Environmental Assessment

Elm Avenue Diversion

City of Delano, Wright County, Minnesota

FEMA 1419-DR-MN

August 2005

FEMA

U.S. Department of Homeland Security
FEMA Region V
536 South Clark Street
Chicago IL 60605

This document was prepared by

200 Orchard Ridge Drive, Suite 101
Gaithersburg, Maryland 20878

Contract No. EMW-2000-CO-0247
Task Order 311

TABLE OF CONTENTS

TABLE OF CONTENTS

APE	Area of Potential Effects
ASTM	American Society for Testing and Materials
BMP	Best Management Practice
BWSR	Board of Water and Soil Resources
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CWA	Clean Water Act
dB	decibel
DHS	Department of Homeland Security
DNL	Day/Night Average Sound Level
EA	Environmental Assessment
EDR	Environmental Data Resources
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHBM	Flood Hazard Boundary Map
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
HMGP	Hazard Mitigation Grant Program
HWL	High Water Level
LGU	Local Governmental Unit
LUST	Leaking Underground Storage Tank
MDNR	Minnesota Department of Natural Resources
MNRRA	Mississippi National River and Recreation Area
MPCA	Minnesota Pollution Control Agency
MRCA	Mississippi River Critical Area
NAAQS	National Ambient Air Quality Standards
NCA	Noise Control Act of 1972
NEPA	National Environmental Policy Act
NHP	Natural Heritage Program
NISTAC	Nationwide Infrastructure Technical Assistance Consultants

NFIP	National Flood Insurance Program
NO_2	Nitrogen Dioxide
NPDES	National Pollution Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
O_3	Ozone
OSA	Minnesota Office of the State Archaeologist
OSHA	Occupational Safety and Health Administration
PA	Public Assistance
Pb	Lead
PM_{10}	Particulate Matter of 10 microns or less
RCRA	Resource Conservation and Recovery Act
ROW	Right-of-Way
SF	Square Feet
SHPO	State Historic Preservation Office
SO_2	Sulfur Dioxide
SWA	Solid Waste Act
TMDL	Total Maximum Daily Load
TSCA	Toxic Substance Control Act
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
WCA	Wetland Conservation Act
WSRA	Wild and Scenic Rivers Act

1.1 PROJECT AUTHORITY

On six occasions during 2001 and 2002, the City of Delano (the City) was forced to conduct emergency pumping and sandbagging activities to mitigate flooding adjacent to County Line Pond. Despite sandbagging efforts, the basements of many homes flooded. On three of the six occasions, the sanitary sewer system also backed up as a result of the flooding, affecting additional homes downstream.

The City of Delano, Wright County, Minnesota, applied for Hazard Mitigation Grant Program (HMGP) funding under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act after the 2002 flooding. The Federal Emergency Management Agency (FEMA) grants funds under this program for mitigation measures, projects, or actions proposed to reduce risk of future damage, hardship, loss of suffering from future disasters. In accordance with the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500 through 1508), and FEMA regulations for NEPA compliance (44 CFR Part 10), FEMA must fully understand and consider the environmental consequences of actions proposed for Federal funding. The purpose of this Environmental Assessment (EA) is to meet FEMA's responsibilities under NEPA and to determine whether to prepare a Finding of No Significant Impact (FONSI) or an Environmental Impact Statement (EIS) for the proposed project.

1.2 PROJECT LOCATION AND SETTING

The City of Delano is in Wright County, approximately 25 miles west of the Minneapolis-St. Paul Metropolitan area in east central Minnesota (Figure 1). The County is bordered on the north by the Mississippi River and on the east by the Crow River. The project site is located in the City of Delano, which lies along the Crow River in the southeastern part of the County. Delano has a population of 3,847 (U.S. Census, 2000). The project is proposed to be located in a residential neighborhood near the intersection of Elm Avenue and Oak Ridge Drive on the east side of the City, around and downstream of a low-lying area known as County Line Pond. County Line Pond does not hold water at all times, but is a basin that intermittently collects water during storm events (see project area photographs in Appendix A).

The homes in this residential subdivision are ranch-style homes built in the 1970s. These homes surround County Line Pond on the east, west, and south. Similar homes also line the south side and some of the north side of Elm Avenue. Delano High School borders the project site to the northwest (Figure 2).

1.3 PURPOSE AND NEED

The objective of FEMA's HMGP is to assist the community in mitigating conditions that could cause damages during future natural disasters. The City has requested Federal funding under HMGP to increase storm sewer capacity and provide a storm outlet for County Line Pond, to protect surrounding homes from flooding and to relieve sanitary sewer backup. The project also includes an emergency overflow from the pond to nearby Elm Avenue.

The City was subject to six major storm events in 2001 and 2002, causing the flooding of County Line Pond. Despite sandbagging efforts, 19 homes surrounding the pond experienced flooded basements. The City of Delano reports that average property damage in the 2002 storms was $20,000, or approximately 15 percent of the property value of any given home. The City also spent an average of $10,000 during each of the storm events in 2001 and 2002 to provide emergency pumping and sandbagging. In several cases, such as the storm event on June 24, 2002, the emergency pumping did not relieve damage to private property.

In the past, flooding of County Line Pond has also resulted in sanitary sewer backup. The City instituted an inspection program to find and eliminate sump pump connections into the sanitary sewer, and also replaced a number of manhole covers in flood-prone areas to reduce the amount of floodwaters entering the sanitary sewer system through manholes. However, the City has determined that flooded basements also contribute to sanitary sewer problems. Floodwater enters basements and infiltrates the separate sanitary sewer system through shower and basement drains. This exceeds system capacity, forcing sewage and contaminated waters out into the basement. The flooding of County Line Pond resulted in sanitary sewer backups on one occasion in 2001 and two occasions in 2002. These backups affected approximately 20 homes downstream of the pond, resulting in a wide range of property damage amounts. One homeowner reported over $45,000 in damage to a finished basement due to the backup of the sanitary sewer system. In addition to property damage, sanitary sewer system backup poses a significant and widespread health and safety risk to residents when raw sewage backs up into their homes. Therefore, improvement of the storm sewer system will also address the sanitary storm sewer issues in the project area.

The purpose of and need for the proposed project is to increase storm sewer capacity and provide a storm outlet for County Line Pond, to protect surrounding homes from flooding and to relieve sanitary sewer backups.

The CEQ has developed regulations for implementing NEPA. These Federal regulations require an evaluation of alternatives and a discussion of the potential environmental impacts of a proposed Federal action as part of the EA process. FEMA regulations, which establish the FEMA process for implementing NEPA, are set forth in 44 CFR, Subpart 10. This EA was prepared in accordance with FEMA regulations as required under NEPA. As part of this NEPA review, the requirements of other environmental laws and Executive Orders (EOs) are also addressed.

2.1 ALTERNATIVE 1 – NO ACTION

Under the No Action Alternative, improvements would not be made to the existing storm sewer or outlets to County Line Pond. During major storm events, residents would continue to experience flooded basements and extensive property damage. Health and safety risks for area residents as a result of sanitary sewer backup into homes would also remain.

2.2 ALTERNATIVE 2 – ELM AVENUE DIVERSION AND INCREASE SIZE OF POND OUTLET (PREFERRED ALTERNATIVE)

Alternative 2 involves installation of 1,900 linear feet of 24- to 36-inch piping to provide a 10-year storm outlet for County Line Pond (Figure 3). The project also includes an emergency overflow to the northwest from the pond to Elm Avenue. The project would reduce the high water level (HWL) by 4.3 feet (from 952.2 feet to 947.9 feet) during a 100-year storm event (Bonestroo, 1997).

The Elm Avenue Diversion would include construction of a larger outlet to County Line Pond, upgrade of storm sewer piping in Elm Avenue, and installation of a storm sewer diversion from Elm Avenue to the area south of Delano High School, approximately 0.3 mile northwest of the County Line Pond. A 24-inch pipe would replace the 12-inch pipe that currently provides an outlet from the north edge of the pond to Elm Avenue. This larger pipe would reduce the HWL by 4.3 feet to 947.9 feet. This pipe would connect to a new 36-inch pipe running on the south side of Elm Avenue west to Oak Ridge Drive. Some of the water would then be diverted across Elm Avenue to the north via a 24-inch pipe, while the remaining water would continue along the existing 18-inch storm sewer in Elm Avenue. The diversion would outlet into an existing wetland (Wetland 1), with a HWL in the wetland of 945.4 feet. Wetland 1 would outlet to a 24-inch pipe, which would lead to a second wetland (Wetland 2) to the northwest where the HWL would be 942.3 feet. Wetland 2 would outlet to a 36-inch pipe leading directly west along the south side of Delano High School, where it would eventually outlet into the existing 18-foot by 4-foot drainage ditch (Figure 3).

As part of construction, all vegetation would be cleared along the utility line. Vegetation will be replaced with species similar to existing conditions. No dewatering is planned for this project.

Storage of construction equipment and materials would take place at the Delano High School property, which borders the project site. No classes or activities are planned for the high school in the summer months. Scheduled summer classes take place at another school site, and there are no organized sports practices or events scheduled to take place on-site in the summer months (Farbo, personal communication). The bulk of project construction would take place in the summer months when school classes are not in session; therefore school activities would not be disrupted.

The City would ensure that one lane of Elm Avenue remains open to traffic at all times during construction. The portion of the project that requires disruption to traffic on Elm Avenue would only last one day. The entire project is anticipated to require up to five months to complete, and the planned completion date is September 2006.

2.3 ALTERNATIVE 3 – TWO DIVERSIONS FROM ELM AVENUE AND INCREASE SIZE OF POND OUTLET

Alternative 3 includes installation of piping and an emergency overflow as described in Alternative 2. In addition, Alternative 3 includes a second diversion from the proposed storm sewer on Elm Avenue. This second diversion would occur just west of the entrance road to Delano High School, and would be approximately 280 feet in length (Figure 3). New 30-inch pipe would connect directly into the proposed 36-inch pipe that would connect to the existing storm sewer system. This alterative would provide slightly higher reductions in street flooding and HWL compared to Alternative 2. However, Alternative 3 would also require additional pipe installation, additional tree removal, and additional easements from the high school. As part of construction, all vegetation would be cleared along the utility line. No dewatering is planned for this project.

Storage of construction equipment and materials would occur on Delano High School property, which borders the project site. The bulk of construction would take place during the summer when school is not in session; therefore school activities would not be disrupted.

The City would ensure that one lane of Elm Avenue remains open to traffic at all times during construction. The portion of the project which requires disruption to traffic on Elm Avenue would only last one day. The entire project is anticipated to require up to five months to complete, and the planned completion date is September 2005.

2.4 ALTERNATIVES CONSIDERED BUT DISMISSED

The enlargement of County Line Pond and the replacement of storm sewer on Elm Avenue was also considered as an alternative to this project. However, this alternative was dismissed because it would require additional excavation and would significantly increase project cost and environmental effects.

The City of Delano also considered installing pipe larger than 36 inches in diameter on Elm Avenue. However, this alternative was dismissed because it would require large amounts of street repair on Elm Avenue. This would result in a longer period of construction on Elm Avenue, which would disrupt traffic and area residents for a longer period of time, and result in higher project costs.

3.1 PHYSICAL ENVIRONMENT

3.1.1 Geology, Seismicity, and Soils

The physical relief in the region that includes the project area was formed by pre-Wisconsin glaciation, resulting in outwash plains, gently rolling to steep hills, and numerous depressions filled with marshes, wetlands, and lakes. The South Fork of the Crow River bisects the City of Delano, creating a well-defined river valley. The City is largely situated on a relatively flat floodplain, though the project area is outside of the 100-year floodplain.

Bedrock underlying the project area is primarily composed of Cambrian and Precambrian sedimentary rock formations, consisting of sandstone, shale, and dolomite in upper layers, and sandstone, siltstone, and shale in lower layers. Bedrock is overlain with undifferentiated drift, which is primarily gray, calcareous, silty till that is largely unsorted and unstratified. There may be buried sand and gravel deposits of varying extents (Wenck Associates, 2004).

Soils within the City of Delano area are mapped entirely within the Hayden-Lester-Peat association, which is described as "deep, medium-textured and moderately fine-textured soils on strongly rolling and hilly uplands" (USDA, 1968). Soils in the project area consist mostly of gentle to moderately sloping soils from the Hayden series. These soils are well to moderately well-drained with a loam surface soil and clay loam subsoil. In some of the lower-lying areas, such as along Elm Avenue and around wetland areas, the soil type is Glencoe silty clay loam. This is a poorly drained, seasonally ponded soil with a high organic content.

Alternative 1 – No Action

The No Action Alternative would not result in any construction impacts to geology, seismicity, and soils. However, with no storm sewer diversion, sanitary sewer backup would continue to be a problem in the Elm Avenue area. Raw sewage could infiltrate the soil and cause contamination.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Alternative 2 may result in soil erosion at the end of the proposed new piping, at the drainage ditch. This erosion would be caused by increased water speeds resulting from diverting water through the proposed new piping. To decrease water velocity and therefore reduce erosion impacts, size-appropriate riprap would be used at the pipe outlet. Silt fencing may also be used when heavy rainfall events are anticipated.

The use of required Best Management Practices (BMPs) would include protecting erodible surfaces (see Appendix C). Earthwork would not be allowed during precipitation events. Additionally, exposed soils would be seeded with a mix comparable to what currently exists. Construction specifications would identify the specific seed mix to be used by the contractor. In addition, compacted soils would be loosened by disking or raking prior to seeding.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Alternative 3 may also result in soil erosion at the end of the proposed new piping, at the drainage ditch, as described under Alternative 2. This erosion would be magnified over that caused by Alternative 2, because of the second diversion and the increase in the volume of water directed to the ditch. As described under Alternative 2, size-appropriate riprap would be used at the pipe outlet. Silt fencing may also be used when heavy rainfall events are anticipated.

Construction activities such as pipe excavation, grading and travels of construction equipment to and from the site may result in a temporary increase in surface soil erosion and compaction. This disturbance would be in excess of Alternative 2, as Alternative 3 would require additional excavation (560 additional cubic yards over Alternative 2) and grading. This would be minimized through the use of BMPs as described under Alternative 2.

