
Depth Completed 370.00 ft
Date Well Completed

Drilling Method

Drilling Fluid

Well Hydrofractured? ☐ YES ☐ NO
From ft. to

Use Abandoned

Casing Type Steel (black or low Drive Shoe? ☐ YES ☐ NO
Diameter 12 Depth 320
12.00 in. from 0.00 to 320.00 ft. lbs/ft

Hole Diameter (in.)

Screen Yes
Make LAYNE EVERDUR Type
Diamter 8.00 Slot 40 Length 320 Set ft. to 360 ft.

Open Hole(ft.) From to

Static Water Level
0.00 ft. Date measured

Pumping Level (below land surface)
ft. after hrs. pumping g.p.m.

Well Head Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grate (Environmental Wells and Borings ONLY) ☐ Basement offset

Grouting Information Well grouted? ☑ YES ☐ NO
Material From 0.0 To 254.0 ft.

Nearest Known Source of Contamination
-999 feet Direction Type
Well disinfected upon completion? ☐ YES ☐ NO

Pump
☐ Not Installed Date Installed
Manufacture's name
Model number HP 0.00 Volts
Length of drop pipe Material Capacity g.p.m
Type

Abandoned Wells
Does property have any not in use and not sealed well(s)? ☐ YES ☐ NO

Variance
Was a variance granted from the MDH for this well? ☐ YES ☐ NO

Well Contractor Cerfication

License Business Name Lic. or Reg No.

Name of Driller Date

210383 ✓ E ELEV. 1080 (108A)

W 97-61
(Rev. 1-61)

1988-2002 MDH
OMW Inventory,
1Suite

MINNESOTA CONSERVATION DEPARTMENT
DIVISION OF WATERS
WELL LOG STATEMENT

	Direc.
	Publ.
✓	Ground W.

116/29-6 bca

Well No. 2

Mail Report Promptly To Director, Division Of Waters, Centennial Office Bldg., St. Paul 1, Minn.

Location of Well (address) 300 South Glen Street

McLeod (County) Hutchinson (City or Town)

South Park S½ City of Hutchinson
Describe Further by Lot, Block, Nearest Highway.

well #2 plugged

Locate Well on Plat of Section — Sec. 6 Twp. 116 N Range 29 W

Drilled for: City of Hutchinson — Driller Fredrickson

Address Hutchinson, Minnesota — Address Hutchinson, Minnesota

Date of Completion August 1954

Type of well Drilled (Dug, Driven, Bored, Drilled) Depth 261

Casing diameter 12 inch, from ___ to ___

inch, from ___ to ___

inch, from ___ to ___

Screen: Length ___ Diameter ___ Slot size ___

Pump: Type ___ Horsepower ___

CODED

REPORT OF FINAL PUMPING TEST

Duration of Test ___ Hrs. ___ Min. Date ___

Rate of Pumping 1050 GPM

Static Water Level 33.01 Ft. Above/Below land surface

Water Level While Pumping 81 Ft.

Use: Domestic ☐ Industrial ☐ Irrigation ☐ Public supply ☐ Commercial ☐ Stock ☐

WELL LOG

Geologic Formations Kind, Color, Hard or Soft	Depth in Feet From	To	Geologic Formations Kind, Color, Hard or Soft	Depth in Feet From	To
QUUU SOIL Top Soil	0	2			
QTUU CLAY Clay	2	25			
QFUU CLAY, COBL Clay & Pebbles	25	195	116-29-6		
QFUU CLAY, GRVL Clay & Coarse Gravel	195	203	BCABDC		
QFUU CLAY, COBL Clay & Pebbles	203	227	ELEV ~~—~~ E5		
QFUU SAND, GRVL Sand & Gravel	227	257	1075		
QFUU SAND, GRVL Lens of Sand & Gravel	257	265			
Aquifer: QRCU — QRCU					

68-2

Well 2

210383

1988-2002 MDH OMW Inventory, 1Suite

FORMATIONS PASSED THROUGH

Kind of Formation	Color of Formation	Depth at Which Found	Thickness of Formation
Top soil	Black	0	2
Clay	Yellow	2	23
Clay & gravel	Blue	25	170
Clay & gravel	Blue	195	202
Sand	Gray	223	34
Clay & gravel	Gray	257	30
Sand & gravel	Green		
Lens of sand	Green		
& gravel	Gray	287	9
Clay pliable	Green & gray	296	7
Sand & gravel	Green & gray	303	10
Clay & gravel	Gray	313	7
Fine sand	Gray	320	38
Sand & gravel	Gray	358	12
Fine sand	Gray	370	30

1988-2002 MDH OMW Inventory, 1Suite

Hutchinson

Below are descriptions of your municipal wells acc
On the opposite side of this sheet is a map of you
location of your municipal wells, located as accur
our present records. Please confirm or correct the
of your wells and include any wells that are not s

Well No.		Well Depth	Casing Dia.	Casing Depth	Drop Pipe Length
1	C	320			
2	E	261	12	116	100
3	F	395	10	330	80
4		412	16	342	120
5		410	16	340	120
6		475	20	315	120

Hutchinson—

PATCHIN FERTILIZER SERVICE Private
Box 226 — Hutchinson — 55350
Joe Patchin — Owner — 612-587-3040
Prop 500-999 1-8 Loc
2875 Fertilizer Blending
2875 Anhydrous Ammonia

POPP BROS LUMBER Private
Rt 3 — Hutchinson — 55350
Willard & Don Popp — Co-Owners — 612-879-2887
Part 1963 100-249 1-8 Loc
2421 Custom Sawing
2448 Pallets

ROCKITE SILO INC
Box 48 — Hutchinson — 55350
Robert W Peterson — President — 612-879-8067
Corp 1952 2000-4999 25 To 49 Loc
Glenene Litchfield
3271 Concrete Blocks
3272 Concrete Silo Staves
3272 Concrete Drain Tile
3273 Ready Mix Concrete

STANDARD PRINTING CO
Box 7 — Hutchinson — 55350
Charles L Pearson — Owner — 612-587-2443
Part 1954 100-249 1-8 Reg
2751 Commercial Printing
2752 Commercial Printing

STEARNSWOOD INC
3rd Av Nw — Hutchinson — 55350
Robert Stearns — Pres — 612-587-2137
Corp 1948 500-999 9 To 24 Loc Reg
2441 Wood Boxes & Crates, Nailed
2448 Pallets Wood
2449 Fiber Blocking Material
2499 Triple Wall Corrugated Union

TTS METAL FINISHING COMPANY
3rd Av N W — Hutchinson — 55350
Jim Betlach — Gen Mgr — 612-587-2389
Corp 1958 250-499 10 To 74 Loc
3471 Metal Finishing Job Shop

HUTCHINSON (8,031)-MC LEOD

AMOCO FOODS CO MID AMERICA DAIRYMEN Private
35 Adams St N — Hutchinson — 55350
Julius Rainwater — Manager — 612-587-2481
Coop 1894 25-49 9 To 24 Nat
2099 Dry Yeast

BONDX INC Private
115 Erie St — Hutchinson — 55350
Vern Mortensen — Pres — 612-879-2238
Corp 1973 100-249 1-8 Reg
2842 Bondx Waterless Hand Cleaner
2842 Bondx Bowl Cleaner Bar Supplies
2842 Bondx Sheer Magic
2891 Bondx Tire Sealant

CROW RIVER PRESS INC
170 Shady Ridge Road — Hutchinson — 55350
David Theis — Sec — 612-587-2062
Corp 1966 500-999 9 To 24 Loc Reg
2711 Bridsheet & Tabloid Offset Newspapers
2711 Circulars, Handbills & Shopper Pub
2711 Commercial Job Printing
2711 Offset Printing

C-41

Charles C Thor — 25 To 49 — Reg
Prop 1965 50-99
3523 Snowblowers Attachment
3523 Rearmounted Loader Reverse Contl
3523 Power Hitches Front Hitch Choppers
3799 Trailers Heavy Duty

FARMERS ELEVATOR CO
P O Box 29 — Hutchinson — 55350
Fred Albrecht — Pres — 612-879-6021
Coop 1934 Under 10 9 To 24 Loc
2048 Feed
2875 Bulk Blend Fertilizers

GOEBEL FIXTURE CO
528 Dale St — Hutchinson — 55350
Virgil E Goebel — President — 612-587-2112
Corp 1947 2000-4999 50 To 74 Nat
2431 Millwork
2541 Custom Wood Store & Bank Fixtures

HANDS INC
325 Michigan Po Box 275 — Hutchinson — 55350
Lucas Unrah — Plant Mgr — 612-879-2354
Corp 50-99 75 To 99 Loc
Windrop
3599 Job Shop
3599 Light Assembly

HARRIS PINE MILLS
25 Michigan Ave; Box 349 — Hutchinson — 55350
Russell Newland — Plant Mgr — 612-587-2222
Corp 1969 2000-4999 75 To 99 Reg Exp
2511 Ready-To-Finish Pine Hdwd Furniture
2511 Finished Pine Furniture
2511 Ready-To-Finish Hardwood Furniture
2511 Finished Hardwood Furniture

HUTCHINSON COOP
Bennett Schaller — Hutchinson Manager — 55350 — 612-897-5159
Coop 1965 2000-4999 1-8 Loc
2875 Fertilizer Blending
3523 Farm Supplies

HUTCHINSON INDUSTRIAL CORP
40 West Highland Park — Hutchinson — 55350
Jon A Geiss — Pres — 612-879-2371
Corp 1965 Over 10000 100 To 249 Nat Exp
3679 Electronic Computer Components

HUTCHINSON LEADER
36 Washington Ave W — Hutchinson — 55350
L D Mills & H T Koeppen Co Pub — 612-879-2385
Corp 1880 250-499 9 To 24 Loc
2711 Newspapers

HUTCHINSON MANUFACTURING SALES INC
Highway 22 Nw Po Box 507 Hutchinson — 55350
E Daggett — President — 612-879-4051
Corp 1953 1000-1999 50 To 74 Loc Reg Nat
Canby
3441 Heavy Structural Steel Private
3613 Switchgear Control Houses
3713 Dump Bodies
3715 Trailers

HUTCHINSON PRODUCTS INC
3rd Av N W — Hutchinson — 55350
Robert Stearns — President — 612-587-2137
Corp 1964 250-499 1-8 Loc Reg
2653 Consumer Slide Pak
2653 Tri Pak Assemblies
2653 Strap Pak Units
2653 Triplewall Corrugated Cartons

LYNN CARD COMPANY
27 1st Av N E — Hutchinson — 55350
Sever B Knutson — President — 612-879-2501
Corp 1950 25-49 1-8 Nat Exp
2771 Greeting Cards Personalized
2771 Packaged Note Cards

METAL CRAFTERS WELDING
37 Monroe — Hutchinson — 55350
William Treitas — President — 612-879-8503
Corp 1975 50-99 9 To 24 Loc
3444 Custom Metal Fabricating & Machining

MINNESOTA MINING MANUFACTURING CO 3 M CO
Jim Joyce — Hutchinson Plant Mgr — 55350 — 612-879-6099
Corp 1947 Unknown 1000 To 1999 Loc Reg Nat Exp
2641 Pressure Sensitive Tapes
3679 Magnetic Tapes

MULTIFORM COMPANY
124 3rd Ave N E — Hutchinson Mgr — 55350 — 612-896-4505
Chas L Pearson — Reg
Part 1964 Under 10 1-8
2782 Sports Scorebooks

NEMITZ, G F & SONS
35 First Ave S W — Hutchinson — 55350
Arthur J Benjamin — Owner — 612-587-2555
Prop 1912 100-249 1-8 Loc
2851 House Paints

Thank you for your cooperation!

1988-2002 MDH OMW Inventory, 1Suite

210425 ✓ F

Appendix V - City of Hutchinson

GHWSC ... 597 ... U.N 210427

FORM 9-1642 (1-68)

Well No. 117 . 29 . 31 . ...

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

MASTER CARD

Record by: C. Cox   Source of data: Water Supt   Date: June 1970   Map: Hutch. 15'

State: Minnesota [27]   County (or town): McLeod Co. [43]

Latitude: 45 53 48 N   Longitude: 094 21 57   Sequential number: 1

Lat-long accuracy: 2   T 117 N, R 29 W, Sec 31, SE ¼, NW ¼, SE ¼, ...

Local well number: 117N29W31DBD1   Other number: #3

Local use: THORPE   Owner or name: City of Hutchinson

Owner or name: CITY HUTCHINSON   Address:

Ownership: (C) County, (F) Fed Gov't, (M) City, (N) Corp or Co, (P) Private, (S) State Agency, (W) Water Dist — M

Use of water: (A) Air cond, (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (H) Dom, (I) Irr, (M) Med, (N) Ind, (P) P S, (R) Rec, (S) Stock, (T) Instit, (U) Unused, (V) Repressure, (W) Recharge, (X) Desal-P S, (Y) Desal-other, (Z) Other — H

Use of well: (A) Anode, (D) Drain, (G) Seismic, (H) Heat Res, (O) Obs, (P) Oil-gas, (R) Recharge, (T) Test, (U) Unused, (W) Withdraw, (X) Waste, (Z) Destroyed. — W

withdrawal total for both 3 & 4, 1970 55,452,000 gallons

VL-13

#3

DATA AVAILABLE: Well data [1]. Freq. W/L meas: [Ø] Field aquifer char.

Hyd. lab. data:

Qual. water data; type:

Freq. sampling: Pumpage inventory: yes, no, period:

Aperture cards:

Log data:

LOCATED BY
1 - ☐ Address Verification
2 - ☐ Name on Mailbox
3 - ☐ Lot-Block
4 - ☐ Plat Book
5 - ☐ Info. From Owner
6 - ☐ Info. From Neighbor
7 - ☐ Other
☐ Can't Locate State Why

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD   Depth well: ~~345~~ 491 ft [491]   Meas. / Rept.

Depth cased (first perf.): 400 ft [400]   Casing type: Diam. 16 in

Finish: (C) porous concrete, (F) gravel w. (perf.), (G) gravel w. (screen), (H) horiz. gallery, (O) open end, (P) perf., (S) screen, (T) sd. pt., (W) shored, (X) open hole, (Z) other

Method Drilled: (A) air rot, (B) bored, (C) cable, (D) dug, (H) hyd rot., (J) jetted, (P) air percussion, (R) reverse rotary, (T) trenching, (V) driven, (W) drive wash, (Z) other

Date Drilled: Nov. 58 [958]   Pump intake setting: 80 ft

Driller: Thorpe Well Co. (name), Des Moines Iowa (address)

Lift (type): (A) air, (B) bucket, (C) cent, (J) jet, (L) multiple (cent.), (M) multiple (turb.), (N) none, (P) piston, (R) rot, (S) submerg, (T) turb, (Z) other   Deep / Shallow

Power (type): diesel, elec, gas, gasoline, hand, nat gas, LP gas, wind; H.P.   Trans. or meter no.

Descrip. MP   ft above/below LSD, Alt. MP

Alt. LSD: 1080 [1080]   Accuracy (source): 4

Water Level: 34 ft above/below MP; Ft above/below LSD [34]   Accuracy: G

Date meas: Yield: 900 gpm [100]   Method determined:

Drawdown: 46 ft [46]   Accuracy: Pumping period: 6 hrs

QUALITY OF WATER DATA: Iron ppm   Sulfate ppm   Chloride ppm   Hard. ppm

Sp. Conduct K x 10^6 Temp. °F   Date sampled

Taste, color, etc.

1080
1116
680
599
< 599

Well No. 117 ...

