

## Multi Hazard Multi-jurisdiction Mitigation Project Worksheet

County: <i>NELSON</i>		
Jurisdiction:		
Contact Name: <i>JAY HAUGEN</i>	Contact Number: <i>701-259-2553</i>	Contact Email: <i>JHAUGEN@MICHIGANND.COM</i>
Project Location:		City: <i>MICHIGAN, ND</i>
Street Address: or Latitude: _____ Longitude: _____		

Priority Ranking	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	Undetermined <input type="checkbox"/>
Project Feasibility				
Socially Acceptable	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Technically Feasible	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Administratively Possible	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Politically Acceptable	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Legal	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Economically Feasible	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Environmentally Acceptable	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		

Recommended Mitigation Measure and Scope of Work: *RELINING OF CITY SEWER MAINS WHICH WOULD PREVENT INFILTRATION DUE TO THE HIGH WATER TABLE CAUSED BY EXCESSIVE RAINFALL AND SPRING RUNOFF.*

How would Project Reduce Hazard: *THE PROJECT WOULD GREATLY REDUCE FLOW AND PREVENT SEWAGE BACKUP DUE TO POSSIBLE FAILURE TO THE CITY'S SEWER LIFT STATION. IT WOULD ALSO PREVENT FURTHER DAMAGE TO THE CITY'S LAGOON SYSTEM CAUSED BY WATER TO EXCEED NORMAL LEVELS.*

Identification of Protected Species, Environmental, Historical, and/or Cultural Impact:  
*NONE WOULD BE AFFECTED.*

Estimated Timeline:  
*AS SOON AS POSSIBLE*

Estimated Cost: *\$787,000*

Engineering Study Completed:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Cost/Benefit Completed:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Project Maintenance:

*COVERS AND BENEFITS ENTIRE CITY*

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Project Location:		City: <b>Michigan, ND</b>
Street Address:		
or		
Latitude:		Longitude:

Priority Ranking	<u>High</u>	Medium	Low	Undetermined
Project Feasibility				
Socially Acceptable	<u>Yes</u>		No	
Technically Feasible	<u>Yes</u>		No	
Administratively Possible	<u>Yes</u>		No	
Politically Acceptable	<u>Yes</u>		No	
Legal	<u>Yes</u>		No	
Economically Feasible	<u>Yes</u>		No	
Environmentally Acceptable	<u>Yes</u>		No	

**Recommended Mitigation Measure and Scope of Work: Replacement of drainage system, street and sewer system to remove the continued flooding streets and compromising of sewer system which has in the past and as recently as this past spring caused sewer backup and flooding in basements of homes in area.**

**How would Project Reduce Hazard: After the project has been completed adequate drainage would occur and the changes to the streets and sewer system would remove the threat of continued infiltration of the system by floodwater and runoff.**