3.1.2 Water Resources and Water Quality

As part of the Clean Water Act (CWA) Sections 404 and 401, each State is required to prepare a biennial report for the Environmental Protection Agency (EPA) on the quality of its water resources. States may measure water quality through a number of parameters, including examining fish and wildlife contaminants, water and sediment chemistry, biological integrity/physical habitat, and stream flow. The goal of the CWA is to achieve waters suitable for fishing and swimming. This is assessed in terms of aquatic life, aquatic consumption, and aquatic recreation.

Minnesota's 2004 Water Quality Report states that the 31.4-mile stretch of the South Fork of the Crow River from Buffalo Creek to the North Fork of the Crow River, which includes the project area, is listed as not supporting the aquatic life and aquatic consumption assessment criteria. It was not evaluated for aquatic recreation. The indicators of impairment for this stretch of river include fish, turbidity, and mercury. This stretch of the river also exceeds ecoregion norms for total phosphorus, nitrite/nitrate, oxygen demand, and suspended solids (MPCA, 2004).

As a result, this segment of the river is on the Impaired Waters List under Category 5A. Under Category 5, the water body does not meet applicable water quality standards or is threatened for one or more designated uses by one or more pollutants. Historically, agricultural runoff and faulty septic systems/wastewater treatment systems have been the primary causes of water pollution in this region.

Potential water quality impacts as a result of any new project construction generally originate from the following:

- Erosion of exposed soils during construction;
- Reduced infiltration and increased runoff from the construction of new impervious surfaces;
- Pollutants from automobiles, such as oil, grease, and metals, that collect on impervious surfaces and are washed off by stormwater runoff;
- Increased stormwater runoff that overburdens existing drainage systems, causing flooding; and,

- Fill or construction in floodplains, which affects flood levels in streams and rivers.

Both the Minnesota Department of Natural Resources (MDNR) Waters Division and the United States Army Corps of Engineers (USACE) were sent information describing and illustrating the proposed project. In an e-mail dated October 13, 2004, Patricia Fowler, MDNR Area Hydrologist, indicated that the proposed project does not impact any public waters of the state, and MDNR authorization is not required. She noted that a MDNR Water Appropriation Permit would be required if proposed construction dewatering would exceed 10,000 gallons per day or one million gallons per year (see Appendix B). The proposed project alternatives would not require dewatering. The MDNR did not voice any concerns about impacts to the South Fork of the Crow River.

USACE also reviewed the project and did not voice any concerns about impacts to the South Fork of the Crow River (see Appendix B). Wetlands are addressed in Section 3.2.2.

The proposed project would not increase the amount of impervious surface and would, in fact, help to decrease the overburden on existing drainage systems that currently results in flooding and septic system backup during significant storm events. Erosion of exposed soils would be managed by BMPs as described in Section 3.1.1.

Potential sedimentation due to temporary construction impacts is discussed below. The proposed project does impact wetlands, which are discussed in Section 3.2.2.

Special Designation Areas

The U.S. Congress added the Mississippi National River and Recreation Area (MNRRA) to the National Park Service (NPS) system in 1988 (Public Law 100-696). The MNRRA boundary includes 54,000 acres of river and adjoining land along a 72-mile stretch of the Mississippi River. The State of Minnesota also designated the Mississippi River corridor as a Critical Area in 1976 in State EO No. 79-19. The Mississippi River is located outside the study area. No further action is necessary under the MNRRA designation.

Within the State of Minnesota, there is one federally designated Wild and Scenic River, the St. Croix River, under 16 USC Section 1273, the Wild and Scenic Rivers Act (WSRA) (NPS, 2003). The St. Croix River is located outside the study area. The State of Minnesota has also developed a State-designated Wild and Scenic River program. A stretch of the Mississippi River from St. Cloud to Anoka is part of the Wild and Scenic River District. This is also located outside the study area. No further action is necessary under the WSRA or under the State-designated Wild and Scenic River program.

Alternative 1 – No Action

Under the No Action Alternative, periodic flooding and sanitary sewer backup during heavy rainfall events would still occur. Residents would continue to be at risk from raw sewage infiltrating the storm sewer and potentially reaching surface waters and drinking water supplies. Continued flooding would also result in increased erosion and sedimentation of water bodies.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Alternative 2 does not lie within any streams, lakes, or rivers. However, stormwater diverted from County Line Pond will eventually drain into the South Fork of the Crow River, as it does under existing conditions. The Elm Avenue Diversion would direct stormwater to the river more quickly, but overall would not impose pollution or long-term sedimentation on the South Fork of the Crow River. In fact, the risk of sedimentation from erosion, and the risk of water pollution from backed up sanitary sewers would be reduced by this alternative.

Alternative 2 has the potential for minor impacts on water quality as a result of construction grading, which may cause temporary sedimentation of sewer systems due to erosion of bare soils. It is possible but unlikely that this sedimentation would reach the South Fork of the Crow River, as the water would be treated in a series of ponds as it works its way through the remaining storm sewer system before reaching the river. BMPs for erosion control during construction would be implemented as outlined in stormwater and erosion control plans. BMPs may include protecting erodible surfaces and avoiding construction during precipitation events. The City of Delano has an approved Stormwater Management Plan, which outlines BMPs that are required through city ordinance. The following ordinances are cited in the plan and have BMP provisions for protecting water resources and water quality (Bonestroo, 1997):

- Grading, Erosion, and Sediment Control Ordinance
- Wetland Systems District Ordinance
- Floodplain District Ordinance

Each of these ordinances would be adhered to during project construction. A National Pollution Discharge Elimination System (NPDES) permit is required, as the project would involve more than one acre of grading. The City has initiated this permit process by preparing a Stormwater Pollution Prevention Plan (SWPPP), which lists the BMPs that would be used as part of the project, and how and when the BMPs will be implemented. The plan states the BMPs would all be in place prior to any excavation/construction, and would be maintained until viable turf or ground cover has been established. BMPs included in the SWPPP are:

- Rock construction entrance
- Erosion control blankets (Bioroll blanket system)
- Silt fence
- Inlet sediment filters

The City has initiated preparation of this plan, and will submit the plan to the selected contractor. The BMP detail sheets that would be included in the SWPPP are included in Appendix C. It would be the contractor's responsibility to use the SWPPP information to submit an NPDES permit to the Minnesota Pollution Control Agency (MPCA). This would be submitted 48 hours prior to construction, as mandated in permit requirements. The permit acts as a notification so the MPCA can monitor the project.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Alternative 3 has the potential for minor impacts on water quality as a result of construction grading, which may cause temporary sedimentation of sewer systems due to erosion of bare

soils. BMPs for erosion control during construction would be implemented as described above under Alternative 2. An NPDES permit is also required for this Alternative.

Alternative 3 would also reduce the risk of sedimentation and pollution caused by flooding and sanitary sewer backup.

3.1.3 Floodplain Management (EO 11988)

Floodplain refers to the 100-year floodplains as defined by FEMA. They are shown on Flood Insurance Rate Maps (FIRMs) or Flood Hazard Boundary Maps (FHBMs) for all communities participating in the National Flood Insurance Program (NFIP).

The 100-year floodplain designates the area inundated during a flood that has a one percent chance of occurring in any given year. FEMA also identifies the 500-year floodplain, which designates the area inundated during a flood that has a 0.2 percent chance of occurring in any given year.

EO 11988 directs Federal agencies to take action to minimize occupancy of and modification to floodplains. Specifically, EO 11988 prohibits FEMA from funding construction in the floodplain unless there are no practicable alternatives. FEMA regulations for complying with EO 11988 are promulgated in 44 CFR Part 9. FEMA applies the Eight-Step Planning Process as required by regulation to meet the requirements of EO 11988 (see Appendix D).

The project would not occupy the 100-year floodplain (see Figure 4), however stormwater from the proposed project would eventually reach the floodplain of the South Fork of the Crow River.

Both the Minnesota Department of Natural Resources (MDNR) Waters Division and the United States Army Corps of Engineers (USACE) were sent information describing and illustrating the proposed project. In an e-mail dated October 13, 2004, Patricia Fowler, MDNR Area Hydrologist, indicated that the proposed project does not impact any public waters of the state, and MDNR authorization is not required. The MDNR did not voice any concerns about impacts to the South Fork of the Crow River or the 100-year floodplain.

USACE also reviewed the project and did not voice any concerns about impacts to the South Fork of the Crow River or the 100-year floodplain (see Appendix B). Wetlands are addressed in Section 3.2.2.

Alternative 1 – No Action

No occupancy or direct modification to the 100-year floodplain would occur; therefore, EO 11988 is not applicable.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Alternative 2 would not occupy or directly modify the 100-year floodplain. The project would, however, reduce the time that it takes for water to reach the floodplain by providing a more efficient outlet system for County Line Park Pond and an unnamed ponding area (HS=P610 per the City's Stormwater Management Plan). The upstream watershed of the South Fork of the Crow River is approximately 1,200 square miles (768,000 acres). The proposed Alternative 2 improvements would impact a watershed that is approximately 50 acres (County Line Park Pond

and HS=P610). Thus, the watershed affected by the proposed project is less than 0.01 % of the upstream watershed. Based on this analysis, the proposed project will not impact the elevation of the 100-year flood of the South Fork of the Crow River.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Alternative 3 would not occupy or directly modify the 100-year floodplain. The project would, however, reduce the time that it takes for water to reach the floodplain by providing a more efficient outlet system for County Line Park Pond and an unnamed ponding area, HS=P610 per the City's Stormwater Management Plan. Based on the analysis described under Alternative 2, Alternative 3 will not impact the elevation of the 100-year flood of the South Fork of the Crow River.

3.1.4 Air Quality

The Clean Air Act of 1970 (CAA), as amended, requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The CAA establishes two types of national air quality standards: primary and secondary. Primary standards set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, visibility, and damage to animals, crops, vegetation, and buildings.

The EPA Office of Air Quality Planning and Standards has set NAAQS for six principal pollutants, which are called "criteria" pollutants: sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), lead (Pb), particulate matter of 10 microns or less (PM_{10}), and ozone (O_3).

The EPA has designated specific areas throughout Minnesota as NAAQS attainment or non-attainment areas. Non-attainment areas are those that either do not meet, or contribute to ambient air quality in a nearby area that does not meet, the national primary or secondary air quality standards for a pollutant. According to the EPA, Wright County is in attainment for all six criteria pollutants (EPA, 2003).

Alternative 1 – No Action

No construction activities would take place under this alternative; therefore, there would be no impact to air quality.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Implementation of Alternative 2 would involve limited use of heavy construction equipment, such as a backhoe, equipment trucks, and a skid steer. The duration of the proposed project activities is anticipated to be approximately five months.

Heavy construction equipment is a source of fugitive dust emissions that may have a temporary effect on air quality. Emissions occurring during construction would be associated with earth-moving (grading). Dust emissions can vary from day-to-day, depending on the level of activity,

the specific operations, and weather. Emissions from fuel-burning internal combustion engines (heavy equipment and earth-moving machinery) could temporarily increase the levels of volatile organic compounds and some of the priority pollutants, including CO, NO_2, O_3, and PM_{10}.

To mitigate for potential air quality impacts from fugitive dust and equipment emissions, vehicle engines would be kept in good repair and turned off while not in use, and the project area would be watered in dry conditions. The same measures would also be taken in the identified construction staging areas.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Implementation of Alternative 3 would involve limited use of heavy construction equipment, as described above under Alternative 2. The duration of the proposed project activities is anticipated to be approximately five months.

Heavy construction equipment is a source of fugitive dust emissions that may have a temporary effect on air quality. Emissions occurring during construction would be associated with earth-moving (grading). Dust emissions can vary from day-to-day, depending on the level of activity, the specific operations, and weather. Emissions from fuel-burning internal combustion engines (heavy equipment and earth-moving machinery) could temporarily increase the levels of volatile organic compounds and some of the priority pollutants, including CO, NO_2, O_3, and PM_{10}.

Mitigation measures to control fugitive dust emission would be the same as those described under Alternative 2.

3.2 BIOLOGICAL ENVIRONMENT

3.2.1 Terrestrial and Aquatic Environment

Terrestrial Environment

The proposed project site includes the areas immediately adjacent to and above the path of the pipe that would be installed.

A biologist with URS Group performed a site visit on September 17, 2004. The proposed pipe installation would originate from County Line Pond, which is located behind several homes. The pond does not normally hold much water, and is predominantly vegetated with reed canary grass *(Phalaris arundinaceae)* and cattail *(Typha spp.),* and is surrounded by mown grass. Vegetation along the north side of Elm Avenue includes American elm *(Ulmus americana),* box-elder *(Acer negundo)*, and wood nettle *(Laportea canadensis)*. Many of the species present within the proposed project site are invasive and/or not native to the area. The path the proposed pipe would take leading to Wetland 1 includes jewelweed *(Impatiens capensis)*, stinging nettle *(Urtica dioica)*, and sumac *(Rhus sp.)*. Wetland 1 consists of cattail, stinging nettle, jewelweed, and Canada thistle *(Cirsium arvense)*, surrounded by reed canary grass. At the time of the site visit, no water was observed in Wetland 1. The depth of Wetland 1 appears to be very shallow at approximately one foot. Wetland 2 consists of stinging nettle, Canada thistle, and reed canary grass. This area also contained no water and appeared relatively flat. Other areas within the proposed project site contain American elm, box-elder, and mown grass.

Wildlife that may use the project site include mammals such as white-tailed deer (*Odocoileus virginianus*), Eastern cottontail rabbit *(Sylvilagus floridanus)*, gray squirrel *(Sciurus carolinesis)*, and raccoon (*Procyon lotor*), which likely use the site for movement between wooded areas. Songbirds will move through the area as habitat is suitable. Various songbirds were the only wildlife observed during the site visit.

Aquatic Environment

The proposed project does not lie near or within any streams, lakes, or rivers, and therefore no fish are present. The proposed project does impact wetlands, which are classified as seasonally flooded (Type 1) to shallow marsh (Type 3). These areas likely provide temporary aquatic habitat, primarily in the spring, to species such as wood ducks, amphibians (frogs, toads, and salamanders), reptiles (snakes and turtles), and songbirds. Wetland impacts are discussed in Section 3.2.2.