Well No. ______

Latitude-longitude ___ d m s N S d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD (1–19)

Physiographic Province: ______ [1|2] (20–21) Section: ______

[3] (22) Drainage Basin: ______ [2|3|7] (23–25) Subbasin: ______ [ ] (26)

Topo of well site: (D) depression, (C) stream channel, (E) dunes, (F) flat, (H) hilltop, (K) sink, (L) swamp, (O) offshore, (P) pediment, (S) hillside, (T) terrace, (U) undulating, (V) valley flat ______ [ ] (27)

MAJOR AQUIFER: ______ system, ______ series [Q|G] (28–29) ______ aquifer, formation, group [|] (30–31)

Lithology: ______ [L|S] (32–33) Origin: ______ [O] (34) Aquifer Thickness: ______ ft

[1|7|3] (35–37) Length of well open to: ______ ft [|3|1] (38–40) Depth to top of: ______ ft [3|0|8] (41–43)

MINOR AQUIFER: ______ system, ______ series [|] (44–45) ______ aquifer, formation, group [|] (46–47)

Lithology: ______ [|] (48–49) Origin: ______ [ ] (50) Aquifer Thickness: ______ ft

[| |] (51–53) Length of well open to: ______ ft [| |] (54–56) Depth to top of: ______ ft [| |] (57–59)

Intervals Screened: 8" — 70' long screen, stainless steel, slot 20/.015

Depth to consolidated rock: ______ ft [| | |] (60–63) Source of data: ______ [ ] (64)

Depth to basement: ______ ft [| | |] (65–68) Source of data: ______ [ ] (69)

Surficial material: ______ [|] (70–71) Infiltration characteristics: ______ [ ] (72)

Coefficient Trans: ______ gpd/ft [| |] (73–75) Coefficient Storage: ______ [| |] (76–78)

Coefficient Perm: ______ gpd/ft^2; Spec cap: ______ gpm/ft; Number of geologic cards: ______ [ ] (79)

0-2 Top soil

5- 2-65 clay

65-165 sd, fine

5- 165-224 clay

224-274 sd

3- 274-308 clay

308-335 sd, fine

335-394 sd

394-431 sd, fine

431'

431
308
173

Well No.

GPO 937-142

F

CITY OF HUTCHINSON WELL #3

LOCATED BY

1 - ☐ Address Verification
2 - ☐ Name on Mailbox
3 - ☐ Lot-Block
4 - ☐ Plat Book
5 - ☐ Info. From Owner
6 - ☐ Info. From Neighbor
7 - ☐ Other_____
☐ Can't Locate State Why

Cement Grout

Materials:

330' - 10" I. D. Black Pipe Sched. 40

30' - 8" I. D. Johnson Stainless Steel Screen
40' - 24 slot
30' - 15 slot

Fittings - 10" Lead Cone Packer

Well Log

City Hutchinson County McLeod State Minnesota

Location #3 Well 5th Avenue Northeast and Bluff St.

F 210425 C? 68-0204

117-29-31D

If occupied by renter list name

Change of ownership name

Well diameter inside 12" recased to 10" Depth of well 395' Screen diameter 8" Length 70'

Screen slot 24 & 15 Screen fittings 10" lead packer Material Stainless Steel

Static level 34' Pumping level 80' G.P.M. tested 1,500 With what? Air & Turbin pump

Additional information pertaining to well Acidized in March 1967

Driller Date completed

Type of pump Turbin Make Berkeley Fairbanks-Morse discharge head Model 1003M- 3 stage Serial No. N 3921 T

Size of motor Voltage Pump installed by

Length of drop pipe 80' Size and type material of drop pipe 1 3/16" Total pump setting 80'

Cylinder size Type Pump rod length Rod size

Size of tank Air charging system

Pit Frost proof house Pitless unit size Pitless make

Pitless type Pitless bury depth

Additional information pertaining to pump and system

Date installed November 23, 1964 Installed by

F

210425

Cement Grout

Materials:

330' - 10" I. D. Black pipe Sch. 40

20' - 4" I. D. 24" Mesh Stainless

Steel Screen

40' - 3/4 slot

20' - 1/8 slot

Fittings - 10" Lead Compacker

Casing

Bell Jar

Top Soil

Clay

Sand, Fine

Clay

Sand

Clay

Sand, Fine

Sand

Sand, Fine

Centering Lugs

10" Casing

Test Pump

FREDERICKSON'S INC.
Hutchinson, Minnesota

210381 G 116-29-6 BCABCA

ELEV. 1063±5

FORM 9-1542 (1-63)

Well No. 116.29.6 bcca 1

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

39

108A

MASTER CARD

Record by C. Cox Source of data Water Supt Date June 52 Map Hutch. 15'

State Minnesota 27 County (or town) McLeod Co. 43

Latitude: 44 53 18 N Longitude: 094 22 22 Sequential number: 1

Lat-long accuracy: 3 T 116 N. R 29 W Sec 06, NE ¼, SW ¼, NW ¼, SE ¼

Local well number: 116N29W06BCAA1 Other number: #1

Local use: LAYNE MN CO Owner or name: City of Hutchinson

Owner or name: CITY HUTCHINSON Address: Hutchinson, Mn.

Ownership: County, Fed Gov't, (M) City, Corp or Co, Private, State Agency, Water Dist — M

Use of water: Air cond, Bottling, Comm, Dewater, Power, Fire, Dom, Irr, Med, Ind, P S, Rec, Stock, Instit, (U) Unused, Repressure, Recharge, Desal-P S, Desal-other, Other — U

Use of well: Anode, Drain, Seismic, Heat Res, Obs, Oil-gas, Recharge, Test, Unused, Withdraw, Waste, Destroyed.

DATA AVAILABLE: Well data 1 Freq. W/L meas: Ø Field aquifer char.

Hyd. lab. data:

Qual. water data: type:

Freq. sampling: Pumpage inventory: yes / no, period: 1952 — 1

Aperture cards: yes

Log data: D

ABANDONED

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 374 ft — 374 Meas. rept accuracy 3

Depth cased: (first perf.) 321 ft — 321 Casing type: Steel Diam. 12 in — 12

Finish: porous concrete, gravel w. (perf.), gravel w. (screen), horiz. gallery, open end, perf., (S) screen, sd. pt., shored, open hole, other

Method Drilled: air rot., bored, cable, dug, hyd rot., jetted, air percussion, reverse rotary, trenching, driven, drive wash, other

Date Drilled: June 27, 1950 — 950 Pump intake setting: 130 ft — 130

Driller: Layne-Minn. Co., Mpls.

Lift (type): air, bucket, cent, jet, multiple (cent.), multiple (turb.), none, piston, rot, submerg, (T) turb., other — T Prep. Shallow D

Power (type): diesel, elec, gas, gasoline, hand, gas, wind; H.P. Trans. or meter no.

Descrip. MP ft above/below LSD, Alt. MP

Alt. LSD: 1063 — 1063 Accuracy: (Source) 4

Water Level 37' 2" ft above/below MP; Ft above/below LSD 37 Accuracy: D

Date meas: Yield: 357 gpm 357 Method determined

Drawdown: 30 ft 30 Accuracy: 3 Pumping period hrs

QUALITY OF WATER DATA: Iron ppm, Sulfate ppm, Chloride ppm, Hard. ppm

Sp. Conduct K x 10^6 Temp. °F Date sampled

1060
1043
710
210

116-29-6 bcca

1988-2002 MDH OMW Inventory, 1Suite

210426

SEE INSIDE

TOP FOR TOPS

FORM 9-1642 (1-58)

210426 Well No. 117 29 31 11 2 (23)

WELL SCHEDULE

SAME LOG ASSIGNED TWO UNIQUE #'S

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

NOTE IN REMARKS

Sample # 601297

MASTER CARD

Record by C. Cox Source of data Water Surv. Date 6-23-71 Map Hutch. 15'

117-29-31

State Minnesota 27 County (or town) McLeod Co. 43

Latitude: 44 53 48 N Longitude: 094 21 57 Sequential number: 2

DBDDDB

Lat-long accuracy: 2 T 117 N, R 29 W, Sec 31, SE ¼ NW ¼ SE ¼ 5th

elev. 1083 ±2

Local well number: 117N29W31DBD2 Other number: #4

108A

Local use: FREDRIKSONS Owner or name: City of Hutchinson

Owner or name: CITY HUTCHINSON Address: PA 68-0309

Ownership: (C) County, (F) Fed Gov't, (M) City, (N) Corp or Co, (P) Private, (S) State Agency, (W) Water Dist — M

Use of water: (A) Air cond, (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (H) Dom, (I) Irr, (M) Med, (N) Ind, (P) P S, (R) Rec, (S) Stock, (T) Instit, (U) Unused, (V) Repressure, (W) Recharge, (X) Desal-P S, (Y) Desal-other, (Z) Other — P

#4

Use of well: (A) Anode, (D) Drain, (G) Seismic, (H) Heat Res, (O) Obs, (P) Oil-gas, (R) Recharge, (T) Test, (U) Unused, (W) Withdraw, (X) Waste, (Z) Destroyed. — W

VL-20

withdrawl; total for 4th 334; 155,452,000

DATA AVAILABLE: Well data 1. Freq. W/L meas: Ø Field aquifer char.

Hyd. lab. data:

Qual. water data; type:

Freq. sampling: Pumpage inventory: yes (no) period:

Aperture cards: yes

Log data: D

1083 476 607

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 481 (412) ft 481 Meas. rept accuracy 6

Depth cased (first perf.) 342 ft 342 Casing type: ; Diam. 16 in 16

Finish: (C) porous concrete, (F) gravel w. (perf.), (G) gravel w. (screen), (H) horiz. gallery, (O) open end, (P) perf., (S) screen, (T) sd. pt., (W) shored, (X) open hole, (Z) other — S

Method Drilled: (A) air rot., (B) bored, (C) cable, (D) dug, (H) hyd rot., (J) jetted, (P) air percussion, (R) reverse rotary, (T) trenching, (V) driven, (W) drive wash, (Z) other

Date Drilled: 12-15-66 Pump intake setting: ft

Drilled: Fredricksons Inc., Hutchinson Mn

top pipe length 130'

Lift (type): (A) air, (B) bucket, (C) cent, (J) jet, (L) multiple (cent.), (M) multiple (turb.), (N) none, (P) piston, (R) rot, (S) submerg, (T) turb, (Z) other — T Deep Shallow

Power (type): diesel, elec, gas, gasoline, hand, gas, wind; H.P. 60 — V Trans. or meter no.

Descrip. MP ft above below LSD, Alt. MP

Alt. LSD: 1080 — 1080 Accuracy (source) 4

Water Level 38 7/71 ft above below MP; ft above below LSD 38 Accuracy 6

Date meas: Yield: 700 gpm 700 Method determined

Drawdown: 28 ft 28 Accuracy 6 Pumping period hrs

QUALITY OF WATER DATA: Iron ppm Sulfate ppm Chloride ppm Hard. ppm

Sp. Conduct K x 10^6 Temp. °F Date sampled

1080, 38, 599, 604

Well No. 117 29 31

210426 #4

Statement
The permit is not ... this log has been submitted to the Director, Division of Waters Soils & Minerals. Form attached.

MINNESOTA CONSERVATION DEPARTMENT
DIVISION OF WATERS
WELL LOG STATEMENT

Director
Publ.
Ground W.
Well No. 117/29-31 D

Mail Report Promptly To Director, Division Of Waters, Centennial Office Bldg., St. Paul 1, Minn.

Location of Well (address) City of Hutchinson

McLeod (County) Hutchinson (City or Town)

Lot 3 Block 14 N 1/2 City
Describe Further by Lot, Block, Nearest Highway.

P.A. 68-209 G

Locate Well on Plat of Section

Sec. 31
Twp. 117
Range 29

Drilled for: City of Hutchinson — Driller Frederickson's Inc.

Address Hutchinson Minnesota — Address Hutchinson Minnesota

Date of Completion December 15, 1966

REPORT OF FINAL PUMPING TEST

Type of well Drilled (Dug, Driven, Bored, Drilled) Depth 412' Duration of Test ____ Hrs. ____ Min. Date ____

Casing diameter 16" inch, from 0' to 342' Rate of Pumping 1500 GPM

____ inch, from ____ to ____ Static Water Level 32'4" Ft. Above / Below land surface

____ inch, from ____ to ____ Water Level While Pumping ____ Ft.

Screen: Length 70' Diameter 8 5/8 Slot size 30 Use: Domestic ☐ Industrial ☐ Irrigation ☐

Pump: Type Turbin Horsepower 50 Public supply ☒ Commercial ☐ Stock ☐

WELL LOG

Geologic Formations Kind, Color, Hard or Soft	Depth in Feet From	To	Geologic Formations Kind, Color, Hard or Soft	Depth in Feet From	To
Top Soil QUUU SOIL, ORGD Black	0	1	4-Clay, gray QTUU Sand, gray QFUU SA	154 / 210	210 / 216
Clay QTUU Brown CLAY	1	6	QFUU CLAY, SAND Clay, Lensed with sand Gray	216	224
Gravel QFUU Brown GRVL	6	8	1-Clay QTUU CLAY Gray	224	230
Clay QTUU Brown CLAY	8	21	Sand QFUU SAND	230	270
16- Clay QTUU Blue CLAY	21	61	Clay QTUU CLAY Gray	270	310
Sandy Clay QFUU Gray CLAY SAND	61	115	57 Sandy Clay QFUU Gray CLAY SAND	310	325
Dirty Sand QFUU Gray SAND, SILT	115	121	Sand with Clay QFUU Gray SAND CLAY	325	331
Fine Sand QFU Gray SAND	121	140	Sand QFUU SAND	331	
Sand, Coarse QFU Brown SAND	140	160	Granite PWUD GNIS Green	476	481
Sand QTUU Brown SAND	160	164			

(2) WELL OWNER: CITY OF HUTCHINSON, MN 278800

LOCATION: County McLeod Township T116-117N Range R29-30W Section ¼ ¼ ¼

Unique Well Number _____ Elevation _____

#5

AQUIFER: (Well Log on Back)

Surficial _____ Buried _____ Bedrock ✓

Depth to Top of Aquifer _____

Saturated Thickness of Aquifer _____

VL-18

AQUIFER TEST:

Date Conducted _____ By Whom _____

Duration of Pumping _____

Discharge (Q) 1000 gpm Specific Capacity (Q/S) 14.9

Transmissivity (T) ( ) Storativity (S) _____

Duration of Recovery _____

Transmissivity (T) _____ Storativity (S) _____

Transmissivity (T) and Storativity (S) Utilized _____

PRODUCTION WELL:

Date Drilled _____ Well Depth 407' 12"d

Casing Depth _____ Casing Diameter _____

Screen Length 70' from _____ feet to _____ feet Slot Size Varied

Pump Manufacturer Name _____ Date Installed _____

Type _____ Length of Drop Pipe _____

Static Water Level flowing + 10' Total Drawdown 67' (57 pump level)

Residual Drawdown _____

Screen Make and Type WM 304 SS Screen Diameter 10"

OBSERVATION WELL:	#1	#2	#3	#4	#5	#6
Well Depth						
Casing Diameter/Depth						
Screen Diameter						
Screen Length/Interval						
Static Water Level						
Total Drawdown						
Residual Drawdown						
Distance from Production Well						
Ob Well Log						

LOCATED BY

1 - ☐ Address Verification
2 - ☐ Name on Mailbox
3 - ☐ Lot-Block
4 - ☐ Plat Book
5 - ☐ Info. From Owner
6 - ☐ Info. From Neighbor
7 - ☐ Other _____
☐ Can't Locate State Why

COMMENTS:

UoP 74

MUNICIPAL WELL INFORMATION FORM (use one per well)
...tions, Contact: Eric Madsen, DNR Division of Waters, St. Paul 55101 (612) 296-0427

— Hutchinson person to contact Merlo Prieke

City Hall, Hutchinson phone 879-2311

City Well Number 5 Active or Standby? Active

Unique Well Number # 6

y McLeod Township 116 Range 29 Section ¼ ¼ ¼ altitude

...BEARING MATERIAL (Include Well Log with this Form if Available)
...or gravel with water table near land surface yes (no)
...or gravel not near (greater than 50 feet) land surface (yes) no
...rock material, not sand or gravel yes (no) Name of aquifer utilized
...ere a layer of clay, shale or other impermeable material between the land surface and water
...aring material? (yes) no If yes, what type of material Clay
...to water
...kness of water-bearing material 109'

...INFORMATION
...of drilling company Fredericksons Address Hutchinson
...drilled 8/11/71 (mo day yr) Well depth 410' Well diameter 16" Casing depth
...en length 70' from feet to feet slot size 30 length of drop pipe 120'
...en make and type — Stainless Steel Screen diameter
...manufacturer's name Jacuzzi Date installed 8/12/71 (mo day)
...of pump Turbine GPM
...level when not affected by pumping 32' Water level when pumping 78'
...vel after pumping stops ft. after pump shut off minutes/hours
...ater level records available for preceding years? no Which years?