**Identification of Protected Species, Environmental, Historical, and/or Cultural Impact:**

**None would be affected**

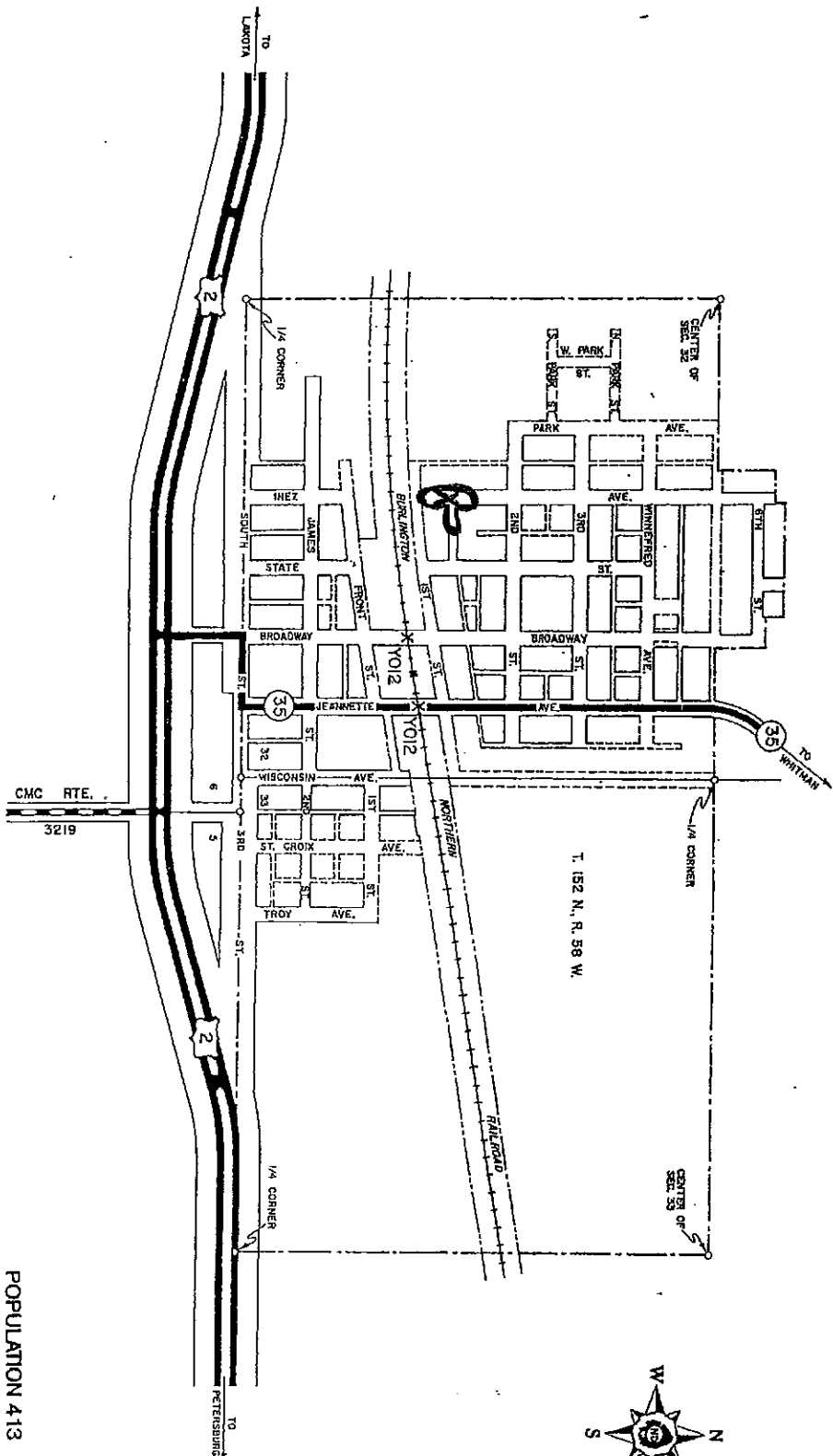
**Estimated Timeline: As soon as possible**

**Estimated Cost: Not yet available**

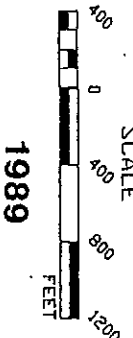
Engineering Study Completed:	Yes	<u>No</u>	
Cost/Benefit Completed:	Yes	<u>No</u>	

**Project Maintenance: None**

*X - Appeared Aerial*



- LEGEND**
- EXISTING STREET OR ROADWAYS
  - NON-EXISTANT DEDICATED STREET (Highway System Road Type)
  - BITUMINOUS-HIGH TYPE (7" & over)
  - BITUMINOUS-LOW TYPE (Under 7")
  - GRAVEL GRADED AND DRAINED ROAD
  - GRADED AND DRAINED ROAD
  - COUNTRY MAJOR COLLECTOR
  - INTERSTATE NUMBERED ROUTE
  - U.S. NUMBERED ROUTE
  - STATE NUMBERED ROUTE
- CORPORATE BOUNDARY
  - SECTION LINE
  - RAILWAY RIGHT OF WAY BOUNDARY
  - RAILWAY
  - RAILWAY STATION
  - RAILWAY CROSSING
  - CROSSING TYPE
  - WIG WAG
  - FLOOD LIGHTS
  - AUTOMATIC FLASHING
  - CROSS BUCKS
  - AUTOMATIC FLASHING WITH ROTATING STOP SIGN
  - AUTOMATIC FLASHING WITH GATES
- CMC
  - 10
  - 49
  - Y010
  - Y011
  - Y012
  - Y016
  - Y017
  - Y018



POPULATION 413

**MICHIGAN**

**NELSON COUNTY**

**NORTH DAKOTA**

North Dakota Department of Transportation  
 in cooperation with the  
 U.S. DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION  
 PLANNING DIVISION

SCALE

## Multi Hazard Multi-jurisdiction Mitigation Project Worksheet

County: <b>Nelson</b>		Jurisdiction:	
Contact Name: <b>Jay Haugen</b>	Contact Number: <b>701-259-2553</b>	Contact Email: <b>jhaugen@michigannd.com</b>	
Project Location:		City: <b>Michigan, ND</b>	
Street Address: or Latitude: _____ Longitude: _____			