Alternative 1 – No Action

Under this alternative, no changes to the existing terrestrial or aquatic environment would occur.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Terrestrial Environment

The effects of Alternative 2 would include temporary disturbances to terrestrial habitat during project implementation. Existing trees and shrubs along the route of pipe installation would be removed to complete this alternative. It is not anticipated that any vegetation would be removed from construction staging sites as a result of the proposed project.

Trees and other vegetation would be replaced to the extent that access to the pipe can still be obtained. Native grass and forb species would be planted within the project site following project construction.

Effects to the terrestrial environment would be temporary until vegetation becomes reestablished. The incidental take of wildlife could be minimized by removing tree and shrub vegetation prior to April 1 and/or after July 15, to avoid migratory bird nesting periods. Heavy construction equipment would compact soils in the project area and potentially in construction staging areas. Soils compacted by construction machinery would be loosened by methods such as disking or raking. Overall, the terrestrial environment would be enhanced by the reintroduction of native/non-invasive species within the utility corridor.

Aquatic Environment

Temporary impacts to aquatic habitats would occur. These impacts would last for the duration of construction and would include removal of vegetation (habitat). Long-term impacts on the aquatic environment would likely include a more consistent water regime, because water is being sent to the wetlands more frequently through the improved storm sewer system. Although the wetlands would still be intermittently without water, the periods where surface water is present would be for a longer duration than what exists currently. This change is not anticipated to have negative consequences on aquatic resources.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet
Terrestrial Environment

The effects of Alternative 3 would include temporary disturbances to terrestrial habitat during project implementation. Existing trees and shrubs along the roadways would be removed to complete this alternative. It is not anticipated that any vegetation would be removed from construction staging sites as a result of the project. Trees and other vegetation would be replaced as described under Alternative 2.

Heavy construction equipment would compact soils in the project area and potentially in construction staging areas. Soils compacted by construction machinery would be loosened by methods such as disking or raking. Overall, the terrestrial environment would be enhanced by the reintroduction of native/non-invasive species within the majority of the utility corridor. The area of the second diversion would be reseeded with turf grass, as currently exists.

Aquatic Environment

Temporary impacts to aquatic habitats would occur. These impacts would last for the duration of construction and would include removal of vegetation (habitat). Long-term impacts on the aquatic environment would likely include a more consistent water regime, as noted in Alternative 2. This change is not anticipated to have negative consequences on aquatic resources.

Temporary impacts to the aquatic environment would be minimized by implementing the measures described under Alternative 2.

3.2.2 Wetlands (EO 11990)

A wetland is defined by State and Federal regulations as an area that exhibits three distinct characteristics: 1) hydric soils; 2) inundation or saturation at or near the ground surface for a period of the growing season; and, 3) a prevalence of vegetation adapted to wet soil conditions. Wetlands are recognized as having important functions, including flood storage, water quality, wildlife and fisheries habitat, vegetation diversity, shoreland protection, aesthetics, and public recreation, resulting in their protection by local, State, and Federal regulations. These regulations require that wetland impacts be avoided or minimized to the extent feasible, with wetland replacement required for unavoidable impacts. Impacts that are unavoidable must be replaced at a ratio of at least two acres of wetland creation or restoration for every acre of wetland impact.

Under EO 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and preserve and enhance their natural and beneficial values. If a Federal action has the potential to impact jurisdictional waters of the United States as defined by Section 404 of the Federal Clean Water Act (CWA), the U.S. Army Corps of Engineers (USACE) is contacted for appropriate permitting requirements. Section 404 of the CWA authorizes the USACE to issue permits, after notice and opportunity for public hearings, for the discharge of dredged or fill material into waters of the United States at specified disposal sites. The Minnesota Department of Natural Resources (MDNR) has regulatory authority over activities within selected wetlands and waters, as identified on Public Waters Inventory maps, published by the MDNR. The City of Delano has regulatory authority for all wetlands within its legal boundary.

FEMA applies the Eight-Step Planning Process as required by regulation to meet the requirements of EO 11990. This step-by-step analysis is included in Appendix D of this document.

In 1991, the State of Minnesota enacted the Wetland Conservation Act (WCA). This legislation authorized Local Governmental Units (LGUs) to administer State wetland regulations. The WCA requires that activities resulting in the draining or filling of a wetland must be avoided or minimized. Impacts that are unavoidable must be replaced at a 2:1 ratio. At least the first 1:1 must be creation of new wetland or purchase of wetland bank credits. The remaining 1:1 can be in the form of plantings or other creative mitigation (MDNR-approved fishing areas, habitat improvements, etc.) on the site. The WCA is administered by the Board of Water and Soil Resources (BWSR) and implemented by LGUs. In those cases where wetland impacts occur on State land, the LGU is the State agency with administrative responsibility for that land.

Wetlands were identified using National Wetland Inventory (NWI) mapping and verified during a site visit on September 17, 2004. There are two NWI designated wetlands within the project area, both classified as Palustrine, Emergent, and Seasonally Flooded (PEMC)/Type 3, or shallow marsh. Field review of the site by the URS biologist identified Wetland 1 as PEMC/Type 3 and Wetland 2 as Palustrine, Emergent, and Temporarily Flooded (PEMA)/Type 1, or seasonally flooded basin. Water was not observed in either of the wetlands during the site visit. The wetlands appeared as shallow depressions (two feet in depth or less) with little capacity for water storage. Typical vegetation included cattails in Wetland 1 and grasses and forbs in Wetland 2. The location of these wetlands is shown on Figure 3.

The ditch portion of County Line Pond also meets wetland criteria. The ditch contains cattails and willow vegetation, and shallow to deep water during storm events. The ditch is identified by URS as PEMC/Type 3, or shallow marsh. County Line Pond is also shown on Figure 3.

Both the MDNR Waters Division and the USACE were sent information describing and illustrating the proposed project. In an e-mail dated October 13, 2004, Patricia Fowler, MDNR Area Hydrologist, indicated that the proposed project does not impact any public waters of the state (including wetlands), and MDNR authorization is not required.

In a letter dated March 25, 2004, the USACE indicated it had previously reviewed the proposed Elm Avenue Diversion project and that it fell under an existing General Permit expiring January 31, 2005. The USACE issued another letter on December 22, 2004 stating that the project will remain authorized by this General Permit 04-01253-TJF until December 22, 2006 (see Appendix B). Under this General Permit, the wetland impacts associated with the proposed project are considered to be minor and do not require specific mitigation measures. If the project is not constructed before December 22, 2006, the USACE will need to be contacted again to reissue or extend the permit.

Alternative 1 – No Action

Under this alternative, wetlands would continue to be subject to frequent flooding, causing potential sedimentation and contamination from sewer backups. This would cause temporary impacts to water quality, wildlife and plants during flood events, and could cause long-term degradation of the wetland system.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Excavation and grading during construction of Alternative 2 would impact approximately 200 square feet (SF) of Wetland 1 and approximately 200 SF of Wetland 2. This would occur along the proposed utility corridor. Existing vegetation would also be stripped while excavation and grading for pipe installation occurs. These impacts would be temporary and would last only for the duration of project construction.

As this is not a permanent impact, it does not carry 2:1 replacement requirements under the WCA or MDNR. To mitigate the temporary impacts, the disturbed wetland areas would be returned to their original elevations and would be replanted with native vegetation.

The inlet and outlets to be installed would provide these wetlands with a more consistent hydrologic regime, as compared to current conditions. The amount of water flowing through these areas would increase, since the watershed would be extended to include that of County Line Pond. The amount of water flowing through these areas would increase, since the watershed would be extended to include that of County Line Pond through the storm water improvements. As a result, it is likely that the wetland and potential wetland would expand in size and hold surface water for longer periods of time, in accordance with the design and elevation of the outlet structures. The quality of water entering the wetlands is expected to be similar to current conditions. The immediate watershed is developed with residential housing, as is the larger watershed of the proposed project.

Construction activities would require a permit from the LGU, which is the City of Delano. It is anticipated that the proposed project would meet the WCA criteria for Utilities Exemption (MN Rule 8420.0122). The wetlands are covered under existing USACE General Permit 04-01253-TJF.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Alternative 3 would cause the same temporary wetland impacts as described under Alternative 2. As this is not a permanent impact, it does not carry 2:1 replacement requirements under the WCA or DNR. To mitigate the temporary impacts, the disturbed wetland areas would be returned to their original elevations and would be replanted with similar vegetation.

3.2.3 Threatened and Endangered Species

The Endangered Species Act (ESA) of 1973 requires Federal agencies to determine the effects of their actions on threatened and endangered species of fish, wildlife, and plants and on their habitats, and to take steps to conserve and protect these species.

The MDNR was contacted in February 2003 for information regarding known occurrences of threatened, endangered, or otherwise significant plant and animal species, natural plant communities, and other natural features. In a letter dated November 10, 2003 (Appendix B), the MDNR concluded that there are four known occurrences of rare species or natural communities within an approximate one-mile radius of the project site. However, based on the nature and location of the proposed project, the DNR has determined that no known occurrences of rare features would likely be affected. The DNR confirmed that this determination was still acceptable in e-mail correspondence dated September 28, 2004 (Appendix B).

The United States Fish and Wildlife Service (USFWS) was sent a letter requesting review of the project for Federal threatened or endangered species. In e-mail correspondence dated January 6, 2005, the USFWS documented that the federally-threatened bald eagle *(Halieaeetus leucocephalus)* is known to nest in Wright County, typically in floodplain forest environments. However, no bald eagles are known to nest within the project area. Therefore, the USFWS does not believe the project will have any adverse impacts on the bald eagle or any other Federal threatened or endangered species (Appendix B).

No impacts to threatened and endangered species are anticipated under any of the alternatives.

3.3 HAZARDOUS MATERIALS

The Resource Conservation and Recovery Act (RCRA) defines hazardous wastes as "a solid waste, or combinations of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of or otherwise managed." While the definition refers to "solids," it has also been interpreted to include semisolids, liquids, and contained gases (Wentz, 1989).

Hazardous materials and wastes are regulated in Minnesota through a combination of federally mandated laws and State laws developed by the MPCA. Minnesota State Hazardous Waste Rules are contained in Chapter 7045 of the Minnesota Rules. Federal regulations governing hazardous wastes include RCRA; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Solid Waste Act (SWA); and the Toxic Substance Control Act (TSCA).

To determine the presence and approximate location of known hazardous materials in the vicinity of the proposed project, a database search was conducted by FirstSearch Technology Corporation (FirstSearch, 2005). The database search queried multiple Federal, State, and local hazardous materials and underground storage tank (UST) databases to identify sites of potential concern. Identified USTs were also cross-checked in the MPCA Storage Tank Database (MPCA, 2004). Information was also utilized from a Phase 1 Environmental Site Assessment prepared for a nearby site in July 2004 (Wenck Associates, 2004).

Four sites were identified within 0.5 mile of the proposed project site. The closest is a leaking underground storage tank (LUST) site that lies approximately 0.25 mile west from the eastern edge of the proposed project, and approximately 400 feet south of the western edge of the proposed project. This site has been closed, meaning the MPCA is no longer requiring any investigative and/or cleanup action at the site. The MPCA also reports that no off-site contamination was released from the site. The remaining three sites are all approximately 0.25 to 0.5 mile southeast of the proposed project site. One is a LUST containing diesel fuel. This site remains open, and contaminated soils remain on the site. It is unknown if off-site contamination has occurred. The other two sites are registered UST sites containing fuel oil, with no reported violations.

Based on review of topographic maps, the eastern edge of the project site lies at an elevation of approximately 950 feet, and the western edge lies at approximately 940 feet. Area elevations

indicate that surface and groundwater drainage occurs to the northwest, toward the South Fork of the Crow River, and away from the proposed project site. This is also consistent with drainage described in the City's Stormwater Management Plan (Bonestroo, 1997). All identified sites lie at lower elevations than the proposed project, in a presumed downgradient groundwater flow position. This information, combined with the distance of these sites from the project area, suggests risk of contamination from area sites is low.

No subsurface materials testing was conducted in the project area as part of this analysis. Conclusions are based on FirstSearch review, MPCA database search, and review of topographic maps and aerial photos.

Alternative 1 – No Action

Under the No Action Alternative, no flood mitigation activities would be undertaken using FEMA funds. Hazardous wastes and materials that may be present in the project area would not be altered from their present condition.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Based upon the information reviewed, no impacts to hazardous materials or wastes are anticipated under Alternative 2.

Although subsurface hazardous materials are not anticipated to be present in the project area, excavation activities could expose or otherwise affect subsurface hazardous wastes or materials. Any hazardous materials discovered, generated, or used during implementation of the proposed project would be disposed of and handled by the City in accordance with applicable local, State, and Federal regulations.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

The second diversion associated with Alternative 3 would come within less than 50 feet of the closed LUST site. Although the site has been closed by the MPCA, contamination may remain in the soils on-site. There is a possibility that fuel oil could be encountered during excavation for the proposed piping.

Any hazardous materials discovered, generated, or used during implementation of the proposed project would be disposed of and handled by the City in accordance with applicable local, State, and Federal regulations. This would include excavation of any contaminated soils, and identification of proper management and disposal alternatives.

3.4 SOCIOECONOMICS

3.4.1 Zoning and Land Use

Wright County, Minnesota, was officially created in 1855. It is located in the east-central part of the State, and is one of seven counties in the Twin Cities Metropolitan Area. The size of the County is approximately 716 square miles (Wright County, 2003), containing 17 cities and 18 townships. It is bordered by Sherburne and Stearns Counties to the north, Meeker County to the

west, Carver and McLeod Counties to the south, and Hennepin County to the east. Due to Wright County's proximity to the Twin Cities, it is considered one of the fastest growing counties in the State. The population of Wright County has increased 31 percent since 1990, to an estimated 89,986 people.

The proposed project is located within the limits of the City of Delano, in the southeast corner of Wright County. The current population of the City is 3,847. It has experienced steady population growth, most recently experiencing a 38 percent growth in population between 1990 and 2000 (U.S. Census Bureau, 2000). It is anticipated that this trend will continue, with an estimated growth of 103 people per year through the year 2015 (Bonestroo, 1997).

Land uses in the project area include a number of residential structures built in the 1970s. Delano High School borders the project site to the north. Delano Evangelical Free Church is also located adjacent to the proposed utility corridor at 730 Elm Avenue. The area is zoned residential with some institutional/public zoning.