...ER OR PUMP TEST DRAWDOWN SPECIFIC CAP
...conducted (mo day yr) By whom
...th of time pumped (days, hours, or minutes) Pumping rate (in gpm)
...fer parameters if known: Transmissivity gpd/ft Storativity
...very information: Duration Transmissivity Storativity
...meters used for calculations: Transmissivity Storativity
...bservation well used in this test?

...RVATION WELL INFORMATION (If observation wells exist) INCLUDE WELL LOG WITH THIS FORM
...depth Casing diameter Casing depth Screen diameter
...en length Screened from feet to feet
...r level when not pumping Water level when pumping
Water level after pumping
...nce from pumping well

LOCATED BY
1 - ☐ Address Verification
2 - ☐ Name on Mailbox
3 - ☐ Lot Block
4 - ☐ Plat Book
5 - ☐ Info. From Owner
6 - ☐ Info. From Neighbor
7 - ☐ Other
☐ Can't Locate State Why

...ou have an unused municipal well (abandoned, back-up, standby, etc.) which could be used as ...R observation well for ground-water monitoring purposes? no If yes, DNR will contact you ...iscuss specific details.

...ENTS

...e Completed by Division of Waters

...Permit application number
...Appropriation number

Test hole proposed #5 wells

Frederickson's, Inc.

Hutchinson, Minnesota • ~~West~~ Fargo, North Dakota

Drilled for City of Hutchinson 9/7/67

Test Hole No. 1 Well No.

LOCATED BY
- ☐ 1 - Address Verification
- ☐ 2 - Name on Mailbox
- ☐ 3 - Lot-Block
- ☐ 4 - Plat Book
- ☐ 5 - Info. From Owner
- ☐ 6 - Info. From Neighbor
- ☐ 7 - Other
- ☐ Can't Locate State Why

FORMATIONS PASSED THROUGH

Kind of Formation	Color of Formation	Started at What Depth	Ended at What Depth	Total Thickness of Formation	
Top Soil	Black	0	1	1	
Clay	Yellow	1	12	11	10
Clay	Blue	12	30	18	
Clay, Sandy	Blue	30	115	85	
Fine Sand		115			
Dirty			136	21	
Sand		136	169	33	
Clay	Blue	169	201	32	-3
Sand		201	207	6	
Clay	Blue	207	234	27	-2
Sand		234	252	17	
Clay	Blue	251	257	6	
Sand		257	279	12	
Clay	Blue	279	313	34	-3
Sand, Dirty		313	323	10	
Sand		323	352	29	
Sand, Little Dirty		352	365	13	
Sand		365	474	109	
Granite		474	477	3	

Signed

Owner Name City of Hutchinson Type Date 233077

City Hutchinson County McLeod State Minnesota Section Township

Location #6

PA-68-0609 117-29-31D

If occupied by renter, list name

Change of ownership, name

Well diameter inside 20" Depth of well 475' Screen diameter 10" Length 120'

Screen slot 30 Screen fittings 40' stainless steel leader Material stainless steel

Static level 36' Pumping level G. P. M. tested With what?

Additional information pertaining to well gravel pack well

Driller Kenneth Hansen Date completed October 1972

Type of pump Turbine Make Flo-Way Model 12 DKS Serial No. 73-69

Size of motor 60 hp Voltage 3/60/230/460 Pump installed by

Length of drop pipe 120' Size and type material of drop pipe 10" Total pump setting

Cylinder size Type Shaft length 120' - 1½" Rod size

Size of tank Air charging system

Pit Frost proof house Pitless unit size Pitless make

Pitless type Pitless bury depth

Additional information pertaining to pump and system 3 Stage 12 bowl assembly

Rated 1300 gpm

Installed by

#6

H-7

1988-2002 MDH OMW Inventory, 1Suite

Frederickson's, Inc.

Hutchinson, Minnesota 55350

Drilled for City of Hutchinson April 13, 1972

Test Hole No. 1 Well No. 6

233077

FORMATIONS PASSED THROUGH

Kind of Formation	Color of Formation	Started at What Depth	Ended at What Depth	Total Thickness of Formation
Top soil	Black	0	2	2
Sandy clay	Yellow	2	19	17
Very sandy clay	Blue	19	76	57
Sand	Blue	76	169	93
Very sandy clay	Blue	169	222	53
Dirty sand	Blue	222	232	10
1- Sandy clay	Blue	232	242	10
Dirty sand	Green	242	298	56
3- Sandy clay	Brown	298	330	32
Dirty sand	Blue	330	405	75
Fine sand		405	455	50
Sand	Green	455	478	23
Sand with Decomposed	Colored	478	483	5
Decomposed	Colored	483	502	19
Shale	Red	502		
TOTAL DEPTH		502		

Signed Raymond O. Nass Driller

1988-2002 MDH OMW Inventory, 1Suite

MINNESOTA CONSERVATION DEPARTMENT
DIVISION OF WATERS

STATEMENT ON APPROPRIATION OF WATER

For Office Use Only
Approp. 43.0007
P.A. 66-5838
WSC 11

66-5838

Before January 1, 1966, mail report to Director, Division of Waters, Centennial Office Bldg., St. Paul, Minnesota 55101.

McLeod Co.

Locate Source of Water on Plat of Section

Location of appropriation 300 South Glen Street
Street
Hutchinson — McLeod
City or Town — County
South Park S½ Hutchinson
Describe further by Lot, Block, Addition, No. of Highway

Sec. 06
Twp. 116N
Range 29W

R6E

Owner City of Hutchinson

Address 35 Washington Ave. W. Hutchinson, Minnesota 55350

Person in Charge: Harvey Thompson

C

E

Ground Water
(List each well separately)

	No. 1	No. 2
Depth of well, ft.	370	261
Diameter of casing, in.	12"	12"
Date of completion	6/50	8/54
Driller	Layne	Fredrickson
Address	Mpls.	Hutchinson
Rated capacity of pump	500	900
Usual pumping rate	351	1050
Water level, pumping (feet below land surface)	67	81
Water level, not pumping (feet below land surface)	37.2	33.01

Surface Water

Source of water (Name of river or stream)

Number of pumps

Rated capacity of pumps

Date appropriation was first begun

The above installation is now equipped with Flow meter X
Timing device
Neither

The water appropriated is used for Municipal Water Supply

For Office Use Only
Code

210381 G

116-29-6 BCABCA

FORM 9-1542 (1-69)

Well No. ELEV. 1065.5

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

116-29-6 Local

38

1088

ABANDONED

No Well Sealing record

MASTER CARD

Record by C. Cox — Source of data Water Supt. — Date — Map Hutch. 15'

State Minnesota [27] — County (or town) McLeod Co. [43]

Latitude: 44 53 18 N — Longitude: 094 22 22 — Sequential number: 1

Lat-long accuracy: 3 — T 116 S, R 29 W, Sec 06, NE ¼ SW ¼ NW ¼ 5TH

Local well number: 116N29W06BCA 1 — Other number:

Local use: LAYNE MN CO — Owner or name: City of Hutchinson

Owner or name: CITY HUTCHINSON — Address: Hutchinson Minn.

Ownership: (C) County, (F) Fed Gov't, **(M) City**, (N) Corp or Co, (P) Private, (S) State Agency, (W) Water Dist — M

Use of water: (A) Air cond, (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (H) Dom, (I) Irr, (M) Med, (N) Ind, (P) P S, (R) Rec, (S) Stock, (T) Instit, **(U) Unused**, (V) Repressure, (W) Recharge, (X) Desal-P S, (Y) Desal-other, (Z) Other — U

Use of well: (A) Anode, (D) Drain, (G) Seismic, (H) Heat Res, (O) Obs, (P) Oil-gas, (R) Recharge, (T) Test, (U) Unused, (W) Withdraw, (X) Waste, (Z) Destroyed.

DATA AVAILABLE: Well data [1] — Freq. W/L meas. — Ø — Field aquifer char.

Hyd. lab. data:

Qual. water data, type:

Freq. sampling: — Pumpage inventory: yes / no, period: 1964-? — 1

Aperture cards: — yes

D

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD — Depth well: 374 ft [374] — Meas. rept accuracy [3]

Depth cased (first perf.) 321 ft [321] — Casing type: Steel — Diam. 12 in [12]

Finish: (C) porous concrete, (F) gravel w. (perf.), (G) gravel w. (screen), (H) horiz. gallery, (O) open end, (P) perf., **(S) screen**, (T) sd. pt., (W) shored, (X) open hole, (Z) other

Method Drilled: (A) air rot., (B) bored, (C) cable, (D) dug, (H) hyd rot., (J) jetted, (P) air percussion, (R) reverse rotary, (T) trenching, (V) driven, (W) drive wash, (Z) other

Date Drilled: June 27, 1950 [950] — Pump intake setting: 130 ft [130]

Driller: Layne-Minn. Co., M...

Lift (type): (A) air, (B) bucket, (C) cent, (J) jet, (L) multiple (cent.), (M) multiple (turb.), (N) none, (P) piston, (R) rot, (S) submerg, **(T) turb.**, (Z) other — T — Deep/Shallow D

Power (type): diesel, elec, gas, gasoline, hand, gas, wind; H.P. — Trans. or meter no.

Descrip. MP — ft above/below LSD, Alt. MP

Alt. LSD: 1092 [1092] — Accuracy (source): 4

Water Level 37'2" ft below MP; ft below LSD [37] — Accuracy: D

Date meas: — Yield: 357 gpm [357] — Method determined

Drawdown: 30 ft [30] — Accuracy: 3 — Pumping period — hrs

QUALITY OF WATER DATA: Iron ppm — Sulfate ppm — Chloride ppm — Hard. ppm

Sp. Conduct. K x 10^6 — Temp. — Date sampled

Taste, color, etc.

1090 1043 759 710 <210

116-29-6 BCABCA

G

Well No.

Latitude-longitude ___ d m s N S d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD

Physiographic Province: ___ 1 | 2 Section: ___

3 Drainage Basin: ___ 2 | 2 | J Subbasin: ___

Topo of well site: (D) depression, (G) stream channel, (E) dunes, (F) flat, (H) hilltop, (K) sink, (L) swamp, (O) offshore, (P) pediment, (S) hillside, (T) terrace, (U) undulating, (V) valley flat ___

MAJOR AQUIFER: ___ system, ___ series | O | G | ___ aquifer, formation, group | 1 | G |

Lithology: ___ | R | Origin: ___ | O | Aquifer Thickness: ___ ft

| 1 | 2 | 0 | Length of well open to: ___ ft | 4 | 9 | Depth to top of: ___ ft | 2 | 5 | 4 |

MINOR AQUIFER: ___ system, ___ series ___ aquifer, formation, group

Lithology: ___ Origin: ___ Aquifer Thickness: ___ ft

Length of well open to: ___ ft Depth to top of: ___ ft

Intervals Screened: 40' screen

Depth to consolidated rock: ___ ft Source of data: ___

Depth to basement: ___ ft Source of data: ___

Surficial material: ___ Infiltration characteristics: ___

Coefficient Trans: ___ gpd/ft Coefficient Storage: ___

Coefficient Perm: ___ gpd/ft^2; Spec cap: 11.7 gpm/ft; Number of geologic cards: ___

Log:

0-2 Top soil QUUU SOIL

2-130 sdy clay QFUU CLAY, SAND

130-150 H.P. QTUU CLAY

150-210 clay QTUU CLAY

210-218 H.P. QTUU CLAY

218-242 clay QTUU CLAY

242-254 sdy. clay QFUU CLAY, SAND

254-274 Muddy sd QFUU SAND, SILT

274-284 " " clay streaks CFUU SAND, SILT, CLAY

284-320 sd. QFUU SAND

320-347 sd + grl. streaks QFUU SAND, GRVL

347-374 sd v. tight QFUU SAND

374'

Aquifers QBCW-QBCW

CODED

Well No.

1988-2002 MDH OMW Inventory, 1Suite

G

210381

Well No.

Latitude-longitude N S d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD

Physiographic Province: 12 Section:

Drainage Basin: 13 Subbasin: 2 3 J

Topo of well site: (D) depression, (C) stream channel, (E) dunes, (F) flat, (H) hilltop, (K) sink, (L) swamp, (S) offshore, (P) pediment, (S) hillside, (T) terrace, (U) undulating, (V) valley flat

MAJOR AQUIFER: system, series 0 G aquifer, formation, group 1 G

Lithology: R Origin: O Aquifer Thickness: ft

1 2 0 Length of well open to: ft 4 9 Depth to top of: ft 2 5 4 ft

MINOR AQUIFER: system, series aquifer, formation, group

Lithology: Origin: Aquifer Thickness: ft

Length of well open to: ft Depth to top of: ft

Intervals Screened: 40' screen

Depth to consolidated rock: ft Source of data:

Depth to basement: ft Source of data:

Surficial material: Infiltration characteristics:

Coefficient Trans: gpd/ft Coefficient Storage:

Coefficient Perm: gpd/ft²; Spec cap: 11.7 gpm/ft; Number of geologic cards:

Log:

0-2 Top soil QUUU SOIL

2-130 sdy clay QFUU CLAY, SAND

130-150 H.P QTUU CLAY

150-210 clay QTUU CLAY

210-218 H.P. QTUU CLAY

218-242 clay QTUU CLAY

242-254 Sdy. clay QFUU CLAY, SAND

254-274 Muddy sd QFUU SAND, SILT

274-284 " " & clay stringers CFUU SAND, SILT, CLAY

284-320 sd QFUU SAND

320-347 sd & gvl. stringers QFUU SAND, GRVL

347-374 sd v. tight QFUU SAND

374'

Aquifer: QBUU-QBOT

Well No.

Unique Well Number: 210381

County McLeod
Quad Hutchinson East
Quad Id 108A

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD
MINNESOTA STATUTES CHAPTER 1031

G

Entry Date 1988/04/11
Update Date 2004/12/06
Received Date

Wellname HUTCHINSON NO. 1

Township	Range	Dir	Section	Subsection	Field Located Elevation	MGS	
116	29	W	6	BCABCA		1065.00	ft.

Well Owner CITY OF HUTCHINSON

HUTCHINSON MN

1988-2002 MDH OMW Inventory, 1Suite

Description	Color	Hardness	From	To (ft.)
TOP SOIL			0	2
SANDY CLAY			2	130
HARDPAN			130	150
CLAY			150	210
HARDPAN			210	218
CLAY			218	242
SANDY CLAY			242	254
MUDDY SAND			254	274
MUDDY SAND & CLAY STREAKS			274	284
SAND			284	320
SAND & GRAVEL STREAKS			320	347
VERY TIGHT SAND			347	374

Remarks

First Bedrock
Last Strat Sand
Aquifer Quat. Buried Artes. Aquifer
Depth to Bedrock ft.

Well Depth 374.00 ft
Depth Completed 374.00 ft
Date Well Completed 1950/06/27

Drilling Method
Drilling Fluid
Well Hydrofractured? ☐ YES ☐ NO From ft. to

Use Abandoned

Casing Type Steel (black or low Drive Shoe? ☐ YES ☐ NO
Diameter 12 Depth 321
12.00 in. from 0.00 to 321.00 ft. lbs/ft

Hole Diameter (in.)