Priority Ranking	High	<b>Medium</b>	Low	Undetermined
Project Feasibility				
Socially Acceptable		<b>Yes</b>	No	
Technically Feasible		<b>Yes</b>	No	
Administratively Possible		<b>Yes</b>	No	
Politically Acceptable		<b>Yes</b>	No	
Legal		<b>Yes</b>	No	
Economically Feasible		<b>Yes</b>	No	
Environmentally Acceptable		<b>Yes</b>	No	

Recommended Mitigation Measure and Scope of Work: **Cleaning of vegetation and cleaning of Michigan drain to Lake Laretta.**

How would Project Reduce Hazard: **Each spring the city faces the risk of water runoff not being able to move to Lake Laretta due to the lack of cleaning of the drain along with vegetation growth slowing the movement of water, especially cattails. This cleaning would eliminate that concern.**

Identification of Protected Species, Environmental, Historical, and/or Cultural Impact: **None would be affected**

Estimated Timeline: **As soon as possible**

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Estimated Cost: **Not yet available**

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Engineering Study Completed:      Yes      **No**

Cost/Benefit Completed:              Yes      **No**

Project Maintenance: **Continued cleaning and removal of vegetation.**

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Latitude:		Longitude:

Priority Ranking			
High	<b>Medium</b>	Low	Undetermined
Project Feasibility			
Socially Acceptable	<b>Yes</b>	No	
Technically Feasible	<b>Yes</b>	No	
Administratively Possible	<b>Yes</b>	No	
Politically Acceptable	<b>Yes</b>	No	
Legal	<b>Yes</b>	No	
Economically Feasible	<b>Yes</b>	No	
Environmentally Acceptable	<b>Yes</b>	No	

**Recommended Mitigation Measure and Scope of Work: Installation of electrical hookups at second lift station so that a portable generator could be used to maintain the sewer system during times of power failure.**

**How would Project Reduce Hazard: The risk to the north area of Michigan is severe during times of power outages and the installation of the electrical hookups would reduce the hazard by providing a method in which to pump down the station during a time of power outages by using the City's portable generator.**

**Identification of Protected Species, Environmental, Historical, and/or Cultural Impact: None would be affected**

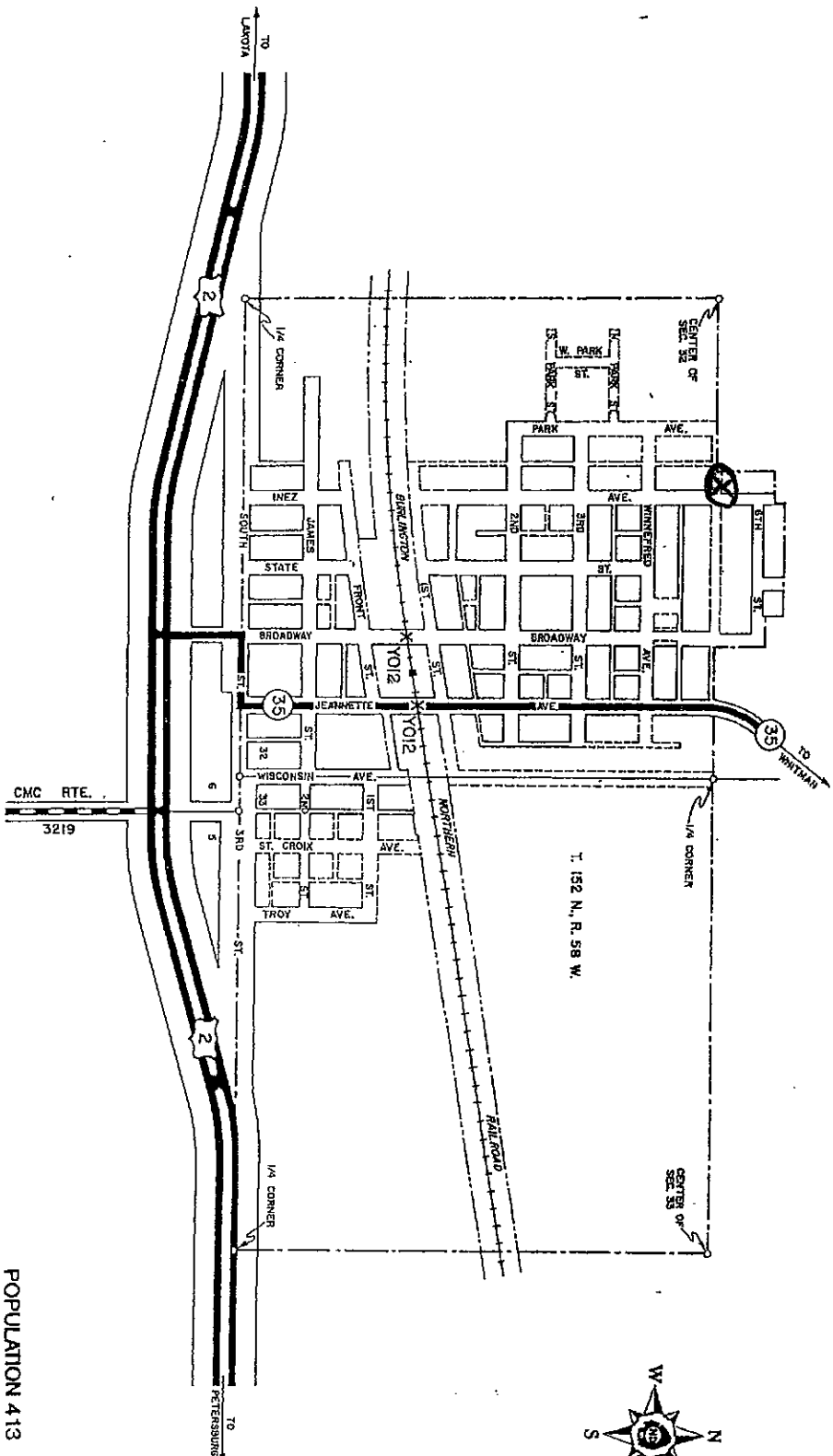
**Estimated Timeline: As soon as possible**