Alternative 1 – No Action

Under the No Action Alternative, there would be no land use and zoning changes. In a storm event, area residents would likely be affected by basement flooding and sanitary sewer backups. The frequent flooding and potential for property damage would also probably result in lower property values in the area over time.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Improvements under Alternative 2 are consistent with current land use and zoning in the project area. With the proposed improvements, the area would be better suited for continued growth.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Improvements under Alternative 2 are consistent with current land use and zoning in the project area. With the proposed improvements, the area would be better suited for continued growth.

3.4.2 Visual Resources

Visual resources refer to the landscape character (what is seen), visual sensitivity (human preferences and values regarding what is seen), scenic integrity (degree of intactness and wholeness in landscape character), and landscape visibility (relative distance of seen areas) of a geographically defined viewshed.

The general character of the project area is a residential neighborhood, bordered by public uses, namely Delano High School, to the northwest. The project sight is relatively flat to gently sloping. Views from a nearby residential home or from Elm Avenue would typically consist of other homes or limited open space areas, with some homes having a view of County Line Pond. Vegetation is typical of a residential neighborhood, consisting of mostly turf grass and some private landscaping, along with various deciduous trees. A relatively large, intact woodland is located around and to the north of Wetland 1. Wetlands in the northwest part of the project area are in open space areas that consist of grasses and typical wetland plants.

Alternative 1 – No Action

Under the No Action Alternative, no activities would be undertaken and visual resources would not be affected. In a storm event, County Line Pond would overflow and flood the surrounding open space area.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Under Alternative 2, larger piping would be installed underground and would not be visible to the public. During construction, overturned earth would be visible in the installation areas, as well as construction fencing and equipment. Post-construction, the disrupted soil would be seeded with grass to match the existing turf or vegetation. These would be temporary impacts. The planting of native and non-invasive species to mitigation impacts to vegetation would be a visual enhancement to the area.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Heavy equipment would be seen in the project area during construction, and staging areas would be visible from some homes as described under Alternative 2. However, these would be temporary impacts. The planting of native and non-invasive species to mitigation impacts to vegetation would be a visual enhancement to the area.

3.4.3 Noise

Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day/Night Average Sound Level (DNL) is an average measure of sound. The DNL takes into account the volume of each sound incident, the number of times each incident occurs, and the time of day each incident occurs (nighttime sound is weighted more heavily because it is assumed to be more annoying to the community). The DNL descriptor is accepted by Federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses.

Noise, defined herein as unwanted or unwelcome sound, is regulated by the Federal Noise Control Act (NCA) of 1972. Although the NCA gives the EPA authority to prepare guidelines for acceptable ambient noise levels, it only requires those Federal agencies that operate noise-producing facilities or equipment to implement noise standards. EPA guidelines (and those of many Federal agencies) state that outdoor sound levels in excess of 55 dB DNL are "normally unacceptable" for noise-sensitive land uses such as residences, schools, and hospitals. Noise sensitive receivers in the vicinity of the project consist of residences, a school, and a church.

City ordinance dictates that construction can only occur between 7:00 AM and 7:00 PM Monday through Saturday.

Alternative 1 – No Action

Under the No Action Alternative, proposed activities would not occur and noise levels would be anticipated to remain at current levels.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Noise associated with Alternative 2 would be limited to construction noise emitted by mechanical equipment, including a backhoe, trucks, and a skid steer. Noise typically associated with this type of construction equipment can measure as much as 80 dB within 50 feet of the source, attenuating at a rate of 6 dB per doubling of distance away from the source.

Noise sensitive receivers in the project area include residences, Delano High School, and a church. The closest residence is roughly 30 feet away from the proposed project, and the church is approximately 200 feet away. Construction at the high school would be approximately 400 feet away from the classroom buildings, and across a parking lot. Pipe installation would also occur approximately 70 feet away from the tennis courts.

Construction activities may minimally disturb these receivers. However, noise would not be continuous, and would be restricted to daylight hours. Therefore, the disturbance would be temporary and would not be concentrated in one area for the entire five-month construction period, and all of the sensitive noise receivers would not be affected at the same time. Construction would also take place in the summer months to avoid disturbing high school classes, as no summer classes take place at the high school (Farbo, personal communication). Construction would not take place on Sunday and would therefore not interfere with church services.

Area residents may also experience daily noise from trucks hauling to and from staging areas and the project site. However, this impact would be temporary and would be spaced out over the daily hours of construction.

To mitigate for any potential noise impacts, the City would inform residents of the time and duration of project activities. All activities would conform to the set hours of 7:00 AM to 7:00 PM as dictated by city ordinance. Construction equipment would be kept in good repair to ensure that proper noise muffling is maintained. Appropriate protective gear would be required to ensure the hearing protection of project workers.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Noise associated with Alternative 3 would be limited to construction noise emitted by construction equipment as described above under Alternative 2, as both alternatives follow most of the same alignment and are in the same study area.

Noise sensitive receivers in the project area are the same as those described above under Alternative 2. Mitigation for any noise impacts would occur as discussed under Alternative 2.

3.4.4 Public Services and Utilities

There are currently 18- to 24-inch storm sewer pipes running along portions of the proposed project route. These pipes would be replaced with 24- to 36-inch pipe under the proposed action.

There are also sanitary sewer lines in the project area. In the past, sanitary sewer backup has also occurred in conjunction with flooding of County Line Pond. Flooded basements contribute to sanitary sewer problems by causing inflow and infiltration of stormwater into the sanitary system.

There are no other utilities (electric, gas) within the proposed project route.

Alternative 1 – No Action

Under the No Action Alternative, periodic flooding would still occur, potentially affecting residential utilities and access to Elm Avenue. Nearby residents would still experience flooding and septic system backup.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Under Alternative 2, the existing storm sewer would be replaced with larger diameter piping. This would help to decrease the overburden on existing drainage systems and the subsequent infiltration of the sanitary sewer, which currently results in flooding and septic system backup during significant storm events. No other utilities would be affected by this alternative.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Alternative 3 would provide the same benefits to the storm sewer system and sanitary sewer as described under Alternative 2. No other utilities would be affected by this alternative.

3.4.5 Traffic and Circulation

The proposed project involves upsizing storm sewer piping beneath part of Elm Avenue, which is a two-lane residential street maintained by the City. There is also a designated bike lane that runs along the north side of Elm Avenue in the project area. The existing storm sewer piping lies on the south side of Elm Avenue, and would be supplemented with a diversion that cuts across Elm Avenue in the vicinity of Oak Ridge Drive. This area would be open-cut to accommodate larger piping and new piping during the proposed project.

Alternative 1 – No Action

Under the No Action Alternative, the existing storm sewer beneath Elm Avenue would not be disturbed, and no diversions would be constructed. No impacts to Elm Avenue or the bike lane would occur.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Under Alternative 2, construction would occur on Elm Avenue for one day during total project construction. One lane would be closed at a time to ensure that the street can remain open to traffic for the entire day. A flagman would be on-site to manage traffic. When the westbound lane is closed (north side of Elm Avenue), the bike lane would also be closed. Cyclists would be able to use the eastbound traffic lane under the guidance of the flagman at this time. Access would be maintained to the school, church, and all residences during construction.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Under Alternative 3, construction would occur on Elm Avenue for one day during total project construction. One lane would be closed at a time to ensure that the street can remain open to traffic for the entire day. A flagman would be on-site to manage traffic. When the westbound lane is closed (north side of Elm Avenue), the bike lane would also be closed. Cyclists would be able to use the eastbound traffic lane under the guidance of the flagman at this time. Access would be maintained to the school, church, and all residences during construction.

3.4.6 Environmental Justice (EO 12898)

EO 12898 requires Federal agencies to make environmental justice part of their mission. Agencies are required to identify and correct programs, policies, and activities that have disproportionately high and adverse human health or environmental effects on minority and low-income populations. EO 12898 also tasks Federal agencies with ensuring that public notifications regarding environmental issues are concise, understandable, and readily accessible. Socioeconomic and demographic data were studied to determine if a disproportionate number (greater than 50 percent) of minority or low-income people have the potential to be adversely affected by the alternatives.

Table 1summarizes the demographic information for Wright County and the City of Delano, in comparison to averages for the State of Minnesota.

Table 1. Demographic Information

	City of Delano	Wright County	State of Minnesota
Total Population	3,837	89,986	4,919,479
White	98.3%	97.9%	89.4%
African American	0.3%	0.3%	3.4%
American Indian/Alaska Native	0.2%	0.3%	1.1%
Asian	0.3%	0.4%	2.9%
Of Hispanic Origin	0.9%	1.1%	2.9%
Total Minority	1.7%	2.1%	10.6%
Median Household Income[1]	$52,917	$53,945	$47,111
Persons Below Poverty Level[1]	0.03%	4.7%	7.9%

Source: U.S. Census Bureau, 2000
League of Minnesota Cities, 2004
[1]1999 data

Based on review of the above information, a disproportionate effect on minority or low-income populations would not occur with any of the alternatives. The City is consistent with Wright County and well below State averages for minorities and persons below poverty level. Additionally, Alternatives 2 and 3 would reduce potential future flooding of basements and backup of the sanitary sewer system, and would benefit all people residing within the project area. Therefore, the project is in compliance with EO 12898.

3.4.7 Safety and Security

Safety and security issues considered in this analysis include the health and safety issues of the area residents and the public at-large, and the protection of personnel involved in activities related to the implementation of the Proposed Action.

EO 13045, Protection of Children, requires federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children.

Alternative 1 – No Action

Under the No Action Alternative, the potential for future flooding of basements and backup of sanitary storm sewers would remain. Residents would also be susceptible to injury or negative health impacts due to unsanitary conditions following flooding, including the significant and widespread health and safety risk to residents who experience raw sewage backup into their homes.

Since the No Action Alternative does not involve the employment of personnel to perform the project activities, there would be no potential risks to the personal safety of project workers.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Under Alternative 2, storm sewer improvement activities could present safety risks to individuals performing the activities. To minimize risks to safety and human health, all project activities would be performed using qualified personnel trained in the proper use of the appropriate equipment, including safety precautions. In addition, all activities would be conducted in accordance with Occupational Safety and Health Administration (OSHA) regulations.

Implementation of Alternative 2 would increase the capacity of the storm sewer system. This would reduce the risk of injury and negative health impacts to residents as a result of flooding and storm sewer backup.

Persons of all ages reside in the project area neighborhood, and youth ages 14 through 19 attend nearby Delano High School. Additional protection will be ensured at the project site by the used of cautionary signage and protective fencing. Children would not be disproportionately affected by the proposed project; therefore the project is in compliance with EO 13045.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

Under the Alternative 3, storm sewer improvement activities could present safety risks to individuals performing the activities. Actions to minimize risks to safety and human health would be completed as described under Alternative 2, as both alternatives follow similar alignment and would require similar construction activities.

Implementation of Alternative 2 would increase the capacity of the storm sewer system. This would reduce the risk of injury and negative health impacts to residents as a result of flooding and storm sewer backup.

Persons of all ages reside in the project area neighborhood, and youth ages 14 through 19 attend nearby Delano High School. Children would not be disproportionately affected by the proposed project; therefore the project is in compliance with EO 13045.

3.5 CULTURAL RESOURCES

In addition to review under NEPA, consideration of impacts to cultural resources is mandated under Section 106 of the National Historic Preservation Act, as amended, and implemented by 36 CFR Part 800. Requirements include identification of significant historic properties that may be affected by the proposed project. Historic properties are defined as archaeological sites, standing structures, or other historic resources listed in or eligible for listing in the National Register of Historic Places (NRHP) (36 CFR 60.4).

As defined in 36 CFR Part 800.16(d), the Area of Potential Effect (APE) "is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist."

In addition to identifying historic properties that may exist in the APE of the Proposed Action, FEMA must also determine, in consultation with the appropriate State Historic Preservation Office (SHPO), what effect, if any, the action would have on historic properties. Moreover, if the project would have an adverse impact on these properties, FEMA must consult with the SHPO on ways to avoid, minimize, or mitigate the adverse effect.

The Minnesota Department of Public Safety/Homeland Security and Emergency Management initiated consultation with the SHPO in October 2003. The SHPO responded in a letter dated December 2, 2003 that no properties eligible for or listed in the NRHP are within the project's area of effect. In an e-mail dated October 1, 2004, the SHPO stated that its review findings from 2003 remain the same (See Appendix B).

Alternative 1 – No Action

Under the No Action Alternative, there would be no effects to cultural resources because proposed improvements would not occur.

Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet (Proposed Action)

Based on research and the archaeological survey, it is not anticipated that any NRHP-eligible or listed properties exist within the proposed project area; however, if artifacts or human remains are encountered during construction, work in the vicinity would be halted, and FEMA, the Office of the State Archaeologist (OSA), and the SHPO would be immediately contacted.

Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet

As under Alternative 2, it is not anticipated that any NRHP-eligible or listed properties exist within the project area for Alternative 3; however, if artifacts or human remains are encountered during construction, work in the vicinity would be halted, and FEMA, the OSA, and the SHPO would be immediately contacted.

3.5.1 Tribal Coordination

Initial American Indian group contacts were suggested by the Minnesota SHPO (see list in Section 7). Letters were sent to the list of potential consulting and interested parties on October 29, 2004.

Follow-up consultation was initiated on April 8, 2005. A response was received from the Shakopee Mdewakanton Community, which expressed an interest in any areas of potential historical significance that may be disturbed (see Appendix B). Consultation with the SHPO was addressed as discussed above. The American Indian community will continue to be notified of project progress, and will be involved in review of this EA.