Screen Yes
Make Type
Diamter Slot Length Set
0.00 40 ft. to ft.

Open Hole(ft.) From to

Static Water Level
37.00 ft. Land surface Date measured 1950/06/27

Pumping Level (below land surface)
67.00 ft. after hrs. pumping 351.00 g.p.m.

Well Head Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grate (Environmental Wells and Borings ONLY) ☐ Basement offset

Grouting Information Well grouted? ☐ YES ☐ NO

Nearest Known Source of Contamination
feet Direction Type
Well disinfected upon completion? ☐ YES ☐ NO

Pump
☐ Not Installed Date Installed
Manufacture's name
Model number HP Volts
Length of drop pipe Material Capacity g.p.m
Type

Abandoned Wells
Does property have any not in use and not sealed well(s)? ☐ YES ☐ NO

Variance
Was a variance granted from the MDH for this well? ☐ YES ☐ NO

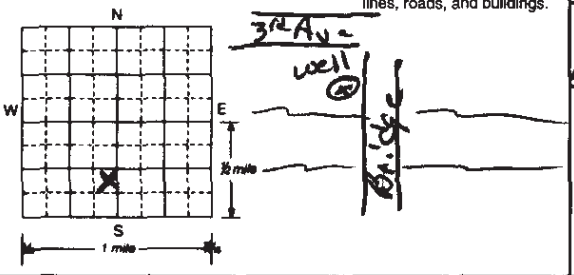
Well Contractor Cerfication
Layne Well Co. 27010
License Business Name Lic. or Reg No.
WELL, L.
Name of Driller Date

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING SEALING RECORD
Minnesota Statutes, Chapter 103I

Minnesota Well and Boring Sealing No. H 250554
Minnesota Unique Well No. or W-series No. (Leave blank if not known)

WELL OR BORING LOCATION
County Name: McLeod
Township Name: Hutchinson | Township No.: T117N | Range No.: R28W | Section No.: 31 | Fraction (sm → lg): NE SE SW¼
GPS LOCATION: Latitude ____ degrees ____ minutes ____ seconds; Longitude ____ degrees ____ minutes ____ seconds
Numerical Street Address or Fire Number and City of Well or Boring Location: Int of Hwy 15 + 3rd Av. NW Hutchinson

Show exact location of well or boring in section grid with "X"



Sketch map of well or boring location, showing property lines, roads, and buildings. NA

Date Sealed: 10-23-06
Date Well or Boring Constructed: unknown (Pre-1917)
Depth Before Sealing: 182 ft.
Original Depth: 182 ft.

AQUIFER(S) ☒ Single Aquifer ☐ Multiaquifer
WELL/BORING ☒ Water Supply Well ☐ Monit. Well ☐ Env. Bore Hole ☐ Other ____
STATIC WATER LEVEL ☐ Measured ☐ Estimated ____ ft. ☐ below ☐ above land surface
CASING TYPE(S) ☒ Steel ☐ Plastic ☐ Tile ☐ Other ____
WELLHEAD COMPLETION
Outside: ☐ Well House ☐ Pitless Adapter/Unit ☐ Well Pit ☒ Buried
Inside: ☐ Basement Offset ☐ Well Pit ☐ Buried

PROPERTY OWNER'S NAME/COMPANY NAME: City of Hutchinson
Property owner's mailing address if different than well location address indicated above: 111 Hassan St. SE, Hutchinson, MN 55350

WELL OWNER'S NAME/COMPANY NAME: SAME
Well owner's mailing address if different than property owner's address indicated above: SAME

CASING(S)

Diameter	Depth	Set in oversize hole?	Annular space initially grouted?
10 in.	from 13 to 182 ft.	☐ Yes ☐ No	☐ Yes ☐ No ☒ Unknown
____ in.	from ____ to ____ ft.	☐ Yes ☐ No	☐ Yes ☐ No ☐ Unknown
____ in.	from ____ to ____ ft.	☐ Yes ☐ No	☐ Yes ☐ No ☐ Unknown

SCREEN/OPEN HOLE Screen from ____ to ____ ft. Open Hole from ____ to ____ ft.
OBSTRUCTIONS ☐ Rods/Drop Pipe ☐ Check Valve(s) ☐ Debris ☒ Fill ☐ No Obstruction
Type of Obstructions (Describe): Rock
Obstructions removed? ☒ Yes ☐ No Describe: Drilled out
PUMP Type ____ ☐ Removed ☒ Not Present ☐ Other ____

METHOD USED TO SEAL ANNULAR SPACE BETWEEN 2 CASINGS, OR CASING AND BORE HOLE:
☒ No Annular Space Exists ☐ Annular space grouted with tremie pipe ☐ Casing Perforation/Removal
____ in. from ____ to ____ ft. ☐ Perforated ☐ Removed
____ in. from ____ to ____ ft. ☐ Perforated ☐ Removed
Type of perforator ____
☐ Other ____

GEOLOGICAL MATERIAL	COLOR	HARDNESS OR FORMATION	FROM	TO
If not known, indicate estimated formation log from nearby well or boring				
unknown				

JAN 2007 RECEIVED WELL MGT.

GROUTING MATERIAL(S) (One bag of cement = 94 lbs., one bag of bentonite = 50 lbs.)
Grouting Material: Neat cement from 182 to 13 ft. 18½ yards ____ bags
____ from ____ to ____ ft. ____ yards ____ bags
____ from ____ to ____ ft. ____ yards ____ bags

OTHER WELLS AND BORINGS Other unsealed and unused well or boring on property? ☐ Yes ☒ No How many? ____

REMARKS, SOURCE OF DATA, DIFFICULTIES IN SEALING
Well was measured on 10-19-06 it was open to 182 ft. Someone put in a rock & it got stuck @ 90'. We drilled the 10" out to 182 ft & pumped in grout. We let the grout set up & topped it off.

LICENSED OR REGISTERED CONTRACTOR CERTIFICATION
This well or boring was sealed in accordance with Minnesota Rules, Chapter 4725. The information contained in this report is true to the best of my knowledge.

T-T Enterprises, Inc — Contractor Business Name — 2157 — License or Registration No.
Authorized Representative Signature — 11-7-06 — Date
George Grimm — Name of Person Sealing Well or Boring

MINN. DEPT OF HEALTH COPY H 250554

HE-01434-08 IC# 140-0423 12/02 R

Appendix V - City of Hutchinson

G

Minnesota Unique Well No.
210381

County McLeod
Quad Hutchinson East
Quad ID 108A

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD
Minnesota Statutes Chapter 103I

Entry Date 04/11/1988
Update Date 09/19/2011
Received Date

Well Name HUTCHINSON 1
Township Range Dir Section Subsections Elevation 1080 ft.
116 29 W 6 BCABCA Elevation Method 7.5 minute topographic map (+/- 5 feet)

Well Depth	Depth Completed	Date Well Completed
374 ft.	374 ft.	06/27/1950

Drilling Method Cable Tool

Well Address
HUTCHINSON MN 55350

Drilling Fluid --
Well Hydrofractured? Yes No From Ft. to Ft.
Use Abandoned Status Inactive

Geological Material	Color	Hardness	From	To
TOP SOIL			0	2
SANDY CLAY			2	130
HARDPAN			130	150
CLAY			150	210
HARDPAN			210	218
CLAY			218	242
SANDY CLAY			242	254
MUDDY SAND			254	274
MUDDY SAND & CLAY STREAKS			274	284
SAND			284	320
SAND & GRAVEL STREAKS			320	347
VERY TIGHT SAND			347	374

Casing Type Steel (black or low carbon) Joint No Information Drive Shoe? Yes No Above/Below ft.

Casing Diameter	Weight	Hole Diameter
12 in. to 321 ft.	lbs./ft.	

Open Hole from ft. to ft.
Screen YES Make Type

Diameter	Slot/Gauze	Length	Set Between
0		40	0 ft. and ft.

Static Water Level
37.2 ft. from Land surface Date Measured 06/27/1950

PUMPING LEVEL (below land surface)
67.17 ft. after hrs. pumping 351 g.p.m.

Well Head Completion
Pitless adapter manufacturer Model
Casing Protection 12 in. above grade
At-grade (Environmental Wells and Borings ONLY)

NO REMARKS

Grouting Information Well Grouted? Yes No

Located by: Minnesota Geological Survey
Method: Digitized - scale 1:24,000 or larger (Digitizing Table)
Unique Number Verification: Information from owner
Input Date: 01/01/1990
System: *UTM - Nad83, Zone15, Meters*
X: 391602 Y: 4971446

Nearest Known Source of Contamination
__feet __direction __type
Well disinfected upon completion? Yes No

Pump Not Installed Date Installed
Manufacturer's name Model number __ HP _ Volts
Length of drop Pipe _ft. Capacity _g.p.m Type Material

Abandoned Wells Does property have any not in use and not sealed well(s)? Yes No

Variance Was a variance granted from the MDH for this well? Yes No

Well Contractor Certification
Layne Well Co. 27010
License Business Name Lic. Or Reg. No. Name of Driller

First Bedrock
Last Strat sand
Aquifer Quat. Buried Artes. Aquifer
Depth to Bedrock ft.

County Well Index Online Report

210381

Printed 10/7/2013
HE-01205-07

Appendix V - City of Hutchinson

C???

Minnesota Unique Well No.

210382

County McLeod
Quad Hutchinson East
Quad ID 108A

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING RECORD

Minnesota Statutes Chapter 103I

Entry Date 04/11/1988
Update Date 01/05/2006
Received Date

Well Name CITY OF HUTCHINSON

Township	Range	Dir	Section	Subsections	Elevation	
116	29	W	6	BCABDB	1080 ft.	7.5 minute topographic map (+/- 5 feet)

Elevation Method

Well Depth	Depth Completed	Date Well Completed
370 ft.	370 ft.	

Drilling Method --

Drilling Fluid --

Well Hydrofractured? ☐ Yes ☐ No
From Ft. to Ft.

Use Abandoned Status Inactive

Casing Type Steel (black or low carbon) Joint No Information Drive Shoe? ☐ Yes ☐ No Above/Below 0 ft.

Casing Diameter	Weight	Hole Diameter
12 in. to 320 ft.	lbs./ft.	

Open Hole from ft. to ft.

Screen YES Make LAYNE EVERDUR Type

Diameter	Slot/Gauze	Length	Set Between
8		40	320 ft. and 360 ft.

Geological Material	Color	Hardness	From	To
SANDY CLAY			0	8
CLAY		HARD	8	65
CLAY GRAVEL			65	78
HARDPAN			78	100
CLAY			100	116
HARDPAN			116	175
SANDY CLAY			175	200
HARDPAN			200	227
CLAY BOULDERS			227	238
HARDPAN			238	254
MUDDY SAND			254	284
FINE SAND			284	320
SAND			320	335
SAND GRAVEL			335	345
SAND			345	370

Static Water Level
ft. from Date Measured

PUMPING LEVEL (below land surface)
ft. after hrs. pumping g.p.m.

Well Head Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

REMARKS

ORIGINALLY DRILLED TO 390', THEN BACKFILLED TO 370' AND GRAVEL-PACKED TO TOP OF
SCREEN WITH 7 YDS. OF FILLER GRAVEL. CASING COMPLETED ABOVE GRADE.
SCREEN TYPE: "SHUTTER SCREEN." USED 8" (PLAIN) EVERDUR PIPE BELOW SCREEN.

Grouting Information Well Grouted? ☑ Yes ☐ No

Grout Material: from 0 to 254 ft.

Located by: Minnesota Geological Survey
Method: Digitized - scale 1:24,000 or larger (Digitizing Table)

Unique Number Verification: Information from owner
Input Date: 01/01/1990

System: *UTM - Nad83, Zone15, Meters*
X: 391603 Y: 4971446

Nearest Known Source of Contamination
__feet __direction __type

Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed
Manufacturer's name Model number __ HP 0 Volts
Length of drop Pipe _ft. Capacity _g.p.m Type Material

Abandoned Wells Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Well Contractor Certification

First Bedrock
Last Strat sand
Aquifer Quat. Buried Artes. Aquifer
Depth to Bedrock ft.

Minnesota Department of Health — License Business Name
MDH — Lic. Or Reg. No.
Name of Driller

County Well Index Online Report

210382

Printed 10/7/2013
HE-01205-07

Appendix V - City of Hutchinson

D

Minnesota Unique Well No. **210428**

County McLeod
Quad Hutchinson East
Quad ID 108A

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING RECORD

Minnesota Statutes Chapter 103I

Entry Date 04/11/1988
Update Date 01/17/2006
Received Date

Well Name KRAFT CHEESE

Township Range Dir Section Subsections Elevation 1045 ft.

117 29 W 31 DCDDAB Elevation Method 7.5 minute topographic map (+/- 5 feet)

Well Depth	Depth Completed	Date Well Completed
235 ft.	235 ft.	11/00/1945

Drilling Method Cable Tool

Well Address

HUTCHINSON MN 55350

Geological Material	Color	Hardness	From	To
FILL			0	4
COARSE GRAVEL			4	28
CLAY & GRAVEL			28	65
QUICK SAND			65	80
CLAY			80	88
WATER GRAVEL			88	92
HARDPAN			92	147
CLAY			147	185
HARDPAN			185	203
MUDDY FINE SAND			203	208
SAND & GRAVEL			208	235

Drilling Fluid --

Well Hydrofractured? ☐ Yes ☐ No
From Ft. to Ft.

Use Industrial

Casing Type Joint No Information Drive Shoe? ☐ Yes ☐ No Above/Below 0 ft.

Casing Diameter	Weight	Hole Diameter
16 in. to 208 ft.	lbs./ft.	

Open Hole from ft. to ft.

Screen YES Make JOHNSON Type stainless steel

Diameter	Slot/Gauze	Length	Set Between
0	39	30	0 ft. and ft.

Static Water Level
-1 ft. from Land surface Date Measured 11/00/1945

PUMPING LEVEL (below land surface)
60 ft. after 3 hrs. pumping 750 g.p.m.

Well Head Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

REMARKS
DRILLED BY E.T. JOHNSON FOR MC CARTHY WELL CO.
WELL FLOWED.

Grouting Information Well Grouted? ☐ Yes ☐ No

Located by: Minnesota Geological Survey
Method: Digitized - scale 1:24,000 or larger (Digitizing Table)
Unique Number Verification: N/A
Input Date: 01/01/1990
System: *UTM - Nad83, Zone15, Meters*
X: 392289 Y: 4971997

Nearest Known Source of Contamination
__feet __direction __type
Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed 11/00/1945
Manufacturer's name Model number __ HP 0 Volts
Length of drop Pipe _ft. Capacity _g.p.m Type Turbine Material

Abandoned Wells Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Well Contractor Certification

First Bedrock
Last Strat sand +larger
Aquifer Quat. Buried Artes. Aquifer
Depth to Bedrock ft.

United States Geological Survey	USGS	
License Business Name	Lic. Or Reg. No.	Name of Driller

County Well Index Online Report **210428** Printed 10/7/2013 HE-01205-07

Appendix V - City of Hutchinson

E

Minnesota Unique Well No.
210383

County McLeod
Quad Hutchinson East
Quad ID 108A

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD
Minnesota Statutes Chapter 103I

Entry Date 04/11/1988
Update Date 01/05/2006
Received Date

Well Name HUTCHINSON 2

Township	Range	Dir	Section	Subsections	Elevation	Elevation Method
116	29	W	6	BCABDC	1075 ft.	7.5 minute topographic map (+/- 5 feet)

Well Depth	Depth Completed	Date Well Completed
392 ft.	265 ft.	08/00/1954

Drilling Method Cable Tool

Well Address
300 GLEN ST S
HUTCHINSON MN 55350

Geological Material	Color	Hardness	From	To
TOPSOIL	BLACK		0	2
CLAY	YELLOW		2	25
CLAY & PEBBLES	BLUE		25	195
CLAY & COARSE GRAVEL	BLUE		195	203
CLAY & PEBBLES	GRAY		203	227
SAND & GRAVEL	GREEN		227	257
LENS OF SAND & GRAVEL	GRN/GRY		257	265
CLAY PLASTIC	GRN/RED		265	272
SAND & GRAVEL	GRN/GRY		272	291
CLAY & GRAVEL	GRAY		291	298
FINE SAND	GRAY		298	322
SAND & GRAVEL	GRAY		322	362
FINE SAND	GRAY		362	392

Drilling Fluid --
Well Hydrofractured? ☐ Yes ☐ No From Ft. to Ft.