**Estimated Cost: Not yet available**

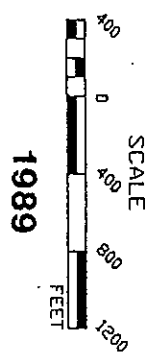
Engineering Study Completed:	Yes	<b>No</b>
Cost/Benefit Completed:	Yes	<b>No</b>

**Project Maintenance: None**

X-List Station Site



- LEGEND**
- EXISTING STREET OR ROADWAYS
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  - BITUMINOUS-HIGH TYPE (7" & over)
  - BITUMINOUS-LOW TYPE (under 7")
  - GRAVEL GRADED AND GRADED ROAD
  - COUNTRY MAJOR COLLECTOR
  - INTERSTATE NUMBERED ROUTE
  - U.S. NUMBERED ROUTE
  - STATE NUMBERED ROUTE
- CMC
  - 94
  - 10
  - 49
- CORPORATE BOUNDARY
  - SECTION LINE
  - RAILWAY RIGHT OF WAY BOUNDARY
  - RAILWAY
  - RAILWAY STATION
  - RAILWAY CROSSING
  - CROSSING TYPE
  - WIC WING
  - FLOOD LIGHTS
  - AUTOMATIC FLASHING
  - CROSS BUCKS
  - AUTOMATIC FLASHING WITH ROTATING STOP SIGN
  - AUTOMATIC FLASHING WITH GATES
- Y010
  - Y011
  - Y012
  - Y016
  - Y017
  - Y018



NELSON COUNTY  
NORTH DAKOTA

in cooperation with the  
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION  
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
PLANNING DIVISION

SCALE

POPULATION 413  
MICHIGAN

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Project Feasibility				
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Technically Feasible		<u>Yes</u>	No	
Administratively Possible		<u>Yes</u>	No	
Politically Acceptable		<u>Yes</u>	No	
Legal		<u>Yes</u>	No	
Economically Feasible		<u>Yes</u>	No	
Environmentally Acceptable		<u>Yes</u>	No	

**Recommended Mitigation Measure and Scope of Work: Development of the Michigan Civic Center to an evacuation center for times of natural and manmade risks to the citizens of the area. This would include the installation of a generator to power the facility, stocking of cots and bedding, medical supplies, food, water and other necessary items to ensure the safety of individuals while housed at the evacuation center**

**How would Project Reduce Hazard: Currently there is no place in the Michigan area that could house and take care of a large number of people for an extended period of time should the need arise for and during a time of emergency. This would provide for that needed facility.**