Table 2. Impact Summary Matrix

Description of Alternative	**Alternative 1 – No Action**	**Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet**	**Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet**
	• FEMA funds would not be used for storm sewer improvements	• Installation of 1,900 feet of 24- to 36-inch storm sewer piping from County Line Pond, across and within Elm Avenue, to an area southwest of Delano High School • Increase size of County Line Pond outlet	• Installation of 1,900 linear feet of 24- to 36-inch storm sewer piping from County Line Pond, across and within Elm Avenue, to an area southwest of Delano High School • Installation of a second 30-inch diversion from the storm sewer on Elm Avenue to the newly proposed 36-inch pipe south of Delano High School, totaling an additional 280 linear feet • Increase size of County Line Pond outlet
Potential Impacts	**No Action (Alternative 1)**	**Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet**	**Alternative 3 - Two Diversions from Elm Avenue and Increase Size of Pond Outlet**
Geology, Seismicity, and Soils	• No impact	• Temporary increase in surface soil erosion and compaction during construction along approximately 1,900 linear feet of pipe installation • 3,800 cubic yards (CY) of excavation along path of proposed pipe	• Temporary increase in surface soil erosion and compaction during construction along approximately 2,180 linear feet of pipe installation • 4,360 CY of excavation along path of proposed pipe
Water Resources and Water Quality	• Floodwater would still present potential for water contamination from increased sedimentation and sanitary sewer backup	• Minor sedimentation impact as a result of construction grading • Risk of sedimentation from erosion, and the risk of water pollution from backed up sanitary sewers would be reduced	• Minor sedimentation impact as a result of construction grading • Risk of sedimentation from erosion, and the risk of water pollution from backed up sanitary sewers would be reduced

Floodplain Management	• EO 11988 is not applicable to this alternative	• No direct impacts to 100-year floodplain • 100-year flood elevation of South Fork of Crow River not impacted	• No direct impacts to 100-year floodplain • 100-year flood elevation of South Fork of Crow River not impacted
Potential Impacts	**No Action (Alternative 1)**	**Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet**	**Alternative 3 - Two Diversions from Elm Avenue and Increase Size of Pond Outlet**
Air Quality	• No impacts	• Temporary construction noise • Potential fugitive dust emissions associated with earth moving (grading) • Temporary emissions from heavy construction equipment	• Temporary construction noise • Potential fugitive dust emissions associated with earth moving (grading) • Temporary emissions from heavy construction equipment
Terrestrial and Aquatic Environment	• No immediate impact	• Temporary disturbances due to noise and removal of trees and shrubs during construction • Overall enhancement of habitat with reestablishment of native/non-invasive species	• Temporary disturbances due to noise and removal of trees and shrubs during construction • Overall enhancement of habitat with reestablishment of native/non-invasive species
Wetlands	• No changes to the existing wetlands would occur	• 400 square feet (SF) of temporary impact (limited to duration of project construction)	• 400 SF of temporary impact (limited to duration of project construction)
Threatened and Endangered Species	• No impact	• No impact	• No impact
Hazardous Materials	• No impact	• No impact	• No impact
Zoning and Land Use	• No impact	• Project is compatible with existing and future land use	• Project is compatible with existing and future land use
Visual Resources	• No impact	• Temporary impacts due to construction equipment and soil disturbance during construction	• Temporary impacts due to construction equipment and soil disturbance during construction
Noise	• No impact	• Temporary impacts on surrounding residences, church, and high school due to construction noise	• Temporary impacts on surrounding residences, church, and high school due to construction noise
Public Services and Utilities	• No impact	• Increased capacity of storm sewer system • No impacts to other utilities	• Increased capacity of storm sewer system • No impacts to other utilities

Traffic and Circulation	• No impact	• One lane of traffic would be closed for one day during construction • Bike lane would be re-routed during construction	• One lane of traffic would be closed for one day during construction • Bike lane would be re-routed during construction
Potential Impacts	**No Action (Alternative 1)**	**Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet**	**Alternative 3 - Two Diversions from Elm Avenue and Increase Size of Pond Outlet**
Environmental Justice	• No impact	• No impact	• No impact
Safety and Security	• Future flooding could result in health and safety risks to surrounding residents • No potential risks to the personal safety of project workers	• Safety risks created to individuals performing project activities • Increased storm sewer capacity would control water and prevent health and safety risks due to flooding and sanitary sewer backup	• Safety risks created to individuals performing project activities • Increased storm sewer capacity would control water and prevent health and safety risks due to flooding and sanitary sewer backup
Cultural Resources	• No impact	• No potential archaeological sites • No historic sites eligible for listing on the National Register of Historic Places (NRHP) • No concerns raised by American Indians	• No potential archaeological sites • No historic sites eligible for listing on the NRHP • No concerns raised by American Indians

Cumulative impacts are those effects on the environment that result from the incremental effect of the action when added to past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period of time.

Four HMGP projects are currently proposed within the City of Delano. The Elm Avenue Diversion project is one of these four projects. The other three include the East Side Lift Station project, the West Side Lift Station, and Alley Resurfacing (Figure 5). All of these projects are designed to control excessive flooding that has plagued the City of Delano in recent years. On many occasions in 2001 and 2002, the City was forced to conduct emergency pumping and sandbagging activities to attempt to protect local homes and businesses.

Cumulatively, a basic hydraulic analysis of total stormwater discharge from the four projects compared to total watershed size indicates these projects will not have substantial negative impacts on the South Fork of the Crow River system or the floodplain system as a whole (Bonestroo, 1997). The Elm Avenue Diversion would direct water to the area south of the high school, which is part of the same system of ditches and wetlands that would eventually run through the East Side Lift Station and to the South Fork of the Crow River. The northeast portion of the Alley Resurfacing Project would also direct water through wetlands to the East Side Lift Station, with the remainder of the area draining through the existing stormwater piping to the river. The West Side Lift Station would serve the west part of the City, collecting stormwater for discharge to the river. Collectively, during a 100-year flood event the projects would deliver approximately 120 cfs to the South Fork of the Crow River. This is derived from the 40 cfs pumping capacity at East Side Lift Station (which would collect water from the Elm Avenue Diversion and the Alley Resurfacing Project) and the 80 cfs of pumping capacity at the West Side Lift Station. Using the June 2002 flood example of 13.5 feet, the South Fork of the Crow River is flowing at 6,489 cfs (National Weather Service, 2005). The impact of the addition of 120 cfs is negligible at 1.8 percent. This slight increase would not increase the elevation of the 100-year floodplain or impact downstream areas (Krogstad, personal communication).

With these projects implemented, the City of Delano would be better able to manage its stormwater and floodwater during and after storm events. This allows for quicker emergency response, and also contributes positively to the overall quality of life for Delano residents. Better water management would reduce risk of property damage from flooding, and protect residents from health and safety risks associated with excess water and sewer backups. The City would be able to expend money on other necessary municipal improvements and programs, instead of funding extensive emergency pumping activities.

It is not anticipated that floodplain development would be promoted as a result of implementing the proposed projects. The City of Delano has an existing Floodplain District Ordinance that prohibits development within the floodway of the South Fork of the Crow River within the City. In addition, the City has actively pursued and successfully obtained Flood Damage Reduction (FDR) grant funding from the WDNR to purchase and remove repetitive loss properties within the 100-year floodplain. The former Bock property, at the site of the proposed West Side Lift Station, was purchased under this grant. The City continues to identify and pursue funding for removal of additional properties. Currently, FDR funding has been received for removal of a residence in the south part of the city, and two other commercial properties along the east bank

of the river in the downtown area are also slated for acquisition and demolition (Fick, personal communication).

Individually, each of the projects would have long-term positive impacts on the natural environment. Any combination of these projects would magnify these benefits citywide. Managing stormwater and handling floodwater more efficiently would create a more consistent hydrologic regime for wetlands, which supports stable habitat and plant and animal life, as well as overall water quality. A more controlled system would also reduce erosion and sedimentation impacts that result from emergency pumping, standing basins of floodwater, and overtopping of roads and basins.

The Delano Stormwater Task Force (Task Force) was appointed by the Delano City Council on November 12, 2002. This was a nine-member committee appointed to identify priorities for flood mitigation projects within the City. Members included City residents as well as two professional engineers. Task Force meetings were held on the following dates:

- November 21, 2002
- December 6, 2002
- December 12, 2002
- December 19, 2002
- January 6, 2003
- January 9, 2003
- January 30, 2003
- February 5, 2003
- February 19, 2003
- March 13, 2003 – joint meeting with City Council

All City Council meetings are open to the public and are also locally televised. Minutes from meetings are also available on the City of Delano website. A specific public hearing discussing sump pump operations and the City's stormwater drainage ordinance was held February 4, 2003. The public notice from this meeting is included on the following page.

Public notice advertising the availability of the draft EA for public review has been drafted and included in Appendix E. This notice has been provided to *The Delano Eagle* newspaper and will also be available for review online at the FEMA website: http://www.fema.gov/ehp/docs.shtm. The public will be provided 30 days for comment on the Proposed Action. The FEMA Region V office will collect and compile comments submitted by the public.

At the conclusion of the public review period, a summary of any comments received will be provided in this section and copies of the comments will be included in Appendix E.

Affidavit of Publication

RECEIVED

State of Minnesota
County of Wright } as
County of Hennepin

Bruce Treichler, being duly sworn, on oath says that he is the publisher or authorized agent and employee of the publisher of the newspaper known as the Delano Eagle and has full knowledge of the facts which are stated below:

(A) The newspaper has complied with all of the requirements constituting qualification as a legal newspaper, as provided by Minnesota Statute 331.02, 331.06, and other applicable laws, as amended.

(B) The printed City of Delano
Pub Hrg-Storm Water Drainage Ordinance

which is attached was cut from the columns of said newspaper, and was printed and published once each week for 1 successive weeks; it was first published on Monday, the 20 day of Jan., 20 03, and was thereafter printed and published on every Monday to and including Monday, the _____ day of _____, 20___; and printed below is a copy of the lower case alphabet from A to Z, both inclusive, which is hereby acknowledged as being the size and kind of type used in the composition and publication of the notice:

abcdefghijklmnopqrstuvwxyz

PEGGY J. BAKKEN
Notary Public
Minnesota
My Commission Expires Jan. 31, 2005

By: Bruce Treichler
Title: Publisher Bruce Treichler

Subscribed and sworn or affirmed before me on this 20 day of Feb., 20 03

Peggy Bakken
Notary Public

DELANO

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Delano City Council will hold a Public Hearing on Tuesday, February 4, 2003, 7:00p.m. or as soon thereafter as the parties may be heard, in the Council Chambers at Delano City Hall, 205 Bridge Avenue East, to consider a request from the City of Delano for a text amendment to City of Delano Storm Water Drainage Ordinance, Chapter 6, Section 606.01 with respect to sump pump operations.

All interested parties are hereby notified and invited to submit oral or written comments at said Public Hearing.

Marlene E. Kittock, Clerk/Treasurer

Published in the Delano Eagle Monday, January 20, 2003.

The following table provides a summary of the anticipated permitting and mitigation requirements for the proposed project alternatives.

Table 3. Permits and Mitigation by Alternative

Alternatives	Permit/Mitigation Requirements
Alternative 1 – No Action	• No permits or mitigation measures are required.
Alternative 2 – Elm Avenue Diversion and Increase Size of Pond Outlet **Alternative 3 – Two Diversions from Elm Avenue and Increase Size of Pond Outlet**	• Erosion would be minimized through the use of BMPs, including protecting erodible surfaces (through mechanisms such as silt fences) and not working during precipitation events. • An NPDES permit would be obtained for proposed project grading. • Exposed soils would be seeded in accordance with the NPDES permit. Native/non-invasive species would be used whenever feasible. • Compacted soils would be loosened by disking or raking • Project would be in compliance with EO 79-19 and the MNRRA/MRCA. • Vehicle engines would be kept in good repair and turned off while not in use to prevent air emissions. • Project access roads would be watered when conditions are dusty. • Any hazardous materials discovered, generated, or used during implementation of the proposed project would be disposed of and handled by the City in accordance with applicable local, State, and Federal regulations. • Vegetation would be replanted with native species or species comparable to existing vegetation. • A WCA Exemption for wetlands will be applied for before construction begins. • Wetland impact covered under existing USACE General Permit 04-01253-TJF. • To mitigate for any potential noise impacts, the City would inform residents of the time and duration of project activities to help mitigate noise impacts. • All activities would conform to the hours of construction set by the City (7:00 AM through 7:00 PM Monday through Saturday).

	• Appropriate gear would be required to protect the hearing of project workers. • Appropriate signage would direct drivers to detours, and would inform them of work zones and equipment transport routes. • All project activities would be performed using qualified personnel trained in the proper use of the appropriate equipment, including safety precautions. • All activities would be conducted in accordance with OSHA regulations. • If artifacts or human remains are encountered during construction, work in the vicinity would be halted, and FEMA, the OSA, and the SHPO would be immediately contacted. • Flagging and fencing would be used to limit construction staging and parking areas.

7.1 CONSULTATIONS

7.1.1 Agency Coordination

The Minnesota Office of Homeland Security and Emergency Management sent initial consultation letters to the following agencies in October 2003:

- Minnesota Department of Natural Resources, Division of Waters
- State Historic Preservation Office
- U.S. Army Corps of Engineers

These agencies were contacted again by URS in September/October 2004 to ensure that findings relayed in 2003 were still applicable to the project. Agencies were sent a summary of the project and an update on the NEPA process.

In addition, MDNR consultation for rare, threatened, and endangered species was initiated by the Minnesota Office of Homeland Security and Emergency Management in February 2003. Consultation with the USFWS was initiated by URS in October 2004, and the MDNR Natural Heritage Program (NHP) was also contacted to ensure that the original findings were still applicable to the project. The findings of the USFWS and the MDNR NHP are incorporated into the EA. These responses are included in Appendix B.

Additional consultations included:

- Federal Emergency Management Agency
- Minnesota Department of Public Safety - Homeland Security and Emergency Management
- City of Delano

7.1.2 Distribution

The following will receive a copy of the Draft EA:

Federal Agencies

U.S. Army Corps of Engineers

U.S. Department of the Interior, U.S. Fish and Wildlife Service

Tribes

Lower Sioux Community

Prairie Island Indian Community

Shakopee Mdewakanton Sioux Community

Upper Sioux Community

State, County, and Local Agencies

Minnesota Department of Emergency Management

Minnesota Department of Natural Resources

State Historic Preservation Office

Office of the State Archaeologist

Minnesota Indian Affairs Council

City of Delano

7.2 REFERENCES

Bonestroo Rosene Anderlik & Associates. 2002. *June 2002 Flood Analysis, Delano, Minnesota.* File No. 280-02-124.

Bonestroo Rosene Anderlik & Associates. 1997. *Stormwater Management Plan, Delano, Minnesota.* File No. 28066.

City of Delano. 2002. City of Delano Web Page, Home Page. http://www.delano.mn.us Accessed August 11, 2004.