Use Abandoned Status Inactive

Casing Type Steel (black or low carbon) Joint No Information Drive Shoe? ☐ Yes ☐ No Above/Below ft.

Casing Diameter	Weight	Hole Diameter
12 in. to ft.	lbs./ft.	

Open Hole from ft. to ft.

Screen YES Make Type

Diameter	Slot/Gauze	Length	Set Between
12	25		ft. and ft.
12	40		ft. and ft.
12	30		ft. and ft.

Static Water Level
33 ft. from Land surface Date Measured 08/00/1954

PUMPING LEVEL (below land surface)
81.41 ft. after 16 hrs. pumping 1000 g.p.m.

Well Head Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

REMARKS
NOTE ON LOCATION FROM DNR WELL LOG: SOUTH PARK, S-1/2 OF CITY.
CONSTRUCTION
METHOD: DRILLED (DETAILS UNSPECIFIED). ORIGINAL LOG FROM FREDERICKSON'S WELL.
CO. SHOWS WELL WAS ORIGINALLY DRILLED TO 392'; APPARENTLY BACKFILLED TO 261'.

Grouting Information Well Grouted? ☐ Yes ☐ No

Nearest Known Source of Contamination
__feet __direction __type
Well disinfected upon completion? ☐ Yes ☐ No

Located by: Minnesota Geological Survey
Method: Digitization (Screen) - Map (1:24,000)

Unique Number Verification: Information from owner
Input Date: 08/02/2005

System: *UTM - Nad83, Zone15, Meters*
X: 391624 Y: 4971434

Pump ☐ Not Installed Date Installed
Manufacturer's name Model number __ HP _ Volts
Length of drop Pipe _ft. Capacity _g.p.m Type Material

Abandoned Wells Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Well Contractor Certification

First Bedrock
Last Strat sand-gray
Aquifer Quat. Buried Artes. Aquifer
Depth to Bedrock ft.

License Business Name	Lic. Or Reg. No.	Name of Driller
Fredrickson's	08317	

County Well Index Online Report

210383

Printed 10/7/2013
HE-01205-07

Appendix V - City of Hutchinson

F

Minnesota Unique Well No. **210425**

County McLeod
Quad Hutchinson East
Quad ID 108A

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING RECORD

Minnesota Statutes Chapter 103I

Entry Date 08/06/1992
Update Date 08/22/2012
Received Date

Well Name HUTCHINSON 3

Township Range Dir Section Subsections Elevation 1078 ft.

117 29 W 31 DACCCD Elevation Method 7.5 minute topographic map (+/- 5 feet)

Well Depth	Depth Completed	Date Well Completed
481 ft.	400 ft.	11/00/1958

Drilling Method Cable Tool

Well Address

HUTCHINSON MN 55350

Geological Material	Color	Hardness	From	To
TOPSOIL			0	2
CLAY			2	16
CLAY			16	65
SAND, FINE			65	165
CLAY			165	224
SAND			224	274
CLAY			274	308
SAND, FINE			308	335
SAND			335	394
SAND, FINE			394	481

Drilling Fluid --

Well Hydrofractured? ☐ Yes ☐ No
From Ft. to Ft.

Use Abandoned Status Sealed

Casing Type Steel (black or low carbon) Joint No Information Drive Shoe? ☐ Yes ☐ No Above/Below 1 ft.

Casing Diameter	Weight	Hole Diameter
10 in. to 330 ft.	lbs./ft.	

Open Hole from ft. to ft.

Screen YES Make Type stainless steel

Diameter	Slot/Gauze	Length	Set Between
8	24	40	330 ft. and 370 ft.
8	15	30	370 ft. and 400 ft.

Static Water Level
34 ft. from Land surface Date Measured 11/00/1958

PUMPING LEVEL (below land surface)
80 ft. after 6 hrs. pumping 900 g.p.m.

Well Head Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

REMARKS
ORIGINALLY DRILLED BY THORPE WELL CO. BUT RELINED BY FREDERICKSON'S INC. SEALED 5-24-2007 BY 2157; PREVIOUS USE: PC

Grouting Information Well Grouted? ☐ Yes ☐ No

Located by: Minnesota Department of Health
Method: GPS SA On (averaged)
Unique Number Verification: N/A
Input Date: 10/01/1999
System: *UTM - Nad83, Zone15, Meters*
X: 392350 Y: 4972303

Nearest Known Source of Contamination
__feet __direction __type
Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed
Manufacturer's name Model number __ HP _ Volts
Length of drop Pipe _ft. Capacity _g.p.m Type Material

Abandoned Wells Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Well Contractor Certification
United States Geological Survey USGS
License Business Name Lic. Or Reg. No. Name of Driller

First Bedrock
Last Strat sand
Aquifer Quat. Buried Artes. Aquifer
Depth to Bedrock ft.

County Well Index Online Report **210425** Printed 10/7/2013
HE-01205-07

F

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING SEALING RECORD

Minnesota Statutes, Chapter 103I

Minnesota Well and Boring Sealing No. H 250568
Minnesota Unique Well No. or W-series No. 210425
(Leave blank if not known)

WELL OR BORING LOCATION

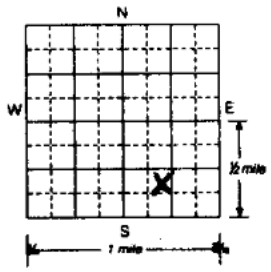
County Name: McLeod

Township Name	Township No.	Range No.	Section No.	Fraction (sm → lg)
Hutchinson	117N	29W	31	NESWSE

GPS LOCATION: Latitude ____ degrees ____ minutes ____ seconds
Longitude ____ degrees ____ minutes ____ seconds

Numerical Street Address or Fire Number and City of Well or Boring Location: 134 5th Av NE Hutchinson WELL #3

Show exact location of well or boring in section grid with "X"



Sketch map of well or boring location, showing property lines, roads, and buildings.

PROPERTY OWNER'S NAME/COMPANY NAME: City of Hutchinson

Property owner's mailing address if different than well location address indicated above:
111 Hassan St SE.
Hutchinson, MN 55350

WELL OWNER'S NAME/COMPANY NAME

Well owner's mailing address if different than property owner's address indicated above

Date Sealed: 5-24-07
Date Well or Boring Constructed: 1958

Depth Before Sealing: 395 ft.
Original Depth: 395 ft.

AQUIFER(S): [X] Single Aquifer [ ] Multiaquifer

WELL/BORING: [X] Water Supply Well [ ] Monit. Well [ ] Env. Bore Hole [ ] Other

STATIC WATER LEVEL: [ ] Measured [X] Estimated 34 ft. [X] below [ ] above land surface

CASING TYPE(S): [X] Steel [ ] Plastic [ ] Tile [ ] Other

WELLHEAD COMPLETION
Outside: [X] Well House [ ] Pitless Adapter/Unit [ ] Well Pit [ ] Buried
Inside: [ ] Basement Offset [ ] Well Pit [ ] Buried

CASING(S)

Diameter	Depth	Set in oversize hole?	Annular space initially grouted?
12 in.	from +2 to 325 ft.	[X] Yes [ ] No	[X] Yes [ ] No [ ] Unknown
10 in.	from +2 to 325 ft.	[ ] Yes [ ] No	[X] Yes [ ] No [ ] Unknown
____ in.	from ____ to ____ ft.	[ ] Yes [ ] No	[ ] Yes [ ] No [ ] Unknown

SCREEN/OPEN HOLE: Screen from 325 to 395 ft. Open Hole from ____ to ____ ft.

OBSTRUCTIONS: [ ] Rods/Drop Pipe [ ] Check Valve(s) [ ] Debris [ ] Fill [X] No Obstruction
Type of Obstructions (Describe): ____
Obstructions removed? [ ] Yes [ ] No Describe: ____

PUMP: Type: Turbine
[X] Removed [ ] Not Present [ ] Other: ____

METHOD USED TO SEAL ANNULAR SPACE BETWEEN 2 CASINGS, OR CASING AND BORE HOLE:
[X] No Annular Space Exists [ ] Annular space grouted with tremie pipe [ ] Casing Perforation/Removal
____ in. from ____ to ____ ft. [ ] Perforated [ ] Removed
____ in. from ____ to ____ ft. [ ] Perforated [ ] Removed
Type of perforator: ____
[ ] Other: ____

GROUTING MATERIAL(S) (One bag of cement = 94 lbs., one bag of bentonite = 50 lbs.)
Grouting Material: Neat cement from 395 to 2 ft. 7½ yards ____ bags
____ from ____ to ____ ft. ____ yards ____ bags
____ from ____ to ____ ft. ____ yards ____ bags

GEOLOGICAL MATERIAL	COLOR	HARDNESS OR FORMATION	FROM	TO
If not known, indicate estimated formation log from nearby well or boring				
Top Soil	Black		0	2
Clay	Yellow		2	16
Clay	Blue		16	65
Fine Sand	Colored		65	165
Clay	Blue		165	224
Sand	Blue		224	274
Clay	Blue		274	308
Sand Fine	Colored		308	335
Sand	Colored		335	394
Fine Sand	Colored		394	481
Granite	Green		481	

REMARKS, SOURCE OF DATA, DIFFICULTIES IN SEALING

SEP 2007 RECEIVED WELL MGT.

OTHER WELLS AND BORINGS
Other unsealed and unused well or boring on property? [ ] Yes [X] No How many? ____

LICENSED OR REGISTERED CONTRACTOR CERTIFICATION
This well or boring was sealed in accordance with Minnesota Rules, Chapter 4725. The information contained in this report is true to the best of my knowledge.

LTP Enterprises Inc — Contractor Business Name
2157 — License or Registration No.
Authorized Representative Signature — Date
Cory Beilke — Name of Person Sealing Well or Boring

MINN. DEPT OF HEALTH COPY H 250568

Historical Photographs
Hutchinson, Minnesota

Ames Brothers Feed Mill, Hutchinson, Minnesota, circa 1910. Well near river not visible.
Courtesy lakesnwoods.com.

City Power House, Hutchinson, Minnesota, circa 1910. Well near river not visible.
Courtesy lakesnwoods.com.

Windmill (well) & water tank adjacent to the St. Paul, Minneapolis & Manitoba railway depot, Hutchinson, Minnesota (both photos above). Courtesy west2K.com.

Luce Line railroad depot. Hutchinson, Minnesota. Courtesy west2K.com.

Appendix V - City of Hutchinson

H

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING RECORD

Minnesota Statutes Chapter 103I

Minnesota Unique Well No. **329469**

County McLeod
Quad Hutchinson East
Quad ID 108A

Entry Date 06/27/2007
Update Date 08/17/2007
Received Date 07/09/2001

Well Name HUTCHINSON UTILITIES

Township Range Dir Section Subsections Elevation 1045 ft.

117 29 W 31 DBCCCA Elevation Method 7.5 minute topographic map (+/- 5 feet)

Well Depth	Depth Completed	Date Well Completed
447 ft.	440 ft.	04/14/1971

Drilling Method --

Well Address
44 4TH AV NE
HUTCHINSON MN

Drilling Fluid --

Well Hydrofractured? ☐ Yes ☐ No
From Ft. to Ft.

Use Abandoned Status Sealed

Casing Type Steel (black or low carbon) Joint No Information Drive Shoe? ☐ Yes ☐ No Above/Below ft.

Casing Diameter	Weight	Hole Diameter
24 in. to 24 ft.	lbs./ft.	
16 in. to 315 ft.	lbs./ft.	

Open Hole from ft. to ft.

Screen YES Make Type

Diameter	Slot/Gauze	Length	Set Between
			315 ft. and 440 ft.

Geological Material	Color	Hardness	From	To
TOP SOIL SAND			0	1
CLAY	YELLOW		1	8
CLAY	BLUE		8	32
DIRTY SAND	BLUE		32	41
SAND	BLUE		41	104
SANDY CLAY	BLUE		104	170
SOFT SAND	BLUE		170	190
SAND	BLUE		190	240
DIRTY SAND	BLUE		240	245
SANDY CLAY	BLUE		245	252
VERY SANDY CLAY	BLUE		252	257
BOULDER			257	258
SANDY CLAY	BLUE		258	277
DIRTY SAND	BLUE		277	282
SAND	BLUE		282	292
DIRTY SAND	BLUE		292	297
SAND			297	345
CLAY	BLUE		345	354
DIRTY SAND	BLUE		354	362
CLAY	BLUE		362	367
DIRTY SAND	BLUE		367	442
DECOMPOSED	WHITE		442	447

Static Water Level
ft. from Date Measured

PUMPING LEVEL (below land surface)
ft. after hrs. pumping g.p.m.

Well Head Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

REMARKS
SEALED 2-5-2001.

Grouting Information Well Grouted? ☑ Yes ☐ No

Grout Material: Neat Cement from 8 to 440 ft. 18 yrds.

Located by: Minnesota Geological Survey

Method: Digitization (Screen) - Map (1:24,000)

Unique Number Verification: Address verification

Input Date: 06/27/2007

System: *UTM - Nad83, Zone15, Meters*

X: 391941 Y: 4972348

Nearest Known Source of Contamination
__feet __direction __type

Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed
Manufacturer's name Model number __ HP _ Volts
Length of drop Pipe _ft. Capacity _g.p.m Type Turbine Material

Abandoned Wells Does property have any not in use and not sealed well(s)? ☐ Yes ☑ No

Variance Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Well Contractor Certification

License Business Name	Lic. Or Reg. No.	Name of Driller
L.t.p. Enterprises, Inc.	91686	THEISEN, R.

First Bedrock weathering residuum unc.age
Last Strat weathering residuum unc.age
Aquifer
Depth to Bedrock 442 ft.

County Well Index Online Report

329469

Printed 10/7/2013
HE-01205-07

Hutchinson

7/18/17

to

~~6/7/80~~

7/15/81

to

~~2004~~

2/6/1963

MINNESOTA STATE BOARD OF HEALTH
Division of Sanitation
REPORT ON WATER SUPPLY FOR HUTCHINSON
July 18, 1917.

A

The public water supply for the City of Hutchinson is obtained from a ten inch drilled well, owned by Ames Brothers, and located near the mill at the corner of Third Avenue N. W. and Main Street N. This well is approximately 193 feet in depth. It is a flowing well, the hydrostatic pressure at the surface of the ground being about 23 feet. Definite information regarding the formations encountered in drilling was not obtainable. The well is surrounded at the surface by a pit three by four feet in plan and five feet deep. The pit is curbed with boards and has a concrete bottom. It is covered by means of loose planks. A four inch drain leads from the pit about fifty feet south, to the river. There was about six inches of water in the pit on this date. There is a small wooden watering trough located on the pit platform. The waste water from this trough drains back into the pit.

Water from this supply is pumped by the Northwest Light and Power Company into the city distribution system and an elevated wooden tank. The pumps consist of a steam or electrically driven triplex pump, capacity 200 gallons per minute, and a Fairbanks Morse steam fire pump, capacity 800 gallons per minute. The distribution system consists of about 22,800 feet of water mains serving

MINNESOTA STATE BOARD OF HEALTH
Division of Sanitation
REPORT ON THE PUBLIC WATER SUPPLY OF HUTCHINSON
February 20, 1918

A

Field Survey:- This supply is obtained from a flowing drilled well, 193 feet in depth, located near the Ames Brothers Mill, at the corner of Third Avenue NW and Main Street. Data relating to this well are contained in the report of an investigation by this Division dated July 18, 1917. That report contained the following recommendations:-

> "A new concrete floor should be constructed in the well pit, at such a level that all water in the pit will drain out quickly through the existing four inch drain. This floor should be sloped from all directions towards this outlet.
>
> The trap door to the elevated tank should be kept securely locked. All openings in the roof or sides of the tank should be closed so as to prevent the entrance of contaminating material."