**Identification of Protected Species, Environmental, Historical, and/or Cultural Impact: None would be affected**

**Estimated Timeline: As soon as possible**

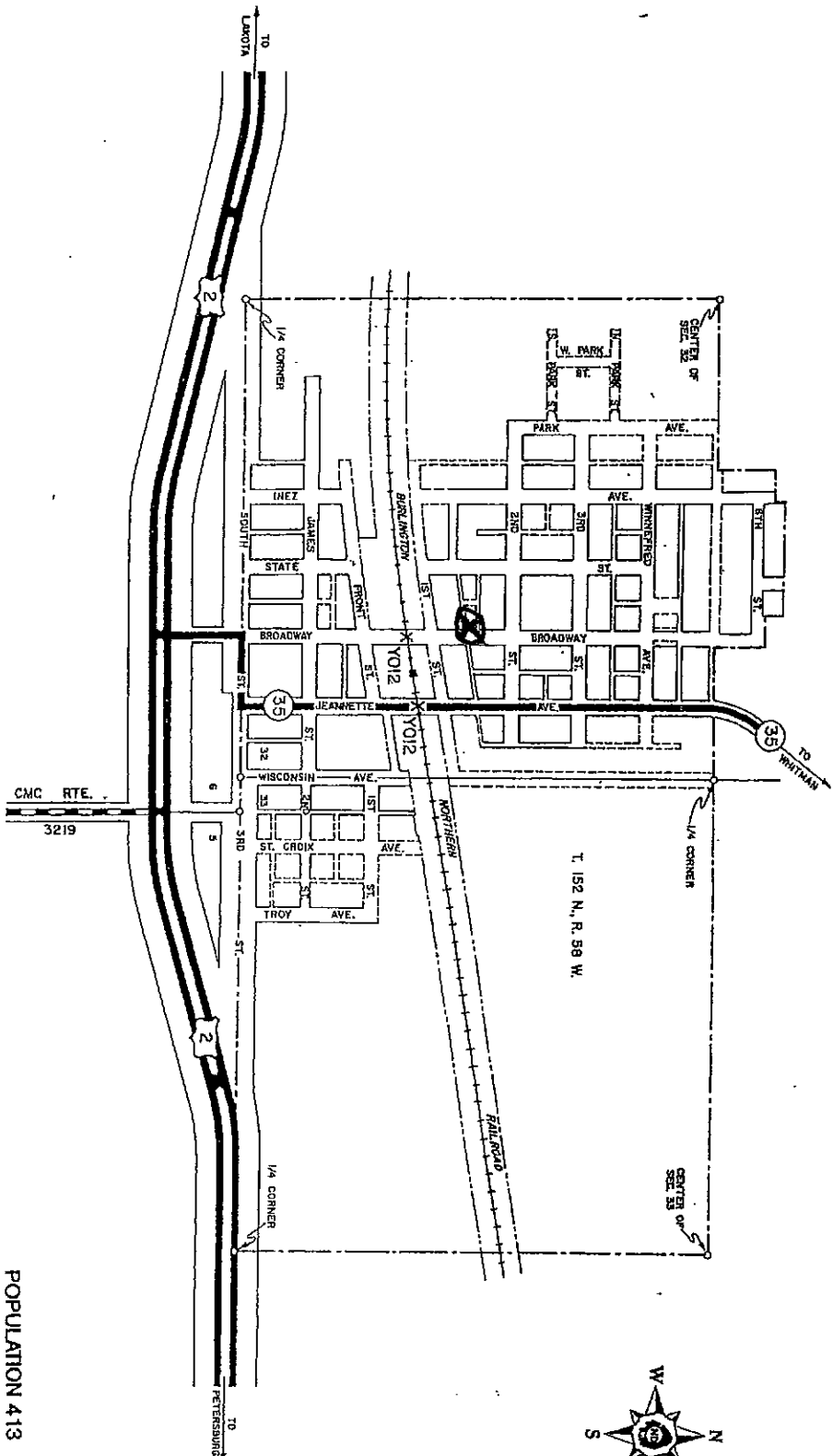
**Estimated Cost: Not yet available**

Engineering Study Completed: Yes No

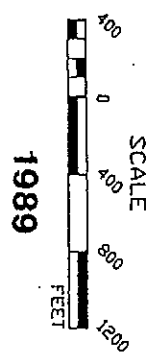
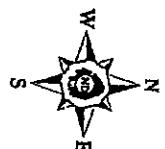
Cost/Benefit Completed: Yes No

**Project Maintenance: None**

X - Civic Center Site



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1989

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**MICHIGAN**  
**NELSON COUNTY**  
**NORTH DAKOTA**  
 NORTH DAKOTA DEPARTMENT OF TRANSPORTATION  
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