Delano, Minnesota. 2003. Delano Citisite: For the Community, From the Community. http://delano.citisite.com/ Accessed August 11, 2004.

Delano School District. 2004. http://www.delano.k12.mn.us/sitepages/pid45.php Accessed October 29, 2004.

Environmental Protection Agency (EPA). 2003. Air Quality. Accessed August 20, 2004 from http://www.epa.gov/air/oaqps/greenbk/mapnpoll.html.

League of Minnesota Cities. 2004. Census 2000 Update: Expanded Minnesota Profiles. http://www.lmnc.org/census/census.cfm Accessed August 20, 2004

Minnesota Pollution Control Agency (MPCA). 2004. Minnesota 305(b) Report to Congress of the United States, Assessments of Stream Conditions in Minnesota's Major River Basins. Retrieved September 14, 2004 from http://www.pca.state.mn.us/water/basins/305briver.html.

MPCA. 2003. Storage Tank Systems. Accessed September 23, 2004 from http://www.pca.state.mn.us/cleanup/tanks.html.

National Park Service (NPS). 2003. Wild and Scenic Rivers by State, http://www.nps.gov/rivers/wildriverslist.html#mn. Accessed November 28, 2003.

U.S. Census Bureau. 2000. Accessed August 20, 2004 from http://www.census.org

U.S. Department of Agriculture (USDA). 1968. *Soil Survey of Wright County, Minnesota*. United States Department of Agriculture, Soil Conservation Service in cooperation with the Minnesota Agricultural Experiment Station. Washington, D.C.

Wenck Associates, Inc. 2004. *Phase I Environmental Site Assessment, Bock Property, 102 Babcock Boulevard West, Delano, MN.* Prepared for City of Delano.

Wentz, C. 1989. *Hazardous Waste Management.* McGraw-Hill Chemical Engineering Series: New York.

Wright County. 2003. Wright County Web Page, Home Page, http://www.co.wright.mn.us. Accessed August 16, 2004.

Personal Communication

Anfinson, Scott. SHPO. Personal communication with Evelyn Tidlow, URS Vice President, October 18.

Fairchild, Laurie, U.S. Fish and Wildlife Service. 2004. Personal communication with Jessica Overmohle, URS Environmental Planner, September 28.

*Farbo, Susan, Delano High School. Personal communication with Jessica Overmohle, URS Environmental Planner, November 10.

Fell, Tim, USACE. Personal communication with Lydia Nelson, URS Professional Wetland Scientist, October 15.

*Fick, Ed, MDNR, Hydrologist. Personal communication with Jessica Overmohle, URS Environmental Planner, July 22, 2005.

Fowler, Patricia, DNR, Area Hydrologist. Personal communication with Jessica Overmohle, URS Environmental Planner, September 28.

*Krogstad, Brad, URS Engineer. Personal Communication with Jessica Overmohle, URS Environmental Planner, July 25, 2005.

Torve, Kent, Wenck Associates, Inc., City Engineer for Delano. 2004. Personal communication with Jessica Overmohle, URS Environmental Planner, ongoing throughout project process.

Torve, Kent, Wenck Associates, Inc., City Engineer for Delano. 2004. Personal communication with Lydia Nelson, URS Professional Wetland Scientist, October 6.

*Referenced in text; Record of Conversation attached.

URS

TELEPHONE NOTES

URS
Thresher Square
700 Third Street South
Minneapolis, MN 55415
(612) 370-0700 Tel
(612) 370-1378 Fax
www.urscorp.com

Date: 11/10/04 **Call was:** ☒ **Placed** ☐ **Received**

Project: Elm Avenue Diversion EA

Project No: 15702311.00100

Conversation Between: Jessica Overmohle
And Susan Farbo **of** Delano High School
Telephone No: 763-972-3365 x2237

NOTES:

The purpose of this call was to inquire about school dates and summer activities at Delano High School. I was transferred to Susan Farbo after calling the main number and explaining my purpose. Susan is the guidance counselor at the school.

Susan indicated that no summer classes take place at the high school. All summer classes are held at another school site. Regular classes end on June 2nd for this school year and will start back up on September 1st. Graduation is held at the high school on June 5th.

Copy to: _____

URS

TELEPHONE NOTES

URS
Thresher Square
700 Third Street South
Minneapolis, MN 55415
(612) 370-0700 Tel
(612) 370-1378 Fax
www.urscorp.com

Date: 7/25/05 **Call was:** ☒ **Placed** ☐ **Received**

Project: Delano Flood Mitigation Projects

Project No: 15702311.00100

Conversation Between: Jessica Overmohle
And Brad Krogstad, PE **of** URS
Telephone No: 612-373-6408

NOTES:

Brad Krogstad is an engineer in the Minneapolis office of URS, specializing in hydrologic and floodplain engineering. I sent Brad some information on the four Delano projects and asked him to provide an opinion on the impact of adding 120 cfs to the river as a result of the pumping at the proposed lift stations. Kent Torve from Wenck Associates, who acts as the City of Delano engineer, had previously made a determination that the addition of 120 cfs would add only "negligible" impacts to the South Fork of the Crow River, and a second opinion on this was solicited from Mr. Krogstad.

After reviewing the project, Brad indicated that the impact of 120 cfs was very small in terms of the total tributary area, and he would agree that it is negligible in terms of total flow. In addition, downstream impacts would not be a concern as a result of this project, due to the small volume of added water and the source of that water.

In summary, Mr. Krogstad said that while adding 120 cfs would impact the river, this impact would not be noticeable nor would it cause any problems downstream.

Copy to: _____

URS

TELEPHONE NOTES

URS
Thresher Square
700 Third Street South
Minneapolis, MN 55415
(612) 370-0700 Tel
(612) 370-1378 Fax
www.urscorp.com

Date: 7/22/05 **Call was:** ☒ **Placed** ☐ **Received**

Project: West Side Lift Station EA

Project No: 15702311.00100

Conversation Between: Jessica Overmohle
And Ed Fick, Hydrologist **of** MDNR
Telephone No: 651-215-1954

NOTES:

The purpose of this call was to inquire about any restrictions placed on the Bock Property as a result of the Flood Damage Reduction (FDR) grant attained to purchase and demolish the property. Ed indicated that all restrictions were laid forth in the grant language, and consist of a statement that any structure going into the subject site needs to be floodproofed in accordance with State standards. I indicated that we had consulted with WDNR Waters early in the process, and they had made a similar stipulation for the site. Ed asked if the Army Corps had been involved in the project as well, and I said yes, the Corps had also provided comments.

Ed asked about the current FEMA projects and also told me of three other properties in the City of Delano that are also being purchased and removed with FDR funds. The other two are located across the river from the Bock property, in the downtown area. He said these two are pretty much located right on the river and subject to frequent flooding. Ed has not yet received requests for funds on either of these two sites, but per his last conversation with Phil Kern, Delano City Administrator, they are planned. One is a working business and one he believes is abandoned. The sites are adjacent to each other. The business is a seasonal operation and therefore wants to wait to be bought out until after this summer is over.

The third property is a residence located downstream in the 100-year floodplain. Some funds have already been released for the purchase of this property.

Copy to: _____

Lydia Nelson, Professional Wetland Scientist, URS-Minneapolis (MSP) – Peer Reviewer/Field Assessment/Floodplain Review. Conducted field research for Water Resources and Water Quality, Floodplain Management, Terrestrial and Aquatic Environment, Wetlands.

Jessica Overmohle, Environmental Planner, URS-MSP – Technical Researcher and Task Coordinator. Author of sections on Purpose and Need, Alternatives, Geology, Seismicity, and Soils, Air Quality, Hazardous Materials, Threatened and Endangered Species, Zoning and Land Use, Visual Resources, Noise, Public Services and Utilities, Traffic and Circulation, Environmental Justice, Safety and Security, Cumulative Impacts.

Evelyn Tidlow, Vice President, URS-MSP – Peer Reviewer.

Amy Siegel, Document Control Supervisor, URS-Gaithersburg (GTB) – Document Quality Control.

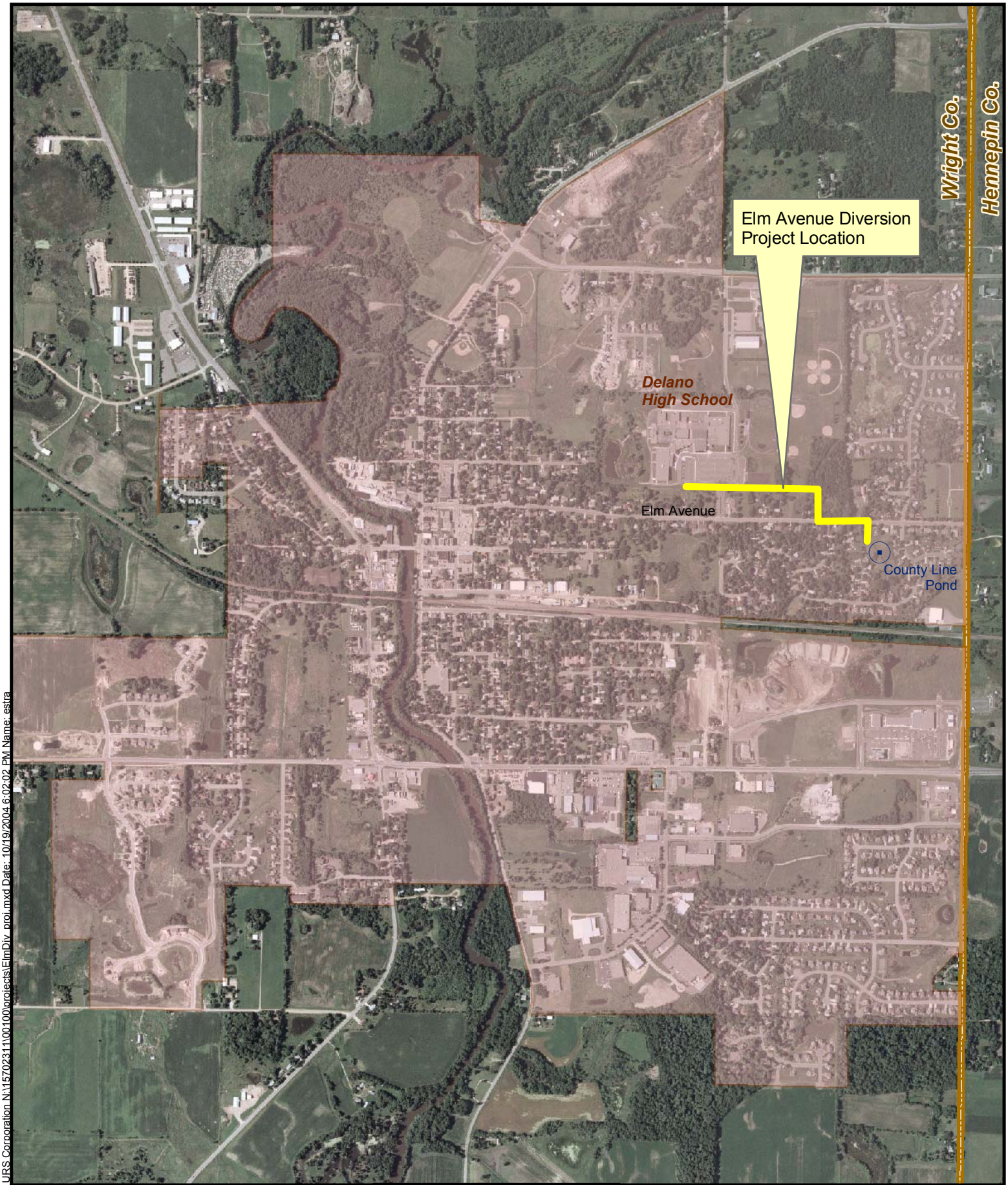
Rhonda Taylor, PE, URS-GTB – Engineering/Floodplain Review.

Stephen Carruth, FEMA National Environmental Coordinator, URS-GTB – Independent Technical Reviewer.

Jeanne Witzig, URS-MSP – Project Manager.

Figures

URS **NO SCALE** Source: U.S. Census Bureau	**ELM AVENUE DIVERSION** **REGIONAL LOCATION** **DELANO, MINNESOTA**		
DRN BY: JO	**10/14/04**	**PROJECT NO.**	**FIG. NO.**
CHEK'D BY: XX	**10/14/04**	**15702311.00100**	**1**



0 0.125 0.25 Miles

Data Sources:
MnDOT, DNR

URS

ELM AVENUE DIVERSION
PROJECT LOCATION
DELANO, MINNESOTA

Thresher Square
700 Third Street South
Minneapolis, MN 55415
612.370.0700 Tel
612.370.1378 Fax

DRN BY:	ES	DATE:	10/5/04	PROJECT NO. 15702311.00100	FIG. NO. 2
CHK'D BY:	XX	DATE:	10/5/04		

URS Corporation N:\15702311\00100\projects\ElmDiv_proj.mxd Date: 10/19/2004 6:02:02 PM Name: estra

URS Corporation N:\15702311\00100\projects\ElmDiv_ProposAlt.mxd Date: 10/19/2004 6:02:02 PM Name: estra