The present investigation was undertaken to determine whether those recommendations had been complied with. It was stated, by the mill officials, that no changes had been made on the well since the time of the last investigation (July 18, 1917). The roof of the elevated storage reservoir has been repaired and the trap door is said to be kept locked at all times. An abundant supply of water is available from this well. The average consumption in the city is said to be 72,000 gallons per day. This is distributed to approximately 200 consumers' connections.

The sanitary aspect of the supply is still unsatisfactory. The recommendation regarding the well pit, which was contained in the former report, has not been carried out.

Analytical Results:- Sample 16941. See analytical sheet. This sample represents water direct from the well. The bacteriological examination shows the water to be of good sanitary quality

MINNESOTA STATE BOARD OF HEALTH
Division of Sanitation
REPORT ON WATER SUPPLY FOR HUTCHINSON
June 26, 1918.

A

Field Survey: The water supply for the city of Hutchinson is obtained from a flowing well located on the premises of the Ames Brothers' Mill at the corner of Third Avenue N. W. and Main Street N. A detailed description of the well and its construction, and also the recommendations made by this Division are contained in a former report dated July 18, 1917. The cement bottom of the well has been raised to the elevation of the drain pipe which leads to the river. No waste water was found standing in the pit of the well on the date this investigation was made. This complies with the recommendations made in a former report.

The sanitary aspect of this well is satisfactory.

Analytical Data: See analytical sheet. Sample 17114 was collected directly from the well. Sample 17115, 16, and 17 were collected at different points on the distribution system. The bacteriological results of these samples show the water to be of good sanitary quality as evidenced by the very low bacterial counts and the absence of the B. Coli group in 1 c.c. and 100 c.c. amounts. The physical examination of sample 17114 shows a water of moderately high turbidity, very high color, and with a very faint earthy odor. The chemical examination shows a very hard water with no incrusting material. The turbidity is due to the very high iron content.

MINNESOTA STATE BOARD OF HEALTH
Division of Sanitation
REPORT ON WATER SUPPLY FOR HUTCHINSON
March 21, 1919.

A

The water supply for the city of Hutchinson is obtained from a flowing well located on the premises of the Ames Brothers' Mill at the corner of Third Avenue N. W. and Main Street N. Data relative to this supply are contained in reports of previous investigations made by this Division. The last investigation was made on June 26, 1918. No changes have been made on the system since the date of the last investigation. At the time of the present investigation the water in the river had risen to such an extent that water had backed up into the pit surrounding the well. The discharge pipe to the pump was also under water, where the river had flooded the pit under the pumping station.

At the time of this investigation a pressure of water from the well was exerted even with the pump running. In the event of the lowering of pressure, for instance due to a break in the pipe leading from the well to the pump, it might be possible for river water to be drawn into the supply.

The sanitary aspect of the supply cannot be considered as entirely satisfactory as long as it is possible for the well and suction pipe to become flooded.

Analytical Data: See analytical sheet. Samples 17636, 17637, and 17638 represent water collected at the source and on the distribution system. The bacteriological examination shows the water to be of good sanitary quality as evidenced by the very low bacterial counts and the absence of the B. Coli group in 100 c.c. amounts.

MINNESOTA STATE BOARD OF HEALTH
Division of Sanitation
REPORT ON WATER SUPPLY FOR HUTCHINSON
December 29, 1919

The water supply for the city of Hutchinson is obtained from a flowing well located on the premises of the Ames Brothers Mill at the corner of Third Avenue N.W. and Main Street N. Data relative to this supply are contained in reports of previous investigations made by this Division. The last investigation was made on March 21, 1919. No changes have been made on the system since the date of the last investigation which would tend to affect the sanitary aspect of the supply.

The present investigation was made to determine whether or not certain recommendations offered in the last report had been carried out. In the report of the last investigation, it was recommended that "the pit around the well should be filled with compact earth. The portion of the basement of the pump station immediately surrounding the suction pipe to the pump should be walled off and the space immediately around the suction pipe be filled with compact earth." It was stated by the superintendent of the water works system that it is impractical to comply with the first recommendation in view of the fact that a shut off valve is located in this pit. It was also stated that pumping of water, while the pipe from the well to the pump was flooded, was impossible owing to the fact that much of the electrical equipment of the plant was located at a lower level than the pipe. In event of such flooding, the pumps would have to be shut down, thus eliminating the possibility of contaminated water being pumped into the system. For these reasons, the recommendations offered had not been carried out.

MINNESOTA DEPARTMENT OF HEALTH
Division of Sanitation

Report on the Water Supply of Hutchinson, Minnesota
April 26, 1933

B

A

This water supply is obtained from two drilled wells, one of which is at the power house and the other at a feed mill across the street. Water is pumped into the system and into a 125,000-gallon, elevated, steel tank. The pump station is on high ground with good surface drainage to the south. The pumproom floor is constructed of concrete and is above the normal ground level. The well at the power house is 210 feet in depth and is cased with sixteen-inch iron pipe. The well at the feed mill is 210 feet in depth and is cased with ten-inch pipe. Both wells are surrounded at the surface by pits. Suction lines from these wells to the pumps are connected together in a pit in the power house. This pit is approximately ten feet square and eight feet in depth.

Water is drawn from these wells by means of three horizontal, centrifugal pumps, one having a capacity of 300 gallons per minute and the other two 500 gallons per minute each. These pumps are above the pumproom floor and suitable connections are made to the suction pipes. The distribution system consists of eight miles of water main which distribute to one-hundred fire hydrants and 650 service connections.

The sanitary aspect of this supply is not entirely satisfactory because the wells are surrounded at the surface by pits. Pits form receptacles in which waste water and other contaminating material may accumulate. The special drainage systems which are used to remove the waste water from pits often get out of order and result in the flooding of the pits. In fact, experience has shown that such pits almost invariably become flooded at some time or other, and if this flooding occurs when there happens to be a leak in the well casing, a serious situation is created because contamination will get into the supply.

Analytical Data: (See attached sheet) Samples No. 41818, -19, -20 and -21 represent water collected at the pumphouse and from various points on the dis-

MINNESOTA DEPARTMENT OF HEALTH
Division of Sanitation

Report on the Water Supply of
Hutchinson, Minnesota
October 23, 1941 and January 26, 1942

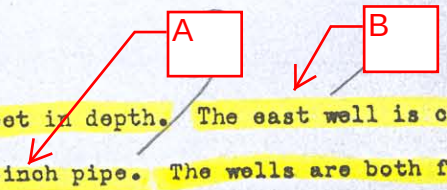
This water supply is obtained from two drilled wells located at the pumping station adjacent to the South Branch of the Crow River at the north end of Main Street. The water is pumped into the distribution system while the overflow accumulates in an elevated steel tank.

Location of Source

Both wells are located about 40 feet from the river bank. For wells that are pumped, a minimum distance of 50 feet to sources of contamination is usually necessary to provide proper protection. The wells are surrounded by concrete pits, the tops of which at ground level are probably above flood level. The pit for the west well is drained to the river. Pits are subject to flooding, and thus the possibility of contamination of the wells is created if they do become flooded.

Wells, Pumps and Pumphouse

Both wells are stated to be 210 feet in depth. The east well is cased with 16-inch pipe and the west well with 10-inch pipe. The wells are both flowing but it is not known what portions of the pipe lines may be under momentary suction when the pumps are started. With the present arrangement the well casings and suction pipes must be considered as operating under negative heads, at least for short intervals. The suction lines from these wells to the pumps are connected in a pipe tunnel below the pumproom floor. Waste water from the pumproom floor is drained through a tile sewer to the sanitary sewer in Main Street to the west. This drain makes it possible for sewage to back up and leak into the soil in the vicinity of the east well and suction pipe leading to the pumps.



1928 Sanborn historical maps refers to Feed Mill well (B, on this list) as "City Well".

MINNESOTA DEPARTMENT OF HEALTH
Division of Municipal Water Supply,
Swimming Pools & Plumbing

Report on Water Supply of
Hutchinson, Minnesota
April 8, 1947

The municipal water supply for the city of Hutchinson is obtained from two flowing wells located in a pumping station adjacent to the south branch of the Crow River at the north end of Main Street. The water is pumped into the distribution system while the overflow collects in an elevated steel tank. A gas chlorinator has recently been received. When the chlorinator is installed it will be used for odor control.

Previous Investigations

Date relative to this supply are contained in the reports of previous investigations made by this Division. The last investigation was undertaken January 26, 1942. No changes have been made in the construction of the supply since that date which would affect the sanitary aspect.

Sanitary Defects

1. The east well and suction pipe from the wells are too close to sewers.

2. Both wells are a little too close to the river when it is considered that they may be under suction from the pumps.

3. Both wells are located in pits subject to flooding.

4. The wells are without protective casings.

5. The suction piping to the pumps is in a pipe tunnel which constitutes a pit subject to flooding.

6. The water main crossing the river is not provided with extra protection against leakage.

7. Automatic flush tanks on sewers have city water outlets that can be flooded.

MINNESOTA DEPARTMENT OF HEALTH
Division of Municipal Water Supply

Report on Water Supply of
Hutchinson, Minnesota
November 8, 1949

1. Date of Last Investigation - October 18, 1949.

2. Rating at Last Investigation - 64.

3. Changes Since Last Investigation -

No changes have been made in the system since the last investigation. However, a well site for a new proposed well has been approved as a beginning step toward improvement of the water supply. It is understood that when the new well is completed, the present sources will be cut off from the municipal system, and will be used to augment the cooling water supply at the power plant only. It is further understood that these wells will discharge via an approved one-way gap delivery arrangement since municipal water also serves the power plant and is used during emergencies as cooling water.

4. Analytical Data (See attached sheet) -

Samples Nos. 106, 107, 108 and 109 represent water collected from the wells and from various points on the distribution system. The bacteriological examination of these samples showed the water to be of good sanitary quality as evidenced by the fact that organisms of the coliform group were not found in 100 ml. portions of the samples examined. The absence of indications of contamination in the water does not mean that the supply is safe as the field survey showed avenues through which contamination can enter the supply at any time.

5. Recommendations -

a. Plans and specifications covering the proposed well, pump, pump mounting, pump house and the proposed arrangement for using the existing well at the power plant should be submitted for examination and approval by this Department prior to construction.

MINNESOTA DEPARTMENT OF HEALTH
District No. 2
Mankato, Minnesota

Report on Investigation of Water Supply,
Hutchinson, Minnesota,
November 14, 1950 and January 9, 1951

I. Ownership: Municipal

II. Date of Last Previous Investigation: November 8, 1949

III. Rating of Supply at Last Previous Investigation: 64

IV. Changes Since Last Investigation:

C

1. A new well has been drilled in the municipal park, and is now completed and in operation. The site is isolated from possible sources of contamination, and drainage is good in all directions. The well is 370 feet in depth, and is provided with 12-inch casing to a depth of 320 feet. The static water level is 37 feet below the ground surface; when test pumped, the draw-down was 63 feet at 800 g.p.m and 48 feet at 600 g.p.m. The well is now being pumped at approximately 650 g.p.m.

A (more likely than B, since it is on City property)

2. The old well near the river has been cut-off from the municipal water supply by turning up the tee on the discharge manifold 90 degrees and providing flange plates to seal the tee outlet and the former discharge pipe to the distribution system. An eight-inch pipe has been laid to the power plant so that water from this old well may be used in the power plant cooling system.

3. It was determined that a cross-connection exists in the municipal power plant between the municipal water supply and the power plant cooling water system. Water from the municipal supply is brought into the plant through a four-inch service pipe and is connected to the cooling water system through a gate and a check valve. River water and the old well water supply

442 7-20-50 5M

MINNESOTA DEPARTMENT OF HEALTH
SECTION OF ENVIRONMENTAL SANITATION

Analytical Examination of Water

NO.	TOWN, ETC.	MAP LOCATION	SPECIFIC LOCATION	SOURCE
5352	Hutchinson	Pumphouse-New Well	Tap-Discharge	New Well — C
86314	"	Pumpstation-old well	Tap-Booster Discharge	old well — A

	5352	86314
Specimen Number		
Station Number		
Collected by	EAH	WRL
Date Collected	11-14-50	5-15-47
Date Rec'd by Lab.	11-16-50	5-15-47
BACTERIAL: Exam. by		
Bacteria per c.c. 37° C. 24 hours		
Coliform group organisms (100 ml. / M.P.N. per 100 ml.)		
PHYSICAL: Exam. by		
Turbidity		
Color		
Total Solids		
Total suspended solids		
Settleable solids c.c. per liter		
CHEMICAL: Exam. by (parts per million except as noted)		
Total hardness	450	420
Alkalinity	440	440
pH value	7.5	7.8
Iron	2.9	1.9
Manganese	.009	0
Chlorides	1.5	0
Residual Chlorine		
Sulphates	93	53
Fluorides	.16	.05
Dissolved Oxygen		
Biochemical Oxygen Demand (Five-day)		
Nitrate Nitrogen	0.29	

9-8-52

MINNESOTA DEPARTMENT OF HEALTH
District No. 2
Mankato, Minnesota

Report on Water Supply
Hutchinson, Minnesota
May 27, 1952

1. Date of Last Investigation - January 9, 1951

2. Rating at Last Investigation - 84

3. Changes Since Last Investigation -

   a. A gravity type sand filter in combination with aeration has been installed for the removal of iron from the municipal water supply. Plans for the plant were approved by this Department in a report dated October 1, 1951.

   b. Fluoridation of the water supply was begun for the partial control of dental caries.

   c. The cross-connection at the power plant between the municipal water supply and cooling water supply has been broken in a satisfactory manner.

4. Analytical Results (See attached sheet)

   Samples Nos. 3381 - 3385, inclusive, represent water collected at the well, at the filtered water tap and at three points on the distribution system. The bacteriological examination of these samples showed the water to be of a good sanitary quality as evidenced by the fact that organisms of the coliform group were not found in the 100 ml. portions of the samples examined. The chemical examination of a sample collected from the filtered water tap showed a very low iron content of 0.12 parts per million indicating that the plant is functioning properly. The fluoride content of the finished water was 0.96 parts per million which is considered in the satisfactory range for caries control.

5. Recommendations -

   D

   a. The cross-connection between the municipal water supply and the private water supply at the Kraft Food Company plant should be broken. Because of the proximity of sewers to the wells at this plant, their water supply is not considered safe. A closed valve is not sufficient protection between

D. Kraft Food Co. wells inter-connected w/city supply. (Multiple wells)

598 11-30-50 5M

MINNESOTA DEPARTMENT OF HEALTH

SECTION OF ENVIRONMENTAL SANITATION

Analytical Examination of Water

NO.	TOWN, ETC.	MAP LOCATION	SPECIFIC LOCATION	SOURCE
3881	Hutchinson	Pumphouse	Tap - pump discharge	Mcpl. new well
3882	Hutchinson	Pumphouse	Filtered water tap	Public supply
3883	Hutchinson	Dodge Garage S. E.	Lav. tap	Public supply
3884	Hutchinson	Shell Oil Sta.-Central	Lav. tap	Public supply
3885	Hutchinson	U.S. Service - North	Lav. tap	Public supply

Specimen Number		3881	3882 C	3883	3884	3885
Station Number						
Collected by		FAH	FAH	FAH	FAH	FAH
Date Collected		5-27-52	5-27-52	5-27-52	5-27-52	5-27-52
Date Rec'd by Lab.		5-28-52	5-28-52	5-28-52	5-28-52	5-28-52
BACTERIAL: Exam. by		HGO	HGO	HGO	HGO	HGO
Bacteria per c.c. 37° C. 24 hours						
Coliform group organisms	100 ml.					
	M.P.N. per 100 ml.	0	0	0	0	0
PHYSICAL: Exam. by						
Turbidity			2.			
Color			12.			
Total Solids						
Total suspended solids						
Settleable solids c.c. per liter						
CHEMICAL: Exam. by (parts per million except as noted)						
Total hardness						
Alkalinity						
pH value						
Iron			.12			
Manganese						
Chlorides						
Residual Chlorine						
Sulphates						
Fluorides			.96			
Dissolved Oxygen						
Biochemical Oxygen Demand	five-day					

MINNESOTA DEPARTMENT OF HEALTH
District No. 2
Mankato, Minnesota

Report on Water Supply
Hutchinson, Minn.
October 7, 1953

1. Date of Last Investigation: May 27, 1952

2. Rating at Last Investigation: 86

3. Changes Since Last Investigation:

All new water services and building sewers are being laid in separate trenches at least 10 feet apart.

4. Analytical Results: (See attached sheet)

Samples Nos. 1993 - 1997, inclusive, represent water collected from the well, the filter effluent tap, and from three points on the distribution system. The bacteriological examination of these samples showed the water to be of a good sanitary quality as evidenced by the fact that organisms of the coliform group were not found in the portions of the samples examined. The chemical examination of Sample 1996, collected from a point on the distribution system, showed a fluoride content of 1.2 parts per million which is considered in the satisfactory range for caries control.

D. multiple wells

5. Defects Remaining on the System:

a. A cross-connection exists between the municipal water supply and the Kraft Food Company water supply. Because of the proximity of sewers to the wells at this plant, their water supply is not considered safe. A closed valve is not sufficient protection between a safe and an unsafe supply.

b. The arrangement for supplying water to the sewage treatment plant is not entirely safe.

c. The water main crossing under the river is not provided with extra protection against leakage, valves for quick isolation, or sampling taps at both ends. (See Paragraph 1219, Section XII, of the Manual of Water Supply Sanitation)

d. There are plumbing fixtures connected to the distribution system that are faulty in design and installation.

MINNESOTA DEPARTMENT OF HEALTH
District No. 2
Mankato, Minnesota

Report on Water Supply
Hutchinson, Minn.
August 16, 1954

1. Date of Last Investigation: October 7, 1953

2. Rating at Last Investigation: 87

3. Changes Since Last Investigation: None

4. Analytical Data (See attached sheet)

Samples Nos. 6783, 6784, 6785, and 6787 represent water obtained from the well, from the iron removal plant booster pump, and from two points on the distribution system. The bacteriological examination of these samples showed the water to be of a good sanitary quality as evidenced by the fact that organisms of the coliform group were not found in the portions of the samples examined. The bacteriological examination of sample No. 6786 which was obtained from another point on the distribution system, however, did show indications of contamination. This result may have been caused by an incomplete sterilization of the tap from which the sample was obtained, and is probably not significant.

5. Defects Remaining on the System:

a. A cross-connection exists between the municipal water supply and the Kraft Food Company water supply. Because of the proximity of sewers to the wells at this plant, their water supply is not considered safe. A closed valve is not sufficient protection between a safe and an unsafe supply.

b. The arrangement for supplying water to the sewage treatment plant is not entirely safe.

c. The water main crossing under the river is not provided with extra protection against leakage, valves for quick isolation, or sampling taps at both ends. (See Paragraph 1219, Section XII, of the Manual of Water Supply Sanitation)

d. There are plumbing fixtures connected to the distribution system that are faulty in design and installation.

MINNESOTA DEPARTMENT OF HEALTH
District No. 2
Mankato, Minnesota

Report on Water Supply
Hutchinson, Minn.
August 23, 1955

1. Date of Last Investigation: August 16, 1954

2. Rating at Last Investigation: 86

3. Changes Since Last Investigation:

E

The new well (No. 2) in the park has been completed. The well is cased with twelve inch pipe, and has a total depth of 257 feet including twenty feet of screen. The vertical turbine pump has a capacity of 750 gallons per minute.

4. Analytical Data (See attached sheet)

Samples Nos. 2605-2610, inclusive, represent water obtained from both wells, of filtered water and from three points on the distribution system. The bacteriological examination of these samples showed the water to be of a good sanitary quality as evidenced by the fact that orgaisms of the coliform group were not found in the portions of the samples examined.

5. Defects Remaining on the System:

a. A cross-connection exists between the municipal water supply and the Kraft Food Company water supply. Because of the proximity of sewers to the wells at this plant, their water supply is not considered safe. A closed valve is not sufficient protection between a safe and an unsafe supply.

b. The arrangement for supplying water to the sewage treatment plant is not entirely safe.

c. The water main crossing under the river is not provided with extra protection against leakage, valves for quick isolation, or sampling taps at both ends.

d. There are plumbing fixtures connected to the distribution system that are faulty in design and installation.

6. Recommendations:

a. It is understood from information received from officials at the Kraft Food Company that the plant water supply is to be reconstructed to conform to the standards of this Department for safe water supplies. When this has been

MINNESOTA CONSERVATION DEPARTMENT
DIVISION OF WATERS

STATEMENT ON APPROPRIATION OF WATER

For Office Use Only
Approp. 43.0009
P.A. 66-5838
WSC 11

66-5838

Before January 1, 1966, mail report to Director, Division of Waters, Centennial Office Bldg., St. Paul, Minnesota 55101.

McLeod Co.

Location of appropriation 300 South Glen Street
Hutchinson — McLeod
City or Town — County
South Park S½ Hutchinson
Describe further by Lot, Block & Addition, N.E. of Highway

Locate Source of Water on Plat of Section

Sec. 06
Twp. 116N
Range 29W

R6E

Owner City of Hutchinson

Address 35 Washington Ave. W. Hutchinson, Minnesota 55350

Person in Charge: Harvey Thompson

Hutchinson

C

E

Ground Water (List each well separately)	No. 1	No. 2
Depth of well, ft.	370	261
Diameter of casing, in.	12"	12"
Date of completion	6/50	8/54
Driller	Layne	Fredrickson
Address	Mpls.	Hutchinson
Rated capacity of pump	500	900
Usual pumping rate	351	1050
Water level, pumping (feet below land surface)	67	81
Water level, not pumping (feet below land surface)	37.2	33.01

Surface Water

Source of water (Name of lake or stream)

Number of pumps

Rated capacity of pumps

Date appropriation was first begun

The above installation is now equipped with Flow meter X
Timing device
Neither

The water appropriated is used for Municipal Water Supply

For Office Use Only
Code

12-1-58

MINNESOTA DEPARTMENT OF HEALTH
District No. II
Mankato, Minnesota

Report on Investigation of the Municipal Water Supply
Hutchinson, Minnesota
October 16, 1958

Date of Last Investigation: August 23, 1955

Rating at Last Investigation: 88

Changes Since Last Investigation:

D

1. The cross connection between the municipal water supply and the Kraft Food Company water supply has been broken.

B

2. The cross connection between the municipal water supply and the power plant water supply has been broken.

3. The city has adopted the Minnesota Plumbing Code by reference and obtained the services of a plumbing inspector.

Discussion

During the annual survey of this supply in November 1957, samples of water collected from the distribution system showed evidence of the introduction of contaminated materials into the supply. Subsequent field observation indicated that the elevated storage tank access hatch was partially removed and that the hatch opening was not properly constructed.

Evidence of contamination found in water collected from Well No. 1 may have been introduced by leakage through the main check valve or through lubrication lines.

Samples collected during this year showed the water to be of satisfactory sanitary quality. The results of bacteriological examinations of the samples collected from the supply during the past two years are summarized in the following table:

MINNESOTA DEPARTMENT OF HEALTH
District II
Mankato Minnesota

Report on Investigation of the Municipal Water Supply
Hutchinson, Minnesota
October 20, 1959

Date of last investigation: October 16, 1958

Rating at last investigation: 85

Changes since last investigation:

F

1. A new well has been drilled on the north side of the river on Lot 2, Block 14, but as yet has not been connected to the system.

2. A new iron removal plant and 500,000 gallon concrete ground-level reservoir are being constructed on Lots 3 and 10, Block 14, for the treatment and storage of the water from the new well. The report recommending approval of plans and specifications for this construction is dated April 13, 1959.

3. A new 12-inch over-water river crossing has been completed in accordance with plans and specifications described in the report dated September 30, 1958.

Location: Monroe Street from Fourth Avenue South to Washington Avenue and thence across Crow River to the rearing pond dyke and along the dyke to Bluff Street. The river crossing is made of cast-iron mechanical joint water main and is on a trestle constructed for this purpose only.

Analytical Data: (See attached sheet)

Samples Nos. 13 through 17 inclusive, represent water obtained from the wells, the iron filter, and from two points on the distribution system. The bacteriological examination of these samples showed the water to be of a satisfactory quality as evidenced by the fact that organisms of the coliform group were not found in the samples examined.

1/20/61

MINNESOTA DEPARTMENT OF HEALTH
District II
Mankato Minnesota

Report on Investigation of the Municipal Water Supply
Hutchinson, Minnesota
December 19, 1960

Date of last investigation - October 10, 1959

Rating at last investigation - 85

Changes since last investigation -

F

1. The new well, the new iron removal plant, and the 500,000 gallon concrete ground-level reservoir were properly disinfected and placed on the distribution system on March 1, 1960.

2. The City has purchased membrane filter testing equipment for bacteriological control. This local testing program will be augmented by tests to be made on a quarterly basis by the Minnesota Valley Dairy and Testing Laboratory of New Ulm.

3. A chlorinator has been installed at the new iron removal plant and a residual of one part per million is being maintained in the ground-level reservoir.

4. A fluoridator has been installed at the new iron removal plant. A residual of 1.2 parts per million is being maintained on the distribution system.

Analytical data - (See attached sheets)

Samples Nos. 425 - 432 inclusive, represent water obtained from the wells, the old filter, and from several points on the distribution system. The bacteriological examination of these samples showed the water to be of a satisfactory quality as evidenced by the fact that organisms of the coliform group were not found in the samples examined.

The chemical examination of Sample No. 7841, which was collected from the new well, showed the water to be very hard and high in iron but very low in manganese, fluorides, chlorides, sulphates, and nitrate nitrogen. Samples Nos. 7842 and 7843 which were collected from filter beds, Nos. 1 and 2, respectively, in the new iron removal plant show that the removal of iron and manganese is satisfactory. The pH

206

MINNESOTA DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL SANITATION
ANALYTICAL DATA

Samples Collected By Dean L. Hahn

Field Number	Town, County, Etc.	Sampling Point and Source of Sample
a 1	Hutchinson	New Well F — Sample tap
b 2	"	New Filter Bed No. 1 — " "
c 3	"	New Filter Bed No. 2 — " "
d		
e		
f		

Sample Number	a 7841	b 7842	c 7843	d	e	f
Date Collected	2-24-60					
Time Collected						
Temperature °F						
Date Received by Lab.						
BACTERIAL: Exam. by						
Bacteria per ml. 35° C. 24 hours						
Coliform group organisms — 100 ml.						
Coliform group organisms — M.P.N. per 100 ml.						
PHYSICAL & CHEMICAL: Exam. by						
Settleable solids ml. per liter						
Total Solids						
Total Volatile Matter						
Suspended Solids						
Suspended Volatile Matter						
Turbidity						
Color						
Total hardness as $CaCO_3$	440	430	430			
Alkalinity as $CaCO_3$	430	460	450			
pH value	7.3	7.6	7.6			
Iron	.80	.04	.04			
Manganese	.08	<.02	<.02			
Chlorides	<1	<1	1.5			
Residual Chlorine						
Sulphates	70.	70.	70.			
Fluorides	.3	.4	.4			
Dissolved Oxygen						
Biochemical Oxygen Demand — five-day						
Phosphorus						
Ammonia Nitrogen						
Organic Nitrogen						
Nitrite Nitrogen						
Nitrate Nitrogen	<1	<1	<1			
Calcium Carbonate	250	260	260			
pH of Stability		7.2	7.2			

* *Results are in milligrams per liter except as noted.*

12-13-61

MINNESOTA DEPARTMENT OF HEALTH
District II
Mankato Minnesota

Report on Investigation of Municipal Water Supply
Hutchinson, Minnesota
November 27, 1961

Date of last investigation - December 19, 1960

Rating at last investigation - 89

Changes since last investigation - None

Analytical data - (See attached sheets)

Samples Nos. 724 - 730 inclusive, represent water obtained from the wells, the old filter, and from several points on the distribution system. The bacteriological examination of these samples showed the water to be of a satisfactory sanitary quality as evidenced by the fact that organisms of the coliform group were not found in the samples examined.

Sanitary defects -

1. The arrangement for supplying water to the sewage treatment plant is not entirely safe.

2. The water main crossing under the river is not provided with extra protection against leakage, valves for quick isolation, or sampling taps at both ends.

3. There are plumbing fixtures connected to the distribution system that are faulty in design and installation.

4. The elevated tank manhole is not constructed in accordance with the standards of this department.

Recommendations -

1. The rate of chlorine application should be increased to provide a chlorine residual of at least 0.5 parts per million in all parts of the distribution system. Consideration may be given to the addition of ammonia in conjunction with chlorine to form chloramines. A chloramine residual is more

MINNESOTA DEPARTMENT OF HEALTH
District II
Mankato Minnesota

Report on Investigation of Municipal Water Supply
Hutchinson, Minnesota
February 6, 1963

Date of last investigation - November 27, 1961

Rating at last investigation - 85

Changes since last investigation - None

Uncertain of which these three are.

Analytical data - (See attached sheets)

Samples Nos. 14 - 19 inclusive, represent water obtained from Wells Nos. 1, 2 and 3, the new reservoir and from two points on the distribution system. The bacteriological examination of these samples showed the water to be of a satisfactory sanitary quality as evidenced by the fact that organisms of the coliform group were not found.

Sanitary defects -

1. The arrangement for supplying water to the sewage treatment plant is not entirely safe.

2. The water main crossing under the river is not provided with extra protection against leakage, valves for quick isolation, or sampling taps at both ends.

3. There are plumbing fixtures connected to the distribution system that are faulty in design and installation.

4. The elevated tank manhole is not constructed in accordance with the standards of this department.

Recommendations -

1. The rate of chlorine application should be increased to provide a chlorine residual of at least 0.5 parts per million in all parts of the distribution system. Consideration may be given to the addition of ammonia in conjunction with chlorine to form chloramines. A chloramine residual is more

April 14, 2017

Mr. John Paulson, Project/Environmental
Regulator Manager
City of Hutchinson
111 Hassan Street Southeast
Hutchinson, Minnesota 55350

Dear Mr. Paulson:

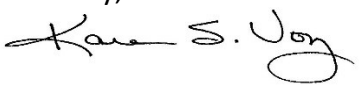
Subject: Scoping 2 Decision Notice and Meeting Summary – City of Hutchinson – PWSID 1430004

This letter provides notice of the results of a scoping meeting held with you. Eric Levine, Ken Exner (city of Hutchinson), John Rodeberg (SEH) at Hutchinson City Hall, and also Jeff Ledine (SEH) and Marilyn Bayerl (Bayerl Water Resources) via conference call on April 11, 2017, regarding wellhead protection (WHP) planning. During the meeting, we discussed the data elements that must be compiled and assessed to prepare the part of the WHP plan related to the management of potential contaminants in the approved drinking water supply management area. The enclosed Scoping 2 Decision Notice lists the data elements discussed at the meeting. The data elements must be compiled and assessed in terms of their present and future implications on the 1) use of the well(s), 2) quality and quantity of water supplying the public water supply wells(s), and 3) land and groundwater uses in the drinking water supply management areas. We also discussed a summary of planning issues that were identified during the Part I WHP Plan development process which should be considered for inclusion in your Part II WHP Plan.