0 0.025 0.05 0.1 Miles

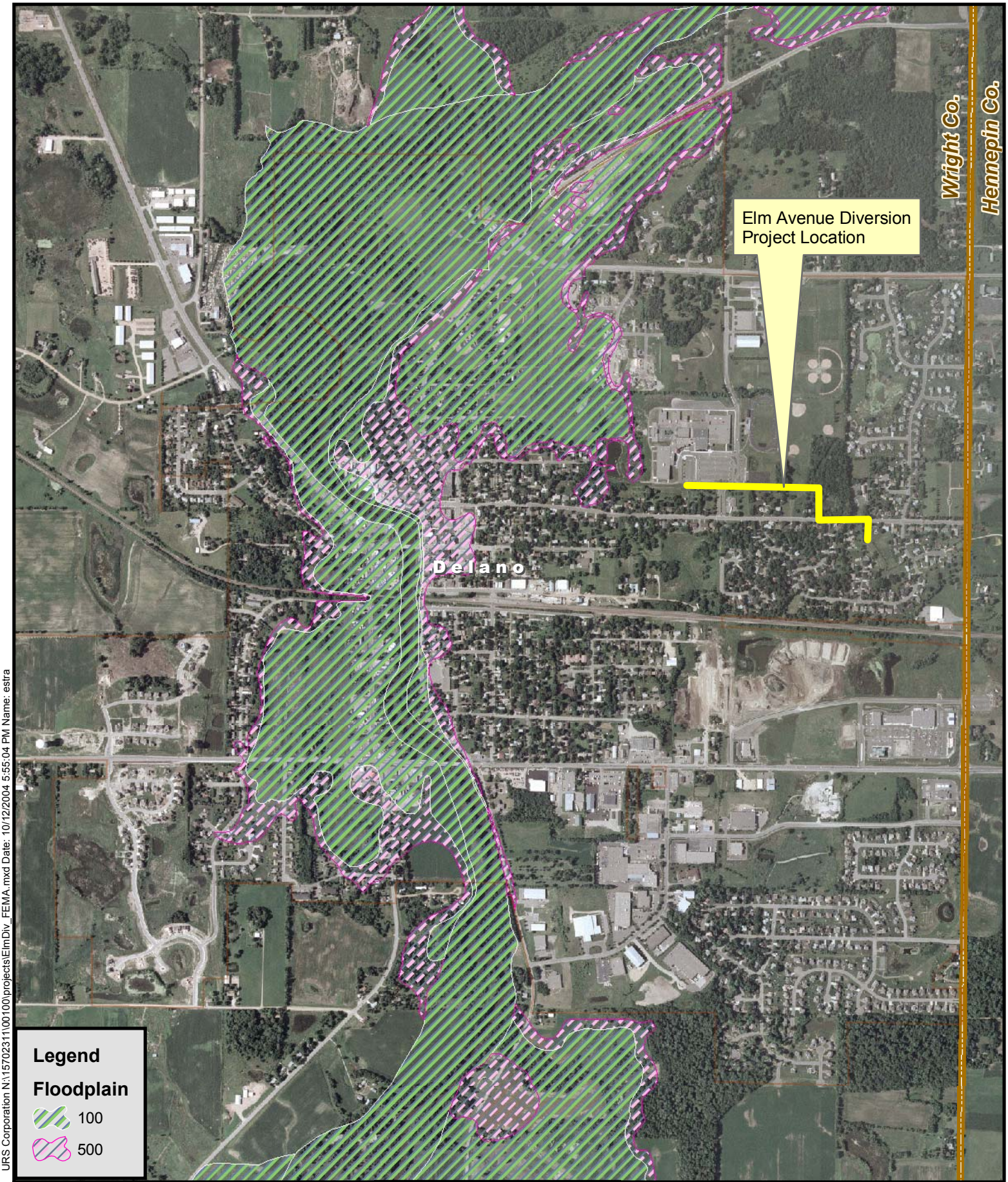
Data Sources:
MnDOT, DNR

URS

ELM AVENUE DIVERSION
PROPOSED ALTERNATIVES
DELANO, MINNESOTA

Thresher Square
700 Third Street South
Minneapolis, MN 55415
612.370.0700 Tel
612.370.1378 Fax

DRN BY:	ES	DATE:	10/5/04	PROJECT NO. 15702311.00100	FIG. NO. 3
CHK'D BY:	XX	DATE:	10/5/04		



Legend

Floodplain

100

500

0 0.125 0.25 Miles

Data Sources:
MnDOT, DNR, FEMA

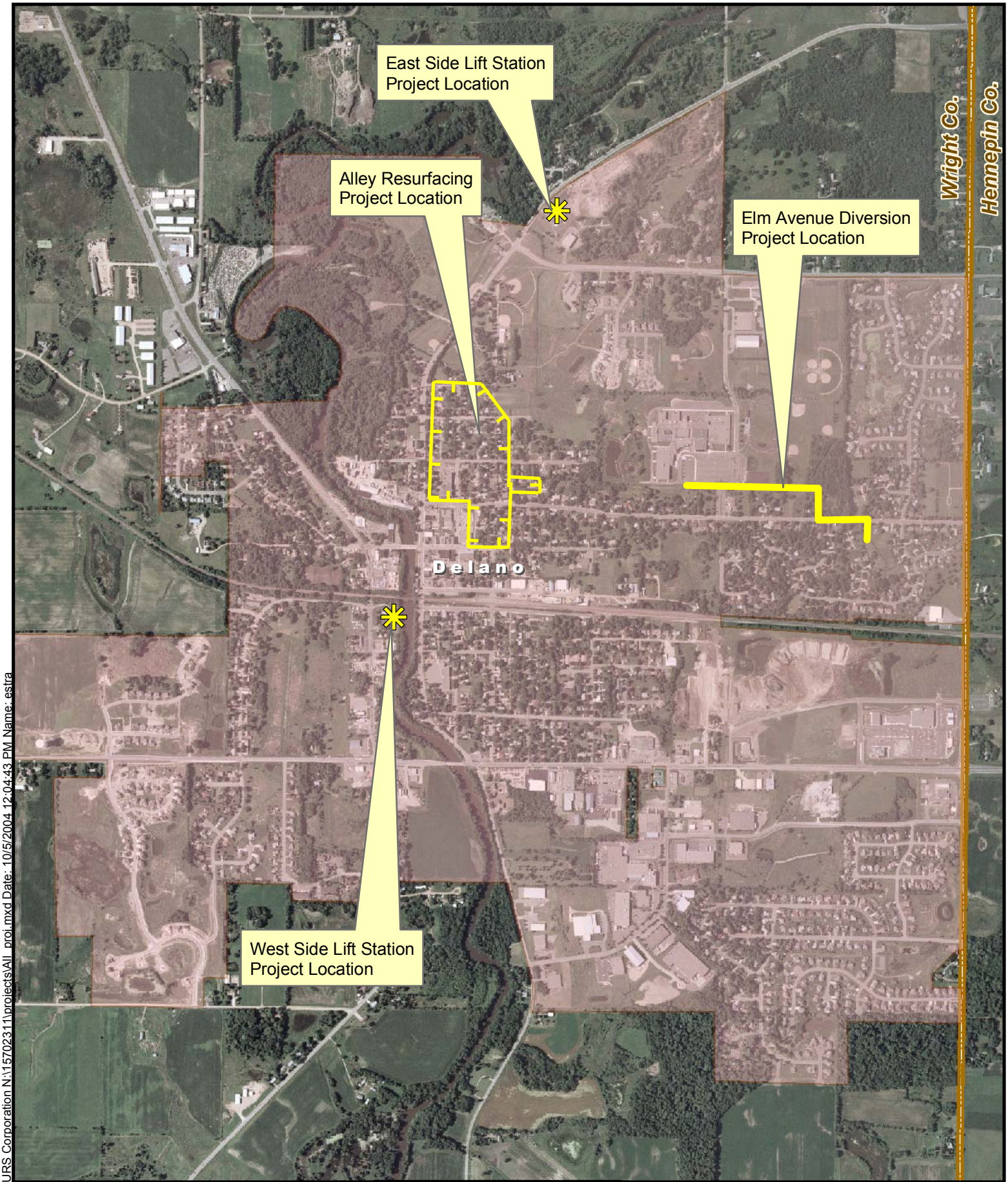
URS

ELM AVENUE DIVERSION
FEMA FLOODPLAINS
DELANO, MINNESOTA

Thresher Square
700 Third Street South
Minneapolis, MN 55415
612.370.0700 Tel
612.370.1378 Fax

DRN BY:	ES	DATE:	10/5/04	PROJECT NO. 15702311.00100	FIG. NO. 4
CHK'D BY:	XX	DATE:	10/5/04		

URS Corporation N:\15702311\00100\projects\ElmDiv_FEMA.mxd Date: 10/12/2004 5:55:04 PM Name: estra



URS Corporation N:\15702311\projects\All_proj.mxd Date: 10/5/2004 12:04:43 PM Name: estra

0 0.125 0.25 Miles

Data Sources:
MnDOT, DNR

URS

PROPOSED HMGP PROJECT LOCATIONS DELANO, MINNESOTA

Thresher Square
700 Third Street South
Minneapolis, MN 55415
612.370.0700 Tel
612.370.1378 Fax

DRN BY:	ES	DATE:	10/5/04	PROJECT NO. 15702311.00100	FIG. NO. 5
CHK'D BY:	XX	DATE:	10/5/04		

Appendix A
Project Area Photographs

View of County Line Pond, facing south/southwest toward Elm Avenue.

View from low area between County Line Pond and Elm Avenue, facing north toward Elm Avenue.

Looking east along the north side of Elm Avenue.

Typical vegetation through which pipe will be installed north of Elm Avenue.

Wetland 1, north of Elm Avenue.

Appendix B
Agency Correspondence

"Patricia Fowler"
<patricia.fowler@dnr.state.mn.us>

10/13/2004 01:55 PM

To: <jessica_overmohle@urscorp.com>
cc: "Ceil Strauss" <Ceil.Strauss@dnr.state.mn.us>, "Ed Fick" <ed.fick@dnr.state.mn.us>, "Suzanne Jiwani" <Suzanne.Jiwani@dnr.state.mn.us>
Subject: FEMA Hazard Mitigation Grant Program Projects in Delan

Jessica,

Thank you for your letter dated October 6, 2004, which requests the Department's review and comment of the above mentioned. It is understood that you are requesting this information on behalf of FEMA as part an environmental assessment for the four projects that the city has received grants for.

I have review the project narratives and the map showing the general location of the four projects and have the following comments:

1) Both proposed lift stations are within the 100-year floodplain and should be either flood proofed meeting state building code standards or elevated above the regulatory flood protection elevation in accordance with the city's floodplain ordinance.
2) The map showing the location of the West Side lift station appears to be located pretty close to the river/emergency levee. According to the FEMA FIRM map, the boundary of the floodway extends landward of the levee in this location; so care should be taken to ensure that the proposed lift station is not located within the floodway.
3) The proposed projects do not impact any DNR public waters of the state. Therefore, DNR authorization is not required. However, a DNR appropriation permit would be required if proposed construction dewatering would exceed 10,000 gallons per day or 1 million gallons per year.

Thank you for the opportunity to provide these comments. Please let me know if you should have any questions.

Thank you

Patricia Fowler
Area Hydrologist
DNR Waters - Sauk Rapids
Phone: (320) 255-2976
Fax: (320) 255-3999

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
190 FIFTH STREET EAST
ST. PAUL, MN 55101-1638

March 25, 2004

REPLY TO
ATTENTION OF:

Construction-Operations
Regulatory (04-01253-TJF)

Mr. John Smyth
Bonestroo Rosene Anderlik & Associates
2335 West Highway 36
St. Paul, MN 55113

Dear Mr. Smyth:

Thank you for provided the additional details regarding the City of Delano's project to correct the storm water management concerns along Elm Avenue. The project site is in the S 1/2 Sec. 12, T. 118N., R. 25W., Wright County, Minnesota.

We understand the project would involve the installation of intake and outfall structures for 4 wetland basins (referred to as Wetlands A, B, C, and D). The project is not intended to reduce the basic size of the existing wetlands, but to reduce the flooding of adjacent properties. Therefore, we have determined that the grading and filling necessary to install these structures is authorized by a Department of the Army General Permit (GP/LOP-98-MN), provided the attached General and Standard Conditions are followed.

This determination covers only the project as described above and on the attached drawing. If the design, location, or purpose of the project is changed, our office should be contacted to make sure the work would not result in a violation of Federal law.

This General Permit is valid until January 31, 2005, unless reissued, or revoked. It is the permittee's responsibility to remain informed of changes to the General Permit program. If this authorized work is not undertaken within the above time period, or the project specifications have changed, our office must be contacted to determine the need for further approval or reverification.

It is the permittee's responsibility to ensure that the work complies with the terms of this letter and any enclosures, AND THAT ALL REQUIRED STATE AND LOCAL PERMITS AND APPROVALS ARE OBTAINED BEFORE WORK PROCEEDS.

If you disagree with the enclosed jurisdictional determination, you may provide new information regarding the jurisdictional determination. Please follow the directions in Section E of the enclosed Notification of Administrative Appeal Options and Process and Request for Appeal.

The decision regarding this action is based on information found in the administrative record which documents the District's decision-making process, the basis for the decision, and the final decision.

If you have any questions, contact Timothy J. Fell in our St. Paul office at (651) 290-5360. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,

Timothy J. Fell for
Robert J. Whiting
Chief, Regulatory Branch

Enclosure

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
190 FIFTH STREET EAST
ST. PAUL, MN 55101-1638

REPLY TO
ATTENTION OF

Operations Division
Regulatory (04-01253-TJF)

December 22, 2004

Ms. Jessica Overmohle
URS Corporation
Thresher Square
700 Third Street South
Minneapolis, Minnesota 55415

Dear Ms. Overmohle:

This is in response to your inquiry regarding the proposed Elm Avenue diversion project in the City of Delano. You asked whether the project would remain authorized by a Department of the Army general permit, as described in our March 25, 2004 letter.

We have determined that the project will remain authorized by this general permit for two years from the date of this letter.

We also understand that the project now includes some slight modifications from the March 2004 plan. The railroad culvert south of wetland D would not be plugged, and the culvert between wetlands 1 and 2 (previously called A and B) would be 24 inches instead of 21 inches in the March 2004 plan.

It is the permittee's responsibility to ensure that the work complies with the terms of this letter and any enclosures, AND THAT ALL REQUIRED STATE AND LOCAL PERMITS AND APPROVALS ARE OBTAINED BEFORE WORK PROCEEDS.

The decision regarding this action is based on information found in the administrative record, which documents the District's decision-making process, the basis for the decision, and the final decision.

If you have any questions, contact Mr. Tim Fell at (651) 290-5360. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,

Timothy J. Fell

for Robert J. Whiting
Chief, Regulatory Branch

Minnesota Department of Natural Resources

Natural Heritage and Nongame Research Program, Box 25

500 Lafayette Road

St. Paul, Minnesota 55155-40__

Phone: (651) 296-7863 Fax: (651) 296-1811 E-mail: sarah.hoffmann@dnr.state.mn.us

November 10, 2003

Brian Woltz
Division of Emergency Management
444 Cedar Street, Suite 223
St. Paul, MN 55101

Re: Request for Natural Heritage information for vicinity of proposed City of Delano Storm Water System Improvements, T118N R25W Sec. 1,11 & 12, Wright County
NHNRP Contact #: ERDB 20040315

Dear Mr. Woltz,

The Minnesota Natural Heritage database has been reviewed to determine if any rare plant or animal species or other significant natural features are known to occur within an approximate one-mile radius of the area indicated on the map enclosed with your information request. Based on this review, there are 4 known occurrences of rare species or natural communities in the area searched (for details, see enclosed database printout and explanation of selected fields). However, based on the nature and location of the proposed project I do not believe it will affect any known occurrences of rare features.