The city of Hutchinson has met the requirements to distribute copies of the first part of the WHP plan to local units of government and hold an informational meeting for the public. The city of Hutchinson will have until August 4, 2017, to complete its WHP plan.

If a data element is marked on the enclosed notice as a data element that must be used and it does not exist, it is helpful if your plan notes this. MDH understands Bayerl Water Resources will be working with you to develop a draft of the remainder of the WHP plan. I will be contacting you to review the progress of the development of Part II of your plan. If you have any questions regarding the enclosed notice, contact me by email at karen.s.voz@state.mn.us or by phone at (320) 223-7322.

Sincerely,



Karen S. Voz, Principal Planner
Source Water Protection Unit
St. Cloud District Office
3333 West Division Street, Suite #212
St. Cloud, Minnesota 56301-4557

KSV:ds-b
Enclosures
cc: Amy Lynch, MDH Engineer, Mankato District Office
Matt Jaunich, City Administrator, City of Hutchinson
Ron Struss, Minnesota Department of Agriculture
John Rodeberg, Short Elliott Hendrickson, Inc
Marilyn Bayerl, Bayerl Water Resources

SCOPING 2 DECISION NOTICE
Low Vulnerability DWSMA

Remainder of the Wellhead Protection Plan

Name of Public Water Supply:		Date:
City of Hutchinson	**PWSID 1430004**	April 14, 2017
Name of the Wellhead Protection Manager:		
Mr. John Paulson, Project/Environmental Regulatory Manager		
Address:	**City:**	**Zip:**
111 Hassan Street Southeast	Hutchinson	55350
Unique Well Numbers:		**Phone:**
210426 (Well #4), 228800 (Well #5), 233077 (Well #6), 510076 (Well #7), 724408 (Well #8)		(320) 235-5682

Instructions for Completing the Scoping 2 Form

N	R	S	
X			**N = Not required.** If this box is checked, this data element is **NOT** necessary for your wellhead protection plan because it is not needed or it has been included in the first scoping decision notice. **Please go to the next data element**.

N	R	S	
	X		**R = Required for the remainder of the plan.** If this box is checked, this data **MUST** be used for the "**remainder of the plan**."

N	R	S	
		X	**S = Submit to MDH.** If this box is checked, this data element **MUST** be included in your **wellhead protection plan and submitted to MDH**. If there is **NO** check mark in the **"S"** box but there is an **"X"** in the **"R"** box, this data element **MUST** be included in your plan, but should **NOT be submitted to MDH**. This box will only be checked if MDH does not have access to this data element. This will help to reduce the cost by reducing the amount of paper and time to reproduce the data element.

DATA ELEMENTS ABOUT THE PHYSICAL ENVIRONMENT

PRECIPITATION

N	R	S	
X			An existing map or list of local precipitation gauging stations.

Technical Assistance Comments:

N	R	S	
X			An existing table showing the average monthly and annual precipitation in inches for the preceding five years.

Technical Assistance Comments:

GEOLOGY

N	R	S	
	X		An existing geologic map and a description of the geology, including aquifers, confining layers, recharge areas, discharge areas, sensitive areas as defined in Minnesota Statutes, section 103H.005, subdivision 13, and groundwater flow characteristics.

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.

N	R	S	
	X		Existing records of the geologic materials penetrated by wells, borings, exploration test holes, or excavations, including those submitted to the department.

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.

N	R	S	
	X		Existing borehole geophysical records from wells, borings, and exploration test holes.

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.

N	R	S	
	X		Existing surface geophysical studies.

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.

SOILS

N	R	S	
X			Existing maps of the soils and a description of soil infiltration characteristics.

Technical Assistance Comments:

N	R	S	
X			A description or an existing map of known eroding lands that are causing sedimentation problems.

Technical Assistance Comments:

WATER RESOURCES			
N	**R**	**S**	An existing map of the boundaries and flow directions of major watershed units and minor watershed units.
X			
Technical Assistance Comments:			

N	**R**	**S**	An existing map and a list of public waters as defined in Minnesota Statutes, section 103G.005, subdivision 15, and public drainage ditches.
X			
Technical Assistance Comments:			

N	**R**	**S**	The shoreland classifications of the public waters listed under subitem (2), pursuant to part 6120.3000 and Minnesota Statutes, sections 103F.201 to 103F.221.
X			
Technical Assistance Comments:			

N	**R**	**S**	An existing map of wetlands regulated under chapter 8420 and Minnesota Statutes, section 103G.221 to 103G.2373.
X			
Technical Assistance Comments:			

N	**R**	**S**	An existing map showing those areas delineated as floodplain by existing local ordinances.
X			
Technical Assistance Comments:			

DATA ELEMENTS ABOUT THE LAND USE

LAND USE			
N	**R**	**S**	An existing map of parcel boundaries.
	X	**X**	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

N	**R**	**S**	An existing map of political boundaries.
	X	**X**	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

N	**R**	**S**	An existing map of public land surveys including township, range, and section.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

N	R	S	
	X	X	A map and an inventory of the current and historical agricultural, residential, commercial, industrial, recreational, and institutional land uses and potential contaminant sources.

Technical Assistance Comments: The inventory, mapping, and management of land uses and potential sources of contamination for all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements, as follows:

Low Vulnerability

1) All potential contaminant sources as listed on the attachment [inventory wells *300 to 500 feet in depth of the open interval or screened section of the well)* and wells of undocumented or unknown depths for the potential contaminant source inventory];
2) a land use/land cover map and table; and
3) an inventory of the Inner Wellhead Management Zone (IWMZ).

As a starting point, MDH will provide a land cover map and table from federal data bases. This data set must be used unless an alternative electronic data set that is more current and detailed is available.

Management strategies must be developed for all land uses and potential sources of contamination.

N	R	S	
	X	X	An existing comprehensive land-use map.

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element. Include any urban fringe planning areas.

N	R	S	
	X	X	Existing zoning map.

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.

PUBLIC UTILITY SERVICES

N	R	S	
X			An existing map of transportation routes or corridors.

Technical Assistance Comments:

N	R	S	
X			An existing map of storm sewers, sanitary sewers, and public water supply systems.

Technical Assistance Comments:

N	R	S	
X			An existing map of the gas and oil pipelines used by gas and oil suppliers.

Technical Assistance Comments:

N	R	S	
X			An existing map or list of public drainage systems.

Technical Assistance Comments:

N	R	S	An existing record of construction, maintenance, and use of the public water supply well(s) and other wells within the drinking water supply management area.
	X		

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.

DATA ELEMENTS ABOUT WATER QUANTITY

SURFACE WATER QUANTITY

N	R	S	An existing description of high, mean, and low flows on streams.
X			

Technical Assistance Comments:

N	R	S	An existing list of lakes where the state has established ordinary high water marks.
X			

Technical Assistance Comments:

N	R	S	An existing list of permitted withdrawals from lakes and streams, including source, use, and amounts withdrawn.
X			

Technical Assistance Comments:

N	R	S	An existing list of lakes and streams for which state protected levels or flows have been established.
X			

Technical Assistance Comments:

N	R	S	An existing description of known water-use conflicts, including those caused by groundwater pumping.
X			

Technical Assistance Comments:

GROUNDWATER QUANTITY

N	R	S	An existing list of wells covered by state appropriation permits, including amounts of water appropriated, type of use, and aquifer source.
	X		

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.

N	R	S	An existing description of known well interference problems and water use conflicts.
	X	X	

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.

N	R	S	An existing list of state environmental bore holes, including unique well number, aquifer measured, years of record, and average monthly levels.
	X		

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.

DATA ELEMENTS ABOUT WATER QUALITY

SURFACE WATER QUALITY

N	R	S	An existing map or list of the state water quality management classification for each stream and lake.
X			

Technical Assistance Comments:

N	R	S	An existing summary of lake and stream water quality monitoring data, including: 1. bacteriological contamination indicators; 2. inorganic chemicals; 3. organic chemicals; 4. sedimentation; 5. dissolved oxygen; and 6. excessive growth or deficiency of aquatic plants.
X			

Technical Assistance Comments:

GROUNDWATER QUALITY

N	R	S	An existing summary of water quality data, including: 1. bacteriological contamination indicators; 2. inorganic chemicals; and 3. organic chemicals.
	X		

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.

N	R	S	An existing list of water chemistry and isotopic data from wells, springs, or other groundwater sampling points.
	X		

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.

N	R	S	An existing report of groundwater tracer studies.
	X		

Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.

N	R	S	An existing site study and well water analysis of known areas of groundwater contamination.
X			

Technical Assistance Comments:

N	R	S	An existing property audit identifying contamination.
X			

Technical Assistance Comments:

N	R	S	An existing report to the Minnesota Department of Agriculture and the Minnesota Pollution Control Agency of contaminant spills and releases.
X			
Technical Assistance Comments:			

City of Hutchinson Scoping 2 Meeting
Wellhead Protection (WHP) Planning Issues Summary

Drinking Water Protection Issues Identified to Date:

The new DWSMA is substantially smaller than the previous, new 2778 acres and 8686 acres in the old DWSMA.

Water Quality Detections and Implications:

Well #4: Nitrate = (max detection) 2.1 mg/L (1974) – not alarmingly elevated, and over 40 years ago, likely not a concern.

Well #8: Tritium detected (0.8 TU), which is the detection limit for tritium. Likely not a concern. Should be resampled.

Old Municipal Well Information:

- The Minnesota Department of Health has compiled historical information for use in the planning process.

Sanborn Maps:

☒ Sanborn Maps are available for this area
☐ Sanborn Maps are not available for this area.

Recommended WHP Measures:

1) **Data Collection:**
   - **a.** Collect water samples and analyze 'Vulnerability Suite' between years five and seven.
   - **b.** If opportunity arises (e.g. pump/well maintenance), inspecting the construction of Well #8 (UN 724408).
     - **i.** City does not agree with well construction in boring record.
     - **ii.** Discrepancies primarily in Well Depth and Boring record when comparing boring log with a daily drilling report & a video inspection log the city had.

2) **Water Conservation:** Include action items to include Water Conservation**.**
3) Address any Old Municipal Wells that are not properly sealed**.**

Other: NONE

This document is intended to be a summary of issues identified to date and is **not intended to replace the required data elements identified in the Scoping 2 Decision Notice** nor is it intended to be an exhaustive list of all potential drinking water issues.

Glossary of Terms

Data Element. A specific type of information required by the Minnesota Department of Health to prepare a wellhead protection plan.

Drinking Water Supply Management Area (DWSMA). The surface and subsurface areas surrounding a public water supply well, including the wellhead protection area, that must be managed by the entity identified in the wellhead protection plan. (Minnesota Rules, part 4720.5100, subpart 13). This area is delineated using identifiable landmarks that reflect the scientifically calculated wellhead protection area boundaries as closely as possible.

Emergency Response Area (ERA). The part of the wellhead protection area that is defined by a one-year time of travel within the aquifer that is used by the public water supply well (Minnesota Rules part 4720.5250, subpart 3). It is used to set priorities for managing potential contamination sources within the DWSMA.

Emergency Standby Well. A well that is pumped by a public water supply system only during emergencies, such as when an adequate water supply cannot be achieved because one or more primary or seasonal water supply wells cannot be used.

Inner Wellhead Management Zone (IWMZ). The land that is within 200 feet of a public water supply well (Minnesota Rules, part 4720.5100, subpart 19). The public water supplier must manage the IWMZ to help protect it from sources of pathogen or chemical contamination that may cause an acute health effect.

Nonpoint Source Contamination. Refers to contamination of the drinking water aquifer that is caused by polluted runoff or pollution sources that cannot be attributed to a specifically defined origin, e.g., runoff from agricultural fields, feedlots, or urban areas.

Point Source Contamination. Refers to contamination of the drinking water aquifer that is attributed to pollution arising from a specifically defined origin, such as discharge from a leaking fuel tank, a solid waste disposal site, or an improperly constructed or sealed well.

Primary Water Supply Well. A well that is regularly pumped by a public water supply system to provide drinking water.

Seasonal Water Supply Well. A well that is only used to provide drinking water during certain times of the year, either when pumping demand cannot be met by the primary water supply well(s) or for a facility, such as a resort, that is closed to the public on a seasonal basis.

Vulnerability. Refers to the likelihood that one or more contaminants of human origin may enter either 1) a water supply well that is used by the public water supplier or 2) an aquifer that is a source of public drinking water.

WHP Area (WHPA). The surface and subsurface area surrounding a well or well field that supplies a public water system, through which contaminants are likely to move toward and reach the well or well field (Minnesota Statutes, part 103I.005, subdivision 24).

WHP Plan Goal. An overall outcome of implementing the WHP plan, e.g., providing for a safe and adequate drinking water supply.

WHP Measure. A method adopted and implemented by a public water supplier to prevent contamination of a public water supply, and approved by the Minnesota Department of Health under Minnesota Rules, parts 4720.5110 to 4720.5590.

WHP Plan Objective. A capability needed to achieve one or more WHP goals, e.g., implementing WHP measures to address high priority potential contamination sources within 5 years.

CITY OF HUTCHINSON WHP IMPLEMENTATION SCHEDULE

NOTE: 1) For a complete description of each strategy, refer to the WHP Plan, Chapter 9. **2) Year 1 starts 60 days after final plan approval is received from MDH.**

STRATEGIES	GRANT	On-going or As needed	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	COMPLETION DATE
MONITORING, DATA COLLECTION, AND ASSESSMENT:													
1 -Contact MDH Hydrologist - routine pump maintenance - televise city well #8.	X						X						
2 - Contact MDH for Tritium testing on well #8.									X				
3 - Contact MDH for well testing "vulnerability suite" - collect samples.									X				
4 - Update well inventory as data is collected.		X											
WELL AND CONTAMINANT SOURCE MANAGEMENT:													
5 - Send DWSMA map to MNDOT, local fire, street and County Hwy Dept.			X										
6 - Replace an sewer lines observed to be leaking, cracked, deteriorated in IWMZ.	X	X											
7 - Implement all measures identified within the IWMZ.	X	X											
8 - Manage stormwater pipe within IWMZ for optimal performance.	X	X											
9 - Contact MDH to review and update IWMZ survey in year 6.								X					
10 - Monitor setbacks for all new potential contamination in IWMZ.		X											
11 - Contact MDH Planner if Class V Well is identified.		X											
12 - Contact MDH Hydrologist if new high-capacity well is identified.		X											
13 - Locate wells in OMW inventory and assess for sealing potential.					X	X							
14 - MDH Grant for sealing identified wells.	X					X	X						
15 - Apply for MDH grant to seal any identified high-priority wells in DWSMA.	X	X											
EDUCATION AND OUTREACH:													
16 - Place wellhead information and links on city website.	X		X	X	X	X	X	X	X	X	X	X	
17 - Request brochures from MDH - place at city hall and local library.			X					X					
18 - Distribute leak detection tablets as available.		X											
19 - Include conservation tips in billing inserts.			X				X				X		
20 - Include water conservation information in CCR.			X	X	X	X	X	X	X	X	X	X	
21 - Encourage rain barrels and participate in CROW rain-barrel program.	X	X											
LAND USE AND PLANNING:													
22 - Update DNR Water Supply Plan.			X										
23 - Incorporate water conservation practices in city-owned facilities.	X	X											
24 - Promote MNTAP to local businesses (water conservation).			X		X		X		X		X		
25 - Provide home water audit for high-water users.		X											
WHP COORDINATION, REPORTING, AND EVALUATION:													
26 -Review of wellhead measures with wellhead team.			X		X		X		X		X		
27 - Maintain WHP folder			X	X	X	X	X	X	X	X	X	X	
28 - Evaluation report every 2.5 years.					X		X		X		X		
29 - Evaluation report to MDH.										X			
34 - Unforeseen issues	X	X											