The Natural Heritage database is maintained by the Natural Heritage and Nongame Research Program, a unit within the Division of Ecological Services, Department of Natural Resources. It is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, natural communities, and other natural features. Its purpose is to foster better understanding and protection of these features.

Because our information is not based on a comprehensive inventory, there may be rare or otherwise significant natural features in the state that are not represented in the database. A county-by-county survey of rare natural features is now underway, and has been completed for Wright County. Our information about natural communities is, therefore, quite thorough for that county. However, because survey work for rare plants and animals is less exhaustive, and because there has not been an on-site survey of all areas of the county, ecologically significant features for which we have no records may exist on the project area.

The enclosed results of the database search are provided in two formats: index and full record. To control the release of locational information which might result in the damage or destruction of a rare element, both printout formats are copyrighted.

The index provides rare feature locations only to the nearest section, and may be reprinted, unaltered, in an Environmental Assessment Worksheet, municipal natural resource plan, or report compiled by your department for the project listed above. If you wish to reproduce the index for any other purpose, please contact me to request written permission. Copyright notice for the index should include the following disclaimer:

> "Copyright (year) State of Minnesota, Department of Natural Resources. This index may be reprinted, unaltered, in Environmental Assessment Worksheets, municipal natural resource plans, and internal reports. For any other use, written permission is required."

The full-record printout includes more detailed locational information, and is for your personal use only. **If you wish to reprint the full-record printouts for any purpose, please contact me to request written permission.**

Please be aware that review by the Natural Heritage and Nongame Research Program focuses only on *rare natural features*. It does not constitute review or approval by the Department of Natural Resources as a whole. If you require further information on the environmental review process for other wildlife-related issues, you may contact your Regional Environmental Assessment Ecologist, Mike North, at (218) 828-2433. Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

Sarah D. Hoffmann
Endangered Species Environmental Review Coordinator

encl: Database search results
Rare Feature Database Print-Outs: An Explanation of Fields

"Sarah Hoffmann"
<sarah.hoffmann@dnr.state.mn.us>

09/28/2004 01:03 PM

To: <Jessica_Overmohle@urscorp.com>
cc:
Subject: Re: FEMA EAs in Delano

Hi Jessica,

I did a bit more searching and it appears that project number was 20040315. I rechecked the database quickly and we don't have any additional information for the Delano area, so our previous comments still hold.

Thanks for checking.

Sarah Hoffmann

Nick_Rowse@fws.gov

01/06/2005 01:05 PM

To: jessica_overmohle@urscorp.com
cc:
Subject: FEMA Hazard Mitigation Grant Program projects in Delano, MN

Dear Ms. Overmohle,

This responds to your email, requesting our comments on the potential impacts to federally listed threatened or endangered species for the proposed construction of four projects - the Elm Avenue Diversion, the East Side Lift Station, the West Side Lift Station, and Alley Resurfacing .

The federally threatened bald eagle (Haliaeetus leucocephalus) is documented to nest in Wright County. Bald eagles typically nest and roost in floodplain forest along the Crow River and other water bodies.

Because the site is not within any areas with known nesting bald eagles, we don't believe the project will have any adverse impacts. This precludes the need for further action on this project as required under section 7 of the Endangered Species Act of 1973, as amended. If the projects are modified or new information becomes available which indicates that listed species may occur in the affected areas, consultation with this office should be reinitiated.

Sincerely,

Nick Rowse
Fish and Wildlife Biologist
Twin Cities Field Office
4101 American Blvd. E.
Bloomington, MN 55425

MINNESOTA HISTORICAL SOCIETY
State Historic Preservation Office

December 2, 2003

Mr. Brian Woltz
MN Dept. of Public Safety
Division of Homeland Security and Emergency Management
444 Cedar Street, Suite 223
St. Paul, MN 55101-6223

RE: Elm Avenue Diversion Project
T118 R25 S12, Delano, Wright County
SHPO Number: 2004-0428

Dear Mr. Woltz:

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the State Historic Preservation Officer by the National Historic Preservation Act of 1966 and the Procedures of the Advisory Council on Historic Preservation (36CFR800), and to the responsibilities given the Minnesota Historical Society by the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

Based on available information, we conclude that **no properties** eligible for or listed on the National Register of Historic Places are within the project's area of effect.

Please contact Dennis Gimmestad at (651) 296-5462 if you have any questions regarding our review of this project.

Sincerely,

Britta L. Bloomberg
Deputy State Historic Preservation Officer

"Gragg-Johnson, Kelly" <Kelly.Gragg-Johnson @mnhs.org>

10/01/2004 03:13 PM

To: <Jessica_Overmohle@URSCorp.com>
cc:
Subject: RE: FEMA EAs in Delano

Jessica -

Our review findings remain the same. Our comments still stand. Thanks for checking, though.

Kelly

-----Original Message-----
From: Jessica_Overmohle@URSCorp.com
[mailto:Jessica_Overmohle@URSCorp.com]
Sent: Tuesday, September 28, 2004 10:56 AM
To: Gragg-Johnson, Kelly
Subject: FEMA EAs in Delano

Hello Kelly,

This email is to inform you that FEMA is now in the process of completing Environmental Assessments for four separate projects that are funded under the Hazard Mitigation Grant Program. URS is under contract with FEMA to complete these EAs. All four projects are intended to mitigate frequent flooding in the City of Delano. The projects are all within the Delano city limits, and include:

Elm Avenue Diversion - installation of 1,900 feet of 21- through 36-inch piping to provide a pond outlet and reduce flooding in residential neighborhoods

East Side Stormwater Lift Station - construction of a lift station near the existing Wastewater Treatment Plant. Lift station would pump 40 cfs from a ponding area to the South Fork of the Crow River.

West Side Stormwater Lift Station - construction of a lift station on the west side of the River, near the railroad bridge. Lift station would pump 80 cfs from a ponding area to the River. A home would be removed and a ponding area constructed in its place.

Alley Resurfacing - paving of existing gravel alley surfaces with bituminous.

In October of last year, Lisa Dressler and/or Brian Woltz from the Minnesota Office of Homeland Security and Emergency Management were in contact with you about these projects. At that time, you indicated that given the nature of the proposed project activities, no impacts to historical resources are anticipated.

Given that a year has passed, we would like to confirm that your previous comments still stand. Please respond to this email, or feel free to give me a call at 612-373-6404 with any questions or comments. Please be advised that all 4 EAs will be released for public/agency review at the same time, announced by public notice. The EAs are just now entering the preliminary review stages with FEMA.

I appreciate your time!

Appendix C
Best Management Practices

For information on the availability of Appendix C which is not included due to size formatting issues, please use contact instructions given in the Public Notice.

Appendix D
EO 11988 and EO 11990 Eight-Step Planning Process

Step 1: Determine whether the Proposed Action is located in a wetland and/or the 100-year floodplain, or whether it has the potential to affect or be affected by a floodplain or wetland.	**Project Analysis:** The City of Delano is a participant in good standing with the NFIP. According to FEMA mapping, the proposed project is not located in the 100-year floodplain of the South Fork of the Crow River. According to NWI maps and a site visit conducted by URS on September 17, 2004, there are two wetlands in the project area.
Step 2: Notify public at earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision-making process.	**Project Analysis:** Status of the project has been discussed at numerous Delano City Council meetings to date. The project was also developed by a citizen task force which met nine times in 2003, and whose findings were reported to the City Council. All City Council meetings are open to the public and are also locally televised. Minutes from all meetings are also available on the City of Delano website. A notice will also be published by the Applicant in a newspaper of general circulation when the EA is made available for public review.
Step 3: Identify and evaluate practicable alternatives to locating the Proposed Action in a floodplain or wetland.	**Project Analysis:** The City of Delano lies in an area that characteristically has a number of low-lying and wetland areas. The Proposed Action includes the least amount of wetland impact that still allows for the project to proceed, and consequently will only incur temporary wetland impact and no long-term wetland impact. Other than the No Action Alternative, there are no practicable alternatives for improving the storm sewer system that would not involve impacts to wetlands. The Proposed Action is not located within, and therefore would not directly impact, the 100-year floodplain. The Proposed Action would not increase the 100-year flood elevation of the South Fork of the Crow River. The following alternatives were evaluated in the EA: *Alternative 1:* No Action *Alternative 2:* Proposed Action Installation of 1,900 feet of 24- to 36-inch storm sewer piping from County Line Pond, across and within Elm Avenue, to an area southwest of Delano High School, while also increasing the size of the County Line Pond outlet.

	Alternative 3 Installation of 1,900 feet of 24- to 36-inch storm sewer piping from County Line Pond, across and within Elm Avenue, to an area southwest of Delano High School, in addition to installation of a second 30-inch connection from the storm sewer on Elm Avenue to the newly proposed 36-inch pipe south of Delano High School. The size of the County Line Pond outlet would also be increased. *Alternatives Considered but Eliminated* The enlargement of County Line Pond and replacement of storm sewer on Elm Avenue was also considered as an alternative to this project. However, this alternative was dismissed because it would require excavation and would significantly increase project costs. The City of Delano also considered installing even larger pipe on Elm Avenue. However, this alternative was dismissed because it would cause additional wetland impacts and large amounts of street repair on Elm Avenue.
Step 4: Identify the full range of potential direct or indirect impacts associated with the occupancy or modification of floodplains and wetlands, and the potential direct and indirect support of floodplain and wetland development that could result from the Proposed Action.	**Project Analysis:** The project will result in only temporary impacts to both identified wetlands. No permanent excavation would take place, and vegetation would be restored after construction. The water entering the wetlands from the enlarged storm sewer pipe would be filtered by vegetation in County Line Pond before it reaches either wetland.
Step 5: Minimize the potential adverse impacts to work within floodplains and wetlands to be identified under Step 4, restore and preserve the natural and beneficial values served by wetlands.	**Project Analysis:** As wetland impacts are anticipated to be temporary, there will be no replacement requirements necessary. The Applicant must follow all applicable local, State, and Federal laws, regulations, and requirements and obtain and comply with all required permits and approvals, prior to initiating work on this project. This will include a WCA exemption for wetlands and a USACE letter of Jurisdictional Determination. No staging of equipment or project activities shall begin until all permits are obtained. The Applicant must apply BMPs for soil erosion prevention and containment during staging of equipment and project activities. Should project activities be delayed for 1 year or more after the date of this EA, coordination and project review by the appropriate regulating

	agencies must be re-initiated. There are no anticipated impacts to the 100-year floodplain or the 100-year flood elevation of the South Fork of the Crow River. Impacts of other project adjoining this storm water system will be reviewed as necessary to ensure that cumulative impacts to the floodplain are addressed.
Step 6: Re-evaluate the Proposed Action to determine: 1) if it is still practicable in light of its exposure to flood hazards; 2) the extent to which it will aggravate the hazards to others; 3) its potential to disrupt floodplain and wetland values.	**Project Analysis:** The Proposed Action remains practicable based on the storm sewer improvement objectives.
Step 7: If the agency decides to take an action in a floodplain or wetland, prepare and provide the public with a finding and explanation of any final decision that the floodplain or wetland is the only practicable alternative. The explanation should include any relevant factors considered in the decision-making process.	**Project Analysis:** A public notice will be submitted informing of FEMA's decision to proceed with the project. This notice will include rationale for wetland impacts; a description of all significant facts considered in making the determination; a list of the alternatives considered; a statement indicating whether the action conforms to State and local wetland protection standards; a statement indicating how the action affects the wetlands; and a statement of how mitigation will be achieved.
Step 8: Review the implementation and post-implementation phases of the Proposed Action to ensure that the requirements of the EOs are fully implemented. Oversight responsibility shall be integrated into existing processes.	**Project Analysis:** This step is integrated into the NEPA process and FEMA project management and oversight functions.

Appendix E
Public Notice

Federal Emergency Management Agency

PUBLIC NOTICE

Notice of Availability for Draft Environmental Assessments

For Elm Avenue Diversion, East Side Lift Station and West Side Lift Station

Delano, Wright County, MN

Environmental Assessments for Elm Avenue Diversion, East Side Lift Station, and West Side Lift Station; City of Delano, Wright County, Minnesota. FEMA-MN-2003-MN.

Interested persons are hereby notified that the Federal Emergency Management Agency (FEMA)/Department of Homeland Security (DHS) is proposing to assist in the funding of storm sewer system improvements to mitigate and prepare for damage caused by flooding in the City of Delano. In accordance with the National Environmental Policy Act (NEPA) of 1969 and the implementing regulations of FEMA, Environmental Assessments (EAs) are being prepared to assess the potential impacts of each of the proposed actions on the human and natural environment. This also provides public notice to invite public comments on the proposed project in accordance with Executive Order 11988, Floodplain Management, and Executive Order 11990, Protection of Wetlands. In addition, this notice and the draft EAs provide information to the public on potential impacts to historic and cultural resources from the proposed undertaking, as outlined in the National Historic Preservation Act of 1966.

The draft EAs are available for review between August 22, 2005 and September 20, 2005 at Delano Public Library, 140 Bridge Avenue East, and Delano City Hall, 234 2nd Street North, during normal hours of operation. A public meeting will be held to discuss these three proposed FEMA projects in Delano on September 6, 2005 from 6:00 PM to 7:00 PM at Delano City Hall. The draft EA is also available for review online at the FEMA website http://www.fema.gov/ehp/docs.shtm.

Written comments regarding this environmental action should be received no later than 5PM on September 20, 2005, by Jeanne Millin, Regional Environmental Officer, 536 South Clark, 6th Floor, Chicago IL 60605-1521, or at Jeanne.Millin@dhs.gov.

If no comments are received by the above deadline, the draft EA will be considered final and a Finding of No Significant Impact will be published by FEMA.

The public may request a copy of the final environmental documents from Jeanne Millin at the address listed above.